Periodic Review Report

Former Clean Zone Dry Cleaners
2500 Central Park Avenue
Yonkers, New York

May 22, 2023

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Executive Summary

This Periodic Review Report (PRR) has been prepared by Roux Environmental Engineering and Geology, D.P.C. (Roux) on behalf of UE Yonkers II LLC (current site owner) and serves as a required element of the remedial program for the Clean Zone Dry Cleaners Site located in Yonkers, New York (hereinafter referred to as the "Site"). A Site location map is attached as Figure 1. The Site was formally enrolled in the New York State (NYS) Voluntary Cleanup Program (VCP), Site No. 360050, which is administered by the New York State Department of Environmental Conservation (NYSDEC). The Site is currently subject to an Order on Consent (Index No. CO 3-2008-0104-3) issued by the NYSDEC. Under the VCP, the property was remediated to allow for commercial and industrial use, and the Site is currently operating as a commercial shopping space.

The following sections provide a brief summary of the controls implemented for the Site, as well as the inspections, monitoring, and reporting activities completed in accordance with the Site Management Plan (SMP), dated December 20, 2019, which was approved by NYSDEC on January 3, 2020 (Appendix A). The required Site-wide inspection, sub-slab depressurization system (SSDS) monitoring, and annual groundwater monitoring were completed during this SMP monitoring phase from May 08, 2022 to May 07, 2023. The components, data, and rationale included in this PRR demonstrate that the engineering and institutional controls (IC/ECs) are performing as designed, are effective, and are compliant with specifications described in the SMP. No changes to the monitoring plan are recommended by Roux at this time.

1. Introduction

This Periodic Review Report (PRR) was prepared by Roux Environmental Engineering and Geology D.P.C. (Roux)[1] on behalf of UE Yonkers II LLC (UE Yonkers II; current Site Owner) and serves as a required element of the remedial program for the Clean Zone Dry Cleaners Site located in Yonkers, New York (hereinafter referred to as the "Site"). A Site map location map is attached as Figure 1. This PRR documents post-remediation activities performed at the Site from May 08, 2022 to May 07, 2023.

The Site was formally enrolled in the New York State (NYS) Voluntary Cleanup Program (VCP), Site No. 360050, which is administered by the New York State Department of Environmental Conservation (NYSDEC). The Site is currently subject to an Order on Consent (Index No. CO 3-2008-0104-3) issued by the NYSDEC. Under the VCP, the property was remediated to allow for commercial and industrial use, and the Site is currently operating as a commercial shopping space. The Site Management Plan (SMP), dated December 20, 2019, was approved by NYSDEC on January 3, 2020.

Site Management activities, reporting, and Institutional Control (IC)/ Engineering Control (EC) certification are scheduled on a certification period basis. This certification is based on the submission of a PRR (included herein), submitted to the NYSDEC every year beginning sixteen months after the SMP was approved. These PRRs will identify and assess all of the IC/ECs required by the remedy for the Site, any environmental monitoring data and/or information generated during the reporting period, and a complete Site evaluation which discusses the overall performance and effectiveness of the previous remedy.

[1] Prior to March 1, 2018, Roux Environmental Engineering and Geology, D.P.C. performed work as Remedial Engineering P.C. and Roux Associates, Inc. Remedial Engineering P.C. is a New York State professional service corporation organized primarily for the purpose of providing engineering services for clients of Roux Associates, Inc.

2. Site Overview

2.1 Site Description and History

The Site is located in Yonkers, Westchester County, New York and is identified as Section 4, Block 4877 and Lot 200 on the County of Westchester Tax Map. The Site is 8.3 acres of the approximately 27-acre Gateway Shopping Center and is bounded by Central Plaza Shopping Center to the north, residential properties to the east, additional stores within the Gateway Shopping Center, Bacon Place and Fortunoffs Backyard Furniture to the south, and Central Park Avenue to the west (see Figure 2 – Site Layout Map).

According to Phase I Environmental Site Assessments (ESAs) prepared for the Site, the Site was first developed in the 1950s as a golf driving range before it was developed into the current commercial/retail development in the 1960s and early 1970s. The Site is currently operating as a commercial/retail shopping space.

The Site consists of one structure known as Building 22 and surface level asphalt paved parking/drive areas. Structural components of Building 22 consist of a concrete foundation, steel interior framing, concrete block and brick perimeter walls, and steel floor decks. The total area of Buildings 22 within Lot 200 is approximately 51,000 square feet.

The Site is zoned as commercial land and is currently utilized by tenants as a commercial shopping space. The tenants occupying Building 22 at the time of Site reconnaissance are listed in the following table.

Building	Tenant Name, Type of Business
East	HomeSense (formerly occupied by the Pathmark Grocery Store)
East	Singas Pizza
East	Marshalls
East	Skin Station, salon
East	One Dollar Zone, retail sales of discounted consumer goods
East	Central Park Optical, optometrist and related retail sales
East	Steve's Shoes, retail sales of shoes
East	Central Warehouse Wine & Liquor, retail sales of wine and liquor
East	Five Guys restaurant/take-out

The properties immediately south and north of the Site include commercial properties; the properties immediately to the east of the Site include residential properties; and the properties to the west of the Site include commercial and residential properties.

Previous ESAs identified the operation of the former Clean Zone Dry Cleaners (currently Singas Pizza) as a recognized environmental condition (REC). A Phase II ESA identified tetrachloroethene (PCE) contamination outside the rear entrance of the former Clean Zone Dry Cleaners tenant space. As a result, the NYSDEC issued a Consent Order on March 21, 2006 (2006 Order on Consent) to investigate and remediate the PCE contamination.

2.2 Summary of Remedial Action

Following issuance of the 2006 Order on Consent, several investigations were conducted at the Site to characterize subsurface soil, groundwater and soil vapor. According to the 2013 Pressly Construction Completion Report, volatile organic compounds (VOCs) were detected above regulatory action levels within sub-slab and indoor air during subsurface investigations. To remediate these impacts, the following remedies were implemented:

- Installation and operation of Air sparging (AS) and soil vapor extraction (SVE) system.
  - One AS well and one SVE well were installed.
  - An AS/SVE system, consisting of one AS and one SVE well was operational at the Site between April 2001 and April 2002. During that period, two monitoring well sampling rebound events (after approximately 1-month of downtime) were performed on October 26, 2002 and May 1, 2002. Based on the rebound results obtained on February 26, 2003, the AS compressor was replaced in April 2003 and the system was operational between that time and September 2003. The air supply pipe to the sparge well was found to be broken on the May 6, 2004 sampling event, probably as a result of icing during the winter.
  - The AS/SVE system is no longer operational at the Site and is not a required EC.
- Installation of the SSDS with two vapor extraction points.
- Preparation and implementation of SMP which was submitted to the NYSDEC in July 2011.
- Installation of two additional monitoring wells.

One June 6 and 7, 2019, Roux completed repair work for the two SSDS as summarized below:

Singas Pizza System

- Replaced the nonfunctioning blower for the Singas Pizza system
- Installed a ½" hole with a threaded cap to collect flow measurements
- Started up system successfully and collected the following measurements:
  - Flowrate: 160-185 scfm
  - Vacuum: 4.1 in. w.c.
- Observed sub-slab influence consistent with TRC's monitoring data from 2014-2015, as follows:
  - Singas Kitchen Vacuum: 0.007 in. w.c.
  - Singas Hall Vacuum: 0.010 in. w.c.

Former Pathmark (HomeSense) SSDS

- Extended length of SSDS piping to allow for installation of instrumentation (see field notes for as-built sketch)
- Installed a ½" hole with a threaded cap to collect flow measurements
- Installed sample port with isolation ball valve
- Started up system successfully and collected the following measurements:
  - Flowrate: 170 scfm
  - Vacuum: 2.72 in. w.c.

The initial SMP for the Site was prepared by Pressley in 2011 and was replaced by the 2019 SMP prepared by Roux.

2.2.1 Remedial Action Objectives

The Remedial Action Objectives (RAOs) for the Site established in the 2019 SMP are as follows.

Remedial Action Objectives

Groundwater RAOs

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of, volatiles from contaminated groundwater.

RAOs for Environmental Protection

- Remove the source of ground or surface water contamination.

Soil RAOs

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of, or exposure to, contaminants volatilizing from soil.

Soil Vapor RAOs

RAOs for Public Health Protection

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

2.3 Remaining Contamination

Residual contamination is present at the Site beneath the Site Composite Cover System as summarized in the following sections. Additional information, including tables detailing the remaining contamination at the Site can be found in the 2019 SMP.

2.3.1 Soil

PCE is present in the soil below the operating space of the former Clean Zone Dry Cleaners (current Singas Pizza) at a concentration greater than the NYSDEC Part 375 Commercial Use Soil Cleanup Objectives (SCOs).

In 2013, TRC collected soil samples to characterize subsurface soil at the Site. The results of the soil analysis were compared to NYSDEC Part 375 Commercial Soil Cleanup. The results indicate that only one VOC, PCE, in one sample (TRC-SB-1), was detected at a concentration exceeding the corresponding Commercial Use SCO. PCE was detected in the soil sample collected from boring TRC-SB-1 from the interval of 6 to 7.5 feet below ground surface (bgs) at 4,500 milligrams per kilogram (mg/kg), which exceeds the Commercial Use SCO of 150 mg/kg.

2.3.2 Groundwater

The groundwater contamination remaining at the site is located proximate to the source area of the historic spill and includes PCE, trichloroethene (TCE), and cis-1,2-dichloroethene (cis-1,2-DCE) at monitoring wells MW-1 and SVE (MW-C). The most recent round of SMP groundwater monitoring (September 29, 2022) indicated that PCE and cis-1,2-DCE were the only compounds detected in concentrations above NYSDEC

AWQSGVs. PCE was detected at two of the six monitoring wells at concentrations ranging from 22 to 31 µg/L with the highest concentration detected in MW-C (SVE). Cis-1,2-DCE was detected at one of the six monitoring wells (MW-C (SVE)) at a concentration of 8 µg/L. TCE was not detected at concentrations above NYSDEC AWQSGVs in any of the monitoring wells.

A summary of the groundwater monitoring analytical results for September 2018 through September 2022 is provided on Table 1. The results of the semi-annual groundwater monitoring events performed from July 2013 through to March 2016 are provided in Table 1 of the SMP.

2.3.3 Soil Vapor

In June 2013, TRC Companies Inc. (TRC) performed sub-slab vapor, indoor and ambient air samples to assess the Singas Pizza, CP Optical and Pathmark tenant spaces. The sub-slab vapor, indoor and ambient air samples were analyzed for PCE, TCE, cis-1,2-DCE, trans-1,2-dichloroethene (trans-1,2-DCE), vinyl chloride (VC), and 1,1-dichloroethene (1,1-DCE). Indoor and ambient air samples results were not detected above NYSDOH Air Guideline Values (AGVs) or background levels of VOCs in indoor air presented in Appendix C of the NYSDOH Guidance Document. A comparison of the sub-slab vapor and co-located indoor air samples to the matrices provided in Section 3.4 of the NYSDOH Guidance Document indicated that mitigation was the recommended action in the western portion of Singas Pizza and in the northern portion of Pathmark (now HomeSense).

The most recent round of SVI samples (March 22, 2023) was collected during the heating period and indicated that cis-1,2-DCE was still present in sub-slab vapor at VE-1 but not present at VE-2. PCE was still present in indoor air at the Site. However, cis-1,2-DCE and TCE were not detected in indoor air at the Site. The results of the most recent sampling event are provided in Section 3.3.3 and in Table 4.

2.4 Engineering and Institutional Controls

Since residual contamination remains beneath the Site, ICs/ECs have been incorporated into the Site remedy as part of the NYSDEC-approved 2019 SMP, to provide proper management of residual contamination in the future and ensure protection of public health and the environment.

2.4.1 Engineering Controls

The Site has ECs consisting of:

- Site Composite Cover System;
- Active Sub-slab Depressurization Systems (SSDS); and
- Monitoring Wells associated with Monitored Natural Attenuation.

The purpose of each EC is described below:

- **Site Composite Cover System:** The Site Composite Cover System is comprised of building slabs, concrete sidewalks, and pavement as is serving as a permanent control designed to prevent exposure to remaining contamination in soil/ fill at the Site.
- **Active SSDS:** The active SSDS is designed to prevent potential vapor intrusion into the tenant spaces at the Site.
- **Monitoring Wells associated with Monitored Natural Attenuation:** Groundwater monitoring activities to assess natural attenuation will continue, as determined by the NYSDEC with consultation with NYSDOH, until residual groundwater concentrations are found to be consistently below the

ambient water quality standards, the site SCGs, or have become asymptotic at an acceptable level over an extended period.

All ECs are fully in place and effective at meeting their objectives.

2.4.2 Institutional Controls

A Site-specific Environmental Easement has been recorded with Westchester Counter Clerk's Office that provides an enforceable means to manage the remaining contamination at the Site until the Environmental Easement is extinguished in accordance with ECL Article 71, Title 36. The ICs presented in the SMP consist of the following:

- The property may be used for commercial or industrial use;
- All ECs must be operated and maintained as specified in the 2019 SMP;
- All ECs must be inspected at a frequency and in a manner defined in the 2019 SMP;
- The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Westchester Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;
- Groundwater and other environmental or public health monitoring must be performed as defined in the 2019 SMP;
- Data and information pertinent to Site management must be reported at the frequency and in a manner as defined in the 2019 SMP;
- All future activities that will disturb remaining contaminated material must be conducted in accordance with the 2019 SMP;
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the 2019 SMP;
- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in the 2019 SMP;
- Access to the Site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement;
- The potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries, and any potential impacts that are identified must be monitored or mitigated; and
- Vegetable gardens and farming on the Site are prohibited.

3. SMP Requirements and Compliance Monitoring

Since remaining contaminated soil, groundwater and soil vapor exist beneath the Site, ICs and ECs are required to protect human health and the environment. This section details the elements of the SMP including the inspection, monitoring, and reporting requirements, IC/ECs, whether the IC/EC requirements were met, and regulatory notification and certification requirements. The various subsections below also include an evaluation of the remedy performance, effectiveness, and protectiveness.

3.1 IC/EC Plan Compliance Report

Since remaining contamination exists beneath the Site, ICs and ECs are required to protect human health and the environment and are described in detail in Section 2.4. On an annual basis, required certifications must be made for these Site-specific ICs and ECs to ensure that the required IC/ ECs are in place, are performing properly, and remain effective; and to confirm that they are continuing to be protective of human health and the environment. The respective IC/EC Certification Form for the controls that are currently in place for the Site is provided in Appendix B.

3.1.1 Notifications

Notifications will be submitted by the property owner to the NYSDEC, as needed, in accordance with NYSDEC's DER – 10 for the following reasons:

- 60-day advance notice of any proposed changes in Site use that are required under the terms of the Order on Consent, 6NYCRR Part 375 and/or Environmental Conservation Law.
- 7-day advance notice of any field activity associated with the remedial program.
- 15-day advance notice of any proposed ground-intrusive activity pursuant to the Excavation Work Plan.
- Notice within 48-hours of any damage or defect to the foundation, structures or EC that reduces or has the potential to reduce the effectiveness of an EC, and likewise, any action to be taken to mitigate the damage or defect.
- Verbal notice by noon of the following day of any emergency, such as a fire, flood, or earthquake that reduces or has the potential to reduce the effectiveness of ECs in place at the Site, along with written confirmation within 7 days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.
- Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action submitted to the NYSDEC within 45 days describing and documenting actions taken to restore the effectiveness of the ECs.

Any change in the ownership of the Site or the responsibility for implementing this SMP will include the following notifications:

- At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser/Remedial Party has been provided with a copy of the Order on Consent, and all approved work plans and reports, including this SMP.
- Within 15 days after the transfer of all or part of the Site, the new owner's name, contact representative, and contact information will be confirmed in writing to the NYSDEC.

No notifications to NYSDEC were required during the reporting period.

3.2 Inspections

All inspections were conducted at the frequency specified in the schedules provided in the following Monitoring Plan Reporting section of this PRR. At a minimum, one Site-wide Cover System and one comprehensive Site-wide inspection are to be conducted annually (starting no more than 15 months after the issuance of the COC) per the SMP. Details of requirements and completed inspections are provided in the following sections. Inspections of remedial components will also be conducted when a severe condition has taken place, such as power interruption or fire that may affect the ECs. The inspections determine and document the following:

- IC/ECs are in place, are performing properly, and remain effective;
- If these controls continue to be protective of human health and the environment;
- Compliance with requirements of this SMP and the Environmental Easement;
- Achievement of remedial performance criteria;
- Sampling and analysis of appropriate media during monitoring events;
- If Site records are complete and up to date; and
- Changes, or needed changes, to the remedial or monitoring system.

If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs, an inspection of the Site will be conducted within 5 days of the event to verify the effectiveness of the IC/ECs implemented at the Site by a qualified environmental professional as determined by NYSDEC.

3.3 Monitoring Plan Compliance Report

The Monitoring Plan describes the measures for evaluating the performance and effectiveness of the remedy to reduce or mitigate contamination at the Site, the Site cover system, and all affected Site media identified below. Components of the Monitoring Plan are:

- Sampling and analysis of all appropriate media (e.g., groundwater).
- Assessing compliance with applicable NYSDEC standards, criteria and guidance, particularly ambient groundwater standards and Part 375 SCOs for soil.
- Assessing achievement of the remedial performance criteria.
- Evaluating Site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment.
- Preparing the necessary reports for the various monitoring activities.

Monitoring of the performance of the remedy and overall reduction in contamination onsite will be conducted for the periods specified for each matrix listed in table below. The frequency is subject to change in consultation with NYSDEC and based on reports submitted showing contaminant trends.

Monitoring Program	Frequency	Matrix	Analysis
Site Cover System and Site-Wide Inspection	Annually. First inspection no more than 15 months after issuance of the COC.	Soil	Visual inspection of all cover system components
Groundwater in Monitoring Wells	Annual gauging and sampling	Groundwater	PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, VC, and 1,1-DCE
SSDS	Semi-annually for first year under revised SMP and annually thereafter during heating season	Vapor	PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, VC, and 1,1-DCE

A record of the findings of each monitoring/inspection event and maintenance activity performed as described above, where applicable, were documented on the Site Inspection Checklists provided in Appendix C. If at any time during the reporting period a failure of one or more of the ECs or non-compliance with one or more of the ICs is identified, the remedial party must notify NYSDEC and implement corrective measures, in accordance with a Corrective Measures Work Plan (CMWP) submitted to and approved by NYSDEC and provide a periodic certification of the IC/ECs.

3.3.1 Site Cover System

Exposure to remaining contamination at the Site is prevented by a non-mechanical engineered Site composite cover system that consists of:

- Existing asphalt pavement in Lot 200;
- Existing concrete-covered sidewalks; and
- Existing concrete building slabs.

The location and details of the Site cover system are shown on Figure 2. Monitoring of the Site cover system will occur on an annual basis as long as the Environmental Easement is in effect to ensure the system's integrity. Monitoring consists of visual inspection, which evaluates the structural integrity of the building slabs, concrete-covered sidewalks, and asphalt pavement.

Roux performed Site cover system and Site-wide inspections on September 29, 2022, and March 22, 2023. The completed Site Inspection Checklists are provided in Appendix C. These inspections determined that all Site cover system elements described herein were observed to be performing as designed during the reporting period of the PRR and are protective of human health and the environment.

3.3.2 Groundwater Monitoring and Sampling

Samples were collected annually from the monitoring wells within the SMP monitoring network for PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, VC, and 1,1-DCE using United States Environmental Protection Agency (USEPA) Method 8260. The SMP well network consisted of monitoring wells MW-1, MW-C (SVE), MW-D, TRC-MW-F, and MW-E. Purge water and decontamination wastewater generated during the groundwater sampling was containerized in a labeled 55-gallon drum stored onsite. Groundwater analytical results are provided in Appendix D. The sampling, sample handling, decontamination, and field instrument calibration procedures were performed in accordance with procedures detailed in the SMP.

The most recent round of SMP groundwater monitoring (September 29, 2022) indicated that PCE and cis-1,2-DCE were the only compounds detected in concentrations above NYSDEC AWQSGVs. PCE was detected at two of the six monitoring wells at concentrations ranging from 22 to 31 µg/L with the highest concentration detected in MW-C (SVE). Cis-1,2-DCE was detected at one of the six monitoring wells (MW-C (SVE)) at a concentration of 8 µg/L. TCE was not detected at concentrations above NYSDEC AWQSGVs in any of the monitoring wells.

3.3.3 SSDS Monitoring and SVI Sampling

SSDS monitoring and SVI sampling was performed semi-annually. During the reporting period, SVI samples were collected on September 29, 2022 and March 22, 2023. Samples were collected from SSDS sample ports VE-1 and VE-2 as well as associated indoor air samples for VOCs via EPA Method TO-15 (Figure 3). Soil vapor analytical results are provided in Appendix D. The sampling, sample handling, decontamination, and field instrument calibration procedures were performed in accordance with procedures detailed in the SMP.

The most recent round of SVI samples (March 22, 2023) was collected during the heating period and are summarized below:

- 1,1-DCE was not detected in either indoor air sample or the samples collected from the SSDS sample ports.
- Cis-1,2-DCE was detected in one of the SSDS sample ports at a concentration of 47.6 µg/m^3 (VE-1) and was not detected in either indoor air samples.
- PCE was detected in one of the SSDS sample ports (VE-1) at a concentration of 224 µg/m^3 and was not detected at VE-2. However, PCE was detected in indoor air at both tenant spaces at concentrations ranging from 0.597 and 3.22 µg/m^3.
- TCE was detected in one of the SSDS sample ports (VE-1) at a concentration of 22.9 µg/m^3. However, TCE was not detected at VE-2 or in indoor air at either tenant spaces.
- VC was detected in one of the SSDS sample ports (VE-1) at a concentration of 0.721 µg/m^3. However, VC was not detected at VE-2 or in indoor air at either tenant spaces.

In addition, PCE was identified as the primary contaminant of concern at the Site. The concentrations of PCE in indoor air and sub-slab vapor from the last eight sampling events is summarized below:

Sample Designation:	Sample Date:	Concentration of PCE in Indoor Air (µg/m^3)	Concentration of PCE in Sub-Slab Vapor (µg/m^3)
VE-1-IA / VE-1	09/23/2019	5.7 / 5.64 (DUP)	1.89
	03/03/2020	1.02	8.48 U
	09/22/2020	7.39	27,000
	03/03/2021	17.4	26.1
	09/16/2021	26.3	2.45 U
	03/16/2022	21.6	1.36 U
	09/29/2022	6.85	124
	03/22/2023	3.22	224

Sample Designation:	Sample Date:	Concentration of PCE in Indoor Air (µg/m^3)	Concentration of PCE in Sub-Slab Vapor (µg/m^3)
VE-2-IA / VE-2	09/23/2019	0.509	41,200
	03/03/2020	1.05 / 1.02 (DUP)	8.68
	09/22/2020	0.393 / 0.353 (DUP)	427
	03/03/2021	0.264 / 0.251 (DUP)	7.73
	09/16/2021	2.32 / 2.07 (DUP)	67.7
	03/16/2022	1.11 / 1.12 (DUP)	1.78 U
	09/29/2022	0.576 / 0.644 (DUP)	22,800
	03/22/2023	0.624 / 0.597 (DUP)	1.36 U

VE-1 had one round of anonymously high levels of PCE detected in sub-slab vapor (27,000 µg/m^3 at VE-1 during the September 22, 2020 sampling event). These high levels were not replicated in the other sampling events. PCE was detected in indoor air during the sampling event. VE-2 had two rounds of anonymously high levels of PCE detected in sub-slab vapor (41,200 µg/m^3 during the September 23, 2019 sampling event and 22,800 µg/m^3 during the September 29, 2022 sampling event). However, the following and most recent sampling event indicated that PCE was not detected at VE-2. PCE was detected in indoor air in each of the sampling events.

3.4 Operation and Maintenance Plan Compliance Report

The O&M Plan provided in the SMP:

- Includes the steps necessary to allow individuals unfamiliar with the Site to operate and maintain the SSDS;
- Includes an O&M contingency plan;
- Will be updated periodically to reflect changes in Site conditions or the manner in which the SSDS is operated and maintained;
- Includes an SSDS Startup Report as part of the initial SSDS startup to verify that each system is operating properly; and
- Includes monitoring requirements.

Exposure to intrusion of contaminated soil vapor within the Site building is prevented by an active SSDS, which applies negative pressure under below-grade portions of the Site, collects potentially contaminated vapor, and subsequently discharges the vapor to the atmosphere above the roof the site building.

3.4.1 SSDS System Operation and Maintenance

Sub-slab vapor extraction well VE-1 was installed in the former dry cleaner, and sub-slab vapor extraction well VE-2 was installed on the edge of the northernmost aisle of the HomeSense, at the locations shown in Figure 3 and in Appendix F. The extraction wells were constructed within the excavation using a 4-inch diameter section of 0.040-inch slotted PVC well screen. The well screen section extended from the bottom of the hole to the bottom of the concrete floor. The annulus surrounding the screen was backfilled with 1/4-1/12 -inch pea stone filter pack. A non-VOC grout sealer was placed above the filter pack to form a seal with the borehole within the concrete floor.

The VE wells were piped to dedicated in-line suction blowers using four (4) inch schedule 40 PVC pipe. The piping from VE-1 extends from the floor to above the foam drop ceiling. Once above the drop ceiling, the pipe runs out through the building's eastern outer wall. The piping from VE-2 extends up along the wall where it exits the northern exterior wall. Both systems have in-line blowers with stacks that extend 4-feet above the existing roof- line. The SSDS is outfitted for drain for convenient removal of fluids.

The routine maintenance activities include visual inspections, operating data collection and general maintenance. Visual inspection is the routine part of the SSDS operator's activities. The system operator will note any conditions which present a potential hazard or could cause future system shutdown. All equipment maintenance and inspections will be performed in accordance with manufacturer's instructions specified in the SMP. Specific routine maintenance tasks are outlined below and were recorded monthly on the SSDS O&M Log:

- Inspect control panel and warning lights/alarms;
- Inspect blower piping to confirm operation of appropriate valves (i.e., dilution valve); and
- Inspect vacuum/pressure gauges for proper operation.

The required quarterly SSDS O&M logs that were completed during the operation of the SSDS during the reporting period are provided in chronological order in Appendix C. O&M activities described herein determined that the O&M Plan was carried out as designed during the reporting period of the PRR and it is protective of human health and the environment. The current O&M Plan being implemented was determined to be successful to date.

3.4.2 Operation and Maintenance of SSDS

3.4.2.1 SSDS Start-Up and Testing

System Startup will include:

- Recording SSDS vacuum and flow rate; and
- Recording subslab vacuum readings at available monitoring points or VE-1 and VE-2.

The system testing described above will be conducted if, in the course of the SSDS lifetime, the system goes down or significant changes are made to the system and the system must be restarted.

3.4.2.2 SSDS Routine System Operation and Maintenance

- Annual Tasks
- Condensate Water Disposal (if required)

3.4.2.3 SSDS Non-Routine System Maintenance

Non-routine equipment maintenance consists of maintenance activities that will be performed with less frequency than the routine maintenance (i.e., semi-annually) on several system components. Non-routine equipment maintenance and inspections. Specific non-routine maintenance tasks are outlined below:

- Check vacuum seal on extraction points;
- Replacement of vacuum/pressure gauges; and
- Service or replace motors as necessary.

Most damage or problems associated with SSDS components will trigger one of the alarms. Damage to any SSDS components will be noted in the routine and detailed system inspections and remedied upon identification. Any maintenance completed for the SSDS should be documented in the Site Management Forms in Appendix C.

In the event that low SSDS air flow rates or vacuum are observed anywhere in the system, further system balancing may be necessary following moisture removal, to ensure that the combined air flow rates and vacuum in a given area of the site achieve the minimum design requirements.

3.4.2.4 System Monitoring Devices and Alarms

The SSDS have warning devices to indicate that the system is not operating properly. Each blower has an overload relay that will shut down the blower for too high voltage or current.

The warning device currently consists of a local alarm light on the control panel of each system. In the event that warning device is activated, applicable maintenance and repairs will be conducted, as specified in the Operation and Maintenance Plan, and the SSDS will be restarted. Operational problems will be noted in the Periodic Review Report to be prepared for that reporting period.

4. Overall Conclusions and Recommendations

The following section presents conclusions from inspections and monitoring activities and recommendations.

- VE-2 exhibited one instance of significantly elevated PCE levels in sub-slab vapor (22,800 µg/m^3 during the September 29, 2022 sampling event). However, the following and most recent sampling event indicated that PCE was not detected at VE-2. PCE was detected in indoor air in each of the sampling events. The need to continue mitigation is required.
- The ICs and ECs are performing as designed, are effective, and are compliant with specifications described in the SMP. No changes to the monitoring plan are recommended at this time.

TABLES

1. Summary of VOCs in Groundwater
2. Summary of Emerging Contaminants in Groundwater
3. Summary of VOCs in Soil Vapor and Indoor Air

Notes Utilized Throughout Tables	
Groundwater Tables	
J -	Estimated Value
U -	Compound was analyzed for but not detected
B -	The analyte was found in an associated blank as well as in the sample
FD -	Duplicate
NA -	Compound was not analyzed for by laboratory
µg/L -	Micrograms per liter
ng/L -	Nanogram per liter
NYSDEC -	New York State Department of Environmental Conservation
AWQSGVs -	Ambient Water-Quality Standards and Guidance Values
--	No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs	
Emerging Contaminants (Per- and Polyfluoroalkyl Substances and 1,4-Dioxane)	
	Bold data indicates that parameter exceeded the NYSDEC Drinking Water MCL
MCL -	Maximum Contaminant Levels
	Undetected results reflect Minimum Detection Limits
Soil Vapor/Ambient Air	
J -	Estimated value
U -	Indicates that the compound was analyzed for but not detected
FD -	Duplicate sample
ug/m3 -	Micrograms per cubic meter
Bold data indicates that parameter was detected	

Table 1. Summary of Volatile Organic Compounds in Groundwater, 2500 Central Park Avenue, Yonkers, New York

Sample Designation:			MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-C_SVE	MW-C_SVE	MW-C_SVE
Sample Date:			09/20/2018	09/23/2019	09/23/2019	09/21/2020	09/16/2021	09/29/2022	09/20/2018	09/23/2019	09/21/2020
Normal Sample or Field Duplicate:			N	N	FD	N	N	N	N	N	N
Parameter	NYSDEC Ambient Water Quality Standards and Guidance Values	Units									
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cis-1,2-Dichloroethylene	**5**	UG/L	**11**	**5.2**	**5.4**	3.2	4.7	4.5	**8.3**	2.5 U	2.5
Tetrachloroethylene (PCE)	**5**	UG/L	**67**	**42**	**43**	**47**	**41**	**22**	**83**	3.9	**52**
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	NA	2.5 U	2.5 U	2.5 U	2.5 U
Trichloroethylene (TCE)	**5**	UG/L	**6.4**	4.4	4.6	3.7	**6.2**	2.3	**8.4**	0.61	3.7
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 1. Summary of Volatile Organic Compounds in Groundwater, 2500 Central Park Avenue, Yonkers, New York

Sample Designation:			MW-C_SVE	MW-C_SVE	MW-D	MW-D	MW-D	MW-D	MW-D	MW-D	MW-E
Sample Date:			09/16/2021	09/29/2022	09/20/2018	09/20/2018	09/23/2019	09/21/2020	09/16/2021	09/29/2022	09/20/2018
Normal Sample or Field Duplicate:			N	N	N	FD	N	N	N	N	N
Parameter	NYSDEC Ambient Water Quality Standards and Guidance Values	Units									
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cis-1,2-Dichloroethylene	**5**	UG/L	5	**8**	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	**5**	UG/L	**62**	**31**	0.33 J	0.23 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	NA	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	NA	2.5 U	2.5 U
Trichloroethylene (TCE)	**5**	UG/L	**6.8**	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 1. Summary of Volatile Organic Compounds in Groundwater, 2500 Central Park Avenue, Yonkers, New York

Sample Designation:			MW-E	MW-E	MW-E	MW-E	TRC-MW-F	TRC-MW-F	TRC-MW-F	TRC-MW-F	TRC-MW-F
Sample Date:			09/23/2019	09/21/2020	09/16/2021	09/29/2022	09/20/2018	09/23/2019	09/21/2020	09/21/2020	09/16/2021
Normal Sample or Field Duplicate:			N	N	N	N	N	N	N	FD	N
Parameter	NYSDEC Ambient Water Quality Standards and Guidance Values	Units									
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cis-1,2-Dichloroethylene	**5**	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	**5**	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.19 J	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	NA	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	NA
Trichloroethylene (TCE)	**5**	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 1. Summary of Volatile Organic Compounds in Groundwater, 2500 Central Park Avenue, Yonkers, New York

Sample Designation:			TRC-MW-F	TRC-MW-F	TRC-MW-F
Sample Date:			09/16/2021	09/29/2022	09/29/2022
Normal Sample or Field Duplicate:			FD	N	FD
Parameter	NYSDEC Ambient Water Quality Standards and Guidance Values	Units			
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U
Cis-1,2-Dichloroethylene	**5**	UG/L	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	**5**	UG/L	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	NA	2.5 U	2.5 U
Trichloroethylene (TCE)	**5**	UG/L	0.5 U	0.5 U	0.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U

Table 2. Summary of 1,4-Dioxane in Groundwater, 2500 Central Park Avenue, Yonkers, New York

Sample Designation:			MW-C_SVE	MW-E	TRC-MW-F
Sample Date:			10/12/2018	10/12/2018	10/12/2018
Normal Sample or Field Duplicate:			N	N	N
Parameter	NYSDEC Drinking Water MCL Action Levels	Units			
1,4-Dioxane (P-Dioxane)	1	UG/L	0.0758 U	0.0758 U	0.0781 U

Table 3. Summary of Volatile Organic Compounds in Soil Vapor and Indoor Air, 2500 Central Park Avenue, Yonkers, New York

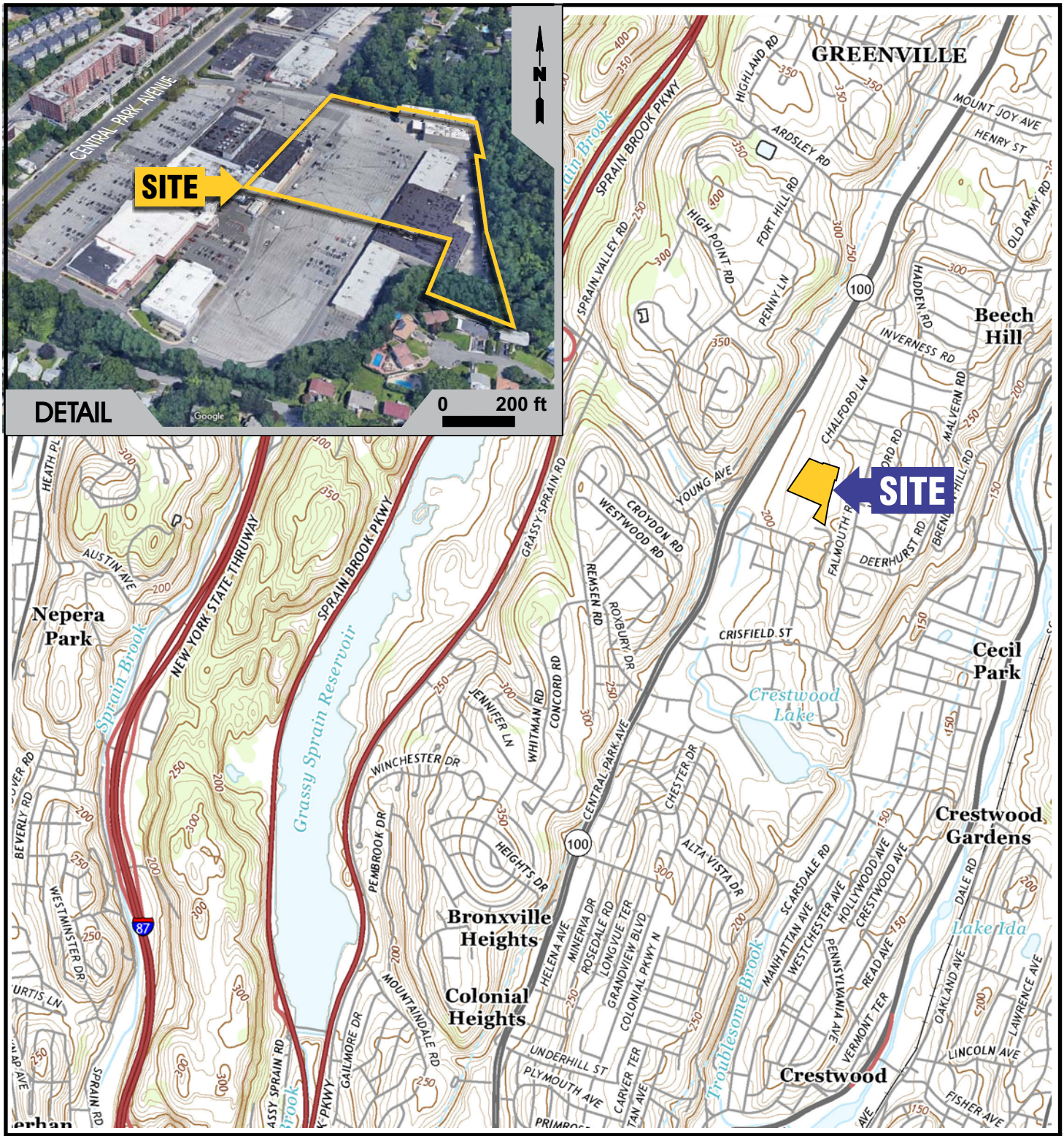
Sample Designation:		VE-1	VE-1	VE-1-IA	VE-1-IA	VE-2	VE-2	VE-2-IA	VE-2-IA	VE-2-IA
Sample Date:		09/29/2022	03/22/2023	09/29/2022	03/22/2023	09/29/2022	03/22/2023	09/29/2022	09/29/2022	03/22/2023
Normal Sample or Field Duplicate:		N	N	N	N	N	N	N	FD	N
Parameter	Units									
1,1,1-Trichloroethane (TCA)	UG/M3	2.73 U	1.09 U	0.109 U	0.109 U	73.1 U	1.09 U	0.109 U	0.109 U	0.109 U
1,1-Dichloroethene	UG/M3	1.98 U	0.793 U	0.079 U	0.079 U	53.1 U	0.793 U	0.079 U	0.079 U	0.079 U
Carbon Tetrachloride	UG/M3	3.15 U	1.26 U	**0.497**	**0.415**	84.3 U	1.26 U	**0.497**	**0.484**	**0.377**
Cis-1,2-Dichloroethylene	UG/M3	1.98 U	**47.6**	0.079 U	0.079 U	**99.1**	0.793 U	0.079 U	0.079 U	0.079 U
Methylene Chloride	UG/M3	4.34 U	1.74 U	1.74 U	1.74 U	117 U	1.74 U	1.74 U	1.74 U	**2**
Tetrachloroethylene (PCE)	UG/M3	**124**	**224**	**6.85**	**3.22**	**22800**	1.36 U	**0.576**	**0.644**	**0.624**
Trichloroethylene (TCE)	UG/M3	2.69 U	**22.9**	0.107 U	0.107 U	**163**	1.07 U	0.107 U	0.107 U	0.107 U
Vinyl Chloride	UG/M3	1.28 U	**0.721**	0.051 U	0.051 U	34.3 U	0.511 U	0.051 U	0.051 U	0.051 U

Table 3. Summary of Volatile Organic Compounds in Soil Vapor and Indoor Air, 2500 Central Park Avenue, Yonkers, New York

Sample Designation:		VE-2-IA
Sample Date:		03/22/2023
Normal Sample or Field Duplicate:		FD
Parameter	Units	
1,1,1-Trichloroethane (TCA)	UG/M3	0.109 U
1,1-Dichloroethene	UG/M3	0.079 U
Carbon Tetrachloride	UG/M3	**0.465**
Cis-1,2-Dichloroethylene	UG/M3	0.079 U
Methylene Chloride	UG/M3	**1.95**
Tetrachloroethylene (PCE)	UG/M3	**0.597**
Trichloroethylene (TCE)	UG/M3	0.107 U
Vinyl Chloride	UG/M3	0.051 U

FIGURES

1. Site Location Map
2. Site Plan
3. SSDS Layout



QUADRANGLE LOCATION



SOURCE:
USGS; Yonkers, NY-NJ (2016)
and Mount Vernon, NY (2016)
7.5 Minute Topographic Quadrangles

N

0 2000’

Title:

SITE LOCATION MAP

FORMER CLEAN ZONE DRY CLEANERS
2500 CENTRAL PARK AVENUE
YONKERS, NEW YORK

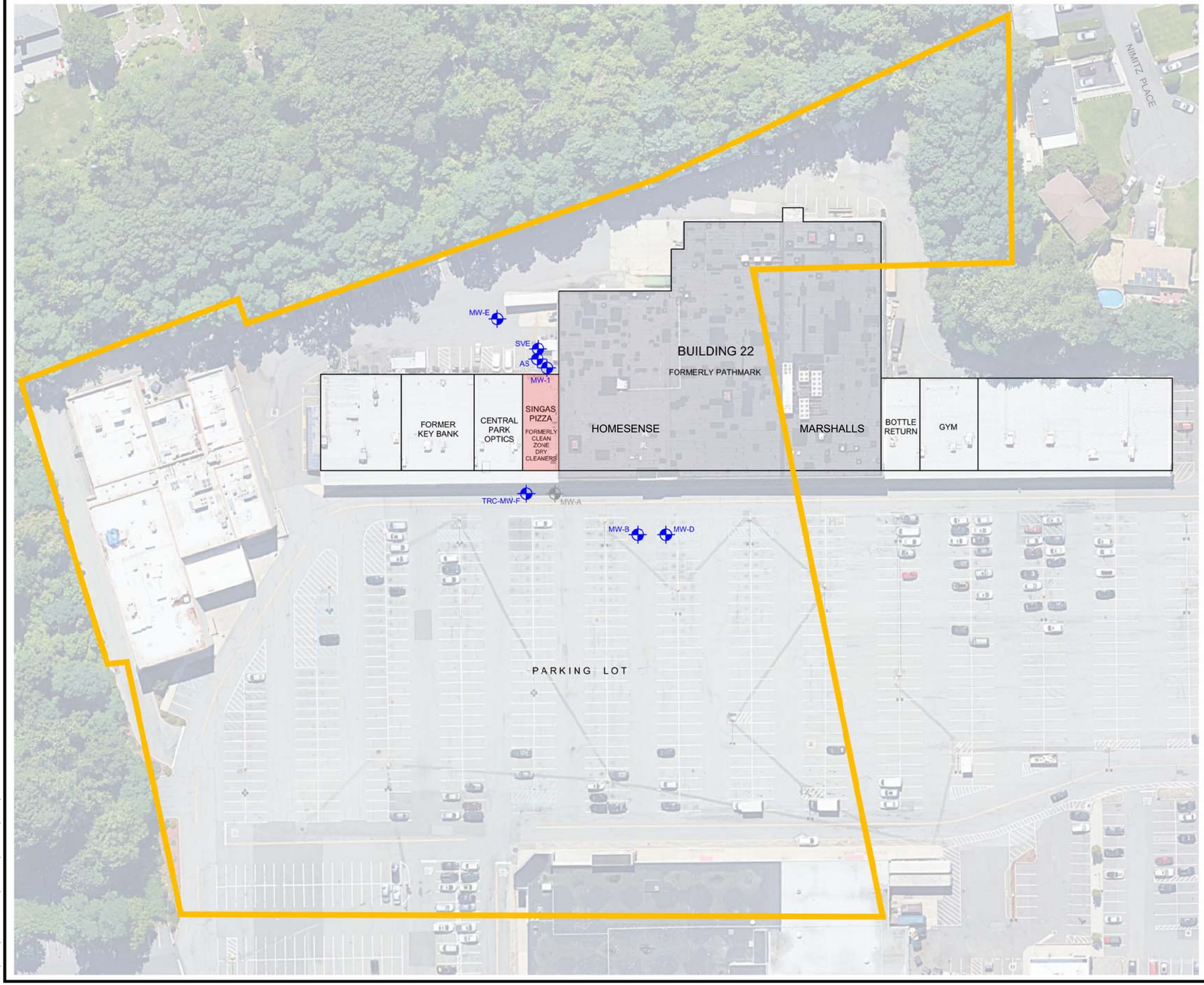
Prepared for:

UE YONKERS II LLC

ROUX

Compiled by: R.H.	Date: 07JUN18	FIGURE
Prepared by: B.H.C.	Scale: AS SHOWN	1
Project Mgr.: R.H.	Project No.: 2546.0007Y002	
File: 2546.0007Y101.02.CDR		

\2546Y\0007Y\101\2546.0007Y101.02.CDR



LEGEND

- MW-1 — MONITORING WELL LOCATION AND DESIGNATION
- MW-A — FORMER MONITORING WELL LOCATION AND DESIGNATION
- FORMER CLEAN ZONE DRY CLEANERS
- SITE BOUNDARY

N

80' 0 80'

Title:

SITE PLAN

FORMER CLEAN ZONE DRY CLEANERS
2500 CENTRAL PARK AVENUE
YONKERS, NEW YORK

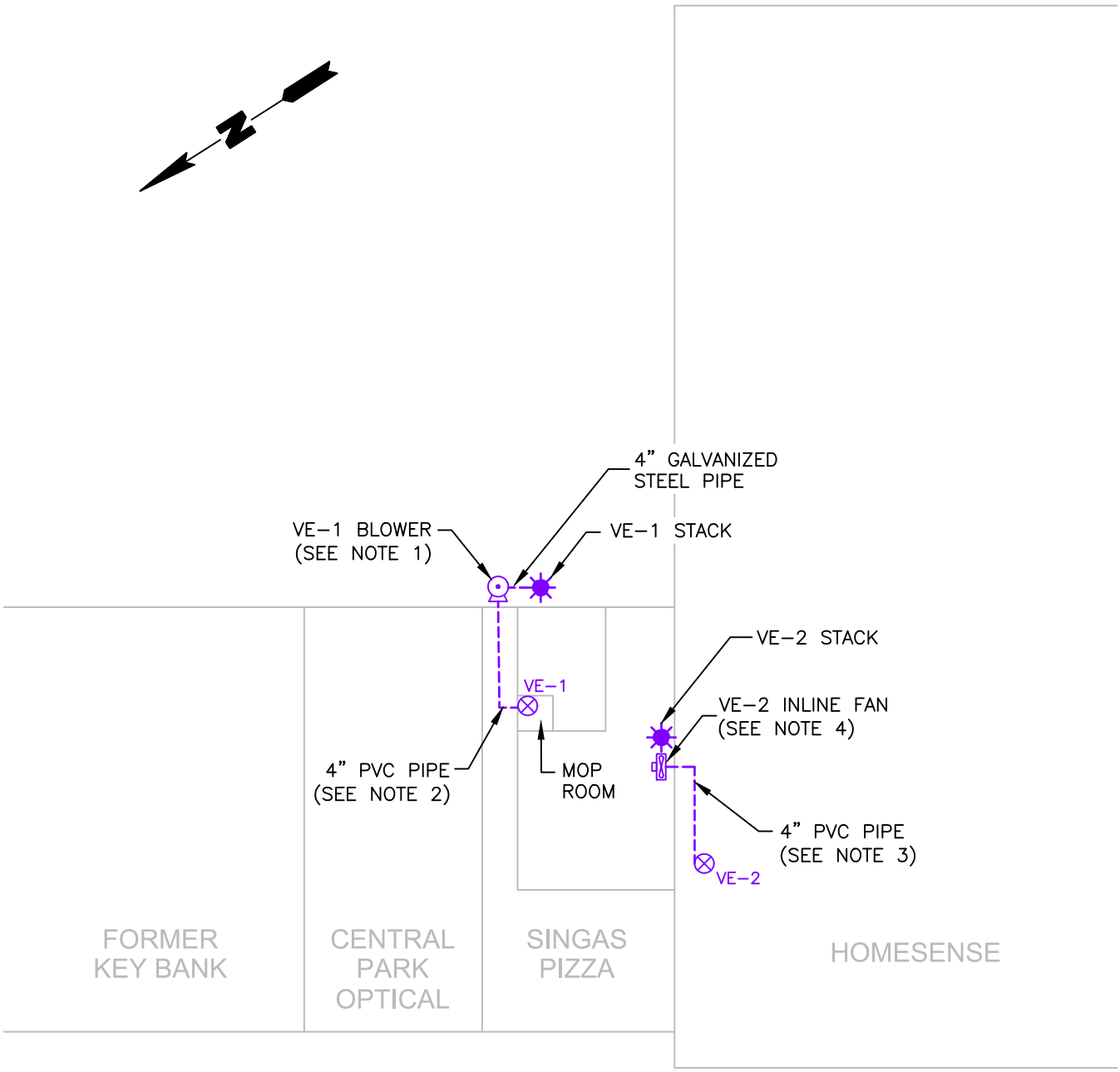
Prepared For:

UE YONKERS II LLC

ROUX

Compiled by: R.H.	Date: 07JUN18	FIGURE 2
Prepared by: B.H.C.	Scale: AS SHOWN	
Project Mgr: R.H.	Project: 2546.0007Y002	
File: 2546.0007Y101.01.DWG		

V:\CAD\PROJECTS\2546Y\0007Y\101\2546.0007Y101.01.DWG



NOTES

1. BLOWER MOUNTED ON STAND ALONG EXTERIOR WALL OF BUILDING.
2. PVC MANIFOLD PIPE LOCATED ABOVE DROP CEILING
3. PIPING LOCATED ALONG NORTH INTERIOR WALL OF BUILDING.
4. INLINE FAN MOUNTED ON NORTH EXTERIOR WALL OF BUILDING AND CAN BE ACCESSED VIA SINGA'S PIZZA ROOF.
5. LAYOUT OF SSDS IS APPROXIMATE AND BASED ON ROUX'S FIELD OBSERVATIONS.

30' 0 30'

Title:

SSDS LAYOUT

FORMER CLEAN ZONE DRY CLEANERS
2500 CENTRAL PARK AVENUE
YONKERS, NEW YORK

Prepared For:

UE YONKERS II LLC

ROUX

Compiled by: R.H.	Date: 03JUN21	FIGURE
Prepared by: N.P.	Scale: AS SHOWN	3
Project Mgr: R.H.	Project: 2546.0007Y002	
File: 2546.0007Y101.01.DWG		

\2546Y\.0007Y\101\2546.0007Y101.01.DWG

APPENDICES

A. NYSDEC Site Management Plan Approval
B. IC/EC Certification Form
C. Site Inspection Checklists and Photo Log
D. Laboratory Analytical Results

APPENDIX A

NYSDEC Site Management Plan Approval

From:	Miller, John Y (DEC)
To:	Rachel Henke
Cc:	Eaton, Daniel J (DEC); Perretta, Anthony C (HEALTH); Schuck, Maureen E (HEALTH); Charlie McGuckin
Subject:	RE: Former Clean Zone Dry Cleaners (360050): Annual GW Sampling Results
Date:	Friday, January 3, 2020 11:12:38 AM
Attachments:	image001.png image002.png image003.png image004.png image005.png image006.jpg

This message originated outside your organization. Please use caution!

Hi Rachel,
The NYSDEC has received the revised Site Management Plan (SMP) for the Clean Zone Dry Cleaners site. The document has been revised in accordance with the comments previously provided by NYSDEC and NYSDOH. As such, the document is approved.
Please implement the required site activities in accordance with the SMP. A periodic review report will be required for submittal in approximately 16 months or around May of 2021.
Regards,
John B. Miller, P.E.
NYSDEC
Division of Environmental Remediation
625 Broadway, 11th floor
Albany, NY 12233-7014
Phone: (518) 402-9589
Fax: (518) 402-9679

From: Rachel Henke <rhenke@rouxinc.com>
Sent: Friday, December 20, 2019 5:20 PM
To: Miller, John Y (DEC) <john.miller@dec.ny.gov>
Cc: Eaton, Daniel J (DEC) <daniel.eaton@dec.ny.gov>; Perretta, Anthony C (HEALTH) <anthony.perretta@health.ny.gov>; Schuck, Maureen E (HEALTH) <maureen.schuck@health.ny.gov>; cmcguckin@rouxinc.com
Subject: RE: Former Clean Zone Dry Cleaners (360050): Annual GW Sampling Results

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Hi John,
Please see attached SMP for the Former Clean Zone Dry Cleaners Site in Yonkers, NY, which has been revised per your comments below.
If you have any questions or comments, don't hesitate to let me know.
Best,
Rachel
Rachel Henke | Project Scientist
209 Shafter Street, Islandia, NY 11749
Main: (631) 232-2600 | Mobile: (919) 619-1503
Email: rhenke@rouxinc.com | Website: www.rouxinc.com

From: Miller, John Y (DEC) <john.miller@dec.ny.gov>

Sent: Wednesday, July 31, 2019 12:07 PM
To: Rachel Henke <rhenke@rouxinc.com>
Cc: Eaton, Daniel J (DEC) <daniel.eaton@dec.ny.gov>; Perretta, Anthony C (HEALTH) <anthony.perretta@health.ny.gov>; Schuck, Maureen E (HEALTH) <maureen.schuck@health.ny.gov>
Subject: RE: Former Clean Zone Dry Cleaners (360050): Annual GW Sampling Results
This message originated outside your organization. Please use caution!

Hi Rachel,
I am following up on the Clean Zone Dry Cleaners Site. The NYSDEC and NYSDOH have reviewed the July 2018 draft Site Management Plan (SMP) for the site. The following minor comments are provided on the document.

1. The NYSDOH contact on page 15 of the document should be changed from Krista Anders to Mr. Anthony Perretta. His phone number is 518-402-7860 and email is anthony.perretta@health.ny.gov
2. The recorded environmental easement (EE) must be included as an attachment to the SMP. Please provide the DEC with proof of recording of the EE with Westchester County.

Please submit to the NYSDEC a clean version of the SMP for final approval. I may be contacted with any questions or comments.
Regards,
John B. Miller, P.E.
NYSDEC
Division of Environmental Remediation
625 Broadway, 11th floor
Albany, NY 12233-7014
Phone: (518) 402-9589
Fax: (518) 402-9679

From: Rachel Henke <rhenke@rouxinc.com>
Sent: Tuesday, March 19, 2019 5:38 PM
To: Miller, John Y (DEC) <john.miller@dec.ny.gov>
Subject: RE: Former Clean Zone Dry Cleaners (360050): Annual GW Sampling Results
ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

John,
I called and left a message yesterday, but I am looking for a status update on the Department's approval of the environmental easement package and the SMP for the Former Clean Zone Dry Cleaners site.
Thank you in advance for your assistance,
Rachel
Rachel Henke | Project Scientist
209 Shafter Street, Islandia, NY 11749
Main: (631) 232-2600 | Mobile: (919) 619-1503
Email: rhenke@rouxinc.com | Website: https://protect2.fireeye.com/url?k=e38b4164-bfb3e7d9-e389b851-000babd9fa3f-eeade8e81e5fb72d&u=http://www.rouxinc.com/

From: Miller, John Y (DEC) <john.miller@dec.ny.gov>
Sent: Thursday, November 15, 2018 1:49 PM

To: Rachel Henke <rhenke@rouxinc.com>
Cc: Tamuno, Alali (DEC) <alali.tamuno@dec.ny.gov>; andrew.perel@troutmansanders.com; Salgado, Anthony <ASalgado@UEdge.com>; Charlie McGuckin <cmcguckin@rouxinc.com>
Subject: RE: Former Clean Zone Dry Cleaners (360050): Annual GW Sampling Results

Hi Rachel,

I have reviewed the groundwater data, including the emerging contaminant results, for the Clean Zone Dry Cleaners Site. As stated, the results are consistent with past groundwater sampling events. In addition, it does not appear that any further action will be required for emerging contaminants at this site. Please proceed with obtaining the "contained-in" determination to dispose of the purge water drum.

Do you know whether the environmental easement package has been submitted yet for the site? It was supposed to be submitted in October but I don't recall seeing anything. Once the easement is completed we can finalize the Site Management Plan for this site.

Regards,

John B. Miller, P.E.
NYSDEC
Division of Environmental Remediation
625 Broadway, 11th floor
Albany, NY 12233-7014
Phone: (518) 402-9589
Fax: (518) 402-9679

From: Rachel Henke [mailto:rhenke@rouxinc.com]
Sent: Monday, November 12, 2018 6:46 PM
To: Miller, John Y (DEC) <john.miller@dec.ny.gov>
Cc: Tamuno, Alali (DEC) <alali.tamuno@dec.ny.gov>; andrew.perel@troutmansanders.com; Salgado, Anthony <ASalgado@UEdge.com>; cmcguckin@rouxinc.com
Subject: Former Clean Zone Dry Cleaners (360050): Annual GW Sampling Results

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Mr. Miller,

We are providing you with the Site Monitoring Plan (SMP) groundwater monitoring data that was collected at the Former Clean Zone Dry Cleaners Site (NYSDEC Site No. 360050 – "Site") on September 20, 2018. These samples were collected as part of the annual groundwater sampling outlined in the draft SMP dated July 2018 for the Site. The groundwater samples have been analyzed for the following volatile organic compounds:

- Tetrachloroethene
- Vinyl chloride
- 1,1-Dichloroethene
- trans-1,2-Dichloroethene
- Trichloroethene
- cis-1,2-Dichloroethene

The laboratory results from this sampling round are consistent with previous sampling results.

One 55-gallon drum of purge water was generated during the sampling of the five on-Site wells. As discussed in the SMP, a portion of the Site once operated as a dry-cleaning facility. With your permission, UE Yonkers II LLC will be requesting a "contained-in" determination from Mr. Henry

Wilke to dispose of non-characteristically hazardous wastewater (purged groundwater) from the Site that may contain either Tetrachloroethene (PCE) or its known breakdown products (e.g., 1,2-Dichloroethene, cis-1,2-Dichloroethene, Trichloroethene, etc.) as non-hazardous waste. Please let me know if this is acceptable.

Data tables summarizing the results of the groundwater samples are attached. A figure showing the various sampling locations is also attached. If you would like me to send a separate link (via Leap File) containing the laboratory data reports for all of the data included herein, please let me know as those files are too large to include in this email. These results will be formally submitted to the NYSDEC as part of the initial Periodic Review Report for the Site.

Please feel free to contact me any time if you have questions or require any additional information.

Regards,

Rachel
Rachel Henke | Project Scientist
209 Shafter Street, Islandia, NY 11749
Main: (631) 232-2600 | Mobile: (919) 619-1503
Email: rhenke@rouxinc.com | Website: https://protect2.fireeye.com/url?k=29ae3c2b-75969a96-29acc51e-000babd9fa3f-162c1f94e29cbcbc&u=http://www.rouxinc.com/

cid:image001.png@01D42F0D.BB9E96C0

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APPENDIX B

IC/EC Certification Form

Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. 360050

Site Name Clean Zone Dry Cleaners

Site Address: 2500 Central Park Avenue Zip Code: 10710
City/Town: Yonkers
County: Westchester
Site Acreage: 27.000

Reporting Period: May 07, 2022 to May 07, 2023

	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?	☑	
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

5/18/2023
Date

SITE NO. 360050 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
4-4877-200	UE Yonkers II LLC	Ground Water Use Restriction
		Soil Management Plan
		Landuse Restriction
		Monitoring Plan
		Site Management Plan
		O&M Plan
		IC/EC Plan

Institutional controls required by the environmental easement include groundwater use restrictions, land use restrictions (commercial/industrial) and the requirement that the site adheres to the approved SMP. Future buildings erected at the site must evaluate the potential for soil vapor intrusion.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
4-4877-200	Vapor Mitigation
	Cover System
	Monitoring Wells

The engineering controls required by the environmental easement include maintenance and annual inspection of the site's cover system. The SSDS will be operated, maintained and inspected. Existing groundwater monitoring wells will be maintained and sampled in accordance with the SMP.

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the 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 compete.

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

5/18/2023
Date

IC CERTIFICATIONS
SITE NO. 360050

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 Anthony Salgado (print name) at 210 Route 4 E. Paramus NJ 07652 (print business address),

am certifying as designated representative (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

5.18.2023
Date

EC CERTIFICATIONS

Box 7

Qualified Environmental Professional 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 Charles McGuckin at 209 Shafter Street, Islandia, NY 11749,
print name print business address

am certifying as a Qualified Environmental Professional for the Owner
(Owner or Remedial Party)



Signature of Qualified Environmental Professional, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

May 15, 2023
Date

APPENDIX C

Site Inspection Checklists and Photo Log



Photograph 1: View of blower behind Singas Pizza.



Photograph 2: View of monitoring wells behind Singas Pizza. .



Photograph 3: View of the system located on the roof of HomeSense.



Photograph 4: View of in-line fan on the side of HomeSense.

Site Inspection Checklist, Former Clean Zone Dry Cleaners, 2500 Central Park Avenue, Yorkers, NY

Date: 03-22-2023

Completed By: ALFREDO FERNANDEZ

Description	Status: Ok	Status: Action Req.	Status: N/A	Actions Taken / Comments
Site Cover System				
1 Inspect site cover system for cracks and leaks.	✓			NO CRACKS OR LEAKS OBSERVED
Sub-Slab Depressurization System Blower				
A. Aboveground Piping on Roof				
1 Inspect aboveground piping for cracks, leaks and support issues.	✓			
2 Inspect vacuum/pressure gauges and flowmeters for proper operation.	✓			
B. Electrical				
1 Check that the electrical control panel is closed/secured.	✓			CONTROL PANEL SECURED
2 Confirm that the alarm light is functioning properly.	✓			
C. Blower Enclosure				
1 Inspect condition of exhaust fan, thermostat and louver.			✓	NO THERMOSTAT INSTALLED
D. Moisture Knock-out Tank				
1 Check condition of vacuum filter.			✓	
2 Check dilution valve for noises or leaks.			✓	
3 Check for presence of water in knockout tank.			✓	
Institutional Controls				
1 Confirm that the site usage is in compliance with the institutional controls.	✓			NO PUBLIC ACCESS TO SSDS SYSTEM
Site Records				
1 Inspect site records and confirm that they are up to date (e.g., Site Inspection Checklists and Sub-Slab Depressurization System and SVE Wells Operations Logs, sampling logs, etc.)	✓			

Site Inspection Checklist, Former Clean Zone Dry Cleaners, 2500 Central Park Avenue, Yorkers, NY

Date: 09-29-2022

Completed By: ALFREDO FERNANDEZ

Description	Status: Ok	Status: Action Req.	Status: N/A	Actions Taken / Comments
Site Cover System				
1 Inspect site cover system for cracks and leaks.	✓			NO CRACKS OR LEAKS OBSERVED
Sub-Slab Depressurization System Blower				
A. Aboveground Piping on Roof				
1 Inspect aboveground piping for cracks, leaks and support issues.	✓			
2 Inspect vacuum/pressure gauges and flowmeters for proper operation.	✓			
B. Electrical				
1 Check that the electrical control panel is closed/secured.	✓			CONTROL PANEL SECURED
2 Confirm that the alarm light is functioning properly.				
C. Blower Enclosure				
1 Inspect condition of exhaust fan, thermostat and louver.			✓	NO THERMOSTAT INSTALLED
D. Moisture Knock-out Tank				
1 Check condition of vacuum filter.			✓	
2 Check dilution valve for noises or leaks.			✓	
3 Check for presence of water in knockout tank.			✓	
Institutional Controls				
1 Confirm that the site usage is in compliance with the institutional controls.	✓			NO PUBLIC ACCESS TO SSDS SYSTEM
Site Records				
1 Inspect site records and confirm that they are up to date (e.g., Site Inspection Checklists and Sub-Slab Depressurization System and SVE Wells Operations Logs, sampling logs, etc.)	✓			

APPENDIX D

Laboratory Analytical Results

www.alphalab.com



Alpha Analytical

Laboratory Code: 11148

SDG Number: L2213657

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

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Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Number: 2546.0007Y002

Lab Number: L2213657
Report Date: 03/22/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2213657-01	VE-1	SOIL_VAPOR	YONKERS, NY	03/16/22 12:09	03/16/22
L2213657-02	VE-2-IA	AIR	YONKERS, NY	03/16/22 12:13	03/16/22
L2213657-03	DUP-031622	AIR	YONKERS, NY	03/16/22 12:14	03/16/22
L2213657-04	VE-2	SOIL_VAPOR	YONKERS, NY	03/16/22 12:28	03/16/22
L2213657-05	VE-1-IA	AIR	YONKERS, NY	03/16/22 13:01	03/16/22

Case Narrative

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

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

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

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

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

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

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on March 15, 2022. The canister certification results are provided as an addendum.

L2213657-04D: Prior to sample analysis, the canisters were pressurized with UHP Nitrogen in order to perform a screen analysis. The pressurization resulted in a dilution of the samples. The reporting limits have been elevated accordingly.

L2213657-05D: The sample was re-analyzed on dilution in order to quantitate the results within the calibration range. The result(s) should be considered estimated, and are qualified with an E flag, for any compound(s) that exceeded the calibration range in the initial analysis. The re-analysis was performed only for the compound(s) that exceeded the calibration range.

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

Authorized Signature: Christopher J Anderson Report Date: 03/22/22

Title: Technical Director/Representative

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report

Footnotes

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

Terms

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

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

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

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

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

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

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

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

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

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Report Format: Data Usability Report

Data Qualifiers

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

ND - Not detected at the reporting limit (RL) for the sample.

Volatile Organics Instruments

Volatile Organics:

Instrument: Agilent 7890 GC/5975C MSD	Columns (length x ID x df):
Trap: Supelco K Trap (VOACARB 3000)	RTX-VMS 20m x 0.18mm x 1um
Concentrator: EST Encon (or equivalent)	RTX-VMS 30m x 0.25mm x 1.4um
Autosampler: EST Centurion (or equivalent)	RTX-502.2 40m x 0.18mm x 1um
Purge time: 11 min	

Volatile Organics: VPH

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

Volatile Organics: PIANO

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

Volatile Organics: Dissolved Gas

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

	Column Type: Haysep S Column
	Column Length: 2 Meters packed (100/200 mesh)
Autosampler: LEAP Headspace	Purge time: 0.6 min

Volatile Organics in Air Instruments

Volatile Organics in Air:

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

Concentrator: Entech 7100A or 7200	Column Type: Restek RTX-1
Autosampler: Entech 7016CA or 7016D	Column Length: 60 Meters
	df: 1.00 um
	ID: 0.25 mm or 0.32 mm

Trap 1: Glass Bead: manufacturer-Entech: 20 cm packing material
Trap 2: Tenax: manufacturer-Entech: 20 cm packing material

Semivolatile Organics Instruments - Westborough

Semivolatile Organics (Acid/Base/Neutral Extractables):

Instrument: Agilent 5973N MSD	Injection volume: 1 ul;2 uL LVI
Column Type: Restek RXI-5SILMS	df: 0.32 um
Column Length: 30 Meters	ID: 0.25 mm

Polynuclear Aromatic Hydrocarbons by 8270 SIM:

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

Pesticides/PCB/Herbicides:

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

Petroleum/EPH:

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

Semivolatile Organic Instruments - Mansfield

Semivolatile Organics (ALK-PAH Extractables):

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

Semivolatile Organics (8270):

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

Semivolatile Organics (8270 SIM):

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

Semivolatile Organics (1,4-Dioxane):

Instrument: Agilent 5973N / 5975 / 5977 MSD	Injection volume: 3 ul
Column Type: RTX-5	df: 0.25um, 0.18 um
Column Length: 30 Meters	ID: 0.25um, 0.18 mm

Semivolatile Organics (209 Congener):

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

Semivolatile Organics (8081):

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

Semivolatile Organics (8082):

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

Semivolatile Organics (SHC Extractables):

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

Sample Delivery Group Summary

Alpha Job Number : L2213657

Received : 16-MAR-2022
Reviewer : Jennifer Jerome

Account Name : Roux Env. Eng. & Geology, DPC
Project Number : 2546.0007Y002
Project Name : FORMER CLEAN ZONE DRY CLEANERS

Delivery Information

Samples Delivered By : Alpha Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
NA	Absent/			

Condition Information

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

Volatile Organics/VPH

1) Reagent Water Vials Frozen by Client?	**NA**

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Mar 22 2022, 05:21 pm

Login Number: L2213657
Account: ROUX-NY Roux Env. Eng. & Geology, DPCProject: 2546.0007Y002
Received: 16MAR22 Due Date: 23MAR22

Sample #	Client ID	Mat	PR	Collected
L2213657-01	VE-1	11	2E	16MAR22 12:09
TO15 SIM for 7 NYS DMCs ASP-B Package Due Date: 03/23/22				
ASP-B,CAN-RENT,FLOW-RENT,TO15-LL				
L2213657-02	VE-2-IA	10	2E	16MAR22 12:13
TO15 SIM for 7 NYS DMCs Package Due Date: 03/23/22				
CAN-RENT,FLOW-RENT,TO15-LL,TO15-SIM				
L2213657-03	DUP-031622	10	2E	16MAR22 12:14
TO15 SIM for 7 NYS DMCs Package Due Date: 03/23/22				
CAN-RENT,FLOW-RENT,TO15-LL,TO15-SIM				
L2213657-04	VE-2	11	2E	16MAR22 12:28
TO15 SIM for 7 NYS DMCs Package Due Date: 03/23/22				
CAN-RENT,FLOW-RENT,TO15-LL				
L2213657-05	VE-1-IA	10	2E	16MAR22 13:01
TO15 SIM for 7 NYS DMCs Package Due Date: 03/23/22				
CAN-RENT,FLOW-RENT,TO15-LL,TO15-SIM				

Logged By: Dylan Snook

AIR ANALYSIS

ALPHA ANALYTICAL — CHAIN OF CUSTODY

PAGE 1 OF 1

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 3/17/22

ALPHA Job #: L2213657

Client Information

Client: ROUX
Address: 209 SHAFTER ST.
ISLANDIA, NY 11749
Phone: 631-2322600
Fax: 631-2329898
Email: RHENKE@ROUXINC.COM

☑ These samples have been previously analyzed by Alpha

Project Information

Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Location: YONKERS, NY
Project #: 2546.00071002
Project Manager: RACHEL HENKE
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: Time:

Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☒ EMAIL (standard pdf report)
☑ Additional Deliverables: CAT B DELIVERABLES
Report to: (if different than Project Manager)

Billing Information

☑ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	ANALYSIS TO-15	TO-15 SIM	APH (Subtract Non-petroleum HCs ☐)	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
13657-01	VE-1	3/16/22	1009	1209	30.11	5.89	SV	AF	2.7L	2232	1546	X					
02	VE-2-IA	3/16/22	1013	1213	30.78	6.01	AA	AF	2.7L	3233	785	X					
03	DUP-031622	3/16/22	1014	1214	29.75	5.47	AA	AF	2.7L	2357	2100	X					
04	VE-2	3/16/22	1028	1228	30.27	6.13	SV	AF	2.7L	3221	543	X					
05	VE-1-IA	3/16/22	1101	1301	29.62	5.09	AA	AF	2.7L	3405	2097	X					

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type: S

Relinquished By:	Date/Time	Received By:	Date/Time:
ROUX	3/16/22 1353	B Lopez	3/16/22 1353
B Lopez	3/16/22 1353		3/16/22 2130
	3/17/22		3/17/22 0130

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Form No: 101-02 Rev: (25-Sep-15)

Supporting Documentation

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2213657-01	VE-1	01546	Flow 3	03/15/22	379826		-	-	-	Pass	18.0	18.7	4
L2213657-01	VE-1	2232	2.7L Can	03/15/22	379826	L2212162-04	Pass	-29.3	-5.1	-	-	-	-
L2213657-02	VE-2-IA	0785	Flow 3	03/15/22	379826		-	-	-	Pass	18.0	17.7	2
L2213657-02	VE-2-IA	3233	2.7L Can	03/15/22	379826	L2212162-04	Pass	-29.3	-6.1	-	-	-	-
L2213657-03	DUP-031622	02100	Flow 3	03/15/22	379826		-	-	-	Pass	18.0	18.1	1
L2213657-03	DUP-031622	2357	2.7L Can	03/15/22	379826	L2212162-04	Pass	-29.1	-5.1	-	-	-	-
L2213657-04	VE-2	0543	Flow 3	03/15/22	379826		-	-	-	Pass	18.0	12.0	40
L2213657-04	VE-2	3221	2.7L Can	03/15/22	379826	L2212162-04	Pass	-29.4	-13.5	-	-	-	-
L2213657-05	VE-1-IA	02097	Flow 3	03/15/22	379826		-	-	-	Pass	18.0	16.8	7
L2213657-05	VE-1-IA	3405	2.7L Can	03/15/22	379826	L2212162-04	Pass	-29.3	-7.2	-	-	-	-

Air Canister Certification Results

Lab ID: L2212162-04
Client ID: CAN 727 SHELF 7
Sample Location:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/10/22 03:40
Analyst: RY

Date Collected: 03/08/22 18:00
Date Received: 03/09/22
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	5.30	5.00	--	6.95	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1

Air Canister Certification Results

Lab ID: L2212162-04
Client ID: CAN 727 SHELF 7
Sample Location:

Date Collected: 03/08/22 18:00
Date Received: 03/09/22
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air								
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1

Air Canister Certification Results

Lab ID: L2212162-04
Client ID: CAN 727 SHELF 7
Sample Location:

Date Collected: 03/08/22 18:00
Date Received: 03/09/22
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air								
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1

Air Canister Certification Results

Lab ID: L2212162-04
Client ID: CAN 727 SHELF 7
Sample Location:

Date Collected: 03/08/22 18:00
Date Received: 03/09/22
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air								
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					
No Tentatively Identified Compounds					

Air Canister Certification Results

Lab ID: L2212162-04 Date Collected: 03/08/22 18:00
Client ID: CAN 727 SHELF 7 Date Received: 03/09/22
Sample Location: Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air								

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	95		60-140

Air Canister Certification Results

Lab ID: L2212162-04
Client ID: CAN 727 SHELF 7
Sample Location:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/10/22 03:40
Analyst: RY

Date Collected: 03/08/22 18:00
Date Received: 03/09/22
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1

Air Canister Certification Results

Lab ID: L2212162-04 Date Collected: 03/08/22 18:00
Client ID: CAN 727 SHELF 7 Date Received: 03/09/22
Sample Location: Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1

Air Canister Certification Results

Lab ID: L2212162-04 Date Collected: 03/08/22 18:00
Client ID: CAN 727 SHELF 7 Date Received: 03/09/22
Sample Location: Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM								
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	95		60-140
bromochloromethane	99		60-140
chlorobenzene-d5	95		60-140

Organics

Volatile Organics in Air
TO-15 Low Level

Volatiles QC Summary

Lab Duplicate Sample Summary
Form 3
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Client Sample ID	: DUP-031622	**Matrix**	: AIR
Lab Sample ID	: L2213657-03	**Analysis Date**	: 03/20/22 21:45
Lab File ID	: R1531789	**DUP File ID**	: r1531790
Dup Sample ID	: WG1617728-5	**DUP Analysis Date**	: 03/20/22 22:25

Parameter	Sample Concentration (ppbV)	Duplicate Concentration (ppbV)	RPD	RPD Limit
Dichlorodifluoromethane	0.495	0.495	0	25
Chloromethane	0.591	0.564	5	25
Freon-114	ND	ND	NC	25
1,3-Butadiene	ND	ND	NC	25
Bromomethane	ND	ND	NC	25
Chloroethane	ND	ND	NC	25
Ethanol	ND	307	0	25
Vinyl bromide	ND	ND	NC	25
Acetone	10.8	9.91	9	25
Trichlorofluoromethane	0.313	0.316	1	25
Isopropanol	12.5	12.5	0	25
Tertiary butyl Alcohol	ND	ND	NC	25
Methylene chloride	ND	0.570	NC	25
3-Chloropropene	ND	ND	NC	25
Carbon disulfide	ND	ND	NC	25
Freon-113	ND	ND	NC	25
trans-1,2-Dichloroethene	ND	ND	NC	25
1,1-Dichloroethane	ND	ND	NC	25
Methyl tert butyl ether	ND	ND	NC	25
2-Butanone	1.69	1.73	2	25
Ethyl Acetate	1.41	1.45	3	25
Chloroform	ND	ND	NC	25
Tetrahydrofuran	ND	ND	NC	25
1,2-Dichloroethane	0.253	0.259	2	25
n-Hexane	ND	ND	NC	25

Lab Duplicate Sample Summary
Form 3
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Client Sample ID	: DUP-031622	**Matrix**	: AIR
Lab Sample ID	: L2213657-03	**Analysis Date**	: 03/20/22 21:45
Lab File ID	: R1531789	**DUP File ID**	: r1531790
Dup Sample ID	: WG1617728-5	**DUP Analysis Date**	: 03/20/22 22:25

Parameter	Sample Concentration (ppbV)	Duplicate Concentration (ppbV)	RPD	RPD Limit
Benzene	ND	ND	NC	25
Cyclohexane	0.210	0.207	1	25
1,2-Dichloropropane	ND	ND	NC	25
Bromodichloromethane	ND	ND	NC	25
1,4-Dioxane	ND	ND	NC	25
2,2,4-Trimethylpentane	ND	ND	NC	25
Heptane	ND	ND	NC	25
cis-1,3-Dichloropropene	ND	ND	NC	25
4-Methyl-2-pentanone	ND	ND	NC	25
trans-1,3-Dichloropropene	ND	ND	NC	25
1,1,2-Trichloroethane	ND	ND	NC	25
Toluene	5.44	5.44	0	25
2-Hexanone	ND	ND	NC	25
Dibromochloromethane	ND	ND	NC	25
1,2-Dibromoethane	ND	ND	NC	25
Chlorobenzene	ND	ND	NC	25
Ethylbenzene	0.543	0.558	3	25
p/m-Xylene	1.40	1.43	2	25
Bromoform	ND	ND	NC	25
Styrene	1.99	2.04	2	25
1,1,2,2-Tetrachloroethane	ND	ND	NC	25
o-Xylene	0.835	0.839	0	25
4-Ethyltoluene	ND	ND	NC	25
1,3,5-Trimethylbenzene	ND	ND	NC	25
1,2,4-Trimethylbenzene	0.741	0.766	3	25

Lab Duplicate Sample Summary
Form 3
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Client Sample ID	: DUP-031622	**Matrix**	: AIR
Lab Sample ID	: L2213657-03	**Analysis Date**	: 03/20/22 21:45
Lab File ID	: R1531789	**DUP File ID**	: r1531790
Dup Sample ID	: WG1617728-5	**DUP Analysis Date**	: 03/20/22 22:25

Parameter	Sample Concentration (ppbV)	Duplicate Concentration (ppbV)	RPD	RPD Limit
Benzyl chloride	ND	ND	NC	25
1,3-Dichlorobenzene	ND	ND	NC	25
1,4-Dichlorobenzene	ND	ND	NC	25
1,2-Dichlorobenzene	ND	ND	NC	25
1,2,4-Trichlorobenzene	ND	ND	NC	25
Hexachlorobutadiene	ND	ND	NC	25

Laboratory Control Sample Summary
Form 3
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Matrix	: AIR		
LCS Sample ID	: WG1617728-3 **Analysis Date** : 03/20/22 13:18	**File ID**	: r1531778
LCSD Sample ID	: **Analysis Date** :	**File ID**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ppbV)	Found (ppbV)	%R	True (ppbV)	Found (ppbV)	%R	RPD	Recovery Limits	RPD Limit
Propylene	10	8.69	87				-	70-130	-
Dichlorodifluoromethane	10	7.84	78				-	70-130	-
Chloromethane	10	8.08	81				-	70-130	-
Freon-114	10	8.12	81				-	70-130	-
Vinyl chloride	10	8.15	82				-	70-130	-
1,3-Butadiene	10	9.12	91				-	70-130	-
Bromomethane	10	7.74	77				-	70-130	-
Chloroethane	10	8.45	84				-	70-130	-
Ethanol	50	58.6	117				-	40-160	-
Vinyl bromide	10	9.27	93				-	70-130	-
Acetone	50	52.1	104				-	40-160	-
Trichlorofluoromethane	10	8.34	83				-	70-130	-
Isopropanol	25	24.8	99				-	40-160	-
1,1-Dichloroethene	10	8.63	86				-	70-130	-
Tertiary butyl Alcohol	10	8.94	89				-	70-130	-
Methylene chloride	10	9.66	97				-	70-130	-
3-Chloropropene	10	10.9	109				-	70-130	-
Carbon disulfide	10	11.6	116				-	70-130	-
Freon-113	10	9.64	96				-	70-130	-
trans-1,2-Dichloroethene	10	8.78	88				-	70-130	-
1,1-Dichloroethane	10	8.60	86				-	70-130	-
Methyl tert butyl ether	10	8.52	85				-	70-130	-
Vinyl acetate	10	8.85	88				-	70-130	-
2-Butanone	10	9.20	92				-	70-130	-
cis-1,2-Dichloroethene	10	8.29	83				-	70-130	-
Ethyl Acetate	10	10.0	100				-	70-130	-

Laboratory Control Sample Summary
Form 3
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Matrix	: AIR		
LCS Sample ID	: WG1617728-3 **Analysis Date** : 03/20/22 13:18	**File ID**	: r1531778
LCSD Sample ID	: **Analysis Date** :	**File ID**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ppbV)	Found (ppbV)	%R	True (ppbV)	Found (ppbV)	%R	RPD	Recovery Limits	RPD Limit
Chloroform	10	8.37	84				-	70-130	-
Tetrahydrofuran	10	8.75	88				-	70-130	-
1,2-Dichloroethane	10	8.26	83				-	70-130	-
n-Hexane	10	9.94	99				-	70-130	-
1,1,1-Trichloroethane	10	9.10	91				-	70-130	-
Benzene	10	8.14	81				-	70-130	-
Carbon tetrachloride	10	8.96	90				-	70-130	-
Cyclohexane	10	9.69	97				-	70-130	-
1,2-Dichloropropane	10	8.96	90				-	70-130	-
Bromodichloromethane	10	10.1	101				-	70-130	-
1,4-Dioxane	10	9.72	97				-	70-130	-
Trichloroethene	10	8.81	88				-	70-130	-
2,2,4-Trimethylpentane	10	10.2	102				-	70-130	-
Heptane	10	9.96	100				-	70-130	-
cis-1,3-Dichloropropene	10	8.98	90				-	70-130	-
4-Methyl-2-pentanone	10	10.0	100				-	70-130	-
trans-1,3-Dichloropropene	10	7.77	78				-	70-130	-
1,1,2-Trichloroethane	10	9.15	92				-	70-130	-
Toluene	10	8.16	82				-	70-130	-
2-Hexanone	10	9.69	97				-	70-130	-
Dibromochloromethane	10	10.8	108				-	70-130	-
1,2-Dibromoethane	10	8.88	89				-	70-130	-
Tetrachloroethene	10	8.50	85				-	70-130	-
Chlorobenzene	10	8.60	86				-	70-130	-
Ethylbenzene	10	8.72	87				-	70-130	-
p/m-Xylene	20	17.6	88				-	70-130	-

Laboratory Control Sample Summary
Form 3
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Matrix	: AIR		
LCS Sample ID	: WG1617728-3 **Analysis Date** : 03/20/22 13:18	**File ID**	: r1531778
LCSD Sample ID	: **Analysis Date** :	**File ID**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	**True (ppbV)**	**Found (ppbV)**	**%R**	**True (ppbV)**	**Found (ppbV)**	**%R**	**RPD**	**Recovery Limits**	**RPD Limit**
Bromoform	10	11.0	110				-	70-130	-
Styrene	10	8.67	87				-	70-130	-
1,1,2,2-Tetrachloroethane	10	9.01	90				-	70-130	-
o-Xylene	10	9.13	91				-	70-130	-
4-Ethyltoluene	10	9.62	96				-	70-130	-
1,3,5-Trimethylbenzene	10	8.94	89				-	70-130	-
1,2,4-Trimethylbenzene	10	9.48	95				-	70-130	-
Benzyl chloride	10	11.2	112				-	70-130	-
1,3-Dichlorobenzene	10	8.96	90				-	70-130	-
1,4-Dichlorobenzene	10	9.10	91				-	70-130	-
1,2-Dichlorobenzene	10	8.94	89				-	70-130	-
1,2,4-Trichlorobenzene	10	8.69	87				-	70-130	-
Hexachlorobutadiene	10	8.55	86				-	70-130	-

Method Blank Summary
Form 4
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Lab Sample ID	: WG1617728-4	**Lab File ID**	: r1531780
Instrument ID	: AIRLAB15		
Matrix	: AIR	**Analysis Date**	: 03/20/22 15:20

Client Sample No.	Lab Sample ID	Analysis Date
WG1617728-3LCS	WG1617728-3	03/20/22 13:18
VE-2-IA	L2213657-02	03/20/22 21:06
DUP-031622	L2213657-03	03/20/22 21:45
DUP-031622DUP	WG1617728-5	03/20/22 22:25
VE-1-IA	L2213657-05	03/20/22 23:04
VE-1	L2213657-01	03/20/22 23:43
VE-2	L2213657-04D	03/21/22 00:22
VE-1-IA	L2213657-05D	03/21/22 09:06

Instrument Performance Check (Tune) Summary
Form 5
Air Volatiles
Bromofluorobenzene (BFB)

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Instrument ID	: AIRLAB15	**Analysis Date**	: 12/22/21 03:37
Tune Standard	: WG1587794-1	**Tune File ID**	: r1529887_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	8.0 - 40.0% of mass 95	17.4
75	30.0 - 66.0% of mass 95	39.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.5 (.7)1
174	50.0 - 120.0% of mass 95	64.3
175	4.0 - 9.0% of mass 174	4.6 (7.2)1
176	93.0 - 101% of mass 174	62.5 (97.2)1
177	5.0 - 9.0% of mass 176	4.1 (6.6)2

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

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

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STD0.2	R1517040-1	R1529891	12/22/21 06:12
STD0.5	R1517040-2	R1529892	12/22/21 06:51
STD1.0	R1517040-4	R1529893	12/22/21 07:32
STD5.0	R1517040-3	R1529894	12/22/21 08:11
STD010	R1517040-5	R1529895	12/22/21 08:52
STD020	R1517040-6	R1529896	12/22/21 09:29
STD050	R1517040-7	R1529897	12/22/21 10:08
STD100	R1517040-8	R1529898	12/22/21 10:49
ICV QUANT	R1517040-9	R1529901	12/22/21 14:28

Instrument Performance Check (Tune) Summary
Form 5
Air Volatiles
Bromofluorobenzene (BFB)

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Instrument ID	: AIRLAB15	**Analysis Date**	: 03/20/22 11:40
Tune Standard	: WG1617728-1	**Tune File ID**	: r1531776_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	8.0 - 40.0% of mass 95	17.6
75	30.0 - 66.0% of mass 95	38.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.4 (.7)1
174	50.0 - 120.0% of mass 95	57.7
175	4.0 - 9.0% of mass 174	3.9 (6.8)1
176	93.0 - 101% of mass 174	55 (95.3)1
177	5.0 - 9.0% of mass 176	3.4 (6.3)2

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

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

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1617728-2CCAL	WG1617728-2	R1531778	03/20/22 13:18
WG1617728-3LCS	WG1617728-3	R1531778	03/20/22 13:18
WG1617728-4BLANK	WG1617728-4	R1531780	03/20/22 15:20
VE-2-IA	L2213657-02	R1531788	03/20/22 21:06
DUP-031622	L2213657-03	R1531789	03/20/22 21:45
WG1617728-5DUP	WG1617728-5	R1531790	03/20/22 22:25
VE-1-IA	L2213657-05	R1531791	03/20/22 23:04
VE-1	L2213657-01	R1531792	03/20/22 23:43
VE-2	L2213657-04D	R1531793	03/21/22 00:22
VE-1-IA	L2213657-05D	R1531799	03/21/22 09:06

Internal Standard Area and RT Summary
Form 8a
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Instrument ID	: AIRLAB15	**Analysis Date**	: 03/20/22 13:18:00
Sample No	: WG1617728-2	**Lab File ID**	: R1531778

	Bromochloromethane		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	RT	Area	RT	Area	RT
WG1617728-2	382239	9.58	859136	11.86	200634	16.57
Upper Limit	535135	9.91	1202790	12.19	280888	16.90
Lower Limit	229343	9.25	515482	11.53	120380	16.24
Sample ID						
WG1617728-3 LCS	382239	9.58	859136	11.86	200634	16.57
WG1617728-4 BLANK	380489	9.59	820809	11.86	191501	16.58
VE-2-IA	382360	9.58	837180	11.86	198398	16.57
DUP-031622	385217	9.58	838965	11.86	202451	16.57
DUP-031622 DUP	380390	9.58	844066	11.86	199949	16.57
VE-1-IA	384366	9.58	836960	11.86	200139	16.57
VE-1	396045	9.58	858084	11.86	209413	16.57
VE-2	391407	9.58	853920	11.86	207988	16.57
VE-1-IA	366355	9.57	769840	11.84	184461	16.53

Area Upper Limit = +40% of internal standard area

Area Lower Limit = - 40% of internal standard area

RT Upper Limit = +0.33 minutes of internal standard RT

RT Lower Limit = -0.33 minutes of internal standard RT

* Values outside of QC limits

Date Created: 02/18/22
Created By: Jason Hebert
File: PM11916-1
Page: 1

Volatile Organics in Air: TO-15 (AIR)

Holding Time: 30 days
Container/Sample Preservation: 1 - Canister - 2.7 Liter

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
1,1,1-Trichloroethane	71-55-6	0.2	0.0501	ppbV	70-130			25	25			
1,1,2,2-Tetrachloroethane	79-34-5	0.2	0.0614	ppbV	70-130			25	25			
1,1,2-Trichloroethane	79-00-5	0.2	0.067	ppbV	70-130			25	25			
1,1-Dichloroethane	75-34-3	0.2	0.0628	ppbV	70-130			25	25			
1,1-Dichloroethene	75-35-4	0.2	0.0643	ppbV	70-130			25	25			
1,2,3-Trimethylbenzene	526-73-8	0.2	0.0576	ppbV	70-130			25	25			
1,2,4-Trichlorobenzene	120-82-1	0.2	0.0674	ppbV	70-130			25	25			
1,2,4-Trimethylbenzene	95-63-6	0.2	0.0368	ppbV	70-130			25	25			
1,2,4,5-Tetramethylbenzene	95-93-2	0.2	0.0604	ppbV	70-130			25	25			
1,2-Dibromoethane	106-93-4	0.2	0.0561	ppbV	70-130			25	25			
1,2-Dichlorobenzene	95-50-1	0.2	0.0628	ppbV	70-130			25	25			
1,2-Dichloroethane	107-06-2	0.2	0.0602	ppbV	70-130			25	25			
1,2-Dichloropropane	78-87-5	0.2	0.061	ppbV	70-130			25	25			
1,3,5-Trimethylbenzene	108-67-8	0.2	0.0675	ppbV	70-130			25	25			
1,3-Butadiene	106-99-0	0.2	0.067	ppbV	70-130			25	25			
1,3-Dichlorobenzene	541-73-1	0.2	0.0627	ppbV	70-130			25	25			
1,4-Dichlorobenzene	106-46-7	0.2	0.0636	ppbV	70-130			25	25			
1,4-Dioxane	123-91-1	0.2	0.0805	ppbV	70-130			25	25			
2,2,4-Trimethylpentane	540-84-1	0.2	0.0361	ppbV	70-130			25	25			
2-Butanone	78-93-3	0.5	0.0482	ppbV	70-130			25	25			
2-Hexanone	591-78-6	0.2	0.0648	ppbV	70-130			25	25			
2-Methylthiophene	554-14-3	0.2	0.0524	ppbV	70-130			25	25			
3-Methylthiophene	616-44-4	0.2	0.0393	ppbV	70-130			25	25			
3-Chloropropene	107-05-1	0.2	0.0585	ppbV	70-130			25	25			
2-Ethylthiophene	872-55-9	0.2	0.0407	ppbV	70-130			25	25			
4-Ethyltoluene	622-96-8	0.2	0.037	ppbV	70-130			25	25			
Acetone	67-64-1	1	0.689	ppbV	40-160			25	25			
Benzene	71-43-2	0.2	0.0487	ppbV	70-130			25	25			
Benzyl chloride	100-44-7	0.2	0.0482	ppbV	70-130			25	25			
Benzothiophene	95-15-8	0.5	0.077	ppbV	70-130			25	25			
Bromodichloromethane	75-27-4	0.2	0.0504	ppbV	70-130			25	25			
Bromoform	75-25-2	0.2	0.0641	ppbV	70-130			25	25			
Bromomethane	74-83-9	0.2	0.0773	ppbV	70-130			25	25			
Carbon disulfide	75-15-0	0.2	0.0559	ppbV	70-130			25	25			
Carbon tetrachloride	56-23-5	0.2	0.0499	ppbV	70-130			25	25			
Chlorobenzene	108-90-7	0.2	0.0624	ppbV	70-130			25	25			
Chloroethane	75-00-3	0.2	0.0805	ppbV	70-130			25	25			
Chloroform	67-66-3	0.2	0.0633	ppbV	70-130			25	25			
Chloromethane	74-87-3	0.2	0.0689	ppbV	70-130			25	25			
cis-1,2-Dichloroethene	156-59-2	0.2	0.117	ppbV	70-130			25	25			
cis-1,3-Dichloropropene	10061-01-5	0.2	0.0409	ppbV	70-130			25	25			
Cyclohexane	110-82-7	0.2	0.0368	ppbV	70-130			25	25			

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Volatile Organics in Air: TO-15 (AIR)

Holding Time: 30 days
Container/Sample Preservation: 1 - Canister - 2.7 Liter

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Dibromochloromethane	124-48-1	0.2	0.0614	ppbV	70-130			25	25			
Dichlorodifluoromethane	75-71-8	0.2	0.0583	ppbV	70-130			25	25			
Ethyl Alcohol	64-17-5	5	0.733	ppbV	40-160			25	25			
Ethyl Acetate	141-78-6	0.5	0.122	ppbV	70-130			25	25			
Ethylbenzene	100-41-4	0.2	0.0432	ppbV	70-130			25	25			
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	0.2	0.0656	ppbV	70-130			25	25			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	0.2	0.0591	ppbV	70-130			25	25			
Hexachlorobutadiene	87-68-3	0.2	0.0529	ppbV	70-130			25	25			
iso-Propyl Alcohol	67-63-0	0.5	0.478	ppbV	40-160			25	25			
Methylene chloride	75-09-2	0.5	0.134	ppbV	70-130			25	25			
4-Methyl-2-pentanone	108-10-1	0.5	0.0421	ppbV	70-130			25	25			
Methyl tert butyl ether	1634-04-4	0.2	0.0525	ppbV	70-130			25	25			
Methyl Methacrylate	80-62-6	0.5	0.0697	ppbV	40-160			25	25			
p/m-Xylene	179601-23-1	0.4	0.091	ppbV	70-130			25	25			
o-Xylene	95-47-6	0.2	0.0453	ppbV	70-130			25	25			
Xylene (Total)	1330-20-7	0.2	0.0453	ppbV				25	25			
Heptane	142-82-5	0.2	0.047	ppbV	70-130			25	25			
n-Heptane	142-82-5	0.2	0.047	ppbV	70-130			25	25			
n-Hexane	110-54-3	0.2	0.0364	ppbV	70-130			25	25			
Propylene	115-07-1	0.5	0.0599	ppbV	70-130			25	25			
Styrene	100-42-5	0.2	0.0434	ppbV	70-130			25	25			
Tetrachloroethene	127-18-4	0.2	0.0655	ppbV	70-130			25	25			
Thiophene	110-02-1	0.2	0.0389	ppbV	70-130			25	25			
Tetrahydrofuran	109-99-9	0.5	0.0568	ppbV	70-130			25	25			
Toluene	108-88-3	0.2	0.052	ppbV	70-130			25	25			
trans-1,2-Dichloroethene	156-60-5	0.2	0.0643	ppbV	70-130			25	25			
1,2-Dichloroethene (total)	540-59-0	0.2	0.0643	ppbV				25	25			
trans-1,3-Dichloropropene	10061-02-6	0.2	0.0436	ppbV	70-130			25	25			
1,3-Dichloropropene, Total	542-75-6	0.2	0.0409	ppbV				25	25			
Trichloroethene	79-01-6	0.2	0.0505	ppbV	70-130			25	25			
Trichlorofluoromethane	75-69-4	0.2	0.0686	ppbV	70-130			25	25			
Vinyl acetate	108-05-4	1	0.0479	ppbV	70-130			25	25			
Vinyl bromide	593-60-2	0.2	0.0717	ppbV	70-130			25	25			
Vinyl chloride	75-01-4	0.2	0.0627	ppbV	70-130			25	25			
Naphthalene	91-20-3	0.2	0.0885	ppbV	70-130			25	25			
Total HC As Hexane	NONE	10	0.0364	ppbV	70-130			25	25			
Total VOCs As Toluene	NONE	10	0.052	ppbV	70-130			25	25			
Propane	74-98-6	0.5	0.132	ppbV	70-130			25	25			
Acrylonitrile	107-13-1	0.5	0.0555	ppbV	70-130			25	25			
Acrolein	107-02-8	0.5	0.0596	ppbV	60-113			25	25			
1,1,1,2-Tetrachloroethane	630-20-6	0.2	0.0561	ppbV	70-130			25	25			
Isopropylbenzene	98-82-8	0.2	0.0491	ppbV	70-130			25	25			

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Volatile Organics in Air: TO-15 (AIR)

Holding Time: 30 days
Container/Sample Preservation: 1 - Canister - 2.7 Liter

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
1,2,3-Trichloropropane	96-18-4	0.2	0.061	ppbV	70-130			25	25			
Acetonitrile	75-05-8	0.2	0.082	ppbV	70-130			25	25			
Bromobenzene	108-86-1	0.2	0.0613	ppbV	70-130			25	25			
Chlorodifluoromethane	75-45-6	0.2	0.0584	ppbV	70-130			25	25			
Dichlorofluoromethane	75-43-4	0.2	0.0807	ppbV	70-130			25	25			
Dibromomethane	74-95-3	0.2	0.0563	ppbV	70-130			25	25			
Pentane	109-66-0	0.2	0.0659	ppbV	70-130			25	25			
Octane	111-65-9	0.2	0.0445	ppbV	70-130			25	25			
Tertiary-Amyl Methyl Ether	994-05-8	0.2	0.0476	ppbV	70-130			25	25			
o-Chlorotoluene	95-49-8	0.2	0.0486	ppbV	70-130			25	25			
p-Chlorotoluene	106-43-4	0.2	0.056	ppbV	70-130			25	25			
2,2-Dichloropropane	594-20-7	0.2	0.0458	ppbV	70-130			25	25			
1,1-Dichloropropene	563-58-6	0.2	0.0457	ppbV	70-130			25	25			
Isopropyl Ether	108-20-3	0.2	0.0621	ppbV	70-130			25	25			
Ethyl-Tert-Butyl-Ether	637-92-3	0.2	0.0422	ppbV	70-130			25	25			
1,2,3-Trichlorobenzene	87-61-6	0.2	0.0715	ppbV	70-130			25	25			
Ethyl ether	60-29-7	0.2	0.0737	ppbV	70-130			25	25			
n-Butylbenzene	104-51-8	0.2	0.044	ppbV	70-130			25	25			
sec-Butylbenzene	135-98-8	0.2	0.0429	ppbV	70-130			25	25			
tert-Butylbenzene	98-06-6	0.2	0.042	ppbV	70-130			25	25			
1,2-Dibromo-3-chloropropane	96-12-8	0.2	0.0495	ppbV	70-130			25	25			
p-Isopropyltoluene	99-87-6	0.2	0.052	ppbV	70-130			25	25			
n-Propylbenzene	103-65-1	0.2	0.0419	ppbV	70-130			25	25			
1,3-Dichloropropane	142-28-9	0.2	0.106	ppbV	70-130			25	25			
Methanol	67-56-1	5	1.84	ppbV	70-130			25	25			
Acetaldehyde	75-07-0	2.5	0.444	ppbV	70-130			25	25			
Butane	106-97-8	0.2	0.0646	ppbV	70-130			25	25			
Nonane (C9)	111-84-2	0.2	0.0463	ppbV	70-130			25	25			
Decane (C10)	124-18-5	0.2	0.0404	ppbV	70-130			25	25			
Undecane	1120-21-4	0.2	0.0427	ppbV	70-130			25	25			
Indane	496-11-7	0.2	0.0507	ppbV	70-130			25	25			
Indene	95-13-6	0.2	0.0433	ppbV	70-130			25	25			
1-Methylnaphthalene	90-12-0	1	0.466	ppbV	70-130			25	25			
Dodecane (C12)	112-40-3	0.2	0.0658	ppbV	70-130			25	25			
Butyl Acetate	123-86-4	0.5	0.126	ppbV	70-130			25	25			
tert-Butyl Alcohol	75-65-0	0.5	0.0466	ppbV	70-130			25	25			
2-Methylnaphthalene	91-57-6	1	0.393	ppbV	70-130			25	25			
1,2-Dichloroethane-d4	*17060-07-0*									*70-130*		
Toluene-d8	*2037-26-5*									*70-130*		
Bromofluorobenzene	*460-00-4*									*70-130*		

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Volatiles Sample Data

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	Lab Number	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	Project Number	: 2546.0007Y002
Lab ID	: L2213657-01	Date Collected	: 03/16/22 12:09
Client ID	: VE-1	Date Received	: 03/16/22
Sample Location	: YONKERS, NY	Date Analyzed	: 03/20/22 23:43
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R1531792	Instrument ID	: AIRLAB15
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.509	0.200	--	2.52	0.989	--	
74-87-3	Chloromethane	0.665	0.200	--	1.37	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	212	5.00	--	399	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	50.3	1.00	--	119	2.38	--	
75-69-4	Trichlorofluoromethane	0.244	0.200	--	1.37	1.12	--	
67-63-0	Isopropanol	58.9	0.500	--	145	1.23	--	
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	6.94	0.500	--	21.0	1.52	--	
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	2.12	0.500	--	6.25	1.47	--	
156-59-2	cis-1,2-Dichloroethene	0.373	0.200	--	1.48	0.793	--	
141-78-6	Ethyl Acetate	0.659	0.500	--	2.37	1.80	--	
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	1.44	0.500	--	4.25	1.47	--	

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	Lab Number	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	Project Number	: 2546.0007Y002
Lab ID	: L2213657-01	Date Collected	: 03/16/22 12:09
Client ID	: VE-1	Date Received	: 03/16/22
Sample Location	: YONKERS, NY	Date Analyzed	: 03/20/22 23:43
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R1531792	Instrument ID	: AIRLAB15
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
107-06-2	1,2-Dichloroethane	1.02	0.200	--	4.13	0.809	--	
110-54-3	n-Hexane	0.224	0.200	--	0.789	0.705	--	
71-55-6	1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	U
71-43-2	Benzene	2.12	0.200	--	6.77	0.639	--	
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
79-01-6	Trichloroethene	ND	0.200	--	ND	1.07	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	0.221	0.200	--	0.906	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	2.54	0.200	--	9.57	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	ND	0.200	--	ND	1.36	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	0.296	0.200	--	1.29	0.869	--	
179601-23-1	p/m-Xylene	1.53	0.400	--	6.65	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	0.321	0.200	--	1.37	0.852	--	

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Lab ID	: L2213657-01	**Date Collected**	: 03/16/22 12:09
Client ID	: VE-1	**Date Received**	: 03/16/22
Sample Location	: YONKERS, NY	**Date Analyzed**	: 03/20/22 23:43
Sample Matrix	: SOIL_VAPOR	**Dilution Factor**	: 1
Analytical Method	: 48,TO-15	**Analyst**	: RY
Lab File ID	: R1531792	**Instrument ID**	: AIRLAB15
Sample Amount	: 250 ml	**GC Column**	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	0.398	0.200	--	1.73	0.869	--	
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	0.213	0.200	--	1.05	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	Lab Number	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	Project Number	: 2546.0007Y002
Lab ID	: L2213657-02	Date Collected	: 03/16/22 12:13
Client ID	: VE-2-IA	Date Received	: 03/16/22
Sample Location	: YONKERS, NY	Date Analyzed	: 03/20/22 21:06
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R1531788	Instrument ID	: AIRLAB15
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.521	0.200	--	2.58	0.989	--	
74-87-3	Chloromethane	0.593	0.200	--	1.22	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	308	5.00	--	580	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	10.9	1.00	--	25.9	2.38	--	
75-69-4	Trichlorofluoromethane	0.315	0.200	--	1.77	1.12	--	
67-63-0	Isopropanol	12.0	0.500	--	29.5	1.23	--	
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	1.57	0.500	--	4.63	1.47	--	
141-78-6	Ethyl Acetate	1.31	0.500	--	4.72	1.80	--	
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	0.539	0.500	--	1.59	1.47	--	
107-06-2	1,2-Dichloroethane	0.239	0.200	--	0.967	0.809	--	
110-54-3	n-Hexane	ND	0.200	--	ND	0.705	--	U
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	Lab Number	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	Project Number	: 2546.0007Y002
Lab ID	: L2213657-02	Date Collected	: 03/16/22 12:13
Client ID	: VE-2-IA	Date Received	: 03/16/22
Sample Location	: YONKERS, NY	Date Analyzed	: 03/20/22 21:06
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R1531788	Instrument ID	: AIRLAB15
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
110-82-7	Cyclohexane	0.208	0.200	--	0.716	0.688	--	
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	5.31	0.200	--	20.0	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	0.529	0.200	--	2.30	0.869	--	
179601-23-1	p/m-Xylene	1.37	0.400	--	5.95	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	1.97	0.200	--	8.39	0.852	--	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	0.832	0.200	--	3.61	0.869	--	
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	0.719	0.200	--	3.53	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Lab ID	: L2213657-02	**Date Collected**	: 03/16/22 12:13
Client ID	: VE-2-IA	**Date Received**	: 03/16/22
Sample Location	: YONKERS, NY	**Date Analyzed**	: 03/20/22 21:06
Sample Matrix	: AIR	**Dilution Factor**	: 1
Analytical Method	: 48,TO-15	**Analyst**	: RY
Lab File ID	: R1531788	**Instrument ID**	: AIRLAB15
Sample Amount	: 250 ml	**GC Column**	: RTX-1

		ppbV			ug/m3			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	Lab Number	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	Project Number	: 2546.0007Y002
Lab ID	: L2213657-03	Date Collected	: 03/16/22 12:14
Client ID	: DUP-031622	Date Received	: 03/16/22
Sample Location	: YONKERS, NY	Date Analyzed	: 03/20/22 21:45
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R1531789	Instrument ID	: AIRLAB15
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.495	0.200	--	2.45	0.989	--	
74-87-3	Chloromethane	0.591	0.200	--	1.22	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	306	5.00	--	577	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	10.8	1.00	--	25.7	2.38	--	
75-69-4	Trichlorofluoromethane	0.313	0.200	--	1.76	1.12	--	
67-63-0	Isopropanol	12.5	0.500	--	30.7	1.23	--	
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	1.69	0.500	--	4.98	1.47	--	
141-78-6	Ethyl Acetate	1.41	0.500	--	5.08	1.80	--	
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	0.253	0.200	--	1.02	0.809	--	
110-54-3	n-Hexane	ND	0.200	--	ND	0.705	--	U
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	Lab Number	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	Project Number	: 2546.0007Y002
Lab ID	: L2213657-03	Date Collected	: 03/16/22 12:14
Client ID	: DUP-031622	Date Received	: 03/16/22
Sample Location	: YONKERS, NY	Date Analyzed	: 03/20/22 21:45
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R1531789	Instrument ID	: AIRLAB15
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
110-82-7	Cyclohexane	0.210	0.200	--	0.723	0.688	--	
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	5.44	0.200	--	20.5	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	0.543	0.200	--	2.36	0.869	--	
179601-23-1	p/m-Xylene	1.40	0.400	--	6.08	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	1.99	0.200	--	8.47	0.852	--	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	0.835	0.200	--	3.63	0.869	--	
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	0.741	0.200	--	3.64	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Lab ID	: L2213657-03	**Date Collected**	: 03/16/22 12:14
Client ID	: DUP-031622	**Date Received**	: 03/16/22
Sample Location	: YONKERS, NY	**Date Analyzed**	: 03/20/22 21:45
Sample Matrix	: AIR	**Dilution Factor**	: 1
Analytical Method	: 48,TO-15	**Analyst**	: RY
Lab File ID	: R1531789	**Instrument ID**	: AIRLAB15
Sample Amount	: 250 ml	**GC Column**	: RTX-1

		ppbV			ug/m3			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	Lab Number	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	Project Number	: 2546.0007Y002
Lab ID	: L2213657-04D	Date Collected	: 03/16/22 12:28
Client ID	: VE-2	Date Received	: 03/16/22
Sample Location	: YONKERS, NY	Date Analyzed	: 03/21/22 00:22
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1.316
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R1531793	Instrument ID	: AIRLAB15
Sample Amount	: 190 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.499	0.263	--	2.47	1.30	--	
74-87-3	Chloromethane	1.03	0.263	--	2.13	0.543	--	
76-14-2	Freon-114	ND	0.263	--	ND	1.84	--	U
75-01-4	Vinyl chloride	ND	0.263	--	ND	0.672	--	U
106-99-0	1,3-Butadiene	ND	0.263	--	ND	0.582	--	U
74-83-9	Bromomethane	ND	0.263	--	ND	1.02	--	U
75-00-3	Chloroethane	ND	0.263	--	ND	0.694	--	U
64-17-5	Ethanol	64.3	6.58	--	121	12.4	--	
593-60-2	Vinyl bromide	ND	0.263	--	ND	1.15	--	U
67-64-1	Acetone	39.8	1.32	--	94.5	3.14	--	
75-69-4	Trichlorofluoromethane	ND	0.263	--	ND	1.48	--	U
67-63-0	Isopropanol	20.4	0.658	--	50.1	1.62	--	
75-35-4	1,1-Dichloroethene	ND	0.263	--	ND	1.04	--	U
75-65-0	Tertiary butyl Alcohol	2.26	0.658	--	6.85	1.99	--	
75-09-2	Methylene chloride	0.663	0.658	--	2.30	2.29	--	
107-05-1	3-Chloropropene	ND	0.263	--	ND	0.823	--	U
75-15-0	Carbon disulfide	ND	0.263	--	ND	0.819	--	U
76-13-1	Freon-113	ND	0.263	--	ND	2.02	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.263	--	ND	1.04	--	U
75-34-3	1,1-Dichloroethane	ND	0.263	--	ND	1.06	--	U
1634-04-4	Methyl tert butyl ether	ND	0.263	--	ND	0.948	--	U
78-93-3	2-Butanone	1.00	0.658	--	2.95	1.94	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.263	--	ND	1.04	--	U
141-78-6	Ethyl Acetate	ND	0.658	--	ND	2.37	--	U
67-66-3	Chloroform	ND	0.263	--	ND	1.28	--	U
109-99-9	Tetrahydrofuran	1.46	0.658	--	4.31	1.94	--	

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	Lab Number	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	Project Number	: 2546.0007Y002
Lab ID	: L2213657-04D	Date Collected	: 03/16/22 12:28
Client ID	: VE-2	Date Received	: 03/16/22
Sample Location	: YONKERS, NY	Date Analyzed	: 03/21/22 00:22
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1.316
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R1531793	Instrument ID	: AIRLAB15
Sample Amount	: 190 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
107-06-2	1,2-Dichloroethane	1.46	0.263	--	5.91	1.06	--	
110-54-3	n-Hexane	0.396	0.263	--	1.40	0.927	--	
71-55-6	1,1,1-Trichloroethane	ND	0.263	--	ND	1.43	--	U
71-43-2	Benzene	1.64	0.263	--	5.24	0.840	--	
56-23-5	Carbon tetrachloride	ND	0.263	--	ND	1.65	--	U
110-82-7	Cyclohexane	ND	0.263	--	ND	0.905	--	U
78-87-5	1,2-Dichloropropane	ND	0.263	--	ND	1.22	--	U
75-27-4	Bromodichloromethane	ND	0.263	--	ND	1.76	--	U
123-91-1	1,4-Dioxane	ND	0.263	--	ND	0.948	--	U
79-01-6	Trichloroethene	ND	0.263	--	ND	1.41	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.263	--	ND	1.23	--	U
142-82-5	Heptane	1.07	0.263	--	4.39	1.08	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.263	--	ND	1.19	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.658	--	ND	2.70	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.263	--	ND	1.19	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.263	--	ND	1.43	--	U
108-88-3	Toluene	3.87	0.263	--	14.6	0.991	--	
591-78-6	2-Hexanone	0.301	0.263	--	1.23	1.08	--	
124-48-1	Dibromochloromethane	ND	0.263	--	ND	2.24	--	U
106-93-4	1,2-Dibromoethane	ND	0.263	--	ND	2.02	--	U
127-18-4	Tetrachloroethene	ND	0.263	--	ND	1.78	--	U
108-90-7	Chlorobenzene	ND	0.263	--	ND	1.21	--	U
100-41-4	Ethylbenzene	ND	0.263	--	ND	1.14	--	U
179601-23-1	p/m-Xylene	0.976	0.526	--	4.24	2.28	--	
75-25-2	Bromoform	ND	0.263	--	ND	2.72	--	U
100-42-5	Styrene	0.404	0.263	--	1.72	1.12	--	

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Lab ID	: L2213657-04D	**Date Collected**	: 03/16/22 12:28
Client ID	: VE-2	**Date Received**	: 03/16/22
Sample Location	: YONKERS, NY	**Date Analyzed**	: 03/21/22 00:22
Sample Matrix	: SOIL_VAPOR	**Dilution Factor**	: 1.316
Analytical Method	: 48,TO-15	**Analyst**	: RY
Lab File ID	: R1531793	**Instrument ID**	: AIRLAB15
Sample Amount	: 190 ml	**GC Column**	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.263	--	ND	1.81	--	U
95-47-6	o-Xylene	0.445	0.263	--	1.93	1.14	--	
622-96-8	4-Ethyltoluene	ND	0.263	--	ND	1.29	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.263	--	ND	1.29	--	U
95-63-6	1,2,4-Trimethylbenzene	0.393	0.263	--	1.93	1.29	--	
100-44-7	Benzyl chloride	ND	0.263	--	ND	1.36	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.263	--	ND	1.58	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.263	--	ND	1.58	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.263	--	ND	1.58	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.263	--	ND	1.95	--	U
87-68-3	Hexachlorobutadiene	ND	0.263	--	ND	2.81	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	Lab Number	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	Project Number	: 2546.0007Y002
Lab ID	: L2213657-05	Date Collected	: 03/16/22 13:01
Client ID	: VE-1-IA	Date Received	: 03/16/22
Sample Location	: YONKERS, NY	Date Analyzed	: 03/20/22 23:04
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R1531791	Instrument ID	: AIRLAB15
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.462	0.200	--	2.28	0.989	--	
74-87-3	Chloromethane	0.559	0.200	--	1.15	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	1180	5.00	--	2220	9.42	--	E
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	4.90	1.00	--	11.6	2.38	--	
75-69-4	Trichlorofluoromethane	0.267	0.200	--	1.50	1.12	--	
67-63-0	Isopropanol	37.2	0.500	--	91.4	1.23	--	
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
141-78-6	Ethyl Acetate	0.704	0.500	--	2.54	1.80	--	
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	ND	0.200	--	ND	0.705	--	U
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	Lab Number	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	Project Number	: 2546.0007Y002
Lab ID	: L2213657-05	Date Collected	: 03/16/22 13:01
Client ID	: VE-1-IA	Date Received	: 03/16/22
Sample Location	: YONKERS, NY	Date Analyzed	: 03/20/22 23:04
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R1531791	Instrument ID	: AIRLAB15
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	0.386	0.200	--	1.45	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	ND	0.400	--	ND	1.74	--	U
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	ND	0.200	--	ND	0.869	--	U
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Lab ID	: L2213657-05	**Date Collected**	: 03/16/22 13:01
Client ID	: VE-1-IA	**Date Received**	: 03/16/22
Sample Location	: YONKERS, NY	**Date Analyzed**	: 03/20/22 23:04
Sample Matrix	: AIR	**Dilution Factor**	: 1
Analytical Method	: 48,TO-15	**Analyst**	: RY
Lab File ID	: R1531791	**Instrument ID**	: AIRLAB15
Sample Amount	: 250 ml	**GC Column**	: RTX-1

		ppbV			ug/m3			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Lab ID	: L2213657-05D	**Date Collected**	: 03/16/22 13:01
Client ID	: VE-1-IA	**Date Received**	: 03/16/22
Sample Location	: YONKERS, NY	**Date Analyzed**	: 03/21/22 09:06
Sample Matrix	: AIR	**Dilution Factor**	: 5
Analytical Method	: 48,TO-15	**Analyst**	: RY
Lab File ID	: R1531799	**Instrument ID**	: AIRLAB15
Sample Amount	: 50.0 ml	**GC Column**	: RTX-1

		ppbV			ug/m3			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**
64-17-5	Ethanol	1600	25.0	--	3010	47.1	--	

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	Lab Number	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	Project Number	: 2546.0007Y002
Lab ID	: WG1617728-4	Date Collected	: NA
Client ID	: WG1617728-4BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 03/20/22 15:20
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R1531780	Instrument ID	: AIRLAB15
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
115-07-1	Propylene	ND	0.500	--	ND	0.861	--	U
75-71-8	Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--	U
74-87-3	Chloromethane	ND	0.200	--	ND	0.413	--	U
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	ND	5.00	--	ND	9.42	--	U
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	ND	1.00	--	ND	2.38	--	U
75-69-4	Trichlorofluoromethane	ND	0.200	--	ND	1.12	--	U
67-63-0	Isopropanol	ND	0.500	--	ND	1.23	--	U
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
108-05-4	Vinyl acetate	ND	1.00	--	ND	3.52	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	Lab Number	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	Project Number	: 2546.0007Y002
Lab ID	: WG1617728-4	Date Collected	: NA
Client ID	: WG1617728-4BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 03/20/22 15:20
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R1531780	Instrument ID	: AIRLAB15
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	ND	0.200	--	ND	0.705	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	U
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
79-01-6	Trichloroethene	ND	0.200	--	ND	1.07	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	ND	0.200	--	ND	0.754	--	U
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	ND	0.200	--	ND	1.36	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	ND	0.400	--	ND	1.74	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	Lab Number	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	Project Number	: 2546.0007Y002
Lab ID	: WG1617728-4	Date Collected	: NA
Client ID	: WG1617728-4BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 03/20/22 15:20
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R1531780	Instrument ID	: AIRLAB15
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	ND	0.200	--	ND	0.869	--	U
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	Lab Number	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	Project Number	: 2546.0007Y002
Lab ID	: WG1617728-5	Date Collected	: 03/16/22 12:14
Client ID	: DUP-031622DUP	Date Received	: 03/16/22
Sample Location	:	Date Analyzed	: 03/20/22 22:25
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R1531790	Instrument ID	: AIRLAB15
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.495	0.200	--	2.45	0.989	--	
74-87-3	Chloromethane	0.564	0.200	--	1.16	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	307	5.00	--	578	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	9.91	1.00	--	23.5	2.38	--	
75-69-4	Trichlorofluoromethane	0.316	0.200	--	1.78	1.12	--	
67-63-0	Isopropanol	12.5	0.500	--	30.7	1.23	--	
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	0.570	0.500	--	1.98	1.74	--	
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	1.73	0.500	--	5.10	1.47	--	
141-78-6	Ethyl Acetate	1.45	0.500	--	5.23	1.80	--	
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	0.259	0.200	--	1.05	0.809	--	
110-54-3	n-Hexane	ND	0.200	--	ND	0.705	--	U
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	Lab Number	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	Project Number	: 2546.0007Y002
Lab ID	: WG1617728-5	Date Collected	: 03/16/22 12:14
Client ID	: DUP-031622DUP	Date Received	: 03/16/22
Sample Location	:	Date Analyzed	: 03/20/22 22:25
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R1531790	Instrument ID	: AIRLAB15
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
110-82-7	Cyclohexane	0.207	0.200	--	0.713	0.688	--	
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	5.44	0.200	--	20.5	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	0.558	0.200	--	2.42	0.869	--	
179601-23-1	p/m-Xylene	1.43	0.400	--	6.21	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	2.04	0.200	--	8.69	0.852	--	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	0.839	0.200	--	3.64	0.869	--	
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	0.766	0.200	--	3.77	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Lab ID	: WG1617728-5	**Date Collected**	: 03/16/22 12:14
Client ID	: DUP-031622DUP	**Date Received**	: 03/16/22
Sample Location	:	**Date Analyzed**	: 03/20/22 22:25
Sample Matrix	: AIR	**Dilution Factor**	: 1
Analytical Method	: 48,TO-15	**Analyst**	: RY
Lab File ID	: R1531790	**Instrument ID**	: AIRLAB15
Sample Amount	: 250 ml	**GC Column**	: RTX-1

		ppbV			ug/m3			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531788.D
Acq On : 20 Mar 2022 9:06 PM
Operator : AIRLAB15:RY
Sample : L2213657-02,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 15:41:00 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320T\r1531778.D
Sub List : TO15-NY-7-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.58	49	382360	10.000	ppbV	-0.03
Standard Area = 382239			Recovery = 100.03%			
43) 1,4-difluorobenzene	11.86	114	837180	10.000	ppbV	-0.03
Standard Area = 859136			Recovery = 97.44%			
67) chlorobenzene-D5	16.57	54	198398	10.000	ppbV	-0.02
Standard Area = 200634			Recovery = 98.89%			
System Monitoring Compounds						
Target Compounds						Qvalue
5) dichlorodifluoromethane	3.96	85	14733	0.521	ppbV	95
6) chloromethane	4.14	50	8364	0.593	ppbV	100
7) Freon-114	4.28		0	N.D.		
10) 1,3-butadiene	4.57		0	N.D.		
13) bromomethane	4.89		0	N.D.		
14) chloroethane	0.00		0	N.D.		
15) ethanol	5.29	31	3376396	307.957	ppbV	97
17) vinyl bromide	0.00		0	N.D.		
19) acetone	5.88	43	237879M6	10.889	ppbV	
21) trichlorofluoromethane	6.07	101	8546	0.315	ppbV	96
22) isopropyl alcohol	6.19	45	284056	12.032	ppbV	99
27) tertiary butyl alcohol	6.95	59	5967	0.195	ppbV #	75
28) methylene chloride	7.02	49	8306	0.464	ppbV	98
29) 3-chloropropene	0.00		0	N.D.	d	
30) carbon disulfide	7.31		0	N.D.		
31) Freon 113	7.36	101	1847	0.068	ppbV #	90
32) trans-1,2-dichloroethene	0.00		0	N.D.		
33) 1,1-dichloroethane	0.00		0	N.D.		
34) MTBE	0.00		0	N.D.		
36) 2-butanone	8.88	43	61062	1.566	ppbV	98
38) Ethyl Acetate	9.70	61	9274	1.312	ppbV	93
39) chloroform	9.75	83	3814	0.118	ppbV	98
40) Tetrahydrofuran	10.22	42	13055	0.539	ppbV	99
42) 1,2-dichloroethane	10.60	62	5556	0.239	ppbV	97
44) hexane	9.66	57	4521	0.128	ppbV #	69
50) benzene	11.42	78	8741	0.149	ppbV	95
53) cyclohexane	11.74	56	7864	0.208	ppbV	97

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531788.D
Acq On : 20 Mar 2022 9:06 PM
Operator : AIRLAB15:RY
Sample : L2213657-02,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 15:41:00 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320T\r1531778.D
Sub List : TO15-NY-7-SIM - .

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
56)	1,2-dichloropropane	12.38	63	1289	0.059	ppbV		96
57)	bromodichloromethane	0.00		0	N.D.			
58)	1,4-dioxane	0.00		0	N.D.			
60)	2,2,4-trimethylpentane	12.71		0	N.D.			
62)	heptane	13.03	43	2542	0.065	ppbV		92
63)	cis-1,3-dichloropropene	0.00		0	N.D.			
64)	4-methyl-2-pentanone	13.73		0	N.D.			
65)	trans-1,3-dichloropropene	0.00		0	N.D.			
66)	1,1,2-trichloroethane	0.00		0	N.D.			
68)	toluene	14.81	91	392608	5.314	ppbV		99
72)	2-hexanone	0.00		0	N.D.	d		
74)	dibromochloromethane	0.00		0	N.D.			
75)	1,2-dibromoethane	0.00		0	N.D.			
80)	chlorobenzene	16.62		0	N.D.			
81)	ethylbenzene	16.96	91	46322	0.529	ppbV		95
83)	m+p-xylene	17.11	91	97659	1.374	ppbV		93
84)	bromoform	0.00		0	N.D.			
85)	styrene	17.43	104	99391	1.972	ppbV		99
86)	1,1,2,2-tetrachloroethane	0.00		0	N.D.	d		
87)	o-xylene	17.52	91	58752	0.832	ppbV		95
96)	4-ethyl toluene	18.57		0	N.D.			
97)	1,3,5-trimethylbenzene	18.63	105	7589	0.100	ppbV	#	89
99)	1,2,4-trimethylbenzene	18.97	105	52552	0.719	ppbV	#	49
101)	Benzyl Chloride	0.00		0	N.D.	d		
102)	1,3-dichlorobenzene	19.15		0	N.D.			
103)	1,4-dichlorobenzene	19.15		0	N.D.			
107)	1,2-dichlorobenzene	19.42		0	N.D.			
115)	1,2,4-trichlorobenzene	0.00		0	N.D.			
119)	hexachlorobutadiene	0.00		0	N.D.			

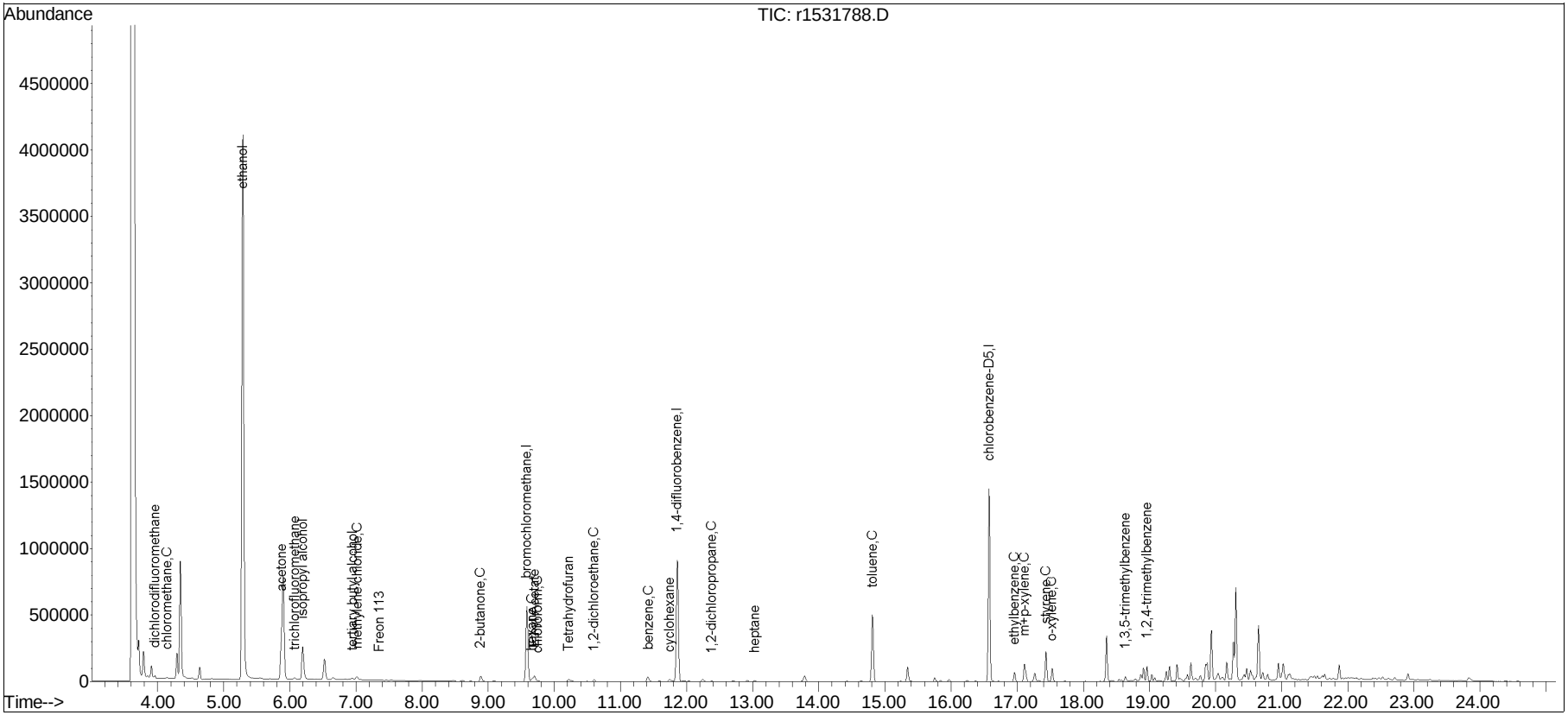
(#) = qualifier out of range (m) = manual integration (+) = signals summed

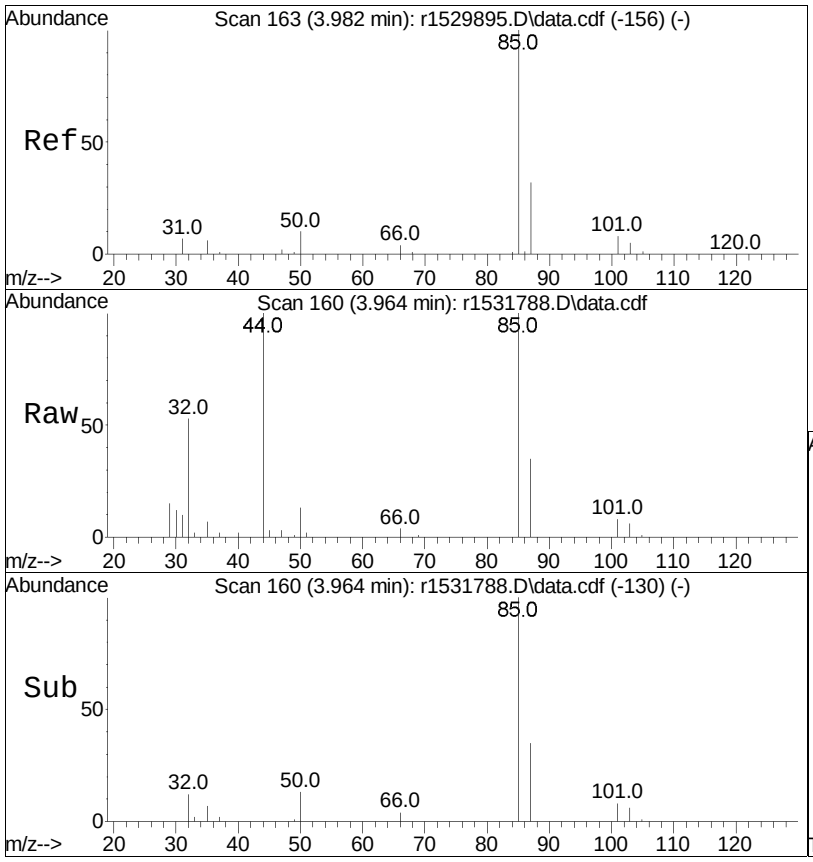
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531788.D
Acq On : 20 Mar 2022 9:06 PM
Operator : AIRLAB15:RY
Sample : L2213657-02,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 15:41:00 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

Sub List : TO15-NY-7-SIM - .\Airlab15\2022\03\0320T\r1531778.D

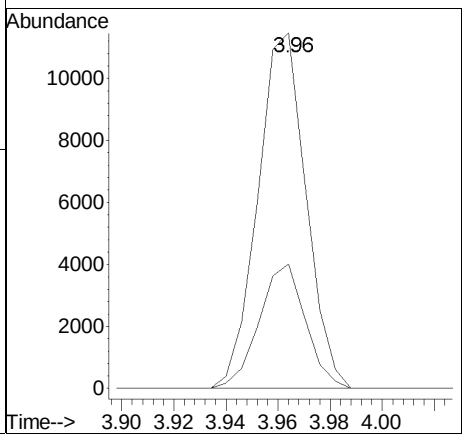


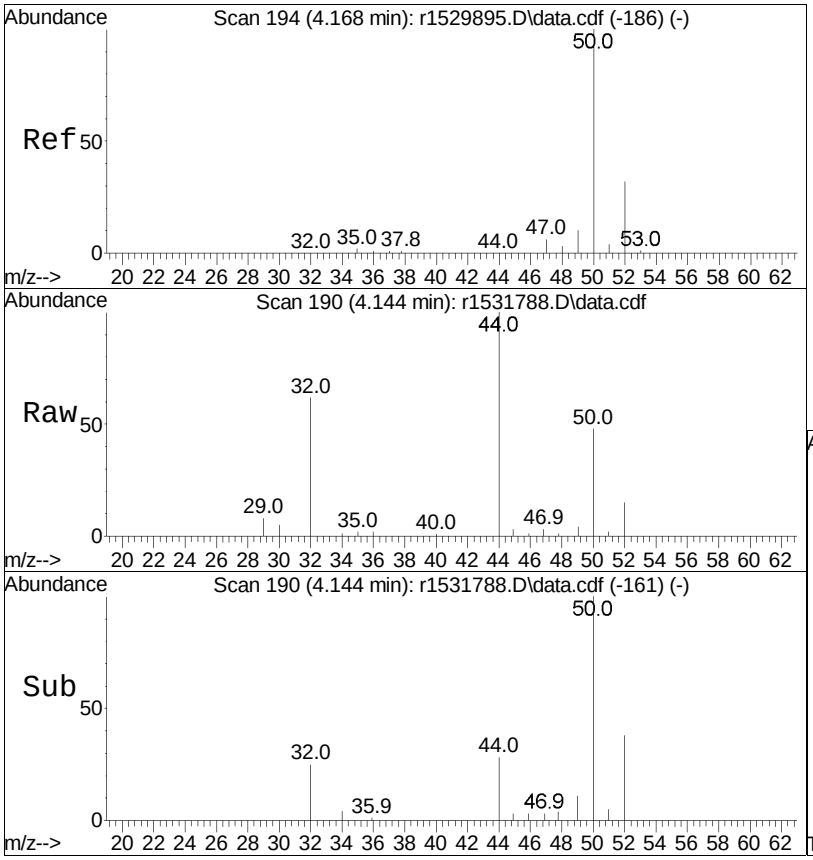


#5
dichlorodifluoromethane
Concen: 0.52 ppbV
RT: 3.96 min Scan# 160
Delta R.T. -0.018 min
Lab File: r1531788.D
Acq: 20 Mar 2022 9:06 PM

Tgt Ion: 85 Resp: 14733

Ion	Ratio	Lower	Upper
85	100		
87	35.0	25.6	38.4

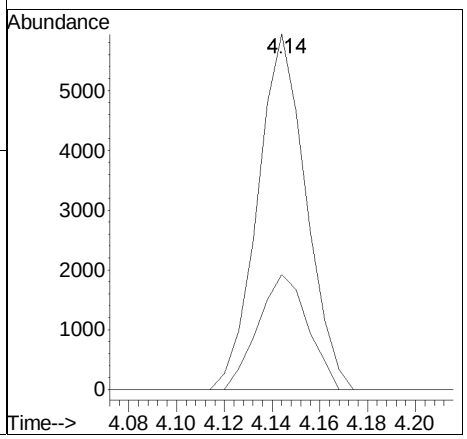


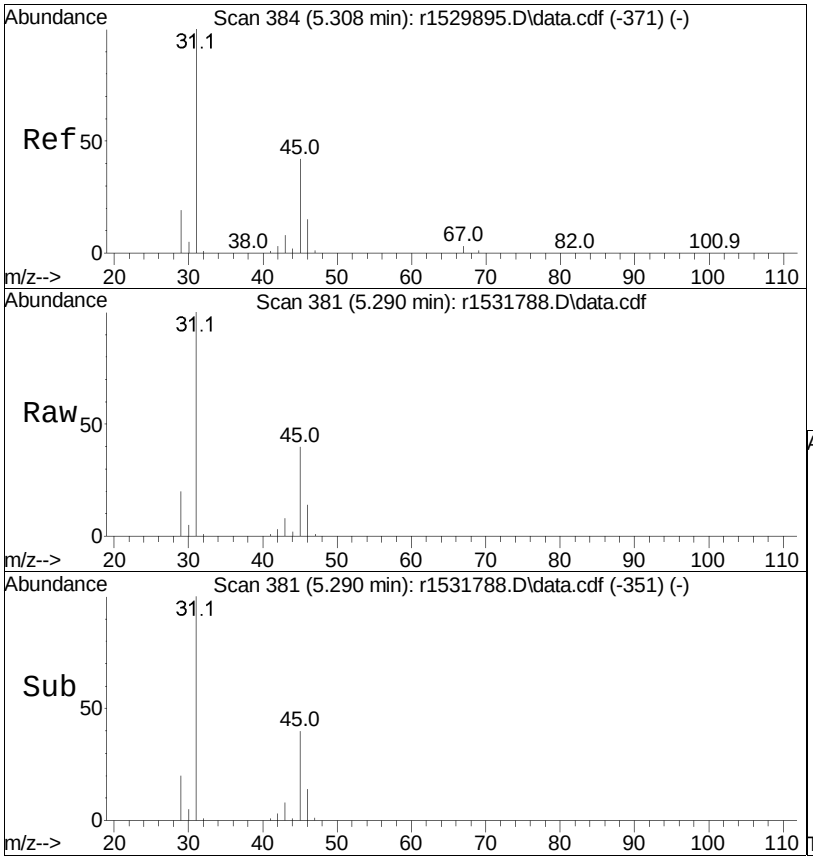


#6
chloromethane
Concen: 0.59 ppbV
RT: 4.14 min Scan# 190
Delta R.T. -0.024 min
Lab File: r1531788.D
Acq: 20 Mar 2022 9:06 PM

Tgt Ion: 50 Resp: 8364

Ion	Ratio	Lower	Upper
50	100		
52	32.4	25.9	38.9

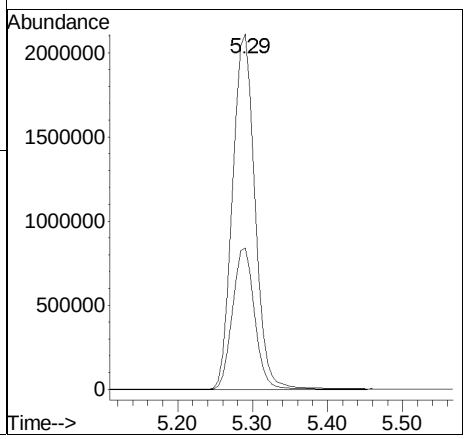


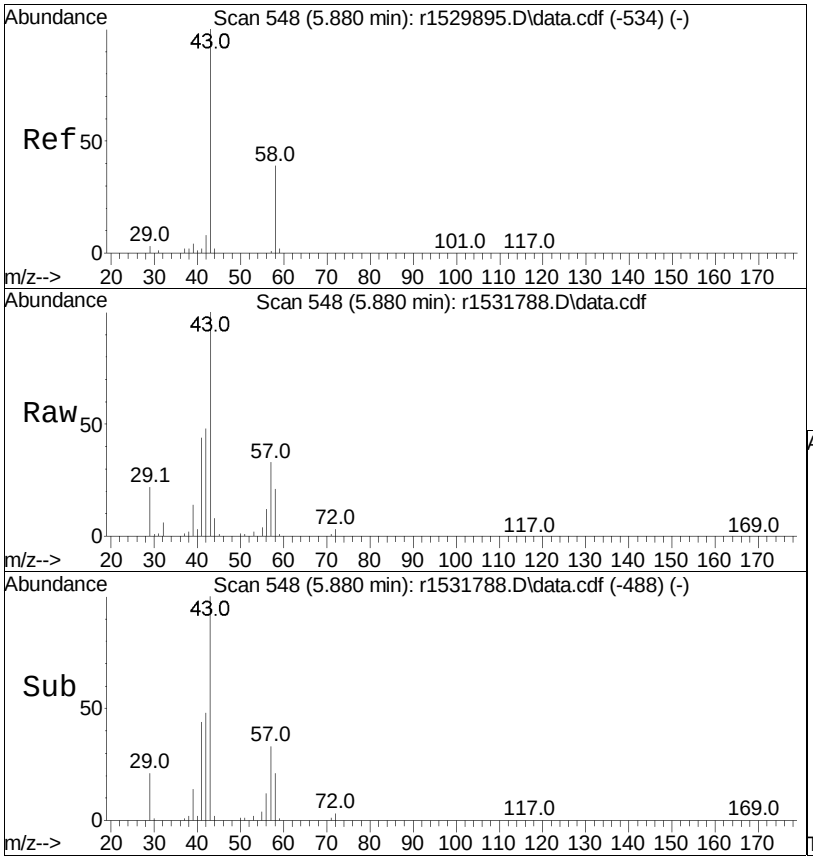


#15
ethanol
Concen: 307.96 ppbV
RT: 5.29 min Scan# 381
Delta R.T. -0.018 min
Lab File: r1531788.D
Acq: 20 Mar 2022 9:06 PM

Tgt Ion: 31 Resp: 3376396

Ion	Ratio	Lower	Upper
31	100		
45	39.8	33.4	50.2

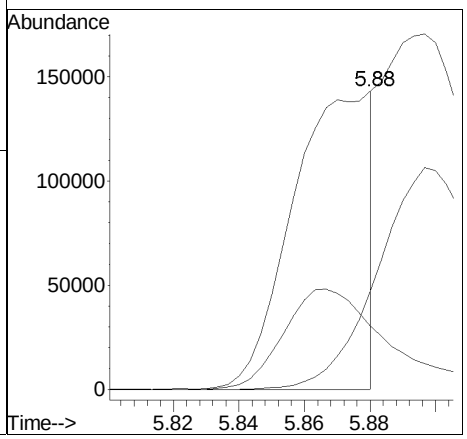


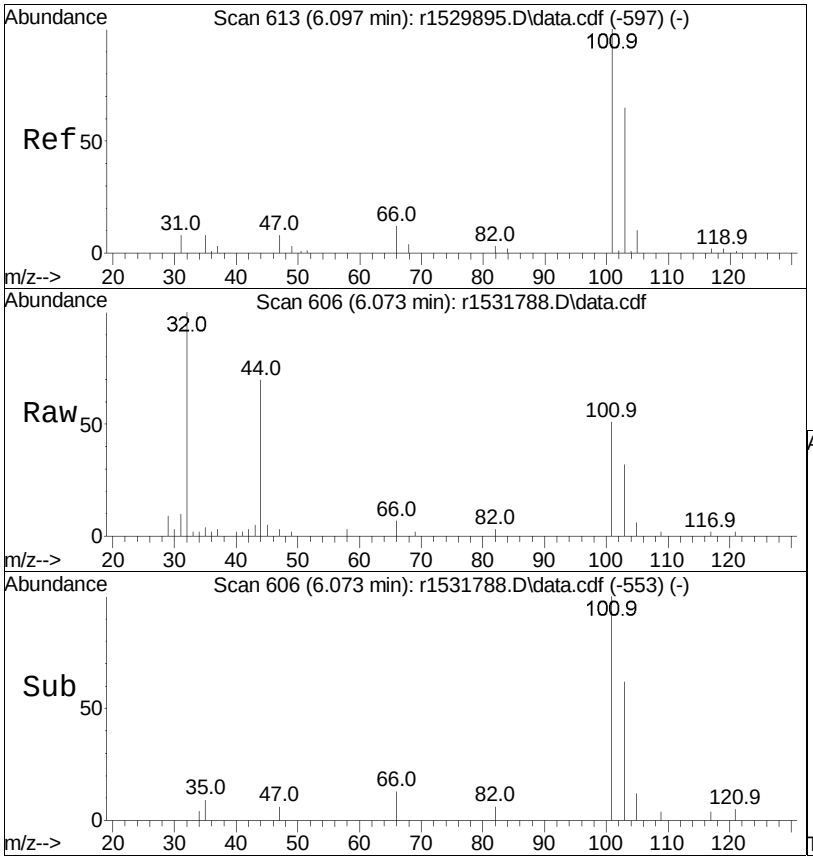


#19
acetone
Concen: 10.89 ppbV m
RT: 5.88 min Scan# 548
Delta R.T. 0.000 min
Lab File: r1531788.D
Acq: 20 Mar 2022 9:06 PM

Tgt Ion: 43 Resp: 237879

Ion	Ratio	Lower	Upper
43	100		
58	21.3	31.6	47.4#
57	32.8	0.8	1.2#

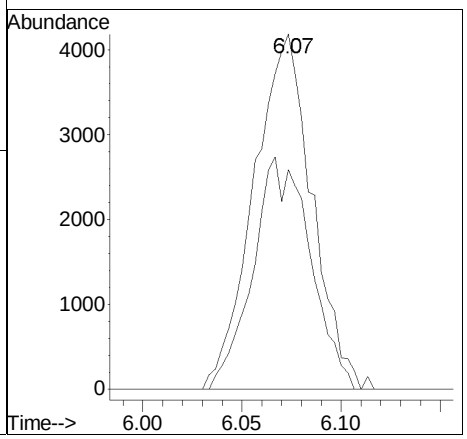


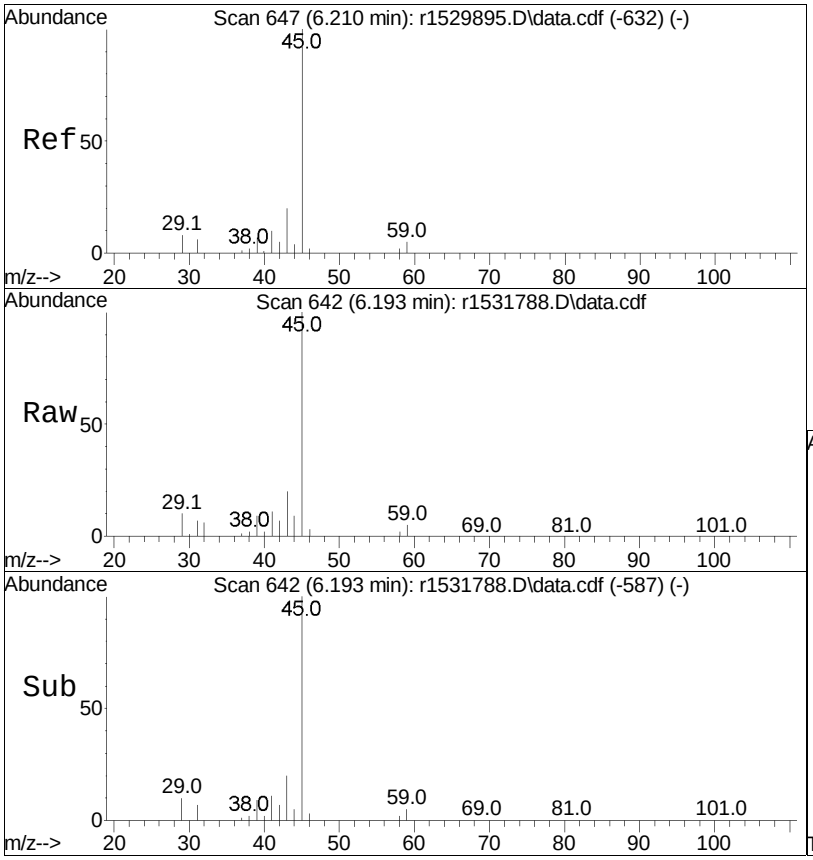


#21
trichlorofluoromethane
Concen: 0.32 ppbV
RT: 6.07 min Scan# 606
Delta R.T. -0.023 min
Lab File: r1531788.D
Acq: 20 Mar 2022 9:06 PM

Tgt Ion:101 Resp: 8546

Ion	Ratio	Lower	Upper
101	100		
103	61.8	52.0	78.0

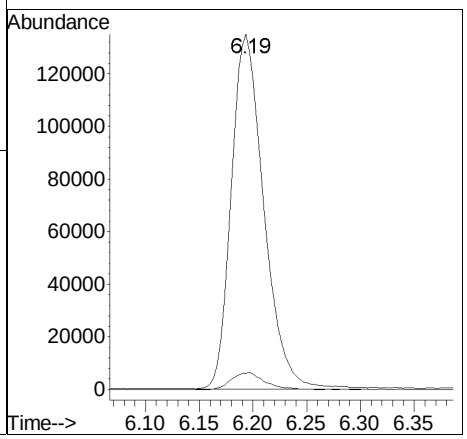


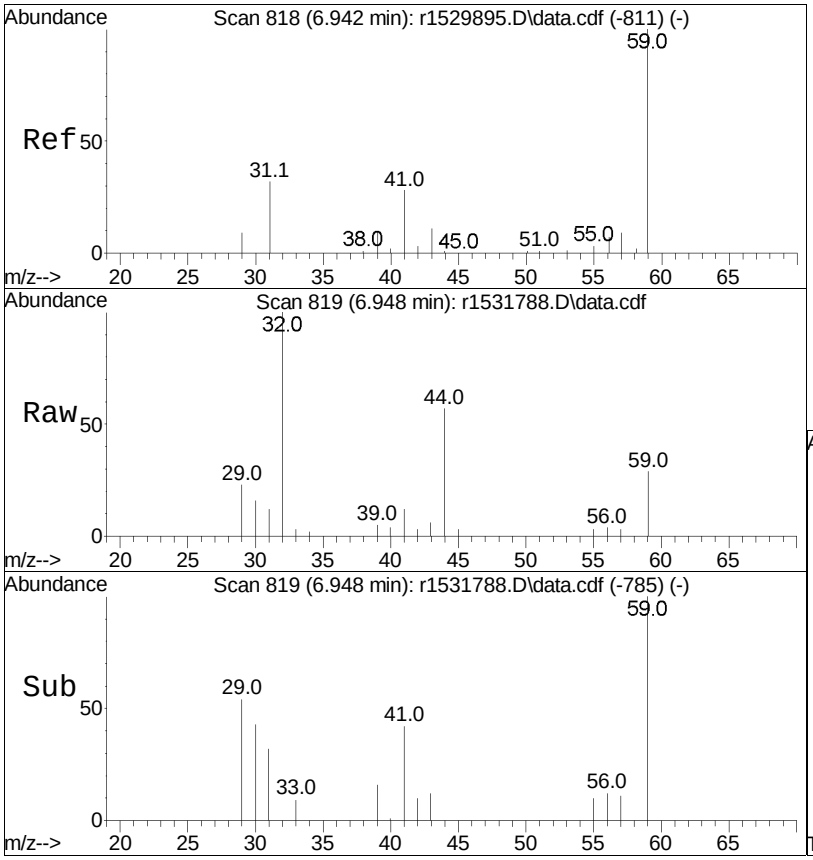


#22
isopropyl alcohol
Concen: 12.03 ppbV
RT: 6.19 min Scan# 642
Delta R.T. -0.017 min
Lab File: r1531788.D
Acq: 20 Mar 2022 9:06 PM

Tgt Ion: 45 Resp: 284056

Ion	Ratio	Lower	Upper
45	100		
59	4.6	3.8	5.8

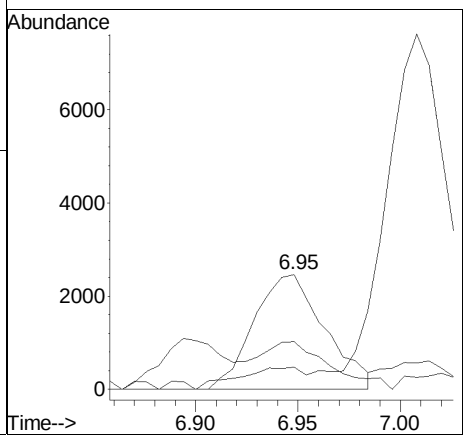


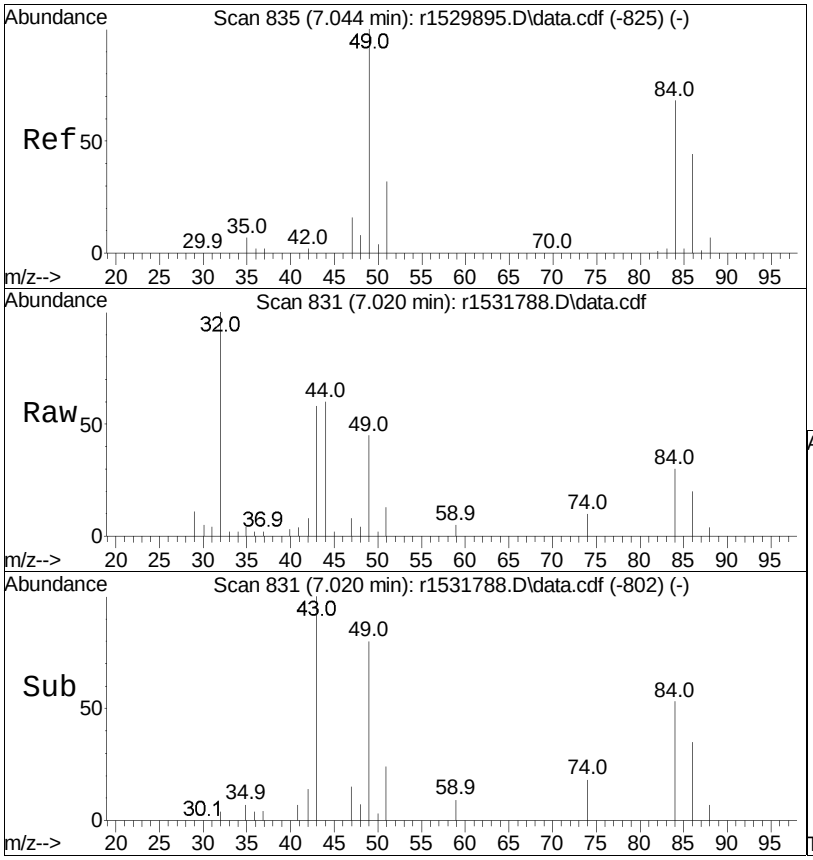


#27
tertiary butyl alcohol
Concen: 0.20 ppbV
RT: 6.95 min Scan# 819
Delta R.T. 0.006 min
Lab File: r1531788.D
Acq: 20 Mar 2022 9:06 PM

Tgt Ion: 59 Resp: 5967

Ion	Ratio	Lower	Upper
59	100		
41	41.6	22.2	33.4#
43	19.4	8.9	13.3#

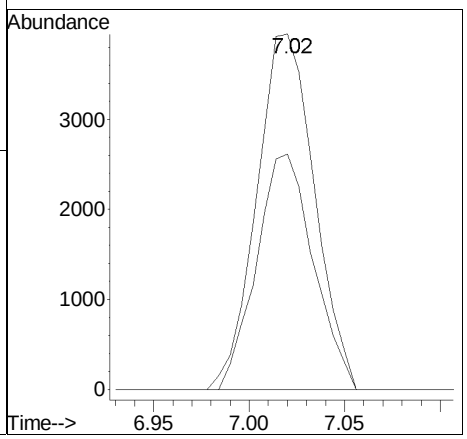


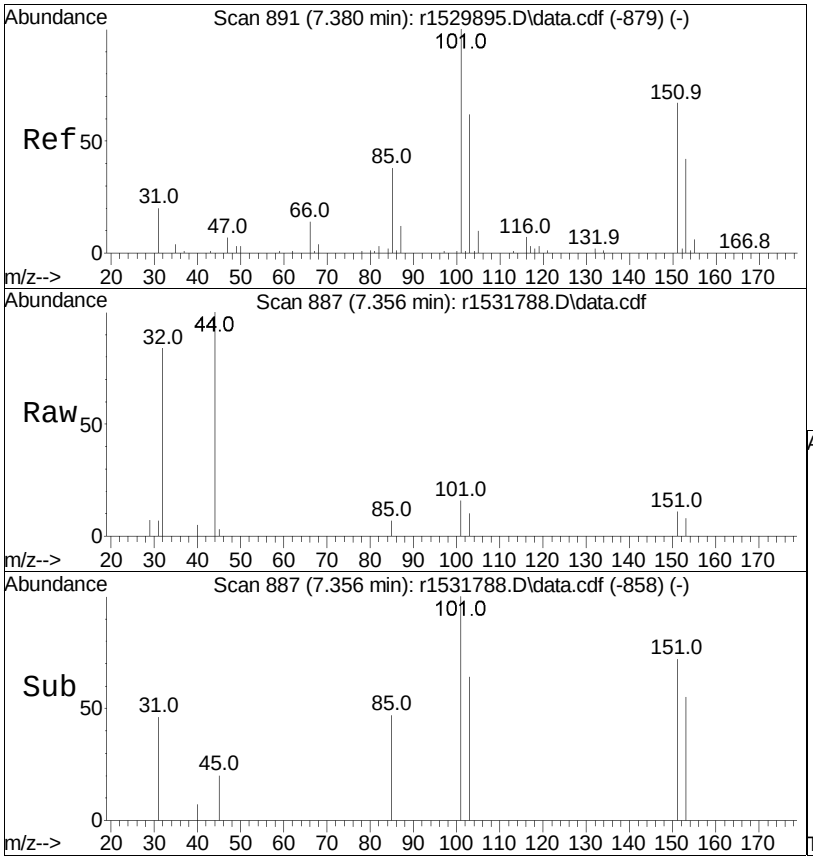


#28
methylene chloride
Concen: 0.46 ppbV
RT: 7.02 min Scan# 831
Delta R.T. -0.024 min
Lab File: r1531788.D
Acq: 20 Mar 2022 9:06 PM

Tgt Ion: 49 Resp: 8306

Ion	Ratio	Lower	Upper
49	100		
84	66.2	54.5	81.7

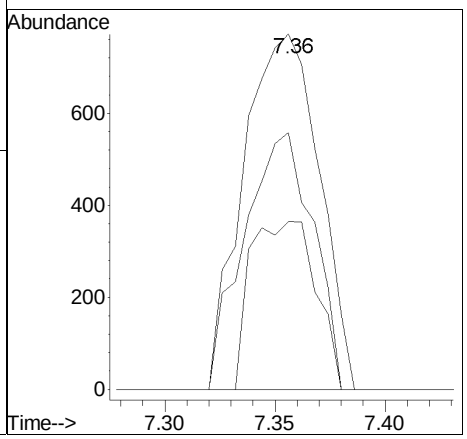


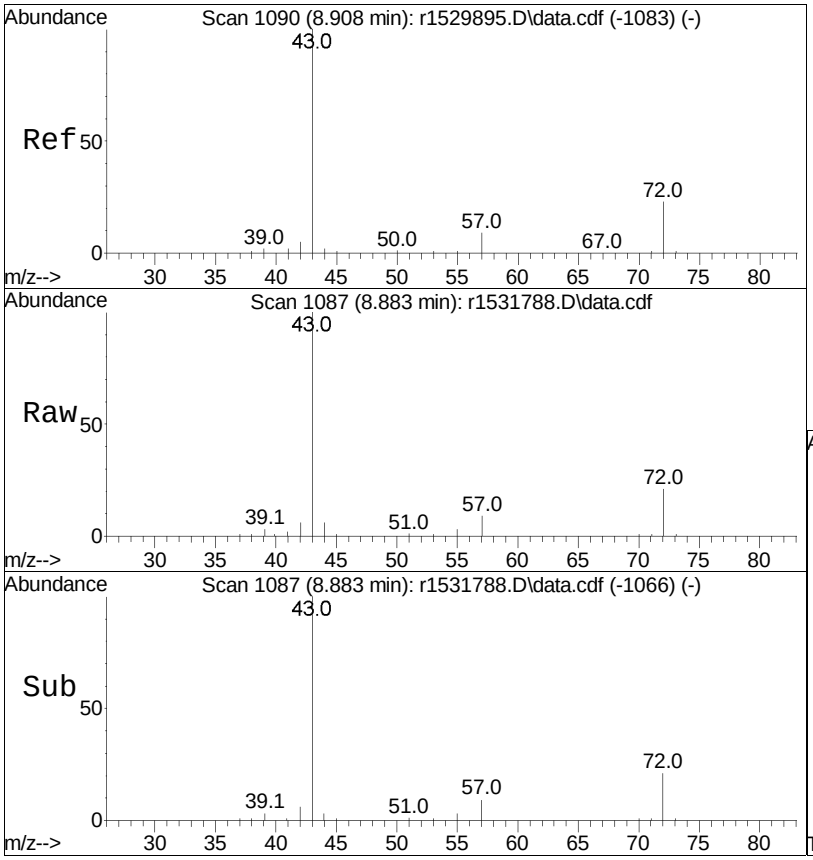


#31
Freon 113
Concen: 0.07 ppbV
RT: 7.36 min Scan# 887
Delta R.T. -0.024 min
Lab File: r1531788.D
Acq: 20 Mar 2022 9:06 PM

Tgt Ion:101 Resp: 1847

Ion	Ratio	Lower	Upper
101	100		
85	47.3	30.6	46.0#
151	72.3	53.5	80.3

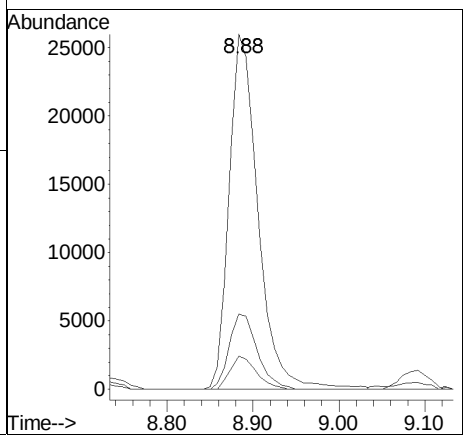


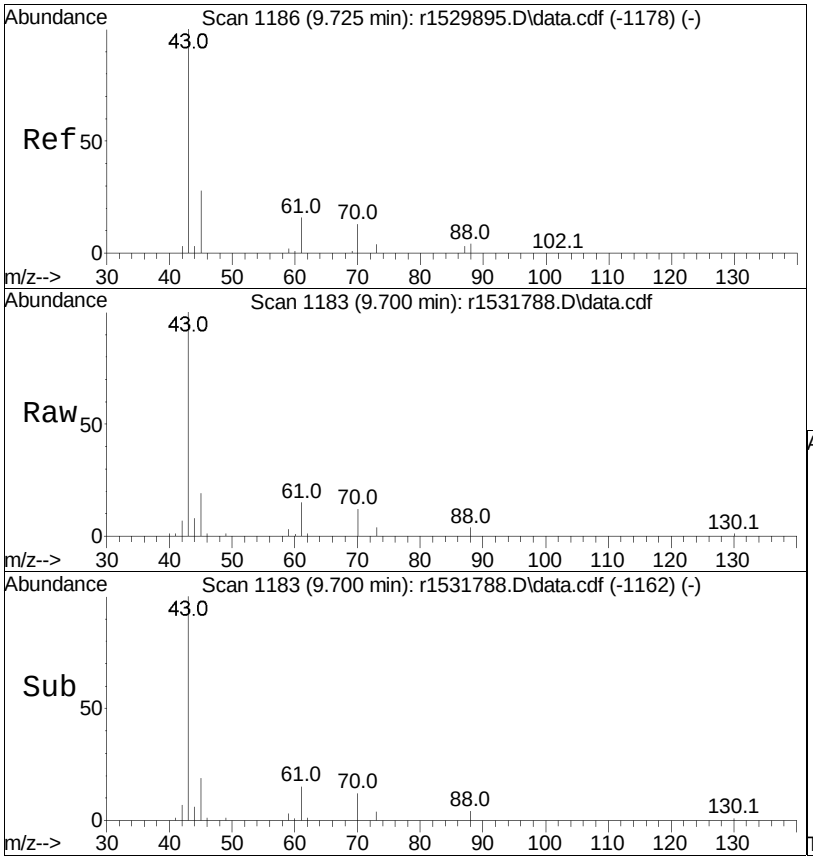


#36
2-butanone
Concen: 1.57 ppbV
RT: 8.88 min Scan# 1087
Delta R.T. -0.025 min
Lab File: r1531788.D
Acq: 20 Mar 2022 9:06 PM

Tgt Ion: 43 Resp: 61062

Ion	Ratio	Lower	Upper
43	100		
72	21.2	18.0	27.0
57	9.4	7.0	10.4

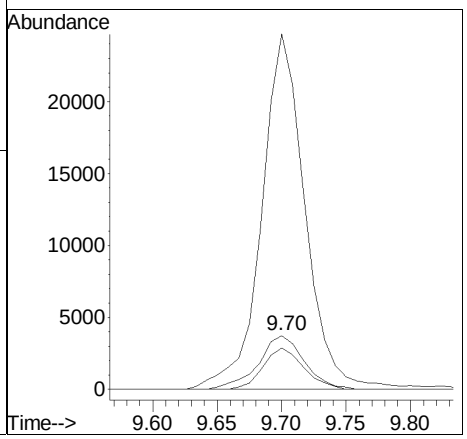


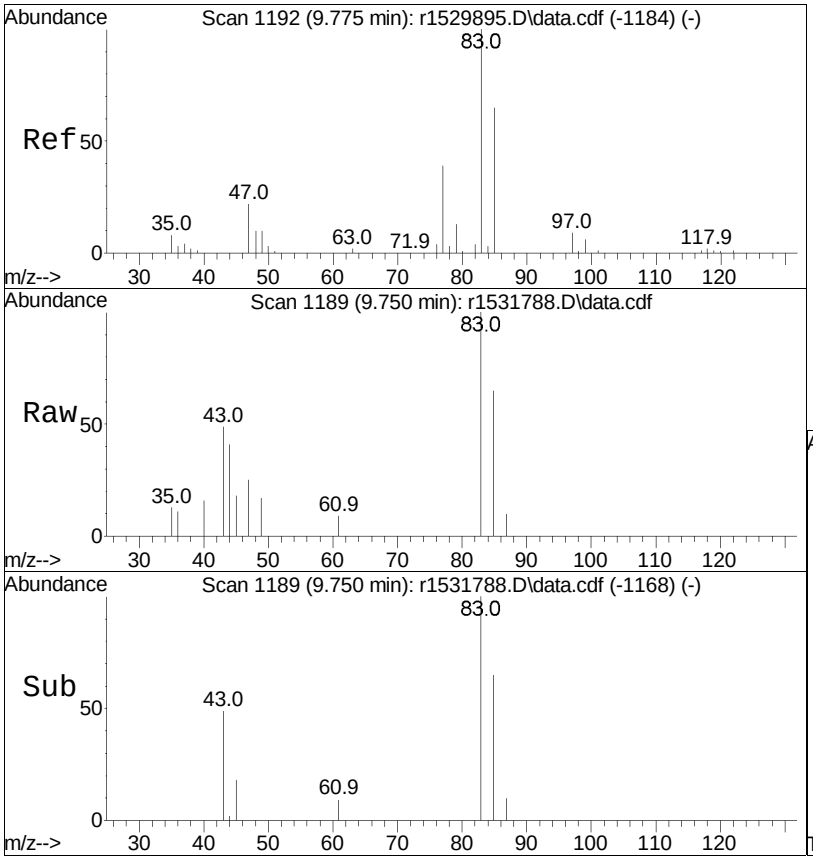


#38
Ethyl Acetate
Concen: 1.31 ppbV
RT: 9.70 min Scan# 1183
Delta R.T. -0.025 min
Lab File: r1531788.D
Acq: 20 Mar 2022 9:06 PM

Tgt Ion: 61 Resp: 9274

Ion	Ratio	Lower	Upper
61	100		
70	77.4	62.7	94.1
43	662.4	551.8	827.8

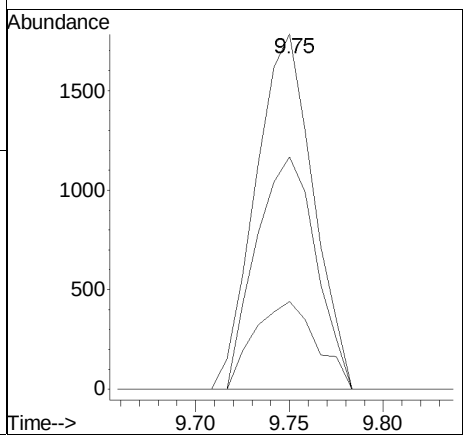


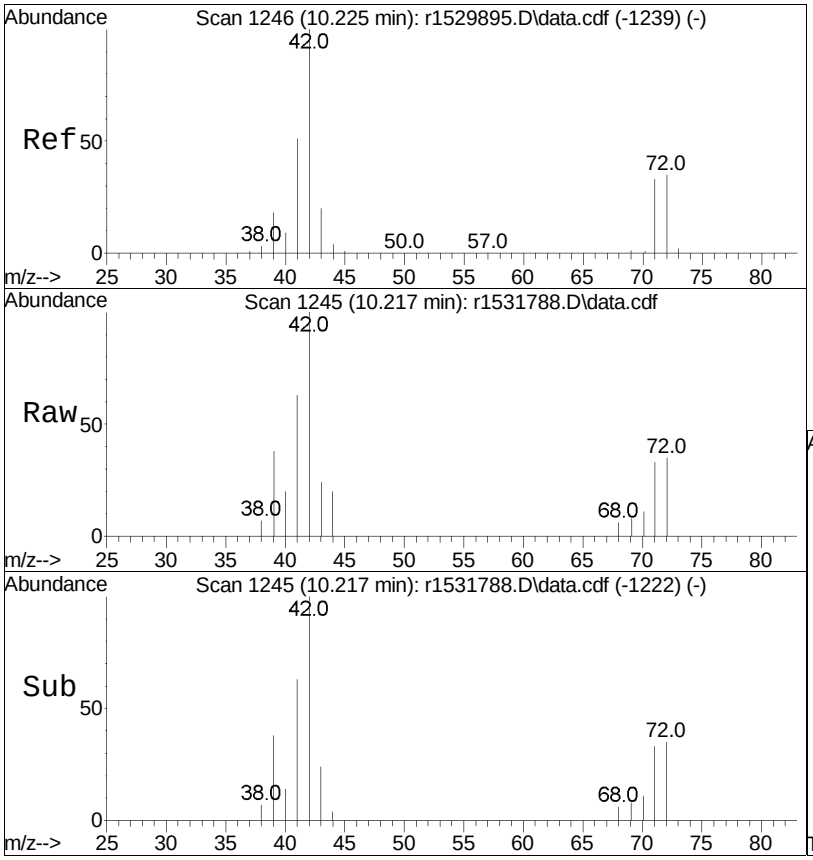


#39
chloroform
Concen: 0.12 ppbV
RT: 9.75 min Scan# 1189
Delta R.T. -0.025 min
Lab File: r1531788.D
Acq: 20 Mar 2022 9:06 PM

Tgt Ion: 83 Resp: 3814

Ion	Ratio	Lower	Upper
83	100		
85	65.4	51.8	77.8
47	24.7	17.9	26.9

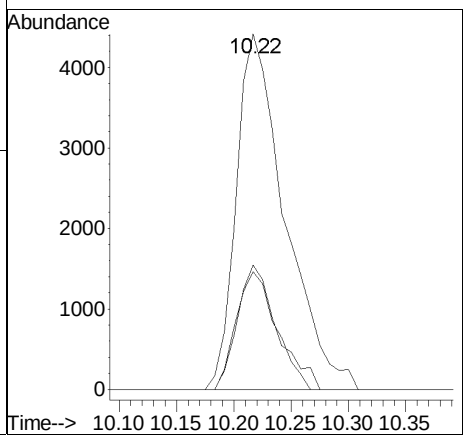


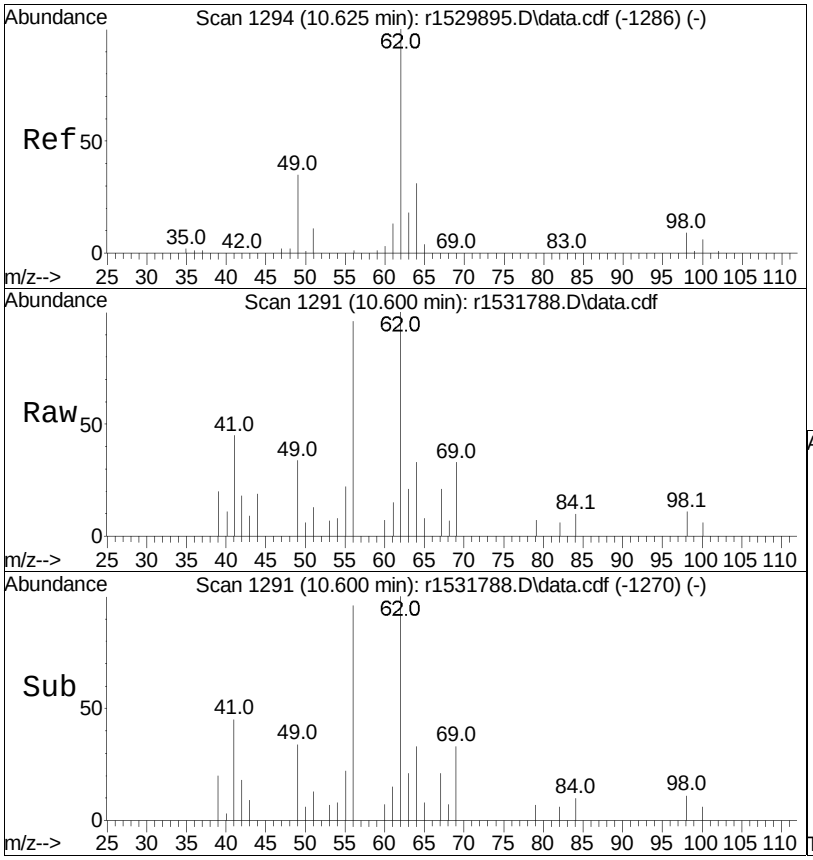


#40
Tetrahydrofuran
Concen: 0.54 ppbV
RT: 10.22 min Scan# 1245
Delta R.T. -0.008 min
Lab File: r1531788.D
Acq: 20 Mar 2022 9:06 PM

Tgt Ion: 42 Resp: 13055

Ion	Ratio	Lower	Upper
42	100		
71	33.1	26.8	40.2
72	35.0	27.7	41.5

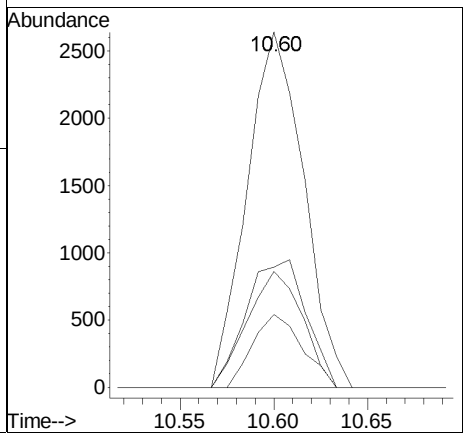


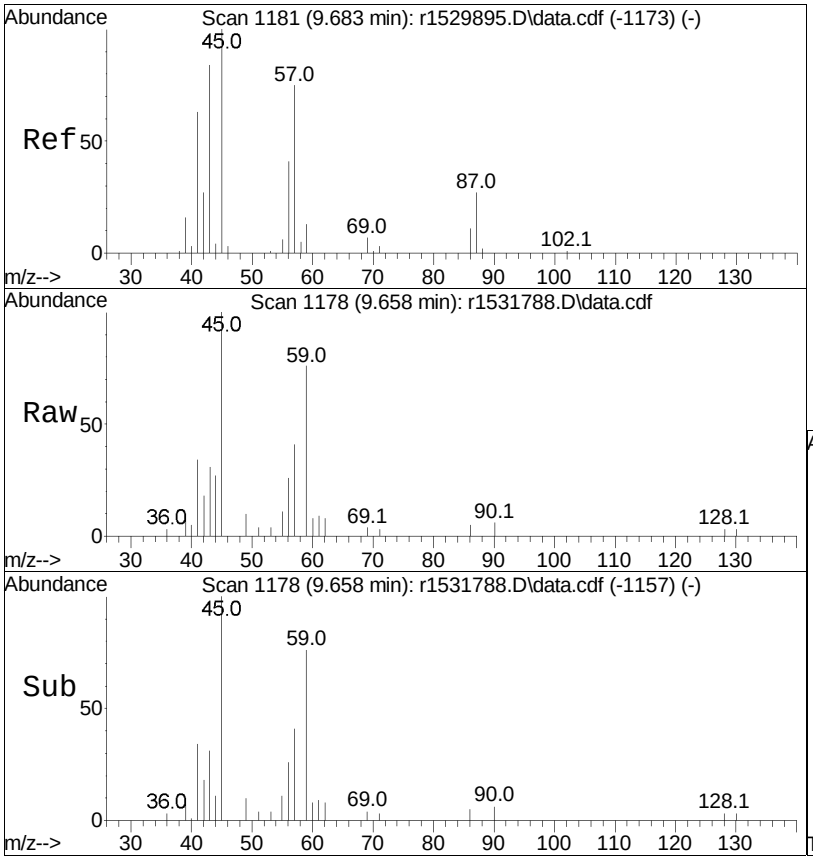


#42
1,2-dichloroethane
Concen: 0.24 ppbV
RT: 10.60 min Scan# 1291
Delta R.T. -0.025 min
Lab File: r1531788.D
Acq: 20 Mar 2022 9:06 PM

Tgt Ion: 62 Resp: 5556

Ion	Ratio	Lower	Upper
62	100		
64	32.6	25.0	37.4
49	33.9	27.8	41.8
63	20.5	14.4	21.6

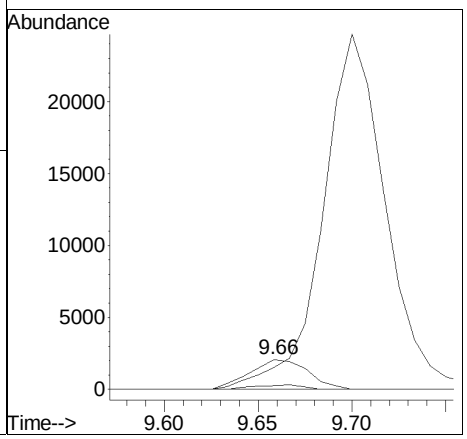


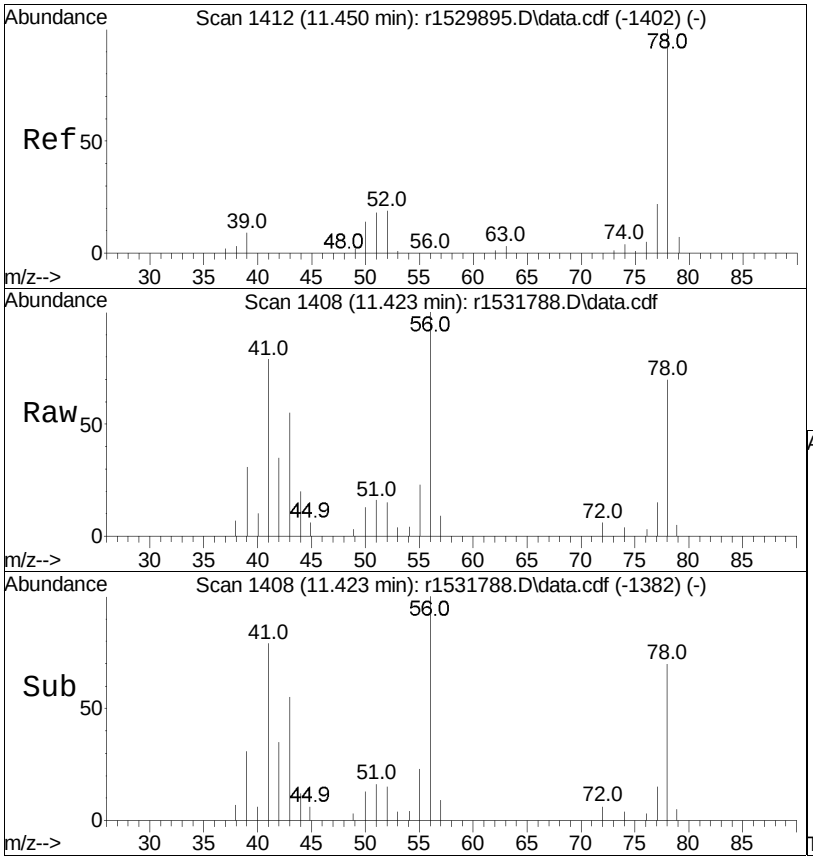


#44
hexane
Concen: 0.13 ppbV
RT: 9.66 min Scan# 1178
Delta R.T. -0.025 min
Lab File: r1531788.D
Acq: 20 Mar 2022 9:06 PM

Tgt Ion: 57 Resp: 4521

Ion	Ratio	Lower	Upper
57	100		
43	74.0	88.8	133.2#
86	12.5	11.4	17.0

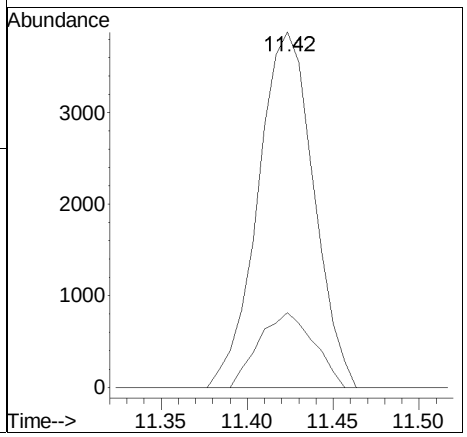


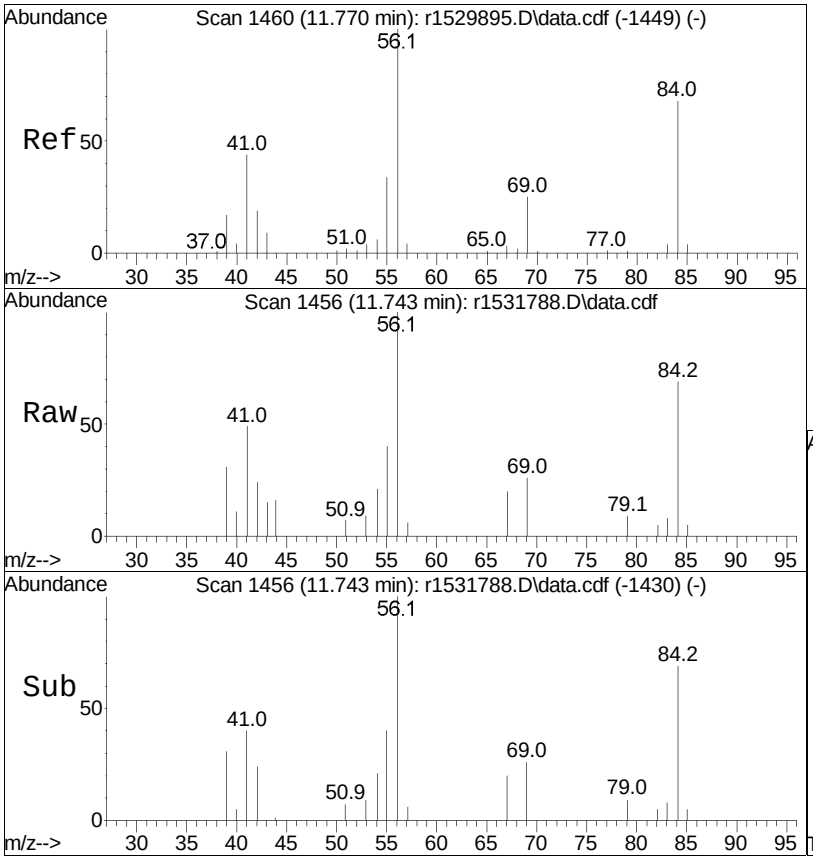


#50
benzene
Concen: 0.15 ppbV
RT: 11.42 min Scan# 1408
Delta R.T. -0.027 min
Lab File: r1531788.D
Acq: 20 Mar 2022 9:06 PM

Tgt Ion: 78 Resp: 8741

Ion	Ratio	Lower	Upper
78	100		
52	21.1	15.2	22.8

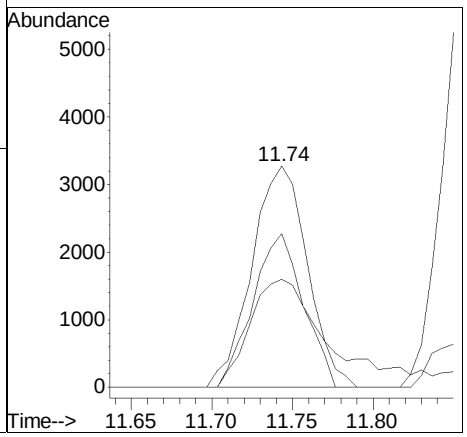


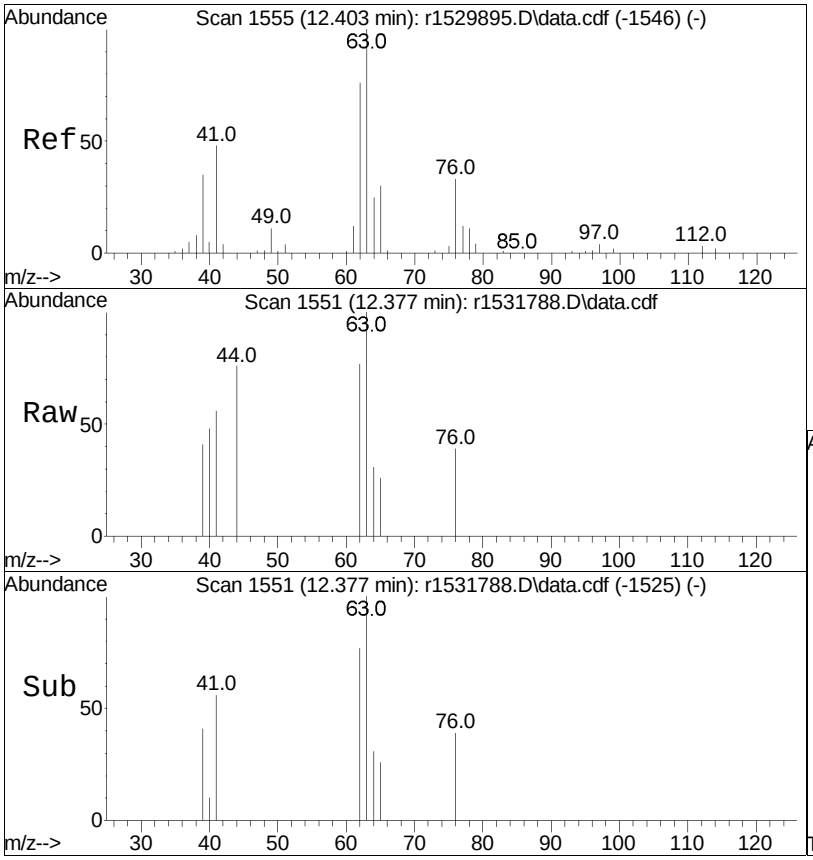


#53
cyclohexane
Concen: 0.21 ppbV
RT: 11.74 min Scan# 1456
Delta R.T. -0.027 min
Lab File: r1531788.D
Acq: 20 Mar 2022 9:06 PM

Tgt Ion: 56 Resp: 7864

Ion	Ratio	Lower	Upper
56	100		
84	69.5	54.8	82.2
41	48.8	35.5	53.3

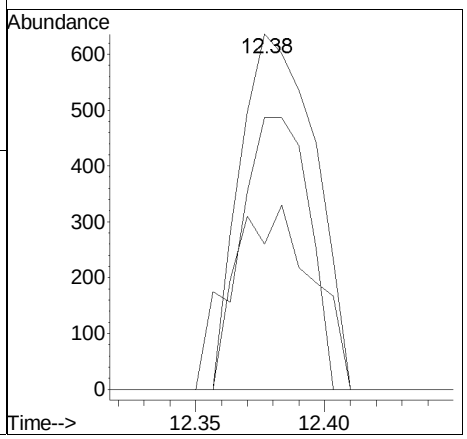


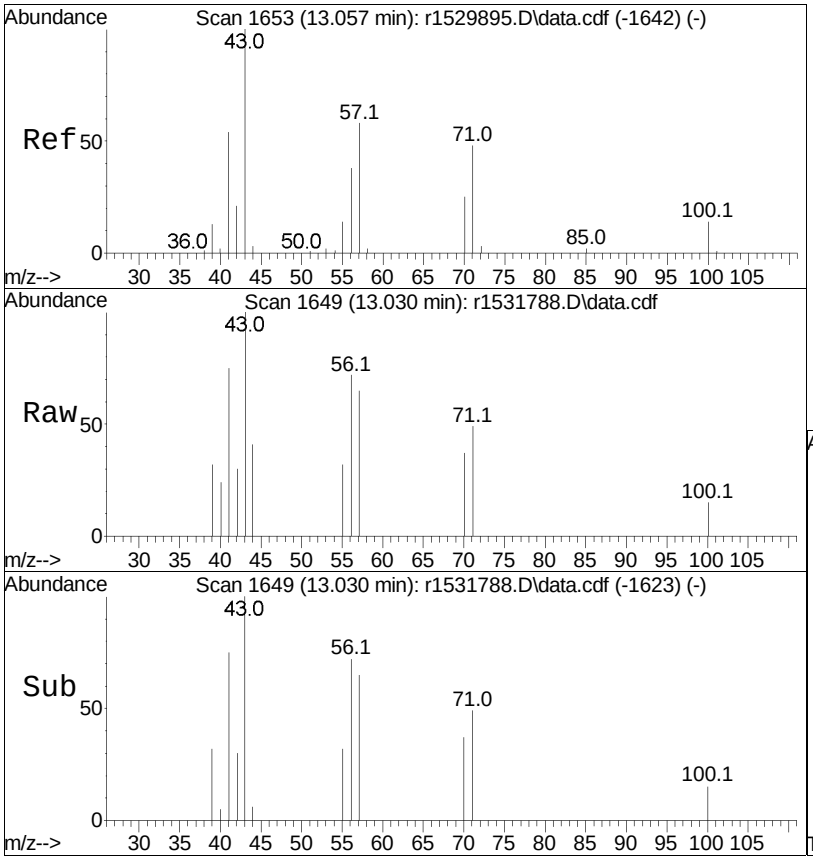


#56
1,2-dichloropropane
Concen: 0.06 ppbV
RT: 12.38 min Scan# 1551
Delta R.T. -0.027 min
Lab File: r1531788.D
Acq: 20 Mar 2022 9:06 PM

Tgt Ion: 63 Resp: 1289

Ion	Ratio	Lower	Upper
63	100		
62	76.6	60.6	91.0
39	40.9	27.8	41.6

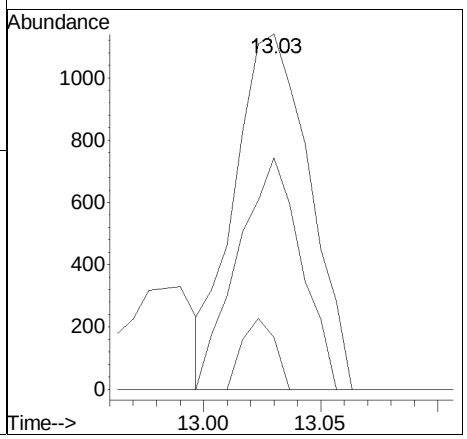


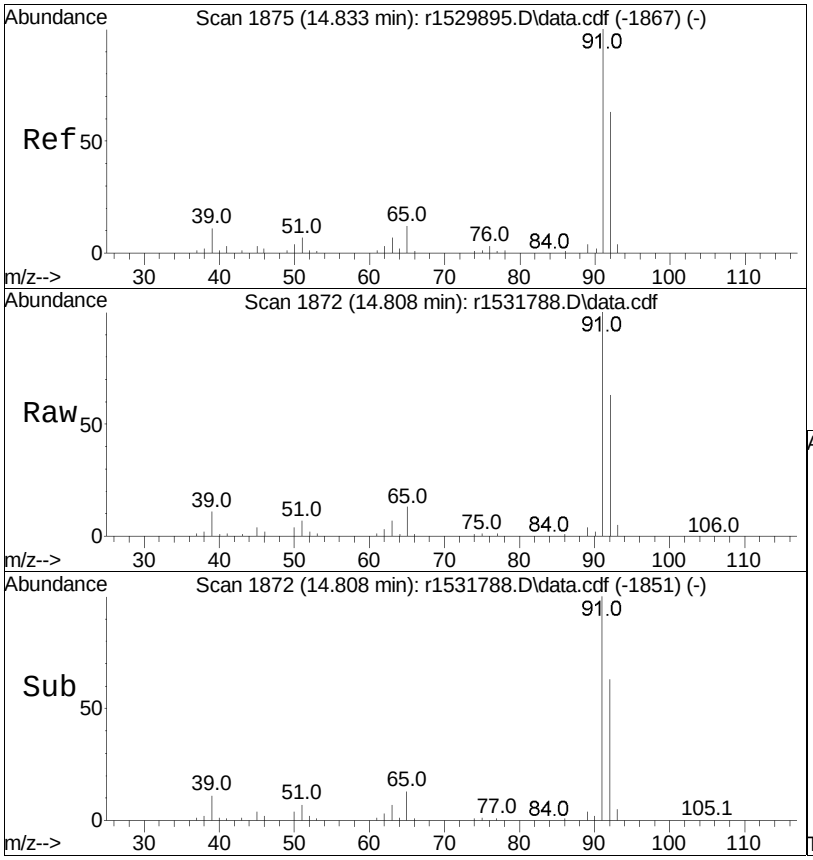


#62
heptane
Concen: 0.07 ppbV
RT: 13.03 min Scan# 1649
Delta R.T. -0.027 min
Lab File: r1531788.D
Acq: 20 Mar 2022 9:06 PM

Tgt Ion: 43 Resp: 2542

Ion	Ratio	Lower	Upper
43	100		
57	65.2	46.5	69.7
100	14.6	11.6	17.4

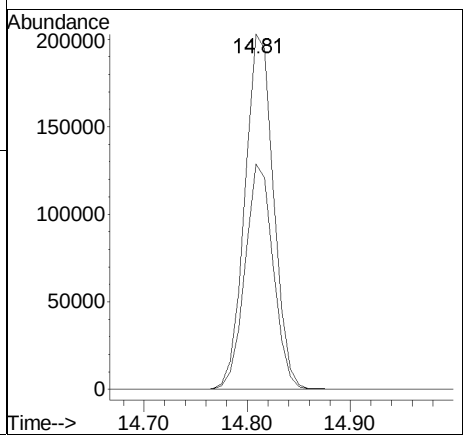


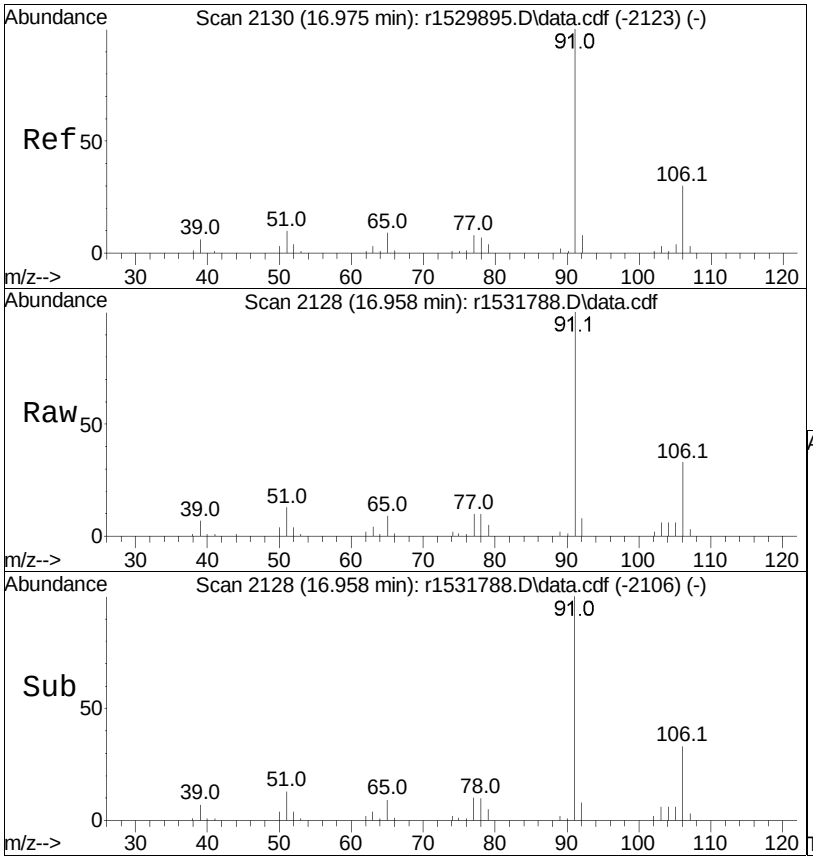


#68
toluene
Concen: 5.31 ppbV
RT: 14.81 min Scan# 1872
Delta R.T. -0.025 min
Lab File: r1531788.D
Acq: 20 Mar 2022 9:06 PM

Tgt Ion: 91 Resp: 392608

Ion	Ratio	Lower	Upper
91	100		
92	63.5	50.3	75.5

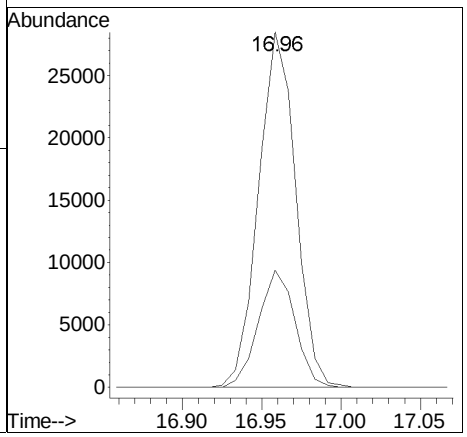


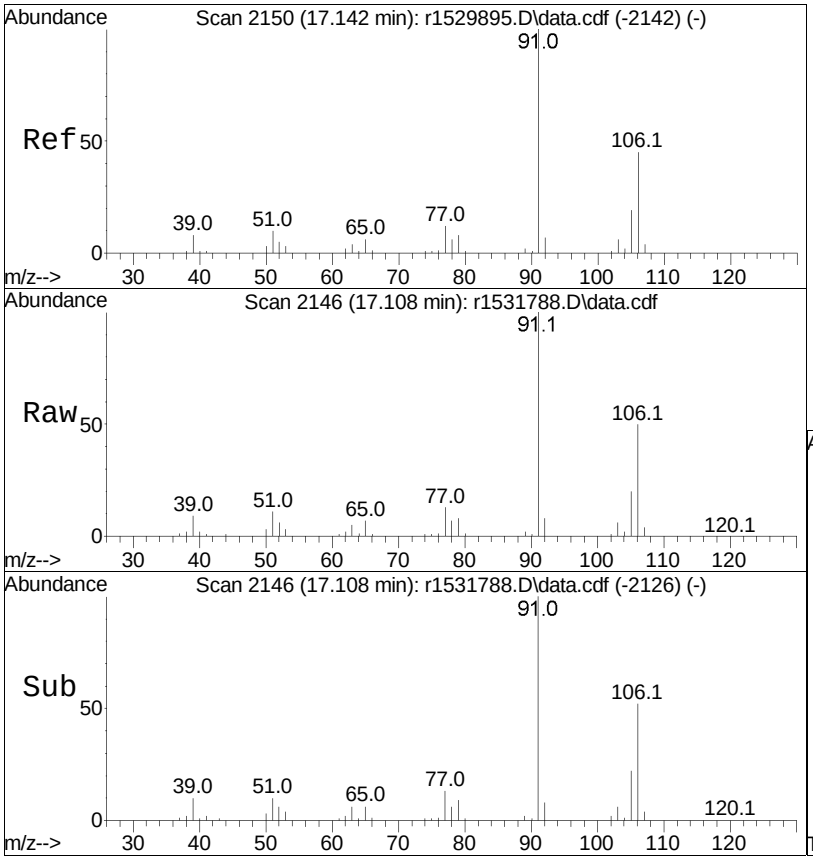


#81
ethylbenzene
Concen: 0.53 ppbV
RT: 16.96 min Scan# 2128
Delta R.T. -0.017 min
Lab File: r1531788.D
Acq: 20 Mar 2022 9:06 PM

Tgt Ion: 91 Resp: 46322

Ion	Ratio	Lower	Upper
91	100		
106	33.0	24.1	36.1

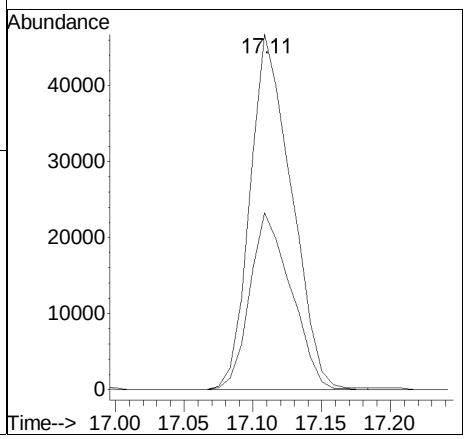


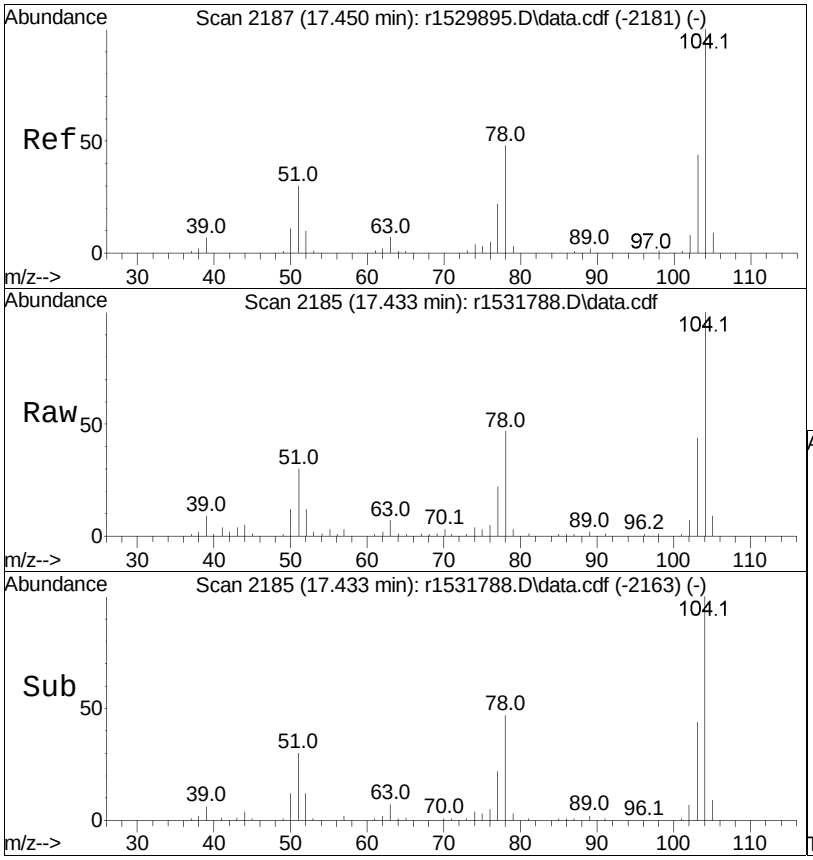


#83
m+p-xylene
Concen: 1.37 ppbV
RT: 17.11 min Scan# 2146
Delta R.T. -0.033 min
Lab File: r1531788.D
Acq: 20 Mar 2022 9:06 PM

Tgt Ion: 91 Resp: 97659

Ion	Ratio	Lower	Upper
91	100		
106	49.7	36.2	54.2

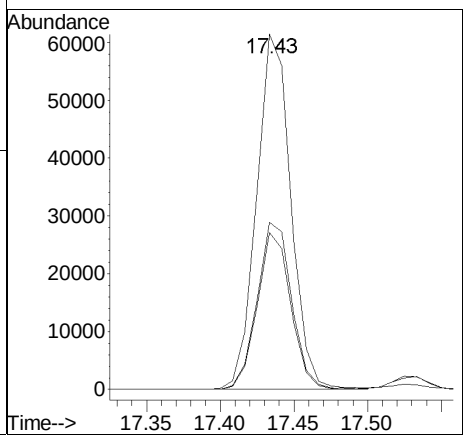


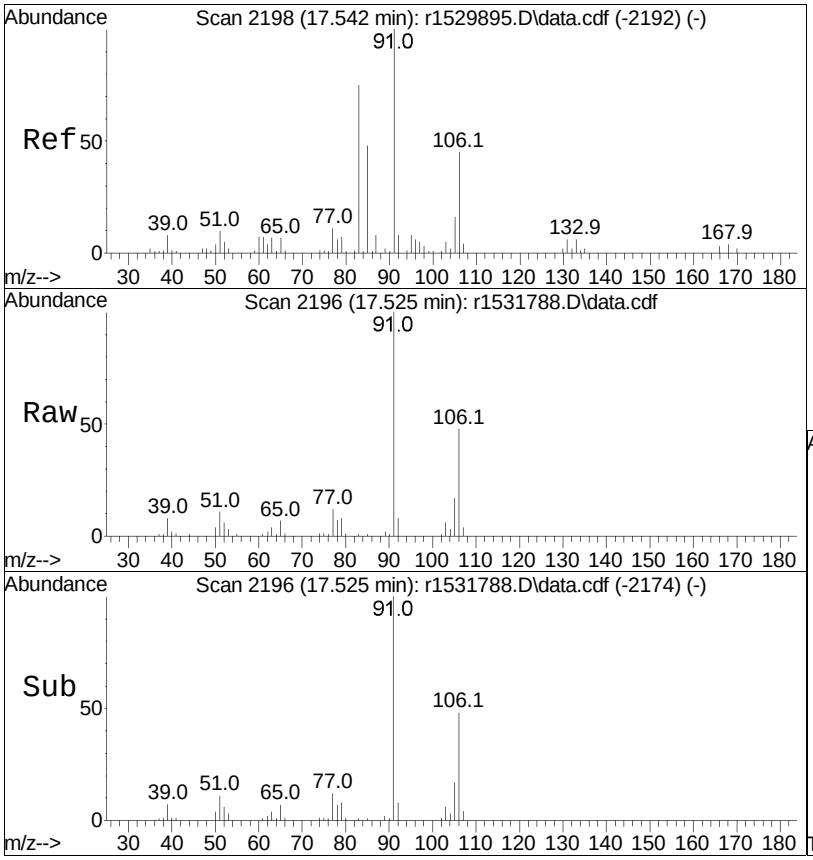


#85
styrene
Concen: 1.97 ppbV
RT: 17.43 min Scan# 2185
Delta R.T. -0.017 min
Lab File: r1531788.D
Acq: 20 Mar 2022 9:06 PM

Tgt Ion:104 Resp: 99391

Ion	Ratio	Lower	Upper
104	100		
103	44.2	35.0	52.6
78	47.0	38.3	57.5

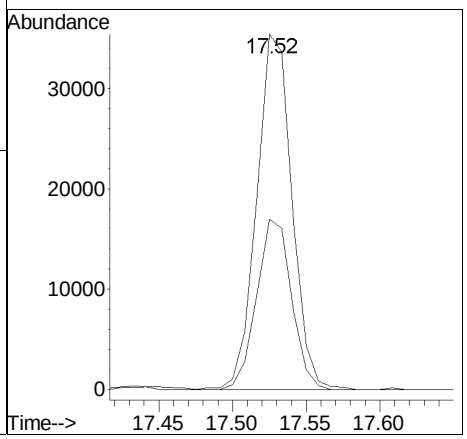


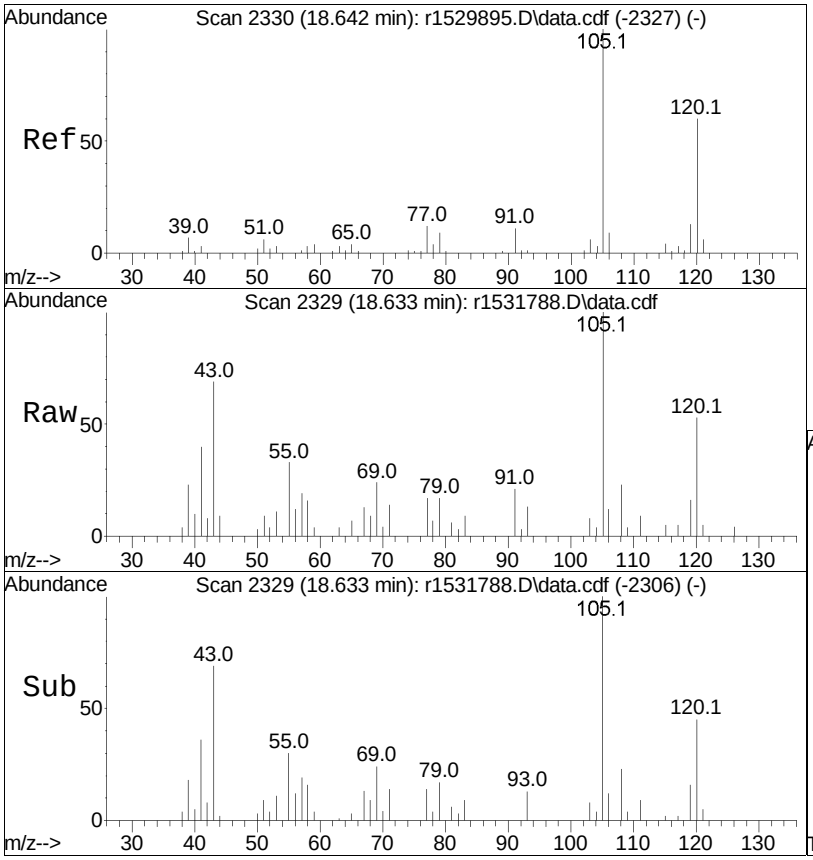


#87
o-xylene
Concen: 0.83 ppbV
RT: 17.52 min Scan# 2196
Delta R.T. -0.017 min
Lab File: r1531788.D
Acq: 20 Mar 2022 9:06 PM

Tgt Ion: 91 Resp: 58752

Ion	Ratio	Lower	Upper
91	100		
106	47.9	35.8	53.8

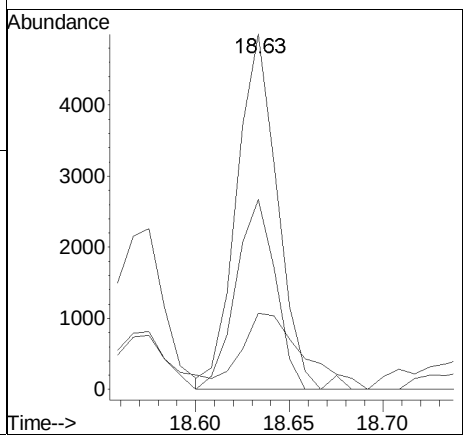


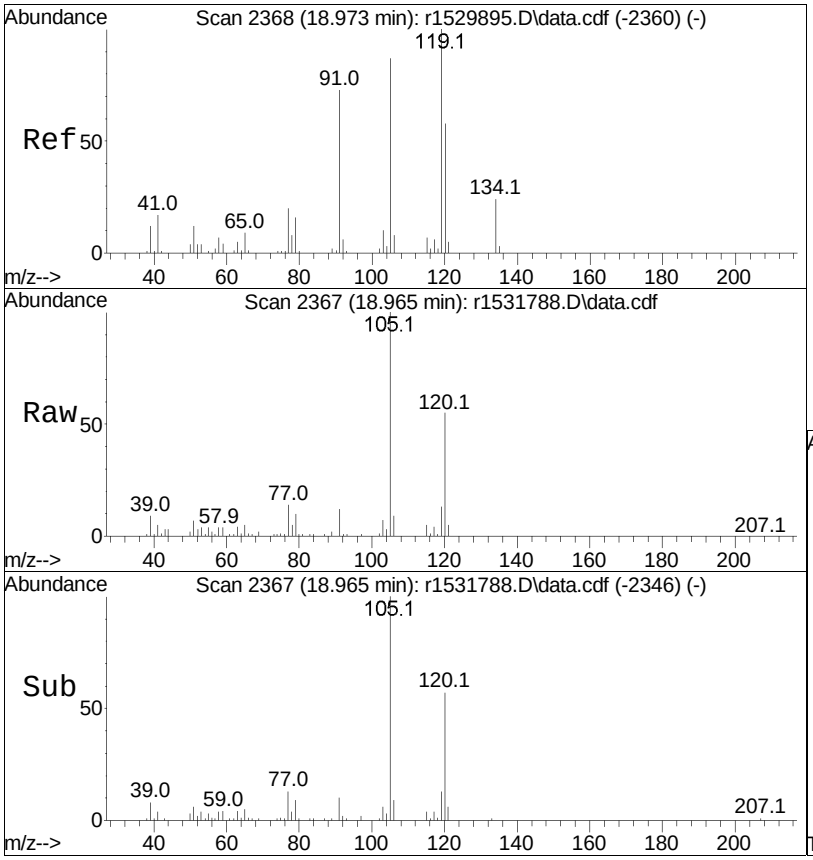


#97
1,3,5-trimethylbenzene
Concen: 0.10 ppbV
RT: 18.63 min Scan# 2329
Delta R.T. -0.008 min
Lab File: r1531788.D
Acq: 20 Mar 2022 9:06 PM

Tgt Ion:105 Resp: 7589

Ion	Ratio	Lower	Upper
105	100		
120	53.4	47.7	71.5
91	21.4	8.5	12.7#

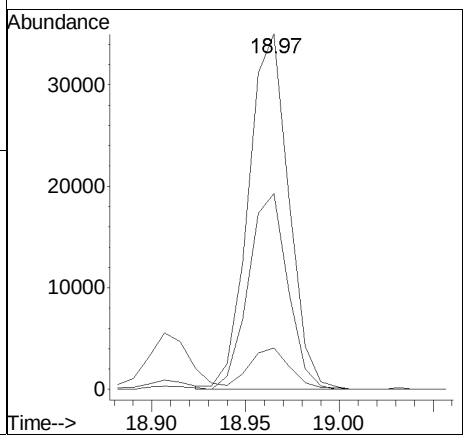




#99
1,2,4-trimethylbenzene
Concen: 0.72 ppbV
RT: 18.97 min Scan# 2367
Delta R.T. -0.008 min
Lab File: r1531788.D
Acq: 20 Mar 2022 9:06 PM

Tgt Ion:105 Resp: 52552

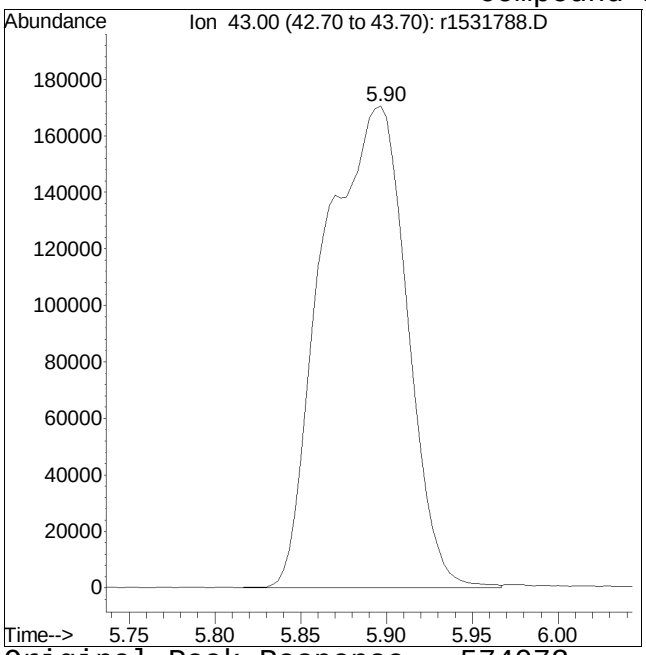
Ion	Ratio	Lower	Upper
105	100		
120	55.1	52.7	79.1
91	11.7	67.2	100.8#



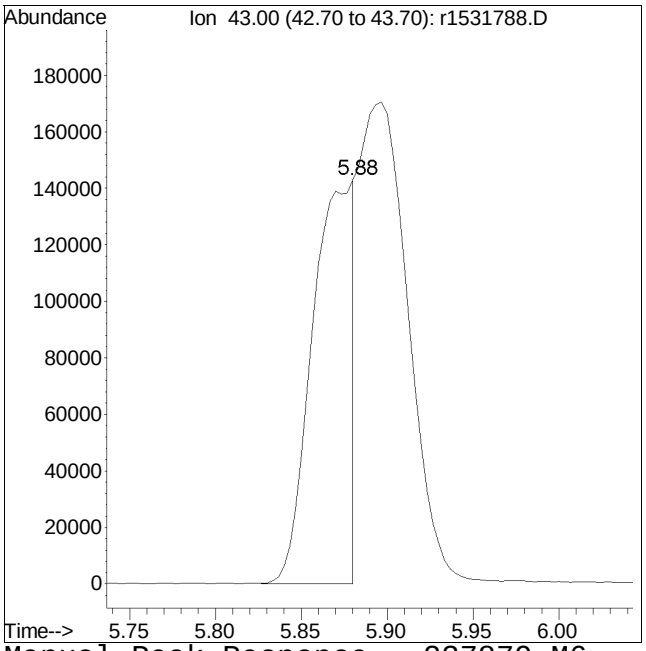
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airlab15\QMethod : TFS15_211222.M
Data File : r1531788.D Operator : AIRLAB15:RY
Date Inj'd : 3/20/2020 0:9: 6 Instrument :
Sample : L2213657-02,3,250,250 Quant Date : 3/21/2022 8:47 am

Compound #19: acetone



Original Peak Response = 574073



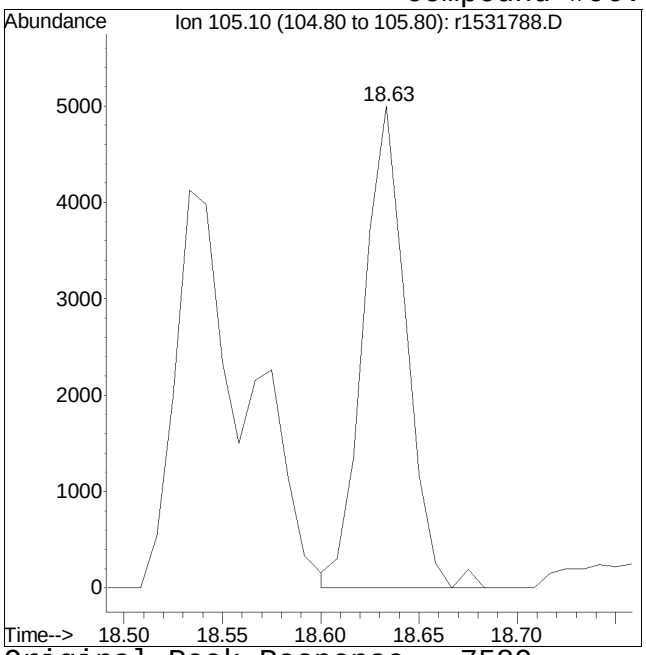
Manual Peak Response = 237879 M6

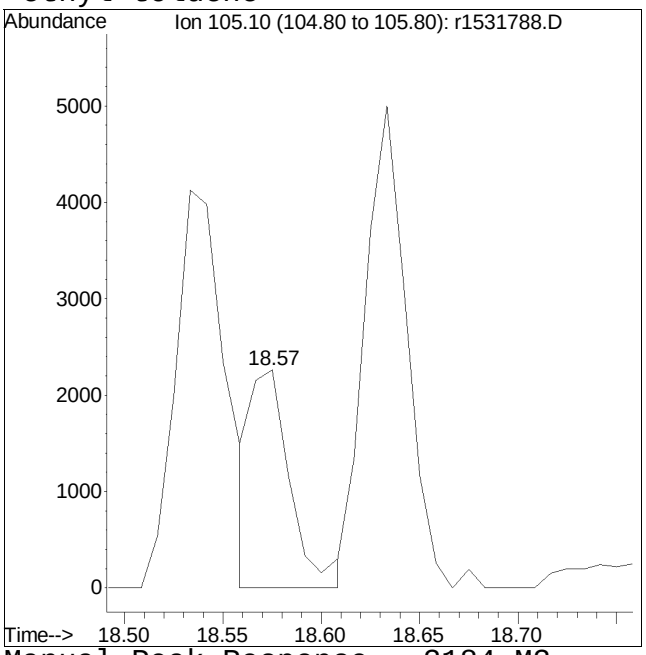
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airlab15\QMethod : TFS15_211222.M
Data File : r1531788.D Operator : AIRLAB15:RY
Date Inj'd : 3/20/2020 0:9: 6 Instrument :
Sample : L2213657-02,3,250,250 Quant Date : 3/21/2022 8:47 am

Compound #96: 4-ethyl toluene





Original Peak Response = 7589 Manual Peak Response = 3184 M3

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531789.D
Acq On : 20 Mar 2022 9:45 PM
Operator : AIRLAB15:RY
Sample : L2213657-03,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 15:42:53 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320T\r1531778.D
Sub List : TO15-NY-7-SIM - .

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) bromochloromethane	9.58	49	385217	10.000	ppbV		-0.03
Standard Area = 382239			Recovery = 100.78%				
43) 1,4-difluorobenzene	11.86	114	838965	10.000	ppbV		-0.03
Standard Area = 859136			Recovery = 97.65%				
67) chlorobenzene-D5	16.57	54	202451	10.000	ppbV		-0.02
Standard Area = 200634			Recovery = 100.91%				
System Monitoring Compounds							
Target Compounds							Qvalue
5) dichlorodifluoromethane	3.96	85	14105	0.495	ppbV		99
6) chloromethane	4.14	50	8387	0.591	ppbV		95
7) Freon-114	4.27		0	N.D.			
10) 1,3-butadiene	4.56		0	N.D.			
13) bromomethane	4.89		0	N.D.			
14) chloroethane	0.00		0	N.D.			
15) ethanol	5.28	31	3379223	305.929	ppbV		99
17) vinyl bromide	5.41		0	N.D.			
19) acetone	5.88	43	238253M6	10.825	ppbV		
21) trichlorofluoromethane	6.07	101	8561	0.313	ppbV		97
22) isopropyl alcohol	6.19	45	296929	12.484	ppbV		100
27) tertiary butyl alcohol	6.94	59	5703	0.185	ppbV	#	75
28) methylene chloride	7.02	49	8856	0.491	ppbV		100
29) 3-chloropropene	0.00		0	N.D.	d		
30) carbon disulfide	7.31		0	N.D.			
31) Freon 113	7.35	101	1924	0.070	ppbV	#	92
32) trans-1,2-dichloroethene	0.00		0	N.D.			
33) 1,1-dichloroethane	0.00		0	N.D.			
34) MTBE	8.47		0	N.D.			
36) 2-butanone	8.88	43	66356	1.689	ppbV		99
38) Ethyl Acetate	9.70	61	10057	1.412	ppbV		85
39) chloroform	9.74	83	4309	0.132	ppbV		94
40) Tetrahydrofuran	10.22	42	9494	0.389	ppbV		97
42) 1,2-dichloroethane	10.60	62	5933	0.253	ppbV	#	92
44) hexane	9.66	57	5055	0.143	ppbV	#	78
50) benzene	11.42	78	8973	0.152	ppbV		94
53) cyclohexane	11.74	56	7942	0.210	ppbV		95

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531789.D
Acq On : 20 Mar 2022 9:45 PM
Operator : AIRLAB15:RY
Sample : L2213657-03,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 15:42:53 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320T\r1531778.D
Sub List : TO15-NY-7-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
56) 1,2-dichloropropane	12.38	63	1405	0.064	ppbV	95
57) bromodichloromethane	0.00		0	N.D.		
58) 1,4-dioxane	0.00		0	N.D.		
60) 2,2,4-trimethylpentane	12.71		0	N.D.		
62) heptane	13.02	43	2903	0.075	ppbV	99
63) cis-1,3-dichloropropene	0.00		0	N.D.		
64) 4-methyl-2-pentanone	13.73		0	N.D.		
65) trans-1,3-dichloropropene	0.00		0	N.D.		
66) 1,1,2-trichloroethane	0.00		0	N.D.		
68) toluene	14.81	91	410047	5.439	ppbV	99
72) 2-hexanone	15.08		0	N.D.		
74) dibromochloromethane	0.00		0	N.D.		
75) 1,2-dibromoethane	0.00		0	N.D.		
80) chlorobenzene	16.62		0	N.D.		
81) ethylbenzene	16.96	91	48459	0.543	ppbV	96
83) m+p-xylene	17.11	91	101778	1.403	ppbV	97
84) bromoform	0.00		0	N.D.		
85) styrene	17.43	104	102171	1.987	ppbV	99
86) 1,1,2,2-tetrachloroethane	0.00		0	N.D.	d	
87) o-xylene	17.52	91	60155	0.835	ppbV	96
96) 4-ethyl toluene	18.57		0	N.D.		
97) 1,3,5-trimethylbenzene	18.63	105	7335	0.095	ppbV #	94
99) 1,2,4-trimethylbenzene	18.97	105	55198	0.741	ppbV #	48
101) Benzyl Chloride	0.00		0	N.D.	d	
102) 1,3-dichlorobenzene	19.15		0	N.D.		
103) 1,4-dichlorobenzene	19.15		0	N.D.		
107) 1,2-dichlorobenzene	19.42		0	N.D.		
115) 1,2,4-trichlorobenzene	0.00		0	N.D.		
119) hexachlorobutadiene	0.00		0	N.D.		

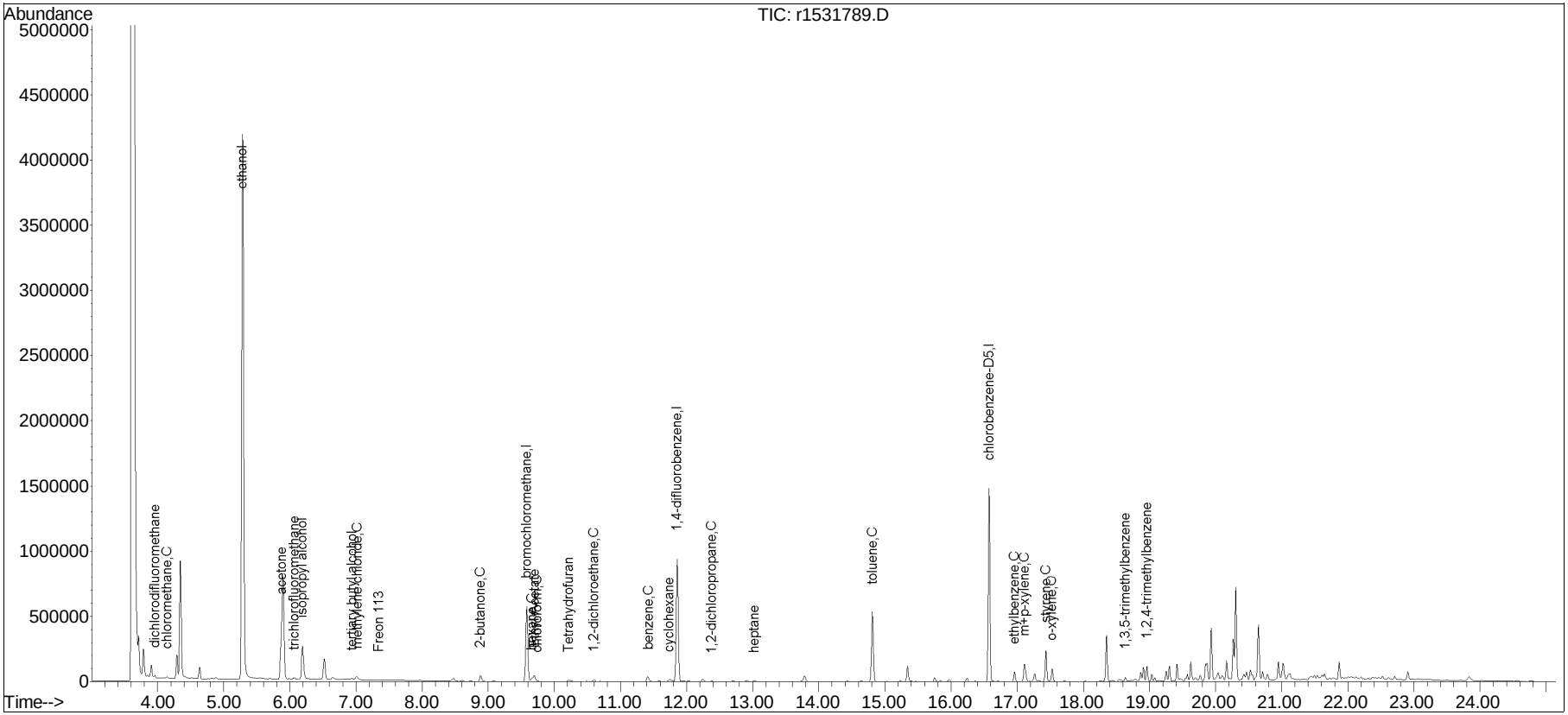
(#) = qualifier out of range (m) = manual integration (+) = signals summed

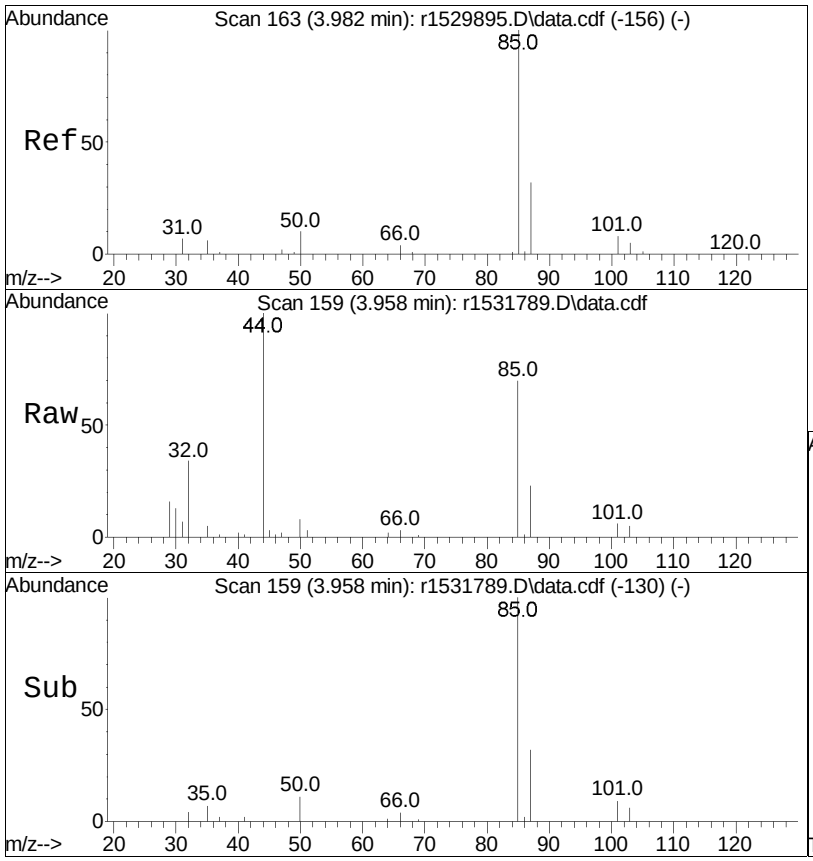
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531789.D
Acq On : 20 Mar 2022 9:45 PM
Operator : AIRLAB15:RY
Sample : L2213657-03,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 15:42:53 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

Sub List : TO15-NY-7-SIM - .\Airlab15\2022\03\0320T\r1531778.D

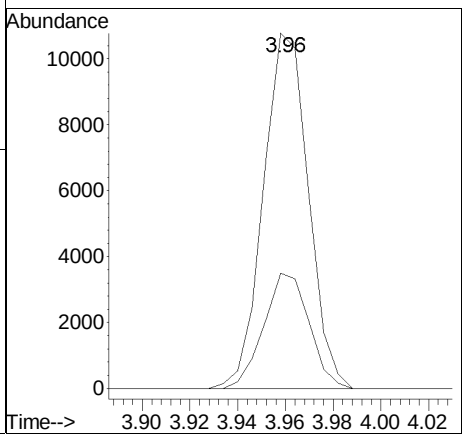


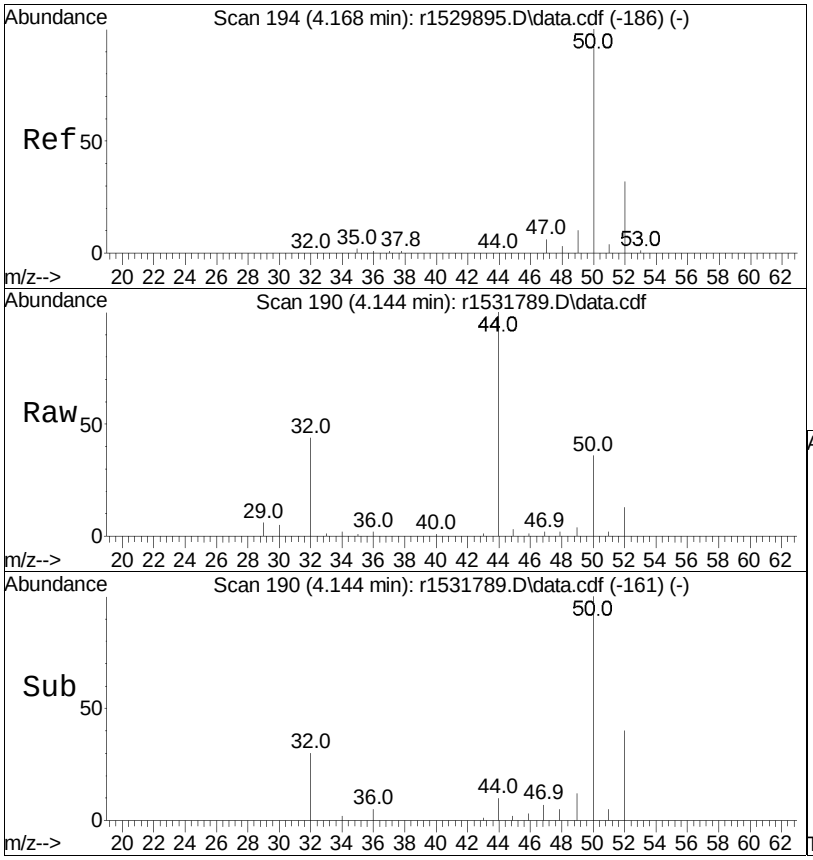


#5
dichlorodifluoromethane
Concen: 0.50 ppbV
RT: 3.96 min Scan# 159
Delta R.T. -0.024 min
Lab File: r1531789.D
Acq: 20 Mar 2022 9:45 PM

Tgt Ion: 85 Resp: 14105

Ion	Ratio	Lower	Upper
85	100		
87	32.4	25.6	38.4

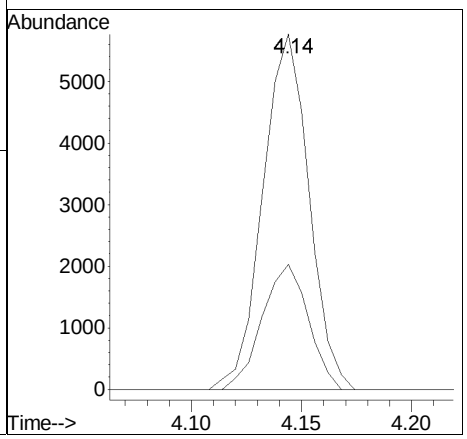


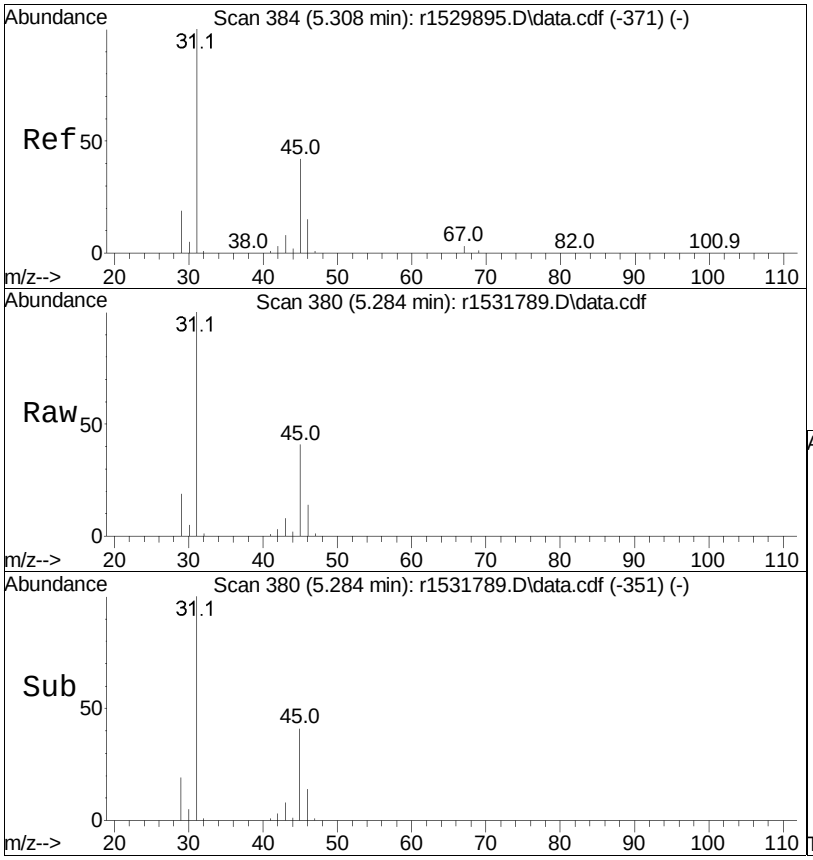


#6
chloromethane
Concen: 0.59 ppbV
RT: 4.14 min Scan# 190
Delta R.T. -0.024 min
Lab File: r1531789.D
Acq: 20 Mar 2022 9:45 PM

Tgt Ion: 50 Resp: 8387

Ion	Ratio	Lower	Upper
50	100		
52	35.2	25.9	38.9

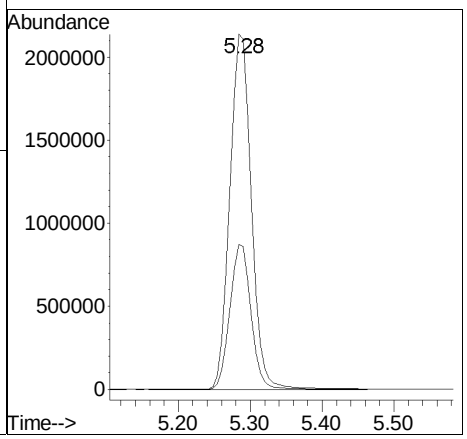


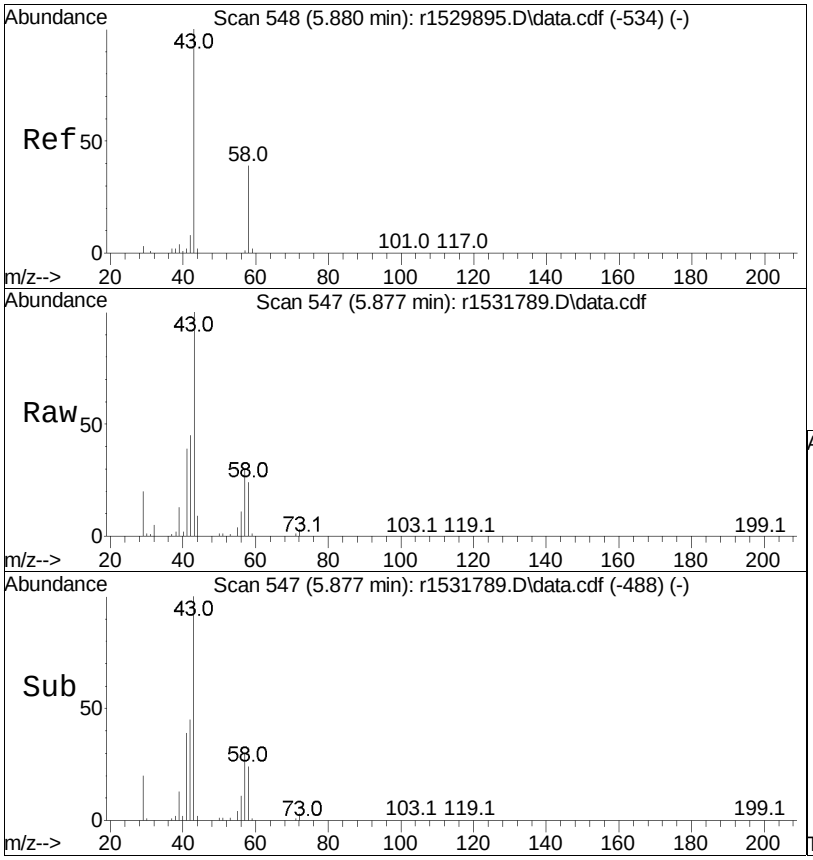


#15
ethanol
Concen: 305.93 ppbV
RT: 5.28 min Scan# 380
Delta R.T. -0.024 min
Lab File: r1531789.D
Acq: 20 Mar 2022 9:45 PM

Tgt Ion: 31 Resp: 3379223

Ion	Ratio	Lower	Upper
31	100		
45	40.9	33.4	50.2

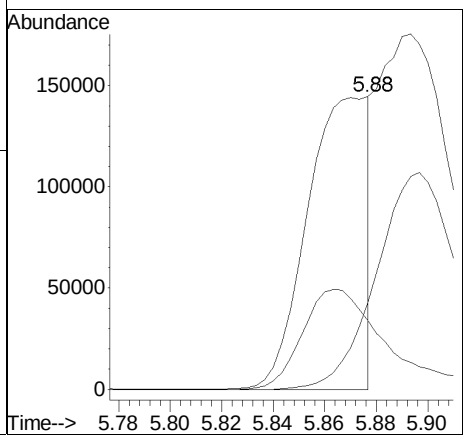


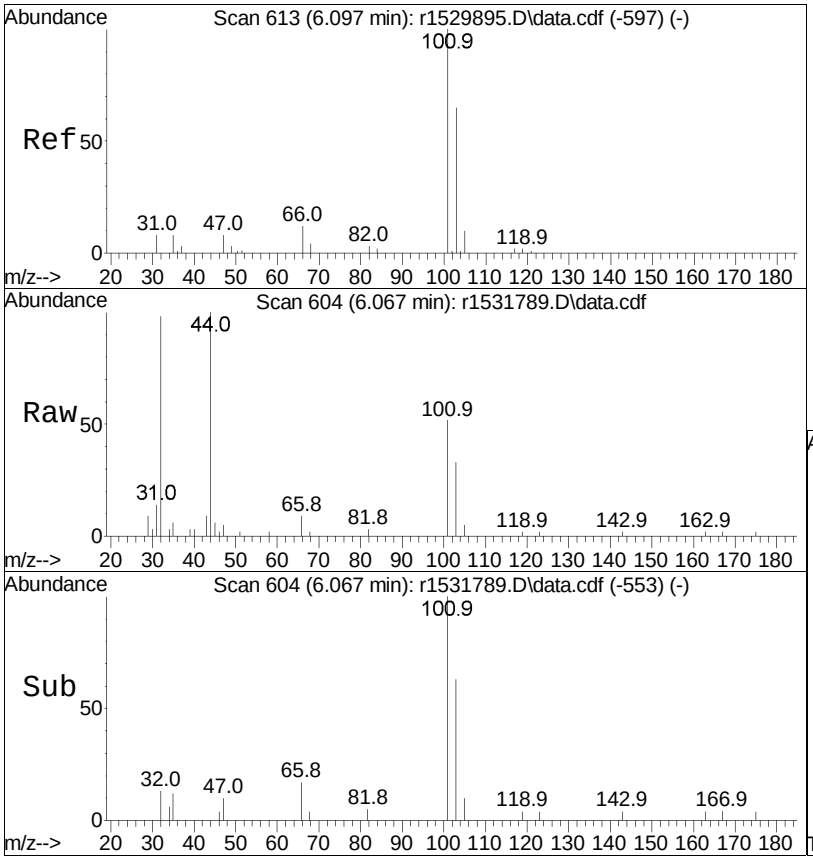


#19
acetone
Concen: 10.83 ppbV m
RT: 5.88 min Scan# 547
Delta R.T. -0.003 min
Lab File: r1531789.D
Acq: 20 Mar 2022 9:45 PM

Tgt Ion: 43 Resp: 238253

Ion	Ratio	Lower	Upper
43	100		
58	23.5	31.6	47.4#
57	29.7	0.8	1.2#

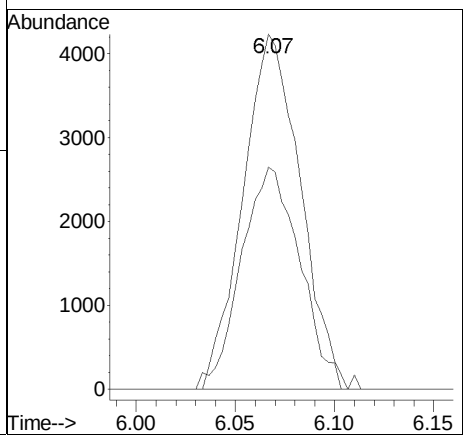


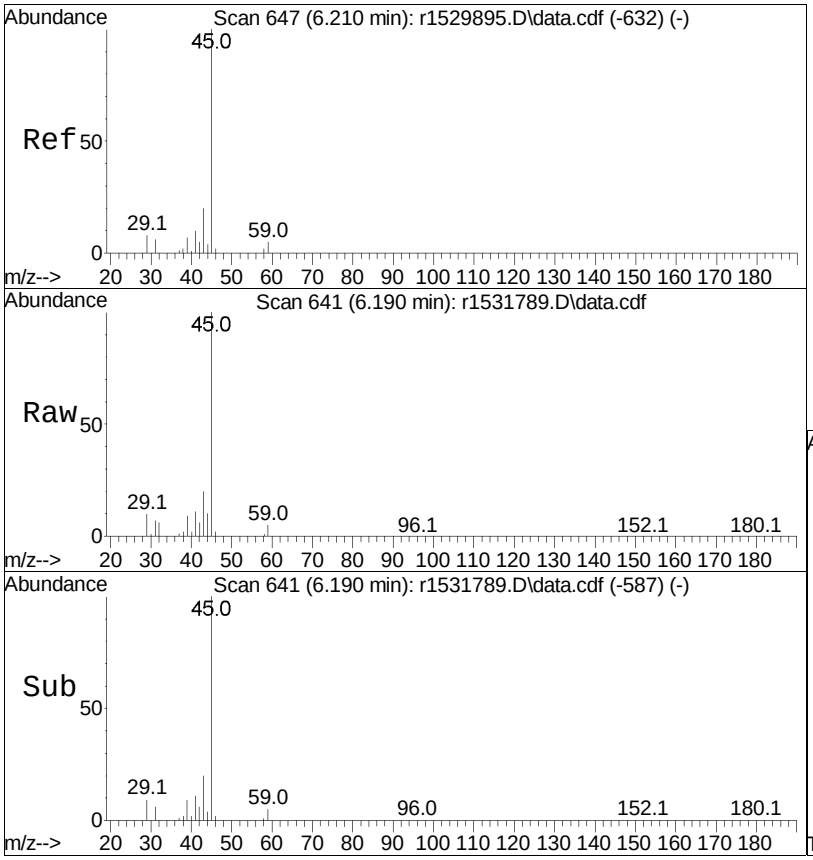


#21
trichlorofluoromethane
Concen: 0.31 ppbV
RT: 6.07 min Scan# 604
Delta R.T. -0.030 min
Lab File: r1531789.D
Acq: 20 Mar 2022 9:45 PM

Tgt Ion:101 Resp: 8561

Ion	Ratio	Lower	Upper
101	100		
103	62.6	52.0	78.0

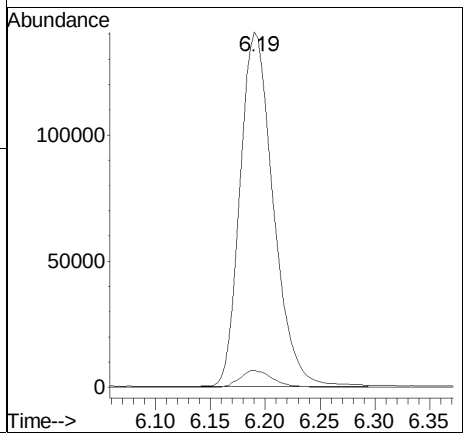


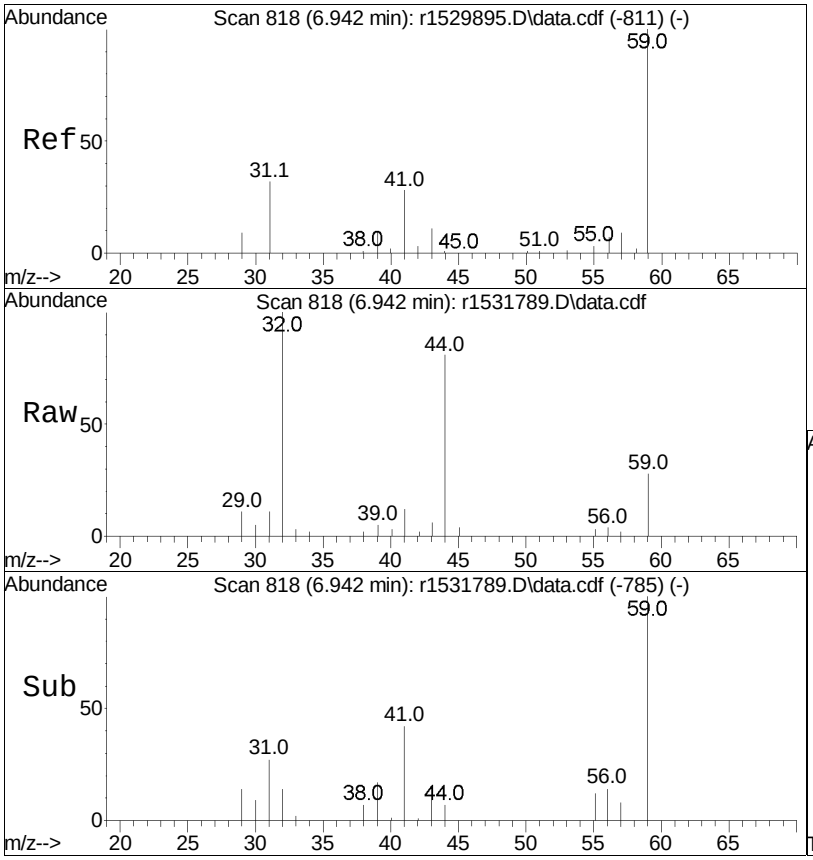


#22
isopropyl alcohol
Concen: 12.48 ppbV
RT: 6.19 min Scan# 641
Delta R.T. -0.020 min
Lab File: r1531789.D
Acq: 20 Mar 2022 9:45 PM

Tgt Ion: 45 Resp: 296929

Ion	Ratio	Lower	Upper
45	100		
59	4.8	3.8	5.8

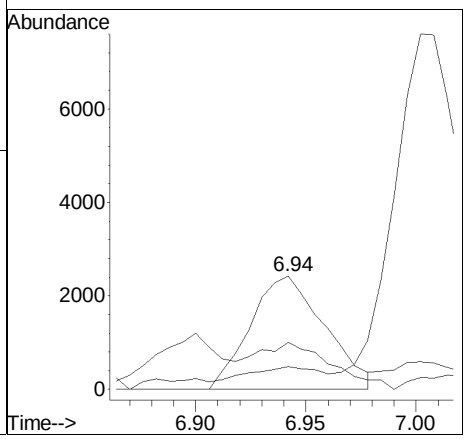


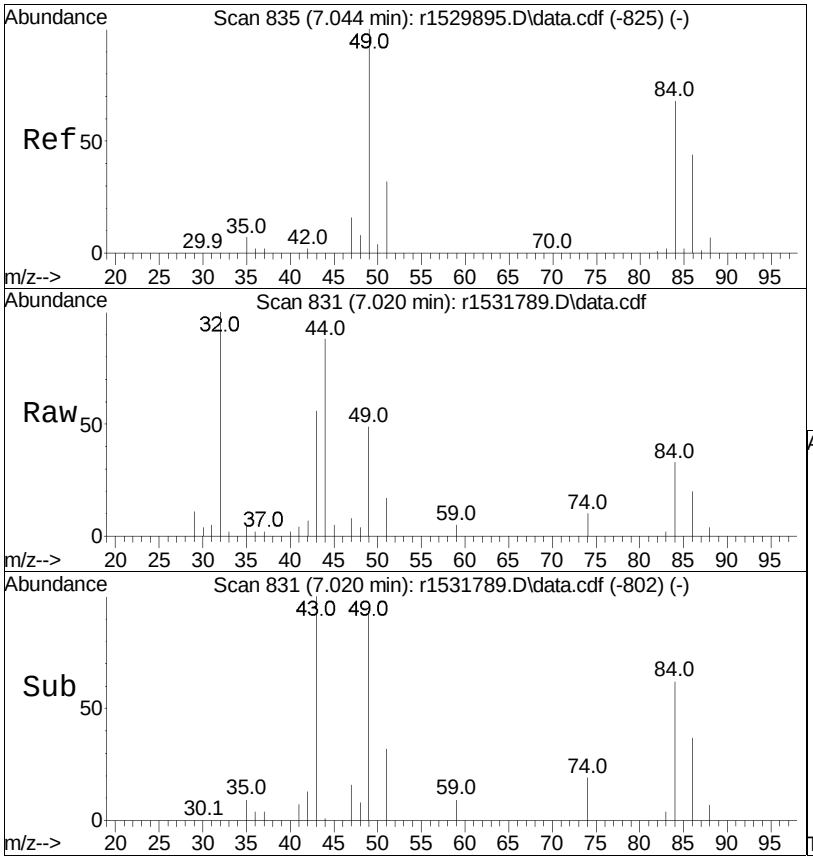


#27
tertiary butyl alcohol
Concen: 0.19 ppbV
RT: 6.94 min Scan# 818
Delta R.T. 0.000 min
Lab File: r1531789.D
Acq: 20 Mar 2022 9:45 PM

Tgt Ion: 59 Resp: 5703

Ion	Ratio	Lower	Upper
59	100		
41	41.5	22.2	33.4#
43	20.1	8.9	13.3#

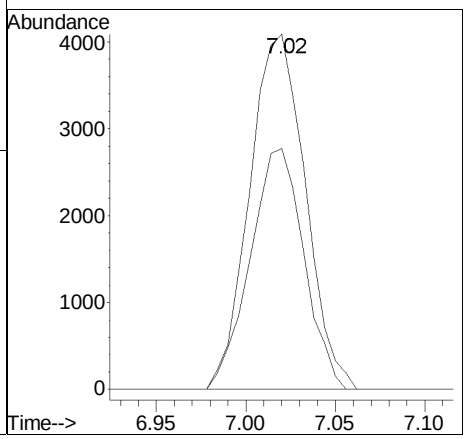


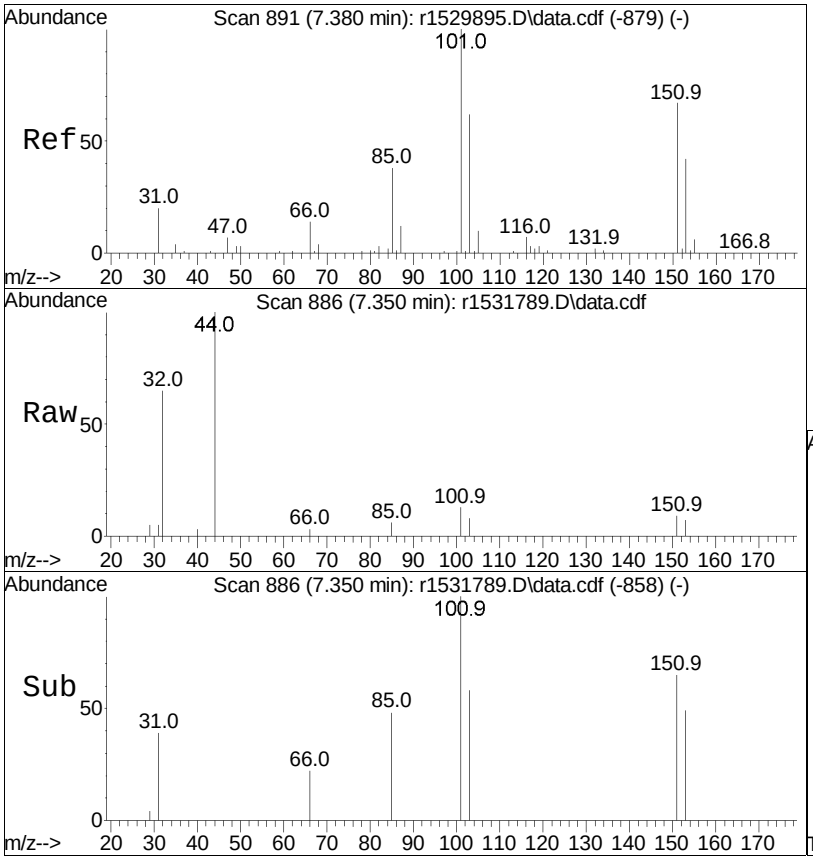


#28
methylene chloride
Concen: 0.49 ppbV
RT: 7.02 min Scan# 831
Delta R.T. -0.024 min
Lab File: r1531789.D
Acq: 20 Mar 2022 9:45 PM

Tgt Ion: 49 Resp: 8856

Ion	Ratio	Lower	Upper
49	100		
84	67.8	54.5	81.7

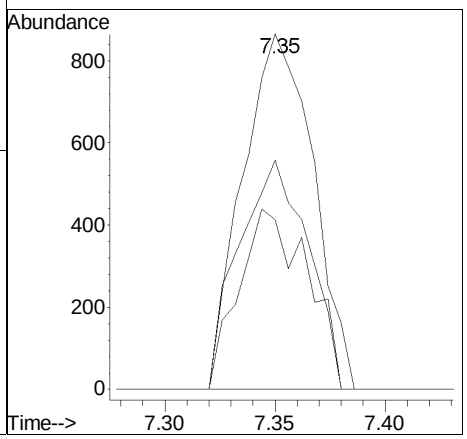


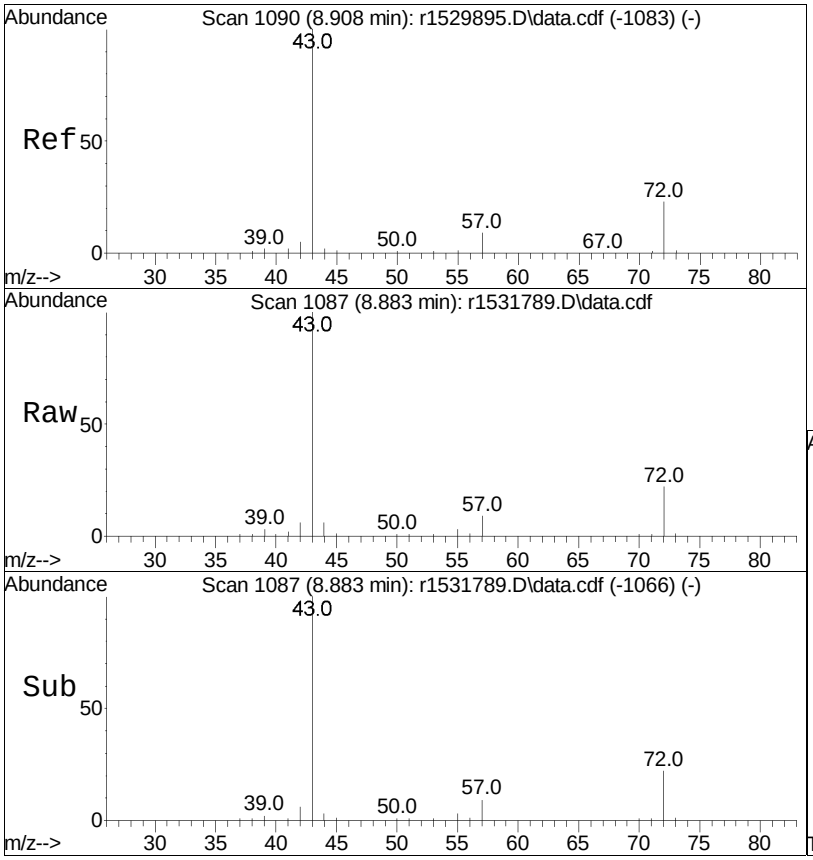


#31
Freon 113
Concen: 0.07 ppbV
RT: 7.35 min Scan# 886
Delta R.T. -0.030 min
Lab File: r1531789.D
Acq: 20 Mar 2022 9:45 PM

Tgt Ion:101 Resp: 1924

Ion	Ratio	Lower	Upper
101	100		
85	47.7	30.6	46.0#
151	64.5	53.5	80.3

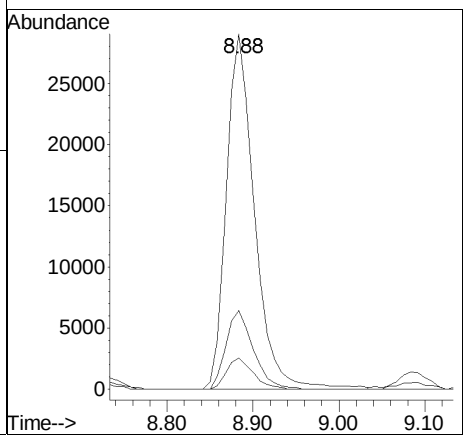


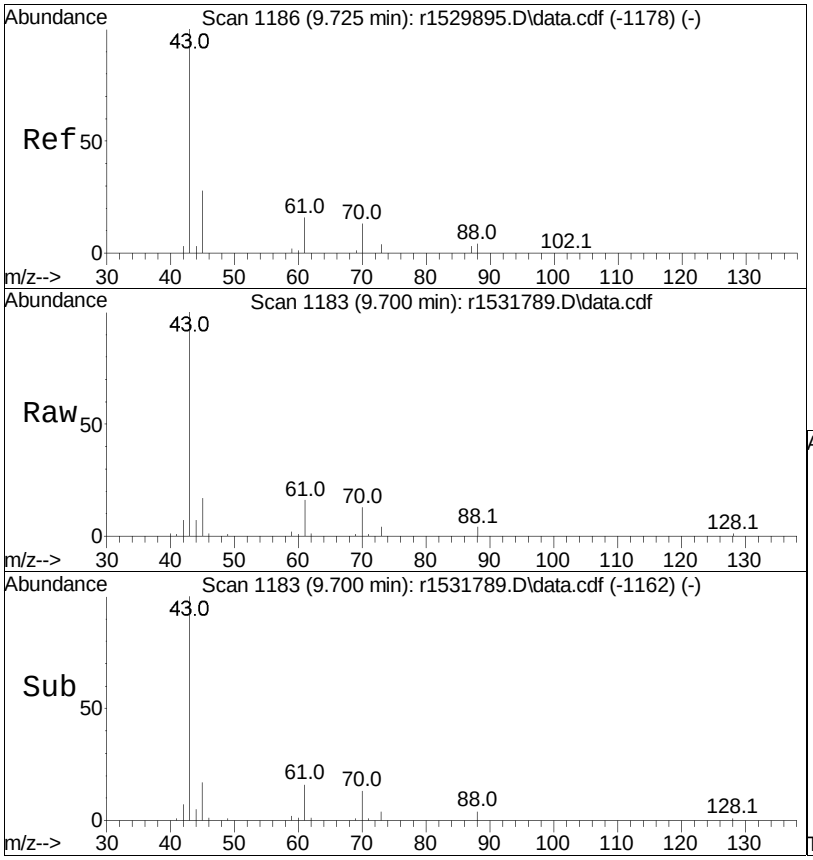


#36
2-butanone
Concen: 1.69 ppbV
RT: 8.88 min Scan# 1087
Delta R.T. -0.025 min
Lab File: r1531789.D
Acq: 20 Mar 2022 9:45 PM

Tgt Ion: 43 Resp: 66356

Ion	Ratio	Lower	Upper
43	100		
72	22.2	18.0	27.0
57	8.8	7.0	10.4

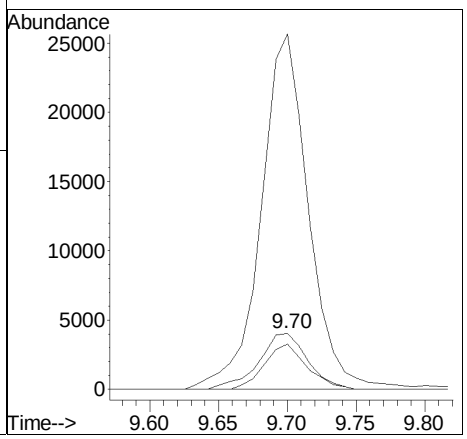


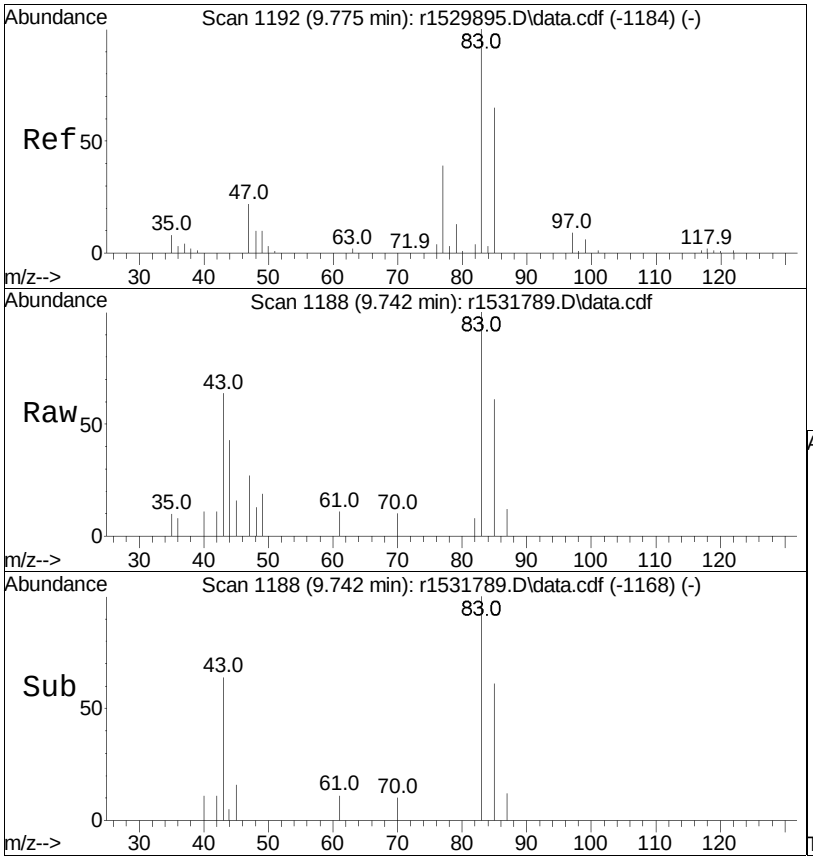


#38
Ethyl Acetate
Concen: 1.41 ppbV
RT: 9.70 min Scan# 1183
Delta R.T. -0.025 min
Lab File: r1531789.D
Acq: 20 Mar 2022 9:45 PM

Tgt Ion: 61 Resp: 10057

Ion	Ratio	Lower	Upper
61	100		
70	80.9	62.7	94.1
43	634.5	551.8	827.8

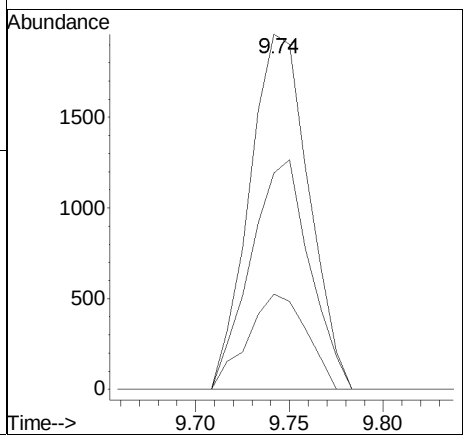


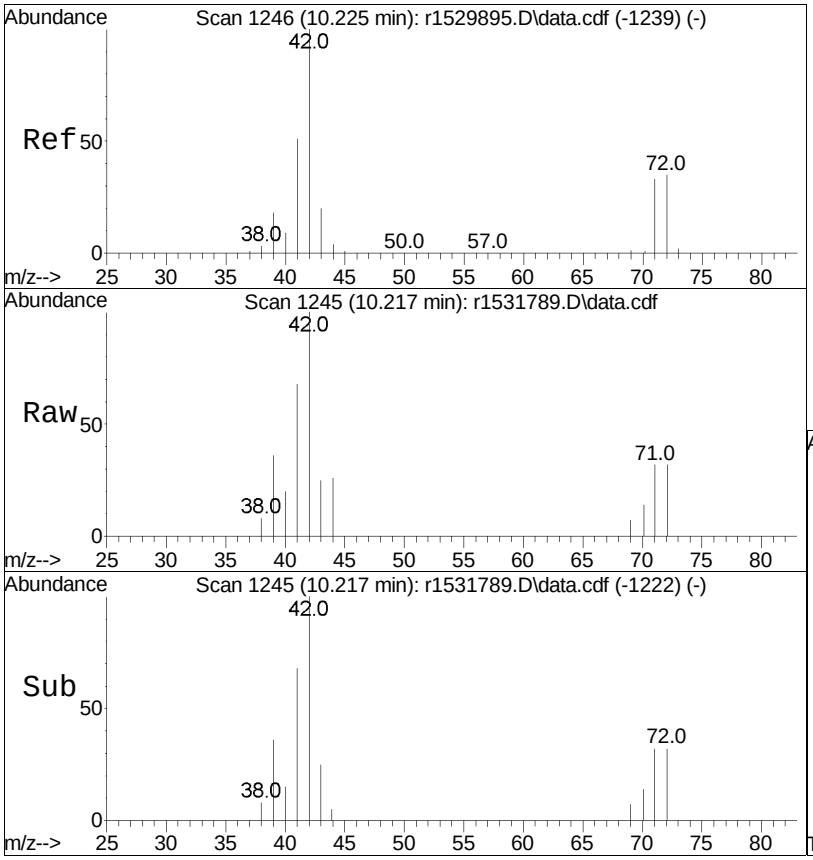


#39
chloroform
Concen: 0.13 ppbV
RT: 9.74 min Scan# 1188
Delta R.T. -0.033 min
Lab File: r1531789.D
Acq: 20 Mar 2022 9:45 PM

Tgt Ion: 83 Resp: 4309

Ion	Ratio	Lower	Upper
83	100		
85	60.9	51.8	77.8
47	26.8	17.9	26.9

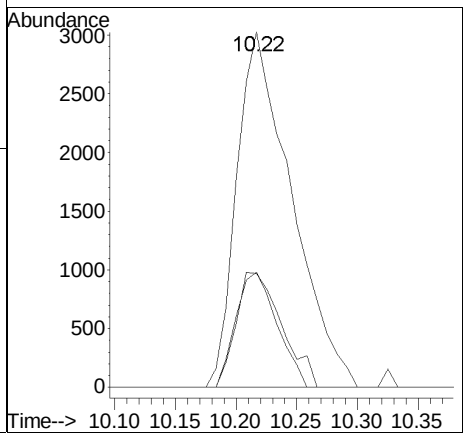


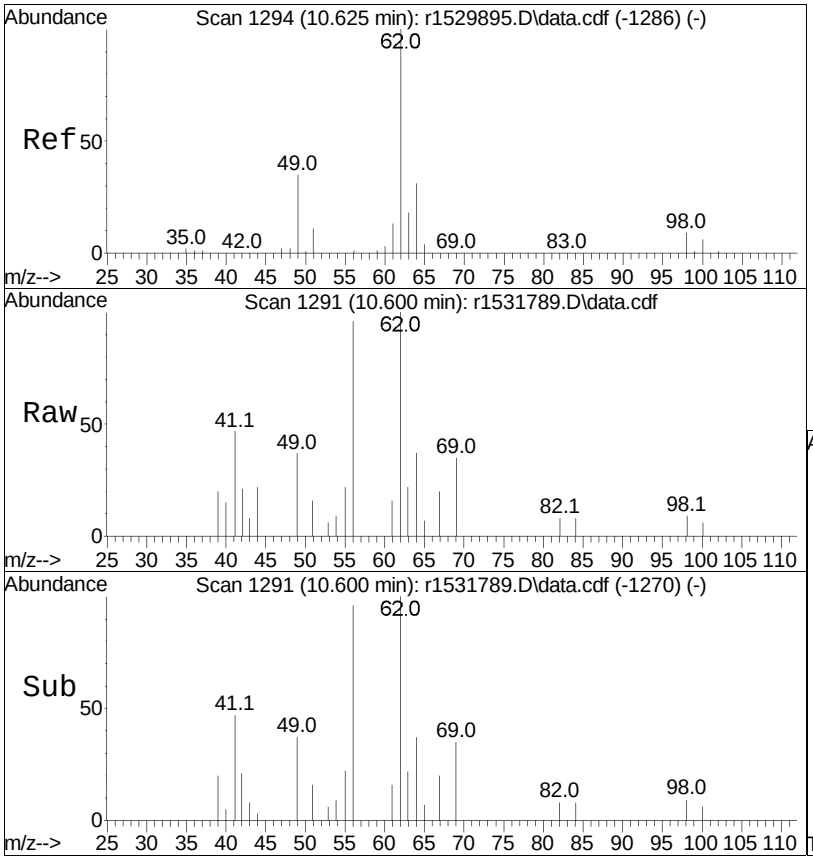


#40
Tetrahydrofuran
Concen: 0.39 ppbV
RT: 10.22 min Scan# 1245
Delta R.T. -0.008 min
Lab File: r1531789.D
Acq: 20 Mar 2022 9:45 PM

Tgt Ion: 42 Resp: 9494

Ion	Ratio	Lower	Upper
42	100		
71	32.5	26.8	40.2
72	32.0	27.7	41.5

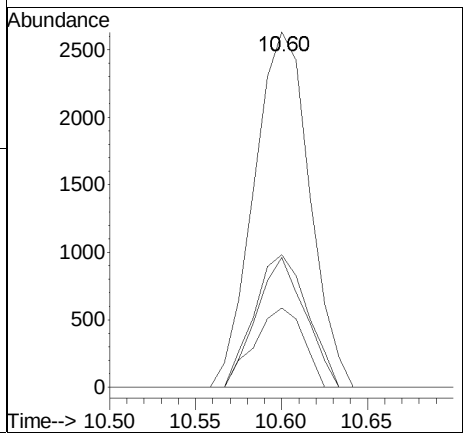


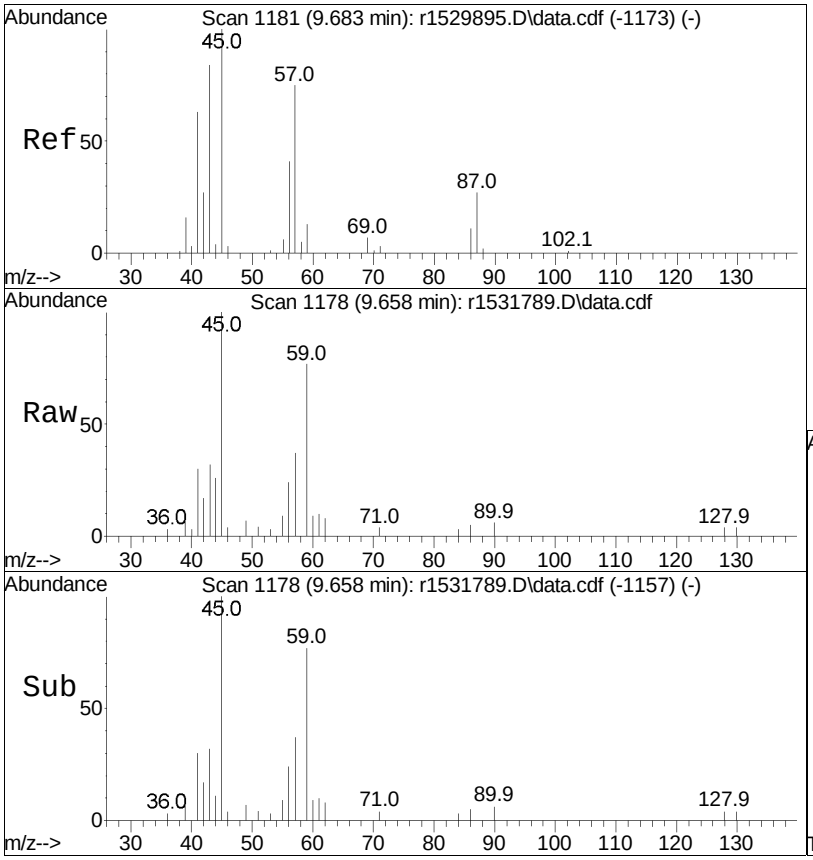


#42
1,2-dichloroethane
Concen: 0.25 ppbV
RT: 10.60 min Scan# 1291
Delta R.T. -0.025 min
Lab File: r1531789.D
Acq: 20 Mar 2022 9:45 PM

Tgt Ion: 62 Resp: 5933

Ion	Ratio	Lower	Upper
62	100		
64	36.6	25.0	37.4
49	37.3	27.8	41.8
63	22.4	14.4	21.6#

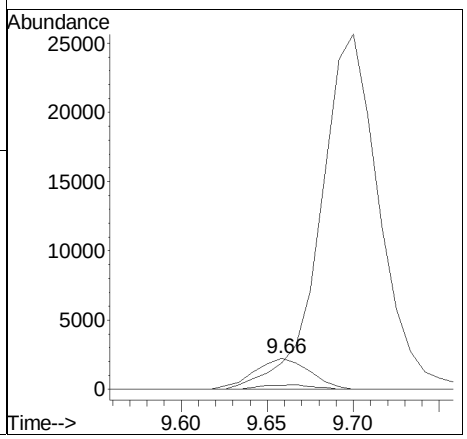


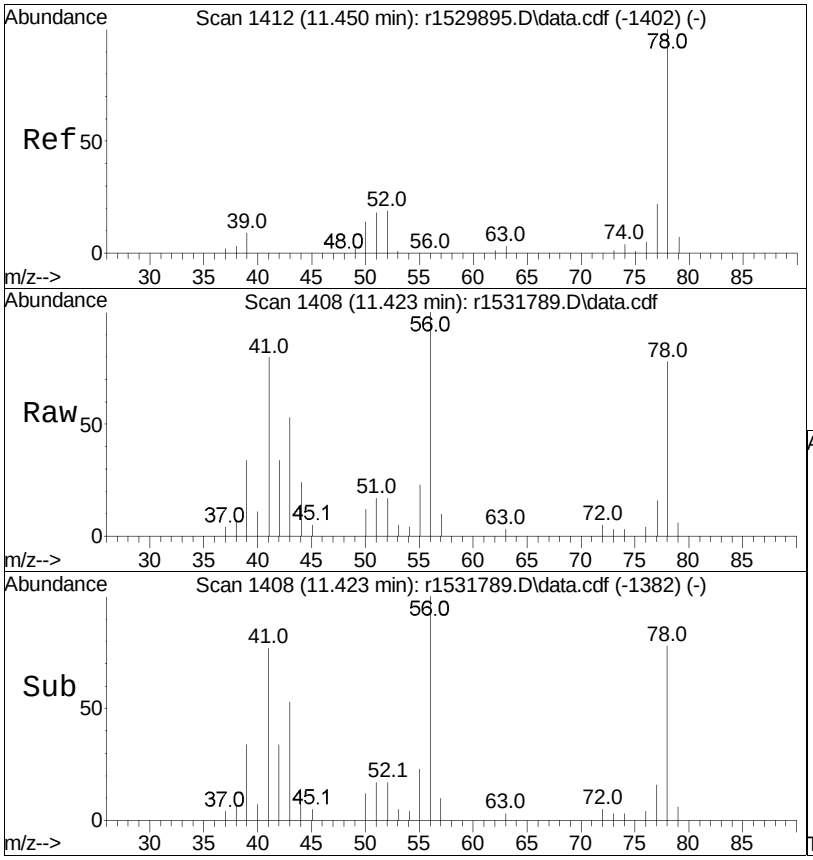


#44
hexane
Concen: 0.14 ppbV
RT: 9.66 min Scan# 1178
Delta R.T. -0.025 min
Lab File: r1531789.D
Acq: 20 Mar 2022 9:45 PM

Tgt Ion: 57 Resp: 5055

Ion	Ratio	Lower	Upper
57	100		
43	84.9	88.8	133.2#
86	13.0	11.4	17.0

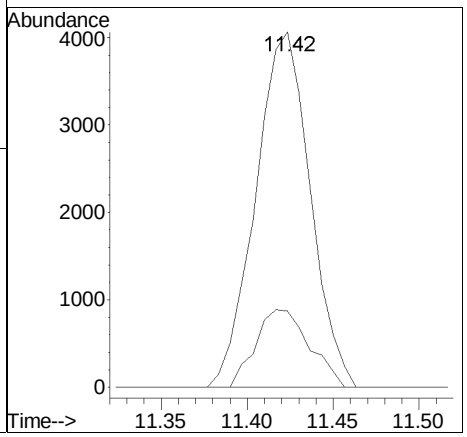


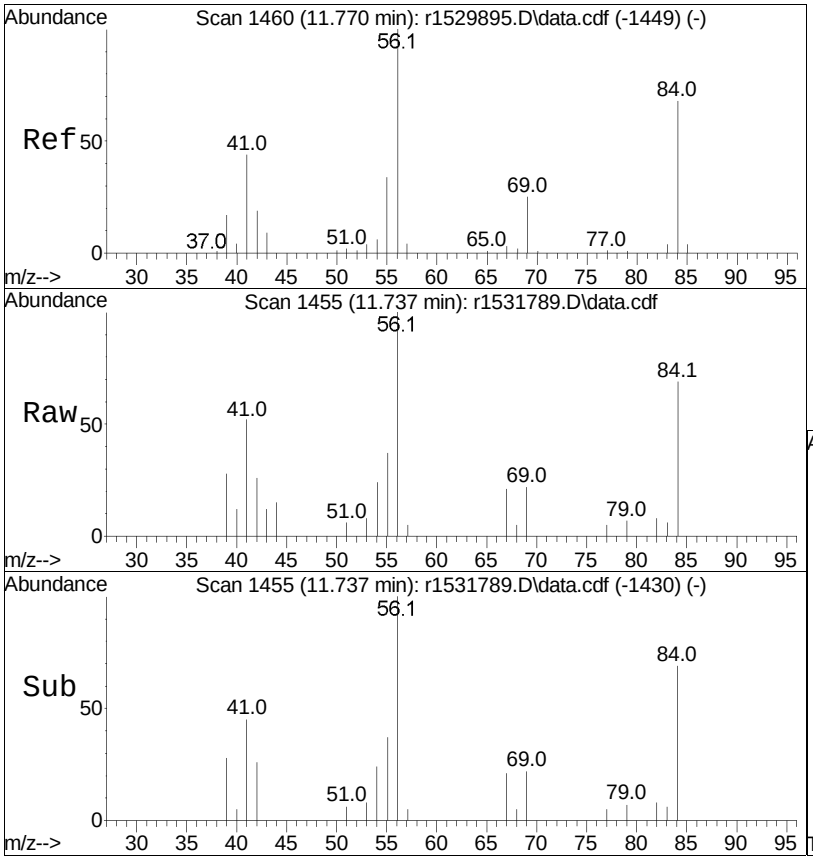


#50
benzene
Concen: 0.15 ppbV
RT: 11.42 min Scan# 1408
Delta R.T. -0.027 min
Lab File: r1531789.D
Acq: 20 Mar 2022 9:45 PM

Tgt Ion: 78 Resp: 8973

Ion	Ratio	Lower	Upper
78	100		
52	21.5	15.2	22.8

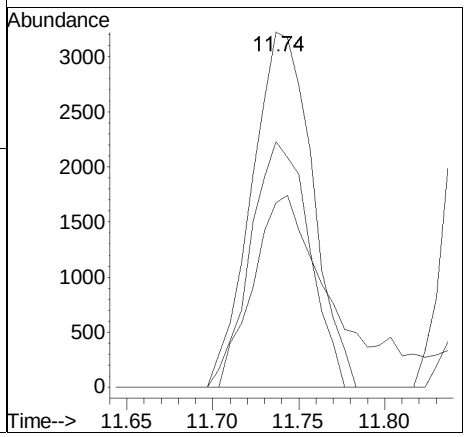


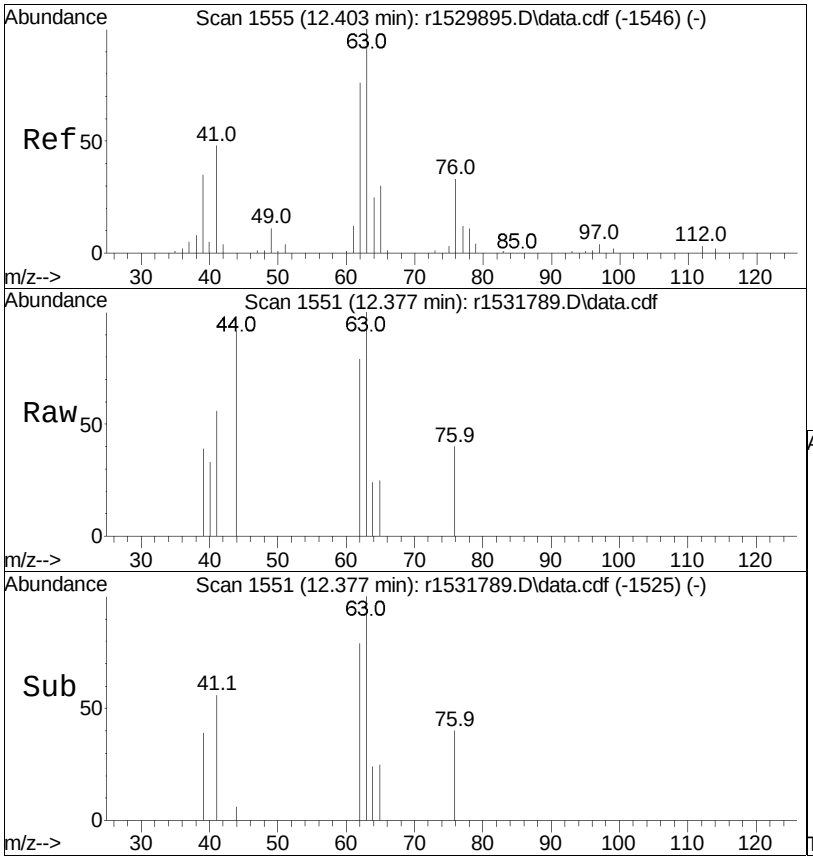


#53
cyclohexane
Concen: 0.21 ppbV
RT: 11.74 min Scan# 1455
Delta R.T. -0.033 min
Lab File: r1531789.D
Acq: 20 Mar 2022 9:45 PM

Tgt Ion: 56 Resp: 7942

Ion	Ratio	Lower	Upper
56	100		
84	69.2	54.8	82.2
41	51.9	35.5	53.3

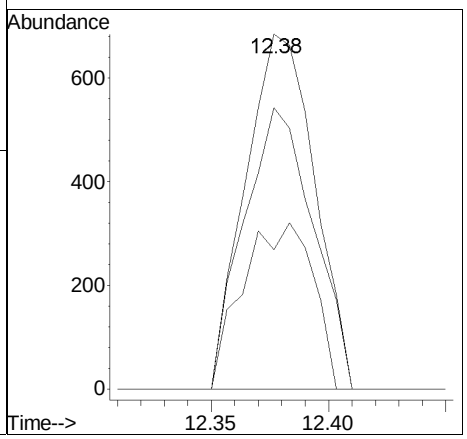


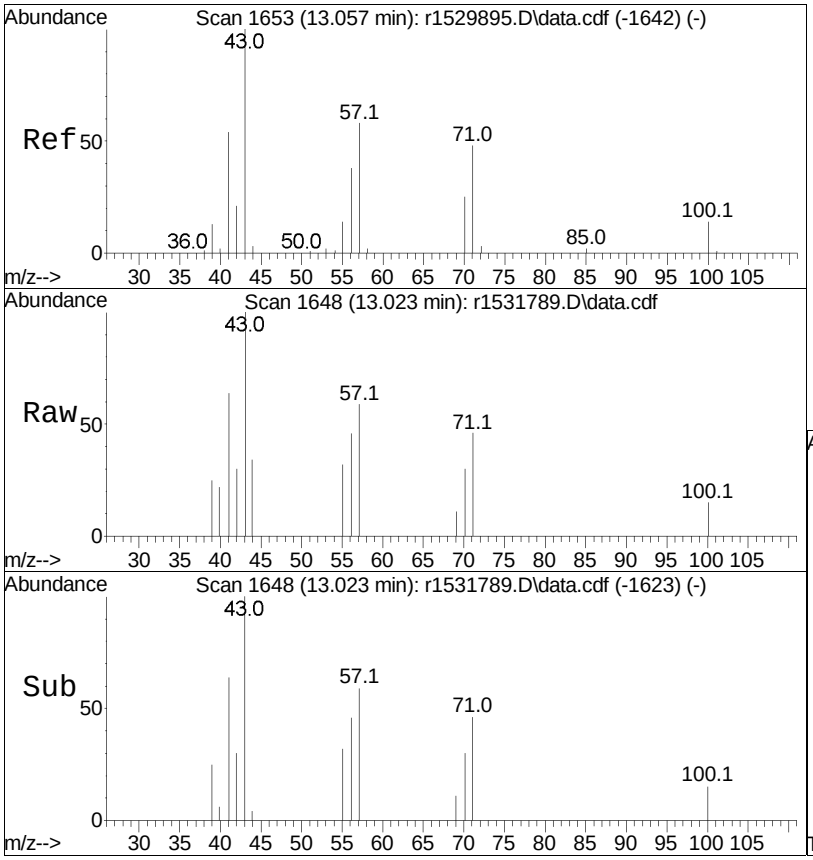


#56
1,2-dichloropropane
Concen: 0.06 ppbV
RT: 12.38 min Scan# 1551
Delta R.T. -0.027 min
Lab File: r1531789.D
Acq: 20 Mar 2022 9:45 PM

Tgt Ion: 63 Resp: 1405

Ion	Ratio	Lower	Upper
63	100		
62	79.3	60.6	91.0
39	39.3	27.8	41.6

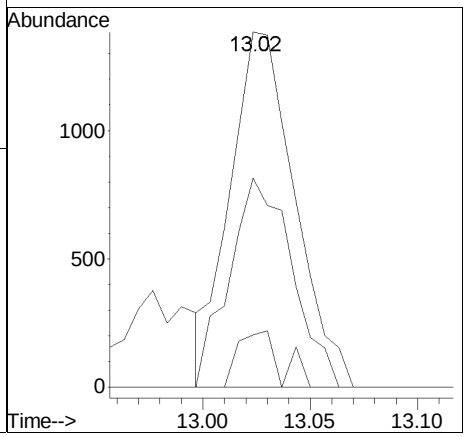


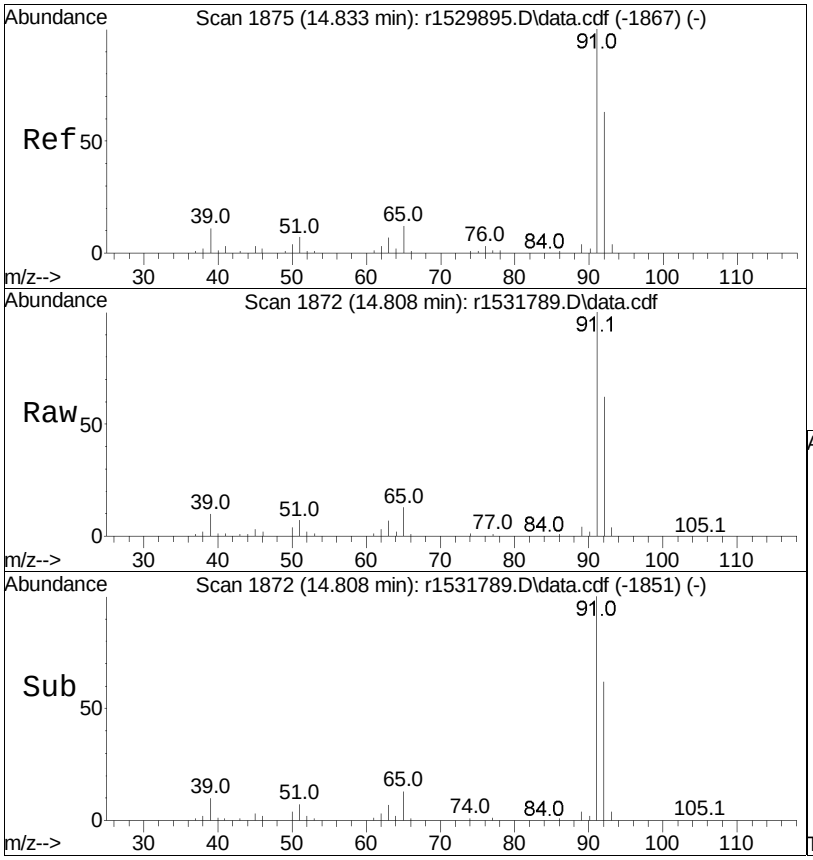


#62
heptane
Concen: 0.07 ppbV
RT: 13.02 min Scan# 1648
Delta R.T. -0.033 min
Lab File: r1531789.D
Acq: 20 Mar 2022 9:45 PM

Tgt Ion: 43 Resp: 2903

Ion	Ratio	Lower	Upper
43	100		
57	58.9	46.5	69.7
100	14.7	11.6	17.4

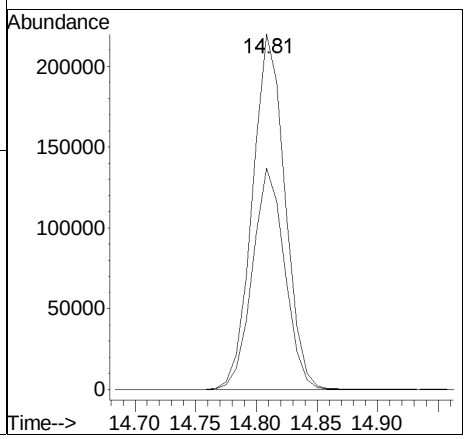


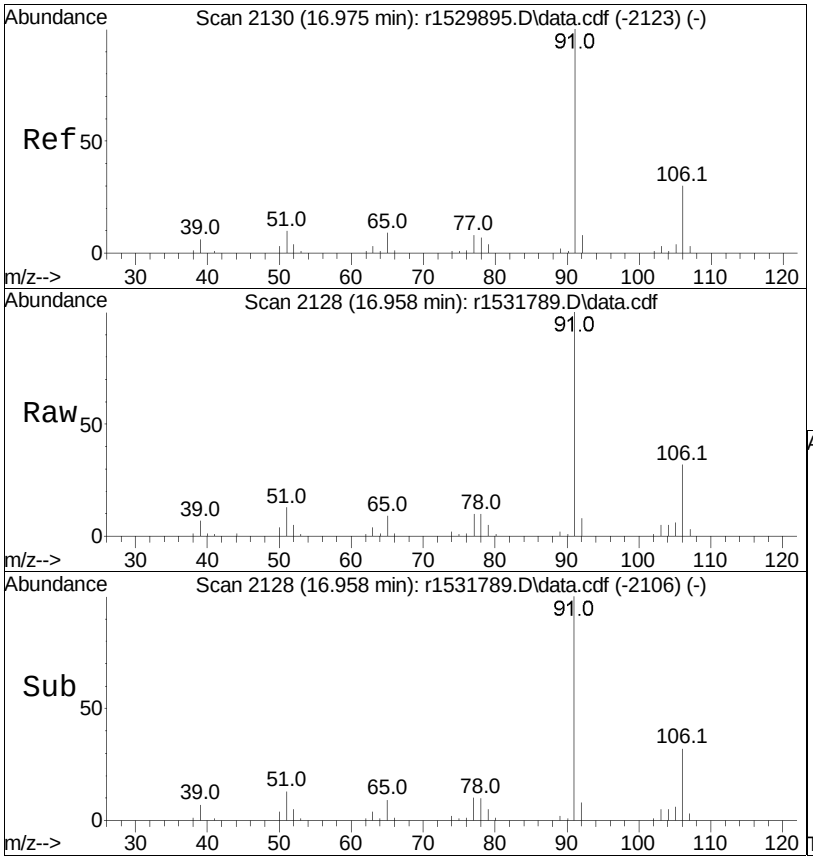


#68
toluene
Concen: 5.44 ppbV
RT: 14.81 min Scan# 1872
Delta R.T. -0.025 min
Lab File: r1531789.D
Acq: 20 Mar 2022 9:45 PM

Tgt Ion: 91 Resp: 410047

Ion	Ratio	Lower	Upper
91	100		
92	62.2	50.3	75.5

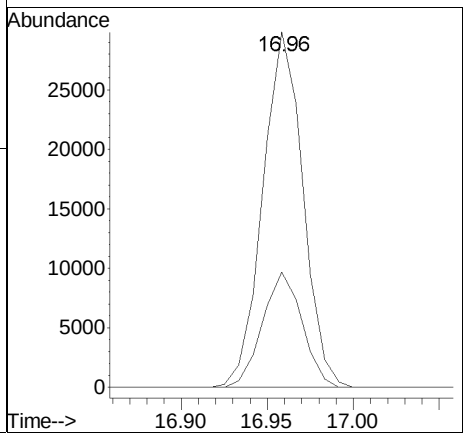


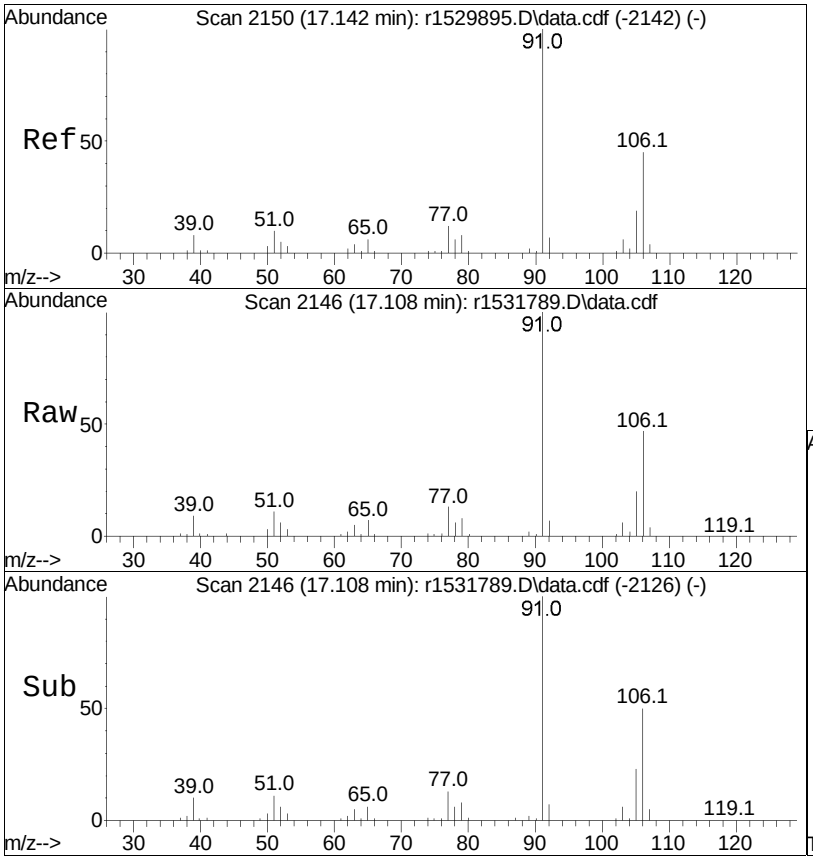


#81
ethylbenzene
Concen: 0.54 ppbV
RT: 16.96 min Scan# 2128
Delta R.T. -0.017 min
Lab File: r1531789.D
Acq: 20 Mar 2022 9:45 PM

Tgt Ion: 91 Resp: 48459

Ion	Ratio	Lower	Upper
91	100		
106	32.5	24.1	36.1

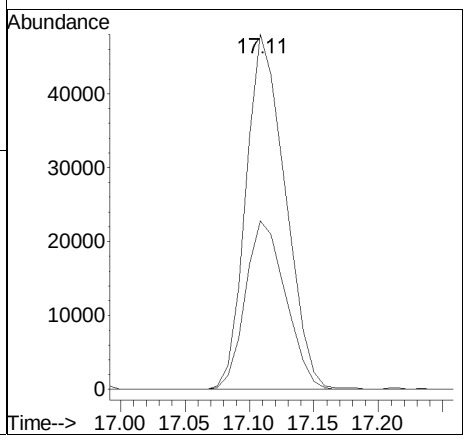


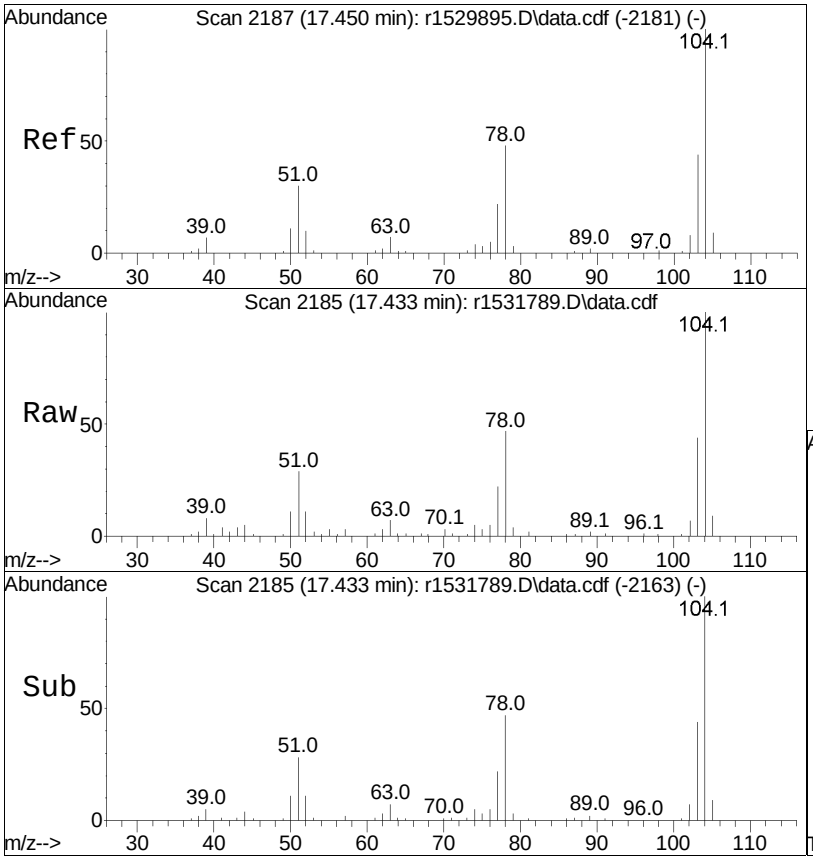


#83
m+p-xylene
Concen: 1.40 ppbV
RT: 17.11 min Scan# 2146
Delta R.T. -0.033 min
Lab File: r1531789.D
Acq: 20 Mar 2022 9:45 PM

Tgt Ion: 91 Resp: 101778

Ion	Ratio	Lower	Upper
91	100		
106	47.4	36.2	54.2

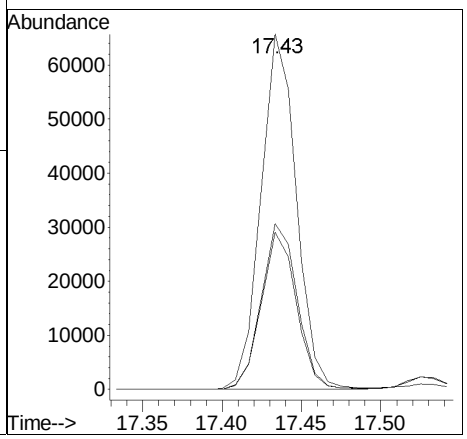


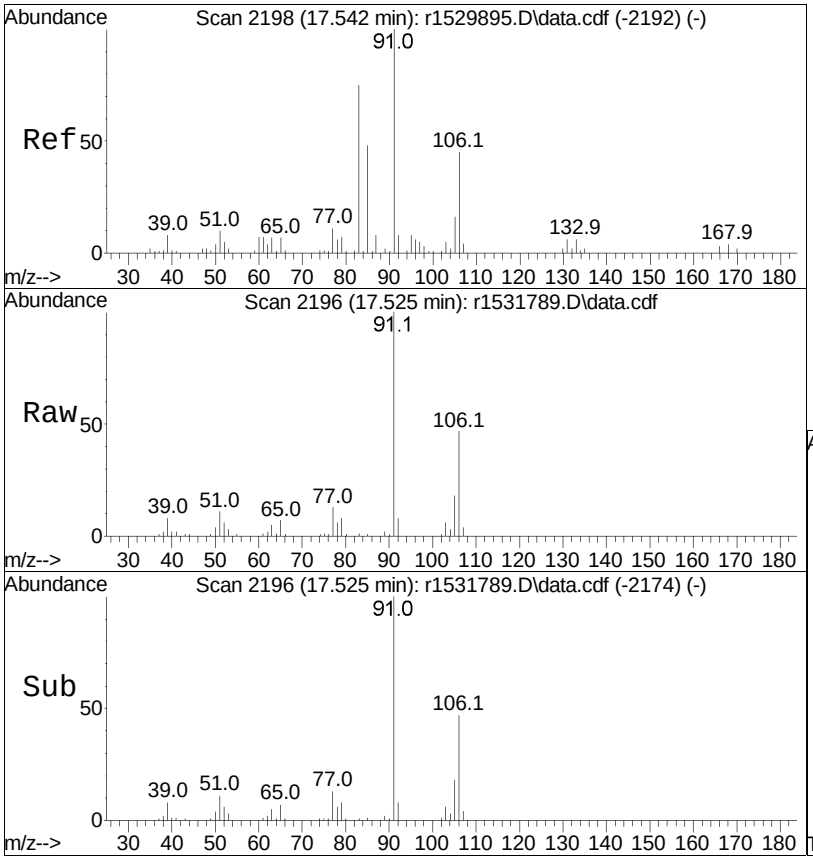


#85
styrene
Concen: 1.99 ppbV
RT: 17.43 min Scan# 2185
Delta R.T. -0.017 min
Lab File: r1531789.D
Acq: 20 Mar 2022 9:45 PM

Tgt Ion:104 Resp: 102171

Ion	Ratio	Lower	Upper
104	100		
103	44.2	35.0	52.6
78	46.7	38.3	57.5

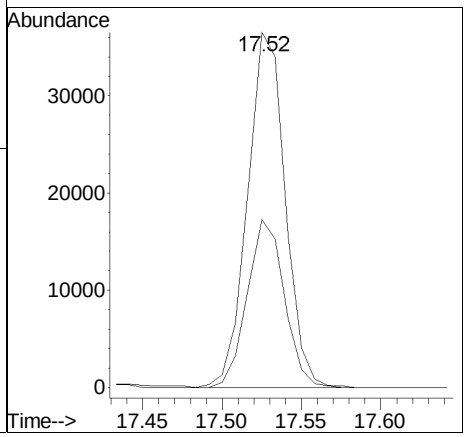


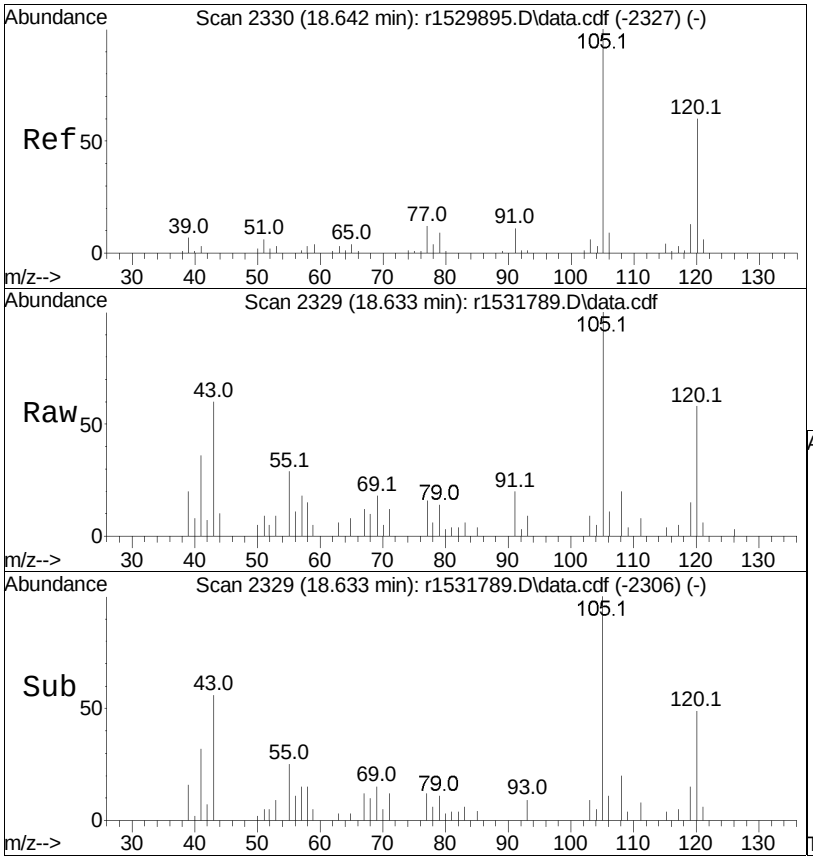


#87
o-xylene
Concen: 0.84 ppbV
RT: 17.52 min Scan# 2196
Delta R.T. -0.017 min
Lab File: r1531789.D
Acq: 20 Mar 2022 9:45 PM

Tgt Ion: 91 Resp: 60155

Ion	Ratio	Lower	Upper
91	100		
106	47.2	35.8	53.8

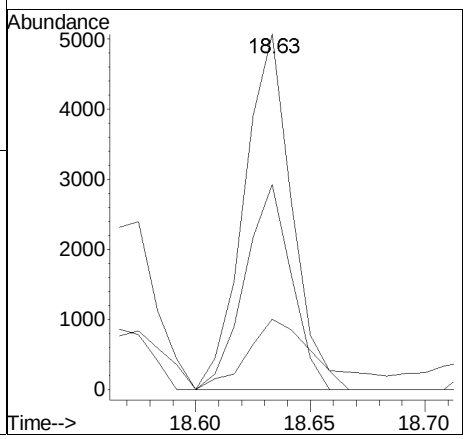


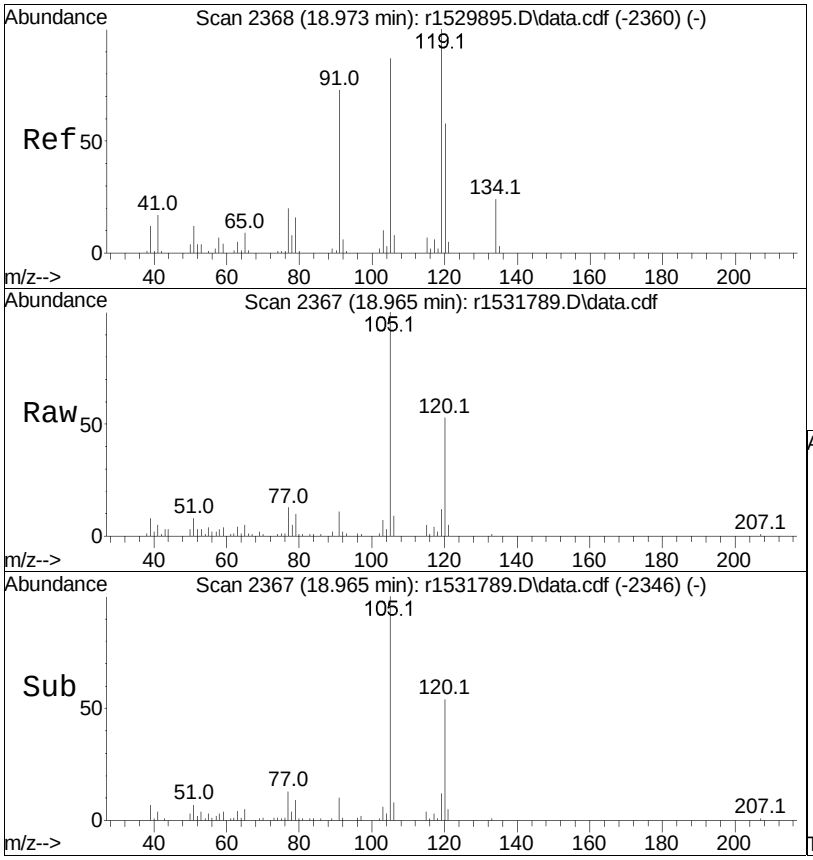


#97
1,3,5-trimethylbenzene
Concen: 0.09 ppbV
RT: 18.63 min Scan# 2329
Delta R.T. -0.008 min
Lab File: r1531789.D
Acq: 20 Mar 2022 9:45 PM

Tgt Ion:105 Resp: 7335

Ion	Ratio	Lower	Upper
105	100		
120	57.7	47.7	71.5
91	19.8	8.5	12.7#

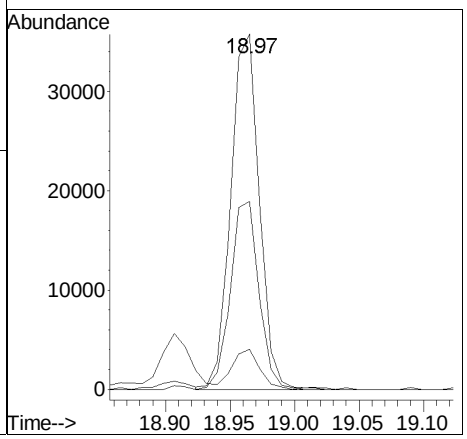




#99
1,2,4-trimethylbenzene
Concen: 0.74 ppbV
RT: 18.97 min Scan# 2367
Delta R.T. -0.008 min
Lab File: r1531789.D
Acq: 20 Mar 2022 9:45 PM

Tgt Ion:105 Resp: 55198

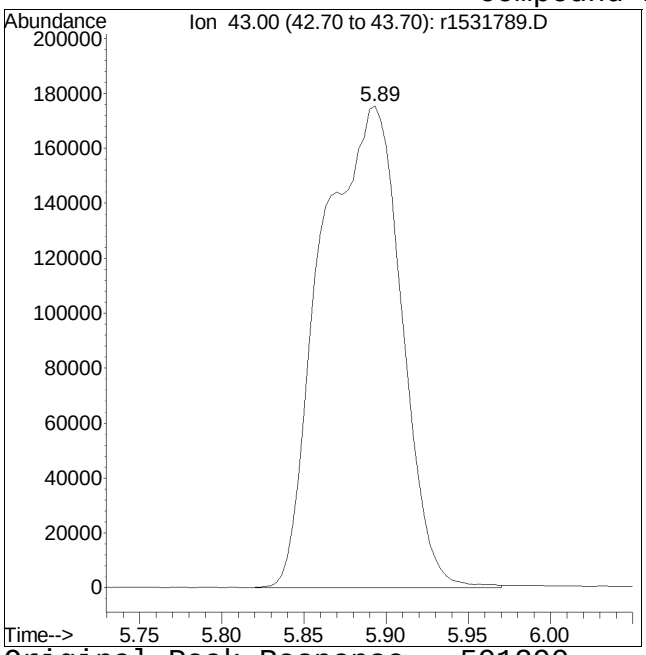
Ion	Ratio	Lower	Upper
105	100		
120	52.9	52.7	79.1
91	11.3	67.2	100.8#



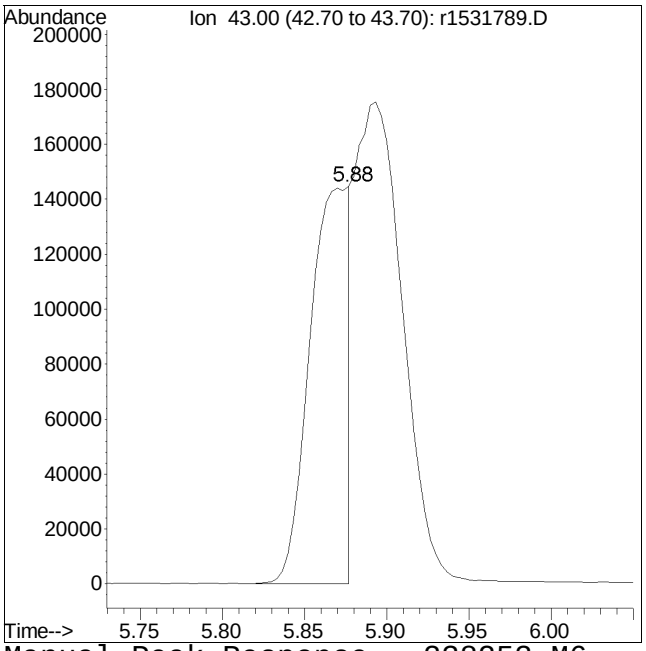
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airlab15\QMethod : TFS15_211222.M
Data File : r1531789.D Operator : AIRLAB15:RY
Date Inj'd : 3/20/2020 0:9: 5 Instrument :
Sample : L2213657-03,3,250,250 Quant Date : 3/21/2022 8:49 am

Compound #19: acetone



Original Peak Response = 591290



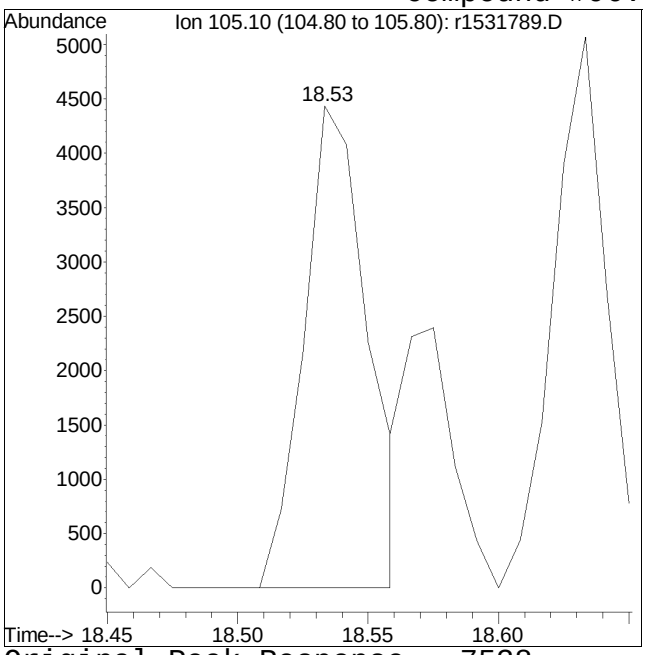
Manual Peak Response = 238253 M6

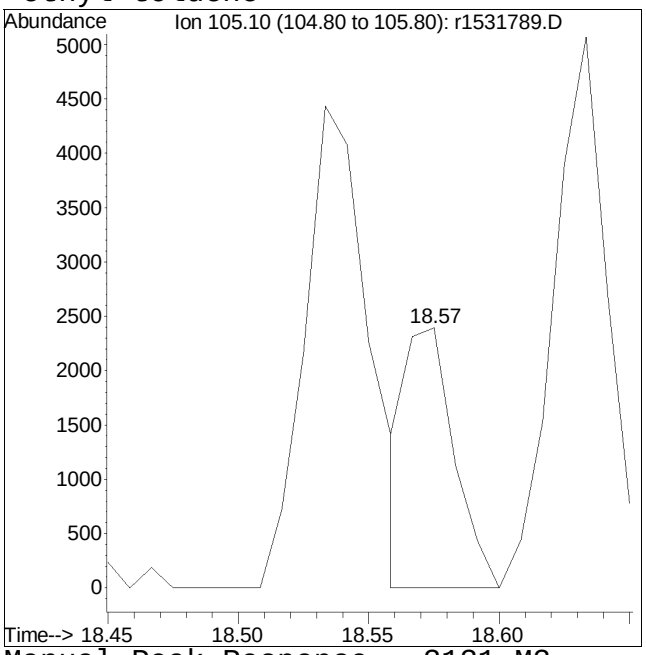
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airlab15\QMethod : TFS15_211222.M
Data File : r1531789.D Operator : AIRLAB15:RY
Date Inj'd : 3/20/2020 0:9: 5 Instrument :
Sample : L2213657-03,3,250,250 Quant Date : 3/21/2022 8:49 am

Compound #96: 4-ethyl toluene





Original Peak Response = 7538 Manual Peak Response = 3131 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531791.D
Acq On : 20 Mar 2022 11:04 PM
Operator : AIRLAB15:RY
Sample : L2213657-05,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 15:46:55 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320T\r1531778.D
Sub List : TO15-NY-7-SIM - .

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) bromochloromethane	9.58	49	384366	10.000	ppbV		-0.03
Standard Area = 382239			Recovery = 100.56%				
43) 1,4-difluorobenzene	11.86	114	836960	10.000	ppbV		-0.03
Standard Area = 859136			Recovery = 97.42%				
67) chlorobenzene-D5	16.57	54	200139	10.000	ppbV		-0.02
Standard Area = 200634			Recovery = 99.75%				
System Monitoring Compounds							
Target Compounds							Qvalue
5) dichlorodifluoromethane	3.96	85	13142	0.462	ppbV		100
6) chloromethane	4.14	50	7918	0.559	ppbV		94
7) Freon-114	4.27		0	N.D.			
10) 1,3-butadiene	4.57		0	N.D.			
13) bromomethane	4.88		0	N.D.			
14) chloroethane	0.00		0	N.D.			
15) ethanol	5.31	31	12996032	1179.166	ppbV	#	84
17) vinyl bromide	0.00		0	N.D.	d		
19) acetone	5.87	43	107681M6	4.903	ppbV		
21) trichlorofluoromethane	6.07	101	7278	0.267	ppbV		95
22) isopropyl alcohol	6.19	45	883263	37.219	ppbV		99
27) tertiary butyl alcohol	6.94	59	1882	0.061	ppbV	#	65
28) methylene chloride	7.01	49	7267	0.404	ppbV		96
29) 3-chloropropene	0.00		0	N.D.	d		
30) carbon disulfide	7.31		0	N.D.			
31) Freon 113	7.34	101	1873	0.068	ppbV	#	81
32) trans-1,2-dichloroethene	0.00		0	N.D.			
33) 1,1-dichloroethane	0.00		0	N.D.			
34) MTBE	0.00		0	N.D.	d		
36) 2-butanone	8.88	43	12907	0.329	ppbV		98
38) Ethyl Acetate	9.70	61	5003	0.704	ppbV		89
39) chloroform	9.74	83	3130	0.096	ppbV	#	90
40) Tetrahydrofuran	10.23	42	5738M6	0.235	ppbV		
42) 1,2-dichloroethane	10.60		0	N.D.			
44) hexane	9.66	57	3638	0.103	ppbV	#	72
50) benzene	11.42	78	8580	0.146	ppbV		97
53) cyclohexane	11.74		0	N.D.			

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531791.D
Acq On : 20 Mar 2022 11:04 PM
Operator : AIRLAB15:RY
Sample : L2213657-05,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 15:46:55 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320T\r1531778.D
Sub List : TO15-NY-7-SIM - .

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
56)	1,2-dichloropropane	0.00		0	N.D.			
57)	bromodichloromethane	12.71		0	N.D.			
58)	1,4-dioxane	0.00		0	N.D.			
60)	2,2,4-trimethylpentane	12.71	57	12286	0.105	ppbV	#	89
62)	heptane	13.02	43	2041	0.053	ppbV		93
63)	cis-1,3-dichloropropene	0.00		0	N.D.			
64)	4-methyl-2-pentanone	13.79		0	N.D.			
65)	trans-1,3-dichloropropene	0.00		0	N.D.			
66)	1,1,2-trichloroethane	0.00		0	N.D.			
68)	toluene	14.81	91	28799	0.386	ppbV		99
72)	2-hexanone	15.07		0	N.D.			
74)	dibromochloromethane	0.00		0	N.D.			
75)	1,2-dibromoethane	0.00		0	N.D.			
80)	chlorobenzene	0.00		0	N.D.			
81)	ethylbenzene	16.96		0	N.D.			
83)	m+p-xylene	17.11	91	9290	0.130	ppbV		92
84)	bromoform	0.00		0	N.D.			
85)	styrene	17.43		0	N.D.			
86)	1,1,2,2-tetrachloroethane	0.00		0	N.D.			
87)	o-xylene	17.52	91	4289	0.060	ppbV		96
96)	4-ethyl toluene	0.00		0	N.D.	d		
97)	1,3,5-trimethylbenzene	18.63		0	N.D.			
99)	1,2,4-trimethylbenzene	18.97	105	5022	0.068	ppbV	#	47
101)	Benzyl Chloride	19.08		0	N.D.			
102)	1,3-dichlorobenzene	19.15		0	N.D.			
103)	1,4-dichlorobenzene	19.15		0	N.D.			
107)	1,2-dichlorobenzene	0.00		0	N.D.			
115)	1,2,4-trichlorobenzene	0.00		0	N.D.			
119)	hexachlorobutadiene	0.00		0	N.D.			

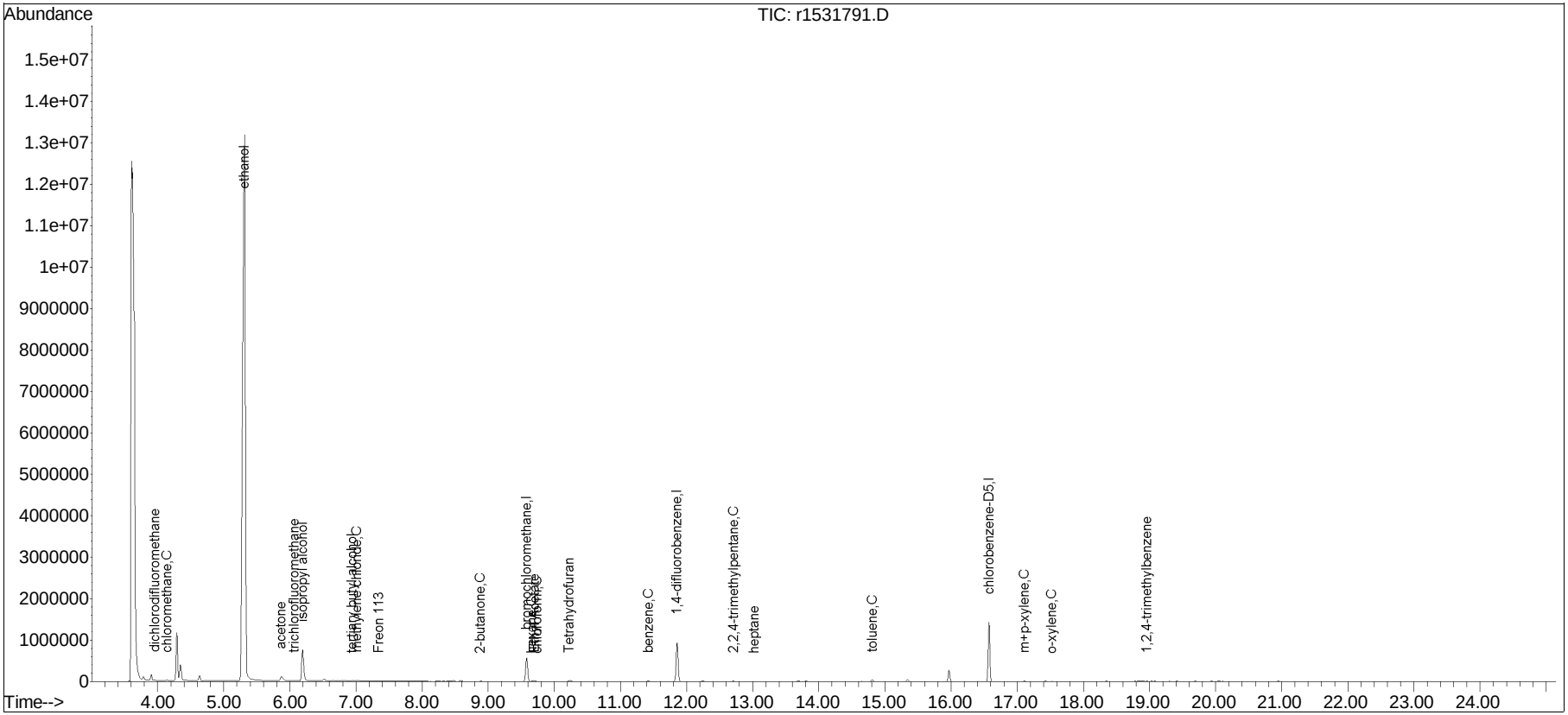
(#) = qualifier out of range (m) = manual integration (+) = signals summed

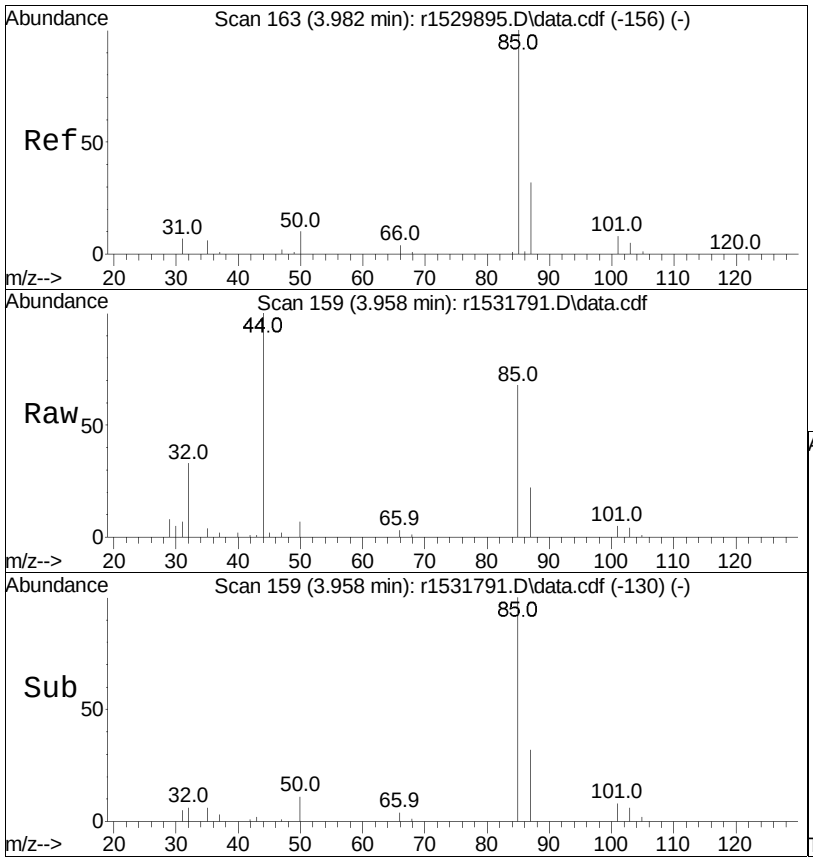
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531791.D
Acq On : 20 Mar 2022 11:04 PM
Operator : AIRLAB15:RY
Sample : L2213657-05,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 15:46:55 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

Sub List : TO15-NY-7-SIM - .\Airlab15\2022\03\0320T\r1531778.D

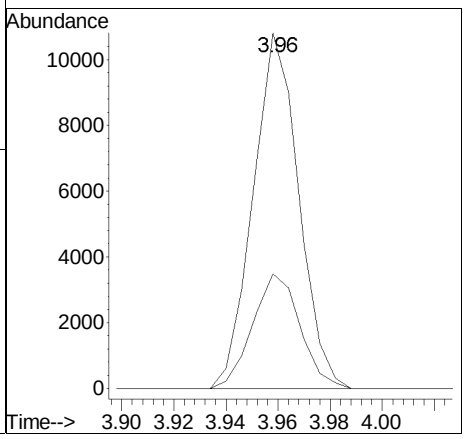


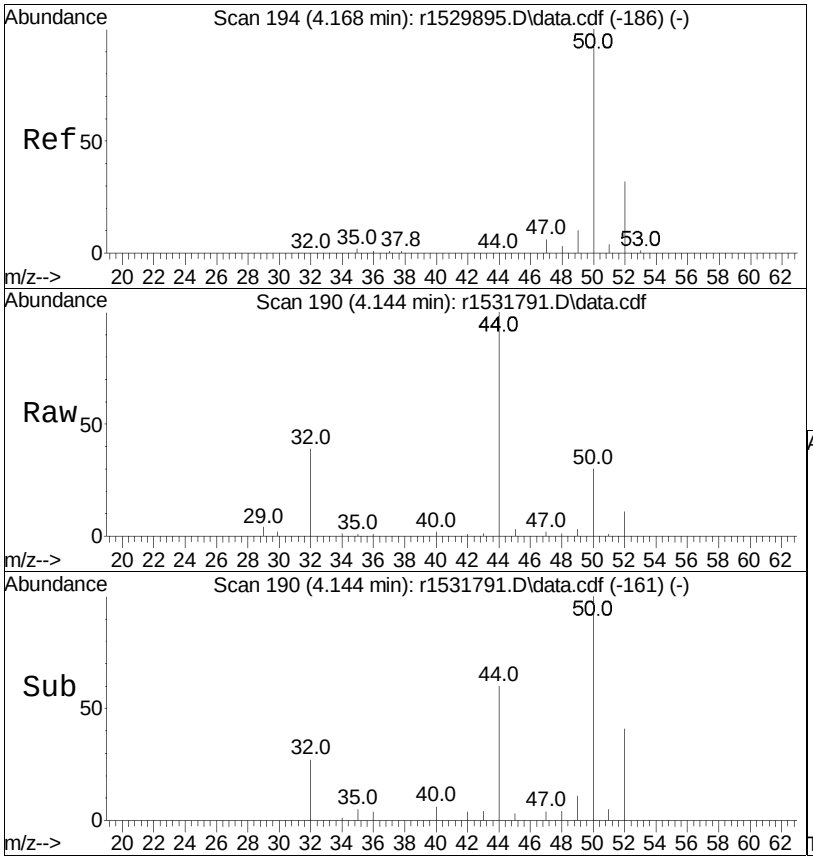


#5
dichlorodifluoromethane
Concen: 0.46 ppbV
RT: 3.96 min Scan# 159
Delta R.T. -0.024 min
Lab File: r1531791.D
Acq: 20 Mar 2022 11:04 PM

Tgt Ion: 85 Resp: 13142

Ion	Ratio	Lower	Upper
85	100		
87	32.3	25.6	38.4

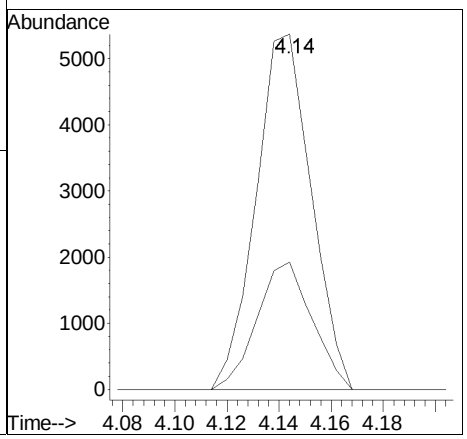


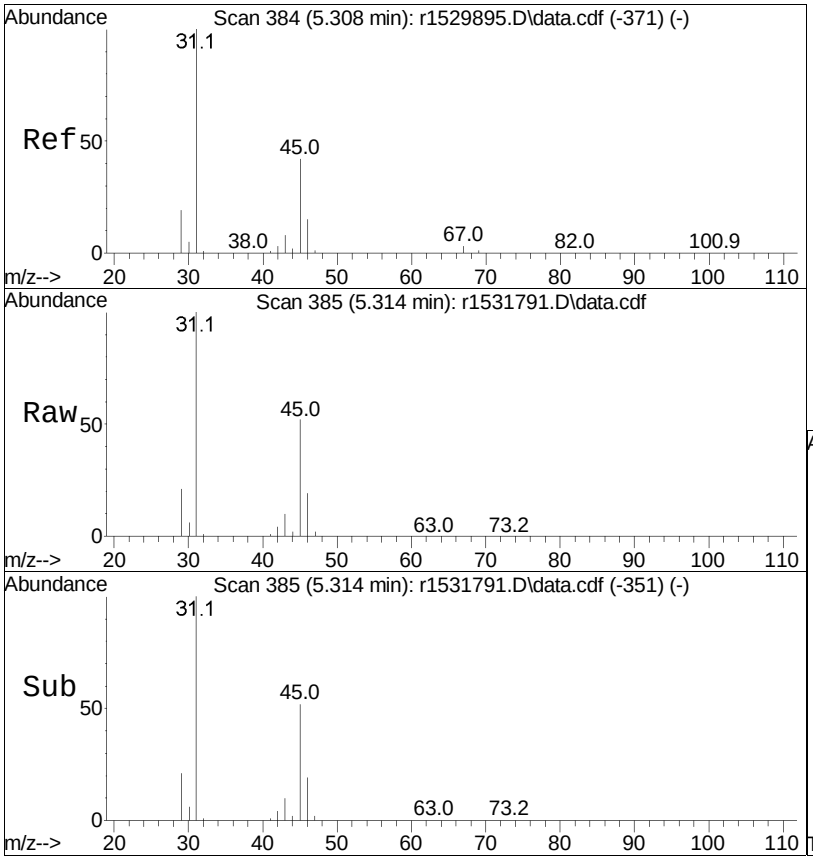


#6
chloromethane
Concen: 0.56 ppbV
RT: 4.14 min Scan# 190
Delta R.T. -0.024 min
Lab File: r1531791.D
Acq: 20 Mar 2022 11:04 PM

Tgt Ion: 50 Resp: 7918

Ion	Ratio	Lower	Upper
50	100		
52	35.9	25.9	38.9

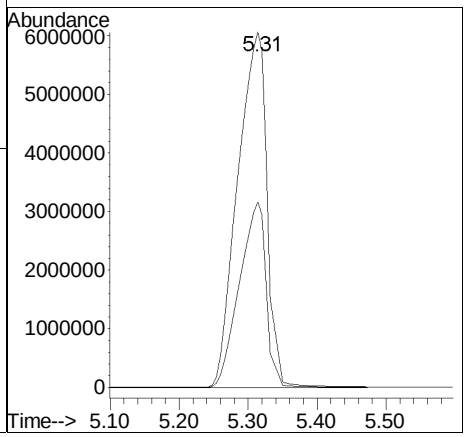


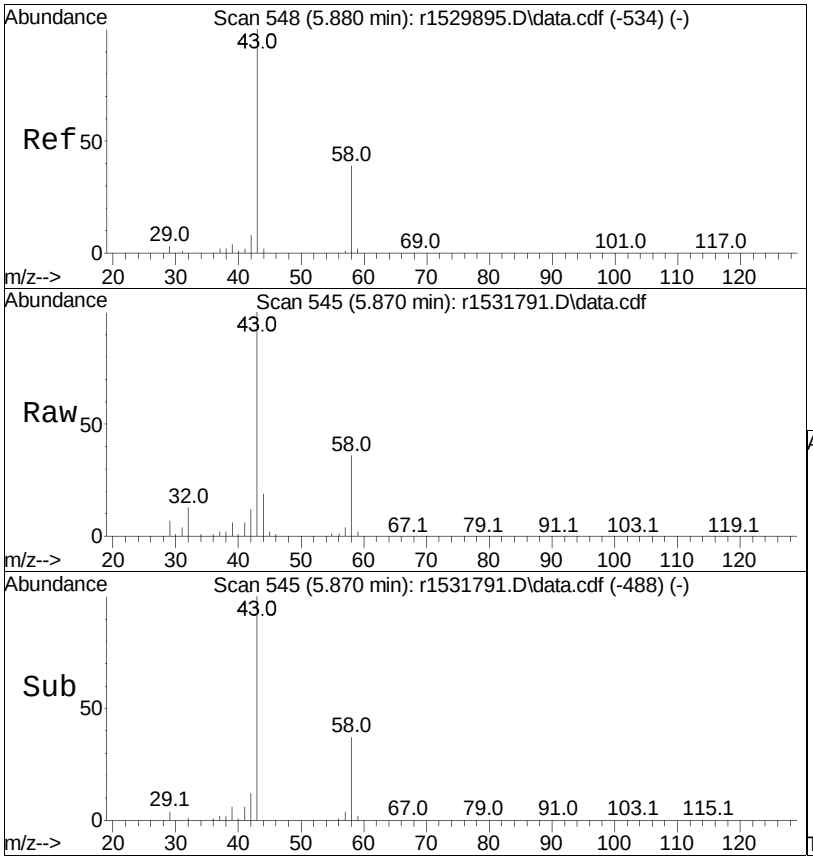


#15
ethanol
Concen: 1179.17 ppbV
RT: 5.31 min Scan# 385
Delta R.T. 0.006 min
Lab File: r1531791.D
Acq: 20 Mar 2022 11:04 PM

Tgt Ion: 31 Resp:12996032

Ion	Ratio	Lower	Upper
31	100		
45	52.2	33.4	50.2#

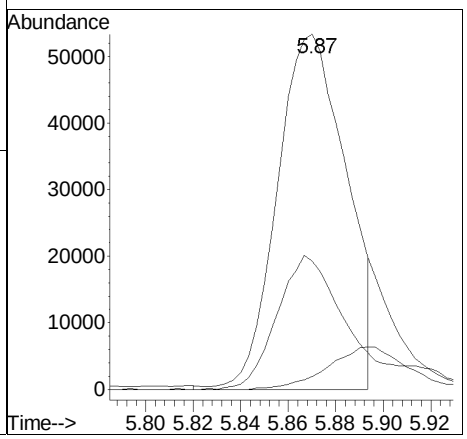


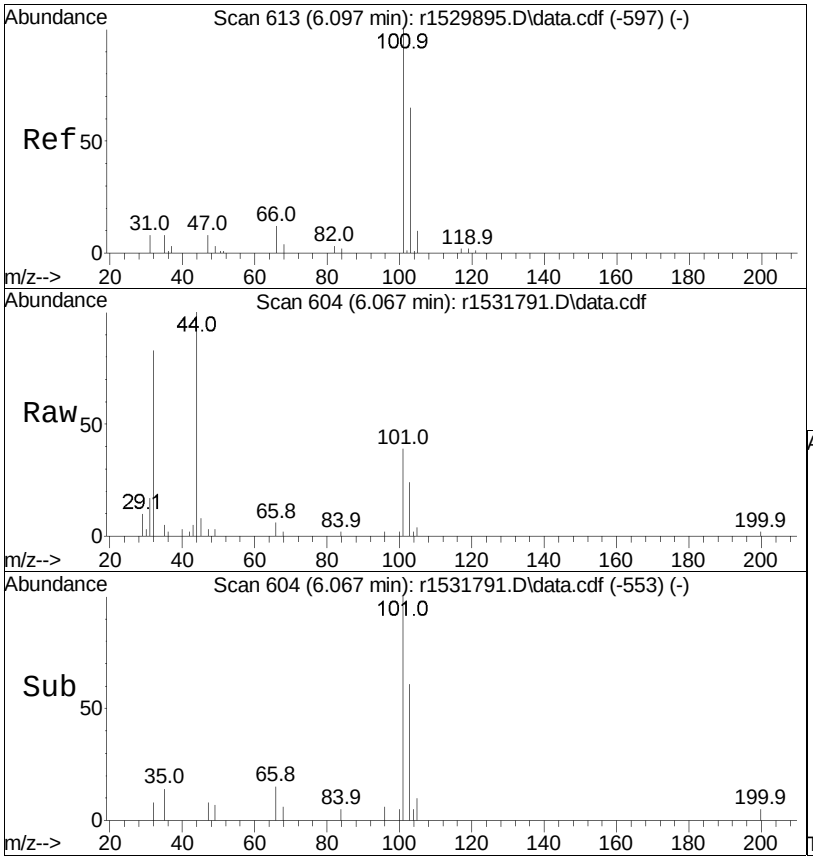


#19
acetone
Concen: 4.90 ppbV m
RT: 5.87 min Scan# 545
Delta R.T. -0.010 min
Lab File: r1531791.D
Acq: 20 Mar 2022 11:04 PM

Tgt Ion: 43 Resp: 107681

Ion	Ratio	Lower	Upper
43	100		
58	36.1	31.6	47.4
57	3.6	0.8	1.2#

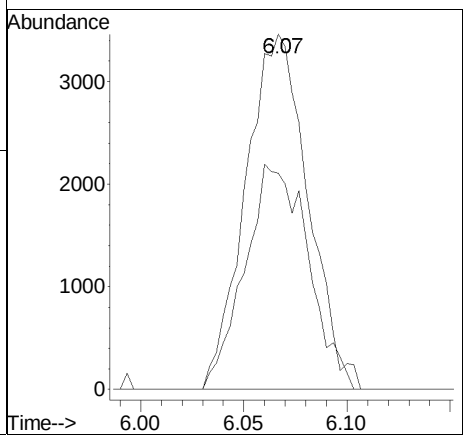


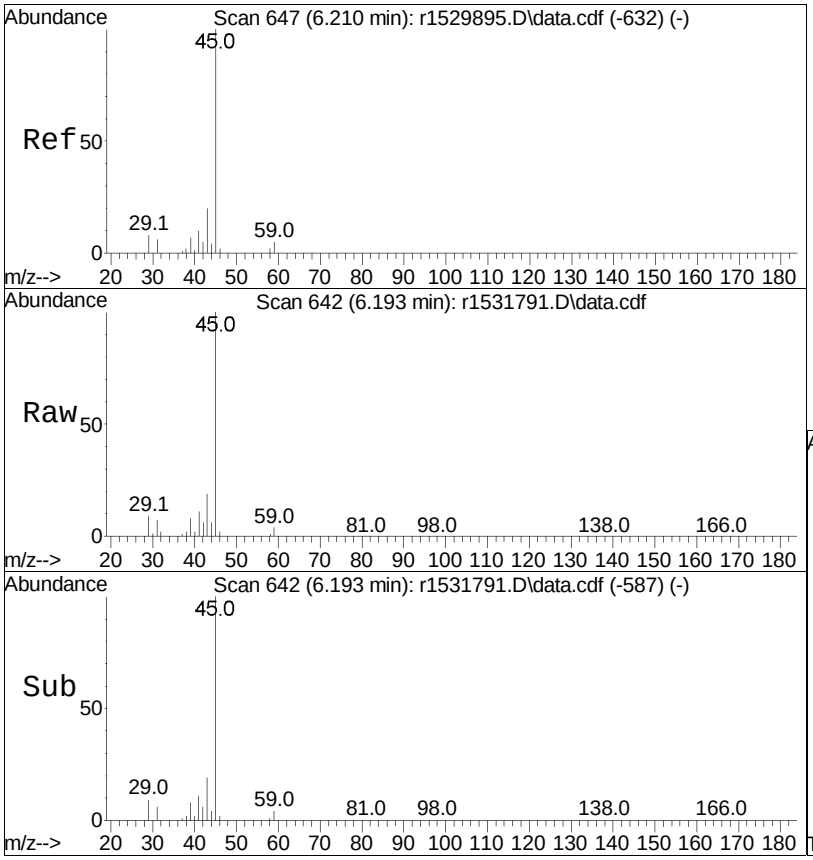


#21
trichlorofluoromethane
Concen: 0.27 ppbV
RT: 6.07 min Scan# 604
Delta R.T. -0.030 min
Lab File: r1531791.D
Acq: 20 Mar 2022 11:04 PM

Tgt Ion:101 Resp: 7278

Ion	Ratio	Lower	Upper
101	100		
103	60.8	52.0	78.0

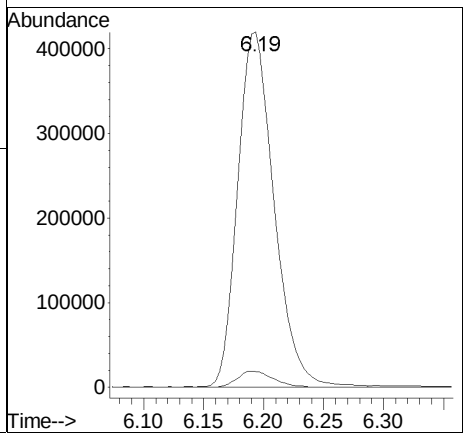


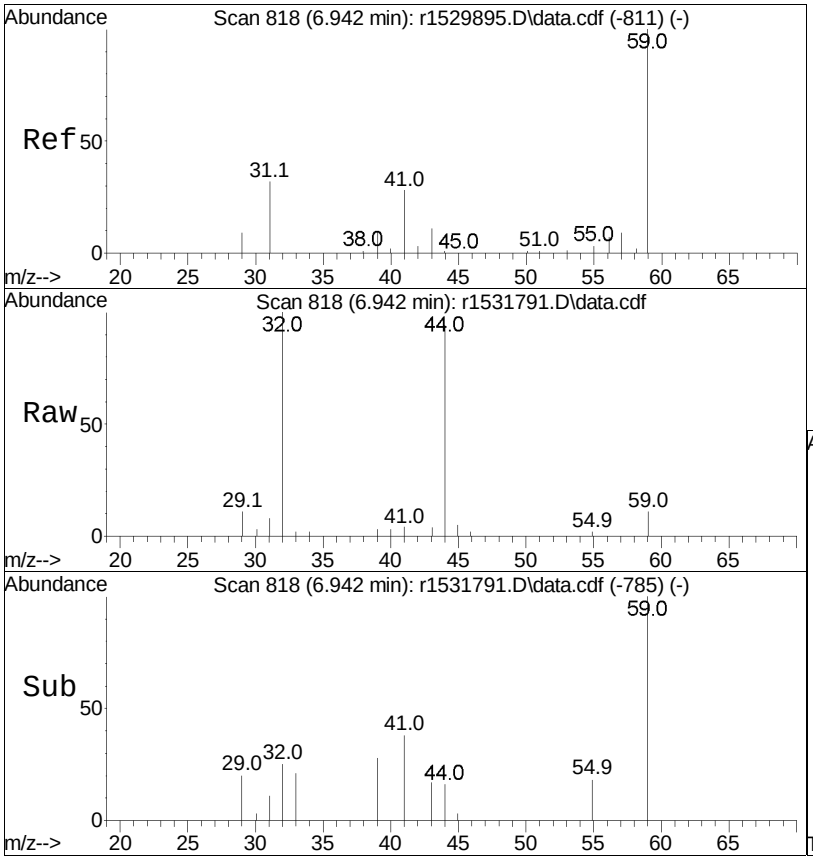


#22
isopropyl alcohol
Concen: 37.22 ppbV
RT: 6.19 min Scan# 642
Delta R.T. -0.017 min
Lab File: r1531791.D
Acq: 20 Mar 2022 11:04 PM

Tgt Ion: 45 Resp: 883263

Ion	Ratio	Lower	Upper
45	100		
59	4.5	3.8	5.8

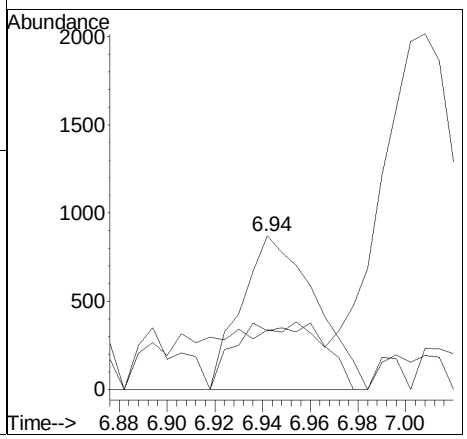


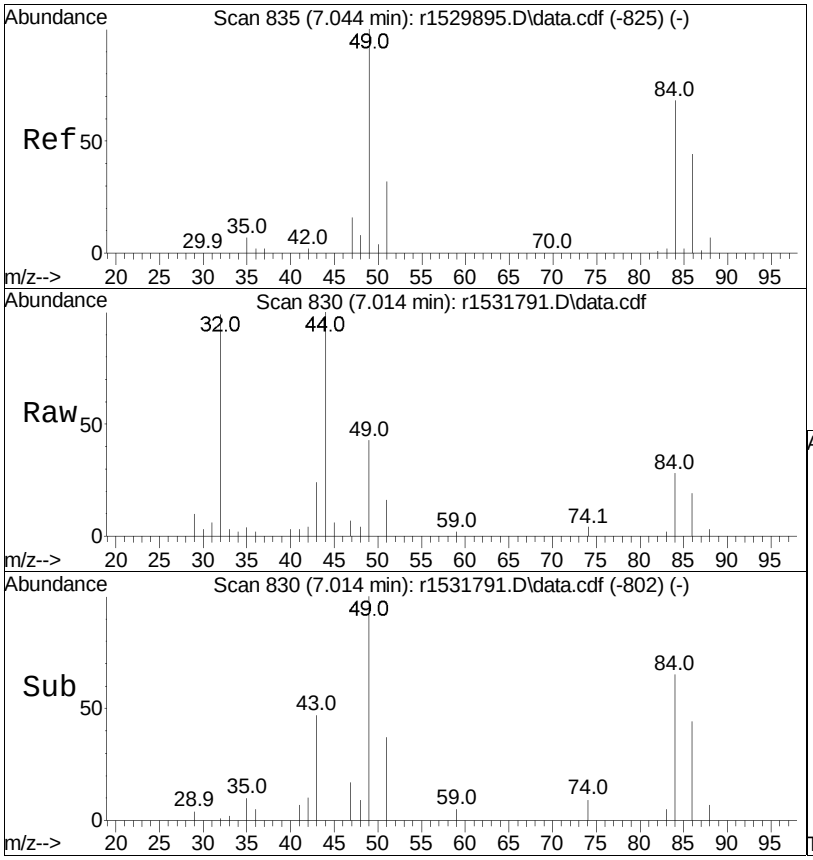


#27
tertiary butyl alcohol
Concen: 0.06 ppbV
RT: 6.94 min Scan# 818
Delta R.T. 0.000 min
Lab File: r1531791.D
Acq: 20 Mar 2022 11:04 PM

Tgt Ion: 59 Resp: 1882

Ion	Ratio	Lower	Upper
59	100		
41	38.1	22.2	33.4#
43	38.8	8.9	13.3#

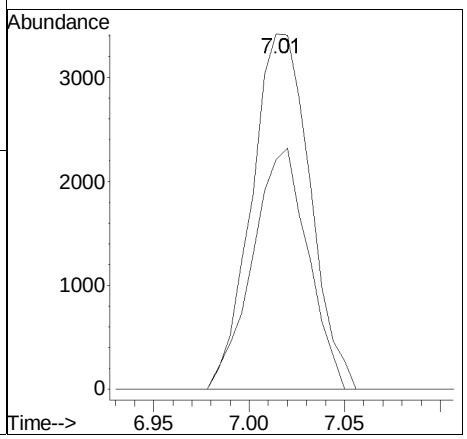


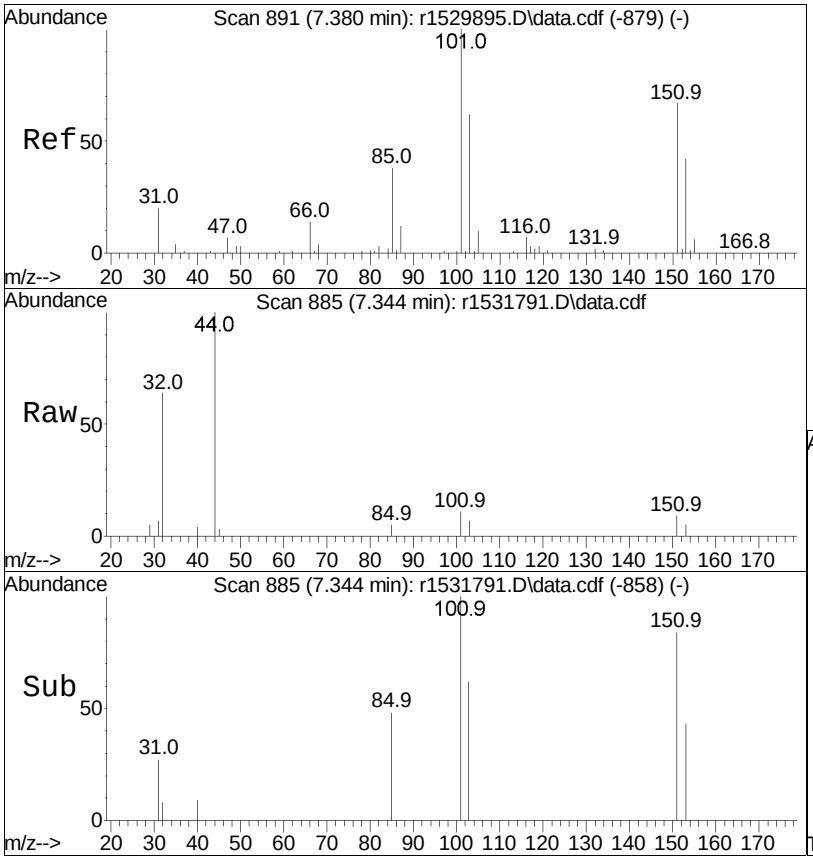


#28
methylene chloride
Concen: 0.40 ppbV
RT: 7.01 min Scan# 830
Delta R.T. -0.030 min
Lab File: r1531791.D
Acq: 20 Mar 2022 11:04 PM

Tgt Ion: 49 Resp: 7267

Ion	Ratio	Lower	Upper
49	100		
84	64.6	54.5	81.7

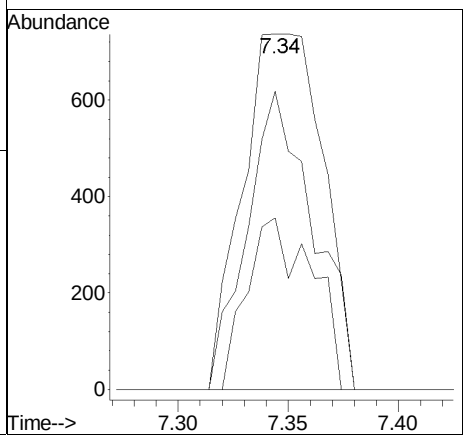


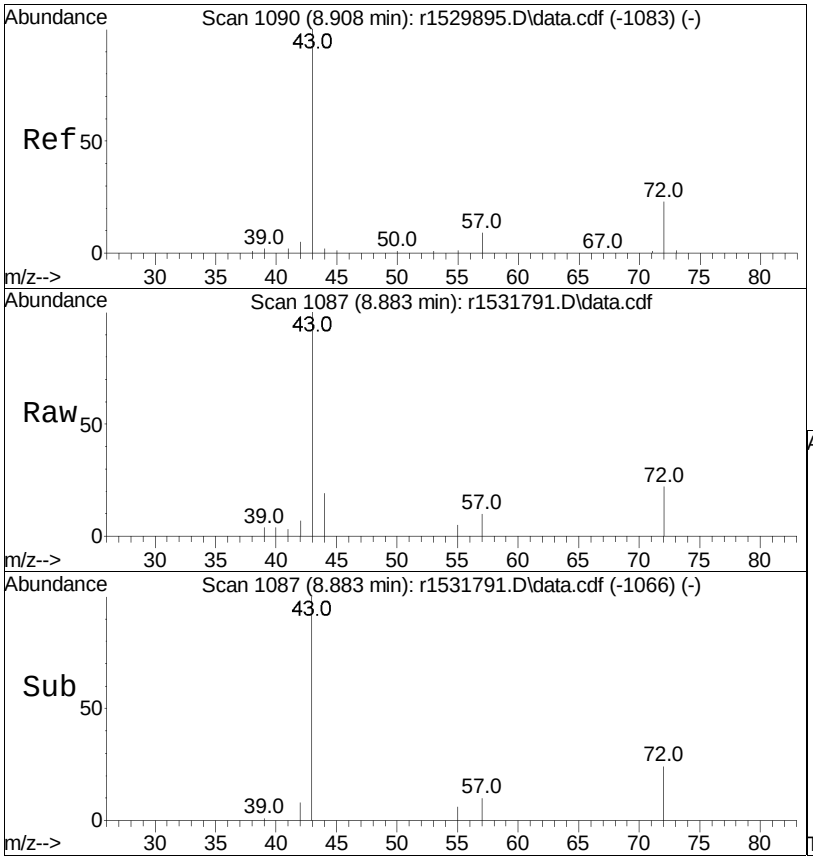


#31
Freon 113
Concen: 0.07 ppbV
RT: 7.34 min Scan# 885
Delta R.T. -0.036 min
Lab File: r1531791.D
Acq: 20 Mar 2022 11:04 PM

Tgt Ion:101 Resp: 1873

Ion	Ratio	Lower	Upper
101	100		
85	48.3	30.6	46.0#
151	83.9	53.5	80.3#

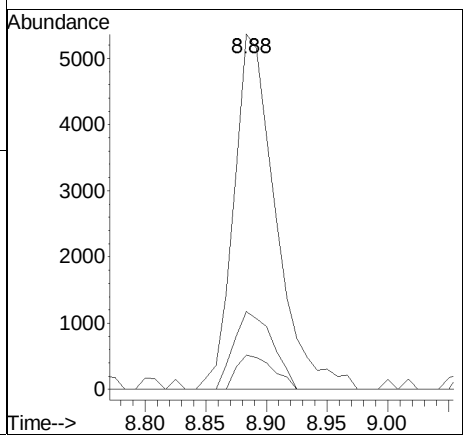


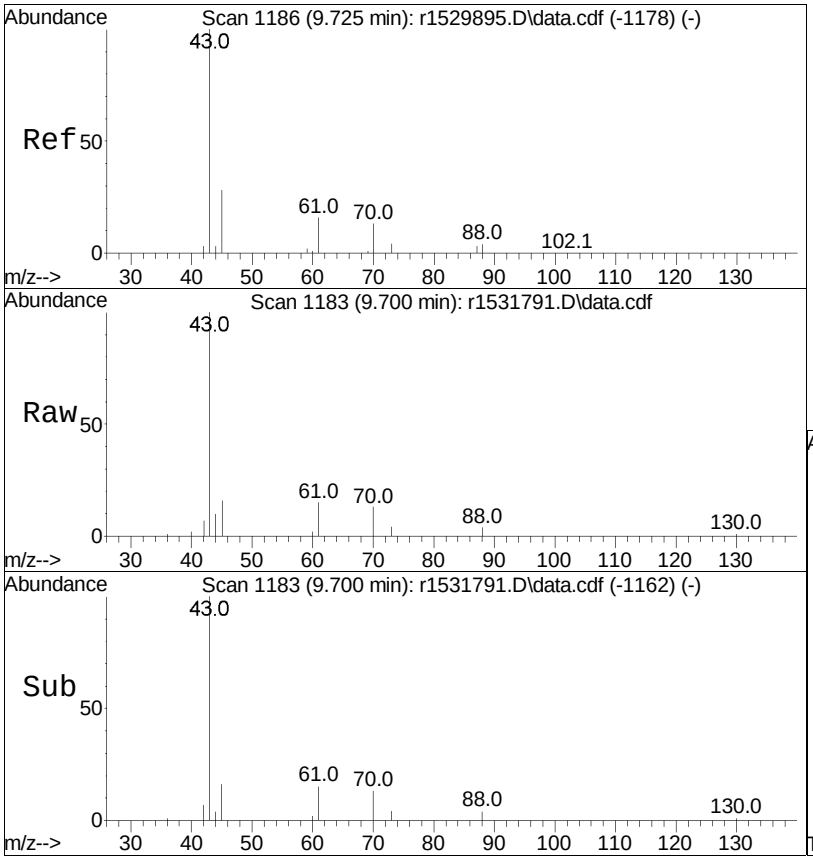


#36
2-butanone
Concen: 0.33 ppbV
RT: 8.88 min Scan# 1087
Delta R.T. -0.025 min
Lab File: r1531791.D
Acq: 20 Mar 2022 11:04 PM

Tgt Ion: 43 Resp: 12907

Ion	Ratio	Lower	Upper
43	100		
72	21.9	18.0	27.0
57	9.7	7.0	10.4

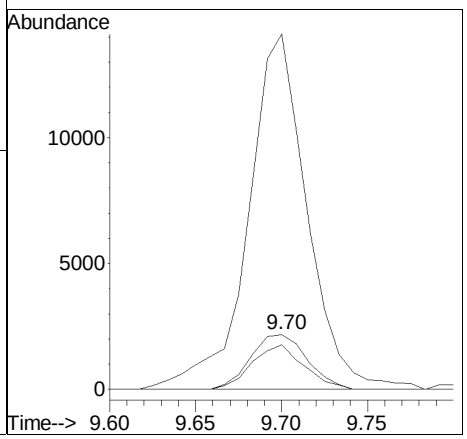


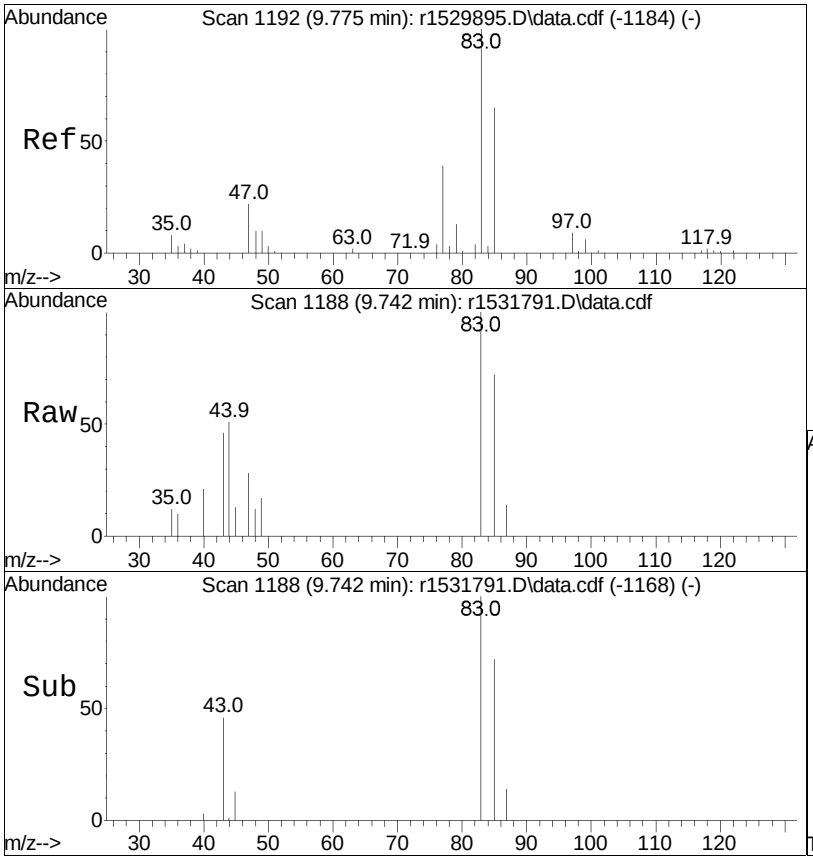


#38
Ethyl Acetate
Concen: 0.70 ppbV
RT: 9.70 min Scan# 1183
Delta R.T. -0.025 min
Lab File: r1531791.D
Acq: 20 Mar 2022 11:04 PM

Tgt Ion: 61 Resp: 5003

Ion	Ratio	Lower	Upper
61	100		
70	81.8	62.7	94.1
43	650.1	551.8	827.8

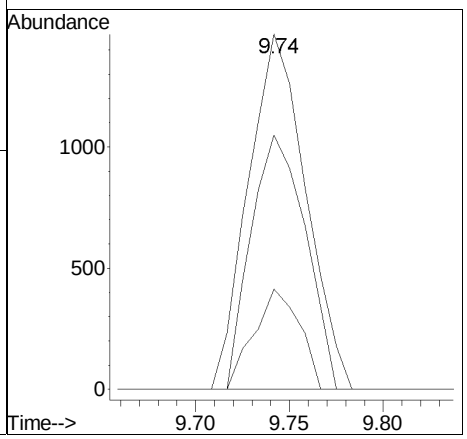


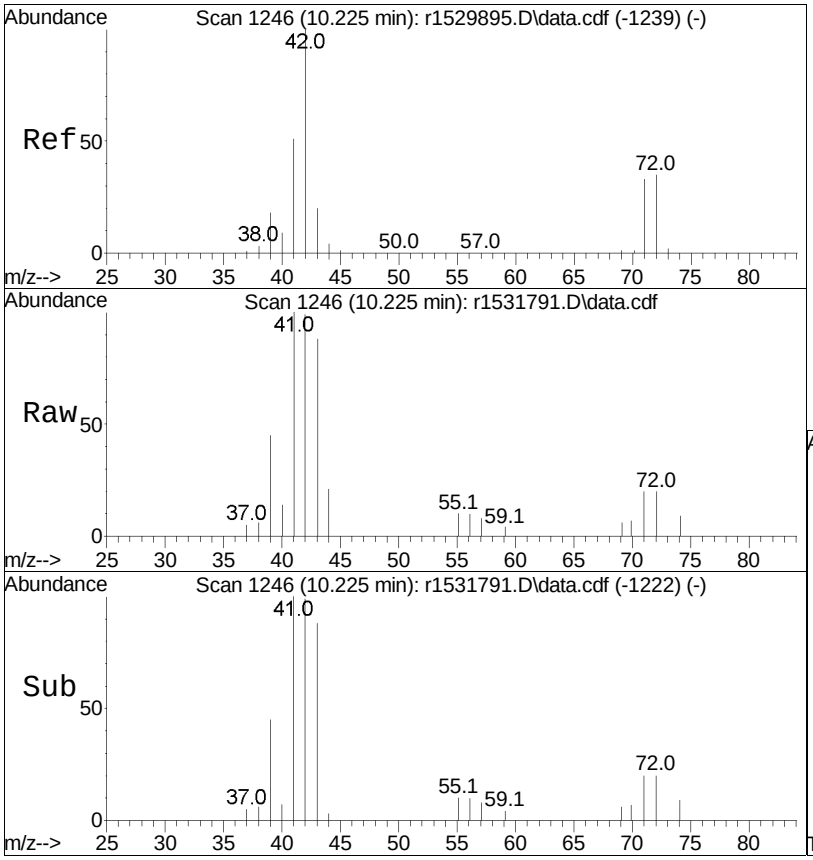


#39
chloroform
Concen: 0.10 ppbV
RT: 9.74 min Scan# 1188
Delta R.T. -0.033 min
Lab File: r1531791.D
Acq: 20 Mar 2022 11:04 PM

Tgt Ion: 83 Resp: 3130

Ion	Ratio	Lower	Upper
83	100		
85	71.6	51.8	77.8
47	28.2	17.9	26.9#

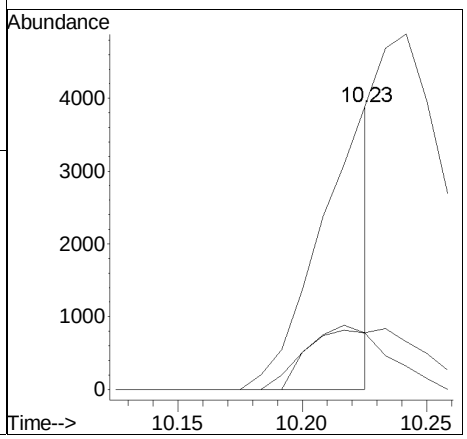


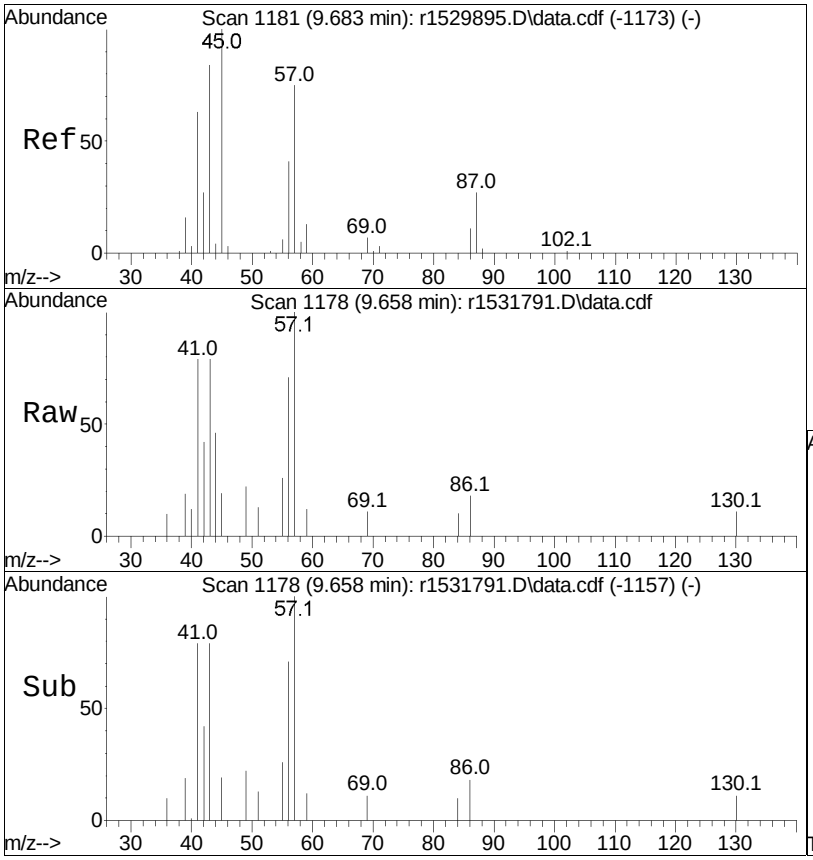


#40
Tetrahydrofuran
Concen: 0.24 ppbV m
RT: 10.23 min Scan# 1246
Delta R.T. 0.000 min
Lab File: r1531791.D
Acq: 20 Mar 2022 11:04 PM

Tgt Ion: 42 Resp: 5738

Ion	Ratio	Lower	Upper
42	100		
71	20.0	26.8	40.2#
72	20.0	27.7	41.5#

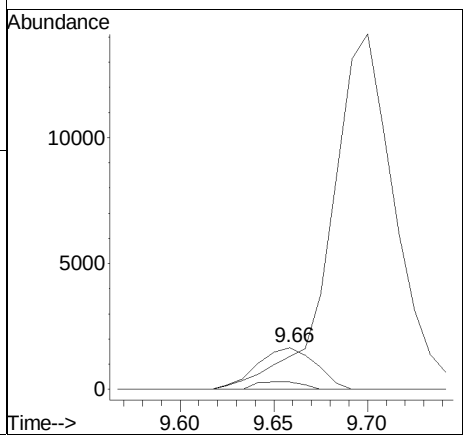


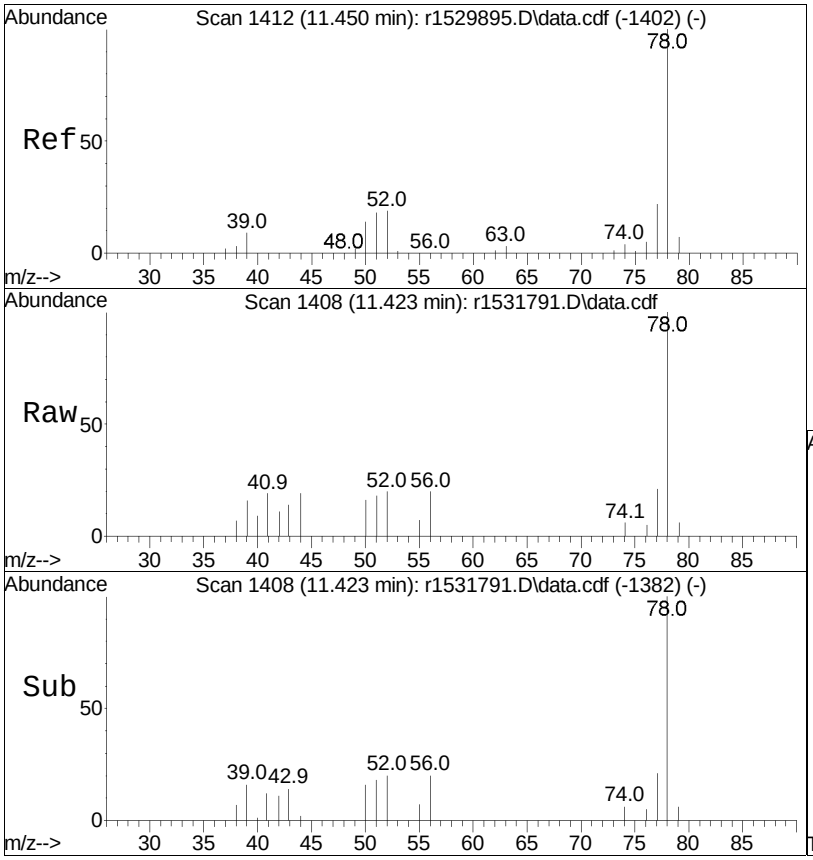


#44
hexane
Concen: 0.10 ppbV
RT: 9.66 min Scan# 1178
Delta R.T. -0.025 min
Lab File: r1531791.D
Acq: 20 Mar 2022 11:04 PM

Tgt Ion: 57 Resp: 3638

Ion	Ratio	Lower	Upper
57	100		
43	78.6	88.8	133.2#
86	17.8	11.4	17.0#

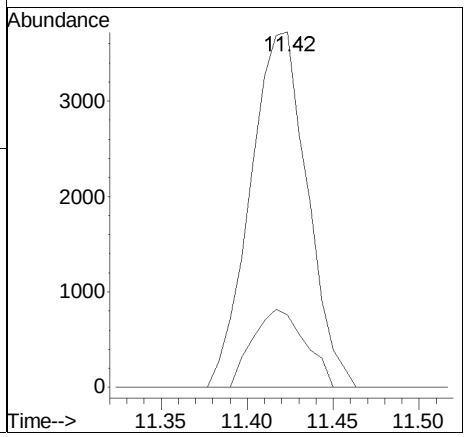


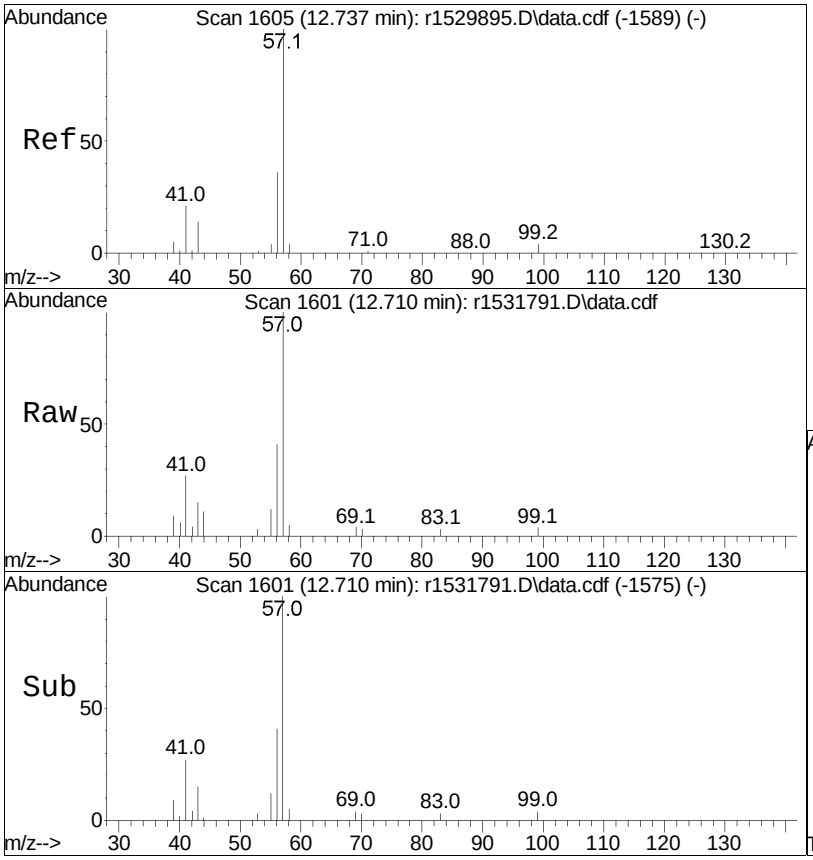


#50
benzene
Concen: 0.15 ppbV
RT: 11.42 min Scan# 1408
Delta R.T. -0.027 min
Lab File: r1531791.D
Acq: 20 Mar 2022 11:04 PM

Tgt Ion: 78 Resp: 8580

Ion	Ratio	Lower	Upper
78	100		
52	20.4	15.2	22.8

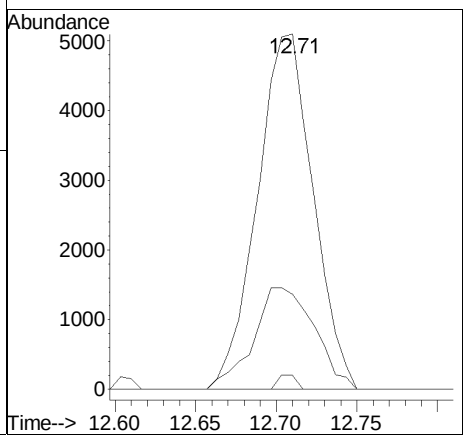


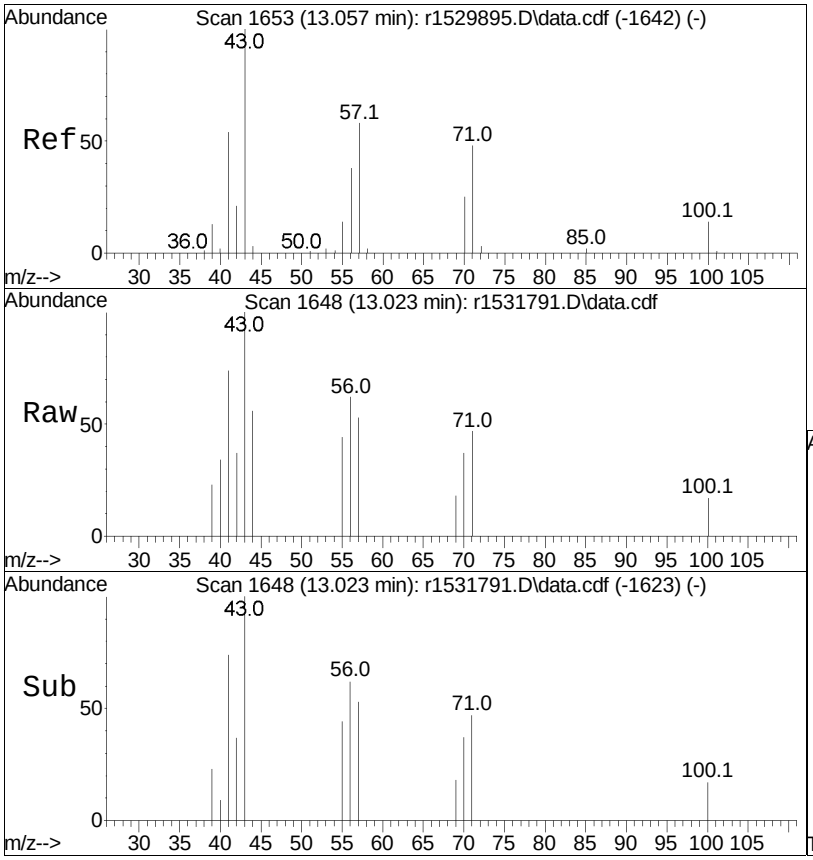


#60
2,2,4-trimethylpentane
Concen: 0.10 ppbV
RT: 12.71 min Scan# 1601
Delta R.T. -0.027 min
Lab File: r1531791.D
Acq: 20 Mar 2022 11:04 PM

Tgt Ion: 57 Resp: 12286

Ion	Ratio	Lower	Upper
57	100		
99	4.0	3.1	4.7
41	26.8	16.6	24.8#

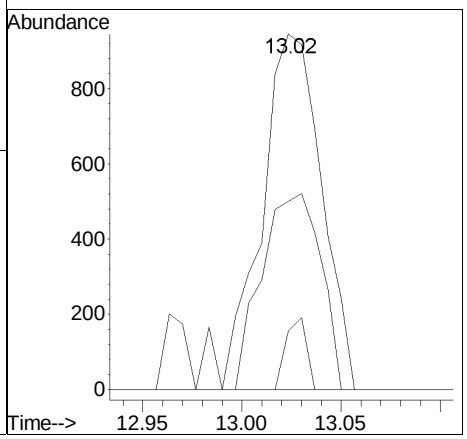


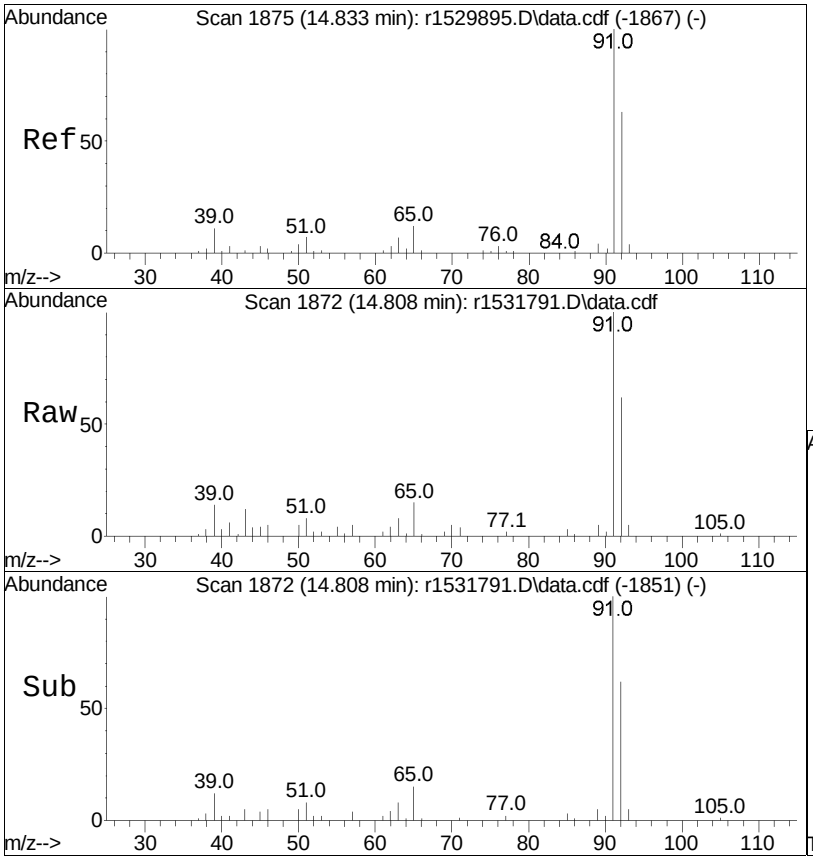


#62
heptane
Concen: 0.05 ppbV
RT: 13.02 min Scan# 1648
Delta R.T. -0.033 min
Lab File: r1531791.D
Acq: 20 Mar 2022 11:04 PM

Tgt Ion: 43 Resp: 2041

Ion	Ratio	Lower	Upper
43	100		
57	52.9	46.5	69.7
100	16.5	11.6	17.4

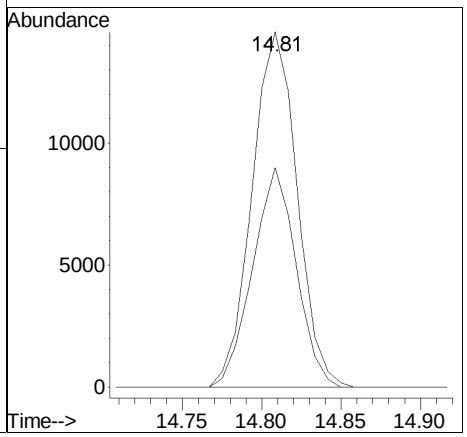


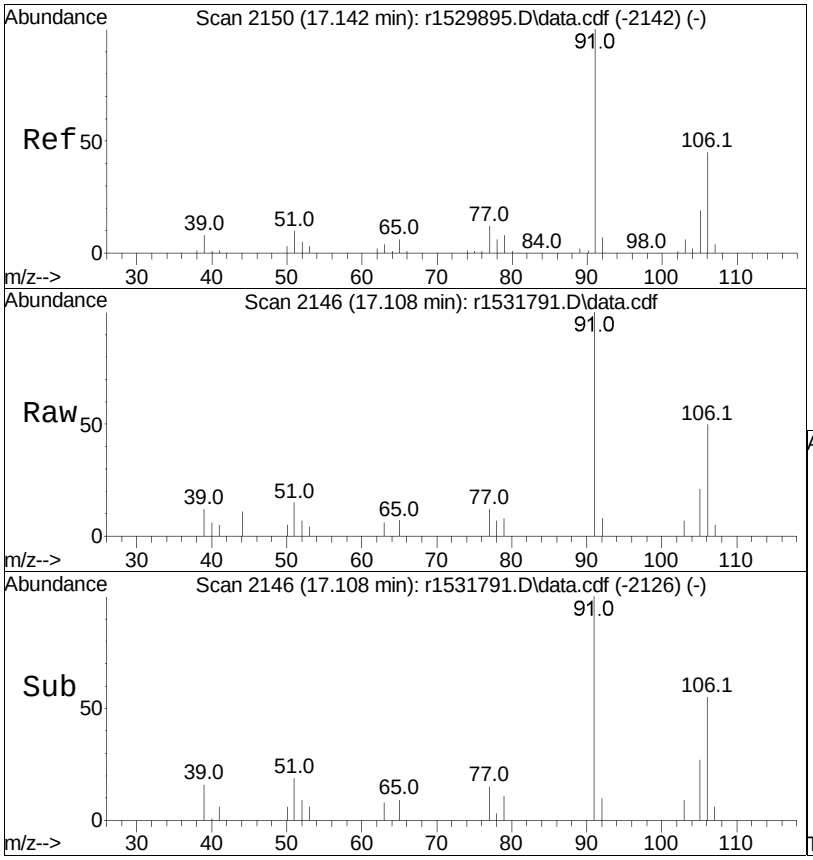


#68
toluene
Concen: 0.39 ppbV
RT: 14.81 min Scan# 1872
Delta R.T. -0.025 min
Lab File: r1531791.D
Acq: 20 Mar 2022 11:04 PM

Tgt Ion: 91 Resp: 28799

Ion	Ratio	Lower	Upper
91	100		
92	61.9	50.3	75.5

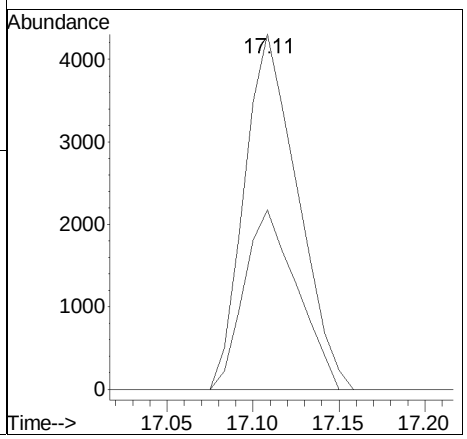


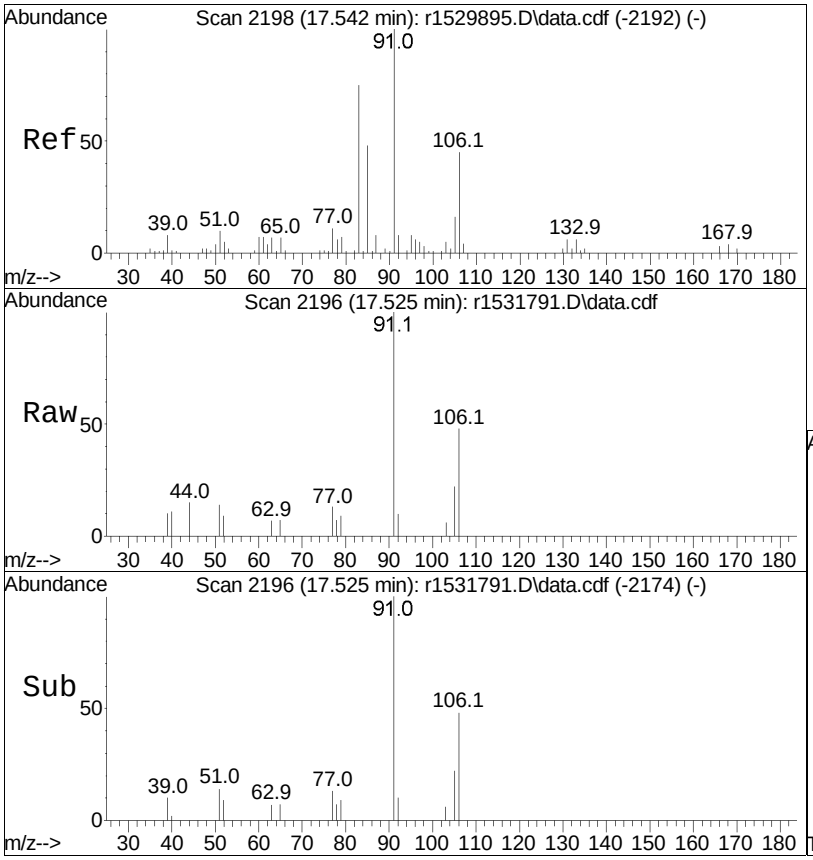


#83
m+p-xylene
Concen: 0.13 ppbV
RT: 17.11 min Scan# 2146
Delta R.T. -0.033 min
Lab File: r1531791.D
Acq: 20 Mar 2022 11:04 PM

Tgt Ion: 91 Resp: 9290

Ion	Ratio	Lower	Upper
91	100		
106	50.5	36.2	54.2

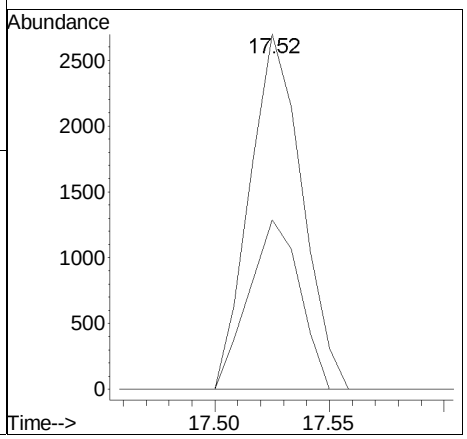


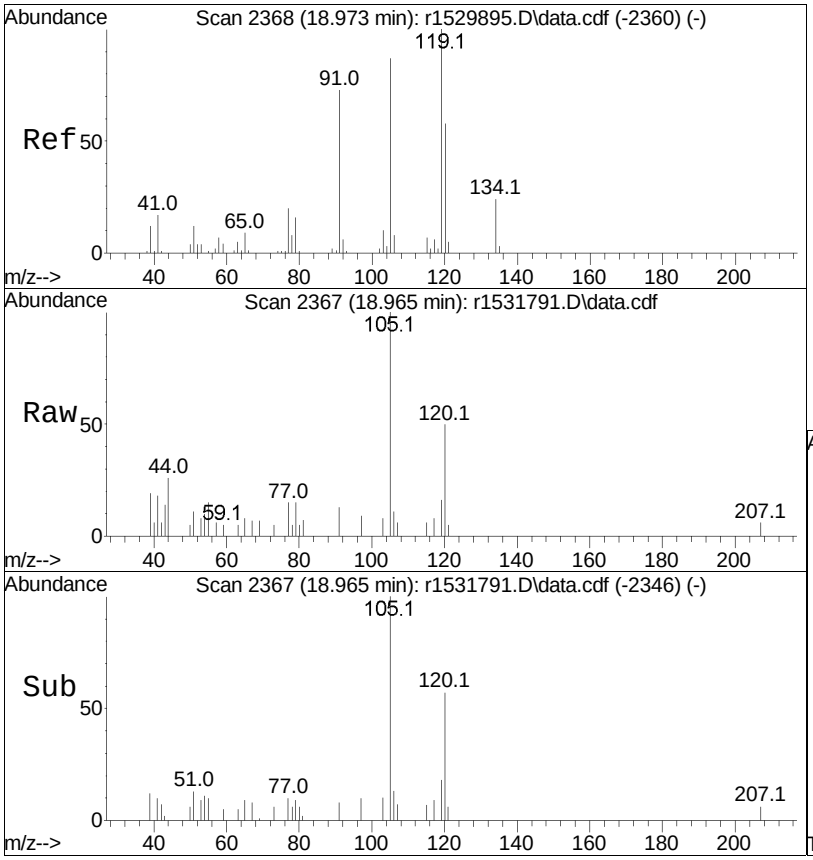


#87
o-xylene
Concen: 0.06 ppbV
RT: 17.52 min Scan# 2196
Delta R.T. -0.017 min
Lab File: r1531791.D
Acq: 20 Mar 2022 11:04 PM

Tgt Ion: 91 Resp: 4289

Ion	Ratio	Lower	Upper
91	100		
106	47.7	35.8	53.8

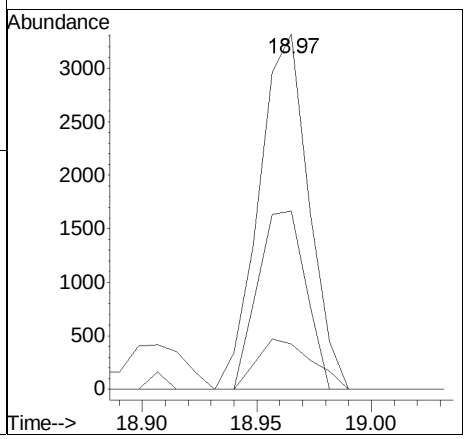




#99
1,2,4-trimethylbenzene
Concen: 0.07 ppbV
RT: 18.97 min Scan# 2367
Delta R.T. -0.008 min
Lab File: r1531791.D
Acq: 20 Mar 2022 11:04 PM

Tgt Ion:105 Resp: 5022

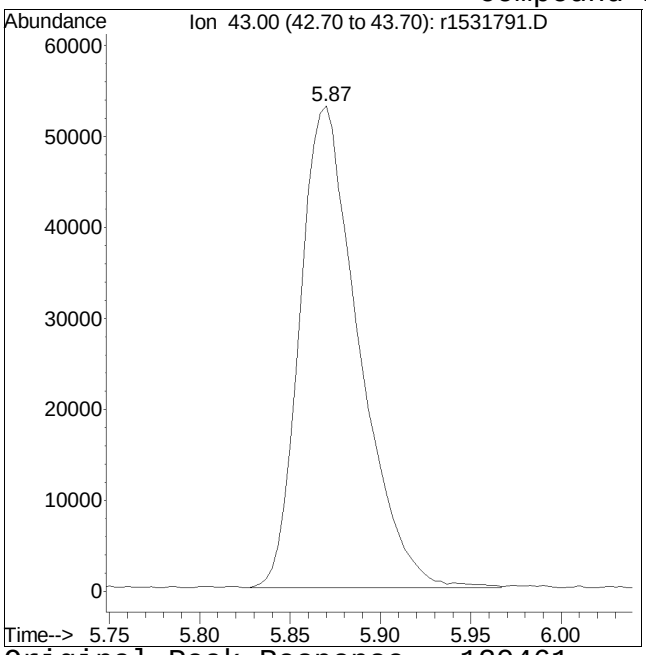
Ion	Ratio	Lower	Upper
105	100		
120	50.2	52.7	79.1#
91	12.8	67.2	100.8#



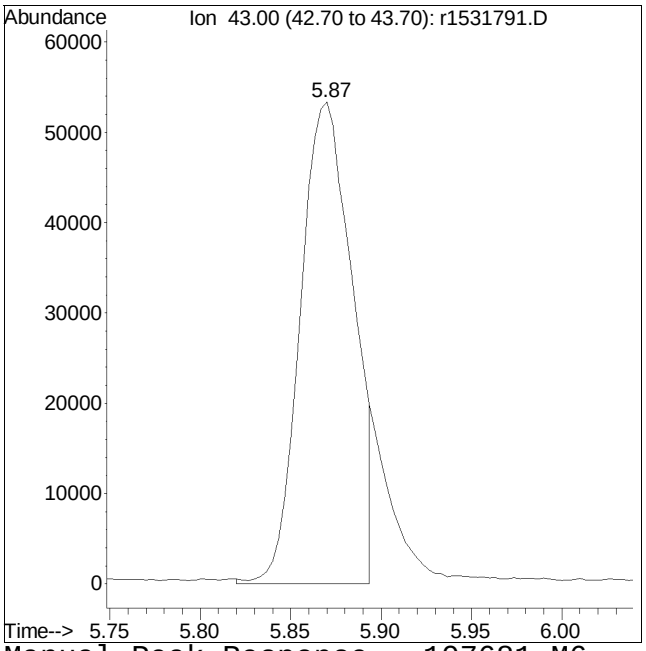
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airlab15\QMethod : TFS15_211222.M
Data File : r1531791.D Operator : AIRLAB15:RY
Date Inj'd : 3/20/2020 0:1: 4 Instrument :
Sample : L2213657-05,3,250,250 Quant Date : 3/21/2022 8:50 am

Compound #19: acetone



Original Peak Response = 120461



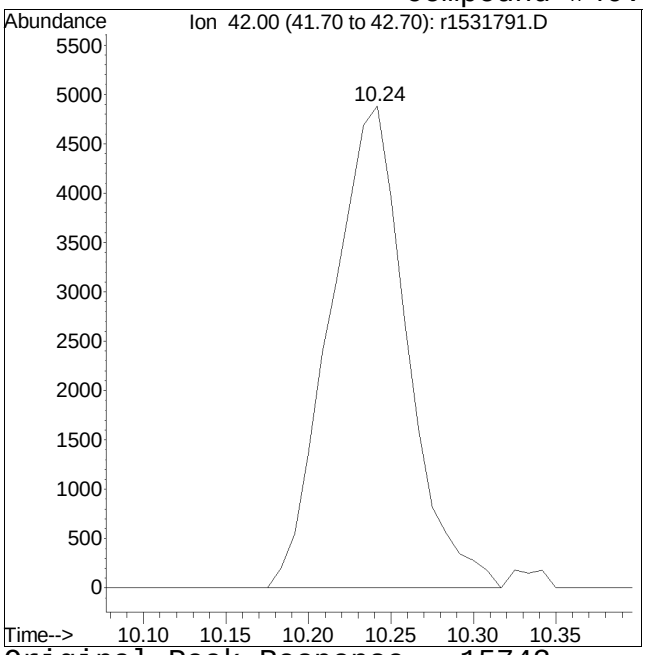
Manual Peak Response = 107681 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

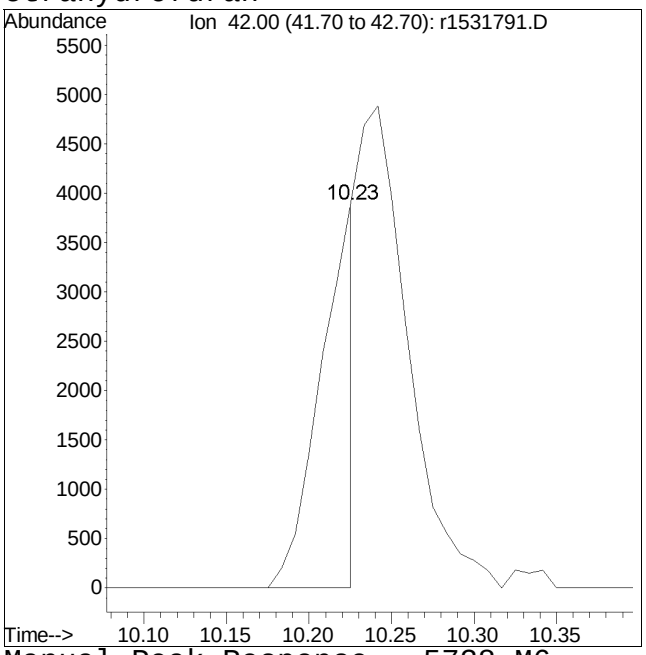
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airlab15\QMethod : TFS15_211222.M
Data File : r1531791.D Operator : AIRLAB15:RY
Date Inj'd : 3/20/2020 0:1: 4 Instrument :
Sample : L2213657-05,3,250,250 Quant Date : 3/21/2022 8:50 am

Compound #40: Tetrahydrofuran



Original Peak Response = 15743



Manual Peak Response = 5738 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531792.D
Acq On : 20 Mar 2022 11:43 PM
Operator : AIRLAB15:RY
Sample : L2213657-01,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 15:49:04 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320T\r1531778.D
Sub List : TO15-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.58	49	396045	10.000	ppbV	-0.03
Standard Area = 382239			Recovery = 103.61%			
43) 1,4-difluorobenzene	11.86	114	858084	10.000	ppbV	-0.03
Standard Area = 859136			Recovery = 99.88%			
67) chlorobenzene-D5	16.57	54	209413	10.000	ppbV	-0.02
Standard Area = 200634			Recovery = 104.38%			
System Monitoring Compounds						
Target Compounds						Qvalue
5) dichlorodifluoromethane	3.96	85	14899	0.509	ppbV	98
6) chloromethane	4.14	50	9704	0.665	ppbV	97
7) Freon-114	4.27		0	N.D.		
9) vinyl chloride	4.40	62	2716	0.142	ppbV	90
10) 1,3-butadiene	4.57		0	N.D.		
13) bromomethane	0.00		0	N.D.		
14) chloroethane	0.00		0	N.D.	d	
15) ethanol	5.28	31	2411493	212.349	ppbV	96
17) vinyl bromide	0.00		0	N.D.	d	
19) acetone	5.86	43	1139120	50.343	ppbV	100
21) trichlorofluoromethane	6.07	101	6868	0.244	ppbV	89
22) isopropyl alcohol	6.19	45	1441440	58.948	ppbV	99
26) 1,1-dichloroethene	6.85		0	N.D.		
27) tertiary butyl alcohol	6.92	59	219440	6.938	ppbV #	90
28) methylene chloride	7.02	49	8070	0.435	ppbV	94
29) 3-chloropropene	0.00		0	N.D.	d	
30) carbon disulfide	7.31	76	7627	0.198	ppbV #	1
31) Freon 113	7.34	101	2018	0.071	ppbV	92
32) trans-1,2-dichloroethene	8.15		0	N.D.		
33) 1,1-dichloroethane	0.00		0	N.D.	d	
34) MTBE	0.00		0	N.D.	d	
36) 2-butanone	8.88	43	85687	2.121	ppbV	100
37) cis-1,2-dichloroethene	9.39	61	10509	0.373	ppbV	95
38) Ethyl Acetate	9.70	61	4826	0.659	ppbV	65
39) chloroform	9.75		0	N.D.		
40) Tetrahydrofuran	10.20	42	36217	1.442	ppbV	99
42) 1,2-dichloroethane	10.59	62	24653	1.023	ppbV	99

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531792.D
Acq On : 20 Mar 2022 11:43 PM
Operator : AIRLAB15:RY
Sample : L2213657-01,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 15:49:04 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320T\r1531778.D
Sub List : TO15-NY - .

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) hexane	9.66	57	8113	0.224 ppbV #	65
48) 1,1,1-trichloroethane	0.00		0	N.D.	
50) benzene	11.42	78	127873	2.122 ppbV	99
52) carbon tetrachloride	11.59	117	1810	0.083 ppbV #	92
53) cyclohexane	11.74	56	3882	0.100 ppbV #	90
56) 1,2-dichloropropane	0.00		0	N.D. d	
57) bromodichloromethane	0.00		0	N.D. d	
58) 1,4-dioxane	0.00		0	N.D.	
59) trichloroethene	12.64		0	N.D.	
60) 2,2,4-trimethylpentane	12.70	57	17918M6	0.149 ppbV	
62) heptane	13.02	43	8780	0.221 ppbV	98
63) cis-1,3-dichloropropene	0.00		0	N.D.	
64) 4-methyl-2-pentanone	13.73	43	10532	0.235 ppbV #	86
65) trans-1,3-dichloropropene	0.00		0	N.D.	
66) 1,1,2-trichloroethane	0.00		0	N.D.	
68) toluene	14.81	91	198194	2.541 ppbV	99
72) 2-hexanone	15.10	43	8244	0.187 ppbV #	79
74) dibromochloromethane	0.00		0	N.D.	
75) 1,2-dibromoethane	0.00		0	N.D.	
78) tetrachloroethene	15.97	166	2318	0.086 ppbV	95
80) chlorobenzene	16.61		0	N.D.	
81) ethylbenzene	16.96	91	27349	0.296 ppbV	96
83) m+p-xylene	17.11	91	115132	1.534 ppbV	95
84) bromoform	0.00		0	N.D.	
85) styrene	17.43	104	17104	0.321 ppbV	99
86) 1,1,2,2-tetrachloroethane	0.00		0	N.D. d	
87) o-xylene	17.52	91	29632	0.398 ppbV	97
96) 4-ethyl toluene	18.57		0	N.D.	
97) 1,3,5-trimethylbenzene	18.63		0	N.D.	
99) 1,2,4-trimethylbenzene	18.96	105	16454	0.213 ppbV #	53
101) Benzyl Chloride	0.00		0	N.D. d	
102) 1,3-dichlorobenzene	0.00		0	N.D. d	
103) 1,4-dichlorobenzene	19.14	146	3945	0.076 ppbV	95
107) 1,2-dichlorobenzene	19.41		0	N.D.	
115) 1,2,4-trichlorobenzene	0.00		0	N.D.	
119) hexachlorobutadiene	0.00		0	N.D.	

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

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531792.D
Acq On : 20 Mar 2022 11:43 PM
Operator : AIRLAB15:RY
Sample : L2213657-01,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 15:49:04 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320T\r1531778.D
Sub List : TO15-NY - .

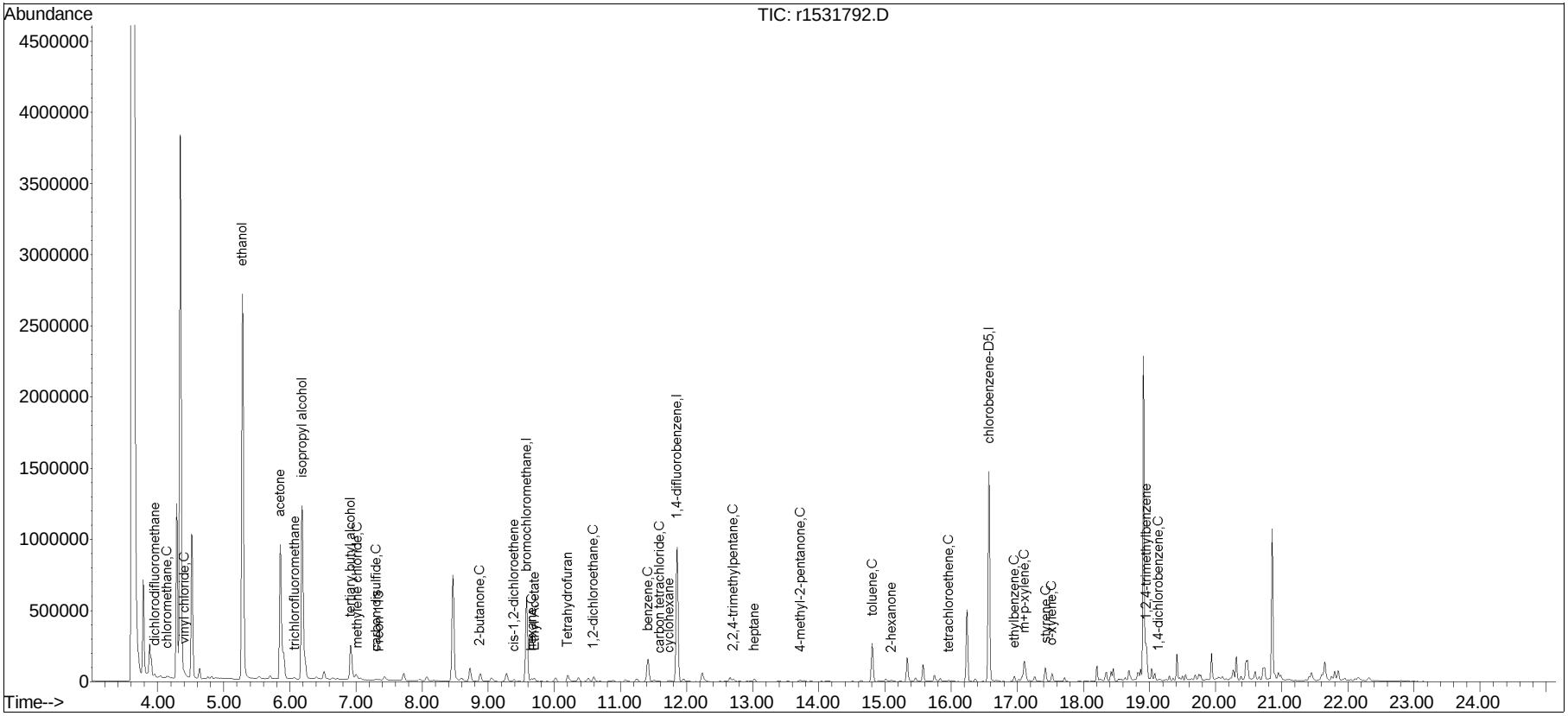
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

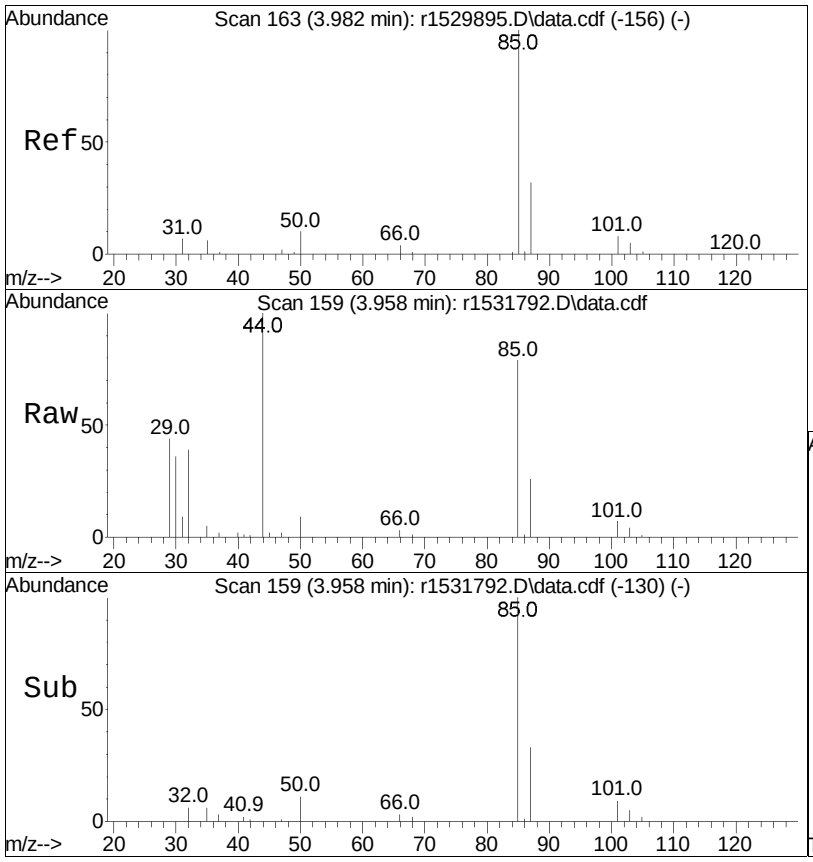
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531792.D
Acq On : 20 Mar 2022 11:43 PM
Operator : AIRLAB15:RY
Sample : L2213657-01,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 15:49:04 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

Sub List : TO15-NY - .s\Data\Airlab15\2022\03\0320T\r1531778.D

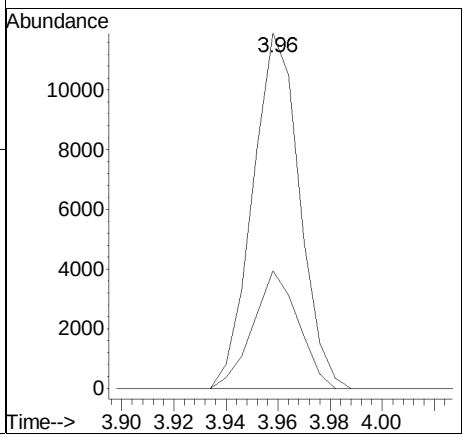


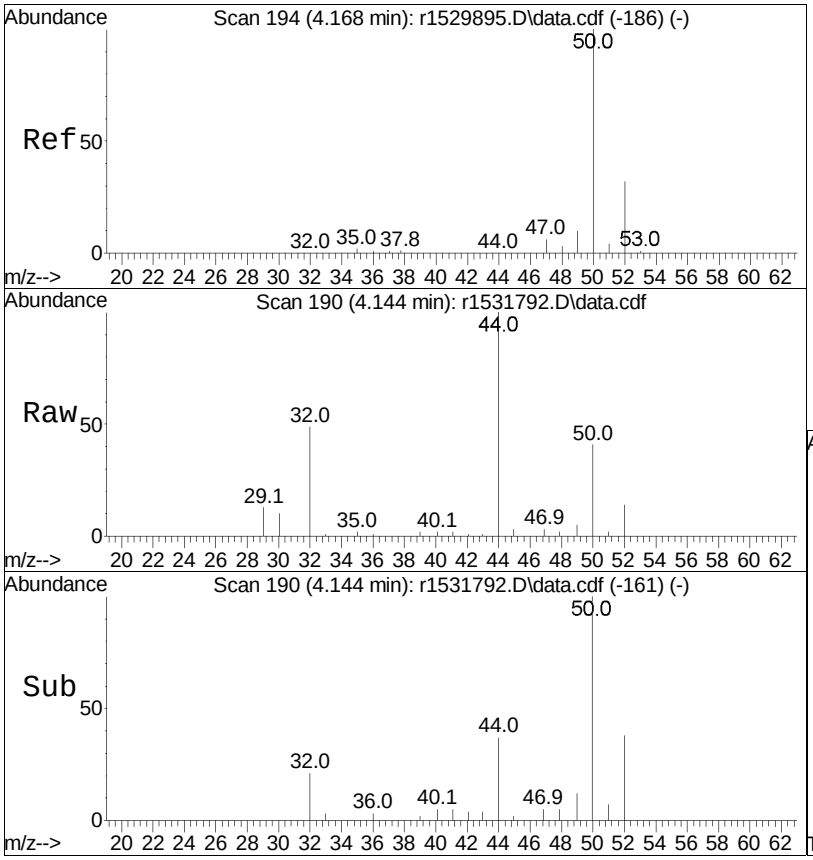


#5
dichlorodifluoromethane
Concen: 0.51 ppbV
RT: 3.96 min Scan# 159
Delta R.T. -0.024 min
Lab File: r1531792.D
Acq: 20 Mar 2022 11:43 PM

Tgt Ion: 85 Resp: 14899

Ion	Ratio	Lower	Upper
85	100		
87	33.1	25.6	38.4

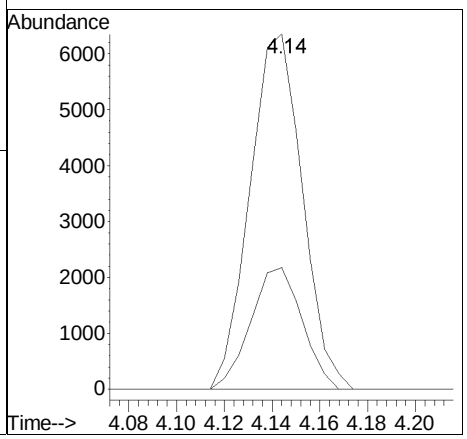


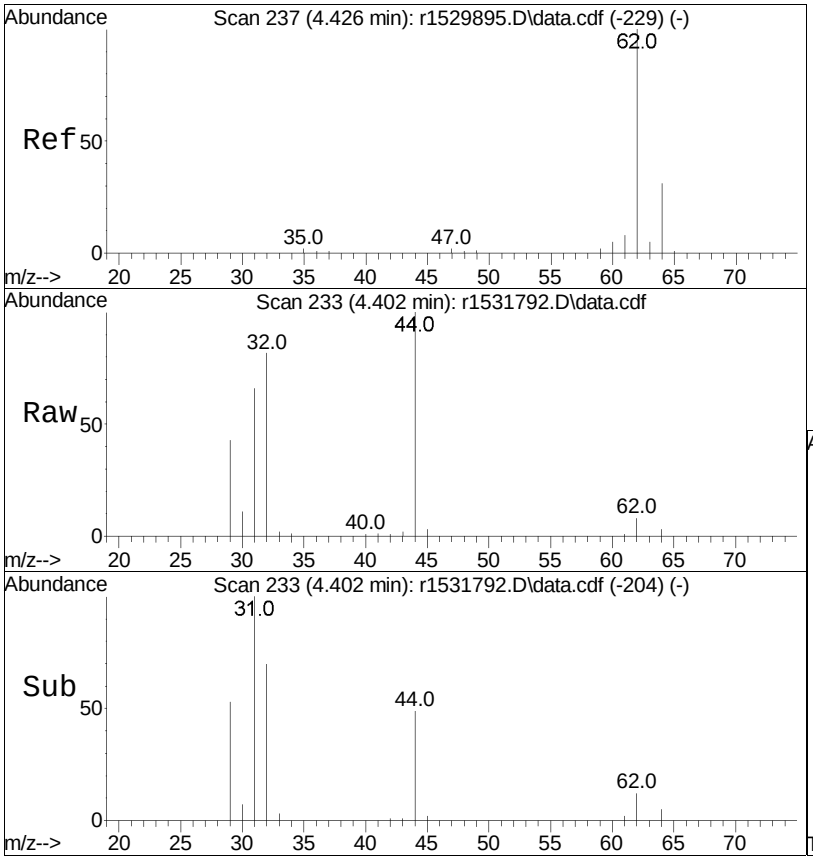


#6
chloromethane
Concen: 0.66 ppbV
RT: 4.14 min Scan# 190
Delta R.T. -0.024 min
Lab File: r1531792.D
Acq: 20 Mar 2022 11:43 PM

Tgt Ion: 50 Resp: 9704

Ion	Ratio	Lower	Upper
50	100		
52	34.3	25.9	38.9

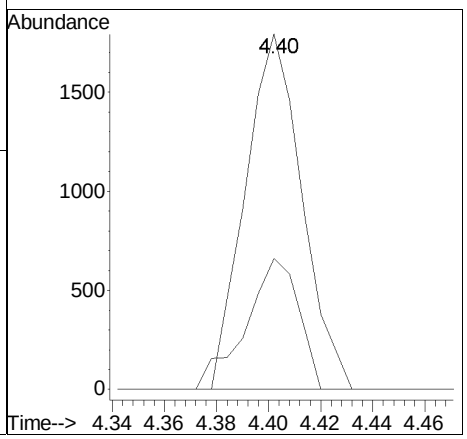


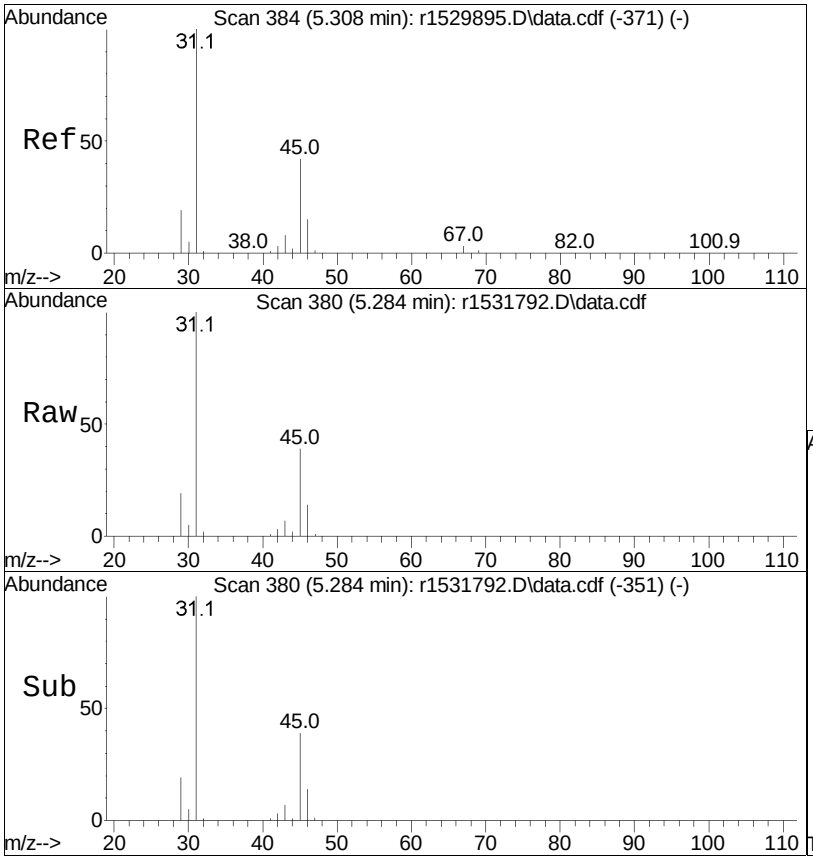


#9
vinyl chloride
Concen: 0.14 ppbV
RT: 4.40 min Scan# 233
Delta R.T. -0.024 min
Lab File: r1531792.D
Acq: 20 Mar 2022 11:43 PM

Tgt Ion: 62 Resp: 2716

Ion	Ratio	Lower	Upper
62	100		
64	36.8	25.1	37.7

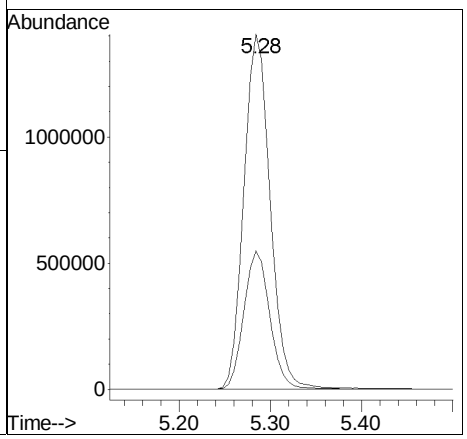


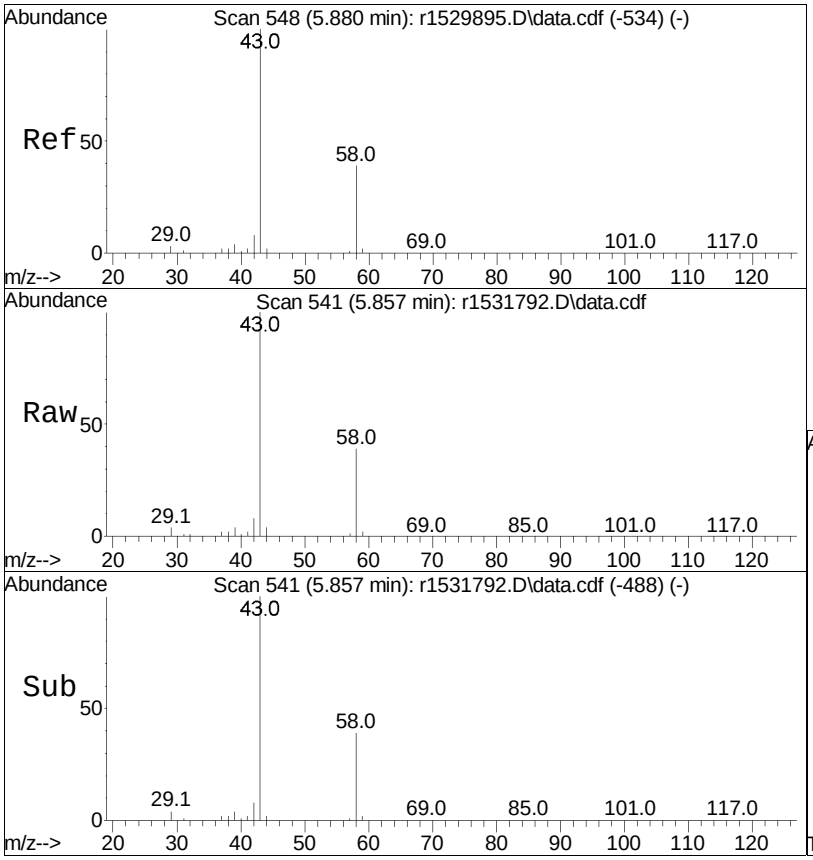


#15
ethanol
Concen: 212.35 ppbV
RT: 5.28 min Scan# 380
Delta R.T. -0.024 min
Lab File: r1531792.D
Acq: 20 Mar 2022 11:43 PM

Tgt Ion: 31 Resp: 2411493

Ion	Ratio	Lower	Upper
31	100		
45	39.0	33.4	50.2

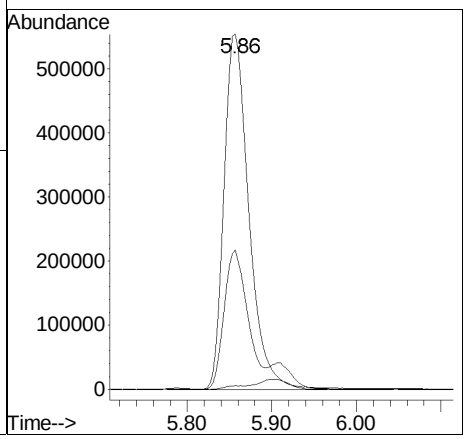


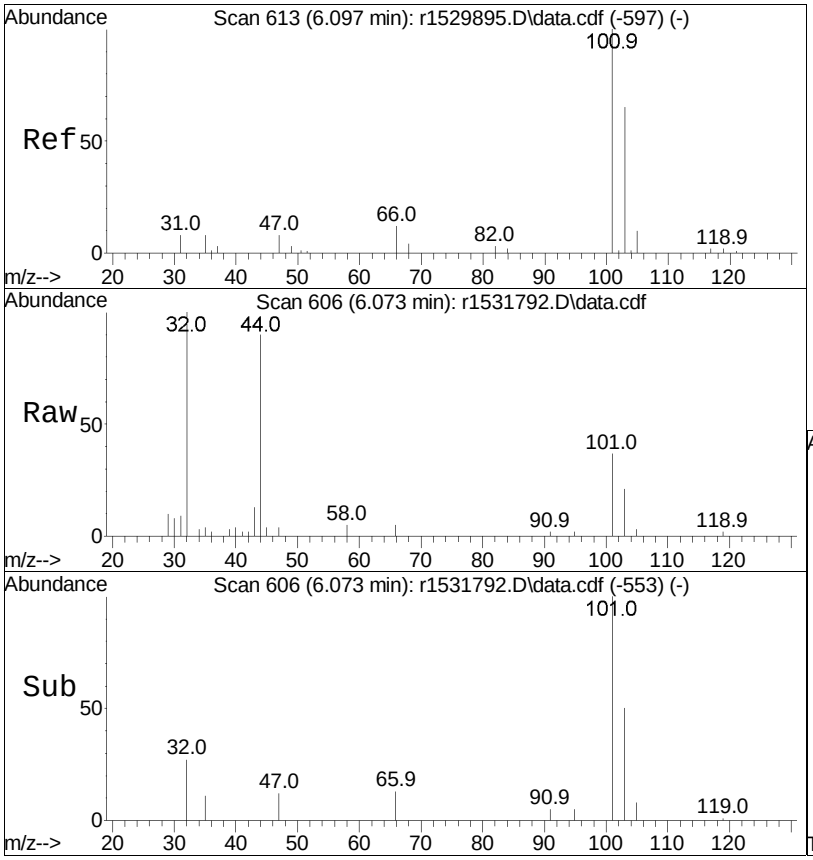


#19
acetone
Concen: 50.34 ppbV
RT: 5.86 min Scan# 541
Delta R.T. -0.023 min
Lab File: r1531792.D
Acq: 20 Mar 2022 11:43 PM

Tgt Ion: 43 Resp: 1139120

Ion	Ratio	Lower	Upper
43	100		
58	39.2	31.6	47.4
57	1.1	0.8	1.2

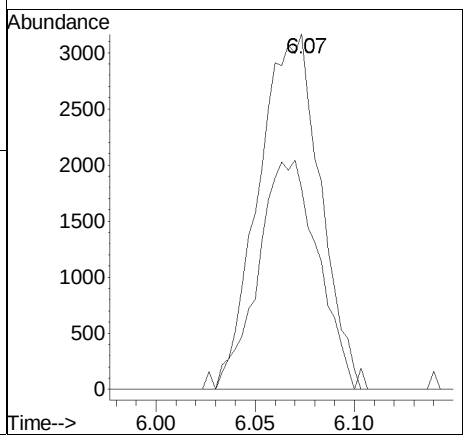


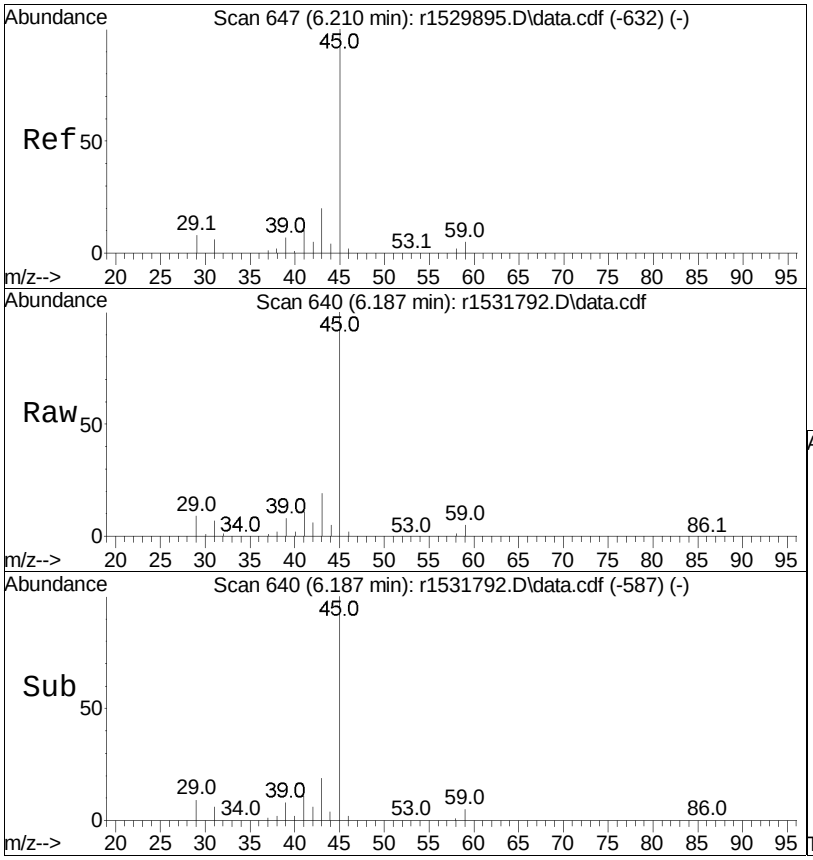


#21
trichlorofluoromethane
Concen: 0.24 ppbV
RT: 6.07 min Scan# 606
Delta R.T. -0.023 min
Lab File: r1531792.D
Acq: 20 Mar 2022 11:43 PM

Tgt Ion:101 Resp: 6868

Ion	Ratio	Lower	Upper
101	100		
103	56.5	52.0	78.0

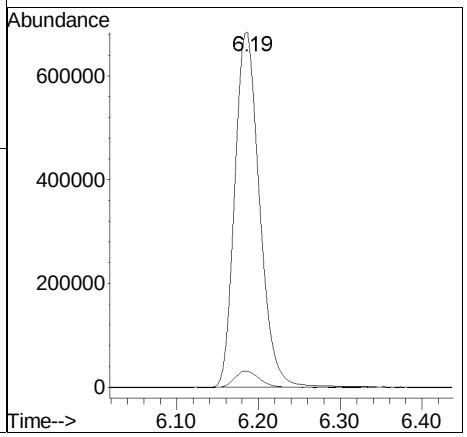


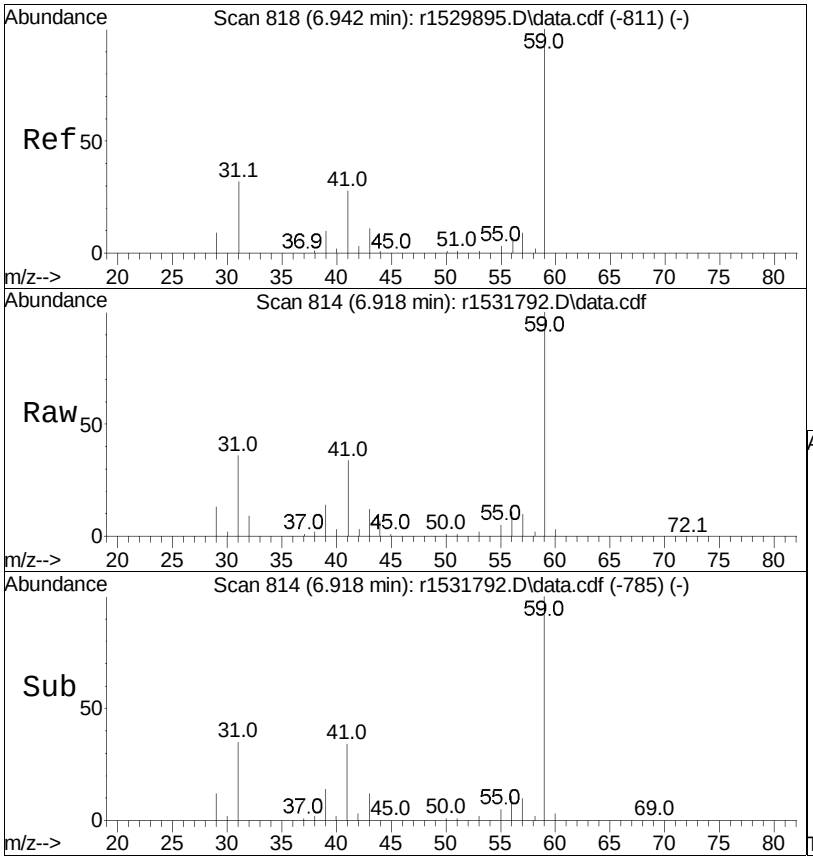


#22
isopropyl alcohol
Concen: 58.95 ppbV
RT: 6.19 min Scan# 640
Delta R.T. -0.023 min
Lab File: r1531792.D
Acq: 20 Mar 2022 11:43 PM

Tgt Ion: 45 Resp: 1441440

Ion	Ratio	Lower	Upper
45	100		
59	4.5	3.8	5.8

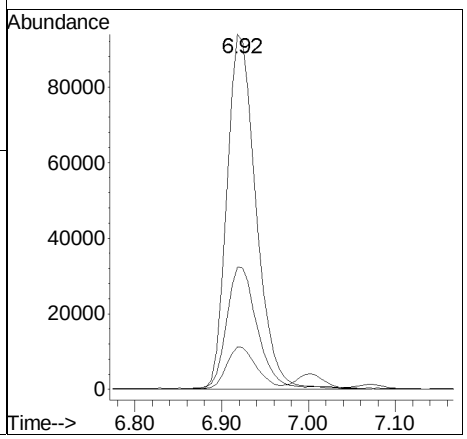


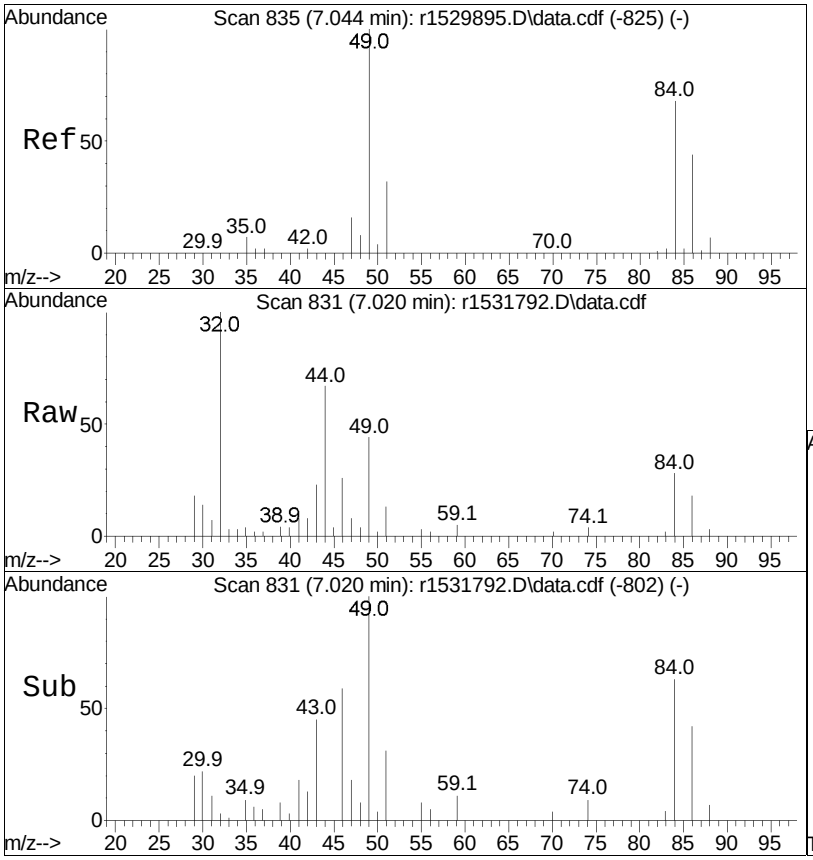


#27
tertiary butyl alcohol
Concen: 6.94 ppbV
RT: 6.92 min Scan# 814
Delta R.T. -0.024 min
Lab File: r1531792.D
Acq: 20 Mar 2022 11:43 PM

Tgt Ion: 59 Resp: 219440

Ion	Ratio	Lower	Upper
59	100		
41	34.5	22.2	33.4#
43	12.0	8.9	13.3

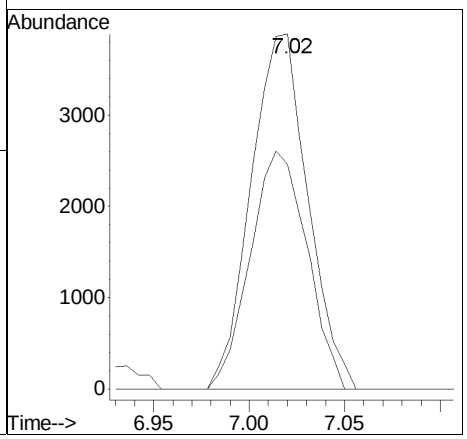


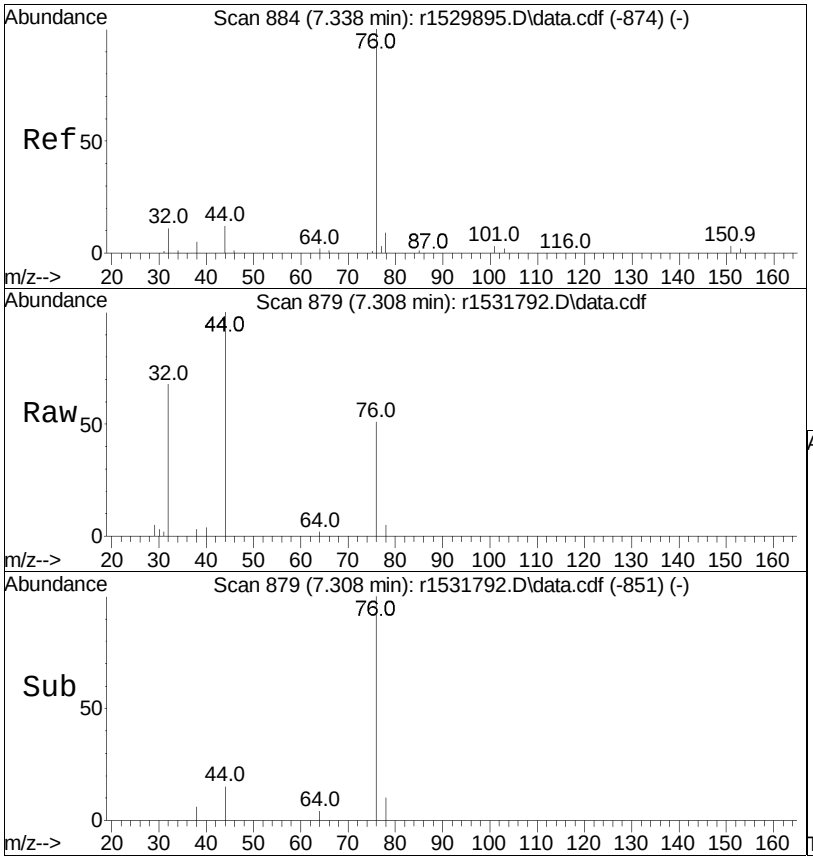


#28
methylene chloride
Concen: 0.43 ppbV
RT: 7.02 min Scan# 831
Delta R.T. -0.024 min
Lab File: r1531792.D
Acq: 20 Mar 2022 11:43 PM

Tgt Ion: 49 Resp: 8070

Ion	Ratio	Lower	Upper
49	100		
84	63.3	54.5	81.7

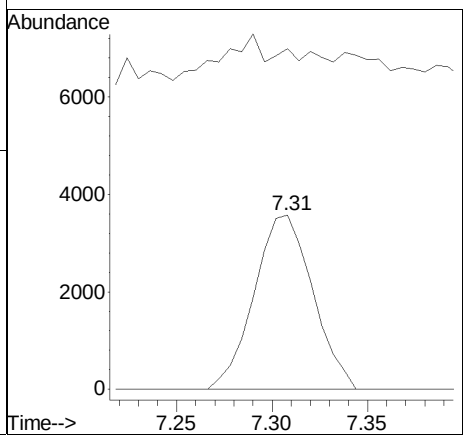


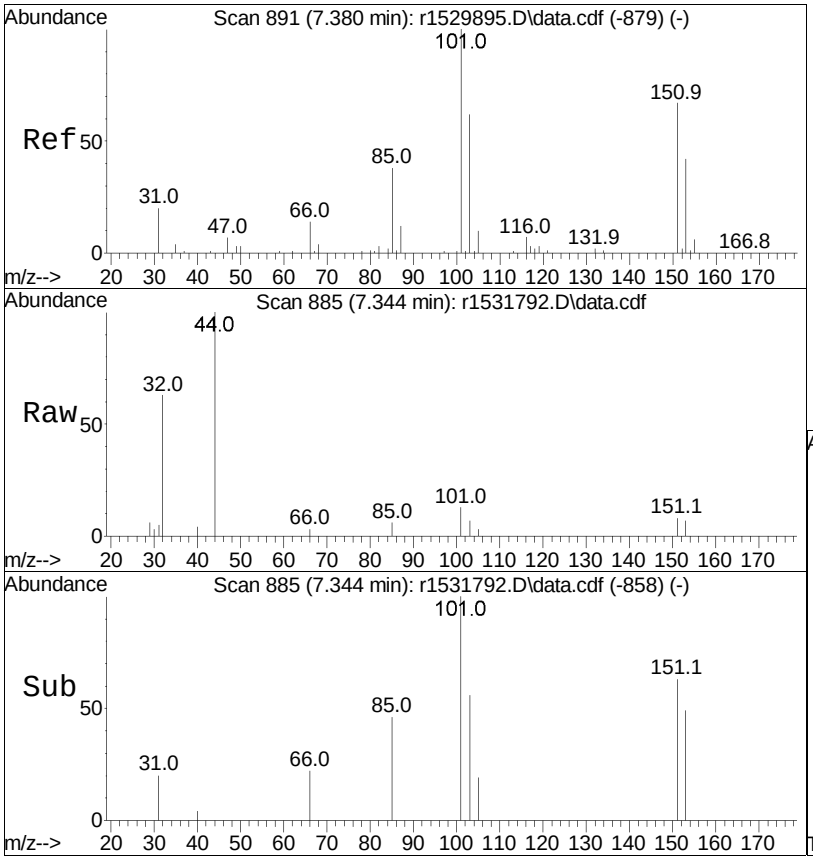


#30
carbon disulfide
Concen: 0.20 ppbV
RT: 7.31 min Scan# 879
Delta R.T. -0.030 min
Lab File: r1531792.D
Acq: 20 Mar 2022 11:43 PM

Tgt Ion: 76 Resp: 7627

Ion	Ratio	Lower	Upper
76	100		
44	195.4	10.1	15.1#

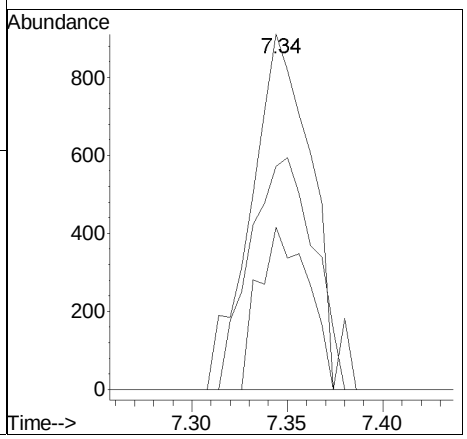


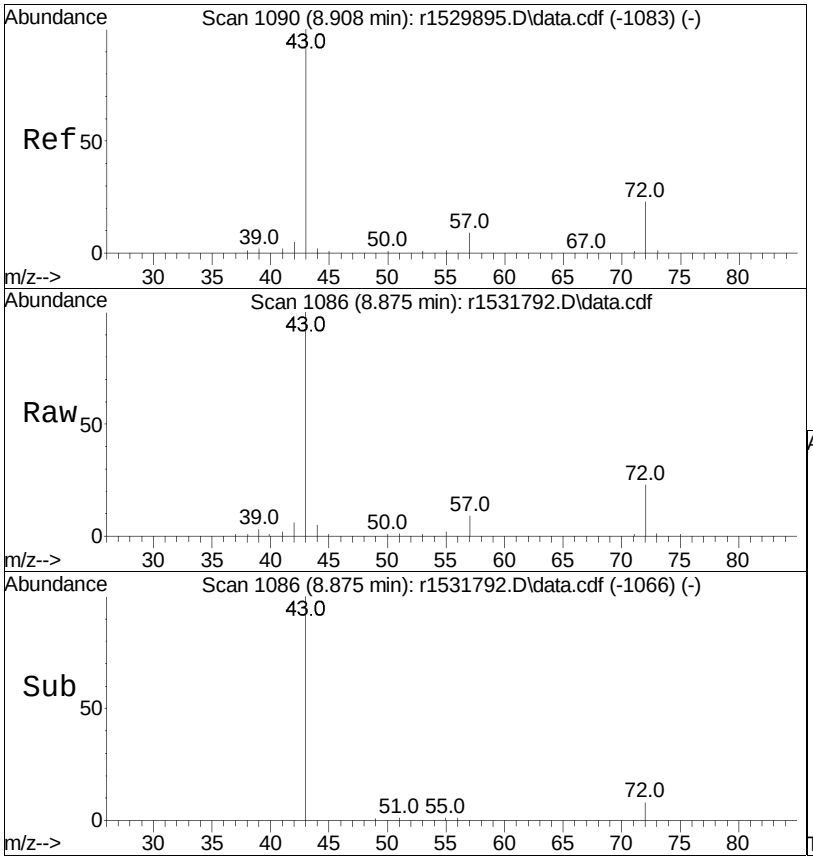


#31
Freon 113
Concen: 0.07 ppbV
RT: 7.34 min Scan# 885
Delta R.T. -0.036 min
Lab File: r1531792.D
Acq: 20 Mar 2022 11:43 PM

Tgt Ion:101 Resp: 2018

Ion	Ratio	Lower	Upper
101	100		
85	45.7	30.6	46.0
151	62.8	53.5	80.3

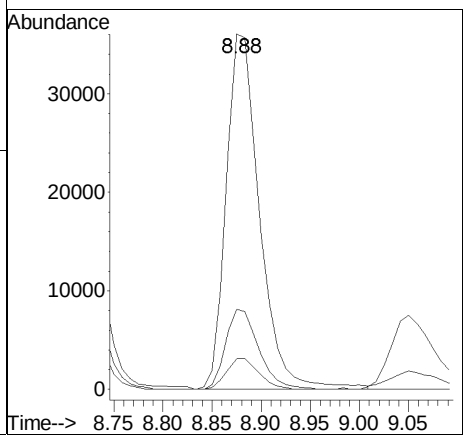


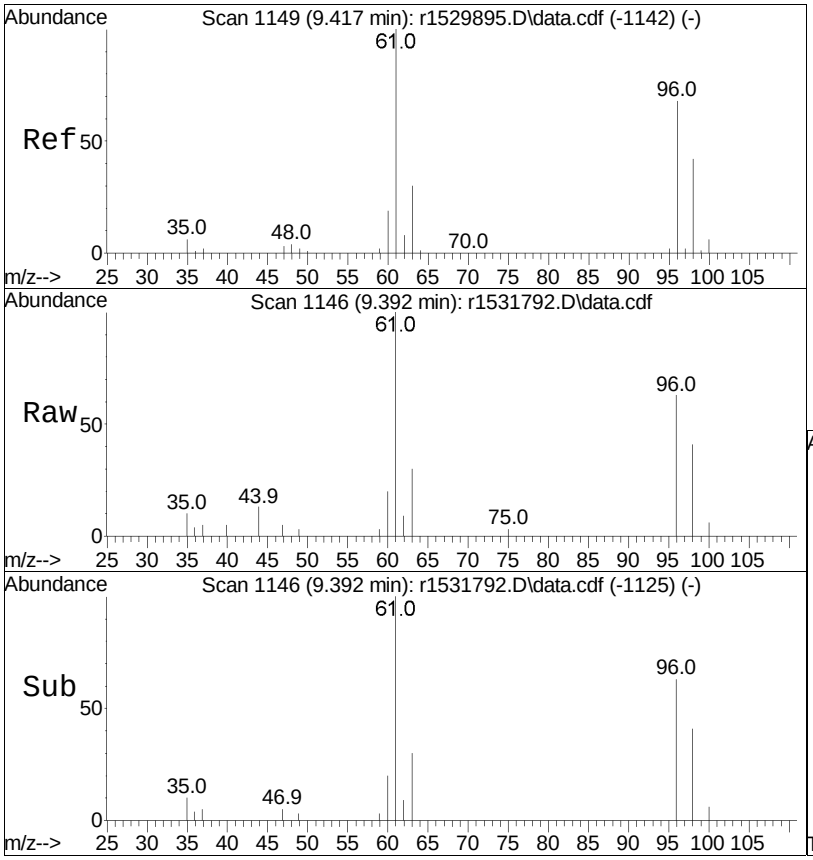


#36
2-butanone
Concen: 2.12 ppbV
RT: 8.88 min Scan# 1086
Delta R.T. -0.033 min
Lab File: r1531792.D
Acq: 20 Mar 2022 11:43 PM

Tgt Ion: 43 Resp: 85687

Ion	Ratio	Lower	Upper
43	100		
72	22.6	18.0	27.0
57	8.6	7.0	10.4

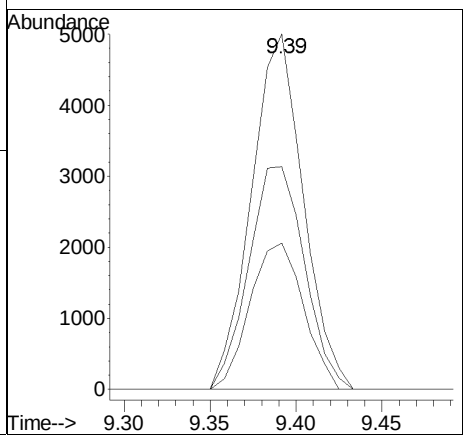


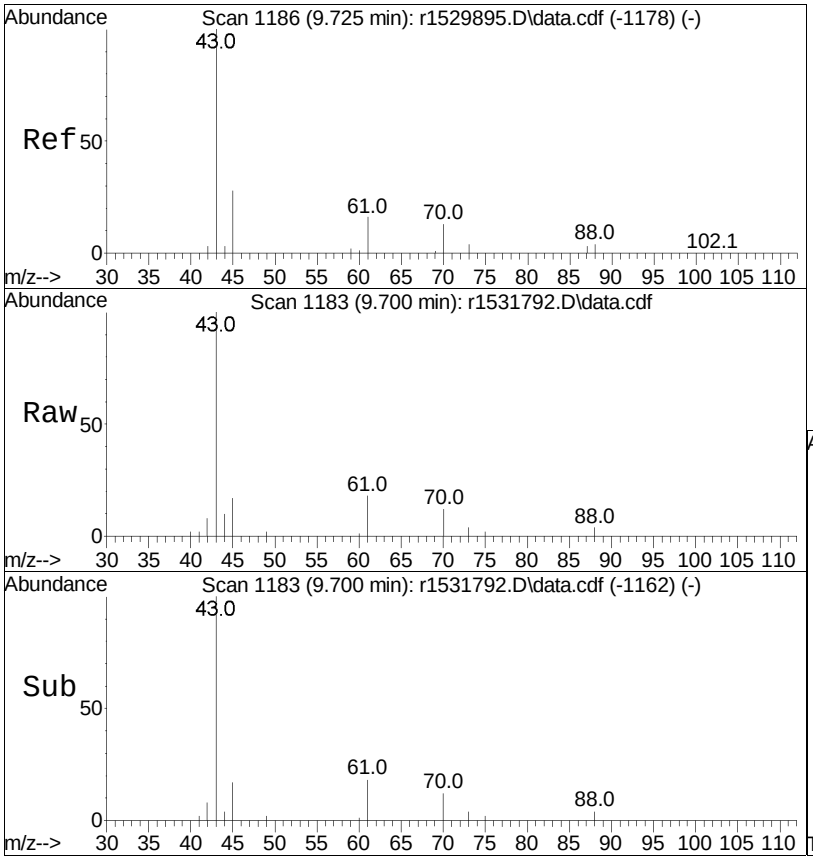


#37
cis-1,2-dichloroethene
Concen: 0.37 ppbV
RT: 9.39 min Scan# 1146
Delta R.T. -0.025 min
Lab File: r1531792.D
Acq: 20 Mar 2022 11:43 PM

Tgt Ion: 61 Resp: 10509

Ion	Ratio	Lower	Upper
61	100		
96	62.7	54.2	81.2
98	41.2	33.9	50.9

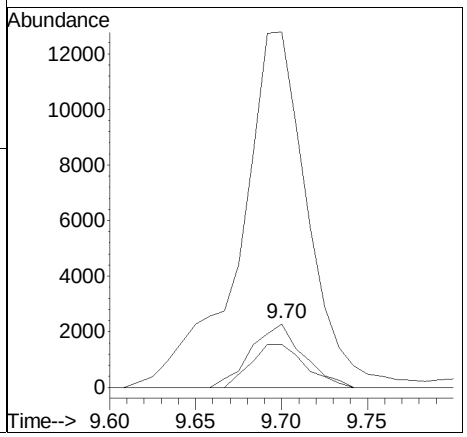


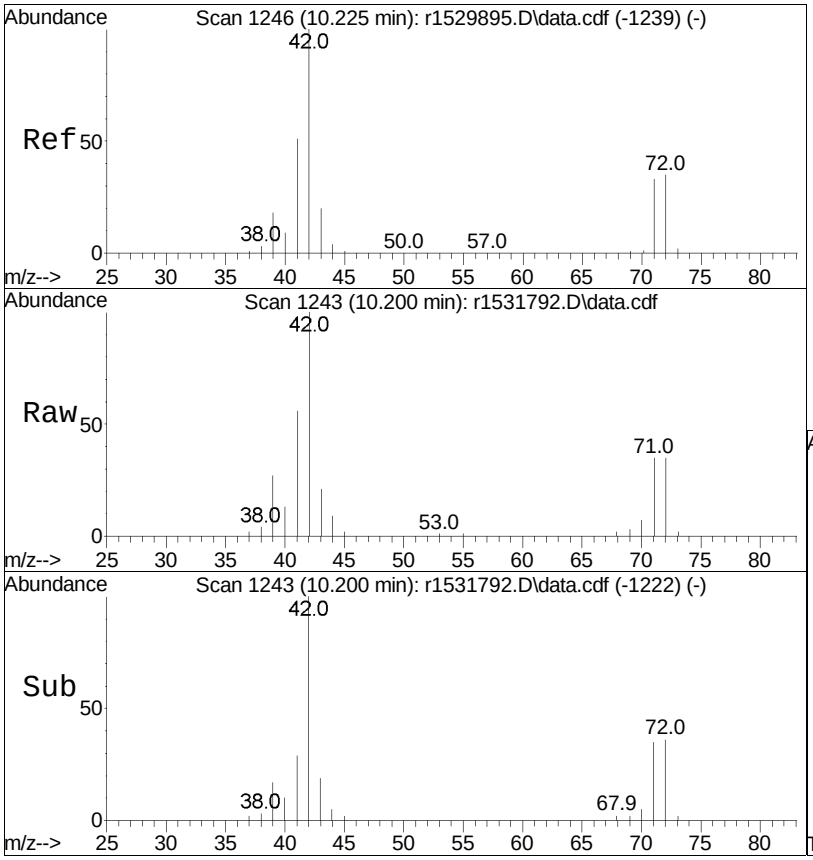


#38
Ethyl Acetate
Concen: 0.66 ppbV
RT: 9.70 min Scan# 1183
Delta R.T. -0.025 min
Lab File: r1531792.D
Acq: 20 Mar 2022 11:43 PM

Tgt Ion: 61 Resp: 4826

Ion	Ratio	Lower	Upper
61	100		
70	67.8	62.7	94.1
43	560.8	551.8	827.8

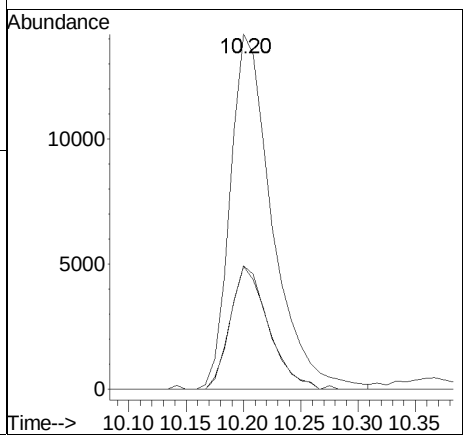


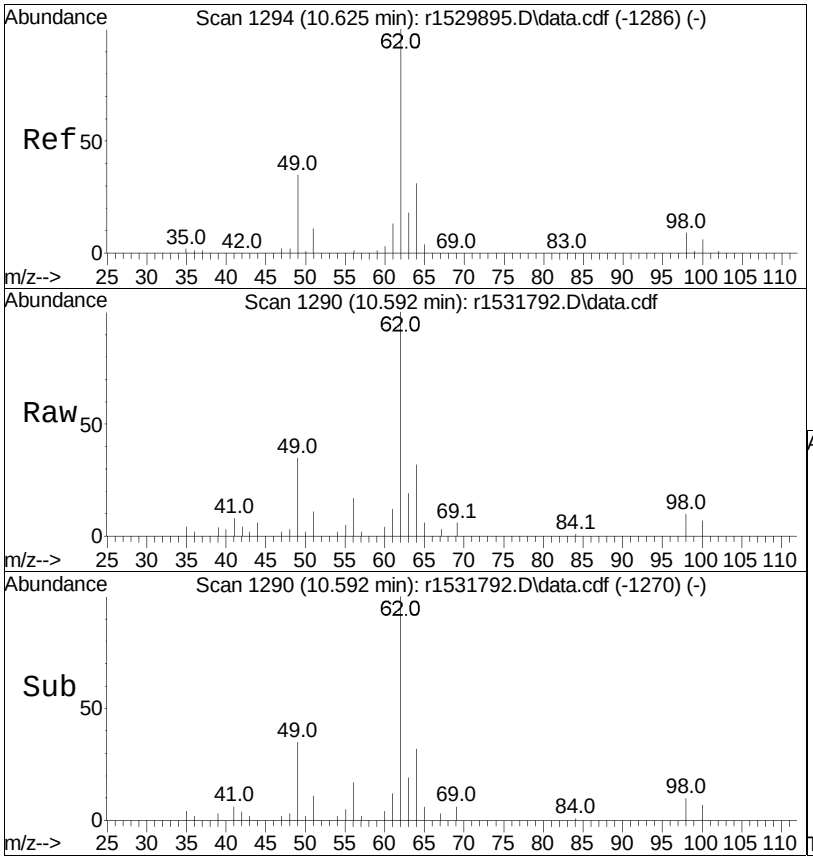


#40
Tetrahydrofuran
Concen: 1.44 ppbV
RT: 10.20 min Scan# 1243
Delta R.T. -0.025 min
Lab File: r1531792.D
Acq: 20 Mar 2022 11:43 PM

Tgt Ion: 42 Resp: 36217

Ion	Ratio	Lower	Upper
42	100		
71	34.6	26.8	40.2
72	34.8	27.7	41.5

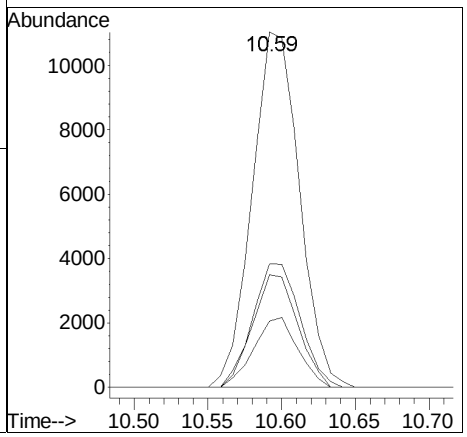


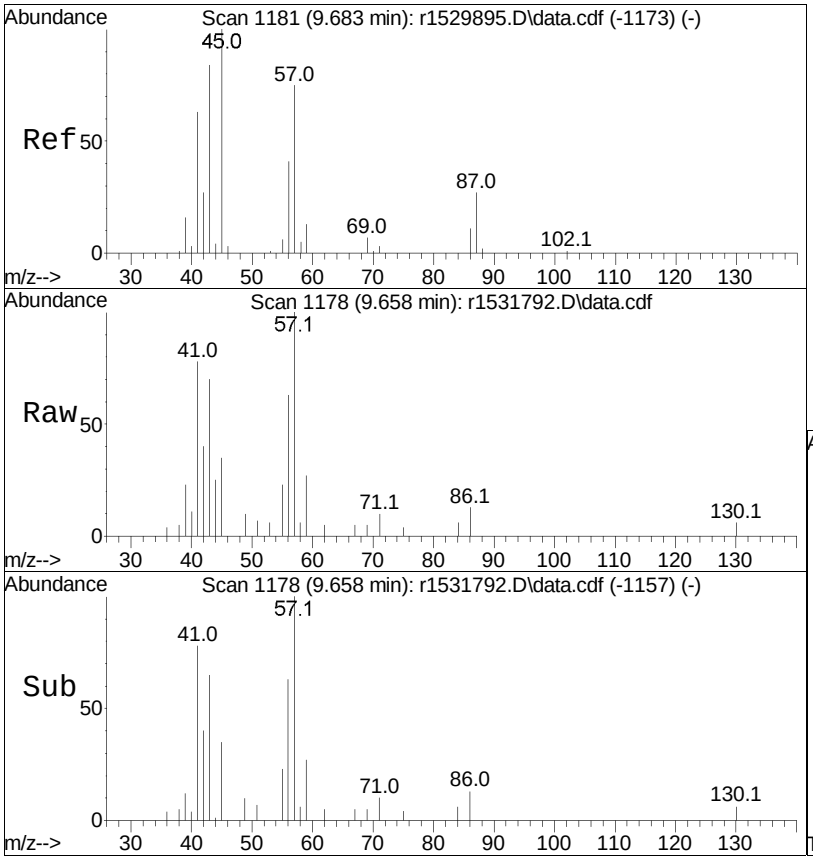


#42
1,2-dichloroethane
Concen: 1.02 ppbV
RT: 10.59 min Scan# 1290
Delta R.T. -0.033 min
Lab File: r1531792.D
Acq: 20 Mar 2022 11:43 PM

Tgt Ion: 62 Resp: 24653

Ion	Ratio	Lower	Upper
62	100		
64	31.7	25.0	37.4
49	34.7	27.8	41.8
63	18.7	14.4	21.6

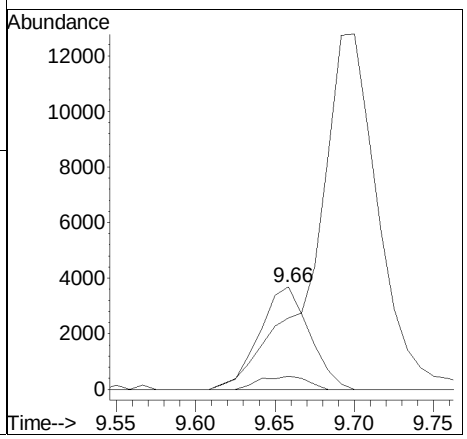


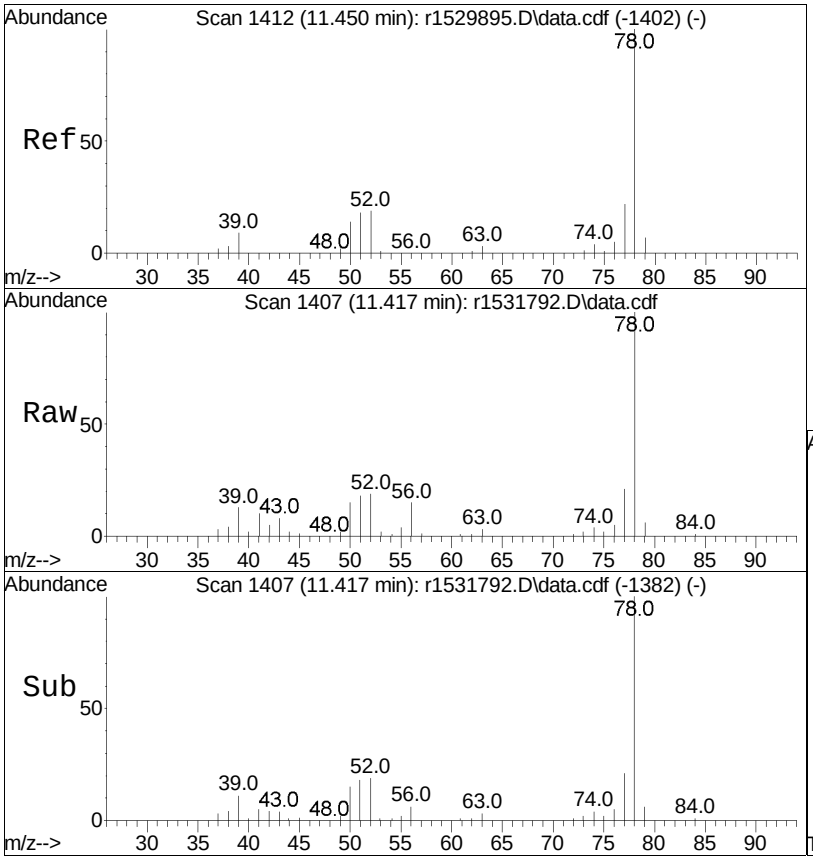


#44
hexane
Concen: 0.22 ppbV
RT: 9.66 min Scan# 1178
Delta R.T. -0.025 min
Lab File: r1531792.D
Acq: 20 Mar 2022 11:43 PM

Tgt Ion: 57 Resp: 8113

Ion	Ratio	Lower	Upper
57	100		
43	69.7	88.8	133.2#
86	13.0	11.4	17.0

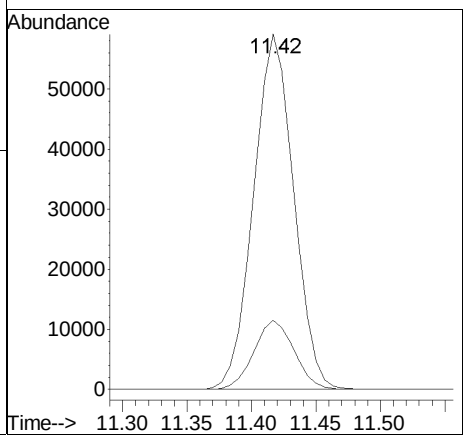


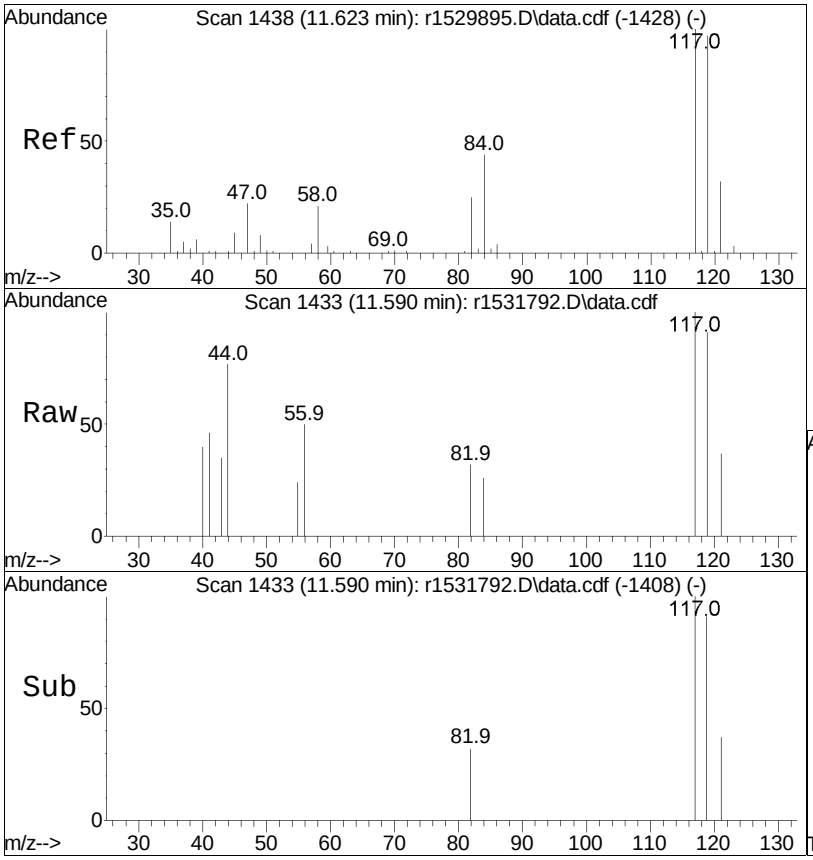


#50
benzene
Concen: 2.12 ppbV
RT: 11.42 min Scan# 1407
Delta R.T. -0.033 min
Lab File: r1531792.D
Acq: 20 Mar 2022 11:43 PM

Tgt Ion: 78 Resp: 127873

Ion	Ratio	Lower	Upper
78	100		
52	19.5	15.2	22.8

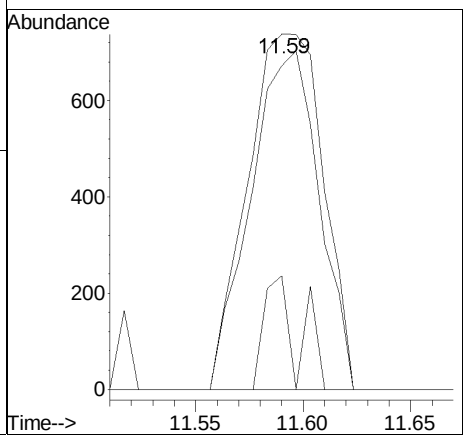


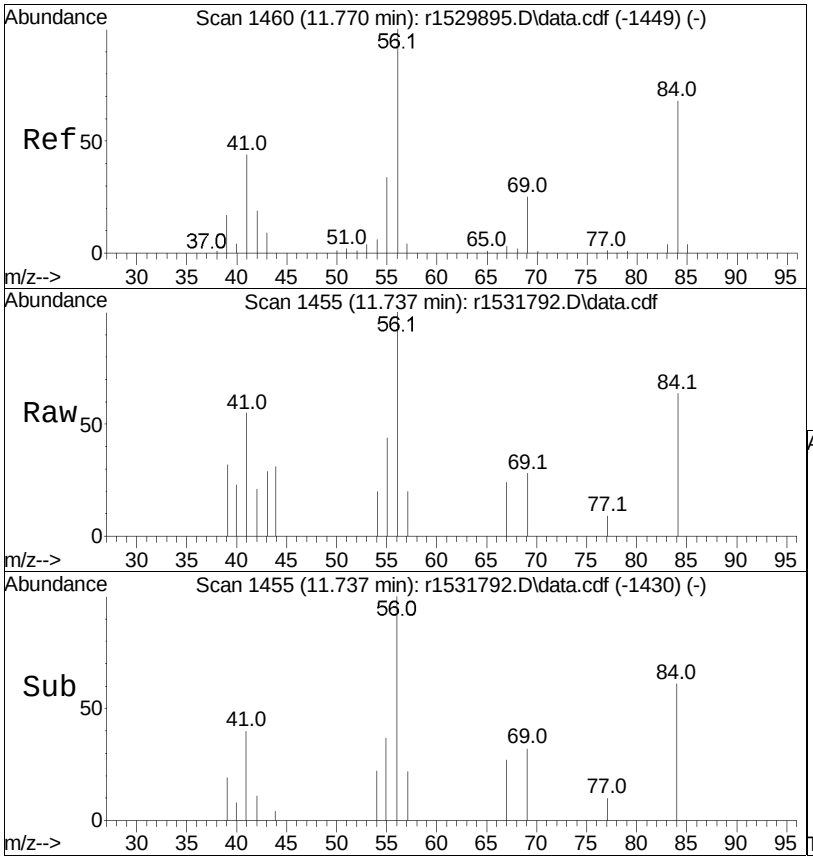


#52
carbon tetrachloride
Concen: 0.08 ppbV
RT: 11.59 min Scan# 1433
Delta R.T. -0.033 min
Lab File: r1531792.D
Acq: 20 Mar 2022 11:43 PM

Tgt Ion:117 Resp: 1810

Ion	Ratio	Lower	Upper
117	100		
119	91.1	77.5	116.3
82	32.0	20.0	30.0#

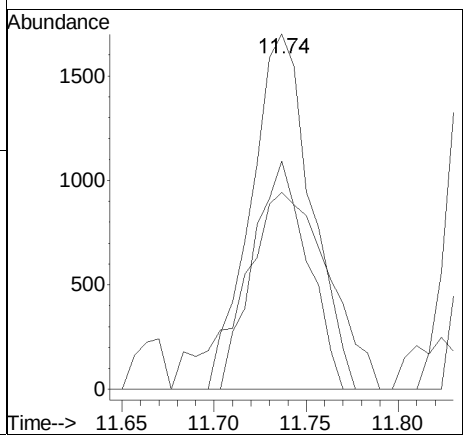


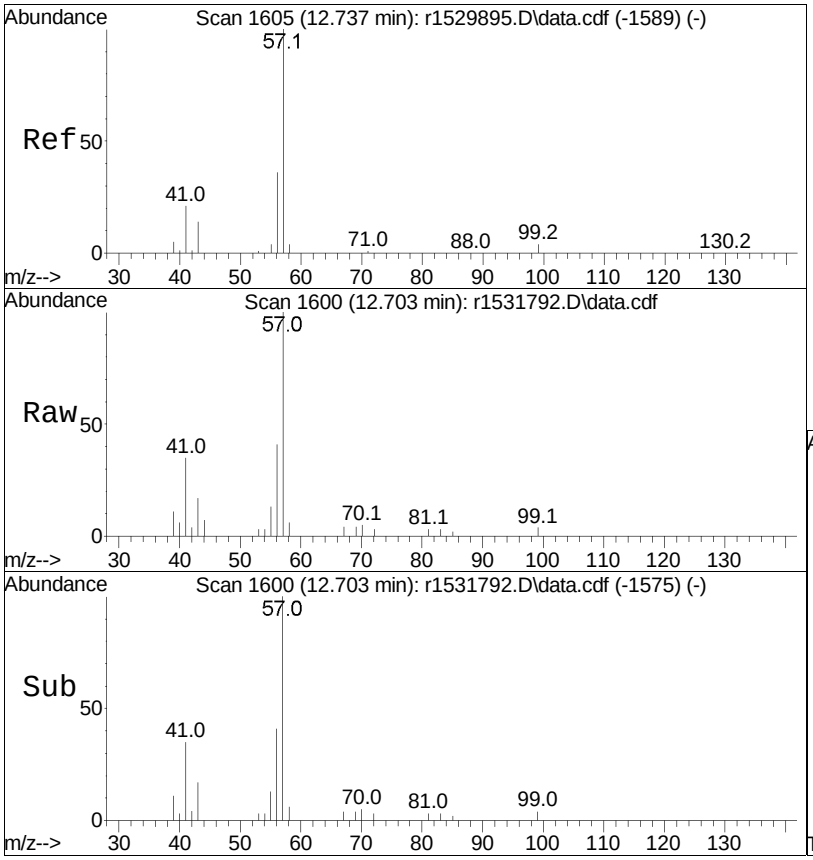


#53
cyclohexane
Concen: 0.10 ppbV
RT: 11.74 min Scan# 1455
Delta R.T. -0.033 min
Lab File: r1531792.D
Acq: 20 Mar 2022 11:43 PM

Tgt Ion: 56 Resp: 3882

Ion	Ratio	Lower	Upper
56	100		
84	64.2	54.8	82.2
41	55.5	35.5	53.3#

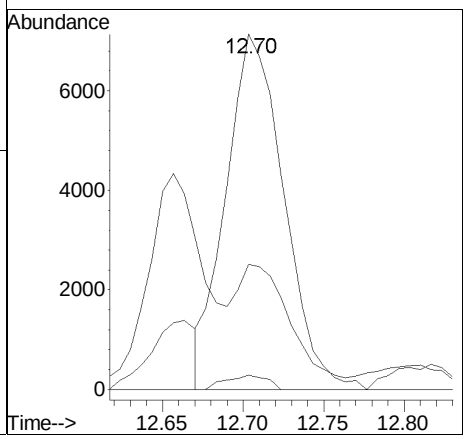


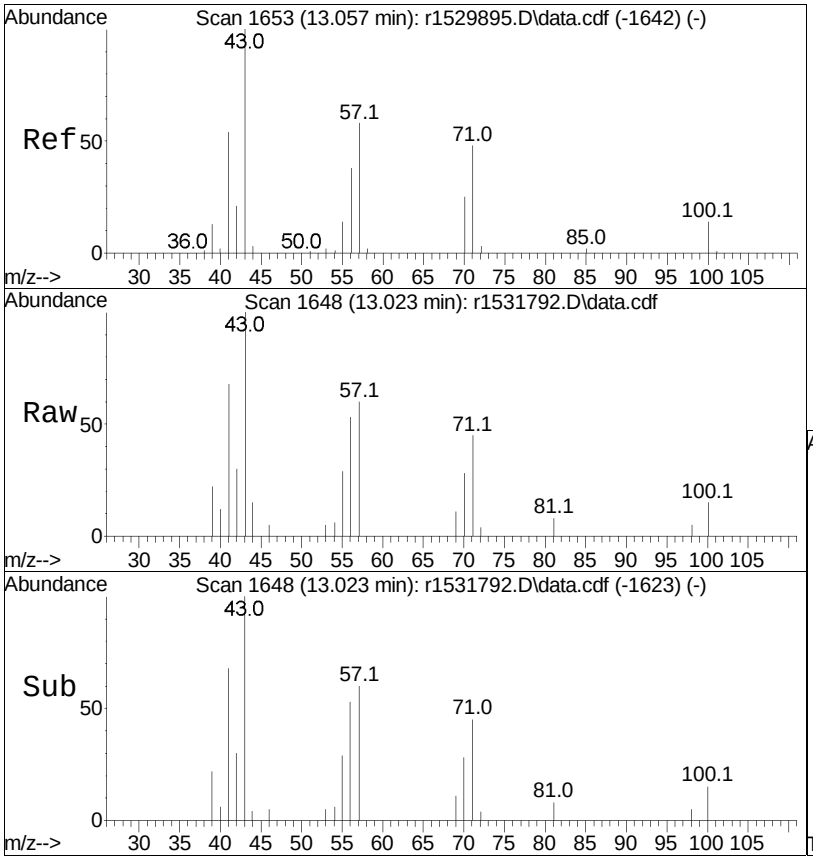


#60
2,2,4-trimethylpentane
Concen: 0.15 ppbV m
RT: 12.70 min Scan# 1600
Delta R.T. -0.033 min
Lab File: r1531792.D
Acq: 20 Mar 2022 11:43 PM

Tgt Ion: 57 Resp: 17918

Ion	Ratio	Lower	Upper
57	100		
99	4.0	3.1	4.7
41	35.2	16.6	24.8#

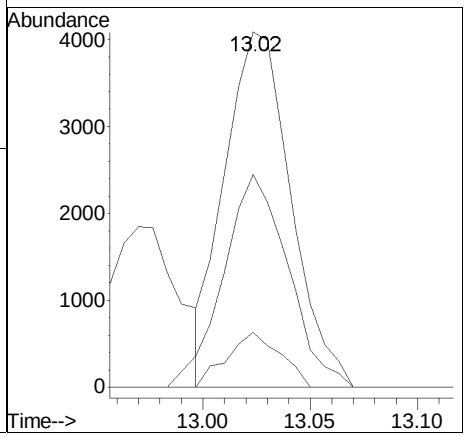


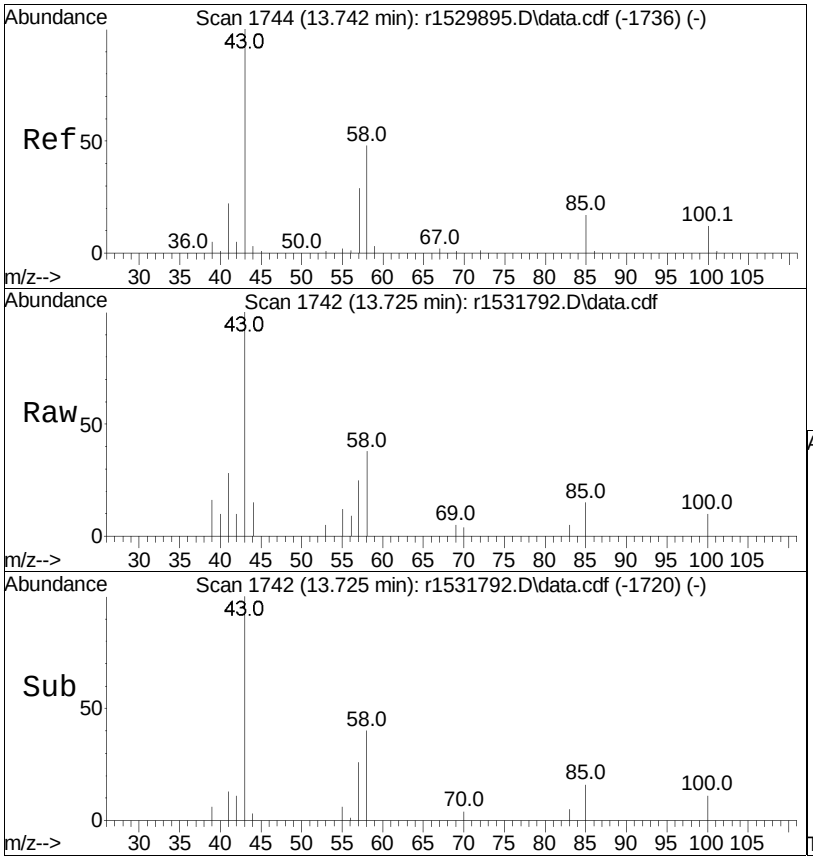


#62
heptane
Concen: 0.22 ppbV
RT: 13.02 min Scan# 1648
Delta R.T. -0.033 min
Lab File: r1531792.D
Acq: 20 Mar 2022 11:43 PM

Tgt Ion: 43 Resp: 8780

Ion	Ratio	Lower	Upper
43	100		
57	59.8	46.5	69.7
100	15.5	11.6	17.4

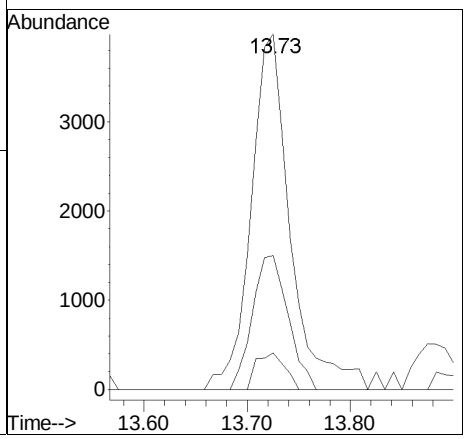


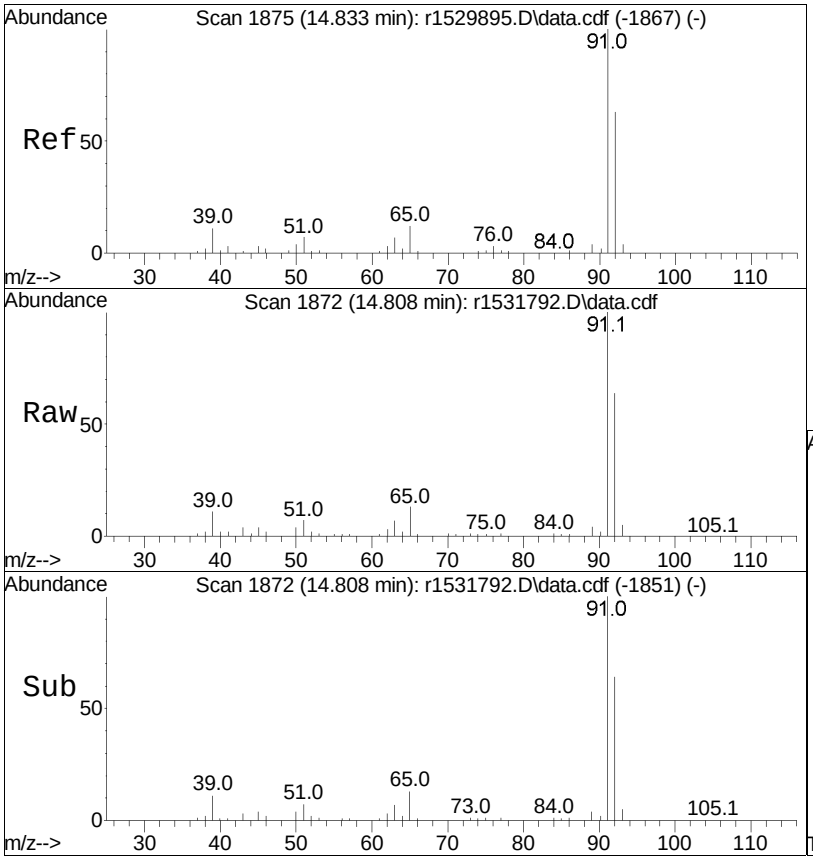


#64
4-methyl-2-pentanone
Concen: 0.24 ppbV
RT: 13.73 min Scan# 1742
Delta R.T. -0.017 min
Lab File: r1531792.D
Acq: 20 Mar 2022 11:43 PM

Tgt Ion: 43 Resp: 10532

Ion	Ratio	Lower	Upper
43	100		
58	37.7	38.6	58.0#
100	10.3	9.9	14.9

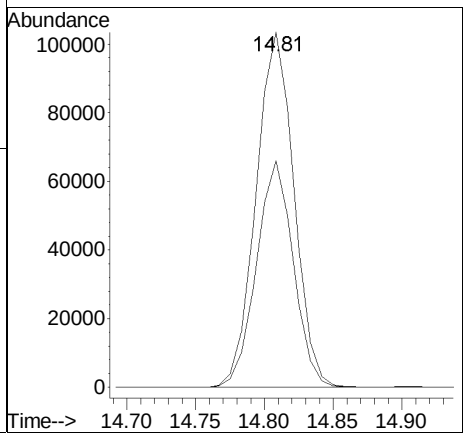


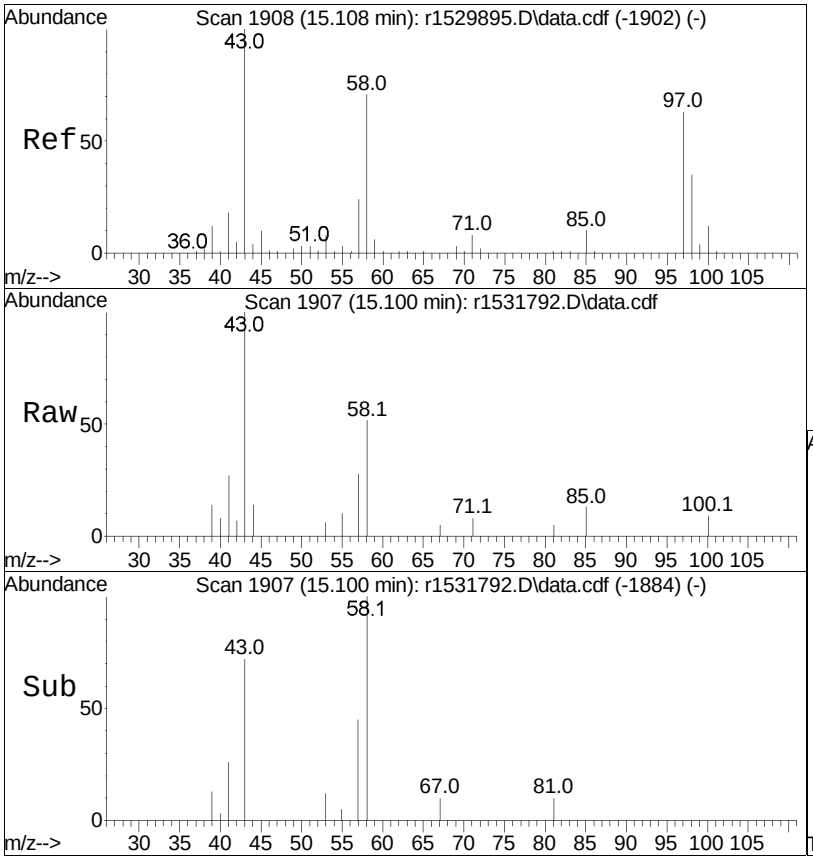


#68
toluene
Concen: 2.54 ppbV
RT: 14.81 min Scan# 1872
Delta R.T. -0.025 min
Lab File: r1531792.D
Acq: 20 Mar 2022 11:43 PM

Tgt Ion: 91 Resp: 198194

Ion	Ratio	Lower	Upper
91	100		
92	63.8	50.3	75.5

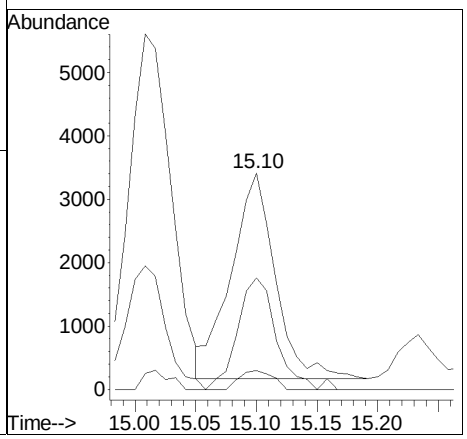


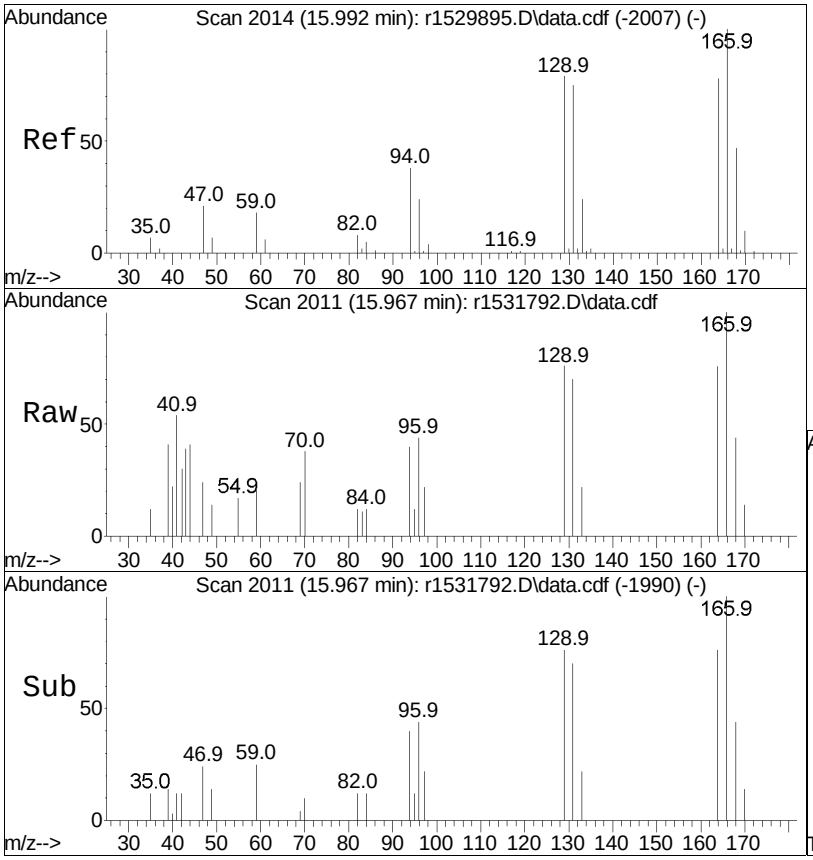


#72
2-hexanone
Concen: 0.19 ppbV
RT: 15.10 min Scan# 1907
Delta R.T. -0.008 min
Lab File: r1531792.D
Acq: 20 Mar 2022 11:43 PM

Tgt Ion: 43 Resp: 8244

Ion	Ratio	Lower	Upper
43	100		
58	51.6	56.6	85.0#
100	8.7	9.8	14.6#

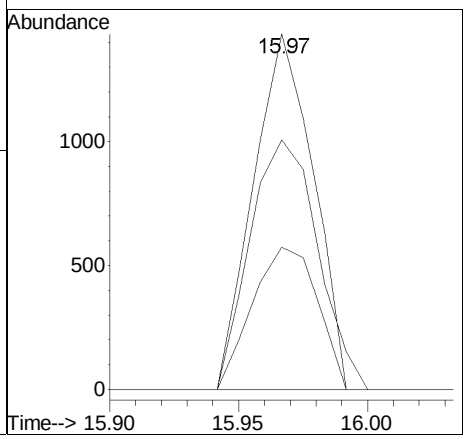


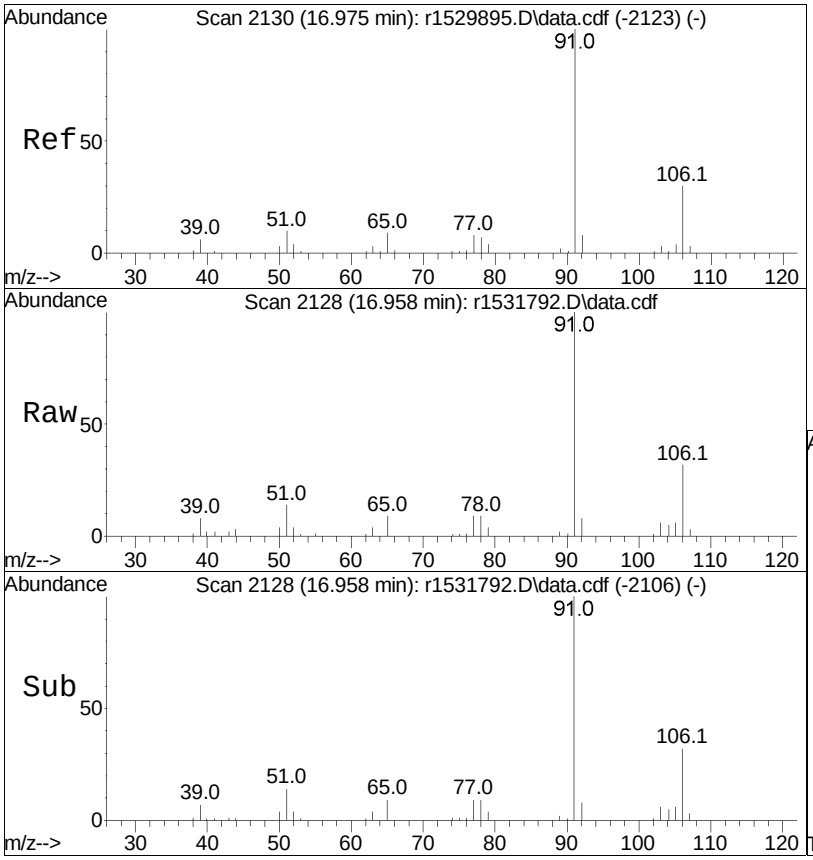


#78
tetrachloroethene
Concen: 0.09 ppbV
RT: 15.97 min Scan# 2011
Delta R.T. -0.025 min
Lab File: r1531792.D
Acq: 20 Mar 2022 11:43 PM

Tgt Ion:166 Resp: 2318

Ion	Ratio	Lower	Upper
166	100		
131	70.2	59.9	89.9
94	40.0	30.2	45.4

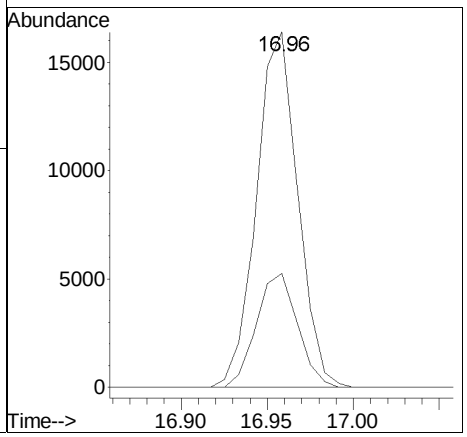


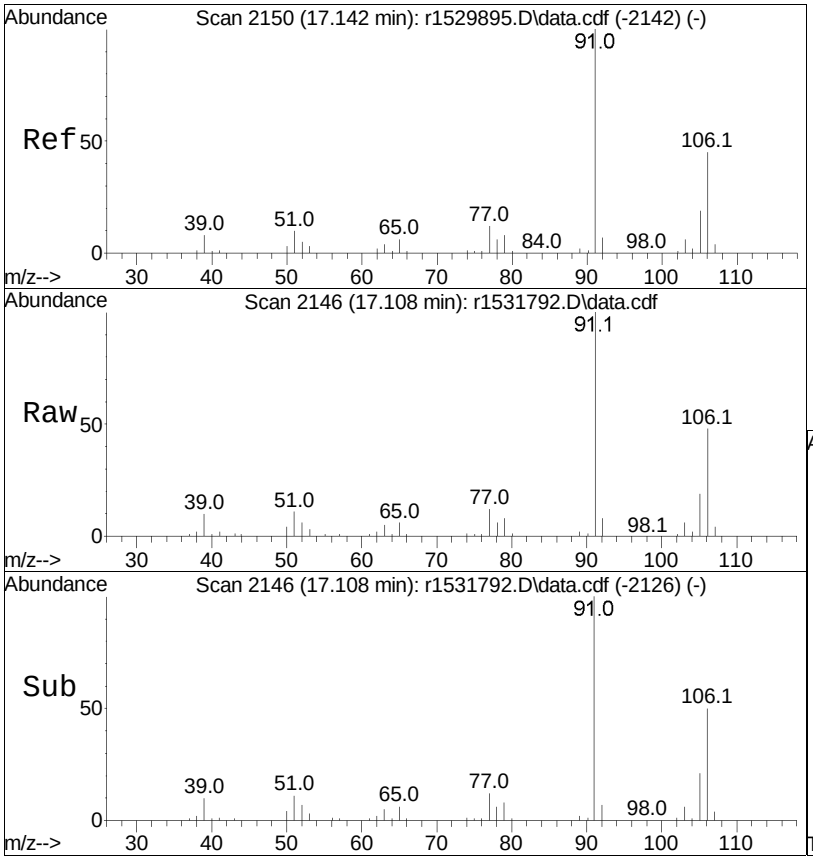


#81
ethylbenzene
Concen: 0.30 ppbV
RT: 16.96 min Scan# 2128
Delta R.T. -0.017 min
Lab File: r1531792.D
Acq: 20 Mar 2022 11:43 PM

Tgt Ion: 91 Resp: 27349

Ion	Ratio	Lower	Upper
91	100		
106	32.1	24.1	36.1

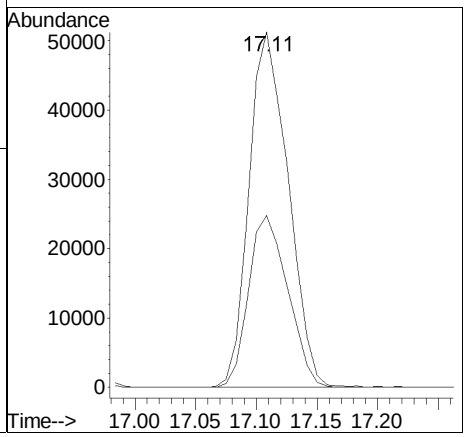


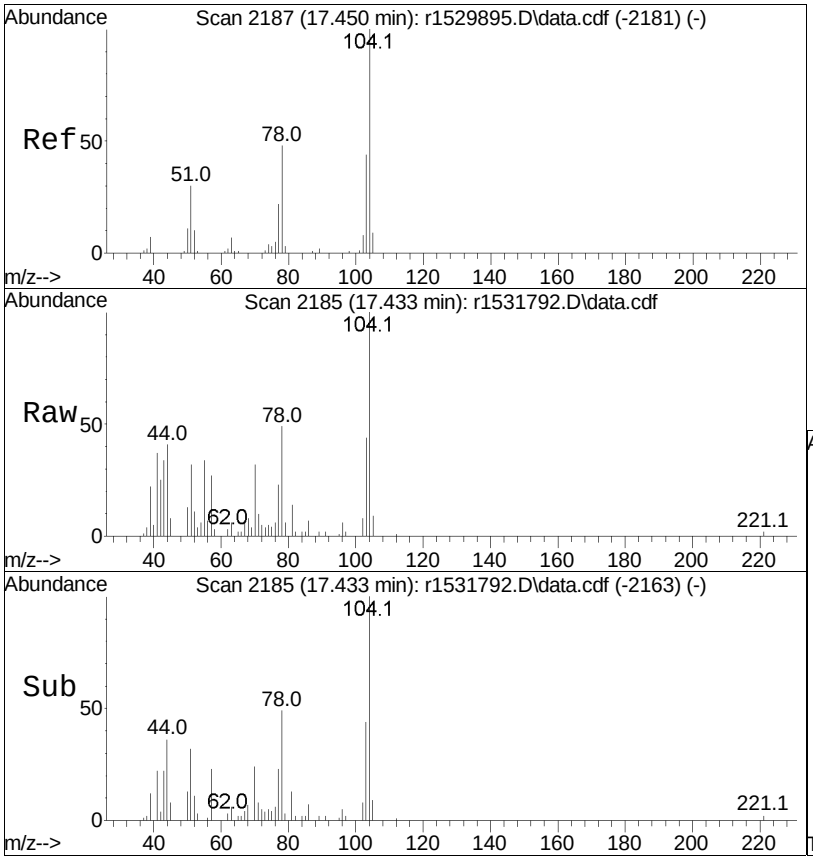


#83
m+p-xylene
Concen: 1.53 ppbV
RT: 17.11 min Scan# 2146
Delta R.T. -0.033 min
Lab File: r1531792.D
Acq: 20 Mar 2022 11:43 PM

Tgt Ion: 91 Resp: 115132

Ion	Ratio	Lower	Upper
91	100		
106	48.4	36.2	54.2

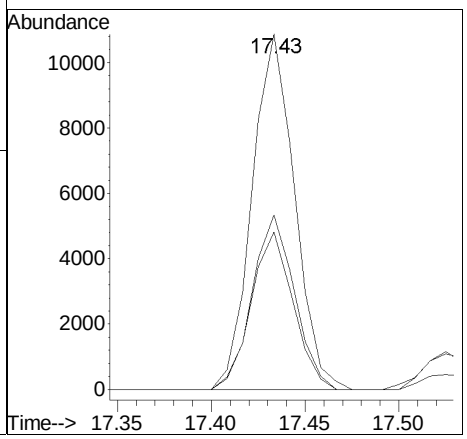


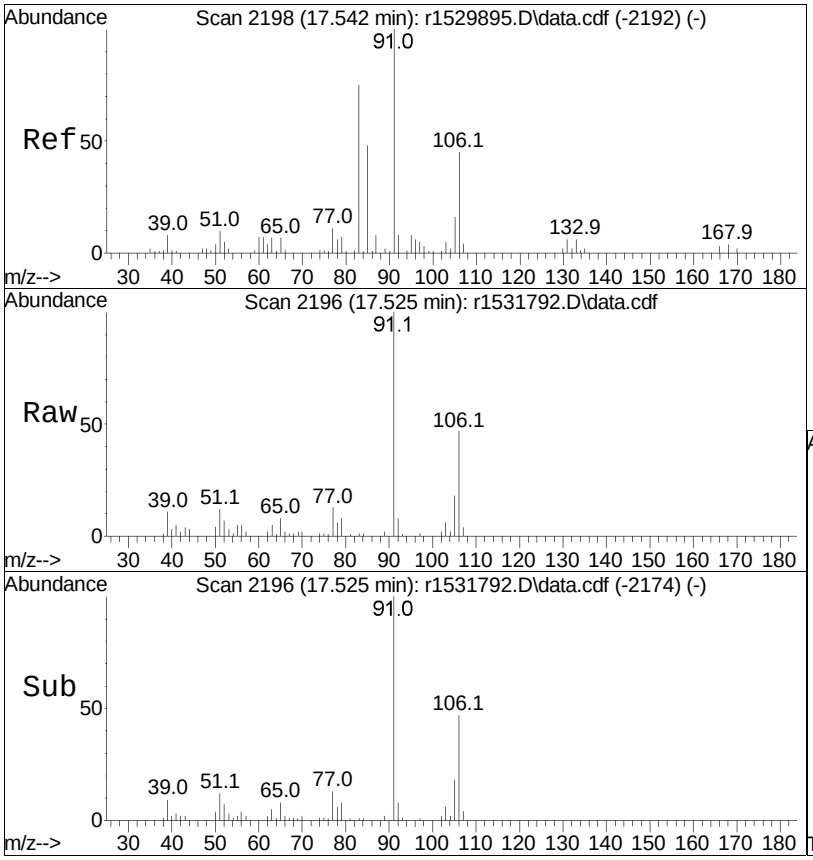


#85
styrene
Concen: 0.32 ppbV
RT: 17.43 min Scan# 2185
Delta R.T. -0.017 min
Lab File: r1531792.D
Acq: 20 Mar 2022 11:43 PM

Tgt Ion:104 Resp: 17104

Ion	Ratio	Lower	Upper
104	100		
103	44.3	35.0	52.6
78	49.1	38.3	57.5

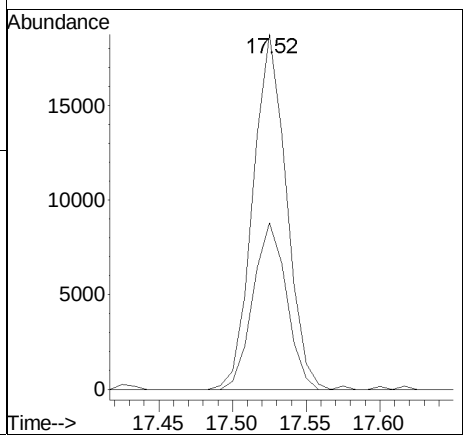


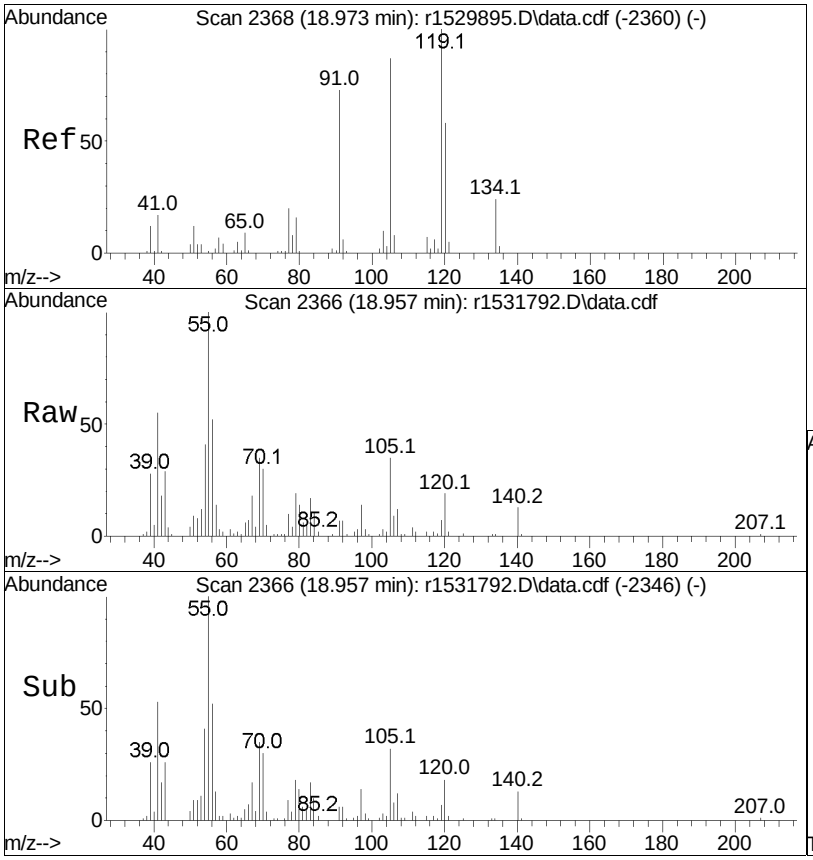


#87
o-xylene
Concen: 0.40 ppbV
RT: 17.52 min Scan# 2196
Delta R.T. -0.017 min
Lab File: r1531792.D
Acq: 20 Mar 2022 11:43 PM

Tgt Ion: 91 Resp: 29632

Ion	Ratio	Lower	Upper
91	100		
106	46.9	35.8	53.8

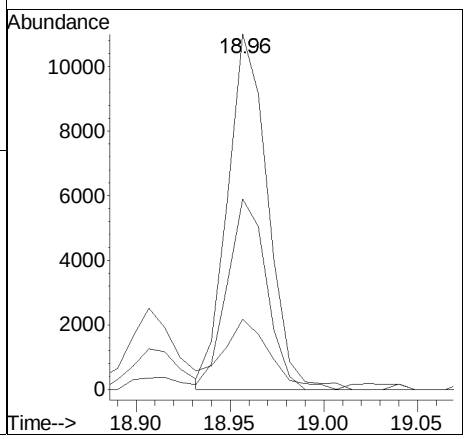


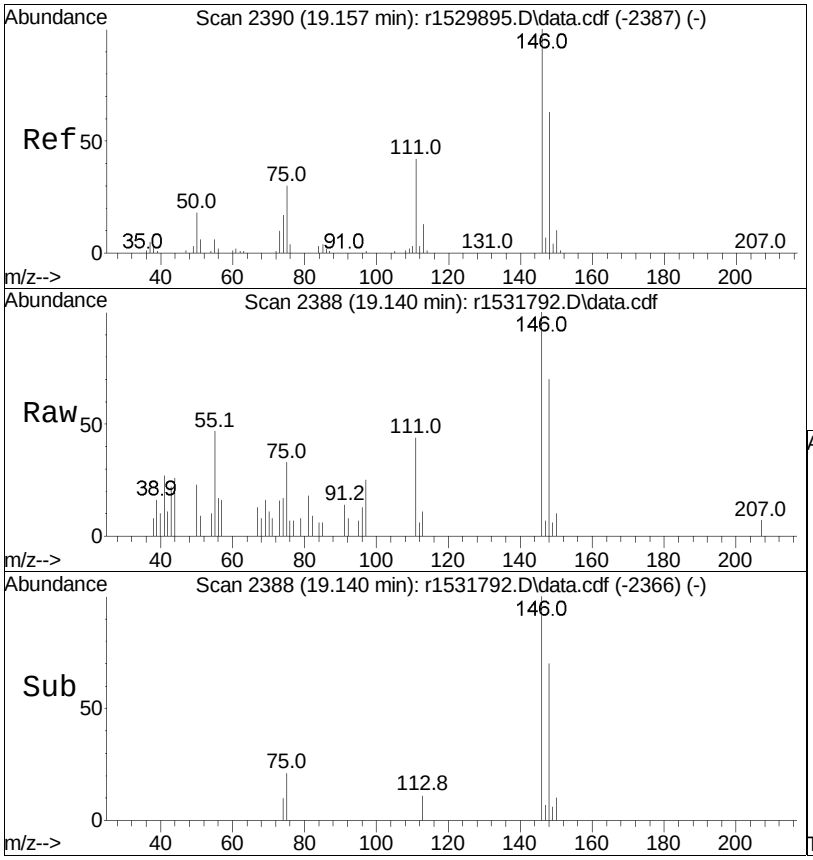


#99
1,2,4-trimethylbenzene
Concen: 0.21 ppbV
RT: 18.96 min Scan# 2366
Delta R.T. -0.017 min
Lab File: r1531792.D
Acq: 20 Mar 2022 11:43 PM

Tgt Ion:105 Resp: 16454

Ion	Ratio	Lower	Upper
105	100		
120	53.6	52.7	79.1
91	19.7	67.2	100.8#

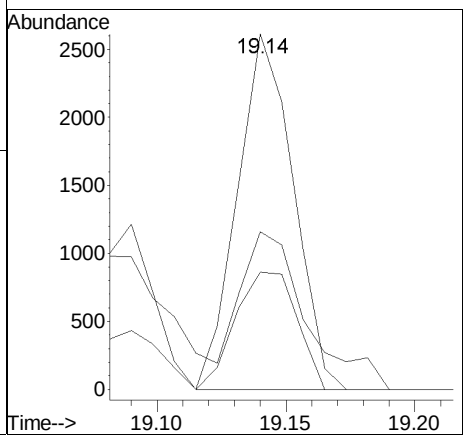




#103
1,4-dichlorobenzene
Concen: 0.08 ppbV
RT: 19.14 min Scan# 2388
Delta R.T. -0.017 min
Lab File: r1531792.D
Acq: 20 Mar 2022 11:43 PM

Tgt Ion:146 Resp: 3945

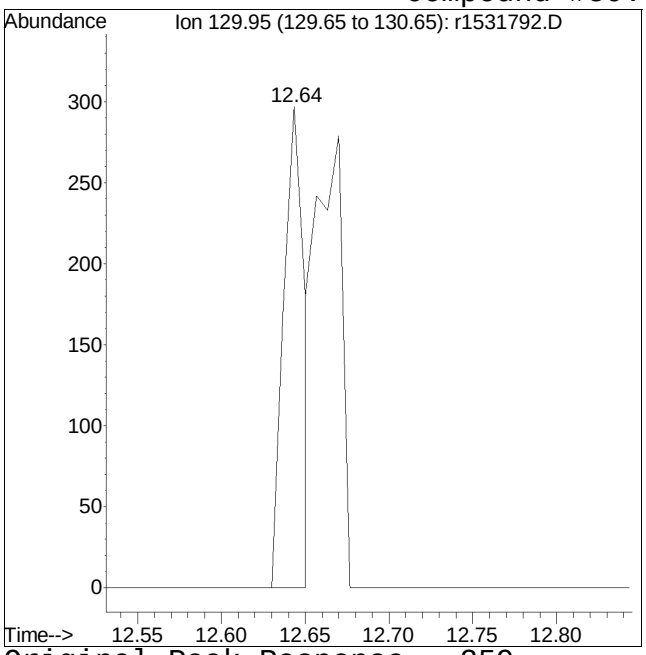
Ion	Ratio	Lower	Upper
146	100		
111	44.4	33.4	50.2
75	33.0	24.0	36.0



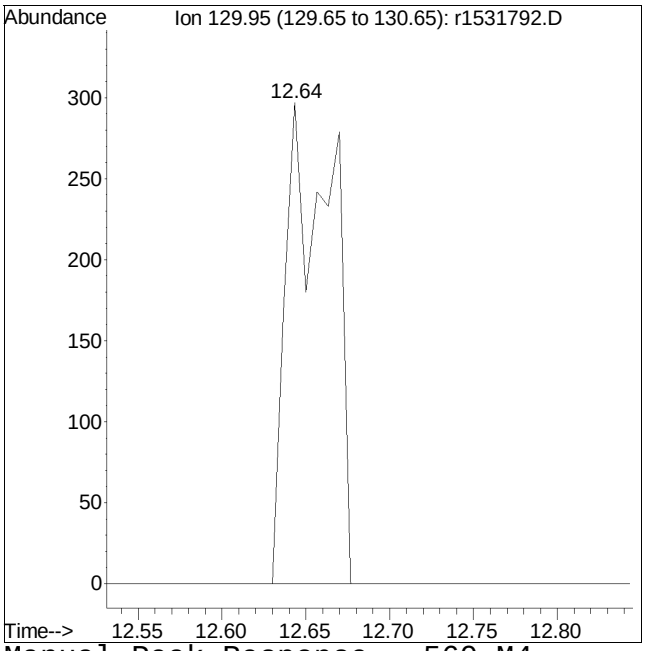
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airlab15\QMethod : TFS15_211222.M
Data File : r1531792.D Operator : AIRLAB15:RY
Date Inj'd : 3/20/2020 0:1: 3 Instrument :
Sample : L2213657-01,3,250,250 Quant Date : 3/21/2022 8:44 am

Compound #59: trichloroethene



Original Peak Response = 259



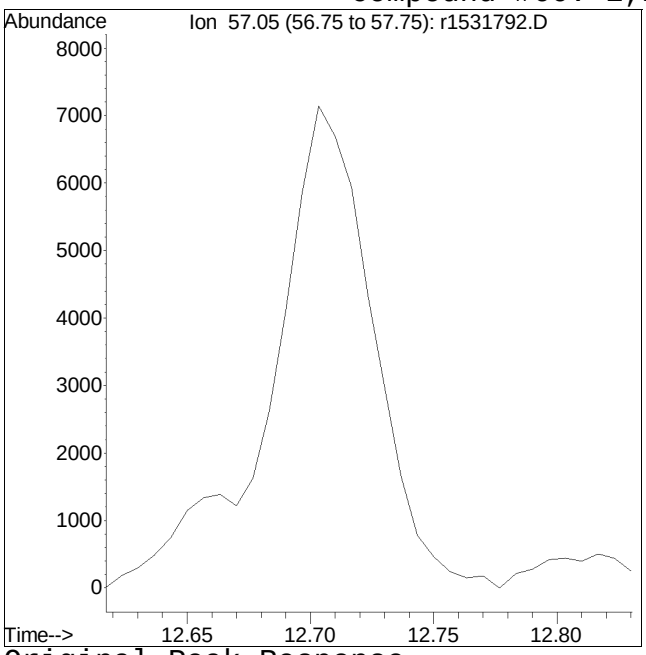
Manual Peak Response = 560 M4

M4 = Poor automated baseline construction.

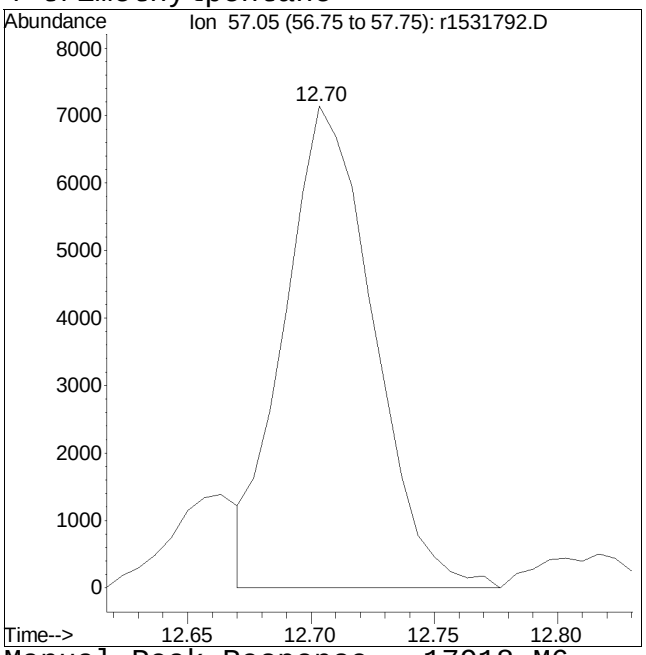
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airlab15\QMethod : TFS15_211222.M
Data File : r1531792.D Operator : AIRLAB15:RY
Date Inj'd : 3/20/2020 0:1: 3 Instrument :
Sample : L2213657-01,3,250,250 Quant Date : 3/21/2022 8:44 am

Compound #60: 2,2,4-trimethylpentane



Original Peak Response =



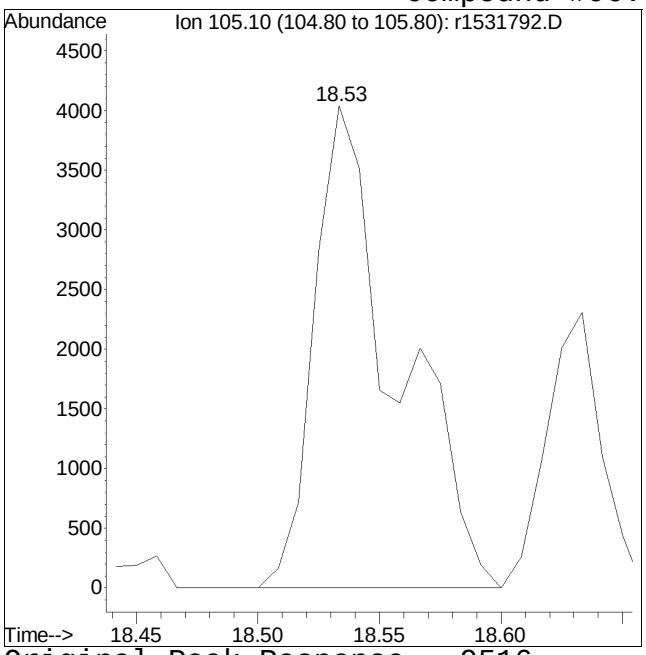
Manual Peak Response = 17918 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

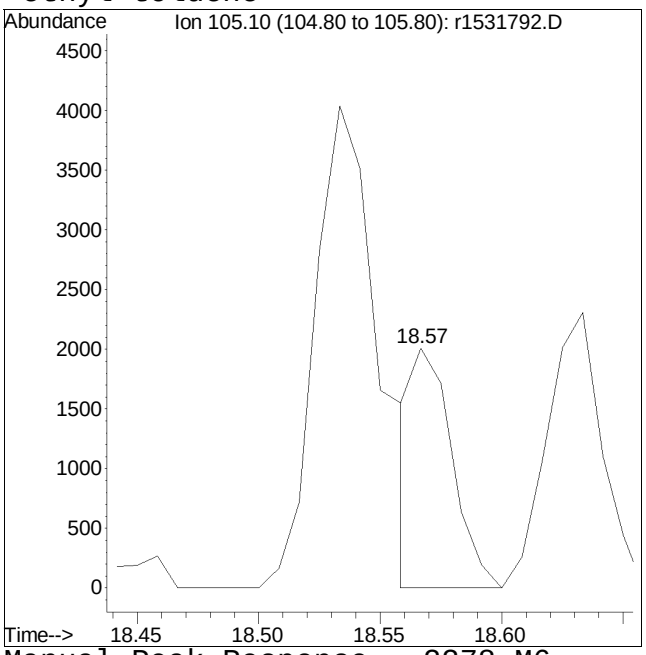
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airlab15\QMethod : TFS15_211222.M
Data File : r1531792.D Operator : AIRLAB15:RY
Date Inj'd : 3/20/2020 0:1: 3 Instrument :
Sample : L2213657-01,3,250,250 Quant Date : 3/21/2022 8:44 am

Compound #96: 4-ethyl toluene



Original Peak Response = 9516



Manual Peak Response = 2278 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531793.D
Acq On : 21 Mar 2022 12:22 AM
Operator : AIRLAB15:RY
Sample : L2213657-04D,3,189.9,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 15:51:07 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320T\r1531778.D
Sub List : TO15-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.58	49	391407	10.000	ppbV	-0.03
Standard Area = 382239			Recovery = 102.40%			
43) 1,4-difluorobenzene	11.86	114	853920	10.000	ppbV	-0.03
Standard Area = 859136			Recovery = 99.39%			
67) chlorobenzene-D5	16.57	54	207988	10.000	ppbV	-0.02
Standard Area = 200634			Recovery = 103.67%			
System Monitoring Compounds						
Target Compounds						Qvalue
5) dichlorodifluoromethane	3.96	85	10959	0.379	ppbV	99
6) chloromethane	4.14	50	11322	0.785	ppbV	97
7) Freon-114	4.26		0	N.D.		
9) vinyl chloride	4.40		0	N.D.		
10) 1,3-butadiene	0.00		0	N.D.	d	
13) bromomethane	0.00		0	N.D.		
14) chloroethane	0.00		0	N.D.	d	
15) ethanol	5.28	31	548170	48.842	ppbV	95
17) vinyl bromide	0.00		0	N.D.	d	
19) acetone	5.86	43	675988	30.229	ppbV	97
21) trichlorofluoromethane	6.06	101	4987	0.180	ppbV	100
22) isopropyl alcohol	6.18	45	374346	15.490	ppbV	100
26) 1,1-dichloroethene	0.00		0	N.D.		
27) tertiary butyl alcohol	6.92	59	53587	1.714	ppbV #	87
28) methylene chloride	7.01	49	9248	0.504	ppbV	95
29) 3-chloropropene	0.00		0	N.D.	d	
30) carbon disulfide	7.30	76	6825	0.179	ppbV #	1
31) Freon 113	7.35	101	1598	0.057	ppbV	93
32) trans-1,2-dichloroethene	0.00		0	N.D.		
33) 1,1-dichloroethane	0.00		0	N.D.	d	
34) MTBE	0.00		0	N.D.	d	
36) 2-butanone	8.88	43	30440	0.762	ppbV	98
37) cis-1,2-dichloroethene	0.00		0	N.D.		
38) Ethyl Acetate	9.70	61	3144	0.435	ppbV	86
39) chloroform	9.74		0	N.D.		
40) Tetrahydrofuran	10.21	42	27619	1.113	ppbV	98
42) 1,2-dichloroethane	10.59	62	26377	1.107	ppbV	98

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531793.D
Acq On : 21 Mar 2022 12:22 AM
Operator : AIRLAB15:RY
Sample : L2213657-04D,3,189.9,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 15:51:07 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320T\r1531778.D
Sub List : TO15-NY - .

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44)	hexane	9.66	57	10839	0.301	ppbV	#	61
48)	1,1,1-trichloroethane	0.00		0	N.D.			
50)	benzene	11.42	78	74872	1.249	ppbV		98
52)	carbon tetrachloride	11.59	117	1415	0.065	ppbV		94
53)	cyclohexane	11.74	56	4100	0.106	ppbV	#	83
56)	1,2-dichloropropane	0.00		0	N.D.			
57)	bromodichloromethane	0.00		0	N.D.	d		
58)	1,4-dioxane	0.00		0	N.D.			
59)	trichloroethene	0.00		0	N.D.			
60)	2,2,4-trimethylpentane	12.70	57	14223	0.119	ppbV	#	71
62)	heptane	13.02	43	32295M6	0.816	ppbV		
63)	cis-1,3-dichloropropene	0.00		0	N.D.			
64)	4-methyl-2-pentanone	13.73	43	10411	0.234	ppbV	#	85
65)	trans-1,3-dichloropropene	0.00		0	N.D.			
66)	1,1,2-trichloroethane	0.00		0	N.D.			
68)	toluene	14.81	91	227543	2.938	ppbV		99
72)	2-hexanone	15.10	43	9996	0.229	ppbV	#	84
74)	dibromochloromethane	0.00		0	N.D.			
75)	1,2-dibromoethane	0.00		0	N.D.			
78)	tetrachloroethene	15.97	166	2389	0.089	ppbV		90
80)	chlorobenzene	0.00		0	N.D.	d		
81)	ethylbenzene	16.96	91	17480	0.191	ppbV		100
83)	m+p-xylene	17.11	91	55313	0.742	ppbV		94
84)	bromoform	0.00		0	N.D.			
85)	styrene	17.43	104	16242	0.307	ppbV		99
86)	1,1,2,2-tetrachloroethane	17.54	83	2772	0.051	ppbV	#	44
87)	o-xylene	17.52	91	25043	0.338	ppbV		97
96)	4-ethyl toluene	18.57		0	N.D.			
97)	1,3,5-trimethylbenzene	18.63	105	6066	0.076	ppbV	#	93
99)	1,2,4-trimethylbenzene	18.96	105	22879	0.299	ppbV	#	50
101)	Benzyl Chloride	0.00		0	N.D.	d		
102)	1,3-dichlorobenzene	0.00		0	N.D.	d		
103)	1,4-dichlorobenzene	19.14		0	N.D.			
107)	1,2-dichlorobenzene	19.41		0	N.D.			
115)	1,2,4-trichlorobenzene	0.00		0	N.D.			
119)	hexachlorobutadiene	0.00		0	N.D.			

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

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531793.D
Acq On : 21 Mar 2022 12:22 AM
Operator : AIRLAB15:RY
Sample : L2213657-04D,3,189.9,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 15:51:07 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320T\r1531778.D
Sub List : TO15-NY - .

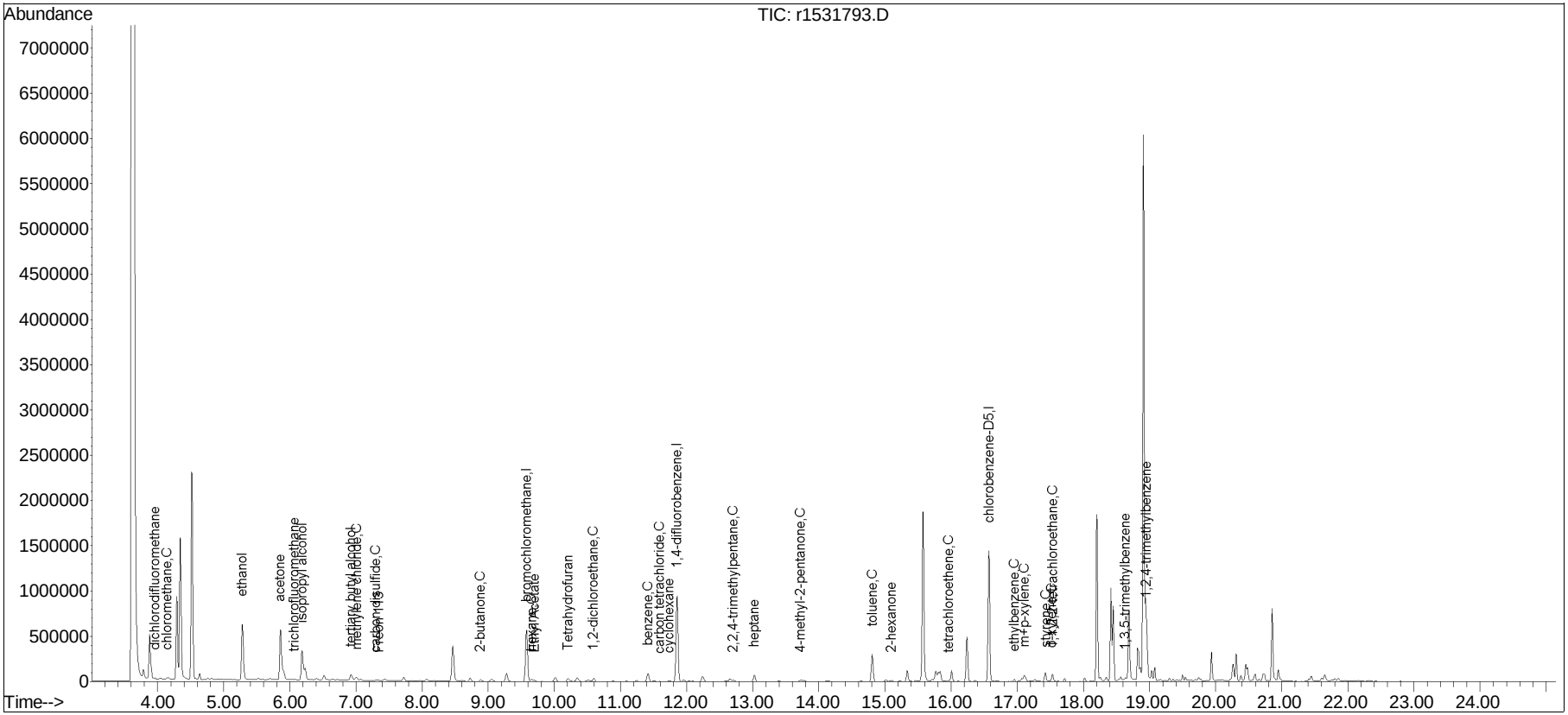
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

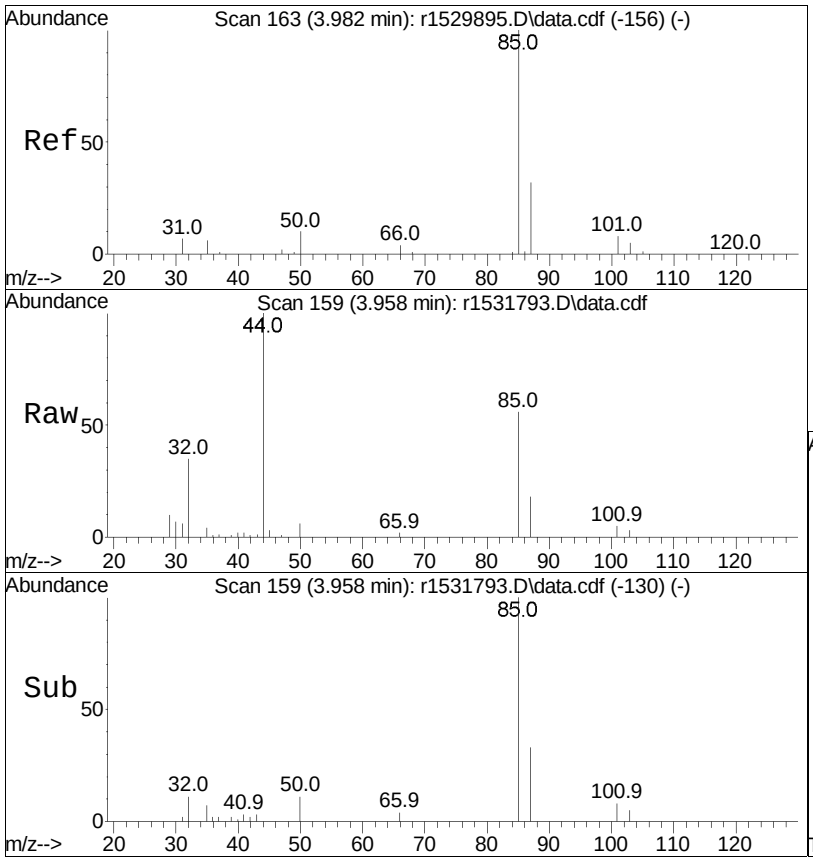
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531793.D
Acq On : 21 Mar 2022 12:22 AM
Operator : AIRLAB15:RY
Sample : L2213657-04D,3,189.9,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 15:51:07 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

Sub List : TO15-NY - .s\Data\Airlab15\2022\03\0320T\r1531778.D

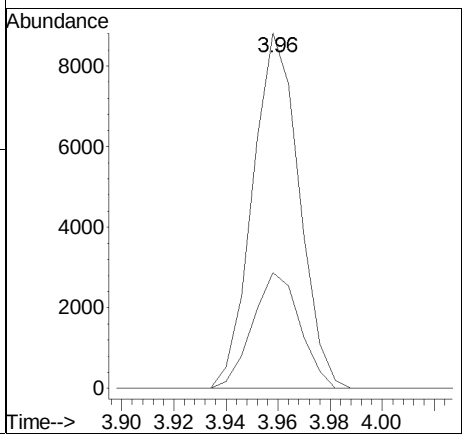


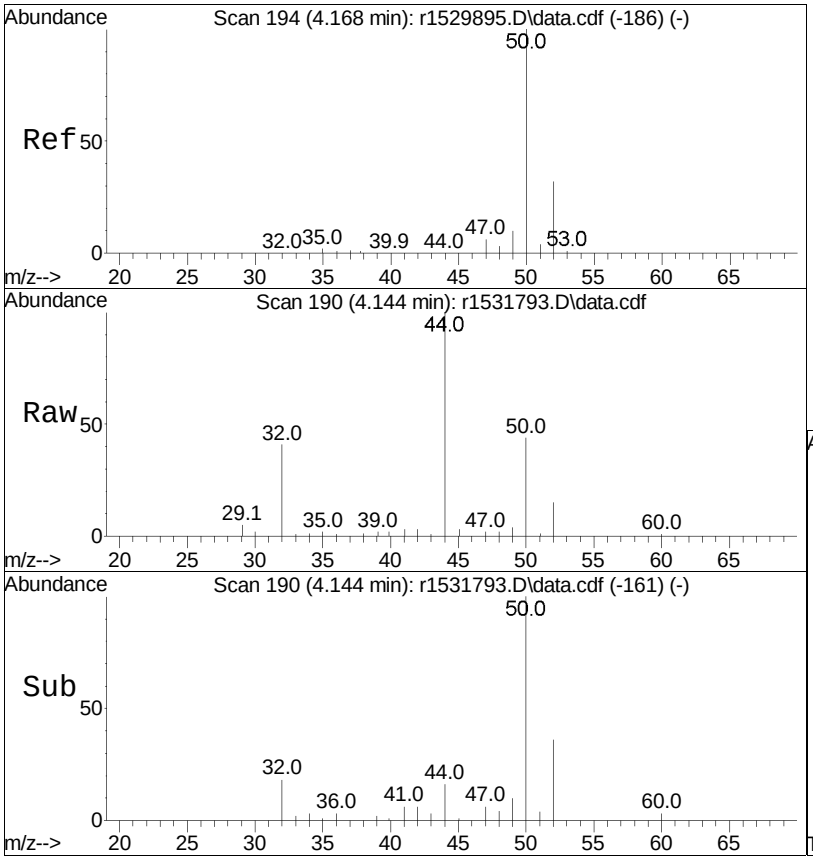


#5
dichlorodifluoromethane
Concen: 0.38 ppbV
RT: 3.96 min Scan# 159
Delta R.T. -0.024 min
Lab File: r1531793.D
Acq: 21 Mar 2022 12:22 AM

Tgt Ion: 85 Resp: 10959

Ion	Ratio	Lower	Upper
85	100		
87	32.6	25.6	38.4

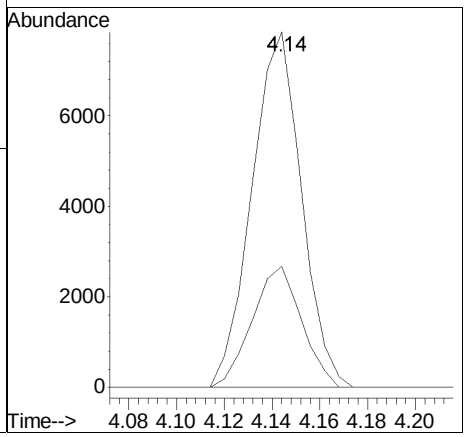


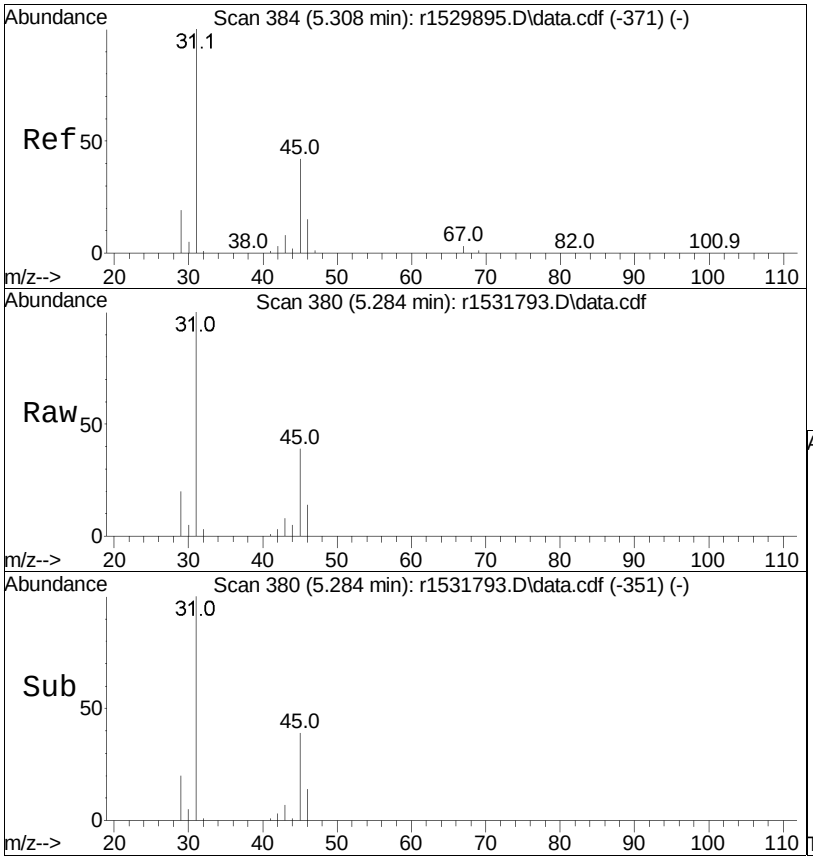


#6
chloromethane
Concen: 0.78 ppbV
RT: 4.14 min Scan# 190
Delta R.T. -0.024 min
Lab File: r1531793.D
Acq: 21 Mar 2022 12:22 AM

Tgt Ion: 50 Resp: 11322

Ion	Ratio	Lower	Upper
50	100		
52	34.1	25.9	38.9

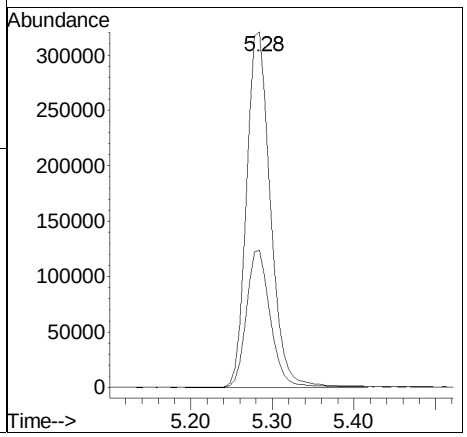


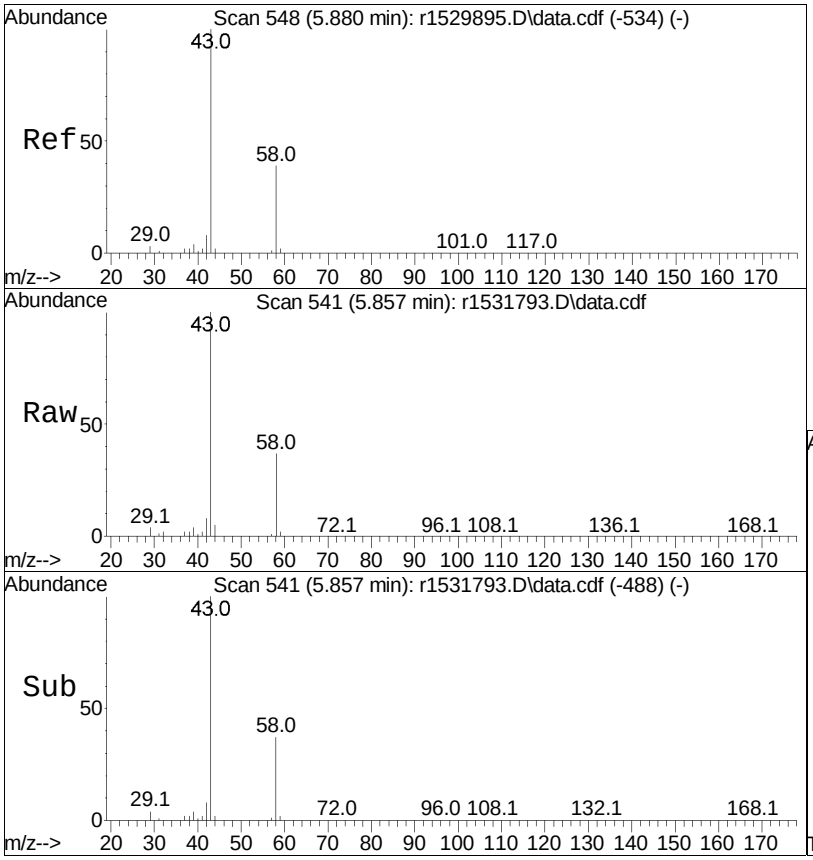


#15
ethanol
Concen: 48.84 ppbV
RT: 5.28 min Scan# 380
Delta R.T. -0.024 min
Lab File: r1531793.D
Acq: 21 Mar 2022 12:22 AM

Tgt Ion: 31 Resp: 548170

Ion	Ratio	Lower	Upper
31	100		
45	38.6	33.4	50.2

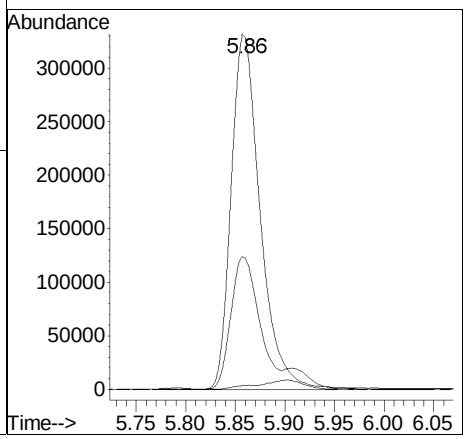


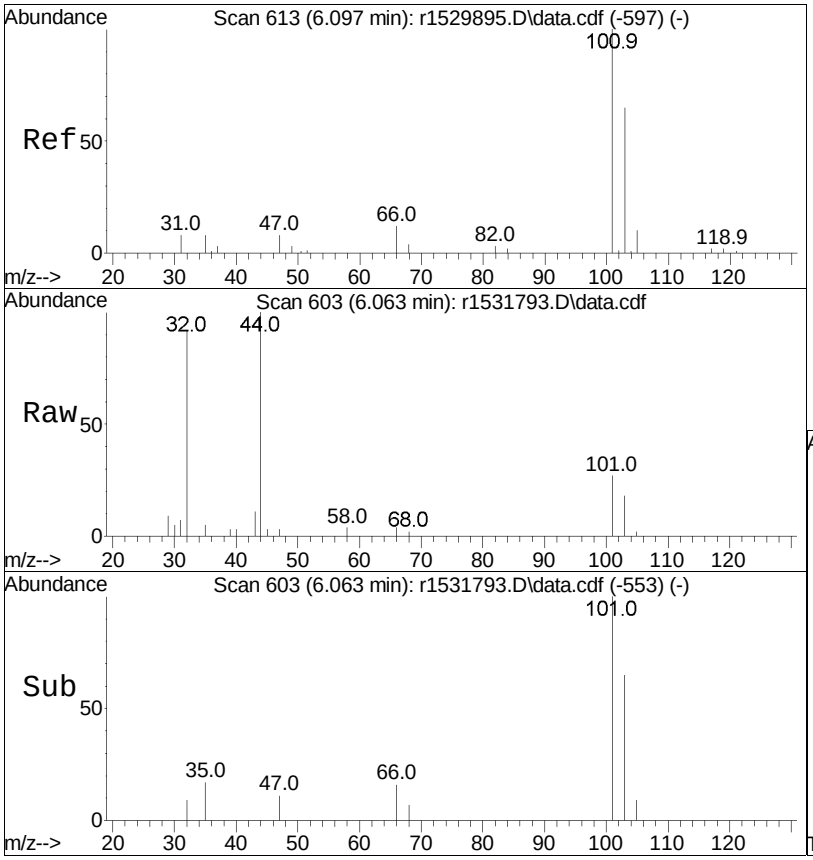


#19
acetone
Concen: 30.23 ppbV
RT: 5.86 min Scan# 541
Delta R.T. -0.023 min
Lab File: r1531793.D
Acq: 21 Mar 2022 12:22 AM

Tgt Ion: 43 Resp: 675988

Ion	Ratio	Lower	Upper
43	100		
58	37.4	31.6	47.4
57	1.1	0.8	1.2

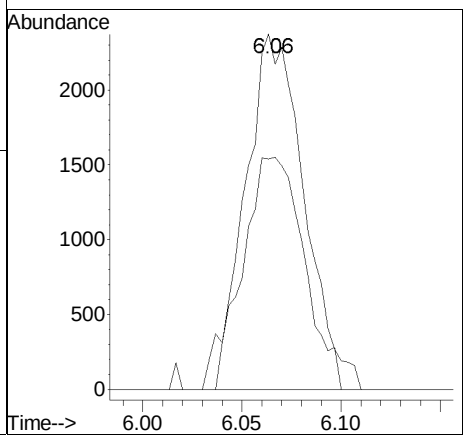


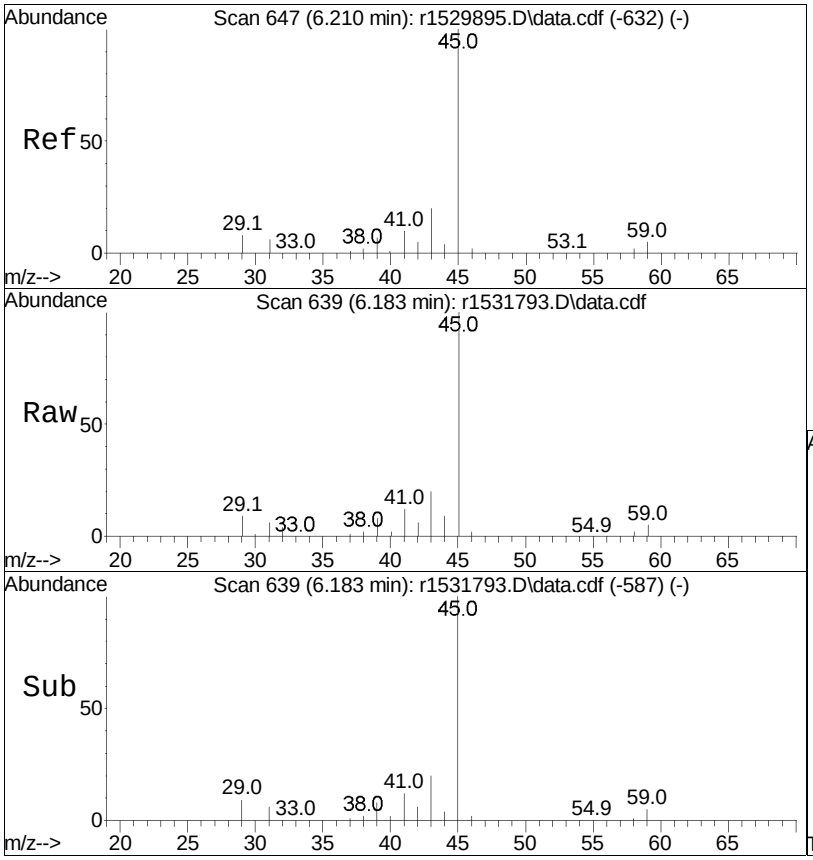


#21
trichlorofluoromethane
Concen: 0.18 ppbV
RT: 6.06 min Scan# 603
Delta R.T. -0.033 min
Lab File: r1531793.D
Acq: 21 Mar 2022 12:22 AM

Tgt Ion:101 Resp: 4987

Ion	Ratio	Lower	Upper
101	100		
103	64.9	52.0	78.0

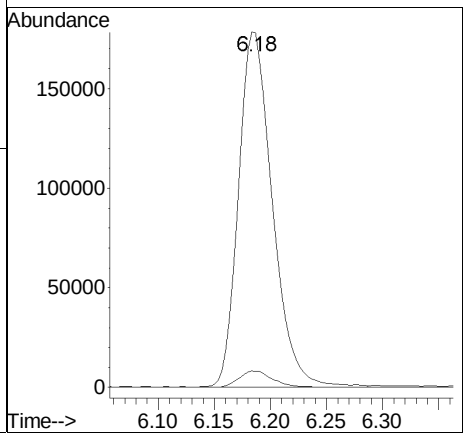


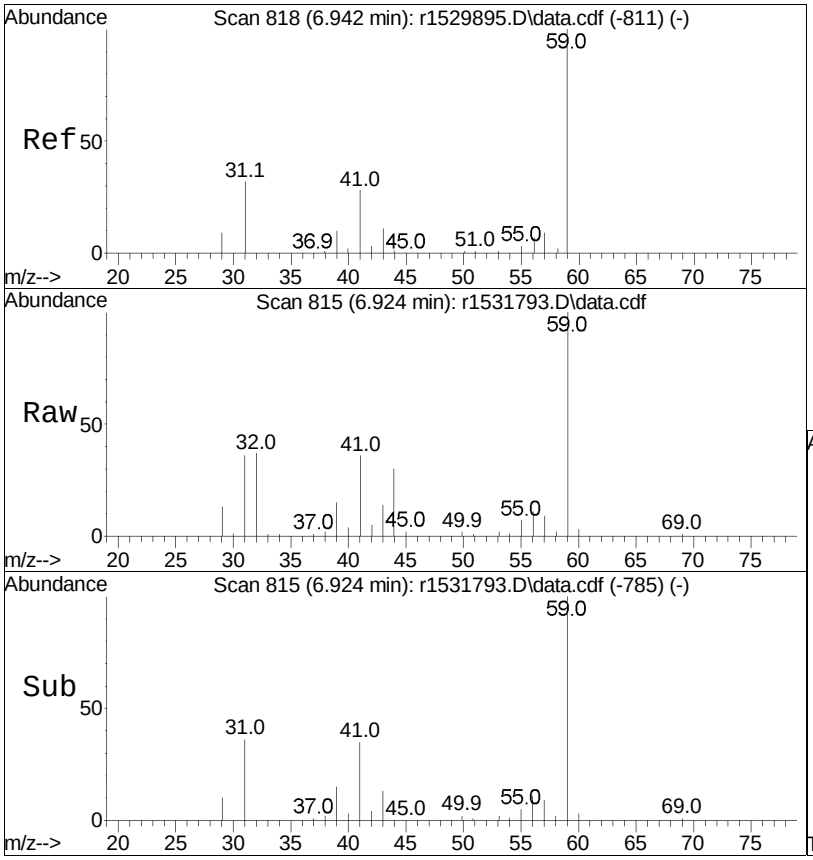


#22
isopropyl alcohol
Concen: 15.49 ppbV
RT: 6.18 min Scan# 639
Delta R.T. -0.027 min
Lab File: r1531793.D
Acq: 21 Mar 2022 12:22 AM

Tgt Ion: 45 Resp: 374346

Ion	Ratio	Lower	Upper
45	100		
59	4.7	3.8	5.8

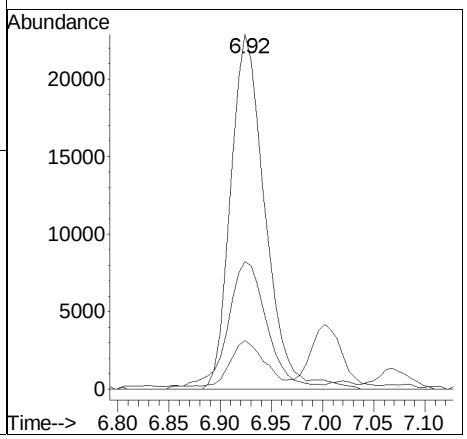


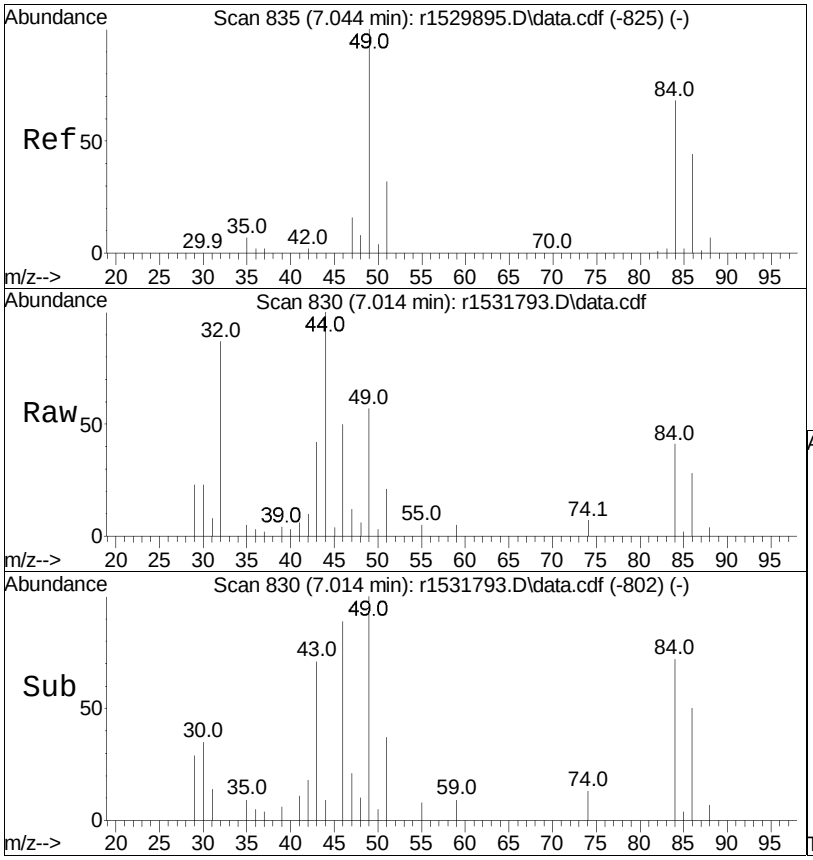


#27
tertiary butyl alcohol
Concen: 1.71 ppbV
RT: 6.92 min Scan# 815
Delta R.T. -0.018 min
Lab File: r1531793.D
Acq: 21 Mar 2022 12:22 AM

Tgt Ion: 59 Resp: 53587

Ion	Ratio	Lower	Upper
59	100		
41	36.0	22.2	33.4#
43	13.7	8.9	13.3#

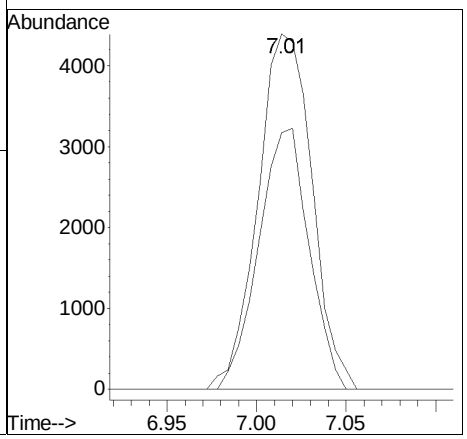


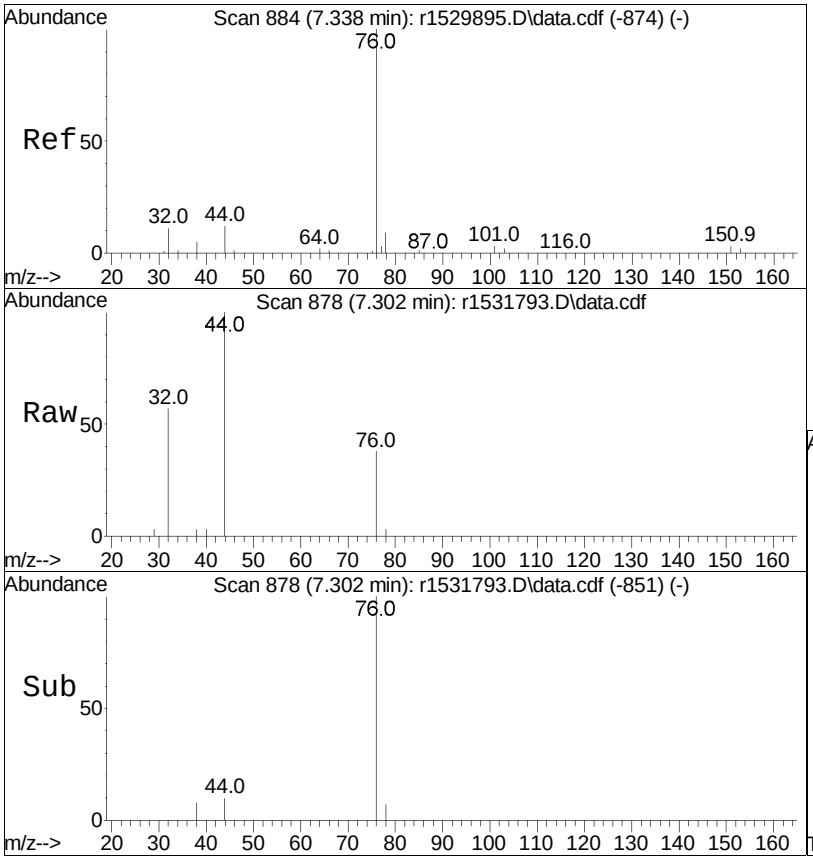


#28
methylene chloride
Concen: 0.50 ppbV
RT: 7.01 min Scan# 830
Delta R.T. -0.030 min
Lab File: r1531793.D
Acq: 21 Mar 2022 12:22 AM

Tgt Ion: 49 Resp: 9248

Ion	Ratio	Lower	Upper
49	100		
84	72.3	54.5	81.7

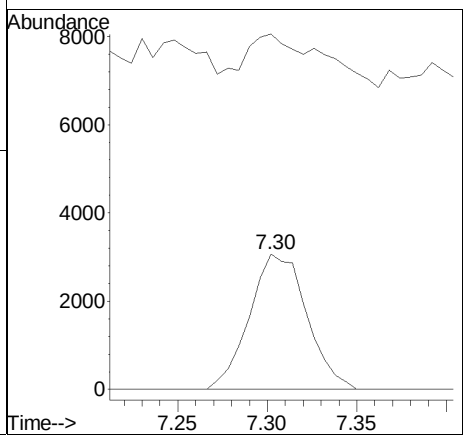


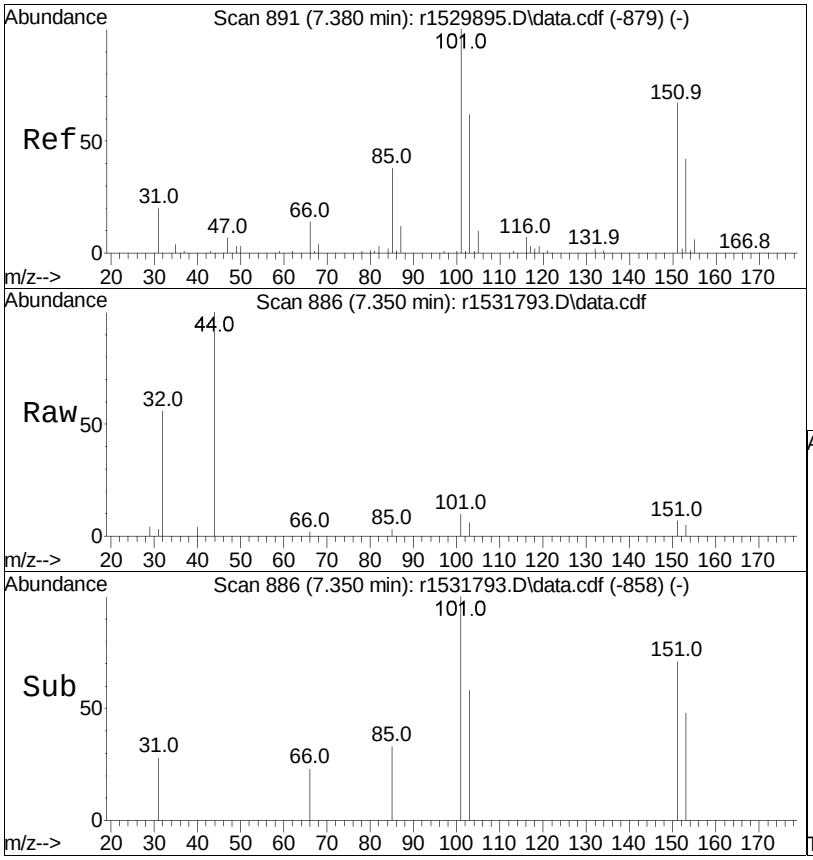


#30
carbon disulfide
Concen: 0.18 ppbV
RT: 7.30 min Scan# 878
Delta R.T. -0.036 min
Lab File: r1531793.D
Acq: 21 Mar 2022 12:22 AM

Tgt Ion: 76 Resp: 6825

Ion	Ratio	Lower	Upper
76	100		
44	262.5	10.1	15.1#

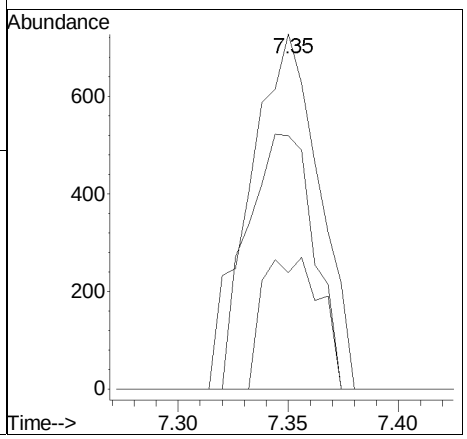


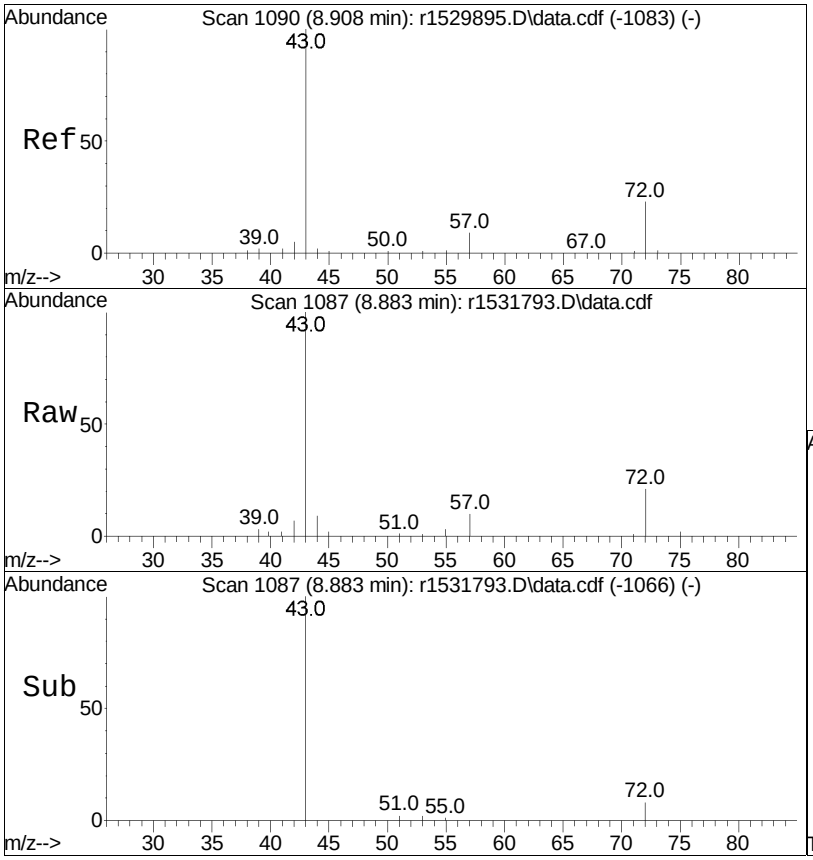


#31
Freon 113
Concen: 0.06 ppbV
RT: 7.35 min Scan# 886
Delta R.T. -0.030 min
Lab File: r1531793.D
Acq: 21 Mar 2022 12:22 AM

Tgt Ion:101 Resp: 1598

Ion	Ratio	Lower	Upper
101	100		
85	32.9	30.6	46.0
151	71.4	53.5	80.3

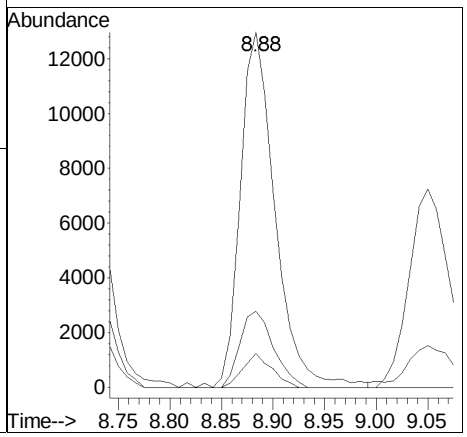


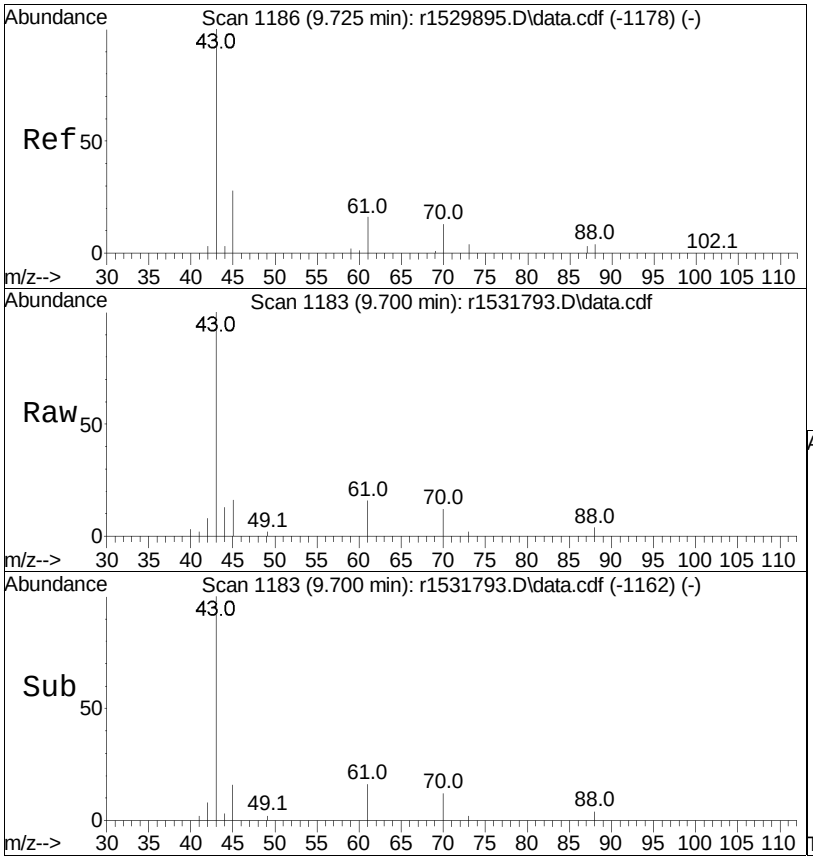


#36
2-butanone
Concen: 0.76 ppbV
RT: 8.88 min Scan# 1087
Delta R.T. -0.025 min
Lab File: r1531793.D
Acq: 21 Mar 2022 12:22 AM

Tgt Ion: 43 Resp: 30440

Ion	Ratio	Lower	Upper
43	100		
72	21.4	18.0	27.0
57	9.5	7.0	10.4

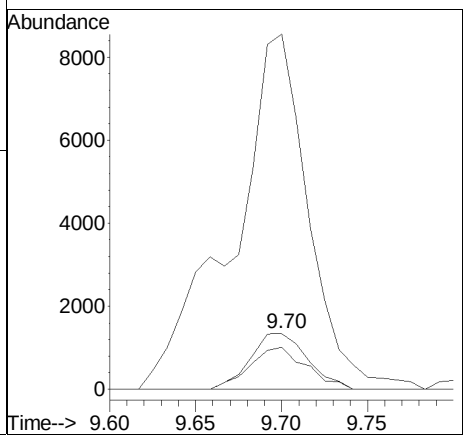


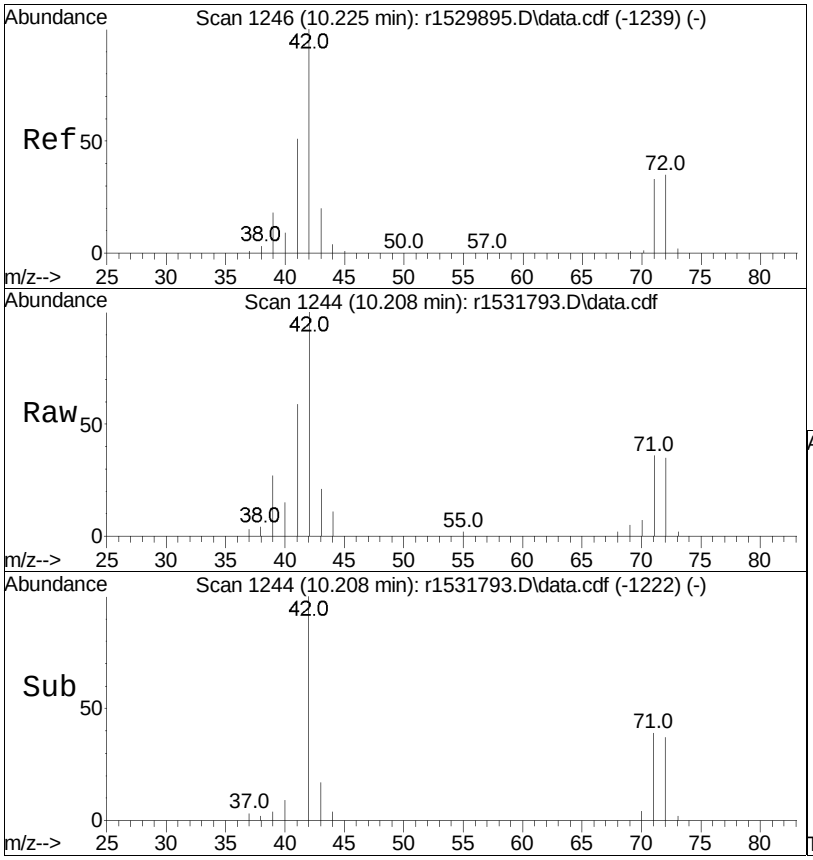


#38
Ethyl Acetate
Concen: 0.43 ppbV
RT: 9.70 min Scan# 1183
Delta R.T. -0.025 min
Lab File: r1531793.D
Acq: 21 Mar 2022 12:22 AM

Tgt Ion: 61 Resp: 3144

Ion	Ratio	Lower	Upper
61	100		
70	75.7	62.7	94.1
43	638.3	551.8	827.8

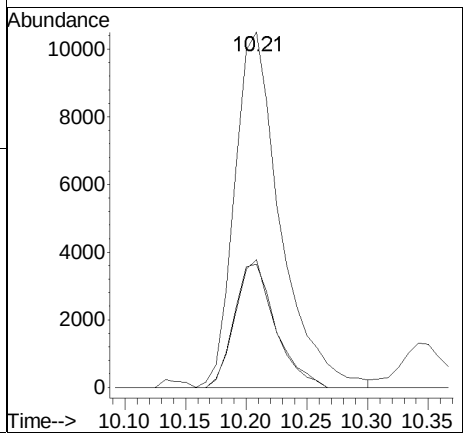


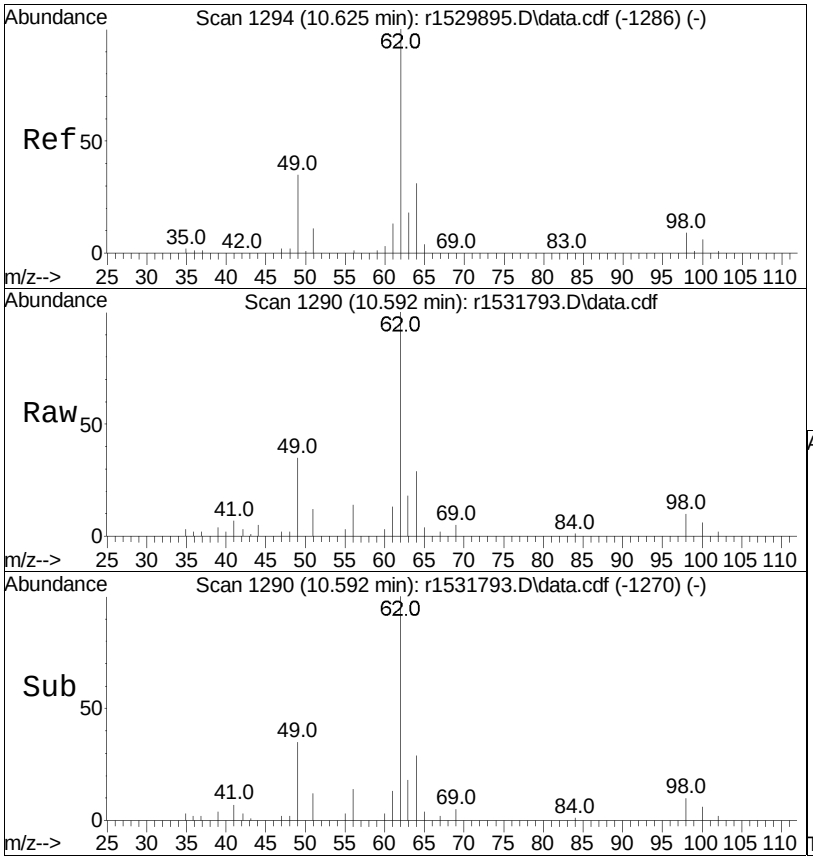


#40
Tetrahydrofuran
Concen: 1.11 ppbV
RT: 10.21 min Scan# 1244
Delta R.T. -0.017 min
Lab File: r1531793.D
Acq: 21 Mar 2022 12:22 AM

Tgt Ion: 42 Resp: 27619

Ion	Ratio	Lower	Upper
42	100		
71	36.0	26.8	40.2
72	34.7	27.7	41.5

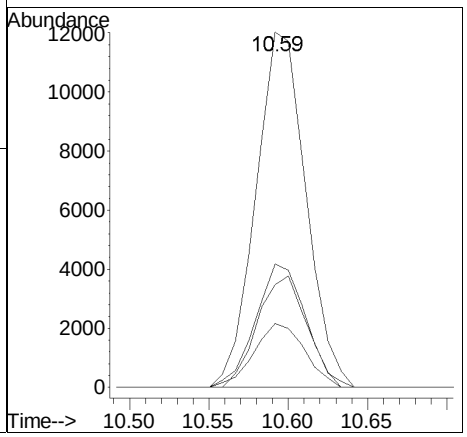


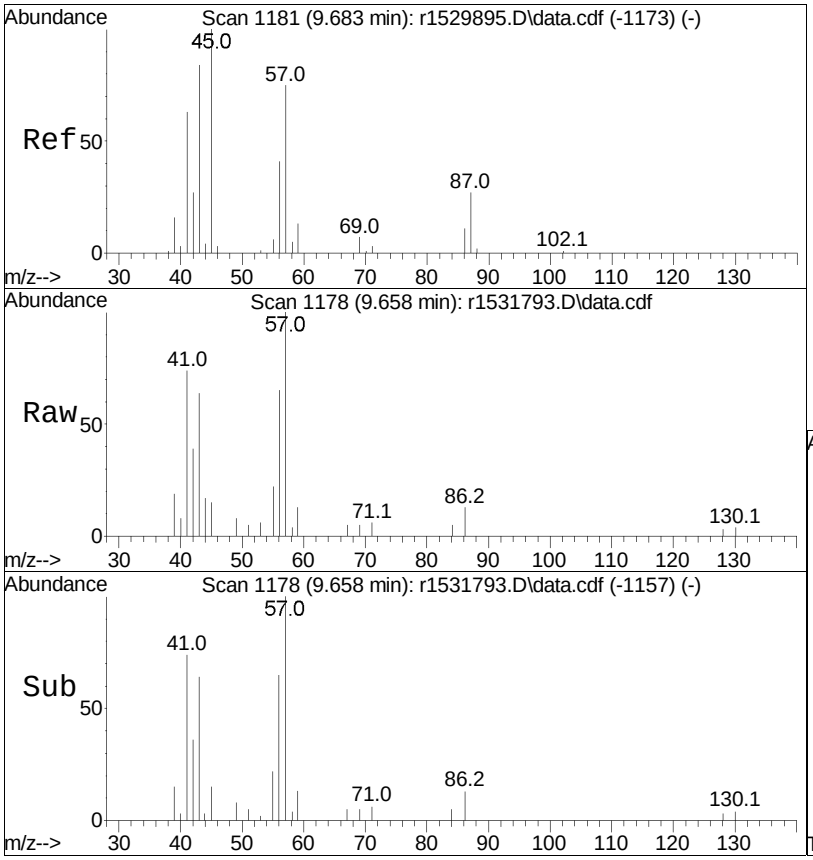


#42
1,2-dichloroethane
Concen: 1.11 ppbV
RT: 10.59 min Scan# 1290
Delta R.T. -0.033 min
Lab File: r1531793.D
Acq: 21 Mar 2022 12:22 AM

Tgt Ion: 62 Resp: 26377

Ion	Ratio	Lower	Upper
62	100		
64	28.9	25.0	37.4
49	34.7	27.8	41.8
63	18.0	14.4	21.6

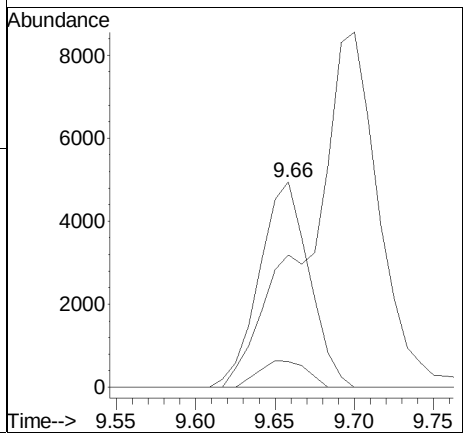


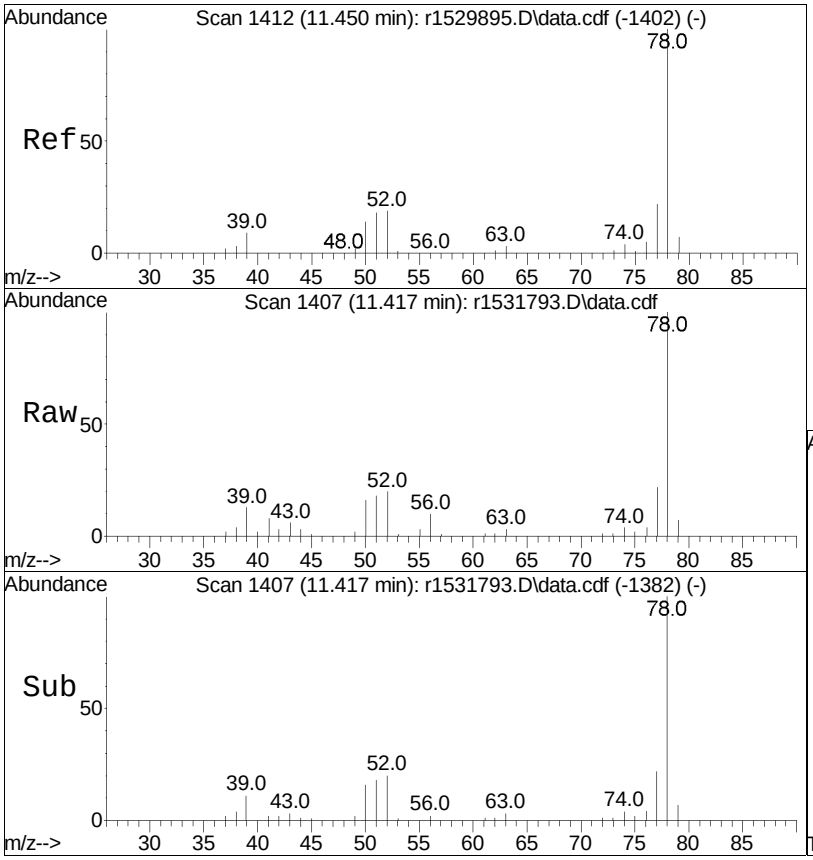


#44
hexane
Concen: 0.30 ppbV
RT: 9.66 min Scan# 1178
Delta R.T. -0.025 min
Lab File: r1531793.D
Acq: 21 Mar 2022 12:22 AM

Tgt Ion: 57 Resp: 10839

Ion	Ratio	Lower	Upper
57	100		
43	64.5	88.8	133.2#
86	12.5	11.4	17.0

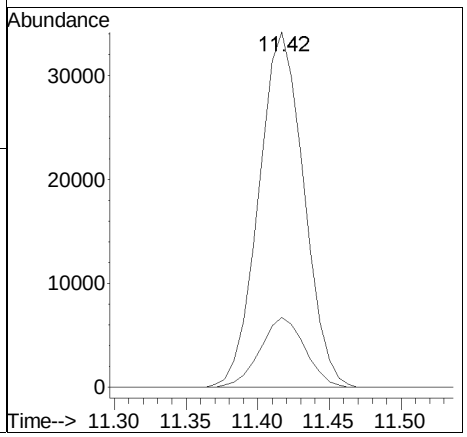


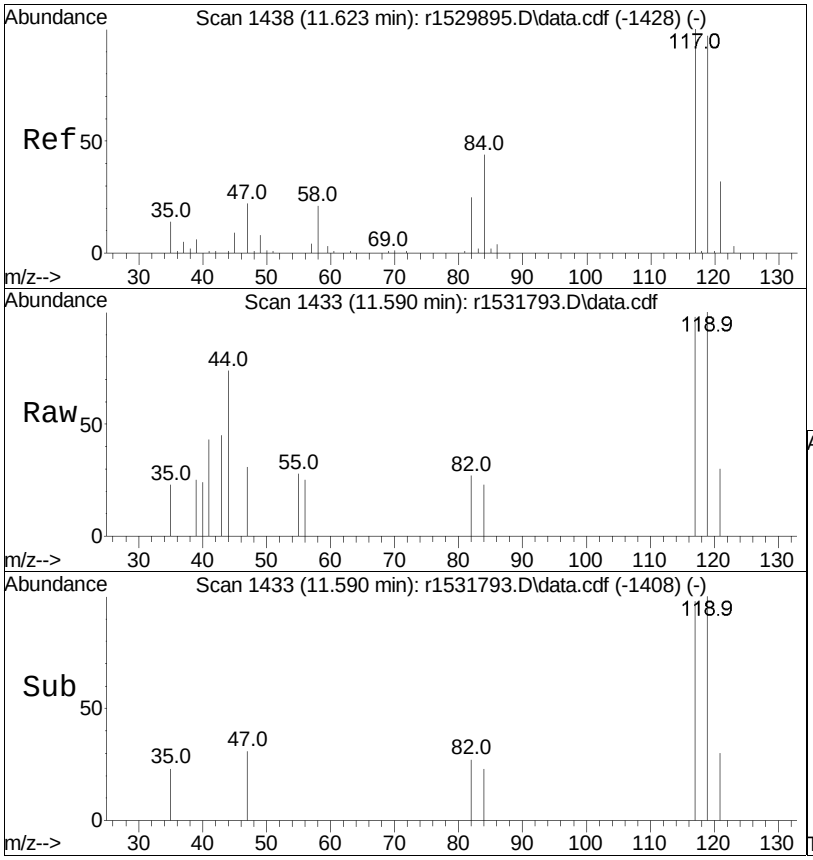


#50
benzene
Concen: 1.25 ppbV
RT: 11.42 min Scan# 1407
Delta R.T. -0.033 min
Lab File: r1531793.D
Acq: 21 Mar 2022 12:22 AM

Tgt Ion: 78 Resp: 74872

Ion	Ratio	Lower	Upper
78	100		
52	19.7	15.2	22.8

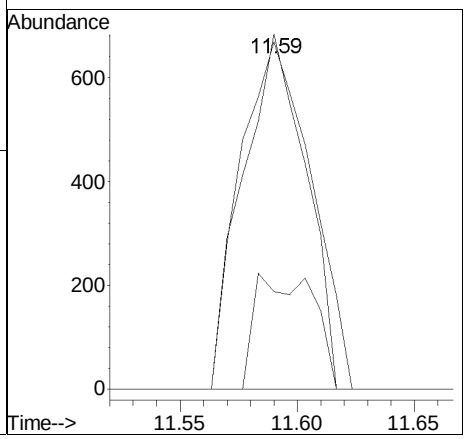


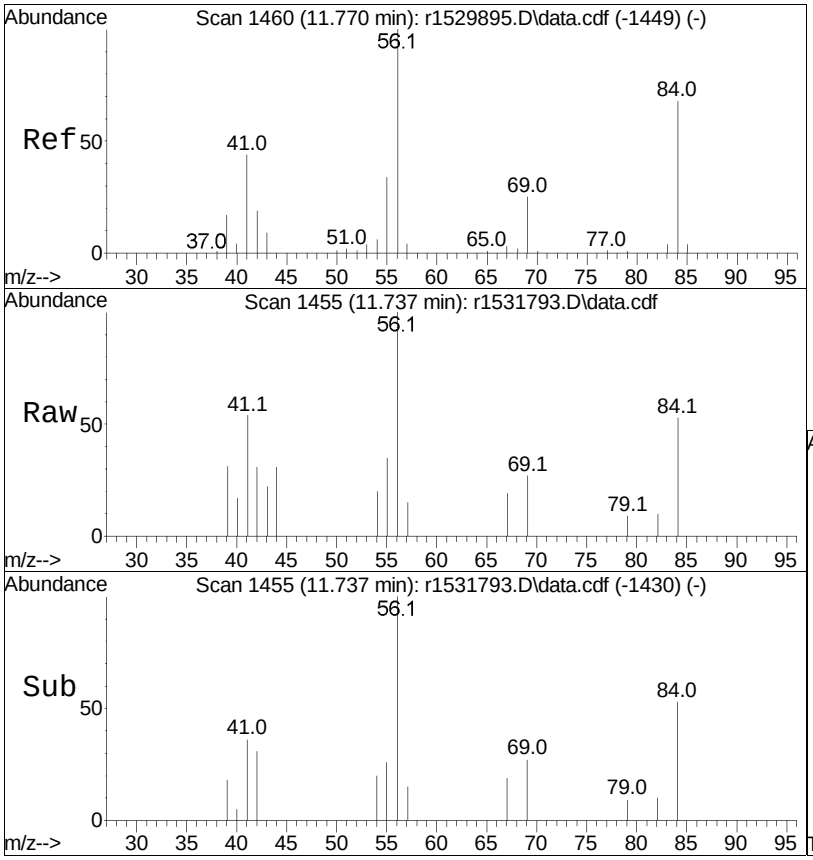


#52
carbon tetrachloride
Concen: 0.07 ppbV
RT: 11.59 min Scan# 1433
Delta R.T. -0.033 min
Lab File: r1531793.D
Acq: 21 Mar 2022 12:22 AM

Tgt Ion:117 Resp: 1415

Ion	Ratio	Lower	Upper
117	100		
119	102.2	77.5	116.3
82	28.1	20.0	30.0

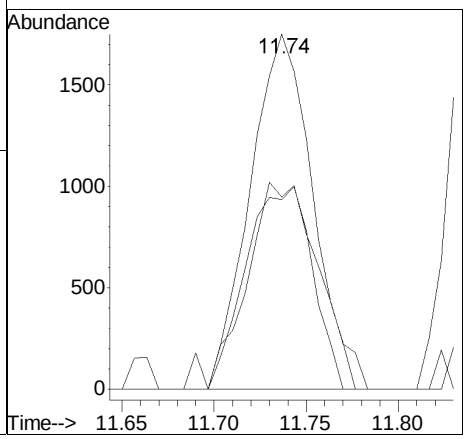


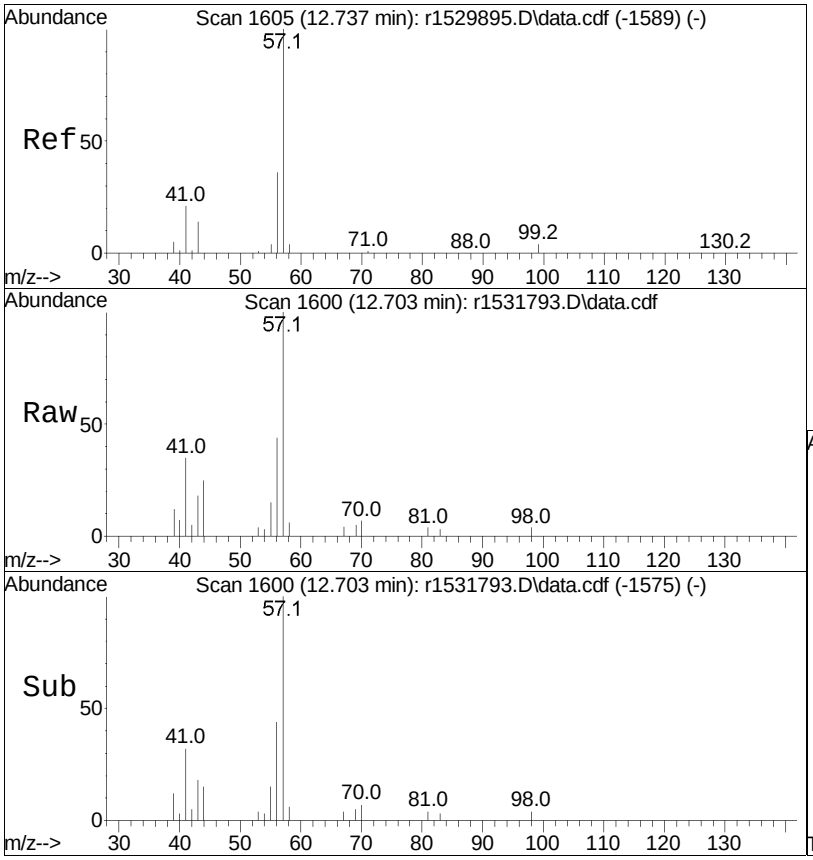


#53
cyclohexane
Concen: 0.11 ppbV
RT: 11.74 min Scan# 1455
Delta R.T. -0.033 min
Lab File: r1531793.D
Acq: 21 Mar 2022 12:22 AM

Tgt Ion: 56 Resp: 4100

Ion	Ratio	Lower	Upper
56	100		
84	53.4	54.8	82.2#
41	54.1	35.5	53.3#

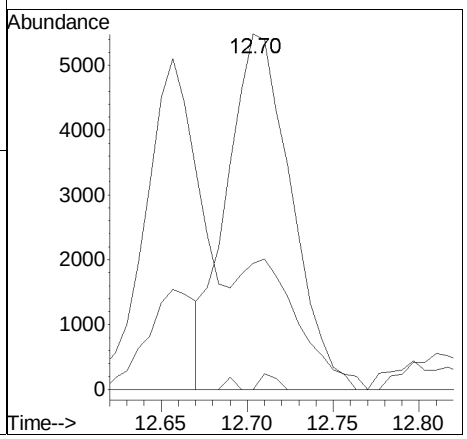


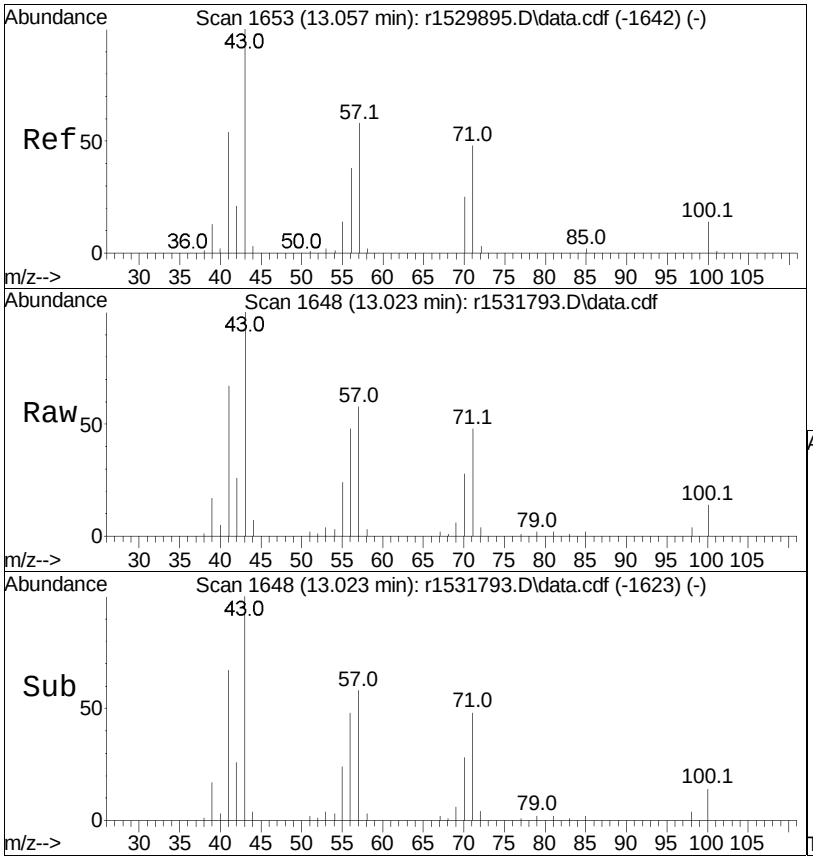


#60
2,2,4-trimethylpentane
Concen: 0.12 ppbV
RT: 12.70 min Scan# 1600
Delta R.T. -0.033 min
Lab File: r1531793.D
Acq: 21 Mar 2022 12:22 AM

Tgt Ion: 57 Resp: 14223

Ion	Ratio	Lower	Upper
57	100		
99	0.0	3.1	4.7#
41	35.5	16.6	24.8#

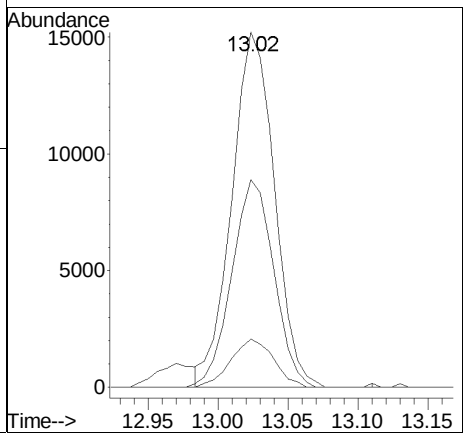


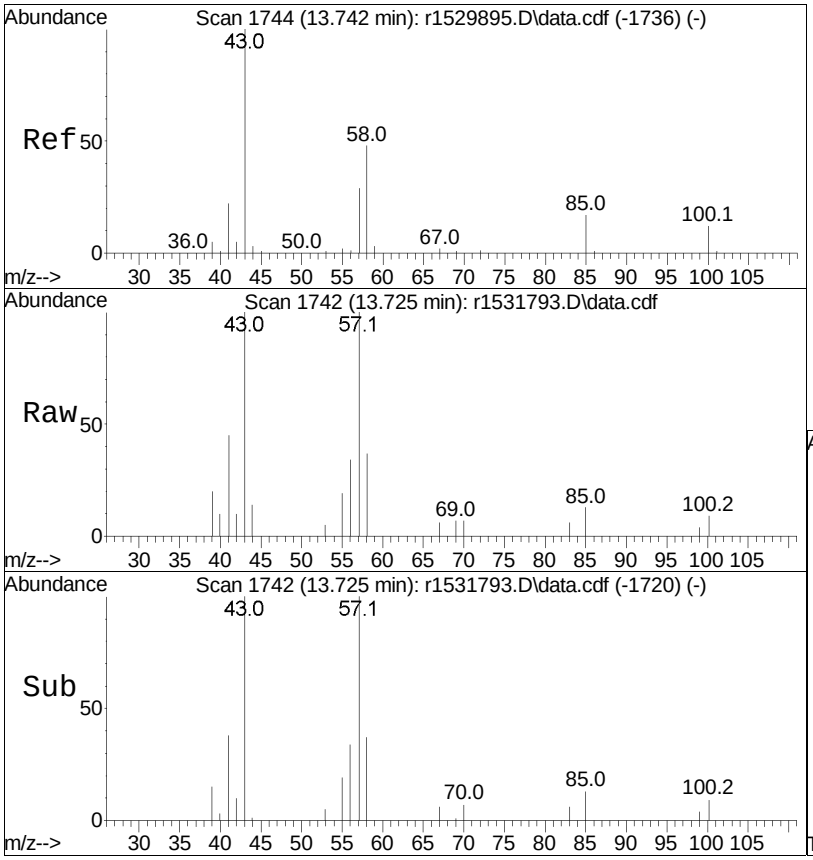


#62
heptane
Concen: 0.82 ppbV m
RT: 13.02 min Scan# 1648
Delta R.T. -0.033 min
Lab File: r1531793.D
Acq: 21 Mar 2022 12:22 AM

Tgt Ion: 43 Resp: 32295

Ion	Ratio	Lower	Upper
43	100		
57	58.5	46.5	69.7
100	13.6	11.6	17.4

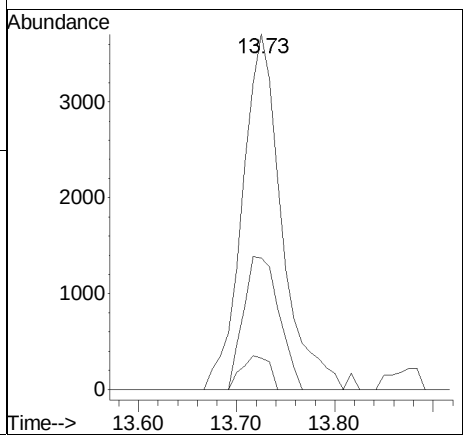


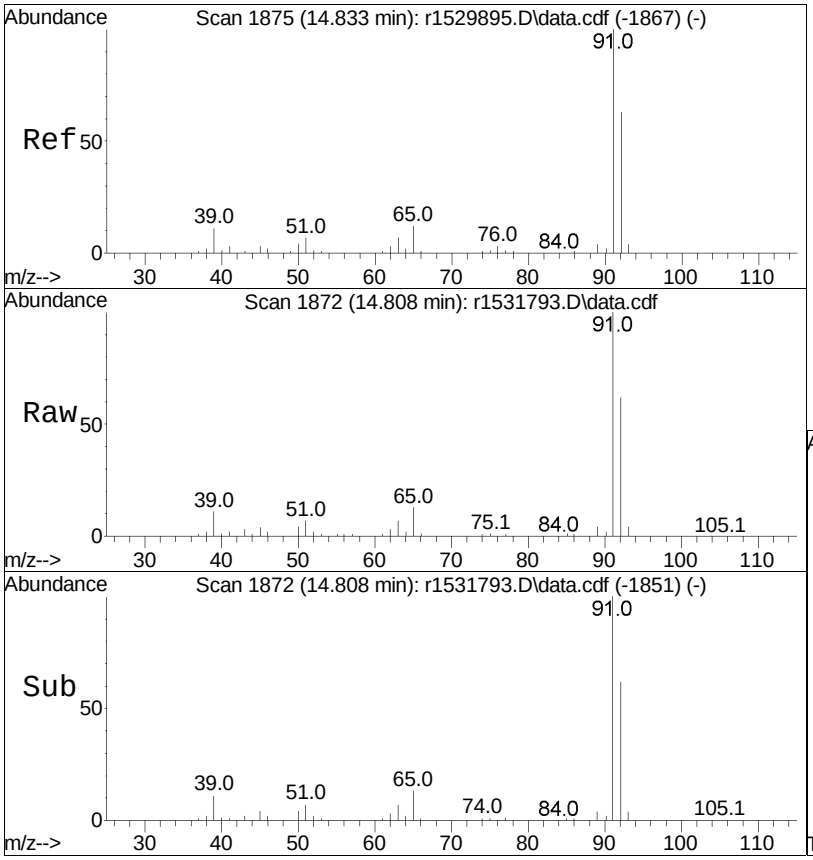


#64
4-methyl-2-pentanone
Concen: 0.23 ppbV
RT: 13.73 min Scan# 1742
Delta R.T. -0.017 min
Lab File: r1531793.D
Acq: 21 Mar 2022 12:22 AM

Tgt Ion: 43 Resp: 10411

Ion	Ratio	Lower	Upper
43	100		
58	37.0	38.6	58.0#
100	8.8	9.9	14.9#

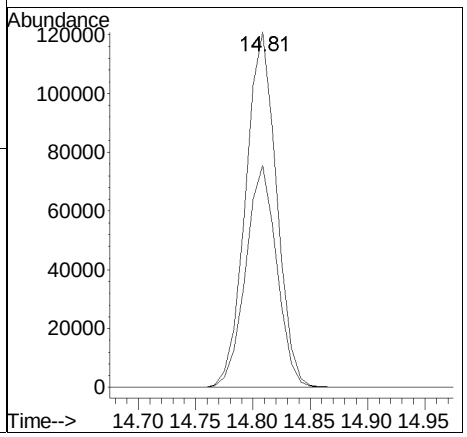


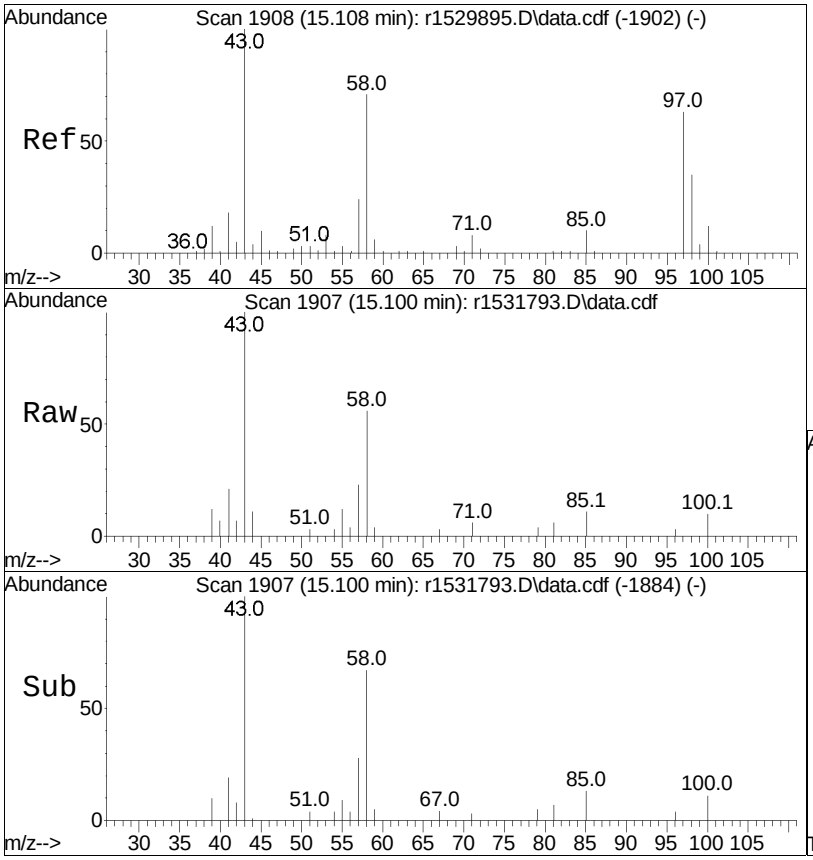


#68
toluene
Concen: 2.94 ppbV
RT: 14.81 min Scan# 1872
Delta R.T. -0.025 min
Lab File: r1531793.D
Acq: 21 Mar 2022 12:22 AM

Tgt Ion: 91 Resp: 227543

Ion	Ratio	Lower	Upper
91	100		
92	62.5	50.3	75.5

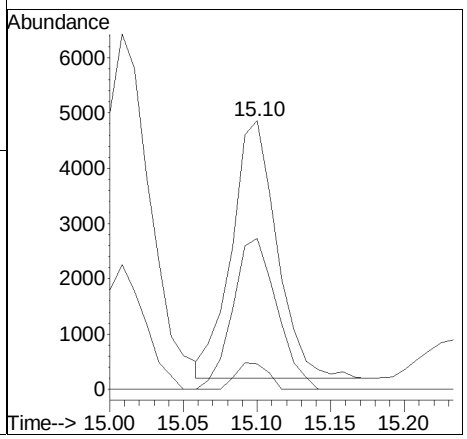


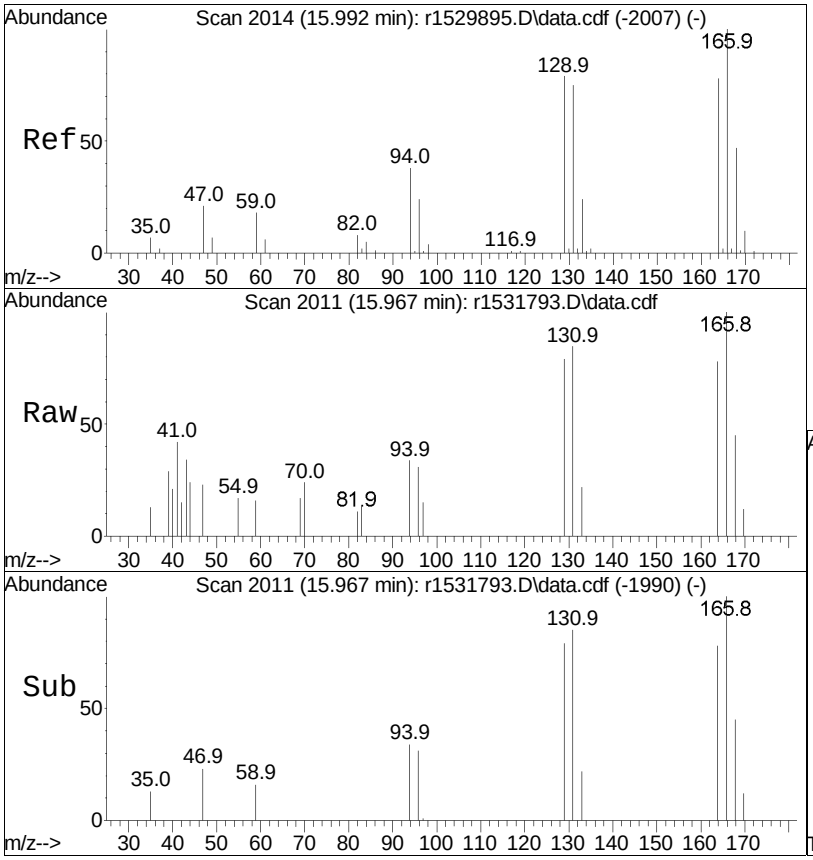


#72
2-hexanone
Concen: 0.23 ppbV
RT: 15.10 min Scan# 1907
Delta R.T. -0.008 min
Lab File: r1531793.D
Acq: 21 Mar 2022 12:22 AM

Tgt Ion: 43 Resp: 9996

Ion	Ratio	Lower	Upper
43	100		
58	56.2	56.6	85.0#
100	9.5	9.8	14.6#

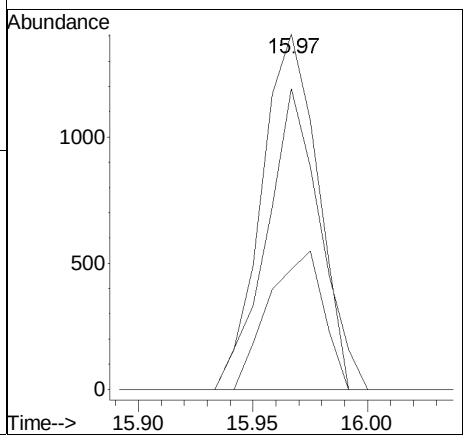


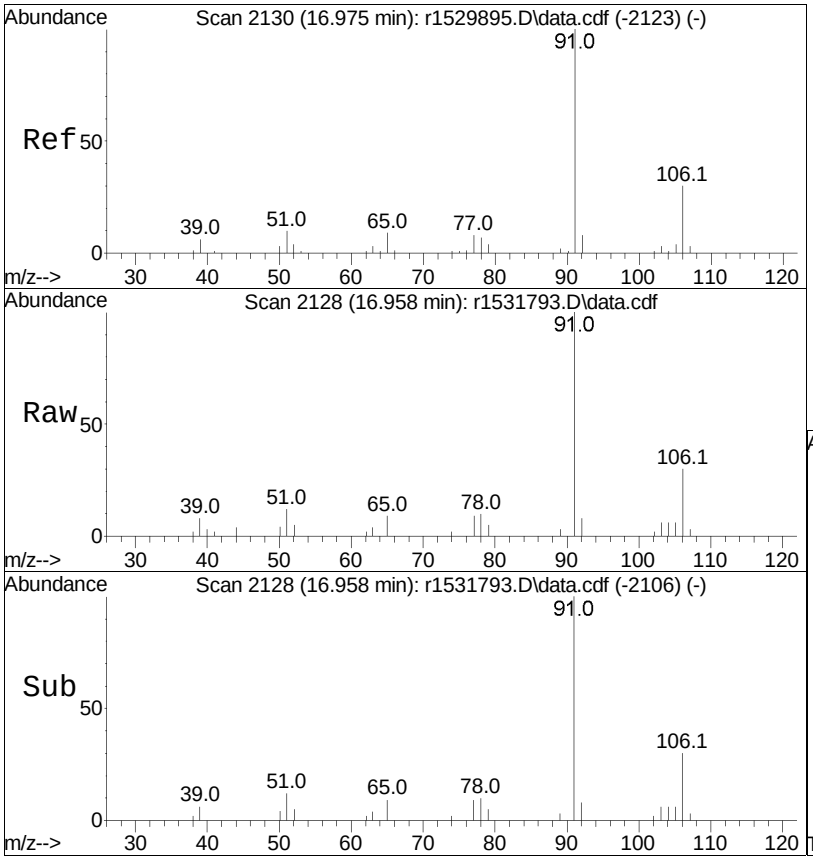


#78
tetrachloroethene
Concen: 0.09 ppbV
RT: 15.97 min Scan# 2011
Delta R.T. -0.025 min
Lab File: r1531793.D
Acq: 21 Mar 2022 12:22 AM

Tgt Ion:166 Resp: 2389

Ion	Ratio	Lower	Upper
166	100		
131	84.7	59.9	89.9
94	33.8	30.2	45.4

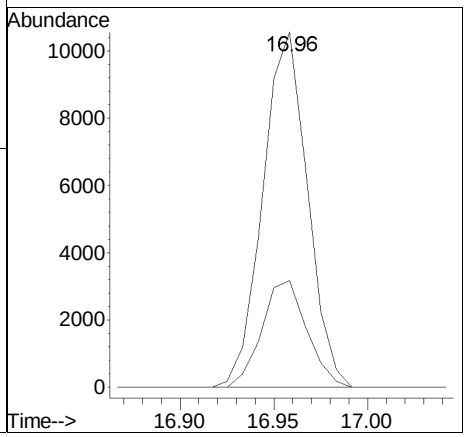


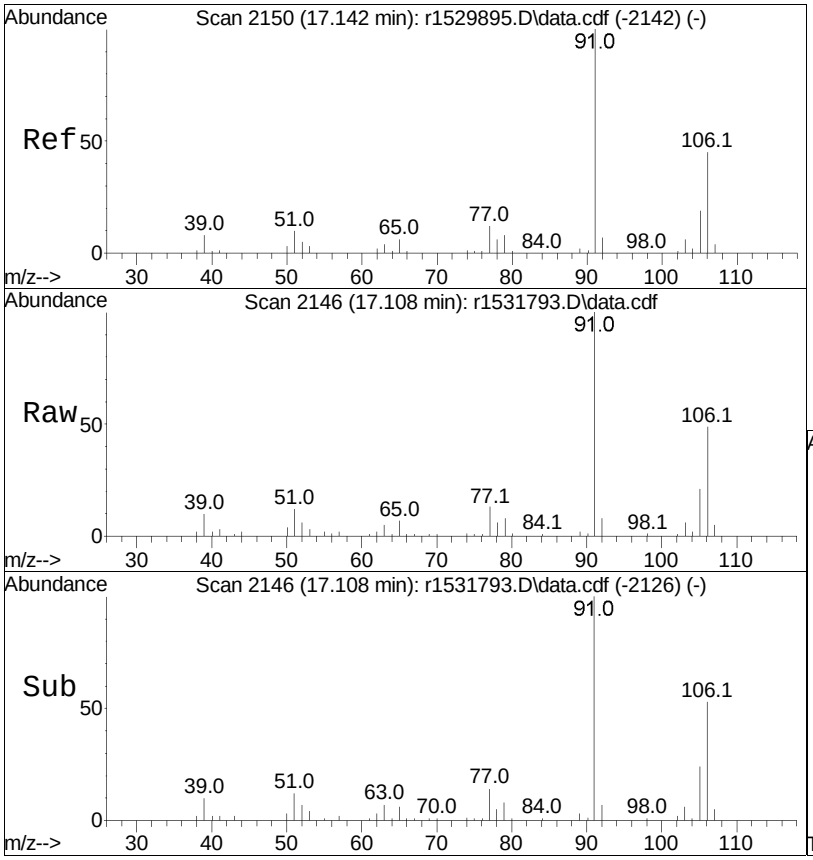


#81
ethylbenzene
Concen: 0.19 ppbV
RT: 16.96 min Scan# 2128
Delta R.T. -0.017 min
Lab File: r1531793.D
Acq: 21 Mar 2022 12:22 AM

Tgt Ion: 91 Resp: 17480

Ion	Ratio	Lower	Upper
91	100		
106	30.1	24.1	36.1

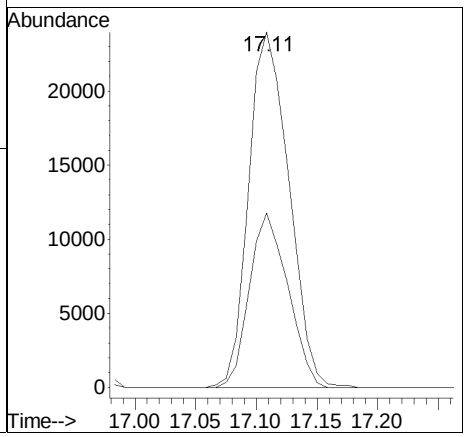


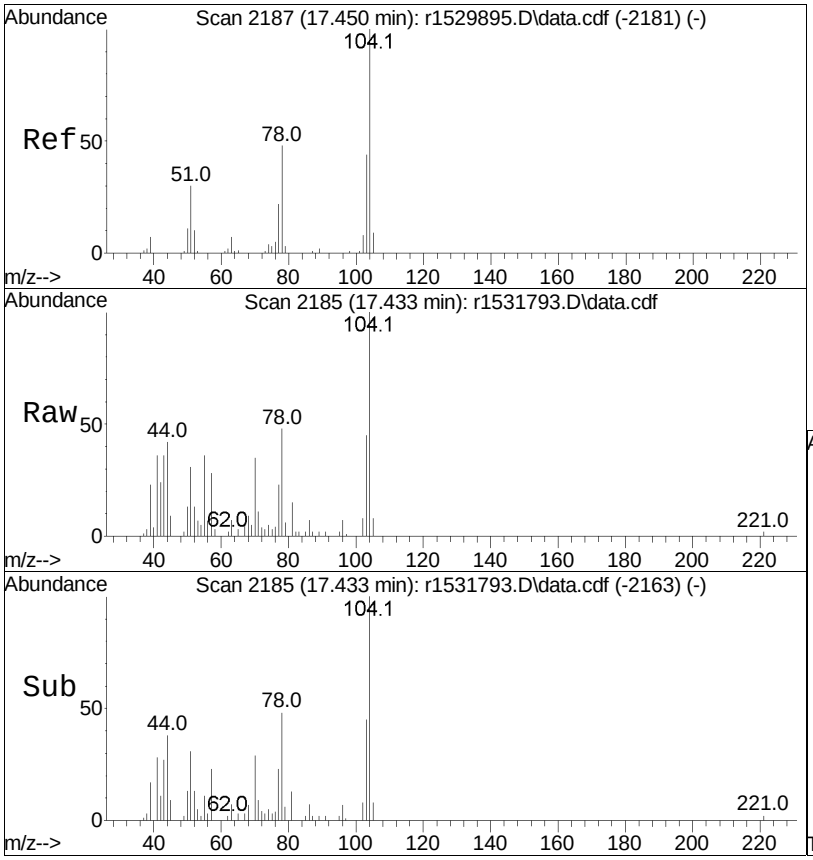


#83
m+p-xylene
Concen: 0.74 ppbV
RT: 17.11 min Scan# 2146
Delta R.T. -0.033 min
Lab File: r1531793.D
Acq: 21 Mar 2022 12:22 AM

Tgt Ion: 91 Resp: 55313

Ion	Ratio	Lower	Upper
91	100		
106	49.1	36.2	54.2

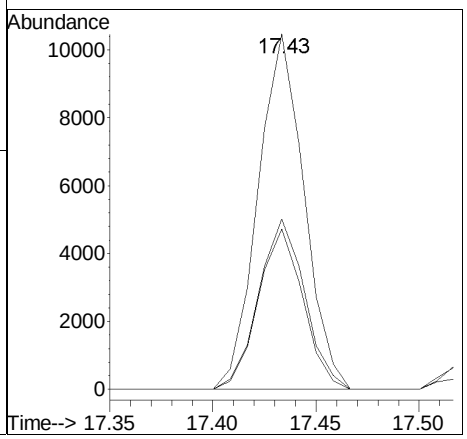


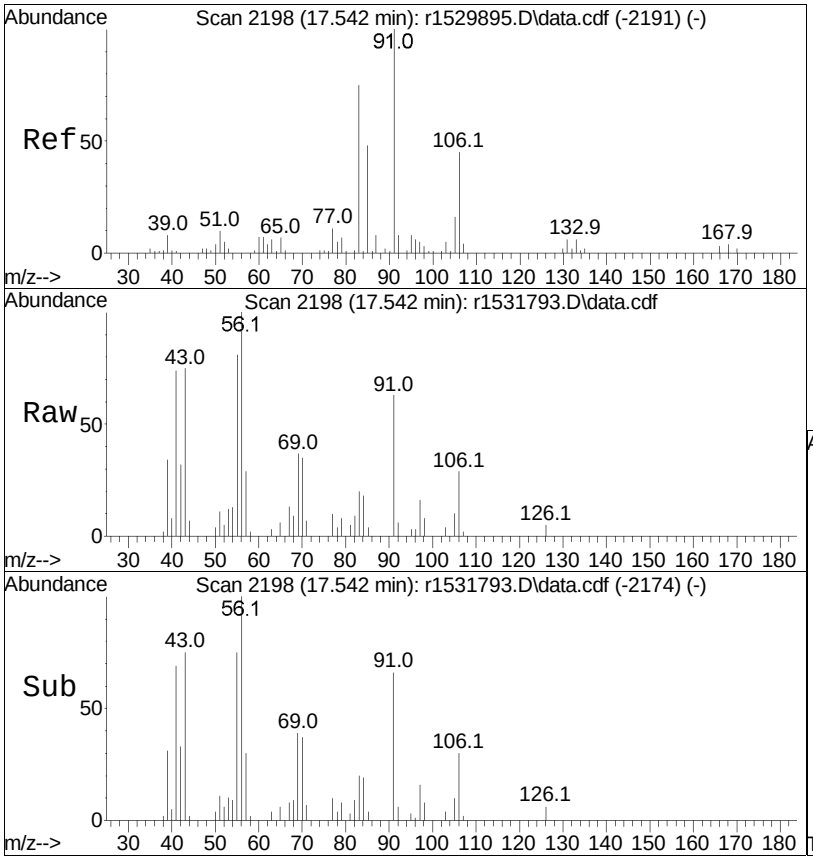


#85
styrene
Concen: 0.31 ppbV
RT: 17.43 min Scan# 2185
Delta R.T. -0.017 min
Lab File: r1531793.D
Acq: 21 Mar 2022 12:22 AM

Tgt Ion:104 Resp: 16242

Ion	Ratio	Lower	Upper
104	100		
103	45.1	35.0	52.6
78	48.0	38.3	57.5

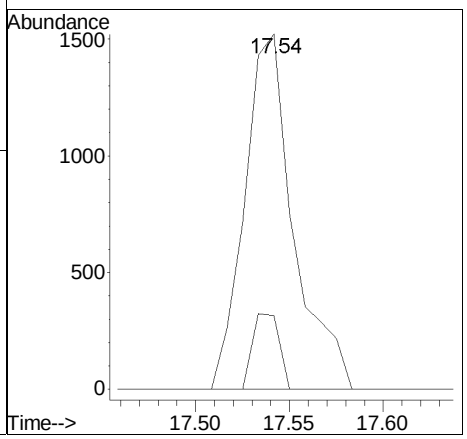


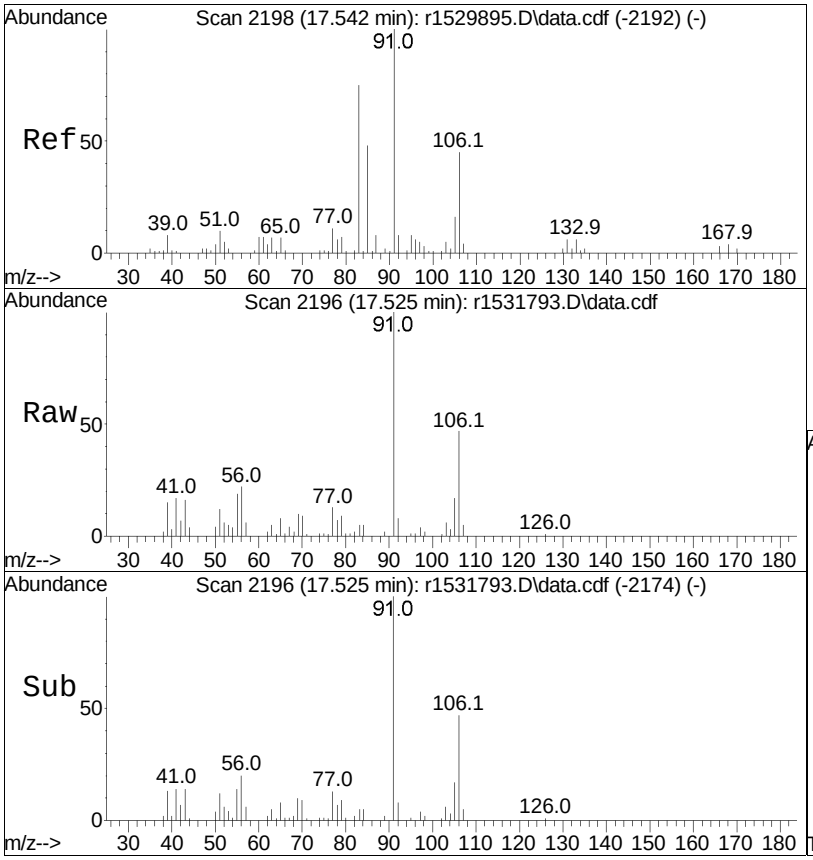


#86
1,1,2,2-tetrachloroethane
Concen: 0.05 ppbV
RT: 17.54 min Scan# 2198
Delta R.T. 0.000 min
Lab File: r1531793.D
Acq: 21 Mar 2022 12:22 AM

Tgt Ion: 83 Resp: 2772

Ion	Ratio	Lower	Upper
83	100		
85	20.8	51.5	77.3#

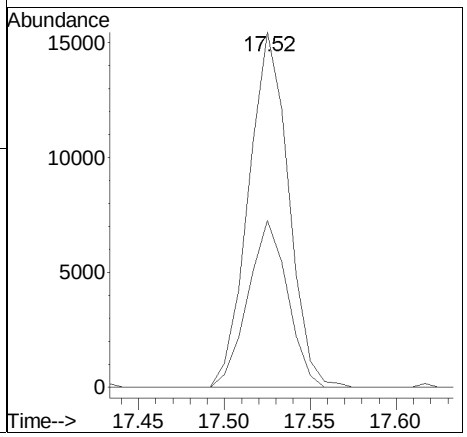


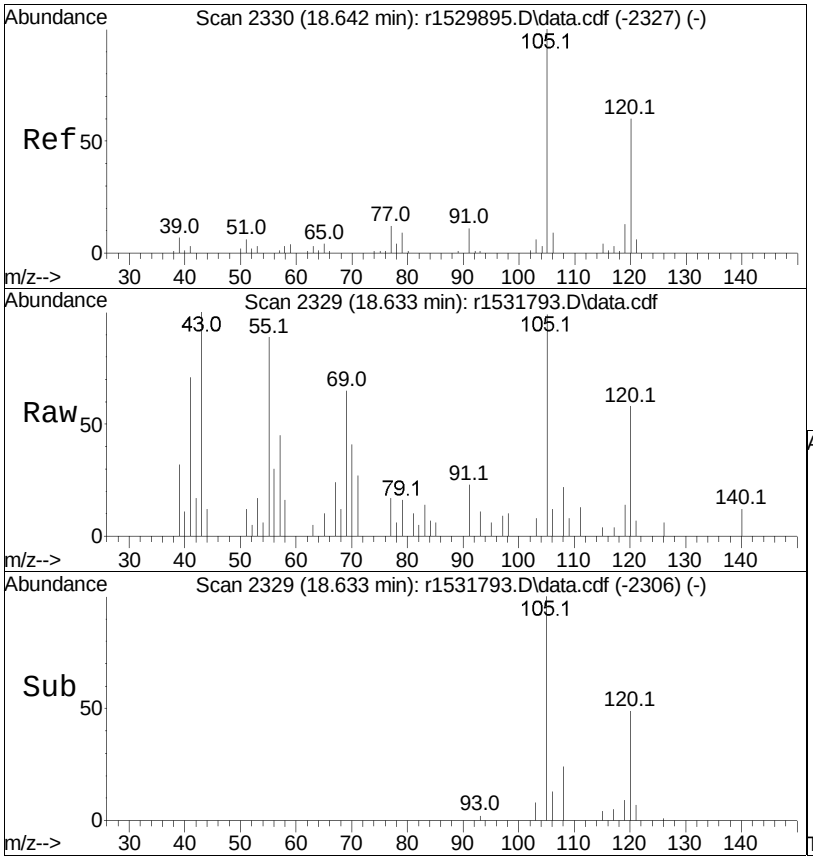


#87
o-xylene
Concen: 0.34 ppbV
RT: 17.52 min Scan# 2196
Delta R.T. -0.017 min
Lab File: r1531793.D
Acq: 21 Mar 2022 12:22 AM

Tgt Ion: 91 Resp: 25043

Ion	Ratio	Lower	Upper
91	100		
106	47.0	35.8	53.8

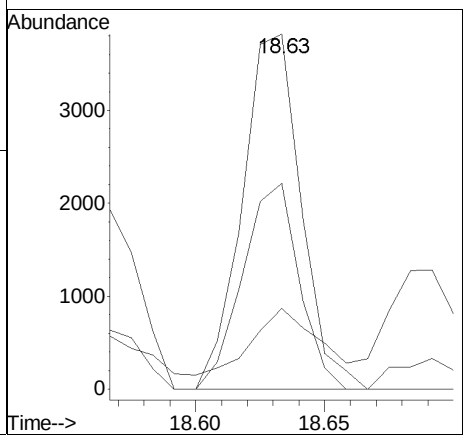


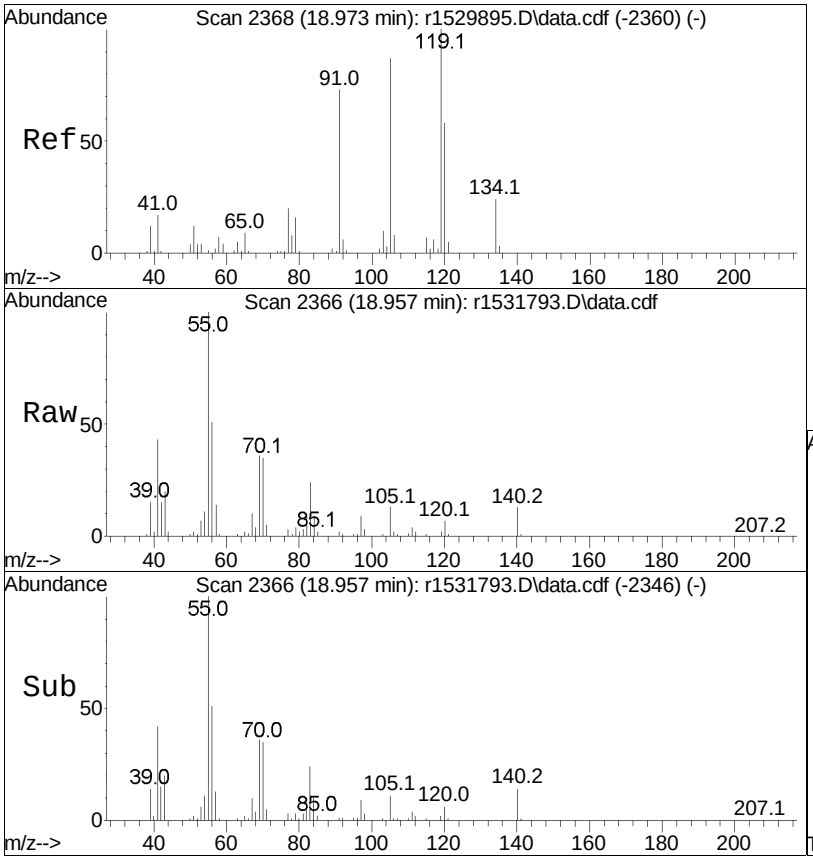


#97
1,3,5-trimethylbenzene
Concen: 0.08 ppbV
RT: 18.63 min Scan# 2329
Delta R.T. -0.008 min
Lab File: r1531793.D
Acq: 21 Mar 2022 12:22 AM

Tgt Ion:105 Resp: 6066

Ion	Ratio	Lower	Upper
105	100		
120	58.0	47.7	71.5
91	22.8	8.5	12.7#

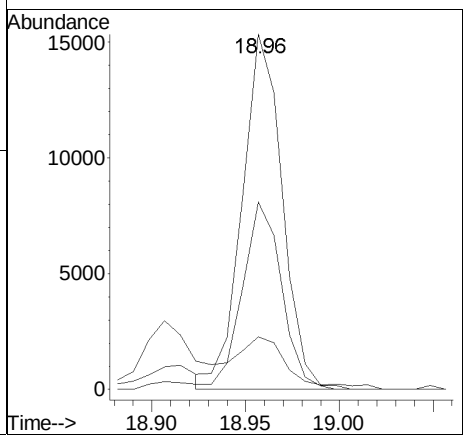




#99
1,2,4-trimethylbenzene
Concen: 0.30 ppbV
RT: 18.96 min Scan# 2366
Delta R.T. -0.017 min
Lab File: r1531793.D
Acq: 21 Mar 2022 12:22 AM

Tgt Ion:105 Resp: 22879

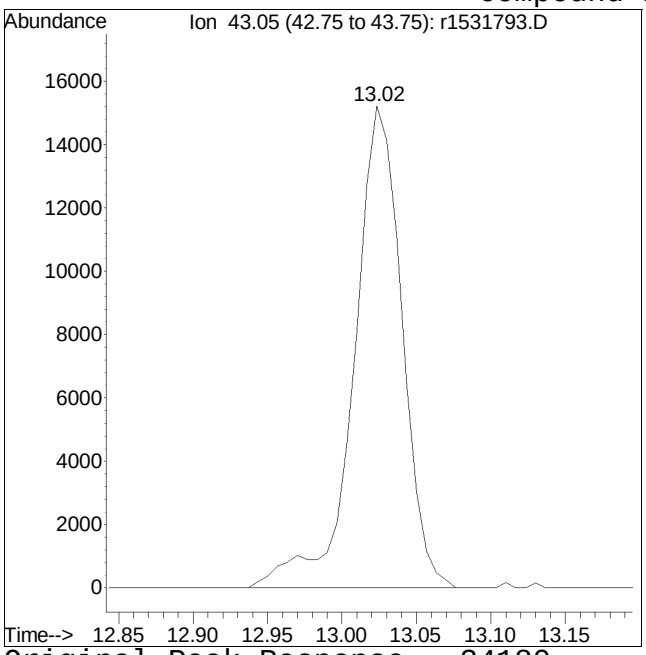
Ion	Ratio	Lower	Upper
105	100		
120	52.7	52.7	79.1#
91	14.8	67.2	100.8#



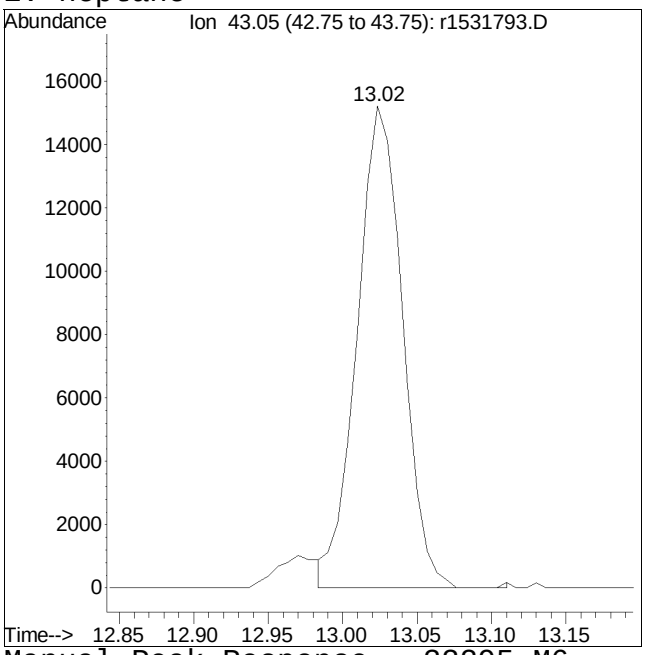
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airlab15\QMethod : TFS15_211222.M
Data File : r1531793.D Operator : AIRLAB15:RY
Date Inj'd : 3/21/2020 0:2: 2 Instrument :
Sample : L2213657-04D,3,189.9,250 Quant Date : 3/21/2022 8:54 am

Compound #62: heptane



Original Peak Response = 34180



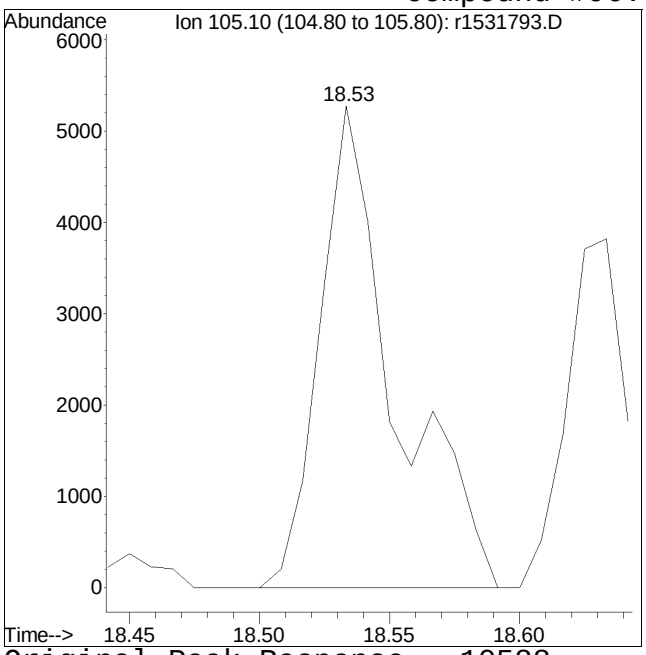
Manual Peak Response = 32295 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

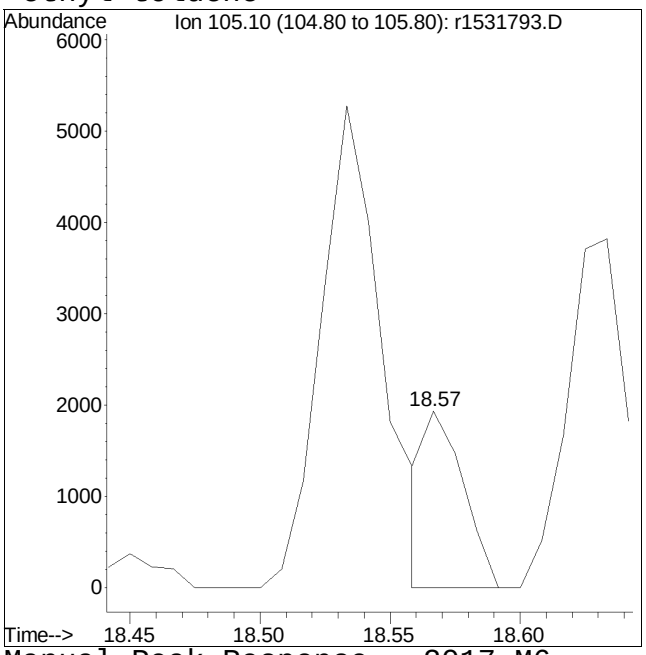
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airlab15\QMethod : TFS15_211222.M
Data File : r1531793.D Operator : AIRLAB15:RY
Date Inj'd : 3/21/2020 0:2: 2 Instrument :
Sample : L2213657-04D,3,189.9,250 Quant Date : 3/21/2022 8:54 am

Compound #96: 4-ethyl toluene



Original Peak Response = 10588



Manual Peak Response = 2017 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531799.D
Acq On : 21 Mar 2022 9:06 AM
Operator : AIRLAB15:RY
Sample : L2213657-05D,3,50,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 09:47:01 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320T\r1531778.D
Sub List : ETOH_Only - Sub List Unknown

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.57	49	366355	10.000	ppbV	-0.05
Standard Area = 382239			Recovery = 95.84%			
43) 1,4-difluorobenzene	11.84	114	769840	10.000	ppbV	-0.05
Standard Area = 859136			Recovery = 89.61%			
67) chlorobenzene-D5	16.53	54	184461	10.000	ppbV	-0.06
Standard Area = 200634			Recovery = 91.94%			
System Monitoring Compounds						
Target Compounds						Qvalue
15) ethanol	5.27	31	3369582	320.762	ppbV	100

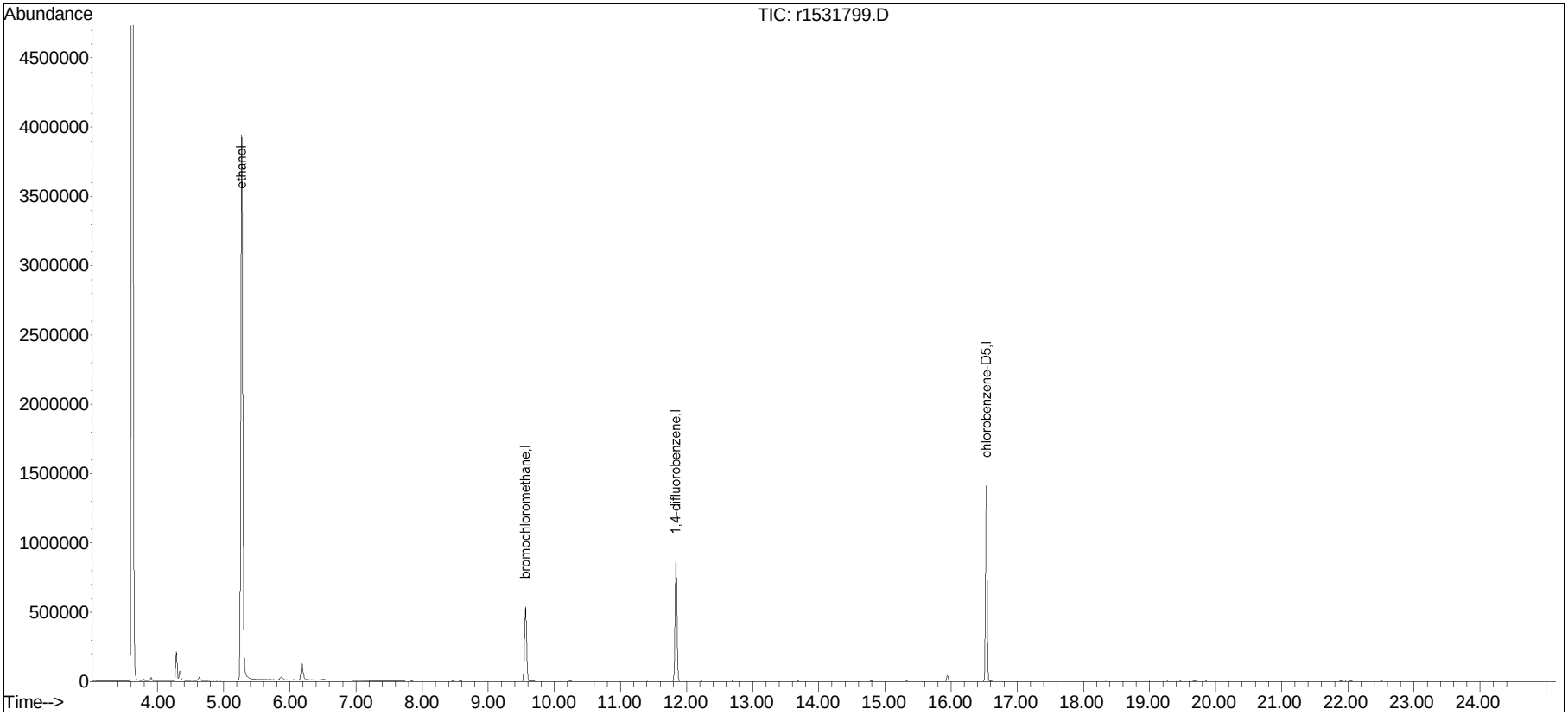
(#) = qualifier out of range (m) = manual integration (+) = signals summed

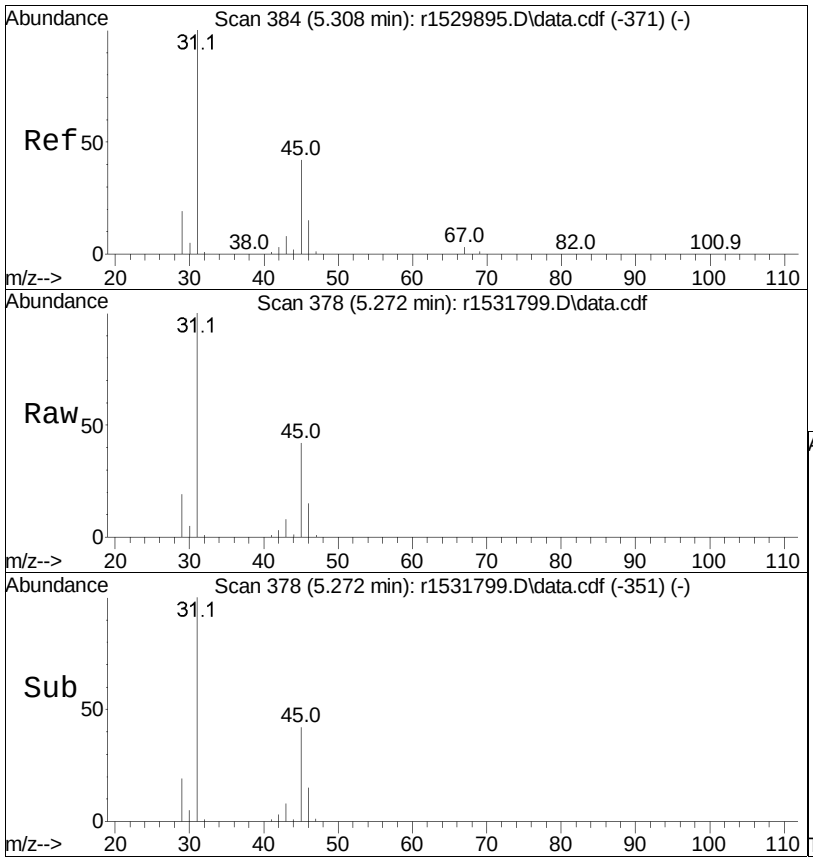
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531799.D
Acq On : 21 Mar 2022 9:06 AM
Operator : AIRLAB15:RY
Sample : L2213657-05D,3,50,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 09:47:01 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

Sub List : ETOH_Only - Sub List Unknown022\03\0320T\r1531778.D

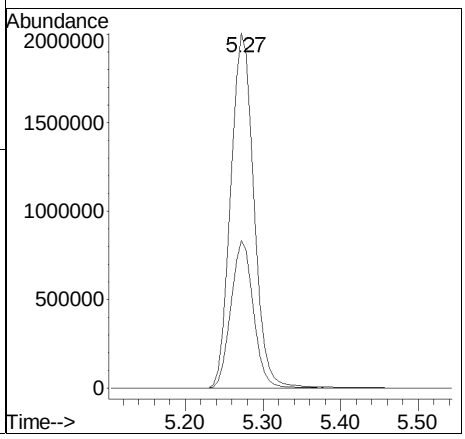




#15
ethanol
Concen: 320.76 ppbV
RT: 5.27 min Scan# 378
Delta R.T. -0.036 min
Lab File: r1531799.D
Acq: 21 Mar 2022 9:06 AM

Tgt Ion: 31 Resp: 3369582

Ion	Ratio	Lower	Upper
31	100		
45	41.6	33.4	50.2



Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\Airlab15\	QMethod	: TFS15_211222.M
Data File	: r1531799.D	Operator	: AIRLAB15:RY
Date Inj'd	: 3/21/2020 0:9: 6	Instrument	:
Sample	: L2213657-05D,3,50,250	Quant Date	: 3/21/2022 9:47 am

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

Volatiles Standards Data

Initial Calibration

Initial Calibration Summary
Form 6
Air Volatiles

Client	**: Roux Env. Eng. & Geology, DPC**	**Lab Number**	**: L2213657**
Project Name	**: FORMER CLEAN ZONE DRY CLEANERS**	**Project Number**	**: 2546.0007Y002**
Instrument ID	**: AIRLAB15**	**Ical Ref**	**: ICAL18600**
Calibration dates	**: 12/22/21 06:12 12/22/21 10:49**		

Calibration Files

0.2 =r1529891.D 0.5 =r1529892.D 1.0 =r1529893.D 5.0 =r1529894.D 10 =r1529895.D 20 =r1529896.D

50 =r1529897.D 100 =r1529898.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
1)	I	bromochloromethane	----------ISTD----------									
2)		chlorodifluoromethane	0.850	0.792	0.765	0.697	0.647	0.677	0.613	0.579	0.7025	13.23
3)		propylene		0.429	0.428	0.386	0.375	0.407	0.373	0.384	0.3975	6.01
4)		propane		0.761	0.711	0.609	0.557	0.577	0.512	0.469	0.5994	17.42
5)		dichlorodifluoromethane	0.894	0.859	0.811	0.766	0.703	0.696	0.619	0.569	0.7396	15.41
6)	C	chloromethane	0.435	0.404	0.389	0.370	0.348	0.356	0.327	0.319	0.3686	10.71
7)		Freon-114	1.063	0.989	0.971	0.912	0.853	0.846	0.747	0.679	0.8825	14.50
8)	C	methanol			0.289	0.214	0.197	0.202	0.176	0.159	0.2063	21.74
9)	C	vinyl chloride	0.557	0.525	0.518	0.488	0.468	0.474	0.432	0.410	0.4841	10.11
10)	C	1,3-butadiene	0.429	0.395	0.397	0.354	0.338	0.351	0.315	0.298	0.3595	12.33
11)		butane	0.914	0.814	0.774	0.705	0.673	0.725	0.683	0.668	0.7446	11.48
12)	C	acetaldehyde		0.270	0.253	0.229	0.207	0.200	0.166	0.140	0.2091	22.06
13)	C	bromomethane	0.438	0.411	0.394	0.366	0.354	0.351	0.316	0.297	0.3659	12.87
14)	C	chloroethane	0.260	0.254	0.253	0.242	0.235	0.237	0.220	0.212	0.2392	7.09
15)		ethanol			0.383	0.304	0.318	0.305	0.244	0.167	0.2867	25.59
16)		dichlorofluoromethane	1.002	0.939	0.891	0.859	0.816	0.884	0.650	0.642	0.8354	15.44
17)	C	vinyl bromide	0.367	0.346	0.329	0.315	0.305	0.337	0.318	0.303	0.3274	6.66
18)	C	acrolein		0.223	0.211	0.195	0.189	0.202	0.182	0.176	0.1969	8.30
19)		acetone	0.723	0.627	0.600	0.546	0.530	0.557	0.506	0.481	0.5713	13.54
20)	C	acetonitrile	0.521	0.484	0.476	0.418	0.416	0.446	0.418	0.407	0.4484	9.18
21)		trichlorofluoromethane	0.842	0.770	0.743	0.708	0.682	0.700	0.631	0.599	0.7095	10.86
22)		isopropyl alcohol	0.705	0.627	0.609	0.581	0.578	0.640	0.604	0.596	0.6174	6.65
23)	C	acrylonitrile	0.390	0.371	0.360	0.339	0.332	0.363	0.324	0.313	0.3492	7.48
24)		pentane	1.017	0.906	1.140	1.030	0.974	1.152	1.062	1.070	1.0439	7.81
25)		ethyl ether	0.827	0.784	0.760	0.711	0.682	0.790	0.598	0.507	0.7073	15.36
26)	C	1,1-dichloroethene	0.772	0.729	0.709	0.687	0.666	0.695	0.613	0.572	0.6805	9.36
27)		tertiary butyl alcohol		0.851	0.847	0.781	0.767	0.852	0.766	0.726	0.7986	6.40
28)	C	methylene chloride		0.536	0.517	0.470	0.457	0.473	0.422	0.405	0.4685	10.03
29)	C	3-chloropropene	0.674	0.611	0.599	0.576	0.558	0.628	0.599	0.598	0.6056	5.74
30)	C	carbon disulfide	0.968	0.919	0.911	0.929	0.957	1.084	1.017	0.991	0.9719	5.96
31)		Freon 113	0.839	0.761	0.740	0.717	0.685	0.716	0.651	0.608	0.7145	9.81
32)		trans-1,2-dichloroethene	0.835	0.818	0.771	0.728	0.708	0.796	0.756	0.730	0.7679	5.92
33)	C	1,1-dichloroethane	0.942	0.920	0.900	0.875	0.862	0.916	0.875	0.867	0.8947	3.27
34)	C	MTBE	1.097	1.085	1.064	0.996	0.985	1.094	1.018	0.999	1.0422	4.57
35)	C	vinyl acetate	0.915	0.891	0.880	0.864	0.899	1.070	1.041	1.049	0.9513	9.06
36)	C	2-butanone		1.039	1.046	0.982	0.971	1.078	1.021	1.004	1.0200	3.67

Initial Calibration Summary
Form 6
Air Volatiles

Client	**: Roux Env. Eng. & Geology, DPC**	**Lab Number**	**: L2213657**
Project Name	**: FORMER CLEAN ZONE DRY CLEANERS**	**Project Number**	**: 2546.0007Y002**
Instrument ID	**: AIRLAB15**	**Ical Ref**	**: ICAL18600**
Calibration dates	**: 12/22/21 06:12 12/22/21 10:49**		

Calibration Files

0.2 =r1529891.D 0.5 =r1529892.D 1.0 =r1529893.D 5.0 =r1529894.D 10 =r1529895.D 20 =r1529896.D

50 =r1529897.D 100 =r1529898.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
37)		cis-1,2-dichloroethene	0.761	0.730	0.718	0.696	0.684	0.734	0.697	0.671	0.7112	4.18
38)		Ethyl Acetate		0.188	0.181	0.177	0.173	0.198	0.195	0.183	0.1849	4.90
39)	C	chloroform	0.984	0.926	0.893	0.851	0.836	0.865	0.753	0.662	0.8461	11.86
40)		Tetrahydrofuran		0.630	0.635	0.602	0.605	0.673	0.648	0.645	0.6340	3.95
41)		2,2-dichloropropane	0.604	0.567	0.572	0.551	0.552	0.621	0.564	0.529	0.5701	5.18
42)	C	1,2-dichloroethane	0.662	0.640	0.614	0.592	0.577	0.614	0.598	0.570	0.6085	5.15
43)	I	1,4-difluorobenzene	----------ISTD----------									
44)	C	hexane	0.468	0.453	0.438	0.410	0.410	0.452	0.400	0.341	0.4218	9.66
45)		diisopropyl ether	0.203	0.200	0.201	0.185	0.182	0.203	0.177	0.153	0.1880	9.19
46)		tert-butyl ethyl ether	0.748	0.738	0.723	0.683	0.680	0.758	0.691	0.643	0.7079	5.62
47)	s	1,2-dichloroethane-D4	0.294	0.290	0.293	0.290	0.291	0.290	0.285	0.287	0.2900	1.01
48)	C	1,1,1-trichloroethane	0.297	0.288	0.283	0.284	0.285	0.309	0.283	0.271	0.2874	3.89
49)		1,1-dichloropropene	0.309	0.296	0.294	0.276	0.277	0.305	0.275	0.262	0.2867	5.77
50)	C	benzene	0.936	0.762	0.724	0.664	0.652	0.689	0.618	0.573	0.7021	15.85
51)		thiophene	0.464	0.442	0.437	0.414	0.416	0.456	0.402	0.359	0.4238	7.99
52)	C	carbon tetrachloride	0.271	0.255	0.252	0.256	0.260	0.278	0.244	0.221	0.2545	6.75
53)		cyclohexane	0.477	0.472	0.470	0.435	0.437	0.483	0.440	0.398	0.4515	6.43
54)		tert-amyl methyl ether	0.570	0.533	0.521	0.499	0.503	0.554	0.515	0.497	0.5241	5.06
55)		dibromomethane	0.261	0.235	0.224	0.209	0.208	0.229	0.210	0.187	0.2203	10.06
56)	C	1,2-dichloropropane	0.289	0.270	0.258	0.253	0.251	0.270	0.256	0.246	0.2617	5.27
57)		bromodichloromethane	0.372	0.359	0.363	0.360	0.365	0.408	0.356	0.318	0.3626	6.70
58)	C	1,4-dioxane	0.174	0.162	0.165	0.158	0.159	0.179	0.161	0.141	0.1622	7.00
59)	C	trichloroethene	0.275	0.274	0.276	0.264	0.261	0.279	0.256	0.229	0.2642	6.18
60)	C	2,2,4-trimethylpentane	1.569	1.492	1.484	1.385	1.340	1.470	1.308	1.144	1.3990	9.62
61)		methyl methacrylate		0.291	0.290	0.285	0.290	0.316	0.295	0.289	0.2938	3.51
62)		heptane	0.500	0.479	0.482	0.446	0.444	0.491	0.444	0.423	0.4636	6.00
63)	C	cis-1,3-dichloropropene	0.280	0.279	0.276	0.294	0.305	0.332	0.307	0.296	0.2961	6.32
64)	C	4-methyl-2-pentanone		0.515	0.520	0.508	0.508	0.570	0.527	0.504	0.5217	4.34
65)		trans-1,3-dichloropropene	0.240	0.246	0.250	0.273	0.286	0.312	0.290	0.283	0.2725	9.23
66)	C	1,1,2-trichloroethane	0.263	0.247	0.249	0.241	0.239	0.256	0.246	0.234	0.2467	3.86
67)	I	chlorobenzene-D5	----------ISTD----------									
68)	C	toluene	4.858	3.975	3.698	3.469	3.434	3.690	3.467	3.201	3.7240	13.77
69)	s	toluene-D8	4.014	3.951	4.079	4.088	4.086	4.164	4.418	4.764	4.1958	6.39
70)		2-methylthiophene	2.696	2.576	2.552	2.416	2.425	2.759	2.675	2.636	2.5920	4.79
71)		1,3-dichloropropane	1.710	1.586	1.612	1.468	1.456	1.621	1.502	1.460	1.5519	6.04
72)		2-hexanone	2.000	2.044	2.068	2.014	2.031	2.307	2.199	2.147	2.1012	5.12

Initial Calibration Summary
Form 6
Air Volatiles

Client	**: Roux Env. Eng. & Geology, DPC**	**Lab Number**	**: L2213657**
Project Name	**: FORMER CLEAN ZONE DRY CLEANERS**	**Project Number**	**: 2546.0007Y002**
Instrument ID	**: AIRLAB15**	**Ical Ref**	**: ICAL18600**
Calibration dates	**: 12/22/21 06:12 12/22/21 10:49**		

Calibration Files

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50 =r1529897.D 100 =r1529898.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
73)		3-methylthiophene	2.735	2.583	2.602	2.499	2.511	2.844	2.738	2.604	2.6394	4.59
74)		dibromochloromethane	1.284	1.252	1.286	1.369	1.410	1.624	1.534	1.426	1.3981	9.32
75)	C	1,2-dibromoethane	1.518	1.414	1.446	1.432	1.414	1.546	1.480	1.486	1.4670	3.32
76)		butyl acetate		0.331	0.340	0.351	0.357	0.412	0.404	0.411	0.3722	9.58
77)		octane	1.418	1.353	1.385	1.329	1.316	1.463	1.320	1.216	1.3499	5.53
78)	C	tetrachloroethene	1.375	1.331	1.311	1.280	1.270	1.356	1.264	1.150	1.2920	5.42
79)		1,1,1,2-tetrachloroethane	1.093	1.104	1.107	1.075	1.112	1.268	1.170	1.052	1.1226	6.05
80)	C	chlorobenzene	2.745	2.626	2.534	2.469	2.481	2.636	2.434	2.222	2.5183	6.29
81)	C	ethylbenzene	4.524	4.285	4.349	4.361	4.384	4.761	4.487	4.127	4.4097	4.24
82)		2-ethylthiophene	3.051	2.965	3.023	2.925	2.909	3.296	3.194	3.069	3.0539	4.37
83)	C	m+p-xylene	3.775	3.631	3.679	3.589	3.594	3.859	3.491	3.049	3.5834	6.82
84)	C	bromoform	0.974	0.930	0.994	1.076	1.170	1.377	1.312	1.196	1.1287	14.44
85)	C	styrene	2.459	2.412	2.451	2.461	2.521	2.733	2.665	2.622	2.5405	4.63
86)	C	1,1,2,2-tetrachloroethane	2.943	2.732	2.758	2.690	2.680	2.788	2.371	1.994	2.6194	11.42
87)	C	o-xylene	3.729	3.687	3.686	3.642	3.645	3.865	3.349	2.862	3.5580	8.88
88)		1,2,3-trichloropropane	2.097	2.000	2.026	1.862	1.854	2.049	1.923	1.859	1.9588	4.91
89)		nonane	3.314	3.147	3.161	2.960	2.954	3.243	2.959	2.771	3.0637	5.93
90)	s	bromofluorobenzene	2.774	2.789	2.978	3.033	3.038	3.146	3.228	3.476	3.0578	7.54
91)	C	isopropylbenzene	4.582	4.396	4.384	4.114	4.072	4.542	4.211	4.010	4.2887	5.08
92)		bromobenzene	2.778	2.605	2.637	2.457	2.428	2.679	2.472	2.321	2.5470	5.95
93)		2-chlorotoluene	1.341	1.283	1.311	1.251	1.260	1.439	1.340	1.215	1.3051	5.35
94)		n-propylbenzene	1.576	1.539	1.529	1.488	1.467	1.649	1.484	1.317	1.5061	6.40
95)		4-chlorotoluene	1.371	1.295	1.300	1.253	1.250	1.418	1.337	1.231	1.3069	4.96
96)		4-ethyl toluene	4.594	4.544	4.610	4.322	4.310	4.877	4.554	4.265	4.5093	4.52
97)		1,3,5-trimethylbenzene	3.924	3.826	3.883	3.798	3.759	4.068	3.802	3.525	3.8231	4.05
98)		tert-butylbenzene	4.437	4.456	4.477	4.280	4.188	4.360	3.617	3.075	4.1112	12.24
99)		1,2,4-trimethylbenzene	3.896	3.758	3.822	3.792	3.745	3.969	3.475	2.998	3.6819	8.47
100)		decane	4.219	4.160	4.213	4.016	4.046	4.453	3.901	3.277	4.0358	8.63
101)	C	Benzyl Chloride	1.772	1.834	1.950	2.114	2.388	3.086	3.012	2.763	2.3650	22.41
102)		1,3-dichlorobenzene	2.521	2.416	2.501	2.487	2.498	2.693	2.593	2.294	2.5002	4.69
103)	C	1,4-dichlorobenzene	2.495	2.406	2.415	2.399	2.475	2.699	2.488	2.327	2.4630	4.49
104)		sec-butylbenzene	5.637	5.477	5.607	5.352	5.329	5.842	5.452	4.831	5.4409	5.47
105)		1,2,3-trimethylbenzene	3.344	3.376	3.452	3.372	3.331	3.552	3.174	2.739	3.2926	7.54
106)		p-isopropyltoluene	5.397	5.326	5.336	5.151	5.050	5.324	4.409	3.663	4.9569	12.37
107)		1,2-dichlorobenzene	2.355	2.321	2.348	2.345	2.348	2.552	2.434	2.306	2.3760	3.38
108)		n-butylbenzene	4.865	4.811	4.945	4.875	4.861	5.317	4.742	4.165	4.8226	6.58

Initial Calibration Summary
Form 6
Air Volatiles

Client	**: Roux Env. Eng. & Geology, DPC**	**Lab Number**	**: L2213657**
Project Name	**: FORMER CLEAN ZONE DRY CLEANERS**	**Project Number**	**: 2546.0007Y002**
Instrument ID	**: AIRLAB15**	**Ical Ref**	**: ICAL18600**
Calibration dates	**: 12/22/21 06:12 12/22/21 10:49**		

Calibration Files
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50 =r1529897.D 100 =r1529898.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
109)		indan	3.828	3.899	3.965	3.870	3.863	4.088	3.756	3.394	3.8329	5.29
110)		indene	2.876	2.888	2.991	2.987	3.007	3.286	3.086	2.857	2.9972	4.69
111)	C	1,2-dibromo-3-chloropropane	0.825	0.891	0.963	0.997	1.025	1.144	1.096	1.076	1.0021	10.68
112)		undecane	4.021	4.339	4.571	4.653	4.622	4.993	4.312	3.567	4.3847	9.98
113)		1,2,4,5-tetramethylbenzene	3.654	3.870	4.094	3.186	3.155	4.403	3.961	3.631	3.7442	11.50
114)		dodecane	2.934	3.839	4.475	4.972	5.002	5.002	4.386	3.635	4.2806	17.65
115)	C	1,2,4-trichlorobenzene	1.259	1.435	1.614	1.829	1.943	2.063	1.972	1.844	1.7451	16.17
116)		naphthalene	3.995	4.778	5.286	5.519	5.768	6.102	5.885	5.359	5.3364	12.71
117)		1,2,3-trichlorobenzene	1.165	1.451	1.677	1.749	1.863	1.963	1.944	1.809	1.7026	15.98
118)		benzothiophene		6.521	7.468	5.960	6.369	8.861	8.331	7.179	7.2413	14.69
119)	C	hexachlorobutadiene	1.173	1.409	1.513	1.570	1.568	1.562	1.473	1.336	1.4505	9.65
120)		2-methylnaphthalene			0.826	0.586	0.685	1.024	1.291	1.436	0.9744	34.72#
121)		1-methylnaphthalene			1.705	1.363	1.529	2.106	2.567	2.671	1.9904	27.49

Response Factor Report

Method Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Method File : TFS15_211222.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Wed Dec 22 16:29:20 2021
Response Via : Initial Calibration

Calibration Files
0.2 =r1529891.D 0.5 =r1529892.D 1.0 =r1529893.D 5.0 =r1529894.D 10 =r1529895.D 20 =r1529896.D
50 =r1529897.D 100 =r1529898.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
1)	I	bromochloromethane	ISTD									
2)		chlorodifluoromethane	0.850	0.792	0.765	0.697	0.647	0.677	0.613	0.579	0.7025	13.23
3)		propylene		0.429	0.428	0.386	0.375	0.407	0.373	0.384	0.3975	6.01
4)		propane		0.761	0.711	0.609	0.557	0.577	0.512	0.469	0.5994	17.42
5)		dichlorodifluoromethane	0.894	0.859	0.811	0.766	0.703	0.696	0.619	0.569	0.7396	15.41
6)	C	chloromethane	0.435	0.404	0.389	0.370	0.348	0.356	0.327	0.319	0.3686	10.71
7)		Freon-114	1.063	0.989	0.971	0.912	0.853	0.846	0.747	0.679	0.8825	14.50
8)	C	methanol			0.289	0.214	0.197	0.202	0.176	0.159	0.2063	21.74
9)	C	vinyl chloride	0.557	0.525	0.518	0.488	0.468	0.474	0.432	0.410	0.4841	10.11
10)	C	1,3-butadiene	0.429	0.395	0.397	0.354	0.338	0.351	0.315	0.298	0.3595	12.33
11)		butane	0.914	0.814	0.774	0.705	0.673	0.725	0.683	0.668	0.7446	11.48
12)	C	acetaldehyde		0.270	0.253	0.229	0.207	0.200	0.166	0.140	0.2091	22.06
13)	C	bromomethane	0.438	0.411	0.394	0.366	0.354	0.351	0.316	0.297	0.3659	12.87
14)	C	chloroethane	0.260	0.254	0.253	0.242	0.235	0.237	0.220	0.212	0.2392	7.09
15)		ethanol			0.383	0.304	0.318	0.305	0.244	0.167	0.2867	25.59
16)		dichlorofluoromethane	1.002	0.939	0.891	0.859	0.816	0.884	0.650	0.642	0.8354	15.44
17)	C	vinyl bromide	0.367	0.346	0.329	0.315	0.305	0.337	0.318	0.303	0.3274	6.66
18)	C	acrolein		0.223	0.211	0.195	0.189	0.202	0.182	0.176	0.1969	8.30
19)		acetone	0.723	0.627	0.600	0.546	0.530	0.557	0.506	0.481	0.5713	13.54
20)	C	acetonitrile	0.521	0.484	0.476	0.418	0.416	0.446	0.418	0.407	0.4484	9.18
21)		trichlorofluoromethane	0.842	0.770	0.743	0.708	0.682	0.700	0.631	0.599	0.7095	10.86
22)		isopropyl alcohol	0.705	0.627	0.609	0.581	0.578	0.640	0.604	0.596	0.6174	6.65
23)	C	acrylonitrile	0.390	0.371	0.360	0.339	0.332	0.363	0.324	0.313	0.3492	7.48
24)		pentane	1.017	0.906	1.140	1.030	0.974	1.152	1.062	1.070	1.0439	7.81
25)		ethyl ether	0.827	0.784	0.760	0.711	0.682	0.790	0.598	0.507	0.7073	15.36
26)	C	1,1-dichloroethene	0.772	0.729	0.709	0.687	0.666	0.695	0.613	0.572	0.6805	9.36
27)		tertiary butyl alcohol		0.851	0.847	0.781	0.767	0.852	0.766	0.726	0.7986	6.40
28)	C	methylene chloride		0.536	0.517	0.470	0.457	0.473	0.422	0.405	0.4685	10.03
29)	C	3-chloropropene	0.674	0.611	0.599	0.576	0.558	0.628	0.599	0.598	0.6056	5.74
30)	C	carbon disulfide	0.968	0.919	0.911	0.929	0.957	1.084	1.017	0.991	0.9719	5.96
31)		Freon 113	0.839	0.761	0.740	0.717	0.685	0.716	0.651	0.608	0.7145	9.81

Response Factor Report

Method Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Method File : TFS15_211222.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Wed Dec 22 16:29:20 2021
Response Via : Initial Calibration

Calibration Files
0.2 =r1529891.D 0.5 =r1529892.D 1.0 =r1529893.D 5.0 =r1529894.D 10 =r1529895.D 20 =r1529896.D
50 =r1529897.D 100 =r1529898.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
32)		trans-1,2-dichloroethene	0.835	0.818	0.771	0.728	0.708	0.796	0.756	0.730	0.7679	5.92
33)	C	1,1-dichloroethane	0.942	0.920	0.900	0.875	0.862	0.916	0.875	0.867	0.8947	3.27
34)	C	MTBE	1.097	1.085	1.064	0.996	0.985	1.094	1.018	0.999	1.0422	4.57
35)	C	vinyl acetate	0.915	0.891	0.880	0.864	0.899	1.070	1.041	1.049	0.9513	9.06
36)	C	2-butanone		1.039	1.046	0.982	0.971	1.078	1.021	1.004	1.0200	3.67
37)		cis-1,2-dichloroethene	0.761	0.730	0.718	0.696	0.684	0.734	0.697	0.671	0.7112	4.18
38)		Ethyl Acetate		0.188	0.181	0.177	0.173	0.198	0.195	0.183	0.1849	4.90
39)	C	chloroform	0.984	0.926	0.893	0.851	0.836	0.865	0.753	0.662	0.8461	11.86
40)		Tetrahydrofuran		0.630	0.635	0.602	0.605	0.673	0.648	0.645	0.6340	3.95
41)		2,2-dichloropropane	0.604	0.567	0.572	0.551	0.552	0.621	0.564	0.529	0.5701	5.18
42)	C	1,2-dichloroethane	0.662	0.640	0.614	0.592	0.577	0.614	0.598	0.570	0.6085	5.15
43)	I	1,4-difluorobenzene	----------ISTD----------									
44)	C	hexane	0.468	0.453	0.438	0.410	0.410	0.452	0.400	0.341	0.4218	9.66
45)		diisopropyl ether	0.203	0.200	0.201	0.185	0.182	0.203	0.177	0.153	0.1880	9.19
46)		tert-butyl ethyl ether	0.748	0.738	0.723	0.683	0.680	0.758	0.691	0.643	0.7079	5.62
47)	s	1,2-dichloroethane-D4	0.294	0.290	0.293	0.290	0.291	0.290	0.285	0.287	0.2900	1.01
48)	C	1,1,1-trichloroethane	0.297	0.288	0.283	0.284	0.285	0.309	0.283	0.271	0.2874	3.89
49)		1,1-dichloropropene	0.309	0.296	0.294	0.276	0.277	0.305	0.275	0.262	0.2867	5.77
50)	C	benzene	0.936	0.762	0.724	0.664	0.652	0.689	0.618	0.573	0.7021	15.85
51)		thiophene	0.464	0.442	0.437	0.414	0.416	0.456	0.402	0.359	0.4238	7.99
52)	C	carbon tetrachloride	0.271	0.255	0.252	0.256	0.260	0.278	0.244	0.221	0.2545	6.75
53)		cyclohexane	0.477	0.472	0.470	0.435	0.437	0.483	0.440	0.398	0.4515	6.43
54)		tert-amyl methyl ether	0.570	0.533	0.521	0.499	0.503	0.554	0.515	0.497	0.5241	5.06
55)		dibromomethane	0.261	0.235	0.224	0.209	0.208	0.229	0.210	0.187	0.2203	10.06
56)	C	1,2-dichloropropane	0.289	0.270	0.258	0.253	0.251	0.270	0.256	0.246	0.2617	5.27
57)		bromodichloromethane	0.372	0.359	0.363	0.360	0.365	0.408	0.356	0.318	0.3626	6.70
58)	C	1,4-dioxane	0.174	0.162	0.165	0.158	0.159	0.179	0.161	0.141	0.1622	7.00
59)	C	trichloroethene	0.275	0.274	0.276	0.264	0.261	0.279	0.256	0.229	0.2642	6.18
60)	C	2,2,4-trimethylpentane	1.569	1.492	1.484	1.385	1.340	1.470	1.308	1.144	1.3990	9.62
61)		methyl methacrylate		0.291	0.290	0.285	0.290	0.316	0.295	0.289	0.2938	3.51
62)		heptane	0.500	0.479	0.482	0.446	0.444	0.491	0.444	0.423	0.4636	6.00

Response Factor Report

Method Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Method File : TFS15_211222.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Wed Dec 22 16:29:20 2021
Response Via : Initial Calibration

Calibration Files
0.2 =r1529891.D 0.5 =r1529892.D 1.0 =r1529893.D 5.0 =r1529894.D 10 =r1529895.D 20 =r1529896.D
50 =r1529897.D 100 =r1529898.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
63)	C	cis-1,3-dichloropropene	0.280	0.279	0.276	0.294	0.305	0.332	0.307	0.296	0.2961	6.32
64)	C	4-methyl-2-pentanone		0.515	0.520	0.508	0.508	0.570	0.527	0.504	0.5217	4.34
65)		trans-1,3-dichloropropene	0.240	0.246	0.250	0.273	0.286	0.312	0.290	0.283	0.2725	9.23
66)	C	1,1,2-trichloroethane	0.263	0.247	0.249	0.241	0.239	0.256	0.246	0.234	0.2467	3.86
67)	I	chlorobenzene-D5	----------	ISTD	----------							
68)	C	toluene	4.858	3.975	3.698	3.469	3.434	3.690	3.467	3.201	3.7240	13.77
69)	s	toluene-D8	4.014	3.951	4.079	4.088	4.086	4.164	4.418	4.764	4.1958	6.39
70)		2-methylthiophene	2.696	2.576	2.552	2.416	2.425	2.759	2.675	2.636	2.5920	4.79
71)		1,3-dichloropropane	1.710	1.586	1.612	1.468	1.456	1.621	1.502	1.460	1.5519	6.04
72)		2-hexanone	2.000	2.044	2.068	2.014	2.031	2.307	2.199	2.147	2.1012	5.12
73)		3-methylthiophene	2.735	2.583	2.602	2.499	2.511	2.844	2.738	2.604	2.6394	4.59
74)		dibromochloromethane	1.284	1.252	1.286	1.369	1.410	1.624	1.534	1.426	1.3981	9.32
75)	C	1,2-dibromoethane	1.518	1.414	1.446	1.432	1.414	1.546	1.480	1.486	1.4670	3.32
76)		butyl acetate		0.331	0.340	0.351	0.357	0.412	0.404	0.411	0.3722	9.58
77)		octane	1.418	1.353	1.385	1.329	1.316	1.463	1.320	1.216	1.3499	5.53
78)	C	tetrachloroethene	1.375	1.331	1.311	1.280	1.270	1.356	1.264	1.150	1.2920	5.42
79)		1,1,1,2-tetrachloroethane	1.093	1.104	1.107	1.075	1.112	1.268	1.170	1.052	1.1226	6.05
80)	C	chlorobenzene	2.745	2.626	2.534	2.469	2.481	2.636	2.434	2.222	2.5183	6.29
81)	C	ethylbenzene	4.524	4.285	4.349	4.361	4.384	4.761	4.487	4.127	4.4097	4.24
82)		2-ethylthiophene	3.051	2.965	3.023	2.925	2.909	3.296	3.194	3.069	3.0539	4.37
83)	C	m+p-xylene	3.775	3.631	3.679	3.589	3.594	3.859	3.491	3.049	3.5834	6.82
84)	C	bromoform	0.974	0.930	0.994	1.076	1.170	1.377	1.312	1.196	1.1287	14.44
85)	C	styrene	2.459	2.412	2.451	2.461	2.521	2.733	2.665	2.622	2.5405	4.63
86)	C	1,1,2,2-tetrachloroethane	2.943	2.732	2.758	2.690	2.680	2.788	2.371	1.994	2.6194	11.42
87)	C	o-xylene	3.729	3.687	3.686	3.642	3.645	3.865	3.349	2.862	3.5580	8.88
88)		1,2,3-trichloropropane	2.097	2.000	2.026	1.862	1.854	2.049	1.923	1.859	1.9588	4.91
89)		nonane	3.314	3.147	3.161	2.960	2.954	3.243	2.959	2.771	3.0637	5.93
90)	s	bromofluorobenzene	2.774	2.789	2.978	3.033	3.038	3.146	3.228	3.476	3.0578	7.54
91)	C	isopropylbenzene	4.582	4.396	4.384	4.114	4.072	4.542	4.211	4.010	4.2887	5.08
92)		bromobenzene	2.778	2.605	2.637	2.457	2.428	2.679	2.472	2.321	2.5470	5.95
93)		2-chlorotoluene	1.341	1.283	1.311	1.251	1.260	1.439	1.340	1.215	1.3051	5.35

Response Factor Report

Method Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Method File : TFS15_211222.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Wed Dec 22 16:29:20 2021
Response Via : Initial Calibration

Calibration Files
0.2 =r1529891.D 0.5 =r1529892.D 1.0 =r1529893.D 5.0 =r1529894.D 10 =r1529895.D 20 =r1529896.D
50 =r1529897.D 100 =r1529898.D

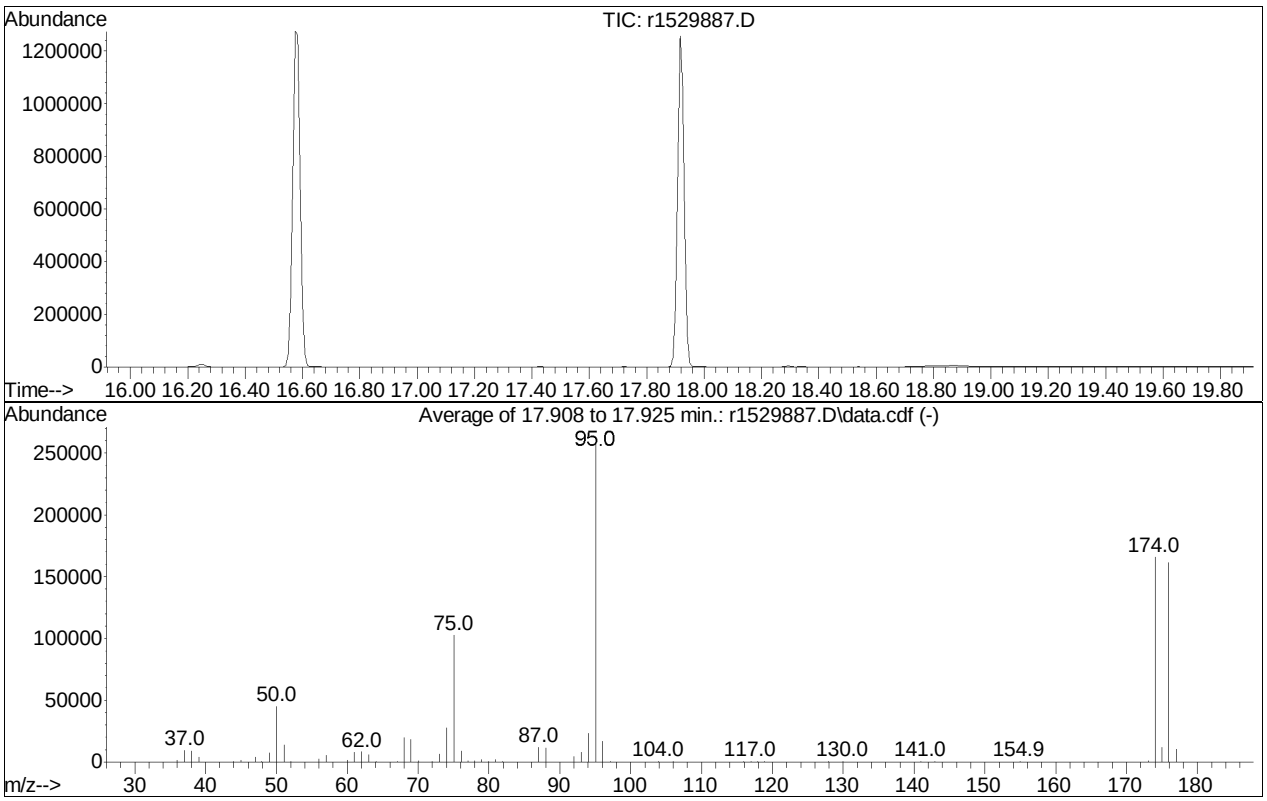
		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
94)		n-propylbenzene	1.576	1.539	1.529	1.488	1.467	1.649	1.484	1.317	1.5061	6.40
95)		4-chlorotoluene	1.371	1.295	1.300	1.253	1.250	1.418	1.337	1.231	1.3069	4.96
96)		4-ethyl toluene	4.594	4.544	4.610	4.322	4.310	4.877	4.554	4.265	4.5093	4.52
97)		1,3,5-trimethylbenzene	3.924	3.826	3.883	3.798	3.759	4.068	3.802	3.525	3.8231	4.05
98)		tert-butylbenzene	4.437	4.456	4.477	4.280	4.188	4.360	3.617	3.075	4.1112	12.24
99)		1,2,4-trimethylbenzene	3.896	3.758	3.822	3.792	3.745	3.969	3.475	2.998	3.6819	8.47
100)		decane	4.219	4.160	4.213	4.016	4.046	4.453	3.901	3.277	4.0358	8.63
101)	C	Benzyl Chloride	1.772	1.834	1.950	2.114	2.388	3.086	3.012	2.763	2.3650	22.41
102)		1,3-dichlorobenzene	2.521	2.416	2.501	2.487	2.498	2.693	2.593	2.294	2.5002	4.69
103)	C	1,4-dichlorobenzene	2.495	2.406	2.415	2.399	2.475	2.699	2.488	2.327	2.4630	4.49
104)		sec-butylbenzene	5.637	5.477	5.607	5.352	5.329	5.842	5.452	4.831	5.4409	5.47
105)		1,2,3-trimethylbenzene	3.344	3.376	3.452	3.372	3.331	3.552	3.174	2.739	3.2926	7.54
106)		p-isopropyltoluene	5.397	5.326	5.336	5.151	5.050	5.324	4.409	3.663	4.9569	12.37
107)		1,2-dichlorobenzene	2.355	2.321	2.348	2.345	2.348	2.552	2.434	2.306	2.3760	3.38
108)		n-butylbenzene	4.865	4.811	4.945	4.875	4.861	5.317	4.742	4.165	4.8226	6.58
109)		indan	3.828	3.899	3.965	3.870	3.863	4.088	3.756	3.394	3.8329	5.29
110)		indene	2.876	2.888	2.991	2.987	3.007	3.286	3.086	2.857	2.9972	4.69
111)	C	1,2-dibromo-3-chloropropane	0.825	0.891	0.963	0.997	1.025	1.144	1.096	1.076	1.0021	10.68
112)		undecane	4.021	4.339	4.571	4.653	4.622	4.993	4.312	3.567	4.3847	9.98
113)		1,2,4,5-tetramethylbenzene	3.654	3.870	4.094	3.186	3.155	4.403	3.961	3.631	3.7442	11.50
114)		dodecane	2.934	3.839	4.475	4.972	5.002	5.002	4.386	3.635	4.2806	17.65
115)	C	1,2,4-trichlorobenzene	1.259	1.435	1.614	1.829	1.943	2.063	1.972	1.844	1.7451	16.17
116)		naphthalene	3.995	4.778	5.286	5.519	5.768	6.102	5.885	5.359	5.3364	12.71
117)		1,2,3-trichlorobenzene	1.165	1.451	1.677	1.749	1.863	1.963	1.944	1.809	1.7026	15.98
118)		benzothiophene		6.521	7.468	5.960	6.369	8.861	8.331	7.179	7.2413	14.69
119)	C	hexachlorobutadiene	1.173	1.409	1.513	1.570	1.568	1.562	1.473	1.336	1.4505	9.65
120)		2-methylnaphthalene			0.826	0.586	0.685	1.024	1.291	1.436	0.9744	34.72#
121)		1-methylnaphthalene			1.705	1.363	1.529	2.106	2.567	2.671	1.9904	27.49

(#) = Out of Range

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529887.D
Acq On : 22 Dec 2021 3:37 AM
Operator : AIRLAB15:TS
Sample : WG1587794-1,3,250,250
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Integration File: rteint.p

Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Wed Dec 22 16:29:20 2021



Spectrum Information: Average of 17.908 to 17.925 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	17.4	44941	PASS
75	95	30	66	39.7	102569	PASS
95	95	100	100	100.0	258437	PASS
96	95	5	9	6.6	17137	PASS
173	174	0.00	2	0.7	1221	PASS
174	95	50	120	64.3	166067	PASS
175	174	4	9	7.2	11983	PASS
176	174	93	101	97.2	161429	PASS
177	176	5	9	6.6	10591	PASS

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529891.D
Acq On : 22 Dec 2021 6:12 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD0.2
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:21:46 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:24:36 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.600	49	346360	10.000	ppbV	-0.02
Standard Area = 354329			Recovery = 97.75%			
43) 1,4-difluorobenzene	11.877	114	805892	10.000	ppbV	0.00
Standard Area = 820934			Recovery = 98.17%			
67) chlorobenzene-D5	16.583	54	190077	10.000	ppbV	0.00
Standard Area = 194813			Recovery = 97.57%			
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.492	65	236994	10.110	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.10%			
69) toluene-D8	14.717	98	763061	9.824	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.24%			
90) bromofluorobenzene	17.925	95	527275	9.132	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 91.32%			
Target Compounds						Qvalue
2) chlorodifluoromethane	3.862	51	5887	0.263	ppbV	98
3) propylene	3.898	41	3372M6	0.260	ppbV	
4) propane	3.922	29	6530	0.338	ppbV	97
5) dichlorodifluoromethane	3.976	85	6196	0.255	ppbV	95
6) chloromethane	4.162	50	3016	0.251	ppbV	95
7) Freon-114	4.288	85	7362	0.249	ppbV	97
8) methanol	4.360	31	15387	2.249	ppbV #	58
9) vinyl chloride	4.420	62	3861	0.238	ppbV	100
10) 1,3-butadiene	4.588	54	2969	0.253	ppbV	95
11) butane	4.654	43	6333	0.272	ppbV	100
12) acetaldehyde	4.306	29	10634	1.484	ppbV	89
13) bromomethane	4.912	94	3034	0.248	ppbV	87
14) chloroethane	5.134	64	1804	0.222	ppbV #	88
15) ethanol	5.308	31	16441	1.493	ppbV	99
16) dichlorofluoromethane	5.272	67	6940	0.246	ppbV	97
17) vinyl bromide	5.563	106	2544	0.241	ppbV	85
18) acrolein	5.727	56	1572	0.240	ppbV #	82
19) acetone	5.890	43	25038	1.365	ppbV #	95
20) acetonitrile	5.560	41	3611	0.250	ppbV #	76
21) trichlorofluoromethane	6.087	101	5831	0.247	ppbV	97
22) isopropyl alcohol	6.217	45	12205	0.609	ppbV	98
23) acrylonitrile	6.470	53	2704	0.235	ppbV	92
24) pentane	6.543	43	7043	0.266	ppbV	96

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529891.D
Acq On : 22 Dec 2021 6:12 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD0.2
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:21:46 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:24:36 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) ethyl ether	6.583	31	5728	0.243	ppbV		93
26) 1,1-dichloroethene	6.870	61	5348	0.232	ppbV		98
27) tertiary butyl alcohol	6.960	59	6241	0.235	ppbV	#	93
28) methylene chloride	7.032	49	4199	0.265	ppbV		94
29) 3-chloropropene	7.182	41	4672	0.242	ppbV		94
30) carbon disulfide	7.332	76	6705	0.202	ppbV	#	1
31) Freon 113	7.368	101	5810	0.245	ppbV		91
32) trans-1,2-dichloroethene	8.175	61	5781	0.236	ppbV		97
33) 1,1-dichloroethane	8.408	63	6527	0.219	ppbV		97
34) MTBE	8.508	73	7601	0.223	ppbV		92
35) vinyl acetate	8.633	43	6341	0.204	ppbV	#	91
36) 2-butanone	8.917	43	7809	0.232	ppbV		96
37) cis-1,2-dichloroethene	9.408	61	5269	0.222	ppbV		98
38) Ethyl Acetate	9.725	61	1544	0.258	ppbV		94
39) chloroform	9.767	83	6813	0.235	ppbV		94
40) Tetrahydrofuran	10.233	42	4579	0.218	ppbV		94
41) 2,2-dichloropropane	9.783	77	4183	0.219	ppbV	#	85
42) 1,2-dichloroethane	10.617	62	4589	0.230	ppbV		97
44) hexane	9.675	57	7551	0.229	ppbV	#	78
45) diisopropyl ether	9.692	87	3265	0.222	ppbV		92
46) tert-butyl ethyl ether	10.325	59	12057	0.220	ppbV		98
48) 1,1,1-trichloroethane	10.903	97	4781	0.208	ppbV		93
49) 1,1-dichloropropene	11.283	75	4981	0.223	ppbV		94
50) benzene	11.437	78	15085	0.287	ppbV		98
51) thiophene	11.590	84	7474	0.223	ppbV		92
52) carbon tetrachloride	11.617	117	4363	0.208	ppbV		96
53) cyclohexane	11.757	56	7693	0.219	ppbV		96
54) tert-amyl methyl ether	12.157	73	9182	0.227	ppbV		99
55) dibromomethane	12.370	93	4202	0.250	ppbV		94
56) 1,2-dichloropropane	12.397	63	4654	0.230	ppbV		96
57) bromodichloromethane	12.630	83	5998	0.204	ppbV		99
58) 1,4-dioxane	12.690	88	2798	0.219	ppbV		95
59) trichloroethene	12.677	130	4428	0.211	ppbV		95
60) 2,2,4-trimethylpentane	12.723	57	25292	0.229	ppbV		95
61) methyl methacrylate	12.937	41	4655	0.199	ppbV		95
62) heptane	13.043	43	8062	0.225	ppbV		98
63) cis-1,3-dichloropropene	13.692	75	4519	0.184	ppbV		98
64) 4-methyl-2-pentanone	13.750	43	8235	0.201	ppbV		96
65) trans-1,3-dichloropropene	14.317	75	3872	0.168	ppbV	#	88
66) 1,1,2-trichloroethane	14.517	97	4241	0.220	ppbV		95

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529891.D
Acq On : 22 Dec 2021 6:12 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD0.2
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:21:46 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:24:36 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.825	91	18468	0.283	ppbV	97
70) 2-methylthiophene	14.892	97	10248	0.222	ppbV	96
71) 1,3-dichloropropane	14.858	76	6500	0.235	ppbV	96
72) 2-hexanone	15.117	43	7602	0.197	ppbV	93
73) 3-methylthiophene	15.083	97	10398	0.218	ppbV	96
74) dibromochloromethane	15.267	129	4880	0.182	ppbV #	92
75) 1,2-dibromoethane	15.517	107	5771	0.215	ppbV	95
76) butyl acetate	15.767	73	1127	0.166	ppbV	92
77) octane	15.850	85	5392	0.216	ppbV	92
78) tetrachloroethene	15.983	166	5226	0.217	ppbV	97
79) 1,1,1,2-tetrachloroethane	16.608	131	4156	0.197	ppbV	98
80) chlorobenzene	16.625	112	10436	0.221	ppbV	97
81) ethylbenzene	16.967	91	17197	0.206	ppbV	95
82) 2-ethylthiophene	17.008	97	11597	0.210	ppbV	99
83) m+p-xylene	17.133	91	28701	0.420	ppbV	97
84) bromoform	17.192	173	3703	0.166	ppbV	98
85) styrene	17.442	104	9348	0.195	ppbV	99
86) 1,1,2,2-tetrachloroethane	17.533	83	11187	0.220	ppbV	96
87) o-xylene	17.533	91	14175	0.205	ppbV	99
88) 1,2,3-trichloropropane	17.650	75	7971	0.226	ppbV	97
89) nonane	17.725	43	12600	0.224	ppbV	98
91) isopropylbenzene	18.033	105	17420	0.225	ppbV	94
92) bromobenzene	18.117	77	10559	0.229	ppbV	93
93) 2-chlorotoluene	18.433	126	5099	0.213	ppbV	97
94) n-propylbenzene	18.458	120	5992	0.215	ppbV	86
95) 4-chlorotoluene	18.492	126	5213M6	0.218	ppbV	
96) 4-ethyl toluene	18.583	105	17464	0.213	ppbV	99
97) 1,3,5-trimethylbenzene	18.642	105	14918	0.209	ppbV	98
98) tert-butylbenzene	18.965	119	16867	0.212	ppbV	98
99) 1,2,4-trimethylbenzene	18.973	105	14810	0.208	ppbV	99
100) decane	19.040	57	16039	0.209	ppbV	92
101) Benzyl Chloride	19.090	91	6737	0.148	ppbV	98
102) 1,3-dichlorobenzene	19.098	146	9583	0.202	ppbV	97
103) 1,4-dichlorobenzene	19.148	146	9486	0.202	ppbV	96
104) sec-butylbenzene	19.182	105	21428	0.212	ppbV	97
105) 1,2,3-trimethylbenzene	19.307	105	12714	0.201	ppbV	88
106) p-isopropyltoluene	19.307	119	20516M6	0.211	ppbV	
107) 1,2-dichlorobenzene	19.423	146	8951	0.201	ppbV	95
108) n-butylbenzene	19.648	91	18493	0.200	ppbV	96
109) indan	19.473	117	14552	0.198	ppbV	96

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529891.D
Acq On : 22 Dec 2021 6:12 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD0.2
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:21:46 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:24:36 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default - All compounds listed

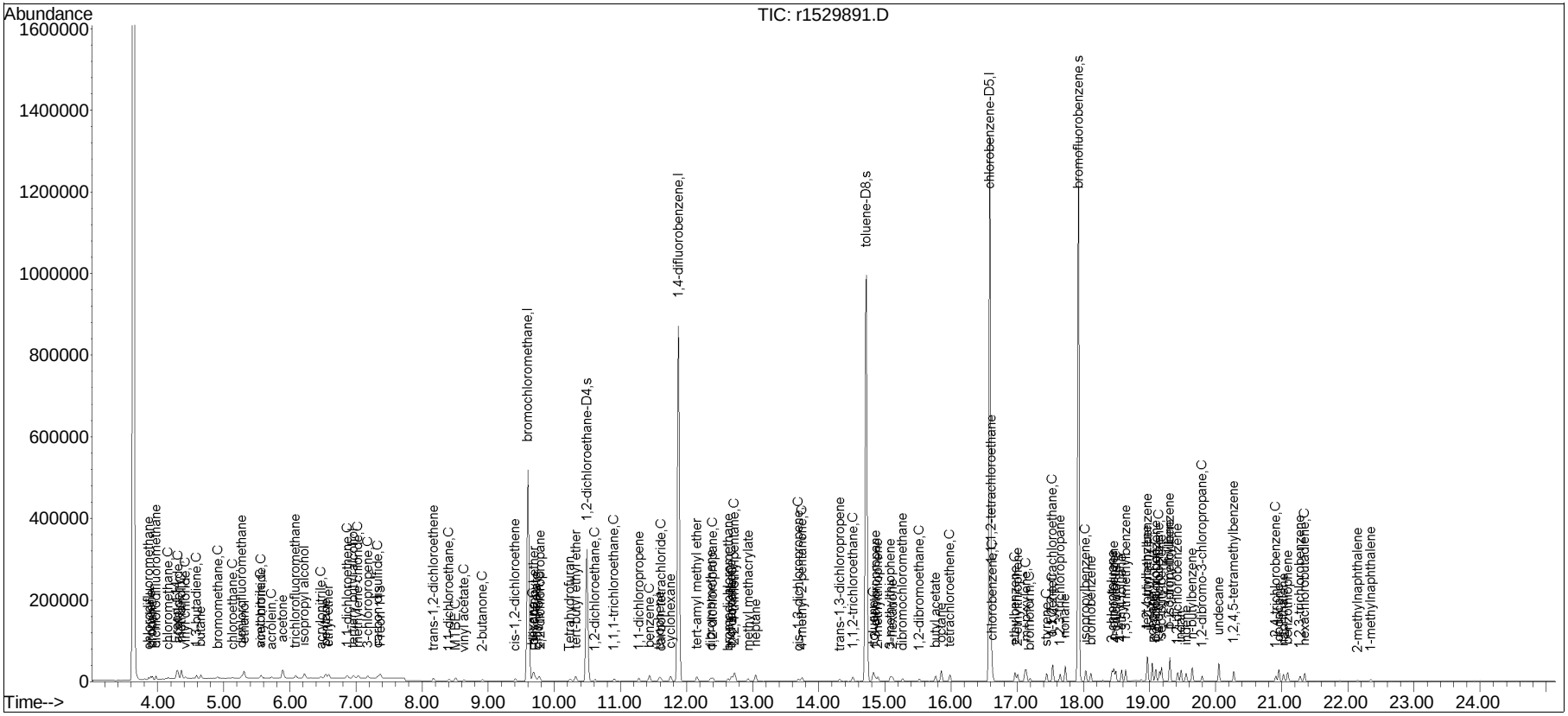
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
110) indene	19.557	115	10933	0.191	ppbV		97
111) 1,2-dibromo-3-chloropr...	19.798	75	3136	0.161	ppbV	#	79
112) undecane	20.048	57	15286	0.174	ppbV	#	96
113) 1,2,4,5-tetramethylben...	20.273	119	13890	0.232	ppbV		93
114) dodecane	20.958	57	11154	0.117	ppbV		90
115) 1,2,4-trichlorobenzene	20.908	180	4788	0.130	ppbV		95
116) naphthalene	21.025	128	15187	0.139	ppbV		99
117) 1,2,3-trichlorobenzene	21.275	180	4429	0.125	ppbV		97
118) benzothiophene	21.092	134	19236	0.159	ppbV		97
119) hexachlorobutadiene	21.350	225	4458	0.150	ppbV		93
120) 2-methylnaphthalene	22.150	142	1470	0.113	ppbV		96
121) 1-methylnaphthalene	22.350	142	3237	0.111	ppbV		92

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

Sub List : Default - All compounds listed1\12\1222T_I\r1529895.D

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529891.D
Acq On : 22 Dec 2021 6:12 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD0.2
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:21:46 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:24:36 2021
Response via : Initial Calibration

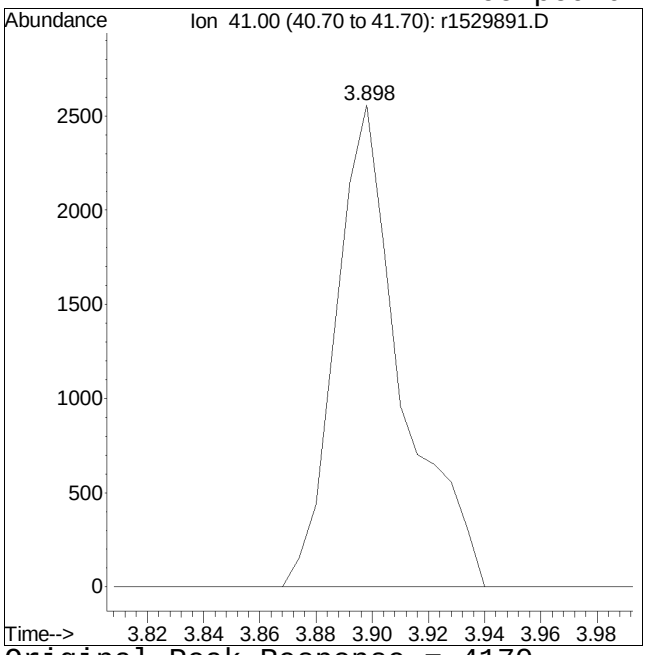


Manual Integration Report

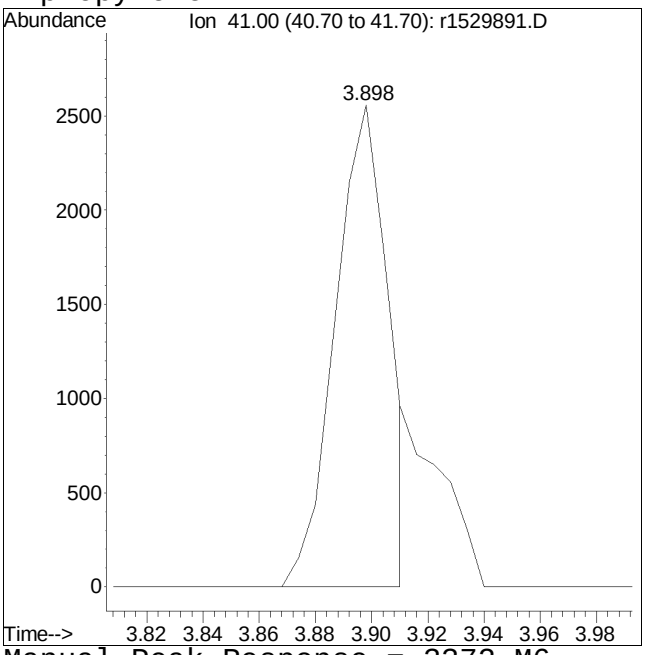
Data Path : O:\Forensics\Data\Airlab15Q
Data File : r1529891.D
Date Inj'd : 12/22/2020 0:6: 2
Sample : ITO15-LLSTD0.2

Method : TFS15_211222.M
Operator : AIRLAB15:TS
Instrument :
Quant Date : 12/22/2021 10:24 am

Compound #3: propylene



Original Peak Response = 4170



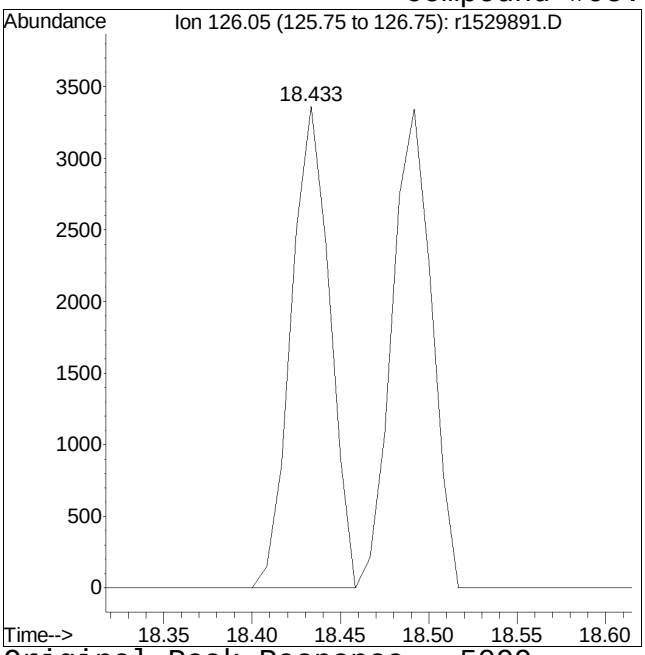
Manual Peak Response = 3372 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

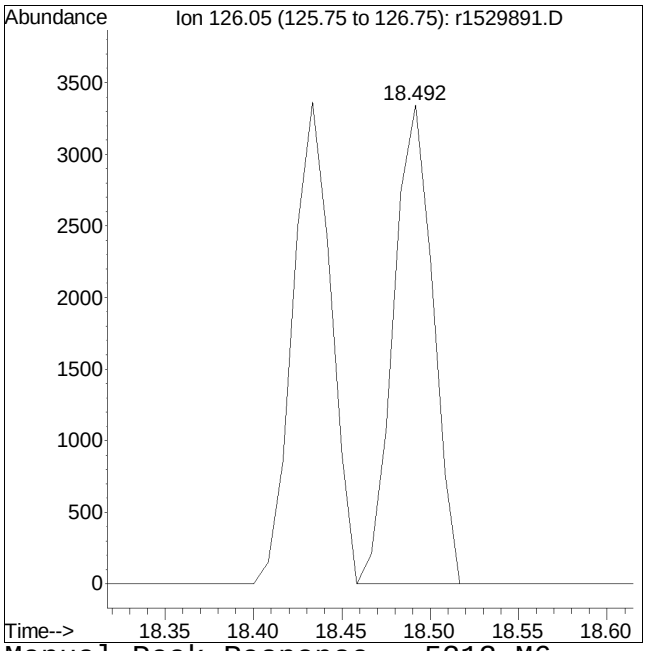
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TFS15_211222.M
Data File : r1529891.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:6: 2 Instrument :
Sample : ITO15-LLSTD0.2 Quant Date : 12/22/2021 10:24 am

Compound #95: 4-chlorotoluene



Original Peak Response = 5099



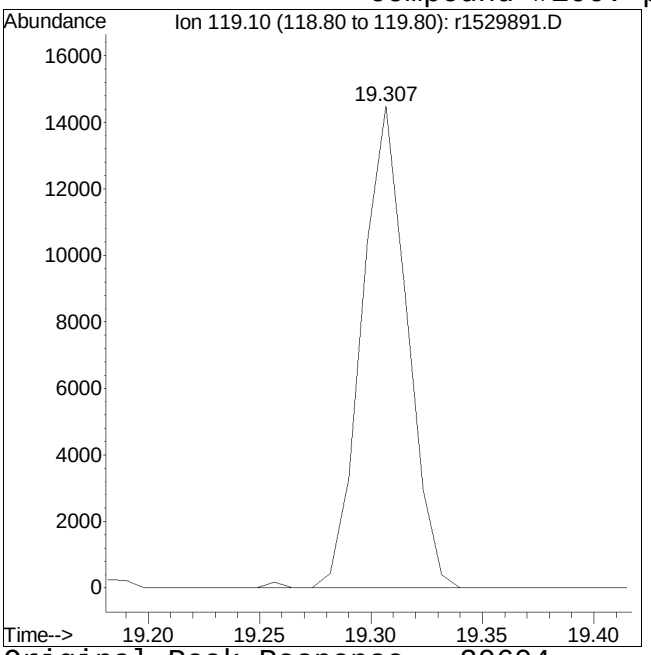
Manual Peak Response = 5213 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

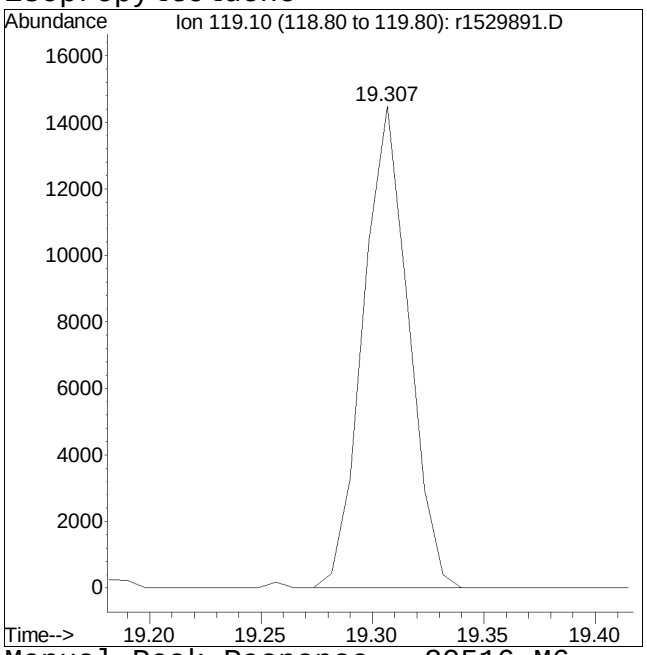
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TFS15_211222.M
Data File : r1529891.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:6: 2 Instrument :
Sample : ITO15-LLSTD0.2 Quant Date : 12/22/2021 10:24 am

Compound #106: p-isopropyltoluene



Original Peak Response = 20604



Manual Peak Response = 20516 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529892.D
Acq On : 22 Dec 2021 6:51 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD0.5
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:23:36 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:24:36 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.608	49	347339	10.000	ppbV	0.00
Standard Area = 354329			Recovery = 98.03%			
43) 1,4-difluorobenzene	11.877	114	808797	10.000	ppbV	0.00
Standard Area = 820934			Recovery = 98.52%			
67) chlorobenzene-D5	16.592	54	192851	10.000	ppbV	0.00
Standard Area = 194813			Recovery = 98.99%			
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.492	65	234954	9.987	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.87%			
69) toluene-D8	14.717	98	761966	9.669	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 96.69%			
90) bromofluorobenzene	17.925	95	537770	9.179	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 91.79%			
Target Compounds						Qvalue
2) chlorodifluoromethane	3.862	51	13746	0.612	ppbV	99
3) propylene	3.898	41	7444M6	0.572	ppbV	
4) propane	3.922	29	13213	0.682	ppbV	98
5) dichlorodifluoromethane	3.976	85	14919	0.611	ppbV	98
6) chloromethane	4.162	50	7016	0.581	ppbV	97
7) Freon-114	4.288	85	17181	0.580	ppbV	98
8) methanol	4.360	31	28477	4.151	ppbV #	81
9) vinyl chloride	4.426	62	9123	0.561	ppbV	99
10) 1,3-butadiene	4.588	54	6853	0.583	ppbV	99
11) butane	4.654	43	14135	0.604	ppbV	99
12) acetaldehyde	4.306	29	23410	3.258	ppbV	98
13) bromomethane	4.906	94	7130	0.581	ppbV	91
14) chloroethane	5.134	64	4407	0.540	ppbV	97
15) ethanol	5.308	31	40719	3.686	ppbV	98
16) dichlorofluoromethane	5.272	67	16302	0.575	ppbV	100
17) vinyl bromide	5.567	106	6005	0.566	ppbV	89
18) acrolein	5.727	56	3872	0.589	ppbV #	85
19) acetone	5.893	43	54468	2.960	ppbV	98
20) acetonitrile	5.560	41	8399	0.581	ppbV #	85
21) trichlorofluoromethane	6.093	101	13377	0.565	ppbV	95
22) isopropyl alcohol	6.217	45	27230	1.356	ppbV	99
23) acrylonitrile	6.473	53	6445	0.558	ppbV	98
24) pentane	6.543	43	15741M6	0.594	ppbV	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529892.D
Acq On : 22 Dec 2021 6:51 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD0.5
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:23:36 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:24:36 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) ethyl ether	6.587	31	13616	0.575	ppbV		93
26) 1,1-dichloroethene	6.870	61	12662	0.547	ppbV		97
27) tertiary butyl alcohol	6.960	59	14782	0.555	ppbV	#	97
28) methylene chloride	7.038	49	9307	0.586	ppbV		92
29) 3-chloropropene	7.182	41	10608	0.547	ppbV		98
30) carbon disulfide	7.338	76	15968	0.481	ppbV	#	42
31) Freon 113	7.368	101	13211	0.555	ppbV		98
32) trans-1,2-dichloroethene	8.175	61	14210	0.578	ppbV		98
33) 1,1-dichloroethane	8.417	63	15976	0.534	ppbV		97
34) MTBE	8.508	73	18841	0.551	ppbV		98
35) vinyl acetate	8.633	43	15482	0.496	ppbV		96
36) 2-butanone	8.908	43	18037	0.535	ppbV		98
37) cis-1,2-dichloroethene	9.417	61	12675	0.533	ppbV		95
38) Ethyl Acetate	9.725	61	3257	0.542	ppbV		87
39) chloroform	9.767	83	16080	0.554	ppbV		99
40) Tetrahydrofuran	10.242	42	10938	0.520	ppbV		99
41) 2,2-dichloropropane	9.783	77	9848	0.513	ppbV		91
42) 1,2-dichloroethane	10.617	62	11122	0.555	ppbV		97
44) hexane	9.683	57	18339	0.553	ppbV		97
45) diisopropyl ether	9.692	87	8083	0.549	ppbV		94
46) tert-butyl ethyl ether	10.325	59	29825	0.543	ppbV		97
48) 1,1,1-trichloroethane	10.910	97	11662	0.506	ppbV		95
49) 1,1-dichloropropene	11.283	75	11956	0.533	ppbV		98
50) benzene	11.443	78	30797	0.584	ppbV		99
51) thiophene	11.590	84	17888	0.531	ppbV		99
52) carbon tetrachloride	11.617	117	10308	0.491	ppbV		98
53) cyclohexane	11.763	56	19082	0.540	ppbV		97
54) tert-amyl methyl ether	12.157	73	21571	0.530	ppbV		99
55) dibromomethane	12.363	93	9484	0.563	ppbV		98
56) 1,2-dichloropropane	12.397	63	10928	0.538	ppbV		97
57) bromodichloromethane	12.630	83	14523M6	0.492	ppbV		
58) 1,4-dioxane	12.690	88	6546	0.510	ppbV		94
59) trichloroethene	12.677	130	11067	0.525	ppbV		97
60) 2,2,4-trimethylpentane	12.730	57	60319	0.545	ppbV		96
61) methyl methacrylate	12.930	41	11766	0.502	ppbV		99
62) heptane	13.050	43	19387	0.540	ppbV		99
63) cis-1,3-dichloropropene	13.700	75	11271	0.456	ppbV		99
64) 4-methyl-2-pentanone	13.742	43	20827	0.506	ppbV		99
65) trans-1,3-dichloropropene	14.317	75	9947	0.431	ppbV		98
66) 1,1,2-trichloroethane	14.517	97	9980	0.516	ppbV		97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529892.D
Acq On : 22 Dec 2021 6:51 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD0.5
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:23:36 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:24:36 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
68) toluene	14.825	91	38328	0.579	ppbV		99
70) 2-methylthiophene	14.900	97	24843	0.531	ppbV		96
71) 1,3-dichloropropane	14.858	76	15293	0.544	ppbV		98
72) 2-hexanone	15.117	43	19711	0.503	ppbV	#	96
73) 3-methylthiophene	15.083	97	24905	0.514	ppbV		98
74) dibromochloromethane	15.275	129	12069	0.444	ppbV		96
75) 1,2-dibromoethane	15.525	107	13631	0.500	ppbV		99
76) butyl acetate	15.767	73	3187	0.463	ppbV		94
77) octane	15.858	85	13049	0.514	ppbV	#	89
78) tetrachloroethene	15.983	166	12830	0.524	ppbV		97
79) 1,1,1,2-tetrachloroethane	16.617	131	10648	0.497	ppbV		95
80) chlorobenzene	16.625	112	25320	0.529	ppbV		99
81) ethylbenzene	16.967	91	41319	0.489	ppbV		98
82) 2-ethylthiophene	17.008	97	28590	0.510	ppbV		98
83) m+p-xylene	17.133	91	70019	1.010	ppbV		99
84) bromoform	17.200	173	8969	0.397	ppbV		100
85) styrene	17.450	104	23257	0.478	ppbV		96
86) 1,1,2,2-tetrachloroethane	17.542	83	26348	0.510	ppbV		100
87) o-xylene	17.542	91	35549	0.506	ppbV		99
88) 1,2,3-trichloropropane	17.650	75	19284	0.539	ppbV		99
89) nonane	17.725	43	30341	0.533	ppbV		94
91) isopropylbenzene	18.042	105	42386	0.540	ppbV		98
92) bromobenzene	18.117	77	25123	0.537	ppbV		92
93) 2-chlorotoluene	18.433	126	12371	0.509	ppbV		89
94) n-propylbenzene	18.458	120	14839	0.525	ppbV		99
95) 4-chlorotoluene	18.492	126	12486M6	0.514	ppbV		
96) 4-ethyl toluene	18.583	105	43813	0.527	ppbV		99
97) 1,3,5-trimethylbenzene	18.642	105	36889	0.509	ppbV		99
98) tert-butylbenzene	18.973	119	42967	0.532	ppbV		95
99) 1,2,4-trimethylbenzene	18.973	105	36238	0.502	ppbV		97
100) decane	19.048	57	40114	0.514	ppbV		94
101) Benzyl Chloride	19.090	91	17686	0.384	ppbV		96
102) 1,3-dichlorobenzene	19.098	146	23293	0.484	ppbV		99
103) 1,4-dichlorobenzene	19.157	146	23203M6	0.486	ppbV		
104) sec-butylbenzene	19.182	105	52814	0.514	ppbV		98
105) 1,2,3-trimethylbenzene	19.315	105	32557	0.507	ppbV		97
106) p-isopropyltoluene	19.307	119	51360M6	0.520	ppbV		
107) 1,2-dichlorobenzene	19.432	146	22379	0.494	ppbV		94
108) n-butylbenzene	19.648	91	46387	0.495	ppbV		95
109) indan	19.482	117	37598	0.505	ppbV		96

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529892.D
Acq On : 22 Dec 2021 6:51 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD0.5
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:23:36 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:24:36 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default - All compounds listed

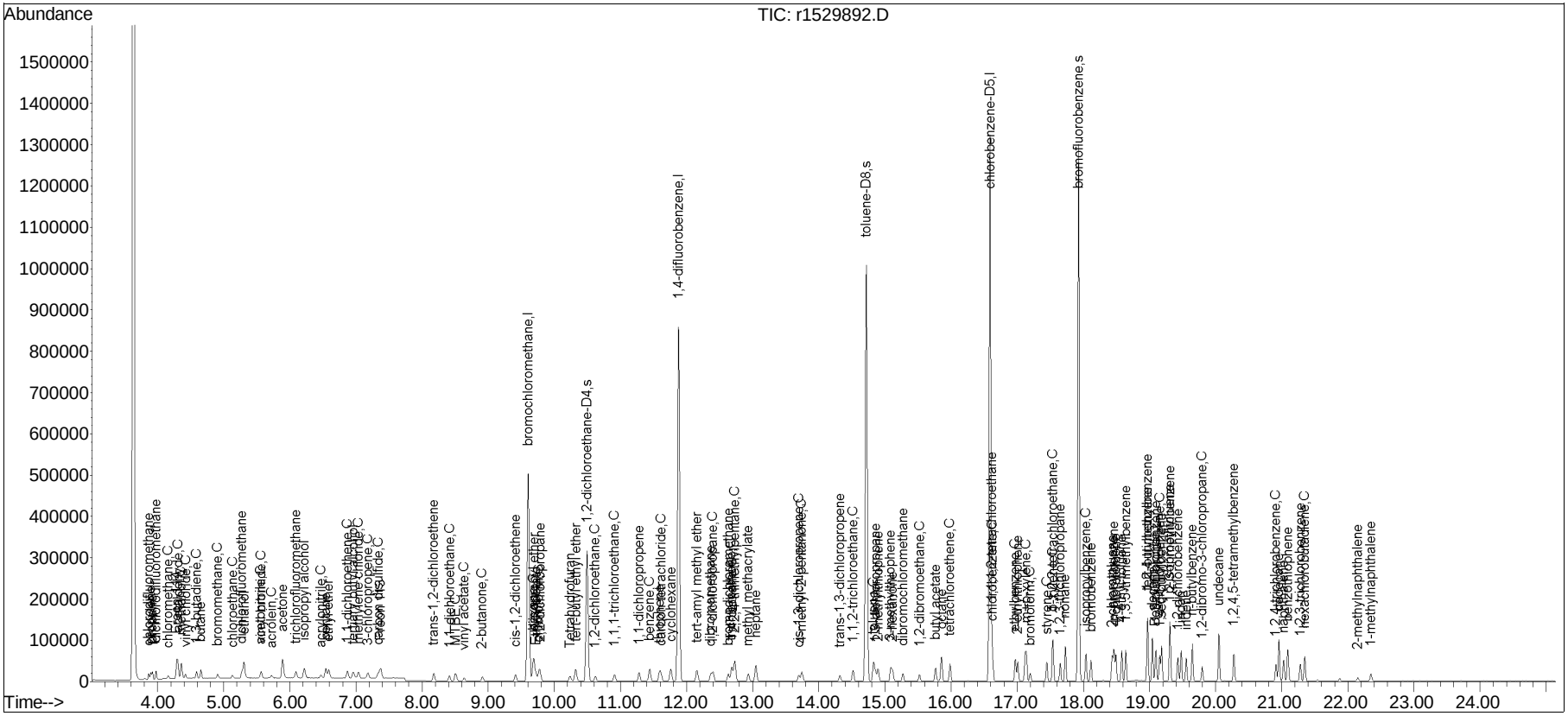
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
110) indene	19.557	115	27849	0.480	ppbV		98
111) 1,2-dibromo-3-chloropr...	19.798	75	8592	0.435	ppbV	#	84
112) undecane	20.048	57	41835	0.469	ppbV		98
113) 1,2,4,5-tetramethylben...	20.273	119	37314	0.613	ppbV		99
114) dodecane	20.958	57	37014	0.384	ppbV		94
115) 1,2,4-trichlorobenzene	20.908	180	13840	0.369	ppbV		96
116) naphthalene	21.025	128	46072	0.414	ppbV		99
117) 1,2,3-trichlorobenzene	21.283	180	13990	0.389	ppbV		95
118) benzothiophene	21.092	134	62882	0.512	ppbV		98
119) hexachlorobutadiene	21.350	225	13583	0.449	ppbV	#	93
120) 2-methylnaphthalene	22.150	142	5542	0.420	ppbV		97
121) 1-methylnaphthalene	22.350	142	11410	0.387	ppbV		96

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

Sub List : Default - All compounds listed1\12\1222T_I\r1529895.D

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529892.D
Acq On : 22 Dec 2021 6:51 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD0.5
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

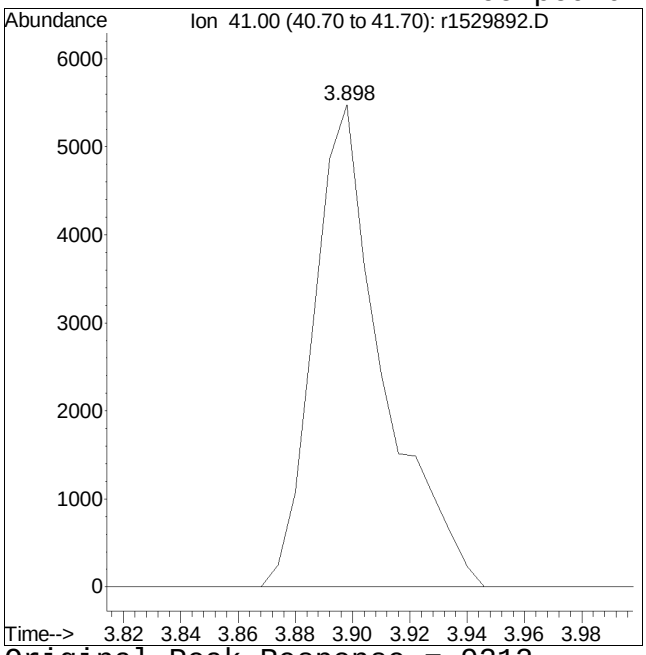
Quant Time: Dec 22 16:23:36 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:24:36 2021
Response via : Initial Calibration



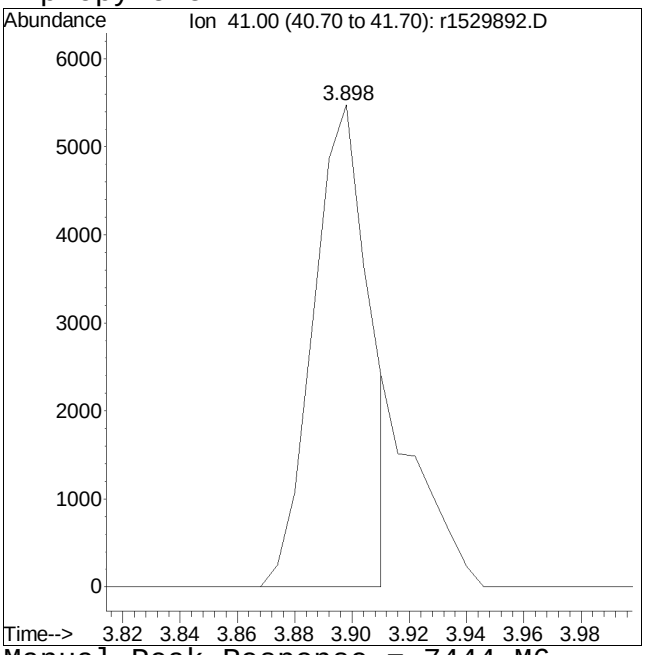
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TFS15_211222.M
Data File : r1529892.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:6: 1 Instrument :
Sample : ITO15-LLSTD0.5 Quant Date : 12/22/2021 10:24 am

Compound #3: propylene



Original Peak Response = 9212



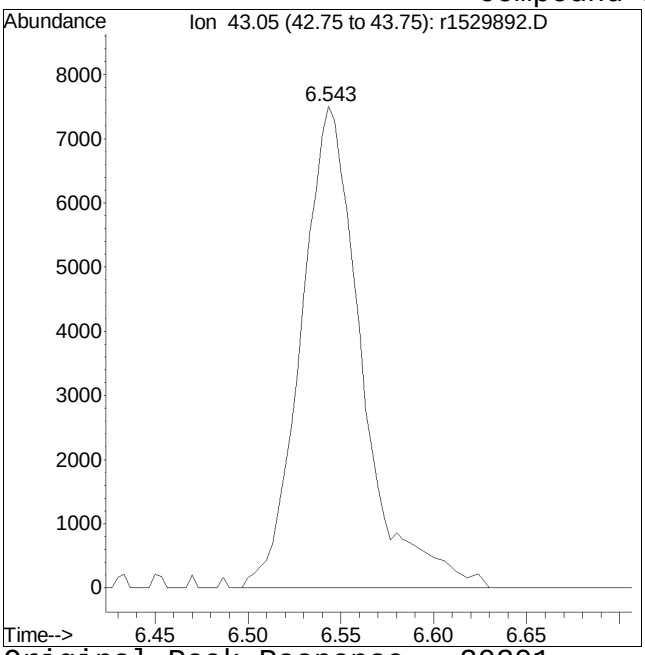
Manual Peak Response = 7444 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

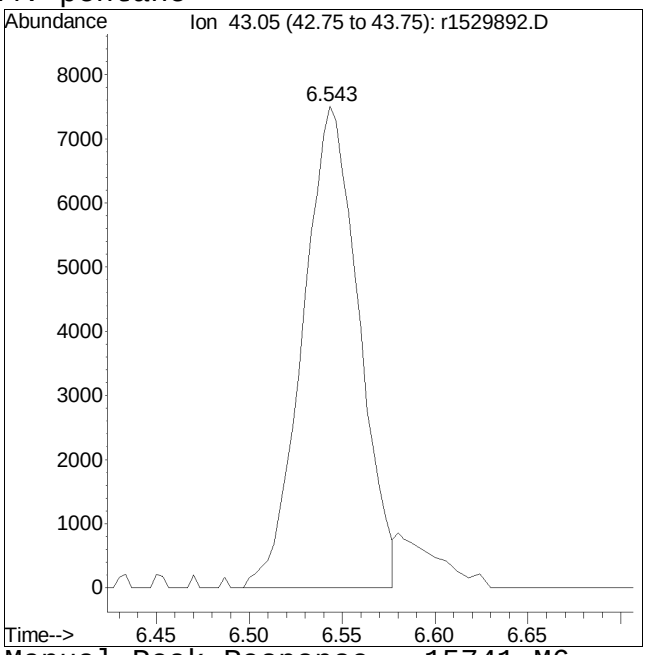
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TFS15_211222.M
Data File : r1529892.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:6: 1 Instrument :
Sample : ITO15-LLSTD0.5 Quant Date : 12/22/2021 10:24 am

Compound #24: pentane



Original Peak Response = 20301



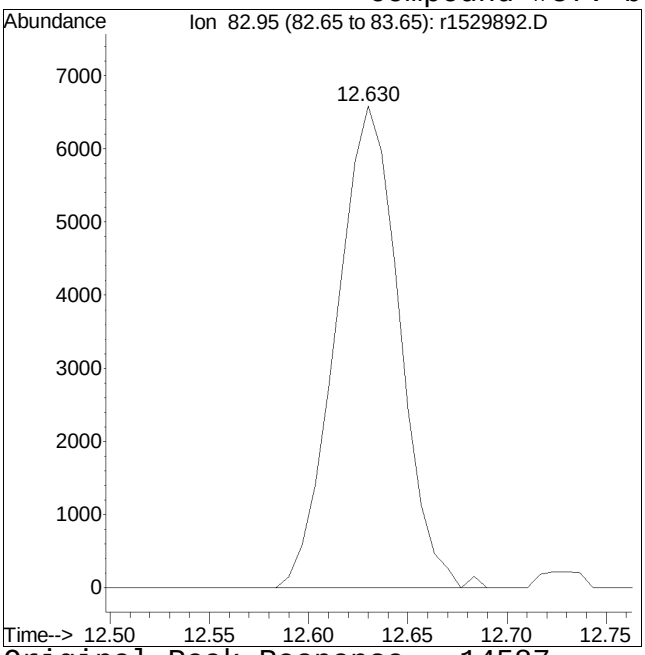
Manual Peak Response = 15741 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

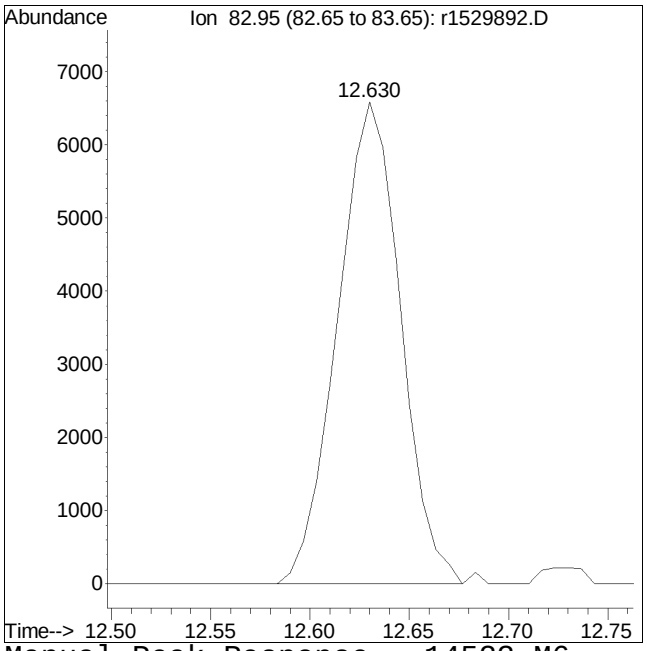
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TFS15_211222.M
Data File : r1529892.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:6: 1 Instrument :
Sample : ITO15-LLSTD0.5 Quant Date : 12/22/2021 10:24 am

Compound #57: bromodichloromethane



Original Peak Response = 14587



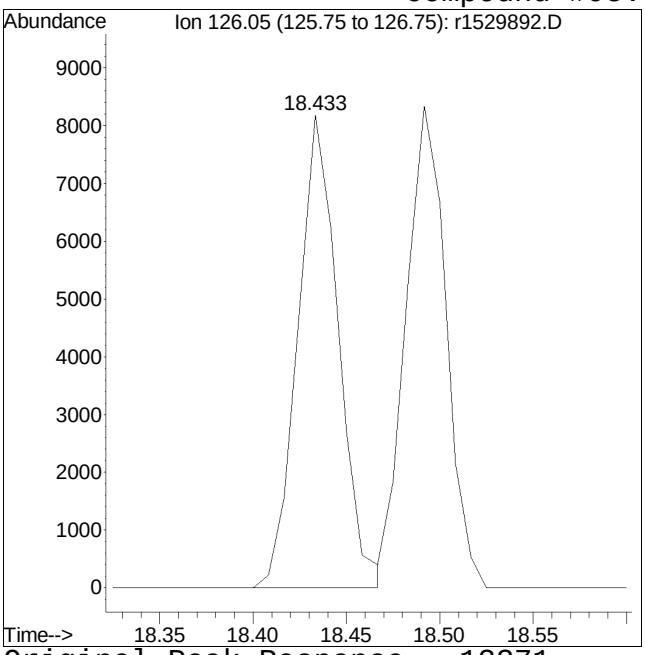
Manual Peak Response = 14523 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

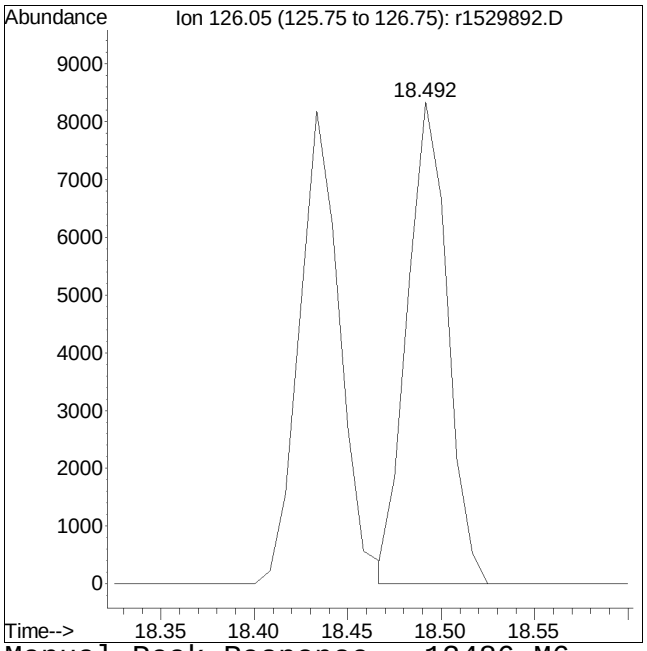
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TFS15_211222.M
Data File : r1529892.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:6: 1 Instrument :
Sample : ITO15-LLSTD0.5 Quant Date : 12/22/2021 10:24 am

Compound #95: 4-chlorotoluene



Original Peak Response = 12371



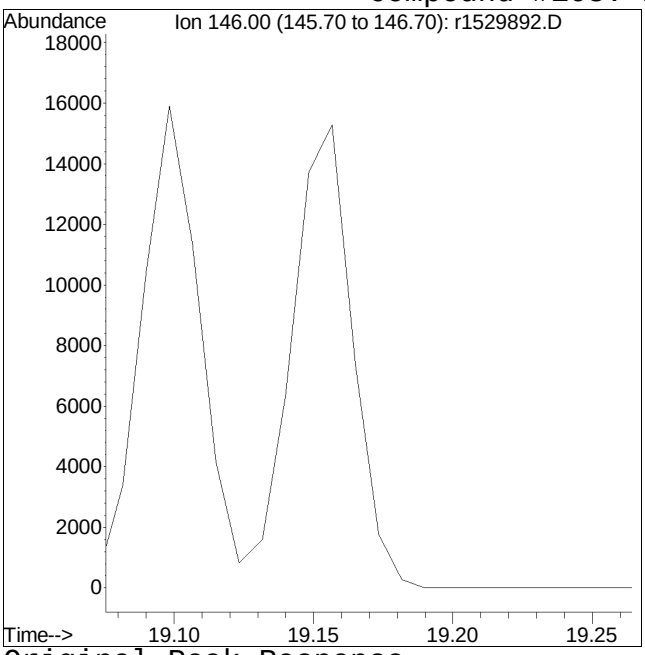
Manual Peak Response = 12486 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

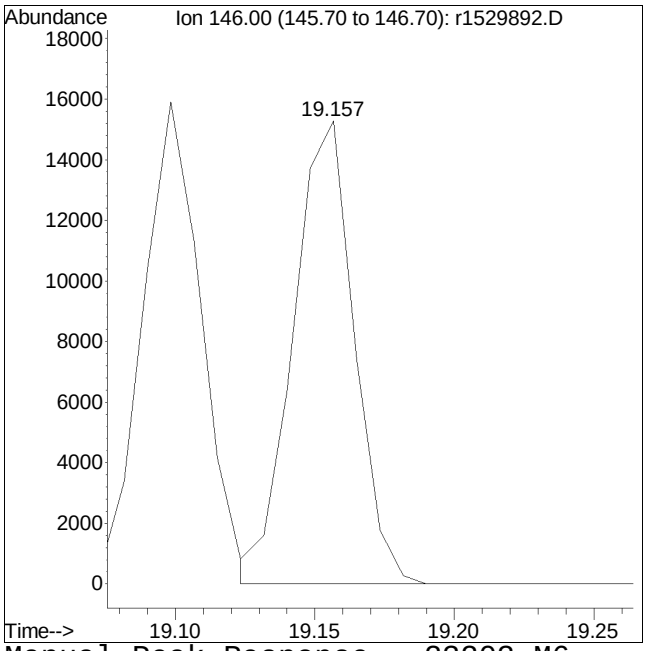
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TFS15_211222.M
Data File : r1529892.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:6: 1 Instrument :
Sample : ITO15-LLSTD0.5 Quant Date : 12/22/2021 10:24 am

Compound #103: 1,4-dichlorobenzene



Original Peak Response =



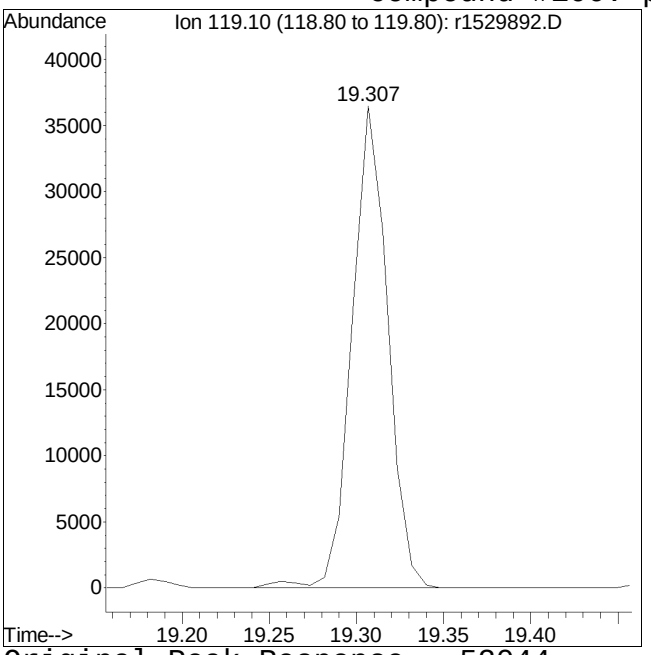
Manual Peak Response = 23203 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

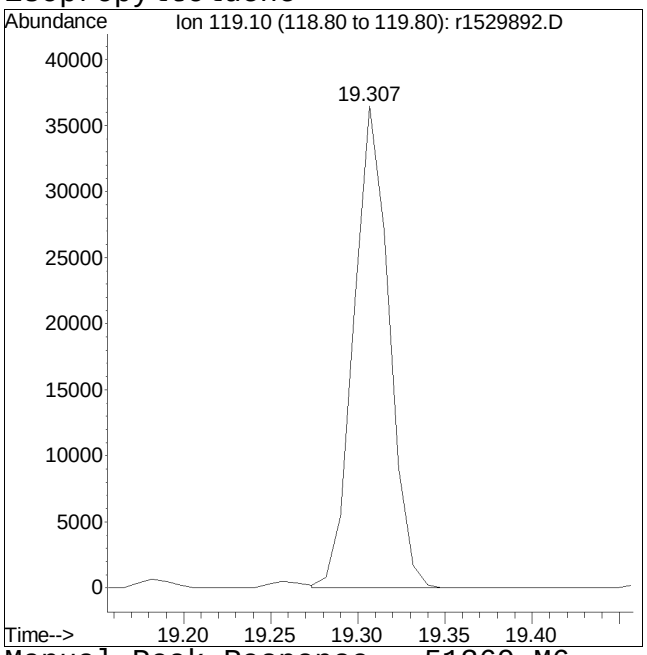
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TFS15_211222.M
Data File : r1529892.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:6: 1 Instrument :
Sample : ITO15-LLSTD0.5 Quant Date : 12/22/2021 10:24 am

Compound #106: p-isopropyltoluene



Original Peak Response = 52044



Manual Peak Response = 51360 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529893.D
Acq On : 22 Dec 2021 7:32 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD1.0
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:25:01 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:24:36 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.608	49	349063	10.000	ppbV	0.00
Standard Area = 354329			Recovery = 98.51%			
43) 1,4-difluorobenzene	11.883	114	812390	10.000	ppbV	0.00
Standard Area = 820934			Recovery = 98.96%			
67) chlorobenzene-D5	16.592	54	191605	10.000	ppbV	0.00
Standard Area = 194813			Recovery = 98.35%			
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.500	65	238019	10.072	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.72%			
69) toluene-D8	14.717	98	781626	9.983	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.83%			
90) bromofluorobenzene	17.933	95	570627	9.804	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.04%			
Target Compounds						Qvalue
2) chlorodifluoromethane	3.868	51	26700	1.183	ppbV	99
3) propylene	3.898	41	14945M6	1.142	ppbV	
4) propane	3.922	29	24813	1.275	ppbV	99
5) dichlorodifluoromethane	3.976	85	28292	1.154	ppbV	98
6) chloromethane	4.162	50	13585	1.120	ppbV	100
7) Freon-114	4.288	85	33898	1.138	ppbV	99
8) methanol	4.360	31	50373	7.307	ppbV #	88
9) vinyl chloride	4.426	62	18076	1.106	ppbV	96
10) 1,3-butadiene	4.594	54	13848	1.173	ppbV	98
11) butane	4.654	43	27015	1.149	ppbV	99
12) acetaldehyde	4.306	29	44138	6.112	ppbV	99
13) bromomethane	4.912	94	13768	1.116	ppbV	94
14) chloroethane	5.140	64	8840	1.079	ppbV	95
15) ethanol	5.308	31	66770	6.015	ppbV	99
16) dichlorofluoromethane	5.278	67	31114	1.092	ppbV	99
17) vinyl bromide	5.567	106	11477	1.077	ppbV	90
18) acrolein	5.730	56	7353	1.113	ppbV	95
19) acetone	5.890	43	104735	5.664	ppbV	98
20) acetonitrile	5.563	41	16619	1.143	ppbV	95
21) trichlorofluoromethane	6.093	101	25939	1.090	ppbV	92
22) isopropyl alcohol	6.213	45	53156	2.633	ppbV	99
23) acrylonitrile	6.473	53	12559	1.082	ppbV	96
24) pentane	6.547	43	39784	1.493	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529893.D
Acq On : 22 Dec 2021 7:32 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD1.0
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:25:01 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:24:36 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) ethyl ether	6.587	31	26522	1.115	ppbV		99
26) 1,1-dichloroethene	6.876	61	24754	1.064	ppbV		97
27) tertiary butyl alcohol	6.954	59	29568	1.105	ppbV		95
28) methylene chloride	7.038	49	18039	1.130	ppbV		100
29) 3-chloropropene	7.182	41	20921	1.073	ppbV		100
30) carbon disulfide	7.338	76	31803	0.952	ppbV	#	68
31) Freon 113	7.374	101	25816	1.079	ppbV		96
32) trans-1,2-dichloroethene	8.175	61	26917	1.089	ppbV		98
33) 1,1-dichloroethane	8.417	63	31419	1.044	ppbV		100
34) MTBE	8.508	73	37157	1.080	ppbV		99
35) vinyl acetate	8.642	43	30715	0.979	ppbV		99
36) 2-butanone	8.908	43	36499	1.077	ppbV		99
37) cis-1,2-dichloroethene	9.417	61	25072	1.049	ppbV		97
38) Ethyl Acetate	9.725	61	6331	1.048	ppbV		83
39) chloroform	9.767	83	31162	1.068	ppbV		99
40) Tetrahydrofuran	10.233	42	22161	1.049	ppbV		99
41) 2,2-dichloropropane	9.783	77	19972	1.036	ppbV		95
42) 1,2-dichloroethane	10.625	62	21442	1.064	ppbV		96
44) hexane	9.683	57	35620	1.070	ppbV		100
45) diisopropyl ether	9.692	87	16298	1.101	ppbV		99
46) tert-butyl ethyl ether	10.325	59	58728	1.064	ppbV		99
48) 1,1,1-trichloroethane	10.917	97	23012	0.994	ppbV		99
49) 1,1-dichloropropene	11.283	75	23896	1.061	ppbV		98
50) benzene	11.443	78	58802	1.110	ppbV		99
51) thiophene	11.590	84	35542	1.051	ppbV		99
52) carbon tetrachloride	11.617	117	20459	0.970	ppbV		98
53) cyclohexane	11.763	56	38153	1.076	ppbV		98
54) tert-amyl methyl ether	12.157	73	42349	1.036	ppbV		99
55) dibromomethane	12.370	93	18213	1.077	ppbV		97
56) 1,2-dichloropropane	12.403	63	20976	1.028	ppbV		99
57) bromodichloromethane	12.630	83	29481	0.995	ppbV		98
58) 1,4-dioxane	12.683	88	13375	1.038	ppbV		96
59) trichloroethene	12.683	130	22419	1.058	ppbV		98
60) 2,2,4-trimethylpentane	12.730	57	120591	1.085	ppbV		99
61) methyl methacrylate	12.937	41	23570	1.002	ppbV		100
62) heptane	13.050	43	39183	1.087	ppbV		98
63) cis-1,3-dichloropropene	13.700	75	22383	0.903	ppbV		95
64) 4-methyl-2-pentanone	13.742	43	42268	1.023	ppbV		96
65) trans-1,3-dichloropropene	14.325	75	20291	0.874	ppbV		100
66) 1,1,2-trichloroethane	14.517	97	20225	1.042	ppbV		96

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529893.D
Acq On : 22 Dec 2021 7:32 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD1.0
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:25:01 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:24:36 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.833	91	70854	1.077	ppbV	96
70) 2-methylthiophene	14.900	97	48898	1.052	ppbV	100
71) 1,3-dichloropropane	14.858	76	30885	1.107	ppbV	95
72) 2-hexanone	15.117	43	39630	1.018	ppbV	94
73) 3-methylthiophene	15.092	97	49858	1.036	ppbV	99
74) dibromochloromethane	15.275	129	24634	0.912	ppbV	99
75) 1,2-dibromoethane	15.525	107	27712	1.023	ppbV	99
76) butyl acetate	15.767	73	6505	0.952	ppbV	90
77) octane	15.858	85	26528	1.052	ppbV	98
78) tetrachloroethene	15.983	166	25110	1.032	ppbV	99
79) 1,1,1,2-tetrachloroethane	16.617	131	21203	0.995	ppbV	96
80) chlorobenzene	16.633	112	48549	1.021	ppbV	98
81) ethylbenzene	16.975	91	83326	0.992	ppbV	100
82) 2-ethylthiophene	17.008	97	57927	1.039	ppbV	99
83) m+p-xylene	17.133	91	140964	2.047	ppbV	100
84) bromoform	17.200	173	19038	0.849	ppbV	97
85) styrene	17.450	104	46962	0.972	ppbV	97
86) 1,1,2,2-tetrachloroethane	17.542	83	52841	1.029	ppbV	98
87) o-xylene	17.542	91	70625	1.011	ppbV	99
88) 1,2,3-trichloropropane	17.650	75	38813	1.092	ppbV	98
89) nonane	17.733	43	60574	1.070	ppbV	98
91) isopropylbenzene	18.042	105	83995	1.077	ppbV	99
92) bromobenzene	18.117	77	50520	1.086	ppbV	95
93) 2-chlorotoluene	18.433	126	25115	1.041	ppbV	91
94) n-propylbenzene	18.467	120	29303	1.043	ppbV	97
95) 4-chlorotoluene	18.492	126	24912M6	1.032	ppbV	
96) 4-ethyl toluene	18.583	105	88328	1.070	ppbV	98
97) 1,3,5-trimethylbenzene	18.642	105	74406	1.033	ppbV	99
98) tert-butylbenzene	18.973	119	85790	1.069	ppbV	96
99) 1,2,4-trimethylbenzene	18.973	105	73238	1.021	ppbV	98
100) decane	19.048	57	80727	1.041	ppbV	94
101) Benzyl Chloride	19.090	91	37371	0.817	ppbV	96
102) 1,3-dichlorobenzene	19.098	146	47921	1.001	ppbV	99
103) 1,4-dichlorobenzene	19.157	146	46271	0.976	ppbV	98
104) sec-butylbenzene	19.182	105	107440	1.052	ppbV	100
105) 1,2,3-trimethylbenzene	19.315	105	66138	1.036	ppbV	99
106) p-isopropyltoluene	19.307	119	102246M6	1.043	ppbV	
107) 1,2-dichlorobenzene	19.432	146	44986	1.000	ppbV	94
108) n-butylbenzene	19.648	91	94741	1.017	ppbV	97
109) indan	19.482	117	75970	1.026	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529893.D
Acq On : 22 Dec 2021 7:32 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD1.0
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:25:01 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:24:36 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default - All compounds listed

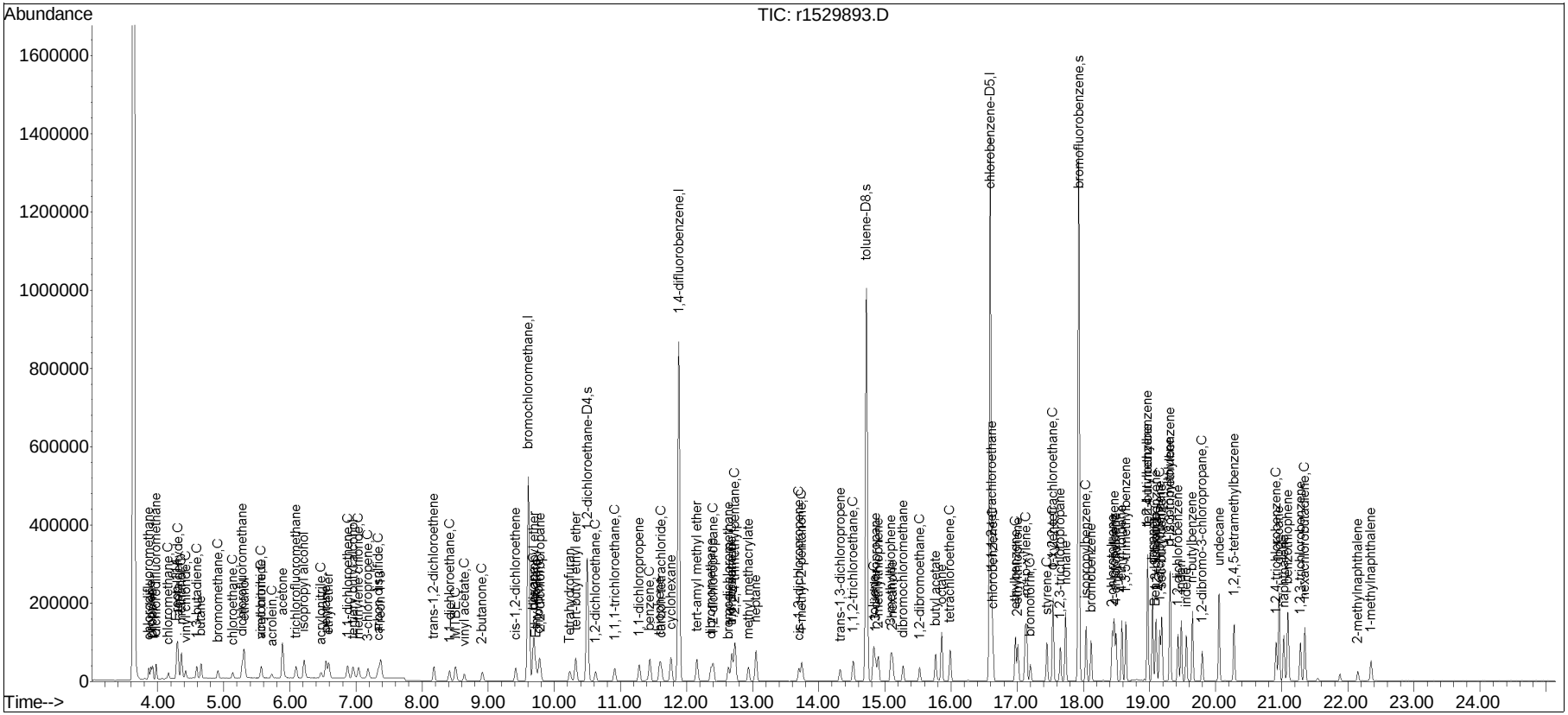
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.557	115	57318	0.995	ppbV	97
111) 1,2-dibromo-3-chloropr...	19.798	75	18450	0.940	ppbV	89
112) undecane	20.057	57	87581	0.989	ppbV	96
113) 1,2,4,5-tetramethylben...	20.282	119	78438	1.298	ppbV	98
114) dodecane	20.958	57	85742	0.895	ppbV	96
115) 1,2,4-trichlorobenzene	20.917	180	30926	0.831	ppbV	98
116) naphthalene	21.033	128	101285	0.917	ppbV	98
117) 1,2,3-trichlorobenzene	21.283	180	32128	0.900	ppbV	97
118) benzothiophene	21.092	134	143090	1.173	ppbV	98
119) hexachlorobutadiene	21.350	225	28987	0.965	ppbV	93
120) 2-methylnaphthalene	22.150	142	15820	1.206	ppbV	97
121) 1-methylnaphthalene	22.350	142	32672	1.115	ppbV	94

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

Sub List : Default - All compounds listed1\12\1222T_I\r1529895.D

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529893.D
Acq On : 22 Dec 2021 7:32 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD1.0
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:25:01 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:24:36 2021
Response via : Initial Calibration

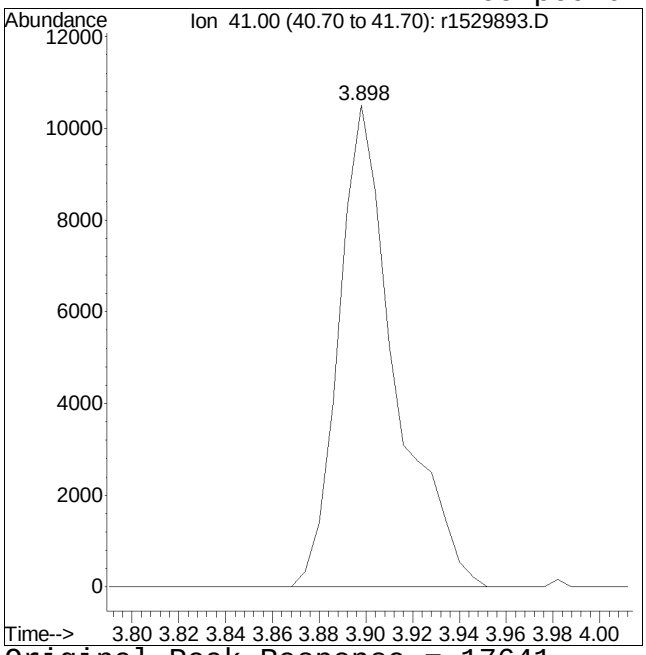


Manual Integration Report

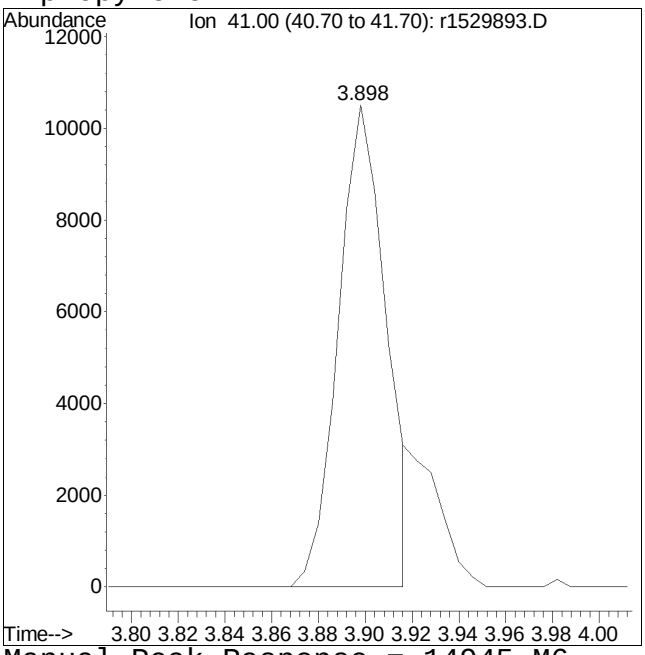
Data Path : O:\Forensics\Data\Airlab15Q
Data File : r1529893.D
Date Inj'd : 12/22/2020 0:7: 2
Sample : ITO15-LLSTD1.0

Method : TFS15_211222.M
Operator : AIRLAB15:TS
Instrument :
Quant Date : 12/22/2021 10:25 am

Compound #3: propylene



Original Peak Response = 17641



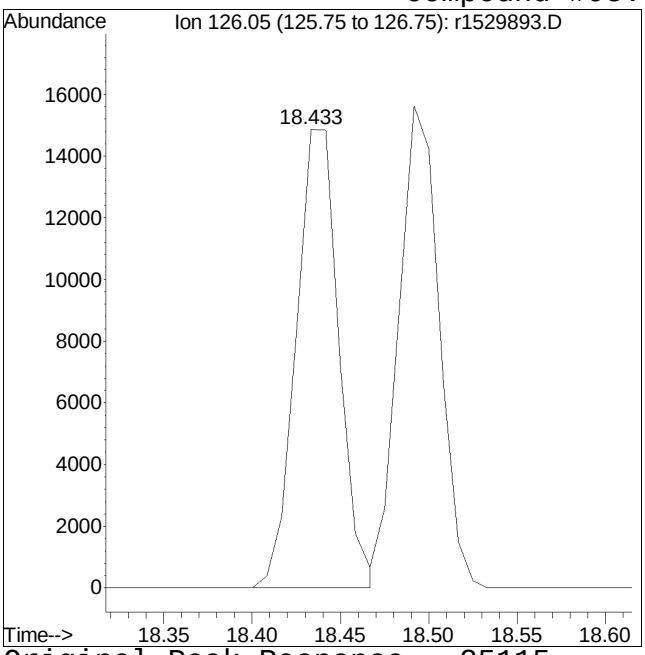
Manual Peak Response = 14945 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

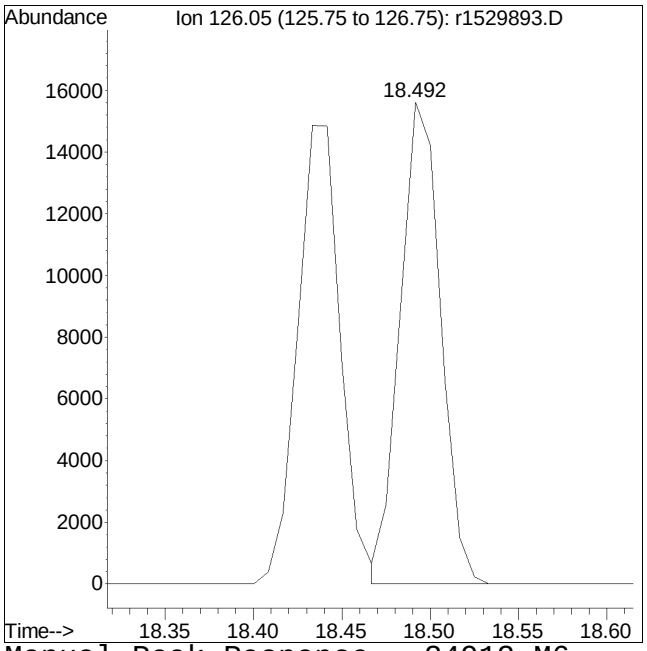
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TFS15_211222.M
Data File : r1529893.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:7: 2 Instrument :
Sample : ITO15-LLSTD1.0 Quant Date : 12/22/2021 10:25 am

Compound #95: 4-chlorotoluene



Original Peak Response = 25115



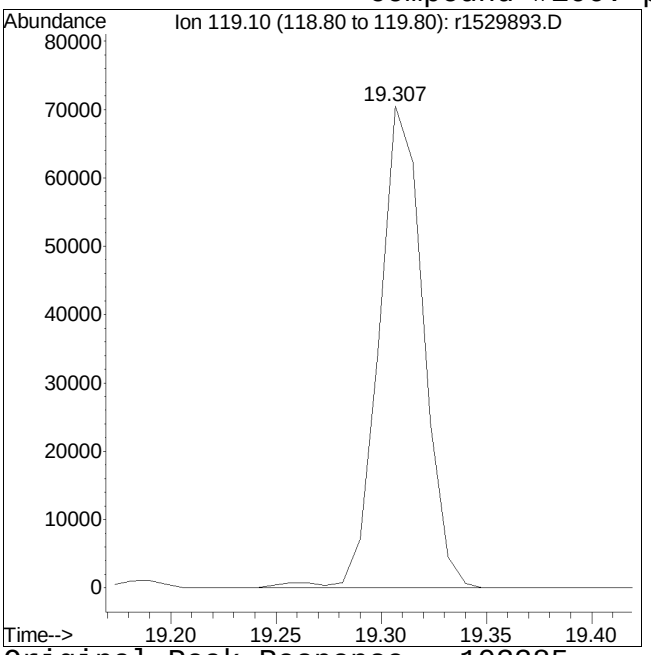
Manual Peak Response = 24912 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

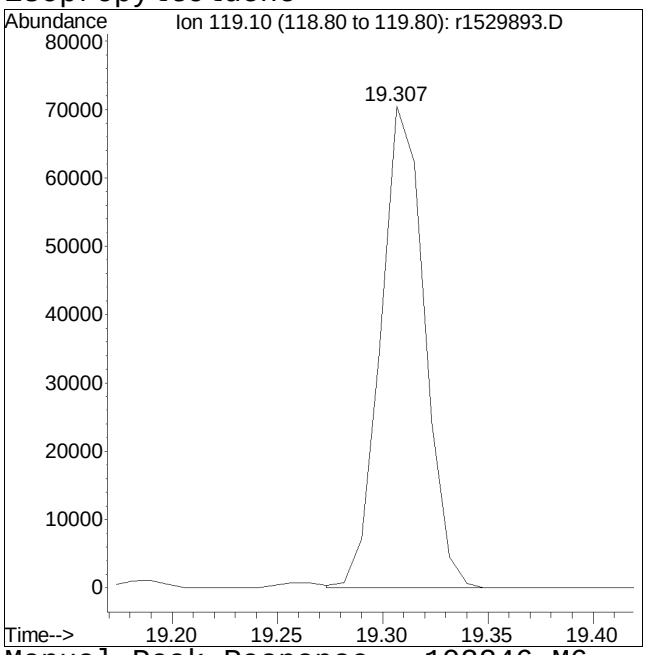
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TFS15_211222.M
Data File : r1529893.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:7: 2 Instrument :
Sample : ITO15-LLSTD1.0 Quant Date : 12/22/2021 10:25 am

Compound #106: p-isopropyltoluene



Original Peak Response = 103385



Manual Peak Response = 102246 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529894.D
Acq On : 22 Dec 2021 8:11 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD5.0
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:26:11 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:24:36 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.608	49	347828	10.000	ppbV	0.00
Standard Area = 354329			Recovery = 98.17%			
43) 1,4-difluorobenzene	11.883	114	818850	10.000	ppbV	0.00
Standard Area = 820934			Recovery = 99.75%			
67) chlorobenzene-D5	16.592	54	193855	10.000	ppbV	0.00
Standard Area = 194813			Recovery = 99.51%			
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.500	65	237091	9.954	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.54%			
69) toluene-D8	14.725	98	792572	10.005	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.05%			
90) bromofluorobenzene	17.933	95	587998	9.985	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.85%			
Target Compounds						Qvalue
2) chlorodifluoromethane	3.868	51	121286	5.392	ppbV	99
3) propylene	3.898	41	67147M6	5.149	ppbV	
4) propane	3.928	29	105866	5.460	ppbV	99
5) dichlorodifluoromethane	3.982	85	133275	5.454	ppbV	97
6) chloromethane	4.162	50	64435	5.329	ppbV	99
7) Freon-114	4.294	85	158607	5.345	ppbV	99
8) methanol	4.360	31	186473	27.146	ppbV	98
9) vinyl chloride	4.426	62	84865	5.212	ppbV	100
10) 1,3-butadiene	4.594	54	61505	5.227	ppbV	97
11) butane	4.660	43	122611	5.234	ppbV	98
12) acetaldehyde	4.306	29	199328	27.700	ppbV	96
13) bromomethane	4.912	94	63669	5.178	ppbV	100
14) chloroethane	5.134	64	42141	5.160	ppbV	100
15) ethanol	5.308	31	263965	23.862	ppbV	100
16) dichlorofluoromethane	5.278	67	149445	5.266	ppbV	100
17) vinyl bromide	5.573	106	54793	5.160	ppbV	94
18) acrolein	5.727	56	33899	5.149	ppbV	97
19) acetone	5.887	43	475051	25.780	ppbV	100
20) acetonitrile	5.563	41	72731	5.021	ppbV	100
21) trichlorofluoromethane	6.097	101	123207	5.195	ppbV	96
22) isopropyl alcohol	6.213	45	252568	12.557	ppbV	100
23) acrylonitrile	6.473	53	59007	5.104	ppbV	100
24) pentane	6.550	43	179154	6.747	ppbV	99

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529894.D
Acq On : 22 Dec 2021 8:11 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD5.0
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:26:11 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:24:36 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.587	31	123720	5.218	ppbV	99
26) 1,1-dichloroethene	6.876	61	119560	5.158	ppbV	99
27) tertiary butyl alcohol	6.948	59	135740	5.089	ppbV	100
28) methylene chloride	7.044	49	81728	5.138	ppbV	100
29) 3-chloropropene	7.182	41	100242	5.162	ppbV	100
30) carbon disulfide	7.338	76	161527	4.854	ppbV	97
31) Freon 113	7.374	101	124718	5.232	ppbV	96
32) trans-1,2-dichloroethene	8.183	61	126684	5.143	ppbV	99
33) 1,1-dichloroethane	8.417	63	152192	5.077	ppbV	99
34) MTBE	8.500	73	173188	5.054	ppbV	99
35) vinyl acetate	8.642	43	150325	4.809	ppbV	100
36) 2-butanone	8.908	43	170809	5.057	ppbV	99
37) cis-1,2-dichloroethene	9.417	61	120993	5.083	ppbV	99
38) Ethyl Acetate	9.717	61	30707	5.102	ppbV	80
39) chloroform	9.775	83	147972	5.089	ppbV	98
40) Tetrahydrofuran	10.225	42	104647	4.970	ppbV	98
41) 2,2-dichloropropane	9.792	77	95820	4.987	ppbV	97
42) 1,2-dichloroethane	10.625	62	102924	5.126	ppbV	98
44) hexane	9.683	57	168038	5.007	ppbV	98
45) diisopropyl ether	9.692	87	75847	5.084	ppbV	99
46) tert-butyl ethyl ether	10.325	59	279793	5.028	ppbV	99
48) 1,1,1-trichloroethane	10.917	97	116270	4.982	ppbV	99
49) 1,1-dichloropropene	11.290	75	112987	4.979	ppbV	99
50) benzene	11.450	78	271824	5.090	ppbV	100
51) thiophene	11.597	84	169419	4.971	ppbV	99
52) carbon tetrachloride	11.623	117	104851	4.930	ppbV	99
53) cyclohexane	11.763	56	177903	4.976	ppbV	98
54) tert-amyl methyl ether	12.157	73	204441	4.963	ppbV	100
55) dibromomethane	12.370	93	85467	5.013	ppbV	98
56) 1,2-dichloropropane	12.403	63	103725	5.045	ppbV	99
57) bromodichloromethane	12.637	83	147552	4.941	ppbV	99
58) 1,4-dioxane	12.677	88	64798	4.987	ppbV	98
59) trichloroethene	12.683	130	108111	5.064	ppbV	97
60) 2,2,4-trimethylpentane	12.737	57	567019	5.063	ppbV	100
61) methyl methacrylate	12.937	41	116858	4.928	ppbV	99
62) heptane	13.050	43	182610	5.026	ppbV	98
63) cis-1,3-dichloropropene	13.700	75	120188	4.808	ppbV	98
64) 4-methyl-2-pentanone	13.742	43	208084	4.998	ppbV	99
65) trans-1,3-dichloropropene	14.325	75	111879	4.784	ppbV	99
66) 1,1,2-trichloroethane	14.525	97	98513	5.035	ppbV	99

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529894.D
Acq On : 22 Dec 2021 8:11 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD5.0
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:26:11 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:24:36 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.833	91	336279	5.052	ppbV	99
70) 2-methylthiophene	14.900	97	234225	4.982	ppbV	99
71) 1,3-dichloropropane	14.858	76	142300	5.040	ppbV	99
72) 2-hexanone	15.108	43	195215	4.958	ppbV	99
73) 3-methylthiophene	15.092	97	242249	4.977	ppbV	100
74) dibromochloromethane	15.275	129	132686	4.855	ppbV	98
75) 1,2-dibromoethane	15.525	107	138797	5.063	ppbV	99
76) butyl acetate	15.767	73	34034	4.921	ppbV	95
77) octane	15.858	85	128802	5.050	ppbV	98
78) tetrachloroethene	15.992	166	124052	5.040	ppbV	99
79) 1,1,1,2-tetrachloroethane	16.617	131	104195	4.835	ppbV	97
80) chlorobenzene	16.633	112	239276	4.975	ppbV	100
81) ethylbenzene	16.975	91	422739	4.974	ppbV	100
82) 2-ethylthiophene	17.008	97	283544	5.028	ppbV	98
83) m+p-xylene	17.133	91	695838	9.987	ppbV	98
84) bromoform	17.200	173	104342	4.600	ppbV	96
85) styrene	17.450	104	238561	4.881	ppbV	98
86) 1,1,2,2-tetrachloroethane	17.542	83	260687	5.018	ppbV	98
87) o-xylene	17.542	91	353031	4.997	ppbV	99
88) 1,2,3-trichloropropane	17.650	75	180491	5.021	ppbV	99
89) nonane	17.733	43	286885	5.010	ppbV	98
91) isopropylbenzene	18.042	105	398733	5.052	ppbV	99
92) bromobenzene	18.117	77	238162	5.061	ppbV	98
93) 2-chlorotoluene	18.442	126	121243	4.965	ppbV	95
94) n-propylbenzene	18.467	120	144203	5.071	ppbV	99
95) 4-chlorotoluene	18.492	126	121498M6	4.976	ppbV	
96) 4-ethyl toluene	18.583	105	418877	5.014	ppbV	100
97) 1,3,5-trimethylbenzene	18.642	105	368114	5.052	ppbV	100
98) tert-butylbenzene	18.973	119	414802	5.109	ppbV	97
99) 1,2,4-trimethylbenzene	18.973	105	367538	5.062	ppbV	97
100) decane	19.048	57	389301	4.964	ppbV	97
101) Benzyl Chloride	19.090	91	204884	4.426	ppbV	99
102) 1,3-dichlorobenzene	19.098	146	241028	4.978	ppbV	96
103) 1,4-dichlorobenzene	19.157	146	232525	4.846	ppbV	95
104) sec-butylbenzene	19.190	105	518749	5.021	ppbV	99
105) 1,2,3-trimethylbenzene	19.315	105	326846	5.061	ppbV	99
106) p-isopropyltoluene	19.307	119	499259	5.033	ppbV	97
107) 1,2-dichlorobenzene	19.432	146	227303	4.993	ppbV	99
108) n-butylbenzene	19.648	91	472513	5.014	ppbV	99
109) indan	19.482	117	375150	5.010	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529894.D
Acq On : 22 Dec 2021 8:11 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD5.0
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:26:11 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:24:36 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default - All compounds listed

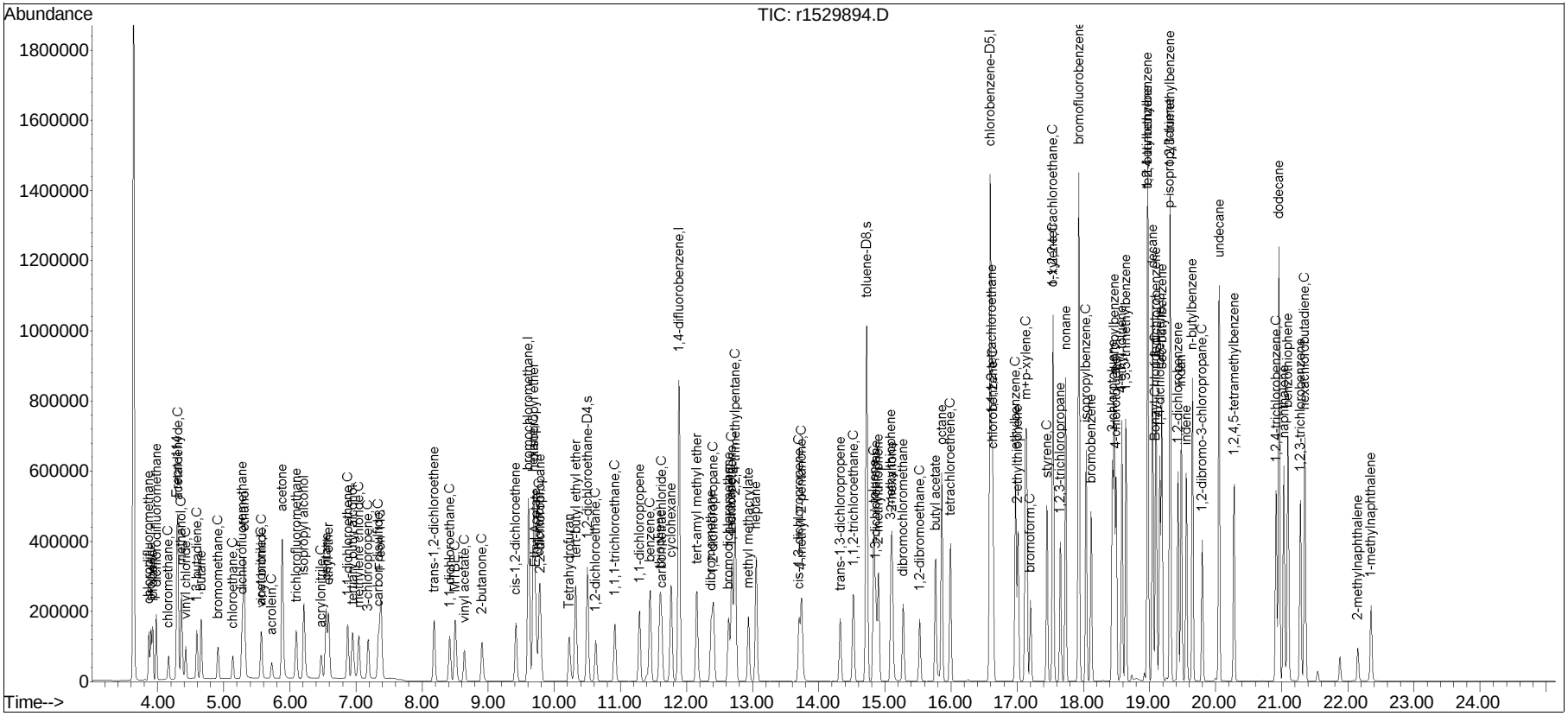
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.557	115	289481	4.966	ppbV	99
111) 1,2-dibromo-3-chloropr...	19.798	75	96671	4.866	ppbV	97
112) undecane	20.057	57	450962	5.033	ppbV	99
113) 1,2,4,5-tetramethylben...	20.282	119	308856	5.050	ppbV	97
114) dodecane	20.958	57	481971	4.970	ppbV	98
115) 1,2,4-trichlorobenzene	20.917	180	177313	4.708	ppbV	99
116) naphthalene	21.033	128	534903	4.784	ppbV	99
117) 1,2,3-trichlorobenzene	21.283	180	169522	4.693	ppbV	99
118) benzothiophene	21.092	134	577695	4.679	ppbV	99
119) hexachlorobutadiene	21.350	225	152188	5.006	ppbV	97
120) 2-methylnaphthalene	22.150	142	56781	4.277	ppbV	98
121) 1-methylnaphthalene	22.350	142	132130	4.457	ppbV	99

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

Sub List : Default - All compounds listed1\12\1222T_I\r1529895.D

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529894.D
Acq On : 22 Dec 2021 8:11 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD5.0
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:26:11 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:24:36 2021
Response via : Initial Calibration

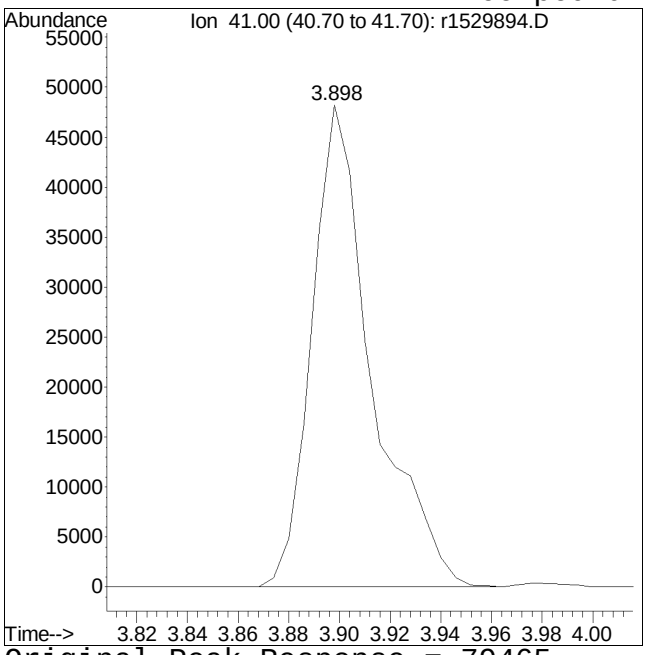


Manual Integration Report

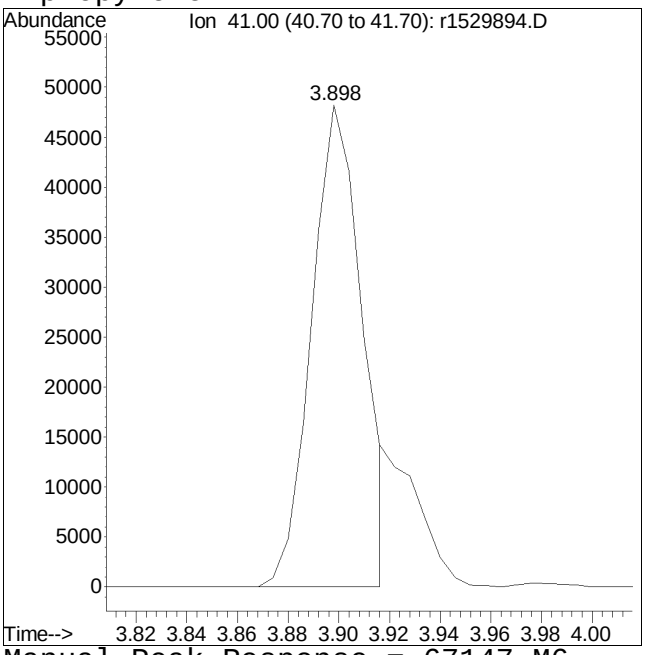
Data Path : O:\Forensics\Data\Airlab15Q
Data File : r1529894.D
Date Inj'd : 12/22/2020 0:8: 1
Sample : ITO15-LLSTD5.0

Method : TFS15_211222.M
Operator : AIRLAB15:TS
Instrument :
Quant Date : 12/22/2021 10:25 am

Compound #3: propylene



Original Peak Response = 79465



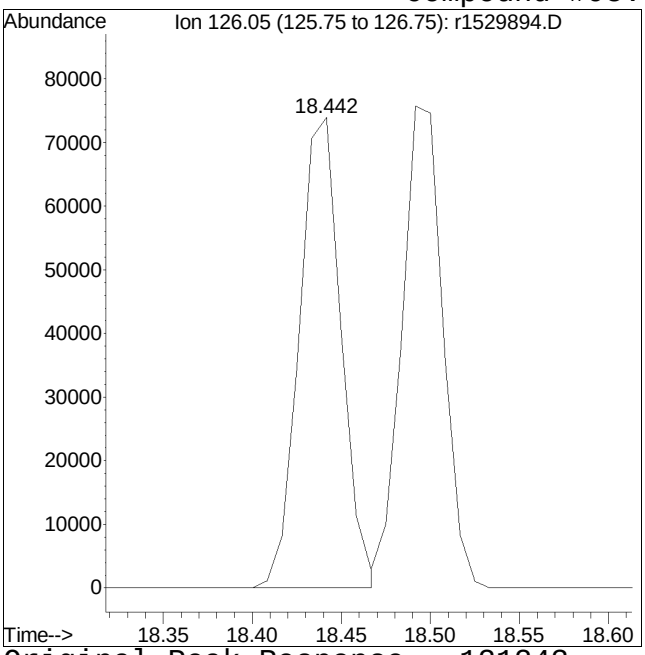
Manual Peak Response = 67147 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

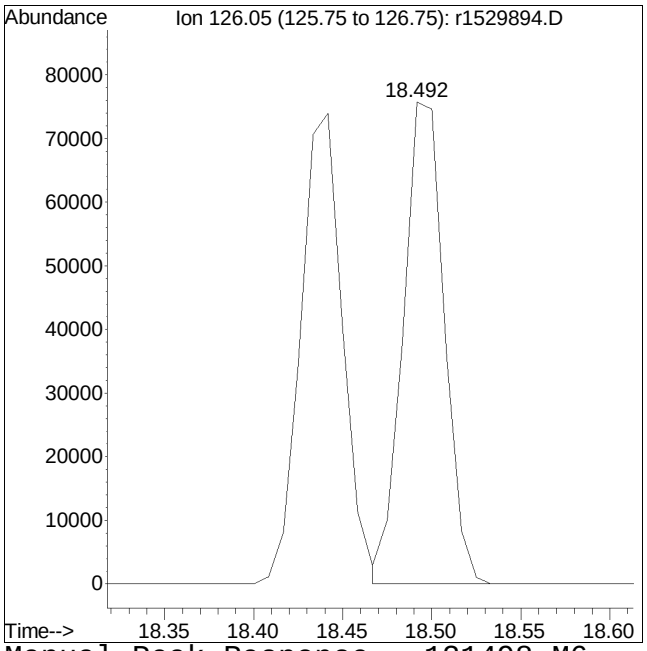
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TFS15_211222.M
Data File : r1529894.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:8: 1 Instrument :
Sample : ITO15-LLSTD5.0 Quant Date : 12/22/2021 10:25 am

Compound #95: 4-chlorotoluene



Original Peak Response = 121243



Manual Peak Response = 121498 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529895.D
Acq On : 22 Dec 2021 8:52 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD010
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:28:02 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Dec 11 07:34:07 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) bromochloromethane	9.617	49	354329	10.000	ppbV	#	0.07
Standard Area = 354329			Recovery = 100.00%				
43) 1,4-difluorobenzene	11.883	114	820934	10.000	ppbV	#	0.06
Standard Area = 820934			Recovery = 100.00%				
67) chlorobenzene-D5	16.592	54	194813	10.000	ppbV		0.04
Standard Area = 194813			Recovery = 100.00%				
System Monitoring Compounds							
47) 1,2-dichloroethane-D4	10.500	65	238799	12.242	ppbV		0.06
Spiked Amount 10.000	Range 70 - 130		Recovery = 122.42%				
69) toluene-D8	14.725	98	796082	9.338	ppbV		0.06
Spiked Amount 10.000	Range 70 - 130		Recovery = 93.38%				
90) bromofluorobenzene	17.933	95	591800	10.155	ppbV		0.04
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.55%				
Target Compounds							Qvalue
2) chlorodifluoromethane	3.868	51	229161	9.866	ppbV		98
3) propylene	3.898	41	132842M6	11.226	ppbV		
4) propane	3.928	29	197522	9.194	ppbV	#	87
5) dichlorodifluoromethane	3.982	85	248931	11.963	ppbV		97
6) chloromethane	4.168	50	123164	8.734	ppbV		96
7) Freon-114	4.294	85	302259	10.298	ppbV		93
8) methanol	4.360	31	349879	41.113	ppbV		95
9) vinyl chloride	4.426	62	165859	11.696	ppbV		97
10) 1,3-butadiene	4.594	54	119870	9.317	ppbV		93
11) butane	4.660	43	238615	10.231	ppbV	#	90
12) acetaldehyde	4.306	29	366518	41.767	ppbV		87
13) bromomethane	4.912	94	125258	11.601	ppbV		96
14) chloroethane	5.140	64	83198	12.211	ppbV		100
15) ethanol	5.308	31	563440	39.866	ppbV	#	76
16) dichlorofluoromethane	5.278	67	289100	13.248	ppbV	#	96
17) vinyl bromide	5.570	106	108165	11.215	ppbV		91
18) acrolein	5.723	56	67073	9.263	ppbV		93
19) acetone	5.880	43	938578	58.295	ppbV	#	82
20) acetonitrile	5.563	41	147557	10.128	ppbV		95
21) trichlorofluoromethane	6.097	101	241601	16.629	ppbV		100
22) isopropyl alcohol	6.210	45	512251	23.216	ppbV	#	95
23) acrylonitrile	6.473	53	117780	8.830	ppbV		95
24) pentane	6.550	43	345259M6	11.595	ppbV		

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529895.D
Acq On : 22 Dec 2021 8:52 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD010
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:28:02 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Dec 11 07:34:07 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) ethyl ether	6.587	31	241554	6.725	ppbV	#	87
26) 1,1-dichloroethene	6.876	61	236132	13.352	ppbV		94
27) tertiary butyl alcohol	6.942	59	271696	11.338	ppbV	#	86
28) methylene chloride	7.044	49	162046	8.895	ppbV	#	79
29) 3-chloropropene	7.188	41	197838	9.758	ppbV	#	84
30) carbon disulfide	7.338	76	338968	9.244	ppbV	#	92
31) Freon 113	7.380	101	242811	12.605	ppbV		95
32) trans-1,2-dichloroethene	8.183	61	250942	13.334	ppbV		98
33) 1,1-dichloroethane	8.417	63	305391	13.594	ppbV		96
34) MTBE	8.500	73	349111	10.704	ppbV	#	90
35) vinyl acetate	8.642	43	318463	9.148	ppbV	#	91
36) 2-butanone	8.908	43	344100	9.701	ppbV	#	89
37) cis-1,2-dichloroethene	9.417	61	242506	14.376	ppbV		97
38) Ethyl Acetate	9.725	61	61317	12.363	ppbV	#	40
39) chloroform	9.775	83	296195	13.670	ppbV	#	93
40) Tetrahydrofuran	10.225	42	214484	9.911	ppbV	#	87
41) 2,2-dichloropropane	9.792	77	195739	11.375	ppbV		85
42) 1,2-dichloroethane	10.625	62	204530	16.046	ppbV		97
44) hexane	9.683	57	336487	11.057	ppbV	#	47
45) diisopropyl ether	9.692	87	149558	10.616	ppbV	#	40
46) tert-butyl ethyl ether	10.325	59	557860	11.007	ppbV		97
48) 1,1,1-trichloroethane	10.917	97	233960	12.575	ppbV		97
49) 1,1-dichloropropene	11.290	75	227506	9.017	ppbV		87
50) benzene	11.450	78	535410	8.773	ppbV		98
51) thiophene	11.597	84	341688	10.513	ppbV	#	91
52) carbon tetrachloride	11.623	117	213207	12.209	ppbV		99
53) cyclohexane	11.770	56	358446	10.933	ppbV	#	85
54) tert-amyl methyl ether	12.157	73	412950	8.347	ppbV	#	86
55) dibromomethane	12.370	93	170918	11.062	ppbV	#	89
56) 1,2-dichloropropane	12.403	63	206127	10.680	ppbV		96
57) bromodichloromethane	12.637	83	299411	10.915	ppbV		99
58) 1,4-dioxane	12.677	88	130270	11.091	ppbV		98
59) trichloroethene	12.683	130	214053	11.845	ppbV		93
60) 2,2,4-trimethylpentane	12.737	57	1099692M6	11.265	ppbV		
61) methyl methacrylate	12.937	41	237742	9.174	ppbV	#	84
62) heptane	13.057	43	364229	8.110	ppbV	#	70
63) cis-1,3-dichloropropene	13.700	75	250616	9.210	ppbV	#	88
64) 4-methyl-2-pentanone	13.742	43	417385	7.947	ppbV	#	73
65) trans-1,3-dichloropropene	14.325	75	234477	9.622	ppbV		89
66) 1,1,2-trichloroethane	14.525	97	196146	10.798	ppbV		94

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529895.D
Acq On : 22 Dec 2021 8:52 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD010
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:28:02 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Dec 11 07:34:07 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
68) toluene	14.833	91	668904	9.707	ppbV		99
70) 2-methylthiophene	14.900	97	472508	9.269	ppbV	#	97
71) 1,3-dichloropropane	14.858	76	283732	7.760	ppbV	#	76
72) 2-hexanone	15.108	43	395660	6.963	ppbV	#	65
73) 3-methylthiophene	15.092	97	489186	9.407	ppbV	#	96
74) dibromochloromethane	15.275	129	274667	10.976	ppbV		98
75) 1,2-dibromoethane	15.525	107	275500	8.494	ppbV		99
76) butyl acetate	15.767	73	69504	7.343	ppbV	#	58
77) octane	15.858	85	256313	9.832	ppbV	#	57
78) tetrachloroethene	15.992	166	247369	10.412	ppbV	#	90
79) 1,1,1,2-tetrachloroethane	16.617	131	216555	10.545	ppbV		98
80) chlorobenzene	16.633	112	483296	9.111	ppbV		96
81) ethylbenzene	16.975	91	854115	10.563	ppbV		98
82) 2-ethylthiophene	17.017	97	566715	9.400	ppbV	#	96
83) m+p-xylene	17.142	91	1400364	21.720	ppbV		95
84) bromoform	17.200	173	227947	10.665	ppbV		99
85) styrene	17.450	104	491127	8.786	ppbV		98
86) 1,1,2,2-tetrachloroethane	17.542	83	522098	9.726	ppbV		99
87) o-xylene	17.542	91	710029	10.919	ppbV		97
88) 1,2,3-trichloropropane	17.658	75	361257	7.943	ppbV		93
89) nonane	17.733	43	575432	7.010	ppbV	#	57
91) isopropylbenzene	18.042	105	793204	8.526	ppbV		97
92) bromobenzene	18.117	77	472947	8.272	ppbV		87
93) 2-chlorotoluene	18.442	126	245383	10.191	ppbV		90
94) n-propylbenzene	18.467	120	285789	10.217	ppbV		93
95) 4-chlorotoluene	18.500	126	243431M6	10.253	ppbV		
96) 4-ethyl toluene	18.583	105	839552	8.614	ppbV		95
97) 1,3,5-trimethylbenzene	18.642	105	732275	9.090	ppbV		91
98) tert-butylbenzene	18.973	119	815837	10.473	ppbV		97
99) 1,2,4-trimethylbenzene	18.973	105	729662	9.240	ppbV		94
100) decane	19.048	57	788185	10.232	ppbV	#	67
101) Benzyl Chloride	19.090	91	465236	9.785	ppbV		96
102) 1,3-dichlorobenzene	19.107	146	486568	9.509	ppbV		95
103) 1,4-dichlorobenzene	19.157	146	482194M3	9.508	ppbV		
104) sec-butylbenzene	19.190	105	1038204	8.636	ppbV		97
105) 1,2,3-trimethylbenzene	19.315	105	648973	9.258	ppbV		95
106) p-isopropyltoluene	19.315	119	983782M6	10.542	ppbV		
107) 1,2-dichlorobenzene	19.432	146	457491	9.509	ppbV		91
108) n-butylbenzene	19.648	91	947047	10.467	ppbV		96
109) indan	19.482	117	752529	10.202	ppbV		96

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529895.D
Acq On : 22 Dec 2021 8:52 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD010
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:28:02 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Dec 11 07:34:07 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default - All compounds listed

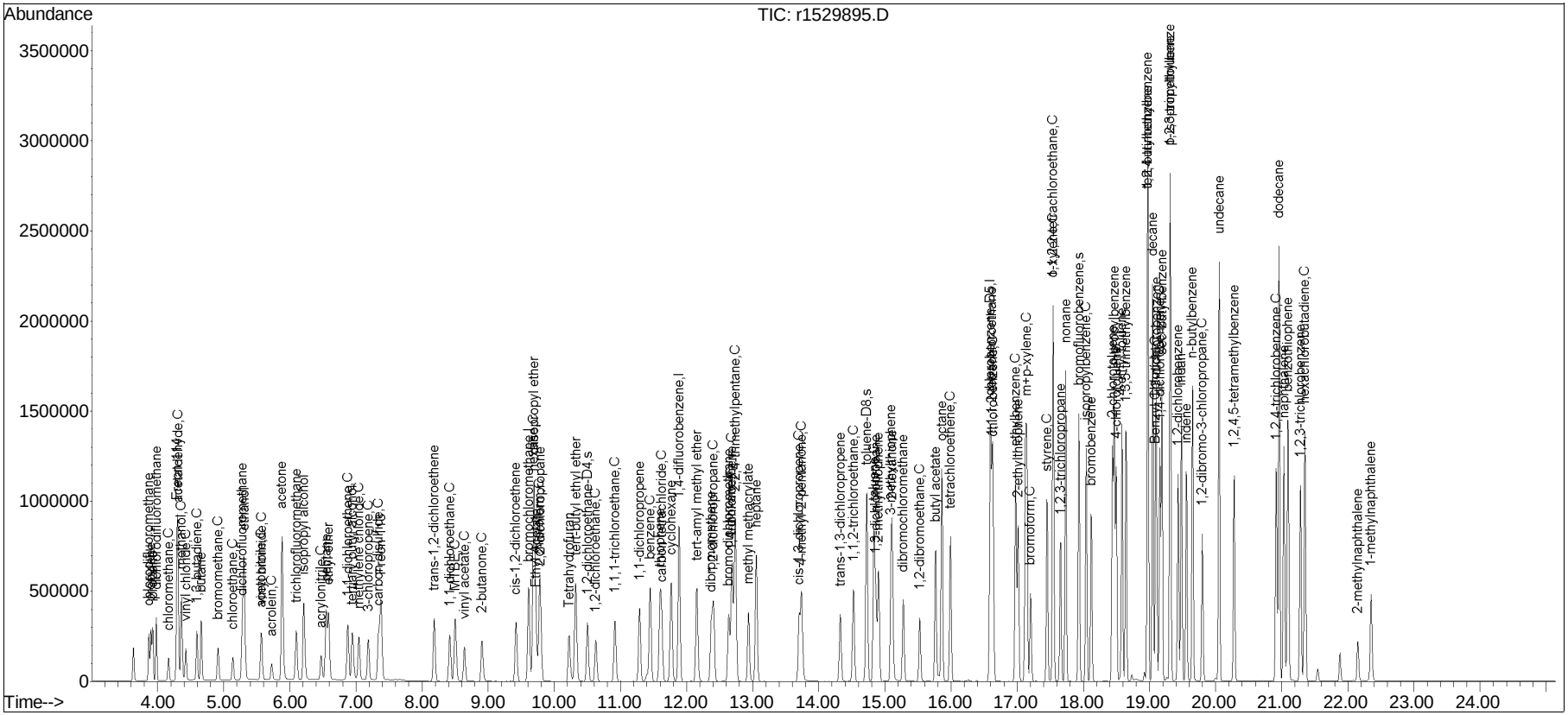
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.557	115	585782	9.768	ppbV	92
111) 1,2-dibromo-3-chloropr...	19.798	75	199628	8.713	ppbV	83
112) undecane	20.057	57	900412	10.658	ppbV #	76
113) 1,2,4,5-tetramethylben...	20.282	119	614626	7.582	ppbV	99
114) dodecane	20.958	57	974508	11.653	ppbV #	66
115) 1,2,4-trichlorobenzene	20.917	180	378496	11.237	ppbV	96
116) naphthalene	21.033	128	1123592	11.293	ppbV	96
117) 1,2,3-trichlorobenzene	21.283	180	362975	11.129	ppbV	97
118) benzothiophene	21.092	134	1240739	6.991	ppbV #	95
119) hexachlorobutadiene	21.350	225	305496	12.122	ppbV	95
120) 2-methylnaphthalene	22.150	142	133423	5.355	ppbV	95
121) 1-methylnaphthalene	22.350	142	297913	6.015	ppbV	97

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

Sub List : Default - All compounds listed1\12\1222T_I\r1529895.D

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529895.D
Acq On : 22 Dec 2021 8:52 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD010
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

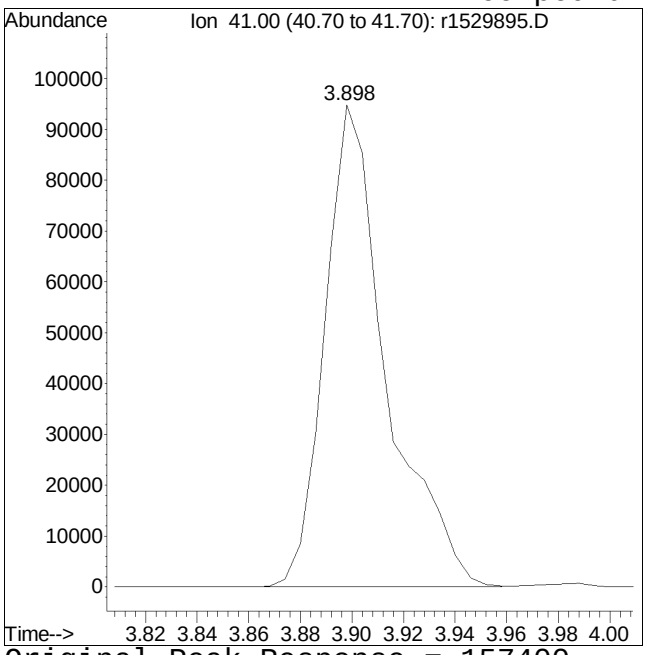
Quant Time: Dec 22 16:28:02 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Dec 11 07:34:07 2021
Response via : Initial Calibration



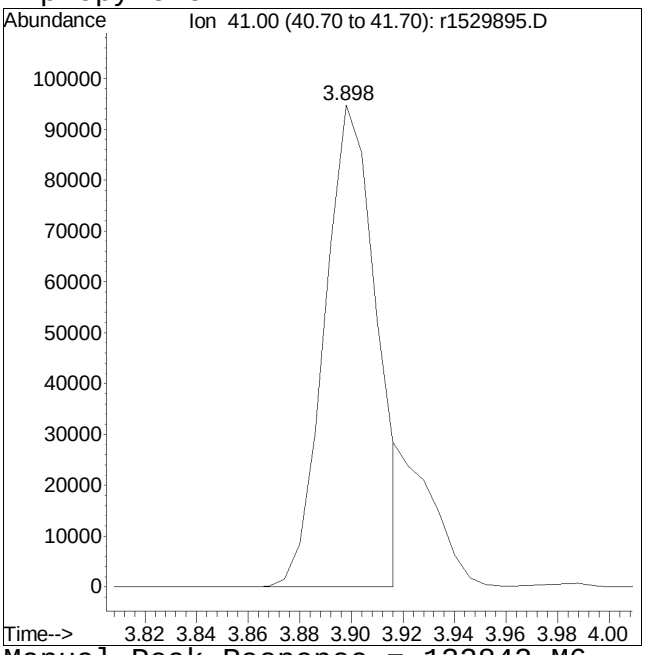
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TFS15_211222.M
Data File : r1529895.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:8: 2 Instrument :
Sample : ITO15-LLSTD010 Quant Date : 12/22/2021 10:21 am

Compound #3: propylene



Original Peak Response = 157400



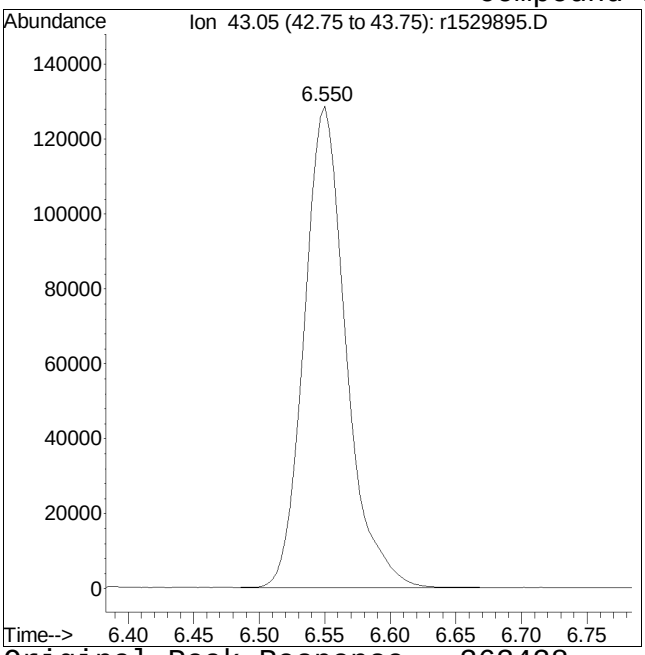
Manual Peak Response = 132842 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

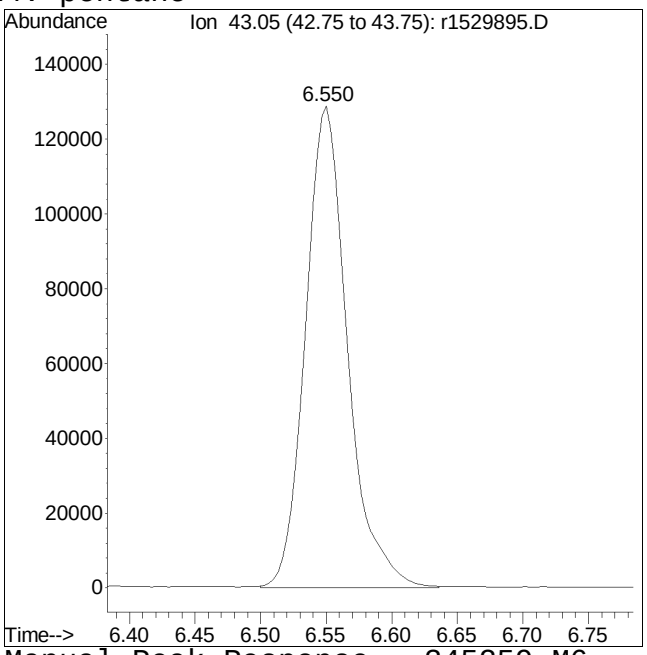
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TFS15_211222.M
Data File : r1529895.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:8: 2 Instrument :
Sample : ITO15-LLSTD010 Quant Date : 12/22/2021 10:21 am

Compound #24: pentane



Original Peak Response = 363438



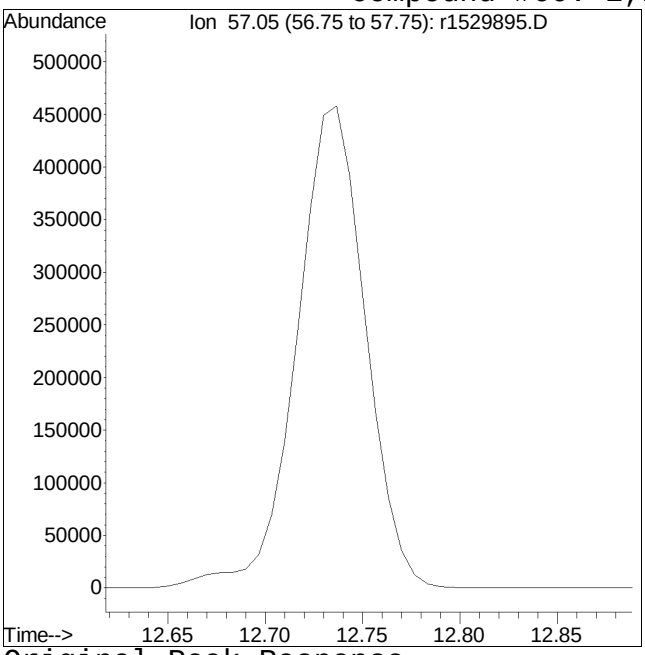
Manual Peak Response = 345259 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

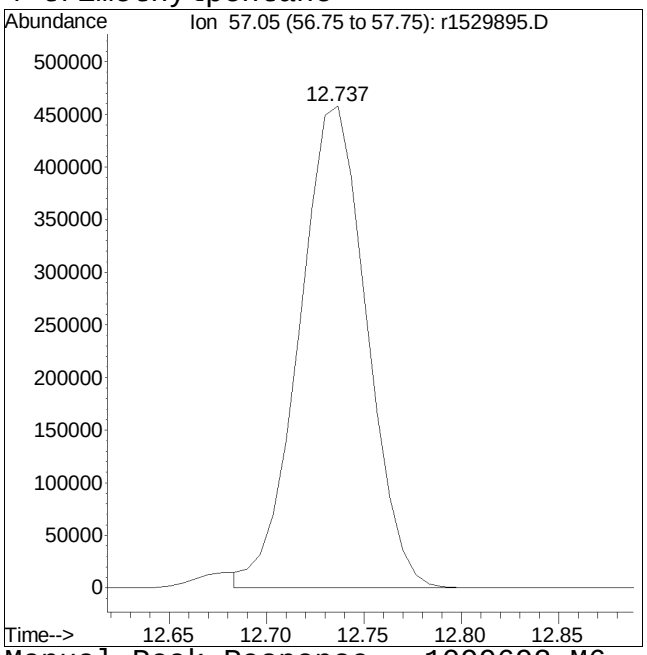
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TFS15_211222.M
Data File : r1529895.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:8: 2 Instrument :
Sample : ITO15-LLSTD010 Quant Date : 12/22/2021 10:21 am

Compound #60: 2,2,4-trimethylpentane



Original Peak Response =



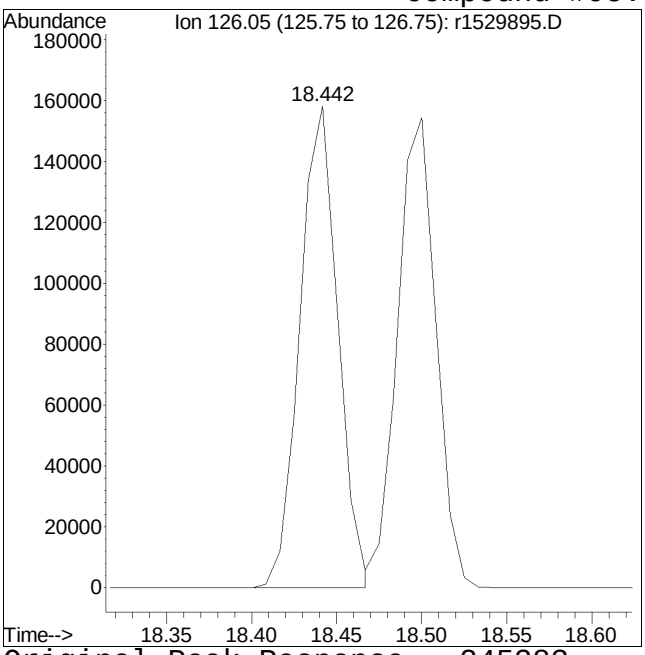
Manual Peak Response = 1099692 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

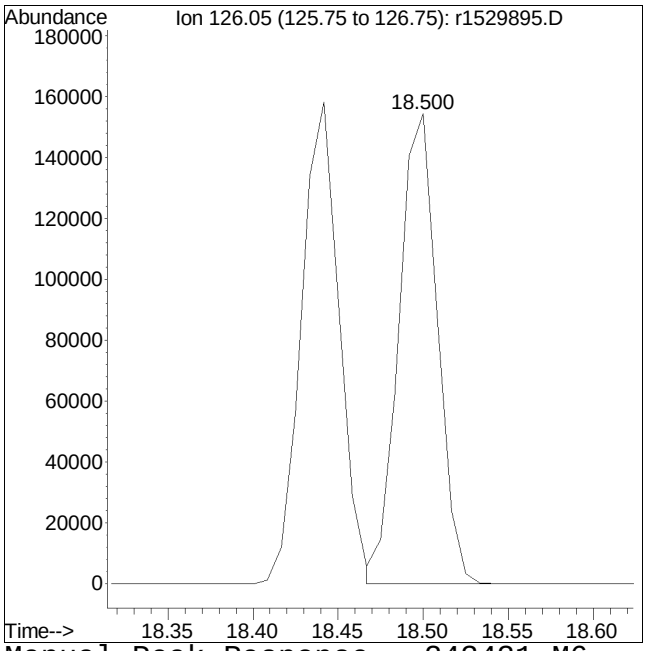
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TFS15_211222.M
Data File : r1529895.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:8: 2 Instrument :
Sample : ITO15-LLSTD010 Quant Date : 12/22/2021 10:21 am

Compound #95: 4-chlorotoluene



Original Peak Response = 245383



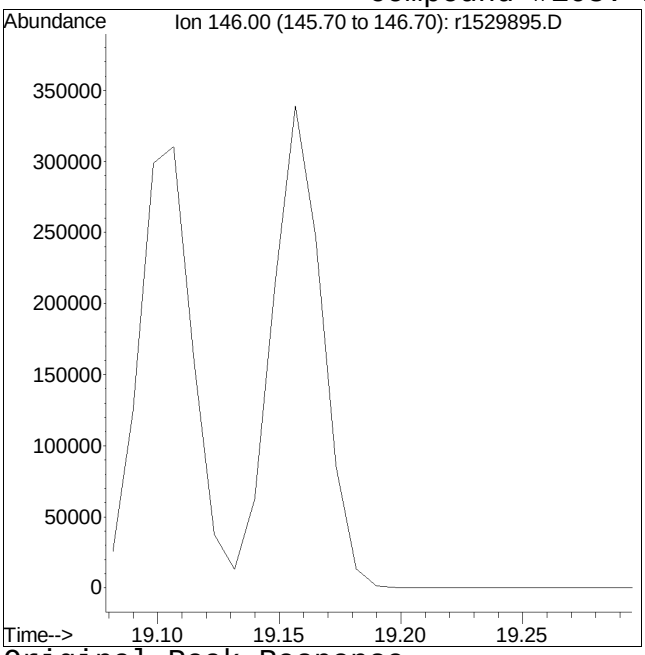
Manual Peak Response = 243431 M6

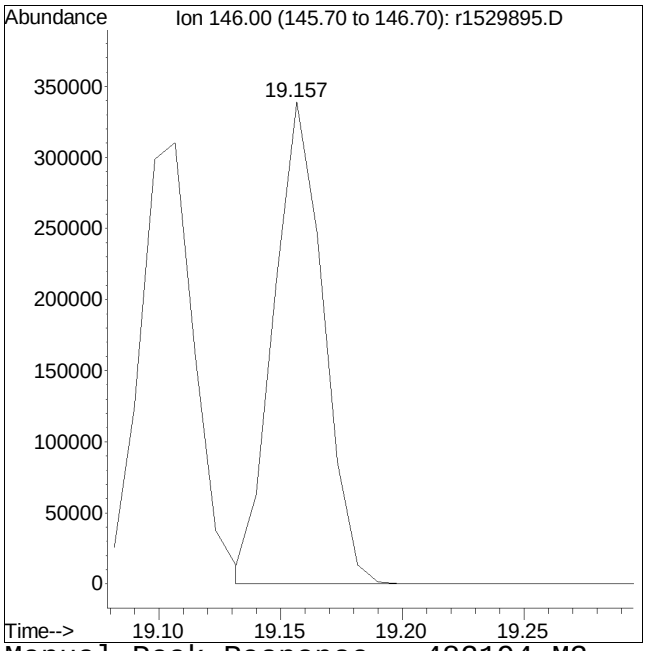
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TFS15_211222.M
Data File : r1529895.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:8: 2 Instrument :
Sample : ITO15-LLSTD010 Quant Date : 12/22/2021 10:21 am

Compound #103: 1,4-dichlorobenzene



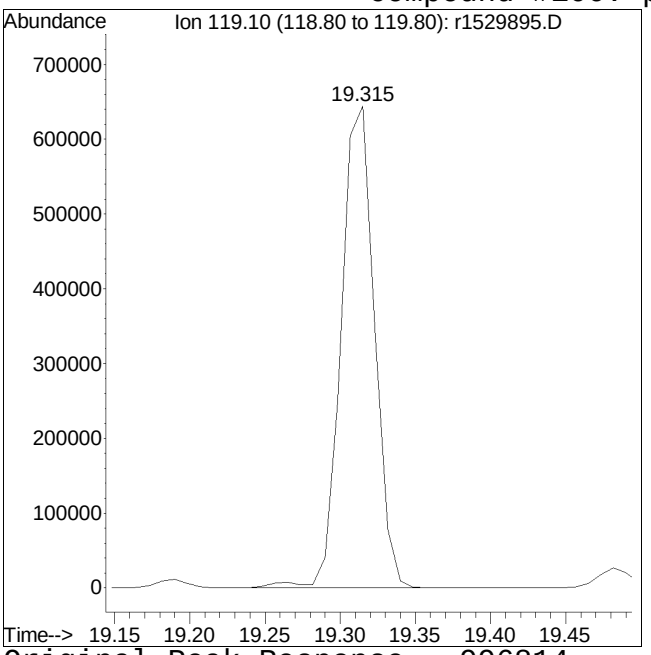


Original Peak Response = Manual Peak Response = 482194 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

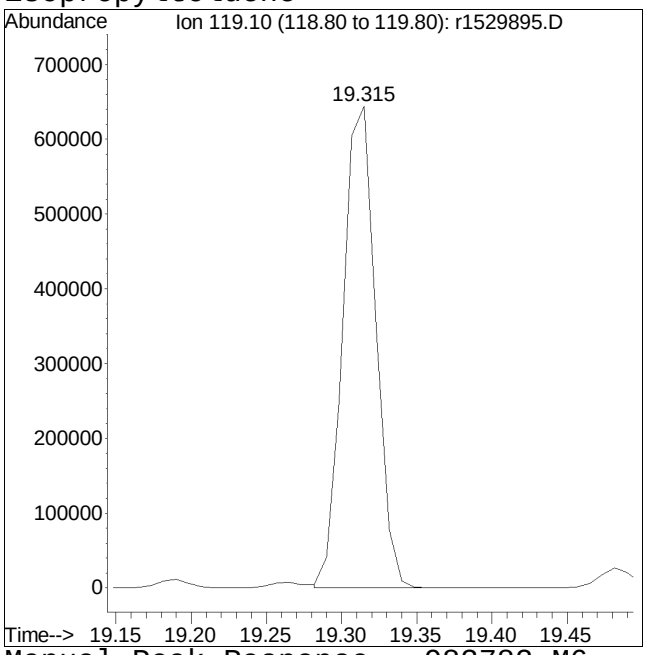
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TFS15_211222.M
Data File : r1529895.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:8: 2 Instrument :
Sample : ITO15-LLSTD010 Quant Date : 12/22/2021 10:21 am

Compound #106: p-isopropyltoluene



Original Peak Response = 996814



Manual Peak Response = 983782 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529896.D
Acq On : 22 Dec 2021 9:29 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD020
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:29:29 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:24:36 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.617	49	354782	10.000	ppbV	0.00
Standard Area = 354329			Recovery = 100.13%			
43) 1,4-difluorobenzene	11.883	114	821851	10.000	ppbV	0.00
Standard Area = 820934			Recovery = 100.11%			
67) chlorobenzene-D5	16.592	54	191647	10.000	ppbV	0.00
Standard Area = 194813			Recovery = 98.37%			
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.500	65	238377	9.971	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.71%			
69) toluene-D8	14.725	98	798046	10.190	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.90%			
90) bromofluorobenzene	17.933	95	602942	10.357	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.57%			
Target Compounds						Qvalue
2) chlorodifluoromethane	3.868	51	480502	20.941	ppbV	100
3) propylene	3.898	41	289079M6	21.733	ppbV	
4) propane	3.928	29	409314	20.696	ppbV	96
5) dichlorodifluoromethane	3.982	85	493969	19.818	ppbV	98
6) chloromethane	4.168	50	252379	20.465	ppbV	100
7) Freon-114	4.294	85	600141	19.830	ppbV	99
8) methanol	4.360	31	714905	102.034	ppbV	99
9) vinyl chloride	4.426	62	336628	20.270	ppbV	99
10) 1,3-butadiene	4.594	54	249169	20.760	ppbV	98
11) butane	4.660	43	514554	21.537	ppbV	99
12) acetaldehyde	4.306	29	708043	96.467	ppbV	94
13) bromomethane	4.912	94	249075	19.860	ppbV	99
14) chloroethane	5.140	64	168499	20.227	ppbV	99
15) ethanol	5.308	31	1082759	95.962	ppbV	95
16) dichlorofluoromethane	5.278	67	627150	21.665	ppbV	99
17) vinyl bromide	5.570	106	238832	22.052	ppbV	99
18) acrolein	5.723	56	143393	21.351	ppbV	97
19) acetone	5.880	43	1977003	105.185	ppbV	98
20) acetonitrile	5.563	41	316791	21.442	ppbV	99
21) trichlorofluoromethane	6.097	101	496978	20.544	ppbV	98
22) isopropyl alcohol	6.210	45	1134606	55.303	ppbV	100
23) acrylonitrile	6.473	53	257516	21.836	ppbV	98
24) pentane	6.550	43	817618	30.187	ppbV	100

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529896.D
Acq On : 22 Dec 2021 9:29 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD020
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:29:29 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:24:36 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.583	31	560499	23.174	ppbV	97
26) 1,1-dichloroethene	6.876	61	492937	20.849	ppbV	99
27) tertiary butyl alcohol	6.942	59	604878	22.235	ppbV	99
28) methylene chloride	7.044	49	335508	20.678	ppbV	99
29) 3-chloropropene	7.188	41	445305	22.480	ppbV	98
30) carbon disulfide	7.338	76	769037	22.659	ppbV	98
31) Freon 113	7.380	101	507700	20.883	ppbV	98
32) trans-1,2-dichloroethene	8.183	61	565065	22.489	ppbV	99
33) 1,1-dichloroethane	8.417	63	650219	21.264	ppbV	99
34) MTBE	8.500	73	776168	22.204	ppbV	99
35) vinyl acetate	8.642	43	759410	23.816	ppbV	99
36) 2-butanone	8.900	43	764664	22.194	ppbV	100
37) cis-1,2-dichloroethene	9.417	61	520826	21.449	ppbV	98
38) Ethyl Acetate	9.717	61	140206	22.837	ppbV	87
39) chloroform	9.775	83	614063	20.705	ppbV	98
40) Tetrahydrofuran	10.217	42	477882	22.252	ppbV	98
41) 2,2-dichloropropane	9.792	77	440620	22.482	ppbV	98
42) 1,2-dichloroethane	10.625	62	435775	21.279	ppbV	98
44) hexane	9.683	57	742984	22.056	ppbV	98
45) diisopropyl ether	9.692	87	333876	22.299	ppbV	97
46) tert-butyl ethyl ether	10.317	59	1245736	22.306	ppbV	99
48) 1,1,1-trichloroethane	10.917	97	507247	21.657	ppbV	98
49) 1,1-dichloropropene	11.290	75	500833	21.989	ppbV	98
50) benzene	11.450	78	1133117	21.140	ppbV	100
51) thiophene	11.597	84	749758	21.918	ppbV	99
52) carbon tetrachloride	11.623	117	457052	21.413	ppbV	98
53) cyclohexane	11.770	56	794390	22.137	ppbV	100
54) tert-amyl methyl ether	12.150	73	910595	22.026	ppbV	100
55) dibromomethane	12.377	93	376948	22.030	ppbV	98
56) 1,2-dichloropropane	12.403	63	443327	21.483	ppbV	99
57) bromodichloromethane	12.637	83	669912	22.349	ppbV	98
58) 1,4-dioxane	12.670	88	294038	22.546	ppbV	99
59) trichloroethene	12.683	130	458952	21.417	ppbV	98
60) 2,2,4-trimethylpentane	12.737	57	2416866M6	21.501	ppbV	
61) methyl methacrylate	12.937	41	519863	21.842	ppbV	100
62) heptane	13.057	43	806489	22.118	ppbV	99
63) cis-1,3-dichloropropene	13.700	75	545092	21.726	ppbV	99
64) 4-methyl-2-pentanone	13.733	43	936773	22.419	ppbV	99
65) trans-1,3-dichloropropene	14.325	75	513042	21.856	ppbV	98
66) 1,1,2-trichloroethane	14.525	97	421318	21.456	ppbV	99

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529896.D
Acq On : 22 Dec 2021 9:29 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD020
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:29:29 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:24:36 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	toluene	14.833	91	1414305	21.493	ppbV	100
70)	2-methylthiophene	14.908	97	1057650	22.754	ppbV	99
71)	1,3-dichloropropane	14.867	76	621149	22.254	ppbV	97
72)	2-hexanone	15.108	43	884155	22.715	ppbV	99
73)	3-methylthiophene	15.092	97	1089923	22.648	ppbV	100
74)	dibromochloromethane	15.275	129	622638	23.043	ppbV	99
75)	1,2-dibromoethane	15.525	107	592432	21.859	ppbV	99
76)	butyl acetate	15.767	73	158057	23.116	ppbV	99
77)	octane	15.858	85	560589	22.233	ppbV	99
78)	tetrachloroethene	15.992	166	519825	21.361	ppbV	97
79)	1,1,1,2-tetrachloroethane	16.617	131	485975	22.812	ppbV	99
80)	chlorobenzene	16.633	112	1010346	21.251	ppbV	98
81)	ethylbenzene	16.975	91	1824852	21.718	ppbV	99
82)	2-ethylthiophene	17.017	97	1263160	22.657	ppbV	100
83)	m+p-xylene	17.142	91	2958200	42.947	ppbV	98
84)	bromoform	17.200	173	527756	23.535	ppbV	99
85)	styrene	17.450	104	1047537	21.682	ppbV	99
86)	1,1,2,2-tetrachloroethane	17.542	83	1068560	20.805	ppbV	99
87)	o-xylene	17.542	91	1481267	21.207	ppbV	98
88)	1,2,3-trichloropropane	17.658	75	785191	22.094	ppbV	99
89)	nonane	17.733	43	1243071	21.959	ppbV	100
91)	isopropylbenzene	18.042	105	1741075	22.313	ppbV	100
92)	bromobenzene	18.125	77	1026675	22.067	ppbV	97
93)	2-chlorotoluene	18.442	126	551623	22.851	ppbV	90
94)	n-propylbenzene	18.467	120	632064	22.482	ppbV	95
95)	4-chlorotoluene	18.500	126	543428M6	22.512	ppbV	
96)	4-ethyl toluene	18.583	105	1869296	22.633	ppbV	99
97)	1,3,5-trimethylbenzene	18.650	105	1559074	21.643	ppbV	98
98)	tert-butylbenzene	18.973	119	1671268	20.824	ppbV	95
99)	1,2,4-trimethylbenzene	18.982	105	1521136	21.192	ppbV	92
100)	decane	19.048	57	1706982	22.015	ppbV	99
101)	Benzyl Chloride	19.090	91	1182851	25.845	ppbV	98
102)	1,3-dichlorobenzene	19.107	146	1032355	21.568	ppbV	96
103)	1,4-dichlorobenzene	19.157	146	1034514	21.809	ppbV	97
104)	sec-butylbenzene	19.190	105	2239031	21.923	ppbV	96
105)	1,2,3-trimethylbenzene	19.315	105	1361452	21.325	ppbV	99
106)	p-isopropyltoluene	19.315	119	2040476M6	20.808	ppbV	
107)	1,2-dichlorobenzene	19.432	146	978034	21.731	ppbV	99
108)	n-butylbenzene	19.657	91	2037991	21.875	ppbV	99
109)	indan	19.482	117	1566879	21.165	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529896.D
Acq On : 22 Dec 2021 9:29 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD020
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:29:29 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:24:36 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default - All compounds listed

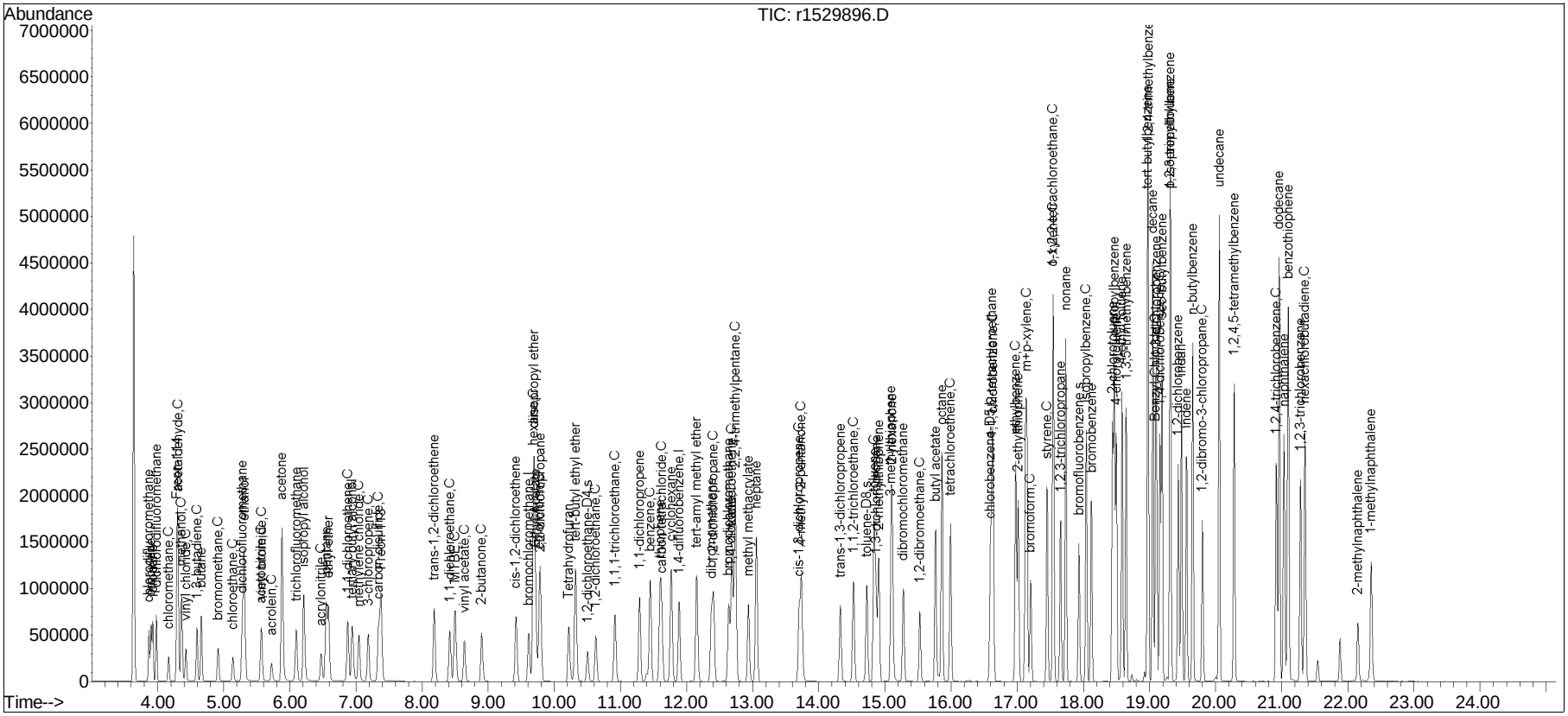
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.557	115	1259641	21.859	ppbV	98
111) 1,2-dibromo-3-chloropr...	19.798	75	438446	22.326	ppbV	96
112) undecane	20.057	57	1913868	21.607	ppbV	99
113) 1,2,4,5-tetramethylben...	20.282	119	1687823	27.915	ppbV	98
114) dodecane	20.958	57	1917111	19.998	ppbV	100
115) 1,2,4-trichlorobenzene	20.917	180	790867	21.240	ppbV	99
116) naphthalene	21.033	128	2338778	21.159	ppbV	99
117) 1,2,3-trichlorobenzene	21.283	180	752465	21.073	ppbV	97
118) benzothiophene	21.100	134	3396381	27.826	ppbV	99
119) hexachlorobutadiene	21.350	225	598802	19.925	ppbV	97
120) 2-methylnaphthalene	22.150	142	392392	29.895	ppbV	99
121) 1-methylnaphthalene	22.350	142	807336	27.547	ppbV	97

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

Sub List : Default - All compounds listed1\12\1222T_I\r1529895.D

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529896.D
Acq On : 22 Dec 2021 9:29 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD020
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:29:29 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:24:36 2021
Response via : Initial Calibration

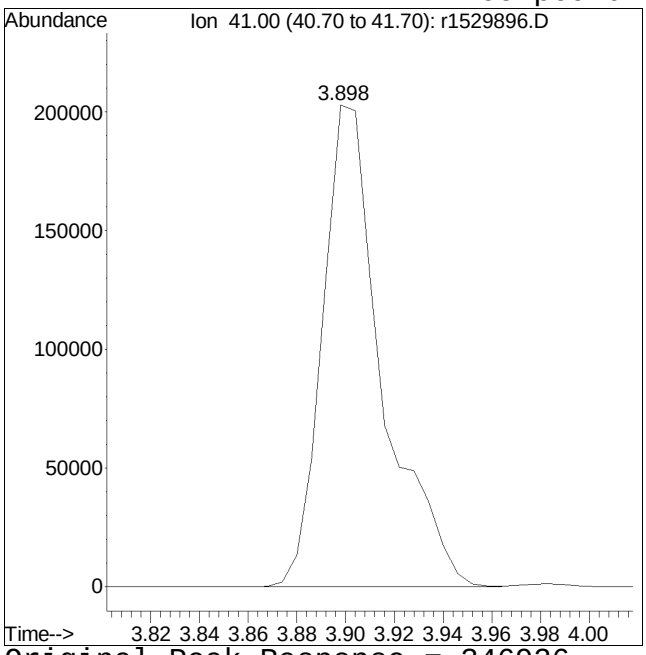


Manual Integration Report

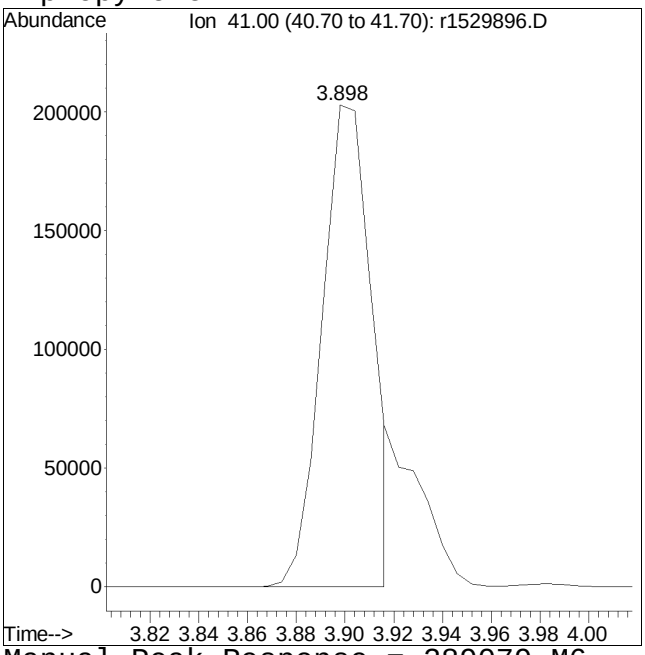
Data Path : O:\Forensics\Data\Airlab15Q
Data File : r1529896.D
Date Inj'd : 12/22/2020 0:9: 9
Sample : ITO15-LLSTD020

Method : TFS15_211222.M
Operator : AIRLAB15:TS
Instrument :
Quant Date : 12/22/2021 10:25 am

Compound #3: propylene



Original Peak Response = 346926



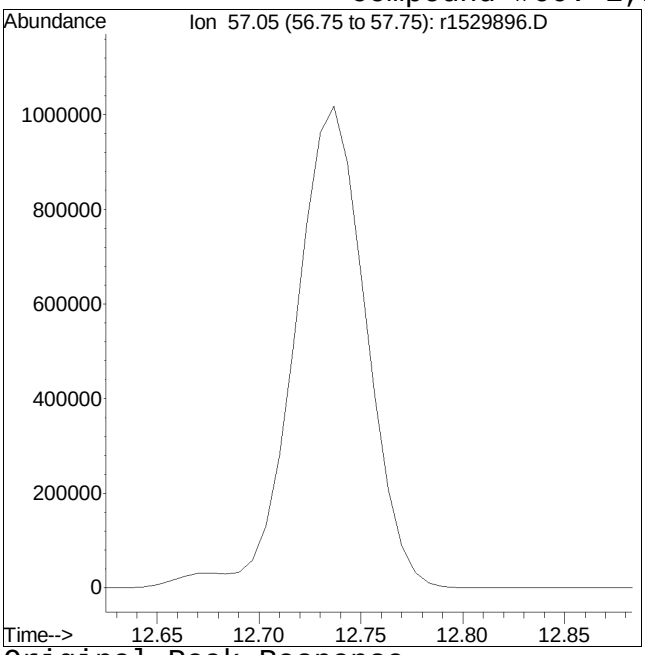
Manual Peak Response = 289079 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

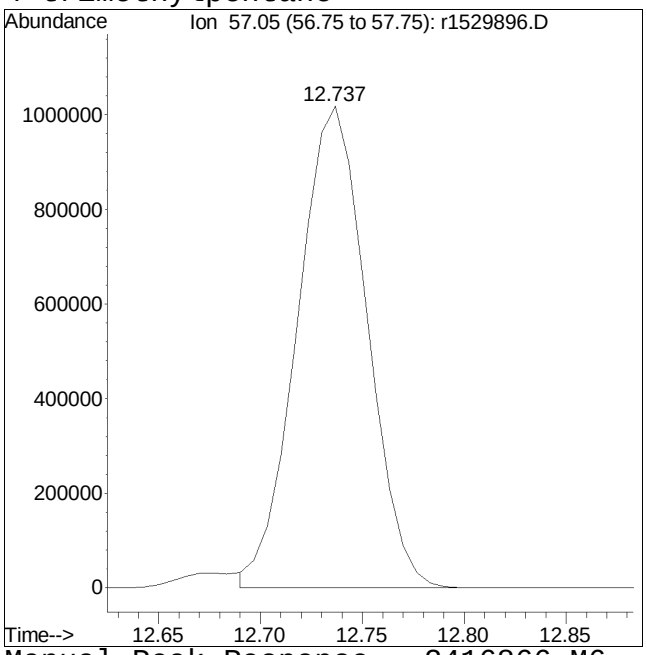
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TFS15_211222.M
Data File : r1529896.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:9: 9 Instrument :
Sample : ITO15-LLSTD020 Quant Date : 12/22/2021 10:25 am

Compound #60: 2,2,4-trimethylpentane



Original Peak Response =



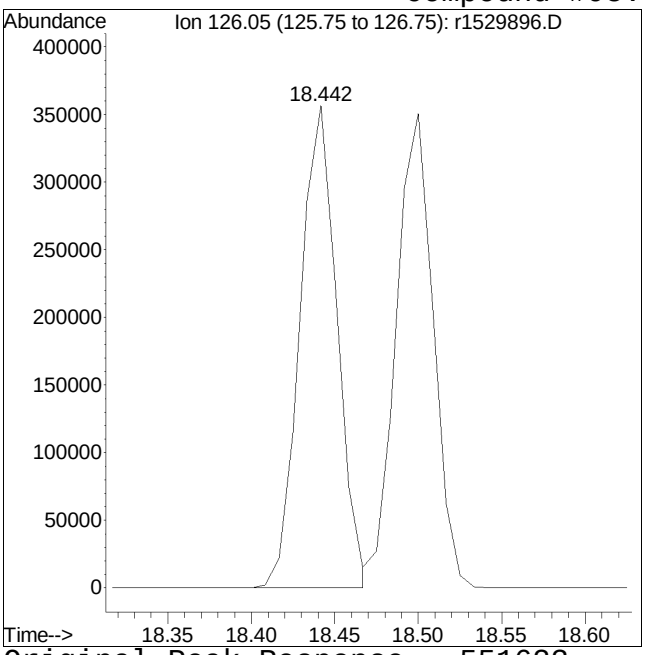
Manual Peak Response = 2416866 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

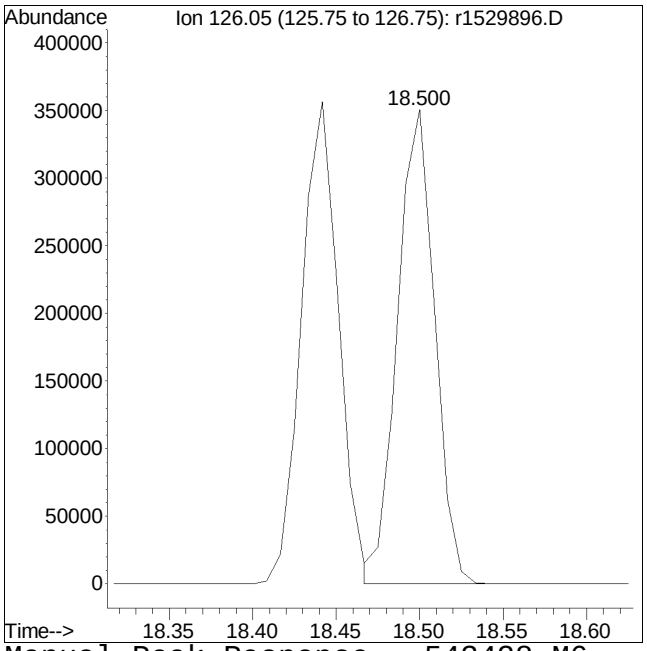
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TFS15_211222.M
Data File : r1529896.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:9: 9 Instrument :
Sample : ITO15-LLSTD020 Quant Date : 12/22/2021 10:25 am

Compound #95: 4-chlorotoluene



Original Peak Response = 551623



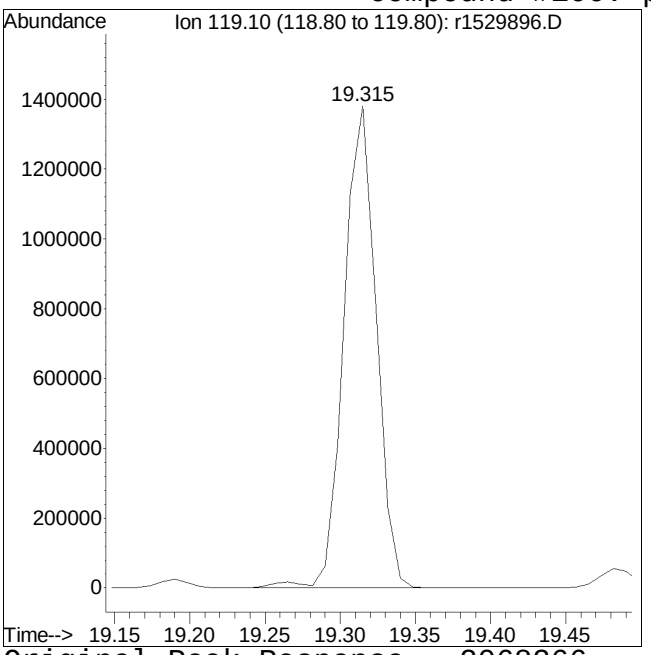
Manual Peak Response = 543428 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

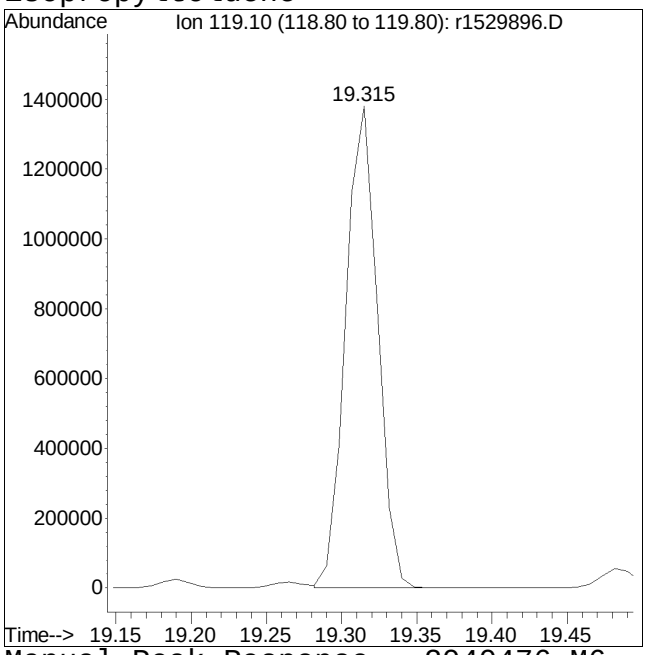
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TFS15_211222.M
Data File : r1529896.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:9: 9 Instrument :
Sample : ITO15-LLSTD020 Quant Date : 12/22/2021 10:25 am

Compound #106: p-isopropyltoluene



Original Peak Response = 2068266



Manual Peak Response = 2040476 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529897.D
Acq On : 22 Dec 2021 10:08 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD050
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:30:35 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:26:07 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.617	49	345448	10.000	ppbV	0.00
Standard Area = 354329			Recovery = 97.49%			
43) 1,4-difluorobenzene	11.890	114	810623	10.000	ppbV	0.00
Standard Area = 820934			Recovery = 98.74%			
67) chlorobenzene-D5	16.600	54	182284	10.000	ppbV	0.00
Standard Area = 194813			Recovery = 93.57%			
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.508	65	231150	9.788	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.88%			
69) toluene-D8	14.725	98	805373	10.872	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 108.72%			
90) bromofluorobenzene	17.933	95	588499	10.908	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 109.08%			
Target Compounds						Qvalue
2) chlorodifluoromethane	3.874	51	1059202	41.551	ppbV	98
3) propylene	3.904	41	644251M6	39.570	ppbV	
4) propane	3.928	29	883776	39.791	ppbV	92
5) dichlorodifluoromethane	3.982	85	1070015	39.299	ppbV	99
6) chloromethane	4.168	50	565440	42.657	ppbV	100
7) Freon-114	4.294	85	1290627	39.788	ppbV	98
8) methanol	4.366	31	1521122	195.258	ppbV	99
9) vinyl chloride	4.432	62	745786	42.736	ppbV	99
10) 1,3-butadiene	4.600	54	543920	41.746	ppbV	91
11) butane	4.666	43	1178864	44.457	ppbV	98
12) acetaldehyde	4.312	29	1433712	179.176	ppbV #	85
13) bromomethane	4.918	94	546294	41.012	ppbV	98
14) chloroethane	5.146	64	380431	44.585	ppbV	99
15) ethanol	5.320	31	2106487	186.286	ppbV #	87
16) dichlorofluoromethane	5.284	67	1123497	36.197	ppbV	99
17) vinyl bromide	5.577	106	548472	47.662	ppbV	95
18) acrolein	5.730	56	314376	44.615	ppbV	95
19) acetone	5.887	43	4370654	211.836	ppbV	94
20) acetonitrile	5.570	41	722549	45.436	ppbV	100
21) trichlorofluoromethane	6.103	101	1090283	42.595	ppbV	98
22) isopropyl alcohol	6.220	45	2608124	121.128	ppbV	99
23) acrylonitrile	6.480	53	560094	45.124	ppbV	98
24) pentane	6.553	43	1833792	50.788	ppbV	98

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529897.D
Acq On : 22 Dec 2021 10:08 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD050
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:30:35 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:26:07 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.587	31	1032058	39.364	ppbV	94
26) 1,1-dichloroethene	6.882	61	1059048	43.191	ppbV	98
27) tertiary butyl alcohol	6.948	59	1323299	46.739	ppbV	99
28) methylene chloride	7.050	49	728505	42.989	ppbV	98
29) 3-chloropropene	7.194	41	1035358	49.310	ppbV	97
30) carbon disulfide	7.344	76	1756383	52.891	ppbV	97
31) Freon 113	7.380	101	1124133	43.808	ppbV	94
32) trans-1,2-dichloroethene	8.192	61	1305549	48.693	ppbV	98
33) 1,1-dichloroethane	8.425	63	1511425	48.474	ppbV	100
34) MTBE	8.500	73	1757687	48.293	ppbV	99
35) vinyl acetate	8.642	43	1798411	56.586	ppbV	99
36) 2-butanone	8.908	43	1763094	49.889	ppbV	99
37) cis-1,2-dichloroethene	9.425	61	1203170	48.342	ppbV	98
38) Ethyl Acetate	9.725	61	336434	53.154	ppbV	97
39) chloroform	9.783	83	1299767	42.163	ppbV	100
40) Tetrahydrofuran	10.217	42	1119637	51.525	ppbV	98
41) 2,2-dichloropropane	9.800	77	973861	48.782	ppbV	97
42) 1,2-dichloroethane	10.633	62	1033495	48.511	ppbV	98
44) hexane	9.692	57	1623123	45.632	ppbV	95
45) diisopropyl ether	9.700	87	718384	45.306	ppbV	97
46) tert-butyl ethyl ether	10.325	59	2800078	47.873	ppbV	98
48) 1,1,1-trichloroethane	10.923	97	1146546	48.609	ppbV	97
49) 1,1-dichloropropene	11.297	75	1114626	46.966	ppbV	98
50) benzene	11.457	78	2502981	41.851	ppbV	99
51) thiophene	11.603	84	1629991	45.879	ppbV	98
52) carbon tetrachloride	11.630	117	986994	46.493	ppbV	97
53) cyclohexane	11.770	56	1785265	47.648	ppbV	99
54) tert-amyl methyl ether	12.157	73	2086204	48.547	ppbV	99
55) dibromomethane	12.383	93	849450	46.038	ppbV	98
56) 1,2-dichloropropane	12.410	63	1039266	48.339	ppbV	98
57) bromodichloromethane	12.643	83	1441762	47.889	ppbV	99
58) 1,4-dioxane	12.677	88	651890	48.448	ppbV	98
59) trichloroethene	12.690	130	1038879	47.222	ppbV	98
60) 2,2,4-trimethylpentane	12.743	57	5301799	44.537	ppbV	99
61) methyl methacrylate	12.943	41	1194953	50.059	ppbV	97
62) heptane	13.057	43	1799509	46.862	ppbV	99
63) cis-1,3-dichloropropene	13.708	75	1246125	52.256	ppbV	97
64) 4-methyl-2-pentanone	13.742	43	2134131	50.206	ppbV	98
65) trans-1,3-dichloropropene	14.333	75	1177002	54.213	ppbV	98
66) 1,1,2-trichloroethane	14.525	97	995276	49.285	ppbV	92

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529897.D
Acq On : 22 Dec 2021 10:08 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD050
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:30:35 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:26:07 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
68)	toluene	14.842	91	3159549	44.975	ppbV		99
70)	2-methylthiophene	14.908	97	2438317	52.030	ppbV		99
71)	1,3-dichloropropane	14.867	76	1369237	47.678	ppbV		98
72)	2-hexanone	15.117	43	2004296	52.931	ppbV		99
73)	3-methylthiophene	15.100	97	2495229	52.068	ppbV		100
74)	dibromochloromethane	15.283	129	1398518	55.972	ppbV		99
75)	1,2-dibromoethane	15.533	107	1348979	50.631	ppbV		99
76)	butyl acetate	15.767	73	368174	56.410	ppbV		88
77)	octane	15.867	85	1202777	47.911	ppbV		95
78)	tetrachloroethene	15.992	166	1152040	47.869	ppbV		98
79)	1,1,1,2-tetrachloroethane	16.625	131	1066748	51.953	ppbV		97
80)	chlorobenzene	16.642	112	2218755	47.147	ppbV		99
81)	ethylbenzene	16.983	91	4089460	50.482	ppbV		98
82)	2-ethylthiophene	17.017	97	2910971	52.737	ppbV		97
83)	m+p-xylene	17.142	91	6363576	94.665	ppbV		95
84)	bromoform	17.208	173	1196048	60.369	ppbV		98
85)	styrene	17.458	104	2428706	53.163	ppbV		97
86)	1,1,2,2-tetrachloroethane	17.550	83	2160635	42.867	ppbV		99
87)	o-xylene	17.550	91	3052084	45.145	ppbV		92
88)	1,2,3-trichloropropane	17.658	75	1753021	48.540	ppbV		98
89)	nonane	17.742	43	2697031	47.273	ppbV		97
91)	isopropylbenzene	18.050	105	3837568	48.416	ppbV		99
92)	bromobenzene	18.125	77	2253429	47.599	ppbV		100
93)	2-chlorotoluene	18.442	126	1221624	50.999	ppbV		79
94)	n-propylbenzene	18.475	120	1352560	48.139	ppbV		99
95)	4-chlorotoluene	18.500	126	1218302M6	50.860	ppbV		
96)	4-ethyl toluene	18.592	105	4150745	50.127	ppbV		97
97)	1,3,5-trimethylbenzene	18.650	105	3465662	49.049	ppbV		96
98)	tert-butylbenzene	18.982	119	3296656	41.420	ppbV		94
99)	1,2,4-trimethylbenzene	18.982	105	3167170	45.361	ppbV		88
100)	decane	19.057	57	3555708	46.614	ppbV	#	94
101)	Benzyl Chloride	19.098	91	2745343	68.746	ppbV		99
102)	1,3-dichlorobenzene	19.107	146	2363054	51.459	ppbV		92
103)	1,4-dichlorobenzene	19.165	146	2267320	50.091	ppbV		98
104)	sec-butylbenzene	19.190	105	4969097	49.200	ppbV		95
105)	1,2,3-trimethylbenzene	19.323	105	2892869	46.613	ppbV		90
106)	p-isopropyltoluene	19.315	119	4018009	41.490	ppbV		94
107)	1,2-dichlorobenzene	19.440	146	2218197	51.172	ppbV		100
108)	n-butylbenzene	19.657	91	4322042	47.943	ppbV		95
109)	indan	19.490	117	3423403	47.924	ppbV		99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529897.D
Acq On : 22 Dec 2021 10:08 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD050
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:30:35 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:26:07 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default - All compounds listed

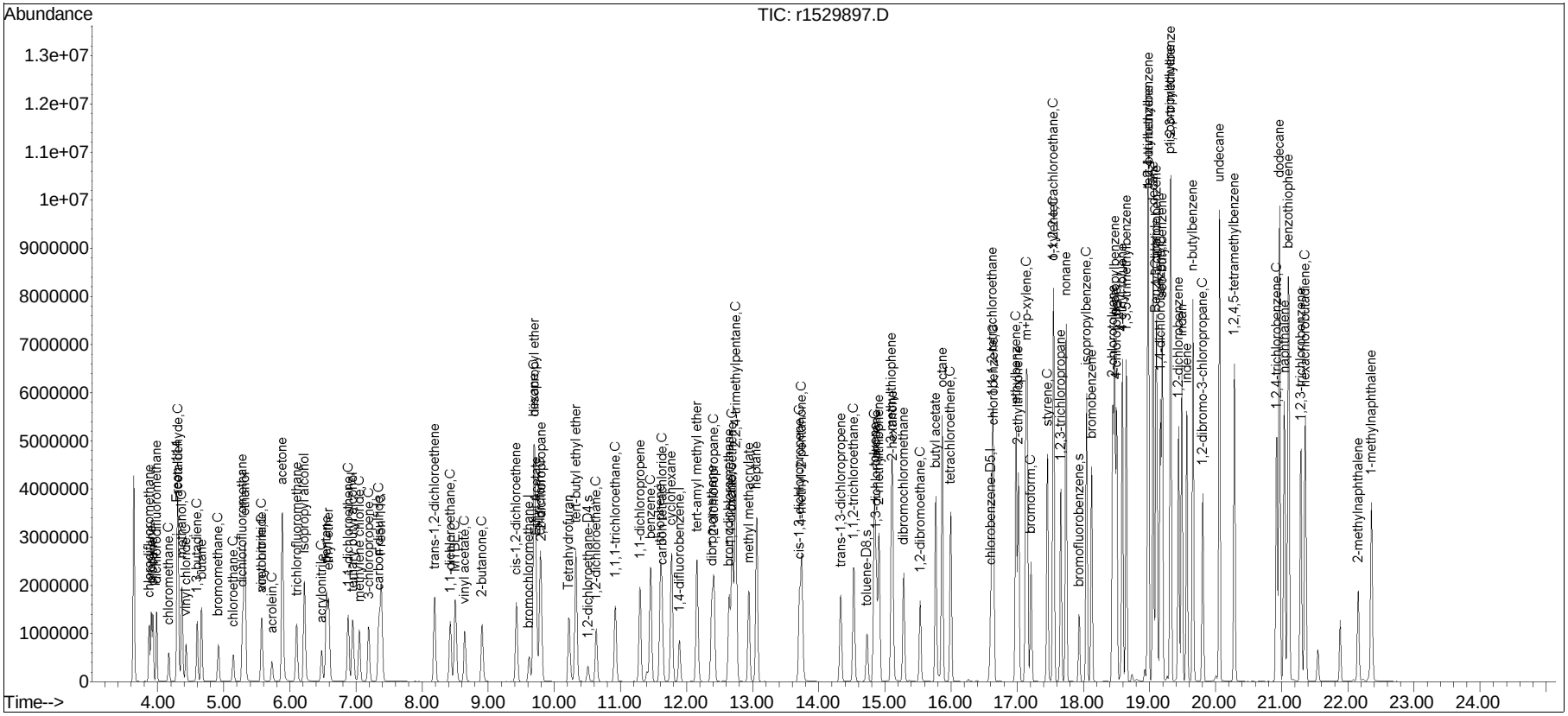
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
110) indene	19.565	115	2812432	51.329	ppbV		98
111) 1,2-dibromo-3-chloropr...	19.807	75	998502	56.231	ppbV		97
112) undecane	20.057	57	3930199	47.564	ppbV	#	94
113) 1,2,4,5-tetramethylben...	20.282	119	3609844	53.135	ppbV		92
114) dodecane	20.967	57	3997384	50.174	ppbV		92
115) 1,2,4-trichlorobenzene	20.925	180	1797128	58.312	ppbV		99
116) naphthalene	21.042	128	5363403	56.139	ppbV		97
117) 1,2,3-trichlorobenzene	21.292	180	1771765	59.099	ppbV		98
118) benzothiophene	21.100	134	7593350	59.206	ppbV		99
119) hexachlorobutadiene	21.358	225	1342631	50.250	ppbV		98
120) 2-methylnaphthalene	22.158	142	1176287	82.729	ppbV		98
121) 1-methylnaphthalene	22.358	142	2340062	76.597	ppbV		96

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

Sub List : Default - All compounds listed1\12\1222T_I\r1529895.D

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529897.D
Acq On : 22 Dec 2021 10:08 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD050
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

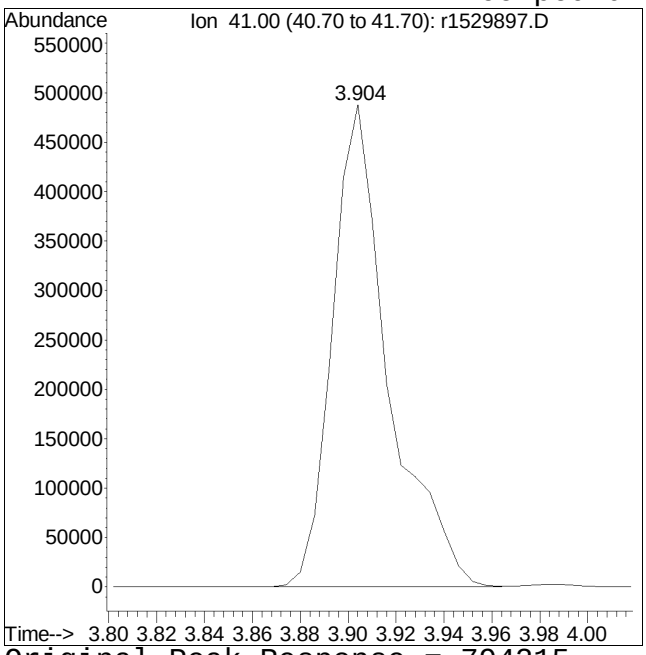
Quant Time: Dec 22 16:30:35 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:26:07 2021
Response via : Initial Calibration



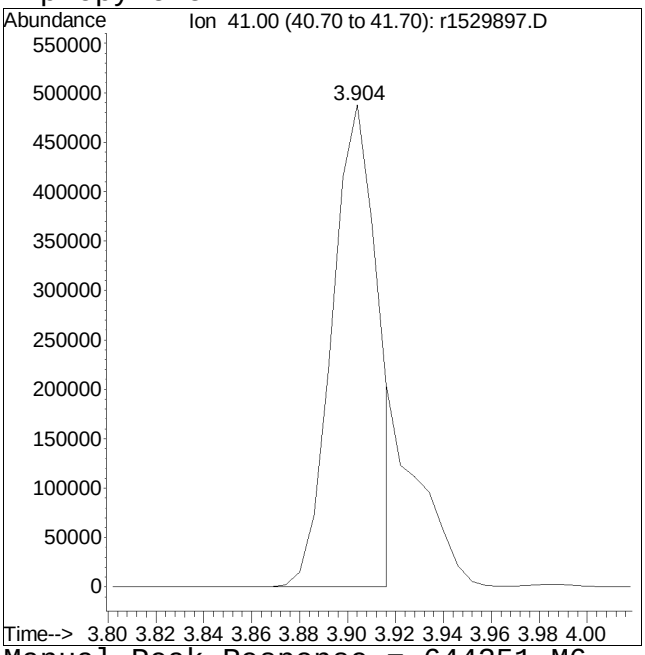
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TFS15_211222.M
Data File : r1529897.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:0: 8 Instrument :
Sample : ITO15-LLSTD050 Quant Date : 12/22/2021 11:25 am

Compound #3: propylene



Original Peak Response = 794215



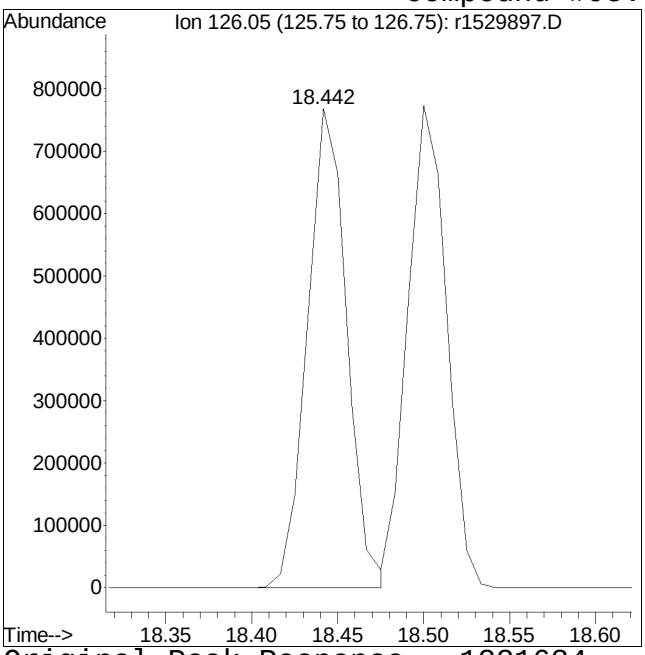
Manual Peak Response = 644251 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

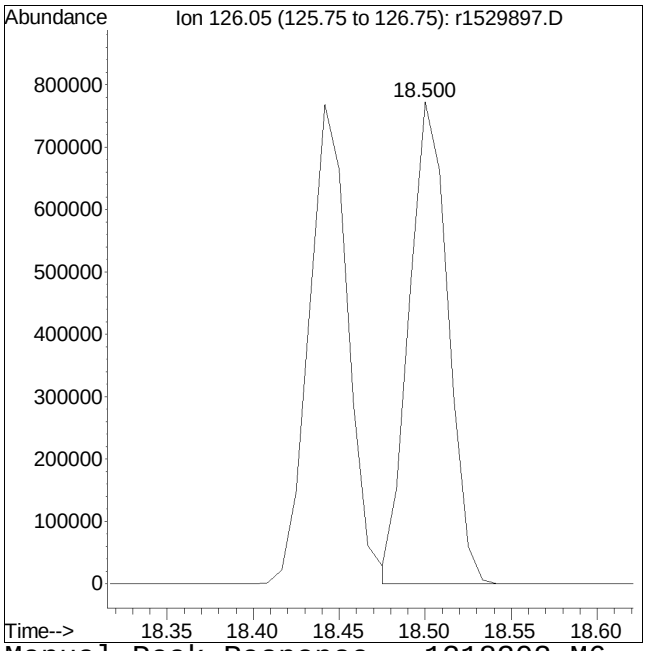
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TFS15_211222.M
Data File : r1529897.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:0: 8 Instrument :
Sample : ITO15-LLSTD050 Quant Date : 12/22/2021 11:25 am

Compound #95: 4-chlorotoluene



Original Peak Response = 1221624



Manual Peak Response = 1218302 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529898.D
Acq On : 22 Dec 2021 10:49 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD100
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:32:13 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 11:26:10 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.625	49	337392	10.000	ppbV	0.00
Standard Area = 354329			Recovery = 95.22%			
43) 1,4-difluorobenzene	11.897	114	797500	10.000	ppbV	0.01
Standard Area = 820934			Recovery = 97.15%			
67) chlorobenzene-D5	16.600	54	172108	10.000	ppbV	0.00
Standard Area = 194813			Recovery = 88.35%			
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.517	65	228738	9.875	ppbV	0.02
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.75%			
69) toluene-D8	14.733	98	819934	11.578	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 115.78%			
90) bromofluorobenzene	17.942	95	598311	11.596	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 115.96%			
Target Compounds						Qvalue
2) chlorodifluoromethane	3.874	51	1954604	80.449	ppbV	97
3) propylene	3.904	41	1295735M6	81.816	ppbV	
4) propane	3.934	29	1583539	75.572	ppbV #	89
5) dichlorodifluoromethane	3.988	85	1918544	74.422	ppbV	98
6) chloromethane	4.174	50	1076391	84.923	ppbV	99
7) Freon-114	4.300	85	2290420	74.469	ppbV	99
8) methanol	4.372	31	2688206	369.490	ppbV	99
9) vinyl chloride	4.432	62	1384126	82.930	ppbV	99
10) 1,3-butadiene	4.600	54	1004744	80.862	ppbV	90
11) butane	4.666	43	2254613	88.456	ppbV	98
12) acetaldehyde	4.312	29	2354437	316.197	ppbV #	75
13) bromomethane	4.924	94	1003534	79.170	ppbV	97
14) chloroethane	5.146	64	713953	87.017	ppbV	99
15) ethanol	5.332	31	2820426	269.095	ppbV #	77
16) dichlorofluoromethane	5.290	67	2165517	74.368	ppbV	99
17) vinyl bromide	5.580	106	1023197	91.650	ppbV	97
18) acrolein	5.733	56	594783	88.004	ppbV	95
19) acetone	5.893	43	8114208	411.645	ppbV	92
20) acetonitrile	5.577	41	1373630	89.608	ppbV	99
21) trichlorofluoromethane	6.103	101	2019920	82.544	ppbV	99
22) isopropyl alcohol	6.230	45	5023054	239.915	ppbV	98
23) acrylonitrile	6.487	53	1056489	88.380	ppbV	98
24) pentane	6.557	43	3609197	102.117	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529898.D
Acq On : 22 Dec 2021 10:49 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD100
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:32:13 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 11:26:10 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) ethyl ether	6.587	31	1710370	68.887	ppbV	#	89
26) 1,1-dichloroethene	6.882	61	1928895	82.142	ppbV		97
27) tertiary butyl alcohol	6.960	59	2450074	89.576	ppbV		98
28) methylene chloride	7.056	49	1365889	84.501	ppbV		99
29) 3-chloropropene	7.194	41	2017945	98.596	ppbV		98
30) carbon disulfide	7.350	76	3342063	102.201	ppbV		98
31) Freon 113	7.386	101	2052216	83.360	ppbV		92
32) trans-1,2-dichloroethene	8.192	61	2463558	94.430	ppbV		97
33) 1,1-dichloroethane	8.433	63	2925134	96.475	ppbV		99
34) MTBE	8.508	73	3369768	95.261	ppbV		99
35) vinyl acetate	8.650	43	3538453	111.888	ppbV		100
36) 2-butanone	8.908	43	3388614	98.211	ppbV		97
37) cis-1,2-dichloroethene	9.433	61	2262347	93.512	ppbV		98
38) Ethyl Acetate	9.733	61	617659	98.876	ppbV		91
39) chloroform	9.792	83	2234519	75.916	ppbV		99
40) Tetrahydrofuran	10.225	42	2175008	101.963	ppbV		98
41) 2,2-dichloropropane	9.800	77	1786419	91.941	ppbV		97
42) 1,2-dichloroethane	10.642	62	1921687	92.749	ppbV		97
44) hexane	9.692	57	2719609	78.699	ppbV		99
45) diisopropyl ether	9.708	87	1223910	79.525	ppbV		93
46) tert-butyl ethyl ether	10.333	59	5130775	89.709	ppbV		98
48) 1,1,1-trichloroethane	10.923	97	2157617	93.351	ppbV		95
49) 1,1-dichloropropene	11.297	75	2089137	90.259	ppbV		96
50) benzene	11.463	78	4567725	79.481	ppbV		98
51) thiophene	11.610	84	2860686	82.819	ppbV		96
52) carbon tetrachloride	11.637	117	1765860	85.407	ppbV		97
53) cyclohexane	11.777	56	3174865	86.713	ppbV		97
54) tert-amyl methyl ether	12.163	73	3965893	94.198	ppbV		99
55) dibromomethane	12.383	93	1491108	83.085	ppbV		96
56) 1,2-dichloropropane	12.417	63	1962874	93.244	ppbV		98
57) bromodichloromethane	12.650	83	2539055	86.243	ppbV		99
58) 1,4-dioxane	12.683	88	1122742	85.192	ppbV		96
59) trichloroethene	12.697	130	1827804	85.125	ppbV		96
60) 2,2,4-trimethylpentane	12.750	57	9123910	79.141	ppbV	#	95
61) methyl methacrylate	12.943	41	2306679	98.202	ppbV		95
62) heptane	13.063	43	3372110	90.068	ppbV		95
63) cis-1,3-dichloropropene	13.708	75	2363701	100.107	ppbV		98
64) 4-methyl-2-pentanone	13.750	43	4017966	96.014	ppbV		97
65) trans-1,3-dichloropropene	14.333	75	2255516	104.342	ppbV		98
66) 1,1,2-trichloroethane	14.533	97	1863478	93.987	ppbV		90

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529898.D
Acq On : 22 Dec 2021 10:49 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD100
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:32:13 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 11:26:10 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
68) toluene	14.842	91	5509815	84.277	ppbV		100
70) 2-methylthiophene	14.917	97	4535955	101.922	ppbV		99
71) 1,3-dichloropropane	14.875	76	2512701	93.287	ppbV		95
72) 2-hexanone	15.125	43	3695107	102.494	ppbV		94
73) 3-methylthiophene	15.100	97	4480873	98.449	ppbV		98
74) dibromochloromethane	15.283	129	2454735	102.308	ppbV		98
75) 1,2-dibromoethane	15.542	107	2557572	101.486	ppbV		97
76) butyl acetate	15.775	73	707723	112.442	ppbV		82
77) octane	15.867	85	2093212	88.841	ppbV		93
78) tetrachloroethene	16.000	166	1979805	87.662	ppbV		95
79) 1,1,1,2-tetrachloroethane	16.625	131	1810135	92.851	ppbV		98
80) chlorobenzene	16.642	112	3824493	86.780	ppbV		97
81) ethylbenzene	16.983	91	7102484	92.733	ppbV		93
82) 2-ethylthiophene	17.025	97	5281265	100.550	ppbV		98
83) m+p-xylene	17.150	91	10496355	166.646	ppbV		90
84) bromoform	17.217	173	2058614	106.884	ppbV		98
85) styrene	17.458	104	4512586	103.682	ppbV		95
86) 1,1,2,2-tetrachloroethane	17.550	83	3432041	73.619	ppbV		98
87) o-xylene	17.558	91	4926274	78.262	ppbV		89
88) 1,2,3-trichloropropane	17.667	75	3199937	94.237	ppbV		97
89) nonane	17.742	43	4769258	89.233	ppbV		89
91) isopropylbenzene	18.050	105	6901303	92.637	ppbV		96
92) bromobenzene	18.133	77	3994466	89.980	ppbV		97
93) 2-chlorotoluene	18.450	126	2091919	92.231	ppbV		90
94) n-propylbenzene	18.475	120	2266368	85.889	ppbV		84
95) 4-chlorotoluene	18.508	126	2118671M6	93.410	ppbV		
96) 4-ethyl toluene	18.592	105	7339656	93.845	ppbV		97
97) 1,3,5-trimethylbenzene	18.650	105	6066445	91.181	ppbV		94
98) tert-butylbenzene	18.982	119	5292411	72.197	ppbV		94
99) 1,2,4-trimethylbenzene	18.990	105	5159221	79.312	ppbV	#	81
100) decane	19.057	57	5640340	79.079	ppbV	#	85
101) Benzyl Chloride	19.098	91	4755731	119.718	ppbV		96
102) 1,3-dichlorobenzene	19.115	146	3947491	90.667	ppbV		96
103) 1,4-dichlorobenzene	19.165	146	4004489	93.676	ppbV		99
104) sec-butylbenzene	19.198	105	8314359	87.390	ppbV		95
105) 1,2,3-trimethylbenzene	19.323	105	4713602	81.227	ppbV		92
106) p-isopropyltoluene	19.323	119	6303617M6	70.657	ppbV		
107) 1,2-dichlorobenzene	19.440	146	3968550	96.640	ppbV		99
108) n-butylbenzene	19.657	91	7168705	84.720	ppbV		90
109) indan	19.490	117	5840665	87.113	ppbV		97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529898.D
Acq On : 22 Dec 2021 10:49 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD100
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:32:13 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 11:26:10 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default - All compounds listed

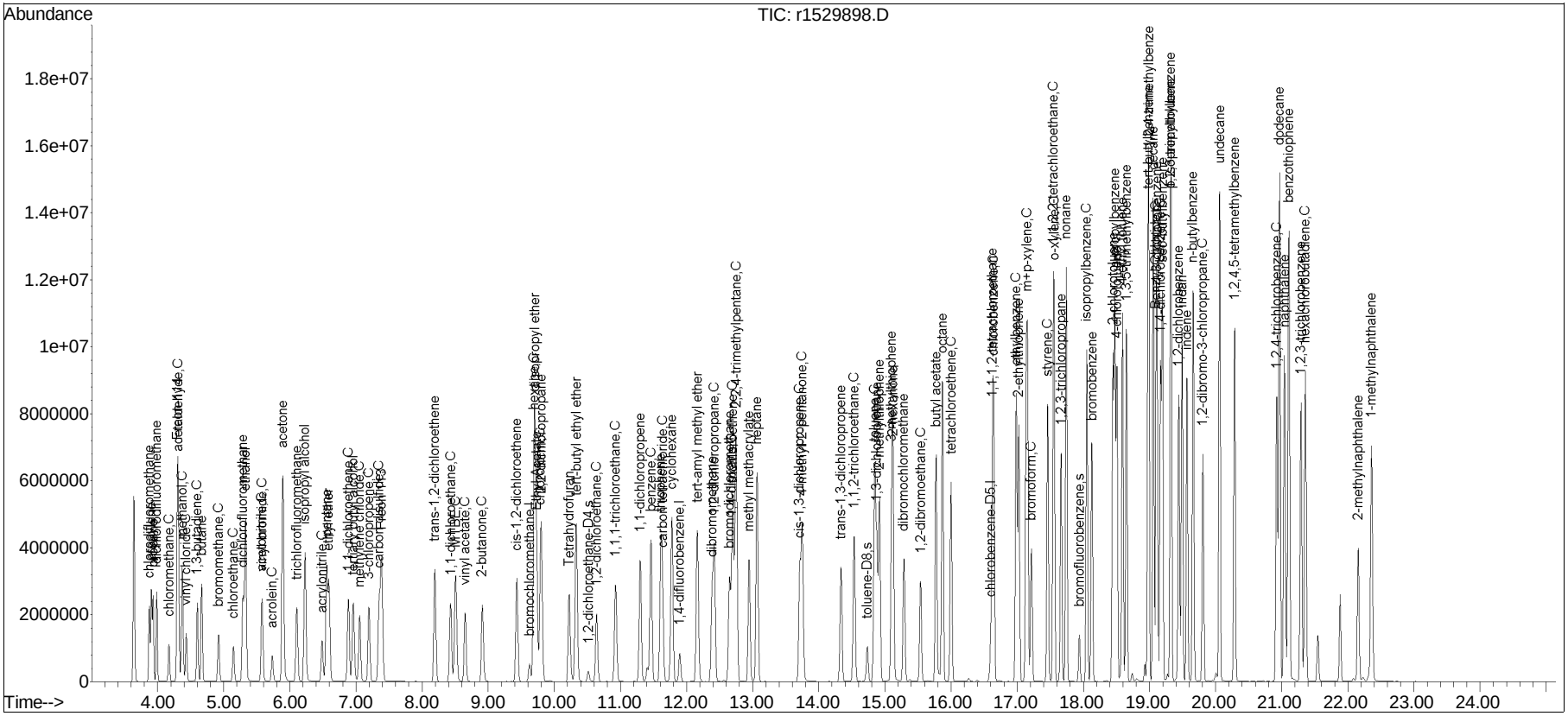
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.565	115	4916633	94.678	ppbV	96
111) 1,2-dibromo-3-chloropr...	19.807	75	1852230	108.544	ppbV	98
112) undecane	20.065	57	6138883	79.238	ppbV #	84
113) 1,2,4,5-tetramethylben...	20.290	119	6249552	96.564	ppbV	94
114) dodecane	20.967	57	6255384	83.117	ppbV #	83
115) 1,2,4-trichlorobenzene	20.925	180	3174413	106.560	ppbV	96
116) naphthalene	21.042	128	9223647	100.490	ppbV #	95
117) 1,2,3-trichlorobenzene	21.292	180	3113264	107.199	ppbV	96
118) benzothiophene	21.108	134	12355307	98.994	ppbV	98
119) hexachlorobutadiene	21.358	225	2298981	91.065	ppbV	99
120) 2-methylnaphthalene	22.158	142	2470982	162.754	ppbV	98
121) 1-methylnaphthalene	22.358	142	4597458	144.060	ppbV	97

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

Sub List : Default - All compounds listed1\12\1222T_I\r1529895.D

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529898.D
Acq On : 22 Dec 2021 10:49 AM
Operator : AIRLAB15:TS
Sample : ITO15-LLSTD100
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:32:13 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 11:26:10 2021
Response via : Initial Calibration

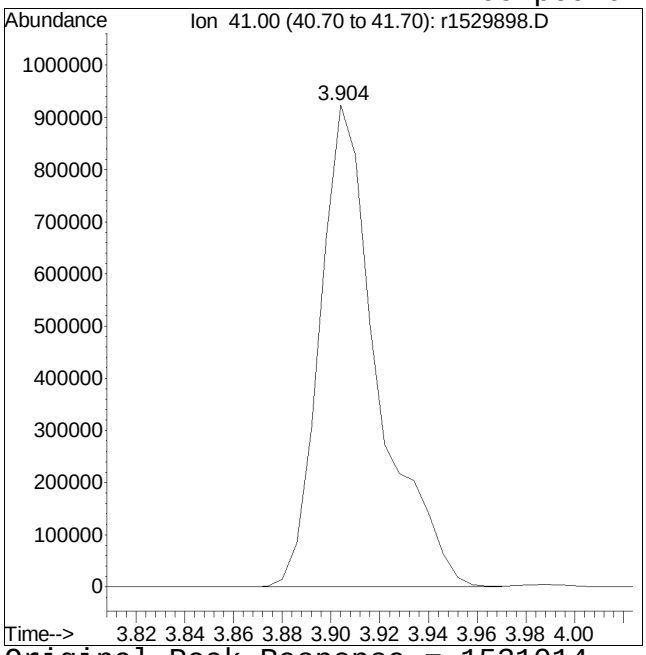


Manual Integration Report

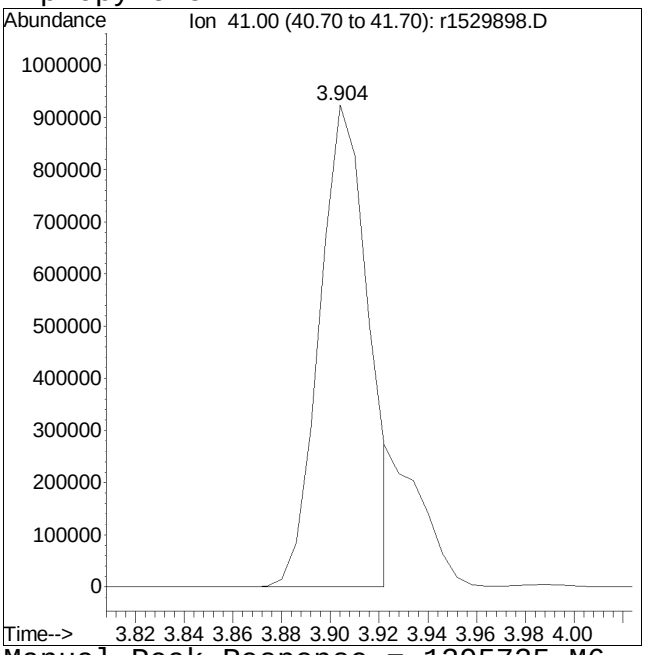
Data Path : O:\Forensics\Data\Airlab15Q
Data File : r1529898.D
Date Inj'd : 12/22/2020 0:0: 9
Sample : ITO15-LLSTD100

Method : TFS15_211222.M
Operator : AIRLAB15:TS
Instrument :
Quant Date : 12/22/2021 11:26 am

Compound #3: propylene



Original Peak Response = 1531014



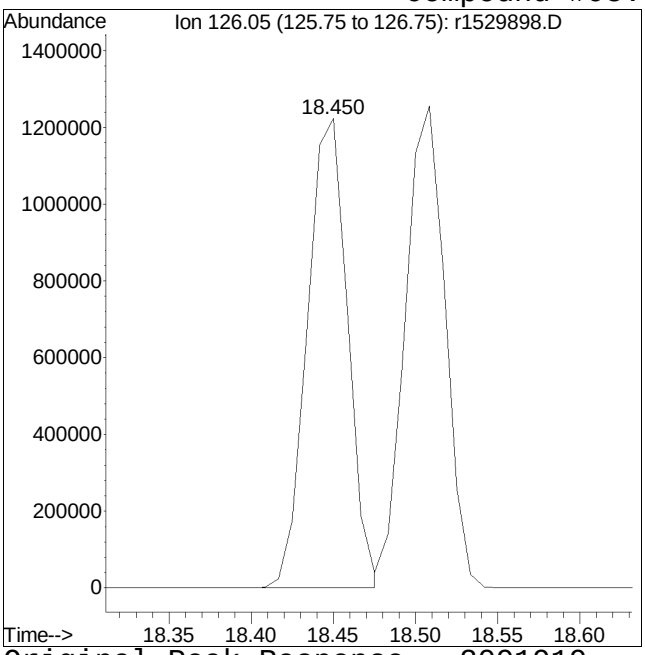
Manual Peak Response = 1295735 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

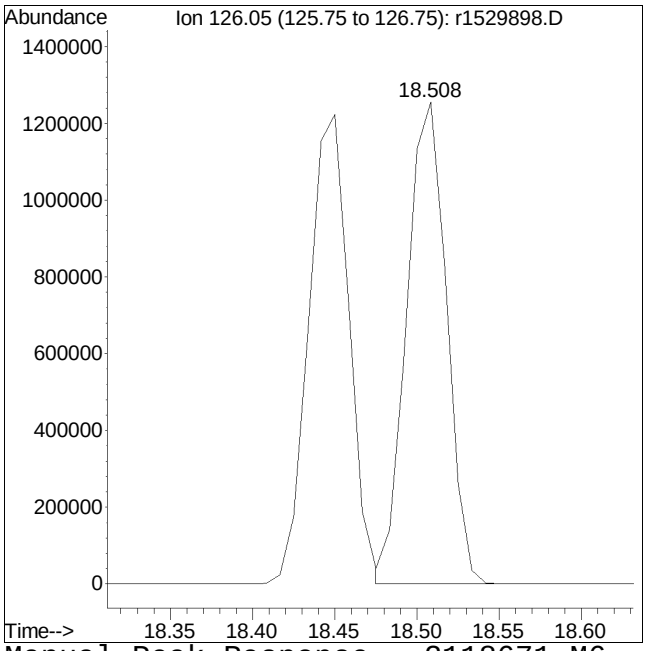
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TFS15_211222.M
Data File : r1529898.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:0: 9 Instrument :
Sample : ITO15-LLSTD100 Quant Date : 12/22/2021 11:26 am

Compound #95: 4-chlorotoluene



Original Peak Response = 2091919



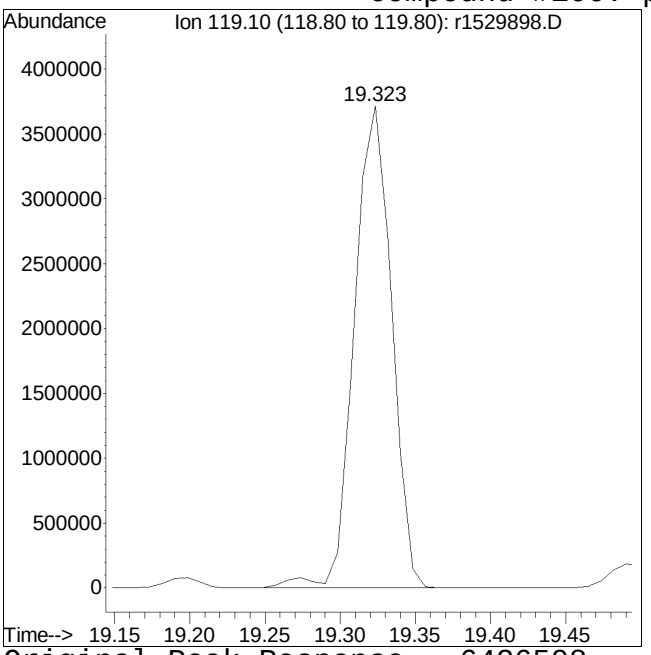
Manual Peak Response = 2118671 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

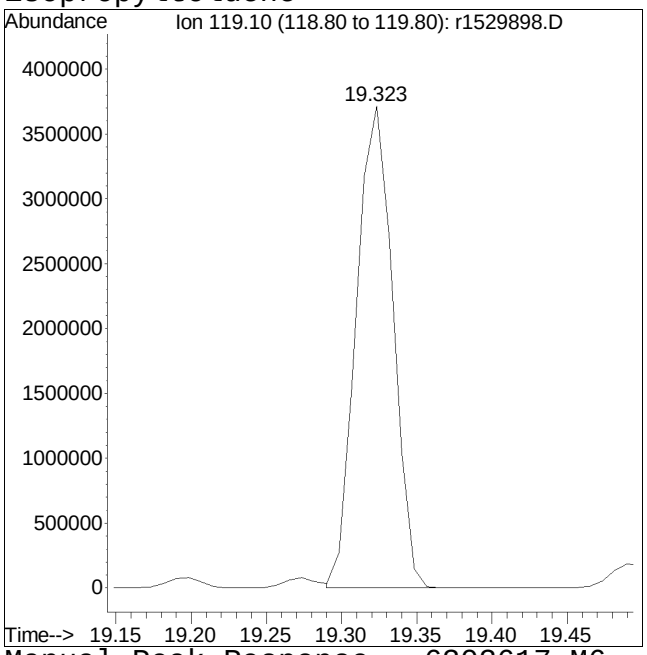
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TFS15_211222.M
Data File : r1529898.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:0: 9 Instrument :
Sample : ITO15-LLSTD100 Quant Date : 12/22/2021 11:26 am

Compound #106: p-isopropyltoluene



Original Peak Response = 6426508



Manual Peak Response = 6303617 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529901.D
Acq On : 22 Dec 2021 2:28 PM
Operator : AIRLAB15:TS
Sample : CTO15-LLSTD10
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:37:02 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	bromochloromethane	1.000	1.000	0.0	91	0.00
2		chlorodifluoromethane	0.703	0.570	18.9	80	0.01
3		propylene	0.397	0.433	-9.1	105	0.01
4		propane	0.599	0.489	18.4	80	0.01
5		dichlorodifluoromethane	0.740	0.696	5.9	90	0.01
6	C	chloromethane	0.369	0.342	7.3	89	0.00
7		Freon-114	0.883	0.830	6.0	88	0.01
8	C	methanol	0.206	0.174	15.5	80	0.01
9	C	vinyl chloride	0.484	0.447	7.6	87	0.01
10	C	1,3-butadiene	0.359	0.334	7.0	89	0.01
11		butane	0.745	0.665	10.7	89	0.01
13	C	bromomethane	0.366	0.331	9.6	85	0.01
14	C	chloroethane	0.239	0.231	3.3	89	0.00
15		ethanol	0.287	0.292	-1.7	83	0.01
16		dichlorofluoromethane	0.835	0.740	11.4	82	0.01
17	C	vinyl bromide	0.327	0.309	5.5	92	0.00
18	C	acrolein	0.197	0.176	10.7	84	0.00
19		acetone	0.571	0.537	6.0	92	0.01
20	C	acetonitrile	0.448	0.413	7.8	90	0.01
21		trichlorofluoromethane	0.709	0.671	5.4	89	0.00
22		isopropyl alcohol	0.617	0.688	-11.5	108	0.01
23	C	acrylonitrile	0.349	0.314	10.0	86	0.00
24		pentane	1.044	1.005	3.7	93	0.00
25		ethyl ether	0.707	0.520	26.4	69	0.01
26	C	1,1-dichloroethene	0.680	0.779	-14.6	106	0.00
27		tertiary butyl alcohol	0.799	1.049	-31.3#	124	0.01
28	C	methylene chloride	0.468	0.561	-19.9	111	0.01
29	C	3-chloropropene	0.606	0.702	-15.8	114	0.00
30	C	carbon disulfide	0.972	1.119	-15.1	106	0.01
31		Freon 113	0.714	0.790	-10.6	105	0.00
32		trans-1,2-dichloroethene	0.768	0.740	3.6	95	0.00
33	C	1,1-dichloroethane	0.895	0.928	-3.7	98	0.00
34	C	MTBE	1.042	1.047	-0.5	96	0.00
35	C	vinyl acetate	0.951	0.882	7.3	89	0.00
36	C	2-butanone	1.020	1.096	-7.5	102	0.00
37		cis-1,2-dichloroethene	0.711	0.736	-3.5	97	0.00
38		Ethyl Acetate	0.185	0.199	-7.6	104	0.00
39	C	chloroform	0.846	0.804	5.0	87	0.00
40		Tetrahydrofuran	0.634	0.680	-7.3	102	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529901.D
Acq On : 22 Dec 2021 2:28 PM
Operator : AIRLAB15:TS
Sample : CTO15-LLSTD10
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:37:02 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41		2,2-dichloropropane	0.570	0.515	9.6	85	0.00
42	C	1,2-dichloroethane	0.609	0.580	4.8	91	0.00
43	I	1,4-difluorobenzene	1.000	1.000	0.0	95	0.00
44	C	hexane	0.422	0.404	4.3	93	0.00
45		diisopropyl ether	0.188	0.174	7.4	90	0.00
46		tert-butyl ethyl ether	0.708	0.655	7.5	91	0.00
47	s	1,2-dichloroethane-D4	0.290	0.281	3.1	92	0.00
48	C	1,1,1-trichloroethane	0.287	0.286	0.3	95	0.00
49		1,1-dichloropropene	0.287	0.266	7.3	91	0.00
50	C	benzene	0.702	0.618	12.0	90	0.00
52	C	carbon tetrachloride	0.255	0.244	4.3	89	0.00
53		cyclohexane	0.451	0.431	4.4	93	0.00
54		tert-amyl methyl ether	0.524	0.494	5.7	93	0.00
55		dibromomethane	0.220	0.199	9.5	91	0.00
56	C	1,2-dichloropropane	0.262	0.264	-0.8	100	0.00
57		bromodichloromethane	0.363	0.349	3.9	91	0.00
58	C	1,4-dioxane	0.162	0.191	-17.9	114	0.00
59	C	trichloroethene	0.264	0.269	-1.9	98	0.00
60	C	2,2,4-trimethylpentane	1.399	1.333	4.7	94	0.00
61		methyl methacrylate	0.294	0.294	0.0	96	0.00
62		heptane	0.464	0.448	3.4	96	0.00
63	C	cis-1,3-dichloropropene	0.296	0.315	-6.4	98	0.00
64	C	4-methyl-2-pentanone	0.522	0.581	-11.3	108	0.00
65		trans-1,3-dichloropropene	0.273	0.249	8.8	83	0.00
66	C	1,1,2-trichloroethane	0.247	0.253	-2.4	100	0.00
67	I	chlorobenzene-D5	1.000	1.000	0.0	89	0.00
68	C	toluene	3.724	3.624	2.7	94	0.00
69	s	toluene-D8	4.196	4.451	-6.1	97	0.00
71		1,3-dichloropropane	1.552	1.426	8.1	87	0.00
72		2-hexanone	2.101	2.448	-16.5	107	0.00
74		dibromochloromethane	1.398	1.547	-10.7	98	0.00
75	C	1,2-dibromoethane	1.467	1.523	-3.8	96	0.00
76		butyl acetate	0.372	0.347	6.7	87	0.00
77		octane	1.350	1.275	5.6	86	0.00
78	C	tetrachloroethene	1.292	1.303	-0.9	91	0.00
79		1,1,1,2-tetrachloroethane	1.123	1.129	-0.5	90	0.00
80	C	chlorobenzene	2.518	2.601	-3.3	93	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529901.D
Acq On : 22 Dec 2021 2:28 PM
Operator : AIRLAB15:TS
Sample : CTO15-LLSTD10
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:37:02 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	C	ethylbenzene	4.410	4.741	-7.5	96	0.00
83	C	m+p-xylene	3.583	3.833	-7.0	95	0.00
84	C	bromoform	1.129	1.271	-12.6	97	0.00
85	C	styrene	2.540	2.722	-7.2	96	0.00
86	C	1,1,2,2-tetrachloroethane	2.619	2.721	-3.9	90	0.00
87	C	o-xylene	3.558	3.878	-9.0	95	0.00
88		1,2,3-trichloropropane	1.959	1.852	5.5	89	0.00
89		nonane	3.064	2.902	5.3	87	0.00
90	s	bromofluorobenzene	3.058	3.125	-2.2	92	0.00
91	C	isopropylbenzene	4.289	4.379	-2.1	96	0.00
92		bromobenzene	2.547	2.431	4.6	89	0.00
93		2-chlorotoluene	1.305	1.273	2.5	90	0.00
94		n-propylbenzene	1.506	1.477	1.9	90	0.00
95		4-chlorotoluene	1.307	1.268	3.0	90	0.00
96		4-ethyl toluene	4.509	4.620	-2.5	95	0.00
97		1,3,5-trimethylbenzene	3.823	4.108	-7.5	97	0.00
98		tert-butylbenzene	4.111	4.223	-2.7	90	0.00
99		1,2,4-trimethylbenzene	3.682	4.124	-12.0	98	0.00
100		decane	4.036	4.083	-1.2	90	0.00
101	C	Benzyl Chloride	2.365	2.435	-3.0	91	0.00
102		1,3-dichlorobenzene	2.500	2.653	-6.1	95	0.00
103	C	1,4-dichlorobenzene	2.463	2.646	-7.4	95	0.00
104		sec-butylbenzene	5.441	5.568	-2.3	93	0.00
106		p-isopropyltoluene	4.957	4.912	0.9	87	0.00
107		1,2-dichlorobenzene	2.376	2.557	-7.6	97	0.00
108		n-butylbenzene	4.823	5.283	-9.5	97	0.00
111	C	1,2-dibromo-3-chloropropane	1.002	1.004	-0.2	87	0.00
112		undecane	4.385	4.771	-8.8	92	0.00
114		dodecane	4.281	4.998	-16.7	89	0.00
115	C	1,2,4-trichlorobenzene	1.745	2.167	-24.2	99	0.00
116		naphthalene	5.336	6.365	-19.3	98	0.00
117		1,2,3-trichlorobenzene	1.703	1.996	-17.2	95	0.00
119	C	hexachlorobutadiene	1.450	1.677	-15.7	95	0.00

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529901.D
Acq On : 22 Dec 2021 2:28 PM
Operator : AIRLAB15:TS
Sample : CTO15-LLSTD10
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:37:02 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default-ICV-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.617	49	321290	10.000	ppbV	0.00
Standard Area = 354329			Recovery = 90.68%			
43) 1,4-difluorobenzene	11.890	114	777019	10.000	ppbV	0.00
Standard Area = 820934			Recovery = 94.65%			
67) chlorobenzene-D5	16.600	54	173480	10.000	ppbV	0.00
Standard Area = 194813			Recovery = 89.05%			
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.508	65	218641	9.703	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.03%			
69) toluene-D8	14.725	98	772192	10.609	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 106.09%			
90) bromofluorobenzene	17.933	95	542191	10.221	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.21%			
Target Compounds						Qvalue
2) chlorodifluoromethane	3.880	51	183147	8.114	ppbV	99
3) propylene	3.910	41	139255M6	10.905	ppbV	
4) propane	3.940	29	157155	8.161	ppbV	94
5) dichlorodifluoromethane	3.994	85	223592	9.409	ppbV	100
6) chloromethane	4.174	50	109729	9.266	ppbV	100
7) Freon-114	4.306	85	266550	9.401	ppbV	98
8) methanol	4.372	31	279865	42.232	ppbV	100
9) vinyl chloride	4.438	62	143507	9.226	ppbV	99
10) 1,3-butadiene	4.606	54	107251	9.286	ppbV	95
11) butane	4.672	43	213549	8.927	ppbV	99
13) bromomethane	4.924	94	106393	9.050	ppbV	98
14) chloroethane	5.146	64	74320	9.669	ppbV	99
15) ethanol	5.320	31	469812	50.996	ppbV	91
16) dichlorofluoromethane	5.290	67	237824	8.861	ppbV	99
17) vinyl bromide	5.580	106	99348	9.443	ppbV	94
18) acrolein	5.733	56	56397	8.915	ppbV	98
19) acetone	5.893	43	861893	46.954	ppbV	95
20) acetonitrile	5.577	41	132768	9.215	ppbV	99
21) trichlorofluoromethane	6.107	101	215742	9.465	ppbV	96
22) isopropyl alcohol	6.223	45	552305	27.842	ppbV	99
23) acrylonitrile	6.483	53	100822	8.987	ppbV	97
24) pentane	6.560	43	322812	9.625	ppbV	98
25) ethyl ether	6.600	31	167132	7.355	ppbV	96

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529901.D
Acq On : 22 Dec 2021 2:28 PM
Operator : AIRLAB15:TS
Sample : CTO15-LLSTD10
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:37:02 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default-ICV-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) 1,1-dichloroethene	6.882	61	250206	11.444	ppbV	100
27) tertiary butyl alcohol	6.954	59	336907M6	13.130	ppbV	
28) methylene chloride	7.056	49	180154	11.969	ppbV	96
29) 3-chloropropene	7.194	41	225674	11.599	ppbV	99
30) carbon disulfide	7.350	76	359420	11.510	ppbV	97
31) Freon 113	7.386	101	253800	11.056	ppbV	94
32) trans-1,2-dichloroethene	8.192	61	237844	9.641	ppbV	99
33) 1,1-dichloroethane	8.425	63	298288	10.377	ppbV	99
34) MTBE	8.508	73	336440	10.047	ppbV	99
35) vinyl acetate	8.650	43	283487	9.275	ppbV	100
36) 2-butanone	8.908	43	352076	10.743	ppbV	99
37) cis-1,2-dichloroethene	9.425	61	236409	10.345	ppbV	98
38) Ethyl Acetate	9.725	61	63947	10.767	ppbV	97
39) chloroform	9.783	83	258365	9.504	ppbV	98
40) Tetrahydrofuran	10.225	42	218517	10.727	ppbV	98
41) 2,2-dichloropropane	9.800	77	165549	9.038	ppbV	96
42) 1,2-dichloroethane	10.633	62	186192	9.523	ppbV	97
44) hexane	9.692	57	314141	9.585	ppbV	91
45) diisopropyl ether	9.700	87	135184	9.252	ppbV	97
46) tert-butyl ethyl ether	10.325	59	508813	9.250	ppbV	98
48) 1,1,1-trichloroethane	10.923	97	222586	9.967	ppbV	98
49) 1,1-dichloropropene	11.297	75	206879	9.287	ppbV	97
50) benzene	11.457	78	480318	8.804	ppbV	99
52) carbon tetrachloride	11.630	117	189686	9.591	ppbV	99
53) cyclohexane	11.777	56	334953	9.548	ppbV	99
54) tert-amyl methyl ether	12.157	73	384096	9.432	ppbV	99
55) dibromomethane	12.377	93	154701	9.038	ppbV	99
56) 1,2-dichloropropane	12.410	63	205448	10.102	ppbV	97
57) bromodichloromethane	12.643	83	271183	9.625	ppbV	98
58) 1,4-dioxane	12.677	88	148306	11.768	ppbV	97
59) trichloroethene	12.690	130	208961	10.178	ppbV	98
60) 2,2,4-trimethylpentane	12.743	57	1035557M6	9.526	ppbV	
61) methyl methacrylate	12.943	41	228190	9.996	ppbV	97
62) heptane	13.063	43	348027	9.661	ppbV	100
63) cis-1,3-dichloropropene	13.708	75	245113	10.653	ppbV	98
64) 4-methyl-2-pentanone	13.742	43	451414	11.135	ppbV	99
65) trans-1,3-dichloropropene	14.325	75	193558	9.141	ppbV	99
66) 1,1,2-trichloroethane	14.525	97	196900	10.270	ppbV	93
68) toluene	14.842	91	628759	9.733	ppbV	99
71) 1,3-dichloropropane	14.867	76	247367	9.188	ppbV	96

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529901.D
Acq On : 22 Dec 2021 2:28 PM
Operator : AIRLAB15:TS
Sample : CTO15-LLSTD10
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:37:02 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default-ICV-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
72) 2-hexanone	15.117	43	424747	11.652	ppbV	97
74) dibromochloromethane	15.283	129	268299	11.062	ppbV	99
75) 1,2-dibromoethane	15.533	107	264136	10.379	ppbV	99
76) butyl acetate	15.767	73	60147	9.315	ppbV	96
77) octane	15.867	85	221271	9.449	ppbV	95
78) tetrachloroethene	15.992	166	226123	10.089	ppbV	96
79) 1,1,1,2-tetrachloroethane	16.625	131	195777	10.053	ppbV	98
80) chlorobenzene	16.633	112	451227	10.328	ppbV	97
81) ethylbenzene	16.975	91	822495	10.752	ppbV	100
83) m+p-xylene	17.142	91	1329837	21.392	ppbV	97
84) bromoform	17.200	173	220532	11.263	ppbV	99
85) styrene	17.450	104	472202	10.714	ppbV	97
86) 1,1,2,2-tetrachloroethane	17.542	83	472008	10.387	ppbV	99
87) o-xylene	17.550	91	672793	10.900	ppbV	99
88) 1,2,3-trichloropropane	17.658	75	321237	9.454	ppbV	99
89) nonane	17.733	43	503418	9.472	ppbV	100
91) isopropylbenzene	18.042	105	759705	10.211	ppbV	97
92) bromobenzene	18.125	77	421769	9.545	ppbV	96
93) 2-chlorotoluene	18.442	126	220846	9.755	ppbV	94
94) n-propylbenzene	18.467	120	256263	9.808	ppbV	98
95) 4-chlorotoluene	18.500	126	219909	9.700	ppbV	90
96) 4-ethyl toluene	18.583	105	801486	10.246	ppbV	97
97) 1,3,5-trimethylbenzene	18.650	105	712706	10.746	ppbV	97
98) tert-butylbenzene	18.973	119	732587	10.272	ppbV	98
99) 1,2,4-trimethylbenzene	18.973	105	715471	11.201	ppbV	95
100) decane	19.048	57	708309	10.117	ppbV	100
101) Benzyl Chloride	19.090	91	422430	10.296	ppbV	99
102) 1,3-dichlorobenzene	19.107	146	460264	10.612	ppbV	97
103) 1,4-dichlorobenzene	19.157	146	459095	10.745	ppbV	98
104) sec-butylbenzene	19.190	105	965957	10.234	ppbV	98
106) p-isopropyltoluene	19.315	119	852075	9.909	ppbV	96
107) 1,2-dichlorobenzene	19.432	146	443658	10.763	ppbV	98
108) n-butylbenzene	19.657	91	916413	10.954	ppbV	98
111) 1,2-dibromo-3-chloropr...	19.798	75	174098	10.015	ppbV	98
112) undecane	20.057	57	827741	10.882	ppbV	99
114) dodecane	20.967	57	867098	11.677	ppbV	97
115) 1,2,4-trichlorobenzene	20.917	180	375909	12.417	ppbV	95
116) naphthalene	21.033	128	1104146	11.927	ppbV	100
117) 1,2,3-trichlorobenzene	21.283	180	346285	11.724	ppbV	96
119) hexachlorobutadiene	21.350	225	290853	11.559	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529901.D
Acq On : 22 Dec 2021 2:28 PM
Operator : AIRLAB15:TS
Sample : CTO15-LLSTD10
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 16:37:02 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222T_I\r1529895.D
Sub List : Default-ICV-AP2 - All compounds listed

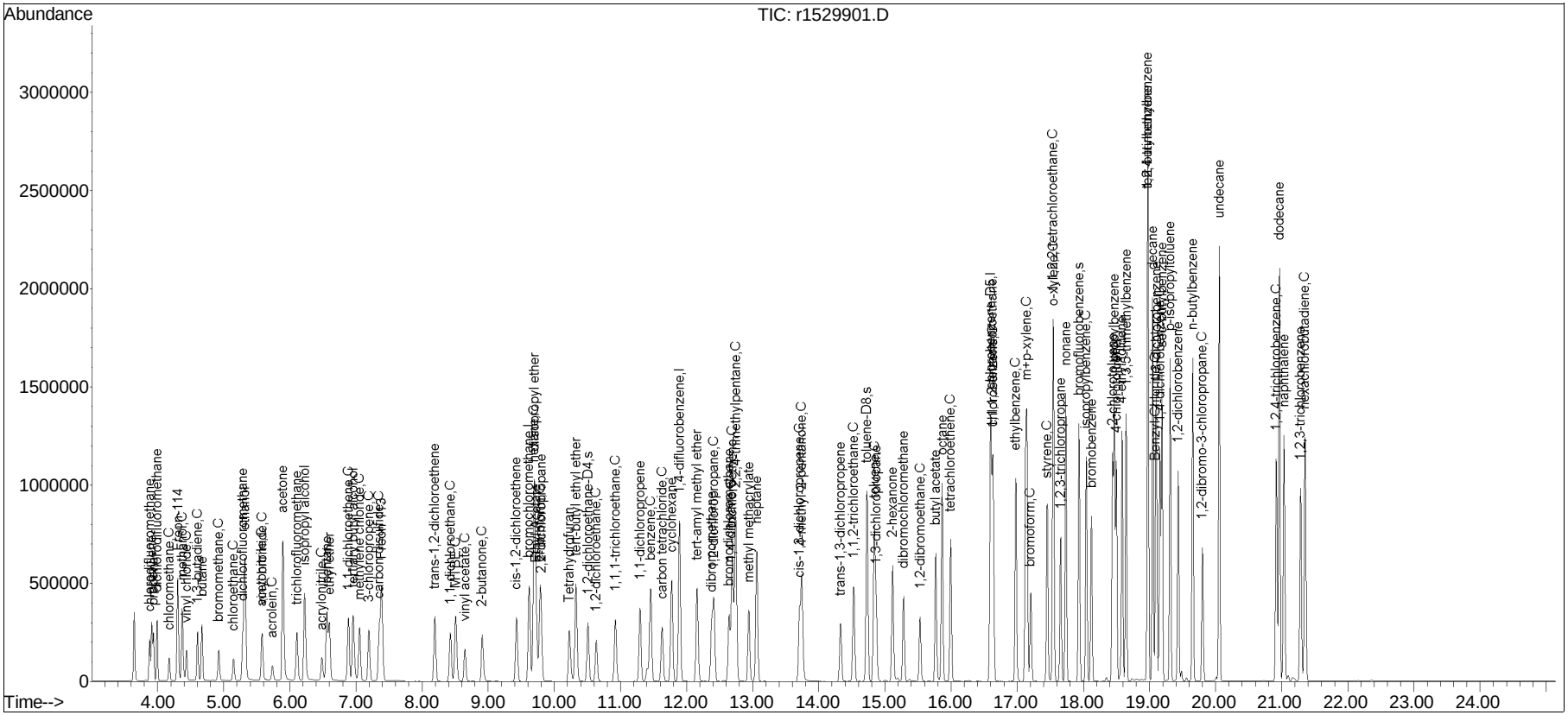
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Sub List : Default-ICV-AP2 - All compounds listed2T_I\r1529895.D

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222T_I\
Data File : r1529901.D
Acq On : 22 Dec 2021 2:28 PM
Operator : AIRLAB15:TS
Sample : CTO15-LLSTD10
Misc : WG1587794
ALS Vial : 0 Sample Multiplier: 1

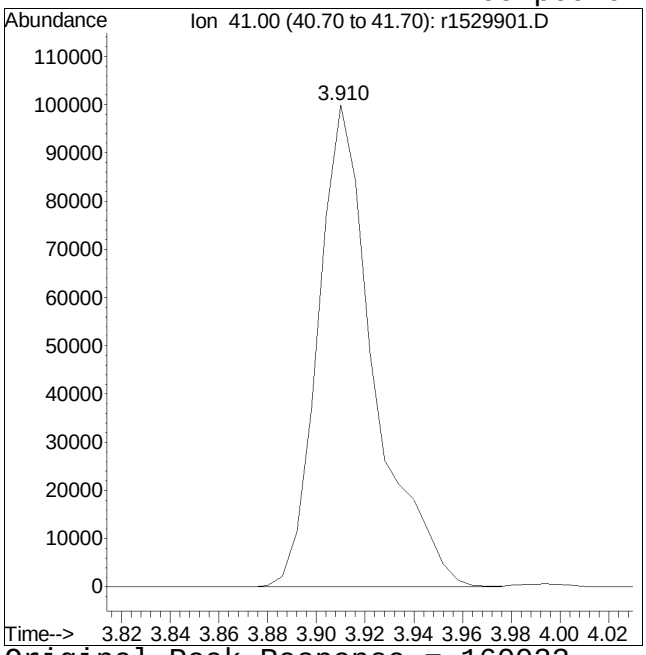
Quant Time: Dec 22 16:37:02 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222T_I\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration



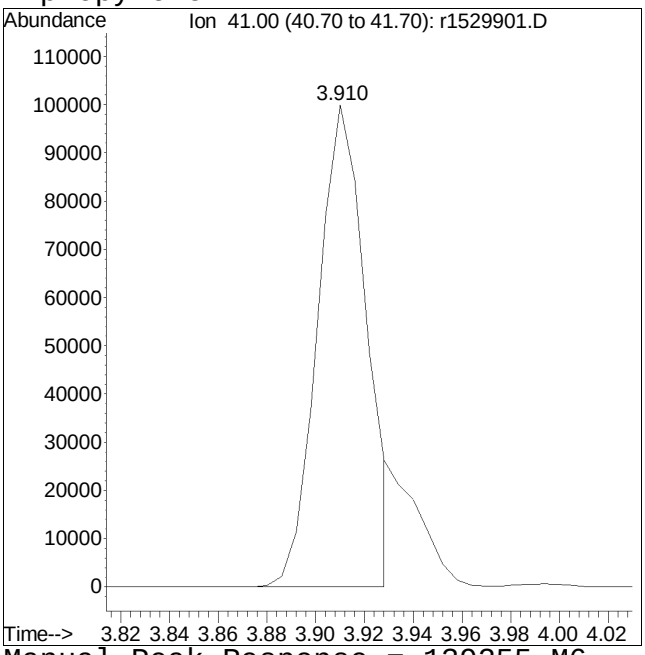
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15\ Method : TFS15_211222.M
Data File : r1529901.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:2: 8 Instrument :
Sample : CTO15-LLSTD10 Quant Date : 12/22/2021 4:32 pm

Compound #3: propylene



Original Peak Response = 160023



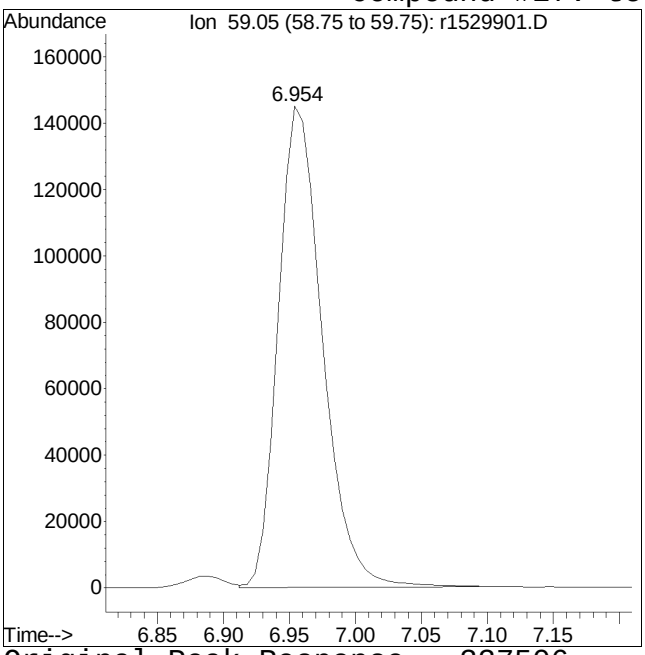
Manual Peak Response = 139255 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

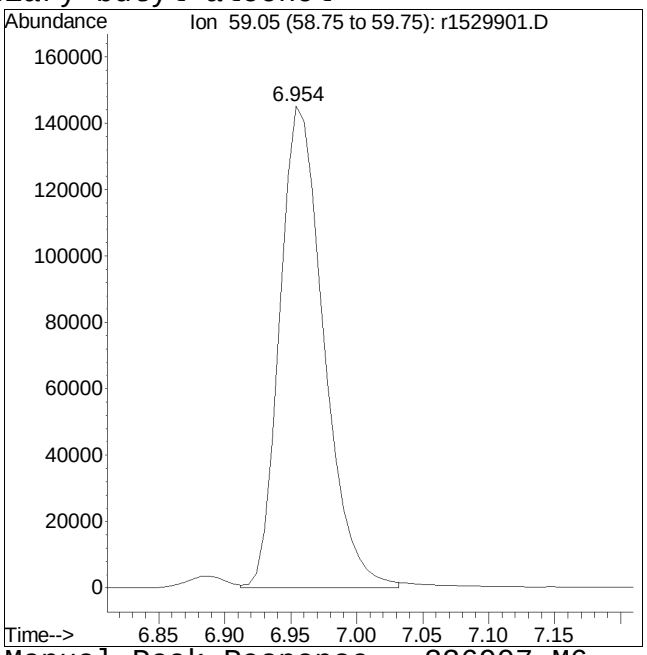
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TFS15_211222.M
Data File : r1529901.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:2: 8 Instrument :
Sample : CTO15-LLSTD10 Quant Date : 12/22/2021 4:32 pm

Compound #27: tertiary butyl alcohol



Original Peak Response = 337506



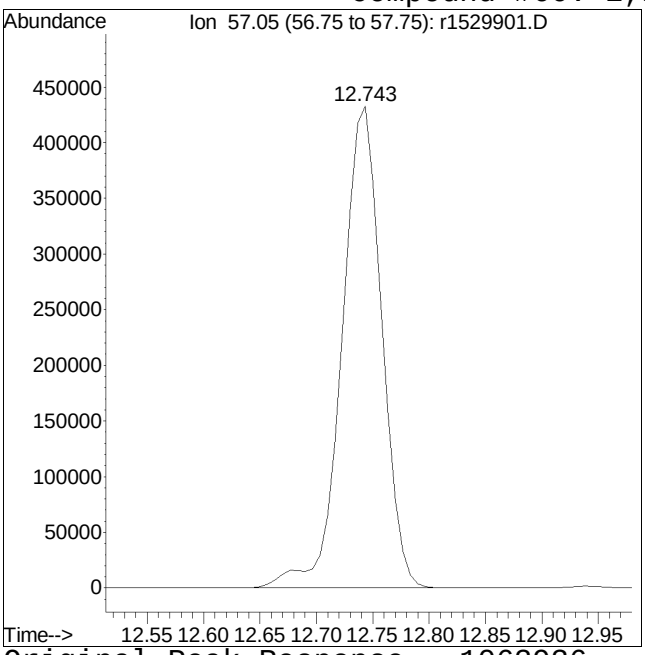
Manual Peak Response = 336907 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

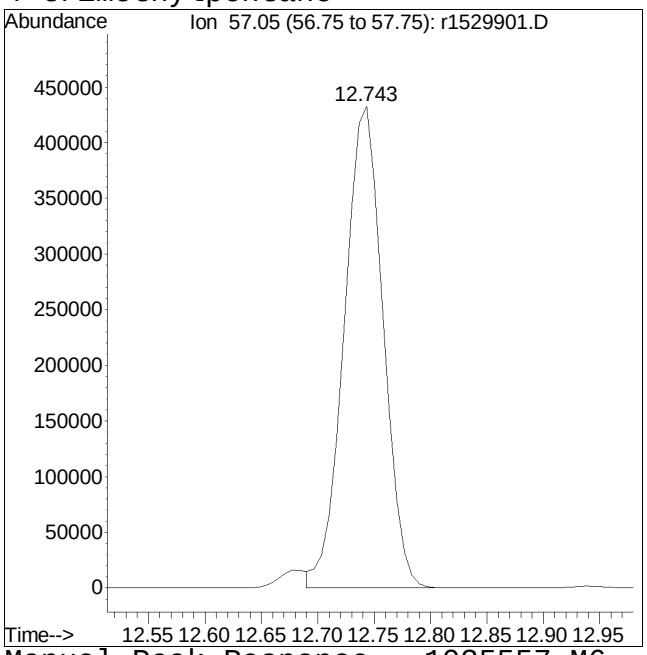
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TFS15_211222.M
Data File : r1529901.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:2: 8 Instrument :
Sample : CTO15-LLSTD10 Quant Date : 12/22/2021 4:32 pm

Compound #60: 2,2,4-trimethylpentane



Original Peak Response = 1063936



Manual Peak Response = 1035557 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Continuing Calibration

Calibration Verification Summary
Form 7
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657		
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002		
Instrument ID	: AIRLAB15	**Calibration Date**	: 03/20/22 13:18		
Lab File ID	: R1531778	**Init. Calib. Date(s)**	: 12/22/21	12/22/21	
Sample No	: WG1617728-2	**Init. Calib. Times**	: 06:12	10:49	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
bromochloromethane	1	1	-	0	30	108	-.03
chlorodifluoromethane	0.703	0.571	-	18.8	30	95	-.02
propylene	0.397	0.345	-	13.1	30	99	-.02
propane	0.599	0.526	-	12.2	30	102	-.02
dichlorodifluoromethane	0.74	0.58	-	21.6	30	89	-.02
chloromethane	0.369	0.298	-	19.2	30	92	-.02
Freon-114	0.883	0.717	-	18.8	30	91	-.02
methanol	0.206	0.186	-	9.7	30	102	-.02
vinyl chloride	0.484	0.395	-	18.4	30	91	-.02
1,3-butadiene	0.359	0.328	-	8.6	30	105	-.02
butane	0.745	0.658	-	11.7	30	105	-.02
bromomethane	0.366	0.283	-	22.7	30	86	-.02
chloroethane	0.239	0.202	-	15.5	30	93	-.02
ethanol	0.287	0.336	-	-17.1	30	114	-.02
dichlorofluoromethane	0.835	0.756	-	9.5	30	100	-.02
vinyl bromide	0.327	0.304	-	7	30	107	-.02
acrolein	0.197	0.172	-	12.7	30	98	-.02
acetone	0.571	0.595	-	-4.2	30	121	-.02
acetonitrile	0.448	0.414	-	7.6	30	107	-.02
trichlorofluoromethane	0.709	0.592	-	16.5	30	94	-.02
isopropyl alcohol	0.617	0.614	-	0.5	30	115	-.02
acrylonitrile	0.349	0.315	-	9.7	30	102	-.03
pentane	1.044	0.958	-	8.2	30	106	-.03
ethyl ether	0.707	1.023	-	-44.7*	30	162	-.03
1,1-dichloroethene	0.68	0.587	-	13.7	30	95	-.03
tertiary butyl alcohol	0.799	0.714	-	10.6	30	100	-.02
methylene chloride	0.468	0.453	-	3.2	30	107	-.02
3-chloropropene	0.606	0.663	-	-9.4	30	128	-.03
carbon disulfide	0.972	1.133	-	-16.6	30	128	-.02
Freon 113	0.714	0.688	-	3.6	30	108	-.03
trans-1,2-dichloroethene	0.768	0.674	-	12.2	30	103	-.03
1,1-dichloroethane	0.895	0.77	-	14	30	96	-.02
MTBE	1.042	0.888	-	14.8	30	97	-.03
vinyl acetate	0.951	0.842	-	11.5	30	101	-.03
2-butanone	1.02	0.939	-	7.9	30	104	-.03
cis-1,2-dichloroethene	0.711	0.59	-	17	30	93	-.02
Ethyl Acetate	0.185	0.185	-	0	30	115	-.03
chloroform	0.846	0.709	-	16.2	30	91	-.03
Tetrahydrofuran	0.634	0.555	-	12.5	30	99	-.03
2,2-dichloropropane	0.57	0.53	-	7	30	103	-.03
1,2-dichloroethane	0.609	0.502	-	17.6	30	94	-.03
1,4-difluorobenzene	1	1	-	0	30	105	-.02
hexane	0.422	0.419	-	0.7	30	107	-.03

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657		
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002		
Instrument ID	: AIRLAB15	**Calibration Date**	: 03/20/22 13:18		
Lab File ID	: R1531778	**Init. Calib. Date(s)**	: 12/22/21	12/22/21	
Sample No	: WG1617728-2	**Init. Calib. Times**	: 06:12	10:49	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
diisopropyl ether	0.188	0.17	-	9.6	30	98	-.03
tert-butyl ethyl ether	0.708	0.608	-	14.1	30	94	-.03
1,1,1-trichloroethane	0.287	0.262	-	8.7	30	96	-.03
1,1-dichloropropene	0.287	0.264	-	8	30	100	-.03
benzene	0.702	0.571	-	18.7	30	92	-.03
carbon tetrachloride	0.255	0.228	-	10.6	30	92	-.03
cyclohexane	0.451	0.437	-	3.1	30	105	-.03
tert-amyl methyl ether	0.524	0.429	-	18.1	30	89	-.03
dibromomethane	0.22	0.203	-	7.7	30	102	-.02
1,2-dichloropropane	0.262	0.235	-	10.3	30	98	-.02
bromodichloromethane	0.363	0.368	-	-1.4	30	106	-.03
1,4-dioxane	0.162	0.158	-	2.5	30	104	-.03
trichloroethene	0.264	0.233	-	11.7	30	93	-.02
2,2,4-trimethylpentane	1.399	1.427	-	-2	30	111	-.03
methyl methacrylate	0.294	0.287	-	2.4	30	104	-.03
heptane	0.464	0.462	-	0.4	30	109	-.03
cis-1,3-dichloropropene	0.296	0.266	-	10.1	30	91	-.02
4-methyl-2-pentanone	0.522	0.522	-	0	30	107	-.03
trans-1,3-dichloropropene	0.273	0.212	-	22.3	30	78	-.02
1,1,2-trichloroethane	0.247	0.226	-	8.5	30	99	-.03
chlorobenzene-D5	1	1	-	0	30	103	-.02
toluene	3.724	3.038	-	18.4	30	91	-.03
1,3-dichloropropane	1.552	1.424	-	8.2	30	101	-.02
2-hexanone	2.101	2.035	-	3.1	30	103	-.02
dibromochloromethane	1.398	1.511	-	-8.1	30	110	-.02
1,2-dibromoethane	1.467	1.303	-	11.2	30	95	-.02
butyl acetate	0.372	0.322	-	13.4	30	93	-.02
octane	1.35	1.206	-	10.7	30	94	-.02
tetrachloroethene	1.292	1.098	-	15	30	89	-.02
1,1,1,2-tetrachloroethane	1.123	1.079	-	3.9	30	100	-.02
chlorobenzene	2.518	2.165	-	14	30	90	-.02
ethylbenzene	4.41	3.843	-	12.9	30	90	-.02
m+p-xylene	3.583	3.161	-	11.8	30	91	-.02
bromoform	1.129	1.236	-	-9.5	30	109	-.02
styrene	2.54	2.203	-	13.3	30	90	-.02
1,1,2,2-tetrachloroethane	2.619	2.359	-	9.9	30	91	-.02
o-xylene	3.558	3.247	-	8.7	30	92	-.02
1,2,3-trichloropropane	1.959	1.806	-	7.8	30	100	-.02
nonane	3.064	2.857	-	6.8	30	100	-.02
isopropylbenzene	4.289	4.179	-	2.6	30	106	0
bromobenzene	2.547	2.324	-	8.8	30	99	0
2-chlorotoluene	1.305	1.181	-	9.5	30	97	-.02
n-propylbenzene	1.506	1.377	-	8.6	30	97	-.02

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657		
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002		
Instrument ID	: AIRLAB15	**Calibration Date**	: 03/20/22 13:18		
Lab File ID	: R1531778	**Init. Calib. Date(s)**	: 12/22/21	12/22/21	
Sample No	: WG1617728-2	**Init. Calib. Times**	: 06:12	10:49	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
4-chlorotoluene	1.307	1.162	-	11.1	30	96	-.02
4-ethyl toluene	4.509	4.34	-	3.7	30	104	0
1,3,5-trimethylbenzene	3.823	3.418	-	10.6	30	94	0
tert-butylbenzene	4.111	3.89	-	5.4	30	96	0
1,2,4-trimethylbenzene	3.682	3.49	-	5.2	30	96	0
decane	4.036	4.017	-	0.5	30	102	0
Benzyl Chloride	2.365	2.66	-	-12.5	30	115	0
1,3-dichlorobenzene	2.5	2.241	-	10.4	30	92	-.02
1,4-dichlorobenzene	2.463	2.241	-	9	30	93	0
sec-butylbenzene	5.441	5.325	-	2.1	30	103	-.02
p-isopropyltoluene	4.957	4.319	-	12.9	30	88	-.02
1,2-dichlorobenzene	2.376	2.123	-	10.6	30	93	0
n-butylbenzene	4.823	4.763	-	1.2	30	101	0
1,2-dibromo-3-chloropropan	1.002	1.011	-	-0.9	30	102	0
undecane	4.385	4.47	-	-1.9	30	100	0
dodecane	4.281	4.539	-	-6	30	93	0
1,2,4-trichlorobenzene	1.745	1.516	-	13.1	30	80	0
naphthalene	5.336	5.208	-	2.4	30	93	0
1,2,3-trichlorobenzene	1.703	1.649	-	3.2	30	91	0
hexachlorobutadiene	1.45	1.24	-	14.5	30	81	0

* Value outside of QC limits.

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531778.D
Acq On : 20 Mar 2022 1:18 PM
Operator : AIRLAB15:RY
Sample : WG1617728-2,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:00:24 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	bromochloromethane	1.000	1.000	0.0	108	-0.03
2		chlorodifluoromethane	0.703	0.571	18.8	95	-0.02
3		propylene	0.397	0.345	13.1	99	-0.02
4		propane	0.599	0.526	12.2	102	-0.02
5		dichlorodifluoromethane	0.740	0.580	21.6	89	-0.02
6	C	chloromethane	0.369	0.298	19.2	92	-0.02
7		Freon-114	0.883	0.717	18.8	91	-0.02
8	C	methanol	0.206	0.186	9.7	102	-0.02
9	C	vinyl chloride	0.484	0.395	18.4	91	-0.02
10	C	1,3-butadiene	0.359	0.328	8.6	105	-0.02
11		butane	0.745	0.658	11.7	105	-0.02
13	C	bromomethane	0.366	0.283	22.7	86	-0.02
14	C	chloroethane	0.239	0.202	15.5	93	-0.02
15		ethanol	0.287	0.336	-17.1	114	-0.02
16		dichlorofluoromethane	0.835	0.756	9.5	100	-0.02
17	C	vinyl bromide	0.327	0.304	7.0	107	-0.02
18	C	acrolein	0.197	0.172	12.7	98	-0.02
19		acetone	0.571	0.595	-4.2	121	-0.02
20	C	acetonitrile	0.448	0.414	7.6	107	-0.02
21		trichlorofluoromethane	0.709	0.592	16.5	94	-0.02
22		isopropyl alcohol	0.617	0.614	0.5	115	-0.02
23	C	acrylonitrile	0.349	0.315	9.7	102	-0.03
24		pentane	1.044	0.958	8.2	106	-0.03
25		ethyl ether	0.707	1.023	-44.7#	162#	-0.03
26	C	1,1-dichloroethene	0.680	0.587	13.7	95	-0.03
27		tertiary butyl alcohol	0.799	0.714	10.6	100	-0.02
28	C	methylene chloride	0.468	0.453	3.2	107	-0.02
29	C	3-chloropropene	0.606	0.663	-9.4	128	-0.03
30	C	carbon disulfide	0.972	1.133	-16.6	128	-0.02
31		Freon 113	0.714	0.688	3.6	108	-0.03
32		trans-1,2-dichloroethene	0.768	0.674	12.2	103	-0.03
33	C	1,1-dichloroethane	0.895	0.770	14.0	96	-0.02
34	C	MTBE	1.042	0.888	14.8	97	-0.03
35	C	vinyl acetate	0.951	0.842	11.5	101	-0.03
36	C	2-butanone	1.020	0.939	7.9	104	-0.03
37		cis-1,2-dichloroethene	0.711	0.590	17.0	93	-0.02
38		Ethyl Acetate	0.185	0.185	0.0	115	-0.03
39	C	chloroform	0.846	0.709	16.2	91	-0.03
40		Tetrahydrofuran	0.634	0.555	12.5	99	-0.03

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531778.D
Acq On : 20 Mar 2022 1:18 PM
Operator : AIRLAB15:RY
Sample : WG1617728-2,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:00:24 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41		2,2-dichloropropane	0.570	0.530	7.0	103	-0.03
42	C	1,2-dichloroethane	0.609	0.502	17.6	94	-0.03
43	I	1,4-difluorobenzene	1.000	1.000	0.0	105	-0.02
44	C	hexane	0.422	0.419	0.7	107	-0.03
45		diisopropyl ether	0.188	0.170	9.6	98	-0.03
46		tert-butyl ethyl ether	0.708	0.608	14.1	94	-0.03
48	C	1,1,1-trichloroethane	0.287	0.262	8.7	96	-0.03
49		1,1-dichloropropene	0.287	0.264	8.0	100	-0.03
50	C	benzene	0.702	0.571	18.7	92	-0.03
52	C	carbon tetrachloride	0.255	0.228	10.6	92	-0.03
53		cyclohexane	0.451	0.437	3.1	105	-0.03
54		tert-amyl methyl ether	0.524	0.429	18.1	89	-0.03
55		dibromomethane	0.220	0.203	7.7	102	-0.02
56	C	1,2-dichloropropane	0.262	0.235	10.3	98	-0.02
57		bromodichloromethane	0.363	0.368	-1.4	106	-0.03
58	C	1,4-dioxane	0.162	0.158	2.5	104	-0.03
59	C	trichloroethene	0.264	0.233	11.7	93	-0.02
60	C	2,2,4-trimethylpentane	1.399	1.427	-2.0	111	-0.03
61		methyl methacrylate	0.294	0.287	2.4	104	-0.03
62		heptane	0.464	0.462	0.4	109	-0.03
63	C	cis-1,3-dichloropropene	0.296	0.266	10.1	91	-0.02
64	C	4-methyl-2-pentanone	0.522	0.522	0.0	107	-0.03
65		trans-1,3-dichloropropene	0.273	0.212	22.3	78	-0.02
66	C	1,1,2-trichloroethane	0.247	0.226	8.5	99	-0.03
67	I	chlorobenzene-D5	1.000	1.000	0.0	103	-0.02
68	C	toluene	3.724	3.038	18.4	91	-0.03
71		1,3-dichloropropane	1.552	1.424	8.2	101	-0.02
72		2-hexanone	2.101	2.035	3.1	103	-0.02
74		dibromochloromethane	1.398	1.511	-8.1	110	-0.02
75	C	1,2-dibromoethane	1.467	1.303	11.2	95	-0.02
76		butyl acetate	0.372	0.322	13.4	93	-0.02
77		octane	1.350	1.206	10.7	94	-0.02
78	C	tetrachloroethene	1.292	1.098	15.0	89	-0.02
79		1,1,1,2-tetrachloroethane	1.123	1.079	3.9	100	-0.02
80	C	chlorobenzene	2.518	2.165	14.0	90	-0.02
81	C	ethylbenzene	4.410	3.843	12.9	90	-0.02
83	C	m+p-xylene	3.583	3.161	11.8	91	-0.02

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531778.D
Acq On : 20 Mar 2022 1:18 PM
Operator : AIRLAB15:RY
Sample : WG1617728-2,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:00:24 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
84	C	bromoform	1.129	1.236	-9.5	109	-0.02
85	C	styrene	2.540	2.203	13.3	90	-0.02
86	C	1,1,2,2-tetrachloroethane	2.619	2.359	9.9	91	-0.02
87	C	o-xylene	3.558	3.247	8.7	92	-0.02
88		1,2,3-trichloropropane	1.959	1.806	7.8	100	-0.02
89		nonane	3.064	2.857	6.8	100	-0.02
91	C	isopropylbenzene	4.289	4.179	2.6	106	0.00
92		bromobenzene	2.547	2.324	8.8	99	0.00
93		2-chlorotoluene	1.305	1.181	9.5	97	-0.02
94		n-propylbenzene	1.506	1.377	8.6	97	-0.02
95		4-chlorotoluene	1.307	1.162	11.1	96	-0.02
96		4-ethyl toluene	4.509	4.340	3.7	104	0.00
97		1,3,5-trimethylbenzene	3.823	3.418	10.6	94	0.00
98		tert-butylbenzene	4.111	3.890	5.4	96	0.00
99		1,2,4-trimethylbenzene	3.682	3.490	5.2	96	0.00
100		decane	4.036	4.017	0.5	102	0.00
101	C	Benzyl Chloride	2.365	2.660	-12.5	115	0.00
102		1,3-dichlorobenzene	2.500	2.241	10.4	92	-0.02
103	C	1,4-dichlorobenzene	2.463	2.241	9.0	93	0.00
104		sec-butylbenzene	5.441	5.325	2.1	103	-0.02
106		p-isopropyltoluene	4.957	4.319	12.9	88	-0.02
107		1,2-dichlorobenzene	2.376	2.123	10.6	93	0.00
108		n-butylbenzene	4.823	4.763	1.2	101	0.00
111	C	1,2-dibromo-3-chloropropane	1.002	1.011	-0.9	102	0.00
112		undecane	4.385	4.470	-1.9	100	0.00
114		dodecane	4.281	4.539	-6.0	93	0.00
115	C	1,2,4-trichlorobenzene	1.745	1.516	13.1	80	0.00
116		naphthalene	5.336	5.208	2.4	93	0.00
117		1,2,3-trichlorobenzene	1.703	1.649	3.2	91	0.00
119	C	hexachlorobutadiene	1.450	1.240	14.5	81	0.00

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531778.D
Acq On : 20 Mar 2022 1:18 PM
Operator : AIRLAB15:RY
Sample : WG1617728-2,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:00:24 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320T\r1531778.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.58	49	382239	10.000	ppbV	-0.03
Standard Area = 382239			Recovery = 100.00%			
43) 1,4-difluorobenzene	11.86	114	859136	10.000	ppbV	-0.02
Standard Area = 859136			Recovery = 100.00%			
67) chlorobenzene-D5	16.57	54	200634	10.000	ppbV	-0.02
Standard Area = 200634			Recovery = 100.00%			
System Monitoring Compounds						
Target Compounds						Qvalue
2) chlorodifluoromethane	3.85	51	218338	8.131	ppbV	100
3) propylene	3.88	41	131970M6	8.687	ppbV	
4) propane	3.91	29	201078	8.777	ppbV	99
5) dichlorodifluoromethane	3.96	85	221742	7.843	ppbV	99
6) chloromethane	4.14	50	113847	8.081	ppbV	99
7) Freon-114	4.28	85	273976	8.122	ppbV	97
8) methanol	4.34	31	355266	45.062	ppbV	99
9) vinyl chloride	4.41	62	150807	8.149	ppbV	100
10) 1,3-butadiene	4.58	54	125316	9.120	ppbV	91
11) butane	4.64	43	251482	8.836	ppbV	98
13) bromomethane	4.89	94	108262	7.740	ppbV	99
14) chloroethane	5.12	64	77243	8.447	ppbV	99
15) ethanol	5.28	31	642221	58.595	ppbV	98
16) dichlorofluoromethane	5.25	67	288821	9.045	ppbV	99
17) vinyl bromide	5.55	106	116069	9.274	ppbV	96
18) acrolein	5.70	56	65798	8.743	ppbV	94
19) acetone	5.86	43	1137940	52.107	ppbV	94
20) acetonitrile	5.54	41	158118	9.224	ppbV	96
21) trichlorofluoromethane	6.07	101	226228	8.342	ppbV	97
22) isopropyl alcohol	6.19	45	586568	24.854	ppbV	99
23) acrylonitrile	6.45	53	120371	9.019	ppbV	99
24) pentane	6.52	43	366371	9.182	ppbV	98
25) ethyl ether	6.56	31	391024	14.464	ppbV	95
26) 1,1-dichloroethene	6.85	61	224415	8.628	ppbV	98
27) tertiary butyl alcohol	6.92	59	272923	8.941	ppbV #	89
28) methylene chloride	7.02	49	173067	9.665	ppbV	98
29) 3-chloropropene	7.16	41	253320	10.944	ppbV	99
30) carbon disulfide	7.31	76	433001	11.656	ppbV	99
31) Freon 113	7.35	101	263159	9.636	ppbV	96

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531778.D
Acq On : 20 Mar 2022 1:18 PM
Operator : AIRLAB15:RY
Sample : WG1617728-2,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:00:24 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320T\r1531778.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
32) trans-1,2-dichloroethene	8.16	61	257745	8.782	ppbV	99
33) 1,1-dichloroethane	8.39	63	294227	8.603	ppbV	100
34) MTBE	8.47	73	339490	8.522	ppbV	99
35) vinyl acetate	8.61	43	321918	8.853	ppbV	100
36) 2-butanone	8.88	43	358733	9.201	ppbV	99
37) cis-1,2-dichloroethene	9.39	61	225336	8.288	ppbV	100
38) Ethyl Acetate	9.69	61	70648	9.999	ppbV	94
39) chloroform	9.75	83	270822	8.373	ppbV	98
40) Tetrahydrofuran	10.19	42	212138	8.754	ppbV	98
41) 2,2-dichloropropane	9.76	77	202396	9.288	ppbV	99
42) 1,2-dichloroethane	10.60	62	192043	8.256	ppbV	99
44) hexane	9.66	57	360206	9.940	ppbV	95
45) diisopropyl ether	9.67	87	146442	9.065	ppbV	91
46) tert-butyl ethyl ether	10.29	59	522111	8.584	ppbV	97
48) 1,1,1-trichloroethane	10.89	97	224778	9.103	ppbV	98
49) 1,1-dichloropropene	11.26	75	226570	9.198	ppbV	97
50) benzene	11.42	78	490838	8.137	ppbV	99
52) carbon tetrachloride	11.60	117	195941	8.960	ppbV	100
53) cyclohexane	11.74	56	375801	9.689	ppbV	98
54) tert-amyl methyl ether	12.13	73	368416	8.182	ppbV	98
55) dibromomethane	12.35	93	174054	9.197	ppbV	95
56) 1,2-dichloropropane	12.38	63	201586	8.965	ppbV	99
57) bromodichloromethane	12.61	83	315957	10.142	ppbV	100
58) 1,4-dioxane	12.65	88	135436	9.719	ppbV	97
59) trichloroethene	12.66	130	200079	8.814	ppbV	95
60) 2,2,4-trimethylpentane	12.71	57	1225946	10.200	ppbV	99
61) methyl methacrylate	12.91	41	246350	9.761	ppbV	99
62) heptane	13.03	43	396751	9.960	ppbV	99
63) cis-1,3-dichloropropene	13.68	75	228456	8.980	ppbV	97
64) 4-methyl-2-pentanone	13.72	43	448679	10.009	ppbV	99
65) trans-1,3-dichloropropene	14.30	75	181954	7.771	ppbV	97
66) 1,1,2-trichloroethane	14.50	97	193890	9.146	ppbV	96
68) toluene	14.81	91	609621	8.159	ppbV	99
71) 1,3-dichloropropane	14.84	76	285769	9.178	ppbV	97
72) 2-hexanone	15.09	43	408384	9.687	ppbV	96
74) dibromochloromethane	15.26	129	303200	10.809	ppbV	97
75) 1,2-dibromoethane	15.51	107	261464	8.883	ppbV	97
76) butyl acetate	15.75	73	64607	8.651	ppbV	93
77) octane	15.84	85	242033	8.937	ppbV	90
78) tetrachloroethene	15.98	166	220329	8.500	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531778.D
Acq On : 20 Mar 2022 1:18 PM
Operator : AIRLAB15:RY
Sample : WG1617728-2,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:00:24 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320T\r1531778.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79) 1,1,1,2-tetrachloroethane	16.60	131	216391	9.608	ppbV	97
80) chlorobenzene	16.62	112	434345	8.596	ppbV	100
81) ethylbenzene	16.96	91	771122	8.716	ppbV	98
83) m+p-xylene	17.13	91	1268438	17.643	ppbV	95
84) bromoform	17.18	173	248065	10.954	ppbV	96
85) styrene	17.43	104	441941	8.671	ppbV	98
86) 1,1,2,2-tetrachloroethane	17.52	83	473341	9.007	ppbV	99
87) o-xylene	17.52	91	651431	9.126	ppbV	99
88) 1,2,3-trichloropropane	17.64	75	362436	9.222	ppbV	98
89) nonane	17.72	43	573116	9.324	ppbV	100
91) isopropylbenzene	18.03	105	838539	9.745	ppbV	95
92) bromobenzene	18.11	77	466349	9.126	ppbV	98
93) 2-chlorotoluene	18.43	126	236986	9.051	ppbV	91
94) n-propylbenzene	18.45	120	276290	9.143	ppbV	94
95) 4-chlorotoluene	18.48	126	233225	8.895	ppbV	95
96) 4-ethyl toluene	18.57	105	870790	9.625	ppbV	96
97) 1,3,5-trimethylbenzene	18.63	105	685812	8.941	ppbV	98
98) tert-butylbenzene	18.97	119	780384	9.461	ppbV	100
99) 1,2,4-trimethylbenzene	18.97	105	700302	9.480	ppbV	94
100) decane	19.04	57	806020	9.954	ppbV	99
101) Benzyl Chloride	19.08	91	533611	11.246	ppbV	99
102) 1,3-dichlorobenzene	19.09	146	449576	8.962	ppbV	97
103) 1,4-dichlorobenzene	19.15	146	449641	9.099	ppbV	98
104) sec-butylbenzene	19.17	105	1068378	9.787	ppbV	100
106) p-isopropyltoluene	19.30	119	866509	8.713	ppbV	96
107) 1,2-dichlorobenzene	19.42	146	426028	8.937	ppbV	98
108) n-butylbenzene	19.64	91	955539	9.876	ppbV	98
111) 1,2-dibromo-3-chloropr...	19.79	75	202910	10.092	ppbV	96
112) undecane	20.05	57	896839	10.195	ppbV	99
114) dodecane	20.95	57	910663	10.604	ppbV	98
115) 1,2,4-trichlorobenzene	20.91	180	304188	8.688	ppbV	97
116) naphthalene	21.02	128	1044840	9.759	ppbV	98
117) 1,2,3-trichlorobenzene	21.27	180	330893	9.687	ppbV	99
119) hexachlorobutadiene	21.34	225	248788	8.549	ppbV	98

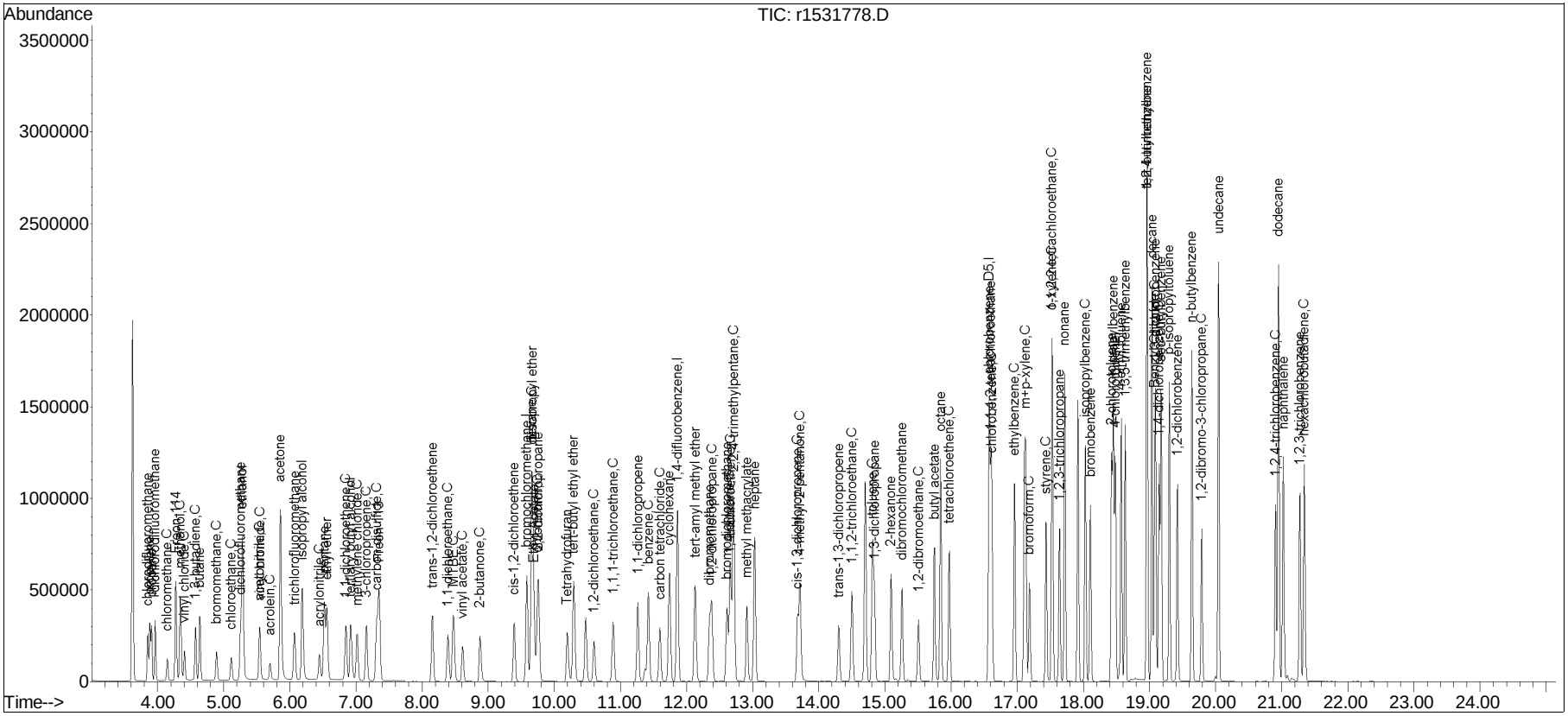
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531778.D
Acq On : 20 Mar 2022 1:18 PM
Operator : AIRLAB15:RY
Sample : WG1617728-2,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:00:24 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

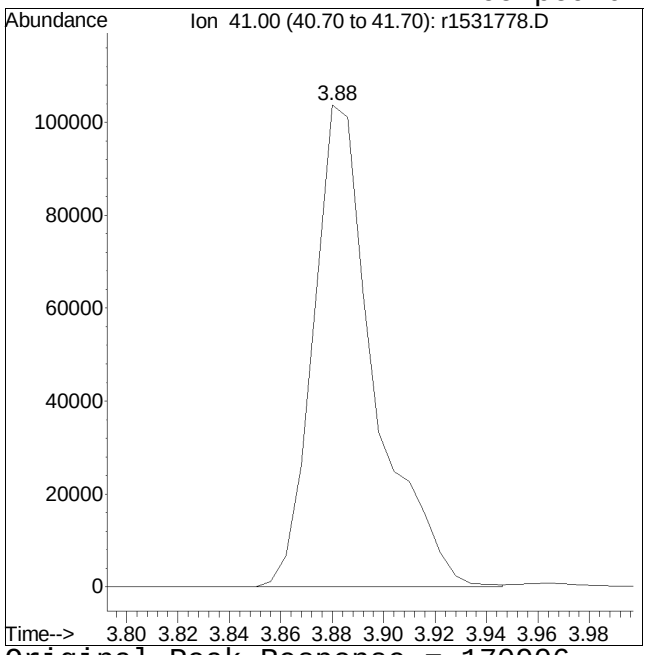
Sub List : Default-LCS-AP2 - All compounds listed0T\r1531778.D



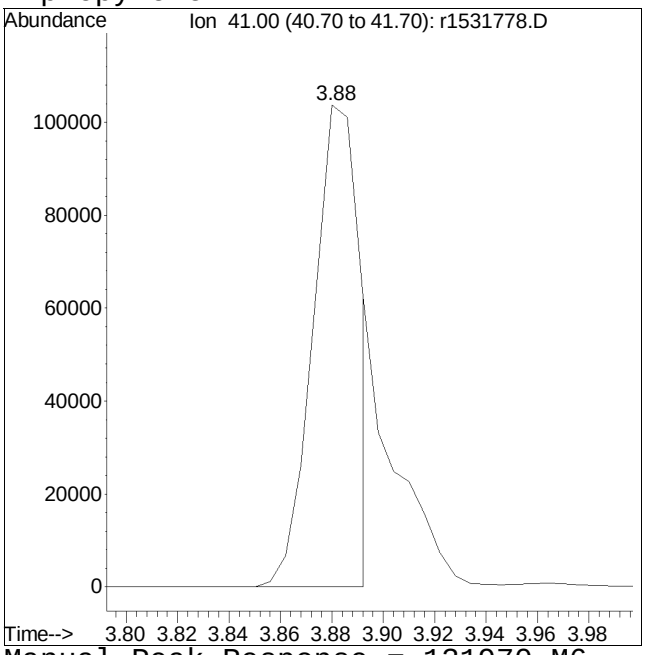
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airlab15\QMethod : TFS15_211222.M
Data File : r1531778.D Operator : AIRLAB15:RY
Date Inj'd : 3/20/2020 0:1: 8 Instrument :
Sample : WG1617728-2,3,250,250 Quant Date : 3/20/2022 12:59 pm

Compound #3: propylene



Original Peak Response = 170906



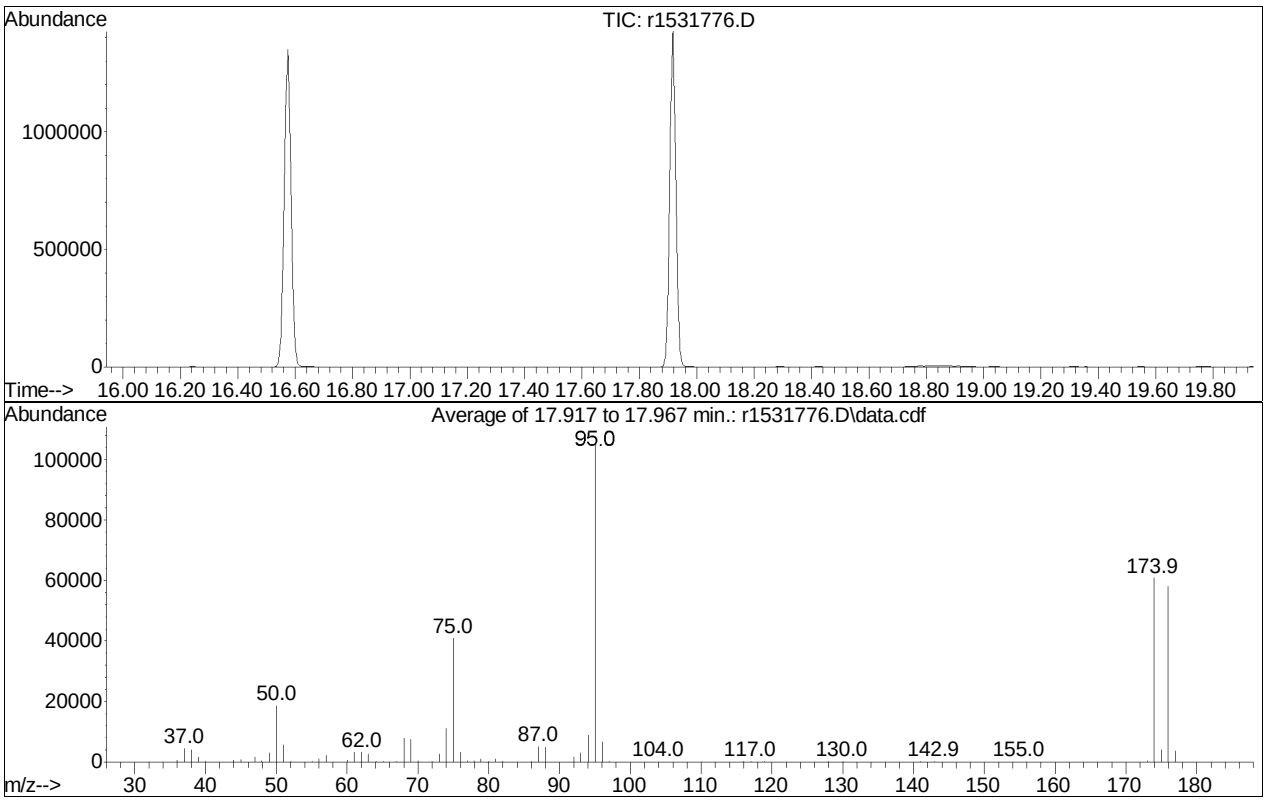
Manual Peak Response = 131970 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531776.D
Acq On : 20 Mar 2022 11:40 AM
Operator : AIRLAB15:RY
Sample : WG1617728-1,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Integration File: rteint.p

Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Wed Dec 22 16:29:20 2021



Spectrum Information: Average of 17.917 to 17.967 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	17.6	18604	PASS
75	95	30	66	38.7	40864	PASS
95	95	100	100	100.0	105517	PASS
96	95	5	9	6.3	6609	PASS
173	174	0.00	2	0.7	412	PASS
174	95	50	120	57.7	60908	PASS
175	174	4	9	6.8	4148	PASS
176	174	93	101	95.3	58019	PASS
177	176	5	9	6.3	3627	PASS

Volatiles Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531780.D
Acq On : 20 Mar 2022 3:20 PM
Operator : AIRLAB15:RY
Sample : WG1617728-4,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 08:45:13 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320T\r1531778.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.59	49	380489	10.000	ppbV	-0.03
Standard Area = 382239			Recovery = 99.54%			
43) 1,4-difluorobenzene	11.86	114	820809	10.000	ppbV	-0.02
Standard Area = 859136			Recovery = 95.54%			
67) chlorobenzene-D5	16.58	54	191501	10.000	ppbV	0.00
Standard Area = 200634			Recovery = 95.45%			
System Monitoring Compounds						
Target Compounds						Qvalue
3) propylene	3.90		0	N.D.		
5) dichlorodifluoromethane	0.00		0	N.D.		
6) chloromethane	0.00		0	N.D.		
7) Freon-114	0.00		0	N.D.		
9) vinyl chloride	0.00		0	N.D.		
10) 1,3-butadiene	0.00		0	N.D.		
13) bromomethane	0.00		0	N.D.		
14) chloroethane	0.00		0	N.D.		
15) ethanol	5.31	31	31399	2.878	ppbV	95
17) vinyl bromide	5.54		0	N.D.		
19) acetone	5.86		0	N.D.		
21) trichlorofluoromethane	6.13		0	N.D.		
22) isopropyl alcohol	6.20		0	N.D.		
26) 1,1-dichloroethene	0.00		0	N.D.		
27) tertiary butyl alcohol	6.98		0	N.D.		
28) methylene chloride	7.02		0	N.D.		
29) 3-chloropropene	0.00		0	N.D.		
30) carbon disulfide	0.00		0	N.D.		
31) Freon 113	0.00		0	N.D.		
32) trans-1,2-dichloroethene	0.00		0	N.D.		
33) 1,1-dichloroethane	0.00		0	N.D.		
34) MTBE	0.00		0	N.D.		
35) vinyl acetate	0.00		0	N.D.		
36) 2-butanone	0.00		0	N.D.		
37) cis-1,2-dichloroethene	0.00		0	N.D.		
38) Ethyl Acetate	0.00		0	N.D.		
39) chloroform	0.00		0	N.D.		

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531780.D
Acq On : 20 Mar 2022 3:20 PM
Operator : AIRLAB15:RY
Sample : WG1617728-4,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 08:45:13 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320T\r1531778.D
Sub List : Default-LCS-AP2 - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40)	Tetrahydrofuran	0.00		0	N.D.		
42)	1,2-dichloroethane	0.00		0	N.D.		
44)	hexane	0.00		0	N.D.		
48)	1,1,1-trichloroethane	0.00		0	N.D.		
50)	benzene	0.00		0	N.D.		
52)	carbon tetrachloride	0.00		0	N.D.		
53)	cyclohexane	0.00		0	N.D.	d	
56)	1,2-dichloropropane	0.00		0	N.D.		
57)	bromodichloromethane	0.00		0	N.D.		
58)	1,4-dioxane	0.00		0	N.D.		
59)	trichloroethene	0.00		0	N.D.		
60)	2,2,4-trimethylpentane	0.00		0	N.D.		
62)	heptane	0.00		0	N.D.		
63)	cis-1,3-dichloropropene	0.00		0	N.D.		
64)	4-methyl-2-pentanone	0.00		0	N.D.		
65)	trans-1,3-dichloropropene	0.00		0	N.D.		
66)	1,1,2-trichloroethane	0.00		0	N.D.		
68)	toluene	14.81		0	N.D.		
72)	2-hexanone	0.00		0	N.D.		
74)	dibromochloromethane	0.00		0	N.D.		
75)	1,2-dibromoethane	0.00		0	N.D.		
78)	tetrachloroethene	0.00		0	N.D.		
80)	chlorobenzene	0.00		0	N.D.		
81)	ethylbenzene	17.11		0	N.D.		
83)	m+p-xylene	17.11		0	N.D.		
84)	bromoform	0.00		0	N.D.		
85)	styrene	0.00		0	N.D.		
86)	1,1,2,2-tetrachloroethane	0.00		0	N.D.		
87)	o-xylene	0.00		0	N.D.		
96)	4-ethyl toluene	0.00		0	N.D.		
97)	1,3,5-trimethylbenzene	0.00		0	N.D.		
99)	1,2,4-trimethylbenzene	18.97		0	N.D.		
101)	Benzyl Chloride	19.08		0	N.D.		
102)	1,3-dichlorobenzene	19.10		0	N.D.		
103)	1,4-dichlorobenzene	19.16		0	N.D.		
107)	1,2-dichlorobenzene	19.42		0	N.D.		
115)	1,2,4-trichlorobenzene	20.91		0	N.D.		
119)	hexachlorobutadiene	21.33		0	N.D.		

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531780.D
Acq On : 20 Mar 2022 3:20 PM
Operator : AIRLAB15:RY
Sample : WG1617728-4,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 08:45:13 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320T\r1531778.D
Sub List : Default-LCS-AP2 - All compounds listed

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

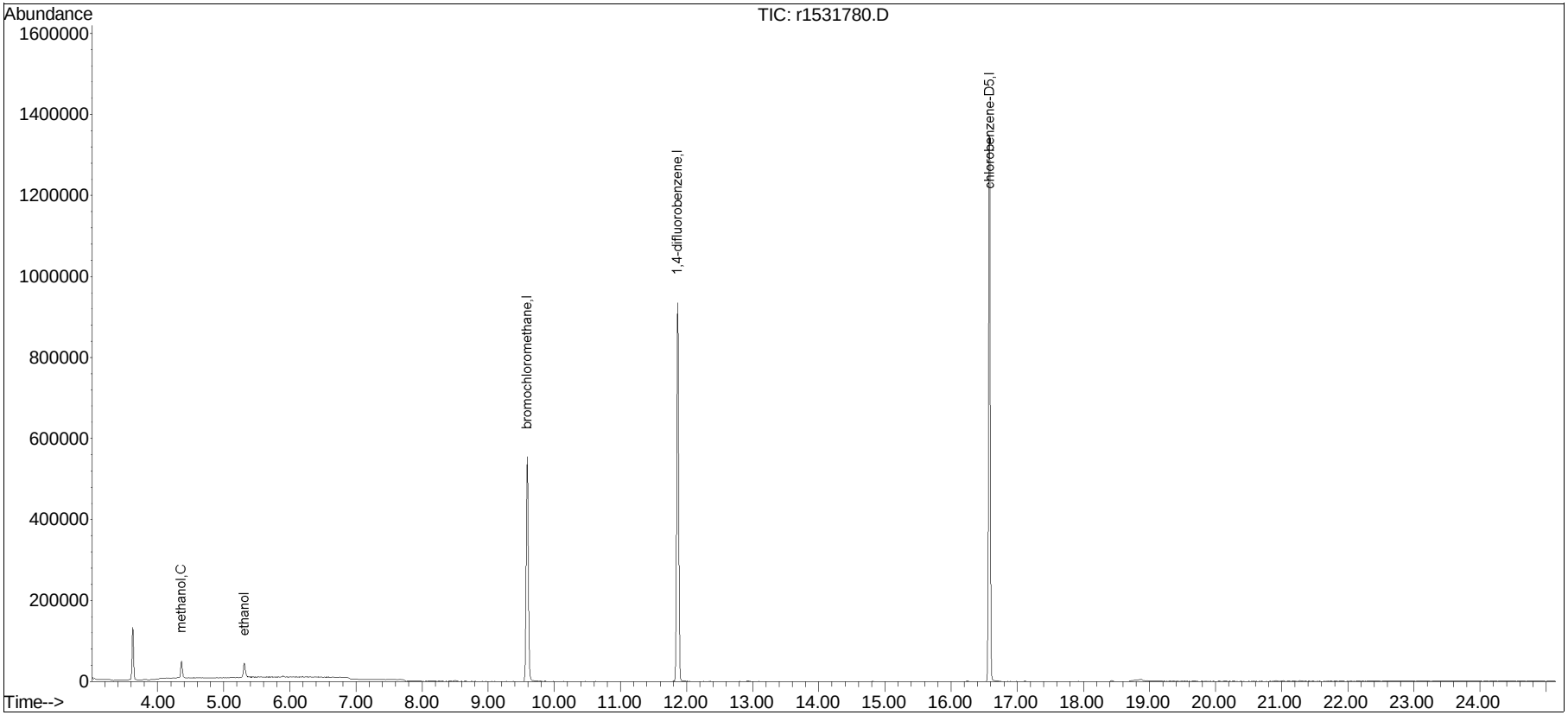
(#) = qualifier out of range (m) = manual integration (+) = signals summed

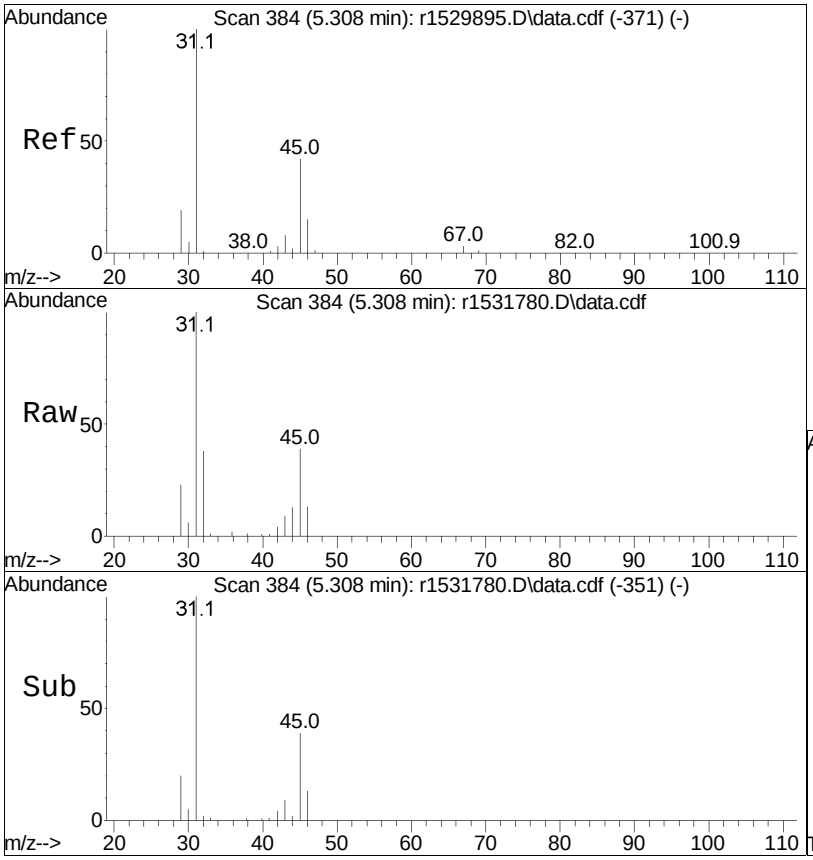
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531780.D
Acq On : 20 Mar 2022 3:20 PM
Operator : AIRLAB15:RY
Sample : WG1617728-4,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 08:45:13 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

Sub List : Default-LCS-AP2 - All compounds listed0T\r1531778.D

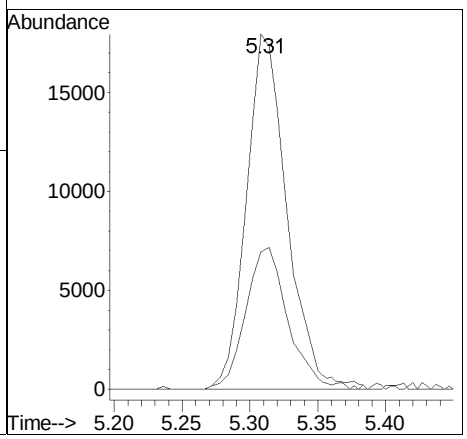




#15
ethanol
Concen: 2.88 ppbV
RT: 5.31 min Scan# 384
Delta R.T. 0.000 min
Lab File: r1531780.D
Acq: 20 Mar 2022 3:20 PM

Tgt Ion: 31 Resp: 31399

Ion	Ratio	Lower	Upper
31	100		
45	38.7	33.4	50.2



Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\Airlab15\	QMethod	: TFS15_211222.M
Data File	: r1531780.D	Operator	: AIRLAB15:RY
Date Inj'd	: 3/20/2020 0:3: 0	Instrument	:
Sample	: WG1617728-4,3,250,250	Quant Date	: 3/21/2022 8:44 am

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

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531778.D
Acq On : 20 Mar 2022 1:18 PM
Operator : AIRLAB15:RY
Sample : WG1617728-3,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:00:24 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	bromochloromethane	10.000	10.000	0.0	108	-0.03
2		chlorodifluoromethane	10.000	8.131	18.7	95	-0.02
3		propylene	10.000	8.687	13.1	99	-0.02
4		propane	10.000	8.777	12.2	102	-0.02
5		dichlorodifluoromethane	10.000	7.843	21.6	89	-0.02
6	C	chloromethane	10.000	8.081	19.2	92	-0.02
7		Freon-114	10.000	8.122	18.8	91	-0.02
8	C	methanol	50.000	45.062	9.9	102	-0.02
9	C	vinyl chloride	10.000	8.149	18.5	91	-0.02
10	C	1,3-butadiene	10.000	9.120	8.8	105	-0.02
11		butane	10.000	8.836	11.6	105	-0.02
13	C	bromomethane	10.000	7.740	22.6	86	-0.02
14	C	chloroethane	10.000	8.447	15.5	93	-0.02
15		ethanol	50.000	58.595	-17.2	114	-0.02
16		dichlorofluoromethane	10.000	9.045	9.6	100	-0.02
17	C	vinyl bromide	10.000	9.274	7.3	107	-0.02
18	C	acrolein	10.000	8.743	12.6	98	-0.02
19		acetone	50.000	52.107	-4.2	121	-0.02
20	C	acetonitrile	10.000	9.224	7.8	107	-0.02
21		trichlorofluoromethane	10.000	8.342	16.6	94	-0.02
22		isopropyl alcohol	25.000	24.854	0.6	115	-0.02
23	C	acrylonitrile	10.000	9.019	9.8	102	-0.03
24		pentane	10.000	9.182	8.2	106	-0.03
25		ethyl ether	10.000	14.464	-44.6#	162	-0.03
26	C	1,1-dichloroethene	10.000	8.628	13.7	95	-0.03
27		tertiary butyl alcohol	10.000	8.941	10.6	100	-0.02
28	C	methylene chloride	10.000	9.665	3.4	107	-0.02
29	C	3-chloropropene	10.000	10.944	-9.4	128	-0.03
30	C	carbon disulfide	10.000	11.656	-16.6	128	-0.02
31		Freon 113	10.000	9.636	3.6	108	-0.03
32		trans-1,2-dichloroethene	10.000	8.782	12.2	103	-0.03
33	C	1,1-dichloroethane	10.000	8.603	14.0	96	-0.02
34	C	MTBE	10.000	8.522	14.8	97	-0.03
35	C	vinyl acetate	10.000	8.853	11.5	101	-0.03
36	C	2-butanone	10.000	9.201	8.0	104	-0.03
37		cis-1,2-dichloroethene	10.000	8.288	17.1	93	-0.02
38		Ethyl Acetate	10.000	9.999	0.0	115	-0.03
39	C	chloroform	10.000	8.373	16.3	91	-0.03
40		Tetrahydrofuran	10.000	8.754	12.5	99	-0.03

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531778.D
Acq On : 20 Mar 2022 1:18 PM
Operator : AIRLAB15:RY
Sample : WG1617728-3,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:00:24 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
41		2,2-dichloropropane	10.000	9.288	7.1	103	-0.03
42	C	1,2-dichloroethane	10.000	8.256	17.4	94	-0.03
43	I	1,4-difluorobenzene	10.000	10.000	0.0	105	-0.02
44	C	hexane	10.000	9.940	0.6	107	-0.03
45		diisopropyl ether	10.000	9.065	9.4	98	-0.03
46		tert-butyl ethyl ether	10.000	8.584	14.2	94	-0.03
48	C	1,1,1-trichloroethane	10.000	9.103	9.0	96	-0.03
49		1,1-dichloropropene	10.000	9.198	8.0	100	-0.03
50	C	benzene	10.000	8.137	18.6	92	-0.03
52	C	carbon tetrachloride	10.000	8.960	10.4	92	-0.03
53		cyclohexane	10.000	9.689	3.1	105	-0.03
54		tert-amyl methyl ether	10.000	8.182	18.2	89	-0.03
55		dibromomethane	10.000	9.197	8.0	102	-0.02
56	C	1,2-dichloropropane	10.000	8.965	10.4	98	-0.02
57		bromodichloromethane	10.000	10.142	-1.4	106	-0.03
58	C	1,4-dioxane	10.000	9.719	2.8	104	-0.03
59	C	trichloroethene	10.000	8.814	11.9	93	-0.02
60	C	2,2,4-trimethylpentane	10.000	10.200	-2.0	111	-0.03
61		methyl methacrylate	10.000	9.761	2.4	104	-0.03
62		heptane	10.000	9.960	0.4	109	-0.03
63	C	cis-1,3-dichloropropene	10.000	8.980	10.2	91	-0.02
64	C	4-methyl-2-pentanone	10.000	10.009	-0.1	107	-0.03
65		trans-1,3-dichloropropene	10.000	7.771	22.3	78	-0.02
66	C	1,1,2-trichloroethane	10.000	9.146	8.5	99	-0.03
67	I	chlorobenzene-D5	10.000	10.000	0.0	103	-0.02
68	C	toluene	10.000	8.159	18.4	91	-0.03
71		1,3-dichloropropane	10.000	9.178	8.2	101	-0.02
72		2-hexanone	10.000	9.687	3.1	103	-0.02
74		dibromochloromethane	10.000	10.809	-8.1	110	-0.02
75	C	1,2-dibromoethane	10.000	8.883	11.2	95	-0.02
76		butyl acetate	10.000	8.651	13.5	93	-0.02
77		octane	10.000	8.937	10.6	94	-0.02
78	C	tetrachloroethene	10.000	8.500	15.0	89	-0.02
79		1,1,1,2-tetrachloroethane	10.000	9.608	3.9	100	-0.02
80	C	chlorobenzene	10.000	8.596	14.0	90	-0.02
81	C	ethylbenzene	10.000	8.716	12.8	90	-0.02
83	C	m+p-xylene	20.000	17.643	11.8	91	-0.02

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531778.D
Acq On : 20 Mar 2022 1:18 PM
Operator : AIRLAB15:RY
Sample : WG1617728-3,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:00:24 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
84	C	bromoform	10.000	10.954	-9.5	109	-0.02
85	C	styrene	10.000	8.671	13.3	90	-0.02
86	C	1,1,2,2-tetrachloroethane	10.000	9.007	9.9	91	-0.02
87	C	o-xylene	10.000	9.126	8.7	92	-0.02
88		1,2,3-trichloropropane	10.000	9.222	7.8	100	-0.02
89		nonane	10.000	9.324	6.8	100	-0.02
91	C	isopropylbenzene	10.000	9.745	2.6	106	0.00
92		bromobenzene	10.000	9.126	8.7	99	0.00
93		2-chlorotoluene	10.000	9.051	9.5	97	-0.02
94		n-propylbenzene	10.000	9.143	8.6	97	-0.02
95		4-chlorotoluene	10.000	8.895	11.1	96	-0.02
96		4-ethyl toluene	10.000	9.625	3.8	104	0.00
97		1,3,5-trimethylbenzene	10.000	8.941	10.6	94	0.00
98		tert-butylbenzene	10.000	9.461	5.4	96	0.00
99		1,2,4-trimethylbenzene	10.000	9.480	5.2	96	0.00
100		decane	10.000	9.954	0.5	102	0.00
101	C	Benzyl Chloride	10.000	11.246	-12.5	115	0.00
102		1,3-dichlorobenzene	10.000	8.962	10.4	92	-0.02
103	C	1,4-dichlorobenzene	10.000	9.099	9.0	93	0.00
104		sec-butylbenzene	10.000	9.787	2.1	103	-0.02
106		p-isopropyltoluene	10.000	8.713	12.9	88	-0.02
107		1,2-dichlorobenzene	10.000	8.937	10.6	93	0.00
108		n-butylbenzene	10.000	9.876	1.2	101	0.00
111	C	1,2-dibromo-3-chloropropane	10.000	10.092	-0.9	102	0.00
112		undecane	10.000	10.195	-2.0	100	0.00
114		dodecane	10.000	10.604	-6.0	93	0.00
115	C	1,2,4-trichlorobenzene	10.000	8.688	13.1	80	0.00
116		naphthalene	10.000	9.759	2.4	93	0.00
117		1,2,3-trichlorobenzene	10.000	9.687	3.1	91	0.00
119	C	hexachlorobutadiene	10.000	8.549	14.5	81	0.00

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531778.D
Acq On : 20 Mar 2022 1:18 PM
Operator : AIRLAB15:RY
Sample : WG1617728-3,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:00:24 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320T\r1531778.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.58	49	382239	10.000	ppbV	-0.03
Standard Area = 382239			Recovery = 100.00%			
43) 1,4-difluorobenzene	11.86	114	859136	10.000	ppbV	-0.02
Standard Area = 859136			Recovery = 100.00%			
67) chlorobenzene-D5	16.57	54	200634	10.000	ppbV	-0.02
Standard Area = 200634			Recovery = 100.00%			
System Monitoring Compounds						
Target Compounds						Qvalue
3) propylene	3.88	41	131970M6	8.687	ppbV	
5) dichlorodifluoromethane	3.96	85	221742	7.843	ppbV	99
6) chloromethane	4.14	50	113847	8.081	ppbV	99
7) Freon-114	4.28	85	273976	8.122	ppbV	97
9) vinyl chloride	4.41	62	150807	8.149	ppbV	100
10) 1,3-butadiene	4.58	54	125316	9.120	ppbV	91
13) bromomethane	4.89	94	108262	7.740	ppbV	99
14) chloroethane	5.12	64	77243	8.447	ppbV	99
15) ethanol	5.28	31	642221	58.595	ppbV	98
17) vinyl bromide	5.55	106	116069	9.274	ppbV	96
19) acetone	5.86	43	1137940	52.107	ppbV	94
21) trichlorofluoromethane	6.07	101	226228	8.342	ppbV	97
22) isopropyl alcohol	6.19	45	586568	24.854	ppbV	99
26) 1,1-dichloroethene	6.85	61	224415	8.628	ppbV	98
27) tertiary butyl alcohol	6.92	59	272923	8.941	ppbV #	89
28) methylene chloride	7.02	49	173067	9.665	ppbV	98
29) 3-chloropropene	7.16	41	253320	10.944	ppbV	99
30) carbon disulfide	7.31	76	433001	11.656	ppbV	99
31) Freon 113	7.35	101	263159	9.636	ppbV	96
32) trans-1,2-dichloroethene	8.16	61	257745	8.782	ppbV	99
33) 1,1-dichloroethane	8.39	63	294227	8.603	ppbV	100
34) MTBE	8.47	73	339490	8.522	ppbV	99
35) vinyl acetate	8.61	43	321918	8.853	ppbV	100
36) 2-butanone	8.88	43	358733	9.201	ppbV	99
37) cis-1,2-dichloroethene	9.39	61	225336	8.288	ppbV	100
38) Ethyl Acetate	9.69	61	70648	9.999	ppbV	94
39) chloroform	9.75	83	270822	8.373	ppbV	98

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531778.D
Acq On : 20 Mar 2022 1:18 PM
Operator : AIRLAB15:RY
Sample : WG1617728-3,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:00:24 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320T\r1531778.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Tetrahydrofuran	10.19	42	212138	8.754	ppbV	98
42) 1,2-dichloroethane	10.60	62	192043	8.256	ppbV	99
44) hexane	9.66	57	360206	9.940	ppbV	95
48) 1,1,1-trichloroethane	10.89	97	224778	9.103	ppbV	98
50) benzene	11.42	78	490838	8.137	ppbV	99
52) carbon tetrachloride	11.60	117	195941	8.960	ppbV	100
53) cyclohexane	11.74	56	375801	9.689	ppbV	98
56) 1,2-dichloropropane	12.38	63	201586	8.965	ppbV	99
57) bromodichloromethane	12.61	83	315957	10.142	ppbV	100
58) 1,4-dioxane	12.65	88	135436	9.719	ppbV	97
59) trichloroethene	12.66	130	200079	8.814	ppbV	95
60) 2,2,4-trimethylpentane	12.71	57	1225946	10.200	ppbV	99
62) heptane	13.03	43	396751	9.960	ppbV	99
63) cis-1,3-dichloropropene	13.68	75	228456	8.980	ppbV	97
64) 4-methyl-2-pentanone	13.72	43	448679	10.009	ppbV	99
65) trans-1,3-dichloropropene	14.30	75	181954	7.771	ppbV	97
66) 1,1,2-trichloroethane	14.50	97	193890	9.146	ppbV	96
68) toluene	14.81	91	609621	8.159	ppbV	99
72) 2-hexanone	15.09	43	408384	9.687	ppbV	96
74) dibromochloromethane	15.26	129	303200	10.809	ppbV	97
75) 1,2-dibromoethane	15.51	107	261464	8.883	ppbV	97
78) tetrachloroethene	15.98	166	220329	8.500	ppbV	97
80) chlorobenzene	16.62	112	434345	8.596	ppbV	100
81) ethylbenzene	16.96	91	771122	8.716	ppbV	98
83) m+p-xylene	17.13	91	1268438	17.643	ppbV	95
84) bromoform	17.18	173	248065	10.954	ppbV	96
85) styrene	17.43	104	441941	8.671	ppbV	98
86) 1,1,2,2-tetrachloroethane	17.52	83	473341	9.007	ppbV	99
87) o-xylene	17.52	91	651431	9.126	ppbV	99
96) 4-ethyl toluene	18.57	105	870790	9.625	ppbV	96
97) 1,3,5-trimethylbenzene	18.63	105	685812	8.941	ppbV	98
99) 1,2,4-trimethylbenzene	18.97	105	700302	9.480	ppbV	94
101) Benzyl Chloride	19.08	91	533611	11.246	ppbV	99
102) 1,3-dichlorobenzene	19.09	146	449576	8.962	ppbV	97
103) 1,4-dichlorobenzene	19.15	146	449641	9.099	ppbV	98
107) 1,2-dichlorobenzene	19.42	146	426028	8.937	ppbV	98
115) 1,2,4-trichlorobenzene	20.91	180	304188	8.688	ppbV	97
119) hexachlorobutadiene	21.34	225	248788	8.549	ppbV	98

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531778.D
Acq On : 20 Mar 2022 1:18 PM
Operator : AIRLAB15:RY
Sample : WG1617728-3,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:00:24 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320T\r1531778.D
Sub List : Default-LCS-AP2 - All compounds listed

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

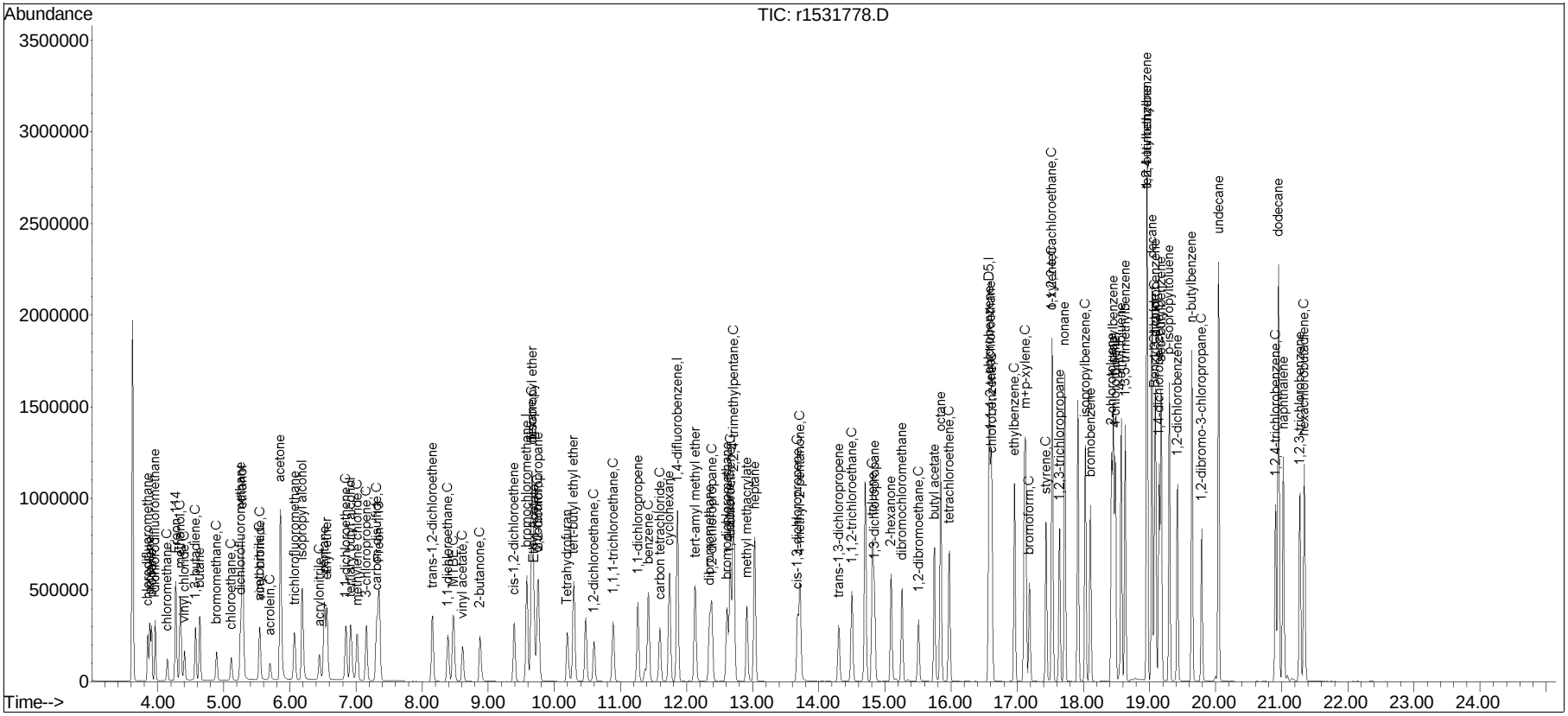
(#) = qualifier out of range (m) = manual integration (+) = signals summed

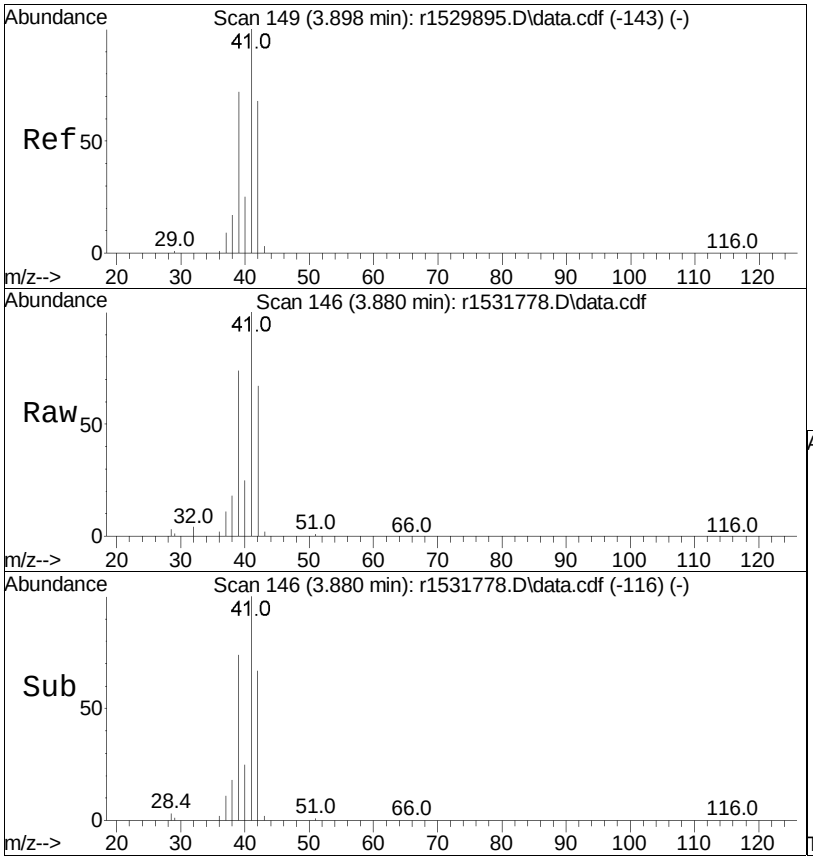
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531778.D
Acq On : 20 Mar 2022 1:18 PM
Operator : AIRLAB15:RY
Sample : WG1617728-3,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:00:24 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

Sub List : Default-LCS-AP2 - All compounds listed0T\r1531778.D

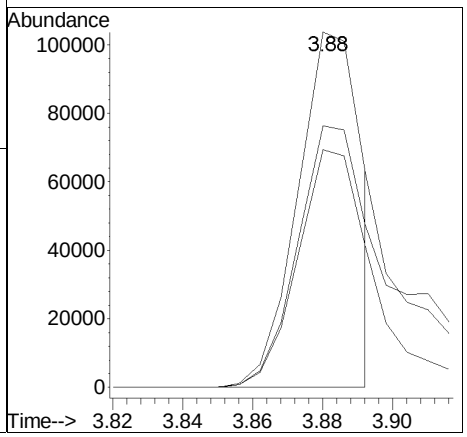


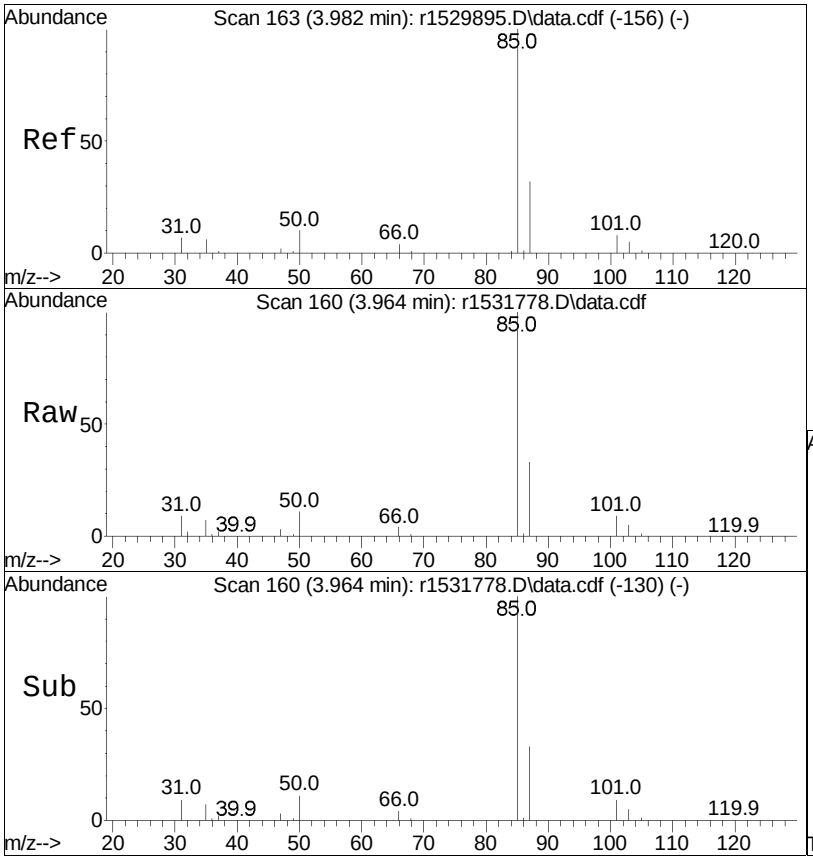


#3
propylene
Concen: 8.69 ppbV m
RT: 3.88 min Scan# 146
Delta R.T. -0.018 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 41 Resp: 131970

Ion	Ratio	Lower	Upper
41	100		
42	66.9	54.3	81.5
39	73.6	57.7	86.5

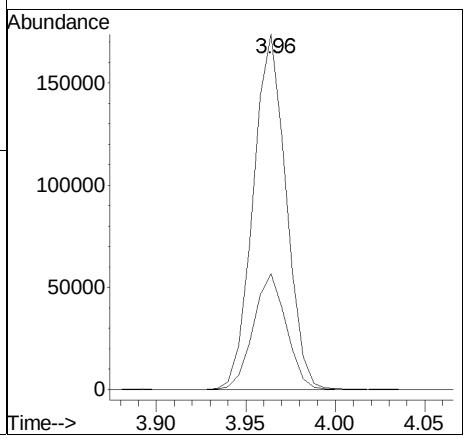


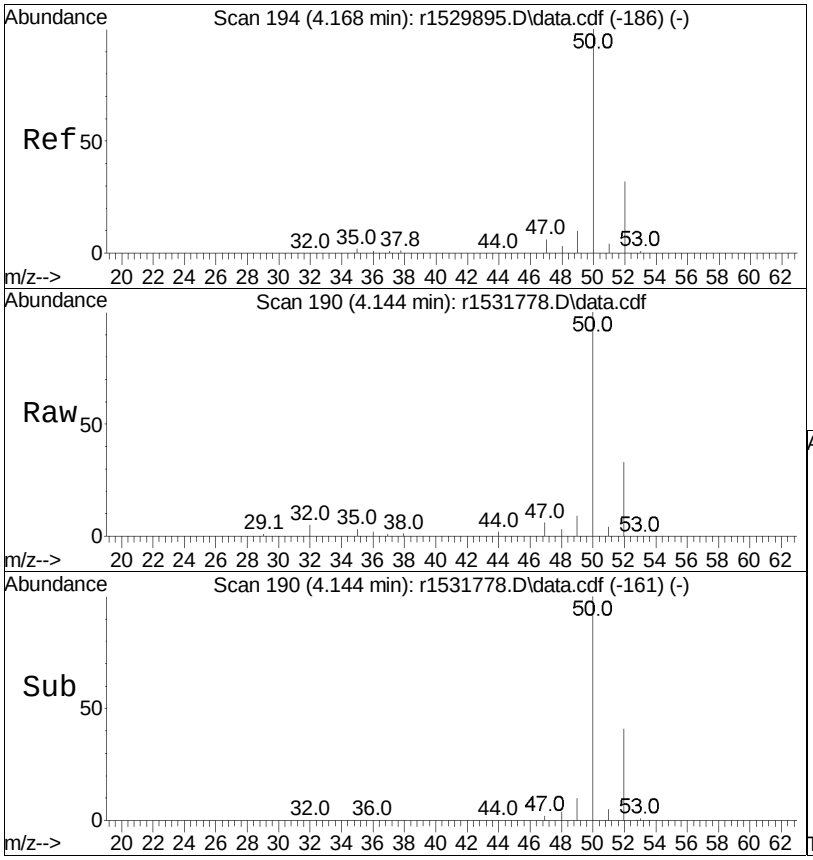


#5
dichlorodifluoromethane
Concen: 7.84 ppbV
RT: 3.96 min Scan# 160
Delta R.T. -0.018 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 85 Resp: 221742

Ion	Ratio	Lower	Upper
85	100		
87	32.6	25.6	38.4

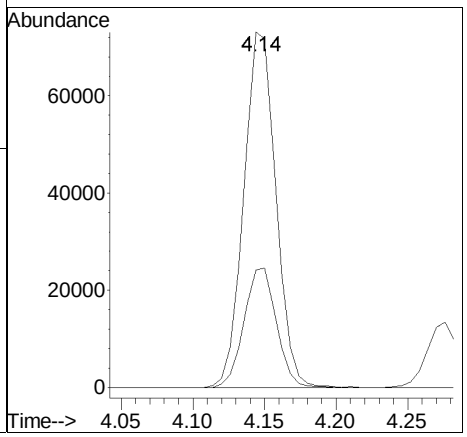


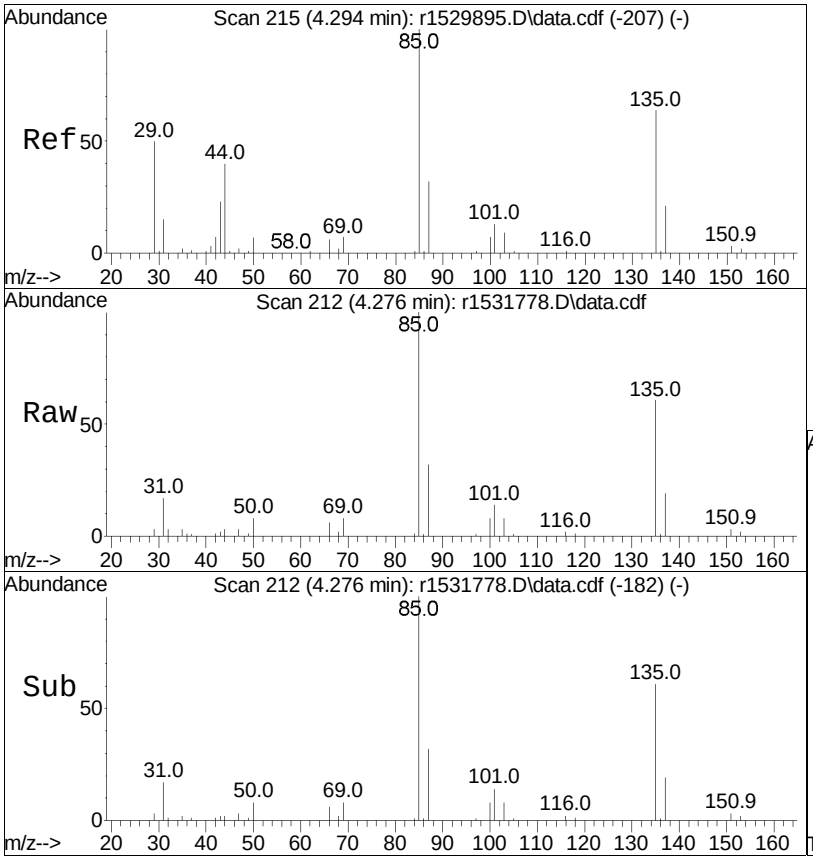


#6
chloromethane
Concen: 8.08 ppbV
RT: 4.14 min Scan# 190
Delta R.T. -0.024 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 50 Resp: 113847

Ion	Ratio	Lower	Upper
50	100		
52	33.0	25.9	38.9

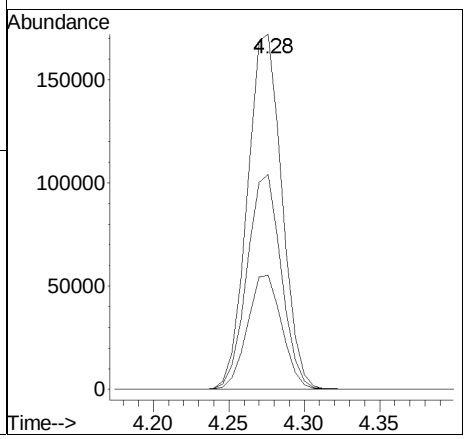


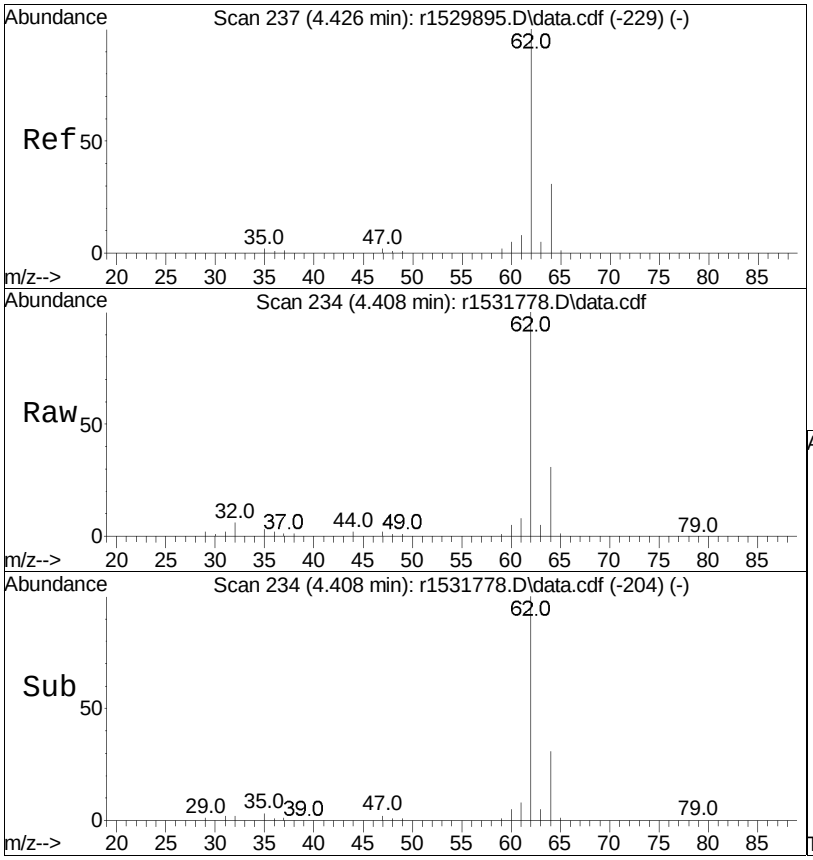


#7
Freon-114
Concen: 8.12 ppbV
RT: 4.28 min Scan# 212
Delta R.T. -0.018 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 85 Resp: 273976

Ion	Ratio	Lower	Upper
85	100		
87	32.1	25.6	38.4
135	60.5	51.1	76.7

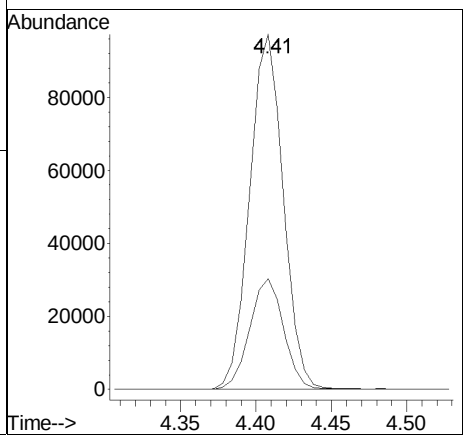


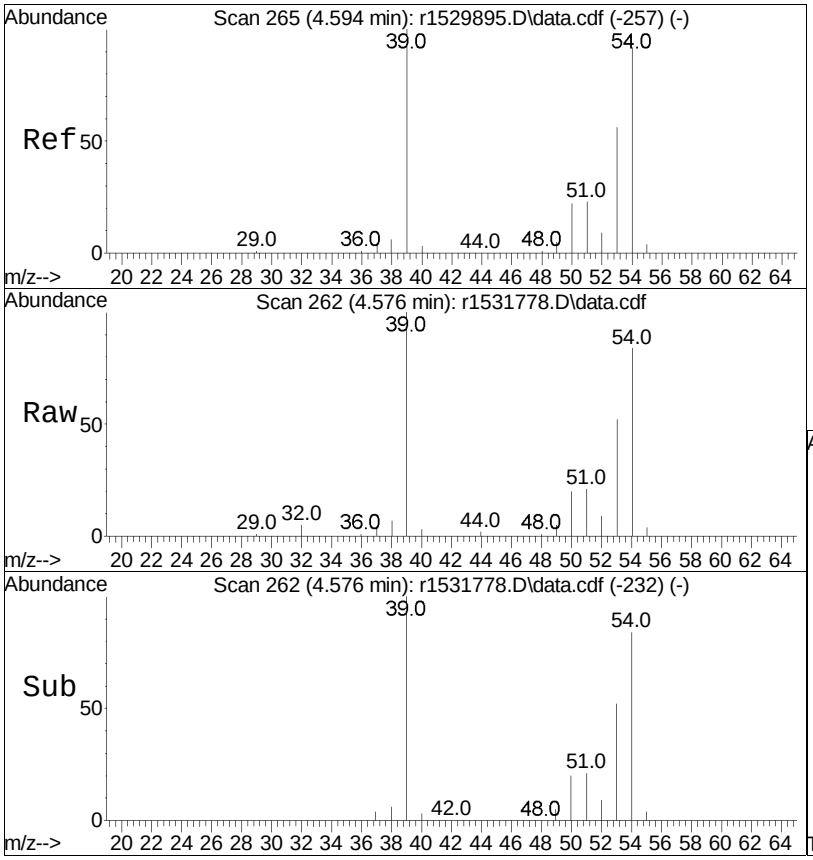


#9
vinyl chloride
Concen: 8.15 ppbV
RT: 4.41 min Scan# 234
Delta R.T. -0.018 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 62 Resp: 150807

Ion	Ratio	Lower	Upper
62	100		
64	31.2	25.1	37.7

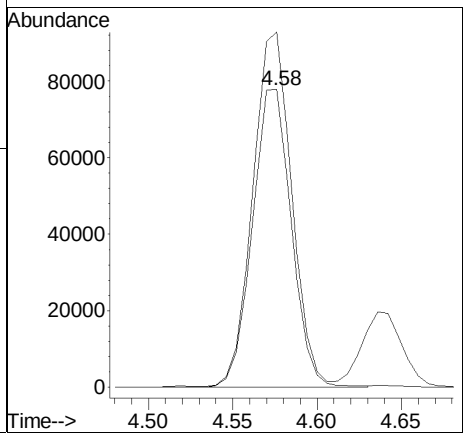


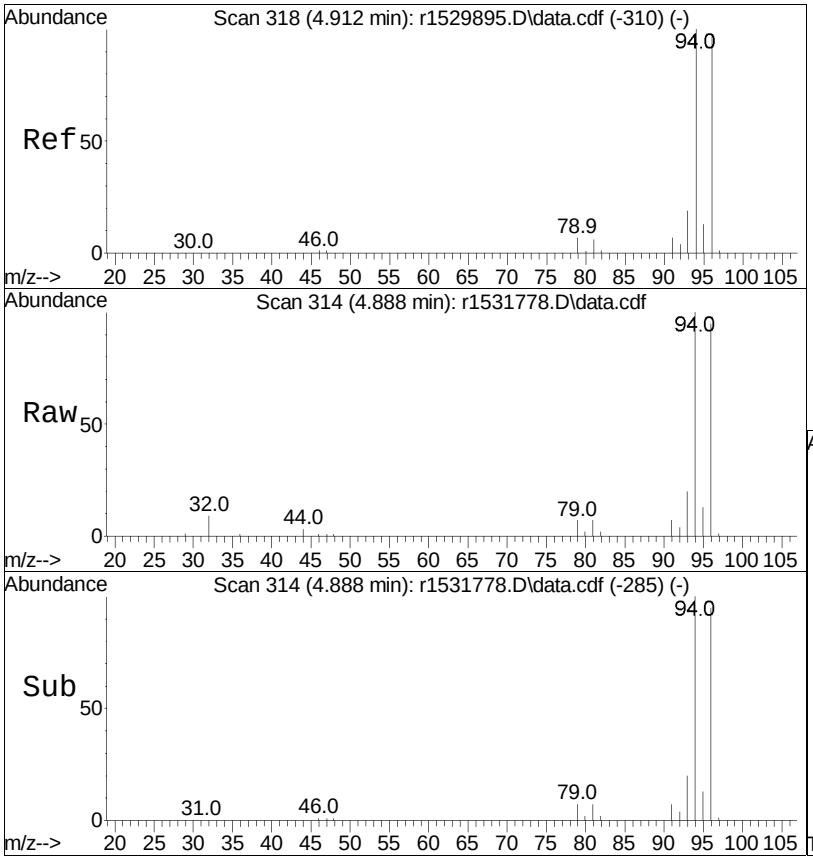


#10
1,3-butadiene
Concen: 9.12 ppbV
RT: 4.58 min Scan# 262
Delta R.T. -0.018 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 54 Resp: 125316

Ion	Ratio	Lower	Upper
54	100		
39	119.3	87.7	131.5

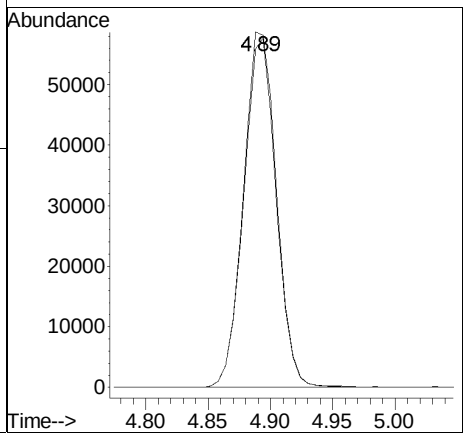


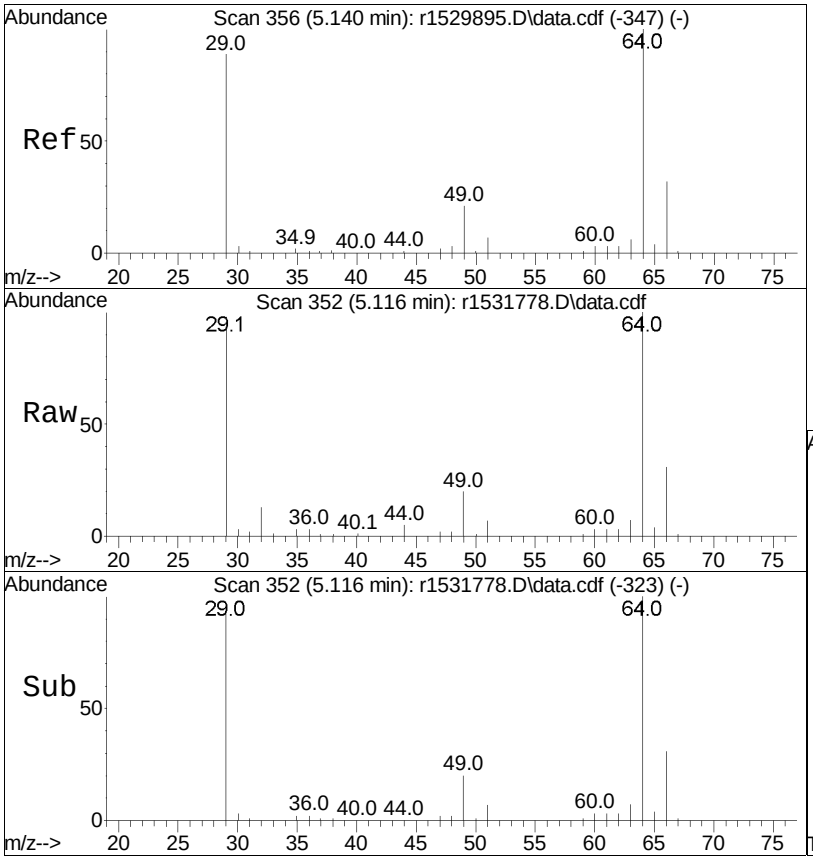


#13
bromomethane
Concen: 7.74 ppbV
RT: 4.89 min Scan# 314
Delta R.T. -0.024 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 94 Resp: 108262

Ion	Ratio	Lower	Upper
94	100		
96	95.3	77.3	115.9

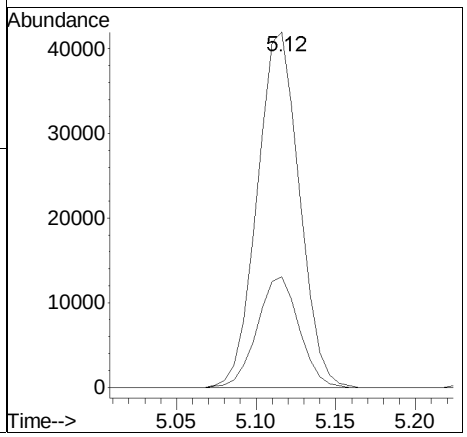


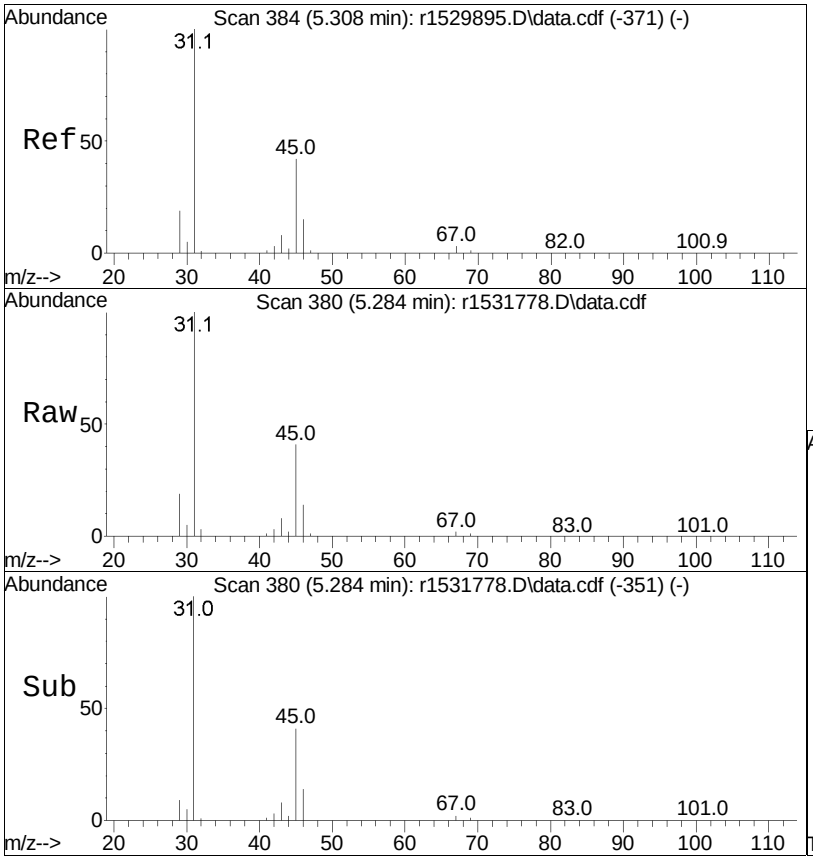


#14
chloroethane
Concen: 8.45 ppbV
RT: 5.12 min Scan# 352
Delta R.T. -0.024 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 64 Resp: 77243

Ion	Ratio	Lower	Upper
64	100		
66	31.1	25.3	37.9

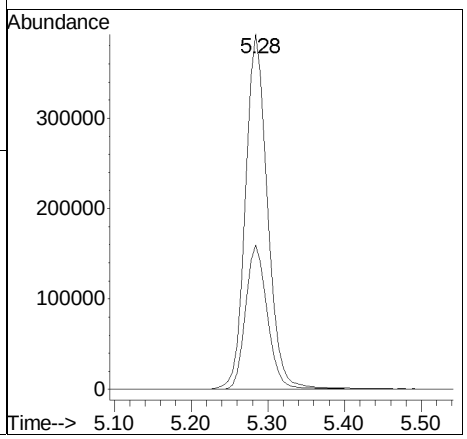


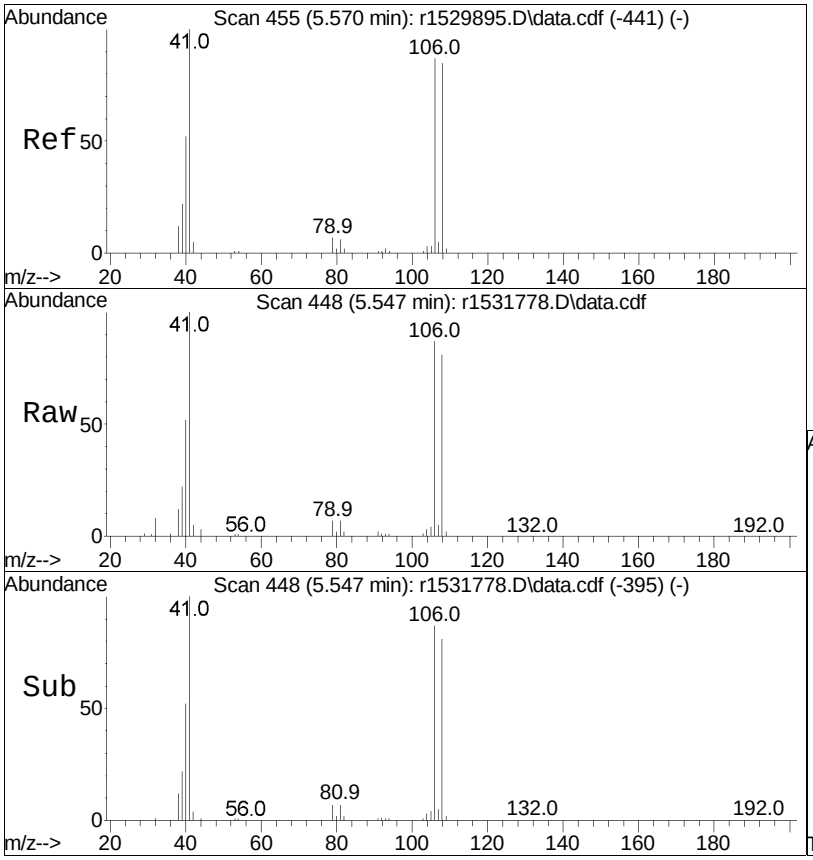


#15
ethanol
Concen: 58.59 ppbV
RT: 5.28 min Scan# 380
Delta R.T. -0.024 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 31 Resp: 642221

Ion	Ratio	Lower	Upper
31	100		
45	40.6	33.4	50.2

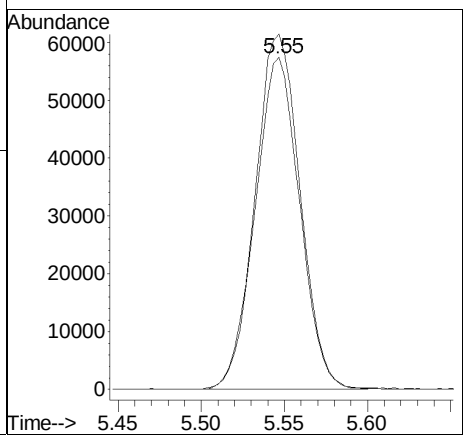


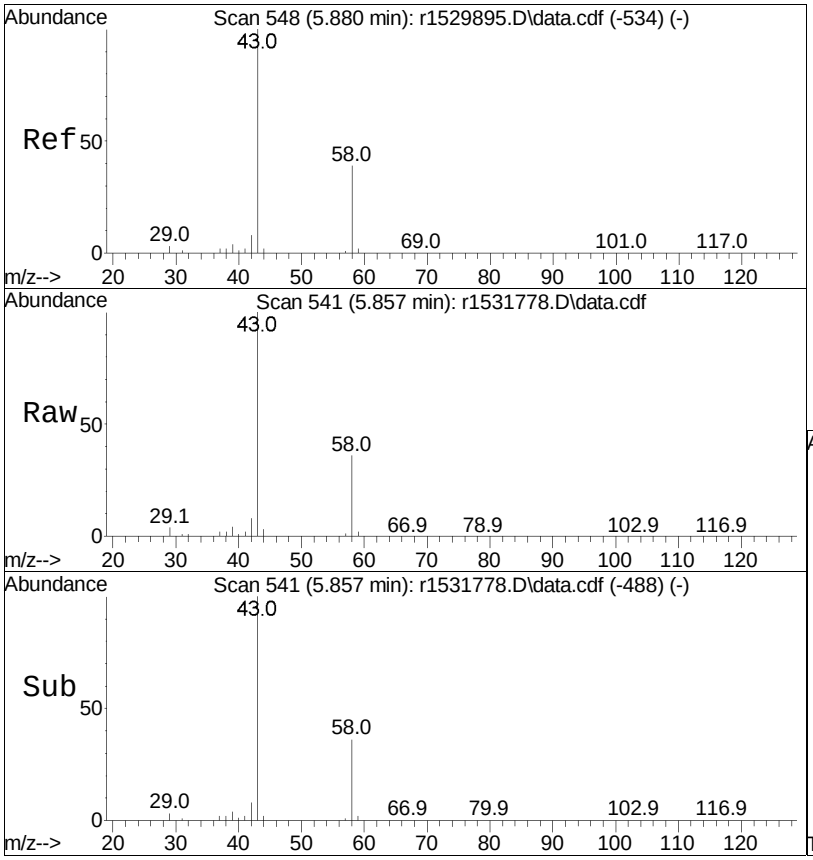


#17
vinyl bromide
Concen: 9.27 ppbV
RT: 5.55 min Scan# 448
Delta R.T. -0.023 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion:106 Resp: 116069

Ion	Ratio	Lower	Upper
106	100		
108	93.4	77.7	116.5

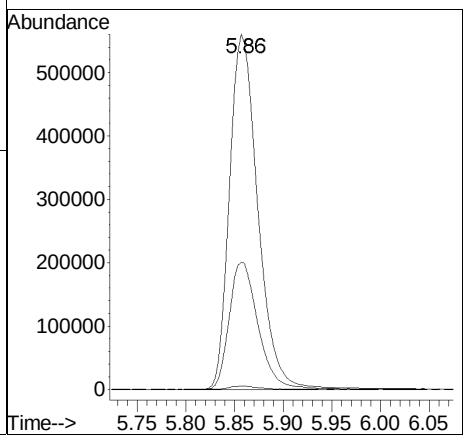


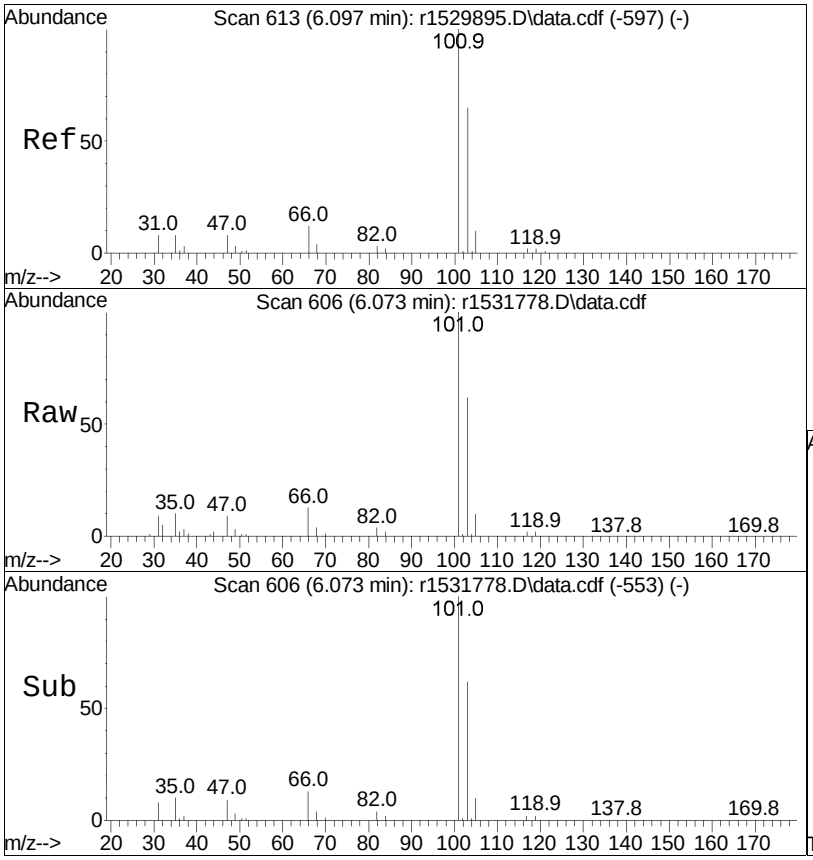


#19
acetone
Concen: 52.11 ppbV
RT: 5.86 min Scan# 541
Delta R.T. -0.023 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 43 Resp: 1137940

Ion	Ratio	Lower	Upper
43	100		
58	35.8	31.6	47.4
57	0.9	0.8	1.2

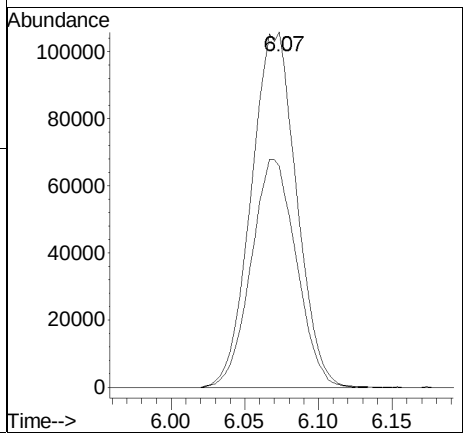


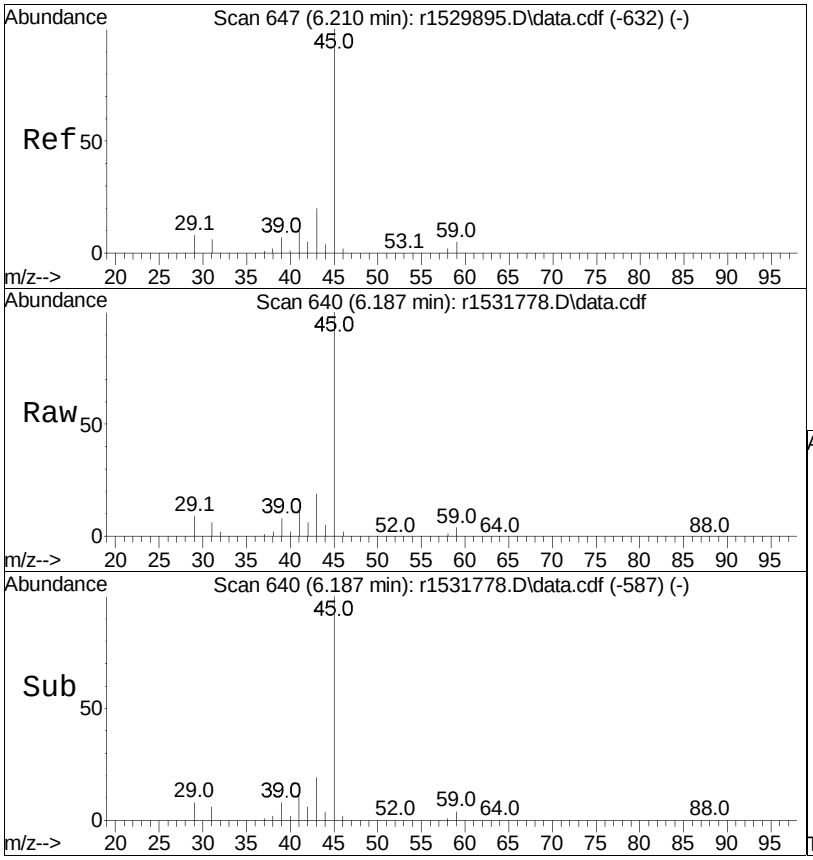


#21
trichlorofluoromethane
Concen: 8.34 ppbV
RT: 6.07 min Scan# 606
Delta R.T. -0.023 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion:101 Resp: 226228

Ion	Ratio	Lower	Upper
101	100		
103	62.3	52.0	78.0

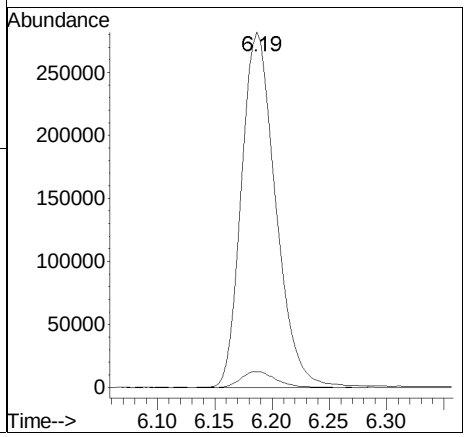


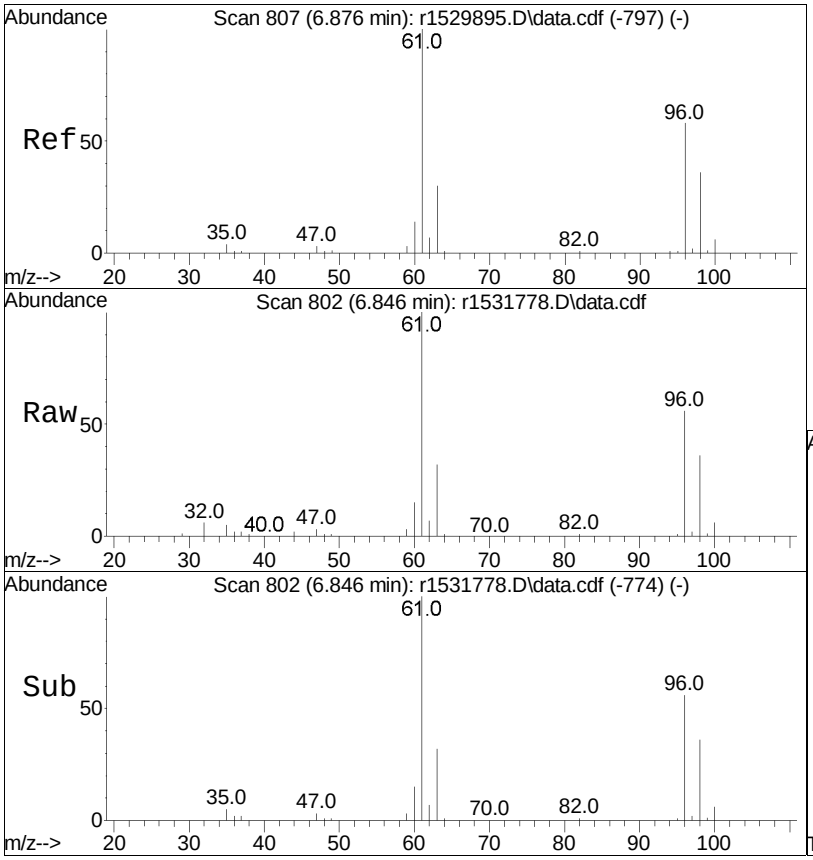


#22
isopropyl alcohol
Concen: 24.85 ppbV
RT: 6.19 min Scan# 640
Delta R.T. -0.023 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 45 Resp: 586568

Ion	Ratio	Lower	Upper
45	100		
59	4.5	3.8	5.8

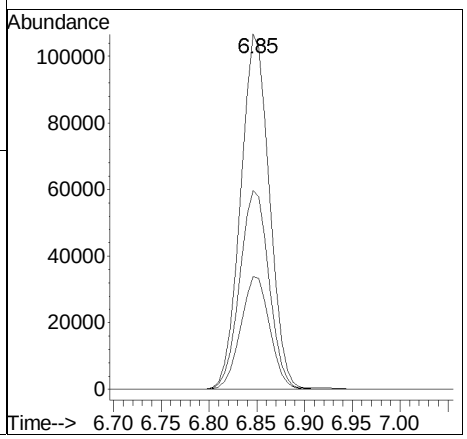


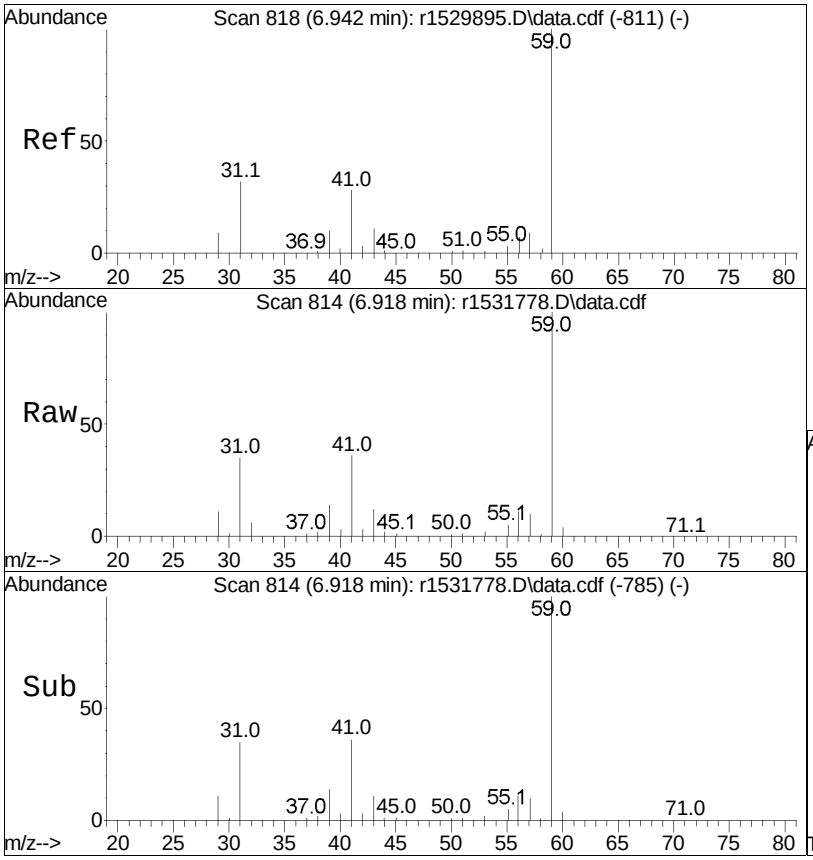


#26
1,1-dichloroethene
Concen: 8.63 ppbV
RT: 6.85 min Scan# 802
Delta R.T. -0.030 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 61 Resp: 224415

Ion	Ratio	Lower	Upper
61	100		
96	56.0	46.0	69.0
63	31.7	24.3	36.5

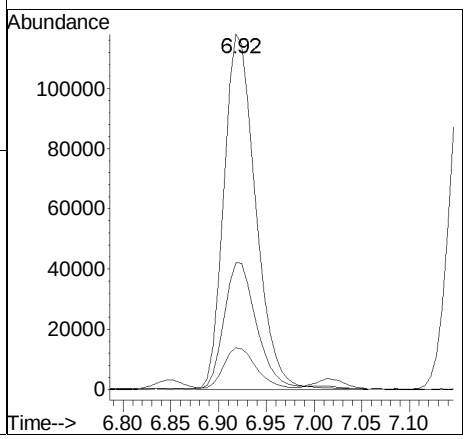


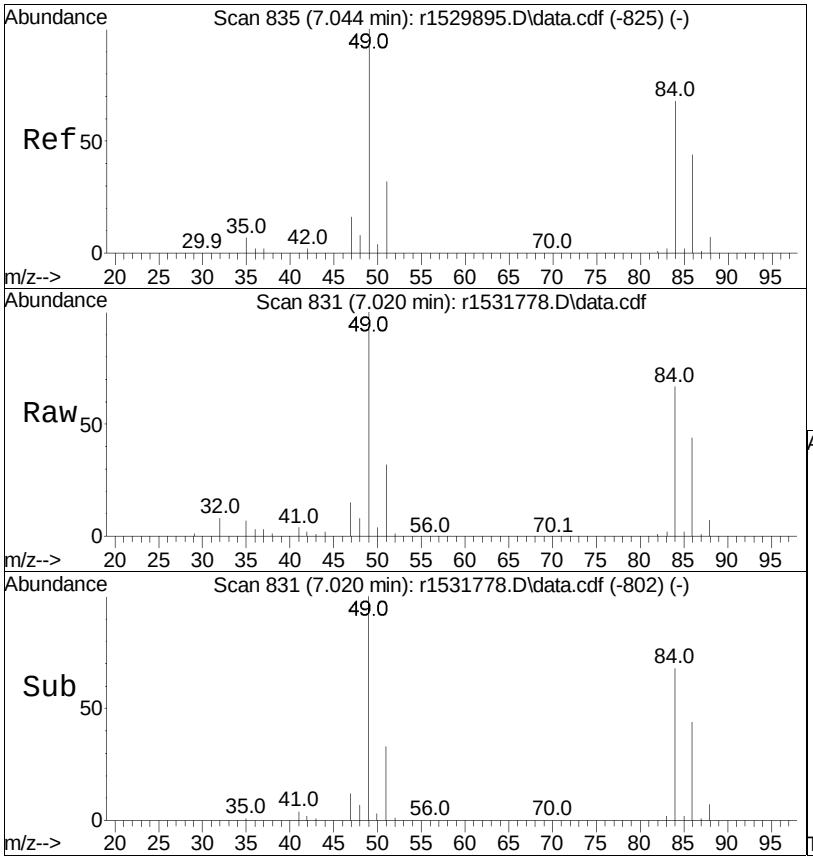


#27
tertiary butyl alcohol
Concen: 8.94 ppbV
RT: 6.92 min Scan# 814
Delta R.T. -0.024 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 59 Resp: 272923

Ion	Ratio	Lower	Upper
59	100		
41	35.7	22.2	33.4#
43	11.7	8.9	13.3

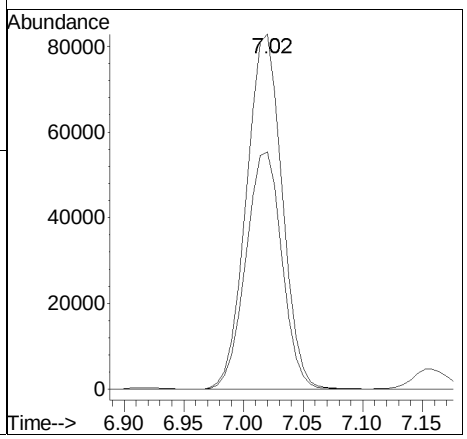


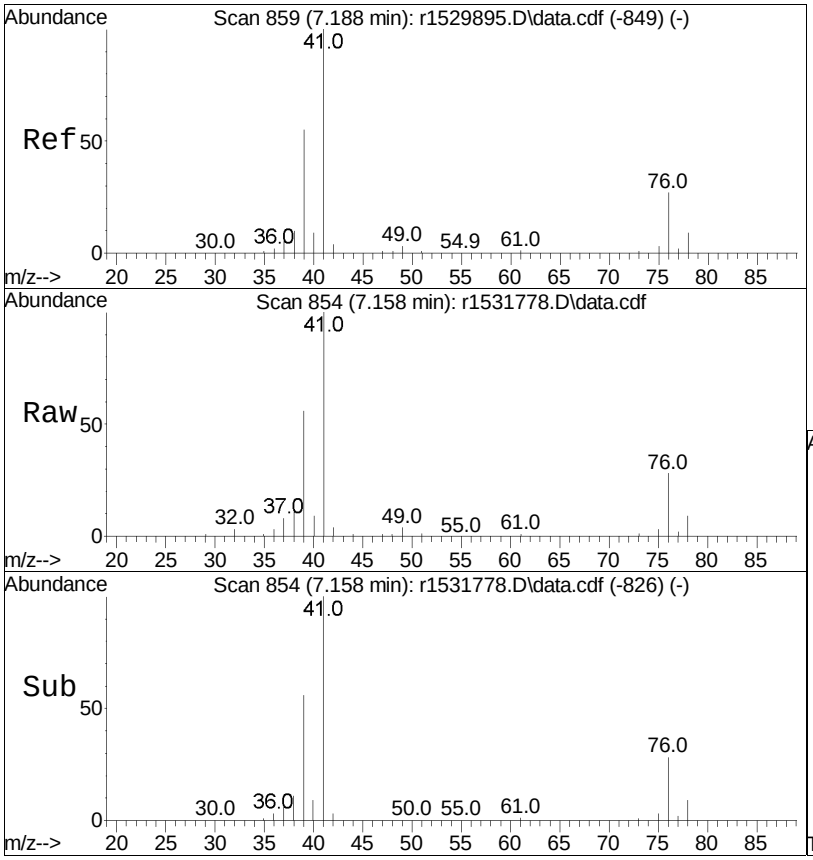


#28
methylene chloride
Concen: 9.66 ppbV
RT: 7.02 min Scan# 831
Delta R.T. -0.024 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 49 Resp: 173067

Ion	Ratio	Lower	Upper
49	100		
84	66.8	54.5	81.7

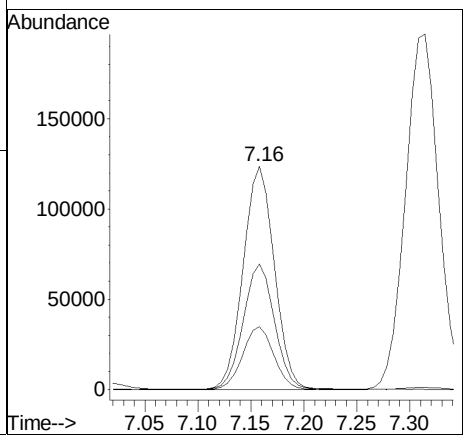


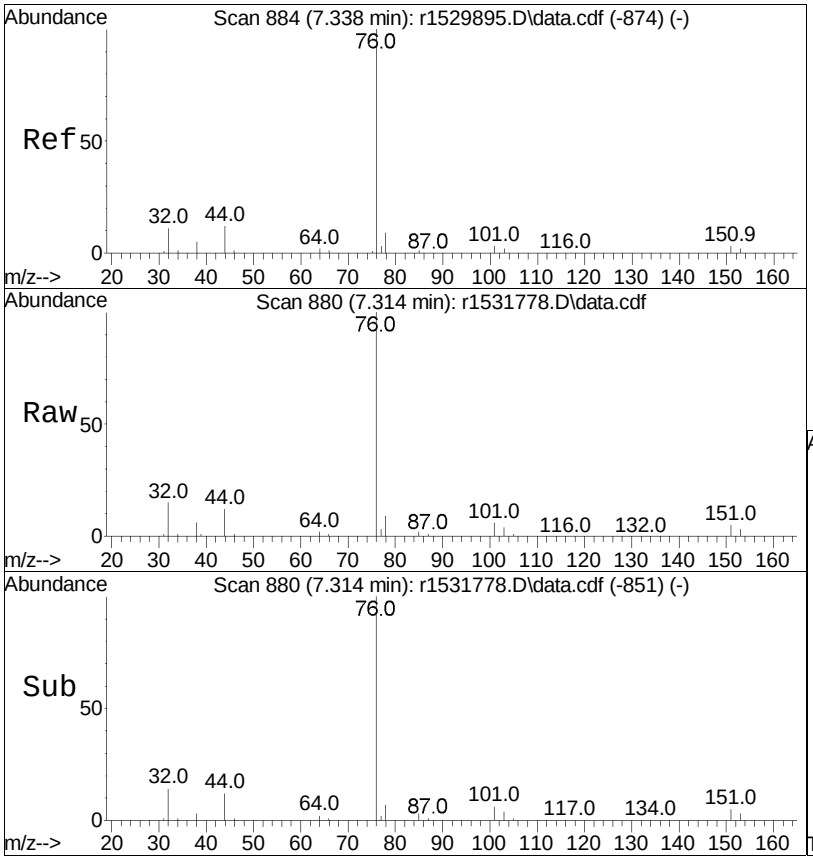


#29
3-chloropropene
Concen: 10.94 ppbV
RT: 7.16 min Scan# 854
Delta R.T. -0.030 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 41 Resp: 253320

Ion	Ratio	Lower	Upper
41	100		
39	56.2	44.4	66.6
76	28.1	21.8	32.6

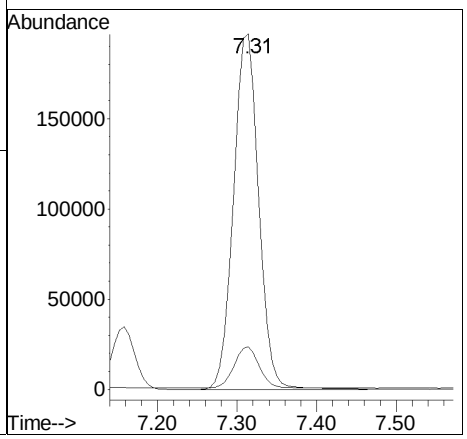


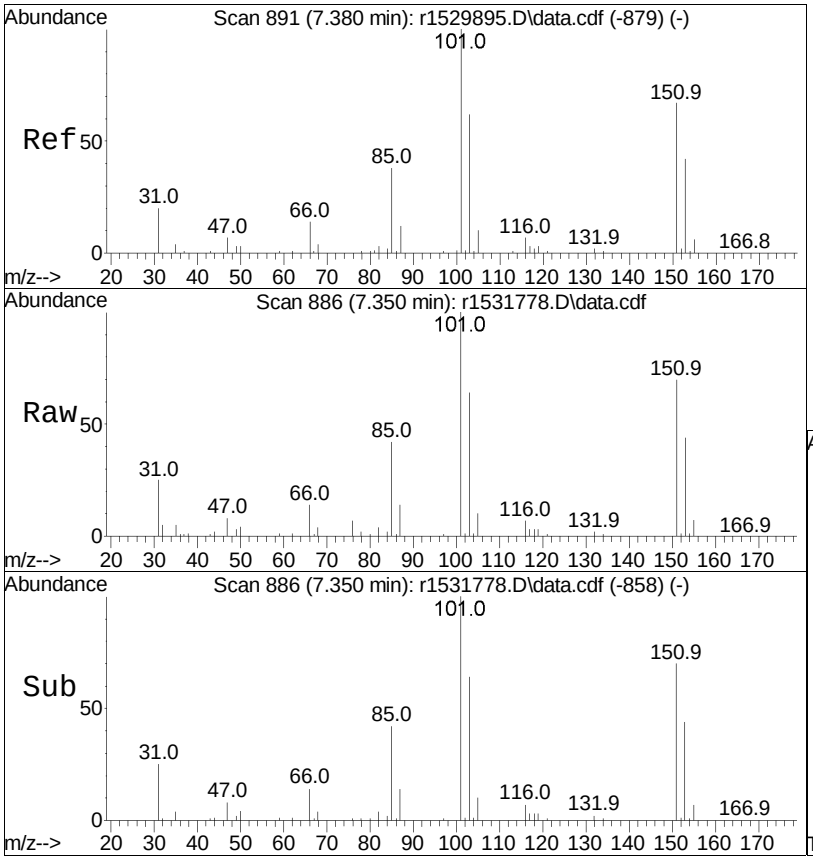


#30
carbon disulfide
Concen: 11.66 ppbV
RT: 7.31 min Scan# 880
Delta R.T. -0.024 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 76 Resp: 433001

Ion	Ratio	Lower	Upper
76	100		
44	12.0	10.1	15.1

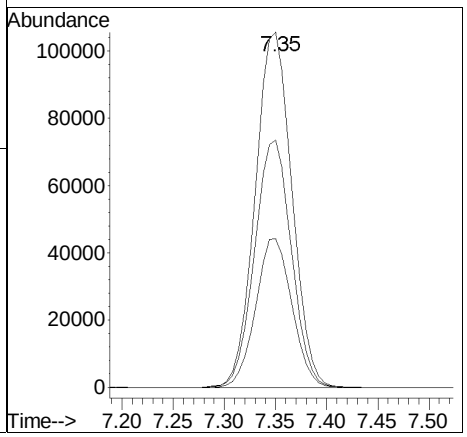


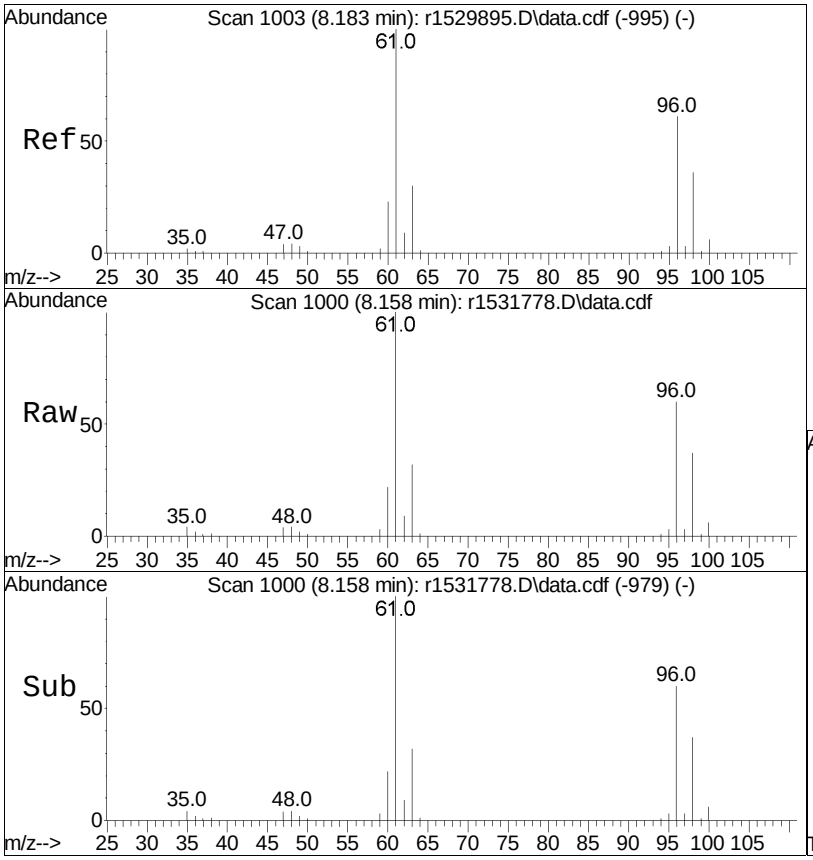


#31
Freon 113
Concen: 9.64 ppbV
RT: 7.35 min Scan# 886
Delta R.T. -0.030 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion:101 Resp: 263159

Ion	Ratio	Lower	Upper
101	100		
85	41.8	30.6	46.0
151	69.6	53.5	80.3

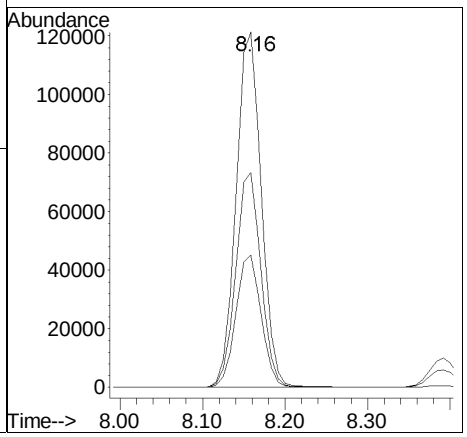


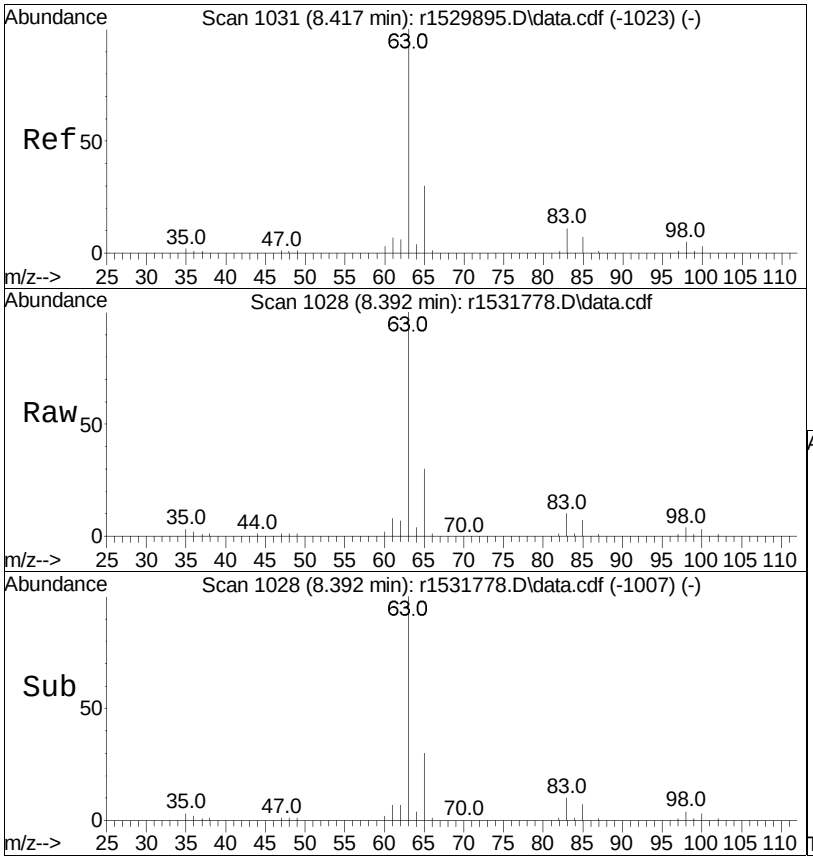


#32
trans-1,2-dichloroethene
Concen: 8.78 ppbV
RT: 8.16 min Scan# 1000
Delta R.T. -0.025 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 61 Resp: 257745

Ion	Ratio	Lower	Upper
61	100		
96	60.5	49.0	73.4
98	37.2	28.9	43.3

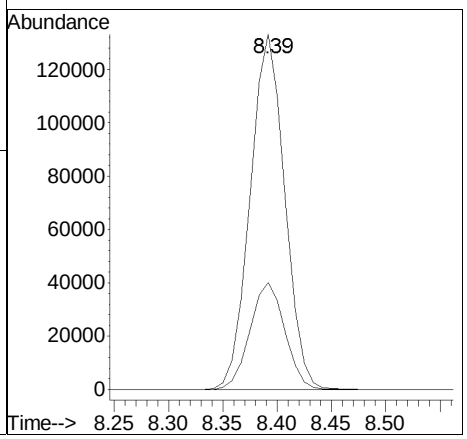


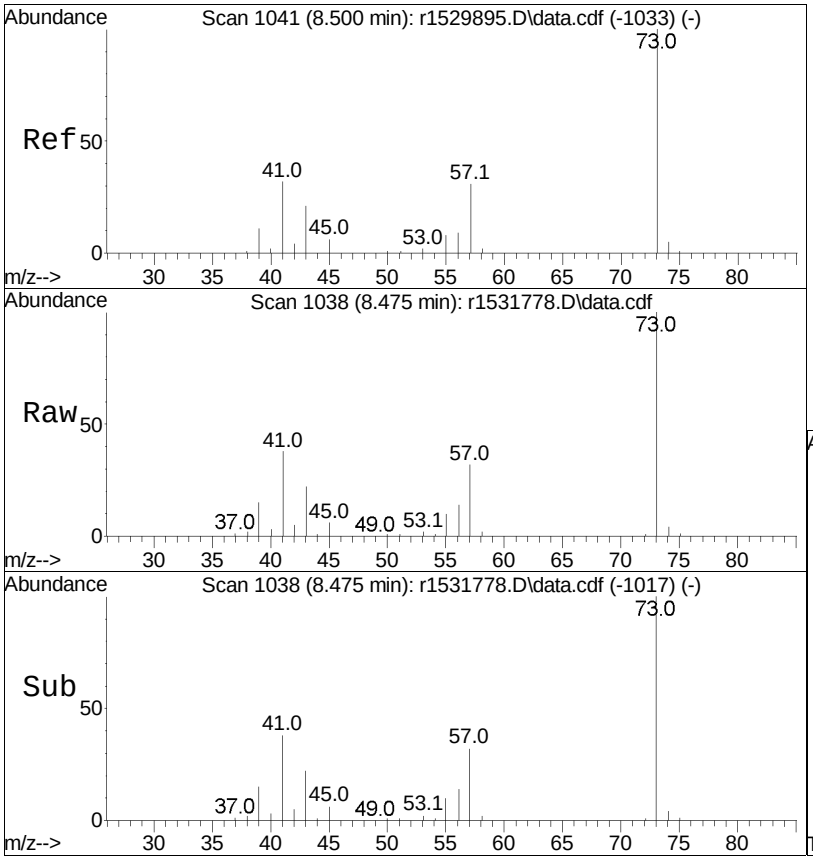


#33
1,1-dichloroethane
Concen: 8.60 ppbV
RT: 8.39 min Scan# 1028
Delta R.T. -0.025 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 63 Resp: 294227

Ion	Ratio	Lower	Upper
63	100		
65	30.1	24.2	36.2

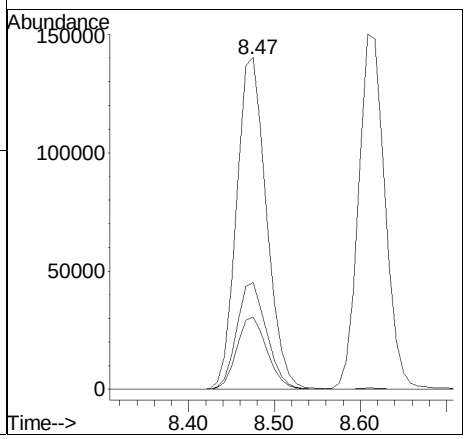


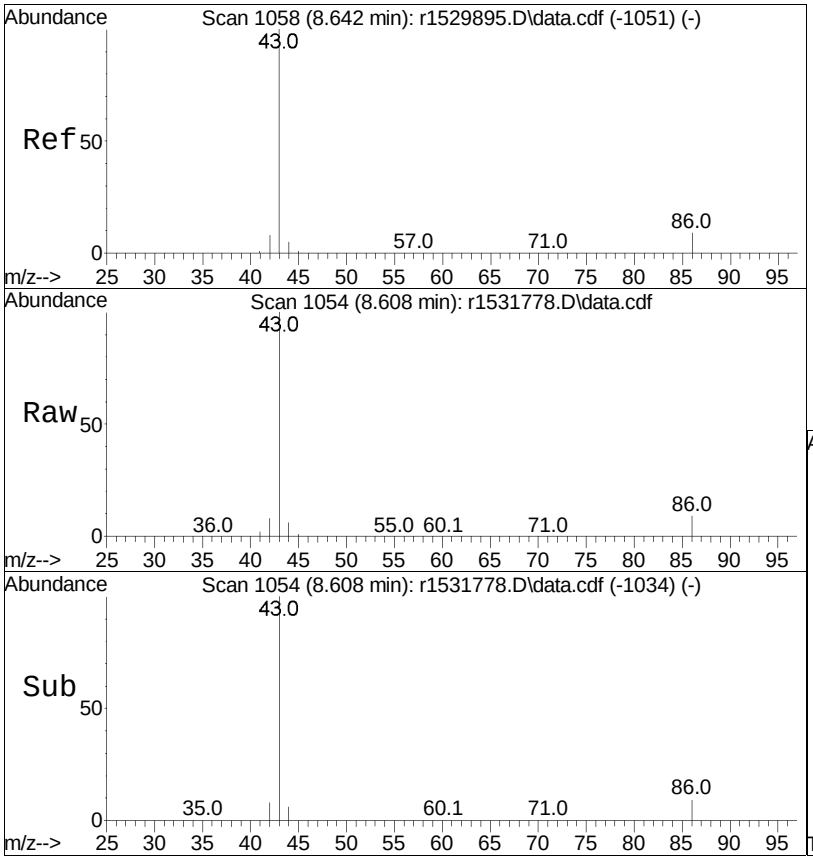


#34
MTBE
Concen: 8.52 ppbV
RT: 8.47 min Scan# 1038
Delta R.T. -0.025 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 73 Resp: 339490

Ion	Ratio	Lower	Upper
73	100		
57	32.2	25.1	37.7
43	21.8	17.0	25.6

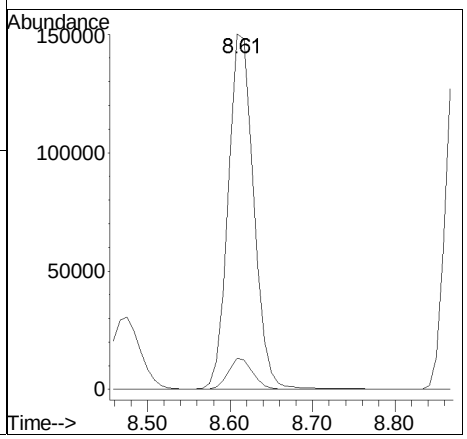


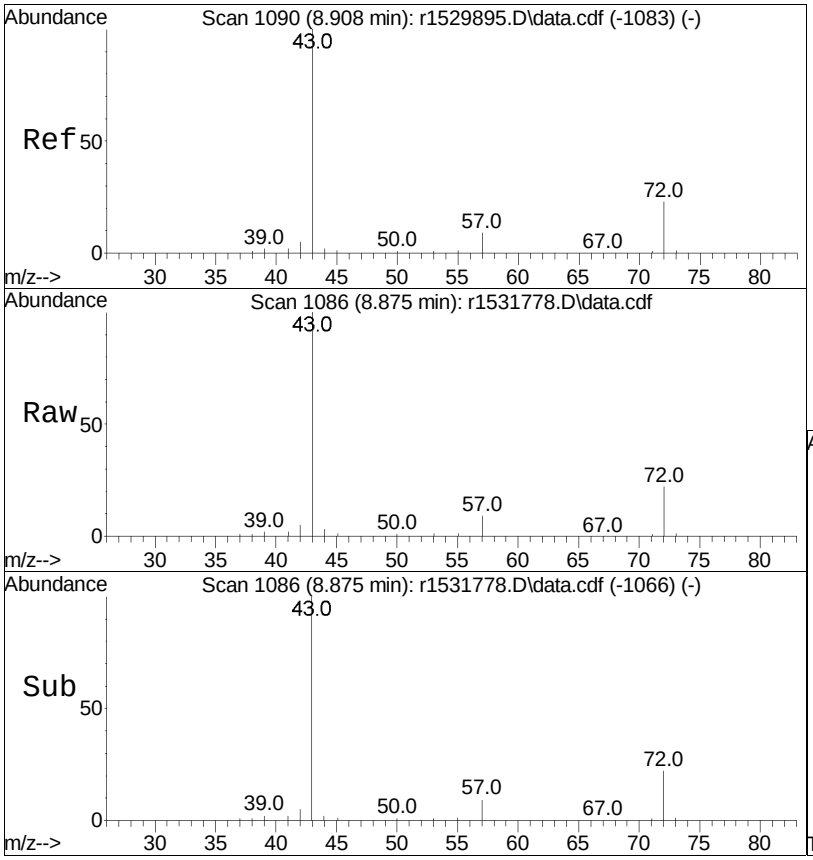


#35
vinyl acetate
Concen: 8.85 ppbV
RT: 8.61 min Scan# 1054
Delta R.T. -0.033 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 43 Resp: 321918

Ion	Ratio	Lower	Upper
43	100		
86	8.8	7.0	10.6

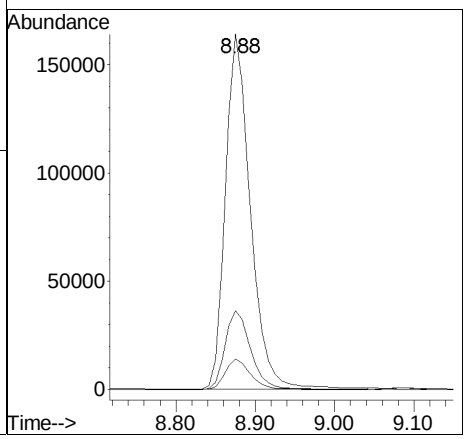


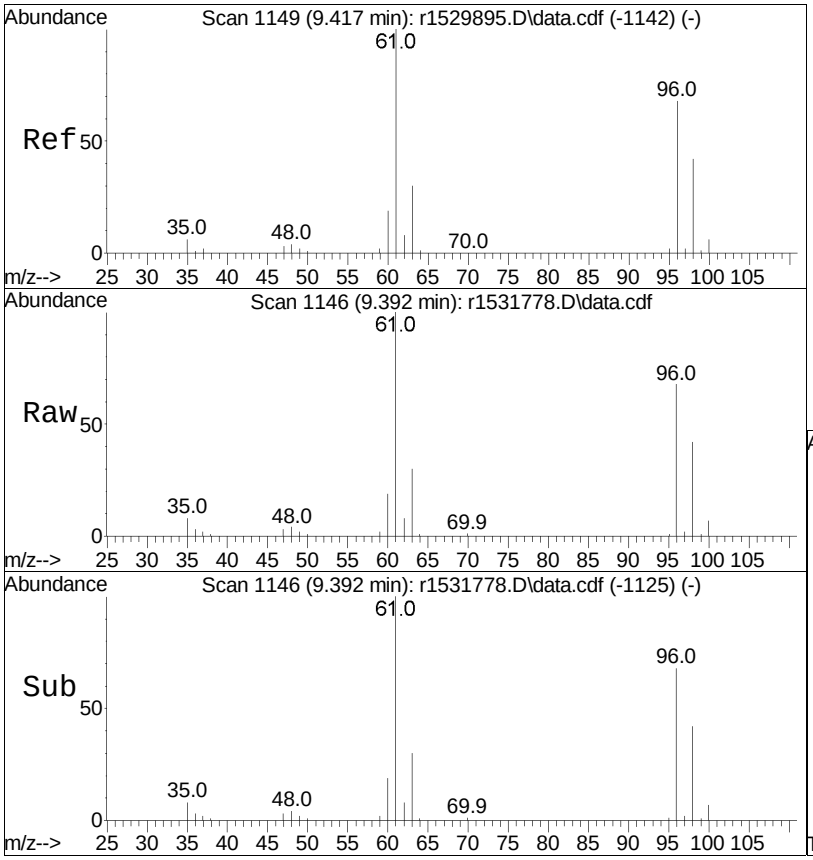


#36
2-butanone
Concen: 9.20 ppbV
RT: 8.88 min Scan# 1086
Delta R.T. -0.033 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 43 Resp: 358733

Ion	Ratio	Lower	Upper
43	100		
72	22.2	18.0	27.0
57	8.6	7.0	10.4

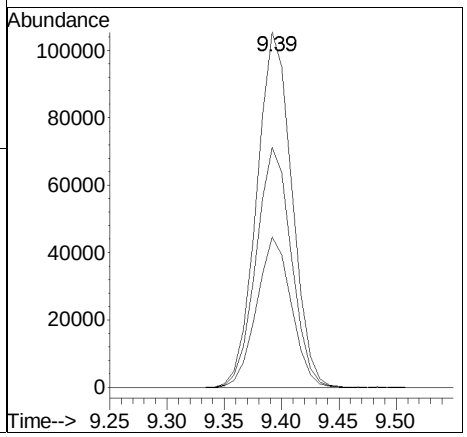


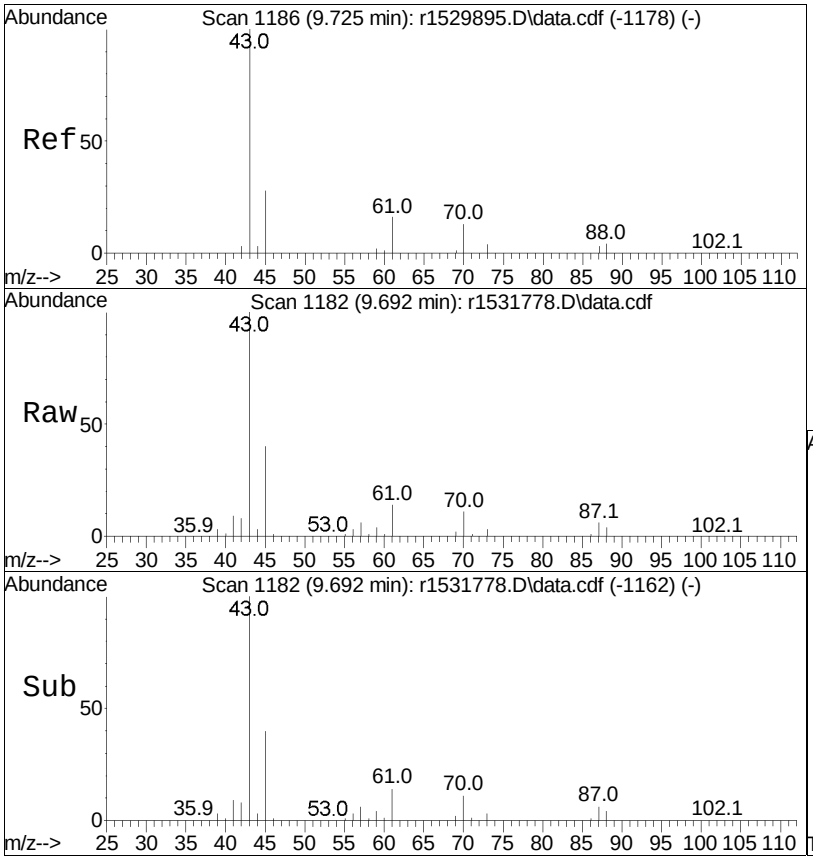


#37
cis-1,2-dichloroethene
Concen: 8.29 ppbV
RT: 9.39 min Scan# 1146
Delta R.T. -0.025 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 61 Resp: 225336

Ion	Ratio	Lower	Upper
61	100		
96	67.5	54.2	81.2
98	42.3	33.9	50.9

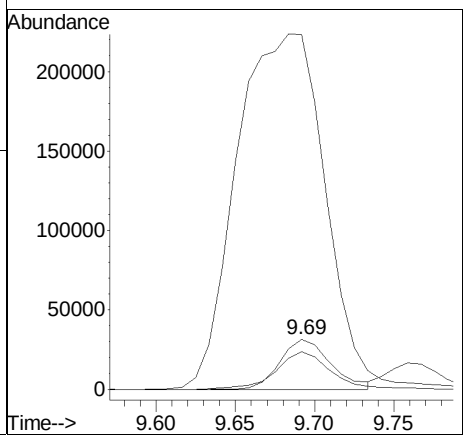


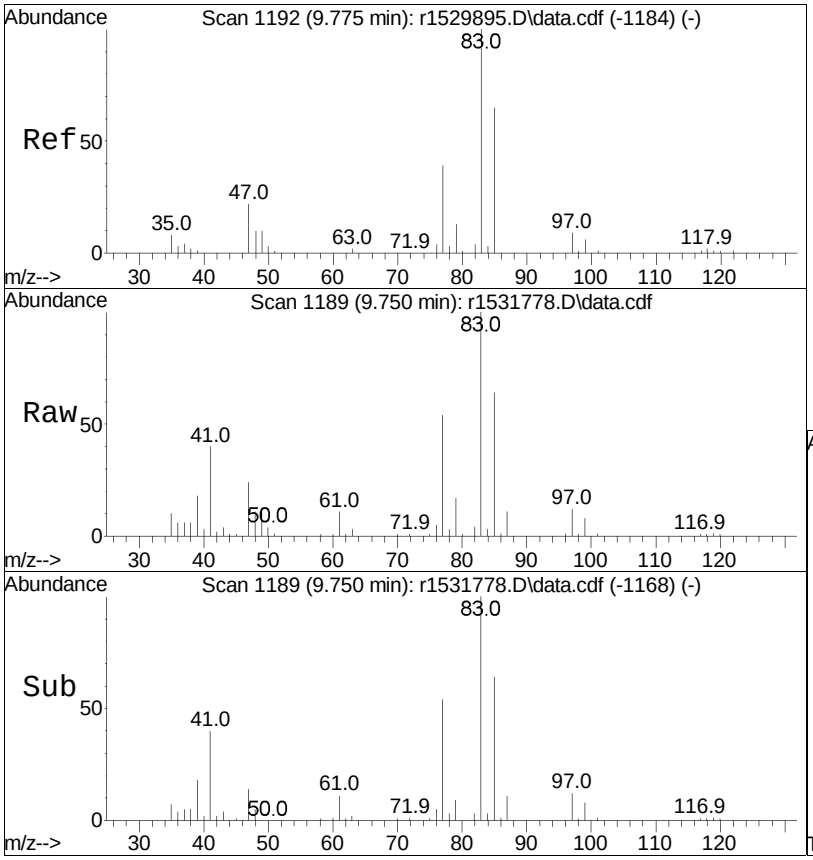


#38
Ethyl Acetate
Concen: 10.00 ppbV
RT: 9.69 min Scan# 1182
Delta R.T. -0.033 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 61 Resp: 70648

Ion	Ratio	Lower	Upper
61	100		
70	75.6	62.7	94.1
43	710.4	551.8	827.8

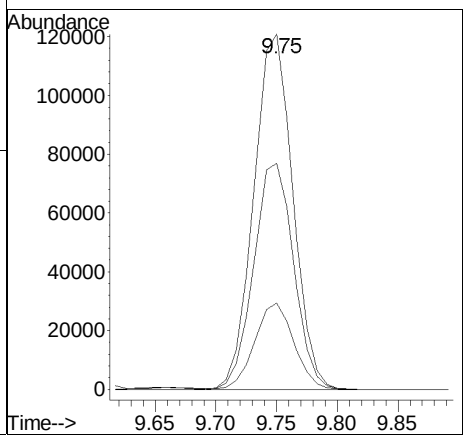


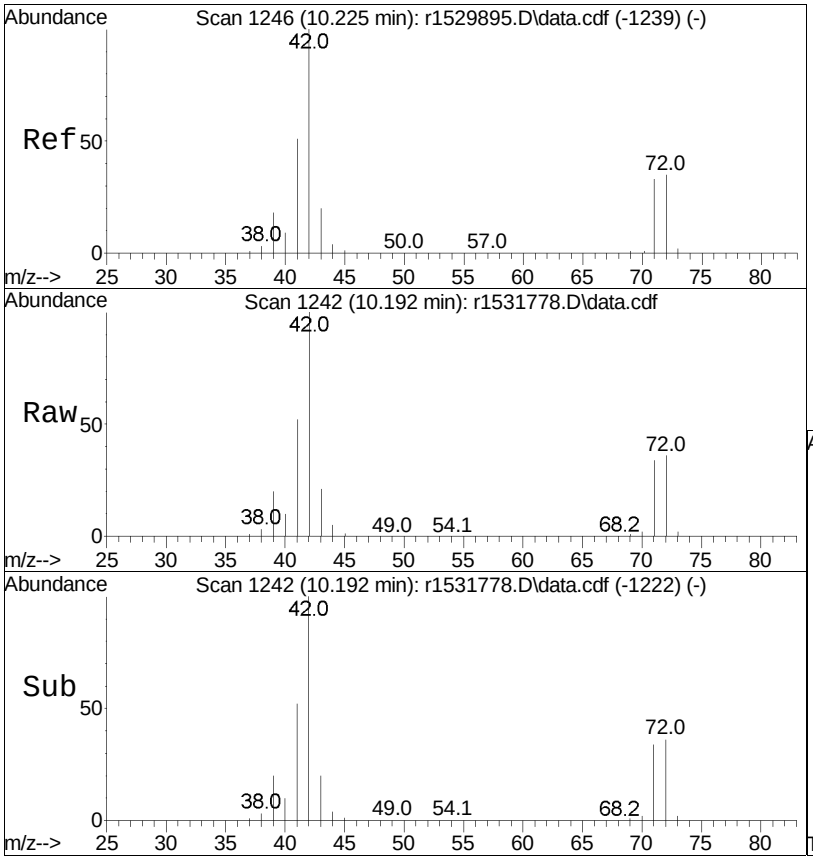


#39
chloroform
Concen: 8.37 ppbV
RT: 9.75 min Scan# 1189
Delta R.T. -0.025 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 83 Resp: 270822

Ion	Ratio	Lower	Upper
83	100		
85	63.6	51.8	77.8
47	24.3	17.9	26.9

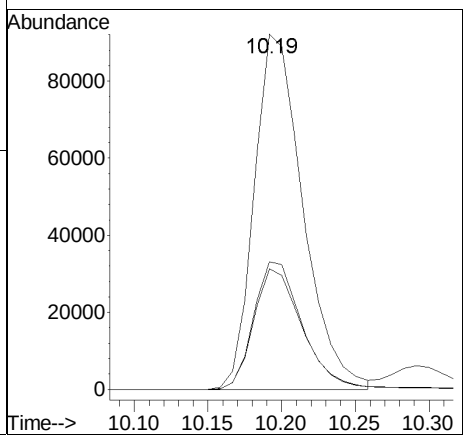


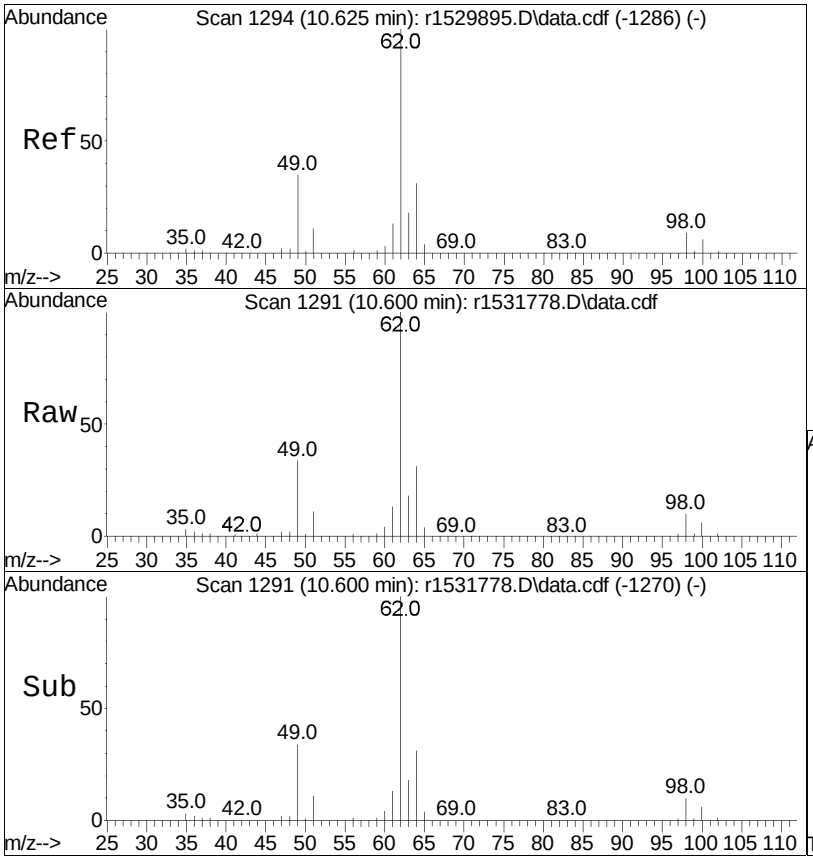


#40
Tetrahydrofuran
Concen: 8.75 ppbV
RT: 10.19 min Scan# 1242
Delta R.T. -0.033 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 42 Resp: 212138

Ion	Ratio	Lower	Upper
42	100		
71	33.9	26.8	40.2
72	35.9	27.7	41.5

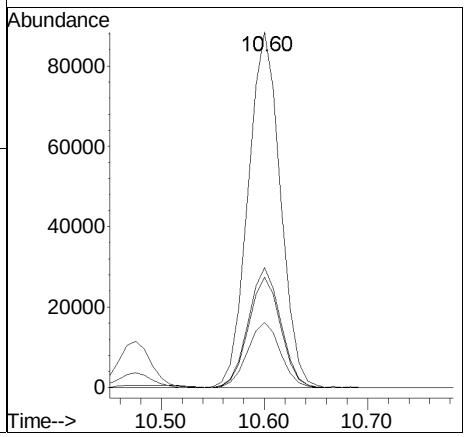


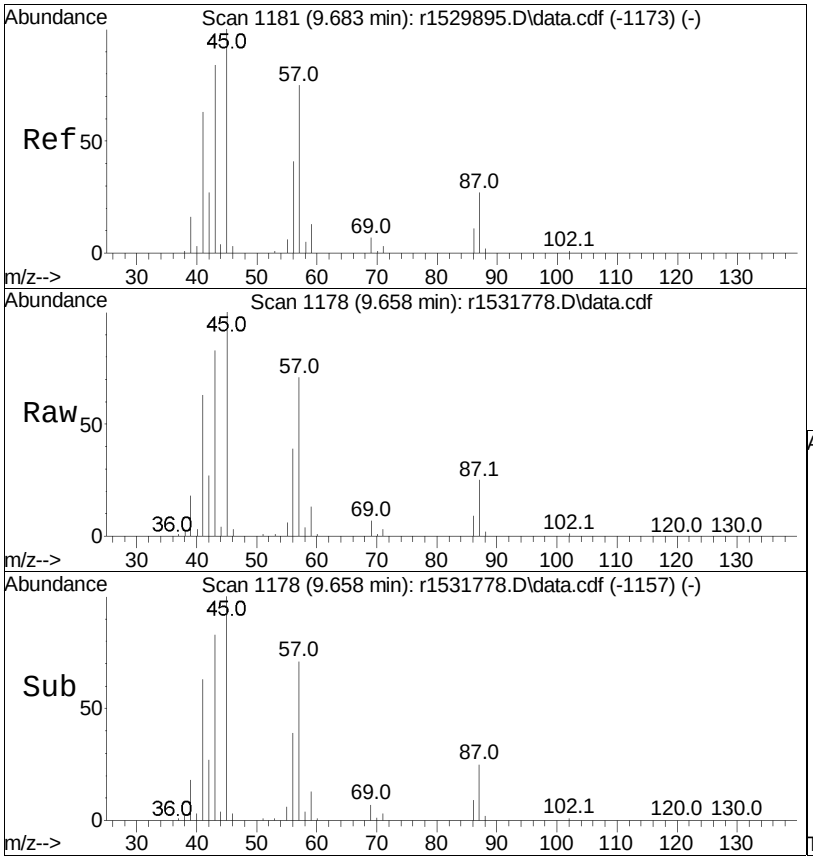


#42
1,2-dichloroethane
Concen: 8.26 ppbV
RT: 10.60 min Scan# 1291
Delta R.T. -0.025 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 62 Resp: 192043

Ion	Ratio	Lower	Upper
62	100		
64	31.0	25.0	37.4
49	33.7	27.8	41.8
63	18.3	14.4	21.6

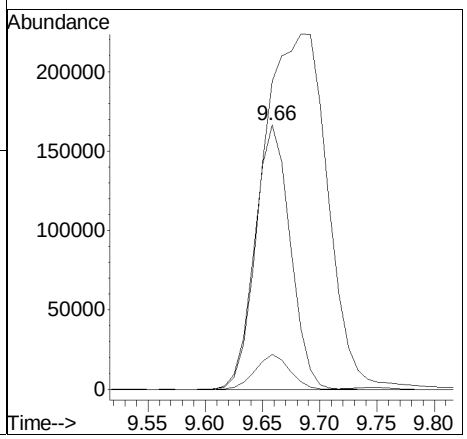


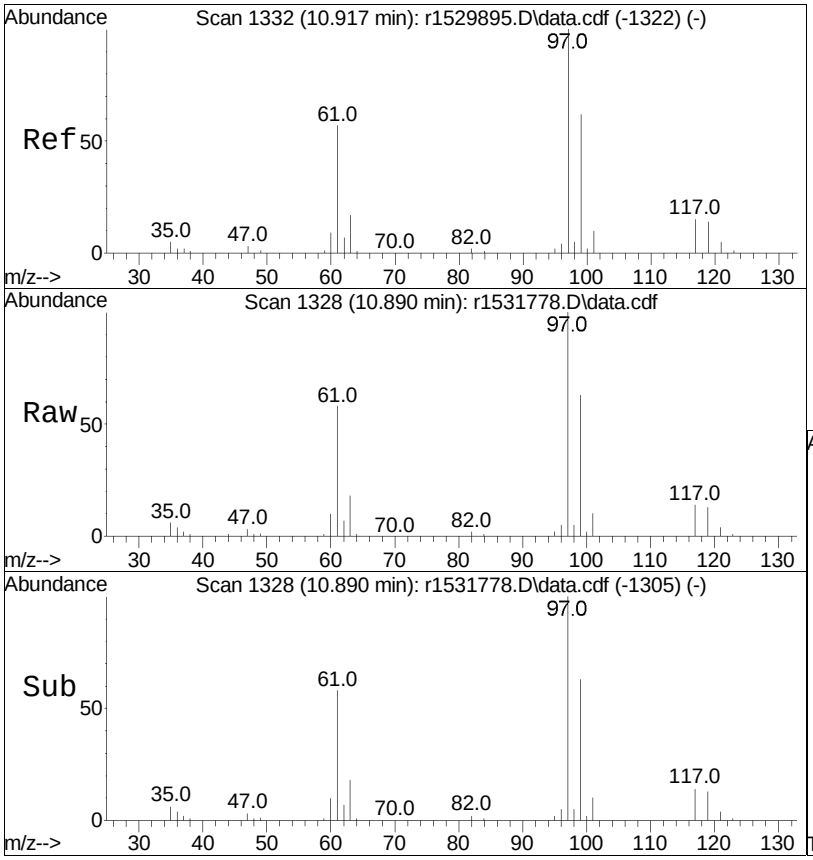


#44
hexane
Concen: 9.94 ppbV
RT: 9.66 min Scan# 1178
Delta R.T. -0.025 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 57 Resp: 360206

Ion	Ratio	Lower	Upper
57	100		
43	116.6	88.8	133.2
86	13.3	11.4	17.0

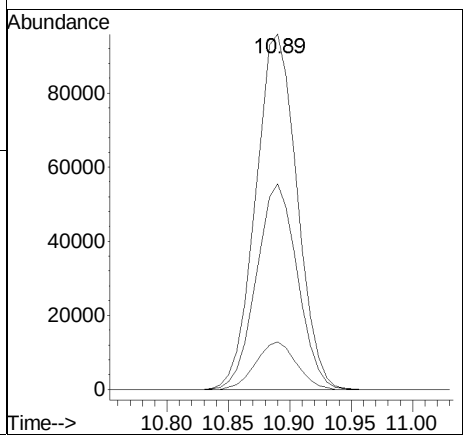


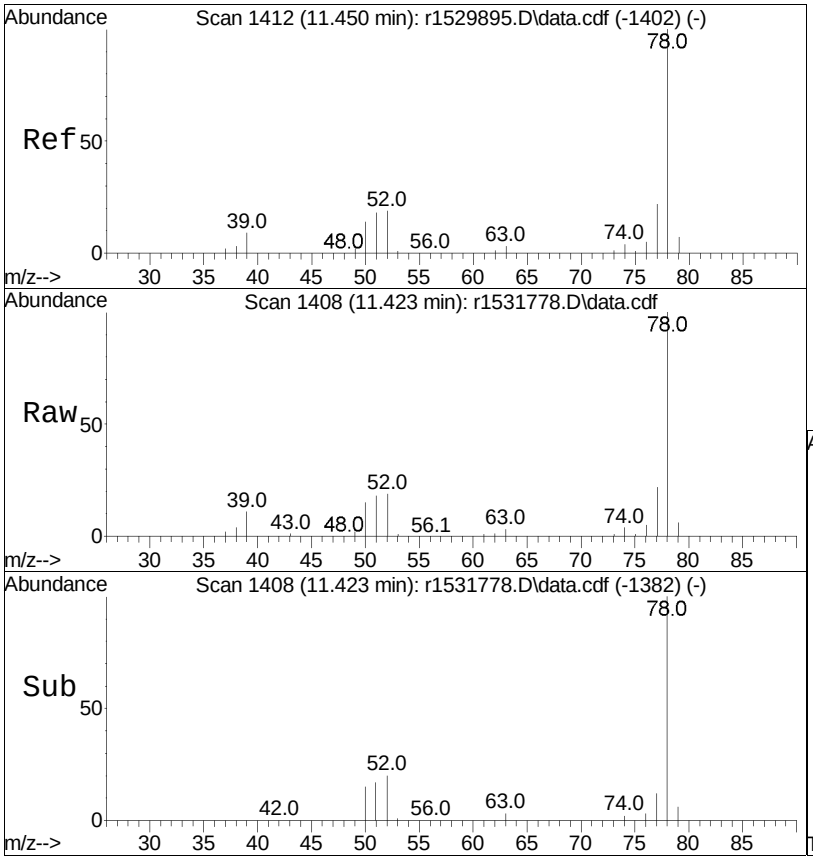


#48
1,1,1-trichloroethane
Concen: 9.10 ppbV
RT: 10.89 min Scan# 1328
Delta R.T. -0.027 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 97 Resp: 224778

Ion	Ratio	Lower	Upper
97	100		
61	57.9	45.3	67.9
119	13.4	11.4	17.0

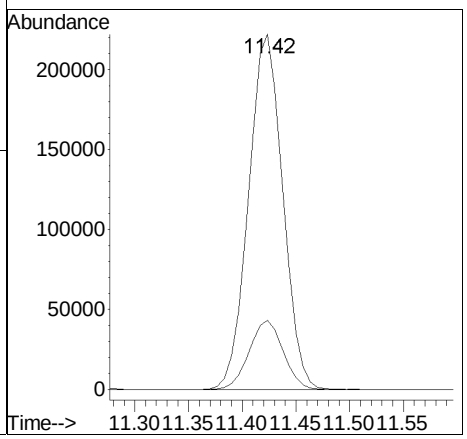


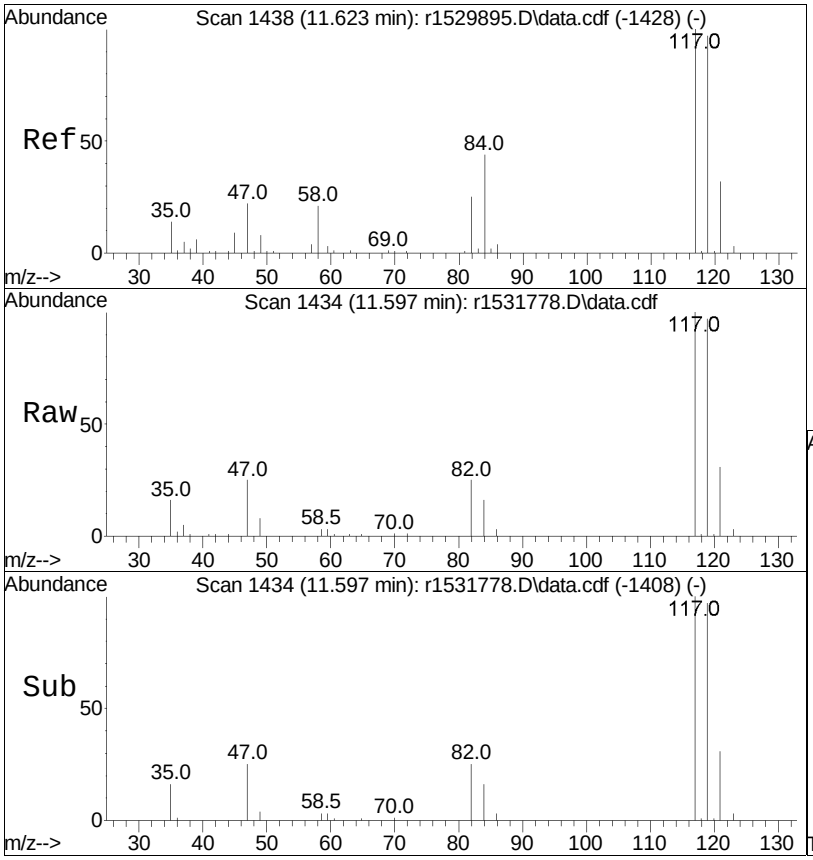


#50
benzene
Concen: 8.14 ppbV
RT: 11.42 min Scan# 1408
Delta R.T. -0.027 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 78 Resp: 490838

Ion	Ratio	Lower	Upper
78	100		
52	19.5	15.2	22.8

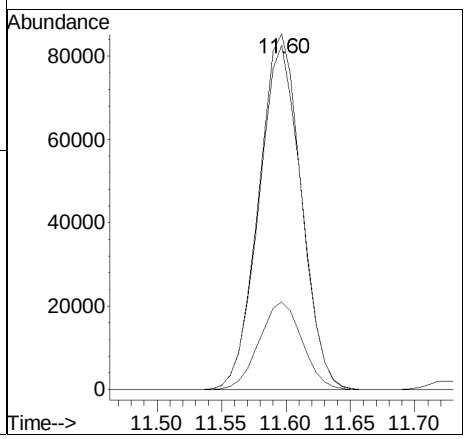


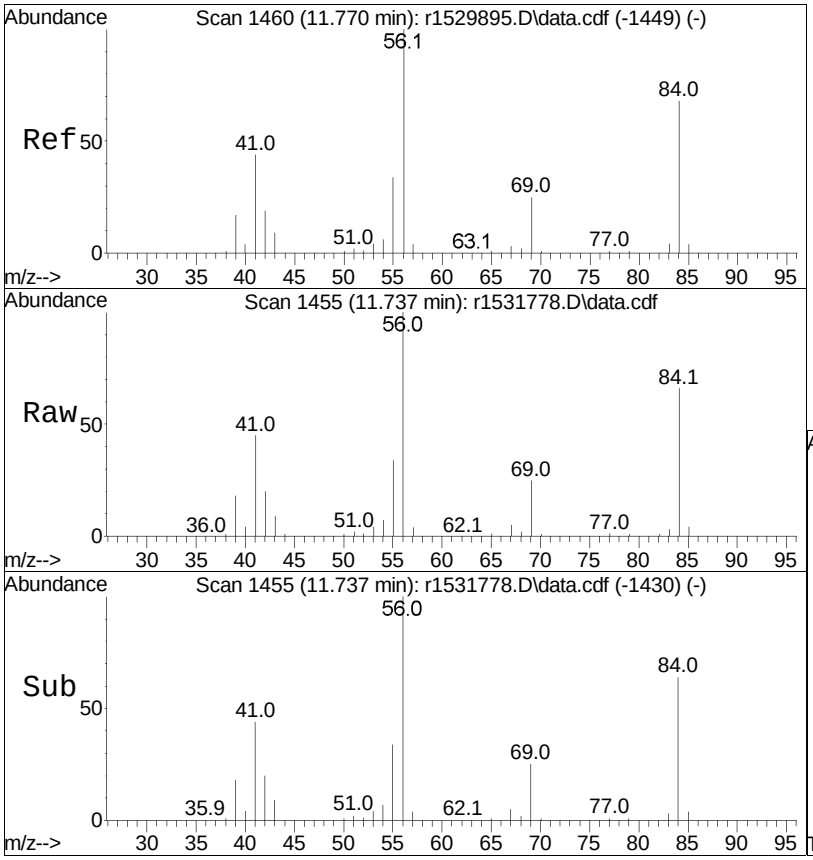


#52
carbon tetrachloride
Concen: 8.96 ppbV
RT: 11.60 min Scan# 1434
Delta R.T. -0.027 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion:117 Resp: 195941

Ion	Ratio	Lower	Upper
117	100		
119	96.9	77.5	116.3
82	24.6	20.0	30.0

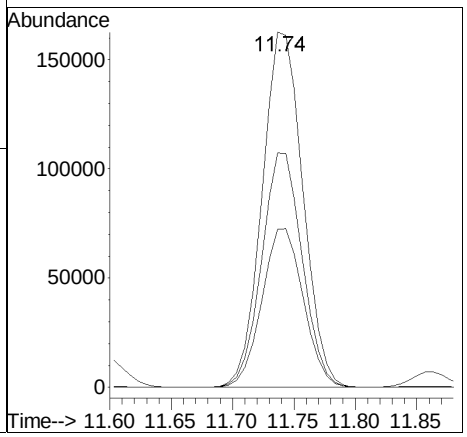


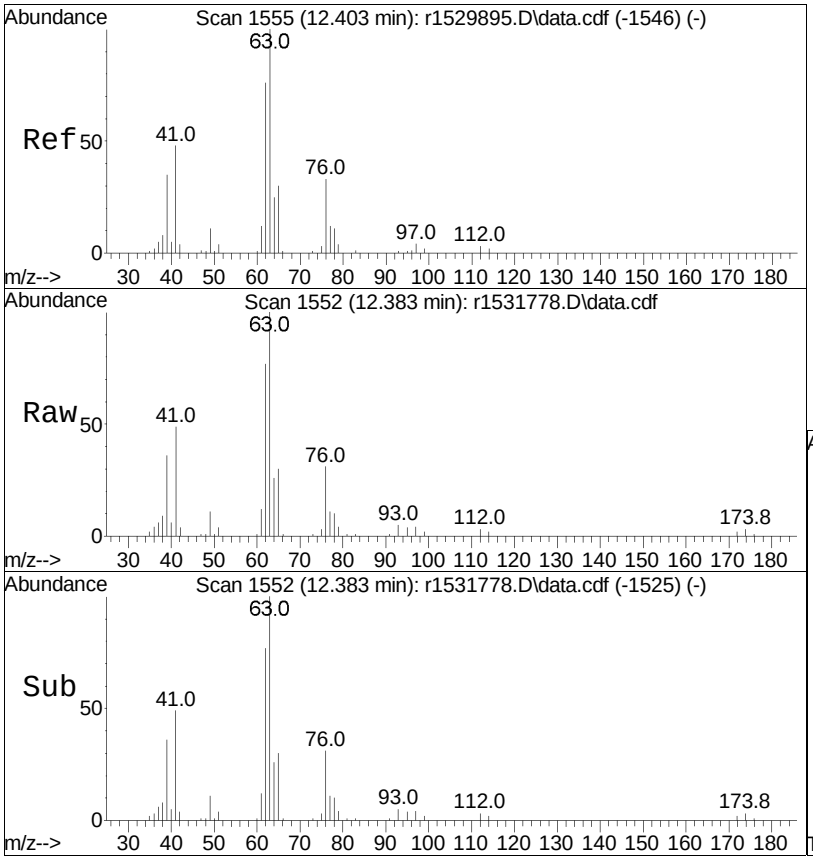


#53
cyclohexane
Concen: 9.69 ppbV
RT: 11.74 min Scan# 1455
Delta R.T. -0.033 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 56 Resp: 375801

Ion	Ratio	Lower	Upper
56	100		
84	66.0	54.8	82.2
41	44.5	35.5	53.3

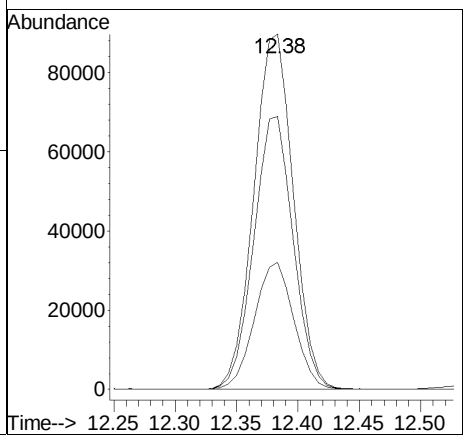


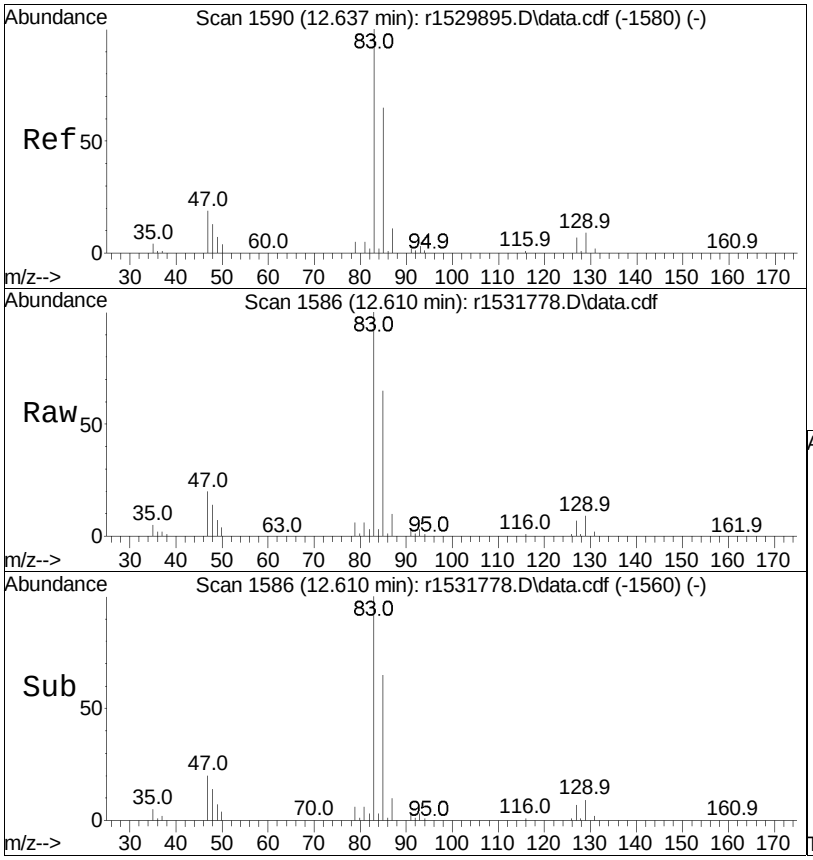


#56
1,2-dichloropropane
Concen: 8.96 ppbV
RT: 12.38 min Scan# 1552
Delta R.T. -0.020 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 63 Resp: 201586

Ion	Ratio	Lower	Upper
63	100		
62	76.8	60.6	91.0
39	35.8	27.8	41.6

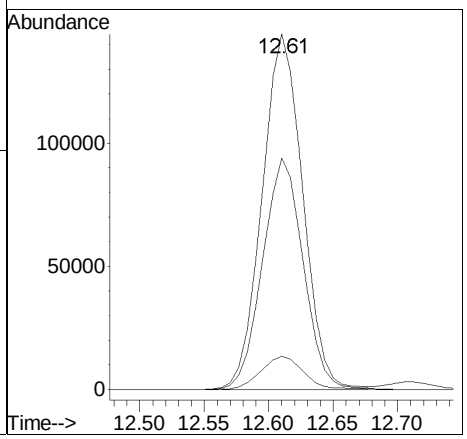


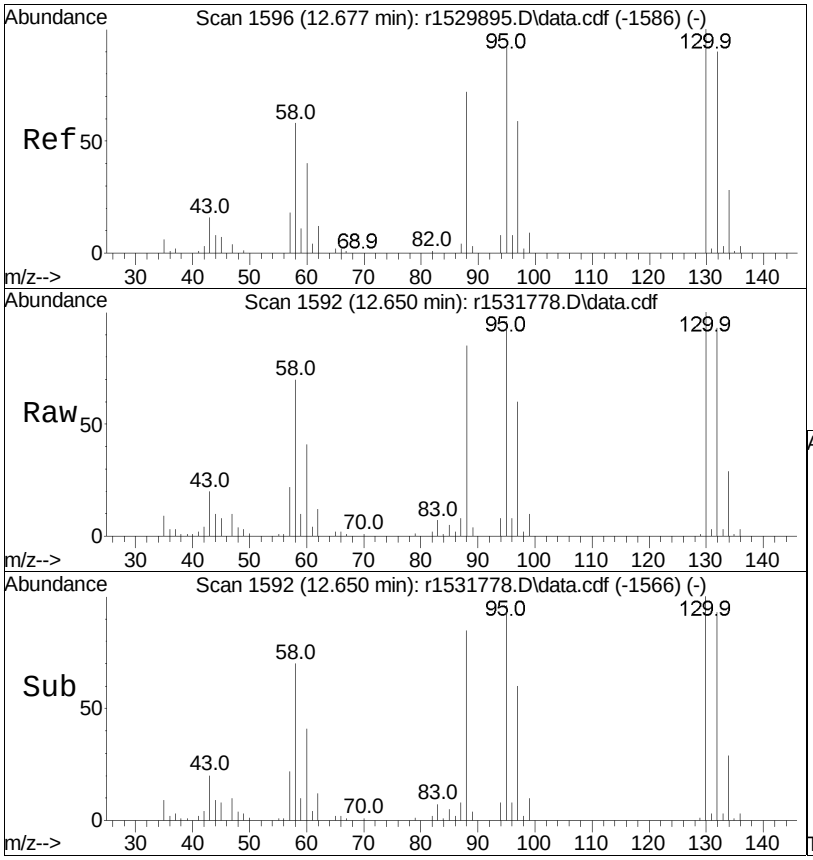


#57
bromodichloromethane
Concen: 10.14 ppbV
RT: 12.61 min Scan# 1586
Delta R.T. -0.027 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 83 Resp: 315957

Ion	Ratio	Lower	Upper
83	100		
85	65.1	52.2	78.2
129	9.3	7.3	10.9

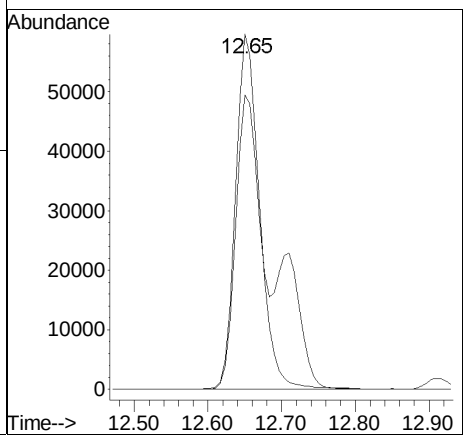


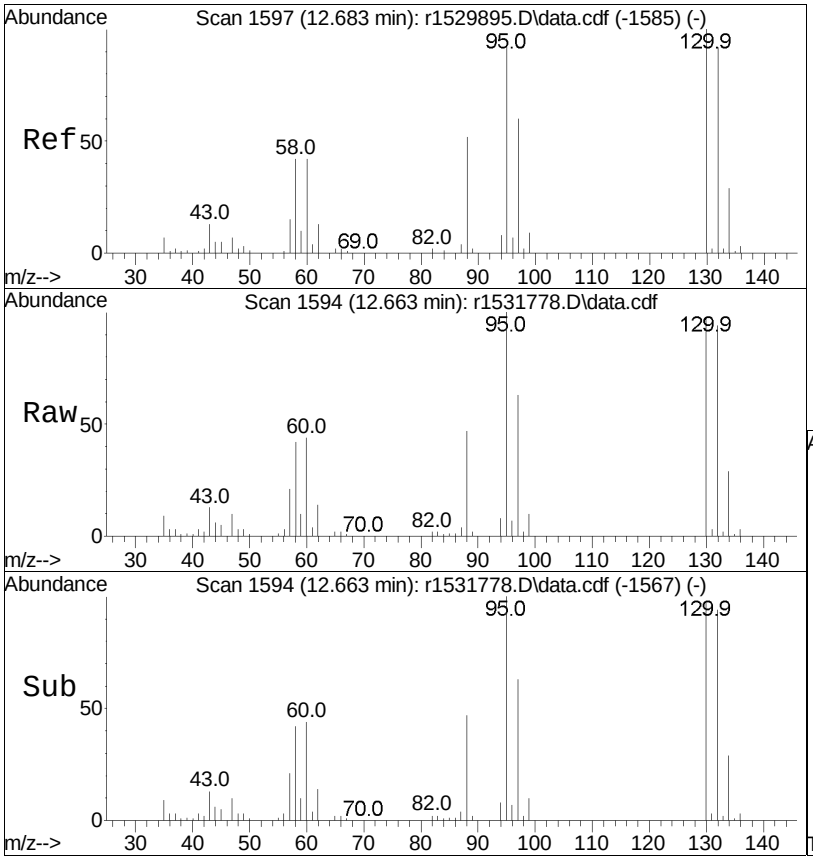


#58
1,4-dioxane
Concen: 9.72 ppbV
RT: 12.65 min Scan# 1592
Delta R.T. -0.027 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 88 Resp: 135436

Ion	Ratio	Lower	Upper
88	100		
58	82.9	64.3	96.5

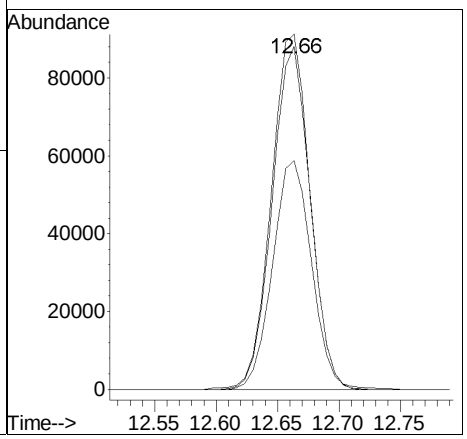


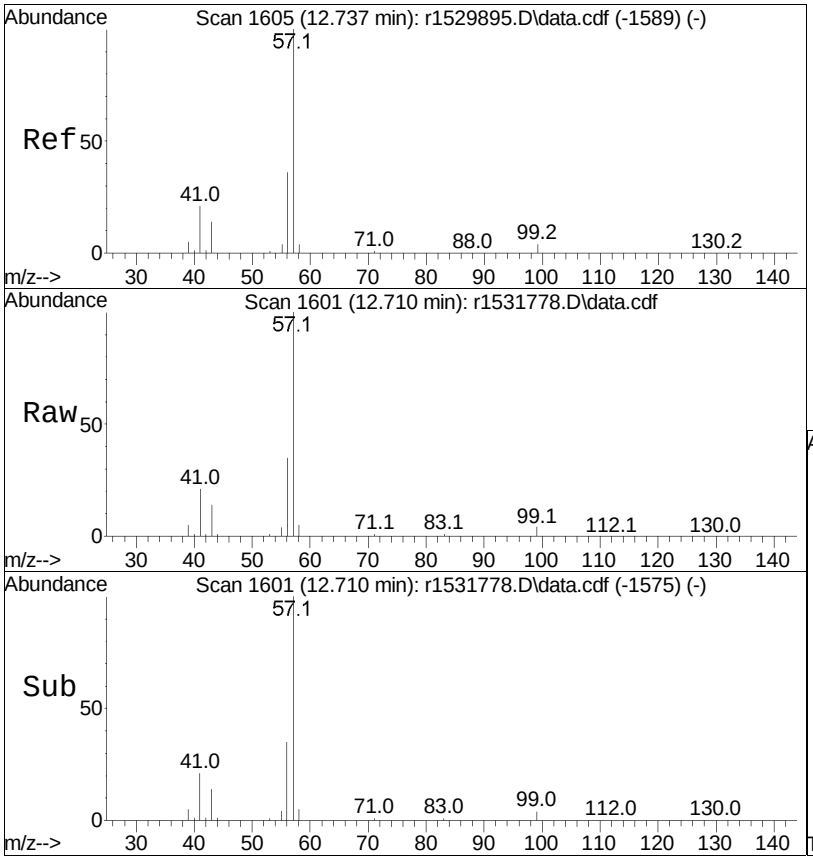


#59
trichloroethene
Concen: 8.81 ppbV
RT: 12.66 min Scan# 1594
Delta R.T. -0.020 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion:130 Resp: 200079

Ion	Ratio	Lower	Upper
130	100		
132	96.5	73.9	110.9
97	64.4	47.8	71.8

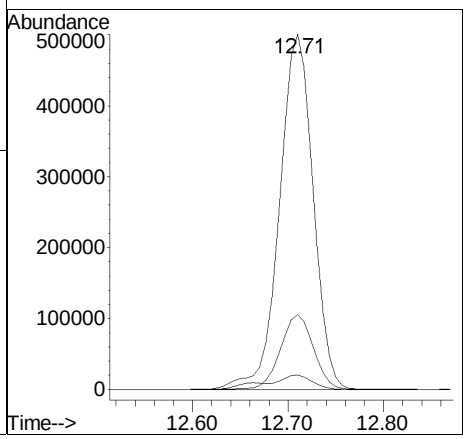


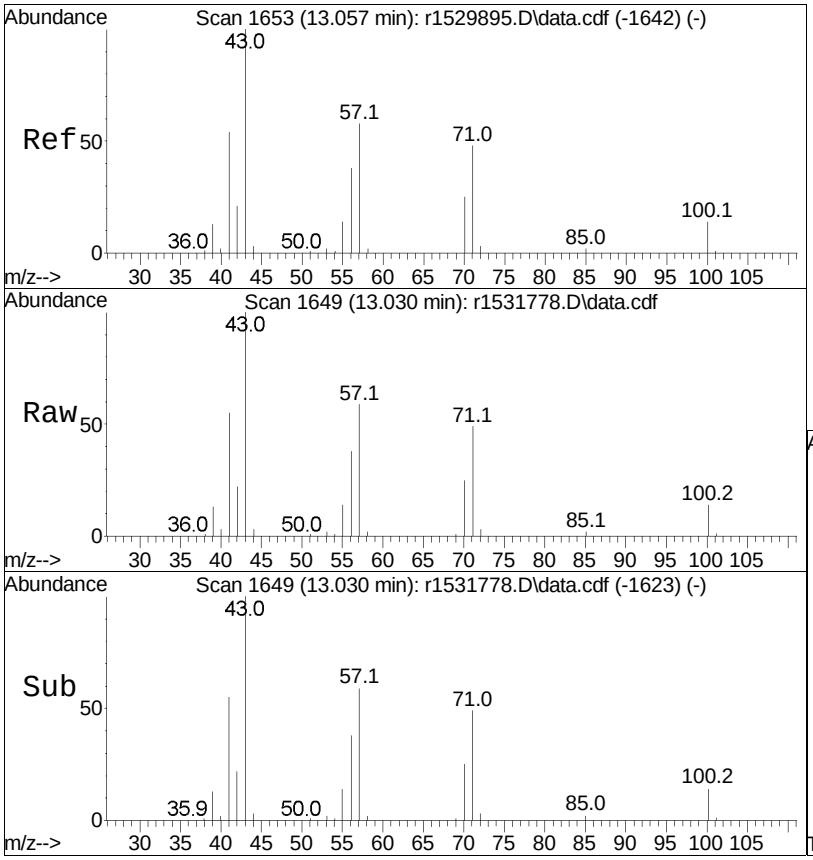


#60
2,2,4-trimethylpentane
Concen: 10.20 ppbV
RT: 12.71 min Scan# 1601
Delta R.T. -0.027 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 57 Resp: 1225946

Ion	Ratio	Lower	Upper
57	100		
99	4.0	3.1	4.7
41	21.0	16.6	24.8

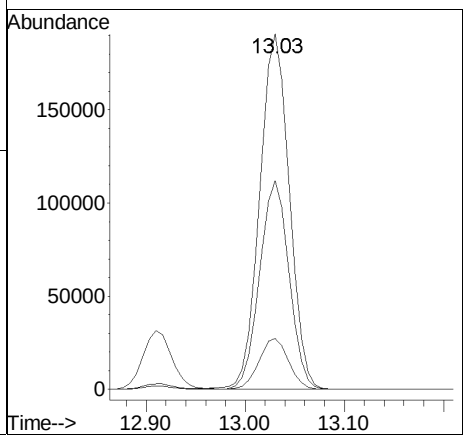


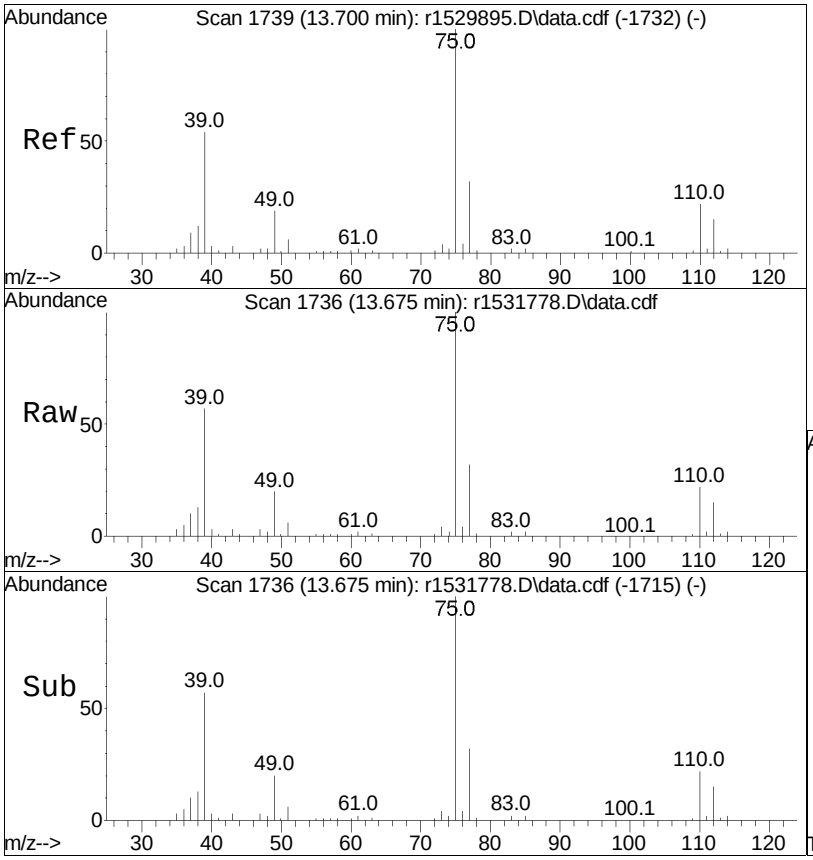


#62
heptane
Concen: 9.96 ppbV
RT: 13.03 min Scan# 1649
Delta R.T. -0.027 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 43 Resp: 396751

Ion	Ratio	Lower	Upper
43	100		
57	58.7	46.5	69.7
100	14.3	11.6	17.4

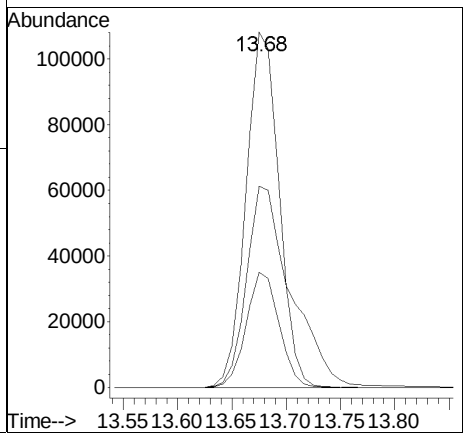


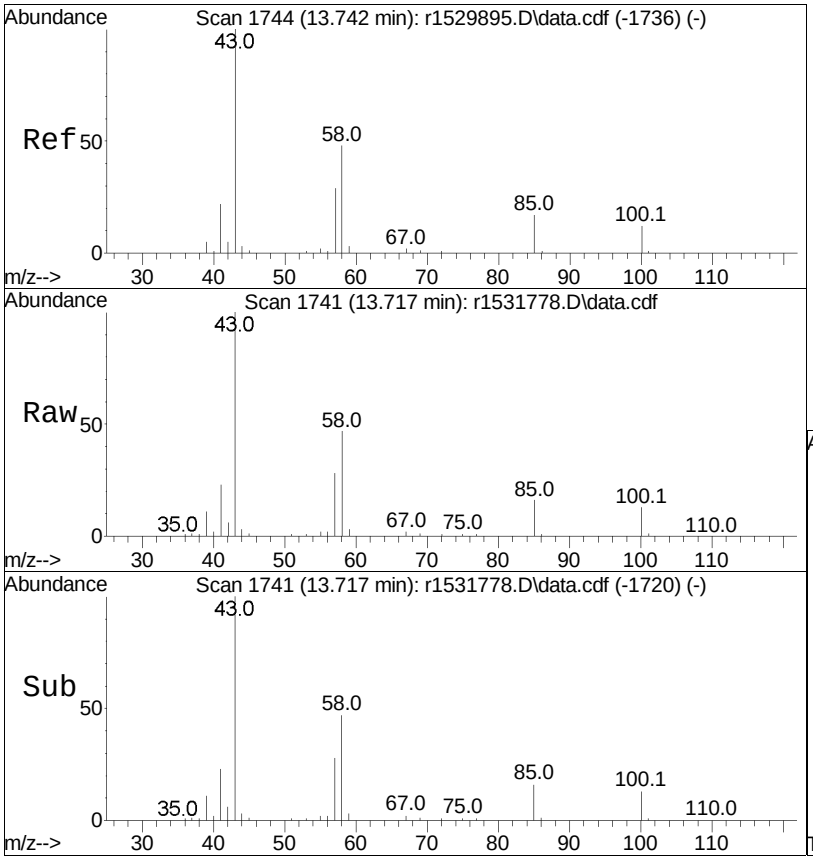


#63
cis-1,3-dichloropropene
Concen: 8.98 ppbV
RT: 13.68 min Scan# 1736
Delta R.T. -0.025 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 75 Resp: 228456

Ion	Ratio	Lower	Upper
75	100		
39	56.6	43.2	64.8
77	32.4	25.6	38.4

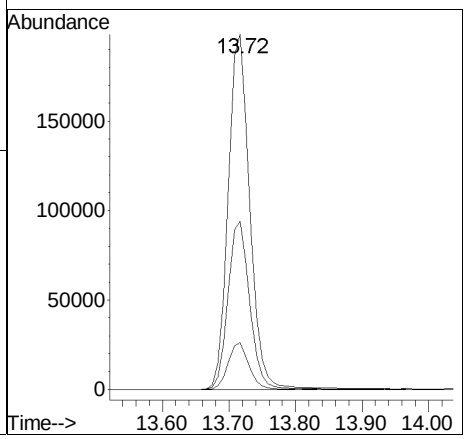


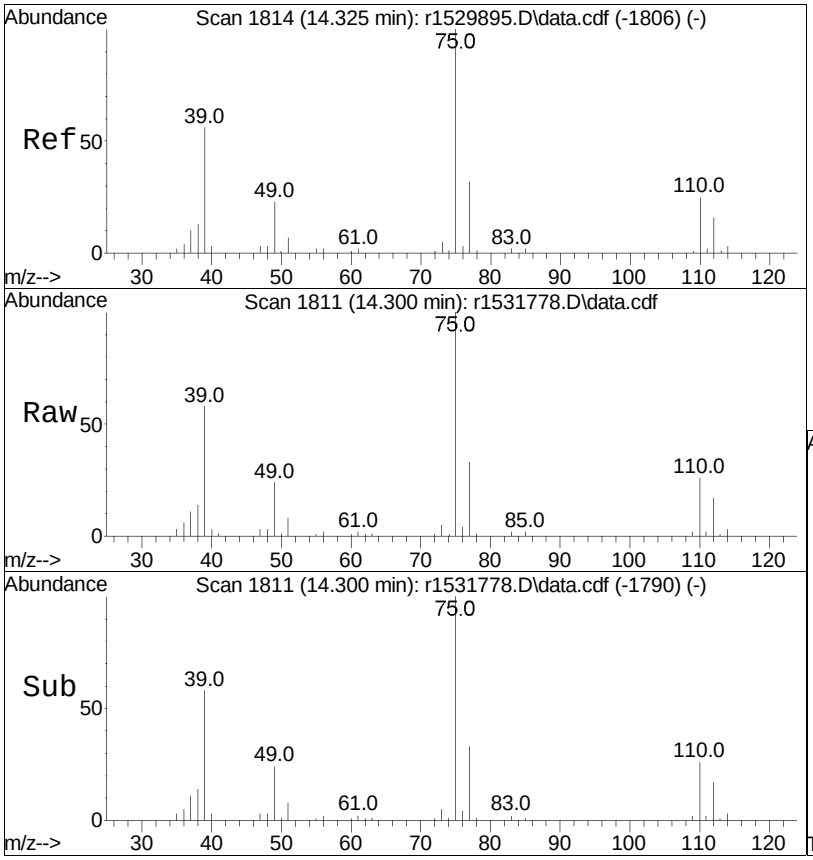


#64
4-methyl-2-pentanone
Concen: 10.01 ppbV
RT: 13.72 min Scan# 1741
Delta R.T. -0.025 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 43 Resp: 448679

Ion	Ratio	Lower	Upper
43	100		
58	47.4	38.6	58.0
100	13.2	9.9	14.9

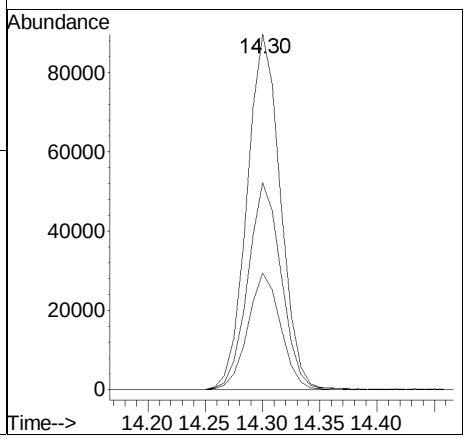


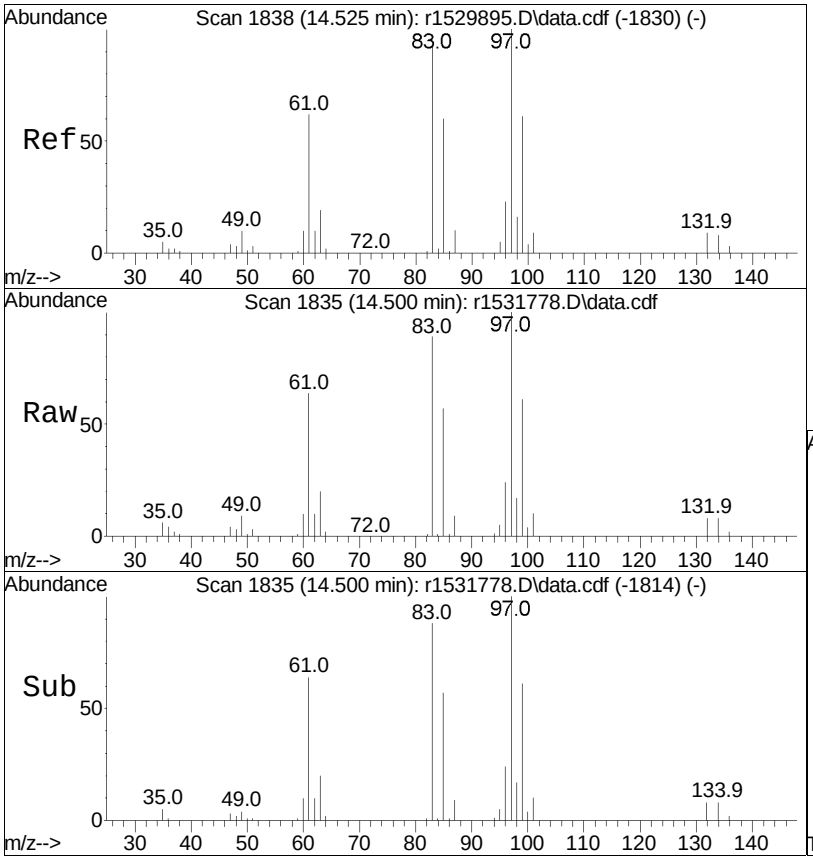


#65
trans-1,3-dichloropropene
Concen: 7.77 ppbV
RT: 14.30 min Scan# 1811
Delta R.T. -0.025 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 75 Resp: 181954

Ion	Ratio	Lower	Upper
75	100		
77	32.8	25.4	38.0
39	58.2	44.5	66.7

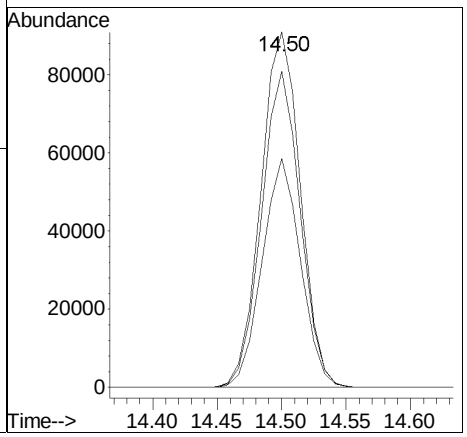


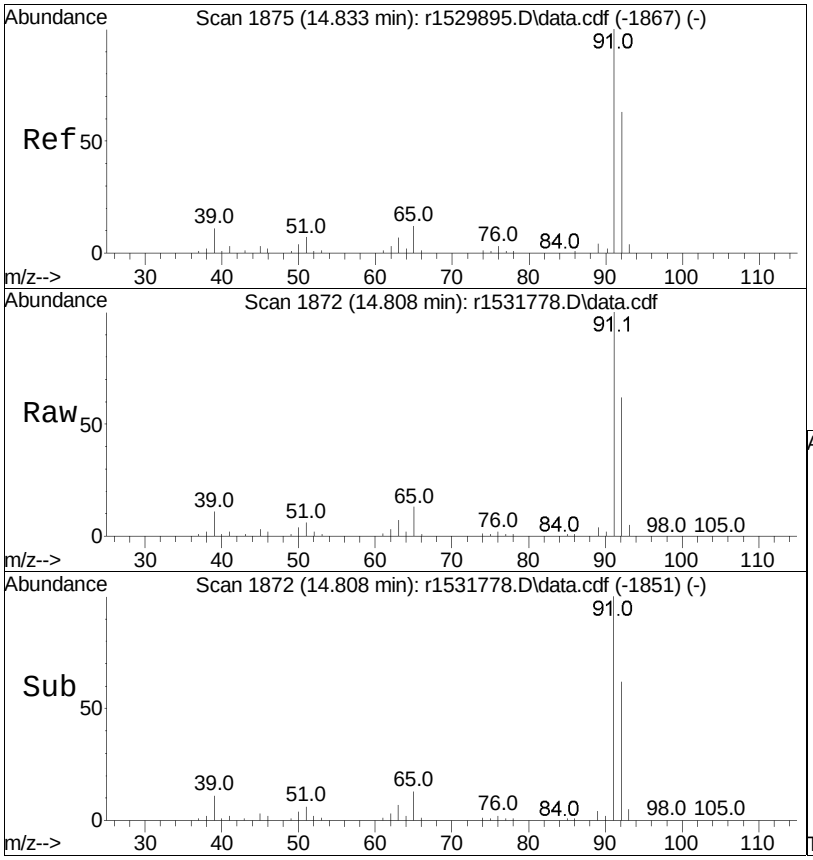


#66
1,1,2-trichloroethane
Concen: 9.15 ppbV
RT: 14.50 min Scan# 1835
Delta R.T. -0.025 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 97 Resp: 193890

Ion	Ratio	Lower	Upper
97	100		
83	89.0	74.6	111.8
61	64.4	49.8	74.8

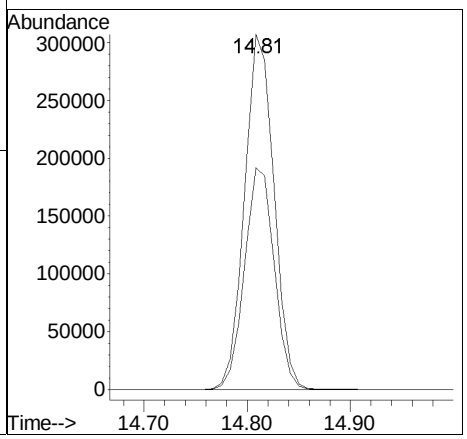


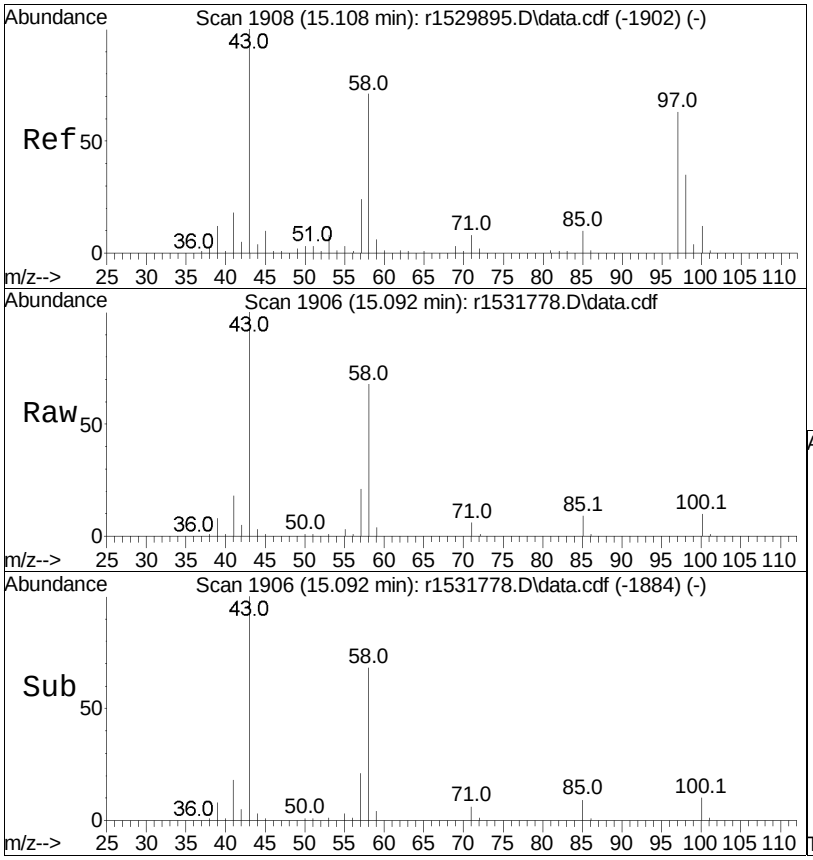


#68
toluene
Concen: 8.16 ppbV
RT: 14.81 min Scan# 1872
Delta R.T. -0.025 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 91 Resp: 609621

Ion	Ratio	Lower	Upper
91	100		
92	62.4	50.3	75.5

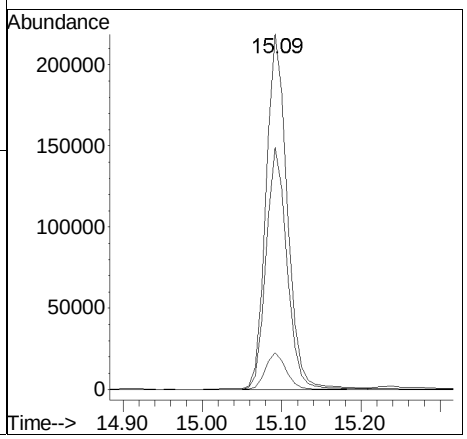


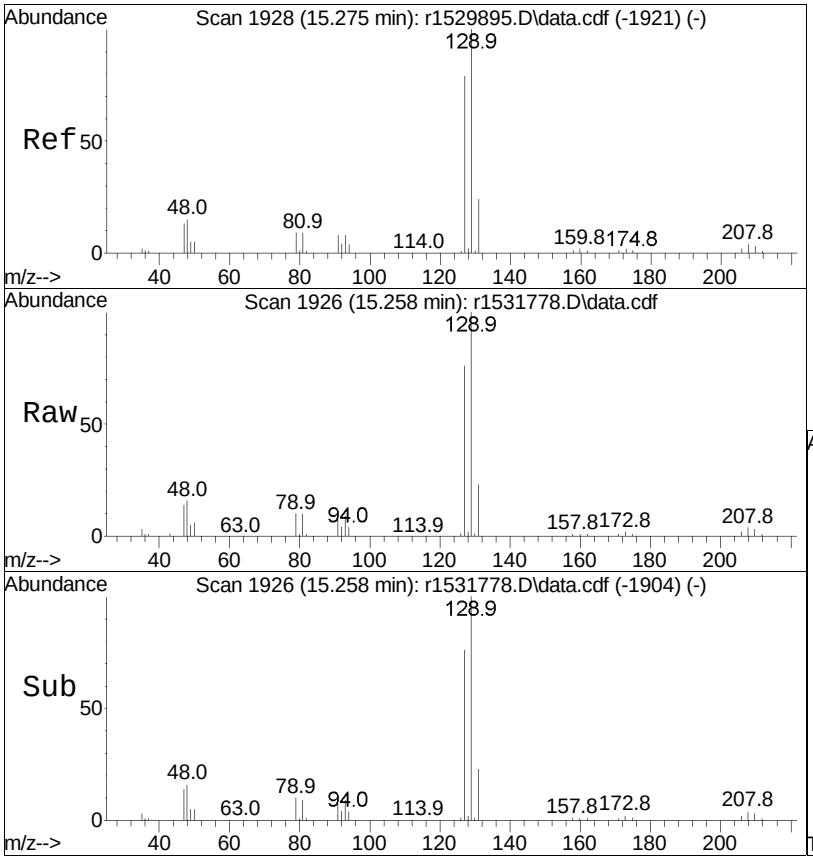


#72
2-hexanone
Concen: 9.69 ppbV
RT: 15.09 min Scan# 1906
Delta R.T. -0.017 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 43 Resp: 408384

Ion	Ratio	Lower	Upper
43	100		
58	68.1	56.6	85.0
100	10.4	9.8	14.6

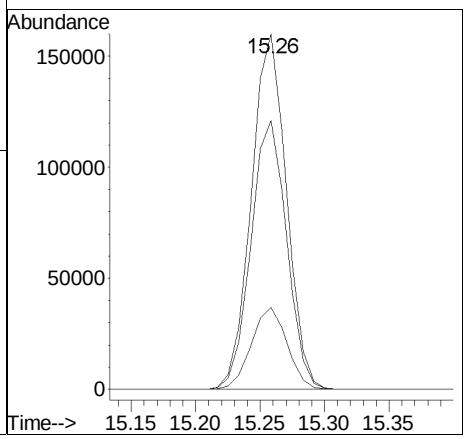


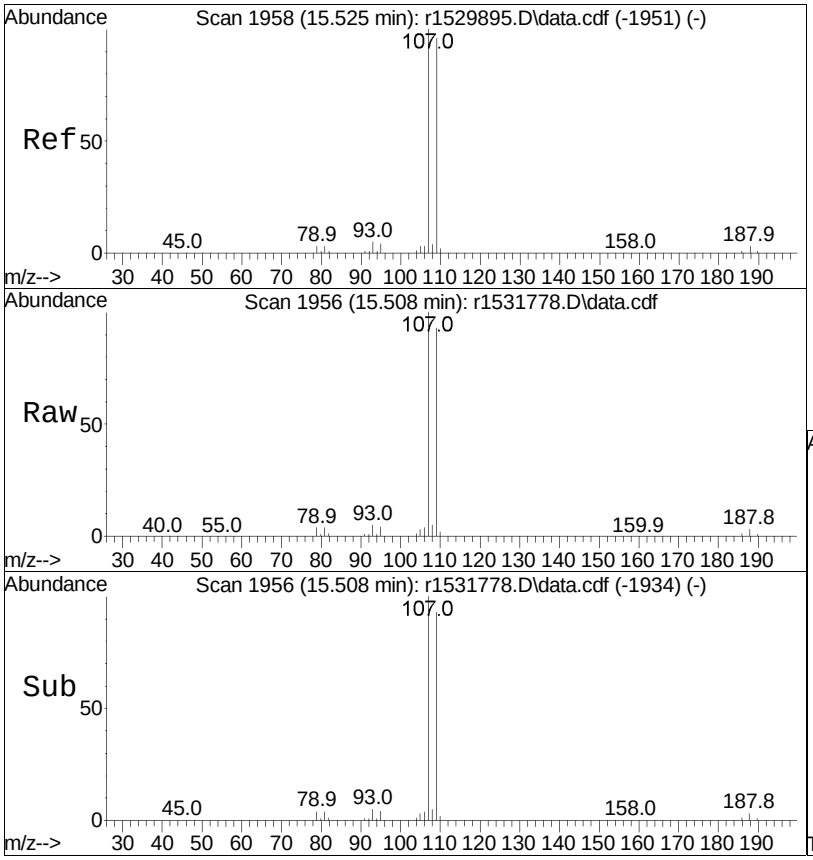


#74
dibromochloromethane
Concen: 10.81 ppbV
RT: 15.26 min Scan# 1926
Delta R.T. -0.017 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion:129 Resp: 303200

Ion	Ratio	Lower	Upper
129	100		
127	75.7	63.2	94.8
131	23.1	18.8	28.2

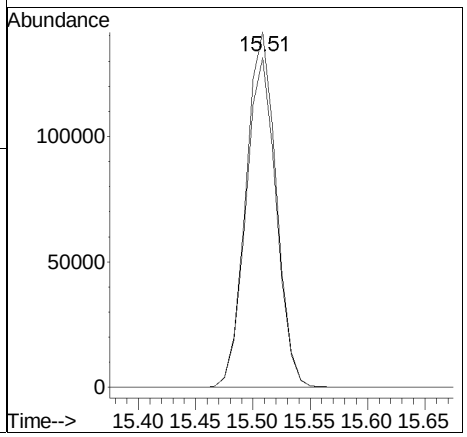


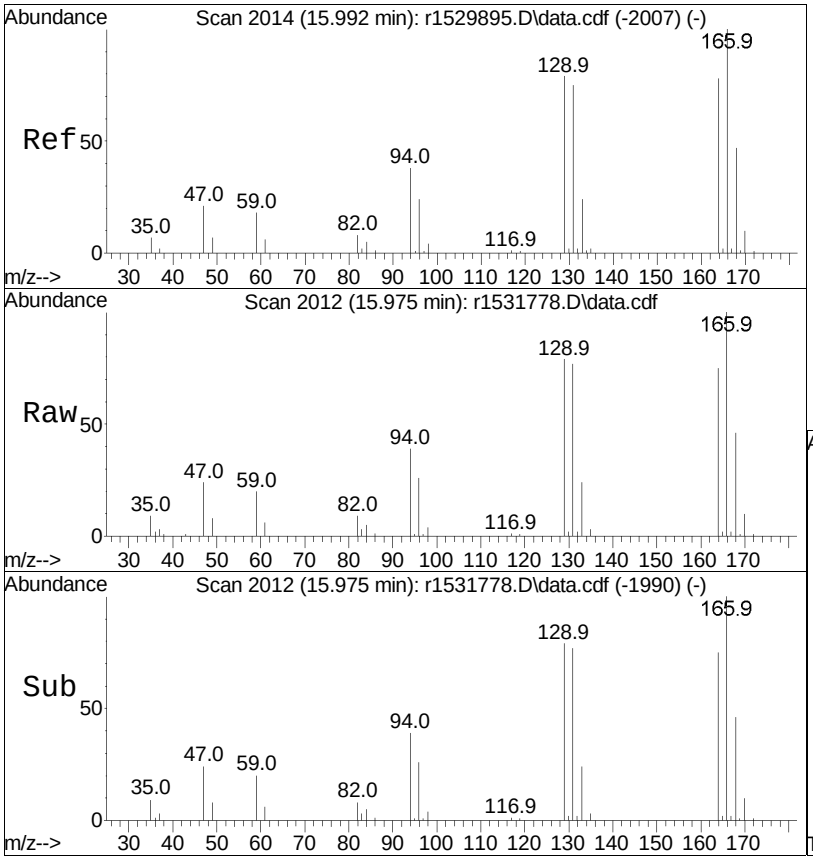


#75
1,2-dibromoethane
Concen: 8.88 ppbV
RT: 15.51 min Scan# 1956
Delta R.T. -0.017 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion:107 Resp: 261464

Ion	Ratio	Lower	Upper
107	100		
109	92.8	76.8	115.2

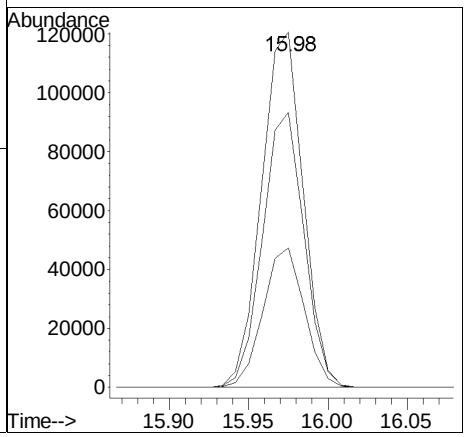


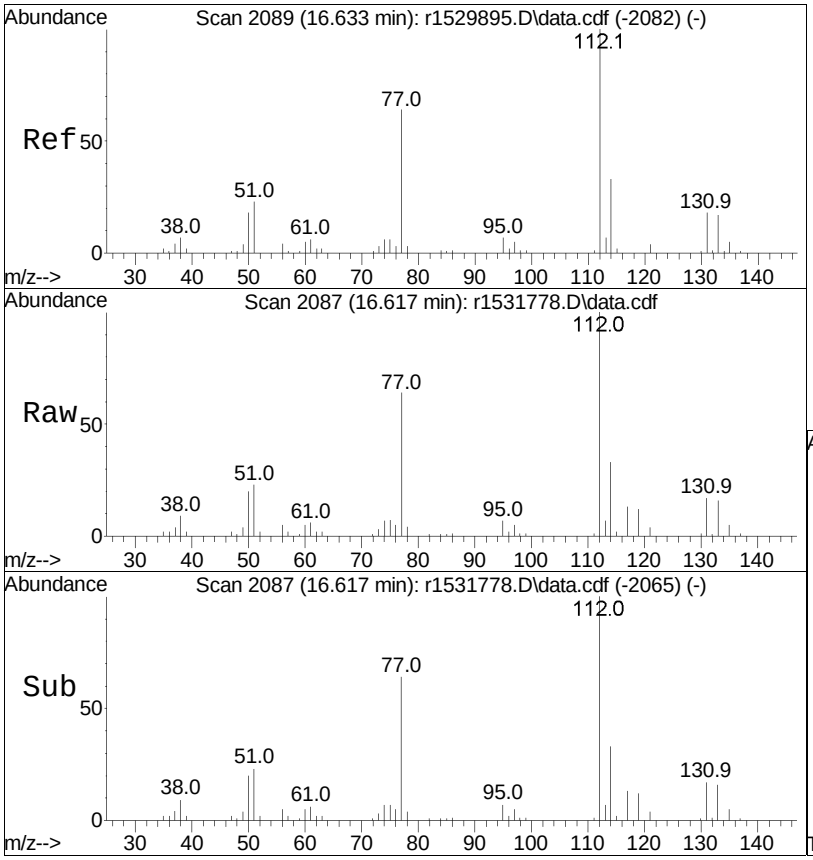


#78
tetrachloroethene
Concen: 8.50 ppbV
RT: 15.98 min Scan# 2012
Delta R.T. -0.017 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion:166 Resp: 220329

Ion	Ratio	Lower	Upper
166	100		
131	77.4	59.9	89.9
94	39.3	30.2	45.4

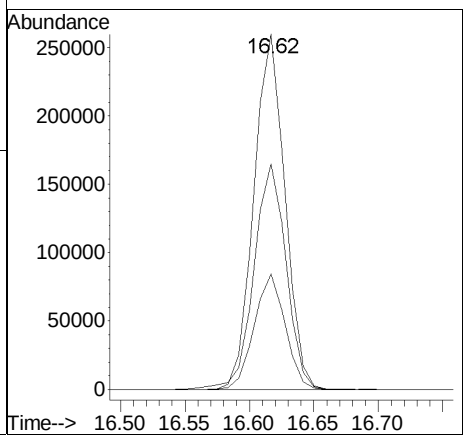


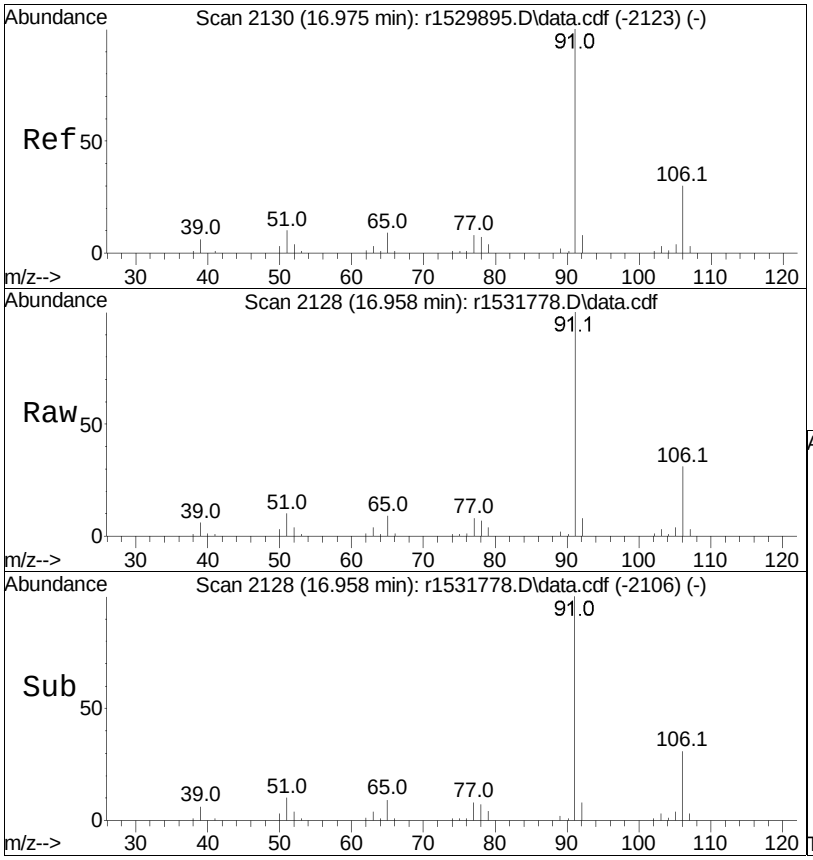


#80
chlorobenzene
Concen: 8.60 ppbV
RT: 16.62 min Scan# 2087
Delta R.T. -0.017 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion:112 Resp: 434345

Ion	Ratio	Lower	Upper
112	100		
114	32.5	26.3	39.5
77	63.5	51.0	76.6

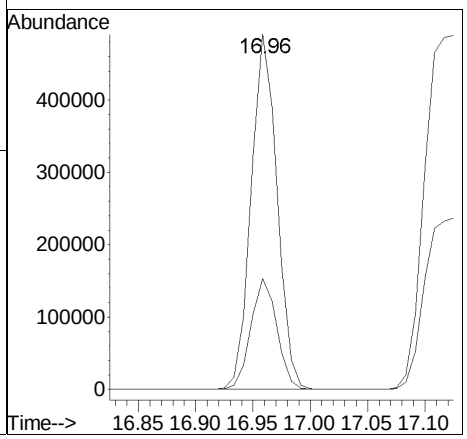


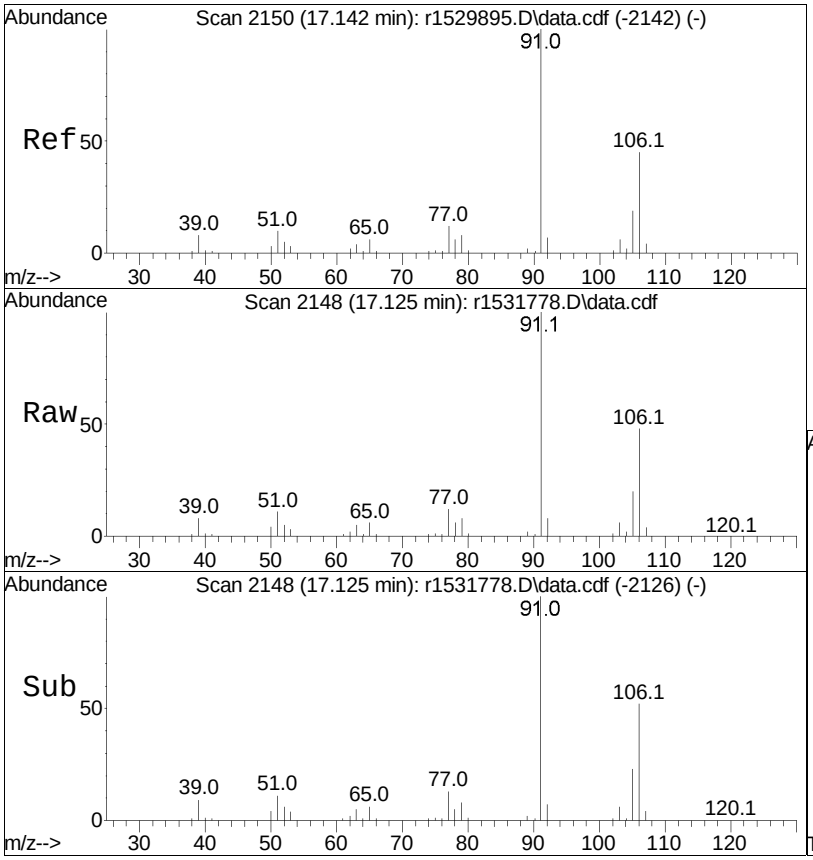


#81
ethylbenzene
Concen: 8.72 ppbV
RT: 16.96 min Scan# 2128
Delta R.T. -0.017 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 91 Resp: 771122

Ion	Ratio	Lower	Upper
91	100		
106	31.2	24.1	36.1

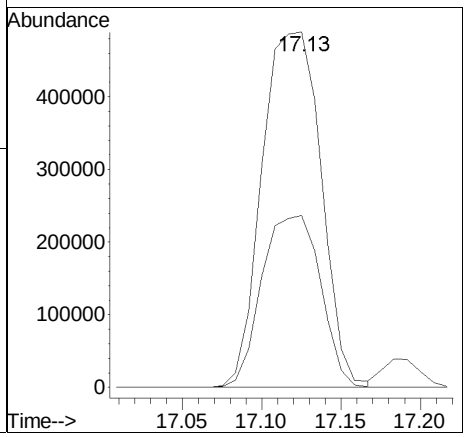


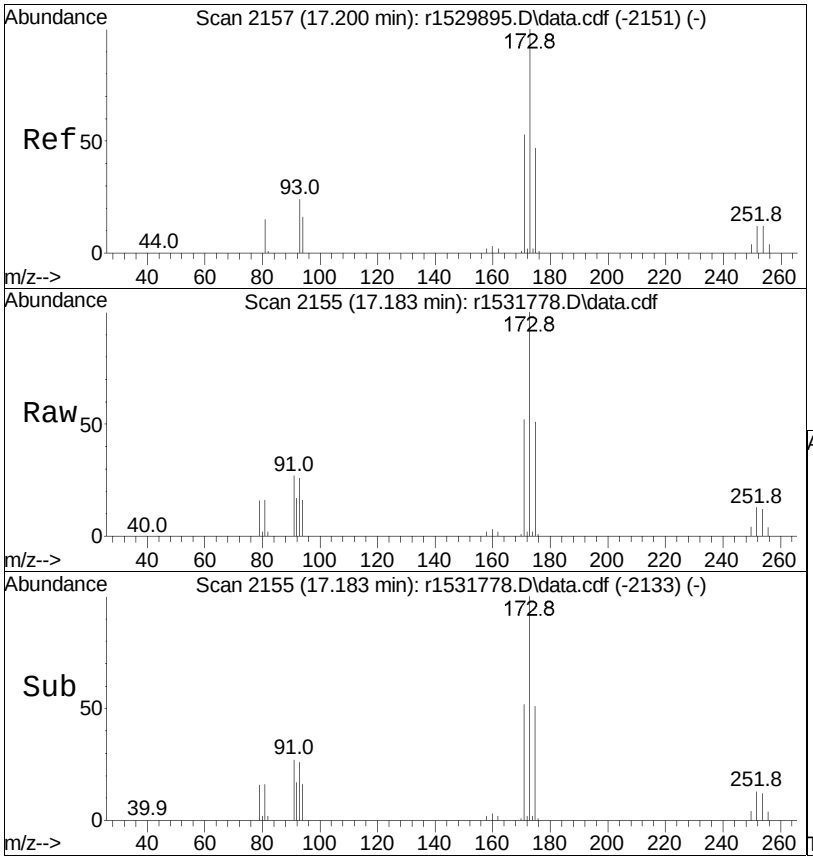


#83
m+p-xylene
Concen: 17.64 ppbV
RT: 17.13 min Scan# 2148
Delta R.T. -0.017 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 91 Resp: 1268438

Ion	Ratio	Lower	Upper
91	100		
106	48.4	36.2	54.2

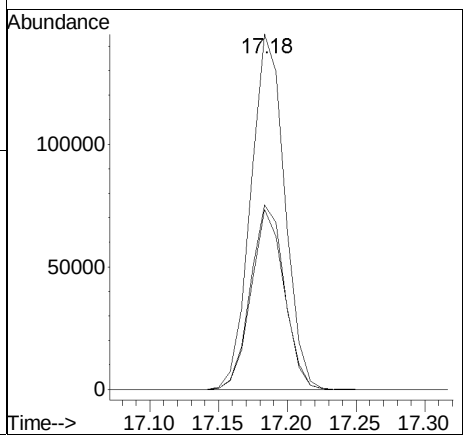


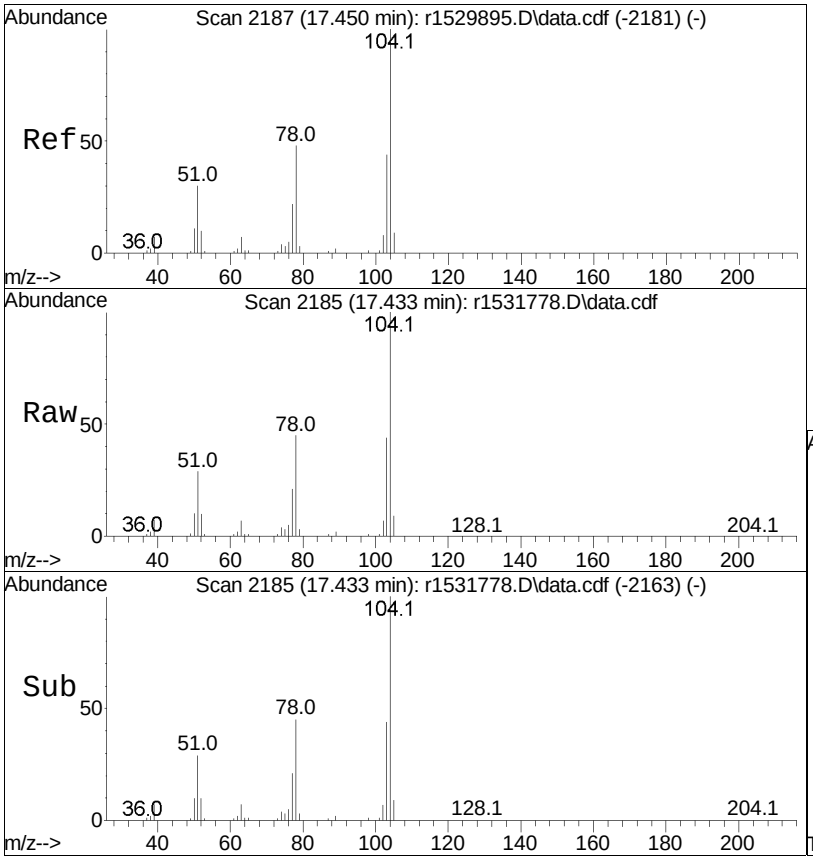


#84
bromoform
Concen: 10.95 ppbV
RT: 17.18 min Scan# 2155
Delta R.T. -0.017 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion:173 Resp: 248065

Ion	Ratio	Lower	Upper
173	100		
175	50.7	37.8	56.8
171	51.9	42.8	64.2

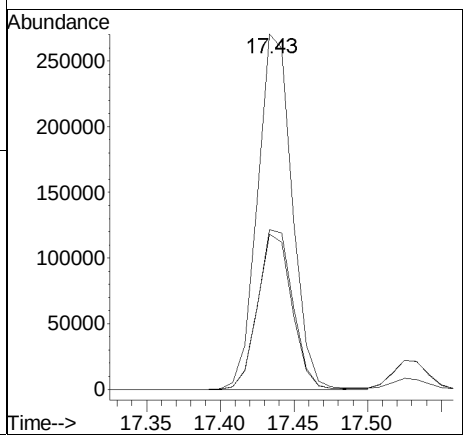


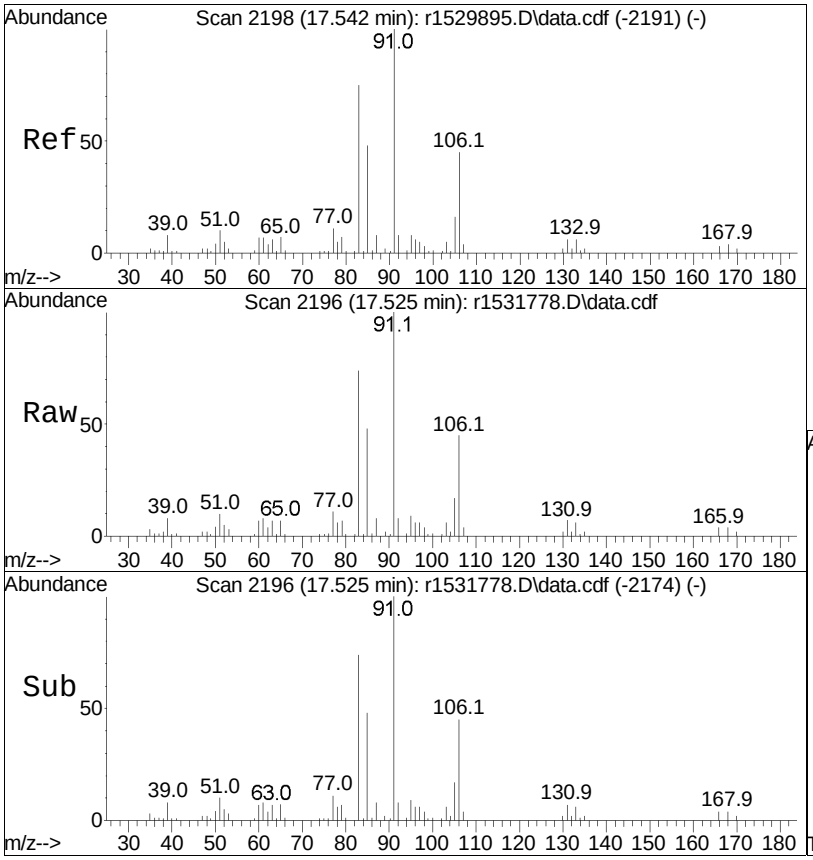


#85
styrene
Concen: 8.67 ppbV
RT: 17.43 min Scan# 2185
Delta R.T. -0.017 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion:104 Resp: 441941

Ion	Ratio	Lower	Upper
104	100		
103	43.7	35.0	52.6
78	45.0	38.3	57.5

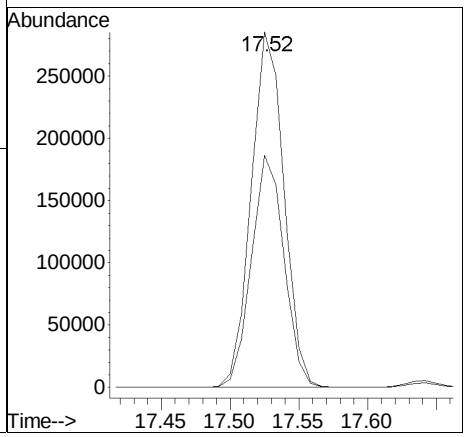


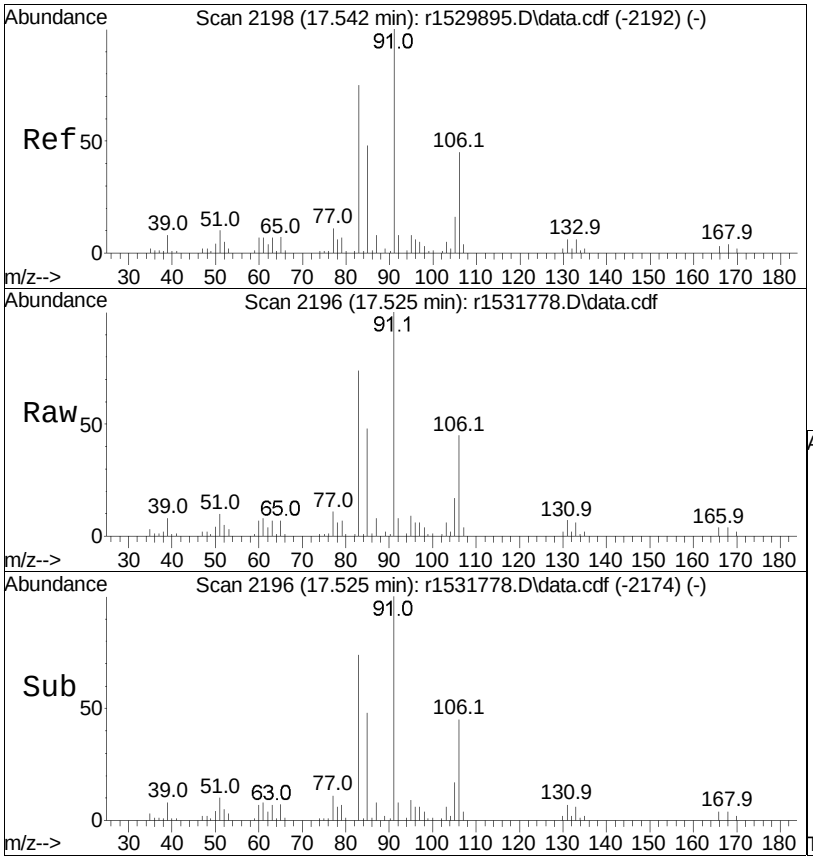


#86
1,1,2,2-tetrachloroethane
Concen: 9.01 ppbV
RT: 17.52 min Scan# 2196
Delta R.T. -0.017 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 83 Resp: 473341

Ion	Ratio	Lower	Upper
83	100		
85	65.3	51.5	77.3

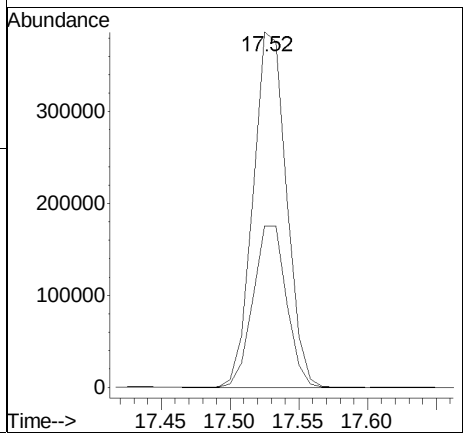


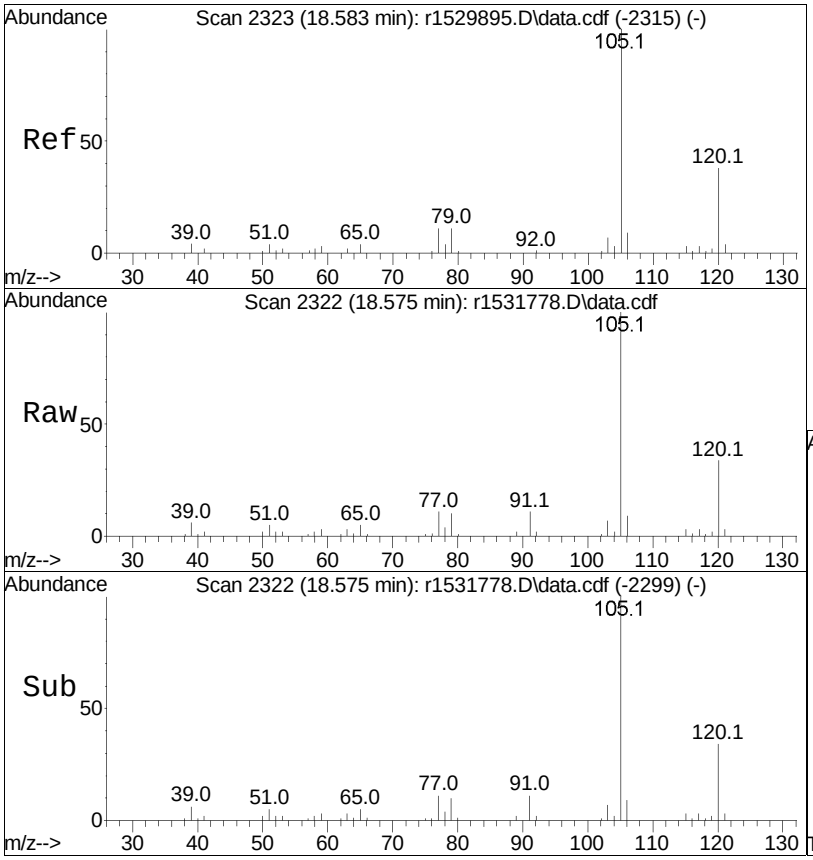


#87
o-xylene
Concen: 9.13 ppbV
RT: 17.52 min Scan# 2196
Delta R.T. -0.017 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 91 Resp: 651431

Ion	Ratio	Lower	Upper
91	100		
106	45.5	35.8	53.8

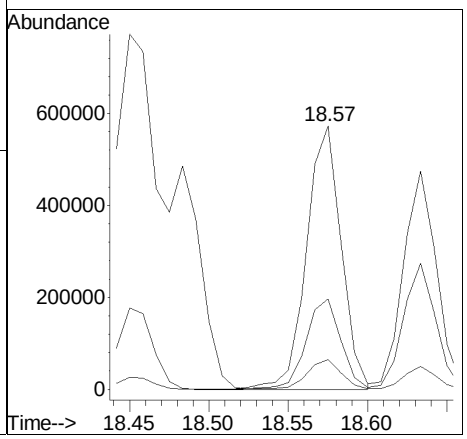


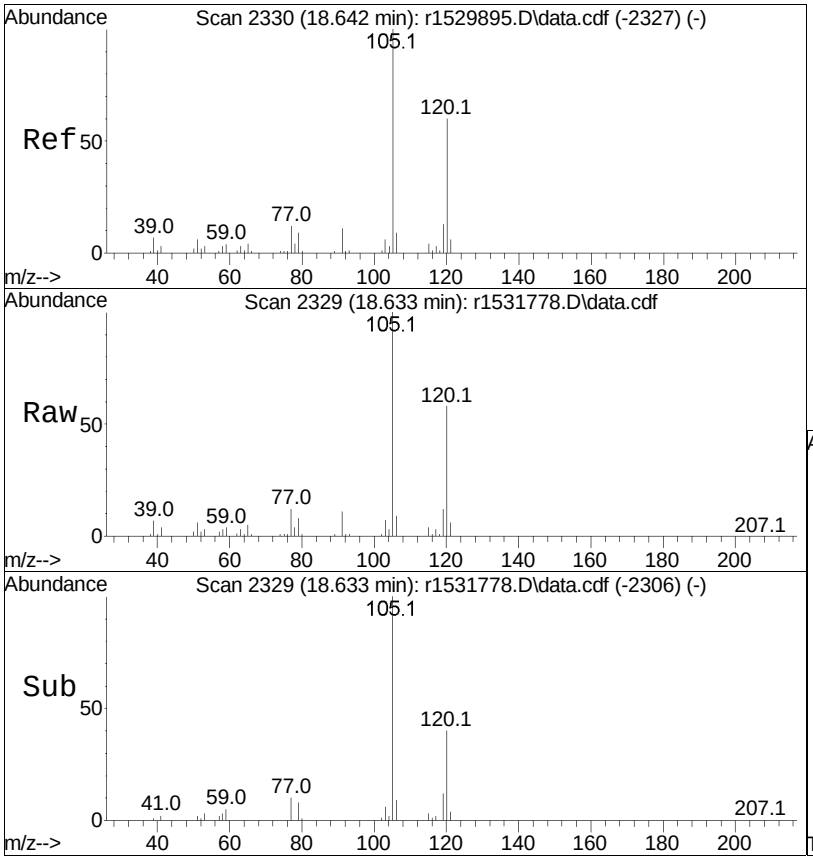


#96
4-ethyl toluene
Concen: 9.63 ppbV
RT: 18.57 min Scan# 2322
Delta R.T. -0.008 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion:105 Resp: 870790

Ion	Ratio	Lower	Upper
105	100		
120	34.4	30.1	45.1
91	11.3	9.1	13.7

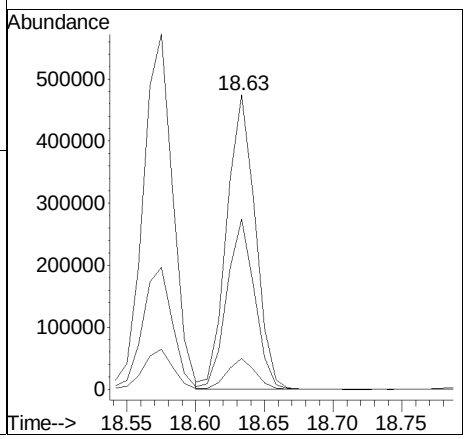


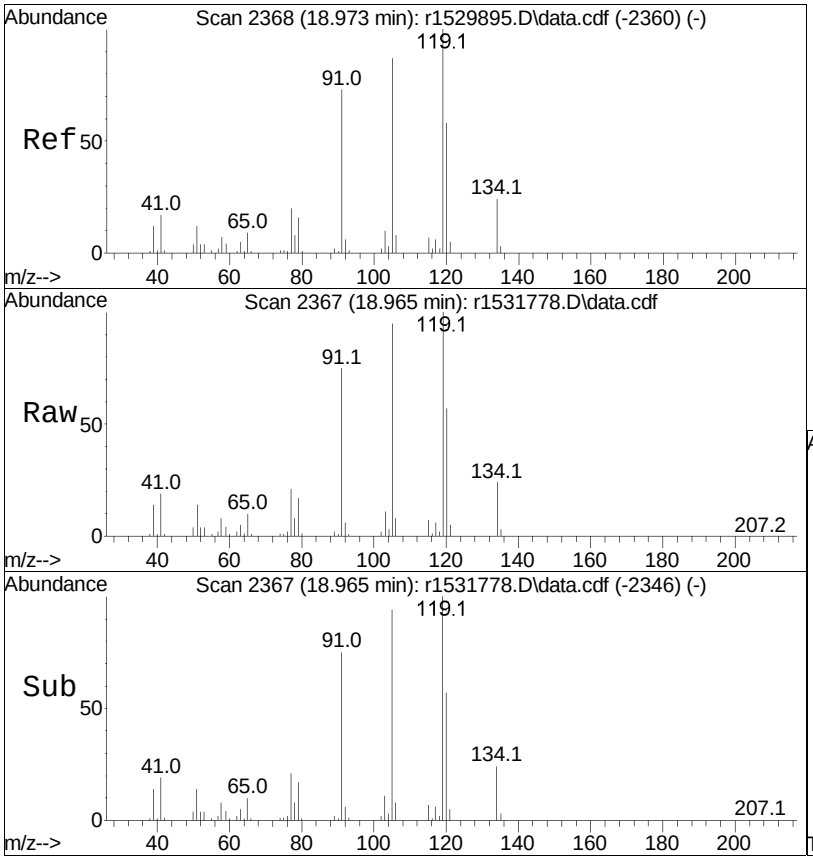


#97
1,3,5-trimethylbenzene
Concen: 8.94 ppbV
RT: 18.63 min Scan# 2329
Delta R.T. -0.008 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion:105 Resp: 685812

Ion	Ratio	Lower	Upper
105	100		
120	57.8	47.7	71.5
91	10.6	8.5	12.7

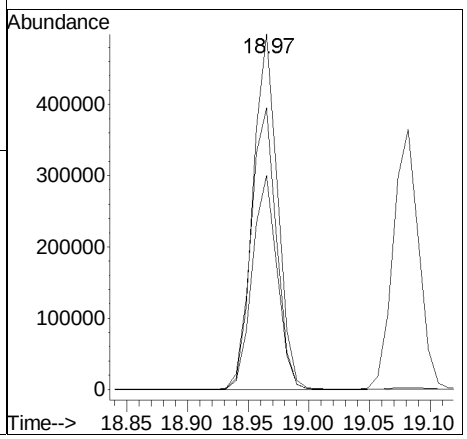


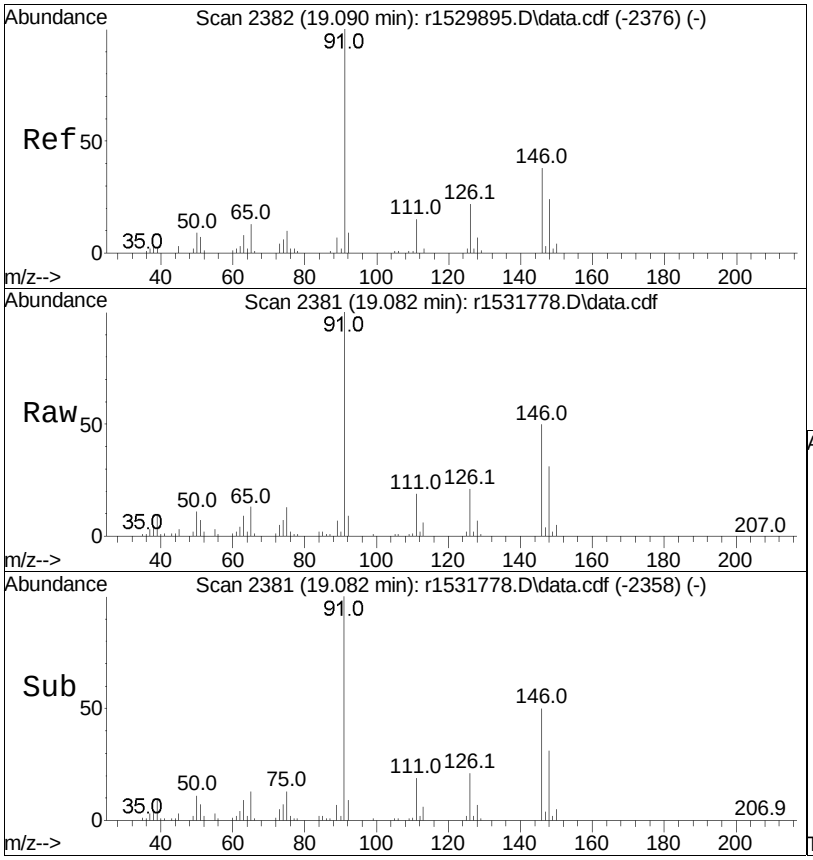


#99
1,2,4-trimethylbenzene
Concen: 9.48 ppbV
RT: 18.97 min Scan# 2367
Delta R.T. -0.008 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion:105 Resp: 700302

Ion	Ratio	Lower	Upper
105	100		
120	60.2	52.7	79.1
91	79.2	67.2	100.8

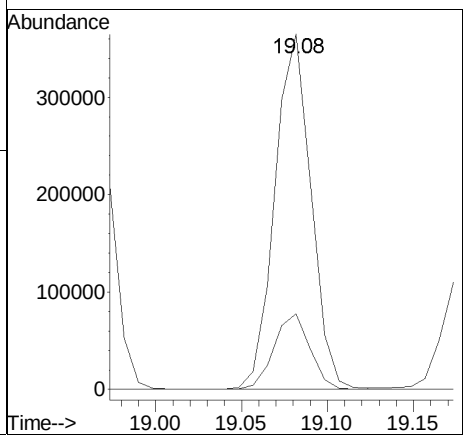


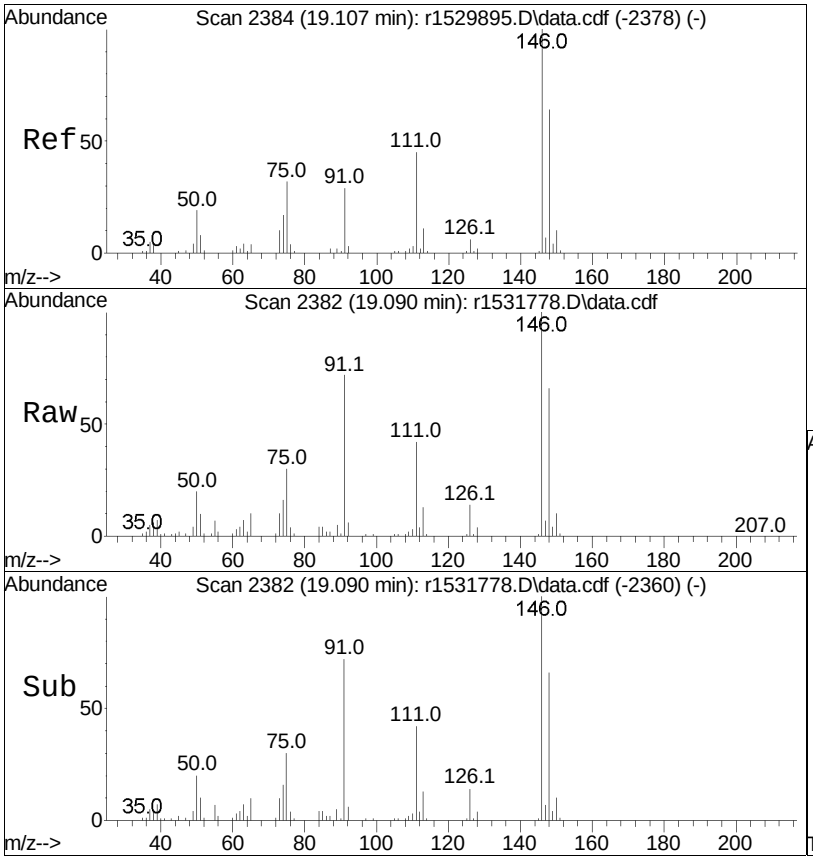


#101
Benzyl Chloride
Concen: 11.25 ppbV
RT: 19.08 min Scan# 2381
Delta R.T. -0.008 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion: 91 Resp: 533611

Ion	Ratio	Lower	Upper
91	100		
126	21.3	17.6	26.4

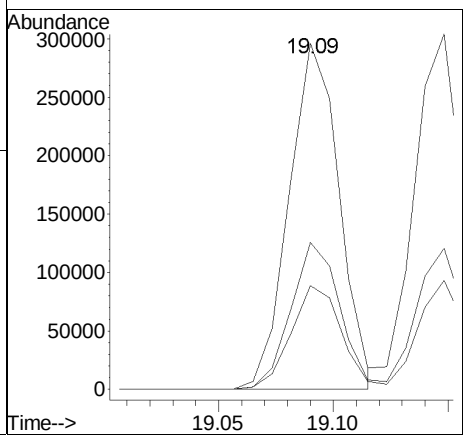


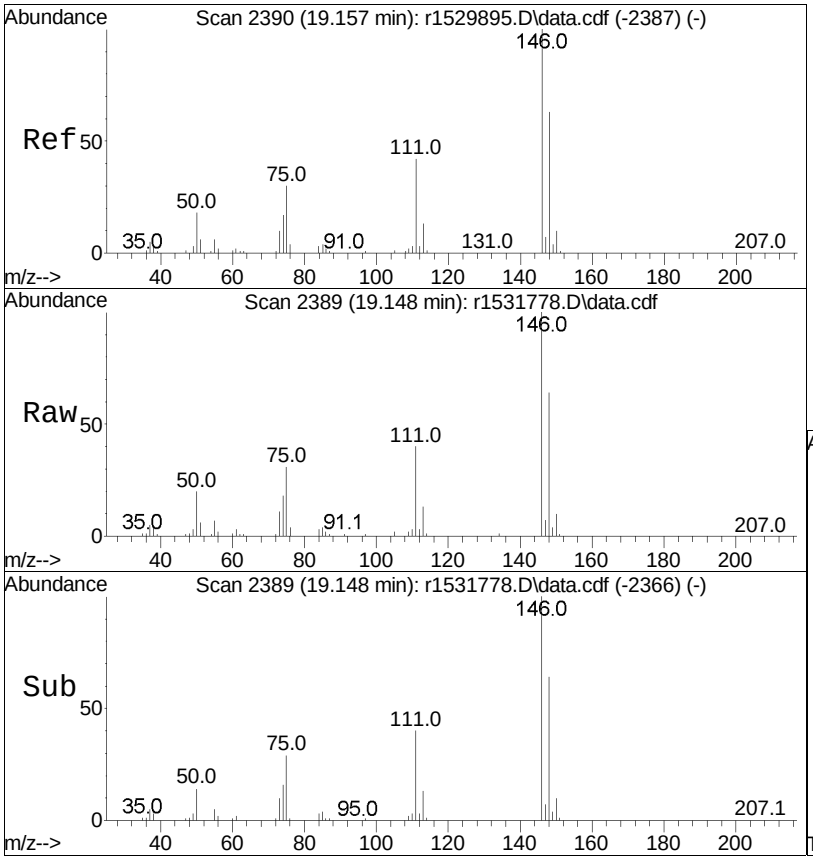


#102
1,3-dichlorobenzene
Concen: 8.96 ppbV
RT: 19.09 min Scan# 2382
Delta R.T. -0.017 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion:146 Resp: 449576

Ion	Ratio	Lower	Upper
146	100		
111	42.5	35.7	53.5
75	30.0	25.4	38.0

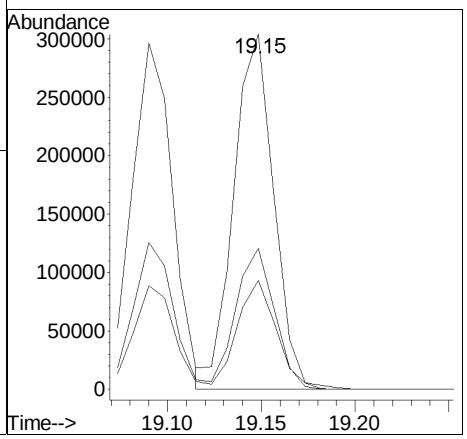


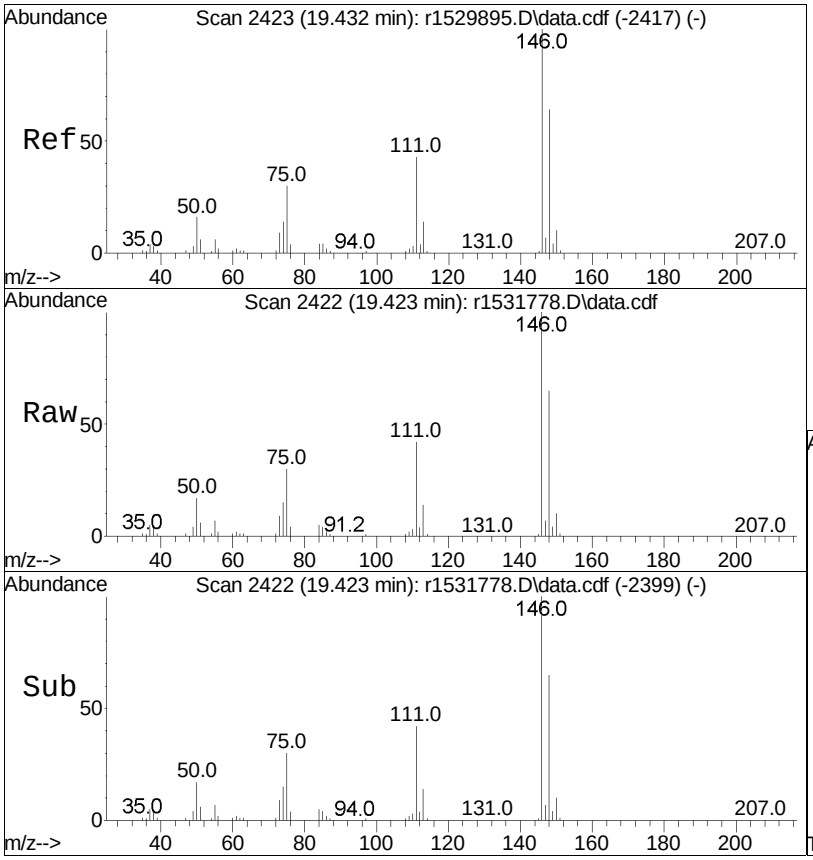


#103
1,4-dichlorobenzene
Concen: 9.10 ppbV
RT: 19.15 min Scan# 2389
Delta R.T. -0.008 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion:146 Resp: 449641

Ion	Ratio	Lower	Upper
146	100		
111	39.7	33.4	50.2
75	30.7	24.0	36.0

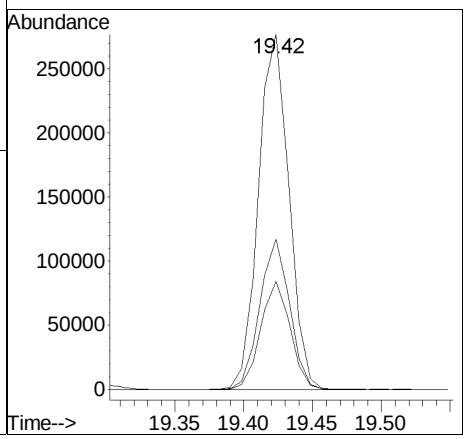


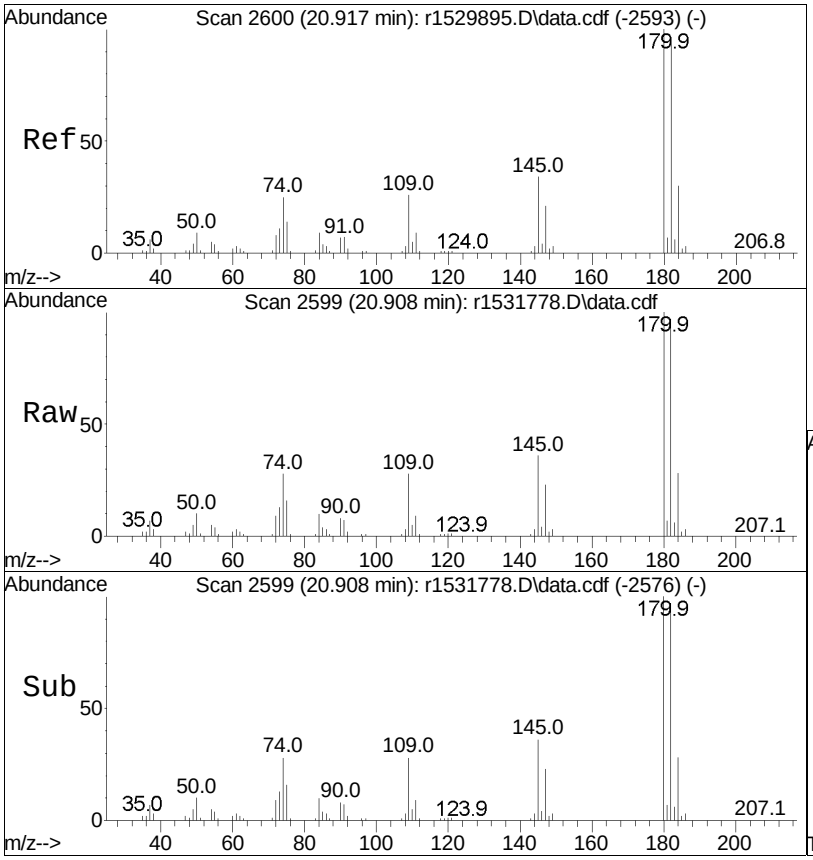


#107
1,2-dichlorobenzene
Concen: 8.94 ppbV
RT: 19.42 min Scan# 2422
Delta R.T. -0.008 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion:146 Resp: 426028

Ion	Ratio	Lower	Upper
146	100		
111	42.4	34.8	52.2
75	30.5	23.6	35.4

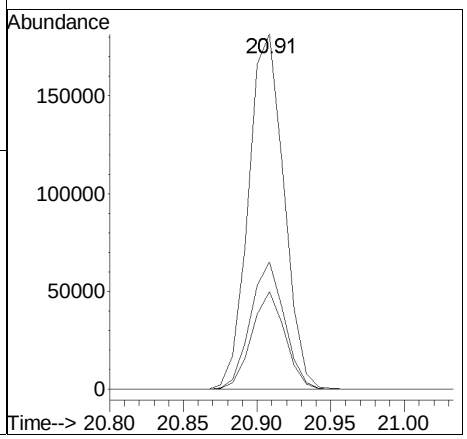


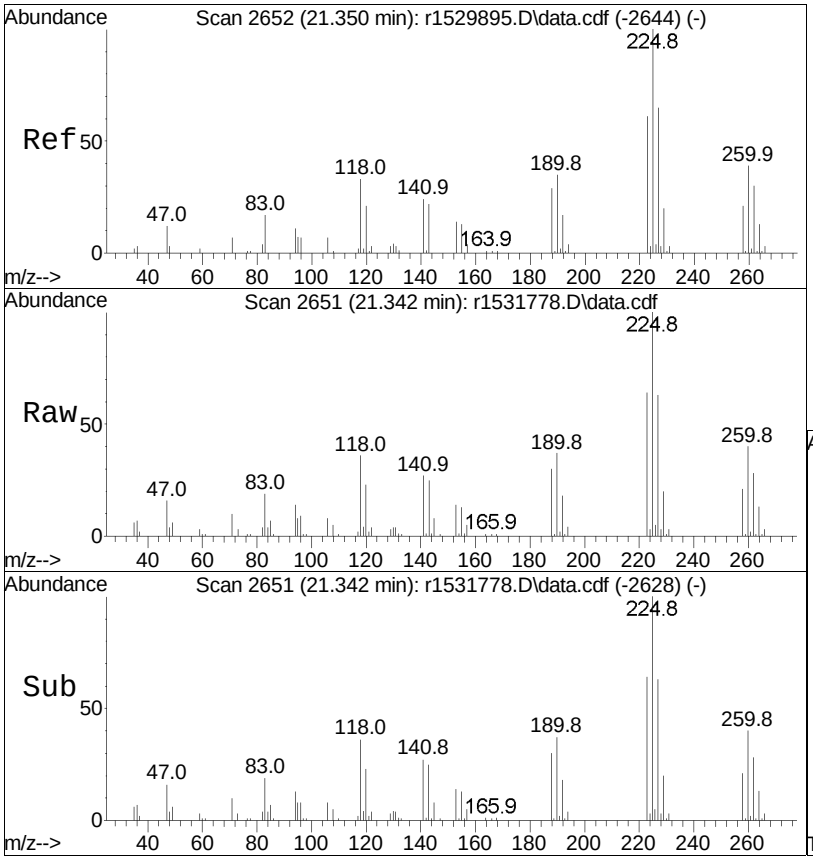


#115
1,2,4-trichlorobenzene
Concen: 8.69 ppbV
RT: 20.91 min Scan# 2599
Delta R.T. -0.008 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion:180 Resp: 304188

Ion	Ratio	Lower	Upper
180	100		
145	35.9	27.2	40.8
109	27.5	20.7	31.1

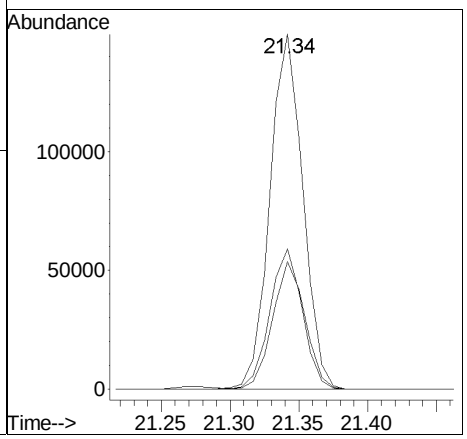




#119
hexachlorobutadiene
Concen: 8.55 ppbV
RT: 21.34 min Scan# 2651
Delta R.T. -0.008 min
Lab File: r1531778.D
Acq: 20 Mar 2022 1:18 PM

Tgt Ion:225 Resp: 248788

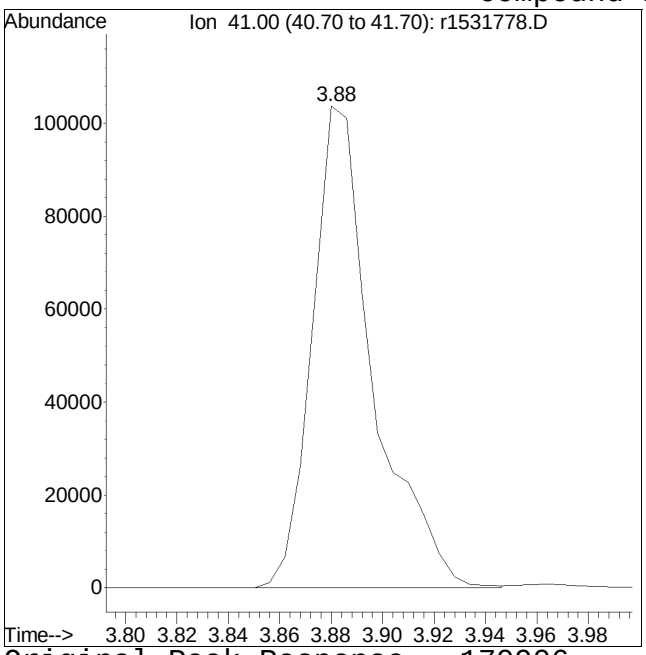
Ion	Ratio	Lower	Upper
225	100		
260	39.6	31.1	46.7
118	36.0	27.0	40.4



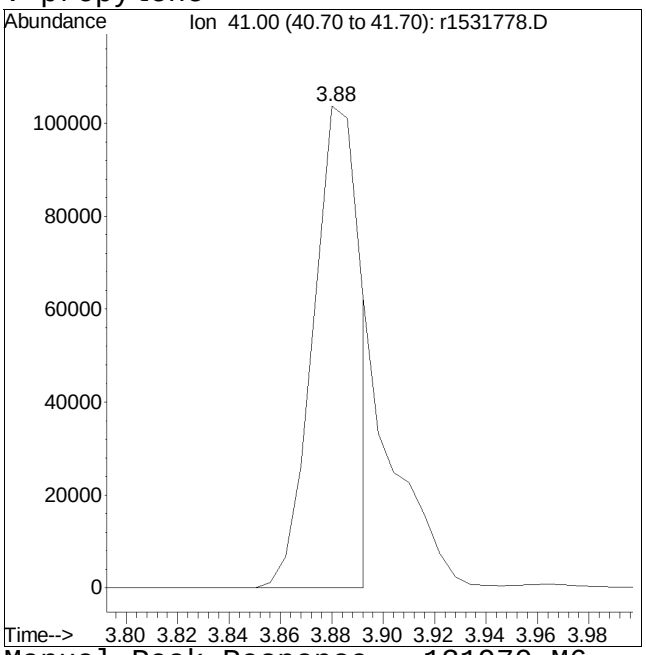
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airlab15\QMethod : TFS15_211222.M
Data File : r1531778.D Operator : AIRLAB15:RY
Date Inj'd : 3/20/2020 0:1: 8 Instrument :
Sample : WG1617728-3,3,250,250 Quant Date : 3/20/2022 12:59 pm

Compound #3: propylene



Original Peak Response = 170906



Manual Peak Response = 131970 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531790.D
Acq On : 20 Mar 2022 10:25 PM
Operator : AIRLAB15:RY
Sample : WG1617728-5,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 15:44:39 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320T\r1531778.D
Sub List : TO15-NY-7-SIM - .

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) bromochloromethane	9.58	49	380390	10.000	ppbV		-0.03
Standard Area = 382239			Recovery = 99.52%				
43) 1,4-difluorobenzene	11.86	114	844066	10.000	ppbV		-0.03
Standard Area = 859136			Recovery = 98.25%				
67) chlorobenzene-D5	16.57	54	199949	10.000	ppbV		-0.02
Standard Area = 200634			Recovery = 99.66%				
System Monitoring Compounds							
Target Compounds							Qvalue
5) dichlorodifluoromethane	3.96	85	13932	0.495	ppbV		99
6) chloromethane	4.14	50	7911	0.564	ppbV		97
7) Freon-114	4.26		0	N.D.			
10) 1,3-butadiene	4.56		0	N.D.			
13) bromomethane	4.89		0	N.D.			
14) chloroethane	0.00		0	N.D.			
15) ethanol	5.29	31	3353335	307.438	ppbV		99
17) vinyl bromide	0.00		0	N.D.			
19) acetone	5.87	43	215284	9.906	ppbV	#	89
21) trichlorofluoromethane	6.07	101	8531	0.316	ppbV		99
22) isopropyl alcohol	6.19	45	294550	12.542	ppbV		100
27) tertiary butyl alcohol	6.94	59	5558	0.183	ppbV	#	79
28) methylene chloride	7.02	49	10152	0.570	ppbV		95
29) 3-chloropropene	0.00		0	N.D.	d		
30) carbon disulfide	7.30		0	N.D.			
31) Freon 113	7.35	101	1847	0.068	ppbV		92
32) trans-1,2-dichloroethene	0.00		0	N.D.			
33) 1,1-dichloroethane	0.00		0	N.D.			
34) MTBE	0.00		0	N.D.	d		
36) 2-butanone	8.88	43	67099	1.729	ppbV		99
38) Ethyl Acetate	9.70	61	10197	1.450	ppbV		75
39) chloroform	9.74	83	4258	0.132	ppbV	#	89
40) Tetrahydrofuran	10.21	42	9283	0.385	ppbV	#	93
42) 1,2-dichloroethane	10.60	62	5984	0.259	ppbV		96
44) hexane	9.66	57	4926	0.138	ppbV	#	76
50) benzene	11.42	78	9326	0.157	ppbV		97
53) cyclohexane	11.74	56	7905	0.207	ppbV		94

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531790.D
Acq On : 20 Mar 2022 10:25 PM
Operator : AIRLAB15:RY
Sample : WG1617728-5,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 15:44:39 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320T\r1531778.D
Sub List : TO15-NY-7-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
56) 1,2-dichloropropane	12.38	63	1312	0.059	ppbV	98
57) bromodichloromethane	0.00		0	N.D.		
58) 1,4-dioxane	0.00		0	N.D.		
60) 2,2,4-trimethylpentane	12.70		0	N.D.		
62) heptane	13.02	43	2916	0.075	ppbV	99
63) cis-1,3-dichloropropene	0.00		0	N.D.		
64) 4-methyl-2-pentanone	13.73		0	N.D.		
65) trans-1,3-dichloropropene	0.00		0	N.D.		
66) 1,1,2-trichloroethane	0.00		0	N.D.		
68) toluene	14.81	91	405241	5.442	ppbV	100
72) 2-hexanone	0.00		0	N.D. d		
74) dibromochloromethane	0.00		0	N.D.		
75) 1,2-dibromoethane	0.00		0	N.D.		
80) chlorobenzene	16.62		0	N.D.		
81) ethylbenzene	16.96	91	49241	0.558	ppbV	93
83) m+p-xylene	17.11	91	102635	1.432	ppbV	96
84) bromoform	0.00		0	N.D.		
85) styrene	17.43	104	103384	2.035	ppbV	99
86) 1,1,2,2-tetrachloroethane	17.52		0	N.D.		
87) o-xylene	17.52	91	59670	0.839	ppbV	96
96) 4-ethyl toluene	18.57		0	N.D.		
97) 1,3,5-trimethylbenzene	18.63	105	7464	0.098	ppbV #	91
99) 1,2,4-trimethylbenzene	18.97	105	56361	0.766	ppbV #	48
101) Benzyl Chloride	0.00		0	N.D. d		
102) 1,3-dichlorobenzene	19.14		0	N.D.		
103) 1,4-dichlorobenzene	19.14		0	N.D.		
107) 1,2-dichlorobenzene	19.41		0	N.D.		
115) 1,2,4-trichlorobenzene	0.00		0	N.D.		
119) hexachlorobutadiene	0.00		0	N.D.		

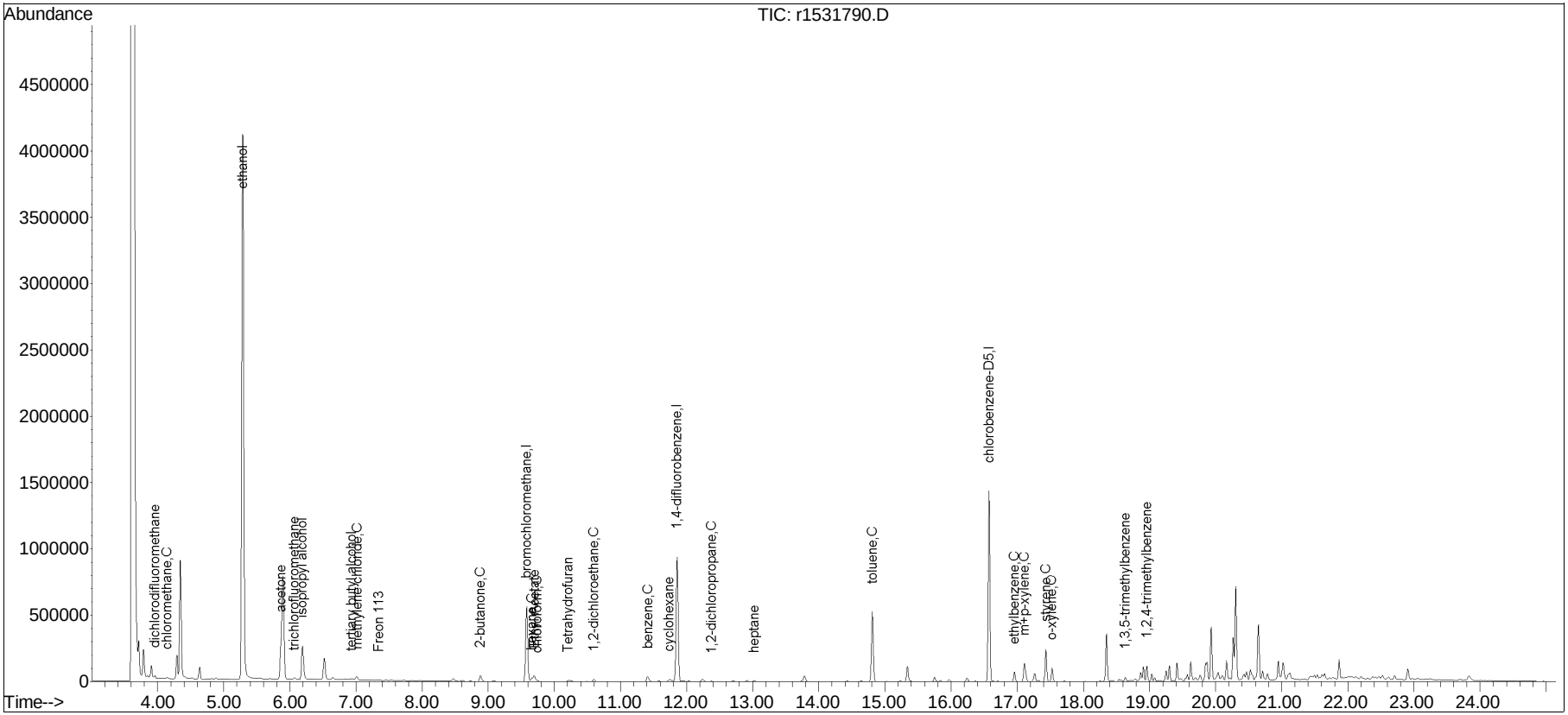
(#) = qualifier out of range (m) = manual integration (+) = signals summed

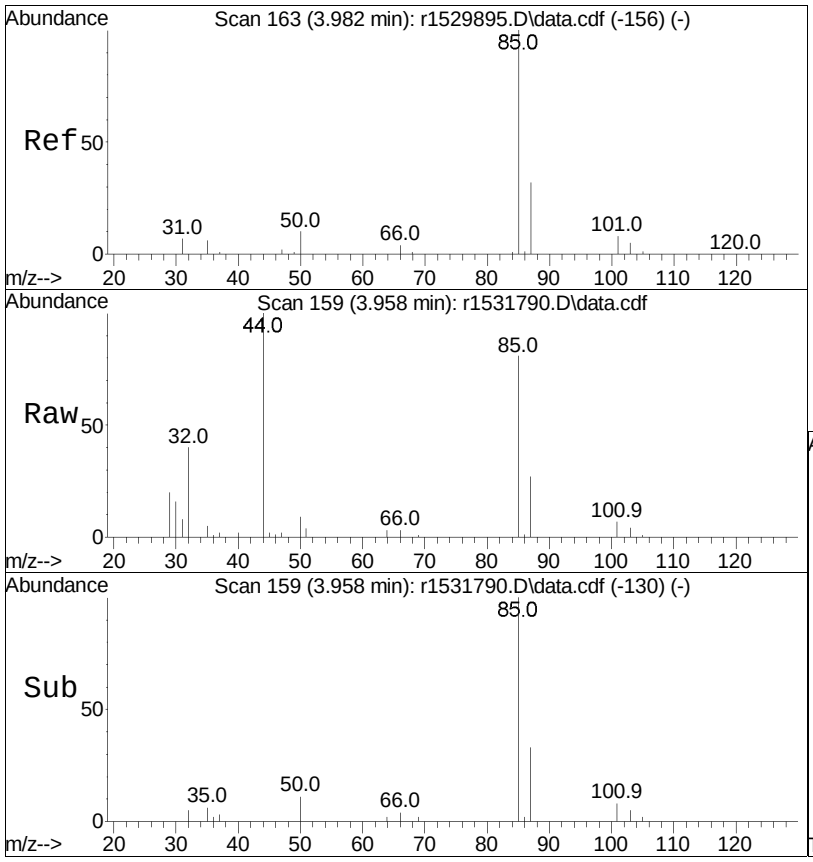
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320T\
Data File : r1531790.D
Acq On : 20 Mar 2022 10:25 PM
Operator : AIRLAB15:RY
Sample : WG1617728-5,3,250,250
Misc : WG1617728,ICAL18600
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 15:44:39 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320T\TFS15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 16:29:20 2021
Response via : Initial Calibration

Sub List : TO15-NY-7-SIM - .\Airlab15\2022\03\0320T\r1531778.D

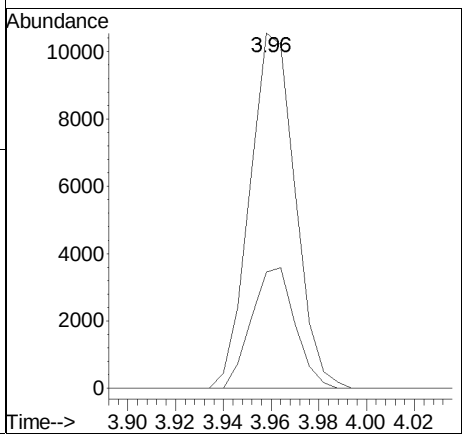


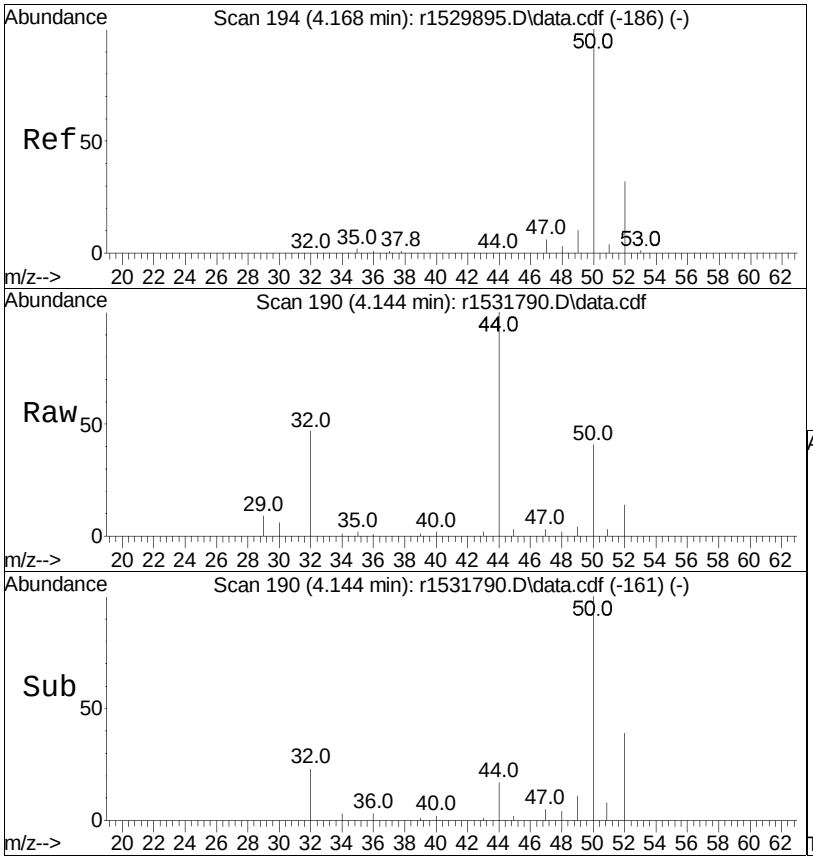


#5
dichlorodifluoromethane
Concen: 0.50 ppbV
RT: 3.96 min Scan# 159
Delta R.T. -0.024 min
Lab File: r1531790.D
Acq: 20 Mar 2022 10:25 PM

Tgt Ion: 85 Resp: 13932

Ion	Ratio	Lower	Upper
85	100		
87	32.7	25.6	38.4

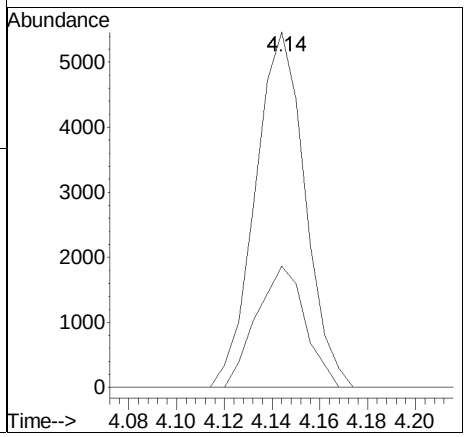


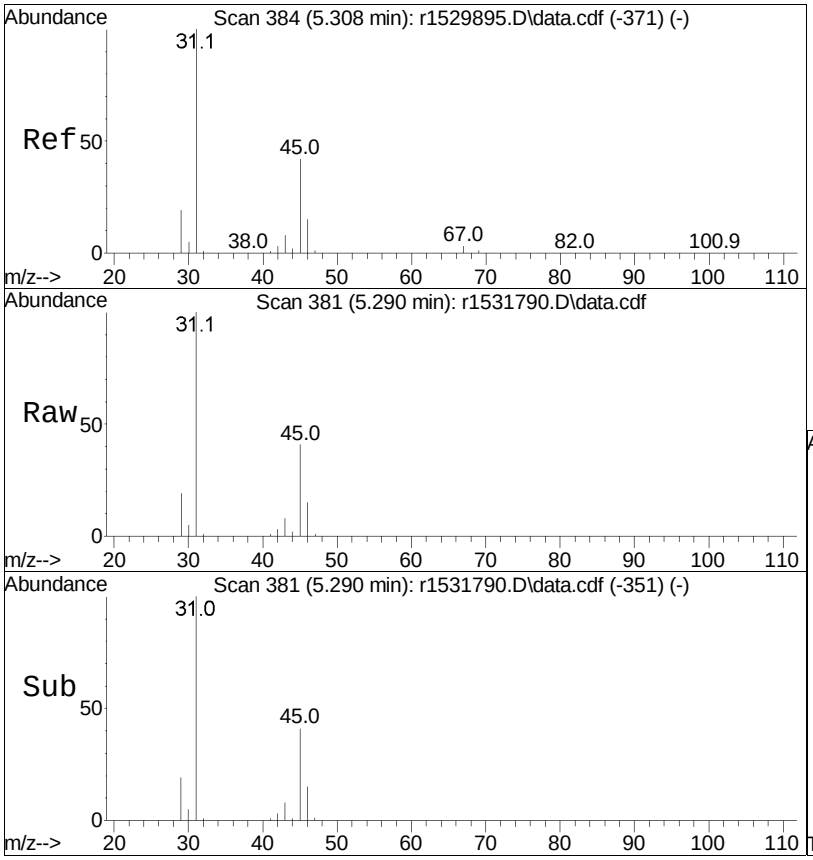


#6
chloromethane
Concen: 0.56 ppbV
RT: 4.14 min Scan# 190
Delta R.T. -0.024 min
Lab File: r1531790.D
Acq: 20 Mar 2022 10:25 PM

Tgt Ion: 50 Resp: 7911

Ion	Ratio	Lower	Upper
50	100		
52	34.1	25.9	38.9

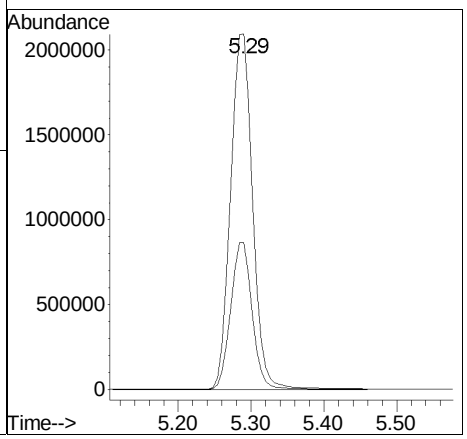


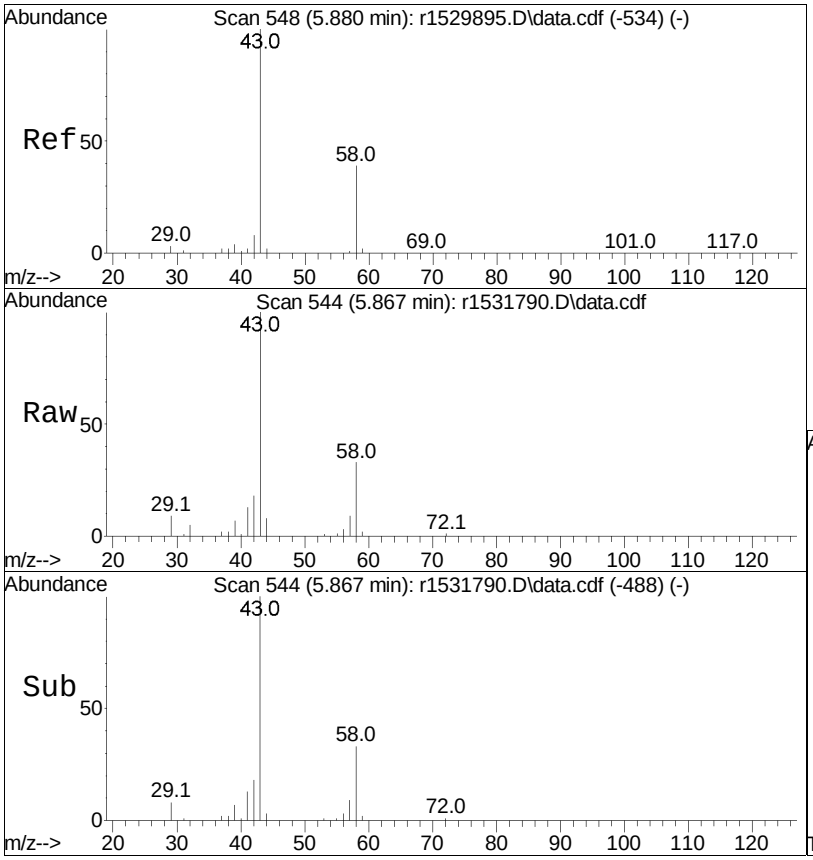


#15
ethanol
Concen: 307.44 ppbV
RT: 5.29 min Scan# 381
Delta R.T. -0.018 min
Lab File: r1531790.D
Acq: 20 Mar 2022 10:25 PM

Tgt Ion: 31 Resp: 3353335

Ion	Ratio	Lower	Upper
31	100		
45	41.2	33.4	50.2

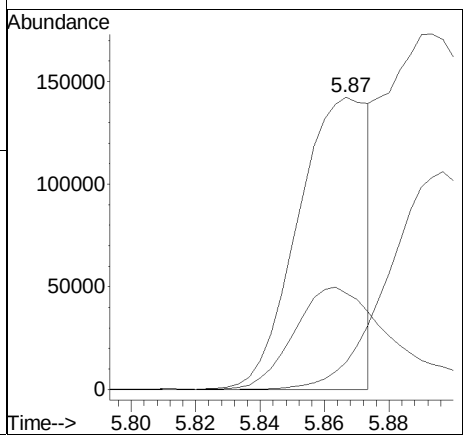


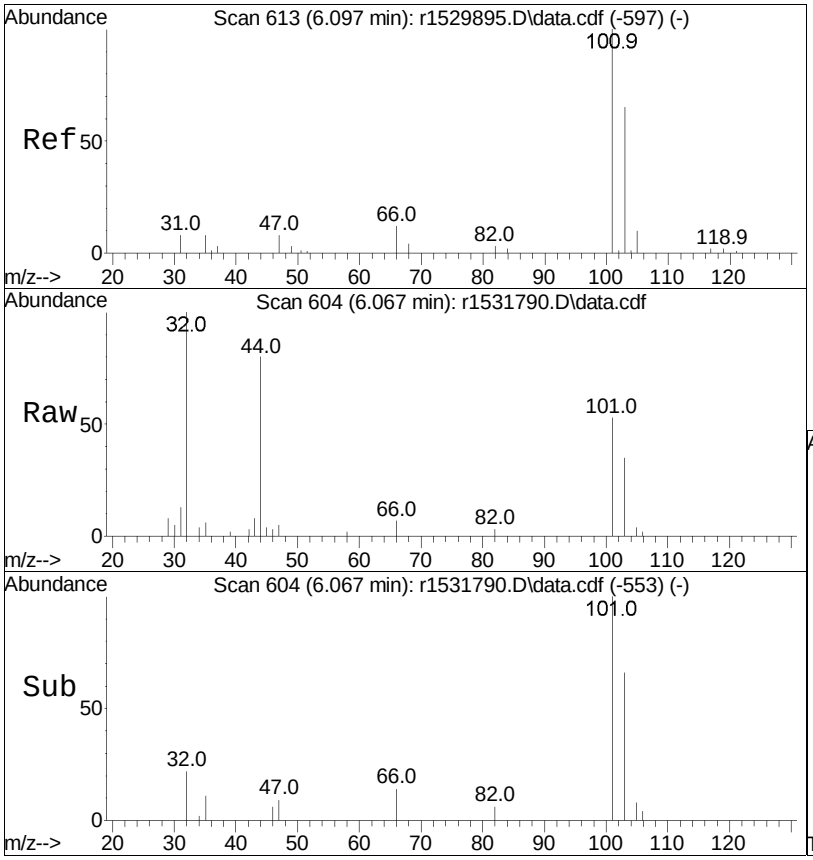


#19
acetone
Concen: 9.91 ppbV
RT: 5.87 min Scan# 544
Delta R.T. -0.013 min
Lab File: r1531790.D
Acq: 20 Mar 2022 10:25 PM

Tgt Ion: 43 Resp: 215284

Ion	Ratio	Lower	Upper
43	100		
58	32.9	31.6	47.4
57	9.4	0.8	1.2#

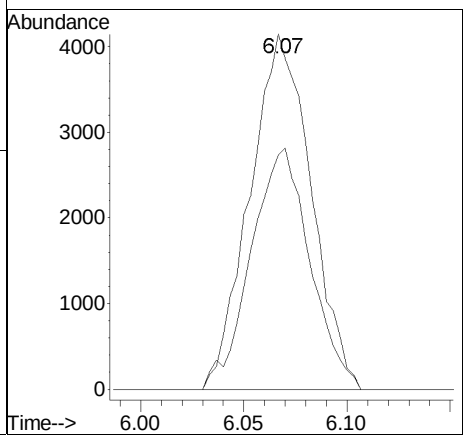


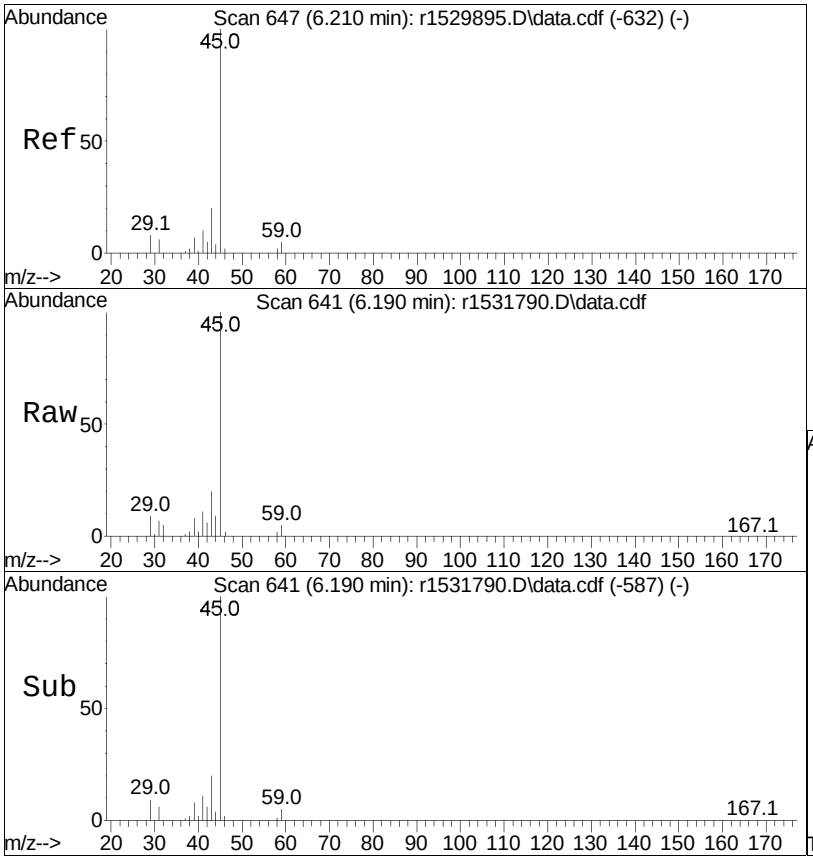


#21
trichlorofluoromethane
Concen: 0.32 ppbV
RT: 6.07 min Scan# 604
Delta R.T. -0.030 min
Lab File: r1531790.D
Acq: 20 Mar 2022 10:25 PM

Tgt Ion:101 Resp: 8531

Ion	Ratio	Lower	Upper
101	100		
103	66.0	52.0	78.0

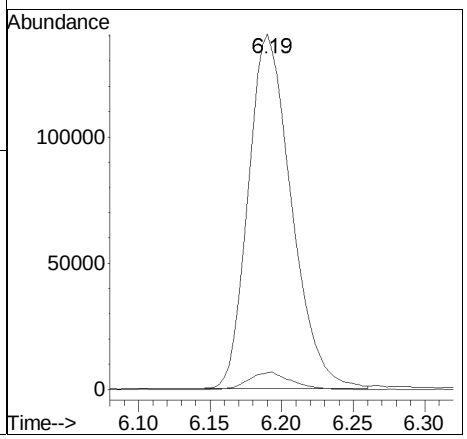


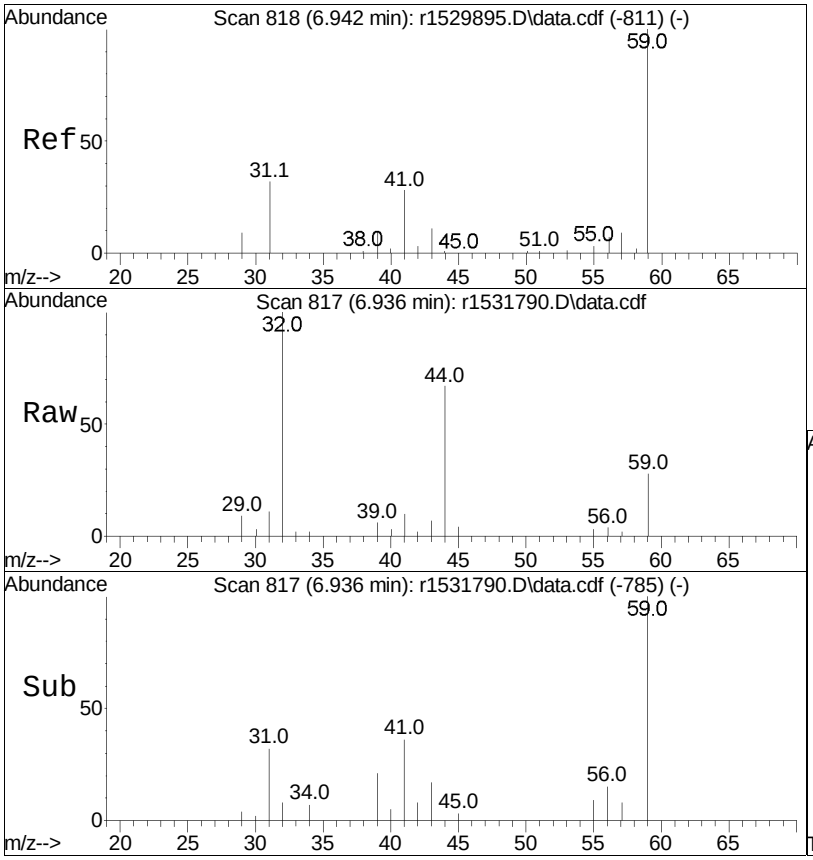


#22
isopropyl alcohol
Concen: 12.54 ppbV
RT: 6.19 min Scan# 641
Delta R.T. -0.020 min
Lab File: r1531790.D
Acq: 20 Mar 2022 10:25 PM

Tgt Ion: 45 Resp: 294550

Ion	Ratio	Lower	Upper
45	100		
59	4.7	3.8	5.8

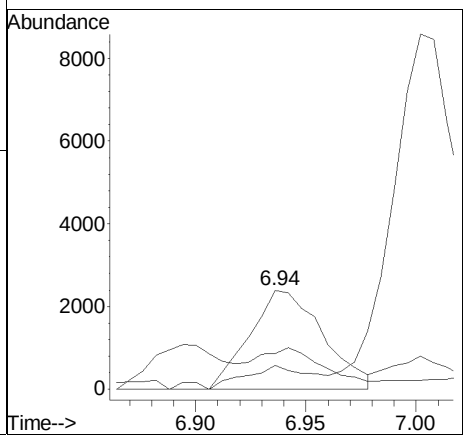


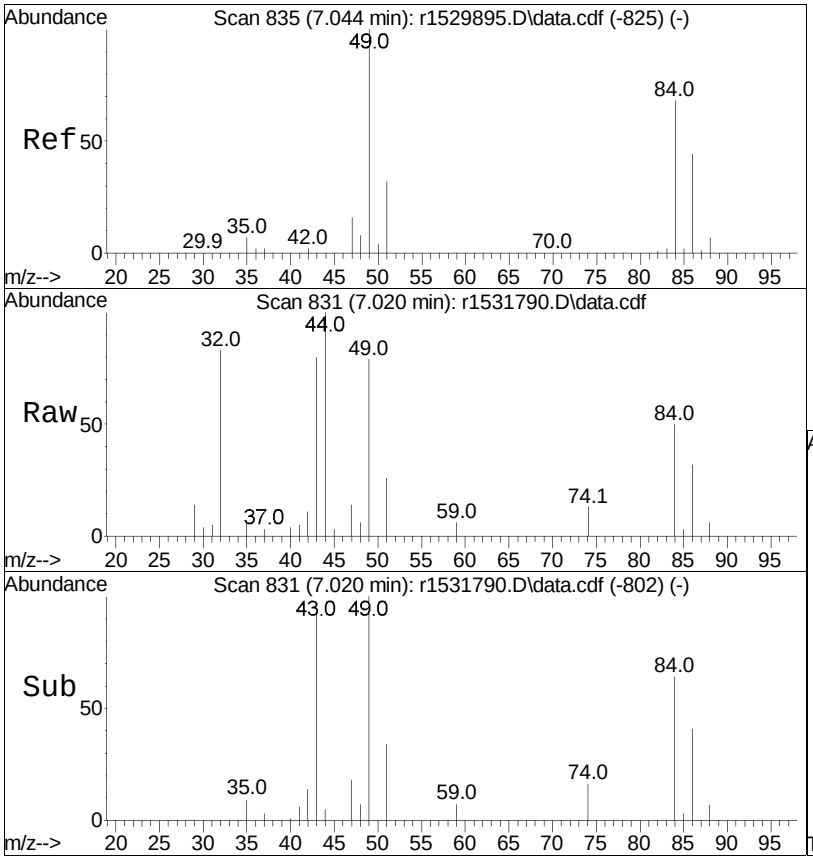


#27
tertiary butyl alcohol
Concen: 0.18 ppbV
RT: 6.94 min Scan# 817
Delta R.T. -0.006 min
Lab File: r1531790.D
Acq: 20 Mar 2022 10:25 PM

Tgt Ion: 59 Resp: 5558

Ion	Ratio	Lower	Upper
59	100		
41	36.3	22.2	33.4#
43	24.3	8.9	13.3#

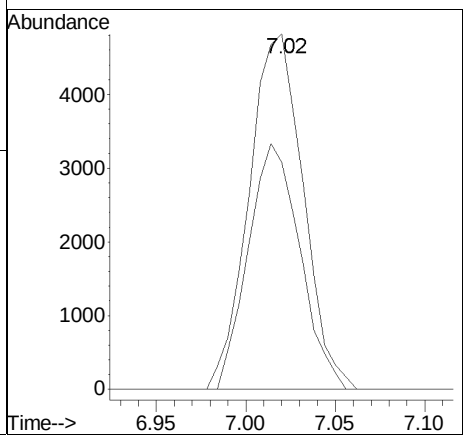


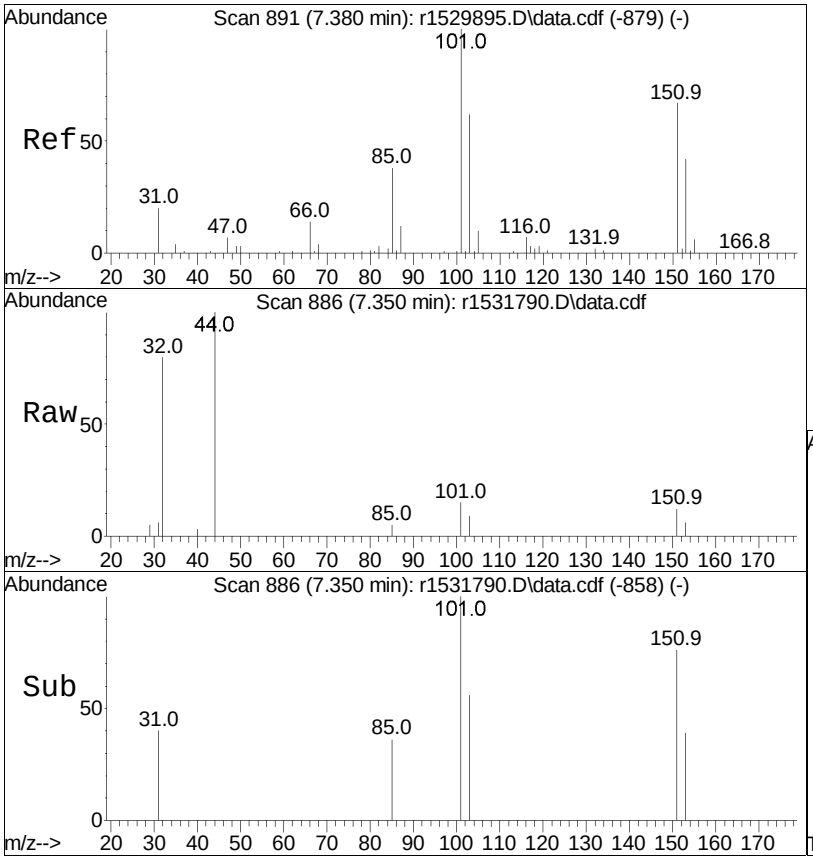


#28
methylene chloride
Concen: 0.57 ppbV
RT: 7.02 min Scan# 831
Delta R.T. -0.024 min
Lab File: r1531790.D
Acq: 20 Mar 2022 10:25 PM

Tgt Ion: 49 Resp: 10152

Ion	Ratio	Lower	Upper
49	100		
84	63.9	54.5	81.7

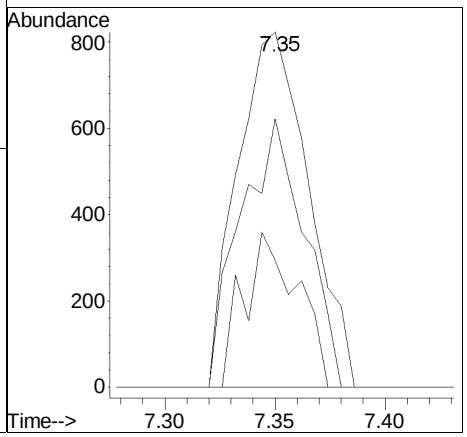


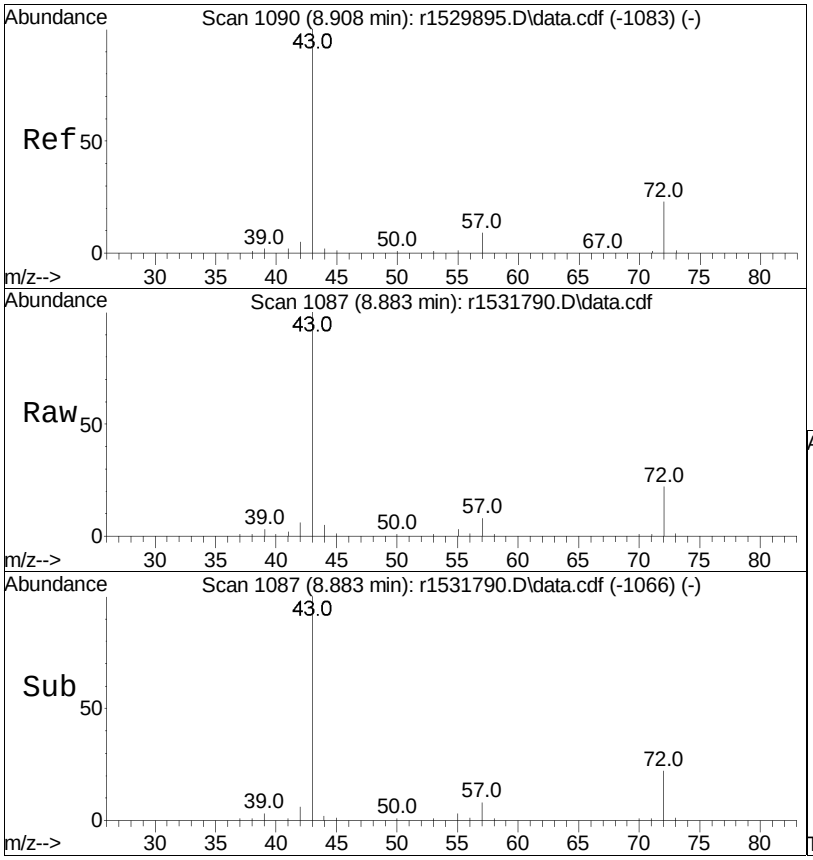


#31
Freon 113
Concen: 0.07 ppbV
RT: 7.35 min Scan# 886
Delta R.T. -0.030 min
Lab File: r1531790.D
Acq: 20 Mar 2022 10:25 PM

Tgt Ion:101 Resp: 1847

Ion	Ratio	Lower	Upper
101	100		
85	35.7	30.6	46.0
151	75.6	53.5	80.3

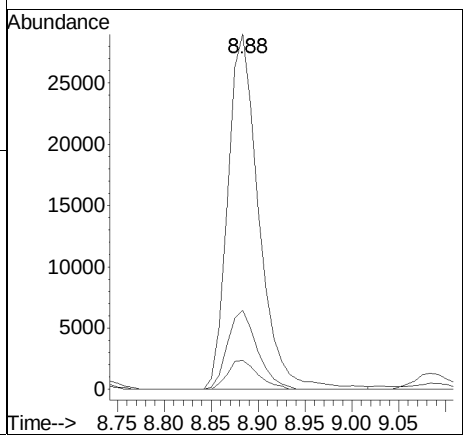


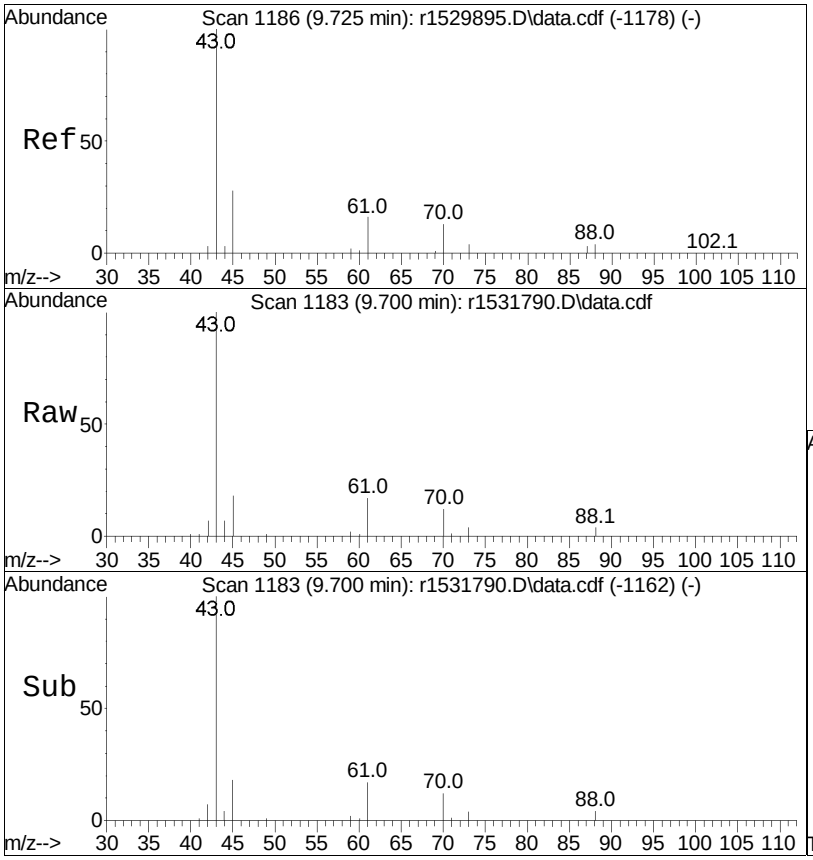


#36
2-butanone
Concen: 1.73 ppbV
RT: 8.88 min Scan# 1087
Delta R.T. -0.025 min
Lab File: r1531790.D
Acq: 20 Mar 2022 10:25 PM

Tgt Ion: 43 Resp: 67099

Ion	Ratio	Lower	Upper
43	100		
72	22.3	18.0	27.0
57	8.2	7.0	10.4

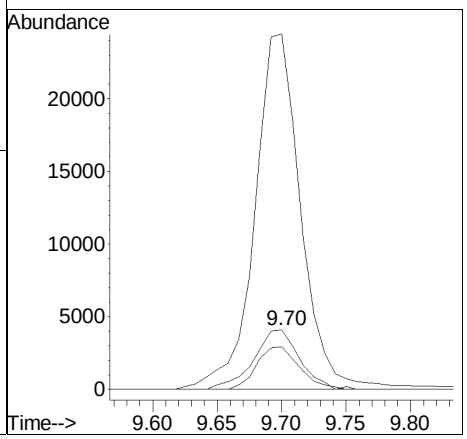


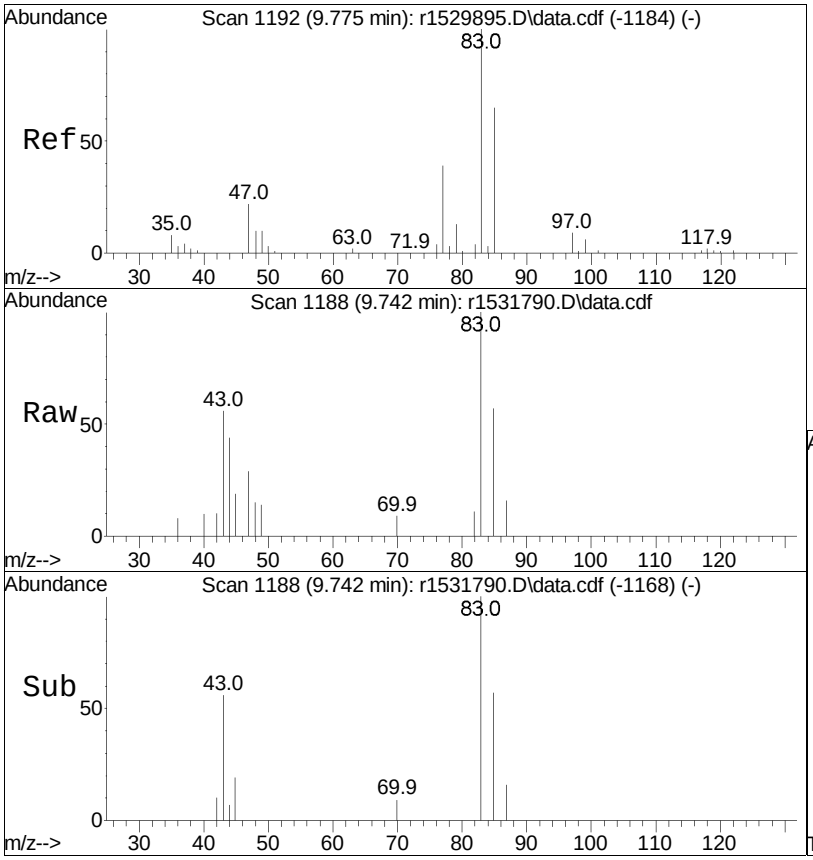


#38
Ethyl Acetate
Concen: 1.45 ppbV
RT: 9.70 min Scan# 1183
Delta R.T. -0.025 min
Lab File: r1531790.D
Acq: 20 Mar 2022 10:25 PM

Tgt Ion: 61 Resp: 10197

Ion	Ratio	Lower	Upper
61	100		
70	71.8	62.7	94.1
43	597.8	551.8	827.8

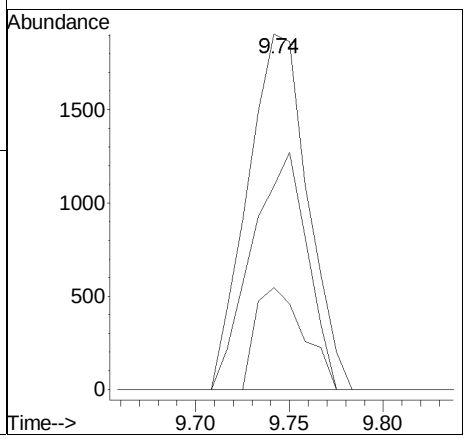


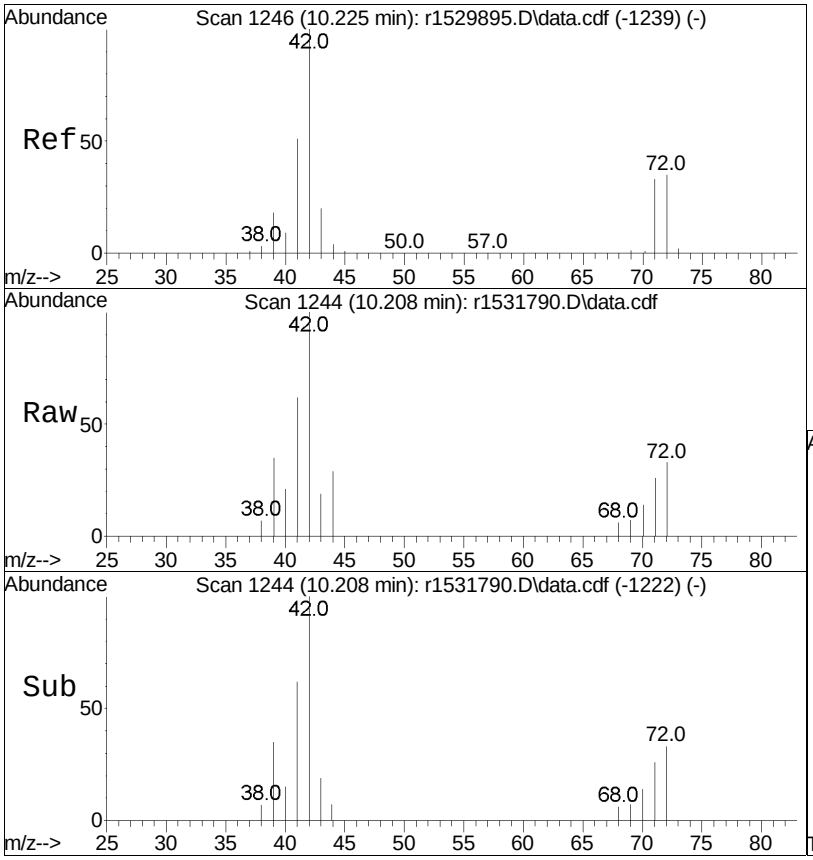


#39
chloroform
Concen: 0.13 ppbV
RT: 9.74 min Scan# 1188
Delta R.T. -0.033 min
Lab File: r1531790.D
Acq: 20 Mar 2022 10:25 PM

Tgt Ion: 83 Resp: 4258

Ion	Ratio	Lower	Upper
83	100		
85	57.2	51.8	77.8
47	28.6	17.9	26.9#

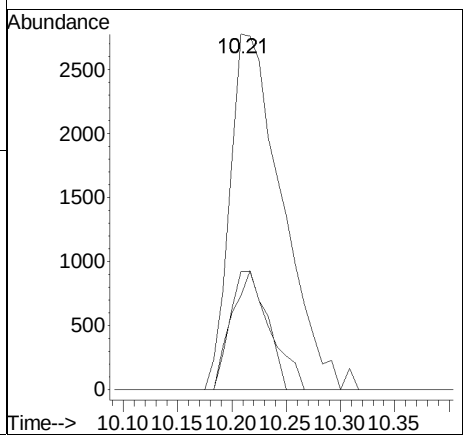


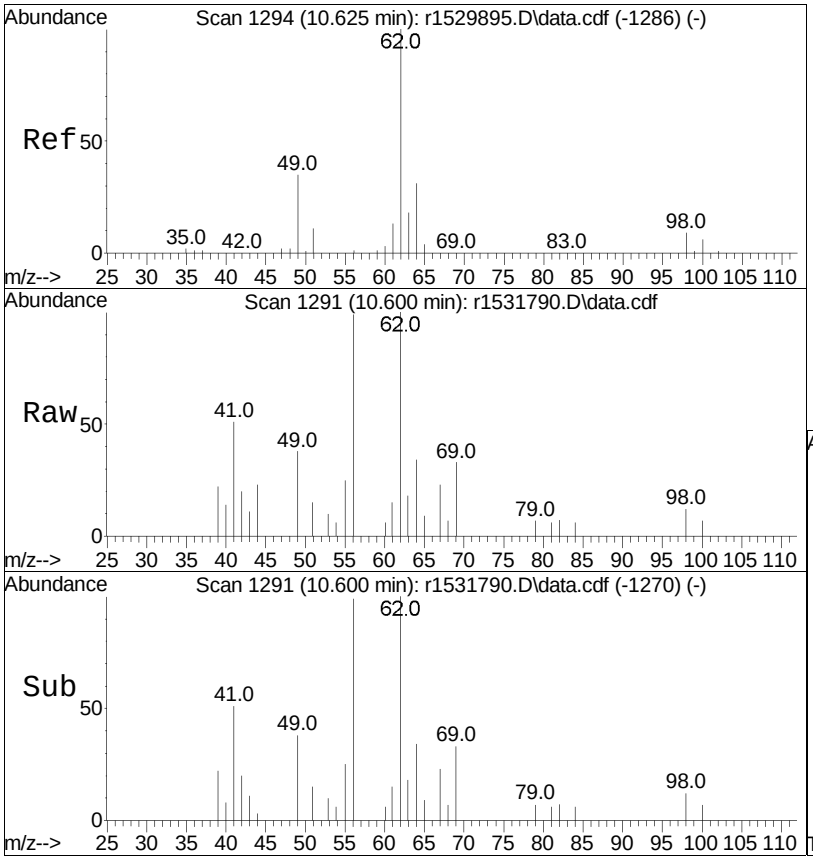


#40
Tetrahydrofuran
Concen: 0.38 ppbV
RT: 10.21 min Scan# 1244
Delta R.T. -0.017 min
Lab File: r1531790.D
Acq: 20 Mar 2022 10:25 PM

Tgt Ion: 42 Resp: 9283

Ion	Ratio	Lower	Upper
42	100		
71	26.5	26.8	40.2#
72	33.3	27.7	41.5

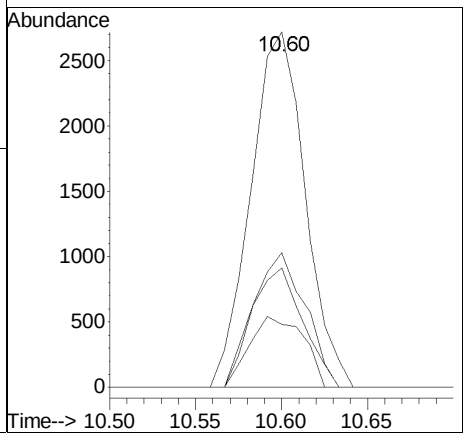


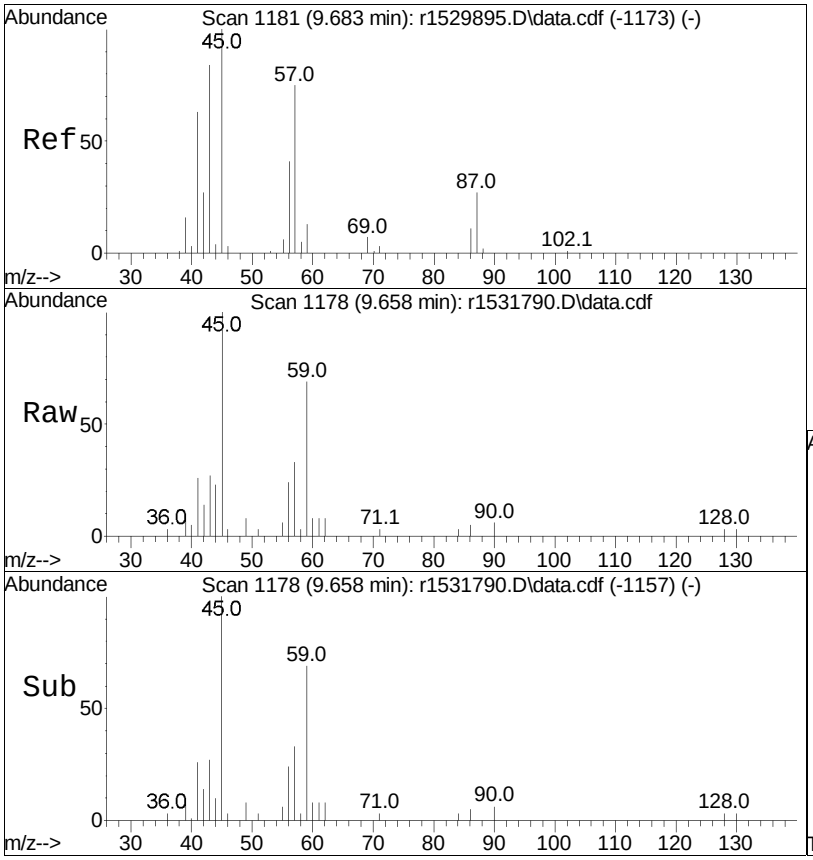


#42
1,2-dichloroethane
Concen: 0.26 ppbV
RT: 10.60 min Scan# 1291
Delta R.T. -0.025 min
Lab File: r1531790.D
Acq: 20 Mar 2022 10:25 PM

Tgt Ion: 62 Resp: 5984

Ion	Ratio	Lower	Upper
62	100		
64	33.6	25.0	37.4
49	37.9	27.8	41.8
63	17.7	14.4	21.6

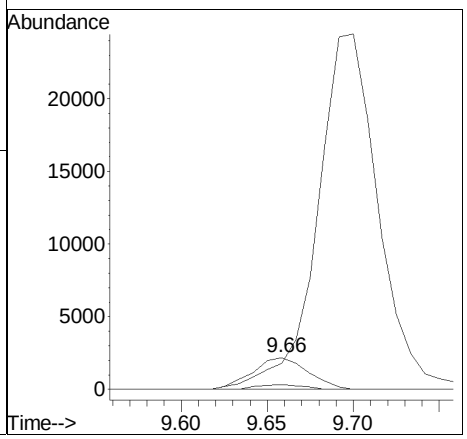


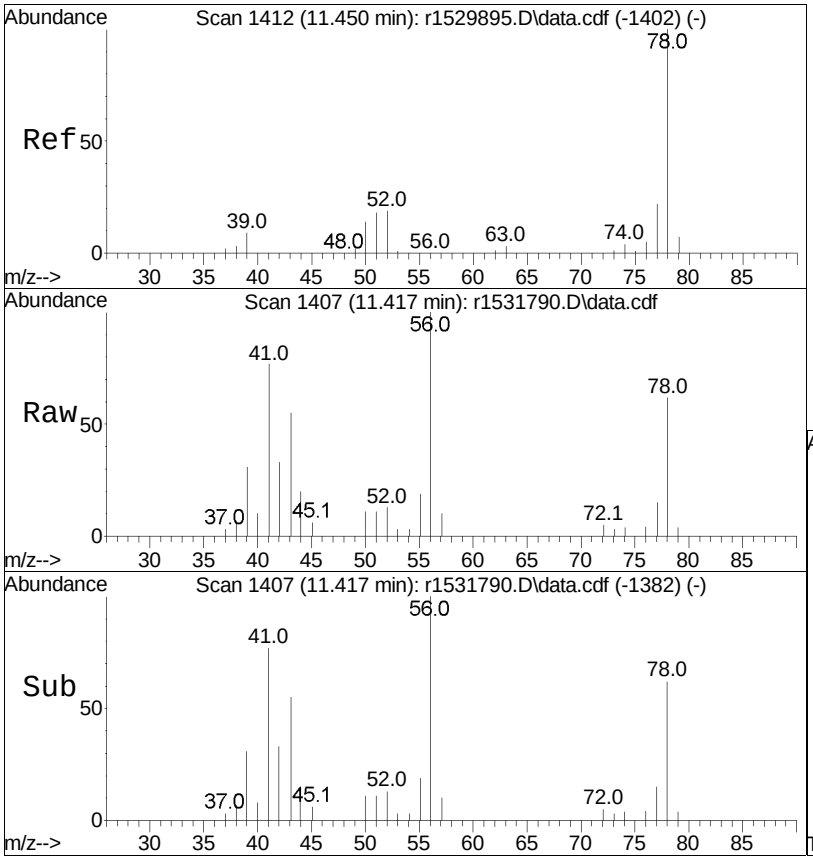


#44
hexane
Concen: 0.14 ppbV
RT: 9.66 min Scan# 1178
Delta R.T. -0.025 min
Lab File: r1531790.D
Acq: 20 Mar 2022 10:25 PM

Tgt Ion: 57 Resp: 4926

Ion	Ratio	Lower	Upper
57	100		
43	82.4	88.8	133.2#
86	15.1	11.4	17.0

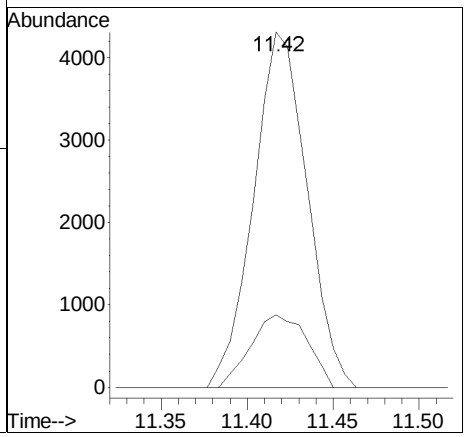


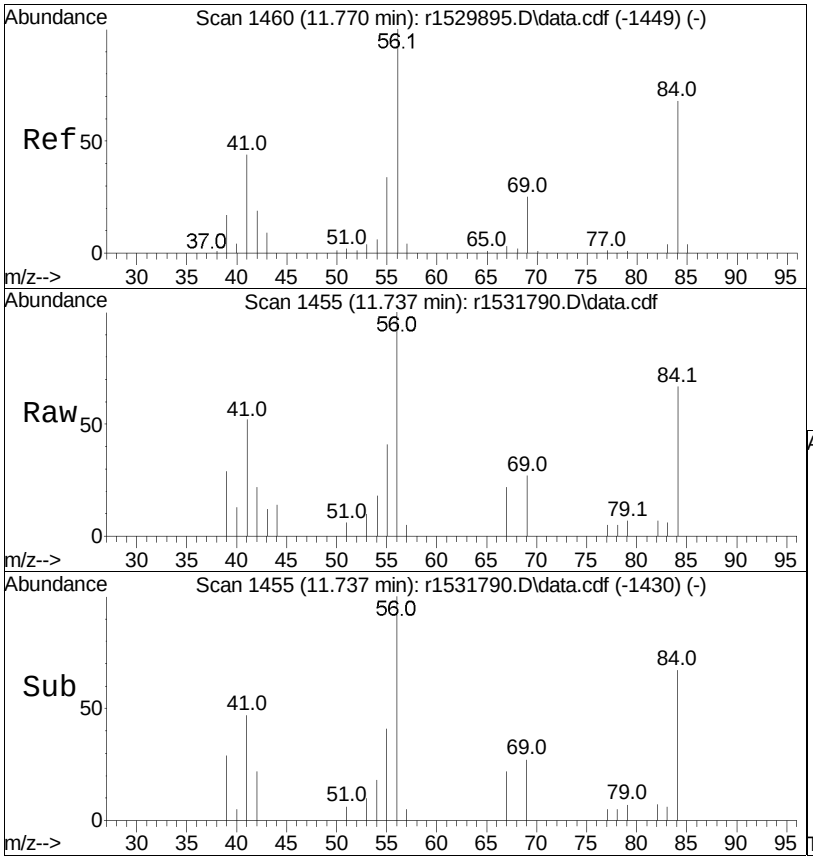


#50
benzene
Concen: 0.16 ppbV
RT: 11.42 min Scan# 1407
Delta R.T. -0.033 min
Lab File: r1531790.D
Acq: 20 Mar 2022 10:25 PM

Tgt Ion: 78 Resp: 9326

Ion	Ratio	Lower	Upper
78	100		
52	20.4	15.2	22.8

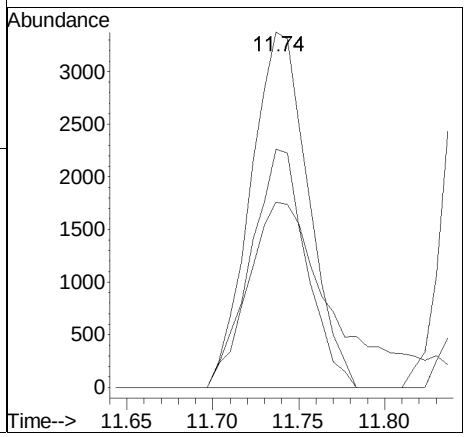


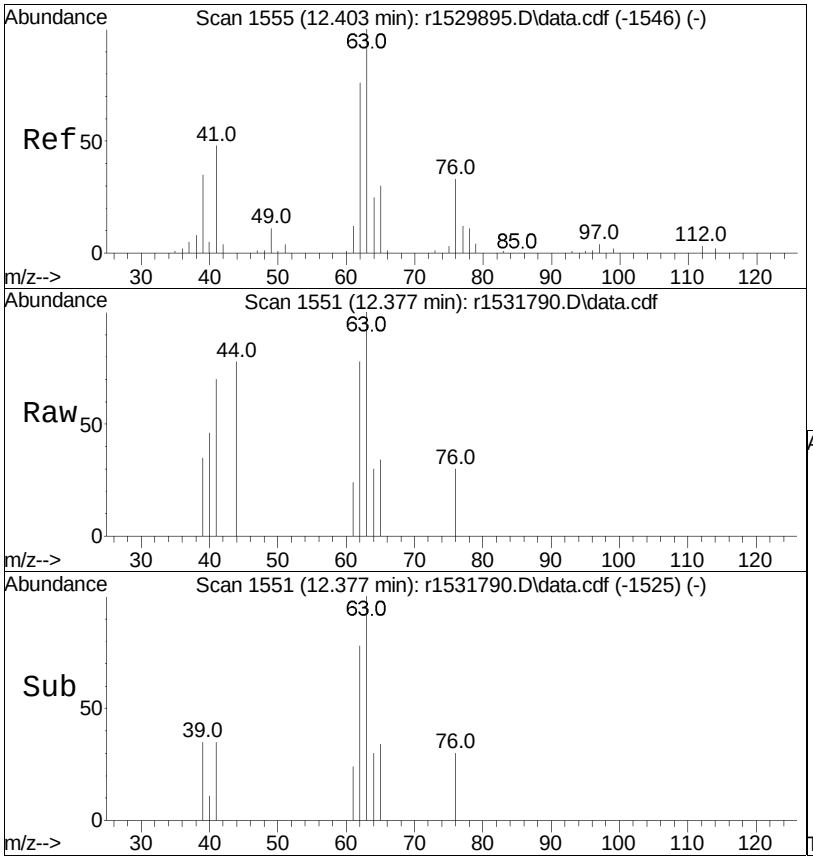


#53
cyclohexane
Concen: 0.21 ppbV
RT: 11.74 min Scan# 1455
Delta R.T. -0.033 min
Lab File: r1531790.D
Acq: 20 Mar 2022 10:25 PM

Tgt Ion: 56 Resp: 7905

Ion	Ratio	Lower	Upper
56	100		
84	67.0	54.8	82.2
41	52.1	35.5	53.3

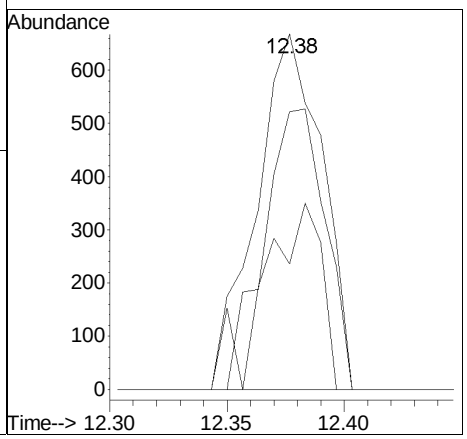


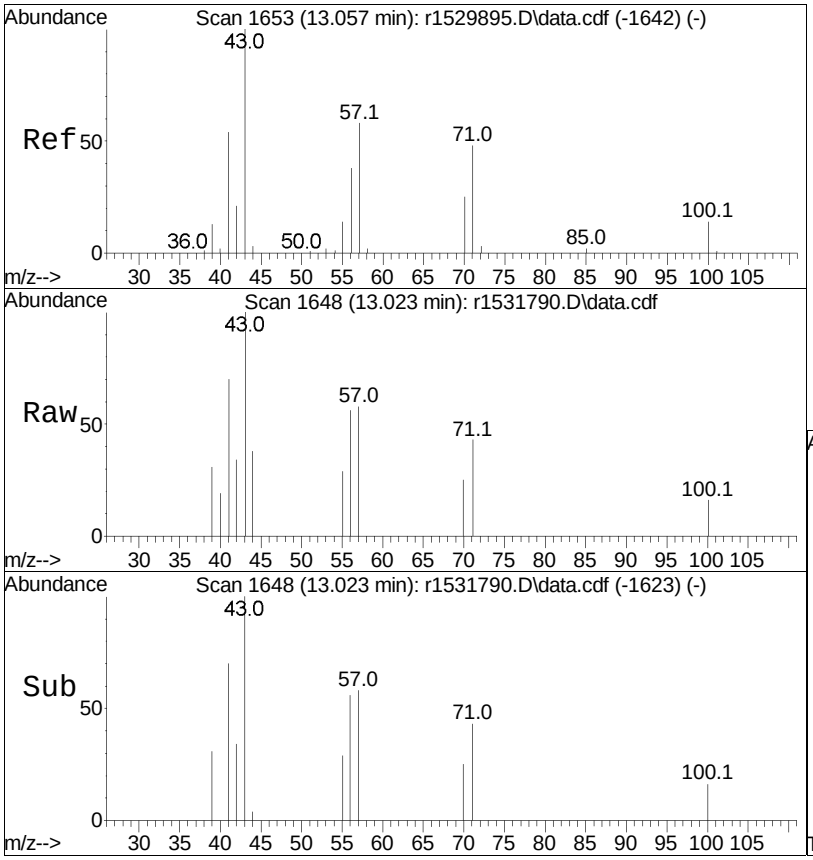


#56
1,2-dichloropropane
Concen: 0.06 ppbV
RT: 12.38 min Scan# 1551
Delta R.T. -0.027 min
Lab File: r1531790.D
Acq: 20 Mar 2022 10:25 PM

Tgt Ion: 63 Resp: 1312

Ion	Ratio	Lower	Upper
63	100		
62	78.1	60.6	91.0
39	35.3	27.8	41.6

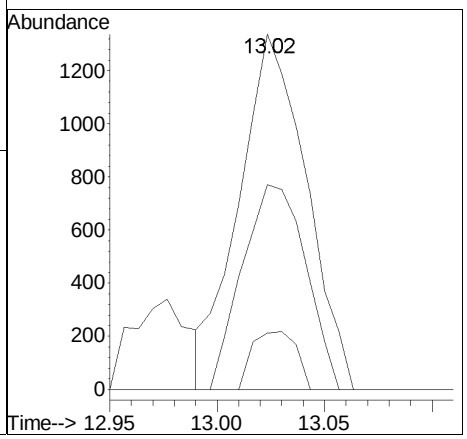


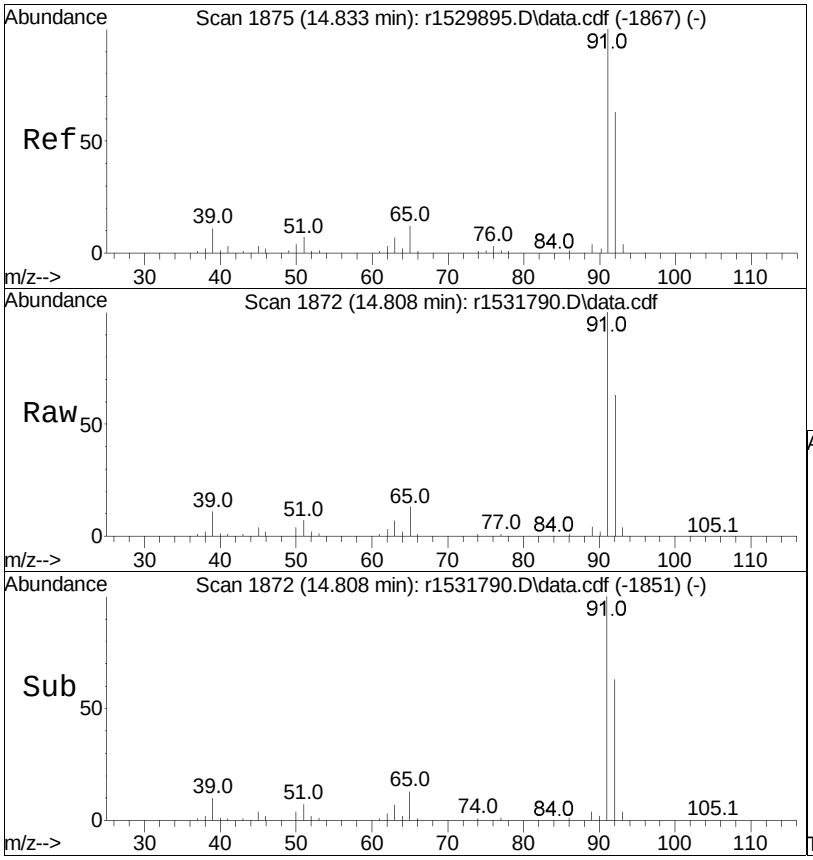


#62
heptane
Concen: 0.07 ppbV
RT: 13.02 min Scan# 1648
Delta R.T. -0.033 min
Lab File: r1531790.D
Acq: 20 Mar 2022 10:25 PM

Tgt Ion: 43 Resp: 2916

Ion	Ratio	Lower	Upper
43	100		
57	57.6	46.5	69.7
100	15.8	11.6	17.4

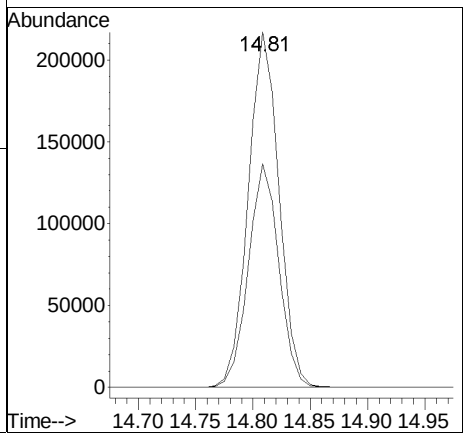


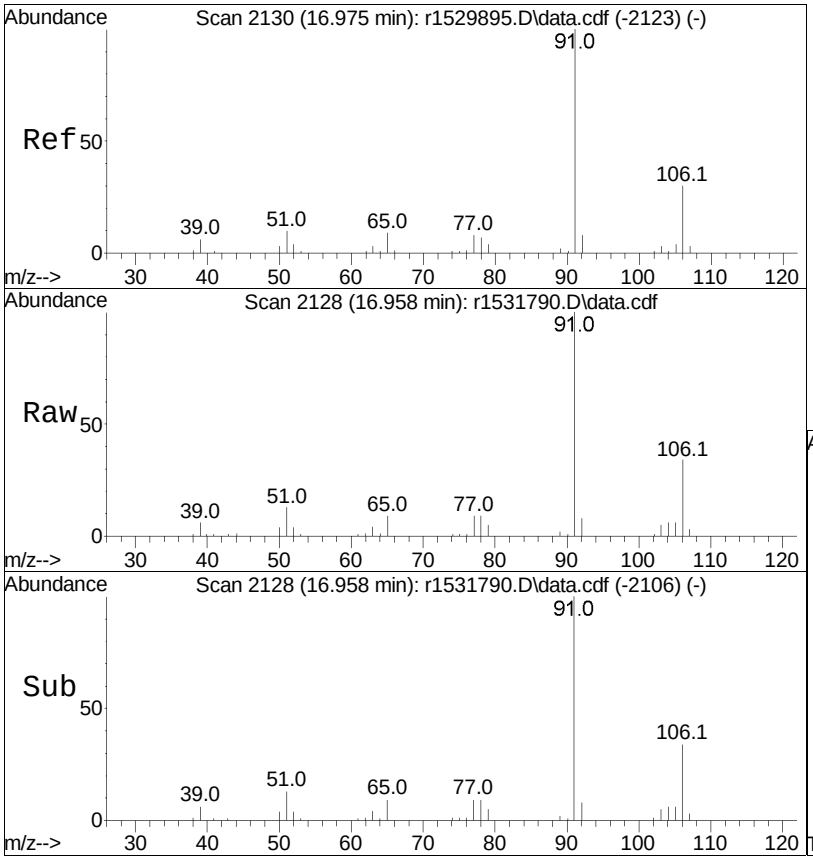


#68
toluene
Concen: 5.44 ppbV
RT: 14.81 min Scan# 1872
Delta R.T. -0.025 min
Lab File: r1531790.D
Acq: 20 Mar 2022 10:25 PM

Tgt Ion: 91 Resp: 405241

Ion	Ratio	Lower	Upper
91	100		
92	62.9	50.3	75.5

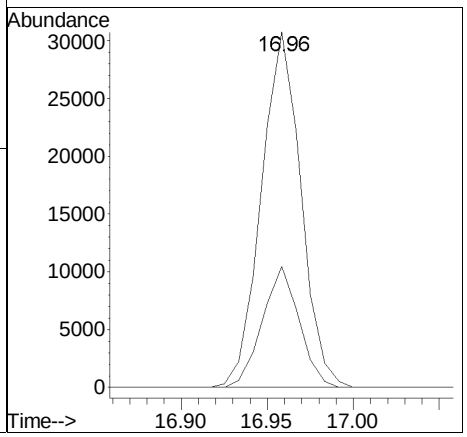


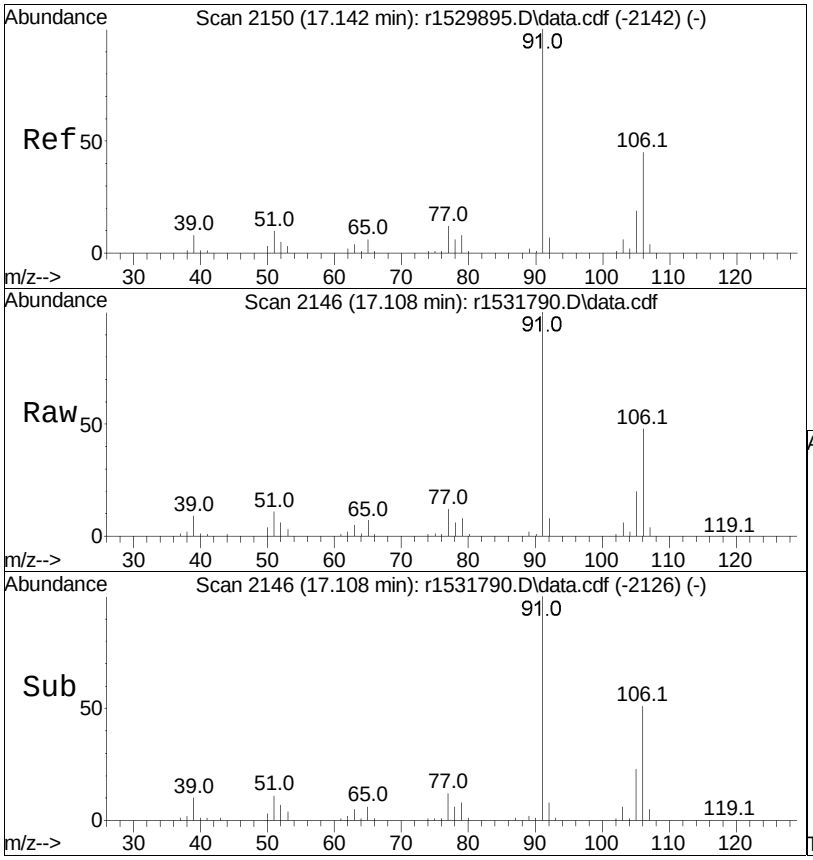


#81
ethylbenzene
Concen: 0.56 ppbV
RT: 16.96 min Scan# 2128
Delta R.T. -0.017 min
Lab File: r1531790.D
Acq: 20 Mar 2022 10:25 PM

Tgt Ion: 91 Resp: 49241

Ion	Ratio	Lower	Upper
91	100		
106	34.1	24.1	36.1

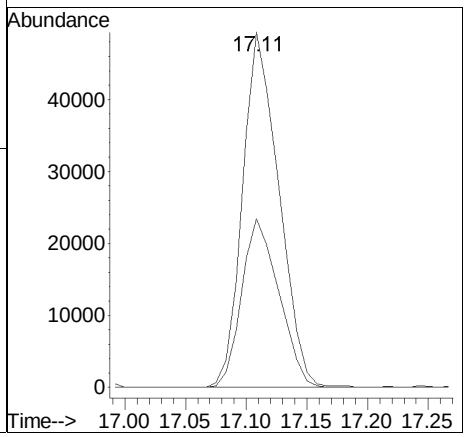


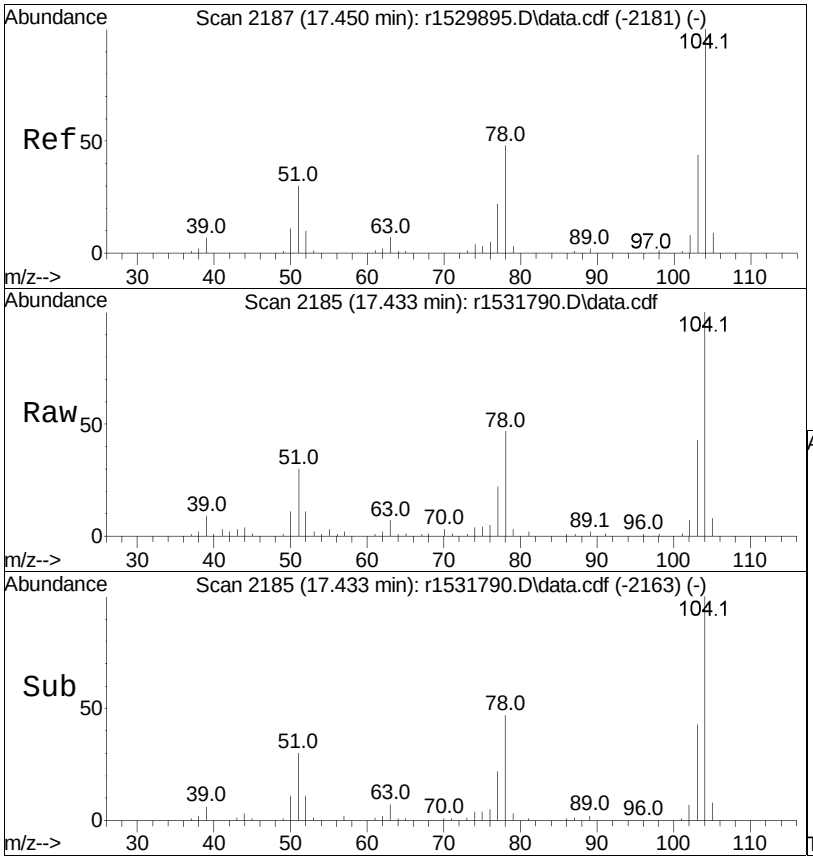


#83
m+p-xylene
Concen: 1.43 ppbV
RT: 17.11 min Scan# 2146
Delta R.T. -0.033 min
Lab File: r1531790.D
Acq: 20 Mar 2022 10:25 PM

Tgt Ion: 91 Resp: 102635

Ion	Ratio	Lower	Upper
91	100		
106	47.6	36.2	54.2

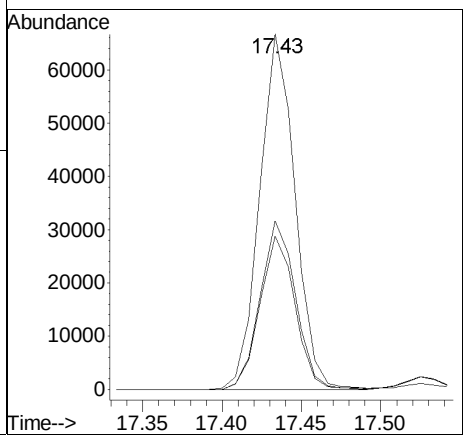


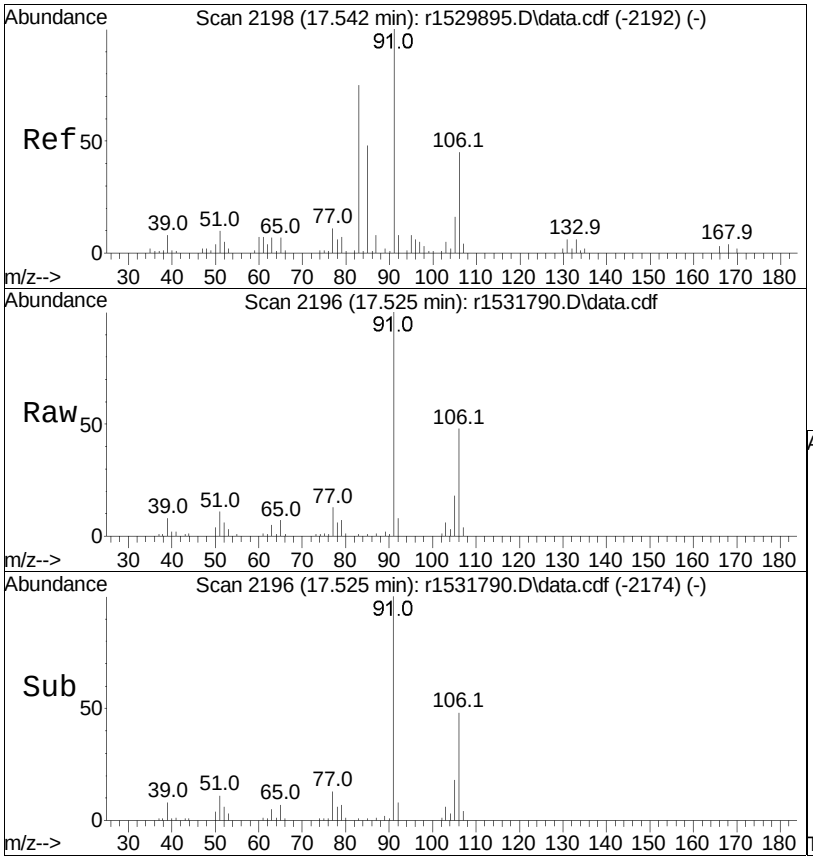


#85
styrene
Concen: 2.04 ppbV
RT: 17.43 min Scan# 2185
Delta R.T. -0.017 min
Lab File: r1531790.D
Acq: 20 Mar 2022 10:25 PM

Tgt Ion:104 Resp: 103384

Ion	Ratio	Lower	Upper
104	100		
103	43.2	35.0	52.6
78	47.4	38.3	57.5

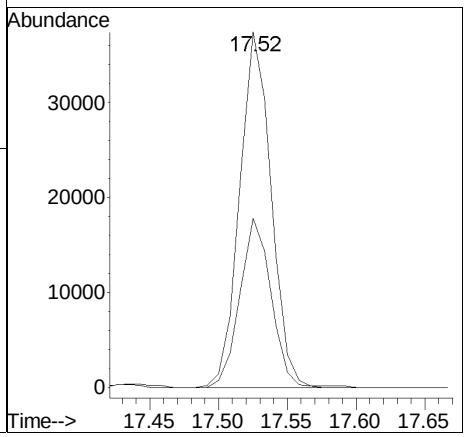


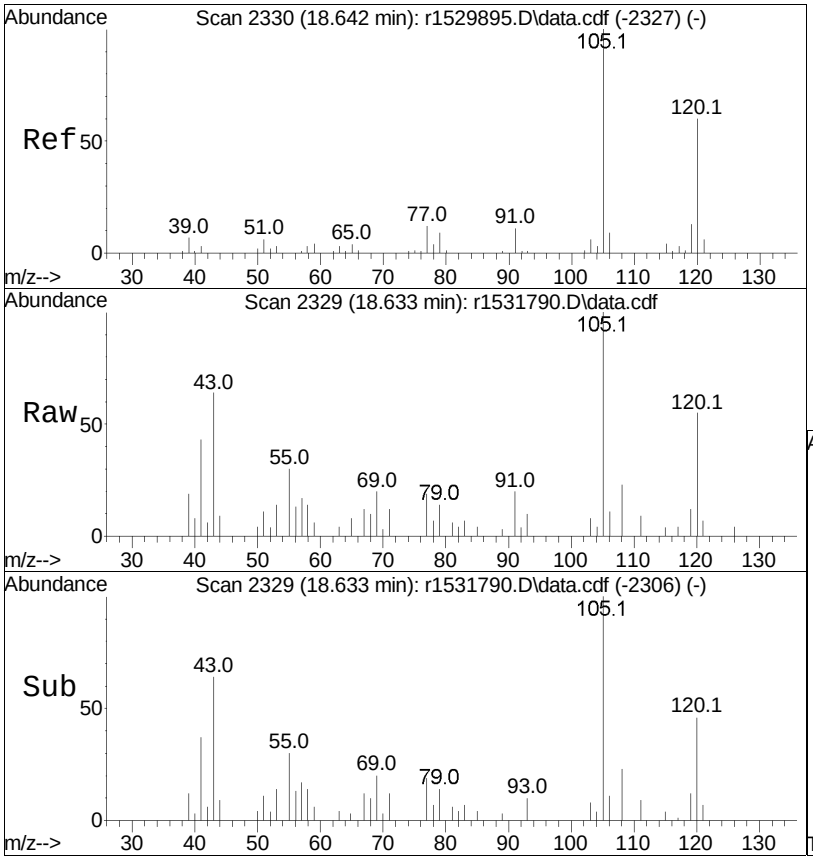


#87
o-xylene
Concen: 0.84 ppbV
RT: 17.52 min Scan# 2196
Delta R.T. -0.017 min
Lab File: r1531790.D
Acq: 20 Mar 2022 10:25 PM

Tgt Ion: 91 Resp: 59670

Ion	Ratio	Lower	Upper
91	100		
106	47.6	35.8	53.8

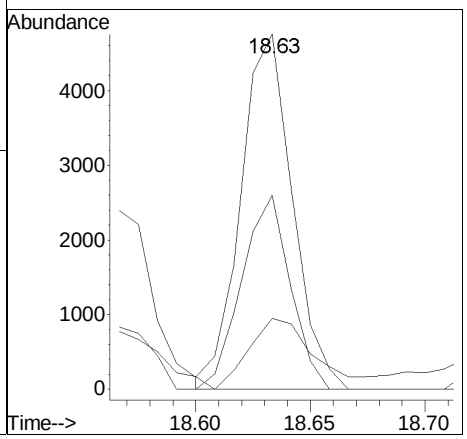


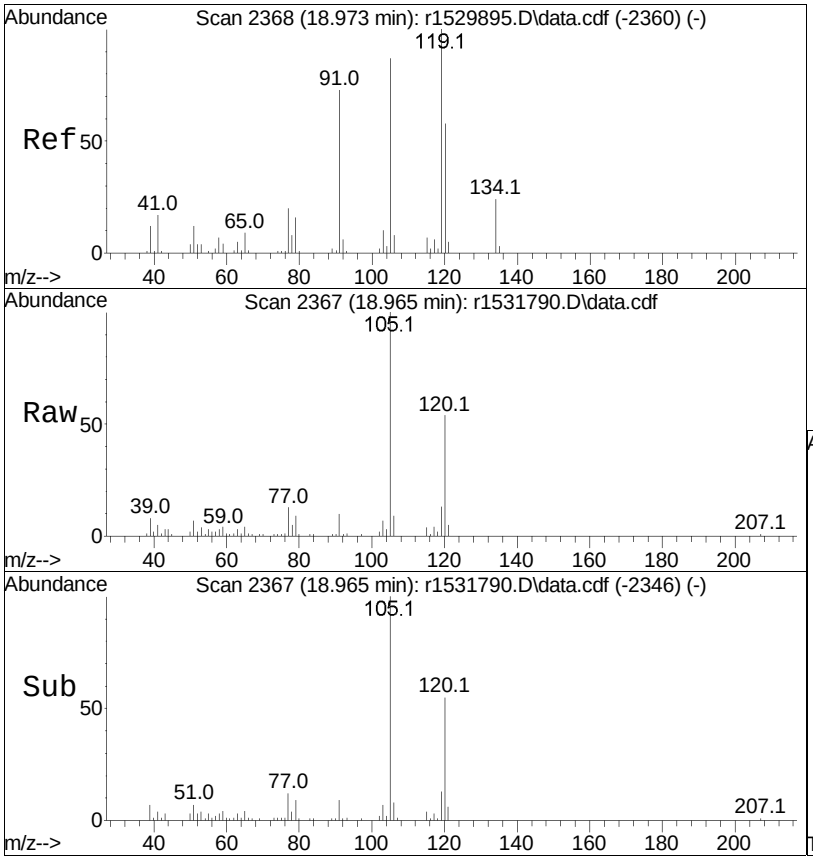


#97
1,3,5-trimethylbenzene
Concen: 0.10 ppbV
RT: 18.63 min Scan# 2329
Delta R.T. -0.008 min
Lab File: r1531790.D
Acq: 20 Mar 2022 10:25 PM

Tgt Ion:105 Resp: 7464

Ion	Ratio	Lower	Upper
105	100		
120	54.6	47.7	71.5
91	20.0	8.5	12.7#

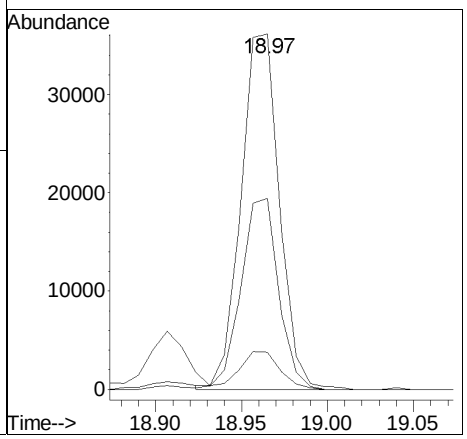




#99
1,2,4-trimethylbenzene
Concen: 0.77 ppbV
RT: 18.97 min Scan# 2367
Delta R.T. -0.008 min
Lab File: r1531790.D
Acq: 20 Mar 2022 10:25 PM

Tgt Ion:105 Resp: 56361

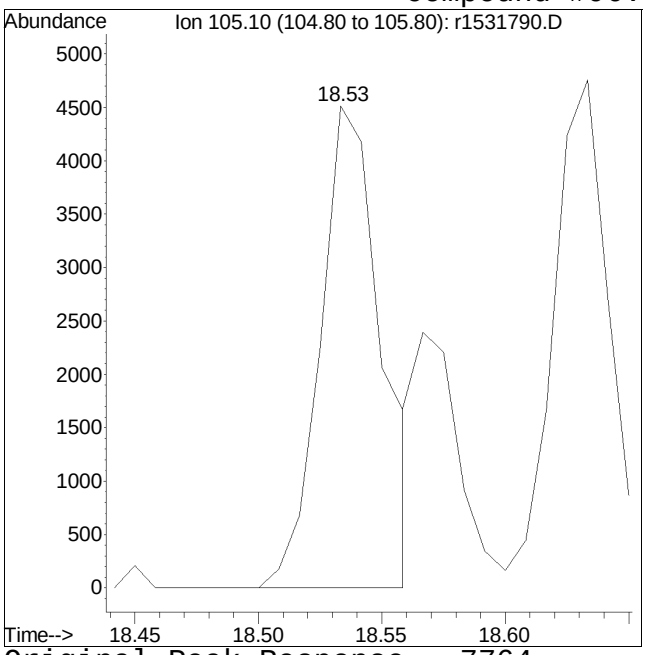
Ion	Ratio	Lower	Upper
105	100		
120	53.7	52.7	79.1
91	10.5	67.2	100.8#

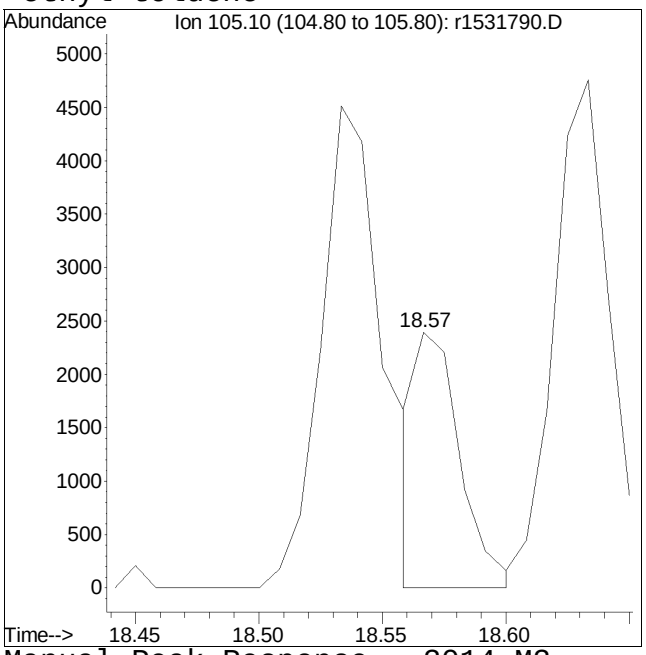


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airlab15\QMethod : TFS15_211222.M
Data File : r1531790.D Operator : AIRLAB15:RY
Date Inj'd : 3/20/2020 0:0: 5 Instrument :
Sample : WG1617728-5,3,250,250 Quant Date : 3/21/2022 8:49 am

Compound #96: 4-ethyl toluene





Original Peak Response = 7764 Manual Peak Response = 3014 M3

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

Calculation of Volatile Organic Compounds in Air

The instrument will calculate the concentration (ppbv). If the sample is diluted (DF), the result is multiplied by the DF to generate the final result.

Result, ppbv = C_s x DF
Where:
C_s = Concentration of sample (ppbv)
DF = Dilution Factor

Calculation of Instrument Dilution Factor

For dilutions, smaller sample volumes (< 250mL) are analyzed. The smallest volume that can be analyzed with accuracy is 10 mL.

Samples that arrive at the laboratory with pressures below -15 inches Hg must be pressurized with zero air to greater than -15 inches Hg. This pressurization results in a dilution factor.

Calculation of Dilution Factor
$DF = V_{cf} / V_{ci}$
Where:
V_{ci} = volume of air in canister prior to pressurization, L
P =

Conversion of ppbv to ug/m^3
ug/m^3 = (ppbv) * MW / 24.47
Where:
24.47 = molar gas constant (g/g-mole)
MW = molecular weight of the compound of interest

Dilution Factor for Pressurization of Subatmospheric Samples: Three Steps

Step 1: Calculate the volume in the canister prior to pressurization (Assume a 2.7 liter canister is used).

Dilution Factor for Pressurization of Subatmospheric Samples: Three Steps

Step 1: Calculate the volume in the canister prior to pressurization (Assume a 2.7 liter canister is used).

$V_{ci} = 2.7 * Pl/14.696$

Step 2: Calculate the volume in the canister after pressurization.

$V_{cf} = 2.7 * PF/14.696$

Step 3: Calculate the dilution factor.

$DF = V_{cf} / V_{ci}$

Where:

V_{ci} = volume of air in canister prior to pressurization, L
PI = pressure reading of canister prior to pressurization (psia)
V_{cf} = volume of air in canister after pressurization, L
PF = pressure reading of canister after pressurization (psia)
DF = dilution factor
14.696 = atmospheric pressure (psia)

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Mar 22 2022, 03:07 pm

Work Group: WG1617728 for Department: 3 GC/MS

Created: 20-MAR-22 Due: Operator: NL

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2212126-01	SG-5	S	TO15-LL	SOIL_VAPOR	DONE	U	0406	0322	S0	Can-2.7
L2213657-01	VE-1	S	TO15-LL	SOIL_VAPOR	DONE	U	0415	0323	2E	Can-2.7
L2213657-02	VE-2-IA	S	TO15-LL	AIR	DONE	U	0415	0323	2E	Can-2.7
L2213657-03	DUP-031622	S	TO15-LL	AIR	DONE	U	0415	0323	2E	Can-2.7
L2213657-04	VE-2	S	TO15-LL	SOIL_VAPOR	DONE	U	0415	0323	2E	Can-2.7
L2213657-05	VE-1-IA	S	TO15-LL	AIR	DONE	U	0415	0323	2E	Can-2.7
WG1617728-1	MS BFB Tune Standard	S	TO15-LL	SOIL_VAPOR	DONE	U				
WG1617728-1	MS BFB Tune Standard	S	TO15-LL	AIR	DONE	U				
WG1617728-2	Continuing Calibrati	S	TO15-LL	SOIL_VAPOR	DONE	U				
WG1617728-2	Continuing Calibrati	S	TO15-LL	AIR	DONE	U				
WG1617728-3	Laboratory Control S	S	TO15-LL	SOIL_VAPOR	DONE	U				
WG1617728-3	Laboratory Control S	S	TO15-LL	AIR	DONE	U				
WG1617728-4	Laboratory Method Bl	S	TO15-LL	SOIL_VAPOR	DONE	U				
WG1617728-4	Laboratory Method Bl	S	TO15-LL	AIR	DONE	U				
WG1617728-5	Duplicate Sample	S	TO15-LL	AIR	DONE	U				
WG1617728-5	Duplicate Sample	S	TO15-LL	SOIL_VAPOR	DONE	U				

Comments:

WG1617728-5 L2213657-03

Alpha Analytical Air Lab
Instrument Run Log

ID:	Airlab15	Internal Standard/Surrogate IDs:	SS20-028 / SS21-026
Date:	12/22/21	Internal Standard/Surrogate Volume:	100 ml
Initials:	AR	Sequence File Name:	211222.S

SIM ICAL# Full Scan ICAL# APH ICAL# 18551

AS Position #	Sample ID	Acquisition Method	Data File ID	Standard ID or Batch ID #, ICAL Ref #	Comment (s)	Product/ sublist	Pass ? Y/ N
1	TA15122201	TO15_SFS.qgm	R1529887.qgd	250 ML	TUNE		NA
5	ITO15-SIMSTD0.02	TO15_SFS.qgm	R1529888.qgd	SS21-036D 50ML	SIM ONLY	DEF	NA
5	ITO15-SIMSTD0.05	TO15_SFS.qgm	R1529889.qgd	SS21-036D 100ML	SIM ONLY	DEF	NA
5	ITO15-SIMSTD0.1	TO15_SFS.qgm	R1529890.qgd	SS21-036D 250ML	SIM ONLY	DEF	NA
6	ITO15-SIMSTD0.2	TO15_SFS.qgm	R1529891.qgd	SS21-036C 50ML		DEF	NA
6	ITO15-SIMSTD0.5	TO15_SFS.qgm	R1529892.qgd	SS21-036C 125ML		DEF	NA
6	ITO15-SIMSTD1.0	TO15_SFS.qgm	R1529893.qgd	SS21-036C 250ML		DEF	NA
7	ITO15-SIMSTD5.0	TO15_SFS.qgm	R1529894.qgd	SS21-036B 125ML		DEF	NA
7	ITO15-SIMSTD010	TO15_SFS.qgm	R1529895.qgd	SS21-036B 250ML		DEF	NA
8	ITO15-SIMSTD020	TO15_SFS.qgm	R1529896.qgd	SS21-036A 50ML		DEF	NA
8	ITO15-SIMSTD050	TO15_SFS.qgm	R1529897.qgd	SS21-036A 125ML		DEF	NA
8	ITO15-LLSTD100	TO15_SFS.qgm	R1529898.qgd	SS21-036A 250ML	LL ONLY	DEF	NA
1	BA15122201	TO15_SFS.qgm	R1529899.qgd	250 ML			NA
1	BA15122202	TO15_SFS.qgm	R1529900.qgd	250 ML			NA
2	CTO15-LLSTD10	TO15_SFS.qgm	R1529901.qgd	SS21-033F 250ML	LL ICV	DEF ICV AP2	NA
2	CTO15-SIMSTD5.0	TO15_SFS.qgm	R1529902.qgd	SS21-033F 250ML	SIM ICV	DEF ICV AP2	NA

Alpha Analytical Air Lab
Instrument Run Log

Date(s) of Initial Calibration: Refer to Initial Calibration Summary Form 6

Date Acquired: see Instrument Performance Check Summary and/or quantitation report.

Sample ID information: L1301234-01,3,250,250 { Lab sample ID, dept #, actual volume analyzed (mL), nominal volume analyzed (mL) }

Dilution Factor: See Form 1 report, or divide nominal volume by actual volume analyzed

Alpha Analytical Air Lab
Instrument Run Log

ID:	Airlab15	Internal Standard/Surrogate IDs:	SS20-028 / SS21-026
Date:	03/20/22	Internal Standard/Surrogate Volume:	100 ml
Initials:	NL	Sequence File Name:	220320.S

AS Position #	Sample ID	Acquisition Method	Data File ID	Standard ID or Batch ID #, ICAL Ref #	Comment (s)	Product/ sublist	Pass? Y/ N
1	TA15032001	TO15_SFS.qgm	R1531776.qgd	250ml	TUNE		NA
2	CA15032001	TO15_SFS.qgm	R1531777.qgd	250 mL SS21-036F	NJ CC FAILS		NA
3	CTO15-LLSTD10.0	TO15_SFS.qgm	R1531778.qgd	250 mL SS22-005E	LL LCS		NA
3	CTO15-SIMSTD5.0	TO15_SFS.qgm	R1531779.qgd	125 mL SS22-005E	SIM LCS		NA
1	BA15032001	TO15_SFS.qgm	R1531780.qgd	250ml	LL BLANK		NA
1	BA15032002	TO15_SFS.qgm	R1531781.qgd	250ml	SIM BLANK		NA
1	L2212319-01,3,250,250	TO15_SFS.qgm	R1531782.qgd	WG1617729,ICAL18600		MCP	Y
2	L2212319-02,3,250,250	TO15_SFS.qgm	R1531783.qgd	WG1617729,ICAL18600		MCP	Y
3	L2212324-01,3,250,250	TO15_SFS.qgm	R1531784.qgd	WG1617729,ICAL18600		MCP	Y
4	L2212232-01,3,250,250	TO15_SFS.qgm	R1531785.qgd	WG1617727,ICAL18601		9CVOCS VIA SIM	Y
5	L2212232-02,3,250,250	TO15_SFS.qgm	R1531786.qgd	WG1617727,ICAL18601		9CVOCS VIA SIM	Y
6	L2212232-03,3,250,250	TO15_SFS.qgm	R1531787.qgd	WG1617727,ICAL18601		9CVOCS VIA SIM	Y
7	L2213657-02,3,250,250	TO15_SFS.qgm	R1531788.qgd	WG1617728,ICAL18600		NY-7SIM	Y
8	L2213657-03,3,250,250	TO15_SFS.qgm	R1531789.qgd	WG1617728,ICAL18600		NY-7SIM	Y
8	L2213657-03DUP,3,250,250	TO15_SFS.qgm	R1531790.qgd	WG1617728,ICAL18600	LL/SIM (DUMMY) DUP	NY-7SIM	Y
9	L2213657-05,3,250,250	TO15_SFS.qgm	R1531791.qgd	WG1617728,ICAL18600	ETOH OVERCAL	NY-7SIM	Y
10	L2213657-01,3,250,250	TO15_SFS.qgm	R1531792.qgd	WG1617728,ICAL18600		NY	Y
11	L2213657-04D,3,189.9,250	TO15_SFS.qgm	R1531793.qgd	WG1617728,ICAL18600	905	NY	Y
12	L2212006-01,3,250,250	TO15_SFS.qgm	R1531794.qgd	WG1617729,ICAL18600		MCP	Y
13	L2212006-02,3,250,250	TO15_SFS.qgm	R1531795.qgd	WG1617729,ICAL18600		MCP	Y
14	L2212126-01,3,250,250	TO15_SFS.qgm	R1531796.qgd	WG1617728,ICAL18600		NY	Y
15	L2212329-01D,3,55,250	TO15_SFS.qgm	R1531797.qgd	WG1617729,ICAL18600	NT	MCP	Y

Alpha Analytical Air Lab
Instrument Run Log

16	L2212329-02D,3,105,250	TO15_SFS.qgm	R1531798.qgd	WG1617729,ICAL18600	NT	MCP	Y
9	L2213657-05D,3,50,250	TO15_SFS.qgm	R1531799.qgd	WG1617728,ICAL18600		ETOH	Y

Date(s) of Initial Calibration: Refer to Initial Calibration Summary Form 6

Date Acquired: see Instrument Performance Check Summary and/or quantitation report.

Sample ID information: L1301234-01,3,250,250 { Lab sample ID, dept #, actual volume analyzed (mL), nominal volume analyzed (mL) }

Dilution Factor: See Form 1 report, or divide nominal volume by actual volume analyzed

Alpha Analytical, Inc.
Canister Dilution Worksheet

	NJDEP Required Information							Pressurization Dilution				Can Dilution				Instrument Dilution				
Sample ID	Can size, L	$P_{1,}$ in Hg	$P_{1,}$ atm	$V_{1,}$ L	$P_{2,}$ in Hg	$P_{2,}$ atm	$V_{2,}$ L	$P_{1,}$ psia	$P_{2,}$ psia	Dilution factor	Gas Used*	Volume injected, mL	Final Pressure, psia	Volume of Dilution Gas in Can, L	Can dilution factor	Volume of Bag or Can Analyzed, mL	Instrument Dilution Factor	Final Dilution Factor **	Final Volume Injected, mL ***	Analyst Initials
L2213657-04D	2.7	-13.82	0.54	1.45	-8.71	0.71	1.91	7.9	10.4	1.32	N2	1000	14.7	1.00	1.00	250	1.00	1.32	189.90	BB

*N2 = Nitrogen and H2= Hydrogen

** Dilution factor on this spreadsheet may differ from reported dilution factor (calculated by LIMs) due to different rounding rules

*** Reported to 2 decimal places unless 0.01 or less; then 3 decimal places are reported

Analyst data input fields

Analyst Comments:

in Hg = ((psia/14.67)*29.94)-29.94 atm =psia/14.67 psig=psia - 14.67 psia = dilution instrument reading

Form# 117-05
03/21/2022 15:35:26

GC/MS VOA
Air Analysis
Selective Ion Monitoring

Volatiles QC Summary

Lab Duplicate Sample Summary
Form 3
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Client Sample ID	: DUP-031622	**Matrix**	: AIR
Lab Sample ID	: L2213657-03	**Analysis Date**	: 03/20/22 21:45
Lab File ID	: R1531789_EV2	**DUP File ID**	: r1531790_Ev2
Dup Sample ID	: WG1617727-5	**DUP Analysis Date**	: 03/20/22 22:25

Parameter	Sample Concentration (ppbV)	Duplicate Concentration (ppbV)	RPD	RPD Limit
Vinyl chloride	ND	ND	NC	25
1,1-Dichloroethene	ND	ND	NC	25
cis-1,2-Dichloroethene	ND	ND	NC	25
1,1,1-Trichloroethane	ND	ND	NC	25
Carbon tetrachloride	0.074	0.071	4	25
Trichloroethene	0.024	0.024	0	25
Tetrachloroethene	0.165	0.162	2	25

Laboratory Control Sample Summary
Form 3
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Matrix	: AIR		
LCS Sample ID	: WG1617727-3 **Analysis Date** : 03/20/22 13:57	**File ID**	: r1531779_Ev2
LCSD Sample ID	: **Analysis Date** :	**File ID**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ppbV)	Found (ppbV)	%R	True (ppbV)	Found (ppbV)	%R	RPD	Recovery Limits	RPD Limit
Vinyl chloride	5	3.93	79				-	70-130	25
1,1-Dichloroethene	5	4.15	83				-	70-130	25
cis-1,2-Dichloroethene	5	3.90	78				-	70-130	25
1,1,1-Trichloroethane	5	4.38	88				-	70-130	25
Carbon tetrachloride	5	4.28	86				-	70-130	25
Trichloroethene	5	4.24	85				-	70-130	25
Tetrachloroethene	5	4.17	83				-	70-130	25

Method Blank Summary
Form 4
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Lab Sample ID	: WG1617727-4	**Lab File ID**	: r1531781_Ev2
Instrument ID	: AIRLAB15		
Matrix	: AIR	**Analysis Date**	: 03/20/22 15:59

Client Sample No.	Lab Sample ID	Analysis Date
WG1617727-3LCS	WG1617727-3	03/20/22 13:57
VE-2-IA	L2213657-02	03/20/22 21:06
DUP-031622	L2213657-03	03/20/22 21:45
DUP-031622DUP	WG1617727-5	03/20/22 22:25
VE-1-IA	L2213657-05	03/20/22 23:04

Instrument Performance Check (Tune) Summary
Form 5
Air Volatiles
Bromofluorobenzene (BFB)

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Instrument ID	: AIRLAB15	**Analysis Date**	: 12/22/21 03:37
Tune Standard	: WG1587796-1	**Tune File ID**	: r1529887_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	8.0 - 40.0% of mass 95	17.4
75	30.0 - 66.0% of mass 95	39.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.5 (.7)1
174	50.0 - 120.0% of mass 95	64.3
175	4.0 - 9.0% of mass 174	4.6 (7.2)1
176	93.0 - 101% of mass 174	62.5 (97.2)1
177	5.0 - 9.0% of mass 176	4.1 (6.6)2

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

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

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STD0.02	R1517044-1	R1529888_EV2	12/22/21 04:15
STD0.05	R1517044-2	R1529889_EV2	12/22/21 04:54
STD0.1	R1517044-4	R1529890_EV2	12/22/21 05:35
STD0.2	R1517044-3	R1529891_EV2	12/22/21 06:12
STD0.5	R1517044-5	R1529892_EV2	12/22/21 06:51
STD1.0	R1517044-6	R1529893_EV2	12/22/21 07:32
STD5.0	R1517044-7	R1529894_EV2	12/22/21 08:11
STD010	R1517044-8	R1529895_EV2	12/22/21 08:52
STD020	R1517044-10	R1529896_EV2	12/22/21 09:29
STD050	R1517044-9	R1529897_EV2	12/22/21 10:08
ICV QUANT	R1517044-11	R1529902_EV2	12/22/21 15:07

Instrument Performance Check (Tune) Summary
Form 5
Air Volatiles
Bromofluorobenzene (BFB)

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Instrument ID	: AIRLAB15	**Analysis Date**	: 03/20/22 11:40
Tune Standard	: WG1617727-1	**Tune File ID**	: r1531776_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	8.0 - 40.0% of mass 95	17.6
75	30.0 - 66.0% of mass 95	38.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.4 (.7)1
174	50.0 - 120.0% of mass 95	57.7
175	4.0 - 9.0% of mass 174	3.9 (6.8)1
176	93.0 - 101% of mass 174	55 (95.3)1
177	5.0 - 9.0% of mass 176	3.4 (6.3)2

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

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

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1617727-2CCAL	WG1617727-2	R1531779_EV2	03/20/22 13:57
WG1617727-3LCS	WG1617727-3	R1531779_EV2	03/20/22 13:57
WG1617727-4BLANK	WG1617727-4	R1531781_EV2	03/20/22 15:59
VE-2-IA	L2213657-02	R1531788_EV2	03/20/22 21:06
DUP-031622	L2213657-03	R1531789_EV2	03/20/22 21:45
WG1617727-5DUP	WG1617727-5	R1531790_EV2	03/20/22 22:25
VE-1-IA	L2213657-05	R1531791_EV2	03/20/22 23:04

Internal Standard Area and RT Summary
Form 8a
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Instrument ID	: AIRLAB15	**Analysis Date**	: 03/20/22 13:57:00
Sample No	: WG1617727-2	**Lab File ID**	: R1531779_EV2

	Bromochloromethane		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	RT	Area	RT	Area	RT
WG1617727-2	238569	9.57	552111	11.86	125385	16.57
Upper Limit	333997	9.90	772955	12.19	175539	16.90
Lower Limit	143141	9.24	331267	11.53	75231	16.24
Sample ID						
WG1617727-3 LCS	238569	9.57	552111	11.86	125385	16.57
WG1617727-4 BLANK	241611	9.58	524044	11.86	119393	16.57
VE-2-IA	236764	9.57	531351	11.86	122893	16.57
DUP-031622	238934	9.57	532568	11.86	124471	16.57
DUP-031622 DUP	236396	9.57	532046	11.86	123487	16.57
VE-1-IA	236651	9.57	525042	11.85	122944	16.57

Area Upper Limit = +40% of internal standard area

Area Lower Limit = - 40% of internal standard area

RT Upper Limit = +0.33 minutes of internal standard RT

RT Lower Limit = -0.33 minutes of internal standard RT

* Values outside of QC limits

Date Created: 02/18/22
Created By: Jason Hebert
File: PM11916-1
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Volatile Organics in Air by TO-15 SIM (AIR)

Holding Time: 30 days
Container/Sample Preservation: 1 - Canister - 2.7 Liter

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
1,1,1-Trichloroethane	71-55-6	0.02	0.0083	ppbV	70-130	25		25	25			
1,1,1,2-Tetrachloroethane	630-20-6	0.02	0.0053	ppbV	70-130	25		25	25			
1,1,2,2-Tetrachloroethane	79-34-5	0.02	0.0056	ppbV	70-130	25		25	25			
1,1,2-Trichloroethane	79-00-5	0.02	0.0058	ppbV	70-130	25		25	25			
1,1-Dichloroethane	75-34-3	0.02	0.0073	ppbV	70-130	25		25	25			
1,1-Dichloroethene	75-35-4	0.02	0.0084	ppbV	70-130	25		25	25			
1,2,4-Trimethylbenzene	95-63-6	0.02	0.0043	ppbV	70-130	25		25	25			
1,2-Dibromoethane	106-93-4	0.02	0.008	ppbV	70-130	25		25	25			
1,2-Dichlorobenzene	95-50-1	0.02	0.0098	ppbV	70-130	25		25	25			
1,2-Dichloroethane	107-06-2	0.02	0.0097	ppbV	70-130	25		25	25			
1,2-Dichloropropane	78-87-5	0.02	0.0054	ppbV	70-130	25		25	25			
1,3,5-Trimethylbenzene	108-67-8	0.02	0.0056	ppbV	70-130	25		25	25			
1,3-Butadiene	106-99-0	0.02	0.0097	ppbV	70-130	25		25	25			
1,3-Dichlorobenzene	541-73-1	0.02	0.0056	ppbV	70-130	25		25	25			
1,4-Dichlorobenzene	106-46-7	0.02	0.0053	ppbV	70-130	25		25	25			
1,4-Dioxane	123-91-1	0.1	0.032	ppbV	70-130	25		25	25			
2,2,4-Trimethylpentane	540-84-1	0.2	0.0063	ppbV	70-130	25		25	25			
2-Hexanone	591-78-6	0.2	0.015	ppbV	70-130	25		25	25			
3-Chloropropene	107-05-1	0.2	0.0067	ppbV	70-130	25		25	25			
4-Ethyltoluene	622-96-8	0.02	0.0042	ppbV	70-130	25		25	25			
Benzene	71-43-2	0.1	0.005	ppbV	70-130	25		25	25			
Benzyl chloride	100-44-7	0.1	0.0072	ppbV	70-130	25		25	25			
Bromodichloromethane	75-27-4	0.02	0.0067	ppbV	70-130	25		25	25			
Bromoform	75-25-2	0.02	0.0065	ppbV	70-130	25		25	25			
Bromomethane	74-83-9	0.02	0.0085	ppbV	70-130	25		25	25			
Carbon disulfide	75-15-0	0.2	0.0138	ppbV	70-130	25		25	25			
Carbon tetrachloride	56-23-5	0.02	0.01	ppbV	70-130	25		25	25			
Chlorobenzene	108-90-7	0.1	0.0064	ppbV	70-130	25		25	25			
Chloroethane	75-00-3	0.1	0.0135	ppbV	70-130	25		25	25			
Chloroform	67-66-3	0.02	0.0089	ppbV	70-130	25		25	25			
Chloromethane	74-87-3	0.2	0.024	ppbV	70-130	25		25	25			
cis-1,2-Dichloroethene	156-59-2	0.02	0.0096	ppbV	70-130	25		25	25			
trans-1,2-Dichloroethene	156-60-5	0.02	0.0076	ppbV	70-130	25		25	25			
1,2-Dichloroethene (total)	540-59-0	0.02	0.0076	ppbV				25	25			
cis-1,3-Dichloropropene	10061-01-5	0.02	0.007	ppbV	70-130	25		25	25			
1,3-Dichloropropene, Total	542-75-6	0.02	0.007	ppbV				25	25			
Cyclohexane	110-82-7	0.2	0.0064	ppbV	70-130	25		25	25			
Dibromochloromethane	124-48-1	0.02	0.0086	ppbV	70-130	25		25	25			
Dichlorodifluoromethane	75-71-8	0.2	0.018	ppbV	70-130	25		25	25			
Ethyl Alcohol	64-17-5	5	0.329	ppbV	40-160	25		25	25			
Ethyl Acetate	141-78-6	0.5	0.0307	ppbV	70-130	25		25	25			
Ethylbenzene	100-41-4	0.02	0.0049	ppbV	70-130	25		25	25			

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

Date Created: 02/18/22
Created By: Jason Hebert
File: PM11916-1
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Volatile Organics in Air by TO-15 SIM (AIR)

Holding Time: 30 days
Container/Sample Preservation: 1 - Canister - 2.7 Liter

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	0.05	0.0088	ppbV	70-130	25		25	25			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	0.05	0.0072	ppbV	70-130	25		25	25			
Methylene chloride	75-09-2	0.5	0.0131	ppbV	70-130	25		25	25			
Methyl tert butyl ether	1634-04-4	0.2	0.0083	ppbV	70-130	25		25	25			
Naphthalene	91-20-3	0.05	0.035	ppbV	70-130	25		25	25			
p/m-Xylene	179601-23-1	0.04	0.019	ppbV	70-130	25		25	25			
o-Xylene	95-47-6	0.02	0.0067	ppbV	70-130	25		25	25			
Heptane	142-82-5	0.2	0.0041	ppbV	70-130	25		25	25			
n-Hexane	110-54-3	0.2	0.0048	ppbV	70-130	25		25	25			
Propylene	115-07-1	0.5	0.0465	ppbV	70-130	25		25	25			
Styrene	100-42-5	0.02	0.0049	ppbV	70-130	25		25	25			
Tetrachloroethene	127-18-4	0.02	0.0078	ppbV	70-130	25		25	25			
Tetrahydrofuran	109-99-9	0.5	0.0066	ppbV	70-130	25		25	25			
Toluene	108-88-3	0.1	0.014	ppbV	70-130	25		25	25			
trans-1,3-Dichloropropene	10061-02-6	0.02	0.007	ppbV	70-130	25		25	25			
Trichloroethene	79-01-6	0.02	0.0062	ppbV	70-130	25		25	25			
1,2,4-Trichlorobenzene	120-82-1	0.05	0.03	ppbV	70-130	25		25	25			
Trichlorofluoromethane	75-69-4	0.05	0.0095	ppbV	70-130	25		25	25			
Vinyl acetate	108-05-4	1	0.0111	ppbV	70-130	25		25	25			
Vinyl bromide	593-60-2	0.2	0.0099	ppbV	70-130	25		25	25			
Hexachlorobutadiene	87-68-3	0.05	0.017	ppbV	70-130	25		25	25			
iso-Propyl Alcohol	67-63-0	0.5	0.179	ppbV	40-160	25		25	25			
Vinyl chloride	75-01-4	0.02	0.0072	ppbV	70-130	25		25	25			
Acrylonitrile	107-13-1	0.5	0.0245	ppbV	70-130	25		25	25			
n-Butylbenzene	104-51-8	0.2	0.0048	ppbV	70-130	25		25	25			
sec-Butylbenzene	135-98-8	0.2	0.0032	ppbV	70-130	25		25	25			
Isopropylbenzene	98-82-8	0.2	0.0053	ppbV	70-130	25		25	25			
Xylene (Total)	1330-20-7	0.02	0.0067	ppbV				25	25			
p-Isopropyltoluene	99-87-6	0.2	0.0045	ppbV	70-130	25		25	25			
Acetone	67-64-1	1	0.299	ppbV	40-160	25		25	25			
2-Butanone	78-93-3	0.5	0.027	ppbV	70-130	25		25	25			
4-Methyl-2-pentanone	108-10-1	0.5	0.012	ppbV	70-130	25		25	25			
1,2,3-Trichlorobenzene	87-61-6	0.05	0.0134	ppbV	70-130	25		25	25			
Acrolein	107-02-8	0.05	0.0387	ppbV	60-113	25		25	25			
1,2-Dichloroethane-d4	*17060-07-0*									*70-130*		
Toluene-d8	*2037-26-5*									*70-130*		
Bromofluorobenzene	*460-00-4*									*70-130*		

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

Volatiles Sample Data

Results Summary
Form 1
Volatile Organics in Air by SIM

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Lab ID	: L2213657-02	**Date Collected**	: 03/16/22 12:13
Client ID	: VE-2-IA	**Date Received**	: 03/16/22
Sample Location	: YONKERS, NY	**Date Analyzed**	: 03/20/22 21:06
Sample Matrix	: AIR	**Dilution Factor**	: 1
Analytical Method	: 48,TO-15-SIM	**Analyst**	: RY
Lab File ID	: R1531788_EV2	**Instrument ID**	: AIRLAB15
Sample Amount	: 250 ml	**GC Column**	: RTX-1

		ppbV			ug/m3			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
56-23-5	Carbon tetrachloride	0.071	0.020	--	0.447	0.126	--	
79-01-6	Trichloroethene	0.024	0.020	--	0.129	0.107	--	
127-18-4	Tetrachloroethene	0.163	0.020	--	1.11	0.136	--	

Results Summary
Form 1
Volatile Organics in Air by SIM

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Lab ID	: L2213657-03	**Date Collected**	: 03/16/22 12:14
Client ID	: DUP-031622	**Date Received**	: 03/16/22
Sample Location	: YONKERS, NY	**Date Analyzed**	: 03/20/22 21:45
Sample Matrix	: AIR	**Dilution Factor**	: 1
Analytical Method	: 48,TO-15-SIM	**Analyst**	: RY
Lab File ID	: R1531789_EV2	**Instrument ID**	: AIRLAB15
Sample Amount	: 250 ml	**GC Column**	: RTX-1

		ppbV			ug/m3			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
56-23-5	Carbon tetrachloride	0.074	0.020	--	0.465	0.126	--	
79-01-6	Trichloroethene	0.024	0.020	--	0.129	0.107	--	
127-18-4	Tetrachloroethene	0.165	0.020	--	1.12	0.136	--	

Results Summary
Form 1
Volatile Organics in Air by SIM

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Lab ID	: L2213657-05	**Date Collected**	: 03/16/22 13:01
Client ID	: VE-1-IA	**Date Received**	: 03/16/22
Sample Location	: YONKERS, NY	**Date Analyzed**	: 03/20/22 23:04
Sample Matrix	: AIR	**Dilution Factor**	: 1
Analytical Method	: 48,TO-15-SIM	**Analyst**	: RY
Lab File ID	: R1531791_EV2	**Instrument ID**	: AIRLAB15
Sample Amount	: 250 ml	**GC Column**	: RTX-1

		ppbV			ug/m3			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	0.041	0.020	--	0.163	0.079	--	
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
56-23-5	Carbon tetrachloride	0.072	0.020	--	0.453	0.126	--	
79-01-6	Trichloroethene	0.031	0.020	--	0.167	0.107	--	
127-18-4	Tetrachloroethene	3.19	0.020	--	21.6	0.136	--	

Results Summary
Form 1
Volatile Organics in Air by SIM

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Lab ID	: WG1617727-4	**Date Collected**	: NA
Client ID	: WG1617727-4BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 03/20/22 15:59
Sample Matrix	: AIR	**Dilution Factor**	: 1
Analytical Method	: 48,TO-15-SIM	**Analyst**	: RY
Lab File ID	: R1531781_EV2	**Instrument ID**	: AIRLAB15
Sample Amount	: 250 ml	**GC Column**	: RTX-1

		ppbV			ug/m3			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
56-23-5	Carbon tetrachloride	ND	0.020	--	ND	0.126	--	U
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	ND	0.020	--	ND	0.136	--	U

Results Summary
Form 1
Volatile Organics in Air by SIM

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Lab ID	: WG1617727-5	**Date Collected**	: 03/16/22 12:14
Client ID	: DUP-031622DUP	**Date Received**	: 03/16/22
Sample Location	:	**Date Analyzed**	: 03/20/22 22:25
Sample Matrix	: AIR	**Dilution Factor**	: 1
Analytical Method	: 48,TO-15-SIM	**Analyst**	: RY
Lab File ID	: R1531790_EV2	**Instrument ID**	: AIRLAB15
Sample Amount	: 250 ml	**GC Column**	: RTX-1

		ppbV			ug/m3			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
56-23-5	Carbon tetrachloride	0.071	0.020	--	0.447	0.126	--	
79-01-6	Trichloroethene	0.024	0.020	--	0.129	0.107	--	
127-18-4	Tetrachloroethene	0.162	0.020	--	1.10	0.136	--	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320SIM\
Data File : r1531788_Ev2.D
Acq On : 20 Mar 2022 9:06 PM
Operator : AIRLAB15:RY
Sample : L2213657-02,3,250,250
Misc : WG1617727,ICAL18601
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 15:19:54 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320SIM\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Dec 27 10:35:25 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320SIM\r1531779_Ev2.D
Sub List : 7-NY-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.57	49	236764	10.000	ppbV	-0.03
Standard Area = 238569			Recovery =		99.24%	
33) 1,4-difluorobenzene	11.86	114	531351	10.000	ppbV	-0.03
Standard Area = 552111			Recovery =		96.24%	
51) chlorobenzene-D5	16.57	54	122893	10.000	ppbV	-0.02
Standard Area = 125385			Recovery =		98.01%	
System Monitoring Compounds						
Target Compounds						Qvalue
6) vinyl chloride	0.00		0	N.D.		
17) 1,1-dichloroethene	0.00		0	N.D.	d	
28) cis-1,2-dichloroethene	0.00		0	N.D.		
36) 1,1,1-trichloroethane	10.89		0	N.D.		
38) carbon tetrachloride	11.59	117	1022	0.071	ppbV #	93
44) trichloroethene	12.66	130	353	0.024	ppbV	92
57) tetrachloroethene	15.97	166	2544	0.163	ppbV	97

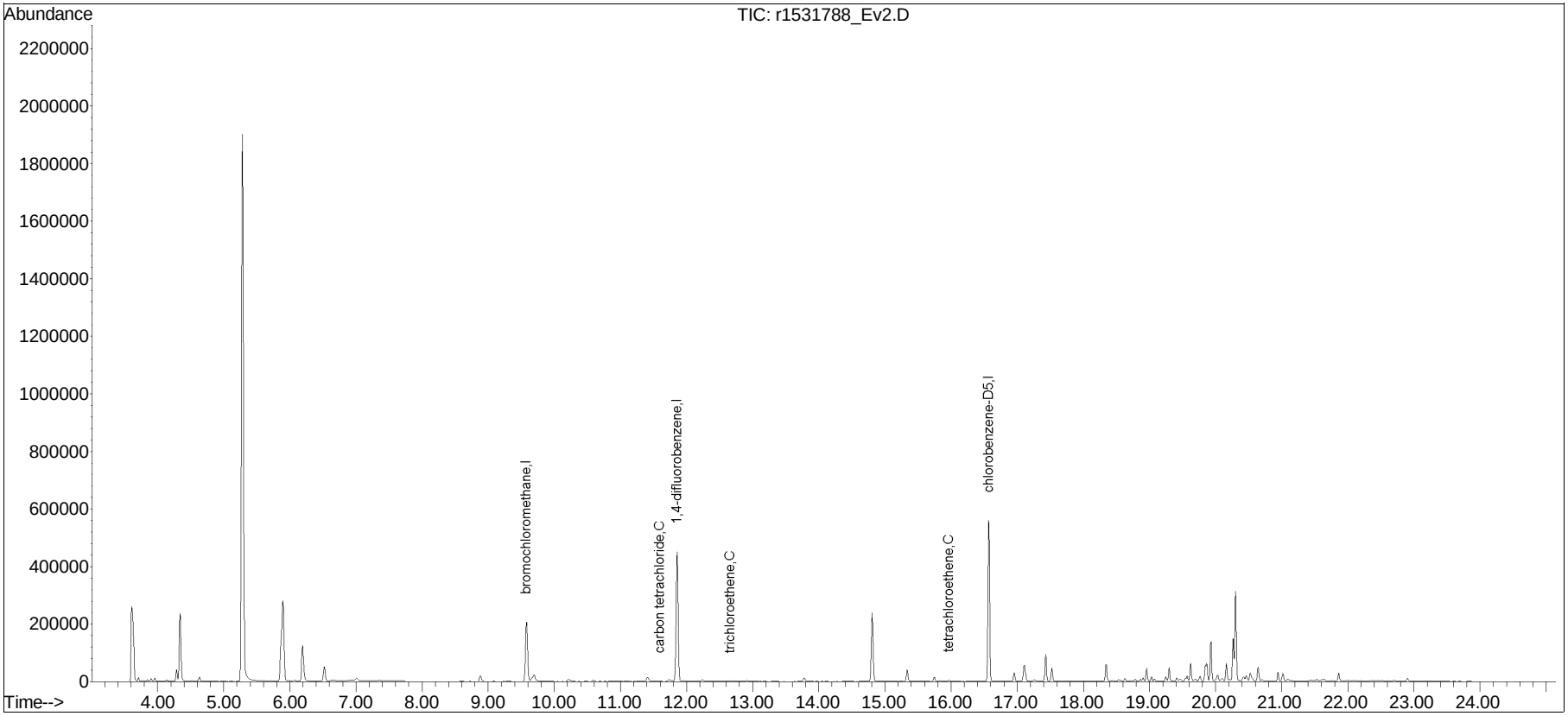
(#) = qualifier out of range (m) = manual integration (+) = signals summed

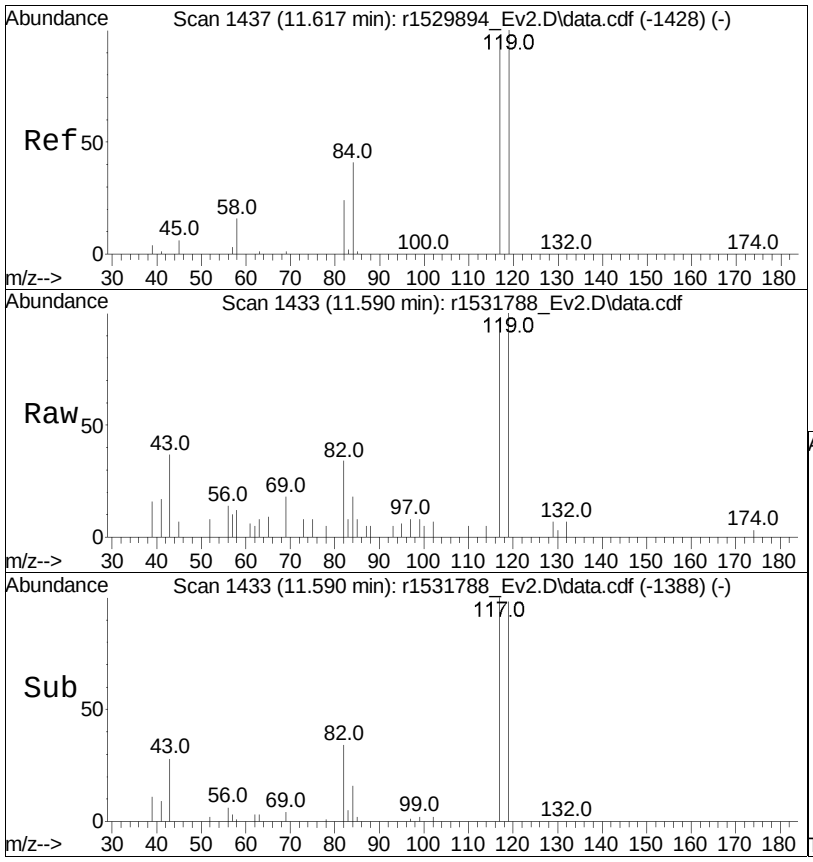
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320SIM\
Data File : r1531788_Ev2.D
Acq On : 20 Mar 2022 9:06 PM
Operator : AIRLAB15:RY
Sample : L2213657-02,3,250,250
Misc : WG1617727,ICAL18601
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 15:19:54 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320SIM\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Dec 27 10:35:25 2021
Response via : Initial Calibration

Sub List : 7-NY-SIM - .\Data\Airlab15\2022\03\0320SIM\r1531779_Ev2.D

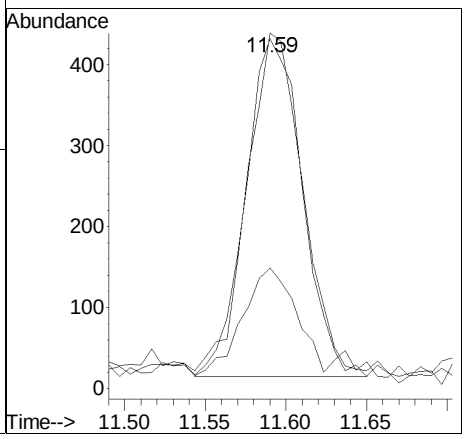


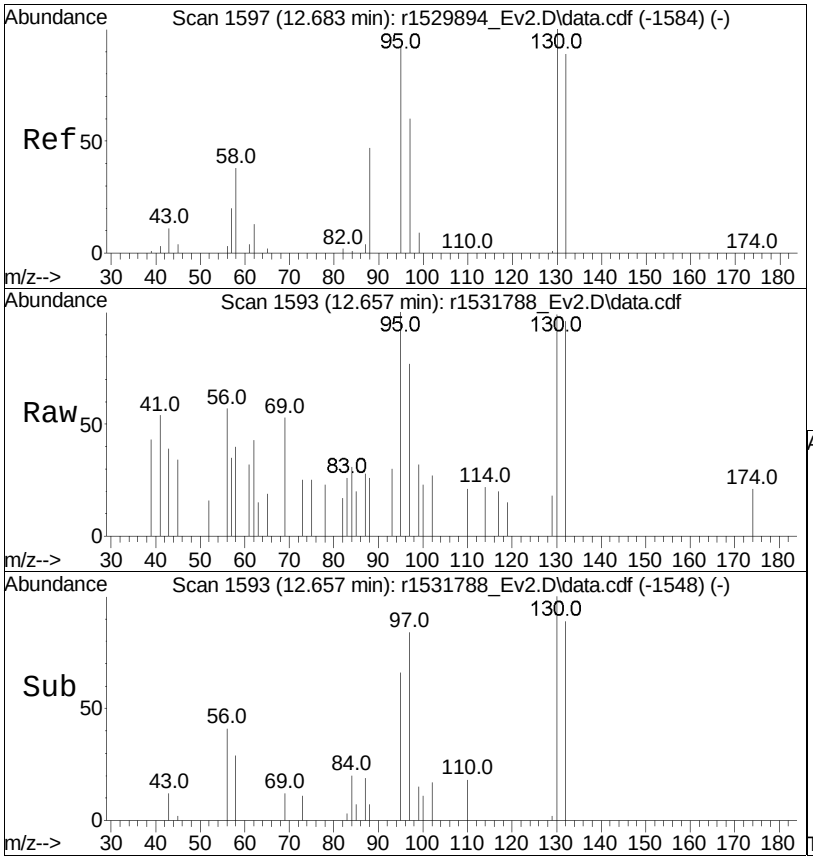


#38
carbon tetrachloride
Concen: 0.07 ppbV
RT: 11.59 min Scan# 1433
Delta R.T. -0.027 min
Lab File: r1531788_Ev2.D
Acq: 20 Mar 2022 9:06 PM

Tgt Ion:117 Resp: 1022

Ion	Ratio	Lower	Upper
117	100		
119	101.6	78.2	117.4
82	34.5	20.5	30.7#

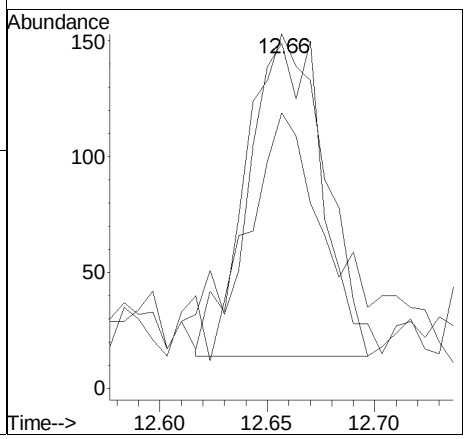


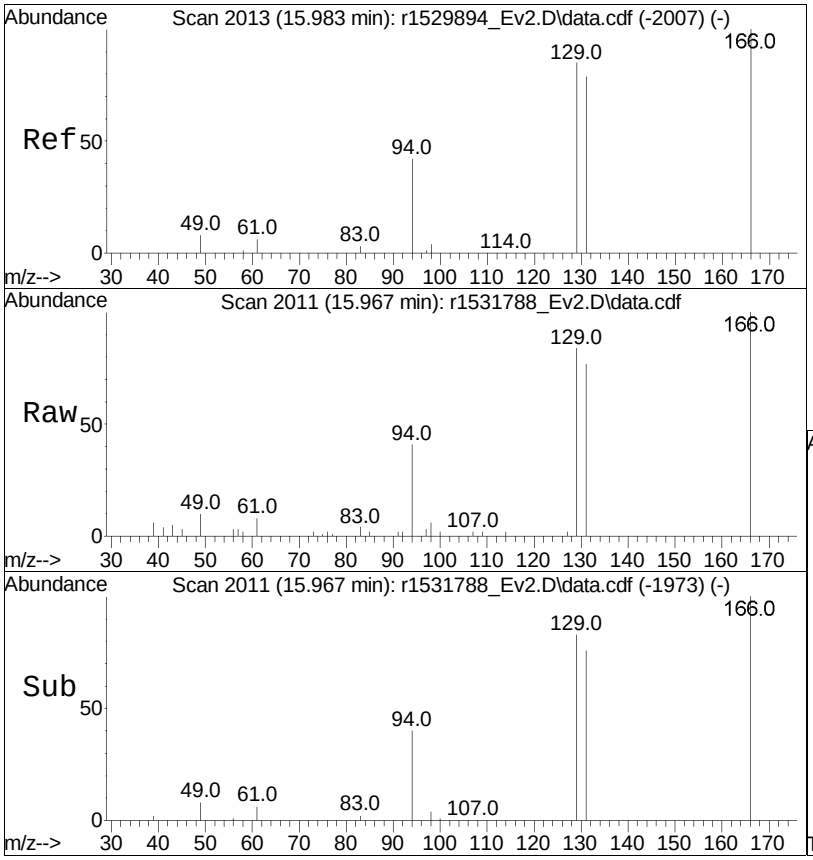


#44
trichloroethene
Concen: 0.02 ppbV
RT: 12.66 min Scan# 1593
Delta R.T. -0.027 min
Lab File: r1531788_Ev2.D
Acq: 20 Mar 2022 9:06 PM

Tgt Ion:130 Resp: 353

Ion	Ratio	Lower	Upper
130	100		
132	97.4	76.2	114.4
97	77.8	52.2	78.4

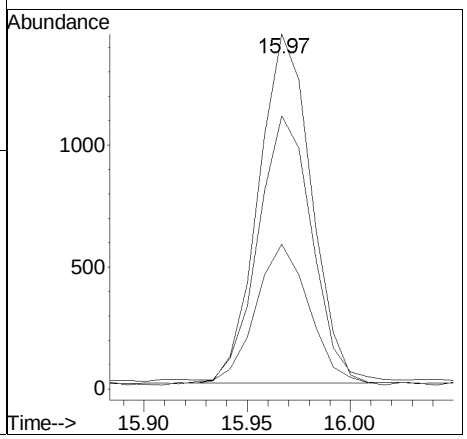




#57
tetrachloroethene
Concen: 0.16 ppbV
RT: 15.97 min Scan# 2011
Delta R.T. -0.017 min
Lab File: r1531788_Ev2.D
Acq: 20 Mar 2022 9:06 PM

Tgt Ion:166 Resp: 2544

Ion	Ratio	Lower	Upper
166	100		
131	77.0	64.3	96.5
94	40.8	33.2	49.8



Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\Airlab15\	QMethod	: TSIM15_211222.M
Data File	: r1531788_Ev2.D	Operator	: AIRLAB15:RY
Date Inj'd	: 3/20/2020 0:9: 6	Instrument	:
Sample	: L2213657-02,3,250,250	Quant Date	: 3/21/2022 8:39 am

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320SIM\
Data File : r1531789_Ev2.D
Acq On : 20 Mar 2022 9:45 PM
Operator : AIRLAB15:RY
Sample : L2213657-03,3,250,250
Misc : WG1617727,ICAL18601
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 08:39:39 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320SIM\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Dec 27 10:35:25 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320SIM\r1531779_Ev2.D
Sub List : 7-NY-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.57	49	238934	10.000	ppbV	-0.03
Standard Area = 238569			Recovery = 100.15%			
33) 1,4-difluorobenzene	11.86	114	532568	10.000	ppbV	-0.03
Standard Area = 552111			Recovery = 96.46%			
51) chlorobenzene-D5	16.57	54	124471	10.000	ppbV	-0.02
Standard Area = 125385			Recovery = 99.27%			
System Monitoring Compounds						
Target Compounds						Qvalue
6) vinyl chloride	0.00		0	N.D.		
17) 1,1-dichloroethene	0.00		0	N.D.		
28) cis-1,2-dichloroethene	0.00		0	N.D.		
36) 1,1,1-trichloroethane	0.00		0	N.D.		
38) carbon tetrachloride	11.60	117	1061	0.074	ppbV	93
44) trichloroethene	12.66	130	351	0.024	ppbV	92
57) tetrachloroethene	15.97	166	2610	0.165	ppbV	97

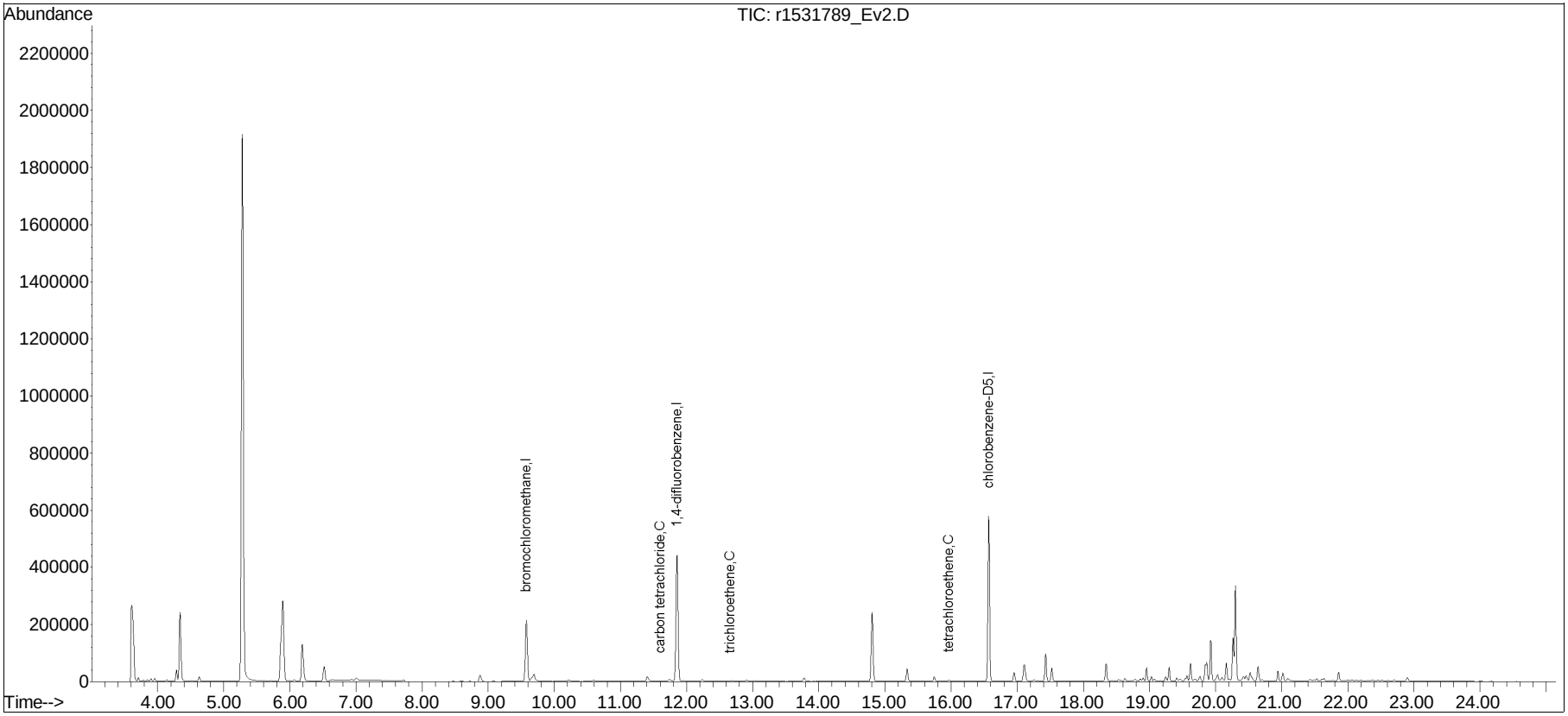
(#) = qualifier out of range (m) = manual integration (+) = signals summed

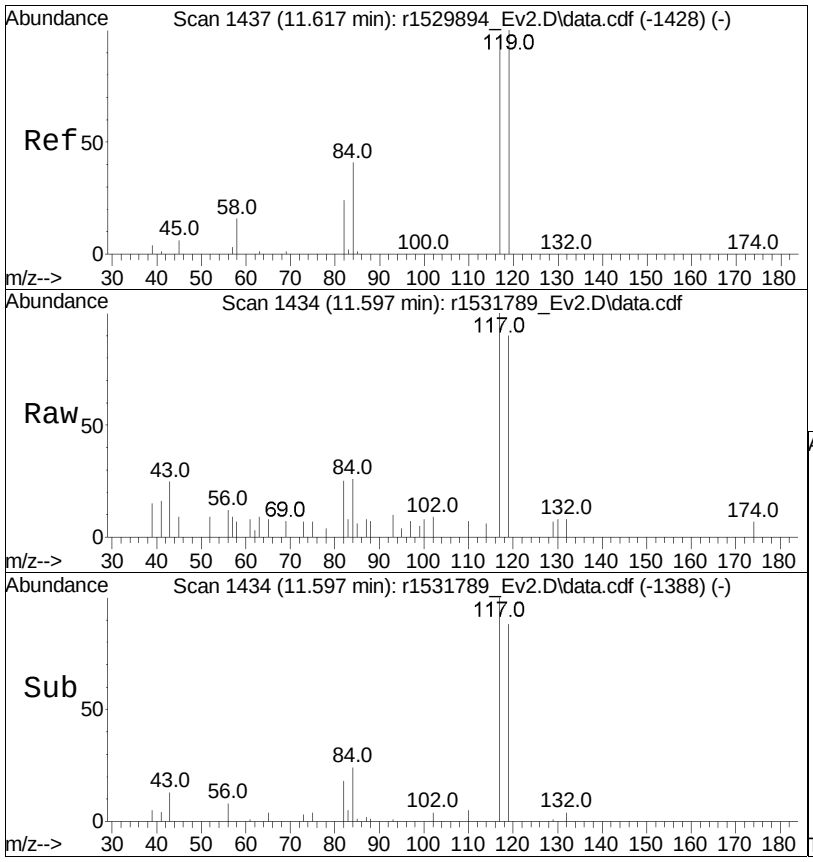
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320SIM\
Data File : r1531789_Ev2.D
Acq On : 20 Mar 2022 9:45 PM
Operator : AIRLAB15:RY
Sample : L2213657-03,3,250,250
Misc : WG1617727,ICAL18601
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 08:39:39 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320SIM\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Dec 27 10:35:25 2021
Response via : Initial Calibration

Sub List : 7-NY-SIM - .\Data\Airlab15\2022\03\0320SIM\r1531779_Ev2.D

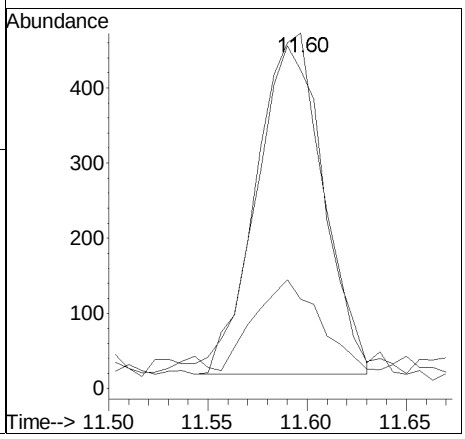


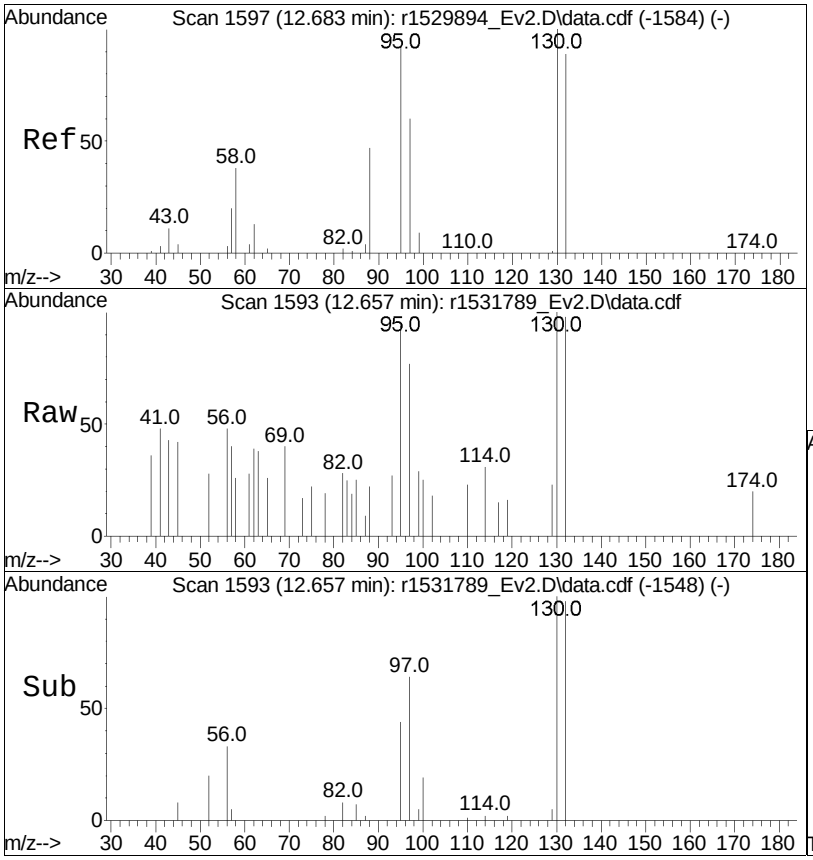


#38
carbon tetrachloride
Concen: 0.07 ppbV
RT: 11.60 min Scan# 1434
Delta R.T. -0.020 min
Lab File: r1531789_Ev2.D
Acq: 20 Mar 2022 9:45 PM

Tgt Ion:117 Resp: 1061

Ion	Ratio	Lower	Upper
117	100		
119	89.6	78.2	117.4
82	25.2	20.5	30.7

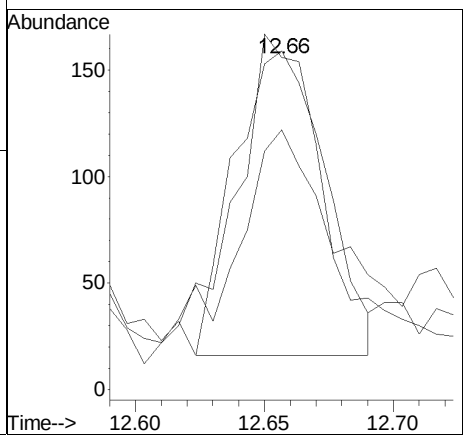


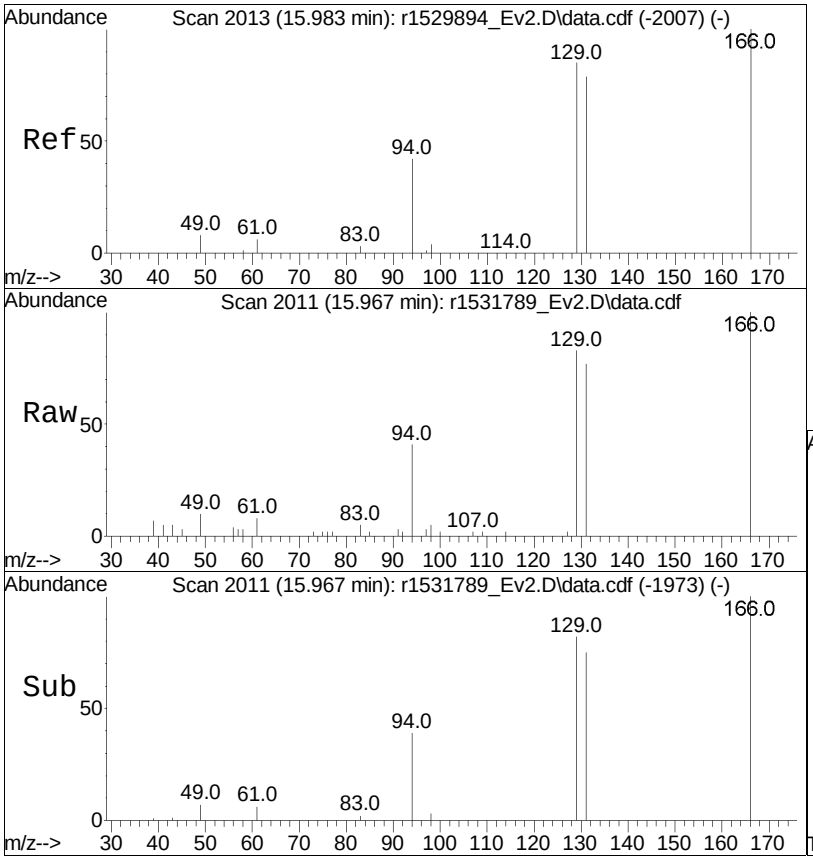


#44
trichloroethene
Concen: 0.02 ppbV
RT: 12.66 min Scan# 1593
Delta R.T. -0.027 min
Lab File: r1531789_Ev2.D
Acq: 20 Mar 2022 9:45 PM

Tgt Ion:130 Resp: 351

Ion	Ratio	Lower	Upper
130	100		
132	98.1	76.2	114.4
97	76.7	52.2	78.4

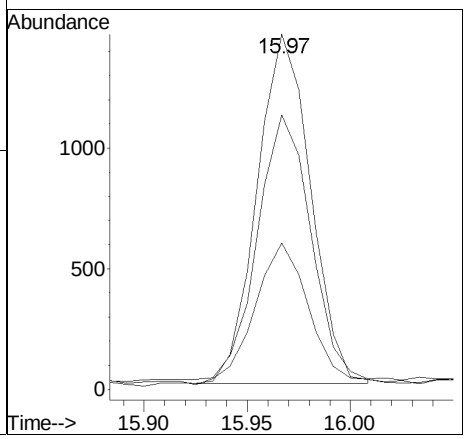




#57
tetrachloroethene
Concen: 0.16 ppbV
RT: 15.97 min Scan# 2011
Delta R.T. -0.017 min
Lab File: r1531789_Ev2.D
Acq: 20 Mar 2022 9:45 PM

Tgt Ion:166 Resp: 2610

Ion	Ratio	Lower	Upper
166	100		
131	77.3	64.3	96.5
94	41.2	33.2	49.8



Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\Airlab15\	QMethod	: TSIM15_211222.M
Data File	: r1531789_Ev2.D	Operator	: AIRLAB15:RY
Date Inj'd	: 3/20/2020 0:9: 5	Instrument	:
Sample	: L2213657-03,3,250,250	Quant Date	: 3/21/2022 8:39 am

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320SIM\
Data File : r1531791_Ev2.D
Acq On : 20 Mar 2022 11:04 PM
Operator : AIRLAB15:RY
Sample : L2213657-05,3,250,250
Misc : WG1617727,ICAL18601
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 15:21:52 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320SIM\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Dec 27 10:35:25 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320SIM\r1531779_Ev2.D
Sub List : 7-NY-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.57	49	236651	10.000	ppbV	-0.03
Standard Area = 238569			Recovery =		99.20%	
33) 1,4-difluorobenzene	11.85	114	525042	10.000	ppbV	-0.03
Standard Area = 552111			Recovery =		95.10%	
51) chlorobenzene-D5	16.57	54	122944	10.000	ppbV	-0.02
Standard Area = 125385			Recovery =		98.05%	
System Monitoring Compounds						
Target Compounds						Qvalue
6) vinyl chloride	0.00		0	N.D.		
17) 1,1-dichloroethene	0.00		0	N.D.	d	
28) cis-1,2-dichloroethene	9.38	61	696	0.041	ppbV #	84
36) 1,1,1-trichloroethane	0.00		0	N.D.		
38) carbon tetrachloride	11.59	117	1014	0.072	ppbV	95
44) trichloroethene	12.66	130	441	0.031	ppbV	99
57) tetrachloroethene	15.97	166	49823	3.186	ppbV	95

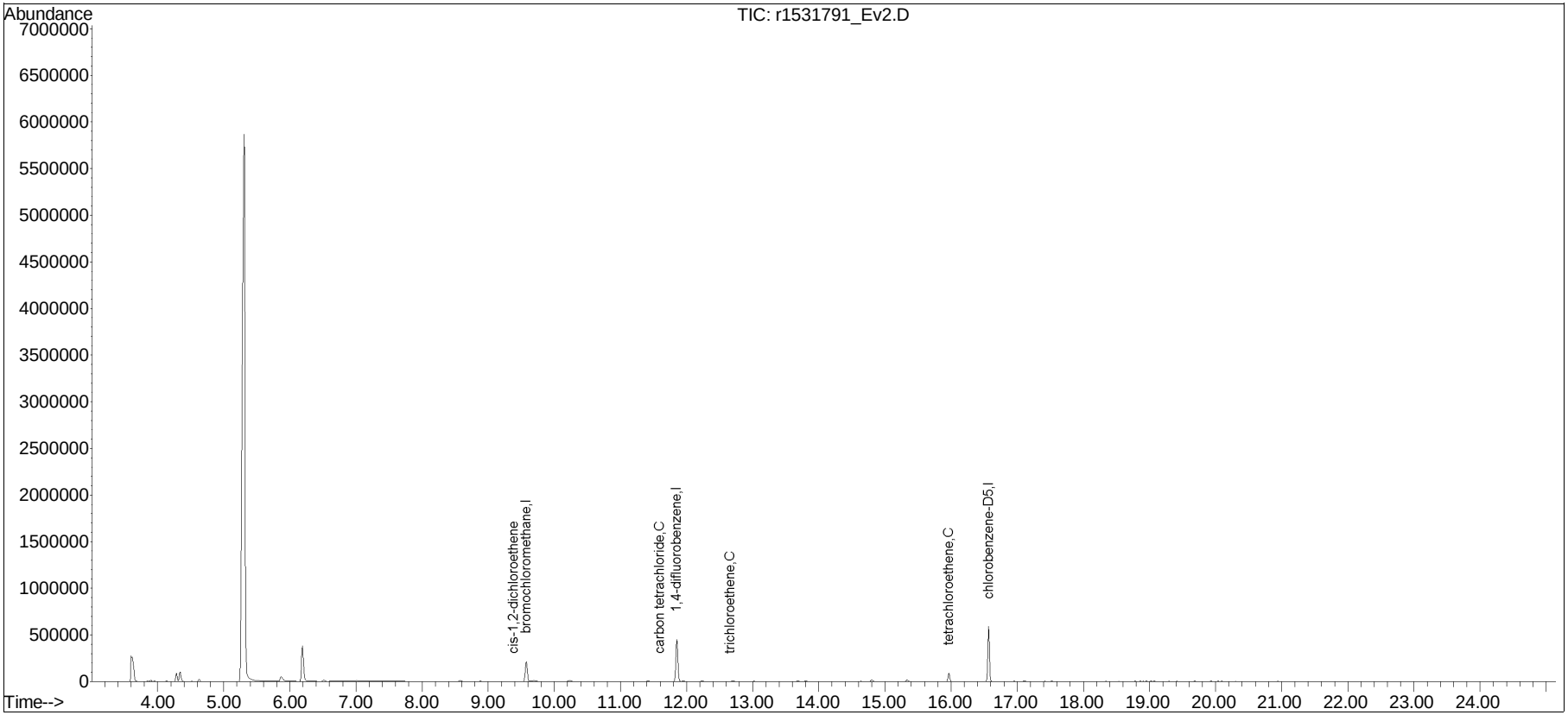
(#) = qualifier out of range (m) = manual integration (+) = signals summed

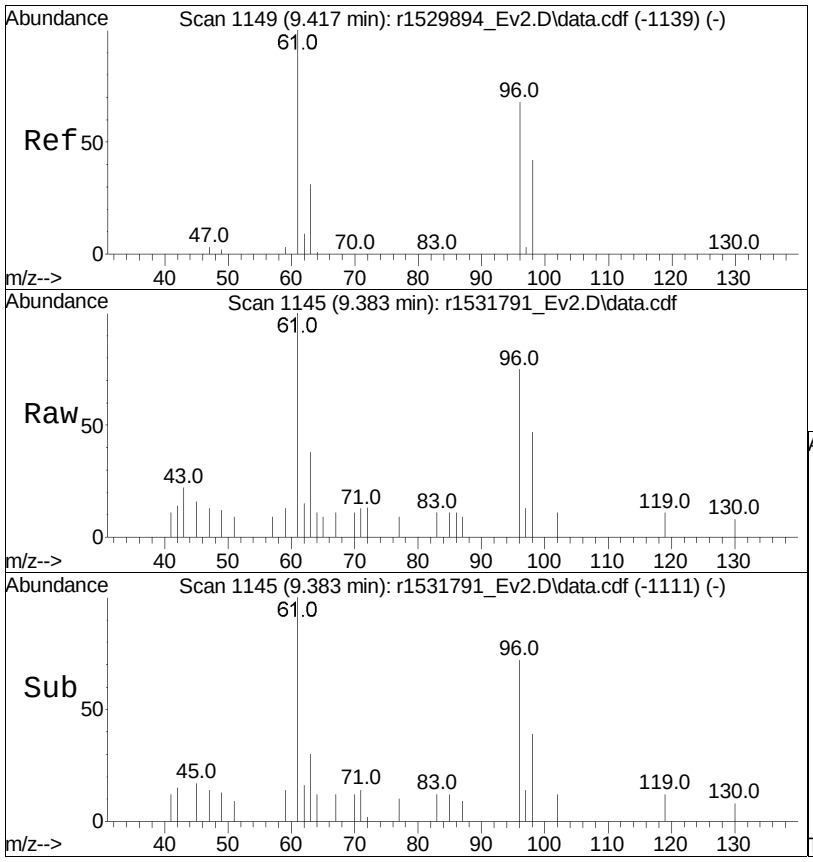
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320SIM\
Data File : r1531791_Ev2.D
Acq On : 20 Mar 2022 11:04 PM
Operator : AIRLAB15:RY
Sample : L2213657-05,3,250,250
Misc : WG1617727,ICAL18601
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 15:21:52 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320SIM\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Dec 27 10:35:25 2021
Response via : Initial Calibration

Sub List : 7-NY-SIM - .\Data\Airlab15\2022\03\0320SIM\r1531779_Ev2.D

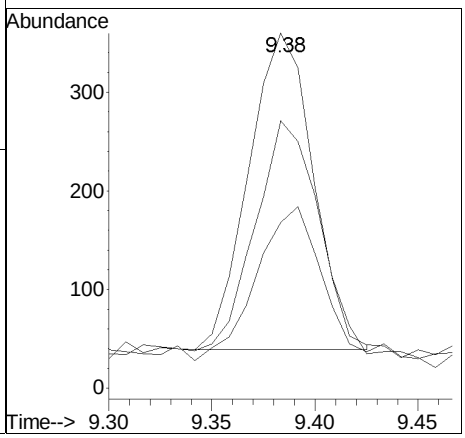


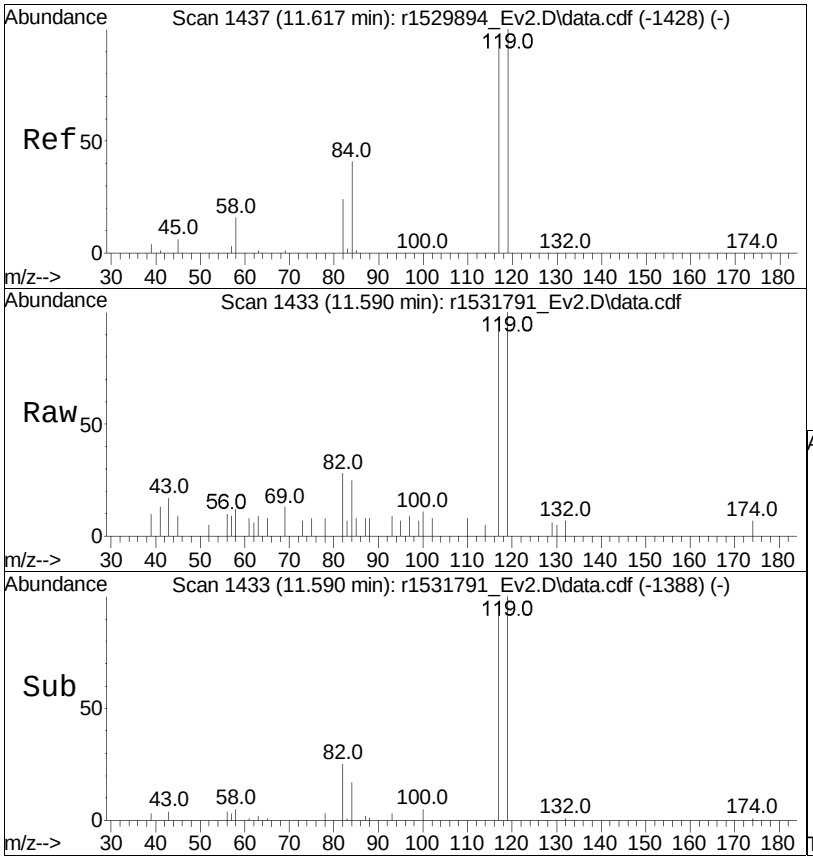


#28
cis-1,2-dichloroethene
Concen: 0.04 ppbV
RT: 9.38 min Scan# 1145
Delta R.T. -0.033 min
Lab File: r1531791_Ev2.D
Acq: 20 Mar 2022 11:04 PM

Tgt Ion: 61 Resp: 696

Ion	Ratio	Lower	Upper
61	100		
96	75.3	49.6	74.4#
98	46.7	30.6	46.0#

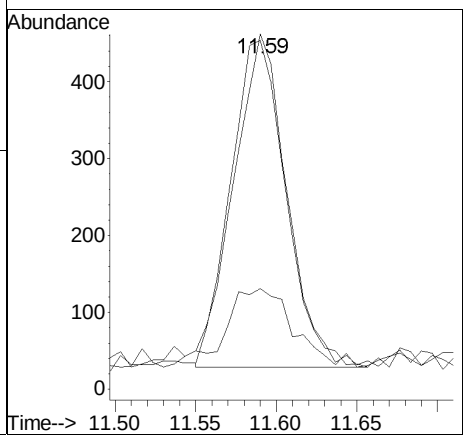


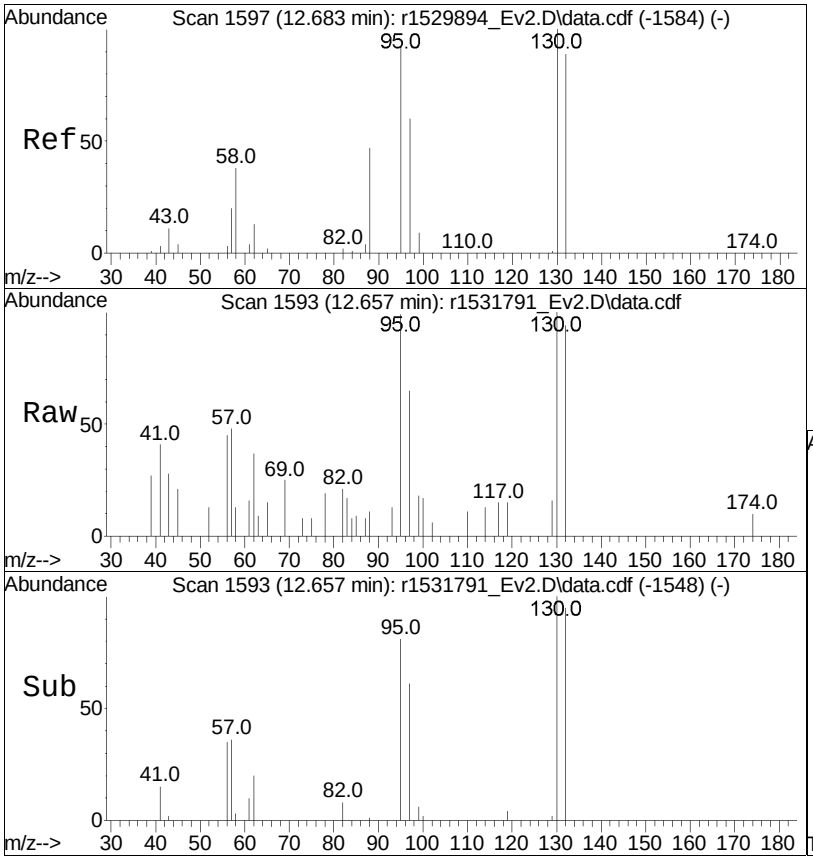


#38
carbon tetrachloride
Concen: 0.07 ppbV
RT: 11.59 min Scan# 1433
Delta R.T. -0.027 min
Lab File: r1531791_Ev2.D
Acq: 20 Mar 2022 11:04 PM

Tgt Ion:117 Resp: 1014

Ion	Ratio	Lower	Upper
117	100		
119	101.8	78.2	117.4
82	28.9	20.5	30.7

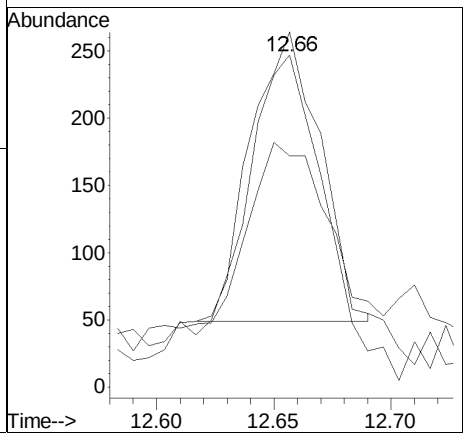


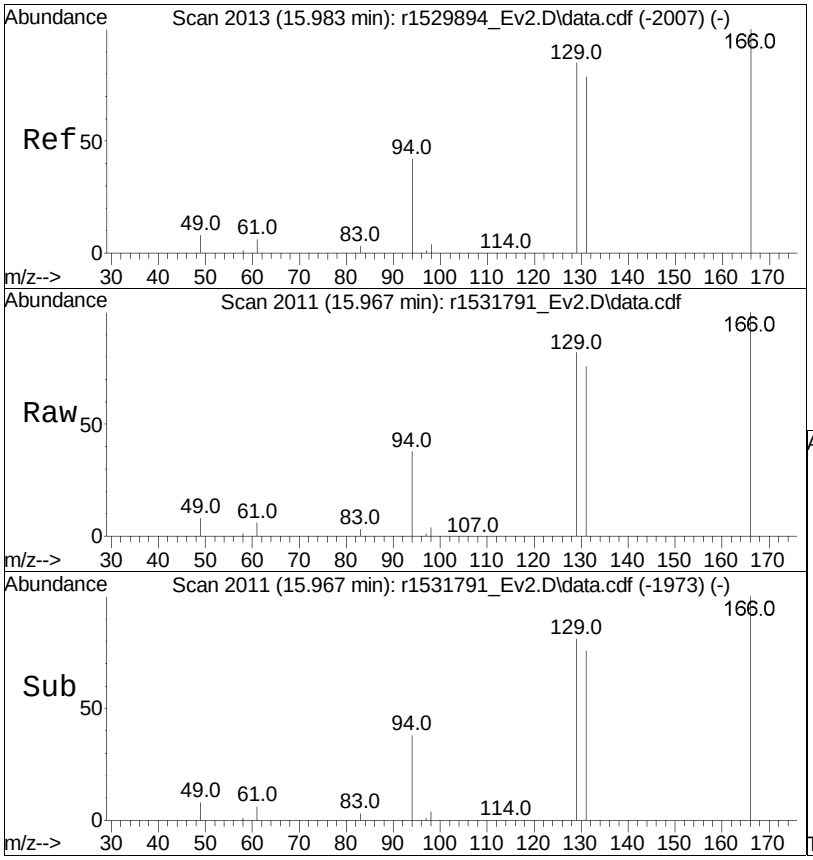


#44
trichloroethene
Concen: 0.03 ppbV
RT: 12.66 min Scan# 1593
Delta R.T. -0.027 min
Lab File: r1531791_Ev2.D
Acq: 20 Mar 2022 11:04 PM

Tgt Ion:130 Resp: 441

Ion	Ratio	Lower	Upper
130	100		
132	93.6	76.2	114.4
97	65.2	52.2	78.4

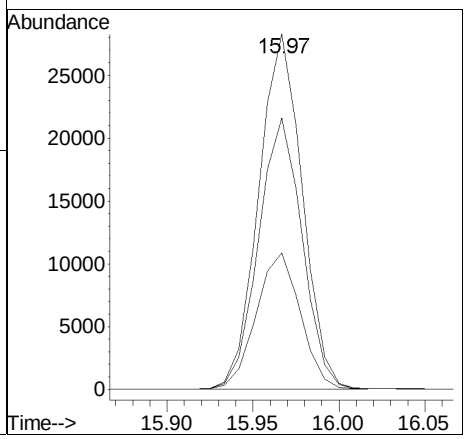




#57
tetrachloroethene
Concen: 3.19 ppbV
RT: 15.97 min Scan# 2011
Delta R.T. -0.017 min
Lab File: r1531791_Ev2.D
Acq: 20 Mar 2022 11:04 PM

Tgt Ion:166 Resp: 49823

Ion	Ratio	Lower	Upper
166	100		
131	76.3	64.3	96.5
94	38.4	33.2	49.8



Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\Airlab15\	QMethod	: TSIM15_211222.M
Data File	: r1531791_Ev2.D	Operator	: AIRLAB15:RY
Date Inj'd	: 3/20/2020 0:1: 4	Instrument	:
Sample	: L2213657-05,3,250,250	Quant Date	: 3/21/2022 8:43 am

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

Volatiles Standards Data

Initial Calibration

Initial Calibration Summary
Form 6
Air Volatiles

Client	**: Roux Env. Eng. & Geology, DPC**	**Lab Number**	**: L2213657**
Project Name	**: FORMER CLEAN ZONE DRY CLEANERS**	**Project Number**	**: 2546.0007Y002**
Instrument ID	**: AIRLAB15**	**Ical Ref**	**: ICAL18601**
Calibration dates	**: 12/22/21 04:15 12/22/21 10:08**		

Calibration Files

0.02=r1529888_Ev2.D 0.05=r1529889_Ev2.D 0.1 =r1529890_Ev2.D 0.2 =r1529891_Ev2.D 0.5 =r1529892_Ev2.D

1.0 =r1529893_Ev2.D 5.0 =r1529894_Ev2.D 10.0=r1529895_Ev2.D 20.0=r1529896_Ev2.D 50.0=r1529897_Ev2.D

		Compound	0.02	0.05	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
1)	I	bromochloromethane	----------ISTD----------											
2)		propylene				0.475	0.416	0.424	0.378	0.366	0.395	0.388	0.4059	9.01
3)		dichlorodifluoromethane				0.907	0.839	0.824	0.776	0.702	0.699	0.620	0.7666	12.87
4)	C	chloromethane				0.429	0.400	0.392	0.368	0.345	0.352	0.324	0.3731	9.69
5)		Freon-114		0.976	0.935	1.079	1.007	0.972	0.918	0.857	0.852	0.754	0.9278	10.42
6)	C	vinyl chloride	0.589	0.524	0.509	0.580	0.534	0.517	0.494	0.471	0.477	0.434	0.5130	9.31
7)	C	1,3-butadiene	0.499	0.402	0.383	0.435	0.402	0.393	0.359	0.340	0.354	0.319	0.3886	13.27
8)	C	bromomethane	0.480	0.392	0.376	0.438	0.402	0.391	0.372	0.355	0.356	0.321	0.3883	11.56
9)	C	chloroethane			0.286	0.293	0.264	0.258	0.241	0.234	0.239	0.222	0.2547	9.93
10)		ethanol					0.478	0.459	0.415	0.400	0.410	0.341	0.4171	11.55
11)	C	vinyl bromide				0.359	0.338	0.331	0.308	0.305	0.334	0.316	0.3274	5.85
12)	C	acrolein		0.244	0.234	0.228	0.220	0.211	0.200	0.195	0.207	0.188	0.2141	8.80
13)		acetone				0.672	0.592	0.570	0.522	0.506	0.530	0.483	0.5537	11.55
14)		trichlorofluoromethane		0.797	0.753	0.780	0.748	0.723	0.696	0.678	0.698	0.634	0.7231	7.17
15)		isopropyl alcohol				0.660	0.603	0.591	0.561	0.559	0.620	0.585	0.5969	5.91
16)	C	acrylonitrile				0.424	0.386	0.374	0.345	0.339	0.369	0.330	0.3667	8.82
17)	C	1,1-dichloroethene	0.798	0.747	0.730	0.770	0.738	0.710	0.684	0.666	0.695	0.615	0.7153	7.44
18)		tertiary butyl alcohol					0.851	0.829	0.776	0.767	0.858	0.772	0.8087	5.18
19)	C	methylene chloride					0.529	0.502	0.467	0.452	0.467	0.417	0.4723	8.20
20)	C	3-chloropropene					0.584	0.574	0.546	0.546	0.611	0.585	0.5743	4.37
21)	C	carbon disulfide				0.994	0.919	0.923	0.926	0.948	1.080	1.018	0.9725	6.25
22)		Freon 113	1.055	0.745	0.746	0.823	0.762	0.728	0.701	0.679	0.707	0.645	0.7591	15.11
23)		trans-1,2-dichloroethene	0.931	0.788	0.756	0.829	0.778	0.760	0.711	0.701	0.780	0.747	0.7782	8.39
24)	C	1,1-dichloroethane	0.984	0.908	0.869	0.977	0.913	0.882	0.858	0.843	0.897	0.860	0.8991	5.39
25)	C	MTBE	1.112	1.035	1.009	1.140	1.070	1.062	0.990	0.981	1.086	1.013	1.0499	5.06
26)	C	vinyl acetate					0.868	0.856	0.840	0.884	1.047	1.017	0.9189	9.72
27)	C	2-butanone				1.134	1.034	1.013	0.954	0.945	1.056	0.994	1.0186	6.37
28)		cis-1,2-dichloroethene	0.782	0.734	0.663	0.762	0.710	0.699	0.685	0.678	0.727	0.690	0.7130	5.33
29)		Ethyl Acetate					0.180	0.181	0.174	0.172	0.195	0.193	0.1826	5.38
30)	C	chloroform	1.041	0.896	0.885	0.986	0.905	0.883	0.845	0.829	0.865	0.756	0.8891	8.91
31)		Tetrahydrofuran				0.670	0.609	0.613	0.594	0.594	0.664	0.637	0.6260	5.06
32)	C	1,2-dichloroethane	0.741	0.665	0.607	0.672	0.618	0.605	0.582	0.622	0.599	0.588	0.6300	7.78
33)	I	1,4-difluorobenzene	----------ISTD----------											
34)	C	hexane				0.461	0.433	0.426	0.398	0.398	0.438	0.391	0.4205	6.15
35)	s	1,2-dichloroethane-D4				0.282	0.278	0.281	0.280	0.280	0.278	0.272	0.2786	1.26
36)	C	1,1,1-trichloroethane	0.401	0.269	0.256	0.302	0.283	0.281	0.276	0.279	0.298	0.274	0.2920	13.89

Initial Calibration Summary
Form 6
Air Volatiles

Client	**: Roux Env. Eng. & Geology, DPC**	**Lab Number**	**: L2213657**
Project Name	**: FORMER CLEAN ZONE DRY CLEANERS**	**Project Number**	**: 2546.0007Y002**
Instrument ID	**: AIRLAB15**	**Ical Ref**	**: ICAL18601**
Calibration dates	**: 12/22/21 04:15 12/22/21 10:08**		

Calibration Files

0.02=r1529888_Ev2.D 0.05=r1529889_Ev2.D 0.1 =r1529890_Ev2.D 0.2 =r1529891_Ev2.D 0.5 =r1529892_Ev2.D

1.0 =r1529893_Ev2.D 5.0 =r1529894_Ev2.D 10.0=r1529895_Ev2.D 20.0=r1529896_Ev2.D 50.0=r1529897_Ev2.D

		Compound	0.02	0.05	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
37)	C	benzene			1.057	0.915	0.758	0.714	0.654	0.648	0.681	0.611	0.7547	20.39
38)	C	carbon tetrachloride	0.357	0.252	0.279	0.266	0.249	0.253	0.257	0.261	0.279	0.244	0.2695	12.24
39)		cyclohexane				0.481	0.459	0.461	0.431	0.432	0.478	0.434	0.4537	4.74
40)		Dibromomethane		0.325	0.259	0.253	0.226	0.222	0.204	0.202	0.224	0.205	0.2356	16.63
41)	C	1,2-dichloropropane	0.283	0.272	0.257	0.278	0.265	0.256	0.247	0.246	0.264	0.252	0.2621	4.84
42)		bromodichloromethane	0.373	0.363	0.343	0.365	0.360	0.356	0.354	0.359	0.401	0.352	0.3626	4.29
43)	C	1,4-dioxane			0.163	0.171	0.155	0.157	0.155	0.155	0.173	0.158	0.1609	4.48
44)	C	trichloroethene	0.312	0.279	0.244	0.297	0.275	0.268	0.263	0.261	0.279	0.257	0.2735	7.27
45)	C	2,2,4-trimethylpentane		1.397	1.340	1.537	1.467	1.453	1.325	1.317	1.451	1.289	1.3974	6.05
46)		heptane				0.487	0.459	0.467	0.436	0.430	0.477	0.431	0.4553	5.11
47)	C	cis-1,3-dichloropropene	0.231	0.231	0.211	0.243	0.234	0.240	0.263	0.276	0.302	0.282	0.2511	11.29
48)	C	4-methyl-2-pentanone					0.483	0.494	0.488	0.492	0.544	0.501	0.5003	4.41
49)		trans-1,3-dichloropropene	0.285	0.288	0.245	0.274	0.262	0.265	0.285	0.296	0.320	0.298	0.2818	7.57
50)	C	1,1,2-trichloroethane	0.281	0.244	0.230	0.254	0.239	0.239	0.230	0.230	0.246	0.233	0.2427	6.48
51)	I	chlorobenzene-D5	----------ISTD----------											
52)	C	toluene			5.597	4.858	3.931	3.680	3.413	3.372	3.622	3.400	3.9841	20.42
53)	s	toluene-D8				3.957	3.903	3.996	4.004	3.988	4.074	4.343	4.0378	3.57
54)		2-hexanone				1.991	1.986	2.015	1.972	1.981	2.249	2.124	2.0455	5.08
55)		dibromochloromethane	1.484	1.351	1.187	1.313	1.264	1.329	1.382	1.412	1.629	1.534	1.3885	9.45
56)	C	1,2-dibromoethane	1.643	1.358	1.370	1.521	1.430	1.442	1.443	1.417	1.544	1.485	1.4653	5.86
57)	C	tetrachloroethene	1.570	1.218	1.199	1.340	1.258	1.247	1.210	1.200	1.285	1.194	1.2721	8.97
58)		1,1,1,2-tetrachloroethane	1.260	1.028	1.033	1.135	1.077	1.100	1.089	1.106	1.266	1.172	1.1265	7.42
59)	C	chlorobenzene	3.006	2.554	2.508	2.853	2.621	2.616	2.508	2.489	2.659	2.448	2.6261	6.72
60)	C	ethylbenzene	4.756	4.168	4.059	4.555	4.278	4.297	4.316	4.302	4.648	4.378	4.3757	4.93
61)	C	m+p-xylene	3.735	3.442	3.292	3.716	3.595	3.597	3.565	3.513	3.745	3.429	3.5629	4.15
62)	C	bromoform	1.127	0.854	0.844	0.966	0.924	0.962	1.051	1.106	1.304	1.245	1.0383	15.12
63)	C	styrene	2.391	2.154	2.130	2.464	2.395	2.410	2.472	2.488	2.707	2.620	2.4231	7.38
64)	C	1,1,2,2-tetrachloroethane	3.027	2.617	2.511	2.849	2.712	2.705	2.667	2.636	2.748	2.355	2.6830	6.76
65)	C	o-xylene	3.668	3.359	3.268	3.795	3.603	3.589	3.592	3.554	3.779	3.319	3.5527	5.15
66)		1,2,3-Trichloropropane	2.275	1.918	1.894	2.143	2.009	1.983	1.856	1.827	2.010	1.897	1.9811	6.98
67)	s	bromofluorobenzene				2.720	2.730	2.914	2.969	2.969	3.070	3.202	2.9390	5.90
68)	C	isopropylbenzene				4.533	4.343	4.309	4.107	4.023	4.459	4.189	4.2804	4.32
69)		Bromobenzene	2.933	2.605	2.431	2.798	2.615	2.600	2.439	2.395	2.640	2.460	2.5916	6.65
70)		4-ethyl toluene	4.158	3.885	3.970	4.578	4.463	4.520	4.301	4.268	4.756	4.459	4.3358	6.31
71)		1,3,5-trimethylbenzene	3.569	3.327	3.307	3.860	3.783	3.815	3.779	3.730	3.995	3.717	3.6882	6.06
72)		tert-butylbenzene				4.706	4.537	4.584	4.374	4.310	4.482	3.735	4.3897	7.23

Initial Calibration Summary
Form 6
Air Volatiles

Client	**: Roux Env. Eng. & Geology, DPC**	**Lab Number**	**: L2213657**
Project Name	**: FORMER CLEAN ZONE DRY CLEANERS**	**Project Number**	**: 2546.0007Y002**
Instrument ID	**: AIRLAB15**	**Ical Ref**	**: ICAL18601**
Calibration dates	**: 12/22/21 04:15 12/22/21 10:08**		

Calibration Files

0.02=r1529888_Ev2.D 0.05=r1529889_Ev2.D 0.1 =r1529890_Ev2.D 0.2 =r1529891_Ev2.D 0.5 =r1529892_Ev2.D

1.0 =r1529893_Ev2.D 5.0 =r1529894_Ev2.D 10.0=r1529895_Ev2.D 20.0=r1529896_Ev2.D 50.0=r1529897_Ev2.D

		Compound	0.02	0.05	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
73)		1,2,4-trimethylbenzene	3.832	3.470	3.397	3.852	3.746	3.756	3.723	3.684	3.859	3.419	3.6737	4.88
74)	C	Benzyl Chloride			1.623	1.789	1.793	1.862	2.060	2.327	3.014	2.987	2.1818	25.09
75)		1,3-dichlorobenzene	2.494	2.289	2.275	2.533	2.463	2.467	2.449	2.451	2.706	2.554	2.4681	5.03
76)	C	1,4-dichlorobenzene	2.494	2.200	2.189	2.519	2.414	2.450	2.440	2.461	2.641	2.584	2.4393	5.98
77)		sec-butylbenzene				5.619	5.479	5.521	5.303	5.228	5.720	5.320	5.4556	3.31
78)		p-isopropyltoluene				5.518	5.435	5.502	5.350	5.240	5.473	4.546	5.2946	6.50
79)		1,2-dichlorobenzene	2.361	2.156	2.106	2.313	2.295	2.311	2.314	2.320	2.518	2.462	2.3155	5.28
80)		n-butylbenzene				4.752	4.736	4.866	4.804	4.774	5.204	4.728	4.8377	3.48
81)		1,2-dibromo-3-chloropr...	0.950	0.817	0.811	0.849	0.884	0.941	1.000	1.009	1.127	1.083	0.9471	11.50
82)	C	1,2,4-trichlorobenzene		1.338	1.320	1.189	1.398	1.536	1.730	1.848	1.962	1.923	1.5826	18.32
83)		naphthalene		4.379	4.311	3.997	4.795	5.293	5.495	5.728	6.053	5.853	5.1005	14.73
84)		1,2,3-trichlorobenzene		1.365	1.322	1.141	1.383	1.566	1.688	1.772	1.858	1.865	1.5511	16.82
85)	C	hexachlorobutadiene		1.384	1.320	1.142	1.315	1.417	1.494	1.493	1.525	1.393	1.3869	8.54

Response Factor Report

Method Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Method File : TSIM15_211222.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Mon Dec 27 10:35:25 2021
Response Via : Initial Calibration

Calibration Files
0.02=r1529888_Ev2.D 0.05=r1529889_Ev2.D 0.1 =r1529890_Ev2.D 0.2 =r1529891_Ev2.D 0.5 =r1529892_Ev2.D
1.0 =r1529893_Ev2.D 5.0 =r1529894_Ev2.D 10.0=r1529895_Ev2.D 20.0=r1529896_Ev2.D 50.0=r1529897_Ev2.D

		Compound	0.02	0.05	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
1)	I	bromochloromethane	ISTD											
2)		propylene				0.475	0.416	0.424	0.378	0.366	0.395	0.388	0.4059	9.01
3)		dichlorodifluorome...				0.907	0.839	0.824	0.776	0.702	0.699	0.620	0.7666	12.87
4)	C	chloromethane				0.429	0.400	0.392	0.368	0.345	0.352	0.324	0.3731	9.69
5)		Freon-114		0.976	0.935	1.079	1.007	0.972	0.918	0.857	0.852	0.754	0.9278	10.42
6)	C	vinyl chloride	0.589	0.524	0.509	0.580	0.534	0.517	0.494	0.471	0.477	0.434	0.5130	9.31
7)	C	1,3-butadiene	0.499	0.402	0.383	0.435	0.402	0.393	0.359	0.340	0.354	0.319	0.3886	13.27
8)	C	bromomethane	0.480	0.392	0.376	0.438	0.402	0.391	0.372	0.355	0.356	0.321	0.3883	11.56
9)	C	chloroethane			0.286	0.293	0.264	0.258	0.241	0.234	0.239	0.222	0.2547	9.93
10)		ethanol					0.478	0.459	0.415	0.400	0.410	0.341	0.4171	11.55
11)	C	vinyl bromide				0.359	0.338	0.331	0.308	0.305	0.334	0.316	0.3274	5.85
12)	C	acrolein		0.244	0.234	0.228	0.220	0.211	0.200	0.195	0.207	0.188	0.2141	8.80
13)		acetone				0.672	0.592	0.570	0.522	0.506	0.530	0.483	0.5537	11.55
14)		trichlorofluoromet...		0.797	0.753	0.780	0.748	0.723	0.696	0.678	0.698	0.634	0.7231	7.17
15)		isopropyl alcohol				0.660	0.603	0.591	0.561	0.559	0.620	0.585	0.5969	5.91
16)	C	acrylonitrile				0.424	0.386	0.374	0.345	0.339	0.369	0.330	0.3667	8.82
17)	C	1,1-dichloroethene	0.798	0.747	0.730	0.770	0.738	0.710	0.684	0.666	0.695	0.615	0.7153	7.44
18)		tertiary butyl alc...					0.851	0.829	0.776	0.767	0.858	0.772	0.8087	5.18
19)	C	methylene chloride					0.529	0.502	0.467	0.452	0.467	0.417	0.4723	8.20
20)	C	3-chloropropene					0.584	0.574	0.546	0.546	0.611	0.585	0.5743	4.37
21)	C	carbon disulfide				0.994	0.919	0.923	0.926	0.948	1.080	1.018	0.9725	6.25
22)		Freon 113	1.055	0.745	0.746	0.823	0.762	0.728	0.701	0.679	0.707	0.645	0.7591	15.11
23)		trans-1,2-dichloro...	0.931	0.788	0.756	0.829	0.778	0.760	0.711	0.701	0.780	0.747	0.7782	8.39
24)	C	1,1-dichloroethane	0.984	0.908	0.869	0.977	0.913	0.882	0.858	0.843	0.897	0.860	0.8991	5.39
25)	C	MTBE	1.112	1.035	1.009	1.140	1.070	1.062	0.990	0.981	1.086	1.013	1.0499	5.06
26)	C	vinyl acetate					0.868	0.856	0.840	0.884	1.047	1.017	0.9189	9.72
27)	C	2-butanone				1.134	1.034	1.013	0.954	0.945	1.056	0.994	1.0186	6.37
28)		cis-1,2-dichloroet...	0.782	0.734	0.663	0.762	0.710	0.699	0.685	0.678	0.727	0.690	0.7130	5.33
29)		Ethyl Acetate					0.180	0.181	0.174	0.172	0.195	0.193	0.1826	5.38
30)	C	chloroform	1.041	0.896	0.885	0.986	0.905	0.883	0.845	0.829	0.865	0.756	0.8891	8.91
31)		Tetrahydrofuran				0.670	0.609	0.613	0.594	0.594	0.664	0.637	0.6260	5.06

Response Factor Report

Method Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Method File : TSIM15_211222.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Mon Dec 27 10:35:25 2021
Response Via : Initial Calibration

Calibration Files
0.02=r1529888_Ev2.D 0.05=r1529889_Ev2.D 0.1 =r1529890_Ev2.D 0.2 =r1529891_Ev2.D 0.5 =r1529892_Ev2.D
1.0 =r1529893_Ev2.D 5.0 =r1529894_Ev2.D 10.0=r1529895_Ev2.D 20.0=r1529896_Ev2.D 50.0=r1529897_Ev2.D

		Compound	0.02	0.05	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
32)	C	1,2-dichloroethane	0.741	0.665	0.607	0.672	0.618	0.605	0.582	0.622	0.599	0.588	0.6300	7.78
33)	I	1,4-difluorobenzene	ISTD											
34)	C	hexane				0.461	0.433	0.426	0.398	0.398	0.438	0.391	0.4205	6.15
35)	s	1,2-dichloroethane-D4				0.282	0.278	0.281	0.280	0.280	0.278	0.272	0.2786	1.26
36)	C	1,1,1-trichloroethane	0.401	0.269	0.256	0.302	0.283	0.281	0.276	0.279	0.298	0.274	0.2920	13.89
37)	C	benzene			1.057	0.915	0.758	0.714	0.654	0.648	0.681	0.611	0.7547	20.39
38)	C	carbon tetrachloride	0.357	0.252	0.279	0.266	0.249	0.253	0.257	0.261	0.279	0.244	0.2695	12.24
39)		cyclohexane				0.481	0.459	0.461	0.431	0.432	0.478	0.434	0.4537	4.74
40)		Dibromomethane		0.325	0.259	0.253	0.226	0.222	0.204	0.202	0.224	0.205	0.2356	16.63
41)	C	1,2-dichloropropane	0.283	0.272	0.257	0.278	0.265	0.256	0.247	0.246	0.264	0.252	0.2621	4.84
42)		bromodichloromethane	0.373	0.363	0.343	0.365	0.360	0.356	0.354	0.359	0.401	0.352	0.3626	4.29
43)	C	1,4-dioxane			0.163	0.171	0.155	0.157	0.155	0.155	0.173	0.158	0.1609	4.48
44)	C	trichloroethene	0.312	0.279	0.244	0.297	0.275	0.268	0.263	0.261	0.279	0.257	0.2735	7.27
45)	C	2,2,4-trimethylpen...		1.397	1.340	1.537	1.467	1.453	1.325	1.317	1.451	1.289	1.3974	6.05
46)		heptane				0.487	0.459	0.467	0.436	0.430	0.477	0.431	0.4553	5.11
47)	C	cis-1,3-dichloropr...	0.231	0.231	0.211	0.243	0.234	0.240	0.263	0.276	0.302	0.282	0.2511	11.29
48)	C	4-methyl-2-pentanone					0.483	0.494	0.488	0.492	0.544	0.501	0.5003	4.41
49)		trans-1,3-dichloro...	0.285	0.288	0.245	0.274	0.262	0.265	0.285	0.296	0.320	0.298	0.2818	7.57
50)	C	1,1,2-trichloroethane	0.281	0.244	0.230	0.254	0.239	0.239	0.230	0.230	0.246	0.233	0.2427	6.48
51)	I	chlorobenzene-D5	ISTD											
52)	C	toluene			5.597	4.858	3.931	3.680	3.413	3.372	3.622	3.400	3.9841	20.42
53)	s	toluene-D8				3.957	3.903	3.996	4.004	3.988	4.074	4.343	4.0378	3.57
54)		2-hexanone				1.991	1.986	2.015	1.972	1.981	2.249	2.124	2.0455	5.08
55)		dibromochloromethane	1.484	1.351	1.187	1.313	1.264	1.329	1.382	1.412	1.629	1.534	1.3885	9.45
56)	C	1,2-dibromoethane	1.643	1.358	1.370	1.521	1.430	1.442	1.443	1.417	1.544	1.485	1.4653	5.86
57)	C	tetrachloroethene	1.570	1.218	1.199	1.340	1.258	1.247	1.210	1.200	1.285	1.194	1.2721	8.97
58)		1,1,1,2-tetrachlor...	1.260	1.028	1.033	1.135	1.077	1.100	1.089	1.106	1.266	1.172	1.1265	7.42
59)	C	chlorobenzene	3.006	2.554	2.508	2.853	2.621	2.616	2.508	2.489	2.659	2.448	2.6261	6.72
60)	C	ethylbenzene	4.756	4.168	4.059	4.555	4.278	4.297	4.316	4.302	4.648	4.378	4.3757	4.93
61)	C	m+p-xylene	3.735	3.442	3.292	3.716	3.595	3.597	3.565	3.513	3.745	3.429	3.5629	4.15

Response Factor Report

Method Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Method File : TSIM15_211222.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Mon Dec 27 10:35:25 2021
Response Via : Initial Calibration

Calibration Files
0.02=r1529888_Ev2.D 0.05=r1529889_Ev2.D 0.1 =r1529890_Ev2.D 0.2 =r1529891_Ev2.D 0.5 =r1529892_Ev2.D
1.0 =r1529893_Ev2.D 5.0 =r1529894_Ev2.D 10.0=r1529895_Ev2.D 20.0=r1529896_Ev2.D 50.0=r1529897_Ev2.D

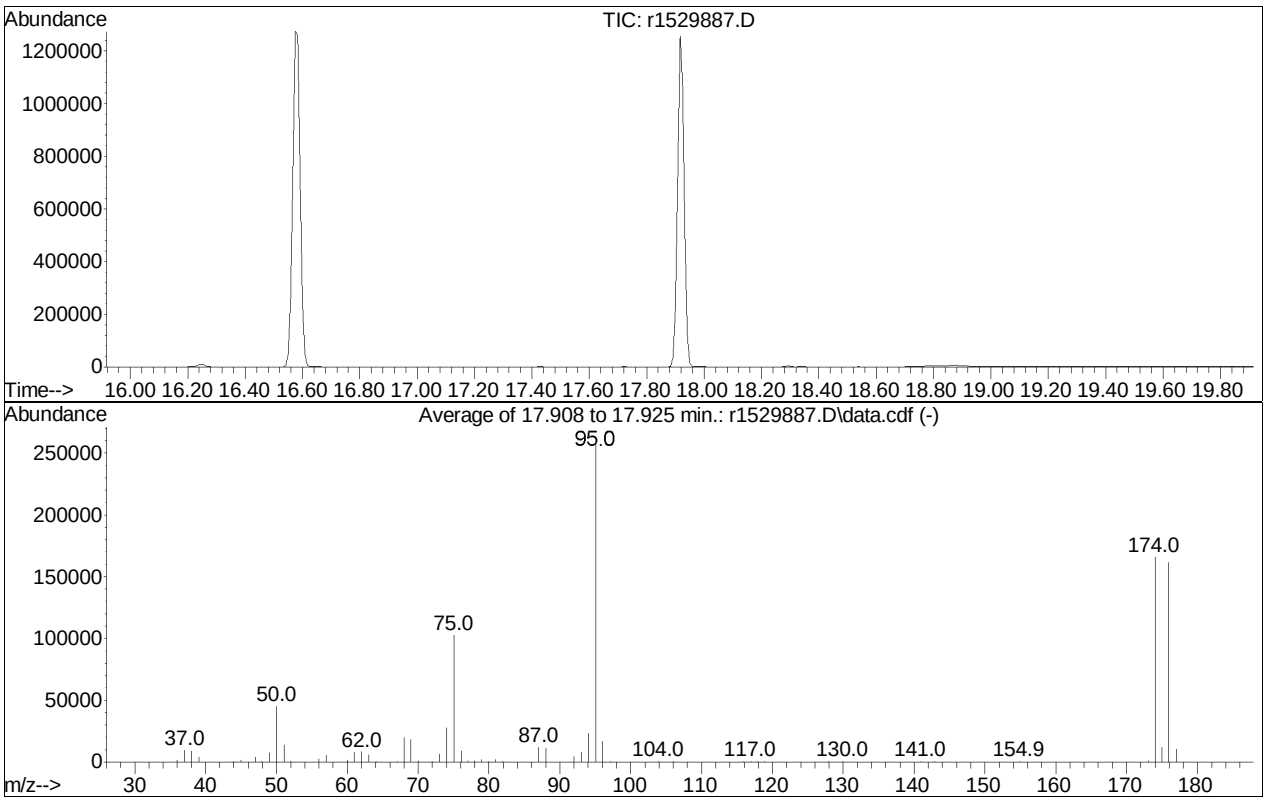
		Compound	0.02	0.05	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
62)	C	bromoform	1.127	0.854	0.844	0.966	0.924	0.962	1.051	1.106	1.304	1.245	1.0383	15.12
63)	C	styrene	2.391	2.154	2.130	2.464	2.395	2.410	2.472	2.488	2.707	2.620	2.4231	7.38
64)	C	1,1,2,2-tetrachlor...	3.027	2.617	2.511	2.849	2.712	2.705	2.667	2.636	2.748	2.355	2.6830	6.76
65)	C	o-xylene	3.668	3.359	3.268	3.795	3.603	3.589	3.592	3.554	3.779	3.319	3.5527	5.15
66)		1,2,3-Trichloropro...	2.275	1.918	1.894	2.143	2.009	1.983	1.856	1.827	2.010	1.897	1.9811	6.98
67)	s	bromofluorobenzene				2.720	2.730	2.914	2.969	2.969	3.070	3.202	2.9390	5.90
68)	C	isopropylbenzene				4.533	4.343	4.309	4.107	4.023	4.459	4.189	4.2804	4.32
69)		Bromobenzene	2.933	2.605	2.431	2.798	2.615	2.600	2.439	2.395	2.640	2.460	2.5916	6.65
70)		4-ethyl toluene	4.158	3.885	3.970	4.578	4.463	4.520	4.301	4.268	4.756	4.459	4.3358	6.31
71)		1,3,5-trimethylben...	3.569	3.327	3.307	3.860	3.783	3.815	3.779	3.730	3.995	3.717	3.6882	6.06
72)		tert-butylbenzene				4.706	4.537	4.584	4.374	4.310	4.482	3.735	4.3897	7.23
73)		1,2,4-trimethylben...	3.832	3.470	3.397	3.852	3.746	3.756	3.723	3.684	3.859	3.419	3.6737	4.88
74)	C	Benzyl Chloride			1.623	1.789	1.793	1.862	2.060	2.327	3.014	2.987	2.1818	25.09
75)		1,3-dichlorobenzene	2.494	2.289	2.275	2.533	2.463	2.467	2.449	2.451	2.706	2.554	2.4681	5.03
76)	C	1,4-dichlorobenzene	2.494	2.200	2.189	2.519	2.414	2.450	2.440	2.461	2.641	2.584	2.4393	5.98
77)		sec-butylbenzene				5.619	5.479	5.521	5.303	5.228	5.720	5.320	5.4556	3.31
78)		p-isopropyltoluene				5.518	5.435	5.502	5.350	5.240	5.473	4.546	5.2946	6.50
79)		1,2-dichlorobenzene	2.361	2.156	2.106	2.313	2.295	2.311	2.314	2.320	2.518	2.462	2.3155	5.28
80)		n-butylbenzene				4.752	4.736	4.866	4.804	4.774	5.204	4.728	4.8377	3.48
81)		1,2-dibromo-3-chlo...	0.950	0.817	0.811	0.849	0.884	0.941	1.000	1.009	1.127	1.083	0.9471	11.50
82)	C	1,2,4-trichloroben...		1.338	1.320	1.189	1.398	1.536	1.730	1.848	1.962	1.923	1.5826	18.32
83)		naphthalene		4.379	4.311	3.997	4.795	5.293	5.495	5.728	6.053	5.853	5.1005	14.73
84)		1,2,3-trichloroben...		1.365	1.322	1.141	1.383	1.566	1.688	1.772	1.858	1.865	1.5511	16.82
85)	C	hexachlorobutadiene		1.384	1.320	1.142	1.315	1.417	1.494	1.493	1.525	1.393	1.3869	8.54

(#) = Out of Range

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529887.D
Acq On : 22 Dec 2021 3:37 AM
Operator : AIRLAB15:TS
Sample : WG1587796-1,3,250,250
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Integration File: rteint.p

Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Mon Dec 27 10:35:25 2021



Spectrum Information: Average of 17.908 to 17.925 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	17.4	44941	PASS
75	95	30	66	39.7	102569	PASS
95	95	100	100	100.0	258437	PASS
96	95	5	9	6.6	17137	PASS
173	174	0.00	2	0.7	1221	PASS
174	95	50	120	64.3	166067	PASS
175	174	4	9	7.2	11983	PASS
176	174	93	101	97.2	161429	PASS
177	176	5	9	6.6	10591	PASS

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529888_Ev2.D
Acq On : 22 Dec 2021 4:15 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD0.02
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:20:10 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.592	49	210437	10.000	ppbV	0.05
Standard Area = 213198			Recovery = 98.70%			
33) 1,4-difluorobenzene	11.863	114	499778	10.000	ppbV	0.04
Standard Area = 515322			Recovery = 96.98%			
51) chlorobenzene-D5	16.575	54	116273	10.000	ppbV	0.03
Standard Area = 119198			Recovery = 97.55%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.475	65	142988	10.220	ppbV	0.04
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.20%			
53) toluene-D8	14.708	98	458497	9.849	ppbV	0.04
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.49%			
67) bromofluorobenzene	17.917	95	310899	9.006	ppbV	0.03
Spiked Amount 10.000	Range 70 - 130		Recovery = 90.06%			
Target Compounds						Qvalue
2) propylene	3.898	41	375M6	0.047	ppbV	
3) dichlorodifluoromethane	3.982	85	431	0.026	ppbV	97
4) chloromethane	4.168	50	225	0.029	ppbV #	72
5) Freon-114	4.294	85	480	0.025	ppbV	99
6) vinyl chloride	4.426	62	248M6	0.024	ppbV	
7) 1,3-butadiene	4.588	54	210	0.028	ppbV	88
8) bromomethane	4.912	94	202	0.026	ppbV	93
9) chloroethane	5.134	64	180	0.035	ppbV #	56
10) ethanol	5.308	31	1808	0.207	ppbV	98
11) vinyl bromide	5.560	106	156M6	0.024	ppbV	
12) acrolein	5.727	56	115	0.027	ppbV #	19
13) acetone	5.897	43	3415	0.311	ppbV #	95
14) trichlorofluoromethane	6.087	101	364	0.025	ppbV	95
15) isopropyl alcohol	6.233	45	1130	0.096	ppbV #	84
16) acrylonitrile	6.470	53	202M6	0.028	ppbV	
17) 1,1-dichloroethene	6.864	61	336	0.023	ppbV #	74
18) tertiary butyl alcohol	6.978	59	420	0.026	ppbV	96
19) methylene chloride	7.032	49	575	0.059	ppbV	91
20) 3-chloropropene	7.170	41	329	0.029	ppbV #	75
21) carbon disulfide	7.326	76	539	0.028	ppbV #	1
22) Freon 113	7.362	101	444	0.030	ppbV #	79
23) trans-1,2-dichloroethene	8.167	61	392	0.026	ppbV #	81
24) 1,1-dichloroethane	8.400	63	414	0.023	ppbV #	81

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529888_Ev2.D
Acq On : 22 Dec 2021 4:15 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD0.02
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:20:10 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	8.508	73	468	0.022	ppbV	#	80
26) vinyl acetate	8.625	43	411	0.023	ppbV	#	71
27) 2-butanone	8.908	43	678	0.034	ppbV	#	85
28) cis-1,2-dichloroethene	9.400	61	329	0.023	ppbV	#	76
29) Ethyl Acetate	9.725	61	62	0.017	ppbV	#	22
30) chloroform	9.750	83	438	0.025	ppbV	#	95
31) Tetrahydrofuran	10.242	42	264	0.021	ppbV	#	73
32) 1,2-dichloroethane	10.608	62	312	0.025	ppbV	#	68
34) hexane	9.667	57	495	0.025	ppbV	#	61
36) 1,1,1-trichloroethane	10.897	97	401	0.029	ppbV	#	81
37) benzene	11.430	78	2850	0.087	ppbV		97
38) carbon tetrachloride	11.597	117	357	0.028	ppbV		94
39) cyclohexane	11.743	56	476	0.022	ppbV		95
40) Dibromomethane	12.350	93	427	0.042	ppbV	#	81
41) 1,2-dichloropropane	12.390	63	283	0.023	ppbV	#	69
42) bromodichloromethane	12.617	83	373	0.021	ppbV	#	94
43) 1,4-dioxane	12.697	88	178	0.023	ppbV		83
44) trichloroethene	12.670	130	312	0.024	ppbV		87
45) 2,2,4-trimethylpentane	12.710	57	1603	0.024	ppbV	#	98
46) heptane	13.037	43	555	0.025	ppbV	#	90
47) cis-1,3-dichloropropene	14.308	75	231	0.018	ppbV	#	82
48) 4-methyl-2-pentanone	13.742	43	482	0.020	ppbV	#	85
49) trans-1,3-dichloropropene	13.675	75	285	0.020	ppbV	#	90
50) 1,1,2-trichloroethane	14.508	97	281	0.024	ppbV		91
52) toluene	14.817	91	3345	0.084	ppbV		97
54) 2-hexanone	15.108	43	447	0.019	ppbV	#	90
55) dibromochloromethane	15.258	129	345	0.021	ppbV	#	79
56) 1,2-dibromoethane	15.508	107	382	0.023	ppbV		93
57) tetrachloroethene	15.975	166	365	0.026	ppbV	#	84
58) 1,1,1,2-tetrachloroethane	16.600	131	293M4	0.023	ppbV		
59) chlorobenzene	16.617	112	699	0.024	ppbV		97
60) ethylbenzene	16.958	91	1106	0.022	ppbV		91
61) m+p-xylene	17.117	91	1737	0.042	ppbV		95
62) bromoform	17.192	173	262	0.021	ppbV	#	86
63) styrene	17.433	104	556	0.019	ppbV		93
64) 1,1,2,2-tetrachloroethane	17.525	83	704	0.023	ppbV		96
65) o-xylene	17.525	91	853	0.020	ppbV		95
66) 1,2,3-Trichloropropane	17.642	75	529	0.025	ppbV		99
68) isopropylbenzene	18.025	105	1064	0.022	ppbV		93
69) Bromobenzene	18.100	77	682	0.024	ppbV		96

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529888_Ev2.D
Acq On : 22 Dec 2021 4:15 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD0.02
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:20:10 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default - All compounds listed

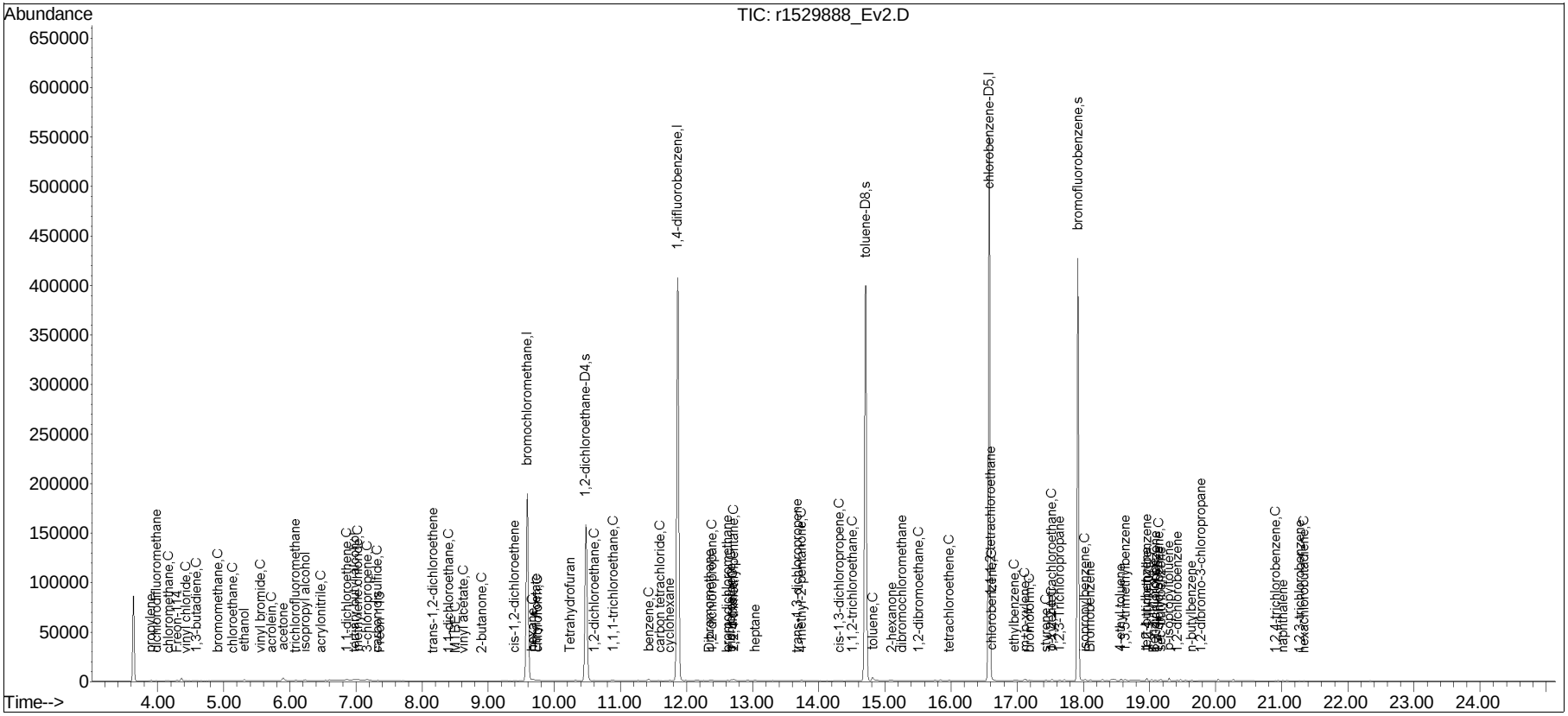
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.567	105	967	0.019	ppbV #	93
71) 1,3,5-trimethylbenzene	18.633	105	830M6	0.019	ppbV	
72) tert-butylbenzene	18.957	119	1064	0.021	ppbV	96
73) 1,2,4-trimethylbenzene	18.965	105	891	0.021	ppbV	98
74) Benzyl Chloride	19.073	91	424	0.018	ppbV #	90
75) 1,3-dichlorobenzene	19.090	146	580	0.020	ppbV	92
76) 1,4-dichlorobenzene	19.148	146	580M6	0.020	ppbV	
77) sec-butylbenzene	19.173	105	1290	0.021	ppbV	94
78) p-isopropyltoluene	19.298	119	1215	0.020	ppbV	99
79) 1,2-dichlorobenzene	19.423	146	549	0.020	ppbV #	86
80) n-butylbenzene	19.640	91	1053	0.019	ppbV	93
81) 1,2-dibromo-3-chloropr...	19.782	75	221	0.019	ppbV	93
82) 1,2,4-trichlorobenzene	20.908	180	335	0.017	ppbV #	68
83) naphthalene	21.017	128	1221	0.019	ppbV #	86
84) 1,2,3-trichlorobenzene	21.275	180	313	0.016	ppbV #	72
85) hexachlorobutadiene	21.342	225	348	0.020	ppbV #	92

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

Sub List : Default - All compounds listed1\12\1222SIM_I\r1529894_Ev2.D

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529888_Ev2.D
Acq On : 22 Dec 2021 4:15 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD0.02
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:20:10 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration

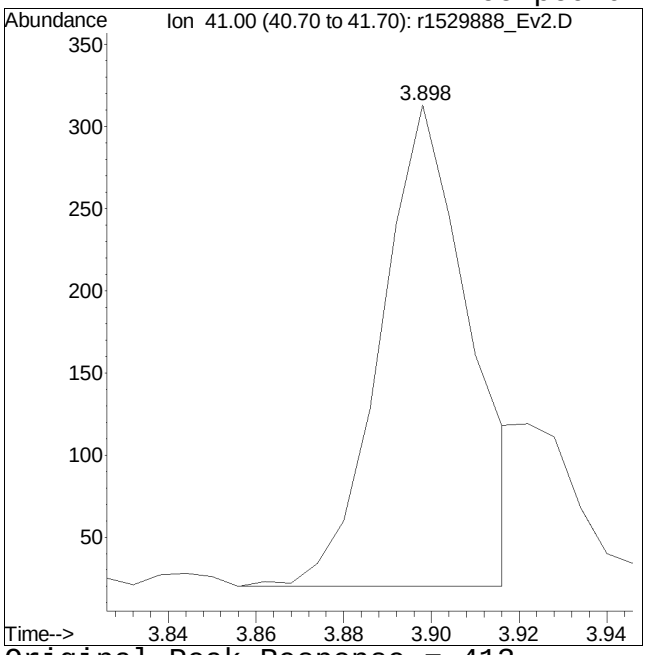


Manual Integration Report

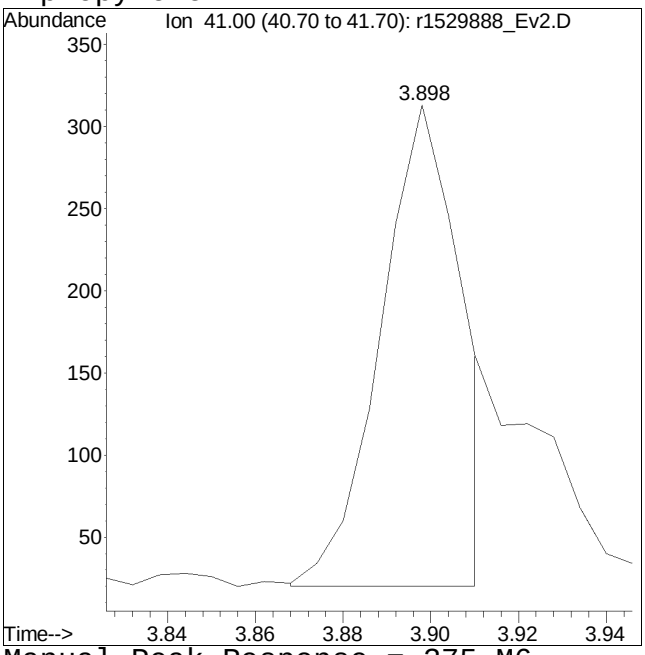
Data Path : O:\Forensics\Data\Airlab15Q
Data File : r1529888_Ev2.D
Date Inj'd : 12/22/2020 0:4: 5
Sample : ITO15-SIMSTD0.02

Method : TSIM15_211222.M
Operator : AIRLAB15:TS
Instrument :
Quant Date : 12/22/2021 10:49 am

Compound #2: propylene



Original Peak Response = 413



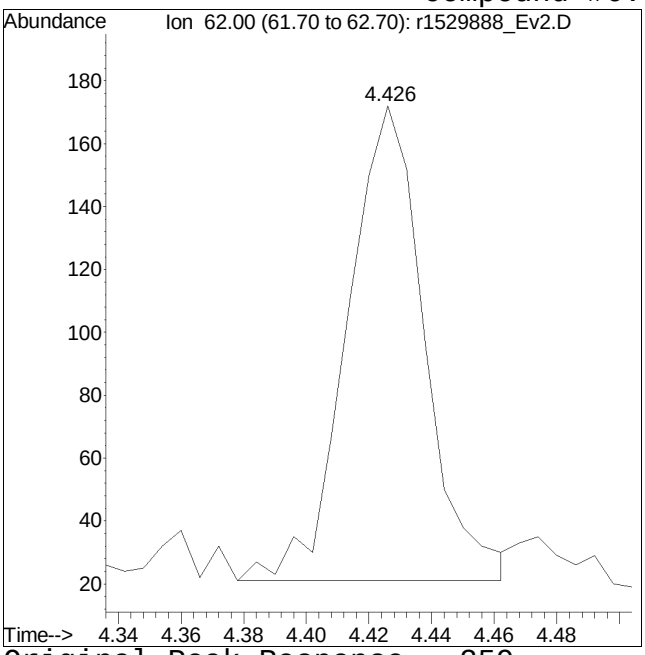
Manual Peak Response = 375 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

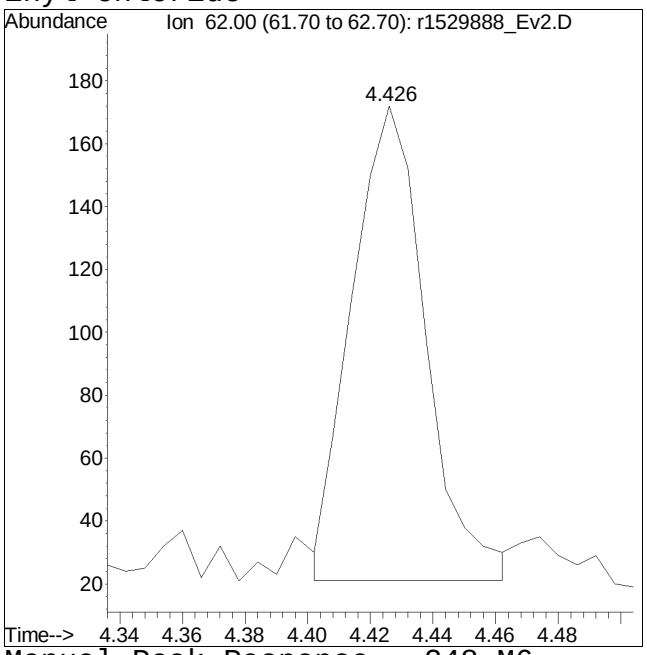
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529888_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:4: 5 Instrument :
Sample : ITO15-SIMSTD0.02 Quant Date : 12/22/2021 10:49 am

Compound #6: vinyl chloride



Original Peak Response = 259



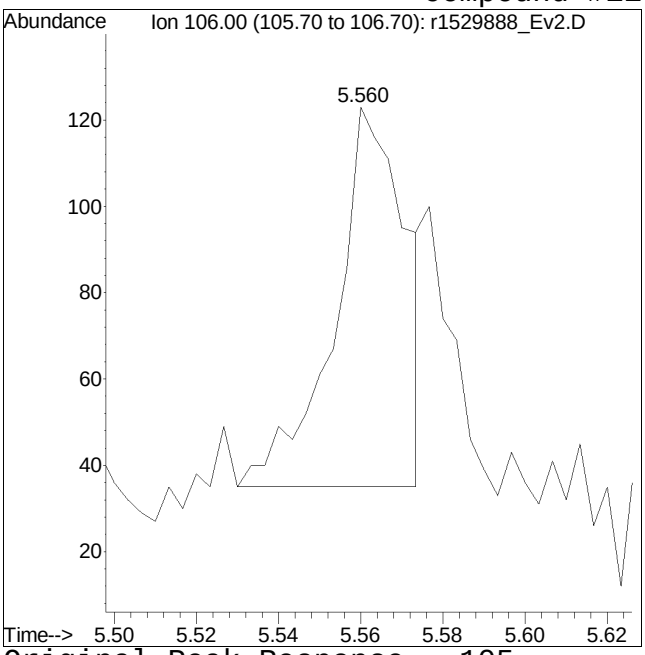
Manual Peak Response = 248 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

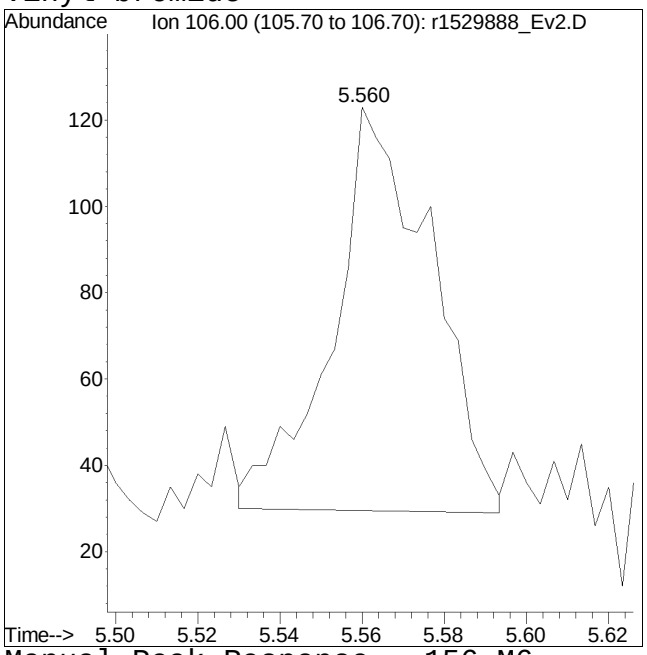
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529888_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:4: 5 Instrument :
Sample : ITO15-SIMSTD0.02 Quant Date : 12/22/2021 10:49 am

Compound #11: vinyl bromide



Original Peak Response = 105



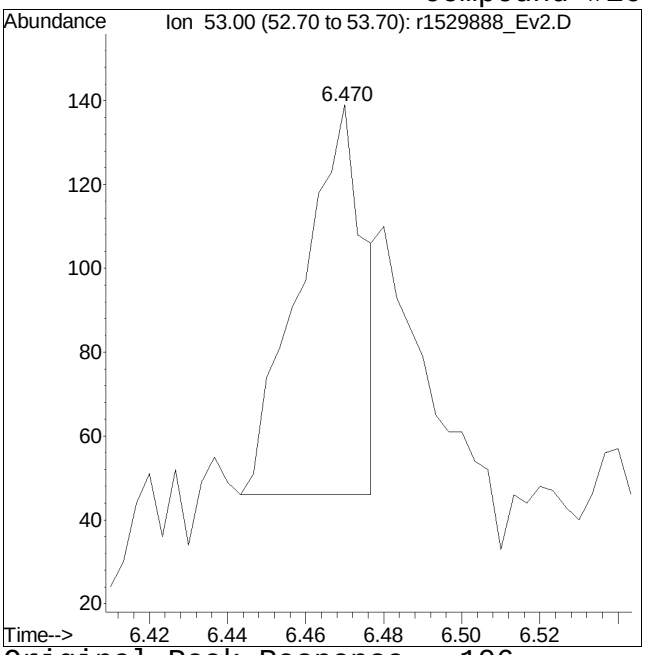
Manual Peak Response = 156 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

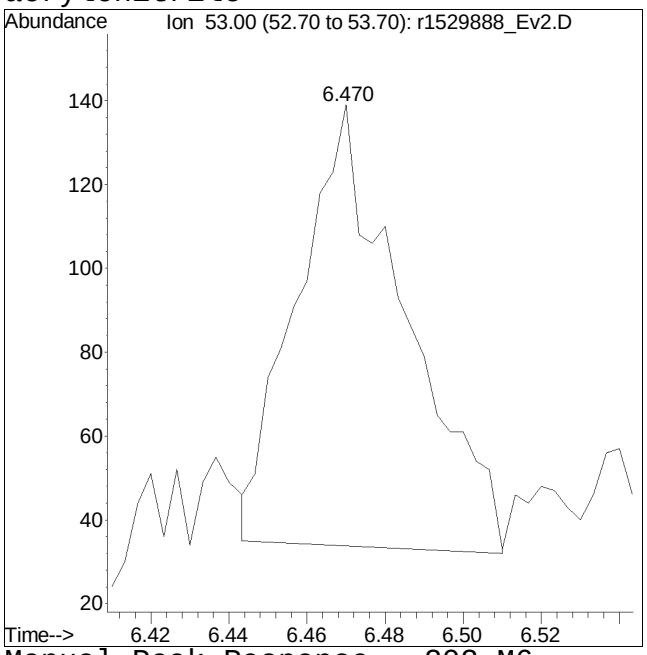
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529888_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:4: 5 Instrument :
Sample : ITO15-SIMSTD0.02 Quant Date : 12/22/2021 10:49 am

Compound #16: acrylonitrile



Original Peak Response = 106



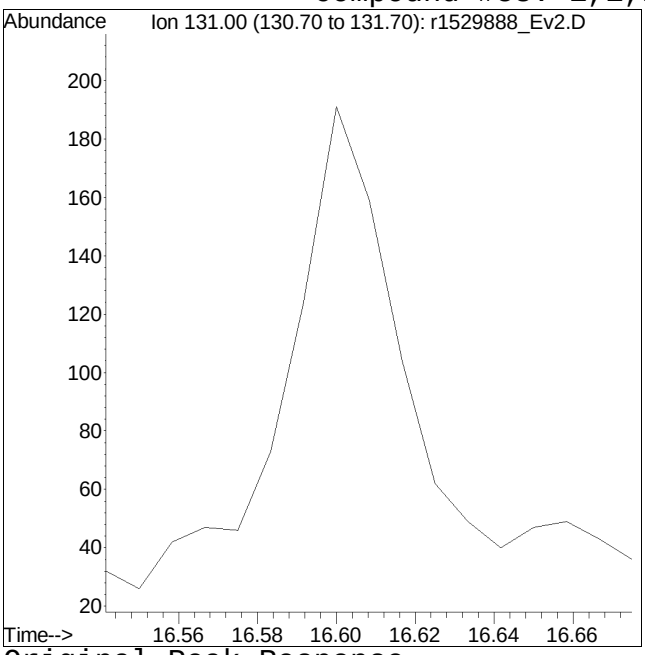
Manual Peak Response = 202 M6

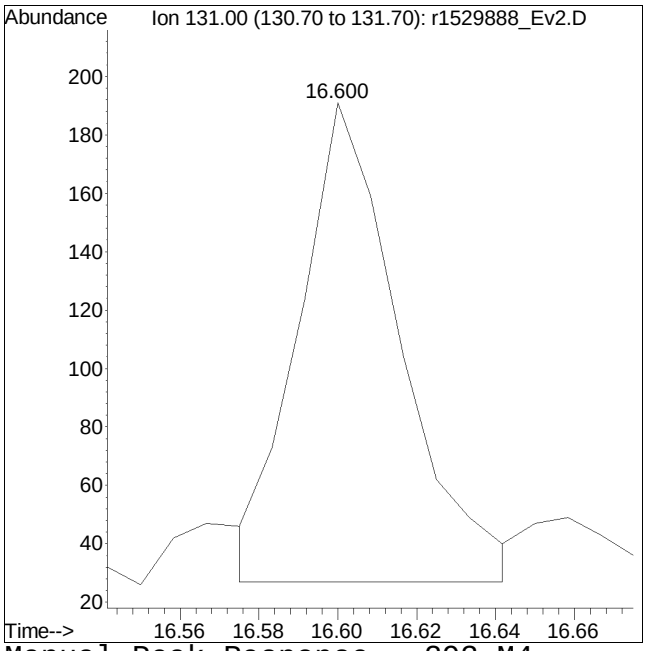
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529888_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:4: 5 Instrument :
Sample : ITO15-SIMSTD0.02 Quant Date : 12/22/2021 10:49 am

Compound #58: 1,1,1,2-tetrachloroethane



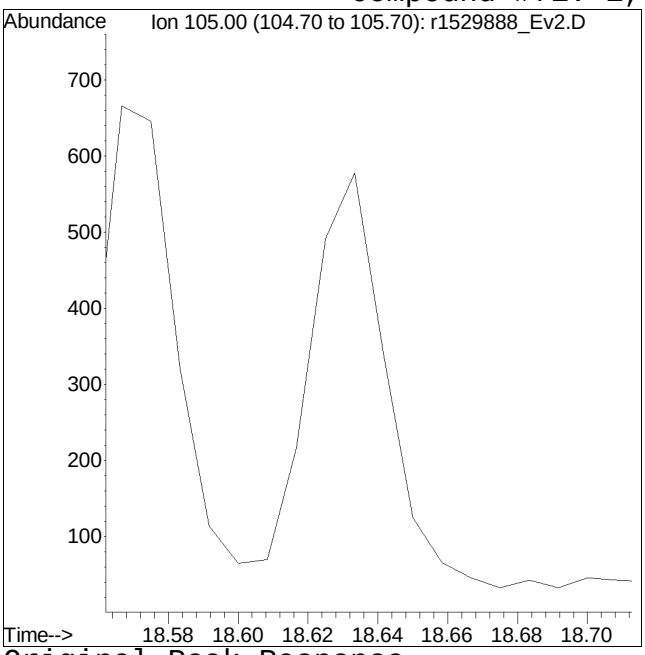


Original Peak Response = Manual Peak Response = 293 M4
M4 = Poor automated baseline construction.

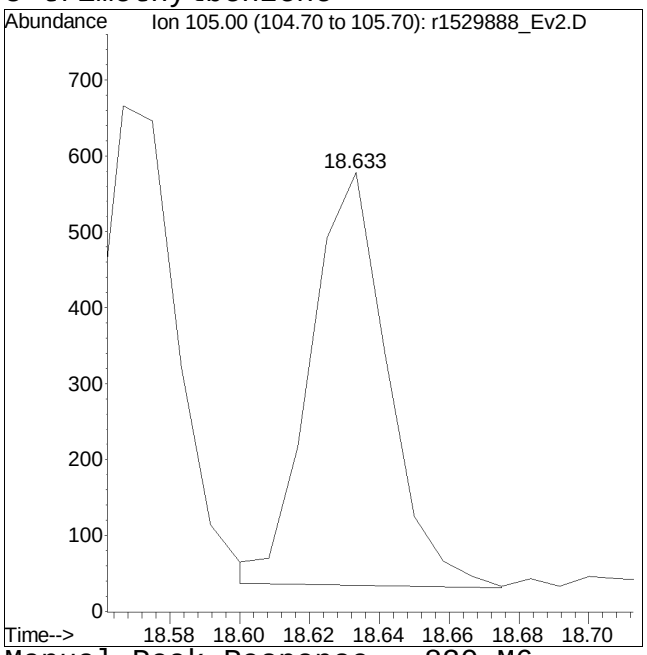
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529888_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:4: 5 Instrument :
Sample : ITO15-SIMSTD0.02 Quant Date : 12/22/2021 10:49 am

Compound #71: 1,3,5-trimethylbenzene



Original Peak Response =



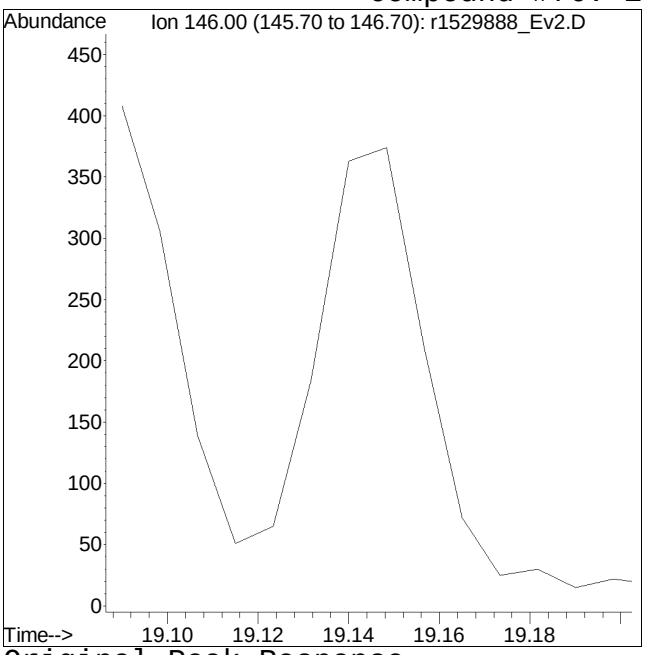
Manual Peak Response = 830 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

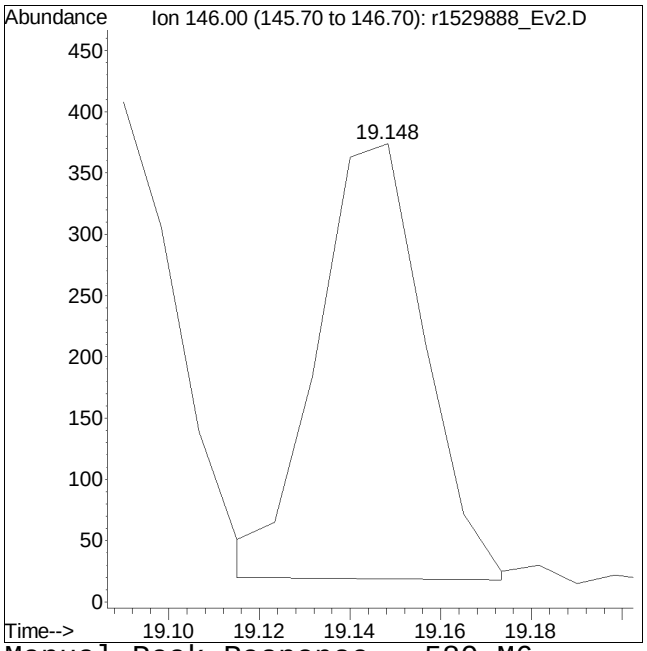
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529888_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:4: 5 Instrument :
Sample : ITO15-SIMSTD0.02 Quant Date : 12/22/2021 10:49 am

Compound #76: 1,4-dichlorobenzene



Original Peak Response =



Manual Peak Response = 580 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529889_Ev2.D
Acq On : 22 Dec 2021 4:54 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD0.05
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:21:48 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.592	49	211166	10.000	ppbV	0.05
Standard Area = 213198			Recovery = 99.05%			
33) 1,4-difluorobenzene	11.870	114	506545	10.000	ppbV	0.05
Standard Area = 515322			Recovery = 98.30%			
51) chlorobenzene-D5	16.575	54	117526	10.000	ppbV	0.03
Standard Area = 119198			Recovery = 98.60%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.483	65	144111	10.163	ppbV	0.05
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.63%			
53) toluene-D8	14.708	98	458639	9.747	ppbV	0.04
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.47%			
67) bromofluorobenzene	17.917	95	330229	9.464	ppbV	0.03
Spiked Amount 10.000	Range 70 - 130		Recovery = 94.64%			
Target Compounds						Qvalue
2) propylene	3.892	41	579M6	0.072	ppbV	
3) dichlorodifluoromethane	3.976	85	919	0.056	ppbV	89
4) chloromethane	4.156	50	472	0.061	ppbV #	86
5) Freon-114	4.282	85	1031	0.053	ppbV	99
6) vinyl chloride	4.420	62	553	0.053	ppbV #	87
7) 1,3-butadiene	4.582	54	424	0.056	ppbV	85
8) bromomethane	4.906	94	414	0.053	ppbV	90
9) chloroethane	5.128	64	303	0.059	ppbV #	85
10) ethanol	5.302	31	3334	0.381	ppbV	100
11) vinyl bromide	5.557	106	366M6	0.056	ppbV	
12) acrolein	5.717	56	258M6	0.061	ppbV	
13) acetone	5.893	43	4892	0.444	ppbV #	94
14) trichlorofluoromethane	6.087	101	842	0.057	ppbV	96
15) isopropyl alcohol	6.217	45	1923	0.162	ppbV #	95
16) acrylonitrile	6.470	53	421M6	0.058	ppbV	
17) 1,1-dichloroethene	6.864	61	789	0.055	ppbV #	87
18) tertiary butyl alcohol	6.966	59	926	0.057	ppbV #	89
19) methylene chloride	7.032	49	946	0.096	ppbV	91
20) 3-chloropropene	7.170	41	637	0.055	ppbV #	80
21) carbon disulfide	7.326	76	981	0.050	ppbV #	1
22) Freon 113	7.368	101	787	0.053	ppbV	94
23) trans-1,2-dichloroethene	8.167	61	832	0.055	ppbV #	90
24) 1,1-dichloroethane	8.400	63	959	0.053	ppbV	89

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529889_Ev2.D
Acq On : 22 Dec 2021 4:54 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD0.05
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:21:48 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	8.508	73	1093	0.052	ppbV	#	91
26) vinyl acetate	8.625	43	948	0.053	ppbV	#	89
27) 2-butanone	8.908	43	1246	0.062	ppbV	#	87
28) cis-1,2-dichloroethene	9.400	61	775	0.054	ppbV		90
29) Ethyl Acetate	9.717	61	230	0.063	ppbV		65
30) chloroform	9.758	83	946	0.053	ppbV		93
31) Tetrahydrofuran	10.242	42	698	0.056	ppbV	#	89
32) 1,2-dichloroethane	10.608	62	702	0.057	ppbV	#	87
34) hexane	9.667	57	1119	0.055	ppbV	#	65
36) 1,1,1-trichloroethane	10.903	97	682	0.049	ppbV	#	94
37) benzene	11.430	78	3707	0.112	ppbV		98
38) carbon tetrachloride	11.610	117	637	0.049	ppbV	#	94
39) cyclohexane	11.750	56	1131	0.052	ppbV	#	88
40) Dibromomethane	12.357	93	823	0.080	ppbV	#	95
41) 1,2-dichloropropane	12.390	63	690	0.055	ppbV	#	93
42) bromodichloromethane	12.617	83	919	0.051	ppbV	#	85
43) 1,4-dioxane	12.690	88	466	0.059	ppbV		82
44) trichloroethene	12.670	130	706	0.053	ppbV		98
45) 2,2,4-trimethylpentane	12.717	57	3539	0.053	ppbV		99
46) heptane	13.030	43	1114	0.050	ppbV	#	92
47) cis-1,3-dichloropropene	14.308	75	584	0.044	ppbV		95
48) 4-methyl-2-pentanone	13.742	43	1079	0.044	ppbV	#	96
49) trans-1,3-dichloropropene	13.683	75	730	0.051	ppbV	#	90
50) 1,1,2-trichloroethane	14.508	97	618	0.053	ppbV		87
52) toluene	14.817	91	4533	0.113	ppbV		99
54) 2-hexanone	15.117	43	1052	0.045	ppbV	#	94
55) dibromochloromethane	15.267	129	794	0.049	ppbV	#	97
56) 1,2-dibromoethane	15.517	107	798	0.047	ppbV		92
57) tetrachloroethene	15.975	166	716	0.050	ppbV		93
58) 1,1,1,2-tetrachloroethane	16.608	131	604	0.047	ppbV		96
59) chlorobenzene	16.617	112	1501	0.051	ppbV		97
60) ethylbenzene	16.958	91	2449	0.048	ppbV		95
61) m+p-xylene	17.117	91	4045	0.097	ppbV		98
62) bromoform	17.192	173	502	0.041	ppbV		95
63) styrene	17.442	104	1266	0.044	ppbV		98
64) 1,1,2,2-tetrachloroethane	17.533	83	1538	0.049	ppbV		99
65) o-xylene	17.533	91	1974	0.047	ppbV		97
66) 1,2,3-Trichloropropane	17.642	75	1127	0.052	ppbV		93
68) isopropylbenzene	18.033	105	2445	0.051	ppbV		95
69) Bromobenzene	18.108	77	1531	0.053	ppbV		95

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529889_Ev2.D
Acq On : 22 Dec 2021 4:54 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD0.05
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:21:48 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default - All compounds listed

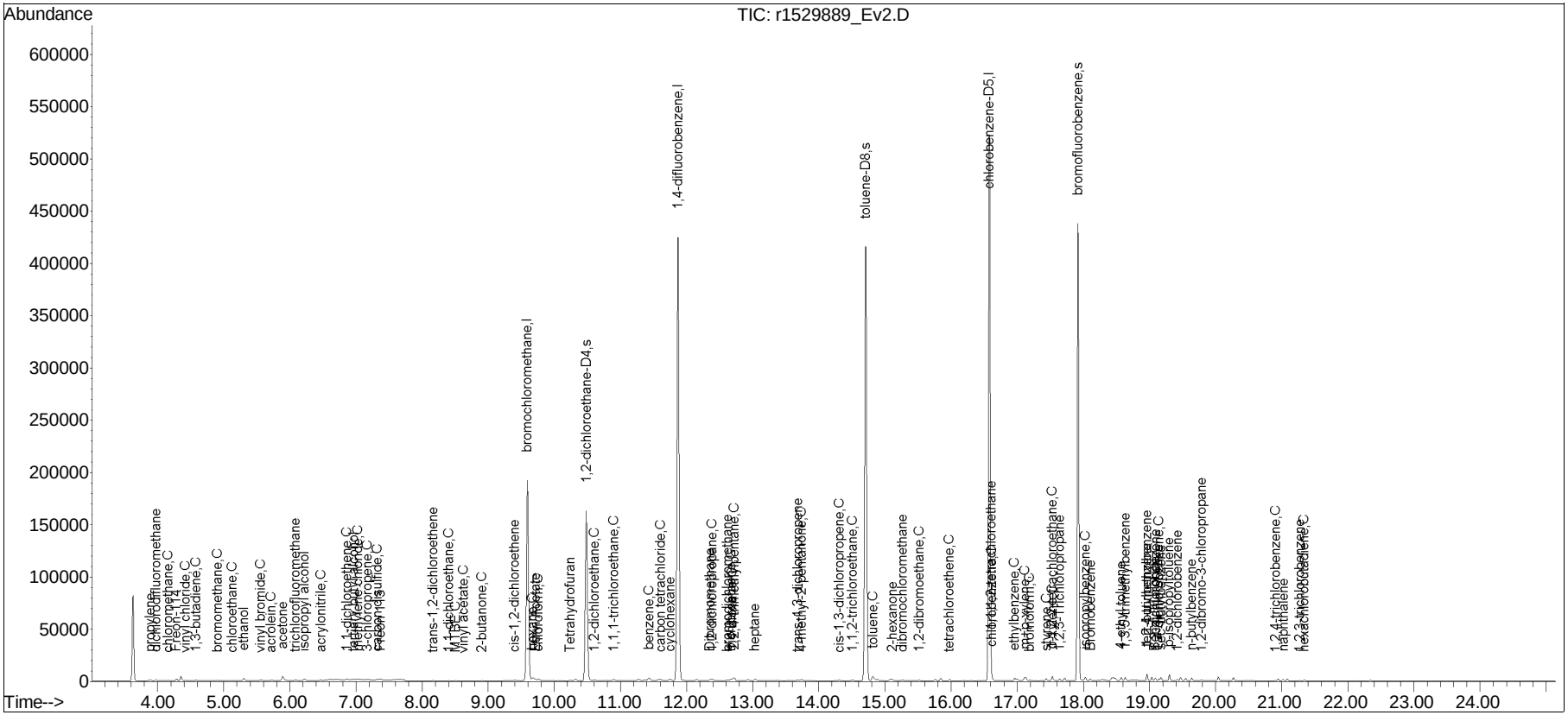
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.575	105	2283	0.045	ppbV #	91
71) 1,3,5-trimethylbenzene	18.633	105	1955	0.044	ppbV	96
72) tert-butylbenzene	18.965	119	2458	0.048	ppbV	95
73) 1,2,4-trimethylbenzene	18.965	105	2039	0.047	ppbV	94
74) Benzyl Chloride	19.082	91	965	0.040	ppbV	97
75) 1,3-dichlorobenzene	19.090	146	1345	0.047	ppbV	91
76) 1,4-dichlorobenzene	19.148	146	1293M6	0.045	ppbV	
77) sec-butylbenzene	19.173	105	2921	0.047	ppbV	98
78) p-isopropyltoluene	19.298	119	2823	0.045	ppbV	97
79) 1,2-dichlorobenzene	19.423	146	1267	0.047	ppbV	91
80) n-butylbenzene	19.640	91	2463	0.044	ppbV	98
81) 1,2-dibromo-3-chloropr...	19.790	75	480	0.041	ppbV	94
82) 1,2,4-trichlorobenzene	20.908	180	786	0.039	ppbV #	85
83) naphthalene	21.025	128	2573	0.040	ppbV #	94
84) 1,2,3-trichlorobenzene	21.275	180	802	0.040	ppbV #	87
85) hexachlorobutadiene	21.342	225	813	0.046	ppbV #	89

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

Sub List : Default - All compounds listed1\12\1222SIM_I\r1529894_Ev2.D

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529889_Ev2.D
Acq On : 22 Dec 2021 4:54 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD0.05
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

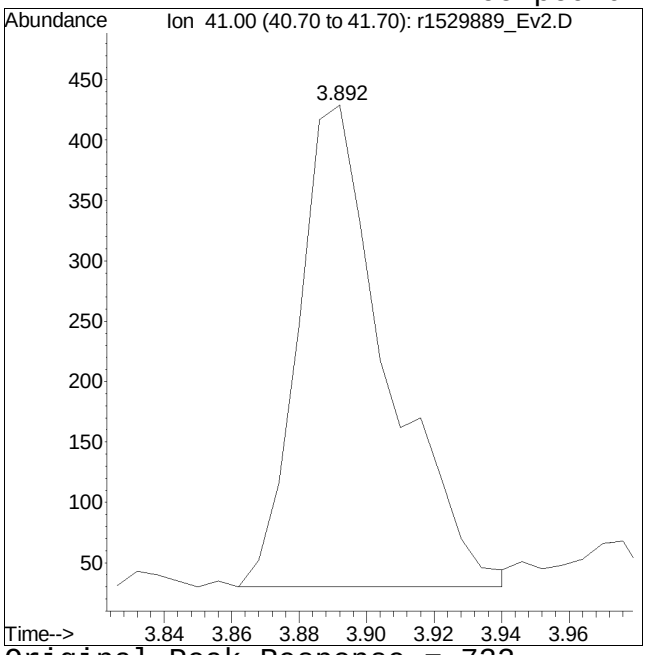
Quant Time: Dec 27 10:21:48 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration



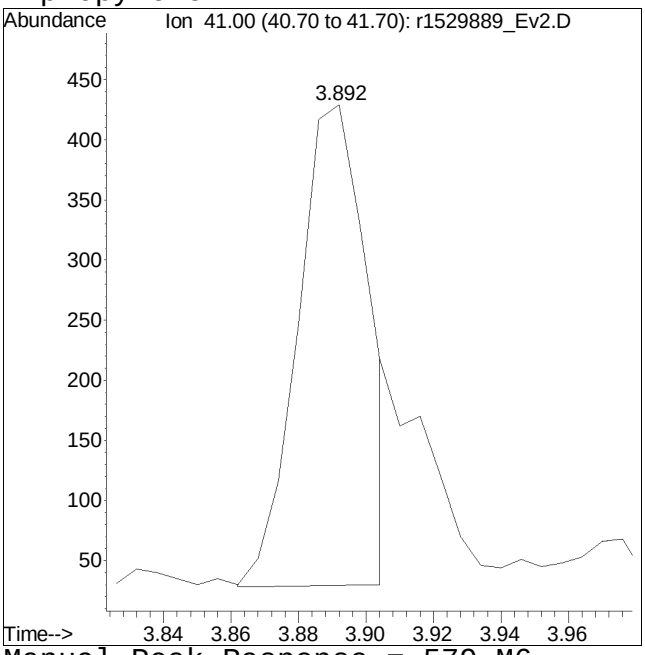
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529889_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:4: 4 Instrument :
Sample : ITO15-SIMSTD0.05 Quant Date : 12/22/2021 10:49 am

Compound #2: propylene



Original Peak Response = 732



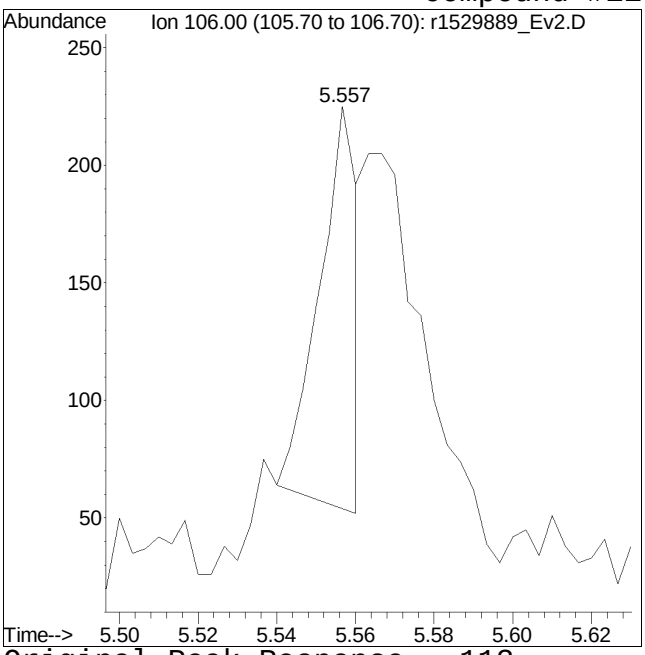
Manual Peak Response = 579 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

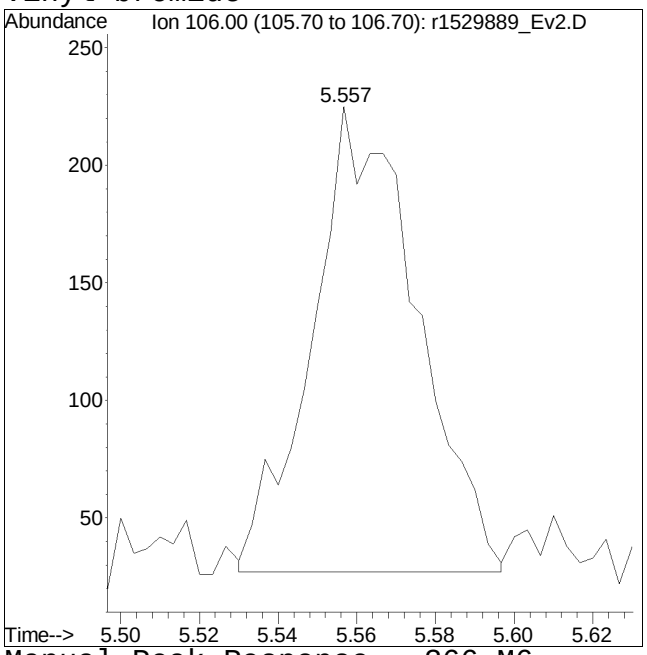
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529889_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:4: 4 Instrument :
Sample : ITO15-SIMSTD0.05 Quant Date : 12/22/2021 10:49 am

Compound #11: vinyl bromide



Original Peak Response = 113



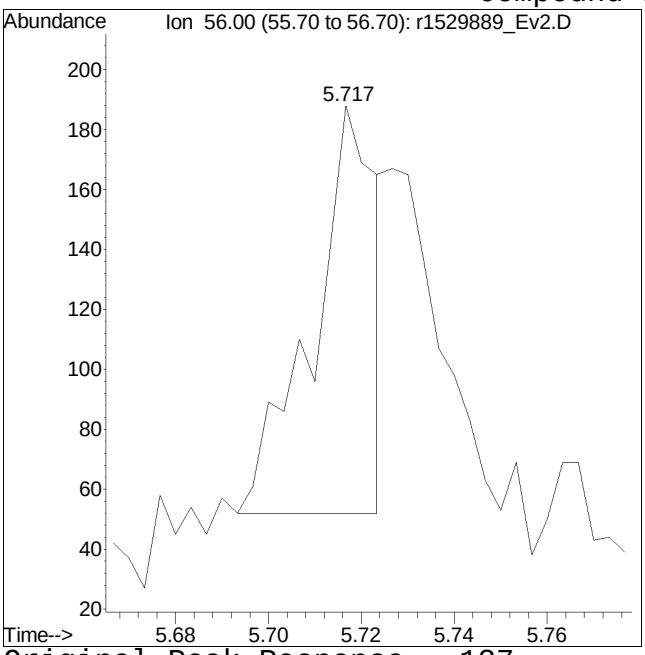
Manual Peak Response = 366 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

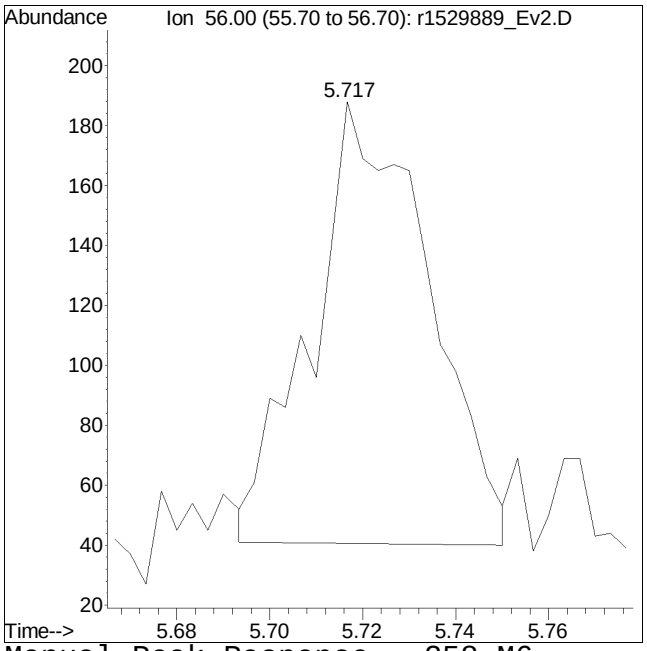
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529889_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:4: 4 Instrument :
Sample : ITO15-SIMSTD0.05 Quant Date : 12/22/2021 10:49 am

Compound #12: acrolein



Original Peak Response = 127



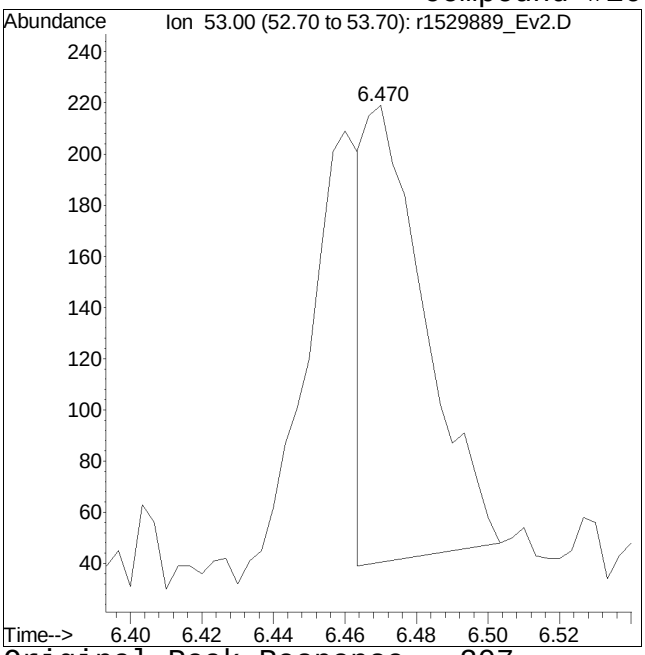
Manual Peak Response = 258 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

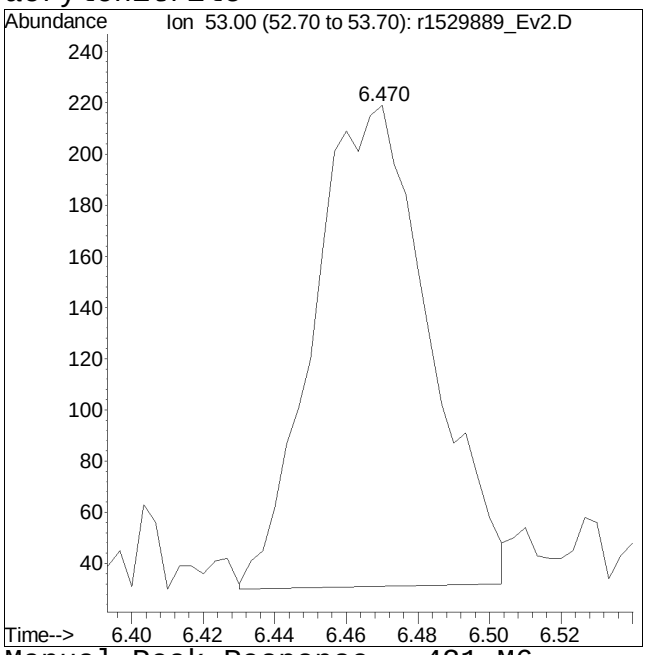
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529889_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:4: 4 Instrument :
Sample : ITO15-SIMSTD0.05 Quant Date : 12/22/2021 10:49 am

Compound #16: acrylonitrile



Original Peak Response = 207



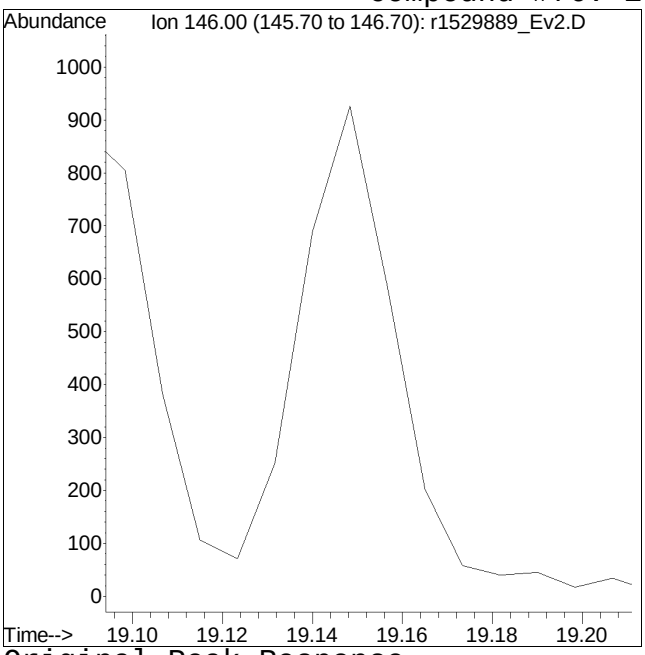
Manual Peak Response = 421 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

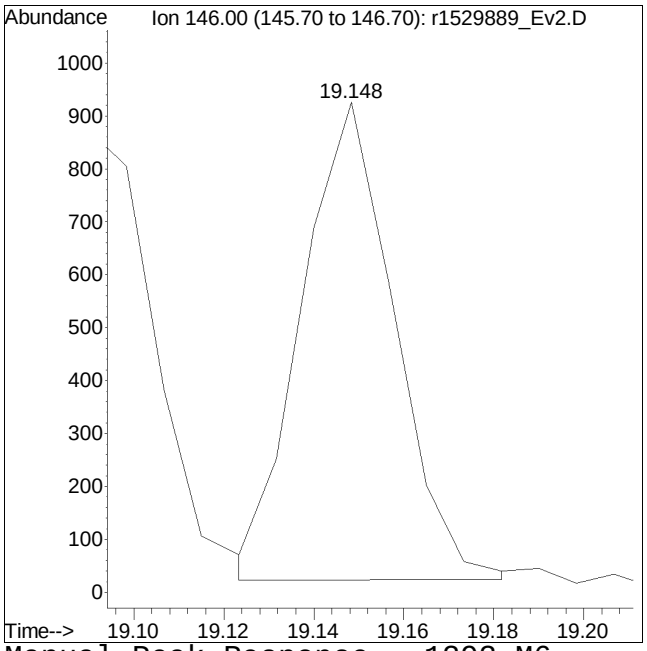
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529889_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:4: 4 Instrument :
Sample : ITO15-SIMSTD0.05 Quant Date : 12/22/2021 10:49 am

Compound #76: 1,4-dichlorobenzene



Original Peak Response =



Manual Peak Response = 1293 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529890_Ev2.D
Acq On : 22 Dec 2021 5:35 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD0.1
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:22:58 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) bromochloromethane	9.592	49	210431	10.000	ppbV		0.05
Standard Area = 213198			Recovery = 98.70%				
33) 1,4-difluorobenzene	11.870	114	506928	10.000	ppbV		0.05
Standard Area = 515322			Recovery = 98.37%				
51) chlorobenzene-D5	16.575	54	116970	10.000	ppbV		0.03
Standard Area = 119198			Recovery = 98.13%				
System Monitoring Compounds							
35) 1,2-dichloroethane-D4	10.483	65	143009	10.078	ppbV		0.05
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.78%				
53) toluene-D8	14.708	98	459662	9.815	ppbV		0.04
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.15%				
67) bromofluorobenzene	17.917	95	331626	9.549	ppbV		0.03
Spiked Amount 10.000	Range 70 - 130		Recovery = 95.49%				
Target Compounds							Qvalue
2) propylene	3.892	41	983M6	0.123	ppbV		
3) dichlorodifluoromethane	3.970	85	1808	0.111	ppbV		97
4) chloromethane	4.156	50	875	0.113	ppbV		96
5) Freon-114	4.288	85	1967	0.102	ppbV		99
6) vinyl chloride	4.420	62	1072	0.103	ppbV		98
7) 1,3-butadiene	4.582	54	805	0.107	ppbV		85
8) bromomethane	4.906	94	792	0.101	ppbV		88
9) chloroethane	5.128	64	602	0.118	ppbV	#	90
10) ethanol	5.302	31	5660	0.649	ppbV		98
11) vinyl bromide	5.560	106	662	0.102	ppbV		94
12) acrolein	5.727	56	492M6	0.117	ppbV		
13) acetone	5.893	43	7445	0.678	ppbV	#	94
14) trichlorofluoromethane	6.087	101	1584	0.108	ppbV		100
15) isopropyl alcohol	6.220	45	3385	0.287	ppbV	#	92
16) acrylonitrile	6.467	53	745	0.103	ppbV		89
17) 1,1-dichloroethene	6.864	61	1537	0.107	ppbV		93
18) tertiary butyl alcohol	6.966	59	1741	0.107	ppbV	#	89
19) methylene chloride	7.032	49	1599	0.163	ppbV		91
20) 3-chloropropene	7.176	41	1143	0.100	ppbV	#	85
21) carbon disulfide	7.332	76	1831	0.094	ppbV	#	1
22) Freon 113	7.368	101	1569	0.106	ppbV	#	95
23) trans-1,2-dichloroethene	8.167	61	1591	0.106	ppbV		99
24) 1,1-dichloroethane	8.400	63	1829	0.101	ppbV		94

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529890_Ev2.D
Acq On : 22 Dec 2021 5:35 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD0.1
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:22:58 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	8.508	73	2124	0.102	ppbV		94
26) vinyl acetate	8.625	43	1716	0.097	ppbV	#	91
27) 2-butanone	8.908	43	2224	0.111	ppbV	#	95
28) cis-1,2-dichloroethene	9.408	61	1396	0.097	ppbV	#	89
29) Ethyl Acetate	9.725	61	386	0.106	ppbV	#	71
30) chloroform	9.758	83	1863	0.105	ppbV		98
31) Tetrahydrofuran	10.233	42	1199	0.096	ppbV		90
32) 1,2-dichloroethane	10.617	62	1278	0.104	ppbV		91
34) hexane	9.675	57	2175	0.108	ppbV	#	79
36) 1,1,1-trichloroethane	10.903	97	1299	0.093	ppbV	#	94
37) benzene	11.437	78	5356	0.162	ppbV		99
38) carbon tetrachloride	11.610	117	1412	0.109	ppbV		95
39) cyclohexane	11.757	56	2169	0.099	ppbV		93
40) Dibromomethane	12.363	93	1314	0.127	ppbV	#	98
41) 1,2-dichloropropane	12.397	63	1302	0.104	ppbV		94
42) bromodichloromethane	12.623	83	1739	0.097	ppbV		95
43) 1,4-dioxane	12.697	88	825	0.105	ppbV		90
44) trichloroethene	12.677	130	1237	0.093	ppbV		92
45) 2,2,4-trimethylpentane	12.717	57	6792	0.101	ppbV		100
46) heptane	13.037	43	2231	0.101	ppbV	#	89
47) cis-1,3-dichloropropene	14.308	75	1069	0.080	ppbV		96
48) 4-methyl-2-pentanone	13.742	43	2229	0.090	ppbV		97
49) trans-1,3-dichloropropene	13.692	75	1240	0.086	ppbV		96
50) 1,1,2-trichloroethane	14.508	97	1168	0.100	ppbV		88
52) toluene	14.817	91	6547	0.164	ppbV		99
54) 2-hexanone	15.108	43	2003	0.087	ppbV		99
55) dibromochloromethane	15.267	129	1389	0.086	ppbV		97
56) 1,2-dibromoethane	15.517	107	1603	0.095	ppbV		89
57) tetrachloroethene	15.983	166	1403	0.099	ppbV		97
58) 1,1,1,2-tetrachloroethane	16.608	131	1208	0.095	ppbV		96
59) chlorobenzene	16.625	112	2934	0.100	ppbV		93
60) ethylbenzene	16.967	91	4748	0.094	ppbV		95
61) m+p-xylene	17.125	91	7702	0.185	ppbV		99
62) bromoform	17.192	173	987	0.080	ppbV		96
63) styrene	17.442	104	2491	0.086	ppbV		96
64) 1,1,2,2-tetrachloroethane	17.533	83	2937	0.094	ppbV		97
65) o-xylene	17.533	91	3823	0.091	ppbV		97
66) 1,2,3-Trichloropropane	17.642	75	2215	0.102	ppbV		93
68) isopropylbenzene	18.033	105	4683	0.097	ppbV		94
69) Bromobenzene	18.108	77	2844	0.100	ppbV		98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529890_Ev2.D
Acq On : 22 Dec 2021 5:35 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD0.1
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:22:58 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default - All compounds listed

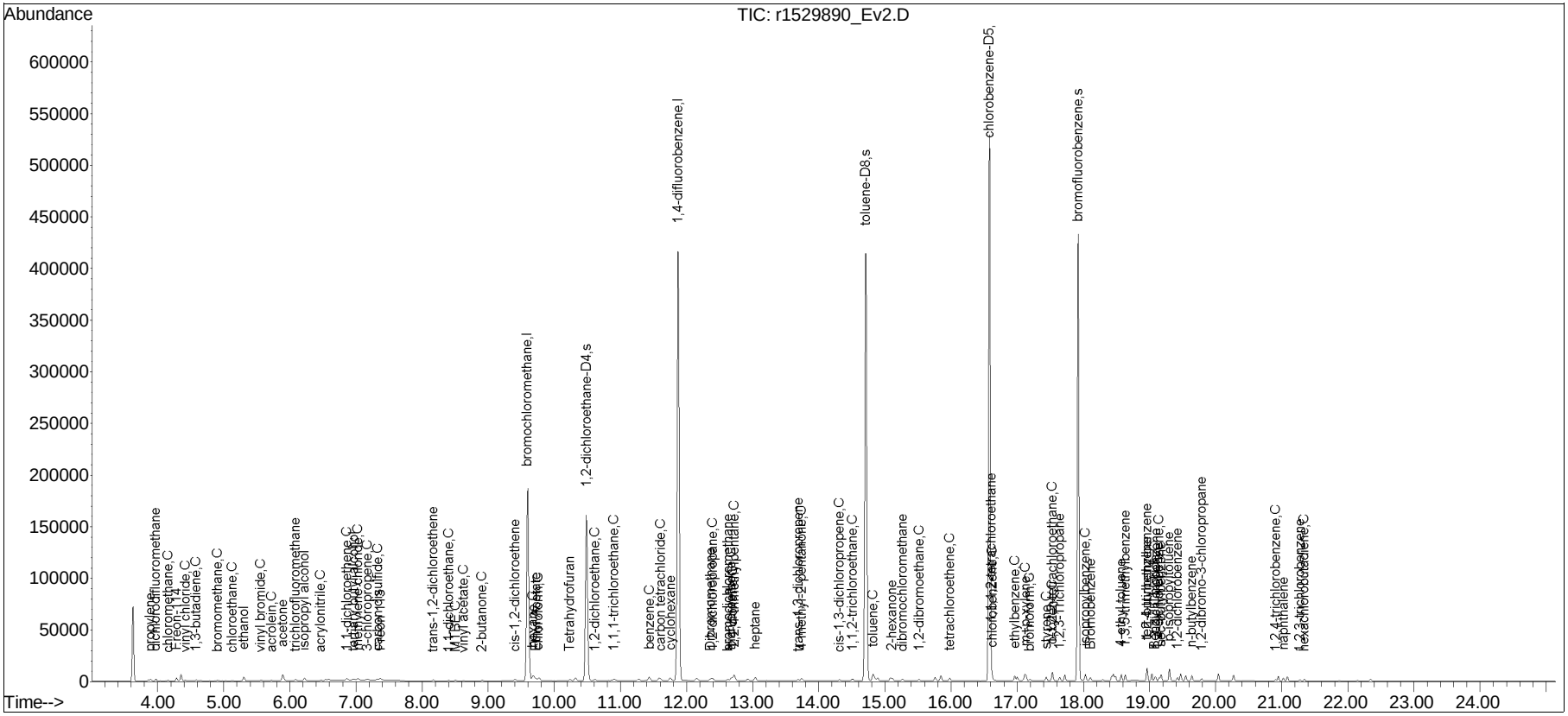
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.575	105	4644	0.092	ppbV	95
71) 1,3,5-trimethylbenzene	18.633	105	3868	0.088	ppbV	97
72) tert-butylbenzene	18.965	119	4919	0.096	ppbV	93
73) 1,2,4-trimethylbenzene	18.965	105	3973	0.091	ppbV	95
74) Benzyl Chloride	19.082	91	1898	0.079	ppbV	100
75) 1,3-dichlorobenzene	19.098	146	2661	0.093	ppbV	98
76) 1,4-dichlorobenzene	19.148	146	2561M6	0.090	ppbV	
77) sec-butylbenzene	19.173	105	5701	0.092	ppbV	99
78) p-isopropyltoluene	19.298	119	5691	0.091	ppbV	95
79) 1,2-dichlorobenzene	19.423	146	2463	0.091	ppbV	89
80) n-butylbenzene	19.640	91	4856	0.086	ppbV	100
81) 1,2-dibromo-3-chloropr...	19.790	75	949	0.081	ppbV	93
82) 1,2,4-trichlorobenzene	20.908	180	1544	0.076	ppbV #	90
83) naphthalene	21.025	128	5043	0.078	ppbV	98
84) 1,2,3-trichlorobenzene	21.275	180	1546	0.078	ppbV #	92
85) hexachlorobutadiene	21.342	225	1544	0.088	ppbV	95

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

Sub List : Default - All compounds listed1\12\1222SIM_I\r1529894_Ev2.D

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529890_Ev2.D
Acq On : 22 Dec 2021 5:35 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD0.1
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

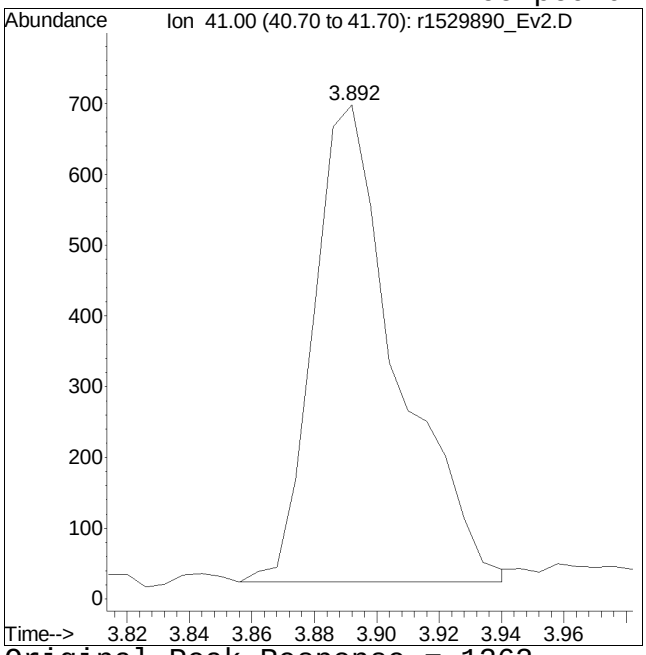
Quant Time: Dec 27 10:22:58 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration



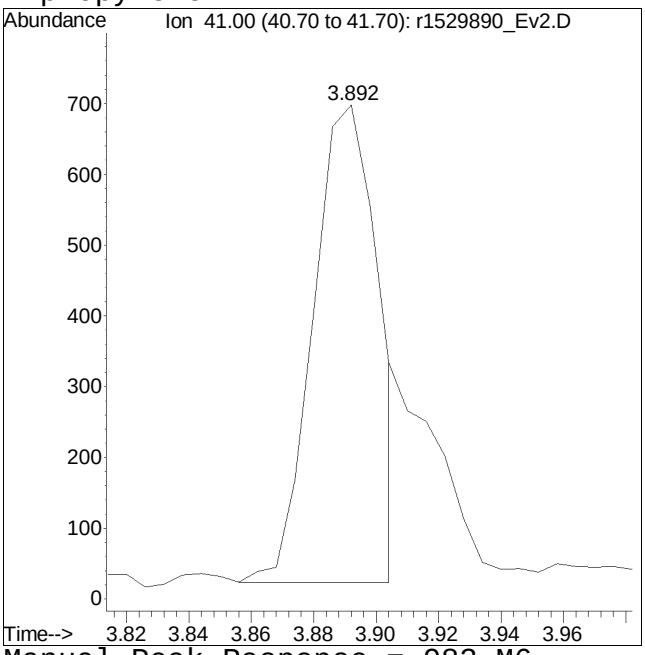
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529890_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:5: 5 Instrument :
Sample : ITO15-SIMSTD0.1 Quant Date : 12/22/2021 10:49 am

Compound #2: propylene



Original Peak Response = 1262



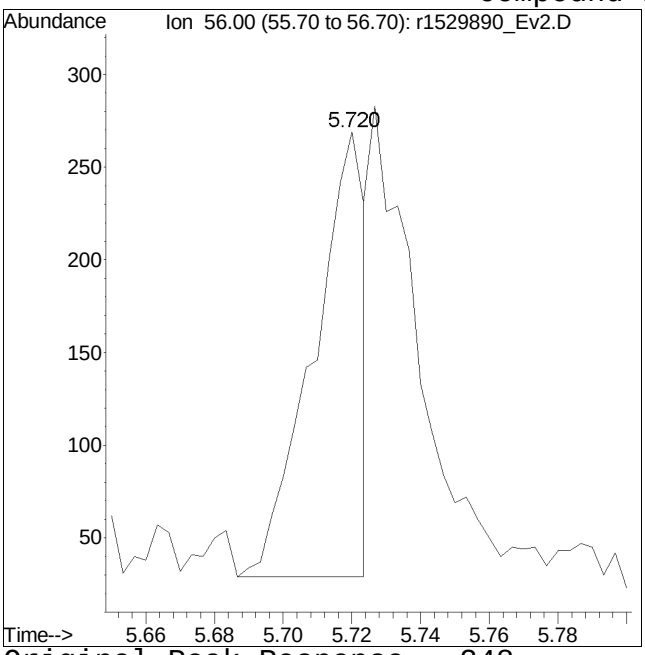
Manual Peak Response = 983 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

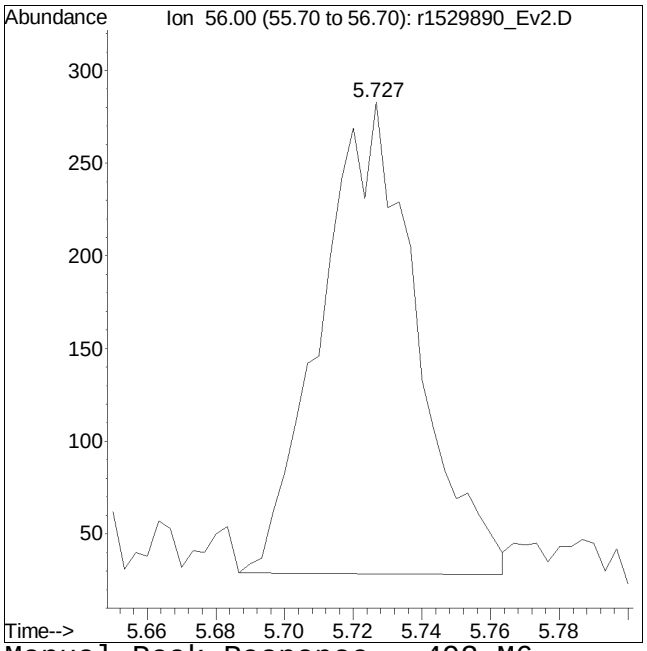
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529890_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:5: 5 Instrument :
Sample : ITO15-SIMSTD0.1 Quant Date : 12/22/2021 10:49 am

Compound #12: acrolein



Original Peak Response = 248



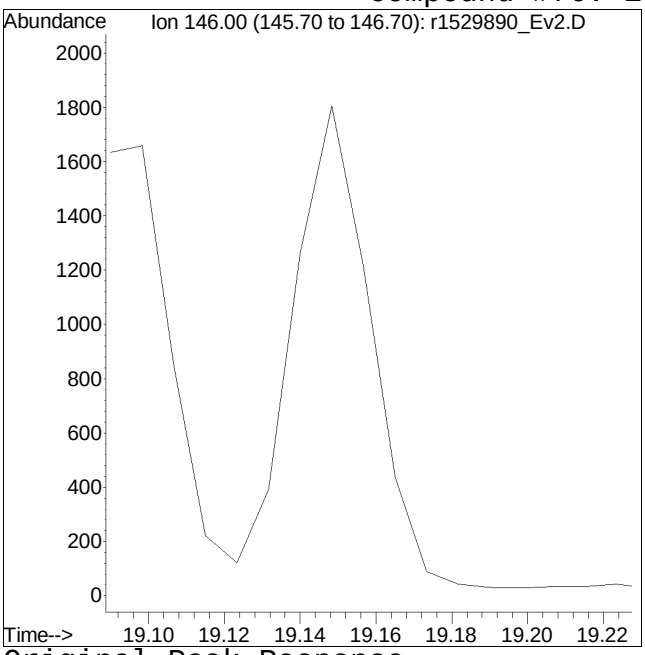
Manual Peak Response = 492 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

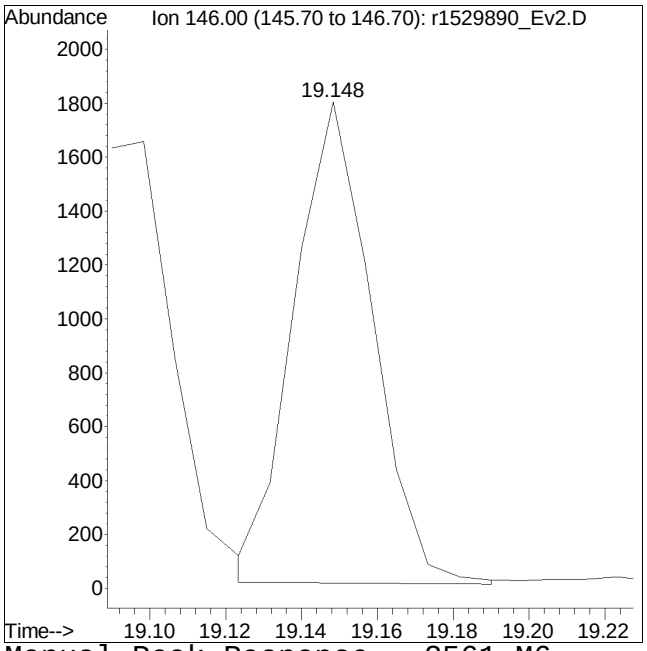
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529890_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:5: 5 Instrument :
Sample : ITO15-SIMSTD0.1 Quant Date : 12/22/2021 10:49 am

Compound #76: 1,4-dichlorobenzene



Original Peak Response =



Manual Peak Response = 2561 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529891_Ev2.D
Acq On : 22 Dec 2021 6:12 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD0.2
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:24:02 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.592	49	211287	10.000	ppbV	0.05
Standard Area = 213198			Recovery = 99.10%			
33) 1,4-difluorobenzene	11.870	114	509842	10.000	ppbV	0.05
Standard Area = 515322			Recovery = 98.94%			
51) chlorobenzene-D5	16.575	54	116601	10.000	ppbV	0.03
Standard Area = 119198			Recovery = 97.82%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.483	65	143916	10.084	ppbV	0.05
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.84%			
53) toluene-D8	14.708	98	461403	9.884	ppbV	0.04
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.84%			
67) bromofluorobenzene	17.925	95	317199	9.163	ppbV	0.04
Spiked Amount 10.000	Range 70 - 130		Recovery = 91.63%			
Target Compounds						Qvalue
2) propylene	3.892	41	2007M6	0.251	ppbV	
3) dichlorodifluoromethane	3.976	85	3831	0.234	ppbV	98
4) chloromethane	4.156	50	1814	0.233	ppbV	93
5) Freon-114	4.288	85	4561	0.235	ppbV	94
6) vinyl chloride	4.420	62	2451	0.235	ppbV	100
7) 1,3-butadiene	4.582	54	1837	0.242	ppbV	79
8) bromomethane	4.906	94	1850	0.235	ppbV	97
9) chloroethane	5.128	64	1239	0.243	ppbV	95
10) ethanol	5.302	31	11063	1.263	ppbV	98
11) vinyl bromide	5.563	106	1518	0.233	ppbV	94
12) acrolein	5.720	56	964	0.228	ppbV #	90
13) acetone	5.887	43	14197	1.288	ppbV	90
14) trichlorofluoromethane	6.090	101	3294	0.224	ppbV	94
15) isopropyl alcohol	6.217	45	6971	0.589	ppbV	97
16) acrylonitrile	6.467	53	1790	0.245	ppbV	98
17) 1,1-dichloroethene	6.864	61	3252	0.225	ppbV	99
18) tertiary butyl alcohol	6.960	59	3964	0.242	ppbV	95
19) methylene chloride	7.032	49	2534	0.257	ppbV	94
20) 3-chloropropene	7.170	41	2671	0.232	ppbV	91
21) carbon disulfide	7.326	76	4201	0.215	ppbV #	1
22) Freon 113	7.368	101	3478	0.235	ppbV	98
23) trans-1,2-dichloroethene	8.167	61	3502	0.233	ppbV	97
24) 1,1-dichloroethane	8.400	63	4130	0.228	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529891_Ev2.D
Acq On : 22 Dec 2021 6:12 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD0.2
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:24:02 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	8.500	73	4817	0.230	ppbV		98
26) vinyl acetate	8.625	43	3868	0.218	ppbV	#	94
27) 2-butanone	8.908	43	4793	0.238	ppbV		95
28) cis-1,2-dichloroethene	9.408	61	3222	0.223	ppbV		92
29) Ethyl Acetate	9.717	61	907	0.247	ppbV		88
30) chloroform	9.758	83	4165	0.233	ppbV		96
31) Tetrahydrofuran	10.233	42	2833	0.226	ppbV		91
32) 1,2-dichloroethane	10.608	62	2838	0.231	ppbV		98
34) hexane	9.667	57	4698	0.231	ppbV	#	72
36) 1,1,1-trichloroethane	10.903	97	3082	0.219	ppbV		94
37) benzene	11.437	78	9327	0.280	ppbV		97
38) carbon tetrachloride	11.610	117	2716	0.208	ppbV		100
39) cyclohexane	11.750	56	4905	0.223	ppbV		92
40) Dibromomethane	12.357	93	2581	0.248	ppbV	#	93
41) 1,2-dichloropropane	12.390	63	2831	0.225	ppbV		99
42) bromodichloromethane	12.623	83	3720	0.206	ppbV		99
43) 1,4-dioxane	12.690	88	1744	0.221	ppbV		92
44) trichloroethene	12.670	130	3028	0.226	ppbV		91
45) 2,2,4-trimethylpentane	12.717	57	15676	0.232	ppbV		99
46) heptane	13.037	43	4964	0.223	ppbV		98
47) cis-1,3-dichloropropene	14.308	75	2473	0.184	ppbV		92
48) 4-methyl-2-pentanone	13.733	43	5087	0.204	ppbV		99
49) trans-1,3-dichloropropene	13.692	75	2791	0.192	ppbV		90
50) 1,1,2-trichloroethane	14.508	97	2595	0.221	ppbV		91
52) toluene	14.817	91	11328	0.285	ppbV		98
54) 2-hexanone	15.108	43	4644	0.202	ppbV		98
55) dibromochloromethane	15.267	129	3062	0.190	ppbV		98
56) 1,2-dibromoethane	15.517	107	3547	0.211	ppbV		94
57) tetrachloroethene	15.983	166	3124	0.221	ppbV		100
58) 1,1,1,2-tetrachloroethane	16.608	131	2647	0.208	ppbV		99
59) chlorobenzene	16.625	112	6653	0.228	ppbV		94
60) ethylbenzene	16.967	91	10623	0.211	ppbV		97
61) m+p-xylene	17.125	91	17330	0.417	ppbV		100
62) bromoform	17.192	173	2252	0.184	ppbV		97
63) styrene	17.442	104	5747	0.199	ppbV		95
64) 1,1,2,2-tetrachloroethane	17.533	83	6645	0.214	ppbV		100
65) o-xylene	17.533	91	8849	0.211	ppbV		98
66) 1,2,3-Trichloropropane	17.642	75	4997	0.231	ppbV		93
68) isopropylbenzene	18.033	105	10571	0.221	ppbV		97
69) Bromobenzene	18.108	77	6524	0.229	ppbV		100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529891_Ev2.D
Acq On : 22 Dec 2021 6:12 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD0.2
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:24:02 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default - All compounds listed

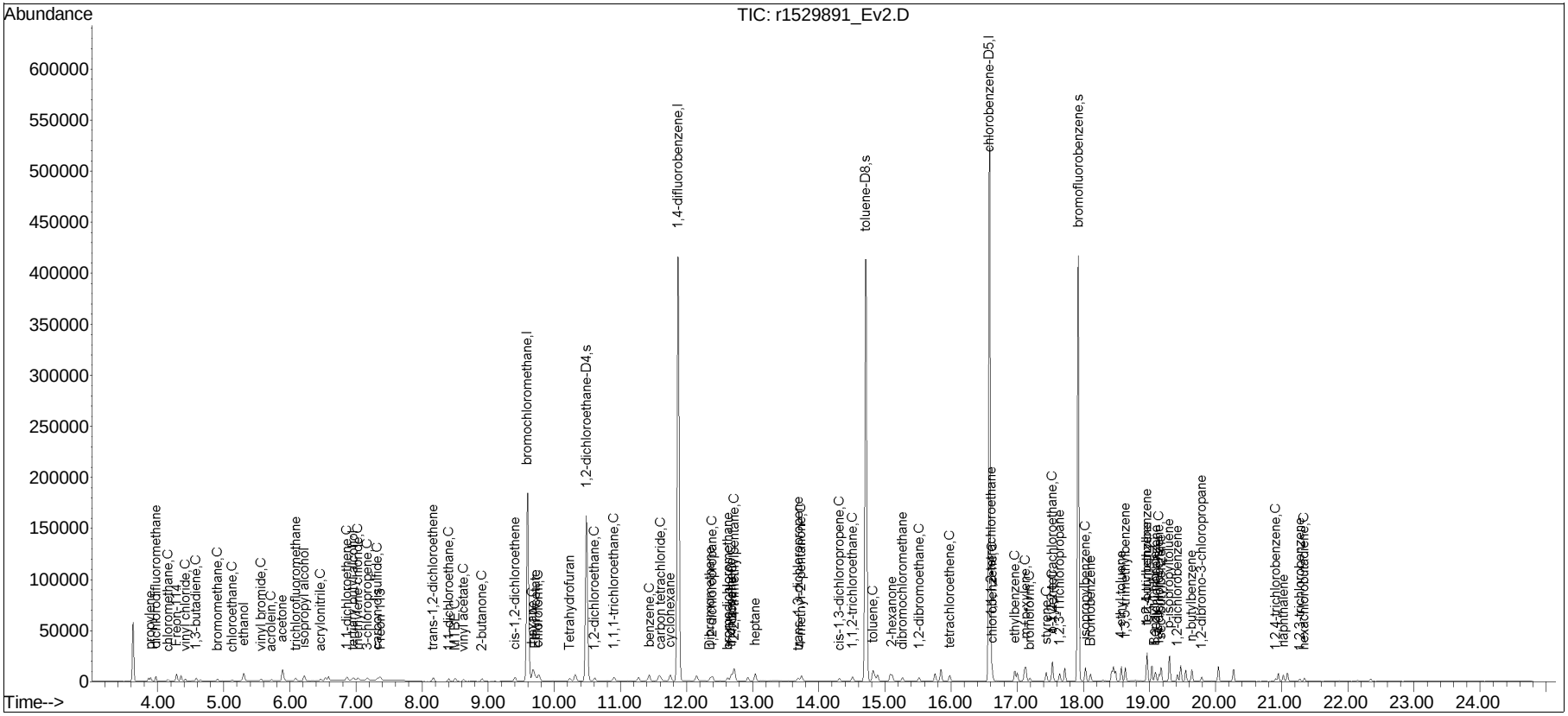
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.575	105	10675	0.213	ppbV	97
71) 1,3,5-trimethylbenzene	18.633	105	9001	0.204	ppbV	99
72) tert-butylbenzene	18.965	119	10975	0.215	ppbV	93
73) 1,2,4-trimethylbenzene	18.965	105	8984	0.207	ppbV	97
74) Benzyl Chloride	19.082	91	4171	0.174	ppbV	99
75) 1,3-dichlorobenzene	19.098	146	5906	0.207	ppbV	98
76) 1,4-dichlorobenzene	19.148	146	5874M6	0.206	ppbV	
77) sec-butylbenzene	19.173	105	13104	0.212	ppbV	96
78) p-isopropyltoluene	19.298	119	12868	0.206	ppbV	94
79) 1,2-dichlorobenzene	19.423	146	5393	0.200	ppbV	91
80) n-butylbenzene	19.640	91	11082	0.198	ppbV	98
81) 1,2-dibromo-3-chloropr...	19.790	75	1979	0.170	ppbV	97
82) 1,2,4-trichlorobenzene	20.908	180	2772	0.137	ppbV #	91
83) naphthalene	21.025	128	9322	0.145	ppbV	99
84) 1,2,3-trichlorobenzene	21.275	180	2660	0.135	ppbV #	92
85) hexachlorobutadiene	21.342	225	2664	0.153	ppbV	95

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

Sub List : Default - All compounds listed1\12\1222SIM_I\r1529894_Ev2.D

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529891_Ev2.D
Acq On : 22 Dec 2021 6:12 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD0.2
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:24:02 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration

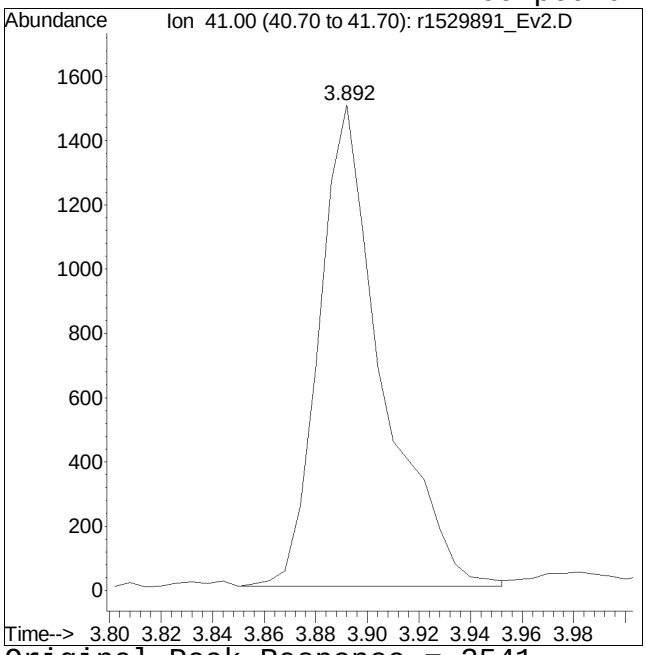


Manual Integration Report

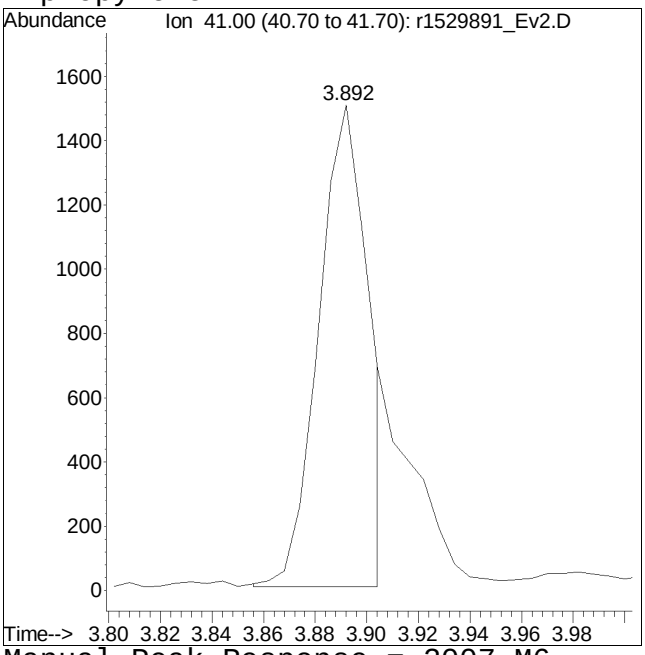
Data Path : O:\Forensics\Data\Airlab15Q
Data File : r1529891_Ev2.D
Date Inj'd : 12/22/2020 0:6: 2
Sample : ITO15-SIMSTD0.2

Method : TSIM15_211222.M
Operator : AIRLAB15:TS
Instrument :
Quant Date : 12/22/2021 10:49 am

Compound #2: propylene



Original Peak Response = 2541



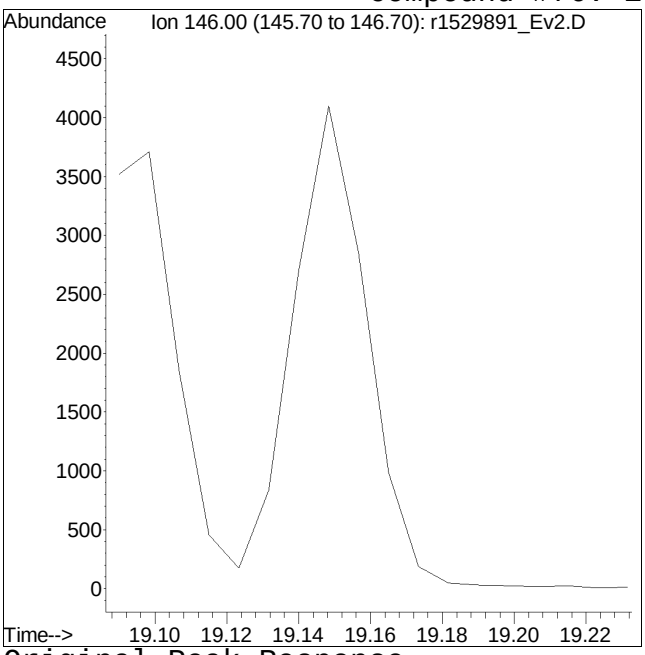
Manual Peak Response = 2007 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

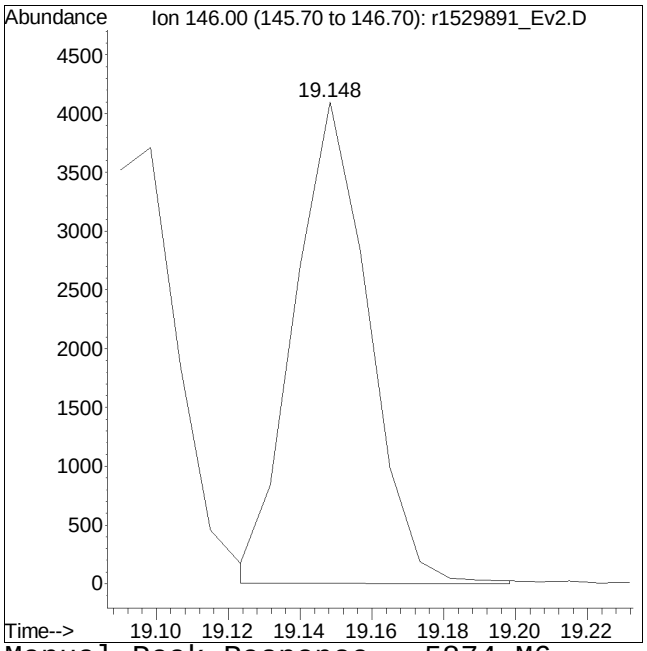
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529891_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:6: 2 Instrument :
Sample : ITO15-SIMSTD0.2 Quant Date : 12/22/2021 10:49 am

Compound #76: 1,4-dichlorobenzene



Original Peak Response =



Manual Peak Response = 5874 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529892_Ev2.D
Acq On : 22 Dec 2021 6:51 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD0.5
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:25:01 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.600	49	212802	10.000	ppbV	0.06
Standard Area = 213198			Recovery = 99.81%			
33) 1,4-difluorobenzene	11.877	114	511455	10.000	ppbV	0.05
Standard Area = 515322			Recovery = 99.25%			
51) chlorobenzene-D5	16.583	54	118025	10.000	ppbV	0.04
Standard Area = 119198			Recovery = 99.02%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.492	65	142106	9.925	ppbV	0.06
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.25%			
53) toluene-D8	14.717	98	460640	9.748	ppbV	0.05
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.48%			
67) bromofluorobenzene	17.925	95	322167	9.194	ppbV	0.04
Spiked Amount 10.000	Range 70 - 130		Recovery = 91.94%			
Target Compounds						Qvalue
2) propylene	3.892	41	4425M6	0.550	ppbV	
3) dichlorodifluoromethane	3.976	85	8922	0.540	ppbV	98
4) chloromethane	4.156	50	4258	0.544	ppbV	97
5) Freon-114	4.288	85	10717	0.549	ppbV	98
6) vinyl chloride	4.420	62	5683	0.541	ppbV	99
7) 1,3-butadiene	4.588	54	4278	0.560	ppbV #	72
8) bromomethane	4.906	94	4276	0.540	ppbV	99
9) chloroethane	5.128	64	2804	0.546	ppbV	94
10) ethanol	5.302	31	25422	2.881	ppbV	99
11) vinyl bromide	5.567	106	3601	0.550	ppbV	94
12) acrolein	5.723	56	2338	0.549	ppbV	95
13) acetone	5.887	43	31521	2.840	ppbV	93
14) trichlorofluoromethane	6.090	101	7964	0.538	ppbV	98
15) isopropyl alcohol	6.213	45	16037	1.344	ppbV #	97
16) acrylonitrile	6.470	53	4109	0.559	ppbV	98
17) 1,1-dichloroethene	6.864	61	7848	0.539	ppbV	99
18) tertiary butyl alcohol	6.954	59	9058	0.549	ppbV	94
19) methylene chloride	7.032	49	5624	0.566	ppbV	95
20) 3-chloropropene	7.176	41	6214	0.535	ppbV #	93
21) carbon disulfide	7.332	76	9779	0.496	ppbV #	64
22) Freon 113	7.368	101	8105	0.543	ppbV	95
23) trans-1,2-dichloroethene	8.167	61	8275	0.547	ppbV	99
24) 1,1-dichloroethane	8.408	63	9714	0.532	ppbV	98

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529892_Ev2.D
Acq On : 22 Dec 2021 6:51 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD0.5
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:25:01 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	8.500	73	11385	0.540	ppbV		99
26) vinyl acetate	8.625	43	9240	0.517	ppbV		98
27) 2-butanone	8.900	43	11004	0.542	ppbV		98
28) cis-1,2-dichloroethene	9.408	61	7550	0.518	ppbV		95
29) Ethyl Acetate	9.717	61	1919	0.519	ppbV		88
30) chloroform	9.767	83	9633	0.535	ppbV		96
31) Tetrahydrofuran	10.225	42	6476	0.512	ppbV		96
32) 1,2-dichloroethane	10.617	62	6577	0.531	ppbV		99
34) hexane	9.675	57	11078	0.544	ppbV		85
36) 1,1,1-trichloroethane	10.910	97	7238	0.513	ppbV		98
37) benzene	11.437	78	19375	0.579	ppbV		100
38) carbon tetrachloride	11.617	117	6360	0.484	ppbV		96
39) cyclohexane	11.757	56	11726	0.531	ppbV		92
40) Dibromomethane	12.363	93	5774	0.553	ppbV	#	93
41) 1,2-dichloropropane	12.397	63	6784	0.536	ppbV		96
42) bromodichloromethane	12.623	83	9209	0.508	ppbV		99
43) 1,4-dioxane	12.683	88	3975	0.502	ppbV		99
44) trichloroethene	12.677	130	7043	0.524	ppbV		92
45) 2,2,4-trimethylpentane	12.723	57	37504	0.554	ppbV		99
46) heptane	13.043	43	11745	0.527	ppbV		96
47) cis-1,3-dichloropropene	14.308	75	5976	0.444	ppbV		93
48) 4-methyl-2-pentanone	13.733	43	12361	0.495	ppbV		99
49) trans-1,3-dichloropropene	13.692	75	6707	0.461	ppbV		91
50) 1,1,2-trichloroethane	14.517	97	6109	0.519	ppbV		94
52) toluene	14.825	91	23196	0.576	ppbV		99
54) 2-hexanone	15.108	43	11720	0.504	ppbV		100
55) dibromochloromethane	15.267	129	7459	0.457	ppbV		96
56) 1,2-dibromoethane	15.517	107	8441	0.496	ppbV		94
57) tetrachloroethene	15.983	166	7422	0.520	ppbV		99
58) 1,1,1,2-tetrachloroethane	16.608	131	6355	0.494	ppbV		98
59) chlorobenzene	16.625	112	15466	0.523	ppbV		96
60) ethylbenzene	16.967	91	25246	0.496	ppbV		96
61) m+p-xylene	17.125	91	42435	1.009	ppbV		99
62) bromoform	17.192	173	5455	0.440	ppbV		98
63) styrene	17.442	104	14135	0.485	ppbV		95
64) 1,1,2,2-tetrachloroethane	17.533	83	16006	0.508	ppbV		99
65) o-xylene	17.533	91	21263	0.502	ppbV		100
66) 1,2,3-Trichloropropane	17.642	75	11856	0.541	ppbV		94
68) isopropylbenzene	18.033	105	25628	0.529	ppbV		98
69) Bromobenzene	18.108	77	15429	0.536	ppbV		100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529892_Ev2.D
Acq On : 22 Dec 2021 6:51 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD0.5
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:25:01 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default - All compounds listed

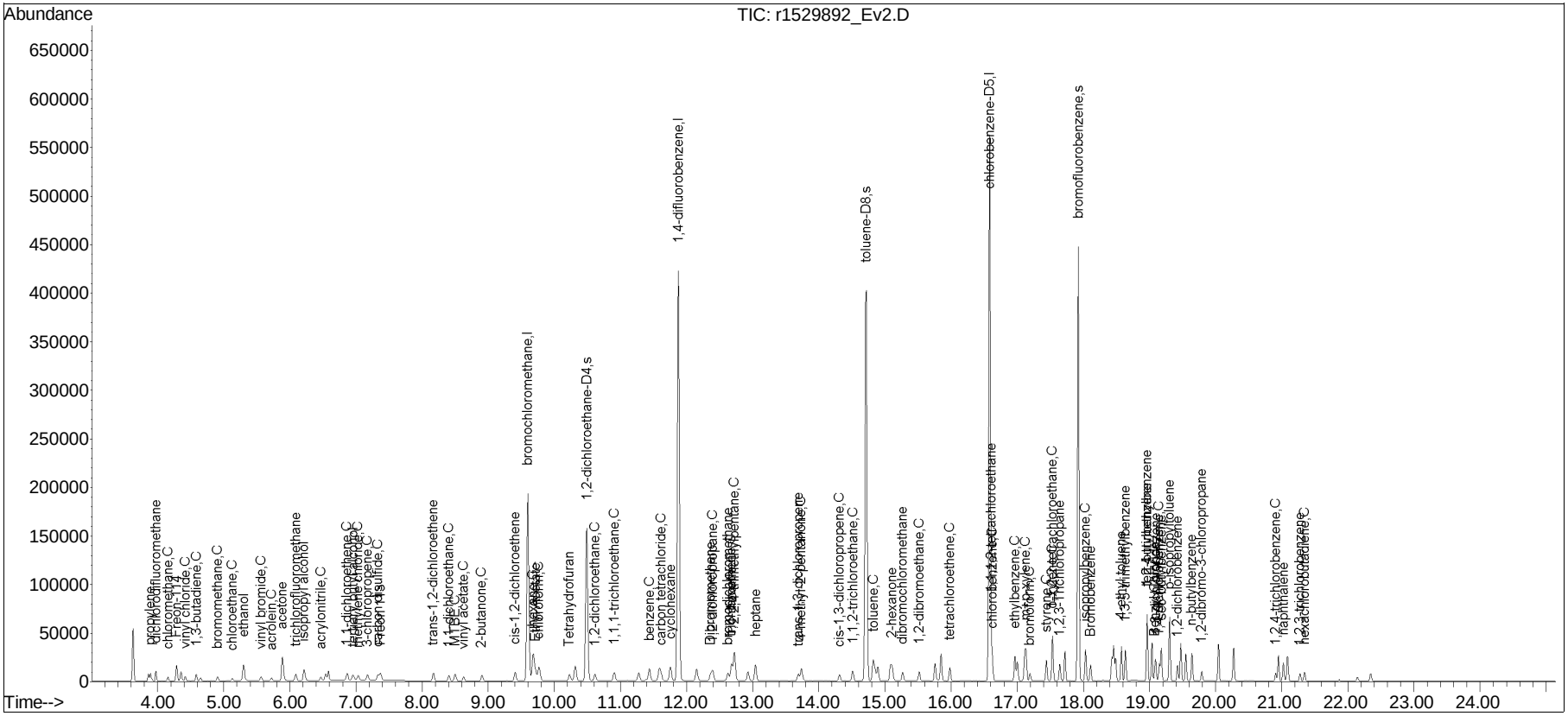
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
70) 4-ethyl toluene	18.575	105	26340	0.519	ppbV		98
71) 1,3,5-trimethylbenzene	18.633	105	22325	0.501	ppbV		99
72) tert-butylbenzene	18.965	119	26772	0.519	ppbV		93
73) 1,2,4-trimethylbenzene	18.965	105	22104	0.503	ppbV		96
74) Benzyl Chloride	19.082	91	10578	0.435	ppbV		98
75) 1,3-dichlorobenzene	19.098	146	14532	0.503	ppbV		98
76) 1,4-dichlorobenzene	19.148	146	14246M6	0.495	ppbV		
77) sec-butylbenzene	19.182	105	32330	0.517	ppbV		98
78) p-isopropyltoluene	19.307	119	32073	0.508	ppbV		95
79) 1,2-dichlorobenzene	19.423	146	13542	0.496	ppbV		91
80) n-butylbenzene	19.640	91	27947	0.493	ppbV		96
81) 1,2-dibromo-3-chloropr...	19.790	75	5216	0.442	ppbV		98
82) 1,2,4-trichlorobenzene	20.908	180	8251	0.404	ppbV	#	92
83) naphthalene	21.025	128	28297	0.436	ppbV		100
84) 1,2,3-trichlorobenzene	21.275	180	8162	0.410	ppbV	#	93
85) hexachlorobutadiene	21.350	225	7759	0.440	ppbV		99

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

Sub List : Default - All compounds listed1\12\1222SIM_I\r1529894_Ev2.D

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529892_Ev2.D
Acq On : 22 Dec 2021 6:51 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD0.5
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

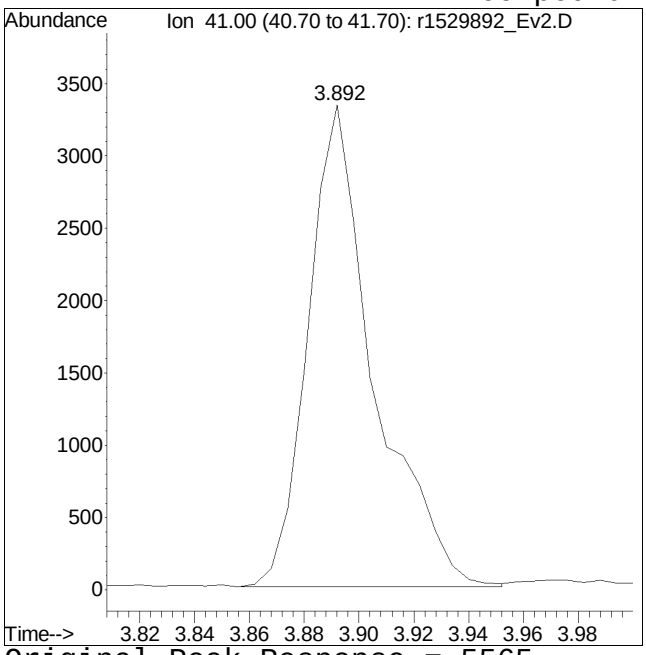
Quant Time: Dec 27 10:25:01 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration



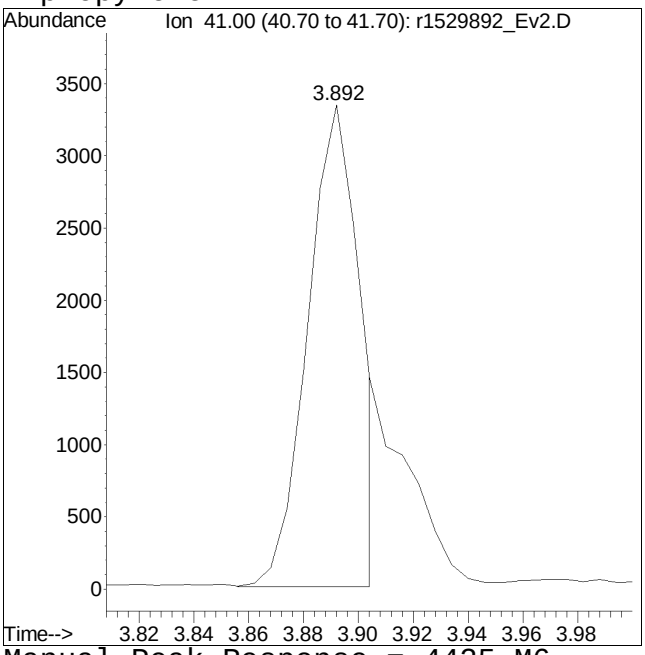
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529892_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:6: 1 Instrument :
Sample : ITO15-SIMSTD0.5 Quant Date : 12/22/2021 10:49 am

Compound #2: propylene



Original Peak Response = 5565



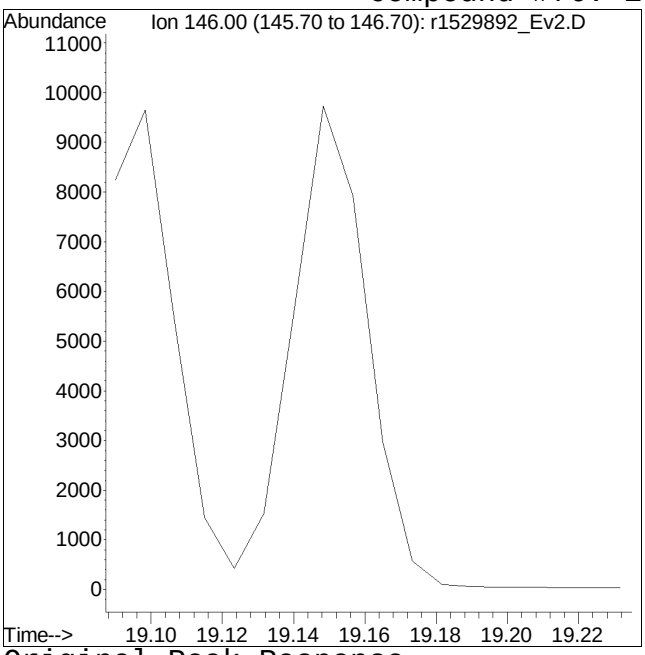
Manual Peak Response = 4425 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

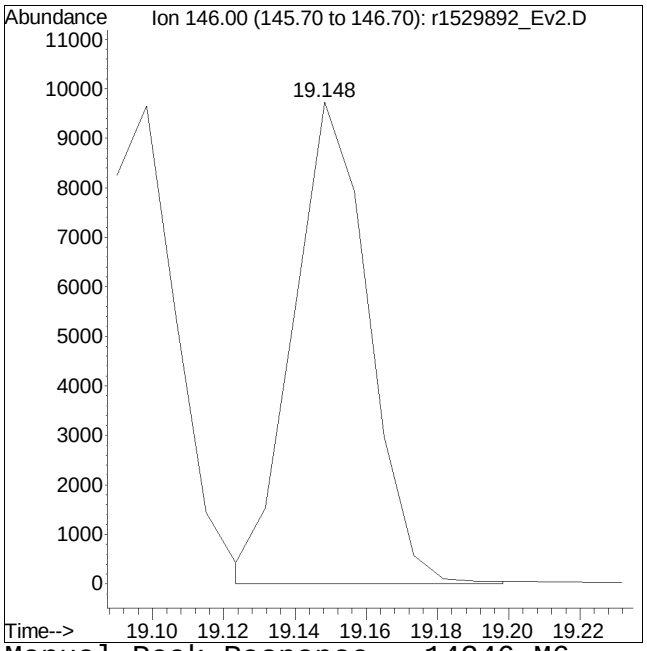
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529892_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:6: 1 Instrument :
Sample : ITO15-SIMSTD0.5 Quant Date : 12/22/2021 10:49 am

Compound #76: 1,4-dichlorobenzene



Original Peak Response =



Manual Peak Response = 14246 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529893_Ev2.D
Acq On : 22 Dec 2021 7:32 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD1.0
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:25:57 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.600	49	213061	10.000	ppbV	0.06
Standard Area = 213198			Recovery = 99.94%			
33) 1,4-difluorobenzene	11.877	114	511519	10.000	ppbV	0.05
Standard Area = 515322			Recovery = 99.26%			
51) chlorobenzene-D5	16.583	54	118053	10.000	ppbV	0.04
Standard Area = 119198			Recovery = 99.04%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.492	65	143904	10.050	ppbV	0.06
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.50%			
53) toluene-D8	14.717	98	471699	9.980	ppbV	0.05
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.80%			
67) bromofluorobenzene	17.925	95	343978	9.814	ppbV	0.04
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.14%			
Target Compounds						Qvalue
2) propylene	3.892	41	9037M6	1.121	ppbV	
3) dichlorodifluoromethane	3.976	85	17556	1.062	ppbV	100
4) chloromethane	4.156	50	8347	1.065	ppbV	97
5) Freon-114	4.288	85	20703	1.059	ppbV	98
6) vinyl chloride	4.420	62	11018	1.048	ppbV	98
7) 1,3-butadiene	4.588	54	8382	1.097	ppbV #	73
8) bromomethane	4.912	94	8335	1.052	ppbV	97
9) chloroethane	5.134	64	5501	1.069	ppbV	96
10) ethanol	5.302	31	48914	5.537	ppbV	100
11) vinyl bromide	5.567	106	7042	1.074	ppbV	95
12) acrolein	5.723	56	4493	1.054	ppbV	97
13) acetone	5.887	43	60713	5.463	ppbV	90
14) trichlorofluoromethane	6.093	101	15404	1.039	ppbV	100
15) isopropyl alcohol	6.213	45	31503	2.638	ppbV	97
16) acrylonitrile	6.470	53	7973	1.084	ppbV	95
17) 1,1-dichloroethene	6.870	61	15132	1.038	ppbV	98
18) tertiary butyl alcohol	6.948	59	17656	1.068	ppbV	95
19) methylene chloride	7.038	49	10686	1.075	ppbV	90
20) 3-chloropropene	7.176	41	12230	1.052	ppbV	95
21) carbon disulfide	7.332	76	19659	0.996	ppbV #	90
22) Freon 113	7.368	101	15514	1.039	ppbV	98
23) trans-1,2-dichloroethene	8.175	61	16196	1.069	ppbV	96
24) 1,1-dichloroethane	8.408	63	18795	1.029	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529893_Ev2.D
Acq On : 22 Dec 2021 7:32 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD1.0
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:25:57 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	8.500	73	22636	1.073	ppbV		99
26) vinyl acetate	8.633	43	18242	1.019	ppbV		96
27) 2-butanone	8.900	43	21580	1.062	ppbV		98
28) cis-1,2-dichloroethene	9.408	61	14895	1.020	ppbV		96
29) Ethyl Acetate	9.717	61	3859	1.043	ppbV		95
30) chloroform	9.767	83	18817	1.045	ppbV		97
31) Tetrahydrofuran	10.225	42	13066	1.033	ppbV		94
32) 1,2-dichloroethane	10.617	62	12886	1.039	ppbV		99
34) hexane	9.675	57	21766	1.069	ppbV		87
36) 1,1,1-trichloroethane	10.910	97	14363	1.018	ppbV		99
37) benzene	11.437	78	36508	1.091	ppbV		99
38) carbon tetrachloride	11.617	117	12917	0.984	ppbV		97
39) cyclohexane	11.757	56	23566	1.068	ppbV		93
40) Dibromomethane	12.363	93	11352	1.087	ppbV	#	97
41) 1,2-dichloropropane	12.397	63	13100	1.035	ppbV		99
42) bromodichloromethane	12.630	83	18205	1.004	ppbV		99
43) 1,4-dioxane	12.683	88	8052	1.017	ppbV		95
44) trichloroethene	12.677	130	13710	1.019	ppbV		93
45) 2,2,4-trimethylpentane	12.723	57	74334	1.097	ppbV		98
46) heptane	13.043	43	23866	1.070	ppbV		96
47) cis-1,3-dichloropropene	14.317	75	12260	0.910	ppbV		91
48) 4-methyl-2-pentanone	13.733	43	25277	1.013	ppbV		100
49) trans-1,3-dichloropropene	13.692	75	13556	0.931	ppbV		92
50) 1,1,2-trichloroethane	14.517	97	12217	1.039	ppbV		94
52) toluene	14.825	91	43438	1.078	ppbV		100
54) 2-hexanone	15.108	43	23791	1.022	ppbV		98
55) dibromochloromethane	15.267	129	15689	0.961	ppbV		99
56) 1,2-dibromoethane	15.517	107	17025	1.000	ppbV		95
57) tetrachloroethene	15.983	166	14717	1.030	ppbV		99
58) 1,1,1,2-tetrachloroethane	16.608	131	12985	1.010	ppbV		99
59) chlorobenzene	16.625	112	30877	1.043	ppbV		97
60) ethylbenzene	16.967	91	50729	0.996	ppbV		98
61) m+p-xylene	17.125	91	84939	2.018	ppbV		99
62) bromoform	17.200	173	11354	0.915	ppbV		100
63) styrene	17.442	104	28453	0.975	ppbV		94
64) 1,1,2,2-tetrachloroethane	17.533	83	31937	1.014	ppbV		100
65) o-xylene	17.533	91	42373	0.999	ppbV		100
66) 1,2,3-Trichloropropane	17.642	75	23407	1.068	ppbV		94
68) isopropylbenzene	18.033	105	50867	1.049	ppbV		98
69) Bromobenzene	18.108	77	30697	1.066	ppbV		100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529893_Ev2.D
Acq On : 22 Dec 2021 7:32 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD1.0
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:25:57 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default - All compounds listed

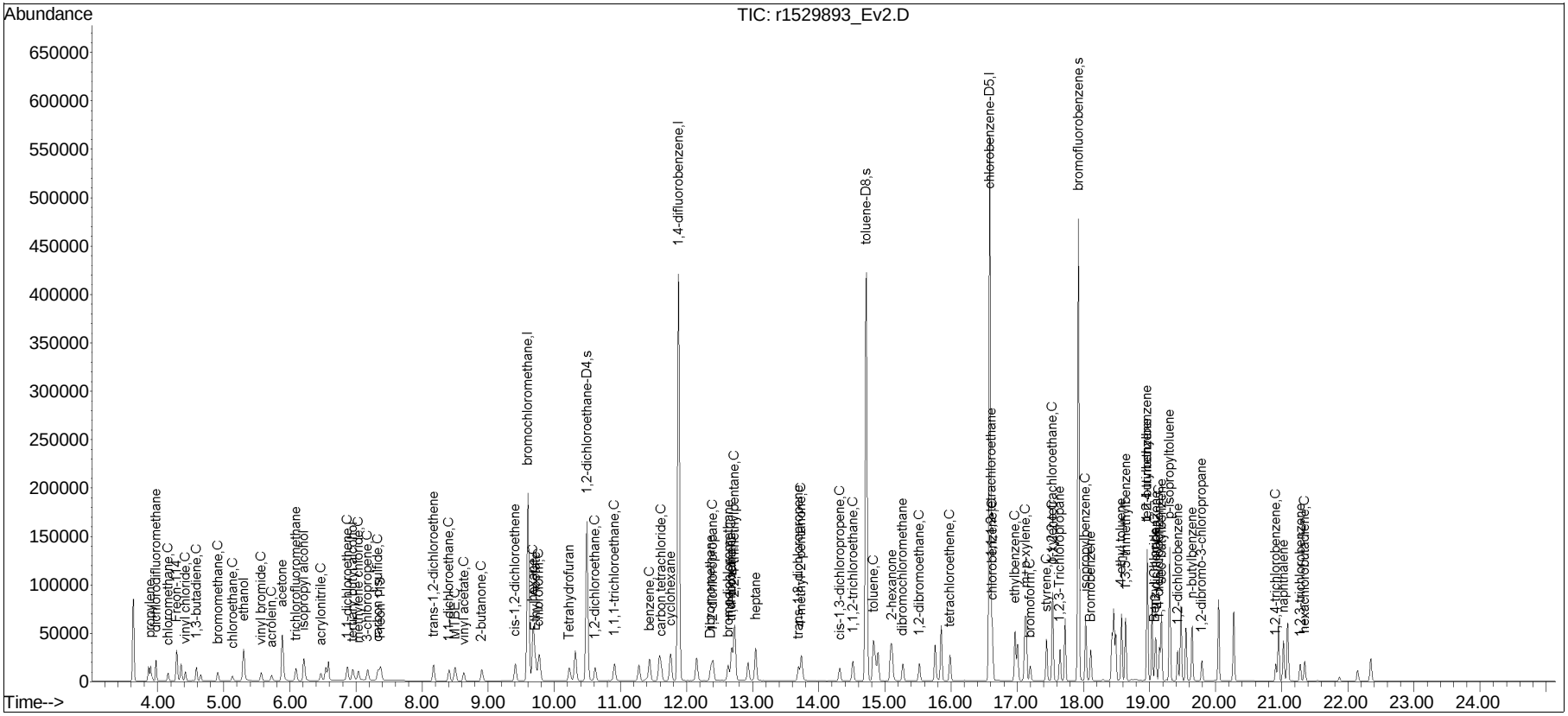
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
70) 4-ethyl toluene	18.575	105	53361	1.051	ppbV		99
71) 1,3,5-trimethylbenzene	18.642	105	45035	1.009	ppbV		96
72) tert-butylbenzene	18.965	119	54121	1.048	ppbV		93
73) 1,2,4-trimethylbenzene	18.965	105	44335	1.009	ppbV		94
74) Benzyl Chloride	19.082	91	21982	0.904	ppbV		97
75) 1,3-dichlorobenzene	19.098	146	29128	1.007	ppbV		99
76) 1,4-dichlorobenzene	19.148	146	28927M6	1.004	ppbV		
77) sec-butylbenzene	19.182	105	65177	1.041	ppbV		99
78) p-isopropyltoluene	19.307	119	64949	1.028	ppbV		95
79) 1,2-dichlorobenzene	19.432	146	27287	0.999	ppbV		98
80) n-butylbenzene	19.648	91	57448	1.013	ppbV		96
81) 1,2-dibromo-3-chloropr...	19.790	75	11108	0.941	ppbV		97
82) 1,2,4-trichlorobenzene	20.908	180	18131	0.888	ppbV	#	91
83) naphthalene	21.025	128	62482	0.963	ppbV		100
84) 1,2,3-trichlorobenzene	21.283	180	18493	0.928	ppbV		96
85) hexachlorobutadiene	21.350	225	16723	0.948	ppbV		98

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

Sub List : Default - All compounds listed1\12\1222SIM_I\r1529894_Ev2.D

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529893_Ev2.D
Acq On : 22 Dec 2021 7:32 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD1.0
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

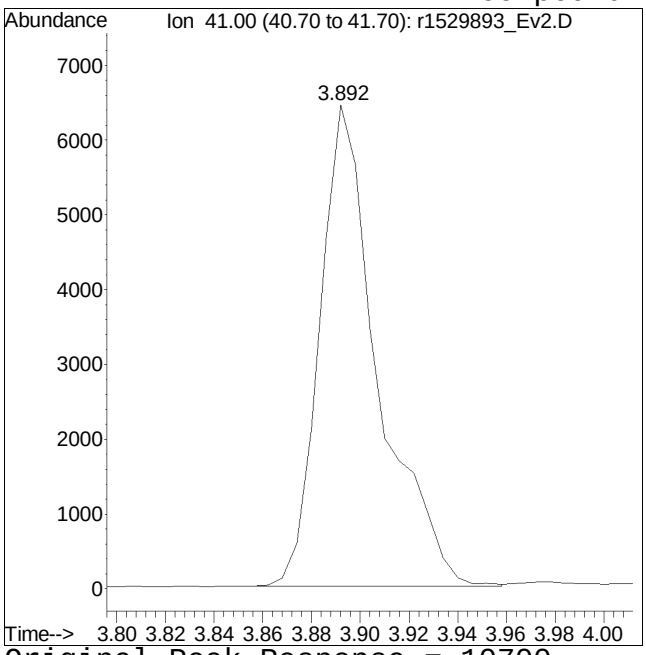
Quant Time: Dec 27 10:25:57 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration



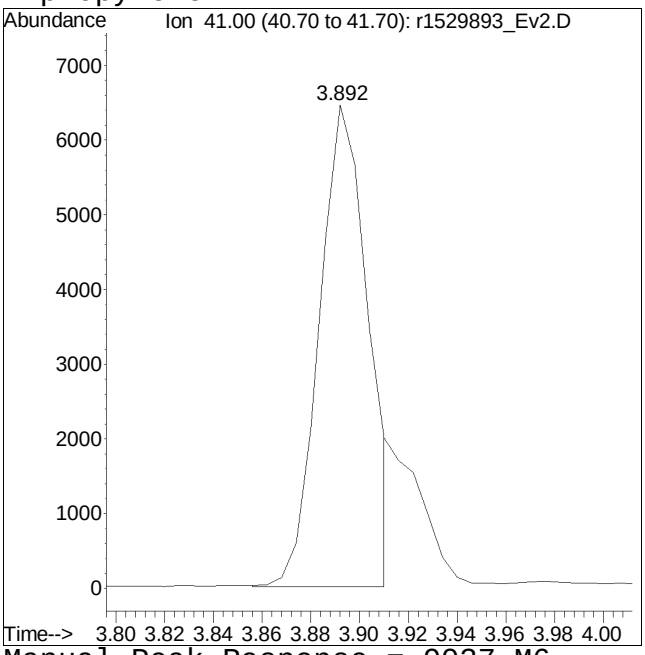
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529893_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:7: 2 Instrument :
Sample : ITO15-SIMSTD1.0 Quant Date : 12/22/2021 10:49 am

Compound #2: propylene



Original Peak Response = 10700



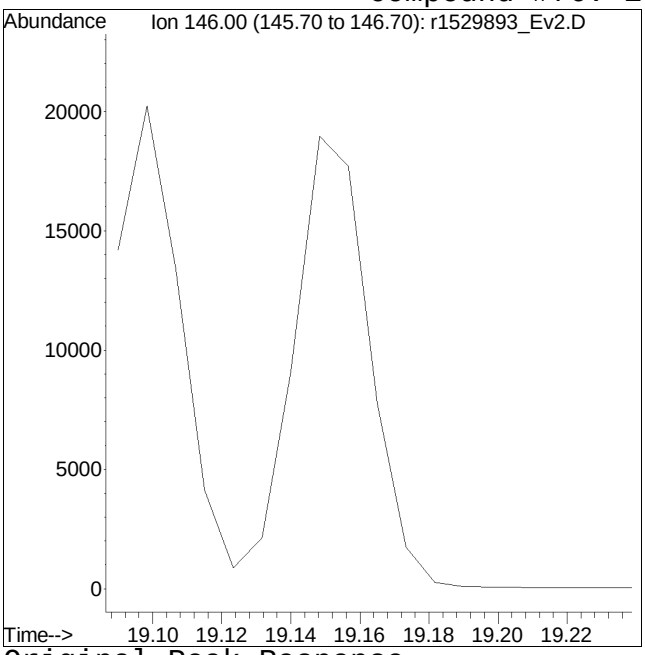
Manual Peak Response = 9037 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

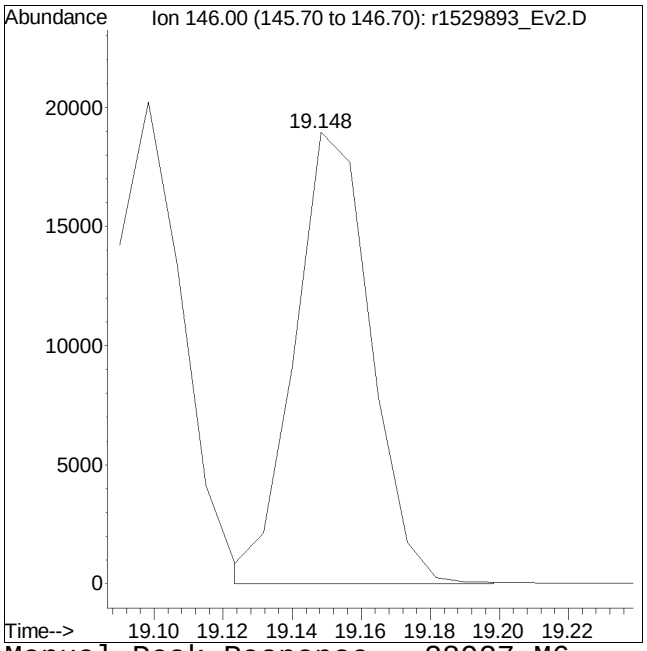
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529893_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:7: 2 Instrument :
Sample : ITO15-SIMSTD1.0 Quant Date : 12/22/2021 10:49 am

Compound #76: 1,4-dichlorobenzene



Original Peak Response =



Manual Peak Response = 28927 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529894_Ev2.D
Acq On : 22 Dec 2021 8:11 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD5.0
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 11:47:56 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Dec 11 07:57:56 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.600	49	213198	10.000	ppbV	0.06
Standard Area = 213198			Recovery = 100.00%			
33) 1,4-difluorobenzene	11.883	114	515322	10.000	ppbV	0.06
Standard Area = 515322			Recovery = 100.00%			
51) chlorobenzene-D5	16.583	54	119198	10.000	ppbV	0.04
Standard Area = 119198			Recovery = 100.00%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.492	65	144258	11.678	ppbV	0.06
Spiked Amount 10.000	Range 70 - 130		Recovery = 116.78%			
53) toluene-D8	14.717	98	477231	8.997	ppbV	0.05
Spiked Amount 10.000	Range 70 - 130		Recovery = 89.97%			
67) bromofluorobenzene	17.925	95	353889	9.873	ppbV	0.04
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.73%			
Target Compounds						Qvalue
2) propylene	3.892	41	40334M6	5.287	ppbV	
3) dichlorodifluoromethane	3.976	85	82694	6.455	ppbV	99
4) chloromethane	4.162	50	39226	4.508	ppbV	97
5) Freon-114	4.288	85	97813	5.310	ppbV	100
6) vinyl chloride	4.420	62	52607	5.898	ppbV	97
7) 1,3-butadiene	4.588	54	38234	4.703	ppbV #	75
8) bromomethane	4.912	94	39649	5.701	ppbV	98
9) chloroethane	5.134	64	25735	6.318	ppbV	99
10) ethanol	5.302	31	220983	24.525	ppbV	99
11) vinyl bromide	5.570	106	32803	5.482	ppbV	93
12) acrolein	5.723	56	21325	4.788	ppbV	95
13) acetone	5.880	43	278034	27.481	ppbV	91
14) trichlorofluoromethane	6.097	101	74212	8.121	ppbV	99
15) isopropyl alcohol	6.210	45	149378	10.890	ppbV	98
16) acrylonitrile	6.470	53	36796	4.508	ppbV	96
17) 1,1-dichloroethene	6.870	61	72925	6.495	ppbV	99
18) tertiary butyl alcohol	6.942	59	82693	5.732	ppbV	95
19) methylene chloride	7.038	49	49739	4.397	ppbV	93
20) 3-chloropropene	7.176	41	58160	4.790	ppbV	96
21) carbon disulfide	7.338	76	98707	4.406	ppbV #	88
22) Freon 113	7.374	101	74715	6.230	ppbV	97
23) trans-1,2-dichloroethene	8.175	61	75832	6.479	ppbV	98
24) 1,1-dichloroethane	8.408	63	91414	6.531	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529894_Ev2.D
Acq On : 22 Dec 2021 8:11 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD5.0
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 11:47:56 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Dec 11 07:57:56 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	8.500	73	105529	5.234	ppbV		97
26) vinyl acetate	8.633	43	89596	4.295	ppbV		96
27) 2-butanone	8.900	43	101651	4.598	ppbV		97
28) cis-1,2-dichloroethene	9.417	61	73027	6.995	ppbV		93
29) Ethyl Acetate	9.717	61	18515	6.283	ppbV		96
30) chloroform	9.767	83	90128	6.632	ppbV		97
31) Tetrahydrofuran	10.217	42	63313	4.757	ppbV		95
32) 1,2-dichloroethane	10.617	62	62065	7.498	ppbV		99
34) hexane	9.675	57	102563	5.438	ppbV		90
36) 1,1,1-trichloroethane	10.910	97	71094	5.889	ppbV		98
37) benzene	11.443	78	168520	4.028	ppbV		99
38) carbon tetrachloride	11.617	117	66135	5.721	ppbV		96
39) cyclohexane	11.763	56	111160	5.394	ppbV		92
40) Dibromomethane	12.370	93	52596	4.753	ppbV	#	95
41) 1,2-dichloropropane	12.403	63	63725	4.989	ppbV		98
42) bromodichloromethane	12.630	83	91309	5.191	ppbV		98
43) 1,4-dioxane	12.677	88	39880	5.206	ppbV		94
44) trichloroethene	12.683	130	67742	5.529	ppbV		94
45) 2,2,4-trimethylpentane	12.730	57	341308M6	5.441	ppbV		
46) heptane	13.043	43	112341	3.916	ppbV		97
47) cis-1,3-dichloropropene	14.317	75	67837	4.390	ppbV		91
48) 4-methyl-2-pentanone	13.733	43	125731	3.748	ppbV		98
49) trans-1,3-dichloropropene	13.692	75	73356	4.268	ppbV		92
50) 1,1,2-trichloroethane	14.517	97	59257	4.965	ppbV		94
52) toluene	14.825	91	203430	4.388	ppbV		100
54) 2-hexanone	15.108	43	117513	3.272	ppbV		95
55) dibromochloromethane	15.275	129	82380	5.334	ppbV		99
56) 1,2-dibromoethane	15.525	107	85992	4.143	ppbV		94
57) tetrachloroethene	15.983	166	72139	4.940	ppbV		99
58) 1,1,1,2-tetrachloroethane	16.617	131	64933	5.003	ppbV		98
59) chlorobenzene	16.625	112	149465	4.365	ppbV		99
60) ethylbenzene	16.967	91	257226	4.931	ppbV		99
61) m+p-xylene	17.133	91	424910	10.205	ppbV		98
62) bromoform	17.200	173	62665	5.052	ppbV		99
63) styrene	17.442	104	147304	4.085	ppbV		95
64) 1,1,2,2-tetrachloroethane	17.533	83	158958	4.603	ppbV		100
65) o-xylene	17.533	91	214097	5.050	ppbV		99
66) 1,2,3-Trichloropropane	17.650	75	110639	3.775	ppbV		93
68) isopropylbenzene	18.033	105	244789	4.193	ppbV		99
69) Bromobenzene	18.108	77	145356	3.961	ppbV		99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529894_Ev2.D
Acq On : 22 Dec 2021 8:11 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD5.0
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 22 11:47:56 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Dec 11 07:57:56 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default - All compounds listed

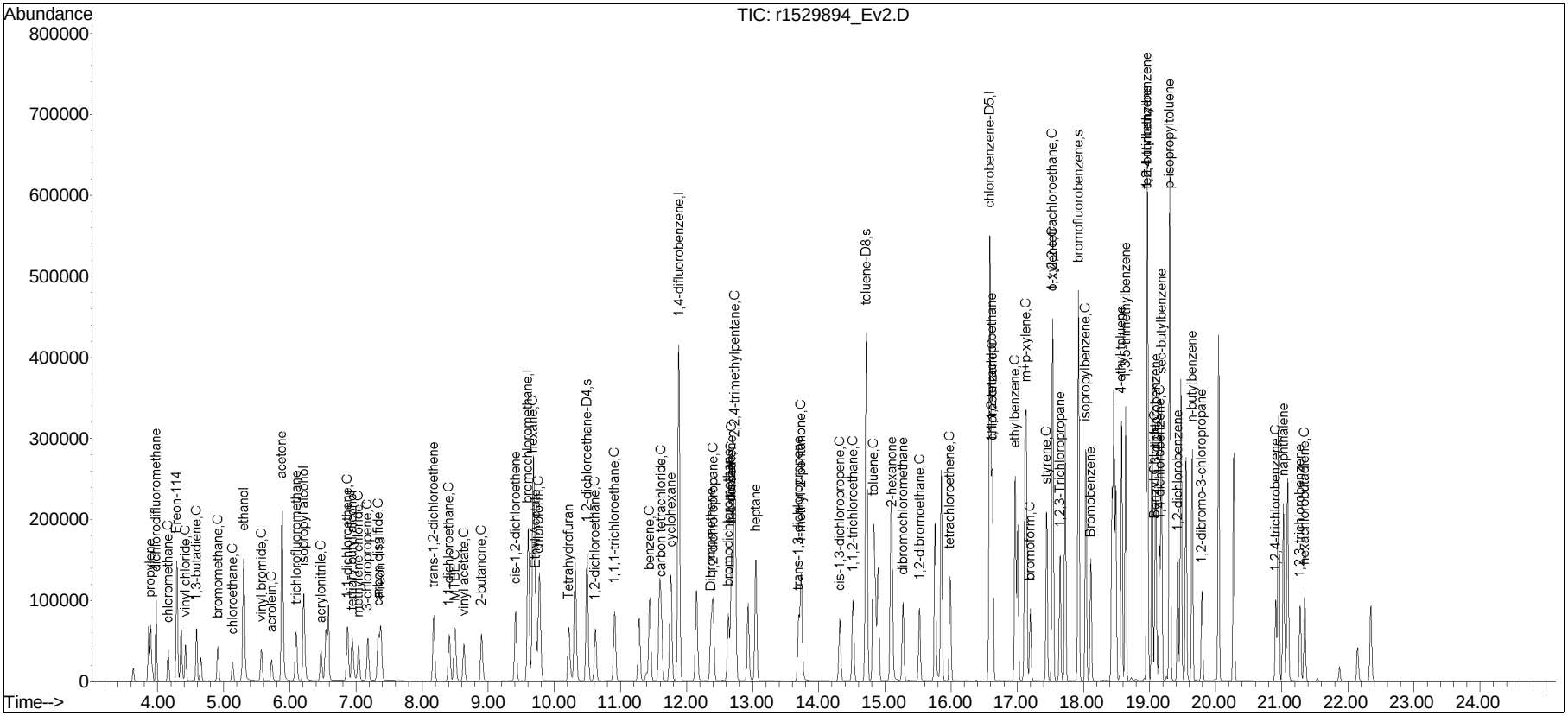
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.575	105	256361	4.147	ppbV	99
71) 1,3,5-trimethylbenzene	18.642	105	225227	4.395	ppbV	95
72) tert-butylbenzene	18.965	119	260675	5.318	ppbV	93
73) 1,2,4-trimethylbenzene	18.965	105	221889	4.277	ppbV	94
74) Benzyl Chloride	19.082	91	122789	4.403	ppbV	97
75) 1,3-dichlorobenzene	19.098	146	145985	4.442	ppbV	98
76) 1,4-dichlorobenzene	19.157	146	145429M3	4.517	ppbV	
77) sec-butylbenzene	19.182	105	316057	4.183	ppbV	98
78) p-isopropyltoluene	19.307	119	318842M3	5.397	ppbV	
79) 1,2-dichlorobenzene	19.432	146	137905	4.458	ppbV	99
80) n-butylbenzene	19.648	91	286322	5.063	ppbV	96
81) 1,2-dibromo-3-chloropr...	19.790	75	59577	4.216	ppbV	92
82) 1,2,4-trichlorobenzene	20.908	180	103126	5.064	ppbV	94
83) naphthalene	21.025	128	327518	5.151	ppbV	100
84) 1,2,3-trichlorobenzene	21.275	180	100624	5.059	ppbV	95
85) hexachlorobutadiene	21.350	225	89042	5.855	ppbV	98

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

Sub List : Default - All compounds listed1\12\1222SIM_I\r1529894_Ev2.D

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529894_Ev2.D
Acq On : 22 Dec 2021 8:11 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD5.0
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

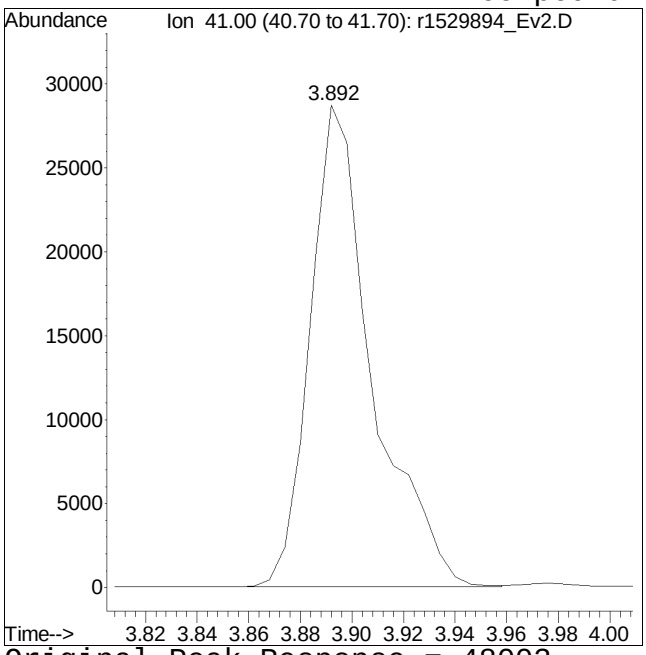
Quant Time: Dec 22 11:47:56 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Dec 11 07:57:56 2021
Response via : Initial Calibration



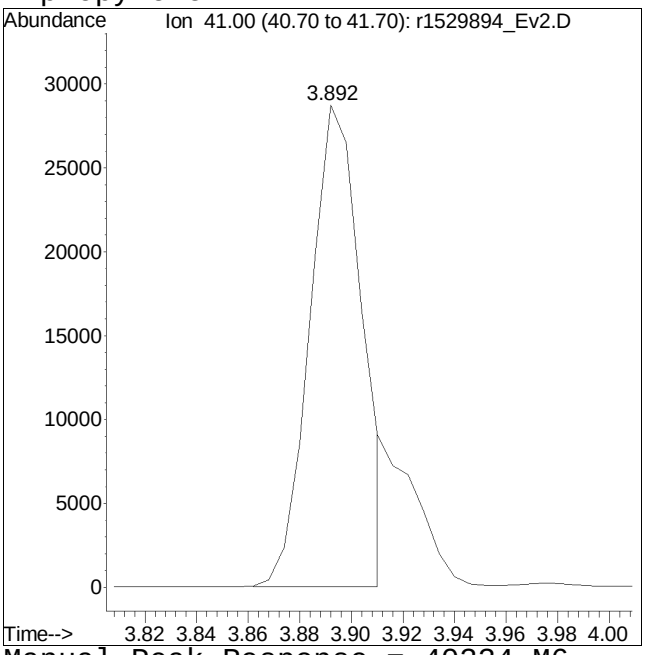
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529894_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:8: 1 Instrument :
Sample : ITO15-SIMSTD5.0 Quant Date : 12/22/2021 10:46 am

Compound #2: propylene



Original Peak Response = 48003



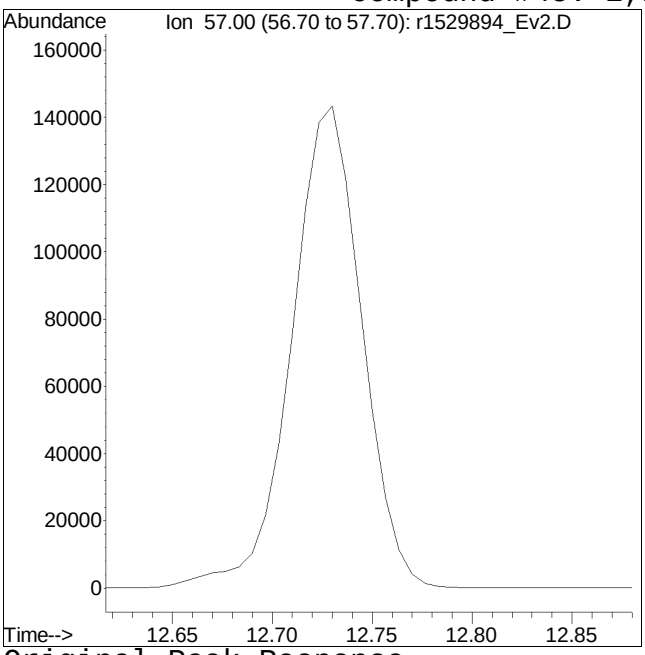
Manual Peak Response = 40334 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

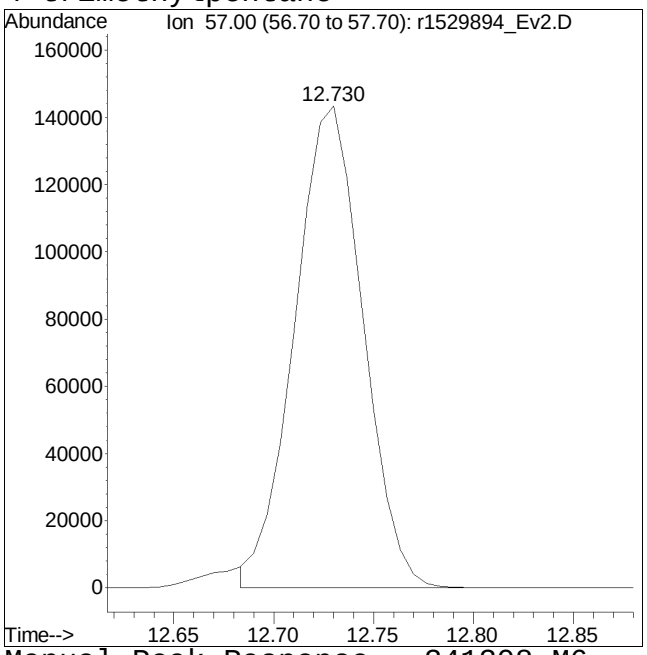
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529894_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:8: 1 Instrument :
Sample : ITO15-SIMSTD5.0 Quant Date : 12/22/2021 10:46 am

Compound #45: 2,2,4-trimethylpentane



Original Peak Response =



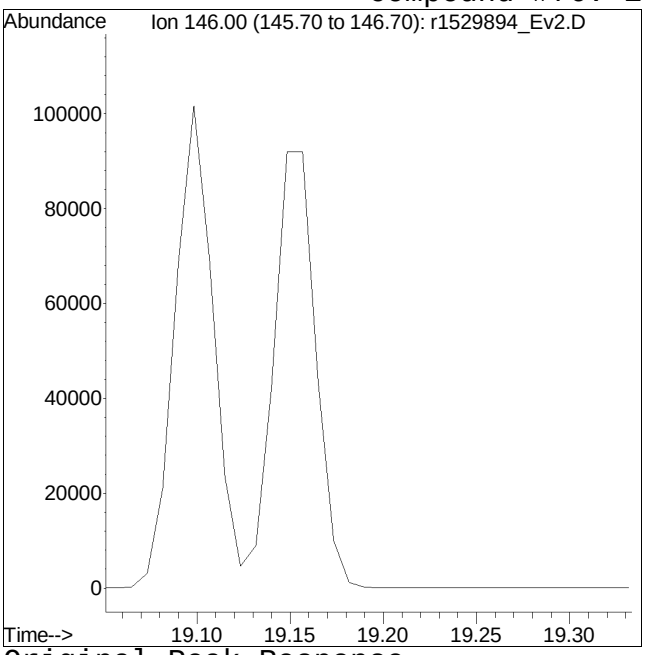
Manual Peak Response = 341308 M6

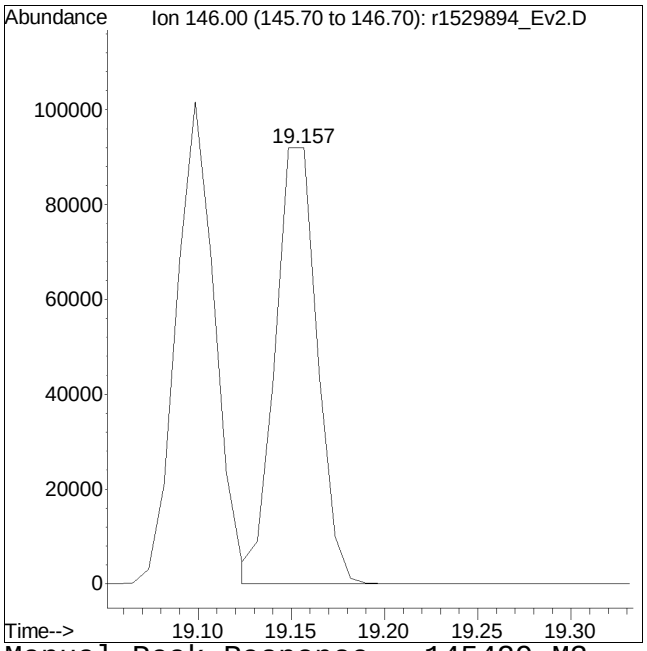
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529894_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:8: 1 Instrument :
Sample : ITO15-SIMSTD5.0 Quant Date : 12/22/2021 10:46 am

Compound #76: 1,4-dichlorobenzene



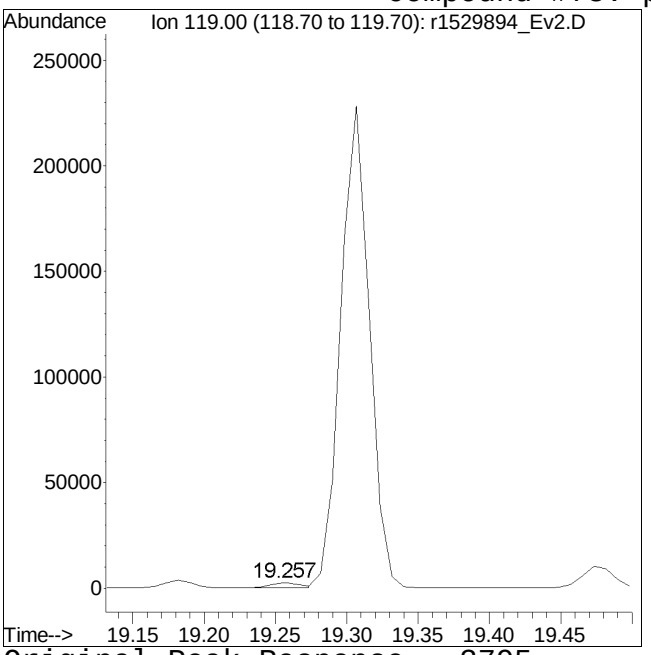


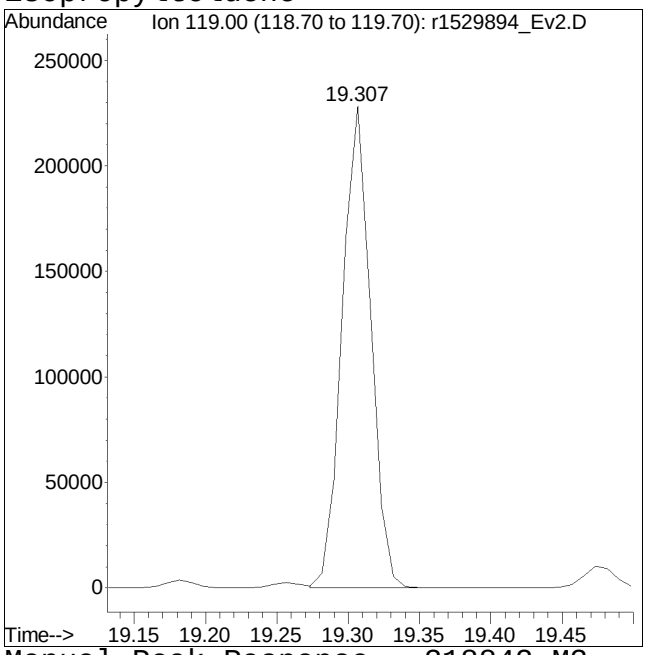
Original Peak Response = Manual Peak Response = 145429 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529894_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:8: 1 Instrument :
Sample : ITO15-SIMSTD5.0 Quant Date : 12/22/2021 10:46 am

Compound #78: p-isopropyltoluene





Original Peak Response = 3795 Manual Peak Response = 318842 M3

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529895_Ev2.D
Acq On : 22 Dec 2021 8:52 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD010
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:27:51 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.608	49	216615	10.000	ppbV	0.07
Standard Area = 213198			Recovery = 101.60%			
33) 1,4-difluorobenzene	11.883	114	516326	10.000	ppbV	0.06
Standard Area = 515322			Recovery = 100.19%			
51) chlorobenzene-D5	16.583	54	120682	10.000	ppbV	0.04
Standard Area = 119198			Recovery = 101.24%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.492	65	144320	9.985	ppbV	0.06
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.85%			
53) toluene-D8	14.717	98	481292	9.961	ppbV	0.05
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.61%			
67) bromofluorobenzene	17.925	95	358271	9.999	ppbV	0.04
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.99%			
Target Compounds						Qvalue
2) propylene	3.892	41	79178M6	9.660	ppbV	
3) dichlorodifluoromethane	3.976	85	152011	9.046	ppbV	99
4) chloromethane	4.162	50	74807	9.385	ppbV	98
5) Freon-114	4.288	85	185579	9.337	ppbV	100
6) vinyl chloride	4.426	62	102129	9.554	ppbV	99
7) 1,3-butadiene	4.588	54	73757	9.493	ppbV	79
8) bromomethane	4.912	94	76913	9.546	ppbV	99
9) chloroethane	5.134	64	50726	9.700	ppbV	98
10) ethanol	5.302	31	433319	48.248	ppbV	99
11) vinyl bromide	5.570	106	66104	9.917	ppbV	96
12) acrolein	5.723	56	42148	9.726	ppbV	96
13) acetone	5.880	43	548504	48.542	ppbV	91
14) trichlorofluoromethane	6.093	101	146904	9.741	ppbV	98
15) isopropyl alcohol	6.207	45	302751	24.935	ppbV	98
16) acrylonitrile	6.470	53	73442	9.822	ppbV	96
17) 1,1-dichloroethene	6.870	61	144331	9.740	ppbV	99
18) tertiary butyl alcohol	6.942	59	166057	9.882	ppbV	96
19) methylene chloride	7.038	49	97973	9.693	ppbV	94
20) 3-chloropropene	7.182	41	118355	10.014	ppbV	96
21) carbon disulfide	7.338	76	205356	10.238	ppbV #	85
22) Freon 113	7.374	101	147189	9.695	ppbV	96
23) trans-1,2-dichloroethene	8.175	61	151845	9.854	ppbV	99
24) 1,1-dichloroethane	8.408	63	182580	9.829	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529895_Ev2.D
Acq On : 22 Dec 2021 8:52 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD010
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:27:51 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	8.492	73	212481	9.909	ppbV		98
26) vinyl acetate	8.633	43	191481	10.517	ppbV		97
27) 2-butanone	8.900	43	204790	9.914	ppbV		96
28) cis-1,2-dichloroethene	9.417	61	146800	9.893	ppbV		94
29) Ethyl Acetate	9.717	61	37181	9.882	ppbV		95
30) chloroform	9.775	83	179513	9.802	ppbV		96
31) Tetrahydrofuran	10.217	42	128761	10.008	ppbV		93
32) 1,2-dichloroethane	10.625	62	134761	10.685	ppbV		99
34) hexane	9.675	57	205282	9.988	ppbV		88
36) 1,1,1-trichloroethane	10.910	97	144223	10.123	ppbV		97
37) benzene	11.443	78	334812	9.915	ppbV		99
38) carbon tetrachloride	11.617	117	134793	10.171	ppbV		97
39) cyclohexane	11.763	56	222923	10.008	ppbV		92
40) Dibromomethane	12.370	93	104380	9.904	ppbV	#	93
41) 1,2-dichloropropane	12.403	63	126920	9.939	ppbV		98
42) bromodichloromethane	12.630	83	185598	10.143	ppbV		98
43) 1,4-dioxane	12.670	88	80224	10.039	ppbV		96
44) trichloroethene	12.683	130	134750	9.926	ppbV		94
45) 2,2,4-trimethylpentane	12.730	57	680097M6	9.944	ppbV		
46) heptane	13.050	43	222070	9.865	ppbV		94
47) cis-1,3-dichloropropene	14.317	75	142387	10.474	ppbV		91
48) 4-methyl-2-pentanone	13.733	43	253801	10.073	ppbV		97
49) trans-1,3-dichloropropene	13.700	75	152991	10.408	ppbV		90
50) 1,1,2-trichloroethane	14.517	97	118561	9.985	ppbV		94
52) toluene	14.825	91	406979	9.880	ppbV		100
54) 2-hexanone	15.108	43	239013	10.045	ppbV		94
55) dibromochloromethane	15.275	129	170363	10.213	ppbV		98
56) 1,2-dibromoethane	15.525	107	171008	9.821	ppbV		94
57) tetrachloroethene	15.992	166	144824	9.914	ppbV		97
58) 1,1,1,2-tetrachloroethane	16.617	131	133474	10.151	ppbV		98
59) chlorobenzene	16.633	112	300420	9.926	ppbV		94
60) ethylbenzene	16.967	91	519211	9.968	ppbV		99
61) m+p-xylene	17.133	91	847899	19.709	ppbV		99
62) bromoform	17.200	173	133472	10.519	ppbV		99
63) styrene	17.450	104	300222	10.065	ppbV		98
64) 1,1,2,2-tetrachloroethane	17.533	83	318166	9.885	ppbV		100
65) o-xylene	17.542	91	428911	9.894	ppbV		98
66) 1,2,3-Trichloropropane	17.650	75	220443	9.840	ppbV		93
68) isopropylbenzene	18.042	105	485486	9.794	ppbV		95
69) Bromobenzene	18.117	77	289017	9.819	ppbV		98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529895_Ev2.D
Acq On : 22 Dec 2021 8:52 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD010
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:27:51 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default - All compounds listed

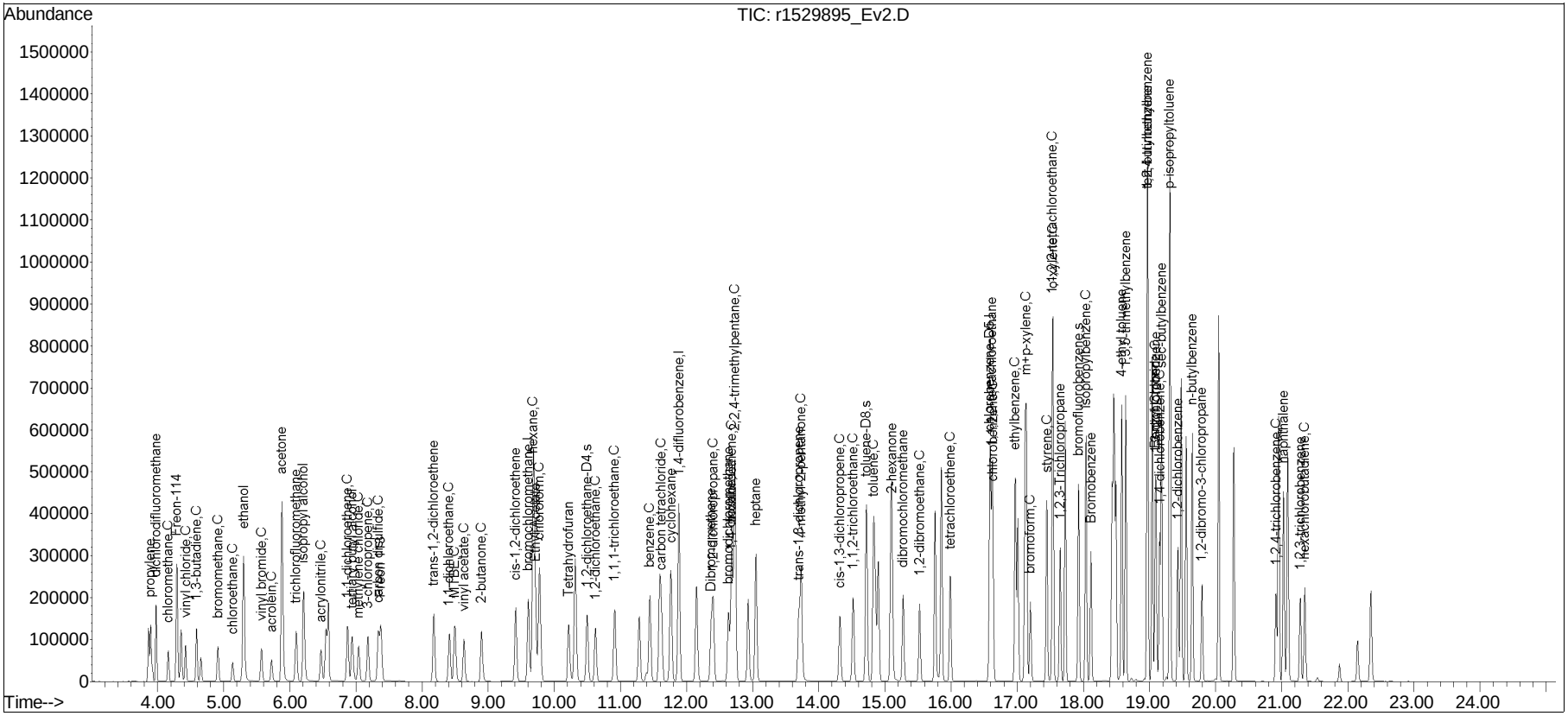
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.583	105	515029	9.921	ppbV	96
71) 1,3,5-trimethylbenzene	18.642	105	450204	9.872	ppbV	95
72) tert-butylbenzene	18.973	119	520137	9.854	ppbV	98
73) 1,2,4-trimethylbenzene	18.973	105	444611	9.896	ppbV	95
74) Benzyl Chloride	19.090	91	280878	11.297	ppbV	97
75) 1,3-dichlorobenzene	19.098	146	295839	10.008	ppbV	98
76) 1,4-dichlorobenzene	19.157	146	296949M6	10.084	ppbV	
77) sec-butylbenzene	19.182	105	630890	9.858	ppbV	98
78) p-isopropyltoluene	19.307	119	632342M6	9.794	ppbV	
79) 1,2-dichlorobenzene	19.432	146	280023	10.028	ppbV	98
80) n-butylbenzene	19.648	91	576144	9.937	ppbV	96
81) 1,2-dibromo-3-chloropr...	19.790	75	121778	10.095	ppbV	89
82) 1,2,4-trichlorobenzene	20.917	180	222980	10.678	ppbV	99
83) naphthalene	21.025	128	691257	10.423	ppbV	99
84) 1,2,3-trichlorobenzene	21.283	180	213858	10.496	ppbV	100
85) hexachlorobutadiene	21.350	225	180146	9.991	ppbV	98

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

Sub List : Default - All compounds listed1\12\1222SIM_I\r1529894_Ev2.D

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529895_Ev2.D
Acq On : 22 Dec 2021 8:52 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD010
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

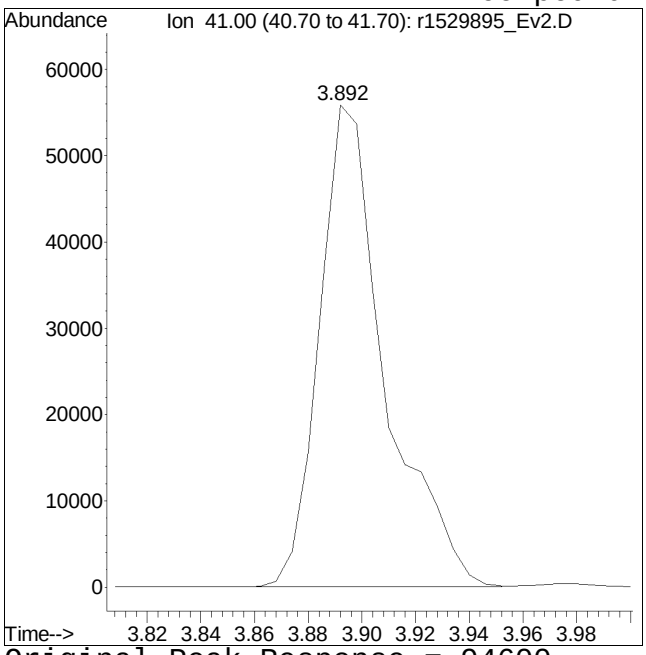
Quant Time: Dec 27 10:27:51 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration



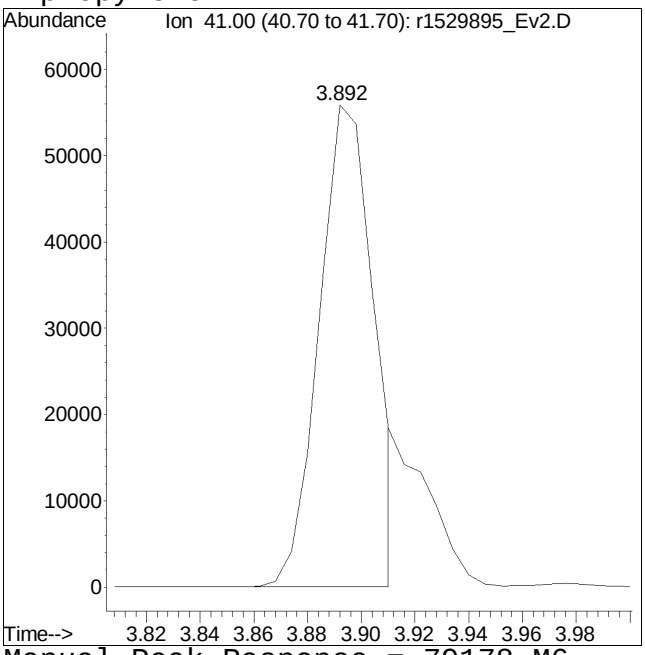
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529895_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:8: 2 Instrument :
Sample : ITO15-SIMSTD010 Quant Date : 12/22/2021 10:49 am

Compound #2: propylene



Original Peak Response = 94600



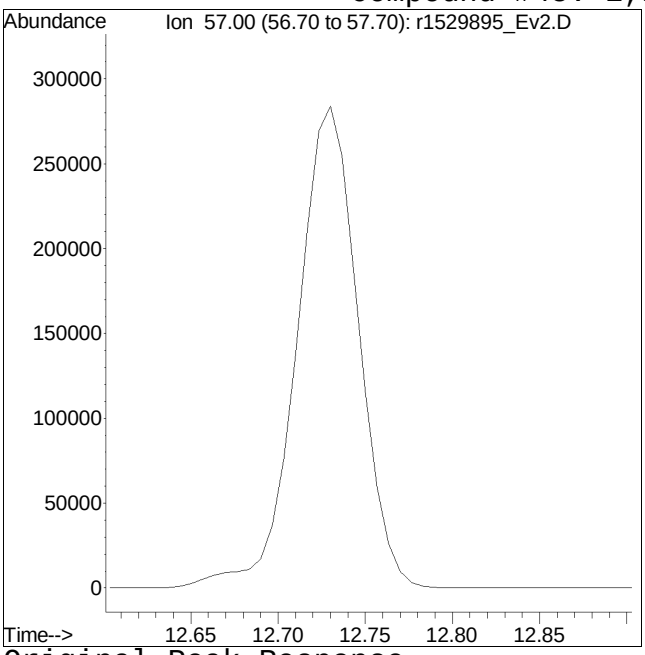
Manual Peak Response = 79178 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

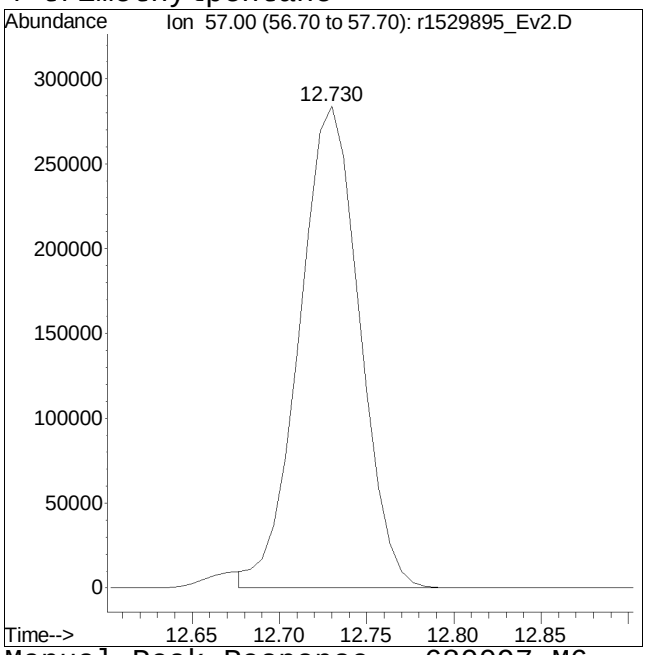
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529895_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:8: 2 Instrument :
Sample : ITO15-SIMSTD010 Quant Date : 12/22/2021 10:49 am

Compound #45: 2,2,4-trimethylpentane



Original Peak Response =



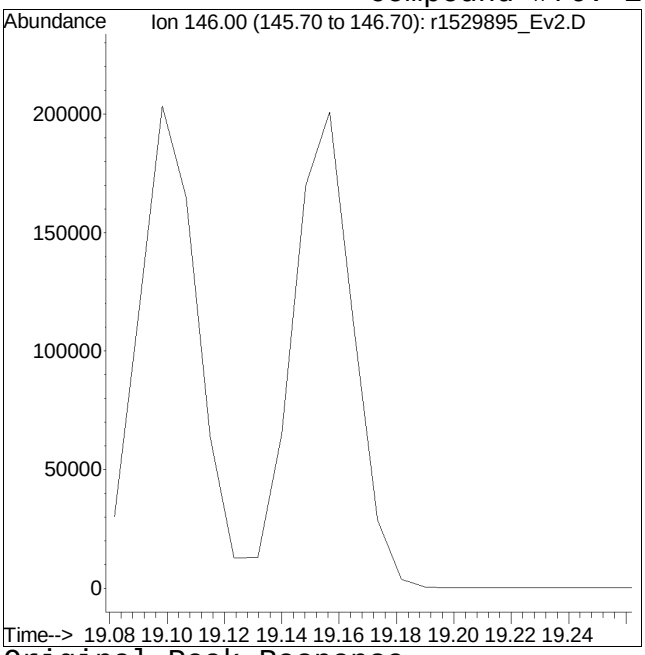
Manual Peak Response = 680097 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

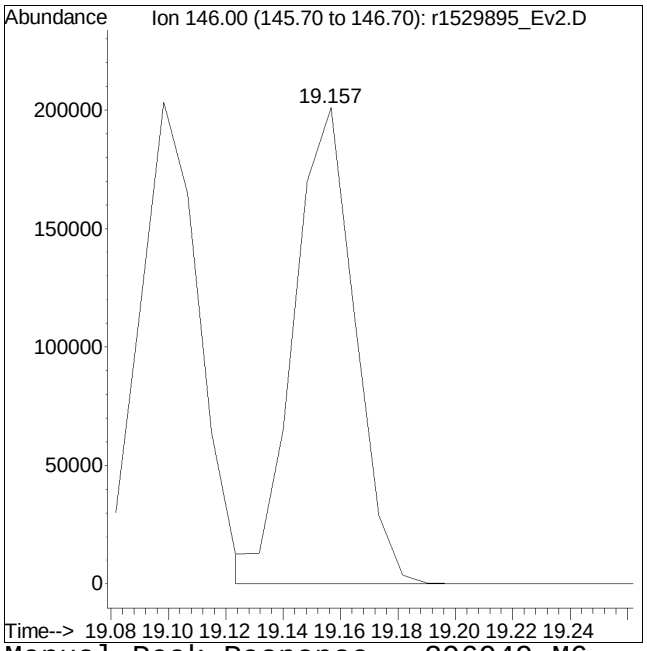
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529895_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:8: 2 Instrument :
Sample : ITO15-SIMSTD010 Quant Date : 12/22/2021 10:49 am

Compound #76: 1,4-dichlorobenzene



Original Peak Response =



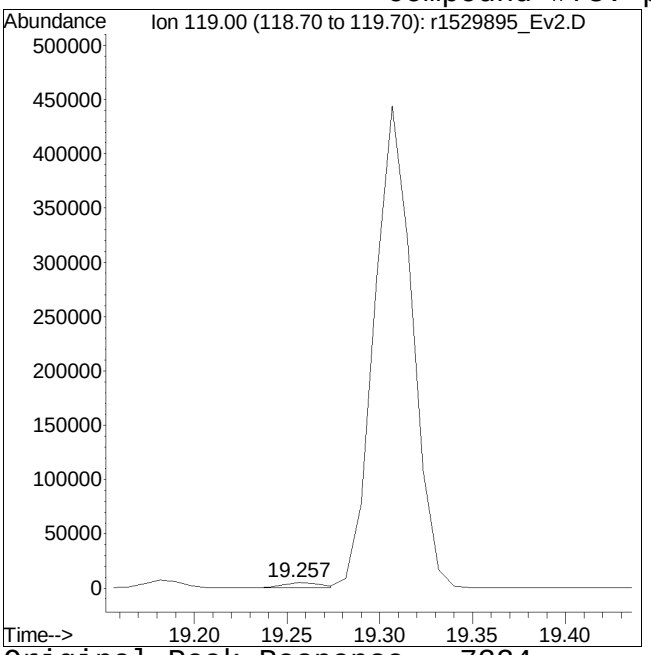
Manual Peak Response = 296949 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

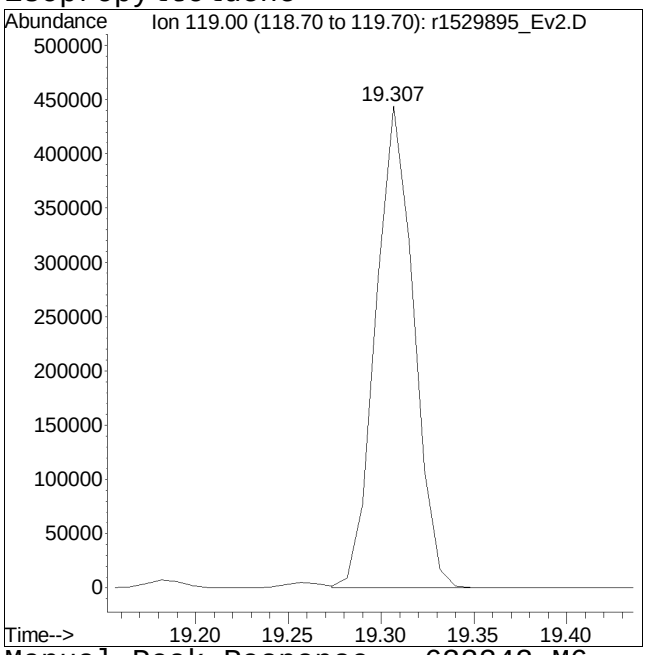
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529895_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:8: 2 Instrument :
Sample : ITO15-SIMSTD010 Quant Date : 12/22/2021 10:49 am

Compound #78: p-isopropyltoluene



Original Peak Response = 7324



Manual Peak Response = 632342 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529896_Ev2.D
Acq On : 22 Dec 2021 9:29 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD020
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:29:18 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.608	49	217568	10.000	ppbV	0.07
Standard Area = 213198			Recovery = 102.05%			
33) 1,4-difluorobenzene	11.883	114	518216	10.000	ppbV	0.06
Standard Area = 515322			Recovery = 100.56%			
51) chlorobenzene-D5	16.592	54	118905	10.000	ppbV	# 0.05
Standard Area = 119198			Recovery = 99.75%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.500	65	143929	9.921	ppbV	0.07
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.21%			
53) toluene-D8	14.717	98	484402	10.175	ppbV	0.05
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.75%			
67) bromofluorobenzene	17.925	95	365008	10.340	ppbV	0.04
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.40%			
Target Compounds						Qvalue
2) propylene	3.898	41	171688M6	20.856	ppbV	
3) dichlorodifluoromethane	3.982	85	304269	18.028	ppbV	99
4) chloromethane	4.162	50	153342	19.153	ppbV	99
5) Freon-114	4.288	85	370754	18.572	ppbV	100
6) vinyl chloride	4.426	62	207460	19.322	ppbV	99
7) 1,3-butadiene	4.594	54	153898	19.722	ppbV #	76
8) bromomethane	4.912	94	154805	19.130	ppbV	99
9) chloroethane	5.134	64	104154	19.829	ppbV	99
10) ethanol	5.302	31	891442	98.824	ppbV	96
11) vinyl bromide	5.570	106	145469	21.728	ppbV	95
12) acrolein	5.723	56	90269	20.740	ppbV	95
13) acetone	5.877	43	1152846	101.578	ppbV	93
14) trichlorofluoromethane	6.097	101	303596	20.044	ppbV	99
15) isopropyl alcohol	6.207	45	674632	55.320	ppbV	98
16) acrylonitrile	6.470	53	160534	21.376	ppbV	96
17) 1,1-dichloroethene	6.870	61	302215	20.305	ppbV	99
18) tertiary butyl alcohol	6.936	59	373213	22.113	ppbV	96
19) methylene chloride	7.038	49	203324	20.029	ppbV	93
20) 3-chloropropene	7.182	41	265887	22.399	ppbV	96
21) carbon disulfide	7.338	76	469889	23.324	ppbV #	84
22) Freon 113	7.374	101	307694	20.178	ppbV	97
23) trans-1,2-dichloroethene	8.175	61	339555	21.939	ppbV	99
24) 1,1-dichloroethane	8.417	63	390485	20.929	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529896_Ev2.D
Acq On : 22 Dec 2021 9:29 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD020
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:29:18 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	8.492	73	472707	21.947	ppbV		98
26) vinyl acetate	8.633	43	455676	24.919	ppbV		96
27) 2-butanone	8.892	43	459438	22.145	ppbV		97
28) cis-1,2-dichloroethene	9.417	61	316201	21.215	ppbV		94
29) Ethyl Acetate	9.708	61	84991	22.491	ppbV		70
30) chloroform	9.775	83	376340	20.459	ppbV		97
31) Tetrahydrofuran	10.208	42	288866	22.354	ppbV		95
32) 1,2-dichloroethane	10.625	62	260802	20.588	ppbV		100
34) hexane	9.683	57	453481	21.984	ppbV		93
36) 1,1,1-trichloroethane	10.910	97	308831	21.599	ppbV		98
37) benzene	11.443	78	705916	20.828	ppbV		99
38) carbon tetrachloride	11.623	117	289221	21.744	ppbV		97
39) cyclohexane	11.763	56	495696	22.172	ppbV		92
40) Dibromomethane	12.370	93	232351	21.965	ppbV	#	93
41) 1,2-dichloropropane	12.403	63	273613	21.348	ppbV		97
42) bromodichloromethane	12.630	83	415115	22.604	ppbV		99
43) 1,4-dioxane	12.670	88	178908	22.306	ppbV		93
44) trichloroethene	12.683	130	289593	21.255	ppbV		94
45) 2,2,4-trimethylpentane	12.730	57	1503898M6	21.908	ppbV		
46) heptane	13.050	43	494883	21.903	ppbV		96
47) cis-1,3-dichloropropene	14.317	75	313139	22.951	ppbV		91
48) 4-methyl-2-pentanone	13.733	43	563451	22.282	ppbV		95
49) trans-1,3-dichloropropene	13.700	75	331311	22.456	ppbV		91
50) 1,1,2-trichloroethane	14.517	97	254964	21.393	ppbV		95
52) toluene	14.833	91	861262	21.221	ppbV		99
54) 2-hexanone	15.100	43	534872	22.814	ppbV		93
55) dibromochloromethane	15.275	129	387280	23.564	ppbV		99
56) 1,2-dibromoethane	15.525	107	367234	21.405	ppbV		94
57) tetrachloroethene	15.992	166	305517	21.228	ppbV		98
58) 1,1,1,2-tetrachloroethane	16.617	131	301048	23.239	ppbV		97
59) chlorobenzene	16.633	112	632252	21.203	ppbV		94
60) ethylbenzene	16.975	91	1105269	21.537	ppbV		96
61) m+p-xylene	17.133	91	1781253	42.024	ppbV		98
62) bromoform	17.200	173	310184	24.810	ppbV		99
63) styrene	17.450	104	643634	21.901	ppbV		98
64) 1,1,2,2-tetrachloroethane	17.533	83	653607	20.610	ppbV		100
65) o-xylene	17.542	91	898601	21.038	ppbV		97
66) 1,2,3-Trichloropropane	17.650	75	478097	21.659	ppbV		93
68) isopropylbenzene	18.042	105	1060366	21.712	ppbV		95
69) Bromobenzene	18.117	77	627854	21.650	ppbV		96

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529896_Ev2.D
Acq On : 22 Dec 2021 9:29 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD020
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:29:18 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default - All compounds listed

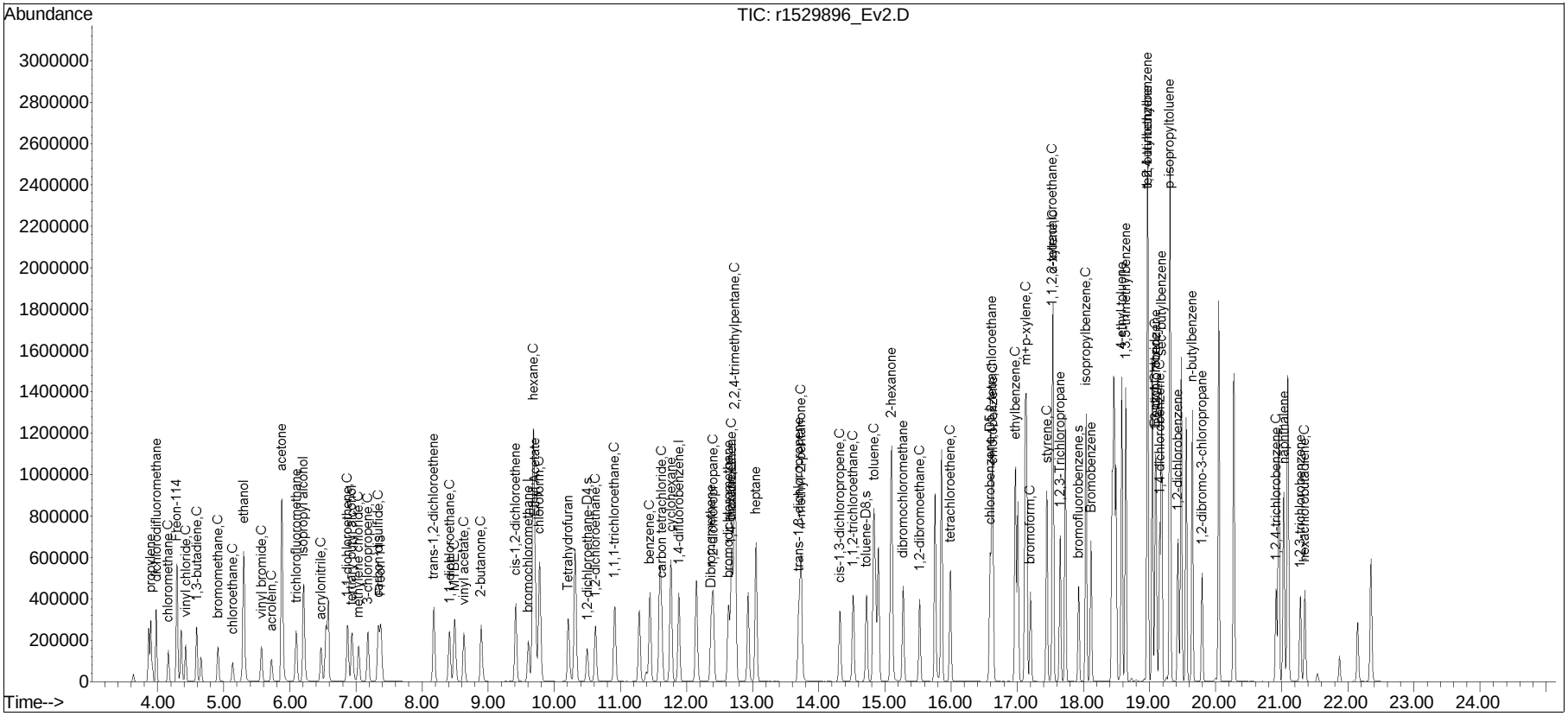
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.583	105	1130942	22.112	ppbV	96
71) 1,3,5-trimethylbenzene	18.642	105	950006	21.142	ppbV	97
72) tert-butylbenzene	18.973	119	1065818	20.494	ppbV	99
73) 1,2,4-trimethylbenzene	18.973	105	917788	20.732	ppbV	99
74) Benzyl Chloride	19.090	91	716658	29.254	ppbV	97
75) 1,3-dichlorobenzene	19.098	146	643427	22.092	ppbV	98
76) 1,4-dichlorobenzene	19.157	146	628107M6	21.648	ppbV	
77) sec-butylbenzene	19.182	105	1360270	21.572	ppbV	96
78) p-isopropyltoluene	19.307	119	1301469M6	20.460	ppbV	
79) 1,2-dichlorobenzene	19.432	146	598811	21.764	ppbV	98
80) n-butylbenzene	19.648	91	1237449	21.663	ppbV	94
81) 1,2-dibromo-3-chloropr...	19.798	75	268017	22.549	ppbV	88
82) 1,2,4-trichlorobenzene	20.917	180	466671	22.682	ppbV	100
83) naphthalene	21.033	128	1439535	22.031	ppbV	99
84) 1,2,3-trichlorobenzene	21.283	180	441744	22.004	ppbV	99
85) hexachlorobutadiene	21.350	225	362681	20.416	ppbV	97

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

Sub List : Default - All compounds listed1\12\1222SIM_I\r1529894_Ev2.D

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529896_Ev2.D
Acq On : 22 Dec 2021 9:29 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD020
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

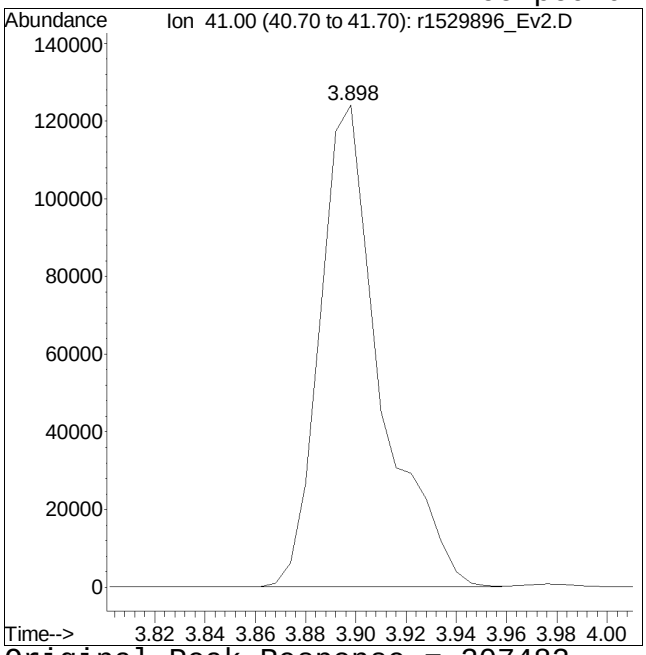
Quant Time: Dec 27 10:29:18 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration



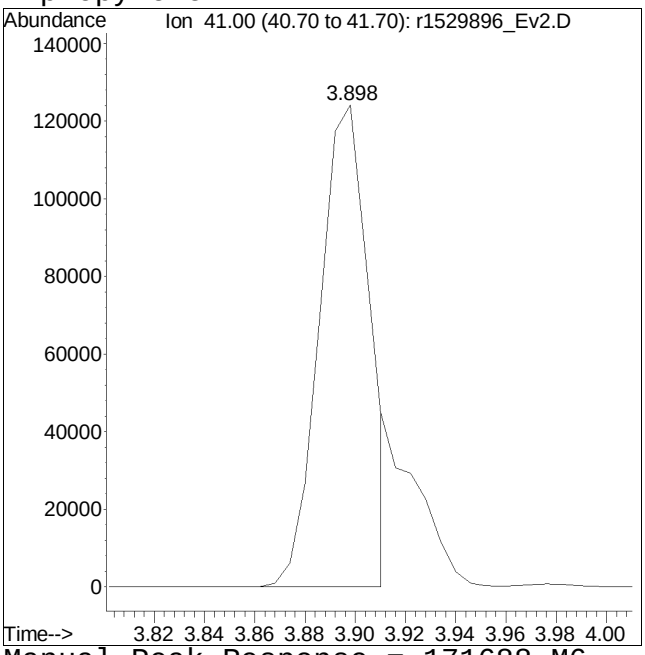
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529896_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:9: 9 Instrument :
Sample : ITO15-SIMSTD020 Quant Date : 12/22/2021 10:49 am

Compound #2: propylene



Original Peak Response = 207482



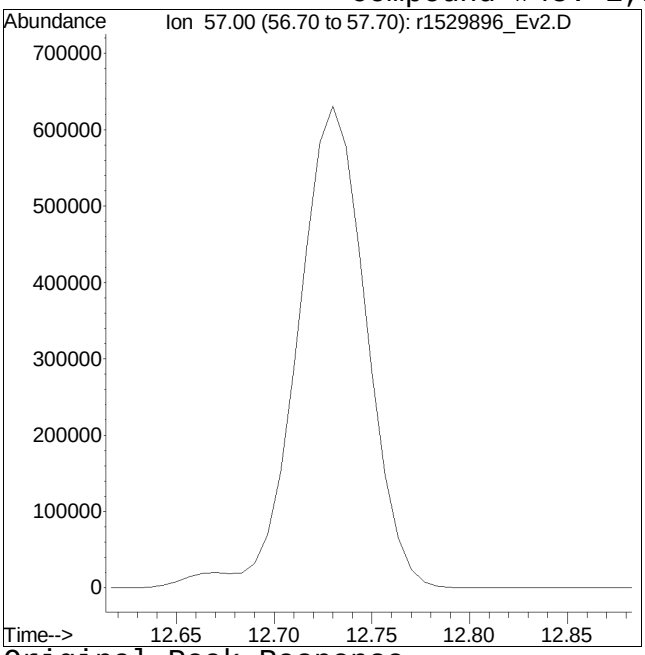
Manual Peak Response = 171688 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

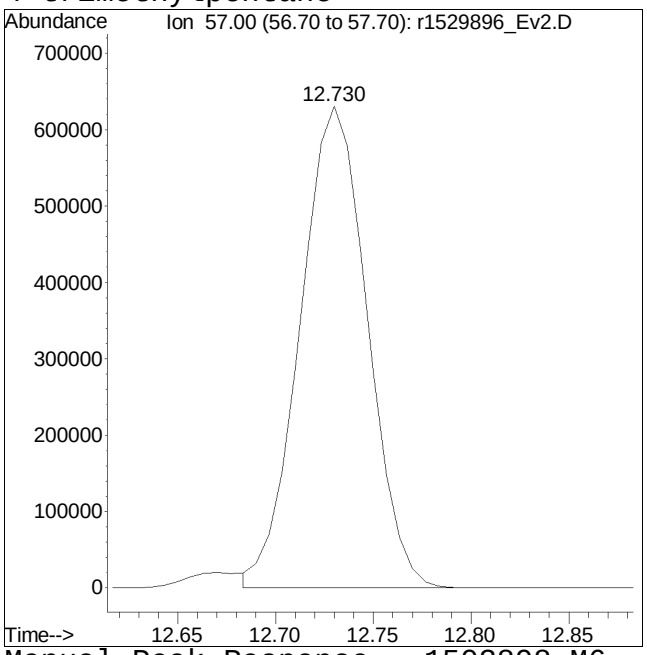
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529896_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:9: 9 Instrument :
Sample : ITO15-SIMSTD020 Quant Date : 12/22/2021 10:49 am

Compound #45: 2,2,4-trimethylpentane



Original Peak Response =



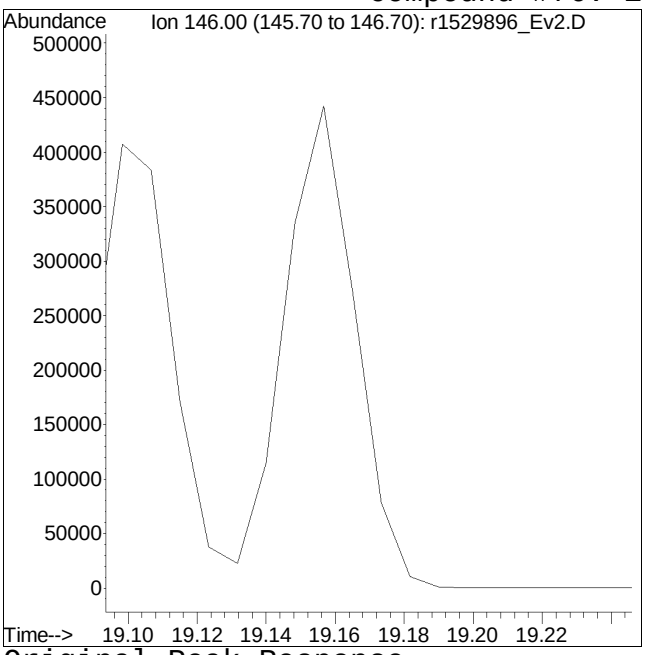
Manual Peak Response = 1503898 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

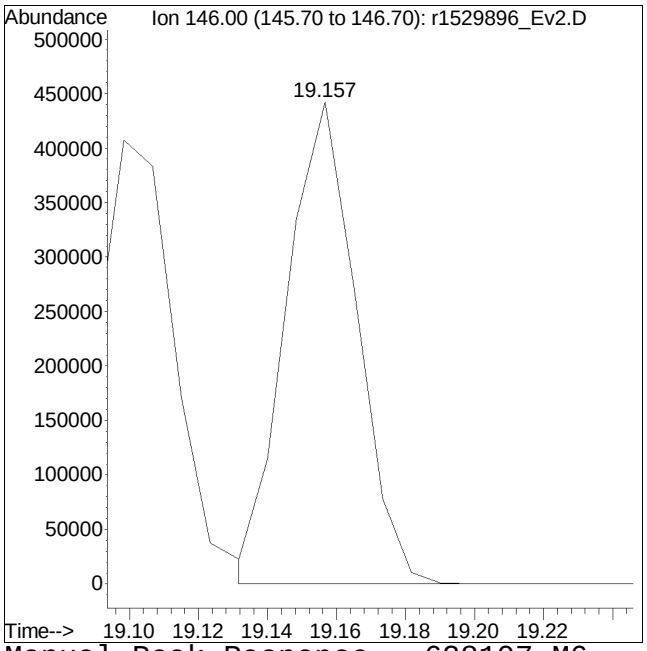
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529896_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:9: 9 Instrument :
Sample : ITO15-SIMSTD020 Quant Date : 12/22/2021 10:49 am

Compound #76: 1,4-dichlorobenzene



Original Peak Response =



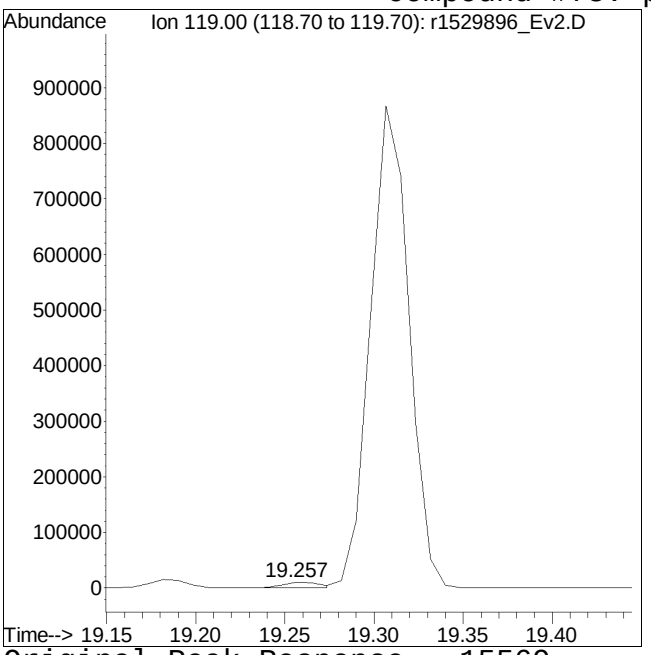
Manual Peak Response = 628107 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

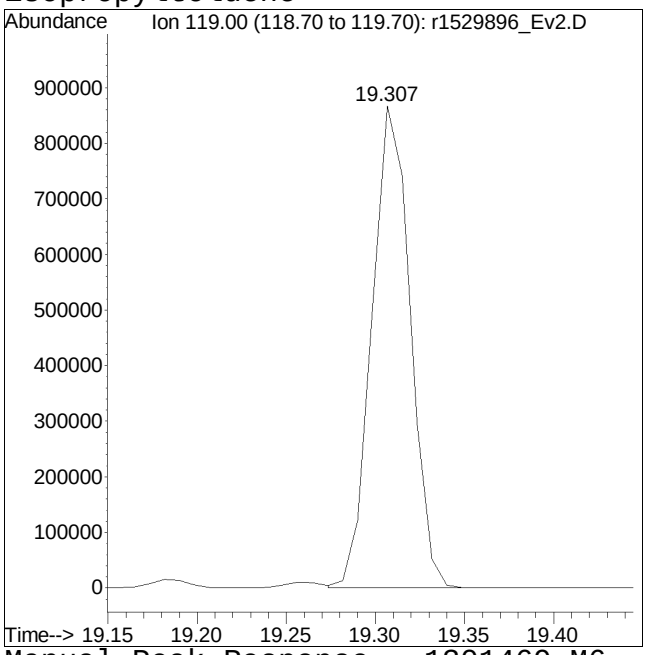
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529896_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:9: 9 Instrument :
Sample : ITO15-SIMSTD020 Quant Date : 12/22/2021 10:49 am

Compound #78: p-isopropyltoluene



Original Peak Response = 15569



Manual Peak Response = 1301469 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529897_Ev2.D
Acq On : 22 Dec 2021 10:08 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD050
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:34:06 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.617	49	211357	10.000	ppbV	0.07
Standard Area = 213198			Recovery = 99.14%			
33) 1,4-difluorobenzene	11.890	114	513268	10.000	ppbV	0.07
Standard Area = 515322			Recovery = 99.60%			
51) chlorobenzene-D5	16.592	54	113066	10.000	ppbV	# 0.05
Standard Area = 119198			Recovery = 94.86%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.500	65	139402	9.702	ppbV	0.07
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.02%			
53) toluene-D8	14.725	98	491090	10.848	ppbV	0.06
Spiked Amount 10.000	Range 70 - 130		Recovery = 108.48%			
67) bromofluorobenzene	17.933	95	362048	10.785	ppbV	0.05
Spiked Amount 10.000	Range 70 - 130		Recovery = 107.85%			
Target Compounds						Qvalue
2) propylene	3.898	41	410236M6	51.298	ppbV	
3) dichlorodifluoromethane	3.982	85	655201	39.961	ppbV	100
4) chloromethane	4.162	50	342837	44.081	ppbV	100
5) Freon-114	4.294	85	796794	41.085	ppbV	98
6) vinyl chloride	4.426	62	458894	43.995	ppbV	100
7) 1,3-butadiene	4.594	54	337553	44.528	ppbV	84
8) bromomethane	4.918	94	339298	43.160	ppbV	99
9) chloroethane	5.140	64	234363	45.931	ppbV	100
10) ethanol	5.314	31	1801667	205.600	ppbV	88
11) vinyl bromide	5.577	106	334071	51.364	ppbV	96
12) acrolein	5.727	56	198830	47.025	ppbV	94
13) acetone	5.883	43	2553612	231.613	ppbV	97
14) trichlorofluoromethane	6.100	101	670286	45.554	ppbV	100
15) isopropyl alcohol	6.217	45	1544395	130.361	ppbV	99
16) acrylonitrile	6.477	53	348472	47.764	ppbV	96
17) 1,1-dichloroethene	6.876	61	649797	44.940	ppbV	98
18) tertiary butyl alcohol	6.948	59	816326	49.789	ppbV	95
19) methylene chloride	7.044	49	441068	44.724	ppbV	93
20) 3-chloropropene	7.188	41	617751	53.570	ppbV #	97
21) carbon disulfide	7.344	76	1075551	54.957	ppbV #	82
22) Freon 113	7.380	101	681316	45.991	ppbV	96
23) trans-1,2-dichloroethene	8.183	61	789559	52.513	ppbV	94
24) 1,1-dichloroethane	8.417	63	908693	50.135	ppbV	99

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529897_Ev2.D
Acq On : 22 Dec 2021 10:08 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD050
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:34:06 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	8.500	73	1070569	51.166	ppbV		98
26) vinyl acetate	8.633	43	1074667	60.495	ppbV		98
27) 2-butanone	8.900	43	1050509	52.122	ppbV		95
28) cis-1,2-dichloroethene	9.425	61	729376	50.374	ppbV		90
29) Ethyl Acetate	9.717	61	204224	55.631	ppbV		89
30) chloroform	9.783	83	799035	44.714	ppbV		97
31) Tetrahydrofuran	10.208	42	673579	53.658	ppbV		96
32) 1,2-dichloroethane	10.625	62	621776	50.527	ppbV		100
34) hexane	9.683	57	1002508	49.068	ppbV		90
36) 1,1,1-trichloroethane	10.917	97	702931	49.635	ppbV		97
37) benzene	11.450	78	1569284	46.747	ppbV		98
38) carbon tetrachloride	11.623	117	625889	47.508	ppbV		98
39) cyclohexane	11.770	56	1114954	50.352	ppbV		93
40) Dibromomethane	12.377	93	526979	50.297	ppbV	#	91
41) 1,2-dichloropropane	12.410	63	647242	50.987	ppbV		95
42) bromodichloromethane	12.637	83	903639	49.680	ppbV		98
43) 1,4-dioxane	12.670	88	404703	50.943	ppbV		96
44) trichloroethene	12.690	130	658644	48.809	ppbV		94
45) 2,2,4-trimethylpentane	12.737	57	3308372	48.660	ppbV		97
46) heptane	13.057	43	1104812M2	49.369	ppbV		
47) cis-1,3-dichloropropene	14.325	75	722622	53.475	ppbV		91
48) 4-methyl-2-pentanone	13.733	43	1285857	51.340	ppbV		95
49) trans-1,3-dichloropropene	13.700	75	765678	52.398	ppbV		91
50) 1,1,2-trichloroethane	14.525	97	599087	50.752	ppbV		98
52) toluene	14.833	91	1922210	49.807	ppbV		98
54) 2-hexanone	15.108	43	1201034M6	53.874	ppbV		
55) dibromochloromethane	15.283	129	867140	55.485	ppbV		98
56) 1,2-dibromoethane	15.525	107	839348	51.451	ppbV		96
57) tetrachloroethene	15.992	166	675184	49.335	ppbV		98
58) 1,1,1,2-tetrachloroethane	16.617	131	662302	53.765	ppbV		98
59) chlorobenzene	16.633	112	1383824	48.803	ppbV		97
60) ethylbenzene	16.975	91	2474769	50.714	ppbV		95
61) m+p-xylene	17.142	91	3877103	96.194	ppbV		95
62) bromoform	17.208	173	703844	59.205	ppbV		99
63) styrene	17.450	104	1481347	53.009	ppbV		98
64) 1,1,2,2-tetrachloroethane	17.542	83	1331340	44.148	ppbV		100
65) o-xylene	17.542	91	1876443	46.199	ppbV		95
66) 1,2,3-Trichloropropane	17.650	75	1072392	51.092	ppbV		92
68) isopropylbenzene	18.042	105	2368336	50.999	ppbV		97
69) Bromobenzene	18.117	77	1390795	50.436	ppbV		95

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529897_Ev2.D
Acq On : 22 Dec 2021 10:08 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD050
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:34:06 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default - All compounds listed

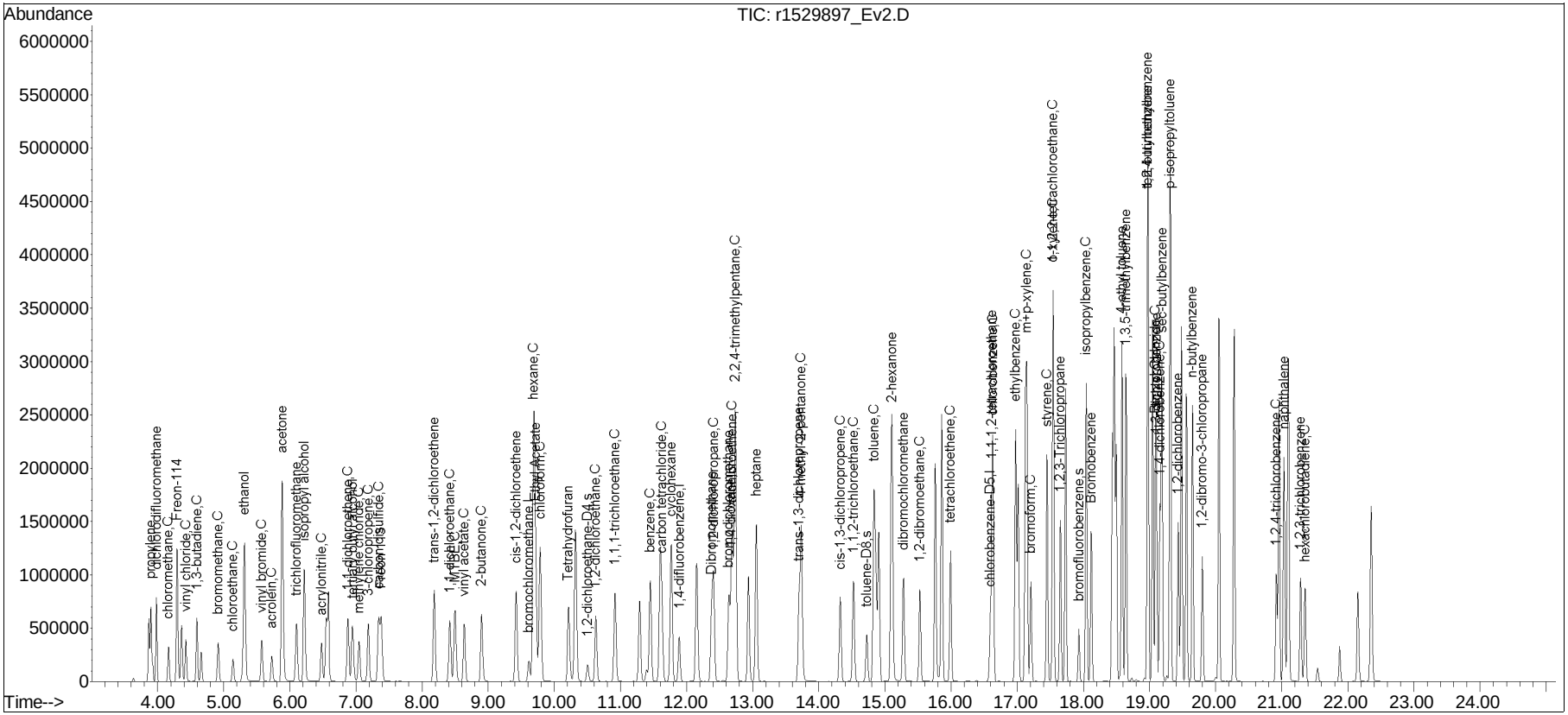
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
70) 4-ethyl toluene	18.583	105	2520697	51.829	ppbV		98
71) 1,3,5-trimethylbenzene	18.642	105	2101610	49.186	ppbV		100
72) tert-butylbenzene	18.973	119	2111419	42.695	ppbV		97
73) 1,2,4-trimethylbenzene	18.973	105	1932790	45.915	ppbV		97
74) Benzyl Chloride	19.090	91	1688855	72.500	ppbV		98
75) 1,3-dichlorobenzene	19.107	146	1443733	52.130	ppbV		94
76) 1,4-dichlorobenzene	19.157	146	1460777M6	52.947	ppbV		
77) sec-butylbenzene	19.190	105	3007328	50.156	ppbV	#	90
78) p-isopropyltoluene	19.315	119	2569744M6	42.484	ppbV		
79) 1,2-dichlorobenzene	19.432	146	1391710	53.196	ppbV		97
80) n-butylbenzene	19.648	91	2672787	49.206	ppbV		93
81) 1,2-dibromo-3-chloropr...	19.798	75	612466	54.189	ppbV		88
82) 1,2,4-trichlorobenzene	20.917	180	1087129	55.567	ppbV		95
83) naphthalene	21.033	128	3308857	53.254	ppbV		98
84) 1,2,3-trichlorobenzene	21.283	180	1054357	55.232	ppbV		96
85) hexachlorobutadiene	21.358	225	787629	46.627	ppbV		96

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

Sub List : Default - All compounds listed1\12\1222SIM_I\r1529894_Ev2.D

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529897_Ev2.D
Acq On : 22 Dec 2021 10:08 AM
Operator : AIRLAB15:TS
Sample : ITO15-SIMSTD050
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:34:06 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 22 10:48:40 2021
Response via : Initial Calibration

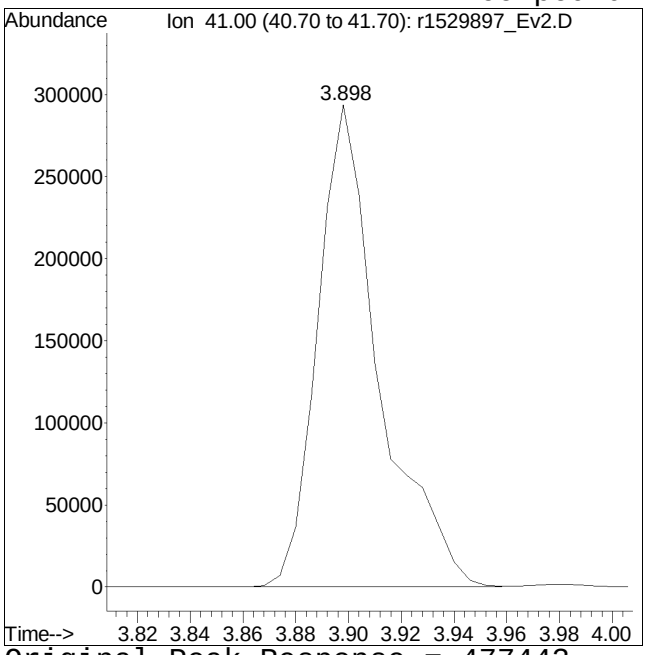


Manual Integration Report

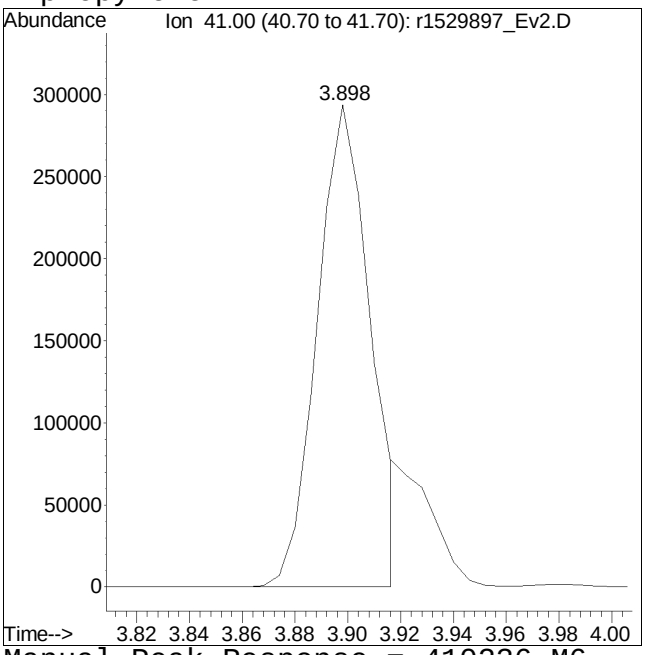
Data Path : O:\Forensics\Data\Airlab15Q
Data File : r1529897_Ev2.D
Date Inj'd : 12/22/2020 0:0: 8
Sample : ITO15-SIMSTD050

Method : TSIM15_211222.M
Operator : AIRLAB15:TS
Instrument :
Quant Date : 12/22/2021 10:49 am

Compound #2: propylene



Original Peak Response = 477443



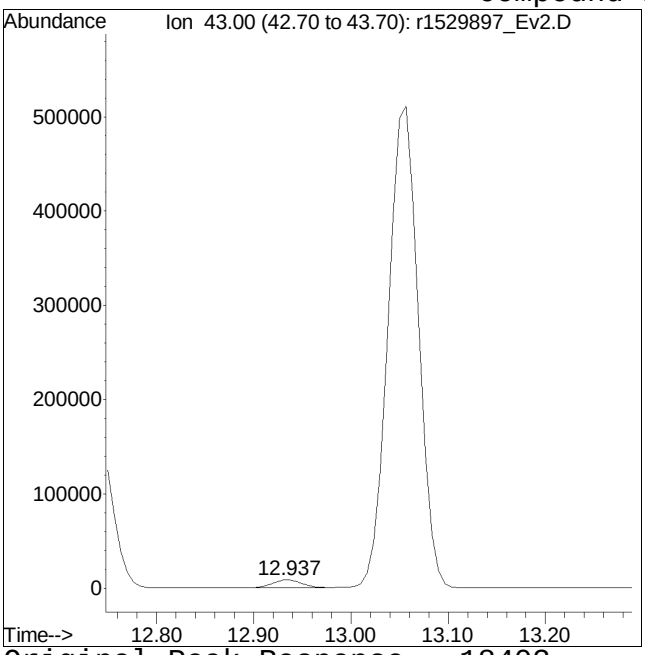
Manual Peak Response = 410236 M6

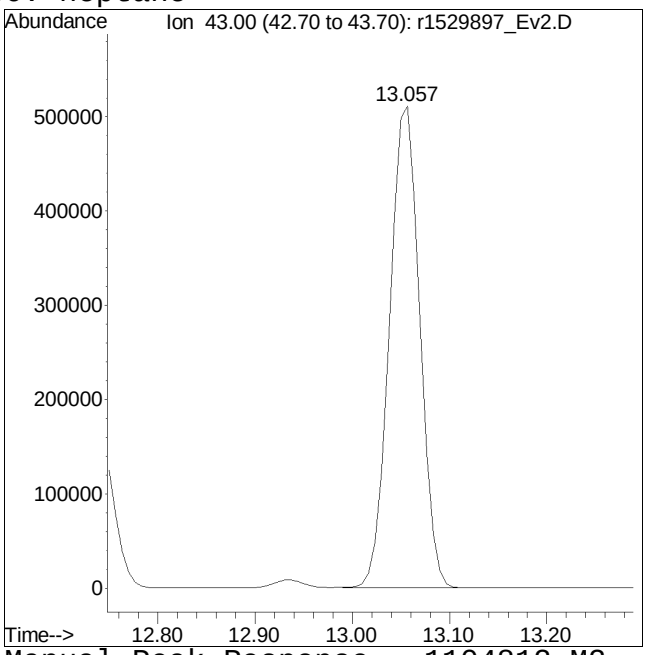
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529897_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:0: 8 Instrument :
Sample : ITO15-SIMSTD050 Quant Date : 12/22/2021 10:49 am

Compound #46: heptane



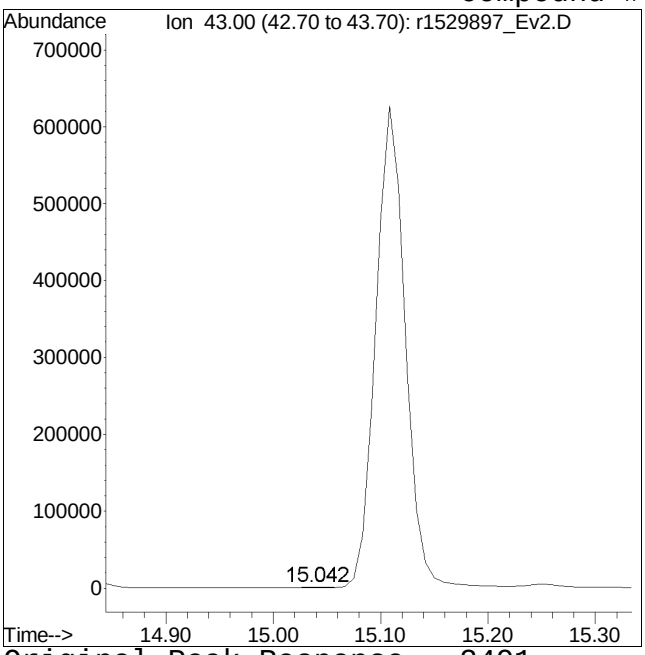


Original Peak Response = 18403 Manual Peak Response = 1104812 M2
M2 = Peak not found by automatic integration algorithm.

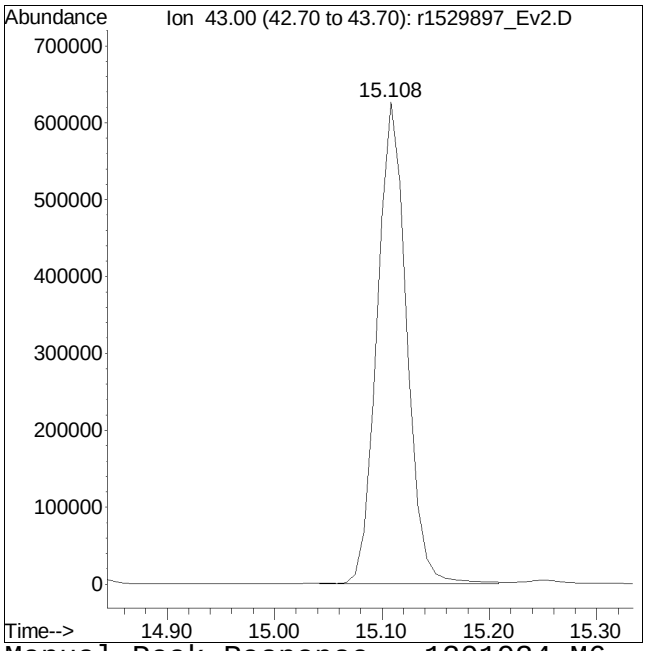
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529897_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:0: 8 Instrument :
Sample : ITO15-SIMSTD050 Quant Date : 12/22/2021 10:49 am

Compound #54: 2-hexanone



Original Peak Response = 2491



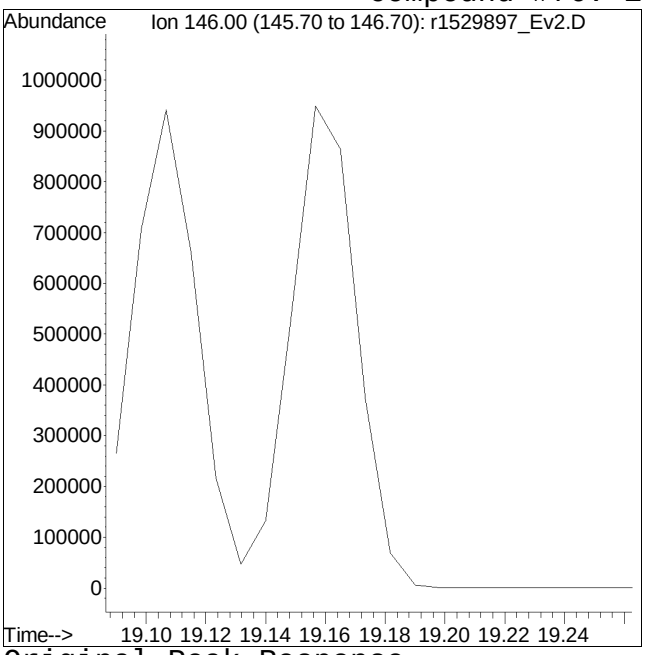
Manual Peak Response = 1201034 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

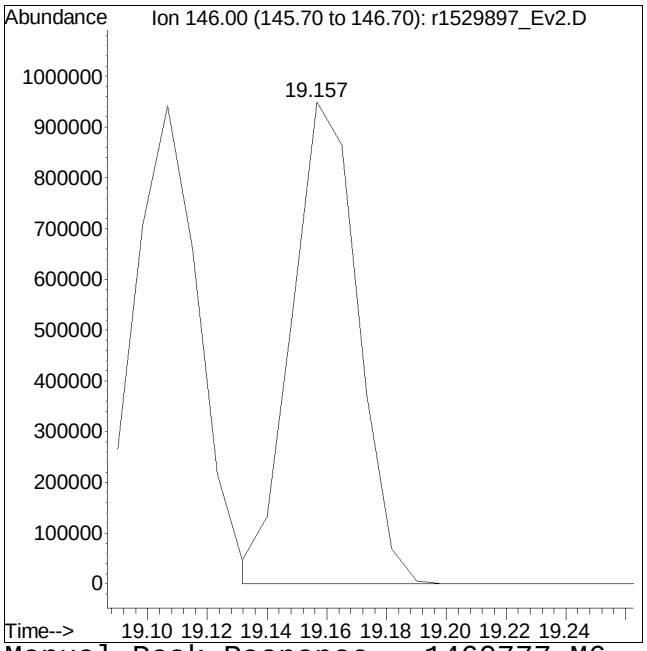
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529897_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:0: 8 Instrument :
Sample : ITO15-SIMSTD050 Quant Date : 12/22/2021 10:49 am

Compound #76: 1,4-dichlorobenzene



Original Peak Response =



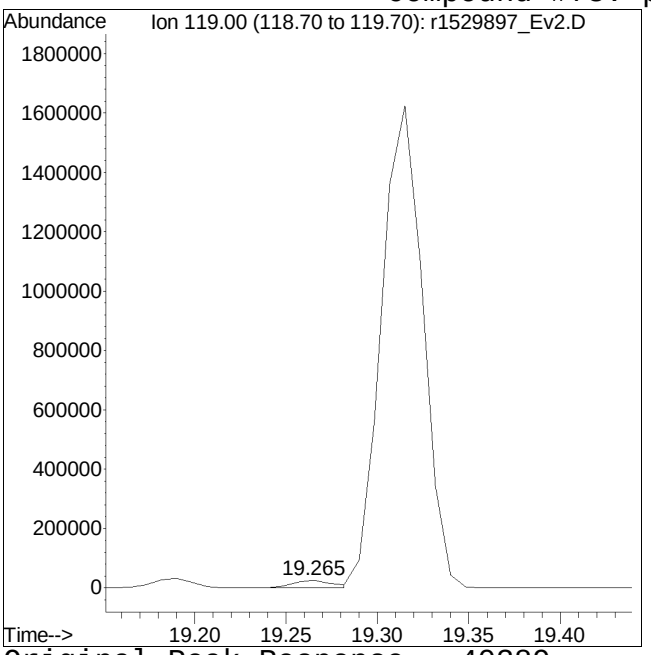
Manual Peak Response = 1460777 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

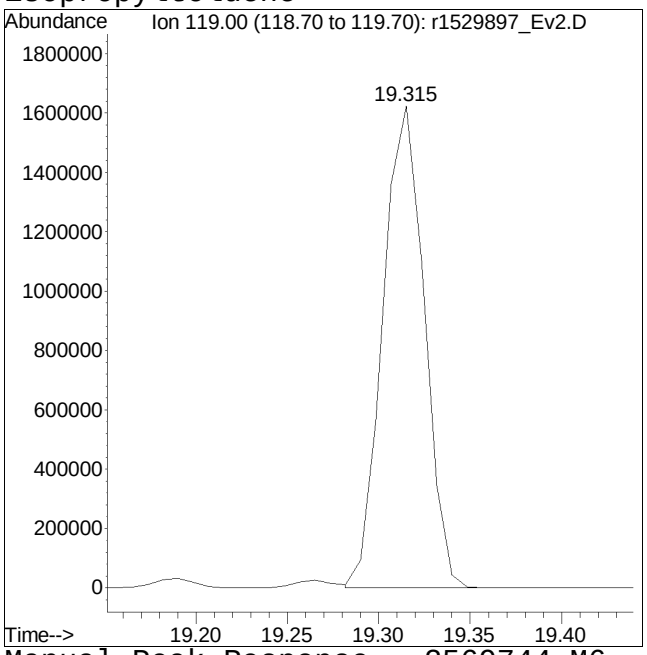
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529897_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:0: 8 Instrument :
Sample : ITO15-SIMSTD050 Quant Date : 12/22/2021 10:49 am

Compound #78: p-isopropyltoluene



Original Peak Response = 40389



Manual Peak Response = 2569744 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529902_Ev2.D
Acq On : 22 Dec 2021 3:07 PM
Operator : AIRLAB15:TS
Sample : CTO15-SIMSTD5.0
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:40:04 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Dec 27 10:35:25 2021
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	bromochloromethane	1.000	1.000	0.0	93	0.00
2		propylene	0.406	0.422	-3.9	104	0.01
3		dichlorodifluoromethane	0.767	0.689	10.2	83	0.01
4	C	chloromethane	0.373	0.333	10.7	84	0.00
5		Freon-114	0.928	0.832	10.3	85	0.01
6	C	vinyl chloride	0.513	0.446	13.1	84	0.01
7	C	1,3-butadiene	0.389	0.333	14.4	87	0.01
8	C	bromomethane	0.388	0.333	14.2	83	0.01
9	C	chloroethane	0.255	0.229	10.2	89	0.01
10		ethanol	0.417	0.393	5.8	88	0.00
11	C	vinyl bromide	0.327	0.300	8.3	91	0.00
12	C	acrolein	0.214	0.174	18.7	81	0.00
13		acetone	0.554	0.505	8.8	90	0.00
14		trichlorofluoromethane	0.723	0.665	8.0	89	0.00
15		isopropyl alcohol	0.597	0.653	-9.4	109	0.00
16	C	acrylonitrile	0.367	0.316	13.9	86	0.01
17	C	1,1-dichloroethene	0.715	0.647	9.5	88	0.01
18		tertiary butyl alcohol	0.809	0.900	-11.2	108	0.00
19	C	methylene chloride	0.472	0.438	7.2	88	0.00
20	C	3-chloropropene	0.574	0.653	-13.8	112	0.01
21	C	carbon disulfide	0.973	1.050	-7.9	106	0.00
22		Freon 113	0.759	0.754	0.7	100	0.00
23		trans-1,2-dichloroethene	0.778	0.707	9.1	93	0.00
24	C	1,1-dichloroethane	0.899	0.878	2.3	96	0.00
25	C	MTBE	1.050	1.014	3.4	96	0.00
26	C	vinyl acetate	0.919	0.800	12.9	89	0.00
27	C	2-butanone	1.019	1.030	-1.1	101	0.00
28		cis-1,2-dichloroethene	0.713	0.707	0.8	96	0.00
29		Ethyl Acetate	0.183	0.191	-4.4	103	0.00
30	C	chloroform	0.889	0.800	10.0	88	0.00
31		Tetrahydrofuran	0.626	0.639	-2.1	100	0.00
32	C	1,2-dichloroethane	0.630	0.562	10.8	90	0.00
33	I	1,4-difluorobenzene	1.000	1.000	0.0	97	0.00
34	C	hexane	0.420	0.383	8.8	93	0.00
35	s	1,2-dichloroethane-D4	0.279	0.269	3.6	93	0.00
36	C	1,1,1-trichloroethane	0.292	0.268	8.2	94	0.00
37	C	benzene	0.755	0.603	20.1	89	0.00
38	C	carbon tetrachloride	0.270	0.234	13.3	88	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529902_Ev2.D
Acq On : 22 Dec 2021 3:07 PM
Operator : AIRLAB15:TS
Sample : CTO15-SIMSTD5.0
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:40:04 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Dec 27 10:35:25 2021
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
39		cyclohexane	0.454	0.415	8.6	93	0.00
40		Dibromomethane	0.236	0.190	19.5	90	0.00
41	C	1,2-dichloropropane	0.262	0.250	4.6	98	0.00
42		bromodichloromethane	0.363	0.331	8.8	91	0.00
43	C	1,4-dioxane	0.161	0.182	-13.0	114	0.00
44	C	trichloroethene	0.274	0.260	5.1	96	0.00
45	C	2,2,4-trimethylpentane	1.397	1.296	7.2	95	0.00
46		heptane	0.455	0.422	7.3	94	0.00
47	C	cis-1,3-dichloropropene	0.251	0.229	8.8	84	0.00
48	C	4-methyl-2-pentanone	0.500	0.529	-5.8	105	0.00
49		trans-1,3-dichloropropene	0.282	0.292	-3.5	99	0.00
50	C	1,1,2-trichloroethane	0.243	0.236	2.9	99	0.00
51	I	chlorobenzene-D5	1.000	1.000	0.0	93	0.00
52	C	toluene	3.984	3.455	13.3	94	0.00
53	s	toluene-D8	4.038	4.257	-5.4	99	0.00
54		2-hexanone	2.046	2.240	-9.5	106	0.00
55		dibromochloromethane	1.388	1.447	-4.3	97	0.00
56	C	1,2-dibromoethane	1.465	1.464	0.1	94	0.00
57	C	tetrachloroethene	1.272	1.189	6.5	91	0.00
58		1,1,1,2-tetrachloroethane	1.127	1.059	6.0	90	0.00
59	C	chlorobenzene	2.626	2.527	3.8	94	0.00
60	C	ethylbenzene	4.376	4.445	-1.6	96	0.00
61	C	m+p-xylene	3.563	3.613	-1.4	94	0.00
62	C	bromoform	1.038	1.121	-8.0	99	0.00
63	C	styrene	2.423	2.555	-5.4	96	0.00
64	C	1,1,2,2-tetrachloroethane	2.683	2.632	1.9	92	0.00
65	C	o-xylene	3.553	3.675	-3.4	95	0.00
66		1,2,3-Trichloropropane	1.981	1.756	11.4	88	0.00
67	s	bromofluorobenzene	2.939	2.912	0.9	91	0.00
68	C	isopropylbenzene	4.280	4.094	4.3	93	0.00
69		Bromobenzene	2.592	2.327	10.2	89	0.00
70		4-ethyl toluene	4.336	4.372	-0.8	94	0.00
71		1,3,5-trimethylbenzene	3.688	3.855	-4.5	95	0.00
72		tert-butylbenzene	4.390	4.339	1.2	92	0.02
73		1,2,4-trimethylbenzene	3.674	3.943	-7.3	98	0.02
74	C	Benzyl Chloride	2.182	2.137	2.1	96	0.02
75		1,3-dichlorobenzene	2.468	2.588	-4.9	98	0.02
76	C	1,4-dichlorobenzene	2.439	2.511	-3.0	96	0.02

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529902_Ev2.D
Acq On : 22 Dec 2021 3:07 PM
Operator : AIRLAB15:TS
Sample : CTO15-SIMSTD5.0
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:40:04 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Dec 27 10:35:25 2021
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
77		sec-butylbenzene	5.456	5.274	3.3	92	0.02
78		p-isopropyltoluene	5.295	4.936	6.8	86	0.02
79		1,2-dichlorobenzene	2.316	2.437	-5.2	98	0.02
80		n-butylbenzene	4.838	4.980	-2.9	96	0.03
81		1,2-dibromo-3-chloropropane	0.947	0.943	0.4	88	0.04
82	C	1,2,4-trichlorobenzene	1.583	1.955	-23.5	105	0.04
83		naphthalene	5.101	6.143	-20.4	104	0.04
84		1,2,3-trichlorobenzene	1.551	1.817	-17.2	100	0.04
85	C	hexachlorobutadiene	1.387	1.545	-11.4	96	0.04

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529902_Ev2.D
Acq On : 22 Dec 2021 3:07 PM
Operator : AIRLAB15:TS
Sample : CTO15-SIMSTD5.0
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:40:04 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Dec 27 10:35:25 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default-ICV-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.608	49	198942	10.000	ppbV	0.00
Standard Area = 213198			Recovery = 93.31%			
33) 1,4-difluorobenzene	11.883	114	499169	10.000	ppbV	0.00
Standard Area = 515322			Recovery = 96.87%			
51) chlorobenzene-D5	16.583	54	110756	10.000	ppbV	0.00
Standard Area = 119198			Recovery = 92.92%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.500	65	134271	9.655	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 96.55%			
53) toluene-D8	14.717	98	471461	10.542	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 105.42%			
67) bromofluorobenzene	17.925	95	322468	9.906	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.06%			
Target Compounds						Qvalue
2) propylene	3.904	41	41928M6	5.192	ppbV	
3) dichlorodifluoromethane	3.988	85	68502	4.492	ppbV	100
4) chloromethane	4.168	50	33134	4.465	ppbV	99
5) Freon-114	4.300	85	82744	4.483	ppbV	100
6) vinyl chloride	4.432	62	44359	4.347	ppbV	99
7) 1,3-butadiene	4.600	54	33153	4.289	ppbV	82
8) bromomethane	4.924	94	33084	4.283	ppbV	100
9) chloroethane	5.146	64	22812	4.502	ppbV	100
10) ethanol	5.308	31	195519	23.564	ppbV	94
11) vinyl bromide	5.580	106	29798	4.576	ppbV	99
12) acrolein	5.733	56	17340	4.071	ppbV	96
13) acetone	5.890	43	250983	22.787	ppbV	96
14) trichlorofluoromethane	6.103	101	66169	4.600	ppbV	99
15) isopropyl alcohol	6.217	45	162350	13.671	ppbV	98
16) acrylonitrile	6.480	53	31482	4.315	ppbV	96
17) 1,1-dichloroethene	6.882	61	64397	4.525	ppbV	98
18) tertiary butyl alcohol	6.948	59	89543	5.565	ppbV	95
19) methylene chloride	7.044	49	43548	4.635	ppbV	92
20) 3-chloropropene	7.188	41	64937	5.684	ppbV #	95
21) carbon disulfide	7.344	76	104433	5.398	ppbV #	84
22) Freon 113	7.380	101	75014	4.967	ppbV #	92
23) trans-1,2-dichloroethene	8.183	61	70354	4.544	ppbV	96
24) 1,1-dichloroethane	8.417	63	87317	4.881	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529902_Ev2.D
Acq On : 22 Dec 2021 3:07 PM
Operator : AIRLAB15:TS
Sample : CTO15-SIMSTD5.0
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:40:04 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Dec 27 10:35:25 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default-ICV-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	8.500	73	100895	4.830	ppbV		98
26) vinyl acetate	8.633	43	79553	4.352	ppbV		98
27) 2-butanone	8.900	43	102450	5.056	ppbV		97
28) cis-1,2-dichloroethene	9.417	61	70322	4.958	ppbV		96
29) Ethyl Acetate	9.717	61	19032	5.240	ppbV		97
30) chloroform	9.775	83	79624	4.501	ppbV		97
31) Tetrahydrofuran	10.217	42	63558	5.104	ppbV		96
32) 1,2-dichloroethane	10.625	62	55890	4.459	ppbV		99
34) hexane	9.683	57	95486	4.549	ppbV		97
36) 1,1,1-trichloroethane	10.917	97	66874	4.588	ppbV		98
37) benzene	11.443	78	150523	3.996	ppbV		98
38) carbon tetrachloride	11.623	117	58411	4.341	ppbV		95
39) cyclohexane	11.763	56	103624	4.575	ppbV		94
40) Dibromomethane	12.370	93	47444	4.033	ppbV	#	93
41) 1,2-dichloropropane	12.403	63	62505	4.778	ppbV		97
42) bromodichloromethane	12.637	83	82667	4.567	ppbV		99
43) 1,4-dioxane	12.677	88	45409	5.654	ppbV		96
44) trichloroethene	12.683	130	65000	4.761	ppbV		95
45) 2,2,4-trimethylpentane	12.730	57	323389M6	4.636	ppbV		
46) heptane	13.050	43	105230	4.631	ppbV		96
47) cis-1,3-dichloropropene	14.317	75	57103	4.555	ppbV		92
48) 4-methyl-2-pentanone	13.733	43	132060	5.288	ppbV		96
49) trans-1,3-dichloropropene	13.700	75	72765	5.173	ppbV		91
50) 1,1,2-trichloroethane	14.517	97	58845	4.858	ppbV		97
52) toluene	14.833	91	191357	4.337	ppbV		99
54) 2-hexanone	15.108	43	124061	5.476	ppbV		95
55) dibromochloromethane	15.275	129	80122	5.210	ppbV		99
56) 1,2-dibromoethane	15.525	107	81064	4.995	ppbV		96
57) tetrachloroethene	15.992	166	65860	4.675	ppbV		97
58) 1,1,1,2-tetrachloroethane	16.617	131	58643	4.700	ppbV		98
59) chlorobenzene	16.633	112	139962	4.812	ppbV		93
60) ethylbenzene	16.975	91	246172	5.080	ppbV		97
61) m+p-xylene	17.133	91	400198	10.141	ppbV		99
62) bromoform	17.200	173	62078	5.398	ppbV		99
63) styrene	17.450	104	141473	5.272	ppbV		99
64) 1,1,2,2-tetrachloroethane	17.533	83	145764	4.905	ppbV		99
65) o-xylene	17.542	91	203495	5.172	ppbV		99
66) 1,2,3-Trichloropropane	17.650	75	97233	4.431	ppbV		93
68) isopropylbenzene	18.042	105	226705	4.782	ppbV		97
69) Bromobenzene	18.117	77	128875	4.490	ppbV		97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529902_Ev2.D
Acq On : 22 Dec 2021 3:07 PM
Operator : AIRLAB15:TS
Sample : CTO15-SIMSTD5.0
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 27 10:40:04 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Dec 27 10:35:25 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\r1529894_Ev2.D
Sub List : Default-ICV-AP2 - All compounds listed

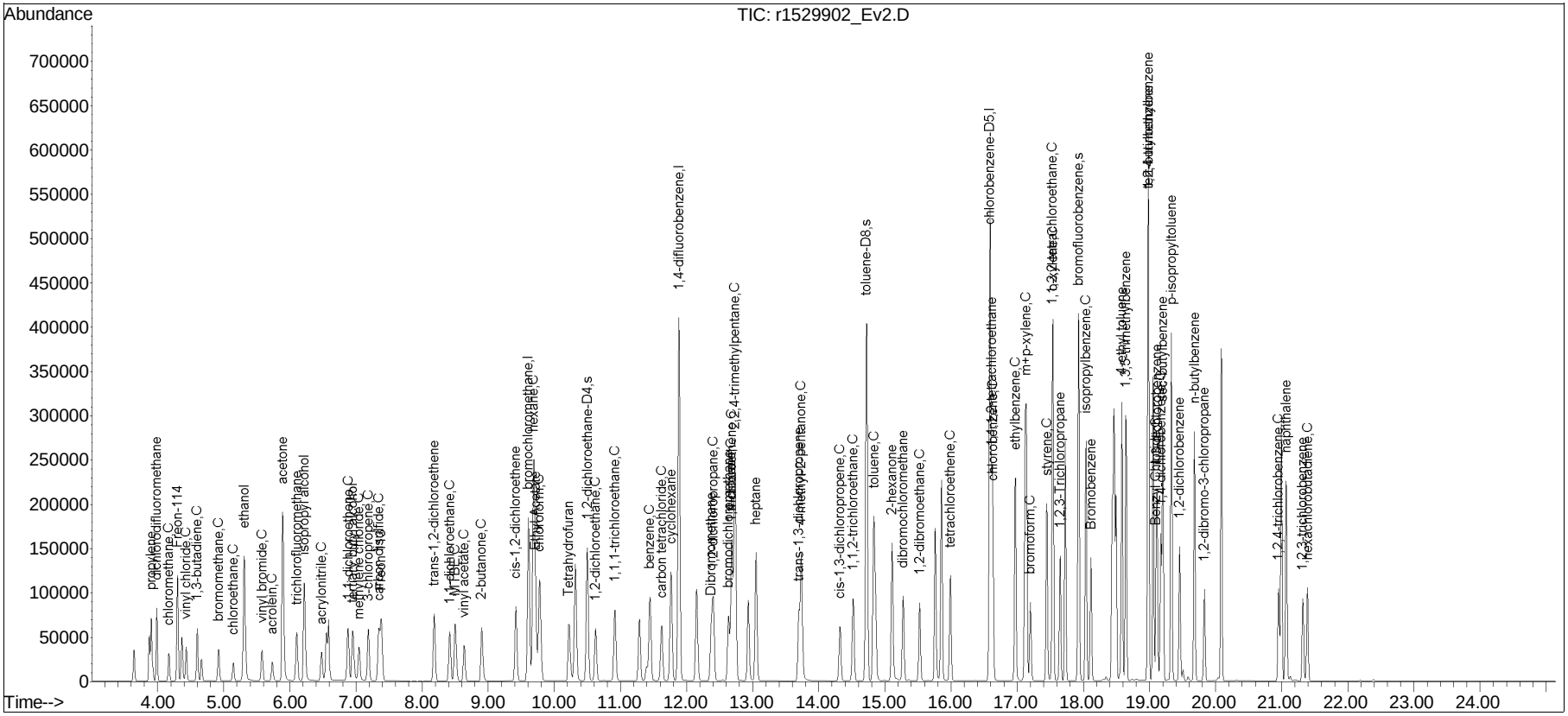
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.583	105	242110	5.042	ppbV	99
71) 1,3,5-trimethylbenzene	18.642	105	213470	5.226	ppbV	100
72) tert-butylbenzene	18.982	119	240273	4.942	ppbV	96
73) 1,2,4-trimethylbenzene	18.982	105	218376	5.367	ppbV	97
74) Benzyl Chloride	19.098	91	118351	4.898	ppbV	96
75) 1,3-dichlorobenzene	19.115	146	143303	5.242	ppbV	98
76) 1,4-dichlorobenzene	19.173	146	139035	5.146	ppbV	98
77) sec-butylbenzene	19.198	105	292045	4.833	ppbV	100
78) p-isopropyltoluene	19.332	119	273357	4.662	ppbV	99
79) 1,2-dichlorobenzene	19.457	146	134973	5.263	ppbV	97
80) n-butylbenzene	19.682	91	275781	5.147	ppbV	96
81) 1,2-dibromo-3-chloropr...	19.832	75	52227	4.979	ppbV	90
82) 1,2,4-trichlorobenzene	20.950	180	108263	6.176	ppbV	96
83) naphthalene	21.067	128	340180M6	6.022	ppbV	
84) 1,2,3-trichlorobenzene	21.317	180	100600	5.856	ppbV	96
85) hexachlorobutadiene	21.392	225	85577	5.571	ppbV	97

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

Sub List : Default-ICV-AP2 - All compounds listed2SIM_I\r1529894_Ev2.D

Data Path : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\
Data File : r1529902_Ev2.D
Acq On : 22 Dec 2021 3:07 PM
Operator : AIRLAB15:TS
Sample : CTO15-SIMSTD5.0
Misc : WG1587796
ALS Vial : 0 Sample Multiplier: 1

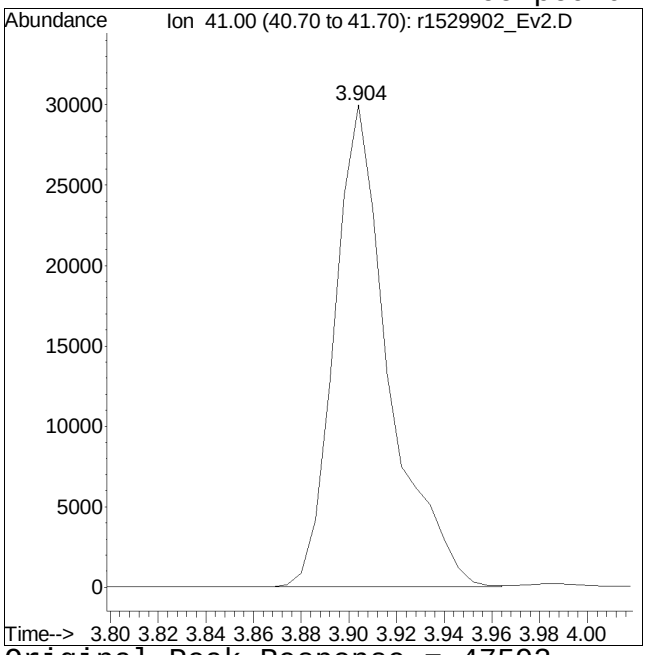
Quant Time: Dec 27 10:40:04 2021
Quant Method : O:\Forensics\Data\Airlab15\2021\12\1222SIM_I\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Dec 27 10:35:25 2021
Response via : Initial Calibration



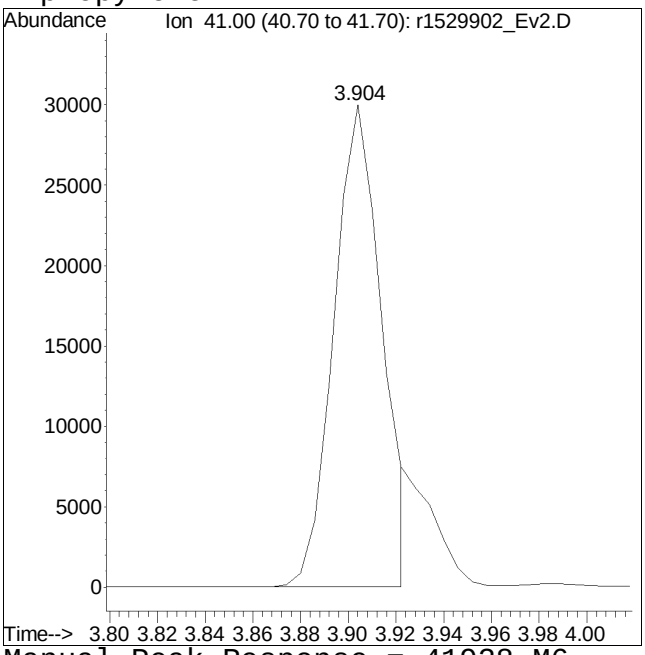
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529902_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:3: 7 Instrument :
Sample : CTO15-SIMSTD5.0 Quant Date : 12/27/2021 10:38 am

Compound #2: propylene



Original Peak Response = 47592



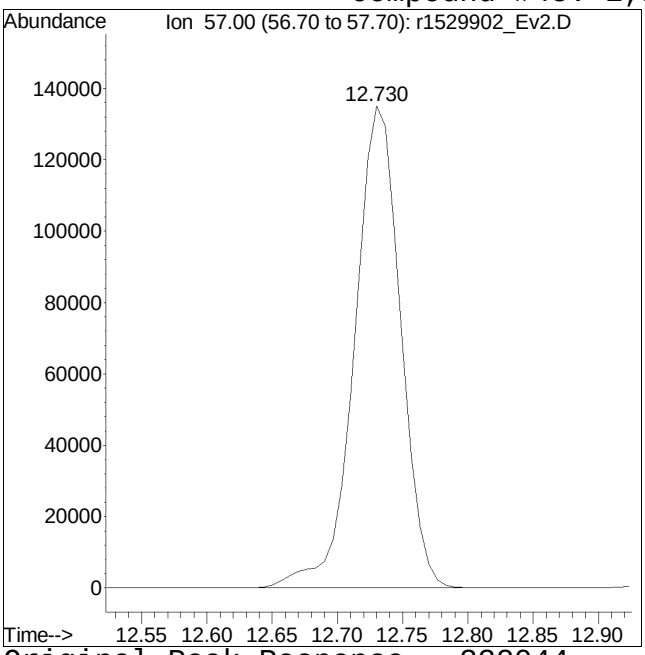
Manual Peak Response = 41928 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

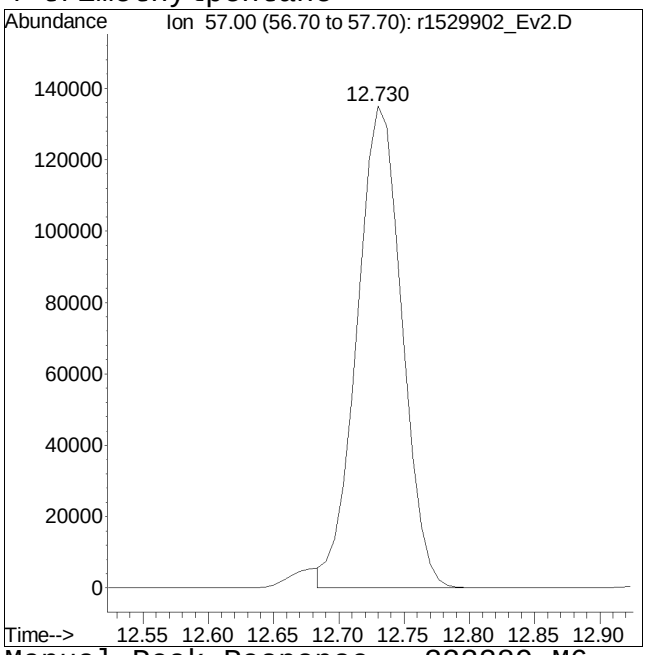
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529902_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:3: 7 Instrument :
Sample : CTO15-SIMSTD5.0 Quant Date : 12/27/2021 10:38 am

Compound #45: 2,2,4-trimethylpentane



Original Peak Response = 332044



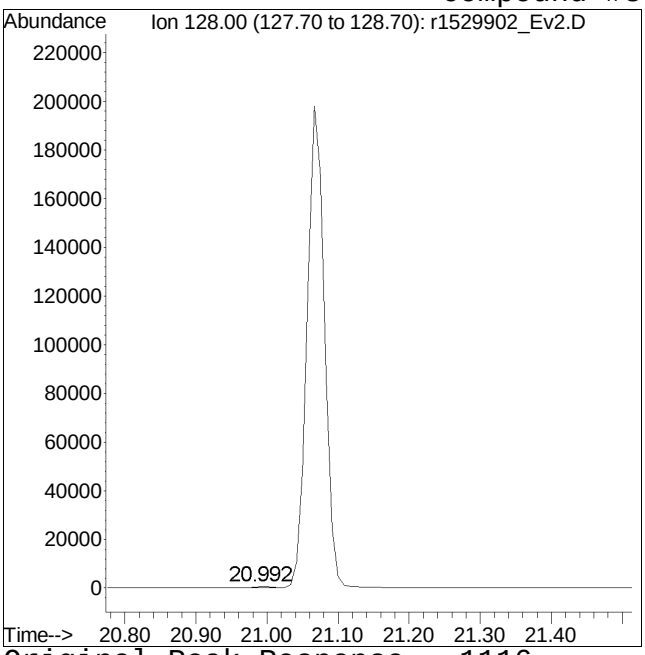
Manual Peak Response = 323389 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

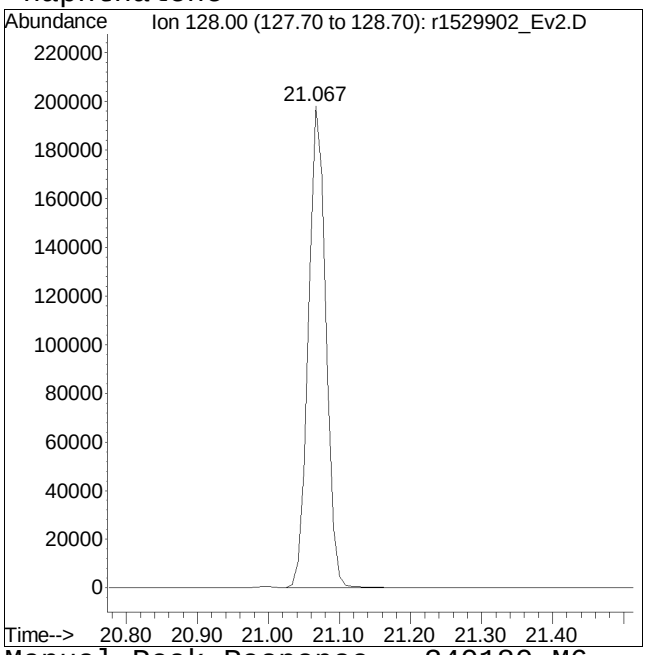
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab15QMethod : TSIM15_211222.M
Data File : r1529902_Ev2.D Operator : AIRLAB15:TS
Date Inj'd : 12/22/2020 0:3: 7 Instrument :
Sample : CTO15-SIMSTD5.0 Quant Date : 12/27/2021 10:38 am

Compound #83: naphthalene



Original Peak Response = 1116



Manual Peak Response = 340180 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Continuing Calibration

Calibration Verification Summary
Form 7
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657		
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002		
Instrument ID	: AIRLAB15	**Calibration Date**	: 03/20/22 13:57		
Lab File ID	: R1531779_EV2	**Init. Calib. Date(s)**	: 12/22/21	12/22/21	
Sample No	: WG1617727-2	**Init. Calib. Times**	: 04:15	10:08	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
bromochloromethane	1	1	-	0	30	112	-.03
propylene	0.406	0.358	-	11.8	30	106	-.02
dichlorodifluoromethane	0.767	0.6	-	21.8	30	87	-.02
chloromethane	0.373	0.304	-	18.5	30	92	-.02
Freon-114	0.928	0.744	-	19.8	30	91	-.02
vinyl chloride	0.513	0.403	-	21.4	30	91	-.02
1,3-butadiene	0.389	0.34	-	12.6	30	106	-.02
bromomethane	0.388	0.293	-	24.5	30	88	-.02
chloroethane	0.255	0.207	-	18.8	30	96	-.02
ethanol	0.417	0.401	-	3.8	30	108	-.02
vinyl bromide	0.327	0.306	-	6.4	30	111	-.03
acrolein	0.214	0.179	-	16.4	30	100	-.02
acetone	0.554	0.584	-	-5.4	30	125	-.02
trichlorofluoromethane	0.723	0.614	-	15.1	30	99	-.03
isopropyl alcohol	0.597	0.597	-	0	30	119	-.02
acrylonitrile	0.367	0.326	-	11.2	30	106	-.02
1,1-dichloroethene	0.715	0.594	-	16.9	30	97	-.02
tertiary butyl alcohol	0.809	0.717	-	11.4	30	103	-.02
methylene chloride	0.472	0.418	-	11.4	30	100	-.02
3-chloropropene	0.574	0.634	-	-10.5	30	130	-.02
carbon disulfide	0.973	1.112	-	-14.3	30	134	-.03
Freon 113	0.759	0.695	-	8.4	30	111	-.02
trans-1,2-dichloroethene	0.778	0.642	-	17.5	30	101	-.03
1,1-dichloroethane	0.899	0.753	-	16.2	30	98	-.03
MTBE	1.05	0.832	-	20.8	30	94	-.03
vinyl acetate	0.919	0.764	-	16.9	30	102	-.03
2-butanone	1.019	0.891	-	12.6	30	105	-.03
cis-1,2-dichloroethene	0.713	0.557	-	21.9	30	91	-.02
Ethyl Acetate	0.183	0.178	-	2.7	30	115	-.03
chloroform	0.889	0.714	-	19.7	30	95	-.03
Tetrahydrofuran	0.626	0.518	-	17.3	30	98	-.03
1,2-dichloroethane	0.63	0.492	-	21.9	30	95	-.03
1,4-difluorobenzene	1	1	-	0	30	107	-.03
hexane	0.42	0.403	-	4	30	108	-.03
1,1,1-trichloroethane	0.292	0.256	-	12.3	30	99	-.02
benzene	0.755	0.561	-	25.7	30	92	-.03
carbon tetrachloride	0.27	0.231	-	14.4	30	96	-.02
cyclohexane	0.454	0.413	-	9	30	103	-.03
Dibromomethane	0.236	0.2	-	15.3	30	105	-.03
1,2-dichloropropane	0.262	0.228	-	13	30	99	-.03
bromodichloromethane	0.363	0.361	-	0.6	30	109	-.02
1,4-dioxane	0.161	0.148	-	8.1	30	102	-.02
trichloroethene	0.274	0.232	-	15.3	30	94	-.03

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2213657		
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002		
Instrument ID	: AIRLAB15	**Calibration Date**	: 03/20/22 13:57		
Lab File ID	: R1531779_EV2	**Init. Calib. Date(s)**	: 12/22/21	12/22/21	
Sample No	: WG1617727-2	**Init. Calib. Times**	: 04:15	10:08	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
2,2,4-trimethylpentane	1.397	1.398	-	-0.1	30	113	-.03
heptane	0.455	0.437	-	4	30	107	-.02
cis-1,3-dichloropropene	0.251	0.189	-	24.7	30	77	-.02
4-methyl-2-pentanone	0.5	0.491	-	1.8	30	108	-.02
trans-1,3-dichloropropene	0.282	0.241	-	14.5	30	91	-.02
1,1,2-trichloroethane	0.243	0.218	-	10.3	30	102	-.02
chlorobenzene-D5	1	1	-	0	30	105	0
toluene	3.984	2.996	-	24.8	30	92	-.02
2-hexanone	2.046	1.922	-	6.1	30	103	-.02
dibromochloromethane	1.388	1.486	-	-7.1	30	113	-.02
1,2-dibromoethane	1.465	1.29	-	11.9	30	94	-.02
tetrachloroethene	1.272	1.061	-	16.6	30	92	0
1,1,1,2-tetrachloroethane	1.127	1.068	-	5.2	30	103	-.02
chlorobenzene	2.626	2.241	-	14.7	30	94	0
ethylbenzene	4.376	3.606	-	17.6	30	88	0
m+p-xylene	3.563	3.081	-	13.5	30	91	-.02
bromoform	1.038	1.18	-	-13.7	30	118	-.02
styrene	2.423	2.099	-	13.4	30	89	0
1,1,2,2-tetrachloroethane	2.683	2.409	-	10.2	30	95	0
o-xylene	3.553	3.169	-	10.8	30	93	0
1,2,3-Trichloropropane	1.981	1.814	-	8.4	30	103	-.02
isopropylbenzene	4.28	4.147	-	3.1	30	106	0
Bromobenzene	2.592	2.35	-	9.3	30	101	0
4-ethyl toluene	4.336	4.3	-	0.8	30	105	0
1,3,5-trimethylbenzene	3.688	3.402	-	7.8	30	95	0
tert-butylbenzene	4.39	4.006	-	8.7	30	96	0
1,2,4-trimethylbenzene	3.674	3.468	-	5.6	30	98	0
Benzyl Chloride	2.182	2.574	-	-18	30	131	0
1,3-dichlorobenzene	2.468	2.331	-	5.6	30	100	0
1,4-dichlorobenzene	2.439	2.272	-	6.8	30	98	0
sec-butylbenzene	5.456	5.366	-	1.6	30	106	0
p-isopropyltoluene	5.295	4.408	-	16.8	30	87	0
1,2-dichlorobenzene	2.316	2.146	-	7.3	30	98	.02
n-butylbenzene	4.838	4.69	-	3.1	30	103	.02
1,2-dibromo-3-chloropropan	0.947	1.013	-	-7	30	107	.03
1,2,4-trichlorobenzene	1.583	1.388	-	12.3	30	84	.03
naphthalene	5.101	5.349	-	-4.9	30	102	.03
1,2,3-trichlorobenzene	1.551	1.614	-	-4.1	30	101	.03
hexachlorobutadiene	1.387	1.222	-	11.9	30	86	.02

* Value outside of QC limits.

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320SIM\
Data File : r1531779_Ev2.D
Acq On : 20 Mar 2022 1:57 PM
Operator : AIRLAB15:RY
Sample : WG1617727-2,3,250,250
Misc : WG1617727,ICAL18601
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:32:52 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320SIM\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Dec 27 10:35:25 2021
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	bromochloromethane	1.000	1.000	0.0	112	-0.03
2		propylene	0.406	0.358	11.8	106	-0.02
3		dichlorodifluoromethane	0.767	0.600	21.8	87	-0.02
4	C	chloromethane	0.373	0.304	18.5	92	-0.02
5		Freon-114	0.928	0.744	19.8	91	-0.02
6	C	vinyl chloride	0.513	0.403	21.4	91	-0.02
7	C	1,3-butadiene	0.389	0.340	12.6	106	-0.02
8	C	bromomethane	0.388	0.293	24.5	88	-0.02
9	C	chloroethane	0.255	0.207	18.8	96	-0.02
10		ethanol	0.417	0.401	3.8	108	-0.02
11	C	vinyl bromide	0.327	0.306	6.4	111	-0.03
12	C	acrolein	0.214	0.179	16.4	100	-0.02
13		acetone	0.554	0.584	-5.4	125	-0.02
14		trichlorofluoromethane	0.723	0.614	15.1	99	-0.03
15		isopropyl alcohol	0.597	0.597	0.0	119	-0.02
16	C	acrylonitrile	0.367	0.326	11.2	106	-0.02
17	C	1,1-dichloroethene	0.715	0.594	16.9	97	-0.02
18		tertiary butyl alcohol	0.809	0.717	11.4	103	-0.02
19	C	methylene chloride	0.472	0.418	11.4	100	-0.02
20	C	3-chloropropene	0.574	0.634	-10.5	130	-0.02
21	C	carbon disulfide	0.973	1.112	-14.3	134	-0.03
22		Freon 113	0.759	0.695	8.4	111	-0.02
23		trans-1,2-dichloroethene	0.778	0.642	17.5	101	-0.03
24	C	1,1-dichloroethane	0.899	0.753	16.2	98	-0.03
25	C	MTBE	1.050	0.832	20.8	94	-0.03
26	C	vinyl acetate	0.919	0.764	16.9	102	-0.03
27	C	2-butanone	1.019	0.891	12.6	105	-0.03
28		cis-1,2-dichloroethene	0.713	0.557	21.9	91	-0.02
29		Ethyl Acetate	0.183	0.178	2.7	115	-0.03
30	C	chloroform	0.889	0.714	19.7	95	-0.03
31		Tetrahydrofuran	0.626	0.518	17.3	98	-0.03
32	C	1,2-dichloroethane	0.630	0.492	21.9	95	-0.03
33	I	1,4-difluorobenzene	1.000	1.000	0.0	107	-0.03
34	C	hexane	0.420	0.403	4.0	108	-0.03
36	C	1,1,1-trichloroethane	0.292	0.256	12.3	99	-0.02
37	C	benzene	0.755	0.561	25.7	92	-0.03
38	C	carbon tetrachloride	0.270	0.231	14.4	96	-0.02
39		cyclohexane	0.454	0.413	9.0	103	-0.03

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320SIM\
Data File : r1531779_Ev2.D
Acq On : 20 Mar 2022 1:57 PM
Operator : AIRLAB15:RY
Sample : WG1617727-2,3,250,250
Misc : WG1617727,ICAL18601
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:32:52 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320SIM\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Dec 27 10:35:25 2021
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40		Dibromomethane	0.236	0.200	15.3	105	-0.03
41	C	1,2-dichloropropane	0.262	0.228	13.0	99	-0.03
42		bromodichloromethane	0.363	0.361	0.6	109	-0.02
43	C	1,4-dioxane	0.161	0.148	8.1	102	-0.02
44	C	trichloroethene	0.274	0.232	15.3	94	-0.03
45	C	2,2,4-trimethylpentane	1.397	1.398	-0.1	113	-0.03
46		heptane	0.455	0.437	4.0	107	-0.02
47	C	cis-1,3-dichloropropene	0.251	0.189	24.7	77	-0.02
48	C	4-methyl-2-pentanone	0.500	0.491	1.8	108	-0.02
49		trans-1,3-dichloropropene	0.282	0.241	14.5	91	-0.02
50	C	1,1,2-trichloroethane	0.243	0.218	10.3	102	-0.02
51	I	chlorobenzene-D5	1.000	1.000	0.0	105	0.00
52	C	toluene	3.984	2.996	24.8	92	-0.02
54		2-hexanone	2.046	1.922	6.1	103	-0.02
55		dibromochloromethane	1.388	1.486	-7.1	113	-0.02
56	C	1,2-dibromoethane	1.465	1.290	11.9	94	-0.02
57	C	tetrachloroethene	1.272	1.061	16.6	92	0.00
58		1,1,1,2-tetrachloroethane	1.127	1.068	5.2	103	-0.02
59	C	chlorobenzene	2.626	2.241	14.7	94	0.00
60	C	ethylbenzene	4.376	3.606	17.6	88	0.00
61	C	m+p-xylene	3.563	3.081	13.5	91	-0.02
62	C	bromoform	1.038	1.180	-13.7	118	-0.02
63	C	styrene	2.423	2.099	13.4	89	0.00
64	C	1,1,2,2-tetrachloroethane	2.683	2.409	10.2	95	0.00
65	C	o-xylene	3.553	3.169	10.8	93	0.00
66		1,2,3-Trichloropropane	1.981	1.814	8.4	103	-0.02
68	C	isopropylbenzene	4.280	4.147	3.1	106	0.00
69		Bromobenzene	2.592	2.350	9.3	101	0.00
70		4-ethyl toluene	4.336	4.300	0.8	105	0.00
71		1,3,5-trimethylbenzene	3.688	3.402	7.8	95	0.00
72		tert-butylbenzene	4.390	4.006	8.7	96	0.00
73		1,2,4-trimethylbenzene	3.674	3.468	5.6	98	0.00
74	C	Benzyl Chloride	2.182	2.574	-18.0	131	0.00
75		1,3-dichlorobenzene	2.468	2.331	5.6	100	0.00
76	C	1,4-dichlorobenzene	2.439	2.272	6.8	98	0.00
77		sec-butylbenzene	5.456	5.366	1.6	106	0.00
78		p-isopropyltoluene	5.295	4.408	16.8	87	0.00
79		1,2-dichlorobenzene	2.316	2.146	7.3	98	0.02

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320SIM\
Data File : r1531779_Ev2.D
Acq On : 20 Mar 2022 1:57 PM
Operator : AIRLAB15:RY
Sample : WG1617727-2,3,250,250
Misc : WG1617727,ICAL18601
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:32:52 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320SIM\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Dec 27 10:35:25 2021
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
80	n-butylbenzene	4.838	4.690	3.1	103	0.02
81	1,2-dibromo-3-chloropropane	0.947	1.013	-7.0	107	0.03
82 C	1,2,4-trichlorobenzene	1.583	1.388	12.3	84	0.03
83	naphthalene	5.101	5.349	-4.9	102	0.03
84	1,2,3-trichlorobenzene	1.551	1.614	-4.1	101	0.03
85 C	hexachlorobutadiene	1.387	1.222	11.9	86	0.02

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320SIM\
Data File : r1531779_Ev2.D
Acq On : 20 Mar 2022 1:57 PM
Operator : AIRLAB15:RY
Sample : WG1617727-2,3,250,250
Misc : WG1617727,ICAL18601
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:32:52 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320SIM\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Dec 27 10:35:25 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320SIM\r1531779_Ev2.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) bromochloromethane	9.57	49	238569	10.000	ppbV		-0.03
Standard Area = 238569			Recovery = 100.00%				
33) 1,4-difluorobenzene	11.86	114	552111	10.000	ppbV		-0.03
Standard Area = 552111			Recovery = 100.00%				
51) chlorobenzene-D5	16.57	54	125385	10.000	ppbV		0.00
Standard Area = 125385			Recovery = 100.00%				
System Monitoring Compounds							
Target Compounds							Qvalue
2) propylene	3.87	41	42701M6	4.409	ppbV		
3) dichlorodifluoromethane	3.96	85	71609	3.916	ppbV		100
4) chloromethane	4.14	50	36284	4.077	ppbV		95
5) Freon-114	4.27	85	88699	4.007	ppbV		98
6) vinyl chloride	4.40	62	48070	3.928	ppbV		100
7) 1,3-butadiene	4.57	54	40563	4.376	ppbV		80
8) bromomethane	4.89	94	34894	3.767	ppbV		99
9) chloroethane	5.11	64	24663	4.059	ppbV		98
10) ethanol	5.28	31	238950	24.015	ppbV		96
11) vinyl bromide	5.54	106	36544	4.679	ppbV		97
12) acrolein	5.70	56	21354	4.180	ppbV		99
13) acetone	5.86	43	348280	26.368	ppbV	#	96
14) trichlorofluoromethane	6.07	101	73192	4.243	ppbV		99
15) isopropyl alcohol	6.19	45	178174	12.511	ppbV		99
16) acrylonitrile	6.45	53	38832	4.439	ppbV		98
17) 1,1-dichloroethene	6.85	61	70881	4.154	ppbV		99
18) tertiary butyl alcohol	6.92	59	85554	4.434	ppbV	#	85
19) methylene chloride	7.01	49	49866	4.426	ppbV		95
20) 3-chloropropene	7.15	41	75622	5.520	ppbV	#	94
21) carbon disulfide	7.31	76	132690	5.719	ppbV	#	86
22) Freon 113	7.35	101	82913	4.578	ppbV	#	96
23) trans-1,2-dichloroethene	8.15	61	76581	4.125	ppbV		96
24) 1,1-dichloroethane	8.38	63	89853	4.189	ppbV		100
25) MTBE	8.47	73	99289	3.964	ppbV		98
26) vinyl acetate	8.61	43	91122	4.157	ppbV		98
27) 2-butanone	8.88	43	106300	4.374	ppbV		97
28) cis-1,2-dichloroethene	9.39	61	66408	3.904	ppbV		90
29) Ethyl Acetate	9.69	61	21237	4.876	ppbV		97
30) chloroform	9.74	83	85196	4.016	ppbV		97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320SIM\
Data File : r1531779_Ev2.D
Acq On : 20 Mar 2022 1:57 PM
Operator : AIRLAB15:RY
Sample : WG1617727-2,3,250,250
Misc : WG1617727,ICAL18601
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:32:52 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320SIM\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Dec 27 10:35:25 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320SIM\r1531779_Ev2.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
31) Tetrahydrofuran	10.19	42	61798	4.138	ppbV		98
32) 1,2-dichloroethane	10.59	62	58708	3.906	ppbV		99
34) hexane	9.65	57	111270	4.793	ppbV		87
36) 1,1,1-trichloroethane	10.89	97	70687	4.385	ppbV		99
37) benzene	11.42	78	154892	3.717	ppbV		100
38) carbon tetrachloride	11.60	117	63678	4.279	ppbV		99
39) cyclohexane	11.74	56	114112	4.555	ppbV		96
40) Dibromomethane	12.34	93	55214	4.244	ppbV	#	94
41) 1,2-dichloropropane	12.38	63	62902	4.347	ppbV		97
42) bromodichloromethane	12.61	83	99734	4.981	ppbV		99
43) 1,4-dioxane	12.66	88	40745	4.587	ppbV		97
44) trichloroethene	12.66	130	63958	4.235	ppbV		98
45) 2,2,4-trimethylpentane	12.70	57	385994	5.003	ppbV		98
46) heptane	13.02	43	120596	4.798	ppbV		96
47) cis-1,3-dichloropropene	14.30	75	52212	3.766	ppbV		91
48) 4-methyl-2-pentanone	13.71	43	135478	4.905	ppbV		99
49) trans-1,3-dichloropropene	13.68	75	66394	4.267	ppbV		91
50) 1,1,2-trichloroethane	14.50	97	60196	4.493	ppbV		98
52) toluene	14.81	91	187833	3.760	ppbV		99
54) 2-hexanone	15.09	43	120466	4.697	ppbV		97
55) dibromochloromethane	15.26	129	93190	5.353	ppbV		99
56) 1,2-dibromoethane	15.51	107	80849	4.400	ppbV		98
57) tetrachloroethene	15.98	166	66507	4.170	ppbV		97
58) 1,1,1,2-tetrachloroethane	16.60	131	66928	4.738	ppbV		100
59) chlorobenzene	16.62	112	140498	4.267	ppbV		94
60) ethylbenzene	16.96	91	226044	4.120	ppbV		95
61) m+p-xylene	17.12	91	386250	8.646	ppbV		95
62) bromoform	17.18	173	73989	5.683	ppbV		98
63) styrene	17.43	104	131598	4.331	ppbV		98
64) 1,1,2,2-tetrachloroethane	17.52	83	151001	4.489	ppbV		99
65) o-xylene	17.52	91	198693	4.460	ppbV		97
66) 1,2,3-Trichloropropane	17.63	75	113738	4.579	ppbV		95
68) isopropylbenzene	18.02	105	259997	4.844	ppbV		99
69) Bromobenzene	18.10	77	147354	4.535	ppbV		98
70) 4-ethyl toluene	18.57	105	269582	4.959	ppbV		99
71) 1,3,5-trimethylbenzene	18.63	105	213310	4.613	ppbV		100
72) tert-butylbenzene	18.97	119	251153	4.563	ppbV		99
73) 1,2,4-trimethylbenzene	18.97	105	217433	4.720	ppbV		100
74) Benzyl Chloride	19.09	91	161397	5.900	ppbV		99
75) 1,3-dichlorobenzene	19.11	146	146155	4.723	ppbV		94

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320SIM\
Data File : r1531779_Ev2.D
Acq On : 20 Mar 2022 1:57 PM
Operator : AIRLAB15:RY
Sample : WG1617727-2,3,250,250
Misc : WG1617727,ICAL18601
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:32:52 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320SIM\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Dec 27 10:35:25 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320SIM\r1531779_Ev2.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
76) 1,4-dichlorobenzene	19.16	146	142446	4.657	ppbV	96
77) sec-butylbenzene	19.19	105	336413	4.918	ppbV	99
78) p-isopropyltoluene	19.32	119	276378	4.163	ppbV	100
79) 1,2-dichlorobenzene	19.45	146	134557	4.635	ppbV	97
80) n-butylbenzene	19.66	91	294018	4.847	ppbV	99
81) 1,2-dibromo-3-chloropr...	19.82	75	63524	5.349	ppbV	93
82) 1,2,4-trichlorobenzene	20.94	180	86995	4.384	ppbV	97
83) naphthalene	21.05	128	335373	5.244	ppbV	99
84) 1,2,3-trichlorobenzene	21.31	180	101174	5.202	ppbV	97
85) hexachlorobutadiene	21.38	225	76602	4.405	ppbV	99

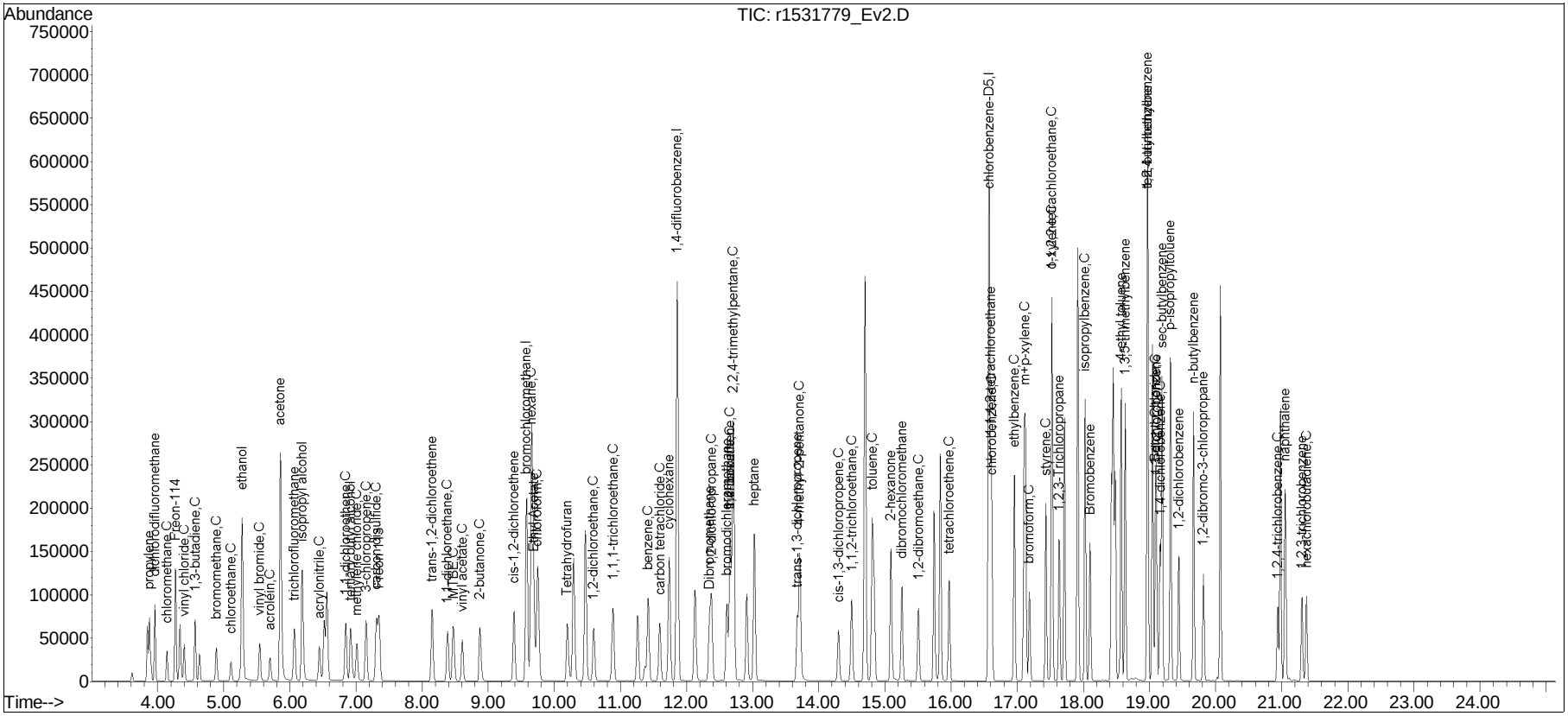
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320SIM\
Data File : r1531779_Ev2.D
Acq On : 20 Mar 2022 1:57 PM
Operator : AIRLAB15:RY
Sample : WG1617727-2,3,250,250
Misc : WG1617727,ICAL18601
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:32:52 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320SIM\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Dec 27 10:35:25 2021
Response via : Initial Calibration

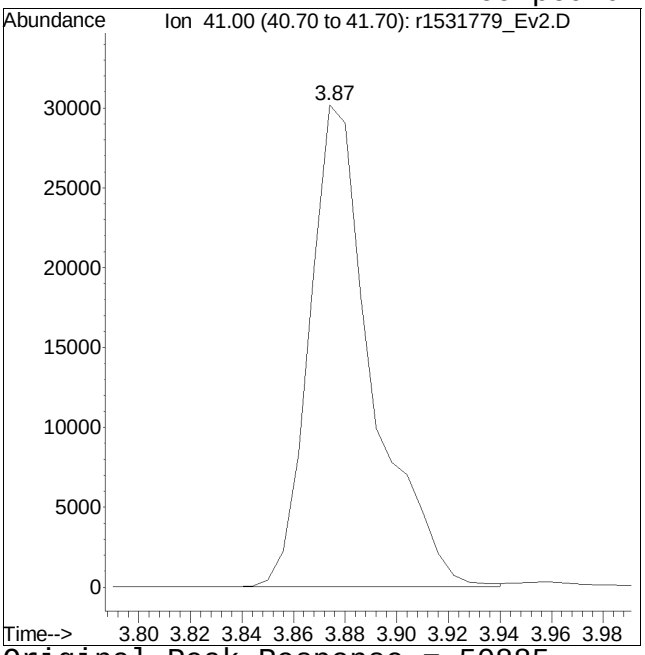
Sub List : Default-LCS-AP2 - All compounds listed0SIM\r1531779_Ev2.D



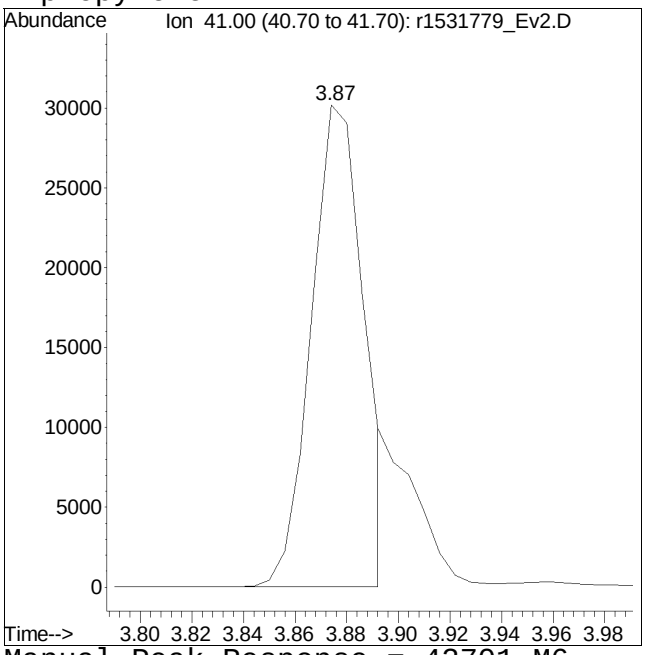
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airlab15\QMethod : TSIM15_211222.M
Data File : r1531779_Ev2.D Operator : AIRLAB15:RY
Date Inj'd : 3/20/2020 0:1: 7 Instrument :
Sample : WG1617727-2,3,250,250 Quant Date : 3/20/2022 1:32 pm

Compound #2: propylene



Original Peak Response = 50885



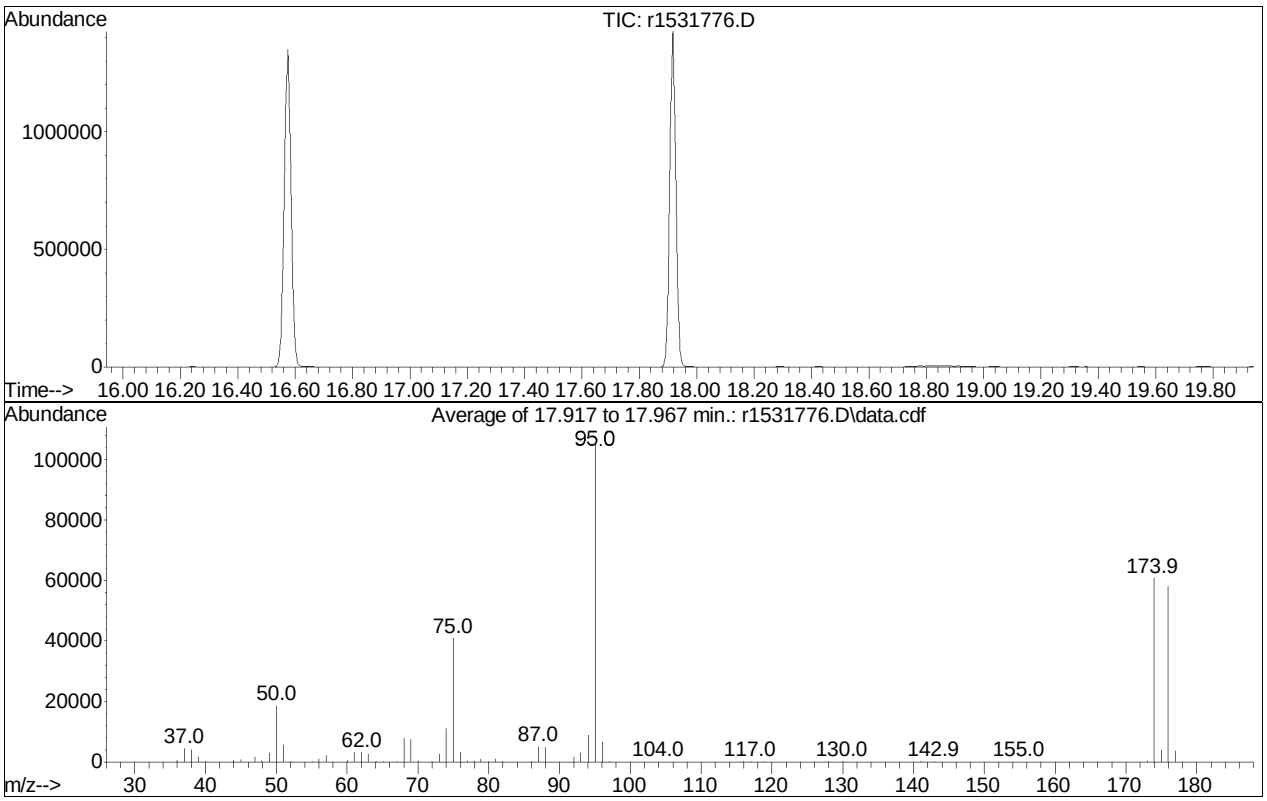
Manual Peak Response = 42701 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320SIM\
Data File : r1531776.D
Acq On : 20 Mar 2022 11:40 AM
Operator : AIRLAB15:RY
Sample : WG1617727-1,3,250,250
Misc : WG1617727,ICAL18601
ALS Vial : 0 Sample Multiplier: 1

Integration File: rteint.p

Method : O:\Forensics\Data\Airlab15\2022\03\0320SIM\TSIM15_211222.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Mon Dec 27 10:35:25 2021



Spectrum Information: Average of 17.917 to 17.967 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	17.6	18604	PASS
75	95	30	66	38.7	40864	PASS
95	95	100	100	100.0	105517	PASS
96	95	5	9	6.3	6609	PASS
173	174	0.00	2	0.7	412	PASS
174	95	50	120	57.7	60908	PASS
175	174	4	9	6.8	4148	PASS
176	174	93	101	95.3	58019	PASS
177	176	5	9	6.3	3627	PASS

Volatiles Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320SIM\
Data File : r1531781_Ev2.D
Acq On : 20 Mar 2022 3:59 PM
Operator : AIRLAB15:RY
Sample : WG1617727-4,3,250,250
Misc : WG1617727,ICAL18601
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 08:34:04 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320SIM\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Dec 27 10:35:25 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320SIM\r1531779_Ev2.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.58	49	241611	10.000	ppbV	-0.02
Standard Area = 238569			Recovery = 101.28%			
33) 1,4-difluorobenzene	11.86	114	524044	10.000	ppbV	-0.02
Standard Area = 552111			Recovery = 94.92%			
51) chlorobenzene-D5	16.57	54	119393	10.000	ppbV	0.00
Standard Area = 125385			Recovery = 95.22%			
System Monitoring Compounds						
Target Compounds						Qvalue
6) vinyl chloride	0.00		0	N.D.		
17) 1,1-dichloroethene	0.00		0	N.D.		
28) cis-1,2-dichloroethene	9.50		0	N.D.		
36) 1,1,1-trichloroethane	0.00		0	N.D.		
38) carbon tetrachloride	0.00		0	N.D.		
44) trichloroethene	0.00		0	N.D.		
57) tetrachloroethene	0.00		0	N.D.		

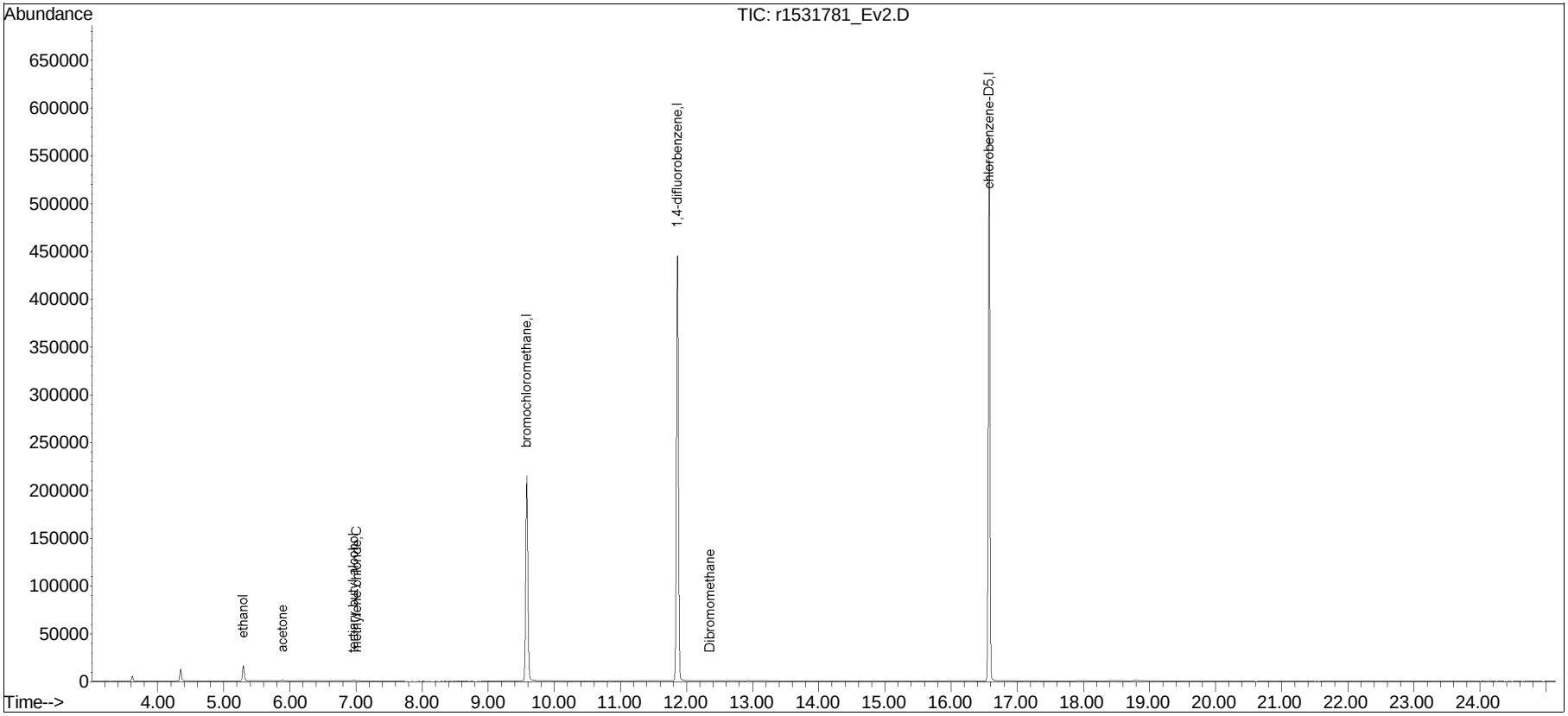
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320SIM\
Data File : r1531781_Ev2.D
Acq On : 20 Mar 2022 3:59 PM
Operator : AIRLAB15:RY
Sample : WG1617727-4,3,250,250
Misc : WG1617727,ICAL18601
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 08:34:04 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320SIM\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Dec 27 10:35:25 2021
Response via : Initial Calibration

Sub List : Default-LCS-AP2 - All compounds listed0SIM\r1531779_Ev2.D



Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\Airlab15\	QMethod	: TSIM15_211222.M
Data File	: r1531781_Ev2.D	Operator	: AIRLAB15:RY
Date Inj'd	: 3/20/2020 0:3: 9	Instrument	:
Sample	: WG1617727-4,3,250,250	Quant Date	: 3/21/2022 8:34 am

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

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320SIM\
Data File : r1531779_Ev2.D
Acq On : 20 Mar 2022 1:57 PM
Operator : AIRLAB15:RY
Sample : WG1617727-3,3,250,250
Misc : WG1617727,ICAL18601
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:32:52 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320SIM\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Dec 27 10:35:25 2021
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	bromochloromethane	10.000	10.000	0.0	112	-0.03
2		propylene	5.000	4.409	11.8	106	-0.02
3		dichlorodifluoromethane	5.000	3.916	21.7	87	-0.02
4	C	chloromethane	5.000	4.077	18.5	92	-0.02
5		Freon-114	5.000	4.007	19.9	91	-0.02
6	C	vinyl chloride	5.000	3.928	21.4	91	-0.02
7	C	1,3-butadiene	5.000	4.376	12.5	106	-0.02
8	C	bromomethane	5.000	3.767	24.7	88	-0.02
9	C	chloroethane	5.000	4.059	18.8	96	-0.02
10		ethanol	25.000	24.015	3.9	108	-0.02
11	C	vinyl bromide	5.000	4.679	6.4	111	-0.03
12	C	acrolein	5.000	4.180	16.4	100	-0.02
13		acetone	25.000	26.368	-5.5	125	-0.02
14		trichlorofluoromethane	5.000	4.243	15.1	99	-0.03
15		isopropyl alcohol	12.500	12.511	-0.1	119	-0.02
16	C	acrylonitrile	5.000	4.439	11.2	106	-0.02
17	C	1,1-dichloroethene	5.000	4.154	16.9	97	-0.02
18		tertiary butyl alcohol	5.000	4.434	11.3	103	-0.02
19	C	methylene chloride	5.000	4.426	11.5	100	-0.02
20	C	3-chloropropene	5.000	5.520	-10.4	130	-0.02
21	C	carbon disulfide	5.000	5.719	-14.4	134	-0.03
22		Freon 113	5.000	4.578	8.4	111	-0.02
23		trans-1,2-dichloroethene	5.000	4.125	17.5	101	-0.03
24	C	1,1-dichloroethane	5.000	4.189	16.2	98	-0.03
25	C	MTBE	5.000	3.964	20.7	94	-0.03
26	C	vinyl acetate	5.000	4.157	16.9	102	-0.03
27	C	2-butanone	5.000	4.374	12.5	105	-0.03
28		cis-1,2-dichloroethene	5.000	3.904	21.9	91	-0.02
29		Ethyl Acetate	5.000	4.876	2.5	115	-0.03
30	C	chloroform	5.000	4.016	19.7	95	-0.03
31		Tetrahydrofuran	5.000	4.138	17.2	98	-0.03
32	C	1,2-dichloroethane	5.000	3.906	21.9	95	-0.03
33	I	1,4-difluorobenzene	10.000	10.000	0.0	107	-0.03
34	C	hexane	5.000	4.793	4.1	108	-0.03
36	C	1,1,1-trichloroethane	5.000	4.385	12.3	99	-0.02
37	C	benzene	5.000	3.717	25.7	92	-0.03
38	C	carbon tetrachloride	5.000	4.279	14.4	96	-0.02
39		cyclohexane	5.000	4.555	8.9	103	-0.03

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320SIM\
Data File : r1531779_Ev2.D
Acq On : 20 Mar 2022 1:57 PM
Operator : AIRLAB15:RY
Sample : WG1617727-3,3,250,250
Misc : WG1617727,ICAL18601
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:32:52 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320SIM\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Dec 27 10:35:25 2021
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
40		Dibromomethane	5.000	4.244	15.1	105	-0.03
41	C	1,2-dichloropropane	5.000	4.347	13.1	99	-0.03
42		bromodichloromethane	5.000	4.981	0.4	109	-0.02
43	C	1,4-dioxane	5.000	4.587	8.3	102	-0.02
44	C	trichloroethene	5.000	4.235	15.3	94	-0.03
45	C	2,2,4-trimethylpentane	5.000	5.003	-0.1	113	-0.03
46		heptane	5.000	4.798	4.0	107	-0.02
47	C	cis-1,3-dichloropropene	5.000	3.766	24.7	77	-0.02
48	C	4-methyl-2-pentanone	5.000	4.905	1.9	108	-0.02
49		trans-1,3-dichloropropene	5.000	4.267	14.7	91	-0.02
50	C	1,1,2-trichloroethane	5.000	4.493	10.1	102	-0.02
51	I	chlorobenzene-D5	10.000	10.000	0.0	105	0.00
52	C	toluene	5.000	3.760	24.8	92	-0.02
54		2-hexanone	5.000	4.697	6.1	103	-0.02
55		dibromochloromethane	5.000	5.353	-7.1	113	-0.02
56	C	1,2-dibromoethane	5.000	4.400	12.0	94	-0.02
57	C	tetrachloroethene	5.000	4.170	16.6	92	0.00
58		1,1,1,2-tetrachloroethane	5.000	4.738	5.2	103	-0.02
59	C	chlorobenzene	5.000	4.267	14.7	94	0.00
60	C	ethylbenzene	5.000	4.120	17.6	88	0.00
61	C	m+p-xylene	10.000	8.646	13.5	91	-0.02
62	C	bromoform	5.000	5.683	-13.7	118	-0.02
63	C	styrene	5.000	4.331	13.4	89	0.00
64	C	1,1,2,2-tetrachloroethane	5.000	4.489	10.2	95	0.00
65	C	o-xylene	5.000	4.460	10.8	93	0.00
66		1,2,3-Trichloropropane	5.000	4.579	8.4	103	-0.02
68	C	isopropylbenzene	5.000	4.844	3.1	106	0.00
69		Bromobenzene	5.000	4.535	9.3	101	0.00
70		4-ethyl toluene	5.000	4.959	0.8	105	0.00
71		1,3,5-trimethylbenzene	5.000	4.613	7.7	95	0.00
72		tert-butylbenzene	5.000	4.563	8.7	96	0.00
73		1,2,4-trimethylbenzene	5.000	4.720	5.6	98	0.00
74	C	Benzyl Chloride	5.000	5.900	-18.0	131	0.00
75		1,3-dichlorobenzene	5.000	4.723	5.5	100	0.00
76	C	1,4-dichlorobenzene	5.000	4.657	6.9	98	0.00
77		sec-butylbenzene	5.000	4.918	1.6	106	0.00
78		p-isopropyltoluene	5.000	4.163	16.7	87	0.00
79		1,2-dichlorobenzene	5.000	4.635	7.3	98	0.02

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320SIM\
Data File : r1531779_Ev2.D
Acq On : 20 Mar 2022 1:57 PM
Operator : AIRLAB15:RY
Sample : WG1617727-3,3,250,250
Misc : WG1617727,ICAL18601
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:32:52 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320SIM\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Dec 27 10:35:25 2021
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
80	n-butylbenzene	5.000	4.847	3.1	103	0.02
81	1,2-dibromo-3-chloropropane	5.000	5.349	-7.0	107	0.03
82 C	1,2,4-trichlorobenzene	5.000	4.384	12.3	84	0.03
83	naphthalene	5.000	5.244	-4.9	102	0.03
84	1,2,3-trichlorobenzene	5.000	5.202	-4.0	101	0.03
85 C	hexachlorobutadiene	5.000	4.405	11.9	86	0.02

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320SIM\
Data File : r1531779_Ev2.D
Acq On : 20 Mar 2022 1:57 PM
Operator : AIRLAB15:RY
Sample : WG1617727-3,3,250,250
Misc : WG1617727,ICAL18601
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:32:52 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320SIM\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Dec 27 10:35:25 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320SIM\r1531779_Ev2.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.57	49	238569	10.000	ppbV	-0.03
Standard Area = 238569			Recovery = 100.00%			
33) 1,4-difluorobenzene	11.86	114	552111	10.000	ppbV	-0.03
Standard Area = 552111			Recovery = 100.00%			
51) chlorobenzene-D5	16.57	54	125385	10.000	ppbV	0.00
Standard Area = 125385			Recovery = 100.00%			
System Monitoring Compounds						
Target Compounds						Qvalue
6) vinyl chloride	4.40	62	48070	3.928	ppbV	100
17) 1,1-dichloroethene	6.85	61	70881	4.154	ppbV	99
28) cis-1,2-dichloroethene	9.39	61	66408	3.904	ppbV	90
36) 1,1,1-trichloroethane	10.89	97	70687	4.385	ppbV	99
38) carbon tetrachloride	11.60	117	63678	4.279	ppbV	99
44) trichloroethene	12.66	130	63958	4.235	ppbV	98
57) tetrachloroethene	15.98	166	66507	4.170	ppbV	97

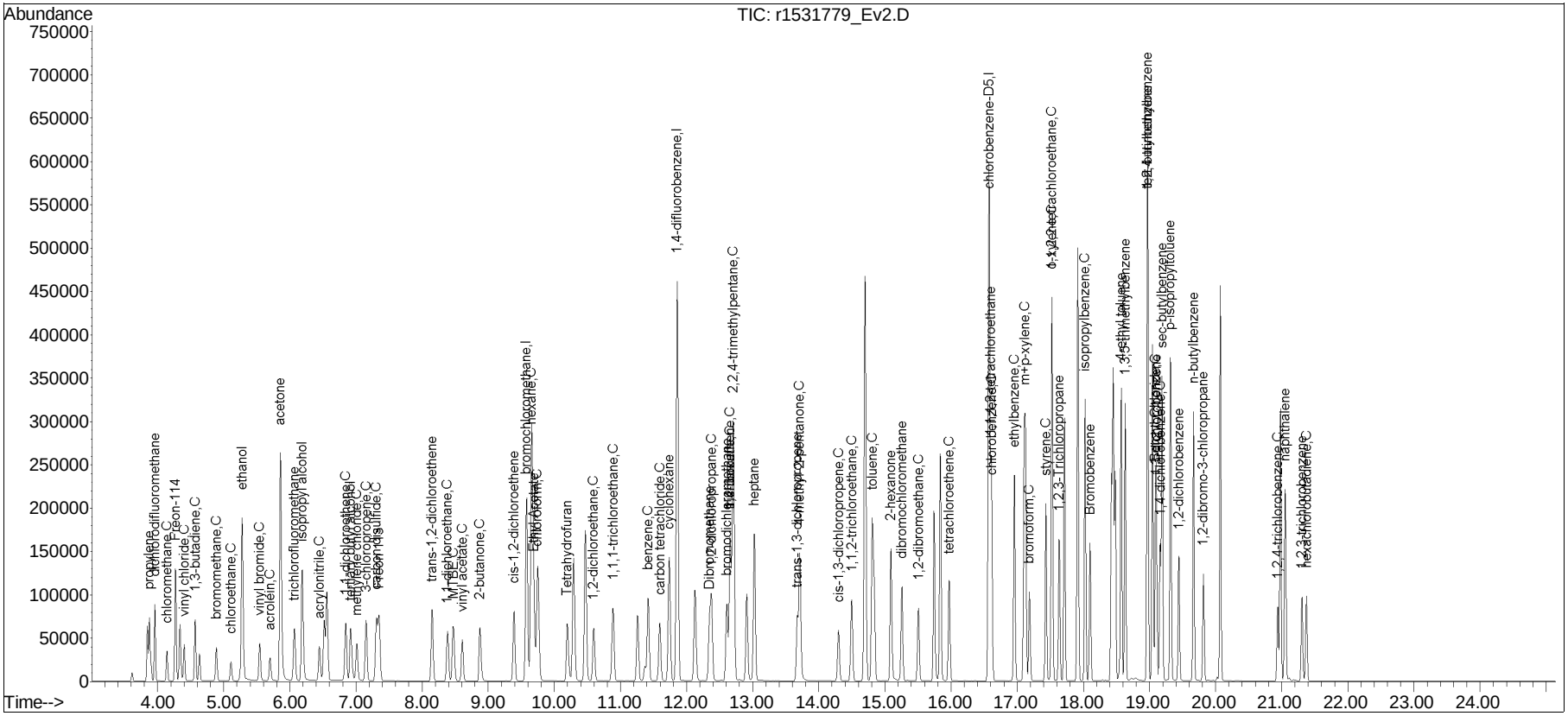
(#) = qualifier out of range (m) = manual integration (+) = signals summed

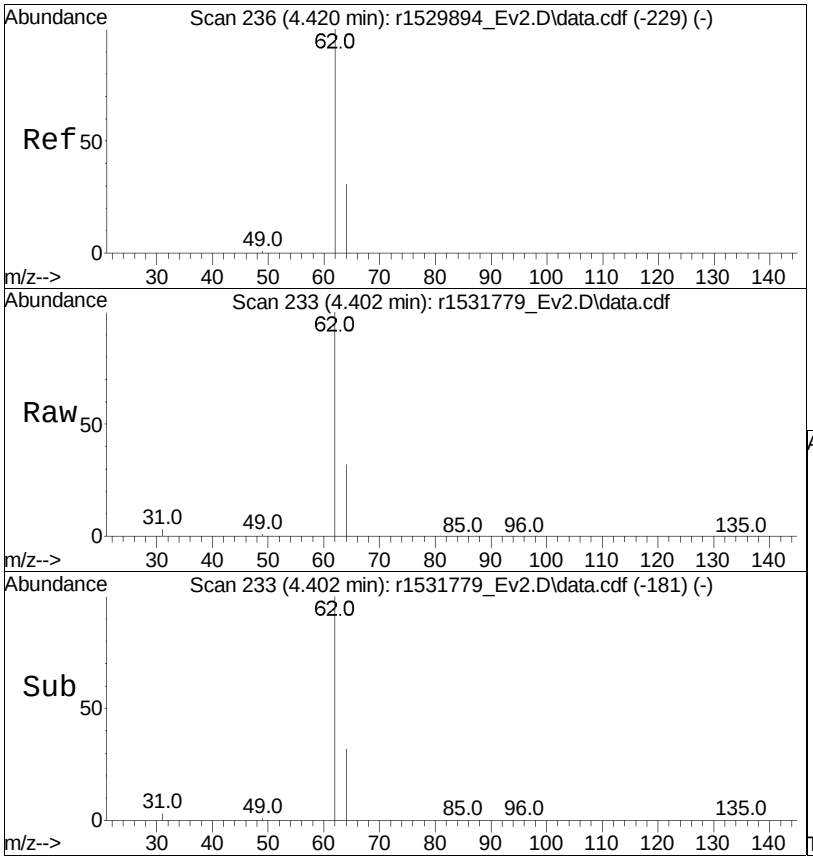
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320SIM\
Data File : r1531779_Ev2.D
Acq On : 20 Mar 2022 1:57 PM
Operator : AIRLAB15:RY
Sample : WG1617727-3,3,250,250
Misc : WG1617727,ICAL18601
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:32:52 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320SIM\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Dec 27 10:35:25 2021
Response via : Initial Calibration

Sub List : Default-LCS-AP2 - All compounds listed0SIM\r1531779_Ev2.D

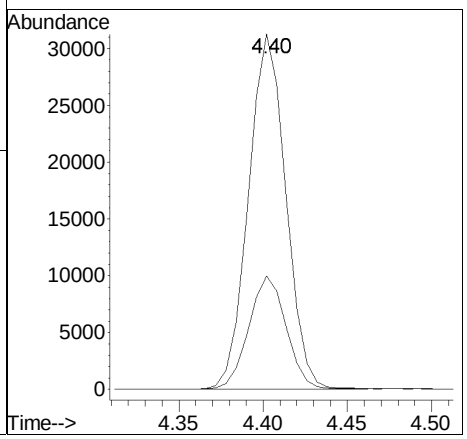


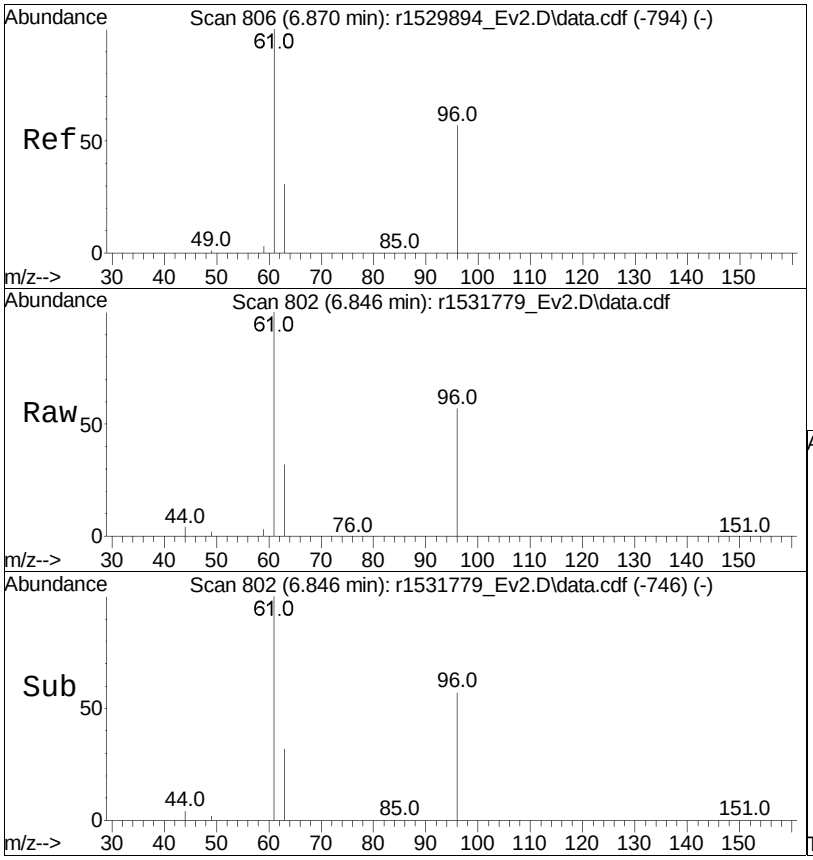


#6
vinyl chloride
Concen: 3.93 ppbV
RT: 4.40 min Scan# 233
Delta R.T. -0.018 min
Lab File: r1531779_Ev2.D
Acq: 20 Mar 2022 1:57 PM

Tgt Ion: 62 Resp: 48070

Ion	Ratio	Lower	Upper
62	100		
64	31.9	25.7	38.5

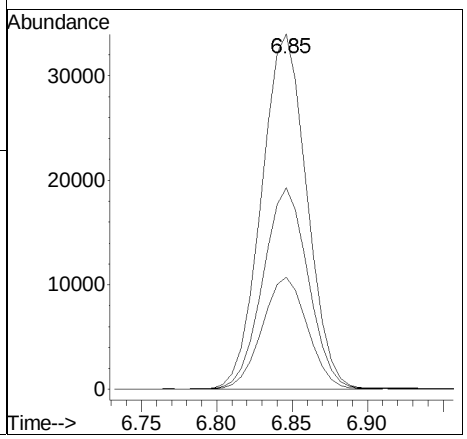


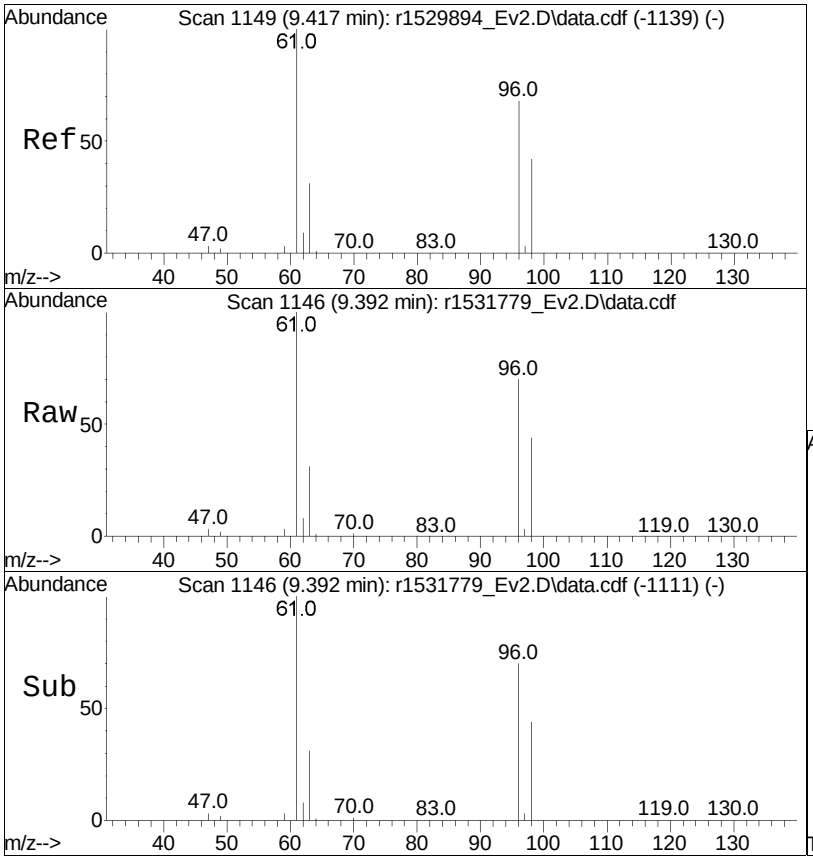


#17
1,1-dichloroethene
Concen: 4.15 ppbV
RT: 6.85 min Scan# 802
Delta R.T. -0.024 min
Lab File: r1531779_Ev2.D
Acq: 20 Mar 2022 1:57 PM

Tgt Ion: 61 Resp: 70881

Ion	Ratio	Lower	Upper
61	100		
96	56.7	45.1	67.7
63	31.6	25.6	38.4

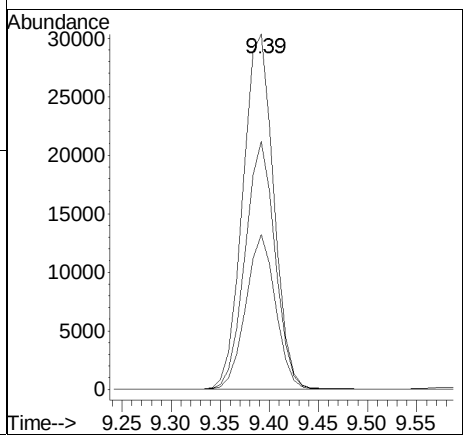


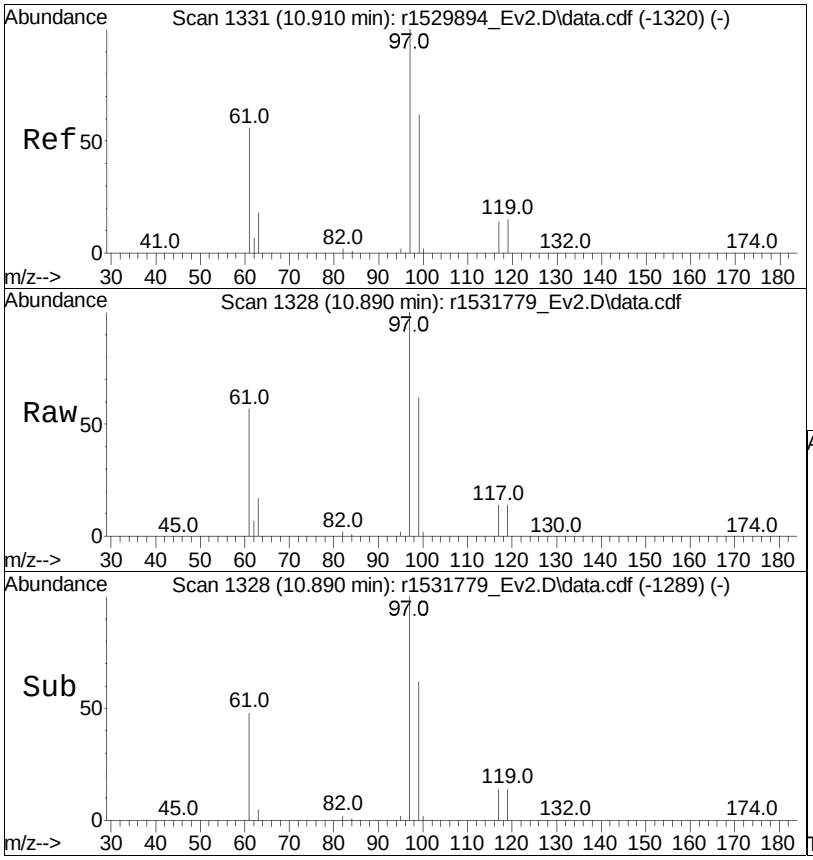


#28
cis-1,2-dichloroethene
Concen: 3.90 ppbV
RT: 9.39 min Scan# 1146
Delta R.T. -0.025 min
Lab File: r1531779_Ev2.D
Acq: 20 Mar 2022 1:57 PM

Tgt Ion: 61 Resp: 66408

Ion	Ratio	Lower	Upper
61	100		
96	69.7	49.6	74.4
98	43.6	30.6	46.0

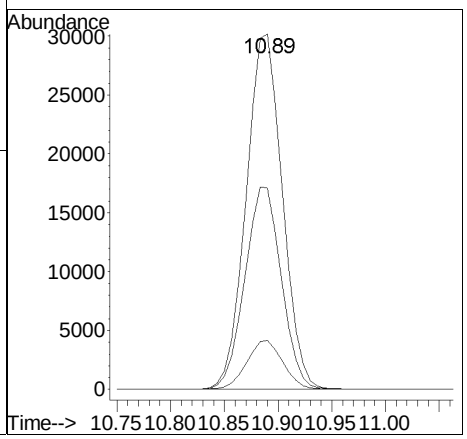


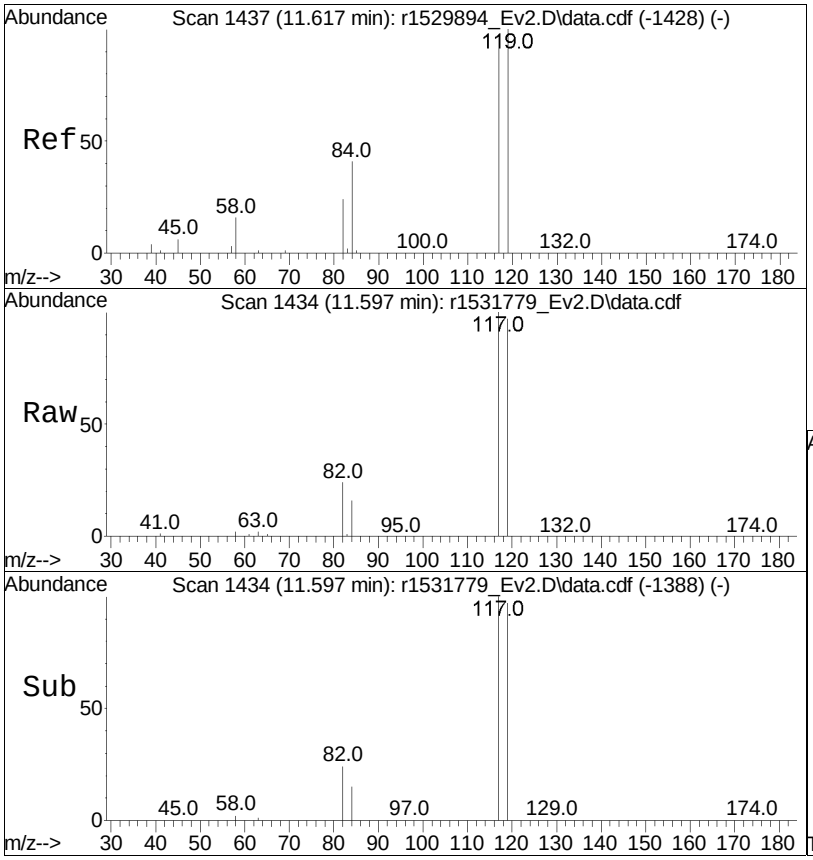


#36
1,1,1-trichloroethane
Concen: 4.38 ppbV
RT: 10.89 min Scan# 1328
Delta R.T. -0.020 min
Lab File: r1531779_Ev2.D
Acq: 20 Mar 2022 1:57 PM

Tgt Ion: 97 Resp: 70687

Ion	Ratio	Lower	Upper
97	100		
61	56.6	45.9	68.9
119	13.8	10.6	15.8

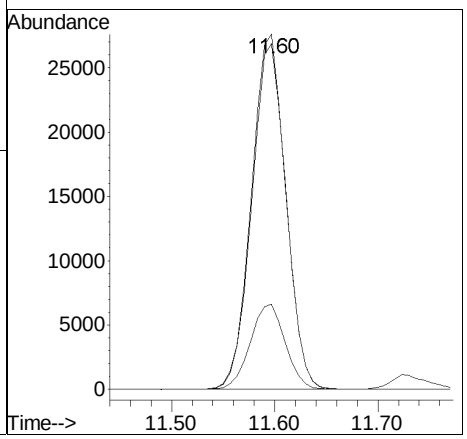


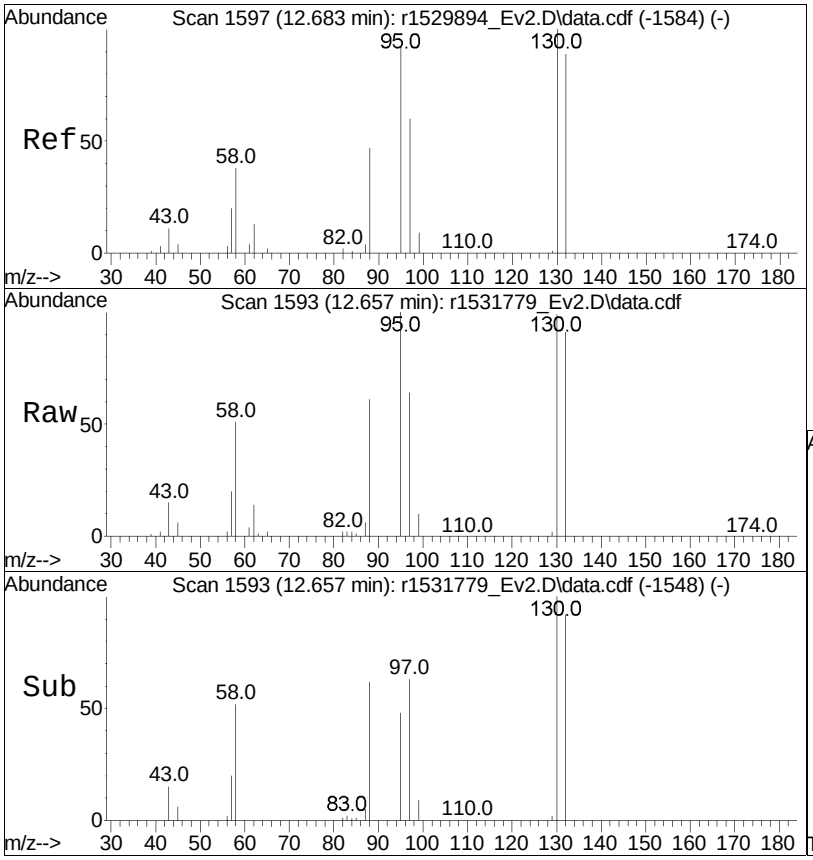


#38
carbon tetrachloride
Concen: 4.28 ppbV
RT: 11.60 min Scan# 1434
Delta R.T. -0.020 min
Lab File: r1531779_Ev2.D
Acq: 20 Mar 2022 1:57 PM

Tgt Ion:117 Resp: 63678

Ion	Ratio	Lower	Upper
117	100		
119	97.3	78.2	117.4
82	24.0	20.5	30.7

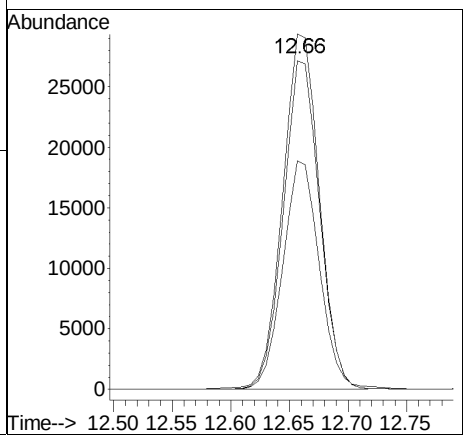


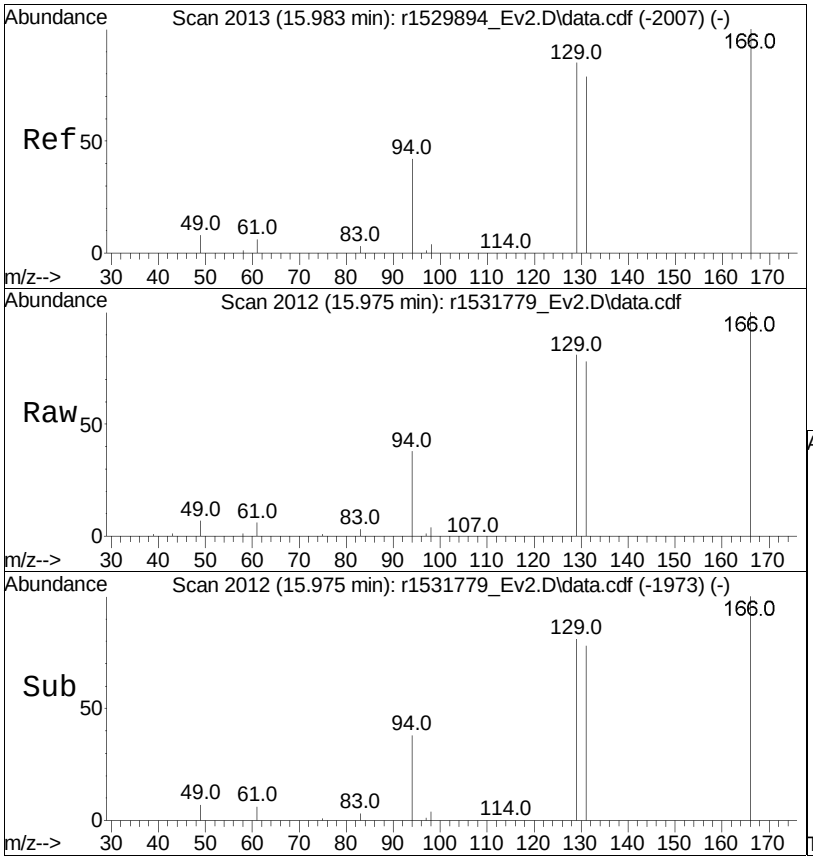


#44
trichloroethene
Concen: 4.24 ppbV
RT: 12.66 min Scan# 1593
Delta R.T. -0.027 min
Lab File: r1531779_Ev2.D
Acq: 20 Mar 2022 1:57 PM

Tgt Ion:130 Resp: 63958

Ion	Ratio	Lower	Upper
130	100		
132	92.4	76.2	114.4
97	64.3	52.2	78.4

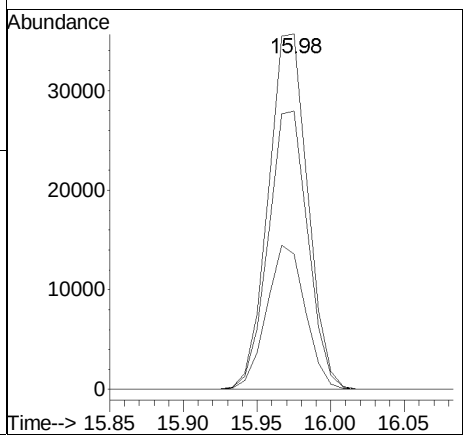




#57
tetrachloroethene
Concen: 4.17 ppbV
RT: 15.98 min Scan# 2012
Delta R.T. -0.008 min
Lab File: r1531779_Ev2.D
Acq: 20 Mar 2022 1:57 PM

Tgt Ion:166 Resp: 66507

Ion	Ratio	Lower	Upper
166	100		
131	78.3	64.3	96.5
94	38.1	33.2	49.8



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320SIM\
Data File : r1531790_Ev2.D
Acq On : 20 Mar 2022 10:25 PM
Operator : AIRLAB15:RY
Sample : WG1617727-5,3,250,250
Misc : WG1617727,ICAL18601
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 08:42:21 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320SIM\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Dec 27 10:35:25 2021
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab15\2022\03\0320SIM\r1531779_Ev2.D
Sub List : 7-NY-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.57	49	236396	10.000	ppbV	-0.03
Standard Area = 238569			Recovery =		99.09%	
33) 1,4-difluorobenzene	11.86	114	532046	10.000	ppbV	-0.03
Standard Area = 552111			Recovery =		96.37%	
51) chlorobenzene-D5	16.57	54	123487	10.000	ppbV	-0.02
Standard Area = 125385			Recovery =		98.49%	
System Monitoring Compounds						
Target Compounds						Qvalue
6) vinyl chloride	0.00		0	N.D.		
17) 1,1-dichloroethene	6.78		0	N.D.		
28) cis-1,2-dichloroethene	0.00		0	N.D.		
36) 1,1,1-trichloroethane	10.95		0	N.D.		
38) carbon tetrachloride	11.59	117	1014	0.071	ppbV #	90
44) trichloroethene	12.66	130	342	0.024	ppbV #	74
57) tetrachloroethene	15.97	166	2541	0.162	ppbV	97

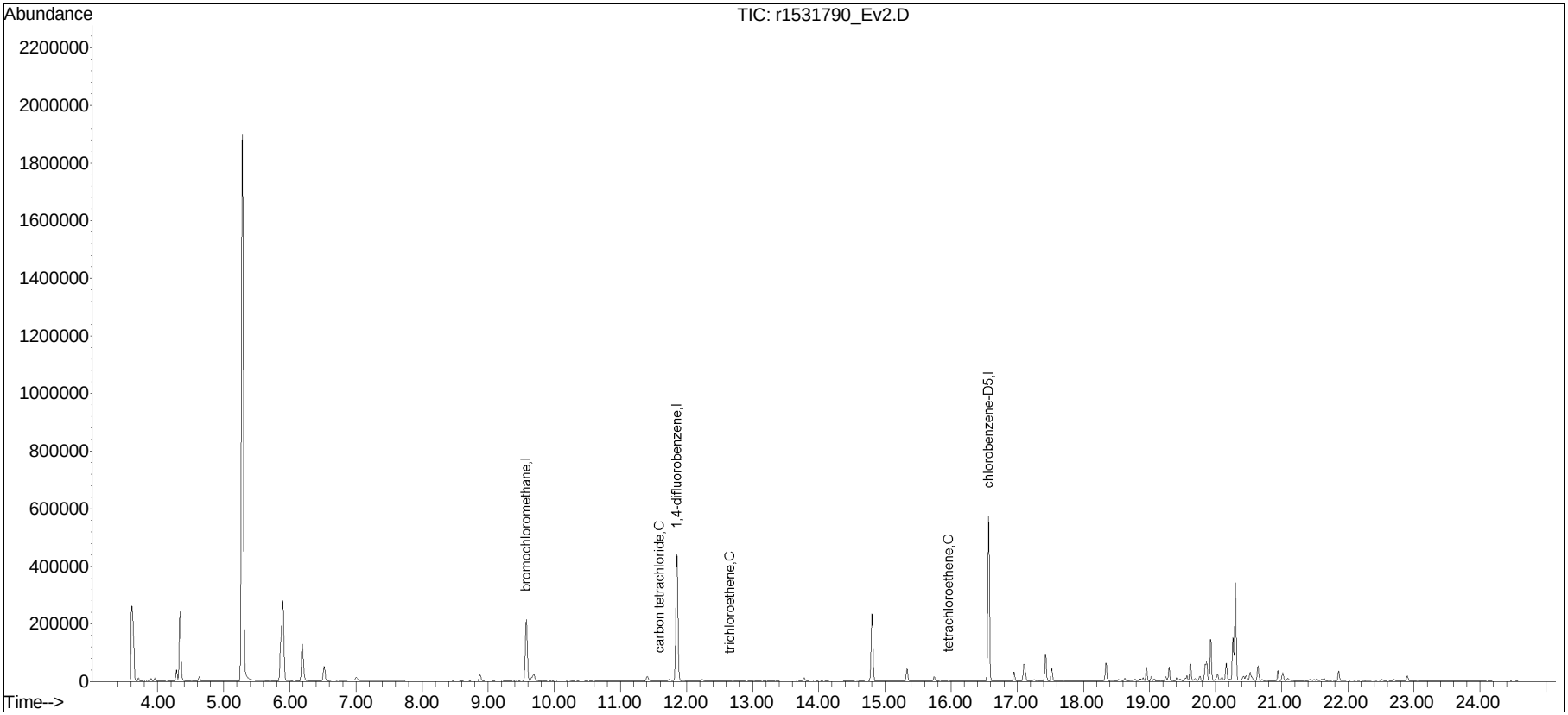
(#) = qualifier out of range (m) = manual integration (+) = signals summed

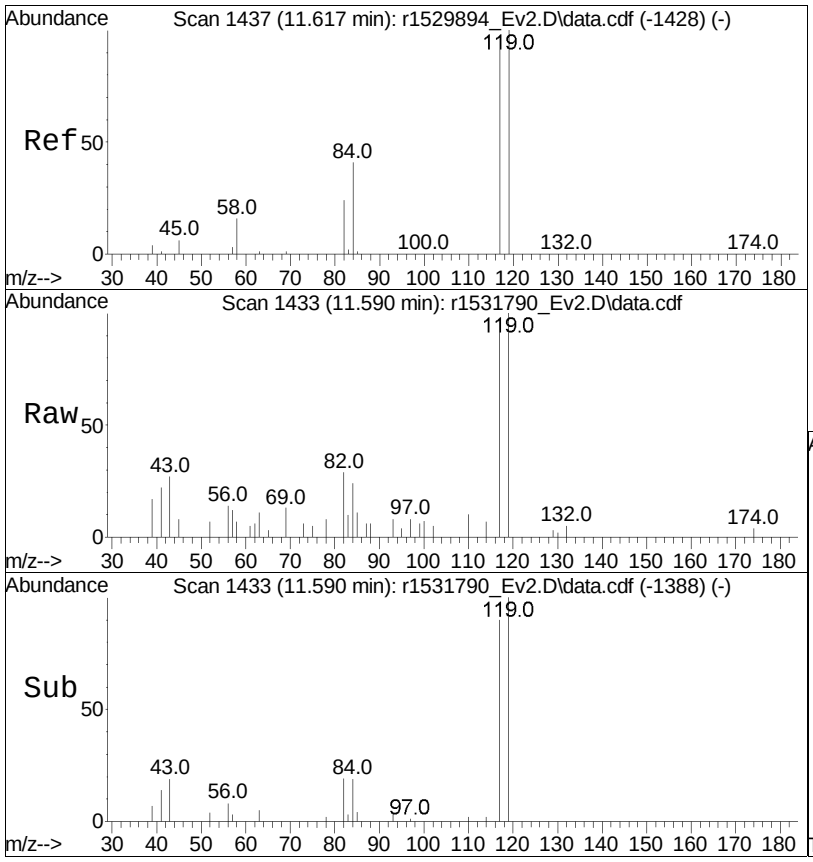
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab15\2022\03\0320SIM\
Data File : r1531790_Ev2.D
Acq On : 20 Mar 2022 10:25 PM
Operator : AIRLAB15:RY
Sample : WG1617727-5,3,250,250
Misc : WG1617727,ICAL18601
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 08:42:21 2022
Quant Method : O:\Forensics\Data\Airlab15\2022\03\0320SIM\TSIM15_211222.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Dec 27 10:35:25 2021
Response via : Initial Calibration

Sub List : 7-NY-SIM - .\Data\Airlab15\2022\03\0320SIM\r1531779_Ev2.D

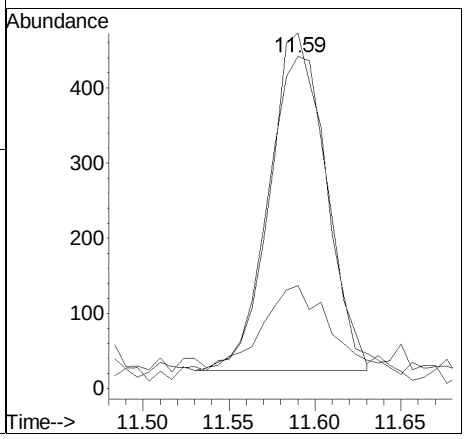


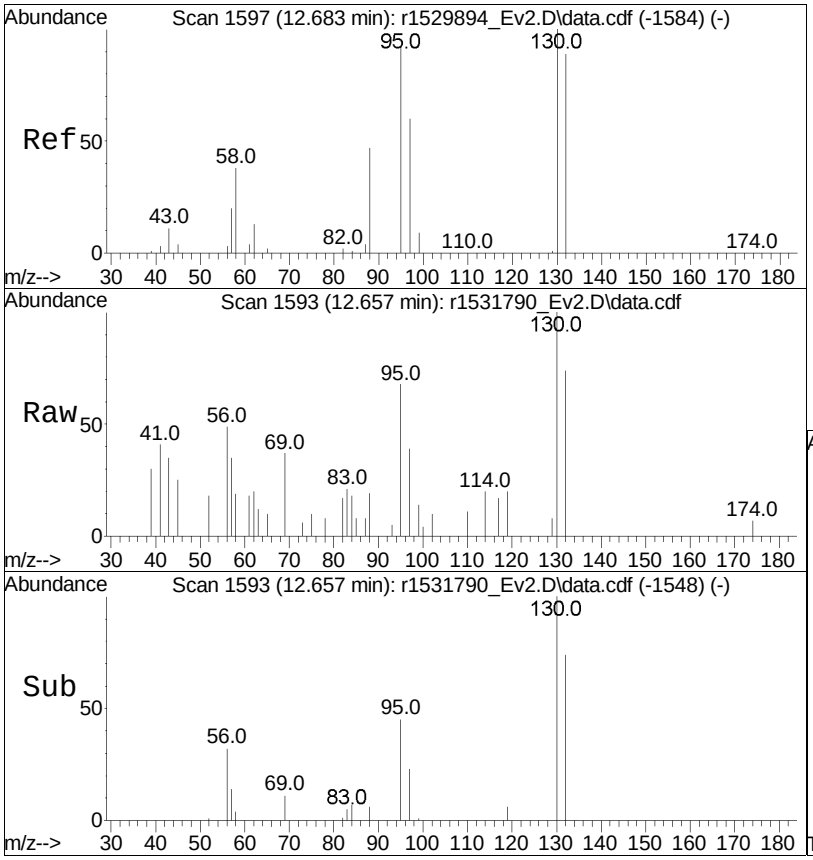


#38
carbon tetrachloride
Concen: 0.07 ppbV
RT: 11.59 min Scan# 1433
Delta R.T. -0.027 min
Lab File: r1531790_Ev2.D
Acq: 20 Mar 2022 10:25 PM

Tgt Ion:117 Resp: 1014

Ion	Ratio	Lower	Upper
117	100		
119	107.0	78.2	117.4
82	31.0	20.5	30.7#

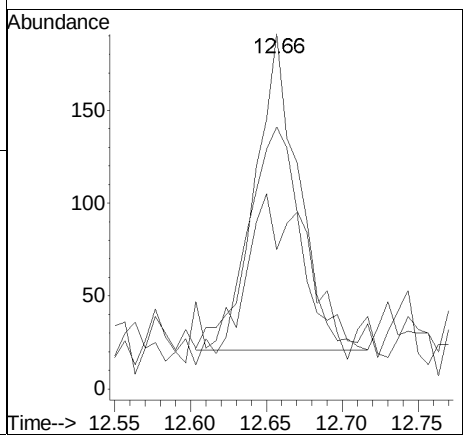


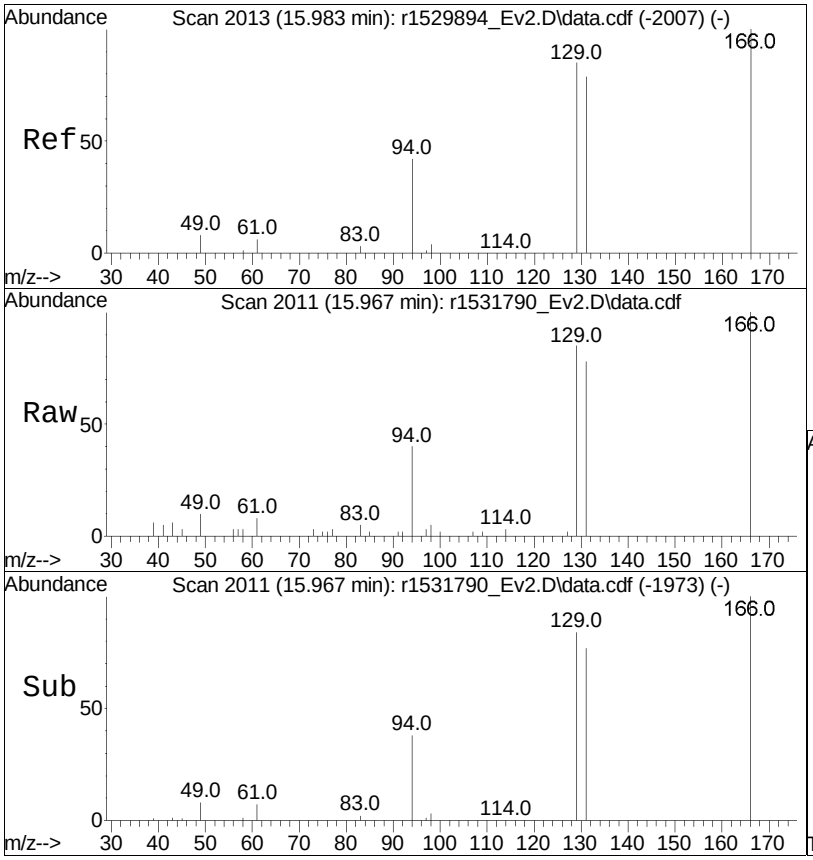


#44
trichloroethene
Concen: 0.02 ppbV
RT: 12.66 min Scan# 1593
Delta R.T. -0.027 min
Lab File: r1531790_Ev2.D
Acq: 20 Mar 2022 10:25 PM

Tgt Ion:130 Resp: 342

Ion	Ratio	Lower	Upper
130	100		
132	73.8	76.2	114.4#
97	39.3	52.2	78.4#

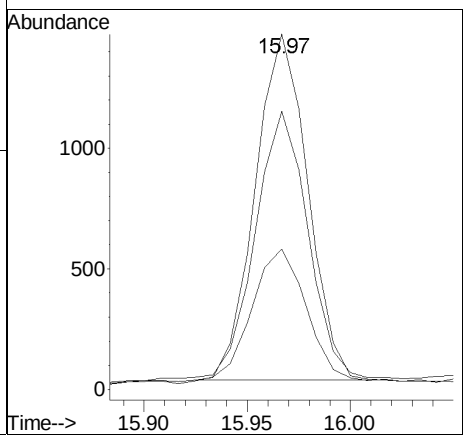




#57
tetrachloroethene
Concen: 0.16 ppbV
RT: 15.97 min Scan# 2011
Delta R.T. -0.017 min
Lab File: r1531790_Ev2.D
Acq: 20 Mar 2022 10:25 PM

Tgt Ion:166 Resp: 2541

Ion	Ratio	Lower	Upper
166	100		
131	78.3	64.3	96.5
94	39.6	33.2	49.8



Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\Airlab15\	QMethod	: TSIM15_211222.M
Data File	: r1531790_Ev2.D	Operator	: AIRLAB15:RY
Date Inj'd	: 3/20/2020 0:0: 5	Instrument	:
Sample	: WG1617727-5,3,250,250	Quant Date	: 3/21/2022 8:42 am

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

Calculation of Volatile Organic Compounds in Air

The instrument will calculate the concentration (ppbv). If the sample is diluted (DF), the result is multiplied by the DF to generate the final result.

Result, ppbv = C_s x DF
Where:
C_s = Concentration of sample (ppbv)
DF = Dilution Factor

Calculation of Instrument Dilution Factor

For dilutions, smaller sample volumes (< 250mL) are analyzed. The smallest volume that can be analyzed with accuracy is 10 mL.

Samples that arrive at the laboratory with pressures below -15 inches Hg must be pressurized with zero air to greater than -15 inches Hg. This pressurization results in a dilution factor.

Calculation of Dilution Factor
$DF = V_{cf} / V_{ci}$
Where:
V_{ci} = volume of air in canister prior to pressurization, L
P =

Conversion of ppbv to ug/m^3
ug/m^3 = (ppbv) * MW / 24.47
Where:
24.47 = molar gas constant (g/g-mole)
MW = molecular weight of the compound of interest

Dilution Factor for Pressurization of Subatmospheric Samples: Three Steps

Step 1: Calculate the volume in the canister prior to pressurization (Assume a 2.7 liter canister is used).

Dilution Factor for Pressurization of Subatmospheric Samples: Three Steps

Step 1: Calculate the volume in the canister prior to pressurization (Assume a 2.7 liter canister is used).

$V_{ci} = 2.7 * Pl/14.696$

Step 2: Calculate the volume in the canister after pressurization.

$V_{cf} = 2.7 * PF/14.696$

Step 3: Calculate the dilution factor.

$DF = V_{cf} / V_{ci}$

Where:

V_{ci} = volume of air in canister prior to pressurization, L
PI = pressure reading of canister prior to pressurization (psia)
V_{cf} = volume of air in canister after pressurization, L
PF = pressure reading of canister after pressurization (psia)
DF = dilution factor
14.696 = atmospheric pressure (psia)

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Mar 22 2022, 03:16 pm

Work Group: WG1617727 for Department: 3 GC/MS

Created: 20-MAR-22 Due: Operator: NL

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2212232-01	IA-104	S	TO15-SIM	AIR	DONE	U	0406	0323	S0	Can-6
L2212232-02	IA-105	S	TO15-SIM	AIR	DONE	U	0406	0323	S0	Can-6
L2212232-03	IA-106	S	TO15-SIM	AIR	DONE	U	0407	0323	S0	Can-6
L2213657-02	VE-2-IA	S	TO15-SIM	AIR	DONE	U	0415	0323	2E	Can-2.7
L2213657-03	DUP-031622	S	TO15-SIM	AIR	DONE	U	0415	0323	2E	Can-2.7
L2213657-05	VE-1-IA	S	TO15-SIM	AIR	DONE	U	0415	0323	2E	Can-2.7
WG1617727-1	MS BFB Tune Standard	S	TO15-SIM	AIR	DONE	U				
WG1617727-2	Continuing Calibrati	S	TO15-SIM	AIR	DONE	U				
WG1617727-3	Laboratory Control S	S	TO15-SIM	AIR	DONE	U				
WG1617727-4	Laboratory Method Bl	S	TO15-SIM	AIR	DONE	U				
WG1617727-5	Duplicate Sample	S	TO15-SIM	AIR	DONE	U				

Comments:

WG1617727-5 L2213657-03

Alpha Analytical Air Lab
Instrument Run Log

ID:	Airlab15	Internal Standard/Surrogate IDs:	SS20-028 / SS21-026
Date:	12/22/21	Internal Standard/Surrogate Volume:	100 ml
Initials:	AR	Sequence File Name:	211222.S

SIM ICAL# Full Scan ICAL# APH ICAL# 18551

AS Position #	Sample ID	Acquisition Method	Data File ID	Standard ID or Batch ID #, ICAL Ref #	Comment (s)	Product/ sublist	Pass ? Y/ N
1	TA15122201	TO15_SFS.qgm	R1529887.qgd	250 ML	TUNE		NA
5	ITO15-SIMSTD0.02	TO15_SFS.qgm	R1529888.qgd	SS21-036D 50ML	SIM ONLY	DEF	NA
5	ITO15-SIMSTD0.05	TO15_SFS.qgm	R1529889.qgd	SS21-036D 100ML	SIM ONLY	DEF	NA
5	ITO15-SIMSTD0.1	TO15_SFS.qgm	R1529890.qgd	SS21-036D 250ML	SIM ONLY	DEF	NA
6	ITO15-SIMSTD0.2	TO15_SFS.qgm	R1529891.qgd	SS21-036C 50ML		DEF	NA
6	ITO15-SIMSTD0.5	TO15_SFS.qgm	R1529892.qgd	SS21-036C 125ML		DEF	NA
6	ITO15-SIMSTD1.0	TO15_SFS.qgm	R1529893.qgd	SS21-036C 250ML		DEF	NA
7	ITO15-SIMSTD5.0	TO15_SFS.qgm	R1529894.qgd	SS21-036B 125ML		DEF	NA
7	ITO15-SIMSTD010	TO15_SFS.qgm	R1529895.qgd	SS21-036B 250ML		DEF	NA
8	ITO15-SIMSTD020	TO15_SFS.qgm	R1529896.qgd	SS21-036A 50ML		DEF	NA
8	ITO15-SIMSTD050	TO15_SFS.qgm	R1529897.qgd	SS21-036A 125ML		DEF	NA
8	ITO15-LLSTD100	TO15_SFS.qgm	R1529898.qgd	SS21-036A 250ML	LL ONLY	DEF	NA
1	BA15122201	TO15_SFS.qgm	R1529899.qgd	250 ML			NA
1	BA15122202	TO15_SFS.qgm	R1529900.qgd	250 ML			NA
2	CTO15-LLSTD10	TO15_SFS.qgm	R1529901.qgd	SS21-033F 250ML	LL ICV	DEF ICV AP2	NA
2	CTO15-SIMSTD5.0	TO15_SFS.qgm	R1529902.qgd	SS21-033F 250ML	SIM ICV	DEF ICV AP2	NA

Alpha Analytical Air Lab
Instrument Run Log

Date(s) of Initial Calibration: Refer to Initial Calibration Summary Form 6

Date Acquired: see Instrument Performance Check Summary and/or quantitation report.

Sample ID information: L1301234-01,3,250,250 { Lab sample ID, dept #, actual volume analyzed (mL), nominal volume analyzed (mL) }

Dilution Factor: See Form 1 report, or divide nominal volume by actual volume analyzed

Alpha Analytical Air Lab
Instrument Run Log

ID:	Airlab15	Internal Standard/Surrogate IDs:	SS20-028 / SS21-026
Date:	03/20/22	Internal Standard/Surrogate Volume:	100 ml
Initials:	NL	Sequence File Name:	220320.S

AS Position #	Sample ID	Acquisition Method	Data File ID	Standard ID or Batch ID #, ICAL Ref #	Comment (s)	Product/ sublist	Pass? Y/ N
1	TA15032001	TO15_SFS.qgm	R1531776.qgd	250ml	TUNE		NA
2	CA15032001	TO15_SFS.qgm	R1531777.qgd	250 mL SS21-036F	NJ CC FAILS		NA
3	CTO15-LLSTD10.0	TO15_SFS.qgm	R1531778.qgd	250 mL SS22-005E	LL LCS		NA
3	CTO15-SIMSTD5.0	TO15_SFS.qgm	R1531779.qgd	125 mL SS22-005E	SIM LCS		NA
1	BA15032001	TO15_SFS.qgm	R1531780.qgd	250ml	LL BLANK		NA
1	BA15032002	TO15_SFS.qgm	R1531781.qgd	250ml	SIM BLANK		NA
1	L2212319-01,3,250,250	TO15_SFS.qgm	R1531782.qgd	WG1617729,ICAL18600		MCP	Y
2	L2212319-02,3,250,250	TO15_SFS.qgm	R1531783.qgd	WG1617729,ICAL18600		MCP	Y
3	L2212324-01,3,250,250	TO15_SFS.qgm	R1531784.qgd	WG1617729,ICAL18600		MCP	Y
4	L2212232-01,3,250,250	TO15_SFS.qgm	R1531785.qgd	WG1617727,ICAL18601		9CVOCS VIA SIM	Y
5	L2212232-02,3,250,250	TO15_SFS.qgm	R1531786.qgd	WG1617727,ICAL18601		9CVOCS VIA SIM	Y
6	L2212232-03,3,250,250	TO15_SFS.qgm	R1531787.qgd	WG1617727,ICAL18601		9CVOCS VIA SIM	Y
7	L2213657-02,3,250,250	TO15_SFS.qgm	R1531788.qgd	WG1617728,ICAL18600		NY-7SIM	Y
8	L2213657-03,3,250,250	TO15_SFS.qgm	R1531789.qgd	WG1617728,ICAL18600		NY-7SIM	Y
8	L2213657-03DUP,3,250,250	TO15_SFS.qgm	R1531790.qgd	WG1617728,ICAL18600	LL/SIM (DUMMY) DUP	NY-7SIM	Y
9	L2213657-05,3,250,250	TO15_SFS.qgm	R1531791.qgd	WG1617728,ICAL18600	ETOH OVERCAL	NY-7SIM	Y
10	L2213657-01,3,250,250	TO15_SFS.qgm	R1531792.qgd	WG1617728,ICAL18600		NY	Y
11	L2213657-04D,3,189.9,250	TO15_SFS.qgm	R1531793.qgd	WG1617728,ICAL18600	905	NY	Y
12	L2212006-01,3,250,250	TO15_SFS.qgm	R1531794.qgd	WG1617729,ICAL18600		MCP	Y
13	L2212006-02,3,250,250	TO15_SFS.qgm	R1531795.qgd	WG1617729,ICAL18600		MCP	Y
14	L2212126-01,3,250,250	TO15_SFS.qgm	R1531796.qgd	WG1617728,ICAL18600		NY	Y
15	L2212329-01D,3,55,250	TO15_SFS.qgm	R1531797.qgd	WG1617729,ICAL18600	NT	MCP	Y

Alpha Analytical Air Lab
Instrument Run Log

16	L2212329-02D,3,105,250	TO15_SFS.qgm	R1531798.qgd	WG1617729,ICAL18600	NT	MCP	Y
9	L2213657-05D,3,50,250	TO15_SFS.qgm	R1531799.qgd	WG1617728,ICAL18600		ETOH	Y

Date(s) of Initial Calibration: Refer to Initial Calibration Summary Form 6

Date Acquired: see Instrument Performance Check Summary and/or quantitation report.

Sample ID information: L1301234-01,3,250,250 { Lab sample ID, dept #, actual volume analyzed (mL), nominal volume analyzed (mL) }

Dilution Factor: See Form 1 report, or divide nominal volume by actual volume analyzed

www.alphalab.com



Alpha Analytical

Laboratory Code: 11148

SDG Number: L2253855

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Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Number: 2546.0007Y002

Lab Number: L2253855
Report Date: 10/06/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2253855-01	VE-2	SOIL_VAPOR	YONKERS, NY	09/29/22 12:05	09/29/22
L2253855-02	VE-2-IA	AIR	YONKERS, NY	09/29/22 12:10	09/29/22
L2253855-03	DUP-092922	AIR	YONKERS, NY	09/29/22 12:11	09/29/22
L2253855-04	VE-1	SOIL_VAPOR	YONKERS, NY	09/29/22 12:40	09/29/22
L2253855-05	VE-1-IA	AIR	YONKERS, NY	09/29/22 13:19	09/29/22

Case Narrative

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

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

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

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

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

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

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on September 28, 2022. The canister certification results are provided as an addendum.

L2253855-01D,04D,05D: The samples have elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the samples.

L2253855-05: The sample was re-analyzed on dilution in order to quantitate the results within the calibration range. The result(s) should be considered estimated, and are qualified with an E flag, for any compound(s) that exceeded the calibration range in the initial analysis. The re-analysis was performed only for the compound(s) that exceeded the calibration range.

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

Authorized Signature: Report Date: 10/06/22

Title: Technical Director/Representative

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report

Footnotes

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

Terms

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

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

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

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

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

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

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

Report Format: Data Usability Report

Data Qualifiers

the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

ND - Not detected at the reporting limit (RL) for the sample.

Volatile Organics Instruments

Volatile Organics:

Instrument: Agilent 7890 GC/5975C MSD	Columns (length x ID x df):
Trap: Supelco K Trap (VOACARB 3000)	RTX-VMS 20m x 0.18mm x 1um
Concentrator: EST Encon (or equivalent)	RTX-VMS 30m x 0.25mm x 1.4um
Autosampler: EST Centurion (or equivalent)	RTX-502.2 40m x 0.18mm x 1um
Purge time: 11 min	

Volatile Organics: VPH

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

Volatile Organics: PIANO

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

Volatile Organics: Dissolved Gas

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

	Column Type: Haysep S Column
	Column Length: 2 Meters packed (100/200 mesh)
Autosampler: LEAP Headspace	Purge time: 0.6 min

Volatile Organics in Air Instruments

Volatile Organics in Air:

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

Concentrator: Entech 7100A or 7200	Column Type: Restek RTX-1
Autosampler: Entech 7016CA or 7016D	Column Length: 60 Meters
	df: 1.00 um
	ID: 0.25 mm or 0.32 mm

Trap 1: Glass Bead: manufacturer-Entech: 20 cm packing material
Trap 2: Tenax: manufacturer-Entech: 20 cm packing material

Semivolatile Organics Instruments - Westborough

Semivolatile Organics (Acid/Base/Neutral Extractables):

Instrument: Agilent 5973N MSD	Injection volume: 1 ul;2 uL LVI
Column Type: Restek RXI-5SILMS	df: 0.32 um
Column Length: 30 Meters	ID: 0.25 mm

Polynuclear Aromatic Hydrocarbons by 8270 SIM:

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

Pesticides/PCB/Herbicides:

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

Petroleum/EPH:

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

Semivolatile Organic Instruments - Mansfield

Semivolatile Organics (ALK-PAH Extractables):

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

Semivolatile Organics (8270):

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

Semivolatile Organics (8270 SIM):

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

Semivolatile Organics (1,4-Dioxane):

Instrument: Agilent 5973N / 5975 / 5977 MSD	Injection volume: 3 ul
Column Type: RTX-5	df: 0.25um, 0.18 um
Column Length: 30 Meters	ID: 0.25um, 0.18 mm

Semivolatile Organics (209 Congener):

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

Semivolatile Organics (8081):

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

Semivolatile Organics (8082):

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

Semivolatile Organics (SHC Extractables):

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

Sample Delivery Group Summary

Alpha Job Number : L2253855

Account Name : Roux Env. Eng. & Geology, DPC
Project Number : 2546.0007Y002
Project Name : FORMER CLEAN ZONE DRY CLEANERS

Received : 29-SEP-2022
Reviewer : Richard Gaskill

Delivery Information

Samples Delivered By : Alpha Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
NA	Present/Intact/na			

Condition Information

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

Volatile Organics/VPH

1) Reagent Water Vials Frozen by Client?	**NA**

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Oct 06 2022, 12:08 pm

Login Number: L2253855
Account: ROUX-NY Roux Env. Eng. & Geology, DPCProject: 2546.0007Y002
Received: 29SEP22 Due Date: 06OCT22

Sample #	Client ID	Mat	PR	Collected
L2253855-01	VE-2	11	2F	29SEP22 12:05
TO15 SIM for 7 NYS DMCs ASP-B Package Due Date: 10/06/22				
ASP-B,CAN-RENT,E&I-FEE,FLOW-RENT,TO15-LL				
L2253855-02	VE-2-IA	10	2F	29SEP22 12:10
TO15 SIM for 7 NYS DMCs Package Due Date: 10/06/22				
CAN-RENT,FLOW-RENT,TO15-LL,TO15-SIM				
L2253855-03	DUP-092922	10	2F	29SEP22 12:11
TO15 SIM for 7 NYS DMCs Package Due Date: 10/06/22				
CAN-RENT,FLOW-RENT,TO15-LL,TO15-SIM				
L2253855-04	VE-1	11	2F	29SEP22 12:40
TO15 SIM for 7 NYS DMCs Package Due Date: 10/06/22				
CAN-RENT,FLOW-RENT,TO15-LL				
L2253855-05	VE-1-IA	10	2F	29SEP22 13:19
TO15 SIM for 7 NYS DMCs Package Due Date: 10/06/22				
CAN-RENT,FLOW-RENT,TO15-LL,TO15-SIM				

Logged By: Richard Gaskill

AIR ANALYSIS

PAGE 1 OF 1

CHAIN OF CUSTODY

ALPHA ANALYTICAL
320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 9/30/22

ALPHA Job #: L2253855

Client Information

Client: ROUX
Address: 209 SHAFTER ST.
ISLANDIA, NY 11749
Phone: 631-232 2600
Fax: 631-2329898
Email: RHENKE@ROUXINC.COM

☑ These samples have been previously analyzed by Alpha

Project Information

Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Location: YONKERS, NY
Project #: 2546.0007Y002
Project Manager: RACHEL HENKE
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: Time:

Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☑ EMAIL (standard pdf report)
☑ Additional Deliverables: CAT B DELIVERABLES
Report to: (if different than Project Manager)

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	TO-15	TO-15 SIM	APH (Subset Non-petroleum HCs ☐)	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
53855-01	VE-2	9/29/22	1005	1205	-29.97	-4.97	SV	AF	6L	3593	2136	X					
-02	VE-2-IA	9/29/22	1010	1210	-30.06	-4.71	AA	AF	6L	3121	839	X					
-03	DUP-092922	9/29/22	1011	1211	-30.18	-5.70	AA	AF	6L	2143	760	X					
-04	VE-1	9/29/22	1040	1240	-29.51	-4.79	SV	AF	6L	1810	1927	X					
-05	VE-1-IA	9/29/22	1119	1319	-30.23	-4.87	AA	AF	6L	3270	1038	X					

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type: SUMMA

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By:	Date/Time	Received By:	Date/Time:
ROUX	9/29/22 1430	MEATHERS (AAL)	9/29/22 1430
(AAL)	9/29/22 1430		9.29.22 2100
	9.29.22	EAAL	9/30/22 0015
EAAL	9/30/22 0255		9/30/22 02:55

Form No: 101-02 Rev: (25-Sep-15)

Supporting Documentation

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2253855-01	VE-2	02136	Flow 2	09/28/22	400859		-	-	-	Pass	40.1	37.2	8
L2253855-01	VE-2	3593	6.0L Can	09/28/22	400859	L2249532-05	Pass	-28.6	-8.7	-	-	-	-
L2253855-02	VE-2-IA	0839	Flow 2	09/28/22	400859		-	-	-	Pass	40.5	43.3	7
L2253855-02	VE-2-IA	3121	6.0L Can	09/28/22	400859	L2249532-04	Pass	-28.5	-5.1	-	-	-	-
L2253855-03	DUP-092922	02143	Flow 2	09/28/22	400859		-	-	-	Pass	40.3	46.3	14
L2253855-03	DUP-092922	760	6.0L Can	09/28/22	400859	L2249532-04	Pass	-28.6	-6.3	-	-	-	-
L2253855-04	VE-1	01927	Flow 2	09/28/22	400859		-	-	-	Pass	40.3	48.2	18
L2253855-04	VE-1	1810	6.0L Can	09/28/22	400859	L2249532-05	Pass	-28.2	-5.6	-	-	-	-
L2253855-05	VE-1-IA	01039	Flow 2	09/28/22	400859		-	-	-	Pass	40.3	42.3	5
L2253855-05	VE-1-IA	3270	6.0L Can	09/28/22	400859	L2249532-05	Pass	-28.3	-5.4	-	-	-	-

Air Canister Certification Results

Lab ID: L2249532-04
Client ID: CAN 3478 SHELF 34
Sample Location:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 09/13/22 22:09
Analyst: JB

Date Collected: 09/12/22 18:00
Date Received: 09/13/22
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1

Air Canister Certification Results

Lab ID: L2249532-04
Client ID: CAN 3478 SHELF 34
Sample Location:

Date Collected: 09/12/22 18:00
Date Received: 09/13/22
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air								
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1

Air Canister Certification Results

Lab ID: L2249532-04 Date Collected: 09/12/22 18:00
Client ID: CAN 3478 SHELF 34 Date Received: 09/13/22
Sample Location: Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air								
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1

Air Canister Certification Results

Lab ID: L2249532-04
Client ID: CAN 3478 SHELF 34
Sample Location:

Date Collected: 09/12/22 18:00
Date Received: 09/13/22
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air								
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					
No Tentatively Identified Compounds					

Air Canister Certification Results

Lab ID: L2249532-04 Date Collected: 09/12/22 18:00
Client ID: CAN 3478 SHELF 34 Date Received: 09/13/22
Sample Location: Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air								

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	96		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	98		60-140

Air Canister Certification Results

Lab ID: L2249532-04
Client ID: CAN 3478 SHELF 34
Sample Location:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 09/13/22 22:09
Analyst: TS

Date Collected: 09/12/22 18:00
Date Received: 09/13/22
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1

Air Canister Certification Results

Lab ID: L2249532-04 Date Collected: 09/12/22 18:00
Client ID: CAN 3478 SHELF 34 Date Received: 09/13/22
Sample Location: Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1

Air Canister Certification Results

Lab ID: L2249532-04 Date Collected: 09/12/22 18:00
Client ID: CAN 3478 SHELF 34 Date Received: 09/13/22
Sample Location: Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM								
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	97		60-140
bromochloromethane	98		60-140
chlorobenzene-d5	98		60-140

Air Canister Certification Results

Lab ID: L2249532-05
Client ID: CAN 2048 SHELF 35
Sample Location:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 09/13/22 22:47
Analyst: JB

Date Collected: 09/12/22 18:00
Date Received: 09/13/22
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1

Air Canister Certification Results

Lab ID: L2249532-05
Client ID: CAN 2048 SHELF 35
Sample Location:

Date Collected: 09/12/22 18:00
Date Received: 09/13/22
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air								
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1

Air Canister Certification Results

Lab ID: L2249532-05
Client ID: CAN 2048 SHELF 35
Sample Location:

Date Collected: 09/12/22 18:00
Date Received: 09/13/22
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air								
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1

Air Canister Certification Results

Lab ID: L2249532-05
Client ID: CAN 2048 SHELF 35
Sample Location:

Date Collected: 09/12/22 18:00
Date Received: 09/13/22
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air								
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					
No Tentatively Identified Compounds					

Air Canister Certification Results

Lab ID: L2249532-05
Client ID: CAN 2048 SHELF 35
Sample Location:

Date Collected: 09/12/22 18:00
Date Received: 09/13/22
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air								

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	98		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	99		60-140

Air Canister Certification Results

Lab ID: L2249532-05
Client ID: CAN 2048 SHELF 35
Sample Location:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 09/13/22 22:47
Analyst: TS

Date Collected: 09/12/22 18:00
Date Received: 09/13/22
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1

Air Canister Certification Results

Lab ID: L2249532-05
Client ID: CAN 2048 SHELF 35
Sample Location:

Date Collected: 09/12/22 18:00
Date Received: 09/13/22
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1

Air Canister Certification Results

Lab ID: L2249532-05 Date Collected: 09/12/22 18:00
Client ID: CAN 2048 SHELF 35 Date Received: 09/13/22
Sample Location: Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM								
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	97		60-140
bromochloromethane	98		60-140
chlorobenzene-d5	99		60-140

Organics

Volatile Organics in Air
TO-15 Low Level

Volatiles QC Summary

Lab Duplicate Sample Summary
Form 3
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Client Sample ID	: VE-1-IA	**Matrix**	: AIR
Lab Sample ID	: L2253855-05	**Analysis Date**	: 10/04/22 22:25
Lab File ID	: R423923	**DUP File ID**	: r423924
Dup Sample ID	: WG1695439-5	**DUP Analysis Date**	: 10/04/22 23:04

Parameter	Sample Concentration (ppbV)	Duplicate Concentration (ppbV)	RPD	RPD Limit
Dichlorodifluoromethane	0.555	0.550	1	25
Chloromethane	0.567	0.560	1	25
Freon-114	ND	ND	NC	25
1,3-Butadiene	ND	ND	NC	25
Bromomethane	ND	ND	NC	25
Chloroethane	ND	ND	NC	25
Ethanol	ND	993	4	25
Vinyl bromide	ND	ND	NC	25
Acetone	3.54	3.52	1	25
Trichlorofluoromethane	0.321	0.311	3	25
Isopropanol	16.0	15.9	1	25
Tertiary butyl Alcohol	ND	ND	NC	25
Methylene chloride	ND	ND	NC	25
3-Chloropropene	ND	ND	NC	25
Carbon disulfide	ND	ND	NC	25
Freon-113	ND	ND	NC	25
trans-1,2-Dichloroethene	ND	ND	NC	25
1,1-Dichloroethane	ND	ND	NC	25
Methyl tert butyl ether	ND	ND	NC	25
2-Butanone	ND	ND	NC	25
Ethyl Acetate	0.519	0.504	3	25
Chloroform	ND	ND	NC	25
Tetrahydrofuran	ND	ND	NC	25
1,2-Dichloroethane	ND	ND	NC	25
n-Hexane	ND	ND	NC	25

Lab Duplicate Sample Summary
Form 3
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Client Sample ID	: VE-1-IA	**Matrix**	: AIR
Lab Sample ID	: L2253855-05	**Analysis Date**	: 10/04/22 22:25
Lab File ID	: R423923	**DUP File ID**	: r423924
Dup Sample ID	: WG1695439-5	**DUP Analysis Date**	: 10/04/22 23:04

Parameter	Sample Concentration (ppbV)	Duplicate Concentration (ppbV)	RPD	RPD Limit
Benzene	ND	ND	NC	25
Cyclohexane	ND	ND	NC	25
1,2-Dichloropropane	ND	ND	NC	25
Bromodichloromethane	ND	ND	NC	25
1,4-Dioxane	ND	ND	NC	25
2,2,4-Trimethylpentane	ND	ND	NC	25
Heptane	ND	ND	NC	25
cis-1,3-Dichloropropene	ND	ND	NC	25
4-Methyl-2-pentanone	ND	ND	NC	25
trans-1,3-Dichloropropene	ND	ND	NC	25
1,1,2-Trichloroethane	ND	ND	NC	25
Toluene	ND	ND	NC	25
2-Hexanone	ND	ND	NC	25
Dibromochloromethane	ND	ND	NC	25
1,2-Dibromoethane	ND	ND	NC	25
Chlorobenzene	ND	ND	NC	25
Ethylbenzene	ND	ND	NC	25
p/m-Xylene	ND	ND	NC	25
Bromoform	ND	ND	NC	25
Styrene	ND	ND	NC	25
1,1,2,2-Tetrachloroethane	ND	ND	NC	25
o-Xylene	ND	ND	NC	25
4-Ethyltoluene	ND	ND	NC	25
1,3,5-Trimethylbenzene	ND	ND	NC	25
1,2,4-Trimethylbenzene	ND	ND	NC	25

Lab Duplicate Sample Summary
Form 3
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Client Sample ID	: VE-1-IA	**Matrix**	: AIR
Lab Sample ID	: L2253855-05	**Analysis Date**	: 10/04/22 22:25
Lab File ID	: R423923	**DUP File ID**	: r423924
Dup Sample ID	: WG1695439-5	**DUP Analysis Date**	: 10/04/22 23:04

Parameter	Sample Concentration (ppbV)	Duplicate Concentration (ppbV)	RPD	RPD Limit
Benzyl chloride	ND	ND	NC	25
1,3-Dichlorobenzene	ND	ND	NC	25
1,4-Dichlorobenzene	ND	ND	NC	25
1,2-Dichlorobenzene	ND	ND	NC	25
1,2,4-Trichlorobenzene	ND	ND	NC	25
Hexachlorobutadiene	ND	ND	NC	25

Lab Duplicate Sample Summary
Form 3
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Client Sample ID	: VE-1-IA	**Matrix**	: AIR
Lab Sample ID	: L2253855-05	**Analysis Date**	: 10/05/22 07:40
Lab File ID	: R423933	**DUP File ID**	: r423934
Dup Sample ID	: WG1695439-5	**DUP Analysis Date**	: 10/05/22 08:16

Parameter	Sample Concentration (ppbV)	Duplicate Concentration (ppbV)	RPD	RPD Limit
Ethanol	ND	1420	4	25

Laboratory Control Sample Summary
Form 3
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Matrix	: AIR		
LCS Sample ID	: WG1695439-3 **Analysis Date** : 10/04/22 13:45	**File ID**	: r423913
LCSD Sample ID	: **Analysis Date** :	**File ID**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ppbV)	Found (ppbV)	%R	True (ppbV)	Found (ppbV)	%R	RPD	Recovery Limits	RPD Limit
Propylene	10	9.35	94				-	70-130	-
Dichlorodifluoromethane	10	10.6	106				-	70-130	-
Chloromethane	10	11.2	112				-	70-130	-
Freon-114	10	11.4	114				-	70-130	-
Vinyl chloride	10	10.4	104				-	70-130	-
1,3-Butadiene	10	11.6	116				-	70-130	-
Bromomethane	10	10.3	103				-	70-130	-
Chloroethane	10	9.81	98				-	70-130	-
Ethanol	50	62.4	125				-	40-160	-
Vinyl bromide	10	9.52	95				-	70-130	-
Acetone	50	53.9	108				-	40-160	-
Trichlorofluoromethane	10	11.4	114				-	70-130	-
Isopropanol	25	26.0	104				-	40-160	-
1,1-Dichloroethene	10	9.58	96				-	70-130	-
Tertiary butyl Alcohol	10	9.57	96				-	70-130	-
Methylene chloride	10	9.52	95				-	70-130	-
3-Chloropropene	10	8.59	86				-	70-130	-
Carbon disulfide	10	8.00	80				-	70-130	-
Freon-113	10	9.08	91				-	70-130	-
trans-1,2-Dichloroethene	10	8.67	87				-	70-130	-
1,1-Dichloroethane	10	8.90	89				-	70-130	-
Methyl tert butyl ether	10	9.34	93				-	70-130	-
Vinyl acetate	10	9.78	98				-	70-130	-
2-Butanone	10	9.33	93				-	70-130	-
cis-1,2-Dichloroethene	10	9.15	92				-	70-130	-
Ethyl Acetate	10	9.50	95				-	70-130	-

Laboratory Control Sample Summary
Form 3
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Matrix	: AIR		
LCS Sample ID	: WG1695439-3 **Analysis Date** : 10/04/22 13:45	**File ID**	: r423913
LCSD Sample ID	: **Analysis Date** :	**File ID**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ppbV)	Found (ppbV)	%R	True (ppbV)	Found (ppbV)	%R	RPD	Recovery Limits	RPD Limit
Chloroform	10	10.2	102				-	70-130	-
Tetrahydrofuran	10	8.66	87				-	70-130	-
1,2-Dichloroethane	10	9.54	95				-	70-130	-
n-Hexane	10	9.92	99				-	70-130	-
1,1,1-Trichloroethane	10	10.2	102				-	70-130	-
Benzene	10	9.52	95				-	70-130	-
Carbon tetrachloride	10	11.1	111				-	70-130	-
Cyclohexane	10	9.76	98				-	70-130	-
1,2-Dichloropropane	10	9.65	96				-	70-130	-
Bromodichloromethane	10	11.0	110				-	70-130	-
1,4-Dioxane	10	10.6	106				-	70-130	-
Trichloroethene	10	9.79	98				-	70-130	-
2,2,4-Trimethylpentane	10	9.82	98				-	70-130	-
Heptane	10	9.95	100				-	70-130	-
cis-1,3-Dichloropropene	10	10.8	108				-	70-130	-
4-Methyl-2-pentanone	10	10.7	107				-	70-130	-
trans-1,3-Dichloropropene	10	9.41	94				-	70-130	-
1,1,2-Trichloroethane	10	9.87	99				-	70-130	-
Toluene	10	8.25	82				-	70-130	-
2-Hexanone	10	9.70	97				-	70-130	-
Dibromochloromethane	10	9.48	95				-	70-130	-
1,2-Dibromoethane	10	9.63	96				-	70-130	-
Tetrachloroethene	10	9.55	96				-	70-130	-
Chlorobenzene	10	9.54	95				-	70-130	-
Ethylbenzene	10	8.93	89				-	70-130	-
p/m-Xylene	20	18.4	92				-	70-130	-

Laboratory Control Sample Summary
Form 3
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Matrix	: AIR		
LCS Sample ID	: WG1695439-3 **Analysis Date** : 10/04/22 13:45	**File ID**	: r423913
LCSD Sample ID	: **Analysis Date** :	**File ID**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	**True (ppbV)**	**Found (ppbV)**	**%R**	**True (ppbV)**	**Found (ppbV)**	**%R**	**RPD**	**Recovery Limits**	**RPD Limit**
Bromoform	10	10.1	101				-	70-130	-
Styrene	10	9.28	93				-	70-130	-
1,1,2,2-Tetrachloroethane	10	10.1	101				-	70-130	-
o-Xylene	10	9.54	95				-	70-130	-
4-Ethyltoluene	10	9.06	91				-	70-130	-
1,3,5-Trimethylbenzene	10	9.37	94				-	70-130	-
1,2,4-Trimethylbenzene	10	10.1	101				-	70-130	-
Benzyl chloride	10	9.70	97				-	70-130	-
1,3-Dichlorobenzene	10	10.4	104				-	70-130	-
1,4-Dichlorobenzene	10	9.77	98				-	70-130	-
1,2-Dichlorobenzene	10	10.2	102				-	70-130	-
1,2,4-Trichlorobenzene	10	10.4	104				-	70-130	-
Hexachlorobutadiene	10	10.4	104				-	70-130	-

Method Blank Summary
Form 4
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Lab Sample ID	: WG1695439-4	**Lab File ID**	: r423916
Instrument ID	: AIRPIANO4		
Matrix	: AIR	**Analysis Date**	: 10/04/22 17:00

Client Sample No.	Lab Sample ID	Analysis Date
WG1695439-3LCS	WG1695439-3	10/04/22 13:45
VE-2-IA	L2253855-02	10/04/22 21:06
DUP-092922	L2253855-03	10/04/22 21:46
VE-1-IA	L2253855-05	10/04/22 22:25
VE-1-IADUP	WG1695439-5	10/04/22 23:04
VE-2	L2253855-01D	10/04/22 23:41
VE-1	L2253855-04D	10/05/22 00:17
VE-1-IA	L2253855-05D	10/05/22 07:40
VE-1-IADUP	WG1695439-5D	10/05/22 08:16

Instrument Performance Check (Tune) Summary
Form 5
Air Volatiles
Bromofluorobenzene (BFB)

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Instrument ID	: AIRPIANO4	**Analysis Date**	: 09/21/22 20:59
Tune Standard	: WG1691174-1	**Tune File ID**	: r423657_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	8.0 - 40.0% of mass 95	12.4
75	30.0 - 66.0% of mass 95	35.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.6 (.8)1
174	50.0 - 120.0% of mass 95	72.8
175	4.0 - 9.0% of mass 174	5.3 (7.2)1
176	93.0 - 101% of mass 174	69.4 (95.3)1
177	5.0 - 9.0% of mass 176	4.6 (6.7)2

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

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

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STD0.2	R1612976-1	R423661	09/21/22 23:28
STD0.5	R1612976-2	R423662	09/22/22 00:08
STD1.0	R1612976-3	R423663	09/22/22 00:49
STD5.0	R1612976-4	R423664	09/22/22 01:29
STD010	R1612976-5	R423665	09/22/22 02:10
STD020	R1612976-6	R423666	09/22/22 02:48
STD050	R1612976-7	R423667	09/22/22 03:28
STD100	R1612976-8	R423668	09/22/22 04:09
ICV Quant	R1612976-9	R423671	09/22/22 10:35

Instrument Performance Check (Tune) Summary
Form 5
Air Volatiles
Bromofluorobenzene (BFB)

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Instrument ID	: AIRPIANO4	**Analysis Date**	: 10/04/22 12:21
Tune Standard	: WG1695439-1	**Tune File ID**	: r423911_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	8.0 - 40.0% of mass 95	13.9
75	30.0 - 66.0% of mass 95	36.1
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.5 (.6)1
174	50.0 - 120.0% of mass 95	74.5
175	4.0 - 9.0% of mass 174	5.3 (7.2)1
176	93.0 - 101% of mass 174	72 (96.7)1
177	5.0 - 9.0% of mass 176	4.7 (6.5)2

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

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

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1695439-2CCAL	WG1695439-2	R423912	10/04/22 13:03
WG1695439-3LCS	WG1695439-3	R423913	10/04/22 13:45
WG1695439-4BLANK	WG1695439-4	R423916	10/04/22 17:00
VE-2-IA	L2253855-02	R423921	10/04/22 21:06
DUP-092922	L2253855-03	R423922	10/04/22 21:46
VE-1-IA	L2253855-05	R423923	10/04/22 22:25
WG1695439-5DUP	WG1695439-5	R423924	10/04/22 23:04
VE-2	L2253855-01D	R423925	10/04/22 23:41
VE-1	L2253855-04D	R423926	10/05/22 00:17
VE-1-IA	L2253855-05D	R423933	10/05/22 07:40
WG1695439-5DUP	WG1695439-5D	R423934	10/05/22 08:16

Internal Standard Area and RT Summary
Form 8a
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Instrument ID	: AIRPIANO4	**Analysis Date**	: 10/04/22 13:03:00
Sample No	: WG1695439-2	**Lab File ID**	: R423912

	Bromochloromethane		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	RT	Area	RT	Area	RT
WG1695439-2	462589	9.45	1229344	11.71	234984	16.45
Upper Limit	647625	9.78	1721082	12.04	328978	16.78
Lower Limit	277553	9.12	737606	11.38	140990	16.12
Sample ID						
WG1695439-3 LCS	479547	9.45	1259040	11.71	243087	16.45
WG1695439-4 BLANK	468822	9.46	1204960	11.71	233128	16.46
VE-2-IA	444578	9.45	1112350	11.71	222941	16.46
DUP-092922	442242	9.45	1127277	11.71	223265	16.46
VE-1-IA	453177	9.46	1153623	11.71	228077	16.46
VE-1-IA DUP	447278	9.46	1140540	11.72	223216	16.46
VE-2	466320	9.45	1187935	11.71	235152	16.46
VE-1	449963	9.46	1153402	11.72	230471	16.46
VE-1-IA	441361	9.46	1126035	11.72	213079	16.46
VE-1-IA DUP	428123	9.47	1074519	11.72	211680	16.44

Area Upper Limit = +40% of internal standard area

Area Lower Limit = - 40% of internal standard area

RT Upper Limit = +0.33 minutes of internal standard RT

RT Lower Limit = -0.33 minutes of internal standard RT

* Values outside of QC limits

Date Created: 02/18/22
Created By: Jason Hebert
File: PM11916-1
Page: 1

Volatile Organics in Air: TO-15 (AIR)

Holding Time: 30 days
Container/Sample Preservation: 1 - Canister - 2.7 Liter

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
1,1,1-Trichloroethane	71-55-6	0.2	0.0501	ppbV	70-130			25	25			
1,1,2,2-Tetrachloroethane	79-34-5	0.2	0.0614	ppbV	70-130			25	25			
1,1,2-Trichloroethane	79-00-5	0.2	0.067	ppbV	70-130			25	25			
1,1-Dichloroethane	75-34-3	0.2	0.0628	ppbV	70-130			25	25			
1,1-Dichloroethene	75-35-4	0.2	0.0643	ppbV	70-130			25	25			
1,2,3-Trimethylbenzene	526-73-8	0.2	0.0576	ppbV	70-130			25	25			
1,2,4-Trichlorobenzene	120-82-1	0.2	0.0674	ppbV	70-130			25	25			
1,2,4-Trimethylbenzene	95-63-6	0.2	0.0368	ppbV	70-130			25	25			
1,2,4,5-Tetramethylbenzene	95-93-2	0.2	0.0604	ppbV	70-130			25	25			
1,2-Dibromoethane	106-93-4	0.2	0.0561	ppbV	70-130			25	25			
1,2-Dichlorobenzene	95-50-1	0.2	0.0628	ppbV	70-130			25	25			
1,2-Dichloroethane	107-06-2	0.2	0.0602	ppbV	70-130			25	25			
1,2-Dichloropropane	78-87-5	0.2	0.061	ppbV	70-130			25	25			
1,3,5-Trimethylbenzene	108-67-8	0.2	0.0675	ppbV	70-130			25	25			
1,3-Butadiene	106-99-0	0.2	0.067	ppbV	70-130			25	25			
1,3-Dichlorobenzene	541-73-1	0.2	0.0627	ppbV	70-130			25	25			
1,4-Dichlorobenzene	106-46-7	0.2	0.0636	ppbV	70-130			25	25			
1,4-Dioxane	123-91-1	0.2	0.0805	ppbV	70-130			25	25			
2,2,4-Trimethylpentane	540-84-1	0.2	0.0361	ppbV	70-130			25	25			
2-Butanone	78-93-3	0.5	0.0482	ppbV	70-130			25	25			
2-Hexanone	591-78-6	0.2	0.0648	ppbV	70-130			25	25			
2-Methylthiophene	554-14-3	0.2	0.0524	ppbV	70-130			25	25			
3-Methylthiophene	616-44-4	0.2	0.0393	ppbV	70-130			25	25			
3-Chloropropene	107-05-1	0.2	0.0585	ppbV	70-130			25	25			
2-Ethylthiophene	872-55-9	0.2	0.0407	ppbV	70-130			25	25			
4-Ethyltoluene	622-96-8	0.2	0.037	ppbV	70-130			25	25			
Acetone	67-64-1	1	0.689	ppbV	40-160			25	25			
Benzene	71-43-2	0.2	0.0487	ppbV	70-130			25	25			
Benzyl chloride	100-44-7	0.2	0.0482	ppbV	70-130			25	25			
Benzothiophene	95-15-8	0.5	0.077	ppbV	70-130			25	25			
Bromodichloromethane	75-27-4	0.2	0.0504	ppbV	70-130			25	25			
Bromoform	75-25-2	0.2	0.0641	ppbV	70-130			25	25			
Bromomethane	74-83-9	0.2	0.0773	ppbV	70-130			25	25			
Carbon disulfide	75-15-0	0.2	0.0559	ppbV	70-130			25	25			
Carbon tetrachloride	56-23-5	0.2	0.0499	ppbV	70-130			25	25			
Chlorobenzene	108-90-7	0.2	0.0624	ppbV	70-130			25	25			
Chloroethane	75-00-3	0.2	0.0805	ppbV	70-130			25	25			
Chloroform	67-66-3	0.2	0.0633	ppbV	70-130			25	25			
Chloromethane	74-87-3	0.2	0.0689	ppbV	70-130			25	25			
cis-1,2-Dichloroethene	156-59-2	0.2	0.117	ppbV	70-130			25	25			
cis-1,3-Dichloropropene	10061-01-5	0.2	0.0409	ppbV	70-130			25	25			
Cyclohexane	110-82-7	0.2	0.0368	ppbV	70-130			25	25			

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
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Volatile Organics in Air: TO-15 (AIR)

Holding Time: 30 days
Container/Sample Preservation: 1 - Canister - 2.7 Liter

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Dibromochloromethane	124-48-1	0.2	0.0614	ppbV	70-130			25	25			
Dichlorodifluoromethane	75-71-8	0.2	0.0583	ppbV	70-130			25	25			
Ethyl Alcohol	64-17-5	5	0.733	ppbV	40-160			25	25			
Ethyl Acetate	141-78-6	0.5	0.122	ppbV	70-130			25	25			
Ethylbenzene	100-41-4	0.2	0.0432	ppbV	70-130			25	25			
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	0.2	0.0656	ppbV	70-130			25	25			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	0.2	0.0591	ppbV	70-130			25	25			
Hexachlorobutadiene	87-68-3	0.2	0.0529	ppbV	70-130			25	25			
iso-Propyl Alcohol	67-63-0	0.5	0.478	ppbV	40-160			25	25			
Methylene chloride	75-09-2	0.5	0.134	ppbV	70-130			25	25			
4-Methyl-2-pentanone	108-10-1	0.5	0.0421	ppbV	70-130			25	25			
Methyl tert butyl ether	1634-04-4	0.2	0.0525	ppbV	70-130			25	25			
Methyl Methacrylate	80-62-6	0.5	0.0697	ppbV	40-160			25	25			
p/m-Xylene	179601-23-1	0.4	0.091	ppbV	70-130			25	25			
o-Xylene	95-47-6	0.2	0.0453	ppbV	70-130			25	25			
Xylene (Total)	1330-20-7	0.2	0.0453	ppbV				25	25			
Heptane	142-82-5	0.2	0.047	ppbV	70-130			25	25			
n-Heptane	142-82-5	0.2	0.047	ppbV	70-130			25	25			
n-Hexane	110-54-3	0.2	0.0364	ppbV	70-130			25	25			
Propylene	115-07-1	0.5	0.0599	ppbV	70-130			25	25			
Styrene	100-42-5	0.2	0.0434	ppbV	70-130			25	25			
Tetrachloroethene	127-18-4	0.2	0.0655	ppbV	70-130			25	25			
Thiophene	110-02-1	0.2	0.0389	ppbV	70-130			25	25			
Tetrahydrofuran	109-99-9	0.5	0.0568	ppbV	70-130			25	25			
Toluene	108-88-3	0.2	0.052	ppbV	70-130			25	25			
trans-1,2-Dichloroethene	156-60-5	0.2	0.0643	ppbV	70-130			25	25			
1,2-Dichloroethene (total)	540-59-0	0.2	0.0643	ppbV				25	25			
trans-1,3-Dichloropropene	10061-02-6	0.2	0.0436	ppbV	70-130			25	25			
1,3-Dichloropropene, Total	542-75-6	0.2	0.0409	ppbV				25	25			
Trichloroethene	79-01-6	0.2	0.0505	ppbV	70-130			25	25			
Trichlorofluoromethane	75-69-4	0.2	0.0686	ppbV	70-130			25	25			
Vinyl acetate	108-05-4	1	0.0479	ppbV	70-130			25	25			
Vinyl bromide	593-60-2	0.2	0.0717	ppbV	70-130			25	25			
Vinyl chloride	75-01-4	0.2	0.0627	ppbV	70-130			25	25			
Naphthalene	91-20-3	0.2	0.0885	ppbV	70-130			25	25			
Total HC As Hexane	NONE	10	0.0364	ppbV	70-130			25	25			
Total VOCs As Toluene	NONE	10	0.052	ppbV	70-130			25	25			
Propane	74-98-6	0.5	0.132	ppbV	70-130			25	25			
Acrylonitrile	107-13-1	0.5	0.0555	ppbV	70-130			25	25			
Acrolein	107-02-8	0.5	0.0596	ppbV	60-113			25	25			
1,1,1,2-Tetrachloroethane	630-20-6	0.2	0.0561	ppbV	70-130			25	25			
Isopropylbenzene	98-82-8	0.2	0.0491	ppbV	70-130			25	25			

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Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Volatile Organics in Air: TO-15 (AIR)

Holding Time: 30 days
Container/Sample Preservation: 1 - Canister - 2.7 Liter

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
1,2,3-Trichloropropane	96-18-4	0.2	0.061	ppbV	70-130			25	25			
Acetonitrile	75-05-8	0.2	0.082	ppbV	70-130			25	25			
Bromobenzene	108-86-1	0.2	0.0613	ppbV	70-130			25	25			
Chlorodifluoromethane	75-45-6	0.2	0.0584	ppbV	70-130			25	25			
Dichlorofluoromethane	75-43-4	0.2	0.0807	ppbV	70-130			25	25			
Dibromomethane	74-95-3	0.2	0.0563	ppbV	70-130			25	25			
Pentane	109-66-0	0.2	0.0659	ppbV	70-130			25	25			
Octane	111-65-9	0.2	0.0445	ppbV	70-130			25	25			
Tertiary-Amyl Methyl Ether	994-05-8	0.2	0.0476	ppbV	70-130			25	25			
o-Chlorotoluene	95-49-8	0.2	0.0486	ppbV	70-130			25	25			
p-Chlorotoluene	106-43-4	0.2	0.056	ppbV	70-130			25	25			
2,2-Dichloropropane	594-20-7	0.2	0.0458	ppbV	70-130			25	25			
1,1-Dichloropropene	563-58-6	0.2	0.0457	ppbV	70-130			25	25			
Isopropyl Ether	108-20-3	0.2	0.0621	ppbV	70-130			25	25			
Ethyl-Tert-Butyl-Ether	637-92-3	0.2	0.0422	ppbV	70-130			25	25			
1,2,3-Trichlorobenzene	87-61-6	0.2	0.0715	ppbV	70-130			25	25			
Ethyl ether	60-29-7	0.2	0.0737	ppbV	70-130			25	25			
n-Butylbenzene	104-51-8	0.2	0.044	ppbV	70-130			25	25			
sec-Butylbenzene	135-98-8	0.2	0.0429	ppbV	70-130			25	25			
tert-Butylbenzene	98-06-6	0.2	0.042	ppbV	70-130			25	25			
1,2-Dibromo-3-chloropropane	96-12-8	0.2	0.0495	ppbV	70-130			25	25			
p-Isopropyltoluene	99-87-6	0.2	0.052	ppbV	70-130			25	25			
n-Propylbenzene	103-65-1	0.2	0.0419	ppbV	70-130			25	25			
1,3-Dichloropropane	142-28-9	0.2	0.106	ppbV	70-130			25	25			
Methanol	67-56-1	5	1.84	ppbV	70-130			25	25			
Acetaldehyde	75-07-0	2.5	0.444	ppbV	70-130			25	25			
Butane	106-97-8	0.2	0.0646	ppbV	70-130			25	25			
Nonane (C9)	111-84-2	0.2	0.0463	ppbV	70-130			25	25			
Decane (C10)	124-18-5	0.2	0.0404	ppbV	70-130			25	25			
Undecane	1120-21-4	0.2	0.0427	ppbV	70-130			25	25			
Indane	496-11-7	0.2	0.0507	ppbV	70-130			25	25			
Indene	95-13-6	0.2	0.0433	ppbV	70-130			25	25			
1-Methylnaphthalene	90-12-0	1	0.466	ppbV	70-130			25	25			
Dodecane (C12)	112-40-3	0.2	0.0658	ppbV	70-130			25	25			
Butyl Acetate	123-86-4	0.5	0.126	ppbV	70-130			25	25			
tert-Butyl Alcohol	75-65-0	0.5	0.0466	ppbV	70-130			25	25			
2-Methylnaphthalene	91-57-6	1	0.393	ppbV	70-130			25	25			
1,2-Dichloroethane-d4	*17060-07-0*									*70-130*		
Toluene-d8	*2037-26-5*									*70-130*		
Bromofluorobenzene	*460-00-4*									*70-130*		

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

Volatiles Sample Data

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	Lab Number	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	Project Number	: 2546.0007Y002
Lab ID	: L2253855-01D	Date Collected	: 09/29/22 12:05
Client ID	: VE-2	Date Received	: 09/29/22
Sample Location	: YONKERS, NY	Date Analyzed	: 10/04/22 23:41
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 67.2
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R423925	Instrument ID	: AIRPIANO4
Sample Amount	: 3.72 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	ND	13.4	--	ND	66.3	--	U
74-87-3	Chloromethane	ND	13.4	--	ND	27.7	--	U
76-14-2	Freon-114	ND	13.4	--	ND	93.7	--	U
75-01-4	Vinyl chloride	ND	13.4	--	ND	34.3	--	U
106-99-0	1,3-Butadiene	ND	13.4	--	ND	29.6	--	U
74-83-9	Bromomethane	ND	13.4	--	ND	52.0	--	U
75-00-3	Chloroethane	ND	13.4	--	ND	35.4	--	U
64-17-5	Ethanol	1210	336	--	2280	633	--	
593-60-2	Vinyl bromide	ND	13.4	--	ND	58.6	--	U
67-64-1	Acetone	90.0	67.2	--	214	160	--	
75-69-4	Trichlorofluoromethane	ND	13.4	--	ND	75.3	--	U
67-63-0	Isopropanol	ND	33.6	--	ND	82.6	--	U
75-35-4	1,1-Dichloroethene	ND	13.4	--	ND	53.1	--	U
75-65-0	Tertiary butyl Alcohol	ND	33.6	--	ND	102.	--	U
75-09-2	Methylene chloride	ND	33.6	--	ND	117.	--	U
107-05-1	3-Chloropropene	ND	13.4	--	ND	41.9	--	U
75-15-0	Carbon disulfide	ND	13.4	--	ND	41.7	--	U
76-13-1	Freon-113	ND	13.4	--	ND	103.	--	U
156-60-5	trans-1,2-Dichloroethene	ND	13.4	--	ND	53.1	--	U
75-34-3	1,1-Dichloroethane	ND	13.4	--	ND	54.2	--	U
1634-04-4	Methyl tert butyl ether	ND	13.4	--	ND	48.3	--	U
78-93-3	2-Butanone	88.8	33.6	--	262	99.1	--	
156-59-2	cis-1,2-Dichloroethene	25.0	13.4	--	99.1	53.1	--	
141-78-6	Ethyl Acetate	ND	33.6	--	ND	121.	--	U
67-66-3	Chloroform	ND	13.4	--	ND	65.4	--	U
109-99-9	Tetrahydrofuran	ND	33.6	--	ND	99.1	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	Lab Number	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	Project Number	: 2546.0007Y002
Lab ID	: L2253855-01D	Date Collected	: 09/29/22 12:05
Client ID	: VE-2	Date Received	: 09/29/22
Sample Location	: YONKERS, NY	Date Analyzed	: 10/04/22 23:41
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 67.2
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R423925	Instrument ID	: AIRPIANO4
Sample Amount	: 3.72 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
107-06-2	1,2-Dichloroethane	ND	13.4	--	ND	54.2	--	U
110-54-3	n-Hexane	ND	13.4	--	ND	47.2	--	U
71-55-6	1,1,1-Trichloroethane	ND	13.4	--	ND	73.1	--	U
71-43-2	Benzene	ND	13.4	--	ND	42.8	--	U
56-23-5	Carbon tetrachloride	ND	13.4	--	ND	84.3	--	U
110-82-7	Cyclohexane	ND	13.4	--	ND	46.1	--	U
78-87-5	1,2-Dichloropropane	ND	13.4	--	ND	61.9	--	U
75-27-4	Bromodichloromethane	ND	13.4	--	ND	89.8	--	U
123-91-1	1,4-Dioxane	ND	13.4	--	ND	48.3	--	U
79-01-6	Trichloroethene	30.3	13.4	--	163	72.0	--	
540-84-1	2,2,4-Trimethylpentane	ND	13.4	--	ND	62.6	--	U
142-82-5	Heptane	ND	13.4	--	ND	54.9	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	13.4	--	ND	60.8	--	U
108-10-1	4-Methyl-2-pentanone	ND	33.6	--	ND	138.	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	13.4	--	ND	60.8	--	U
79-00-5	1,1,2-Trichloroethane	ND	13.4	--	ND	73.1	--	U
108-88-3	Toluene	ND	13.4	--	ND	50.5	--	U
591-78-6	2-Hexanone	ND	13.4	--	ND	54.9	--	U
124-48-1	Dibromochloromethane	ND	13.4	--	ND	114.	--	U
106-93-4	1,2-Dibromoethane	ND	13.4	--	ND	103.	--	U
127-18-4	Tetrachloroethene	3360	13.4	--	22800	90.9	--	
108-90-7	Chlorobenzene	ND	13.4	--	ND	61.7	--	U
100-41-4	Ethylbenzene	ND	13.4	--	ND	58.2	--	U
179601-23-1	p/m-Xylene	ND	26.9	--	ND	117.	--	U
75-25-2	Bromoform	ND	13.4	--	ND	139.	--	U
100-42-5	Styrene	ND	13.4	--	ND	57.1	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Lab ID	: L2253855-01D	**Date Collected**	: 09/29/22 12:05
Client ID	: VE-2	**Date Received**	: 09/29/22
Sample Location	: YONKERS, NY	**Date Analyzed**	: 10/04/22 23:41
Sample Matrix	: SOIL_VAPOR	**Dilution Factor**	: 67.2
Analytical Method	: 48,TO-15	**Analyst**	: TJS
Lab File ID	: R423925	**Instrument ID**	: AIRPIANO4
Sample Amount	: 3.72 ml	**GC Column**	: RTX-1

		ppbV			ug/m3			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**
79-34-5	1,1,2,2-Tetrachloroethane	ND	13.4	--	ND	92.0	--	U
95-47-6	o-Xylene	ND	13.4	--	ND	58.2	--	U
622-96-8	4-Ethyltoluene	ND	13.4	--	ND	65.9	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	13.4	--	ND	65.9	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	13.4	--	ND	65.9	--	U
100-44-7	Benzyl chloride	ND	13.4	--	ND	69.4	--	U
541-73-1	1,3-Dichlorobenzene	ND	13.4	--	ND	80.6	--	U
106-46-7	1,4-Dichlorobenzene	ND	13.4	--	ND	80.6	--	U
95-50-1	1,2-Dichlorobenzene	ND	13.4	--	ND	80.6	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	13.4	--	ND	99.5	--	U
87-68-3	Hexachlorobutadiene	ND	13.4	--	ND	143.	--	U

Results Summary
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Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	Lab Number	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	Project Number	: 2546.0007Y002
Lab ID	: L2253855-02	Date Collected	: 09/29/22 12:10
Client ID	: VE-2-IA	Date Received	: 09/29/22
Sample Location	: YONKERS, NY	Date Analyzed	: 10/04/22 21:06
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R423921	Instrument ID	: AIRPIANO4
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.583	0.200	--	2.88	0.989	--	
74-87-3	Chloromethane	0.596	0.200	--	1.23	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	125	5.00	--	236	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	7.40	1.00	--	17.6	2.38	--	
75-69-4	Trichlorofluoromethane	0.473	0.200	--	2.66	1.12	--	
67-63-0	Isopropanol	50.4	0.500	--	124	1.23	--	
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	ND	0.200	--	ND	0.705	--	U
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	Lab Number	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	Project Number	: 2546.0007Y002
Lab ID	: L2253855-02	Date Collected	: 09/29/22 12:10
Client ID	: VE-2-IA	Date Received	: 09/29/22
Sample Location	: YONKERS, NY	Date Analyzed	: 10/04/22 21:06
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R423921	Instrument ID	: AIRPIANO4
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	0.630	0.200	--	2.37	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	ND	0.400	--	ND	1.74	--	U
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	0.368	0.200	--	1.57	0.852	--	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	ND	0.200	--	ND	0.869	--	U
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Lab ID	: L2253855-02	**Date Collected**	: 09/29/22 12:10
Client ID	: VE-2-IA	**Date Received**	: 09/29/22
Sample Location	: YONKERS, NY	**Date Analyzed**	: 10/04/22 21:06
Sample Matrix	: AIR	**Dilution Factor**	: 1
Analytical Method	: 48,TO-15	**Analyst**	: TJS
Lab File ID	: R423921	**Instrument ID**	: AIRPIANO4
Sample Amount	: 250 ml	**GC Column**	: RTX-1

		ppbV			ug/m3			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	Lab Number	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	Project Number	: 2546.0007Y002
Lab ID	: L2253855-03	Date Collected	: 09/29/22 12:11
Client ID	: DUP-092922	Date Received	: 09/29/22
Sample Location	: YONKERS, NY	Date Analyzed	: 10/04/22 21:46
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R423922	Instrument ID	: AIRPIANO4
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.595	0.200	--	2.94	0.989	--	
74-87-3	Chloromethane	0.629	0.200	--	1.30	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	146	5.00	--	275	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	7.76	1.00	--	18.4	2.38	--	
75-69-4	Trichlorofluoromethane	0.495	0.200	--	2.78	1.12	--	
67-63-0	Isopropanol	50.7	0.500	--	125	1.23	--	
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	ND	0.200	--	ND	0.705	--	U
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	Lab Number	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	Project Number	: 2546.0007Y002
Lab ID	: L2253855-03	Date Collected	: 09/29/22 12:11
Client ID	: DUP-092922	Date Received	: 09/29/22
Sample Location	: YONKERS, NY	Date Analyzed	: 10/04/22 21:46
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R423922	Instrument ID	: AIRPIANO4
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	0.640	0.200	--	2.41	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	ND	0.400	--	ND	1.74	--	U
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	0.392	0.200	--	1.67	0.852	--	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	0.205	0.200	--	0.890	0.869	--	
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Lab ID	: L2253855-03	**Date Collected**	: 09/29/22 12:11
Client ID	: DUP-092922	**Date Received**	: 09/29/22
Sample Location	: YONKERS, NY	**Date Analyzed**	: 10/04/22 21:46
Sample Matrix	: AIR	**Dilution Factor**	: 1
Analytical Method	: 48,TO-15	**Analyst**	: TJS
Lab File ID	: R423922	**Instrument ID**	: AIRPIANO4
Sample Amount	: 250 ml	**GC Column**	: RTX-1

		ppbV			ug/m3			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	Lab Number	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	Project Number	: 2546.0007Y002
Lab ID	: L2253855-04D	Date Collected	: 09/29/22 12:40
Client ID	: VE-1	Date Received	: 09/29/22
Sample Location	: YONKERS, NY	Date Analyzed	: 10/05/22 00:17
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 2.5
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R423926	Instrument ID	: AIRPIANO4
Sample Amount	: 100 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.535	0.500	--	2.65	2.47	--	
74-87-3	Chloromethane	0.600	0.500	--	1.24	1.03	--	
76-14-2	Freon-114	ND	0.500	--	ND	3.49	--	U
75-01-4	Vinyl chloride	ND	0.500	--	ND	1.28	--	U
106-99-0	1,3-Butadiene	ND	0.500	--	ND	1.11	--	U
74-83-9	Bromomethane	ND	0.500	--	ND	1.94	--	U
75-00-3	Chloroethane	ND	0.500	--	ND	1.32	--	U
64-17-5	Ethanol	240	12.5	--	452	23.6	--	
593-60-2	Vinyl bromide	ND	0.500	--	ND	2.19	--	U
67-64-1	Acetone	106	2.50	--	252	5.94	--	
75-69-4	Trichlorofluoromethane	ND	0.500	--	ND	2.81	--	U
67-63-0	Isopropanol	5.78	1.25	--	14.2	3.07	--	
75-35-4	1,1-Dichloroethene	ND	0.500	--	ND	1.98	--	U
75-65-0	Tertiary butyl Alcohol	1.50	1.25	--	4.55	3.79	--	
75-09-2	Methylene chloride	ND	1.25	--	ND	4.34	--	U
107-05-1	3-Chloropropene	ND	0.500	--	ND	1.57	--	U
75-15-0	Carbon disulfide	ND	0.500	--	ND	1.56	--	U
76-13-1	Freon-113	ND	0.500	--	ND	3.83	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.500	--	ND	1.98	--	U
75-34-3	1,1-Dichloroethane	ND	0.500	--	ND	2.02	--	U
1634-04-4	Methyl tert butyl ether	ND	0.500	--	ND	1.80	--	U
78-93-3	2-Butanone	123	1.25	--	363	3.69	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.500	--	ND	1.98	--	U
141-78-6	Ethyl Acetate	ND	1.25	--	ND	4.50	--	U
67-66-3	Chloroform	ND	0.500	--	ND	2.44	--	U
109-99-9	Tetrahydrofuran	ND	1.25	--	ND	3.69	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	Lab Number	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	Project Number	: 2546.0007Y002
Lab ID	: L2253855-04D	Date Collected	: 09/29/22 12:40
Client ID	: VE-1	Date Received	: 09/29/22
Sample Location	: YONKERS, NY	Date Analyzed	: 10/05/22 00:17
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 2.5
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R423926	Instrument ID	: AIRPIANO4
Sample Amount	: 100 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
107-06-2	1,2-Dichloroethane	ND	0.500	--	ND	2.02	--	U
110-54-3	n-Hexane	ND	0.500	--	ND	1.76	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.500	--	ND	2.73	--	U
71-43-2	Benzene	ND	0.500	--	ND	1.60	--	U
56-23-5	Carbon tetrachloride	ND	0.500	--	ND	3.15	--	U
110-82-7	Cyclohexane	ND	0.500	--	ND	1.72	--	U
78-87-5	1,2-Dichloropropane	ND	0.500	--	ND	2.31	--	U
75-27-4	Bromodichloromethane	ND	0.500	--	ND	3.35	--	U
123-91-1	1,4-Dioxane	ND	0.500	--	ND	1.80	--	U
79-01-6	Trichloroethene	ND	0.500	--	ND	2.69	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.500	--	ND	2.34	--	U
142-82-5	Heptane	ND	0.500	--	ND	2.05	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.500	--	ND	2.27	--	U
108-10-1	4-Methyl-2-pentanone	ND	1.25	--	ND	5.12	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.500	--	ND	2.27	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.500	--	ND	2.73	--	U
108-88-3	Toluene	ND	0.500	--	ND	1.88	--	U
591-78-6	2-Hexanone	7.24	0.500	--	29.7	2.05	--	
124-48-1	Dibromochloromethane	ND	0.500	--	ND	4.26	--	U
106-93-4	1,2-Dibromoethane	ND	0.500	--	ND	3.84	--	U
127-18-4	Tetrachloroethene	18.3	0.500	--	124	3.39	--	
108-90-7	Chlorobenzene	ND	0.500	--	ND	2.30	--	U
100-41-4	Ethylbenzene	ND	0.500	--	ND	2.17	--	U
179601-23-1	p/m-Xylene	ND	1.00	--	ND	4.34	--	U
75-25-2	Bromoform	ND	0.500	--	ND	5.17	--	U
100-42-5	Styrene	ND	0.500	--	ND	2.13	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Lab ID	: L2253855-04D	**Date Collected**	: 09/29/22 12:40
Client ID	: VE-1	**Date Received**	: 09/29/22
Sample Location	: YONKERS, NY	**Date Analyzed**	: 10/05/22 00:17
Sample Matrix	: SOIL_VAPOR	**Dilution Factor**	: 2.5
Analytical Method	: 48,TO-15	**Analyst**	: TJS
Lab File ID	: R423926	**Instrument ID**	: AIRPIANO4
Sample Amount	: 100 ml	**GC Column**	: RTX-1

		ppbV			ug/m3			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.500	--	ND	3.43	--	U
95-47-6	o-Xylene	ND	0.500	--	ND	2.17	--	U
622-96-8	4-Ethyltoluene	ND	0.500	--	ND	2.46	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.500	--	ND	2.46	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.500	--	ND	2.46	--	U
100-44-7	Benzyl chloride	ND	0.500	--	ND	2.59	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.500	--	ND	3.01	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.500	--	ND	3.01	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.500	--	ND	3.01	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.500	--	ND	3.71	--	U
87-68-3	Hexachlorobutadiene	ND	0.500	--	ND	5.33	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	Lab Number	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	Project Number	: 2546.0007Y002
Lab ID	: L2253855-05	Date Collected	: 09/29/22 13:19
Client ID	: VE-1-IA	Date Received	: 09/29/22
Sample Location	: YONKERS, NY	Date Analyzed	: 10/04/22 22:25
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R423923	Instrument ID	: AIRPIANO4
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.555	0.200	--	2.74	0.989	--	
74-87-3	Chloromethane	0.567	0.200	--	1.17	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	1030	5.00	--	1940	9.42	--	E
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	3.54	1.00	--	8.41	2.38	--	
75-69-4	Trichlorofluoromethane	0.321	0.200	--	1.80	1.12	--	
67-63-0	Isopropanol	16.0	0.500	--	39.3	1.23	--	
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
141-78-6	Ethyl Acetate	0.519	0.500	--	1.87	1.80	--	
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	ND	0.200	--	ND	0.705	--	U
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Lab ID	: L2253855-05	**Date Collected**	: 09/29/22 13:19
Client ID	: VE-1-IA	**Date Received**	: 09/29/22
Sample Location	: YONKERS, NY	**Date Analyzed**	: 10/04/22 22:25
Sample Matrix	: AIR	**Dilution Factor**	: 1
Analytical Method	: 48,TO-15	**Analyst**	: TJS
Lab File ID	: R423923	**Instrument ID**	: AIRPIANO4
Sample Amount	: 250 ml	**GC Column**	: RTX-1

		ppbV			ug/m3			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	ND	0.200	--	ND	0.754	--	U
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	ND	0.400	--	ND	1.74	--	U
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	ND	0.200	--	ND	0.869	--	U
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Lab ID	: L2253855-05	**Date Collected**	: 09/29/22 13:19
Client ID	: VE-1-IA	**Date Received**	: 09/29/22
Sample Location	: YONKERS, NY	**Date Analyzed**	: 10/04/22 22:25
Sample Matrix	: AIR	**Dilution Factor**	: 1
Analytical Method	: 48,TO-15	**Analyst**	: TJS
Lab File ID	: R423923	**Instrument ID**	: AIRPIANO4
Sample Amount	: 250 ml	**GC Column**	: RTX-1

		ppbV			ug/m3			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Lab ID	: L2253855-05D	**Date Collected**	: 09/29/22 13:19
Client ID	: VE-1-IA	**Date Received**	: 09/29/22
Sample Location	: YONKERS, NY	**Date Analyzed**	: 10/05/22 07:40
Sample Matrix	: AIR	**Dilution Factor**	: 5
Analytical Method	: 48,TO-15	**Analyst**	: TJS
Lab File ID	: R423933	**Instrument ID**	: AIRPIANO4
Sample Amount	: 50.0 ml	**GC Column**	: RTX-1

		ppbV			ug/m3			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**
64-17-5	Ethanol	1370	25.0	--	2580	47.1	--	

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	Lab Number	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	Project Number	: 2546.0007Y002
Lab ID	: WG1695439-4	Date Collected	: NA
Client ID	: WG1695439-4BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 10/04/22 17:00
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R423916	Instrument ID	: AIRPIANO4
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
115-07-1	Propylene	ND	0.500	--	ND	0.861	--	U
75-71-8	Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--	U
74-87-3	Chloromethane	ND	0.200	--	ND	0.413	--	U
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	ND	5.00	--	ND	9.42	--	U
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	ND	1.00	--	ND	2.38	--	U
75-69-4	Trichlorofluoromethane	ND	0.200	--	ND	1.12	--	U
67-63-0	Isopropanol	ND	0.500	--	ND	1.23	--	U
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
108-05-4	Vinyl acetate	ND	1.00	--	ND	3.52	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	Lab Number	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	Project Number	: 2546.0007Y002
Lab ID	: WG1695439-4	Date Collected	: NA
Client ID	: WG1695439-4BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 10/04/22 17:00
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R423916	Instrument ID	: AIRPIANO4
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	ND	0.200	--	ND	0.705	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	U
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
79-01-6	Trichloroethene	ND	0.200	--	ND	1.07	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	ND	0.200	--	ND	0.754	--	U
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	ND	0.200	--	ND	1.36	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	ND	0.400	--	ND	1.74	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Lab ID	: WG1695439-4	**Date Collected**	: NA
Client ID	: WG1695439-4BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 10/04/22 17:00
Sample Matrix	: AIR	**Dilution Factor**	: 1
Analytical Method	: 48,TO-15	**Analyst**	: TJS
Lab File ID	: R423916	**Instrument ID**	: AIRPIANO4
Sample Amount	: 250 ml	**GC Column**	: RTX-1

		ppbV			ug/m3			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	ND	0.200	--	ND	0.869	--	U
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	Lab Number	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	Project Number	: 2546.0007Y002
Lab ID	: WG1695439-5	Date Collected	: 09/29/22 13:19
Client ID	: VE-1-IADUP	Date Received	: 09/29/22
Sample Location	:	Date Analyzed	: 10/04/22 23:04
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R423924	Instrument ID	: AIRPIANO4
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.550	0.200	--	2.72	0.989	--	
74-87-3	Chloromethane	0.560	0.200	--	1.16	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	993	5.00	--	1870E	9.42	--	E
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	3.52	1.00	--	8.36	2.38	--	
75-69-4	Trichlorofluoromethane	0.311	0.200	--	1.75	1.12	--	
67-63-0	Isopropanol	15.9	0.500	--	39.1	1.23	--	
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
141-78-6	Ethyl Acetate	0.504	0.500	--	1.82	1.80	--	
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	ND	0.200	--	ND	0.705	--	U
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	Lab Number	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	Project Number	: 2546.0007Y002
Lab ID	: WG1695439-5	Date Collected	: 09/29/22 13:19
Client ID	: VE-1-IADUP	Date Received	: 09/29/22
Sample Location	:	Date Analyzed	: 10/04/22 23:04
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R423924	Instrument ID	: AIRPIANO4
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	ND	0.200	--	ND	0.754	--	U
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	ND	0.400	--	ND	1.74	--	U
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	ND	0.200	--	ND	0.869	--	U
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Lab ID	: WG1695439-5	**Date Collected**	: 09/29/22 13:19
Client ID	: VE-1-IADUP	**Date Received**	: 09/29/22
Sample Location	:	**Date Analyzed**	: 10/04/22 23:04
Sample Matrix	: AIR	**Dilution Factor**	: 1
Analytical Method	: 48,TO-15	**Analyst**	: TJS
Lab File ID	: R423924	**Instrument ID**	: AIRPIANO4
Sample Amount	: 250 ml	**GC Column**	: RTX-1

		ppbV			ug/m3			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Lab ID	: WG1695439-5D	**Date Collected**	: 09/29/22 13:19
Client ID	: VE-1-IADUP	**Date Received**	: 09/29/22
Sample Location	:	**Date Analyzed**	: 10/05/22 08:16
Sample Matrix	: AIR	**Dilution Factor**	: 5
Analytical Method	: 48,TO-15	**Analyst**	: TJS
Lab File ID	: R423934	**Instrument ID**	: AIRPIANO4
Sample Amount	: 50.0 ml	**GC Column**	: RTX-1

		ppbV			ug/m3			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**
64-17-5	Ethanol	1420	25.0	--	2680	47.1	--	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423921.D
Acq On : 4 Oct 2022 9:06 PM
Operator : AIRPIANO4:TJS
Sample : L2253855-02,3,250,250
Misc : WG1695439,ICAL19361
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 05 15:17:03 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004T\r423912.D
Sub List : TO15-NY-7-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.450	49	444578	10.000	ppbV	#-0.03
Standard Area = 462589			Recovery =	96.11%		
43) 1,4-difluorobenzene	11.713	114	1112350	10.000	ppbV	-0.03
Standard Area = 1229344			Recovery =	90.48%		
67) chlorobenzene-D5	16.458	54	222941	10.000	ppbV	-0.02
Standard Area = 234984			Recovery =	94.87%		
System Monitoring Compounds						
Target Compounds						Qvalue
5) dichlorodifluoromethane	3.958	85	21285	0.583	ppbV	97
6) chloromethane	4.132	50	9393	0.596	ppbV	100
7) Freon-114	4.258		0	N.D.		
10) 1,3-butadiene	0.000		0	N.D.		
13) bromomethane	0.000		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	5.242	31	1625487	125.405	ppbV	94
17) vinyl bromide	0.000		0	N.D.		
19) acetone	5.807	43	173965M6	7.400	ppbV	
21) trichlorofluoromethane	5.997	101	13323	0.473	ppbV	100
22) isopropyl alcohol	6.127	45	1673476	50.436	ppbV	100
27) tertiary butyl alcohol	6.876	59	3164	0.064	ppbV #	70
28) methylene chloride	6.924	49	6219	0.252	ppbV	96
29) 3-chloropropene	0.000		0	N.D.		
30) carbon disulfide	7.212		0	N.D.		
31) Freon 113	7.248	101	2267	0.056	ppbV #	92
32) trans-1,2-dichloroethene	0.000		0	N.D.		
33) 1,1-dichloroethane	0.000		0	N.D.		
34) MTBE	0.000		0	N.D.		
36) 2-butanone	8.775	43	22842	0.445	ppbV	99
38) Ethyl Acetate	9.575	61	2090M6	0.218	ppbV	
39) chloroform	9.617	83	2149	0.053	ppbV #	96
40) Tetrahydrofuran	10.092	42	2220	0.066	ppbV	94
42) 1,2-dichloroethane	10.467	62	4845	0.176	ppbV	96
44) hexane	9.525	57	1756	0.039	ppbV #	59
50) benzene	11.280	78	4196	0.054	ppbV #	86
53) cyclohexane	11.593	56	4506	0.094	ppbV #	93

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423921.D
Acq On : 4 Oct 2022 9:06 PM
Operator : AIRPIANO4:TJS
Sample : L2253855-02,3,250,250
Misc : WG1695439,ICAL19361
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 05 15:17:03 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004T\r423912.D
Sub List : TO15-NY-7-SIM - .

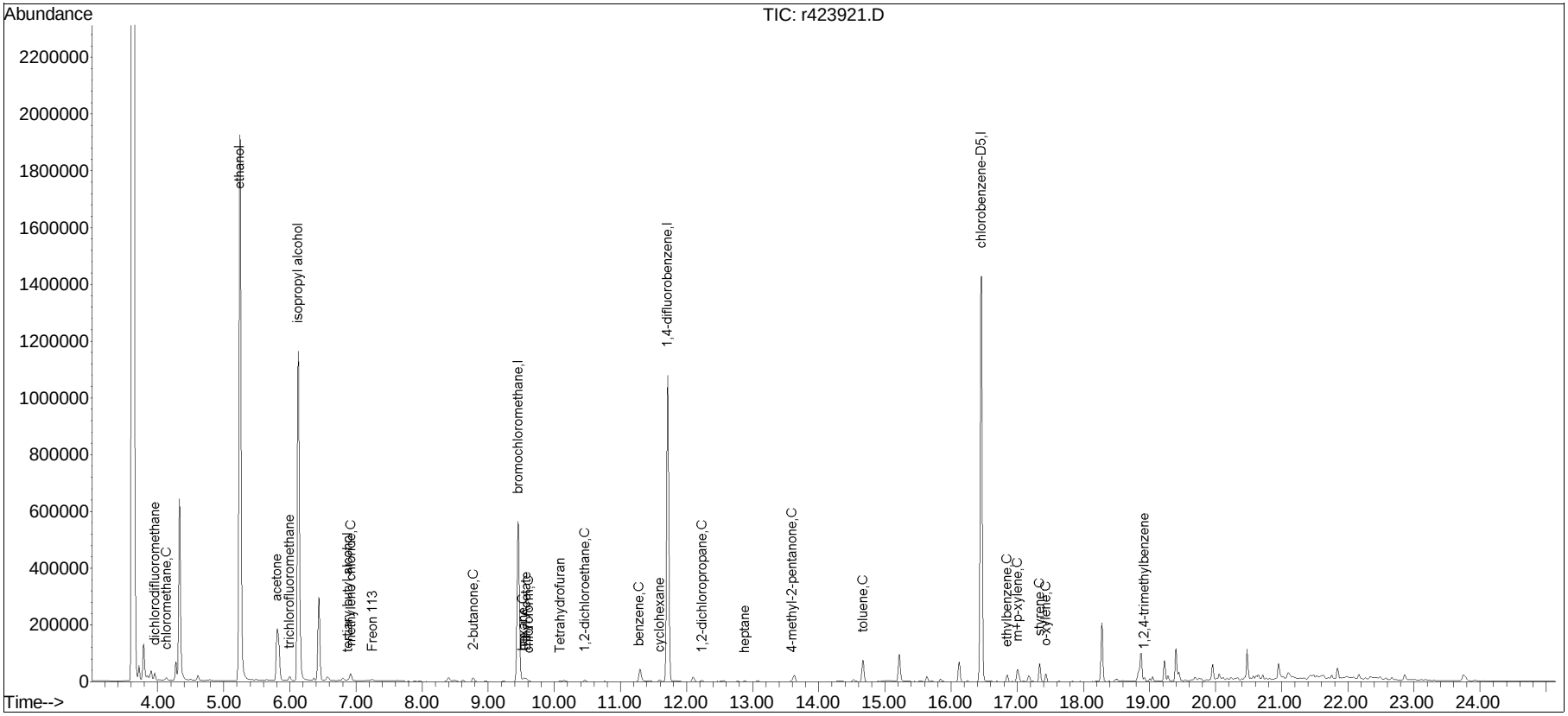
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
56) 1,2-dichloropropane	12.233	63	2675	0.098	ppbV #	86
57) bromodichloromethane	0.000		0	N.D.		
58) 1,4-dioxane	0.000		0	N.D.		
60) 2,2,4-trimethylpentane	12.560		0	N.D.		
62) heptane	12.880	43	2192	0.046	ppbV #	81
63) cis-1,3-dichloropropene	0.000		0	N.D.		
64) 4-methyl-2-pentanone	13.592	43	3127	0.059	ppbV #	87
65) trans-1,3-dichloropropene	0.000		0	N.D.		
66) 1,1,2-trichloroethane	0.000		0	N.D.		
68) toluene	14.667	91	68731	0.630	ppbV	100
72) 2-hexanone	14.983		0	N.D.		
74) dibromochloromethane	0.000		0	N.D.		
75) 1,2-dibromoethane	0.000		0	N.D.		
80) chlorobenzene	16.500		0	N.D.		
81) ethylbenzene	16.850	91	20378	0.162	ppbV	95
83) m+p-xylene	17.008	91	37599	0.371	ppbV	95
84) bromoform	0.000		0	N.D.		
85) styrene	17.342	104	28619	0.368	ppbV	98
86) 1,1,2,2-tetrachloroethane	0.000		0	N.D.		
87) o-xylene	17.433	91	19283	0.194	ppbV	94
96) 4-ethyl toluene	18.508		0	N.D.		
97) 1,3,5-trimethylbenzene	18.575		0	N.D.		
99) 1,2,4-trimethylbenzene	18.925	105	7938	0.075	ppbV #	45
101) Benzyl Chloride	18.925		0	N.D.		
102) 1,3-dichlorobenzene	19.117		0	N.D.		
103) 1,4-dichlorobenzene	19.117		0	N.D.		
107) 1,2-dichlorobenzene	19.408		0	N.D.		
115) 1,2,4-trichlorobenzene	20.900		0	N.D.		
119) hexachlorobutadiene	21.333		0	N.D.		

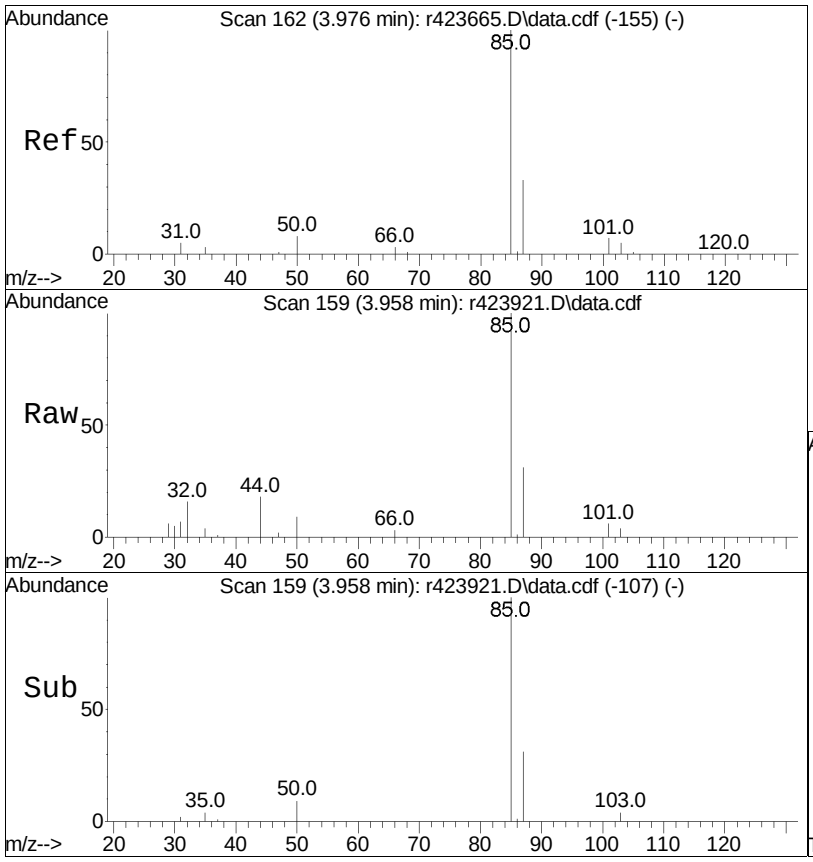
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : TO15-NY-7-SIM - .\Airpiano4\2022\10\1004T\r423912.D

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423921.D
Acq On : 4 Oct 2022 9:06 PM
Operator : AIRPIANO4:TJS
Sample : L2253855-02,3,250,250
Misc : WG1695439,ICAL19361
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 05 15:17:03 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

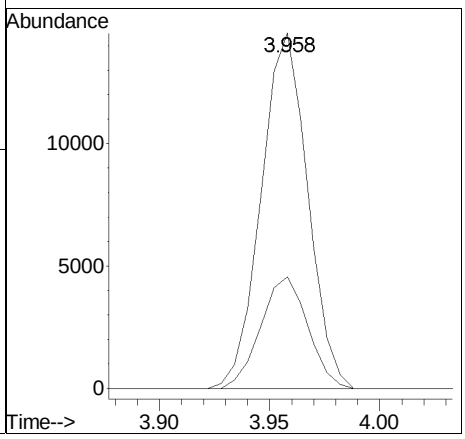


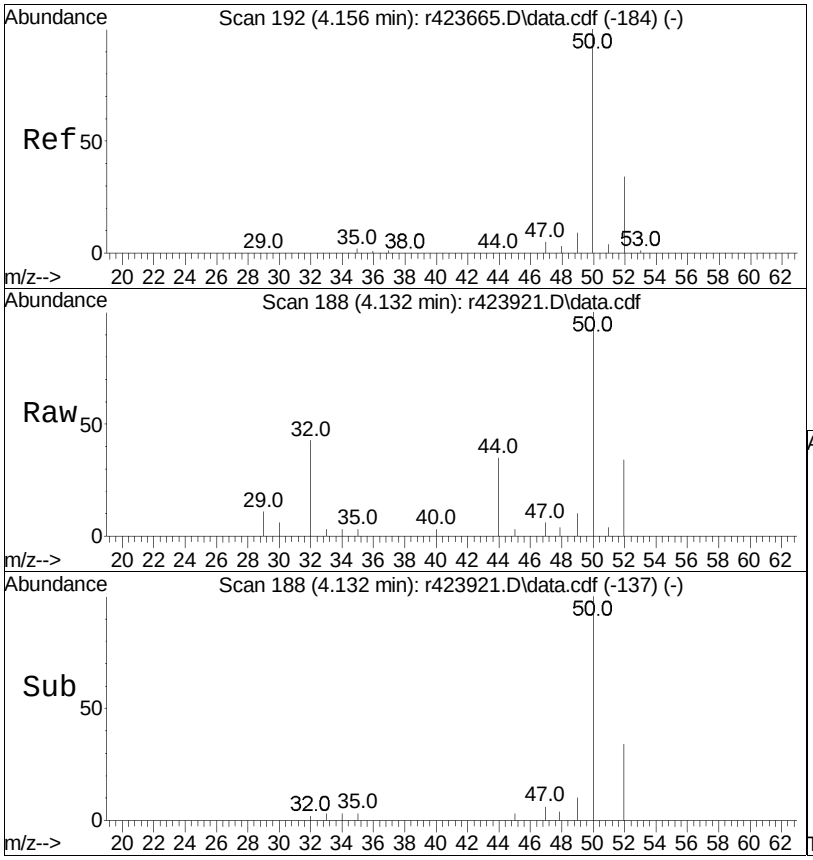


#5
dichlorodifluoromethane
Concen: 0.58 ppbV
RT: 3.958 min Scan# 159
Delta R.T. -0.018 min
Lab File: r423921.D
Acq: 4 Oct 2022 9:06 PM

Tgt Ion: 85 Resp: 21285

Ion	Ratio	Lower	Upper
85	100		
87	31.4	26.3	39.5

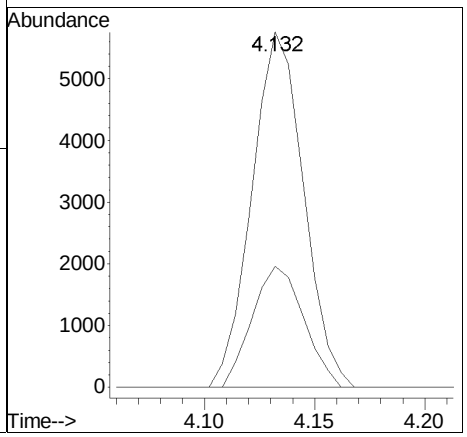


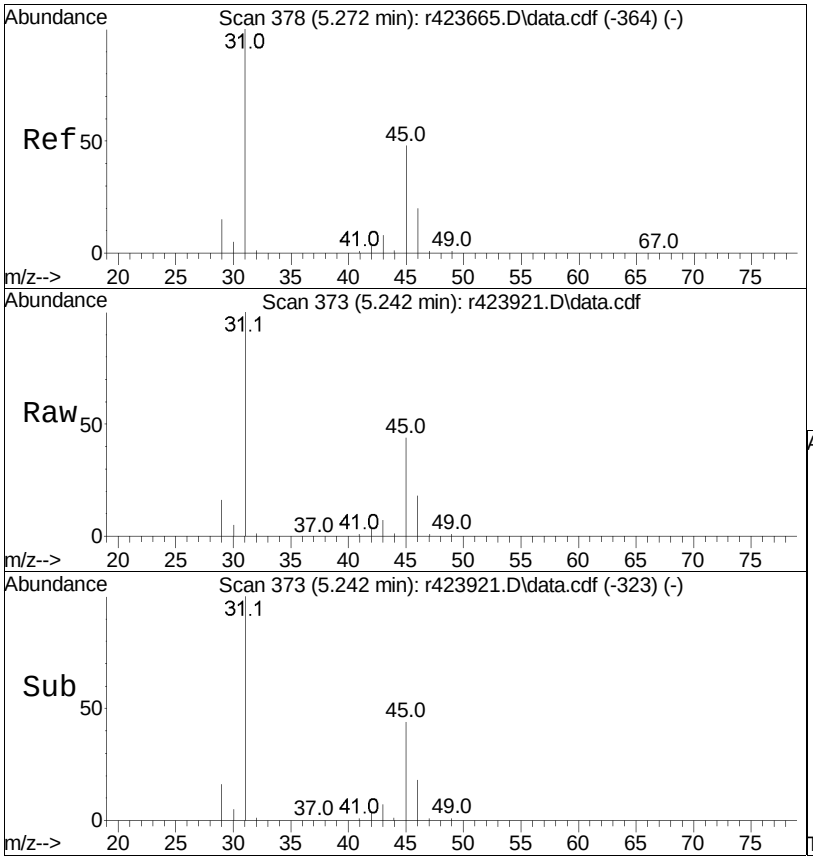


#6
chloromethane
Concen: 0.60 ppbV
RT: 4.132 min Scan# 188
Delta R.T. -0.024 min
Lab File: r423921.D
Acq: 4 Oct 2022 9:06 PM

Tgt Ion: 50 Resp: 9393

Ion	Ratio	Lower	Upper
50	100		
52	34.1	27.0	40.6

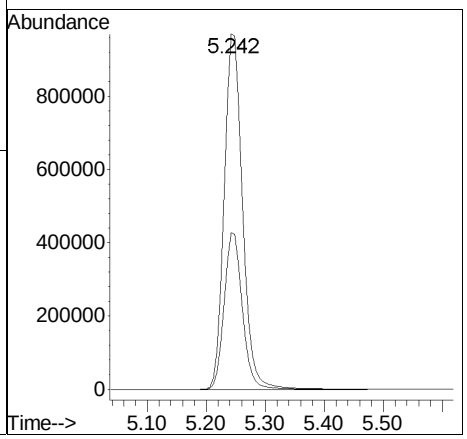


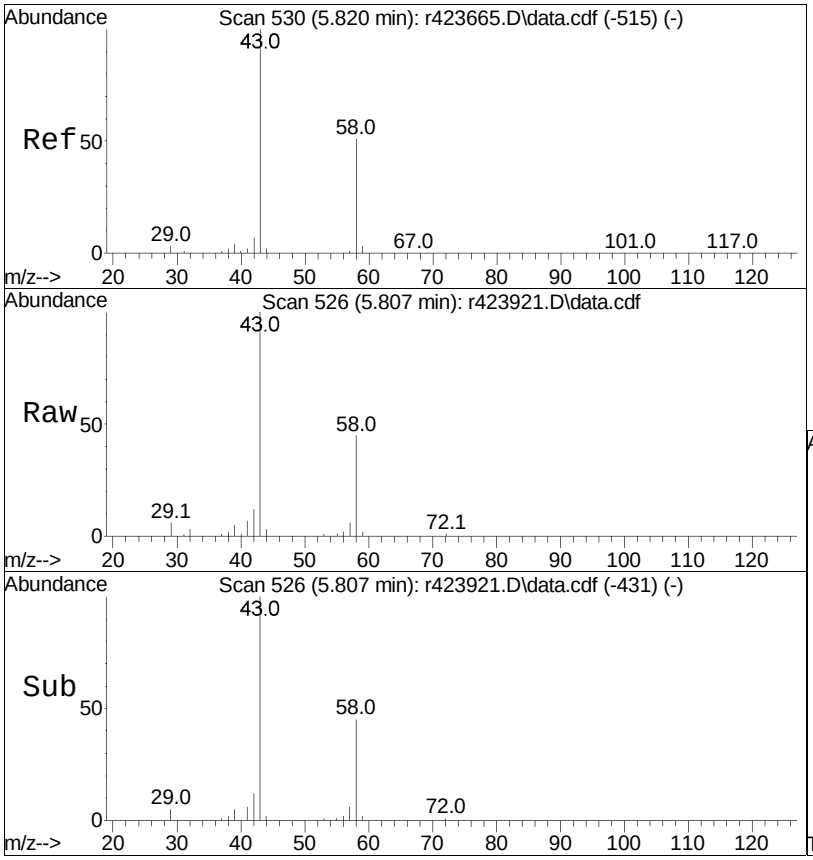


#15
ethanol
Concen: 125.41 ppbV
RT: 5.242 min Scan# 373
Delta R.T. -0.030 min
Lab File: r423921.D
Acq: 4 Oct 2022 9:06 PM

Tgt Ion: 31 Resp: 1625487

Ion	Ratio	Lower	Upper
31	100		
45	44.1	38.3	57.5

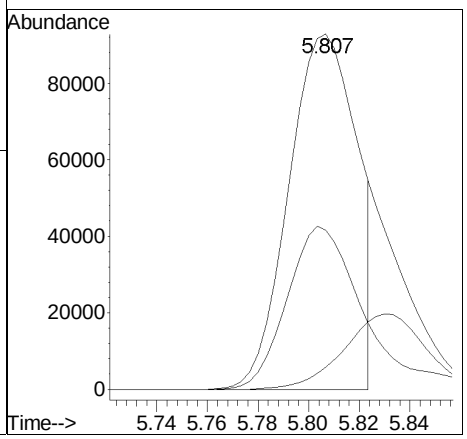


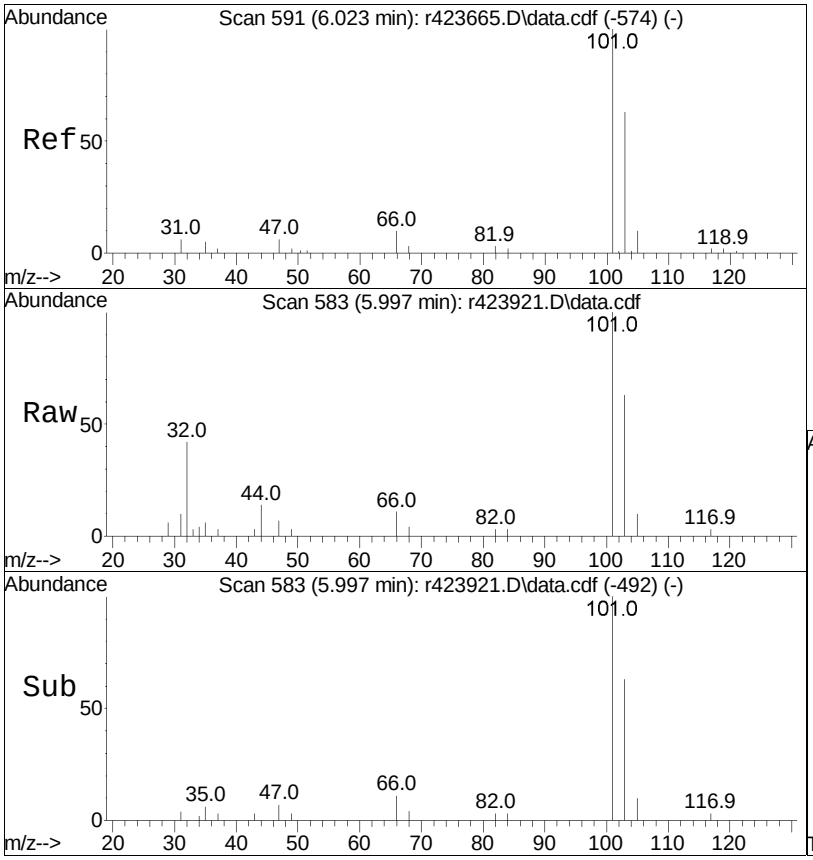


#19
acetone
Concen: 7.40 ppbV m
RT: 5.807 min Scan# 526
Delta R.T. -0.013 min
Lab File: r423921.D
Acq: 4 Oct 2022 9:06 PM

Tgt Ion: 43 Resp: 173965

Ion	Ratio	Lower	Upper
43	100		
58	44.8	41.0	61.6
57	6.3	1.0	1.6#

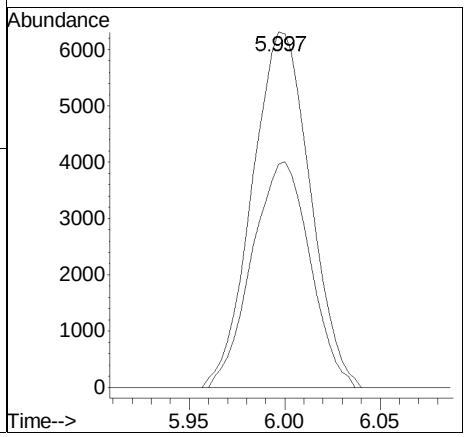


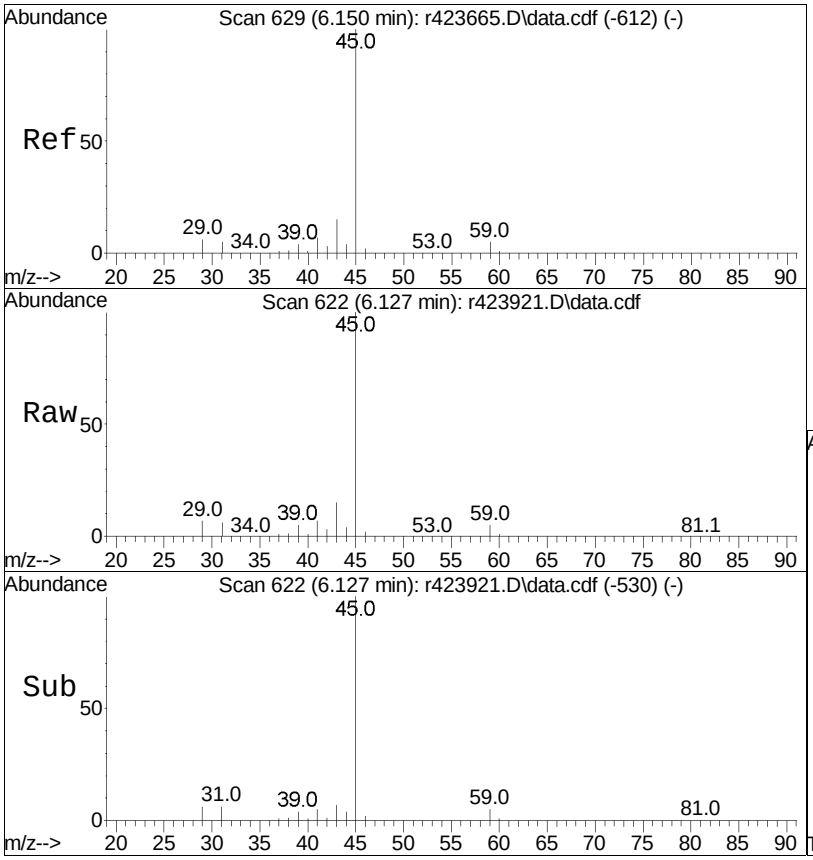


#21
trichlorofluoromethane
Concen: 0.47 ppbV
RT: 5.997 min Scan# 583
Delta R.T. -0.027 min
Lab File: r423921.D
Acq: 4 Oct 2022 9:06 PM

Tgt Ion:101 Resp: 13323

Ion	Ratio	Lower	Upper
101	100		
103	62.8	50.2	75.2

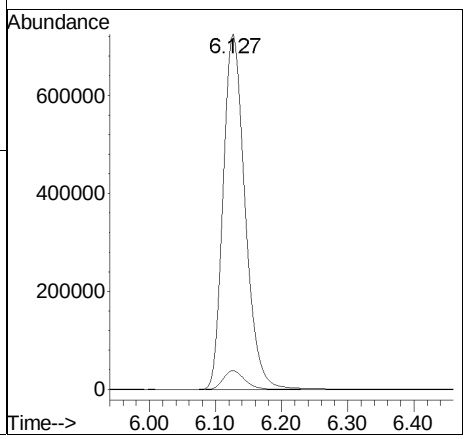


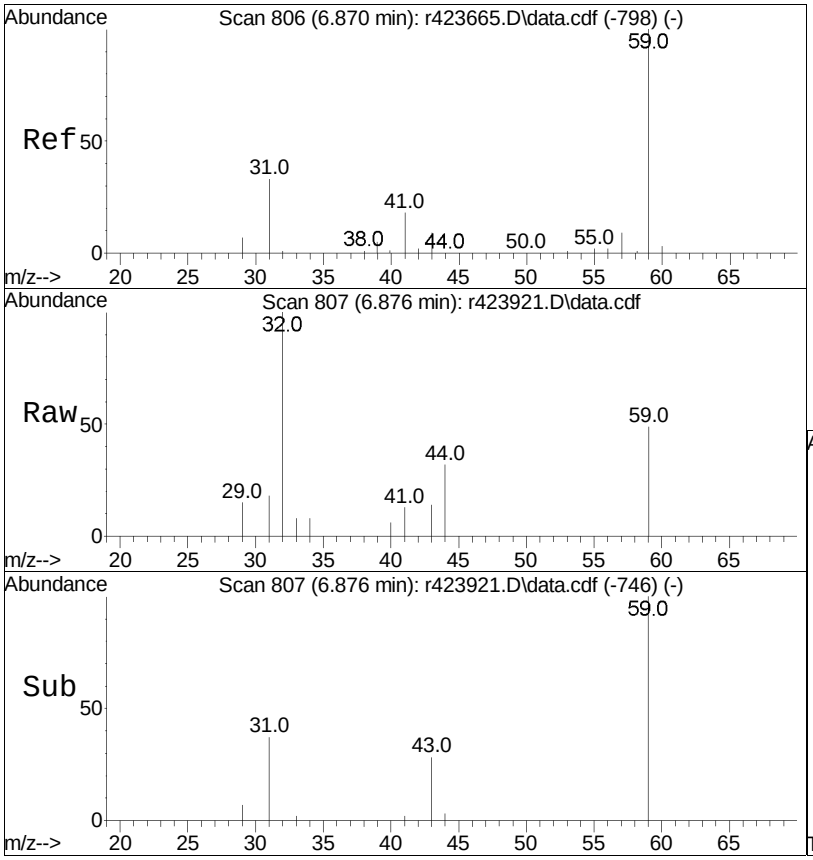


#22
isopropyl alcohol
Concen: 50.44 ppbV
RT: 6.127 min Scan# 622
Delta R.T. -0.023 min
Lab File: r423921.D
Acq: 4 Oct 2022 9:06 PM

Tgt Ion: 45 Resp: 1673476

Ion	Ratio	Lower	Upper
45	100		
59	5.3	4.3	6.5

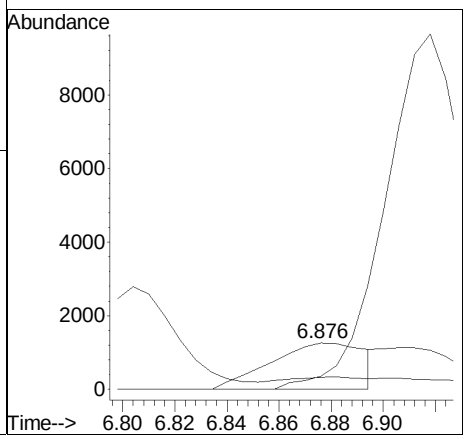


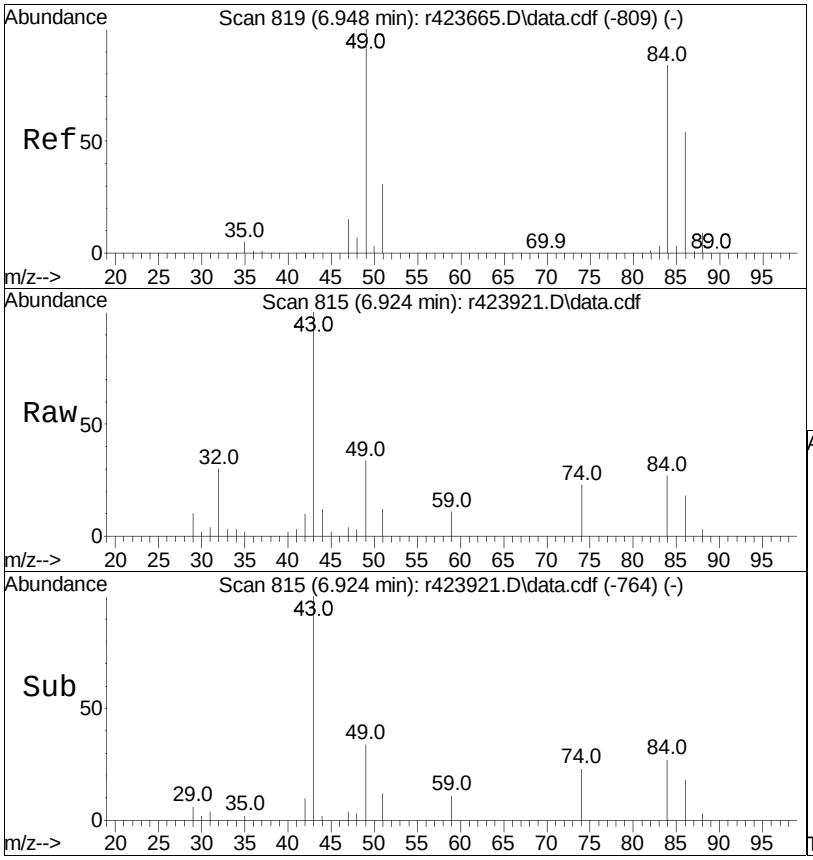


#27
tertiary butyl alcohol
Concen: 0.06 ppbV
RT: 6.876 min Scan# 807
Delta R.T. 0.006 min
Lab File: r423921.D
Acq: 4 Oct 2022 9:06 PM

Tgt Ion: 59 Resp: 3164

Ion	Ratio	Lower	Upper
59	100		
41	26.1	14.6	21.8#
43	28.5	7.0	10.6#

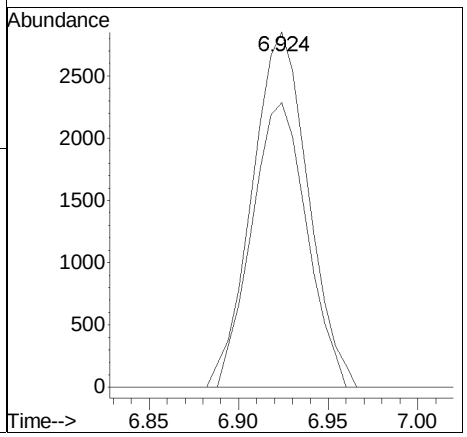


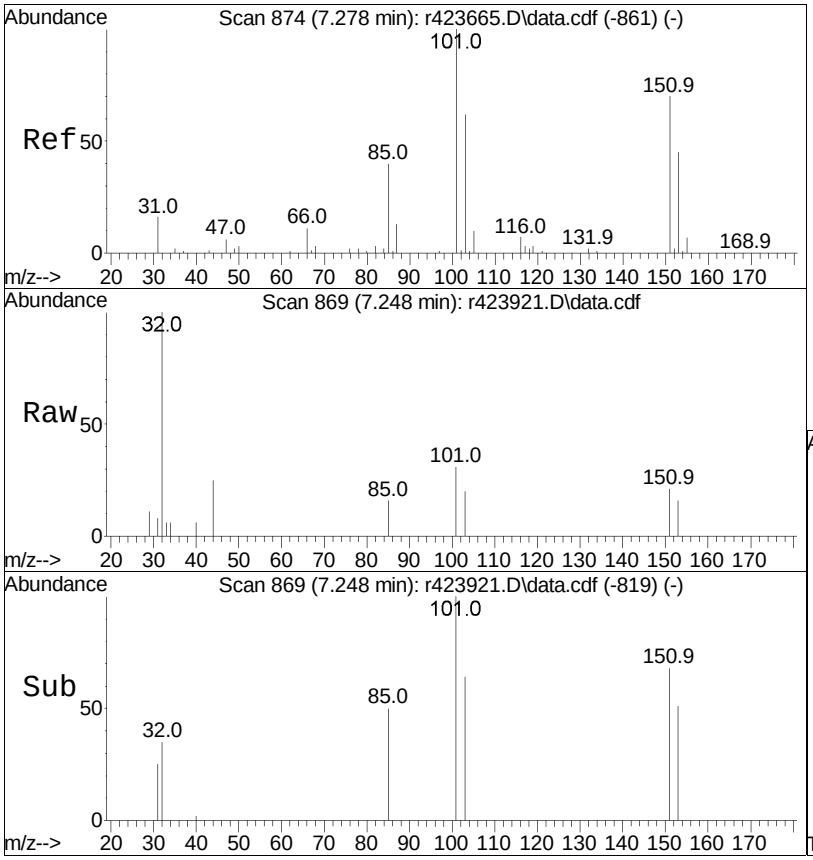


#28
methylene chloride
Concen: 0.25 ppbV
RT: 6.924 min Scan# 815
Delta R.T. -0.024 min
Lab File: r423921.D
Acq: 4 Oct 2022 9:06 PM

Tgt Ion: 49 Resp: 6219

Ion	Ratio	Lower	Upper
49	100		
84	80.1	66.8	100.2

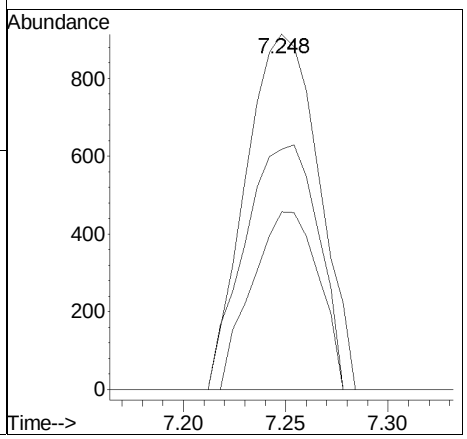


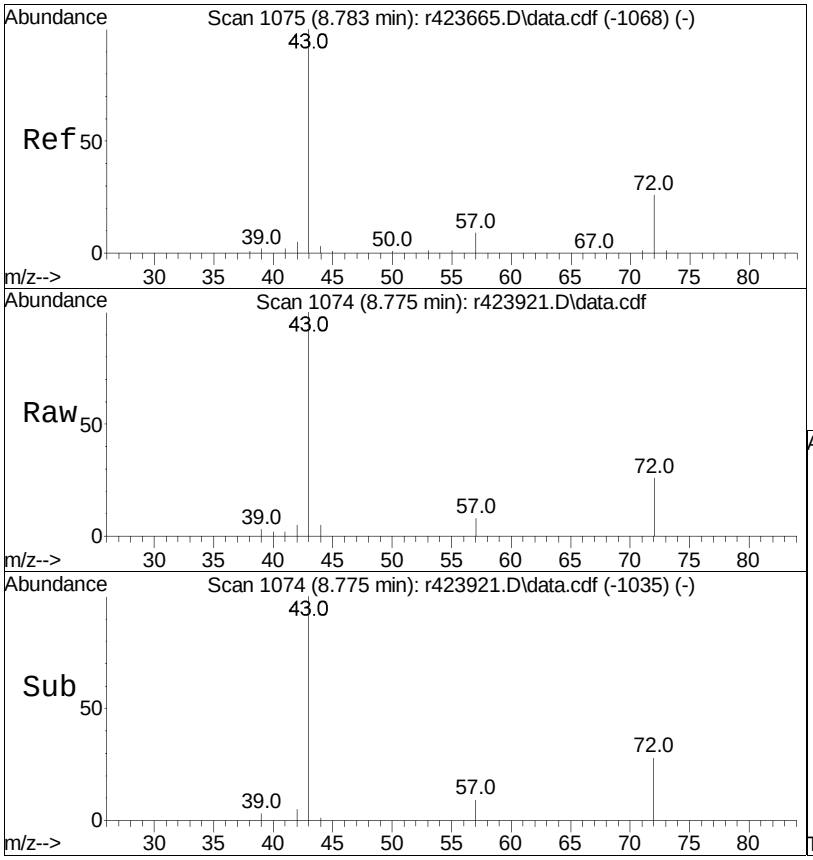


#31
Freon 113
Concen: 0.06 ppbV
RT: 7.248 min Scan# 869
Delta R.T. -0.030 min
Lab File: r423921.D
Acq: 4 Oct 2022 9:06 PM

Tgt Ion:101 Resp: 2267

Ion	Ratio	Lower	Upper
101	100		
85	50.0	32.2	48.2#
151	67.6	56.3	84.5

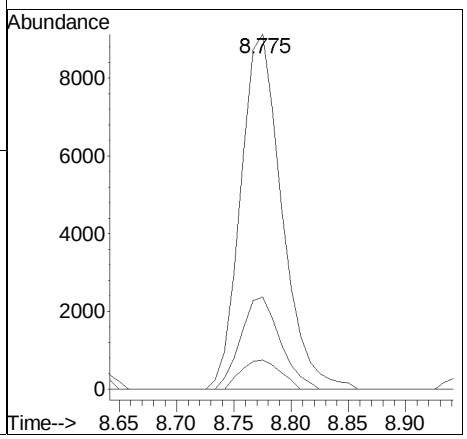


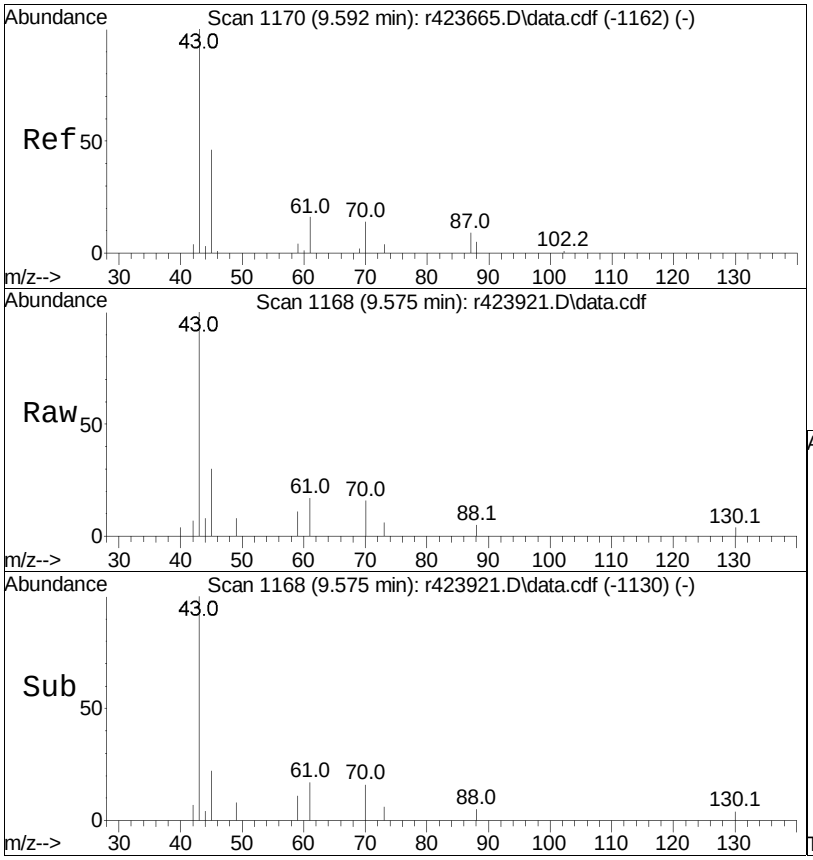


#36
2-butanone
Concen: 0.44 ppbV
RT: 8.775 min Scan# 1074
Delta R.T. -0.008 min
Lab File: r423921.D
Acq: 4 Oct 2022 9:06 PM

Tgt Ion: 43 Resp: 22842

Ion	Ratio	Lower	Upper
43	100		
72	26.0	21.0	31.6
57	8.3	7.4	11.0

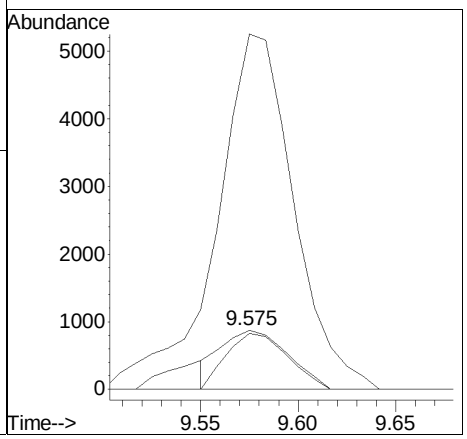


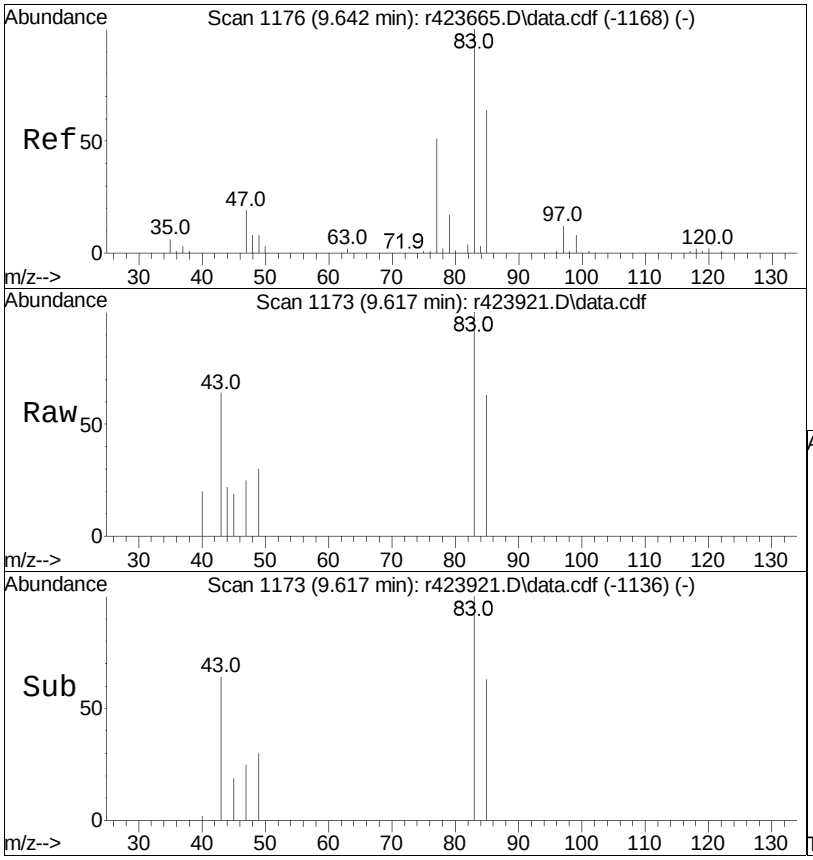


#38
Ethyl Acetate
Concen: 0.22 ppbV m
RT: 9.575 min Scan# 1168
Delta R.T. -0.017 min
Lab File: r423921.D
Acq: 4 Oct 2022 9:06 PM

Tgt Ion: 61 Resp: 2090

Ion	Ratio	Lower	Upper
61	100		
70	94.8	71.0	106.6
43	601.6	558.9	838.3

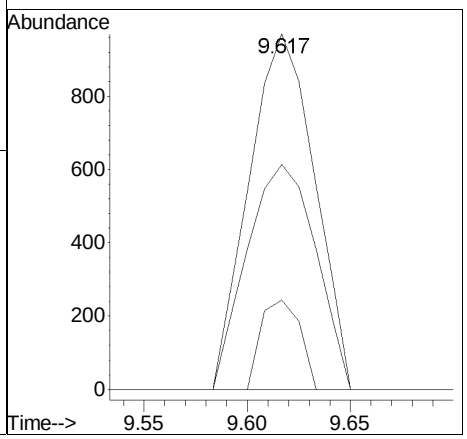


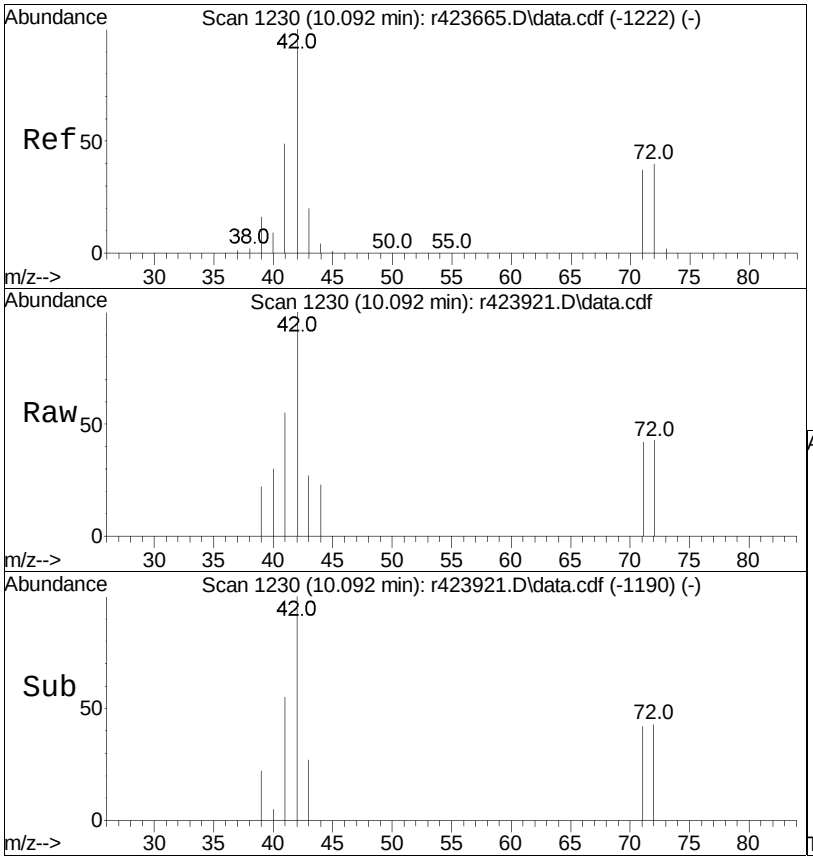


#39
chloroform
Concen: 0.05 ppbV
RT: 9.617 min Scan# 1173
Delta R.T. -0.025 min
Lab File: r423921.D
Acq: 4 Oct 2022 9:06 PM

Tgt Ion: 83 Resp: 2149

Ion	Ratio	Lower	Upper
83	100		
85	63.3	51.6	77.4
47	25.2	15.2	22.8#

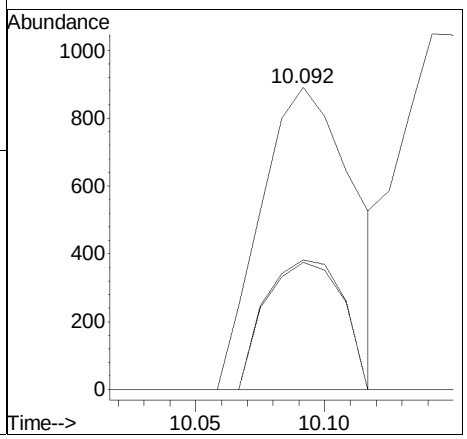


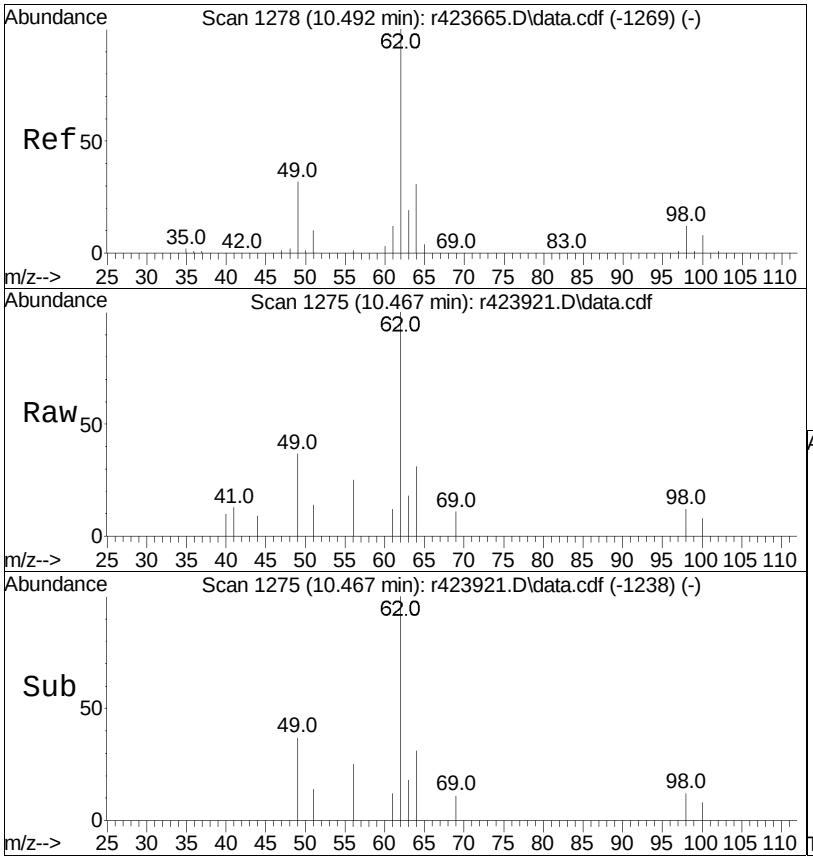


#40
Tetrahydrofuran
Concen: 0.07 ppbV
RT: 10.092 min Scan# 1230
Delta R.T. 0.000 min
Lab File: r423921.D
Acq: 4 Oct 2022 9:06 PM

Tgt Ion: 42 Resp: 2220

Ion	Ratio	Lower	Upper
42	100		
71	42.1	29.7	44.5
72	42.9	32.4	48.6

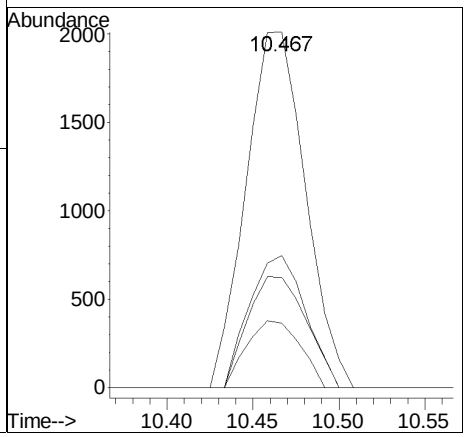


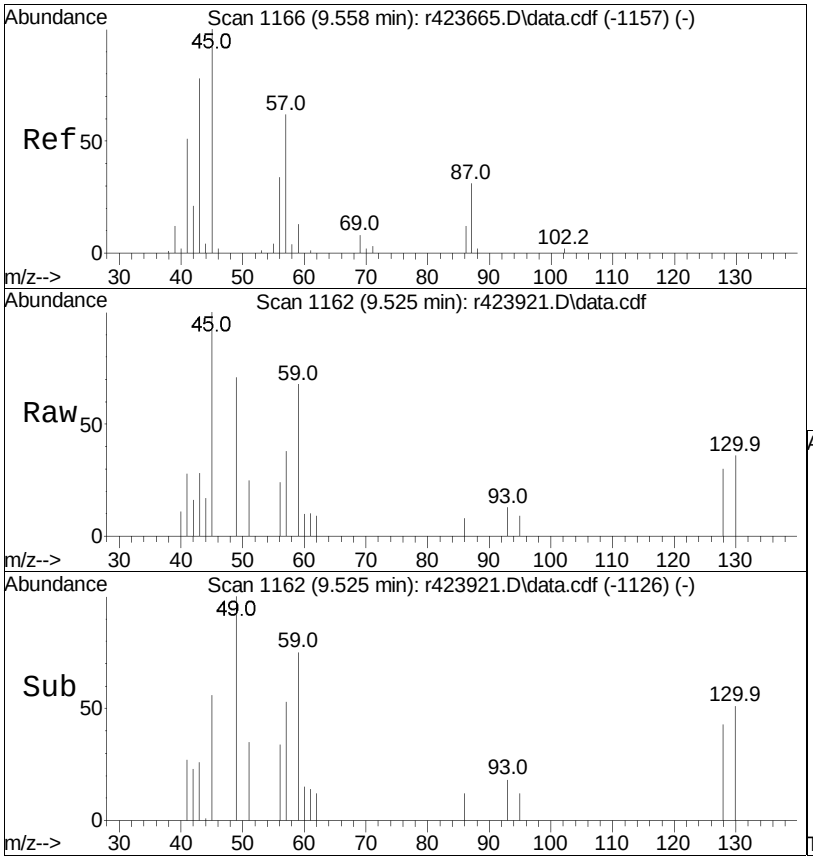


#42
1,2-dichloroethane
Concen: 0.18 ppbV
RT: 10.467 min Scan# 1275
Delta R.T. -0.025 min
Lab File: r423921.D
Acq: 4 Oct 2022 9:06 PM

Tgt Ion: 62 Resp: 4845

Ion	Ratio	Lower	Upper
62	100		
64	31.0	25.0	37.4
49	37.1	25.8	38.6
63	18.1	15.1	22.7

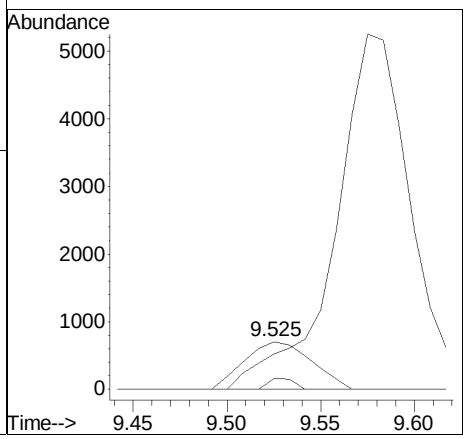


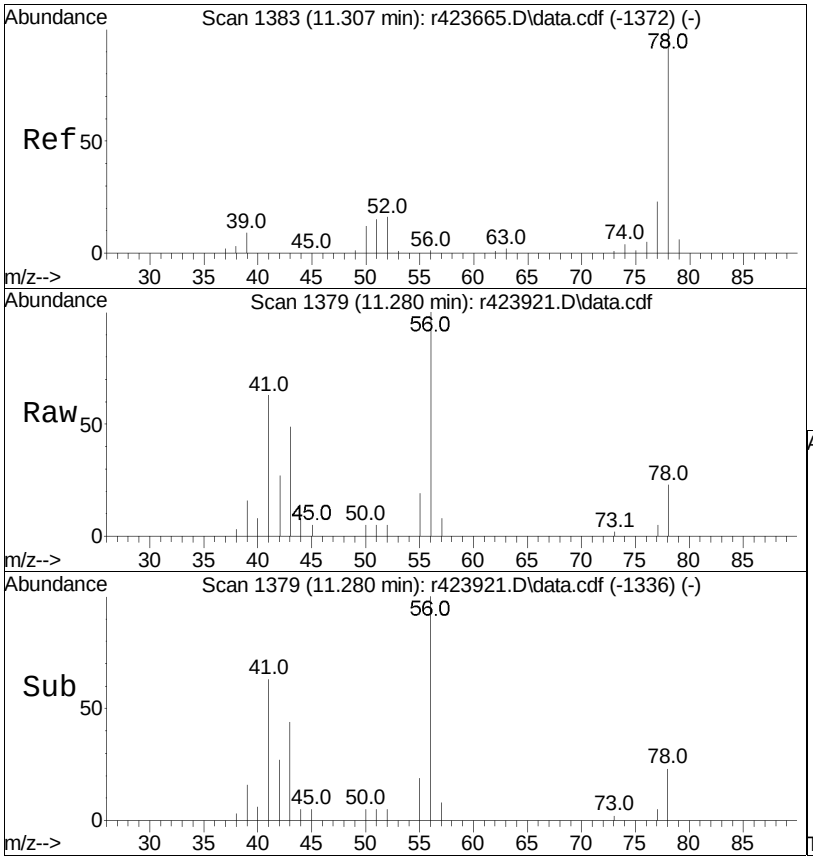


#44
hexane
Concen: 0.04 ppbV
RT: 9.525 min Scan# 1162
Delta R.T. -0.033 min
Lab File: r423921.D
Acq: 4 Oct 2022 9:06 PM

Tgt Ion: 57 Resp: 1756

Ion	Ratio	Lower	Upper
57	100		
43	74.5	101.0	151.4#
86	22.6	14.8	22.2#

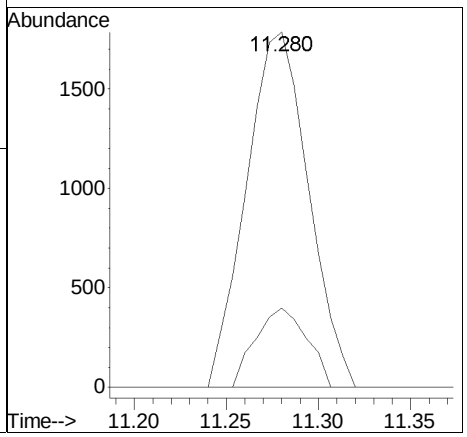


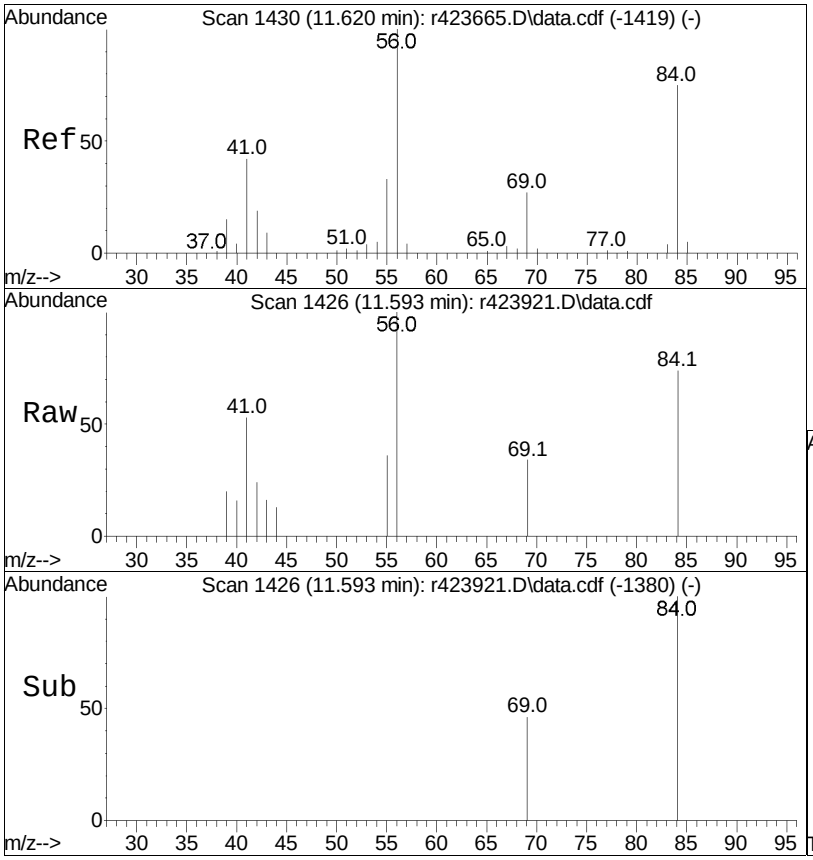


#50
benzene
Concen: 0.05 ppbV
RT: 11.280 min Scan# 1379
Delta R.T. -0.027 min
Lab File: r423921.D
Acq: 4 Oct 2022 9:06 PM

Tgt Ion: 78 Resp: 4196

Ion	Ratio	Lower	Upper
78	100		
52	22.3	13.0	19.6#

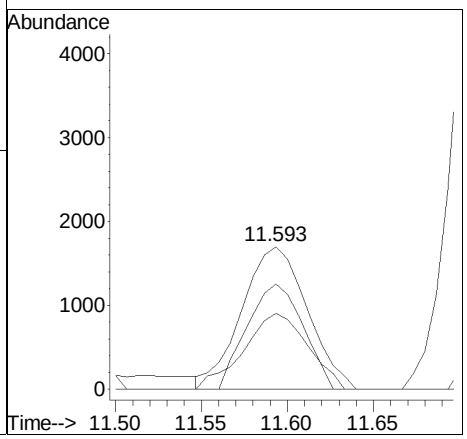


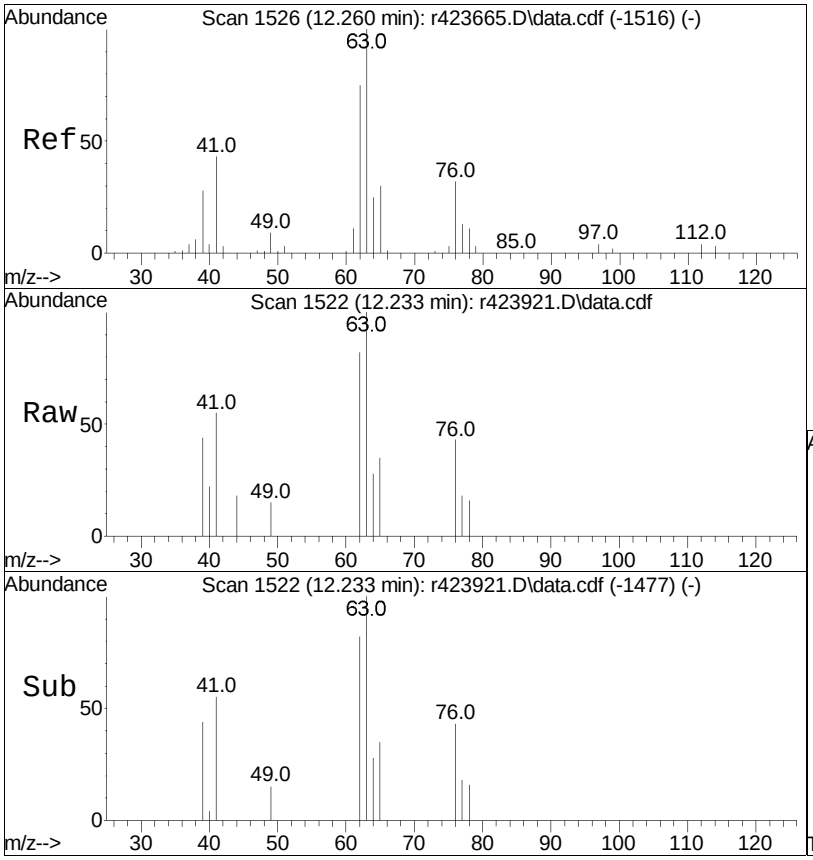


#53
cyclohexane
Concen: 0.09 ppbV
RT: 11.593 min Scan# 1426
Delta R.T. -0.027 min
Lab File: r423921.D
Acq: 4 Oct 2022 9:06 PM

Tgt Ion: 56 Resp: 4506

Ion	Ratio	Lower	Upper
56	100		
84	73.9	60.4	90.6
41	53.4	33.9	50.9#

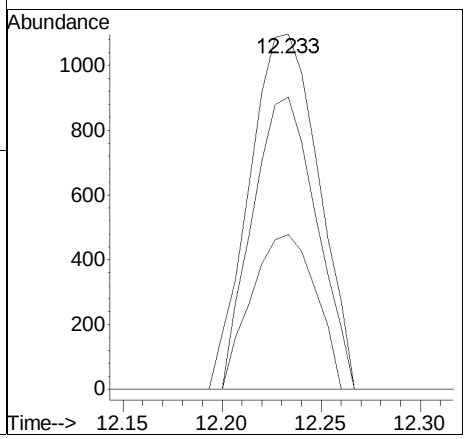


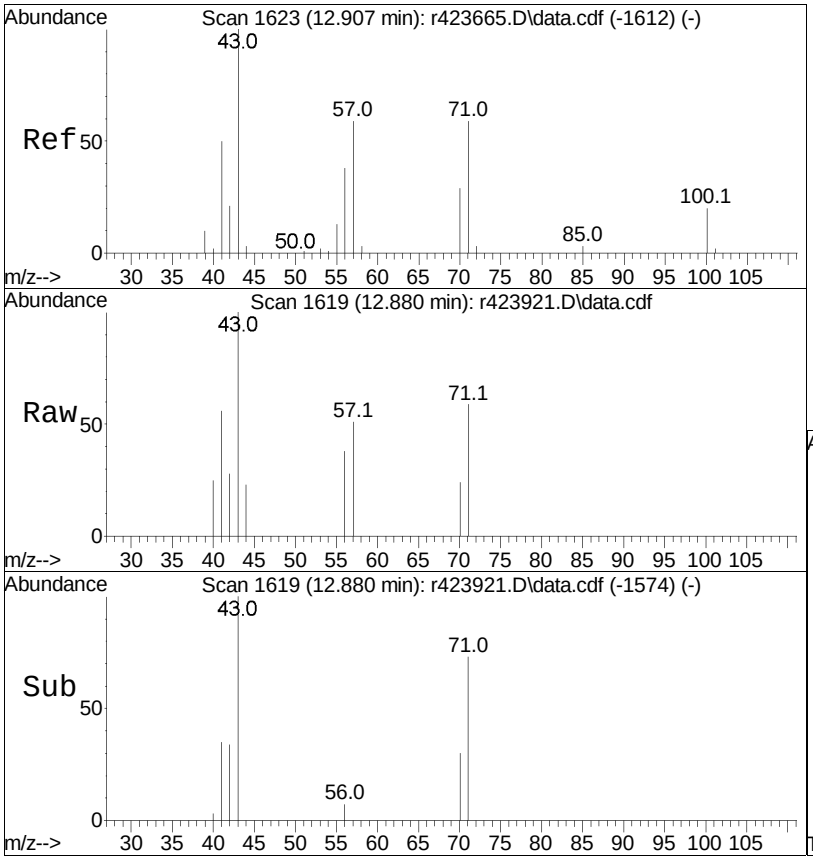


#56
1,2-dichloropropane
Concen: 0.10 ppbV
RT: 12.233 min Scan# 1522
Delta R.T. -0.027 min
Lab File: r423921.D
Acq: 4 Oct 2022 9:06 PM

Tgt Ion: 63 Resp: 2675

Ion	Ratio	Lower	Upper
63	100		
62	82.2	60.2	90.4
39	43.6	22.7	34.1#

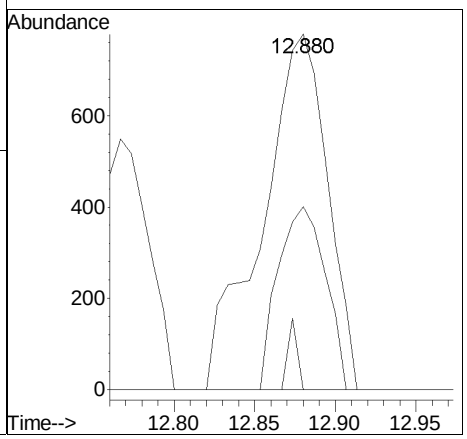


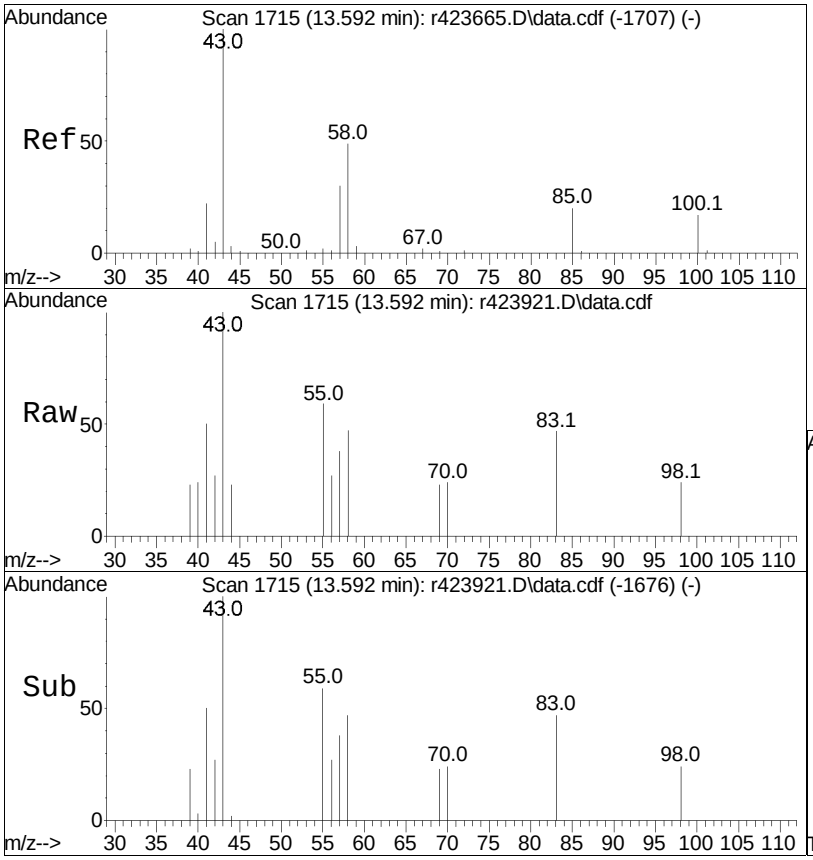


#62
heptane
Concen: 0.05 ppbV
RT: 12.880 min Scan# 1619
Delta R.T. -0.027 min
Lab File: r423921.D
Acq: 4 Oct 2022 9:06 PM

Tgt Ion: 43 Resp: 2192

Ion	Ratio	Lower	Upper
43	100		
57	51.5	47.1	70.7
100	0.0	16.7	25.1#

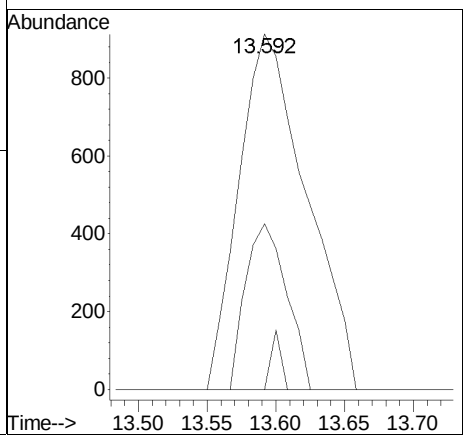


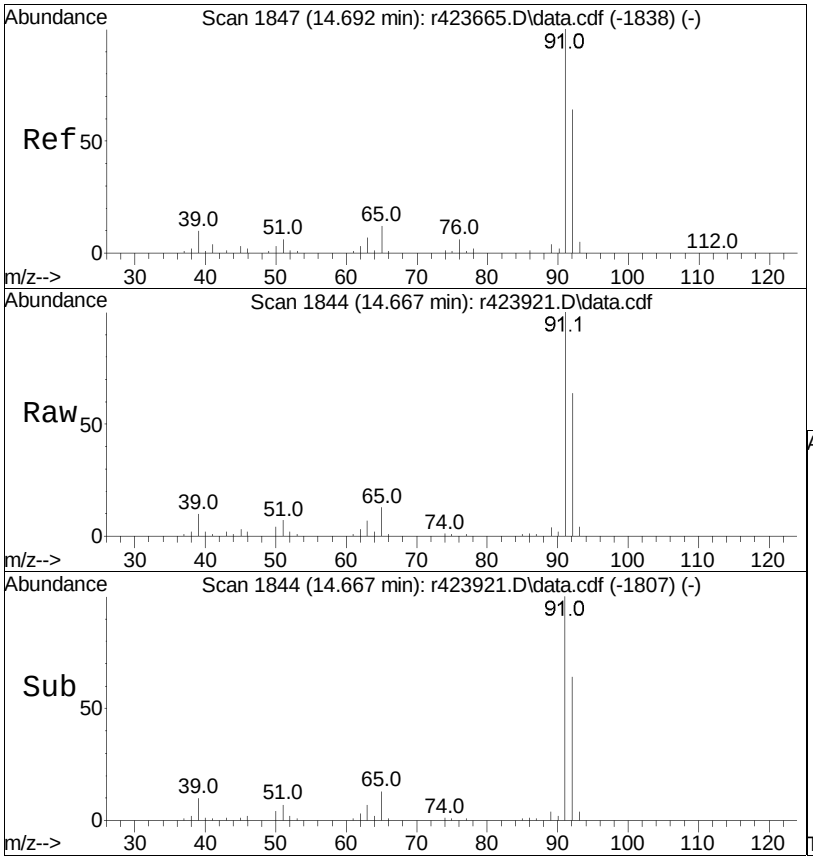


#64
4-methyl-2-pentanone
Concen: 0.06 ppbV
RT: 13.592 min Scan# 1715
Delta R.T. 0.000 min
Lab File: r423921.D
Acq: 4 Oct 2022 9:06 PM

Tgt Ion: 43 Resp: 3127

Ion	Ratio	Lower	Upper
43	100		
58	46.7	39.3	58.9
100	0.0	13.8	20.8#

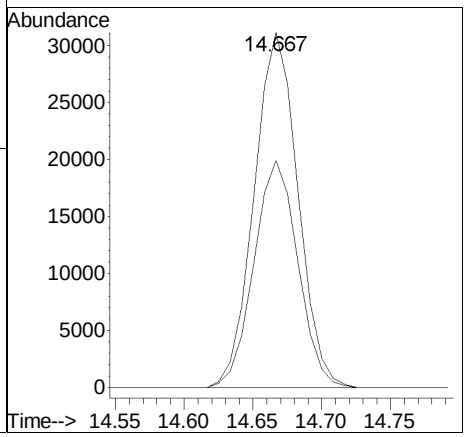


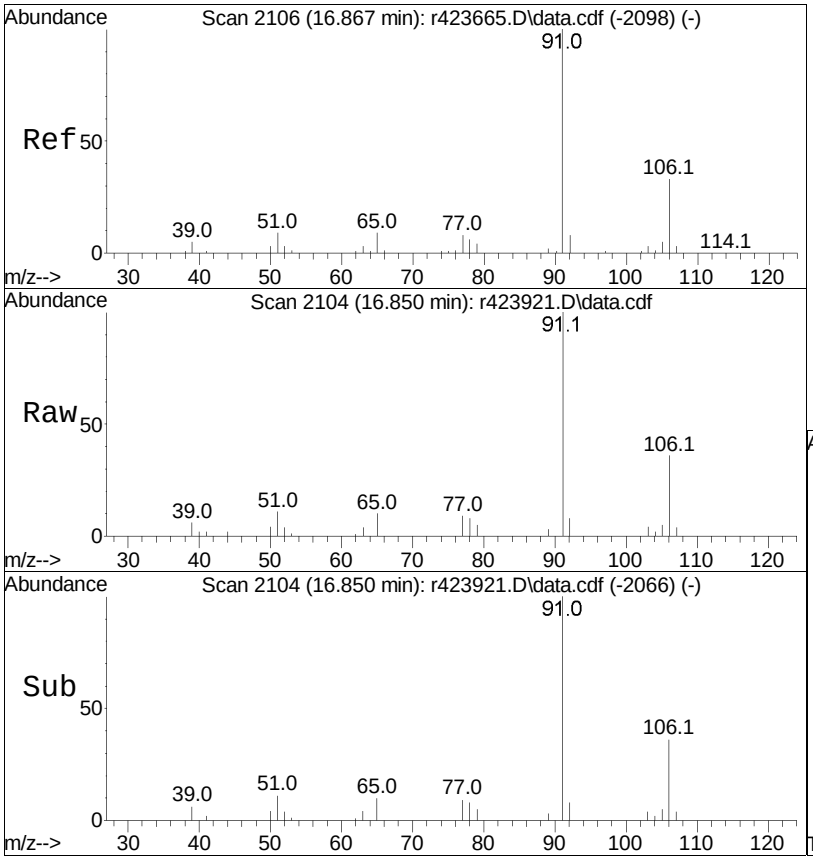


#68
toluene
Concen: 0.63 ppbV
RT: 14.667 min Scan# 1844
Delta R.T. -0.025 min
Lab File: r423921.D
Acq: 4 Oct 2022 9:06 PM

Tgt Ion: 91 Resp: 68731

Ion	Ratio	Lower	Upper
91	100		
92	63.9	50.8	76.2

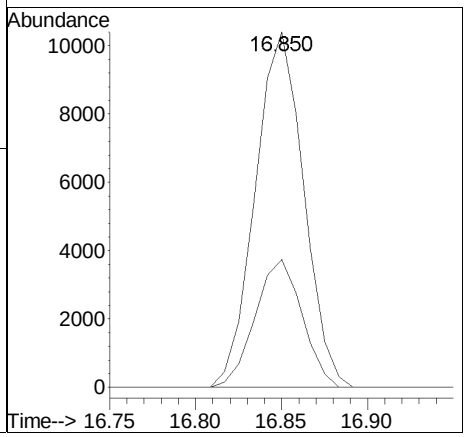


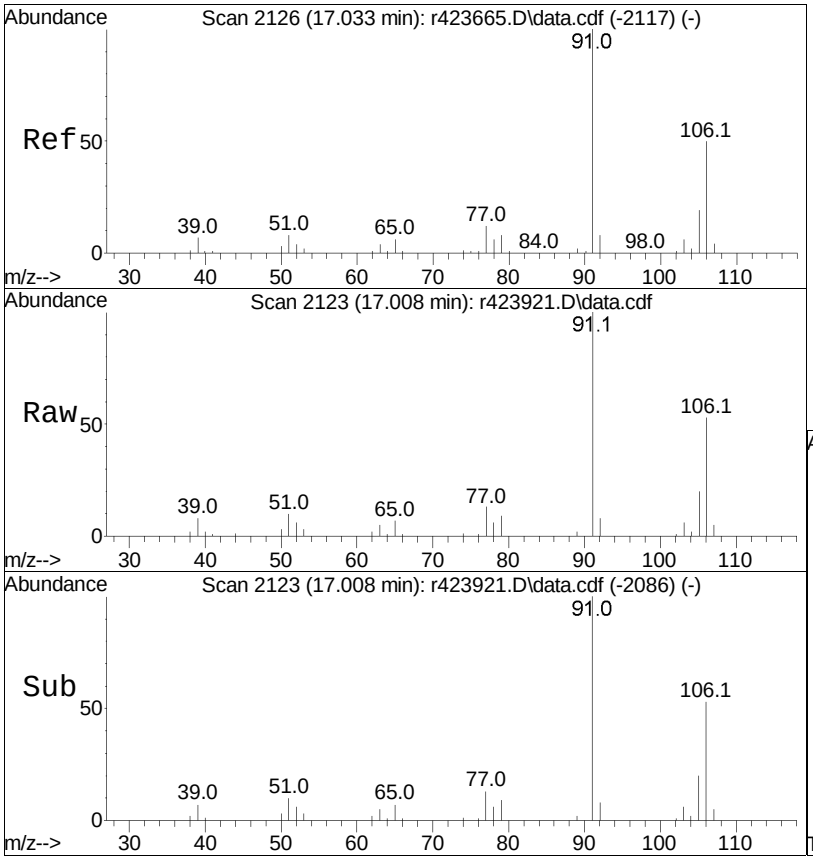


#81
ethylbenzene
Concen: 0.16 ppbV
RT: 16.850 min Scan# 2104
Delta R.T. -0.017 min
Lab File: r423921.D
Acq: 4 Oct 2022 9:06 PM

Tgt Ion: 91 Resp: 20378

Ion	Ratio	Lower	Upper
91	100		
106	36.0	26.6	39.8

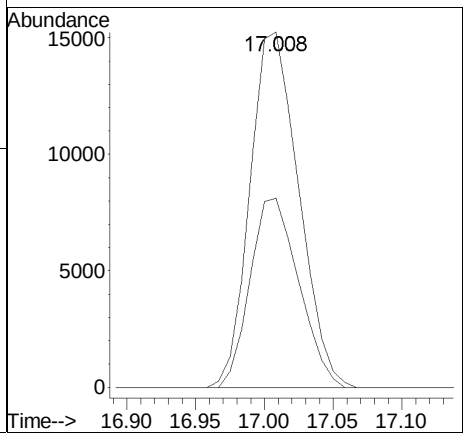


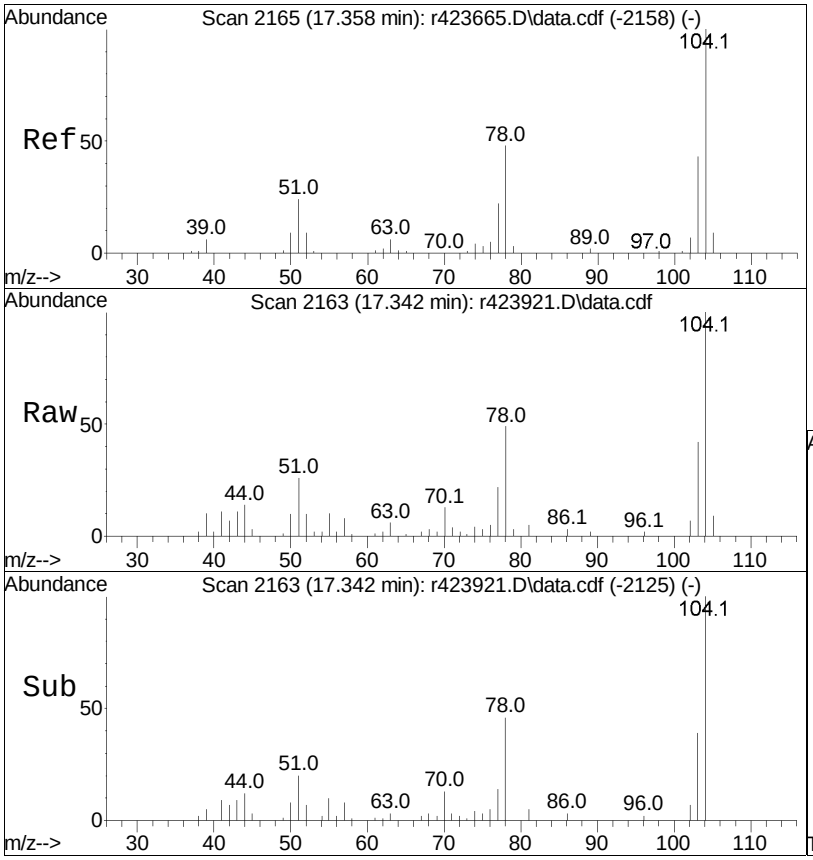


#83
m+p-xylene
Concen: 0.37 ppbV
RT: 17.008 min Scan# 2123
Delta R.T. -0.025 min
Lab File: r423921.D
Acq: 4 Oct 2022 9:06 PM

Tgt Ion: 91 Resp: 37599

Ion	Ratio	Lower	Upper
91	100		
106	53.2	39.8	59.6

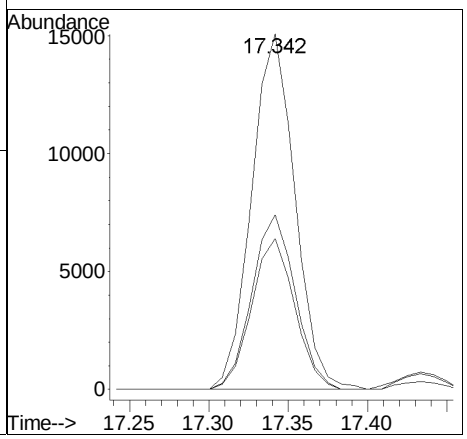


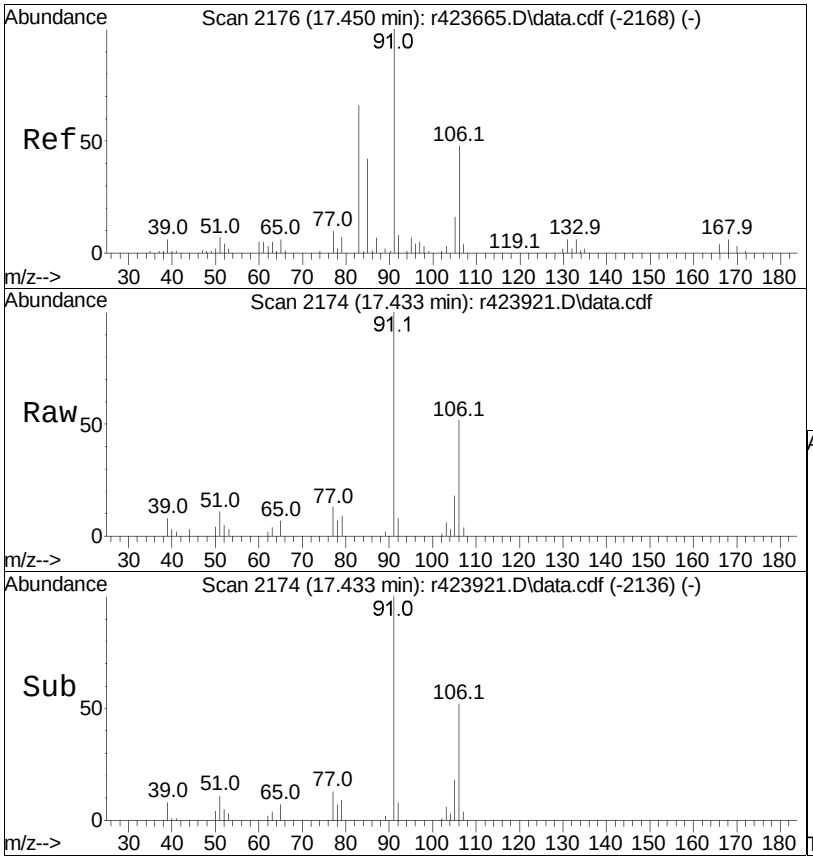


#85
styrene
Concen: 0.37 ppbV
RT: 17.342 min Scan# 2163
Delta R.T. -0.017 min
Lab File: r423921.D
Acq: 4 Oct 2022 9:06 PM

Tgt Ion:104 Resp: 28619

Ion	Ratio	Lower	Upper
104	100		
103	42.5	34.8	52.2
78	49.2	38.1	57.1

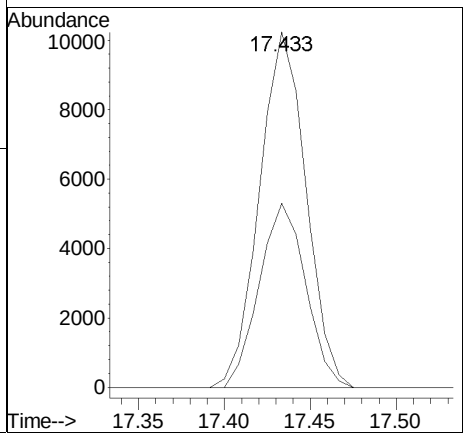


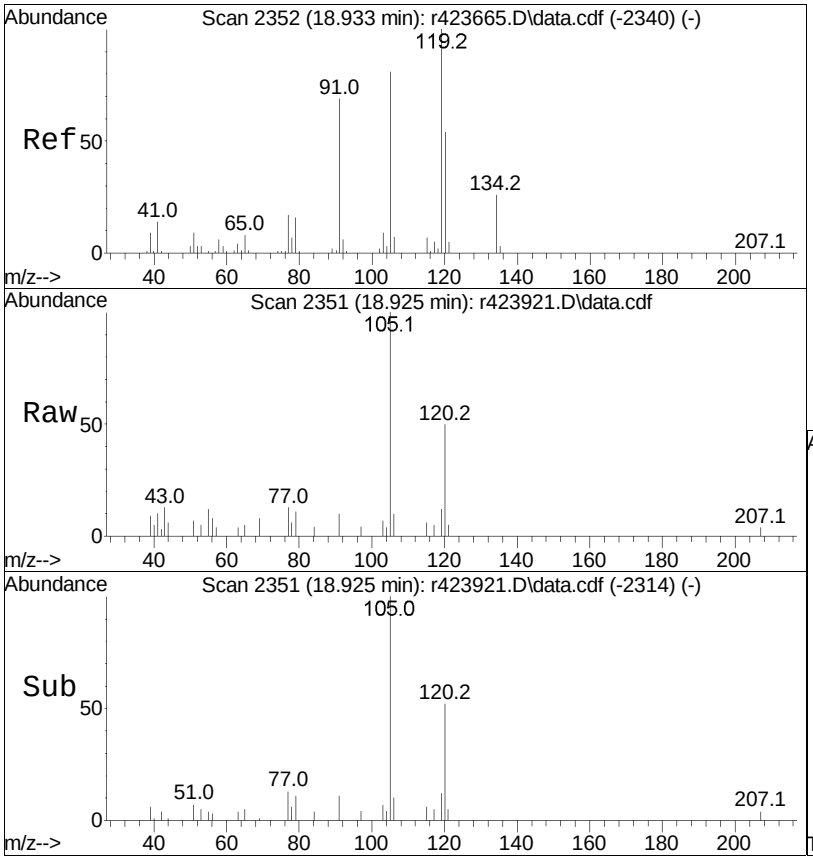


#87
o-xylene
Concen: 0.19 ppbV
RT: 17.433 min Scan# 2174
Delta R.T. -0.017 min
Lab File: r423921.D
Acq: 4 Oct 2022 9:06 PM

Tgt Ion: 91 Resp: 19283

Ion	Ratio	Lower	Upper
91	100		
106	51.8	38.2	57.4

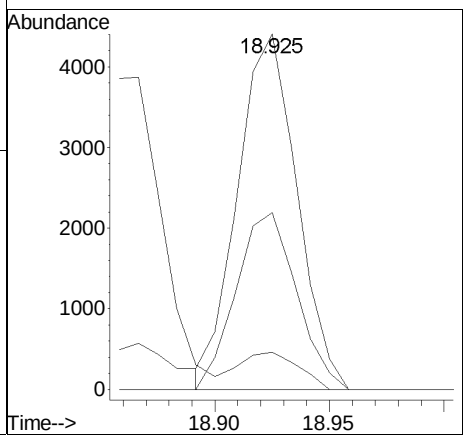




#99
1,2,4-trimethylbenzene
Concen: 0.07 ppbV
RT: 18.925 min Scan# 2351
Delta R.T. -0.008 min
Lab File: r423921.D
Acq: 4 Oct 2022 9:06 PM

Tgt Ion:105 Resp: 7938

Ion	Ratio	Lower	Upper
105	100		
120	49.8	53.0	79.6#
91	10.5	67.5	101.3#

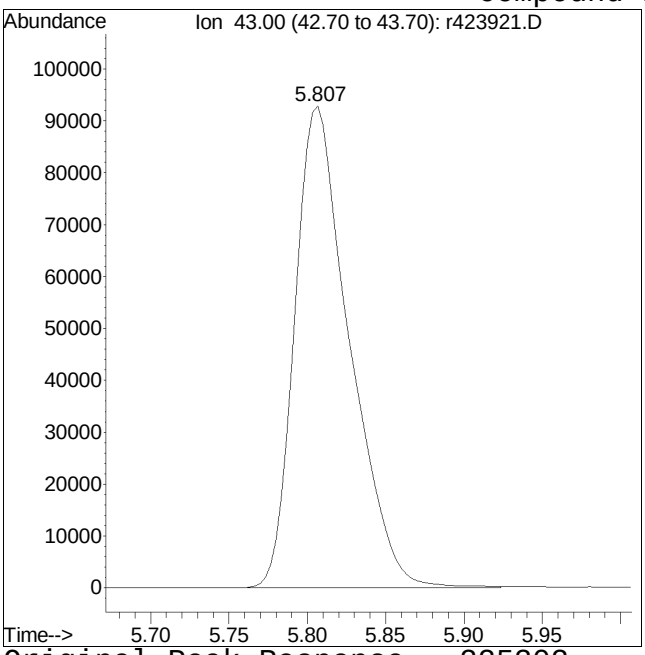


Manual Integration Report

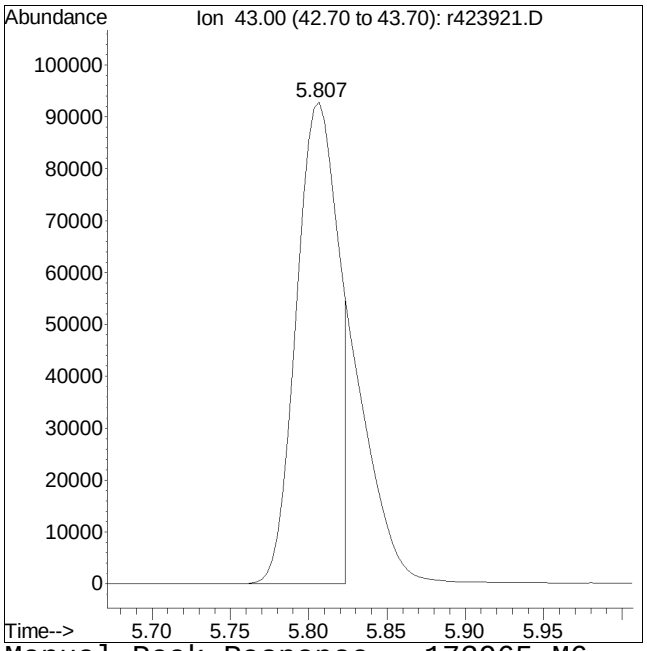
Data Path : O:\Forensics\Data\AirpianoQ
Data File : r423921.D
Date Inj'd : 10/4/2020 0:9: 6
Sample : L2253855-02,3,250,250

Method : TFS4_220921.M
Operator : AIRPIANO4:TJS
Instrument :
Quant Date : 10/5/2022 8:15 am

Compound #19: acetone



Original Peak Response = 225302



Manual Peak Response = 173965 M6

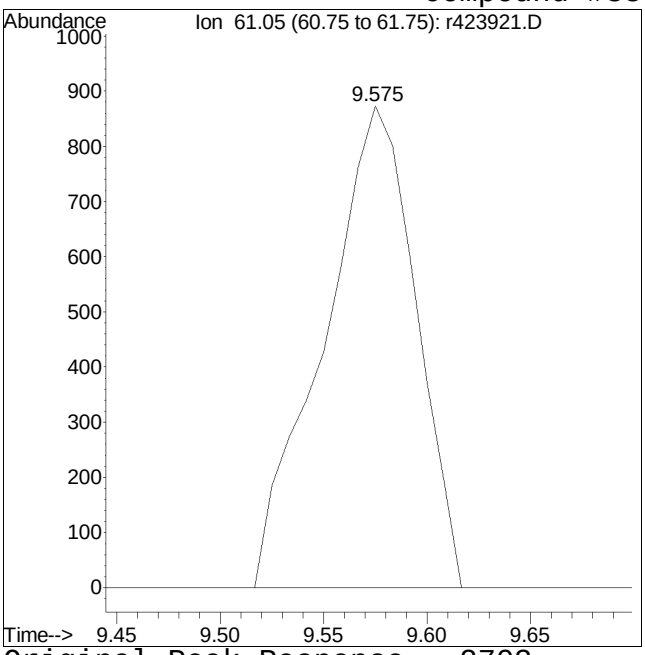
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

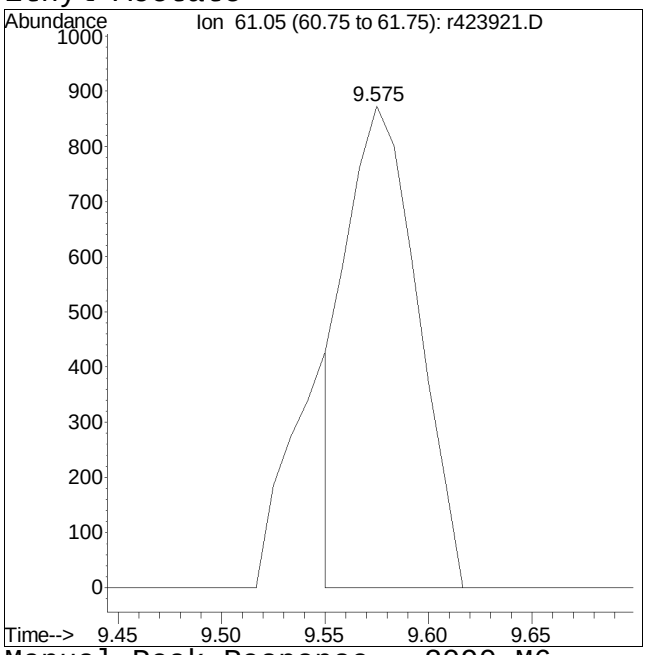
Data Path : O:\Forensics\Data\AirpianoQ
Data File : r423921.D
Date Inj'd : 10/4/2020 0:9: 6
Sample : L2253855-02,3,250,250

Method : TFS4_220921.M
Operator : AIRPIANO4:TJS
Instrument :
Quant Date : 10/5/2022 8:15 am

Compound #38: Ethyl Acetate



Original Peak Response = 2703



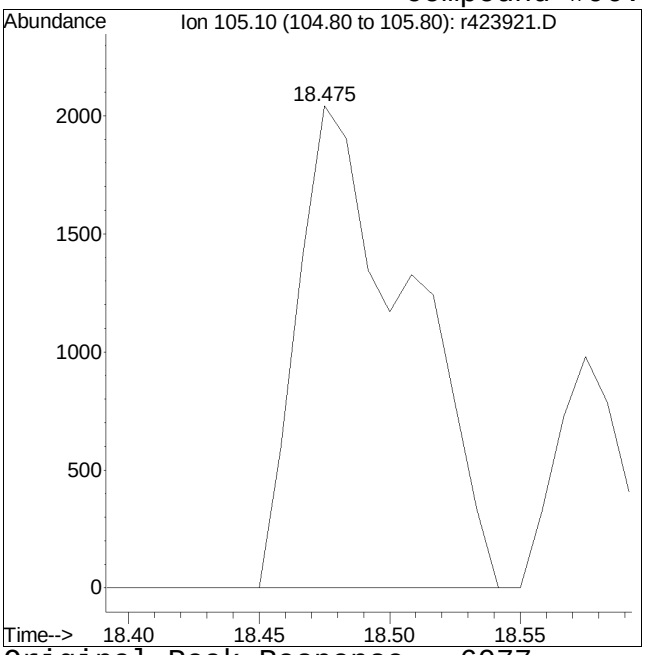
Manual Peak Response = 2090 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

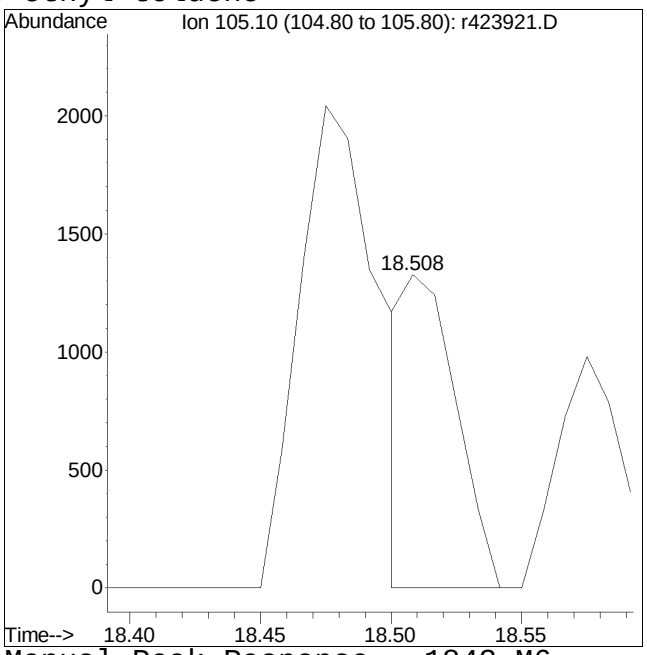
Manual Integration Report

Data Path : O:\Forensics\Data\AirpianoQMethod : TFS4_220921.M
Data File : r423921.D Operator : AIRPIANO4:TJS
Date Inj'd : 10/4/2020 0:9: 6 Instrument :
Sample : L2253855-02,3,250,250 Quant Date : 10/5/2022 8:15 am

Compound #96: 4-ethyl toluene



Original Peak Response = 6077



Manual Peak Response = 1843 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423922.D
Acq On : 4 Oct 2022 9:46 PM
Operator : AIRPIANO4:TJS
Sample : L2253855-03,3,250,250
Misc : WG1695439,ICAL19362
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 05 15:17:52 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004T\r423912.D
Sub List : TO15-NY-7-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.450	49	442242	10.000	ppbV	#-0.03
Standard Area = 462589			Recovery =	95.60%		
43) 1,4-difluorobenzene	11.713	114	1127277	10.000	ppbV	-0.03
Standard Area = 1229344			Recovery =	91.70%		
67) chlorobenzene-D5	16.458	54	223265	10.000	ppbV	-0.02
Standard Area = 234984			Recovery =	95.01%		
System Monitoring Compounds						
Target Compounds						Qvalue
5) dichlorodifluoromethane	3.958	85	21605	0.595	ppbV	99
6) chloromethane	4.132	50	9865	0.629	ppbV	100
7) Freon-114	4.252		0	N.D.		
10) 1,3-butadiene	0.000		0	N.D.		
13) bromomethane	4.852		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	5.242	31	1885261	146.215	ppbV	95
17) vinyl bromide	0.000		0	N.D.		
19) acetone	5.803	43	181518M6	7.762	ppbV	
21) trichlorofluoromethane	5.997	101	13868	0.495	ppbV	100
22) isopropyl alcohol	6.127	45	1673043	50.689	ppbV	100
27) tertiary butyl alcohol	6.882	59	3944M6	0.080	ppbV	
28) methylene chloride	6.924	49	6299	0.257	ppbV	95
29) 3-chloropropene	0.000		0	N.D.		
30) carbon disulfide	7.212	76	2178	0.031	ppbV #	1
31) Freon 113	7.248	101	3782	0.095	ppbV	94
32) trans-1,2-dichloroethene	0.000		0	N.D.		
33) 1,1-dichloroethane	0.000		0	N.D.		
34) MTBE	8.392		0	N.D.		
36) 2-butanone	8.775	43	25041	0.490	ppbV	100
38) Ethyl Acetate	9.575	61	2203M6	0.231	ppbV	
39) chloroform	9.617	83	2237	0.055	ppbV #	91
40) Tetrahydrofuran	10.092	42	2705	0.080	ppbV	98
42) 1,2-dichloroethane	10.467	62	5256	0.192	ppbV	97
44) hexane	9.525	57	1746	0.038	ppbV #	50
50) benzene	11.273	78	3984	0.051	ppbV	93
53) cyclohexane	11.593	56	4959	0.102	ppbV	93

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423922.D
Acq On : 4 Oct 2022 9:46 PM
Operator : AIRPIANO4:TJS
Sample : L2253855-03,3,250,250
Misc : WG1695439,ICAL19362
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 05 15:17:52 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004T\r423912.D
Sub List : TO15-NY-7-SIM - .

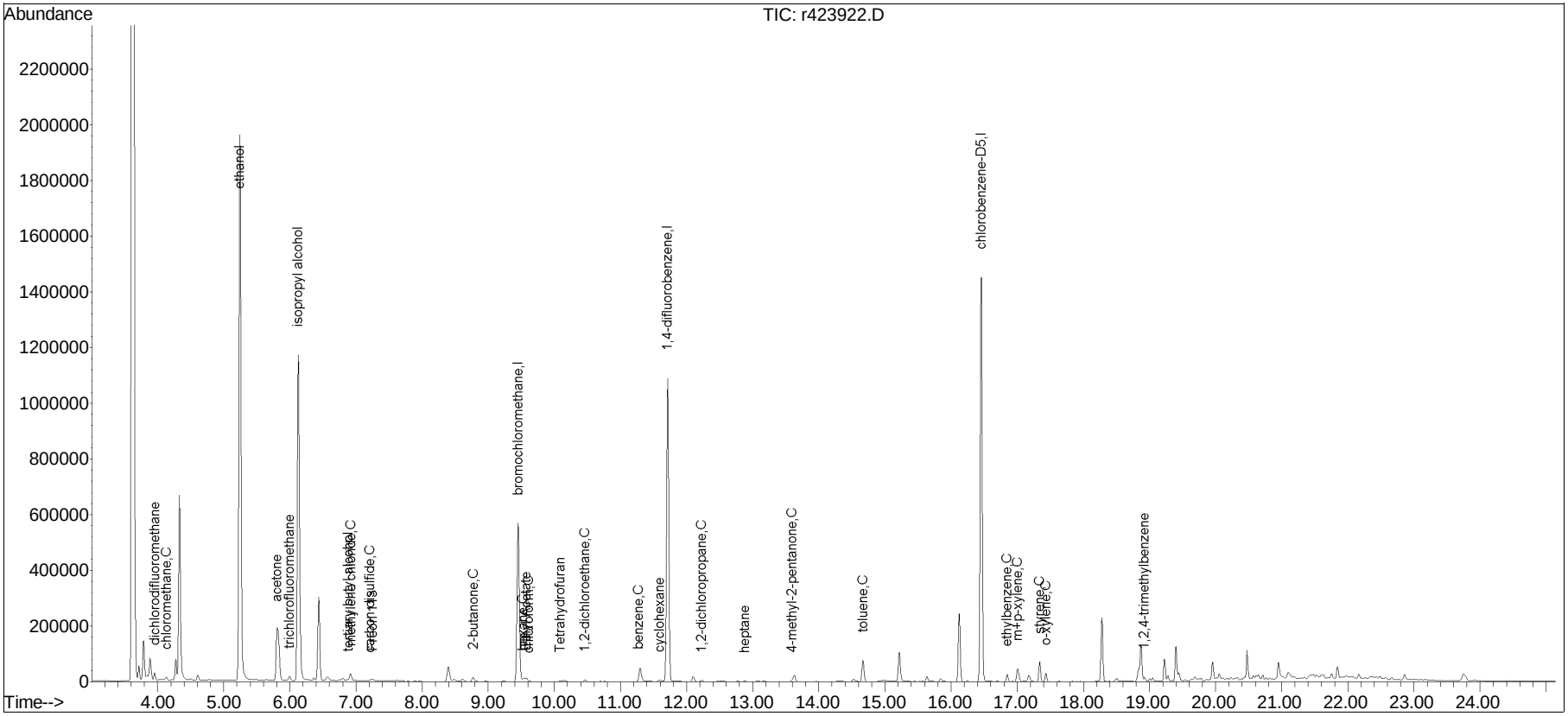
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
56) 1,2-dichloropropane	12.227	63	2789	0.101	ppbV #	94
57) bromodichloromethane	0.000		0	N.D.		
58) 1,4-dioxane	12.547		0	N.D.		
60) 2,2,4-trimethylpentane	12.560		0	N.D.		
62) heptane	12.880	43	2323	0.048	ppbV	90
63) cis-1,3-dichloropropene	0.000		0	N.D.		
64) 4-methyl-2-pentanone	13.592	43	3403	0.064	ppbV #	81
65) trans-1,3-dichloropropene	0.000		0	N.D.		
66) 1,1,2-trichloroethane	0.000		0	N.D.		
68) toluene	14.667	91	69877	0.640	ppbV	99
72) 2-hexanone	14.992		0	N.D.		
74) dibromochloromethane	0.000		0	N.D.		
75) 1,2-dibromoethane	0.000		0	N.D.		
80) chlorobenzene	16.500		0	N.D.		
81) ethylbenzene	16.850	91	21870	0.173	ppbV	96
83) m+p-xylene	17.008	91	40484	0.399	ppbV	94
84) bromoform	0.000		0	N.D.		
85) styrene	17.342	104	30533	0.392	ppbV	98
86) 1,1,2,2-tetrachloroethane	0.000		0	N.D.		
87) o-xylene	17.433	91	20426	0.205	ppbV	94
96) 4-ethyl toluene	18.508		0	N.D.		
97) 1,3,5-trimethylbenzene	18.575		0	N.D.		
99) 1,2,4-trimethylbenzene	18.925	105	8619	0.081	ppbV #	49
101) Benzyl Chloride	18.925		0	N.D.		
102) 1,3-dichlorobenzene	19.117		0	N.D.		
103) 1,4-dichlorobenzene	19.117		0	N.D.		
107) 1,2-dichlorobenzene	19.408		0	N.D.		
115) 1,2,4-trichlorobenzene	20.900		0	N.D.		
119) hexachlorobutadiene	21.325		0	N.D.		

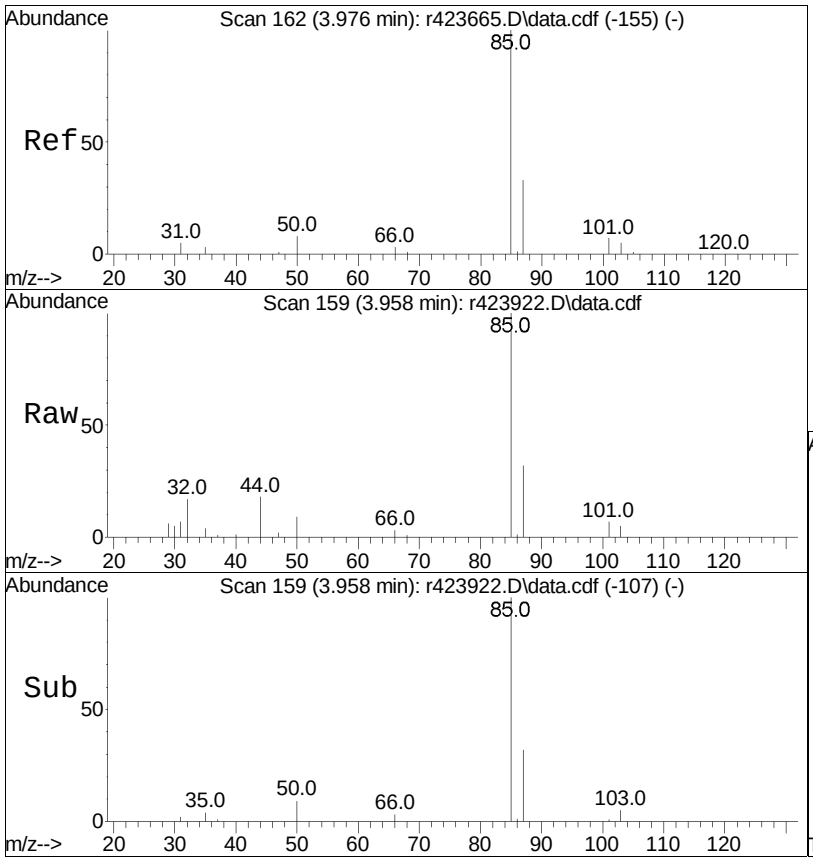
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : TO15-NY-7-SIM - .\Airpiano4\2022\10\1004T\r423912.D

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423922.D
Acq On : 4 Oct 2022 9:46 PM
Operator : AIRPIANO4:TJS
Sample : L2253855-03,3,250,250
Misc : WG1695439,ICAL19362
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 05 15:17:52 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

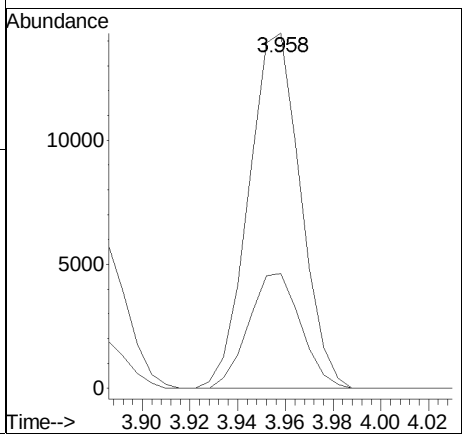


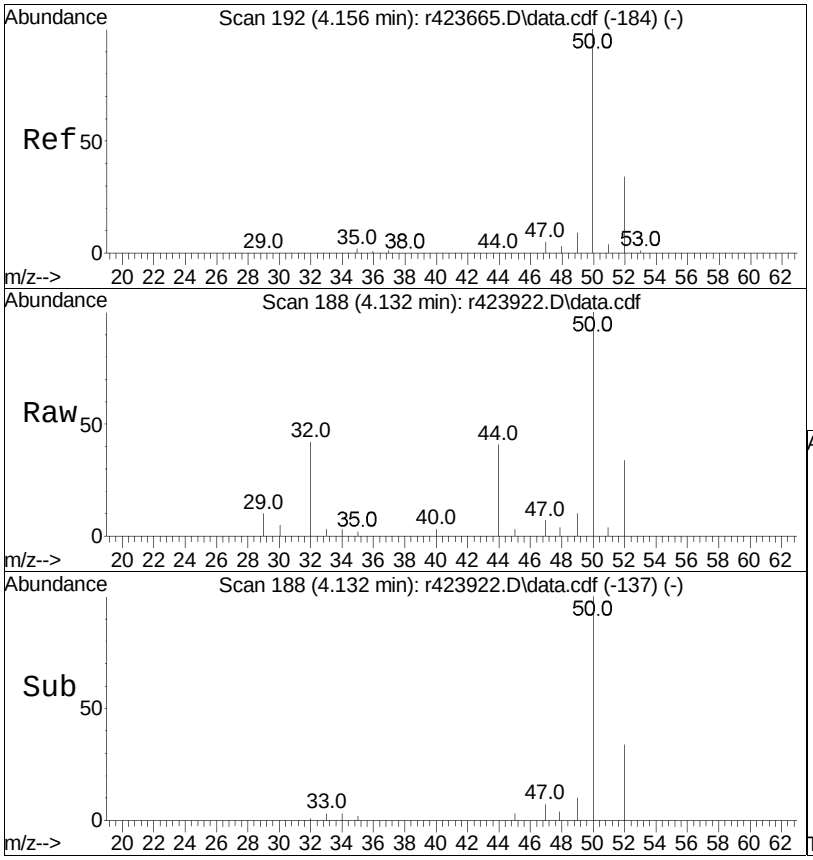


#5
dichlorodifluoromethane
Concen: 0.60 ppbV
RT: 3.958 min Scan# 159
Delta R.T. -0.018 min
Lab File: r423922.D
Acq: 4 Oct 2022 9:46 PM

Tgt Ion: 85 Resp: 21605

Ion	Ratio	Lower	Upper
85	100		
87	32.3	26.3	39.5

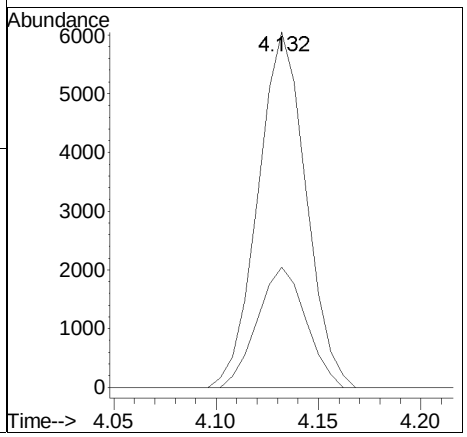


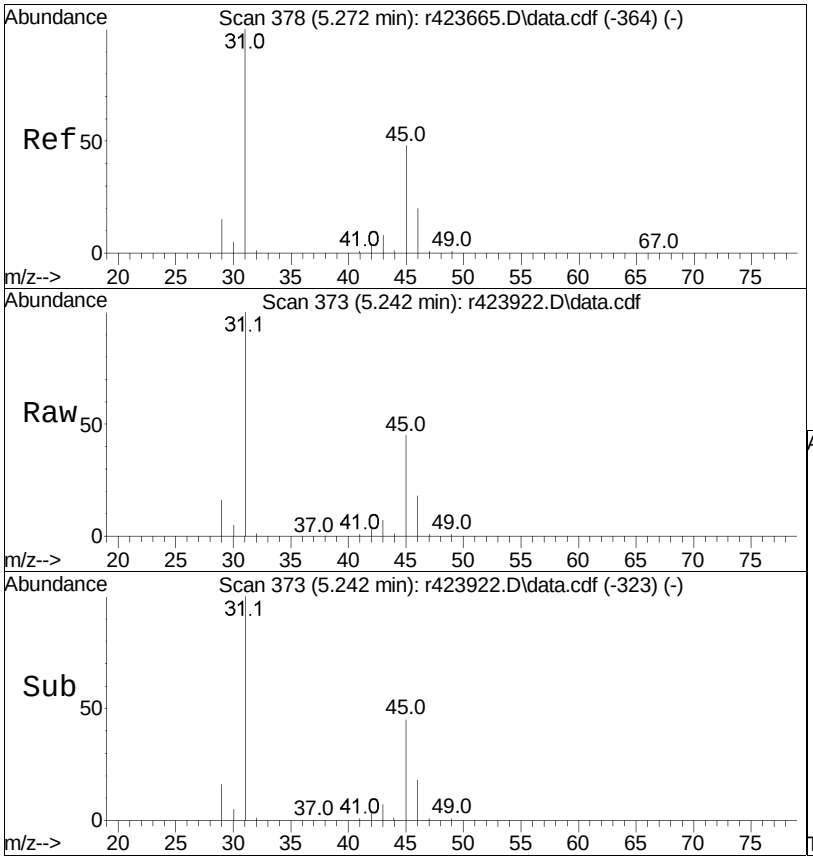


#6
chloromethane
Concen: 0.63 ppbV
RT: 4.132 min Scan# 188
Delta R.T. -0.024 min
Lab File: r423922.D
Acq: 4 Oct 2022 9:46 PM

Tgt Ion: 50 Resp: 9865

Ion	Ratio	Lower	Upper
50	100		
52	33.8	27.0	40.6

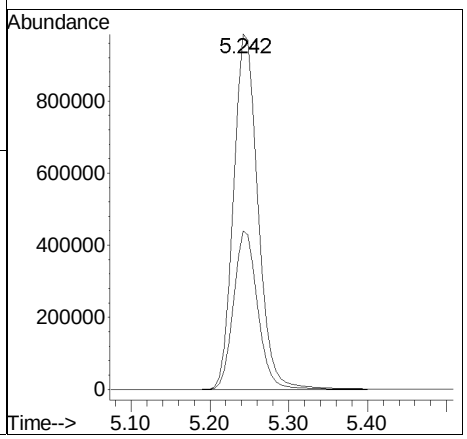


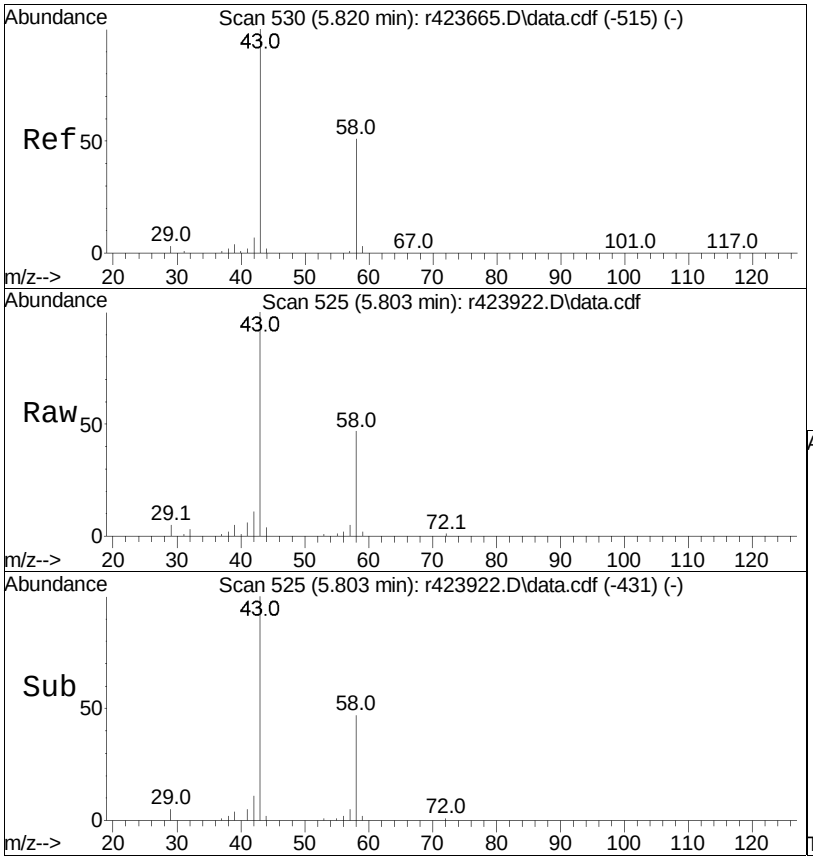


#15
ethanol
Concen: 146.22 ppbV
RT: 5.242 min Scan# 373
Delta R.T. -0.030 min
Lab File: r423922.D
Acq: 4 Oct 2022 9:46 PM

Tgt Ion: 31 Resp: 1885261

Ion	Ratio	Lower	Upper
31	100		
45	44.6	38.3	57.5

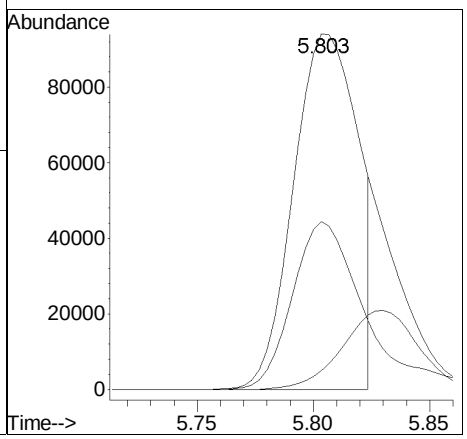


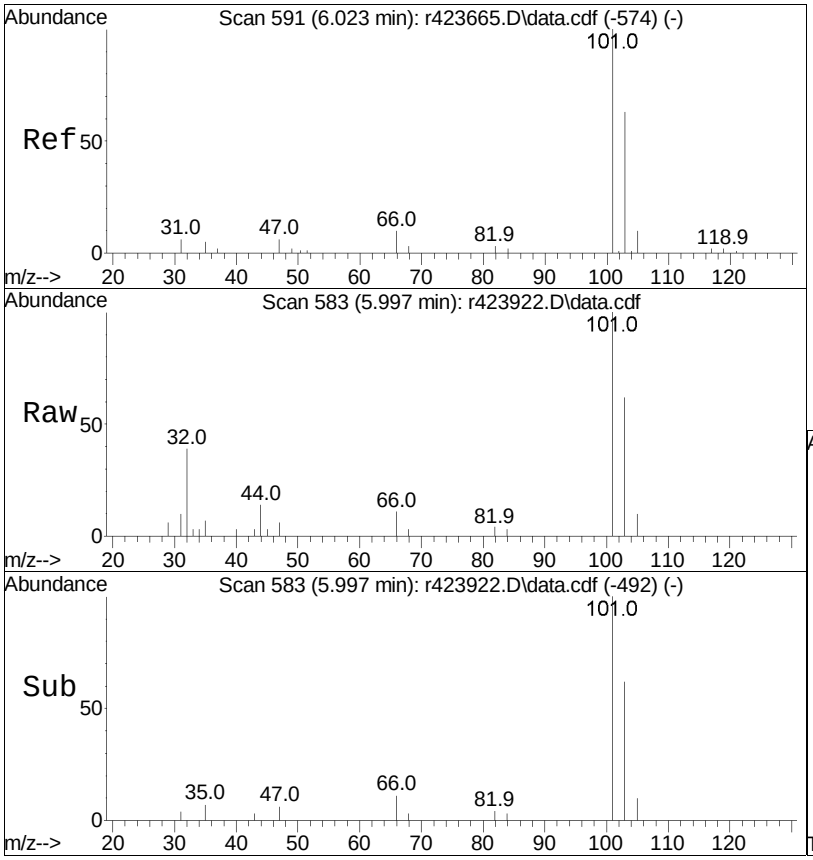


#19
acetone
Concen: 7.76 ppbV m
RT: 5.803 min Scan# 525
Delta R.T. -0.017 min
Lab File: r423922.D
Acq: 4 Oct 2022 9:46 PM

Tgt Ion: 43 Resp: 181518

Ion	Ratio	Lower	Upper
43	100		
58	47.2	41.0	61.6
57	5.3	1.0	1.6#

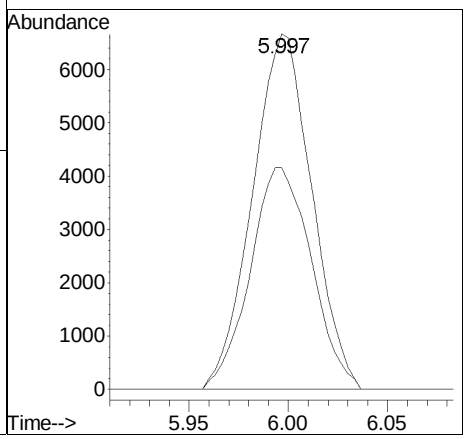


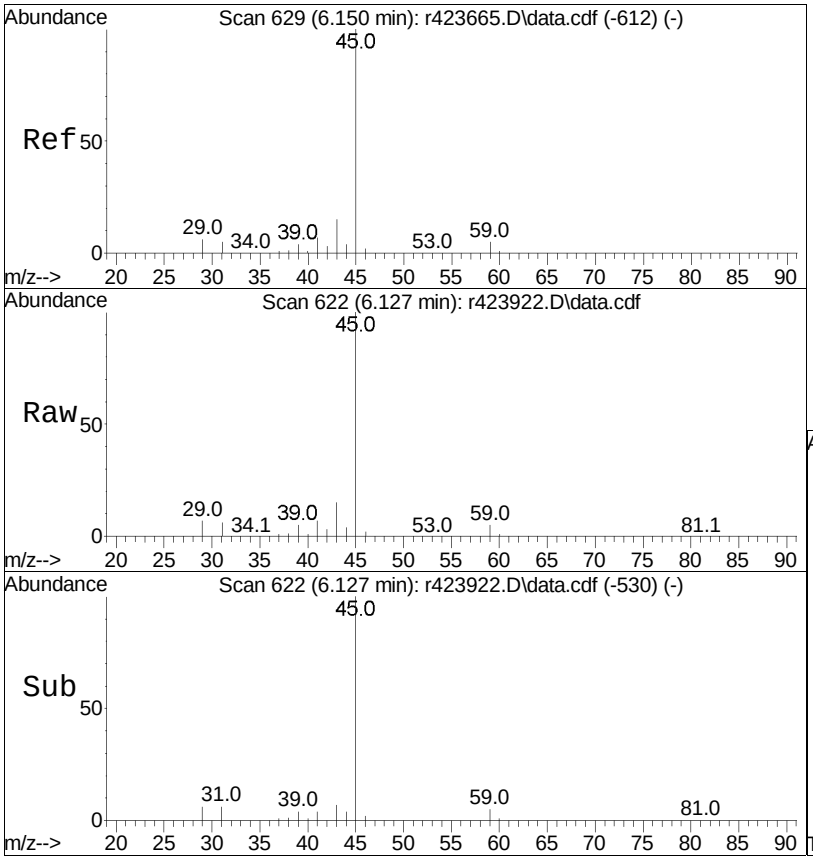


#21
trichlorofluoromethane
Concen: 0.49 ppbV
RT: 5.997 min Scan# 583
Delta R.T. -0.027 min
Lab File: r423922.D
Acq: 4 Oct 2022 9:46 PM

Tgt Ion:101 Resp: 13868

Ion	Ratio	Lower	Upper
101	100		
103	62.3	50.2	75.2

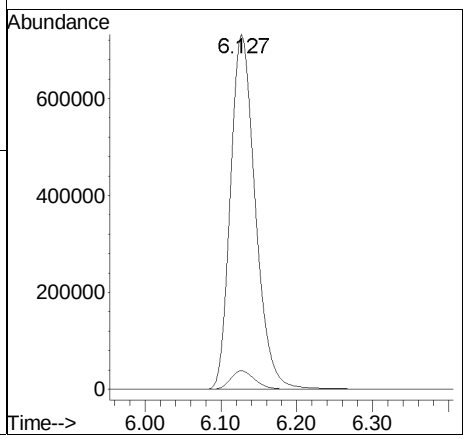


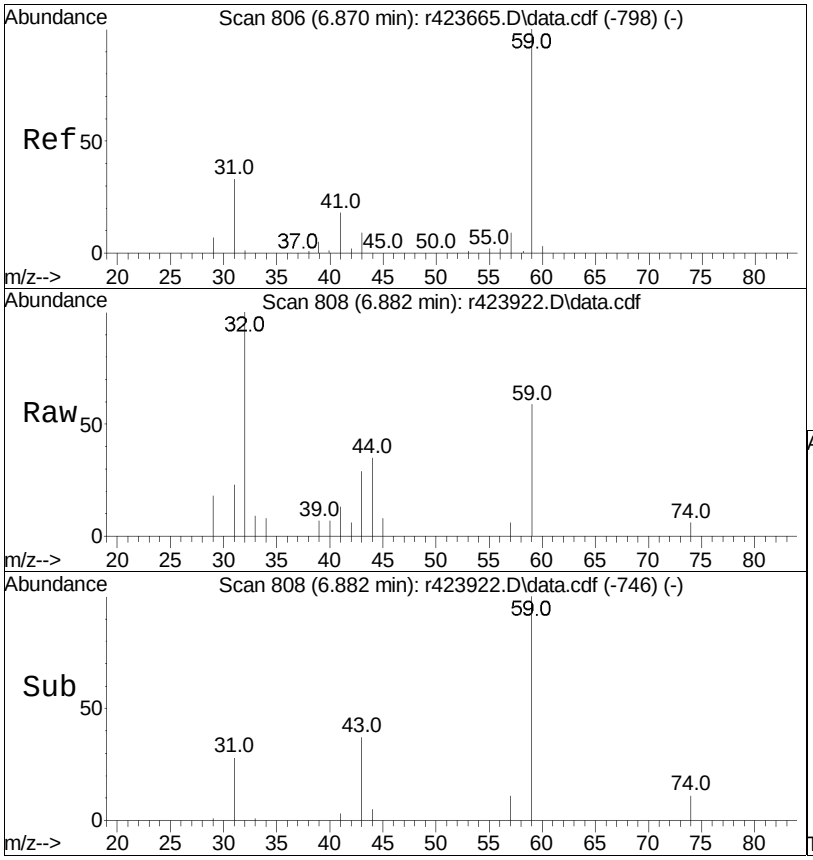


#22
isopropyl alcohol
Concen: 50.69 ppbV
RT: 6.127 min Scan# 622
Delta R.T. -0.023 min
Lab File: r423922.D
Acq: 4 Oct 2022 9:46 PM

Tgt Ion: 45 Resp: 1673043

Ion	Ratio	Lower	Upper
45	100		
59	5.3	4.3	6.5

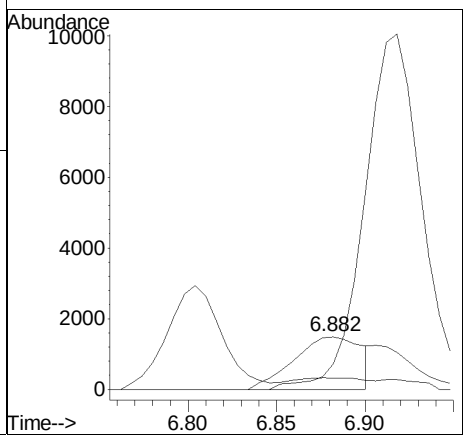


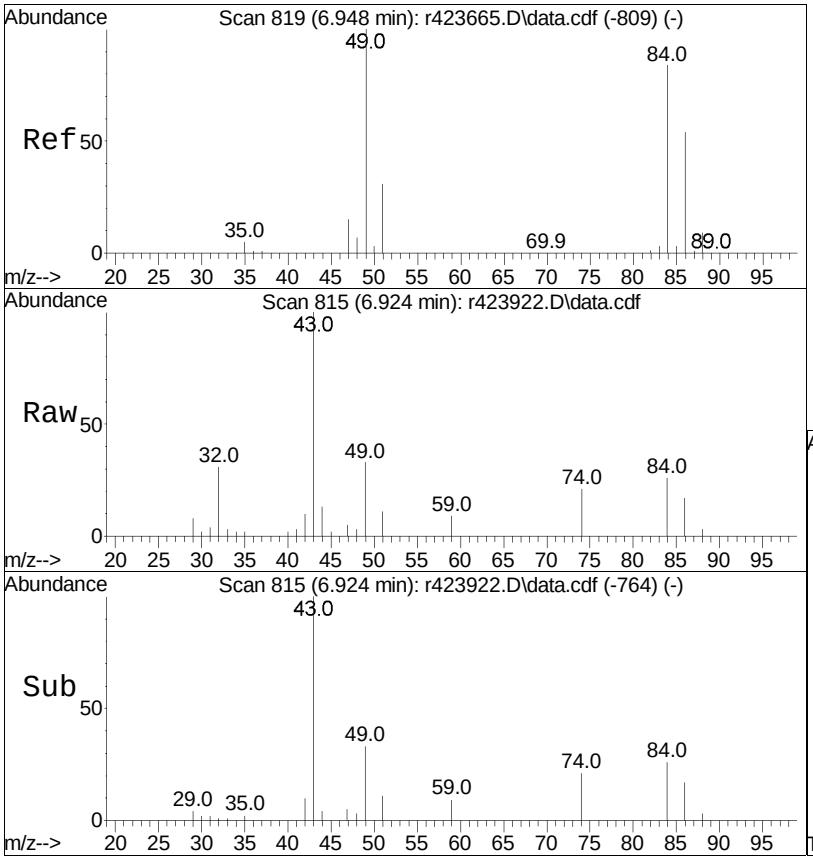


#27
tertiary butyl alcohol
Concen: 0.08 ppbV m
RT: 6.882 min Scan# 808
Delta R.T. 0.012 min
Lab File: r423922.D
Acq: 4 Oct 2022 9:46 PM

Tgt Ion: 59 Resp: 3944

Ion	Ratio	Lower	Upper
59	100		
41	22.0	14.6	21.8#
43	48.5	7.0	10.6#

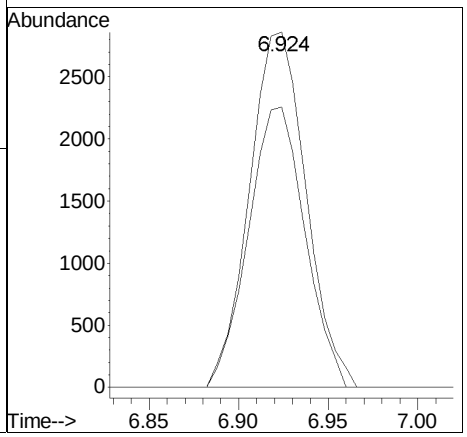


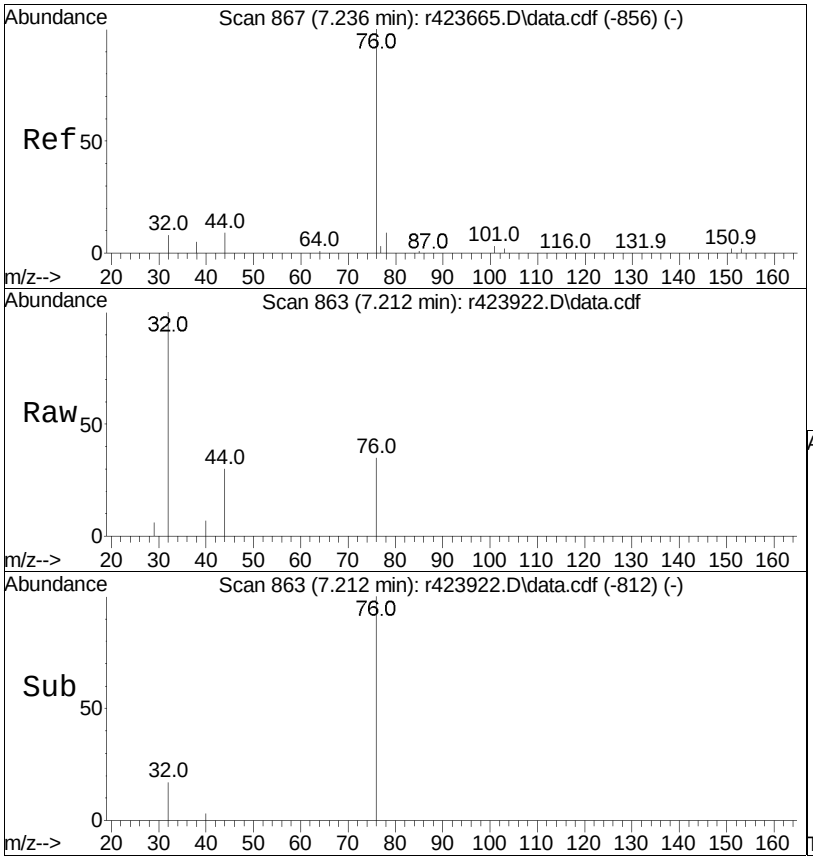


#28
methylene chloride
Concen: 0.26 ppbV
RT: 6.924 min Scan# 815
Delta R.T. -0.024 min
Lab File: r423922.D
Acq: 4 Oct 2022 9:46 PM

Tgt Ion: 49 Resp: 6299

Ion	Ratio	Lower	Upper
49	100		
84	78.9	66.8	100.2

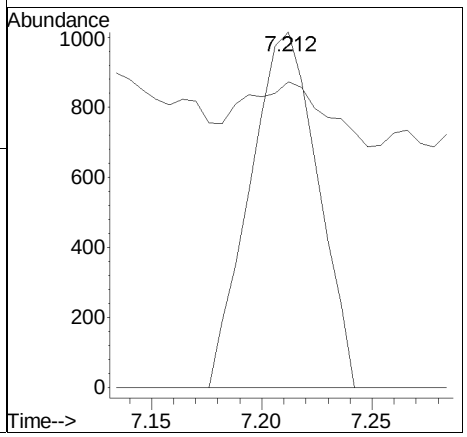


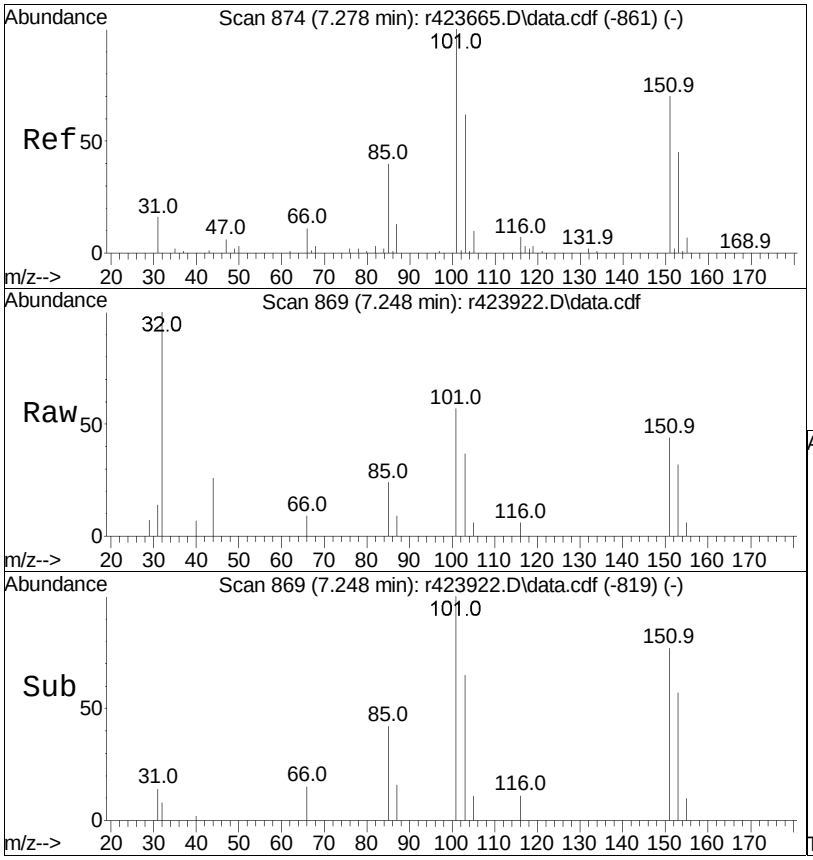


#30
carbon disulfide
Concen: 0.03 ppbV
RT: 7.212 min Scan# 863
Delta R.T. -0.024 min
Lab File: r423922.D
Acq: 4 Oct 2022 9:46 PM

Tgt Ion: 76 Resp: 2178

Ion	Ratio	Lower	Upper
76	100		
44	86.0	7.4	11.2#

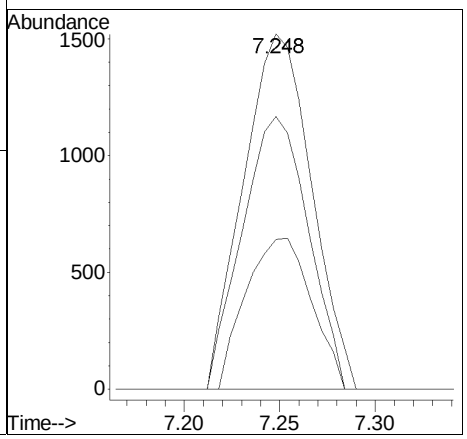


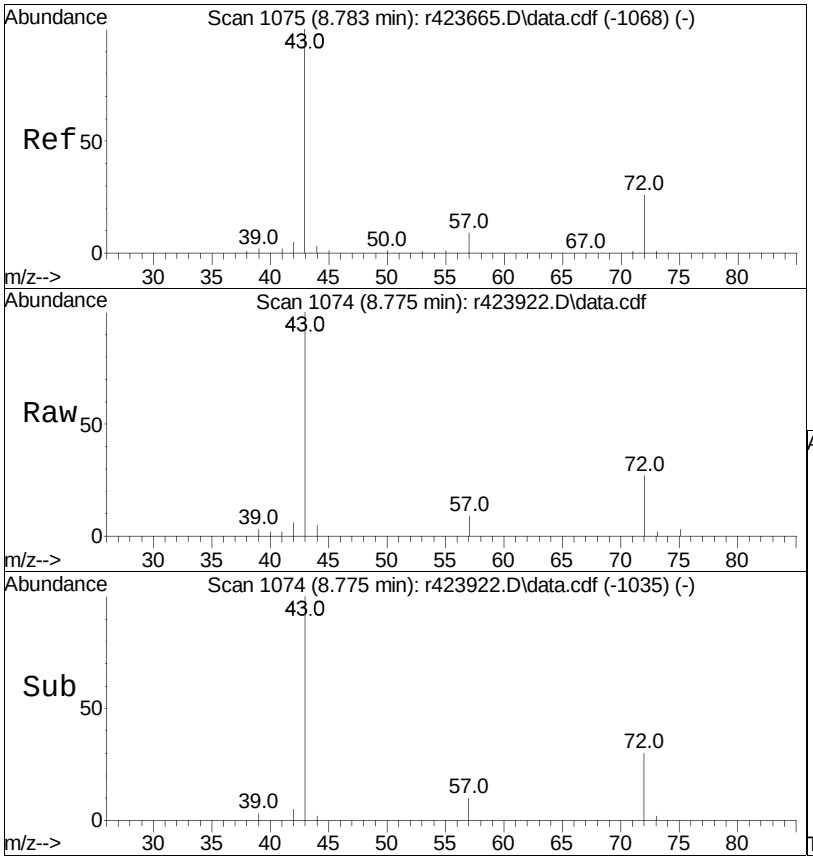


#31
Freon 113
Concen: 0.09 ppbV
RT: 7.248 min Scan# 869
Delta R.T. -0.030 min
Lab File: r423922.D
Acq: 4 Oct 2022 9:46 PM

Tgt Ion:101 Resp: 3782

Ion	Ratio	Lower	Upper
101	100		
85	42.2	32.2	48.2
151	76.8	56.3	84.5

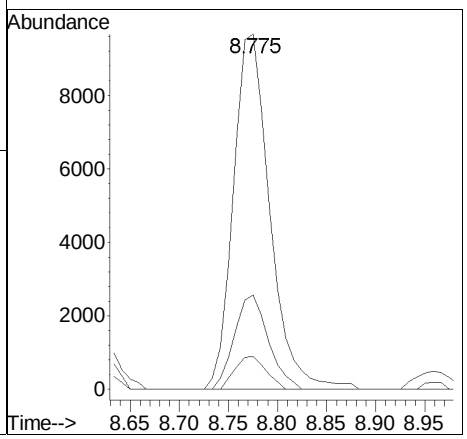


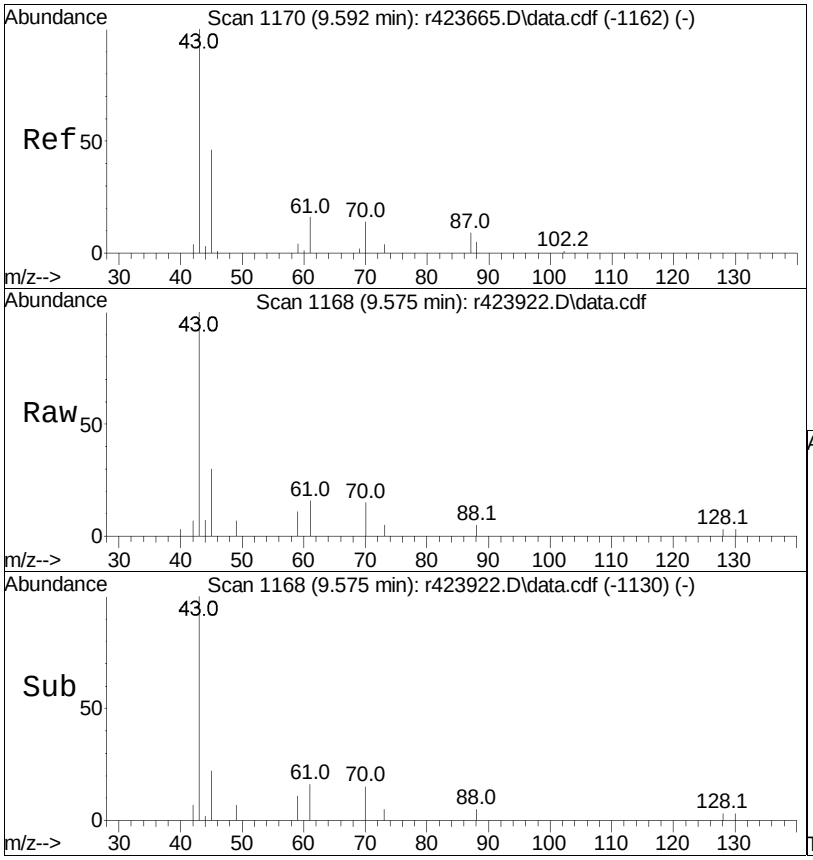


#36
2-butanone
Concen: 0.49 ppbV
RT: 8.775 min Scan# 1074
Delta R.T. -0.008 min
Lab File: r423922.D
Acq: 4 Oct 2022 9:46 PM

Tgt Ion: 43 Resp: 25041

Ion	Ratio	Lower	Upper
43	100		
72	26.6	21.0	31.6
57	9.3	7.4	11.0

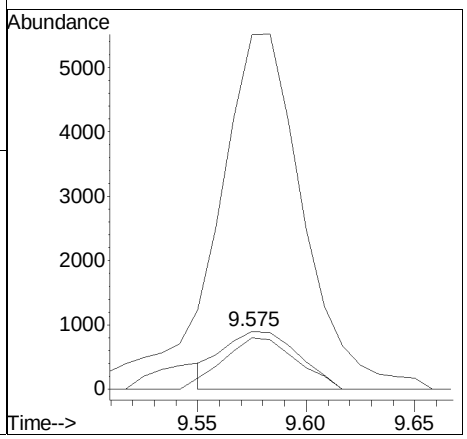


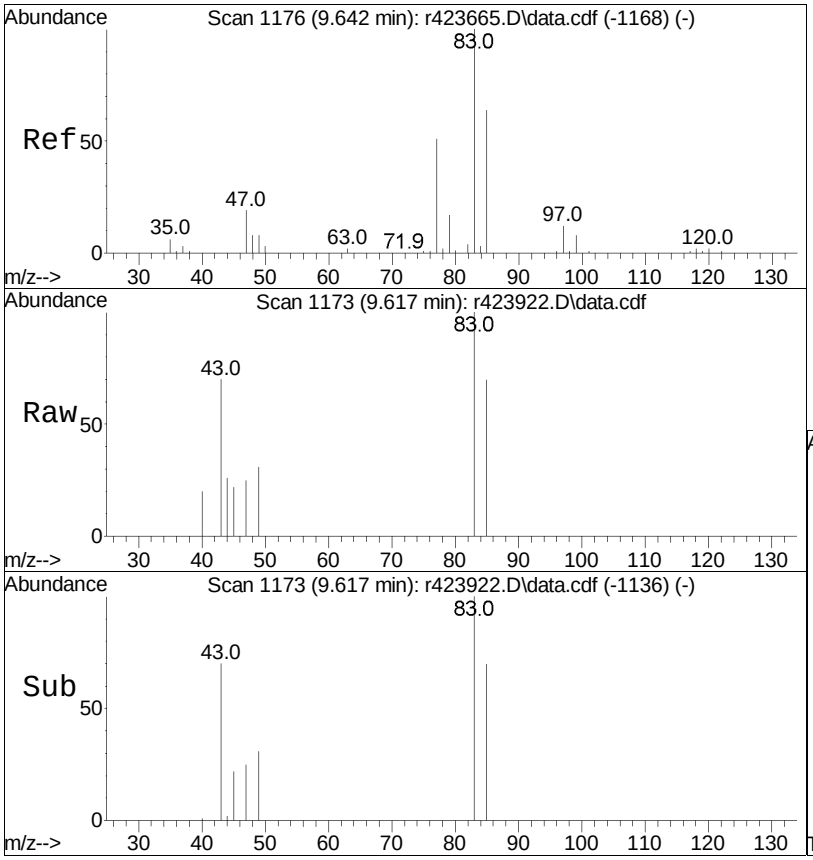


#38
Ethyl Acetate
Concen: 0.23 ppbV m
RT: 9.575 min Scan# 1168
Delta R.T. -0.017 min
Lab File: r423922.D
Acq: 4 Oct 2022 9:46 PM

Tgt Ion: 61 Resp: 2203

Ion	Ratio	Lower	Upper
61	100		
70	89.1	71.0	106.6
43	612.5	558.9	838.3

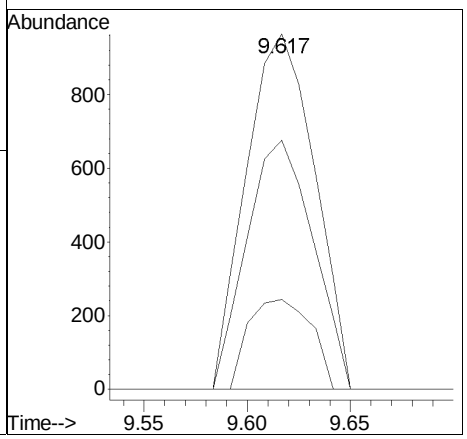


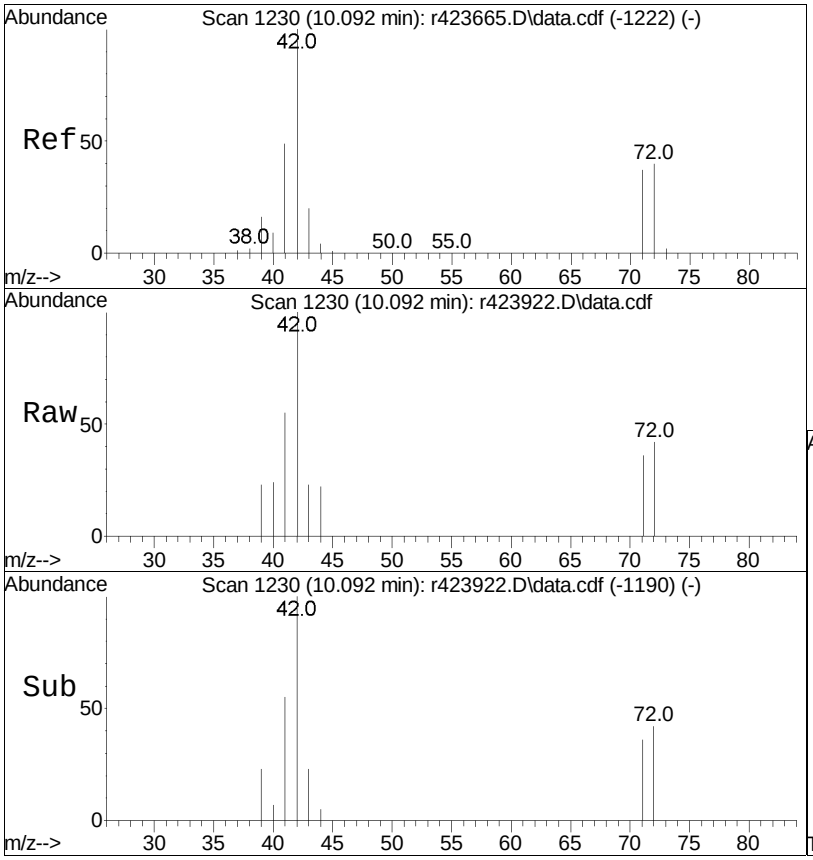


#39
chloroform
Concen: 0.05 ppbV
RT: 9.617 min Scan# 1173
Delta R.T. -0.025 min
Lab File: r423922.D
Acq: 4 Oct 2022 9:46 PM

Tgt Ion: 83 Resp: 2237

Ion	Ratio	Lower	Upper
83	100		
85	70.1	51.6	77.4
47	25.3	15.2	22.8#

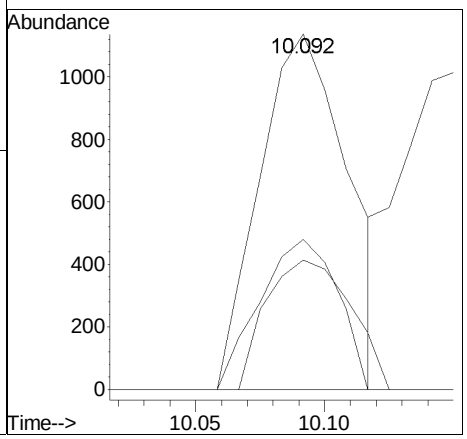


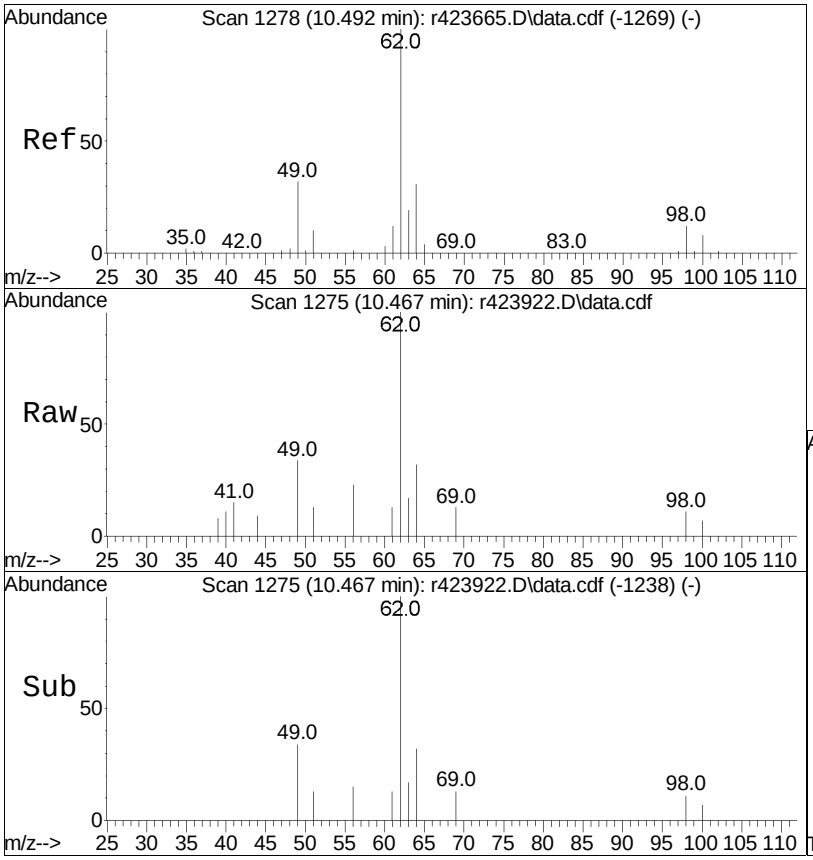


#40
Tetrahydrofuran
Concen: 0.08 ppbV
RT: 10.092 min Scan# 1230
Delta R.T. 0.000 min
Lab File: r423922.D
Acq: 4 Oct 2022 9:46 PM

Tgt Ion: 42 Resp: 2705

Ion	Ratio	Lower	Upper
42	100		
71	36.4	29.7	44.5
72	42.2	32.4	48.6

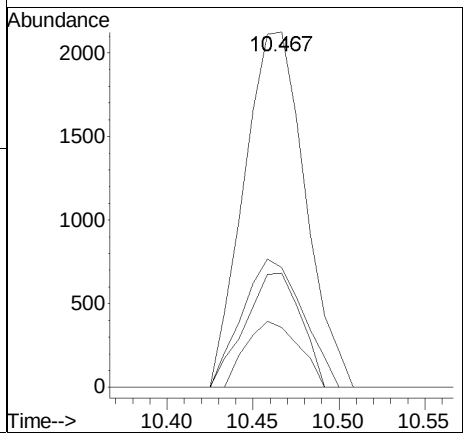


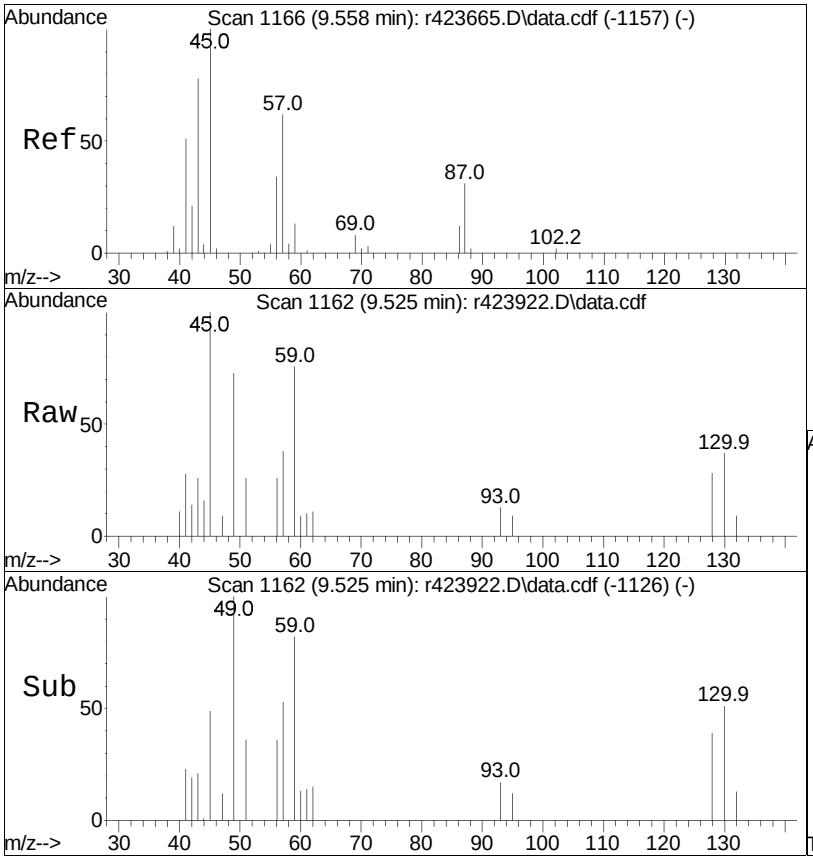


#42
1,2-dichloroethane
Concen: 0.19 ppbV
RT: 10.467 min Scan# 1275
Delta R.T. -0.025 min
Lab File: r423922.D
Acq: 4 Oct 2022 9:46 PM

Tgt Ion: 62 Resp: 5256

Ion	Ratio	Lower	Upper
62	100		
64	32.1	25.0	37.4
49	33.7	25.8	38.6
63	16.9	15.1	22.7

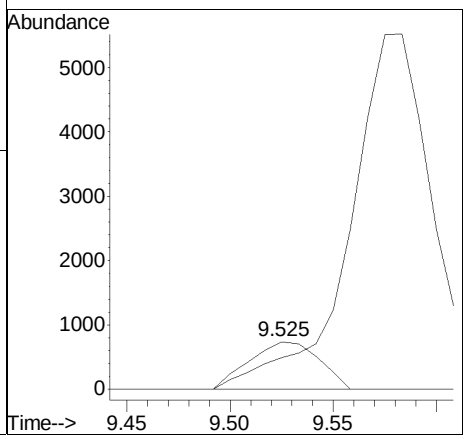


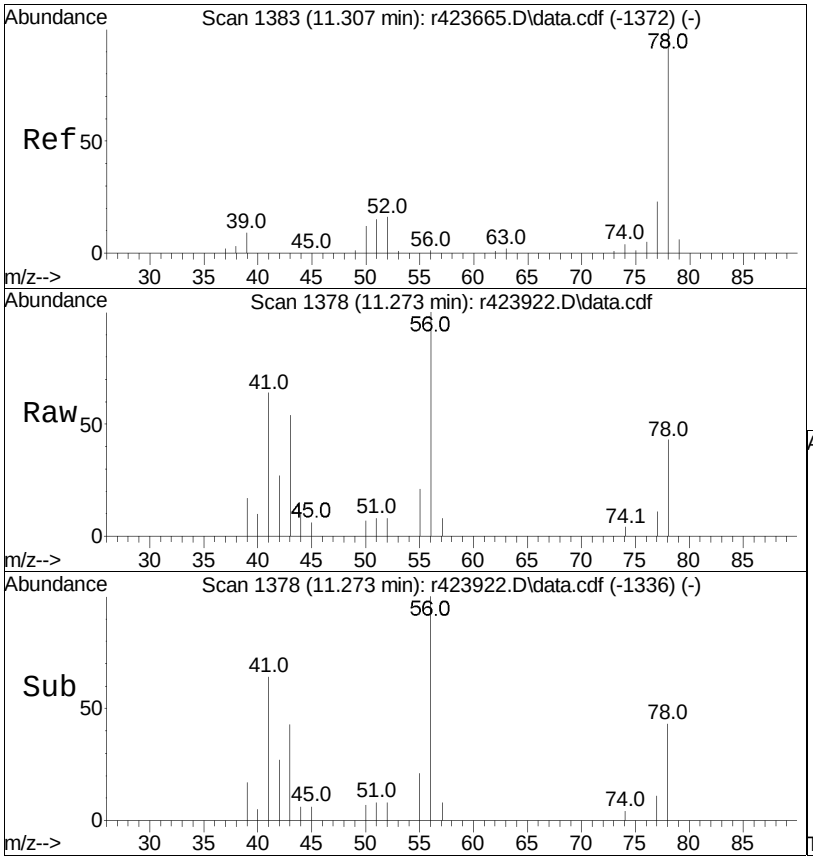


#44
hexane
Concen: 0.04 ppbV
RT: 9.525 min Scan# 1162
Delta R.T. -0.033 min
Lab File: r423922.D
Acq: 4 Oct 2022 9:46 PM

Tgt Ion: 57 Resp: 1746

Ion	Ratio	Lower	Upper
57	100		
43	66.9	101.0	151.4#
86	0.0	14.8	22.2#

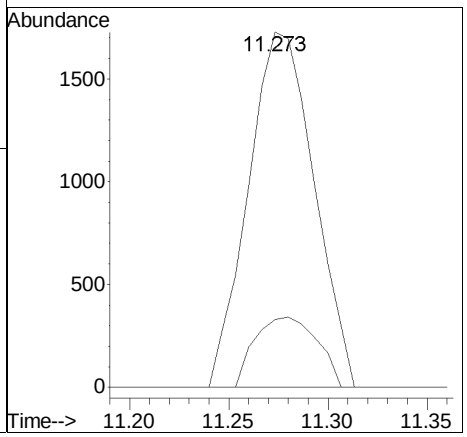


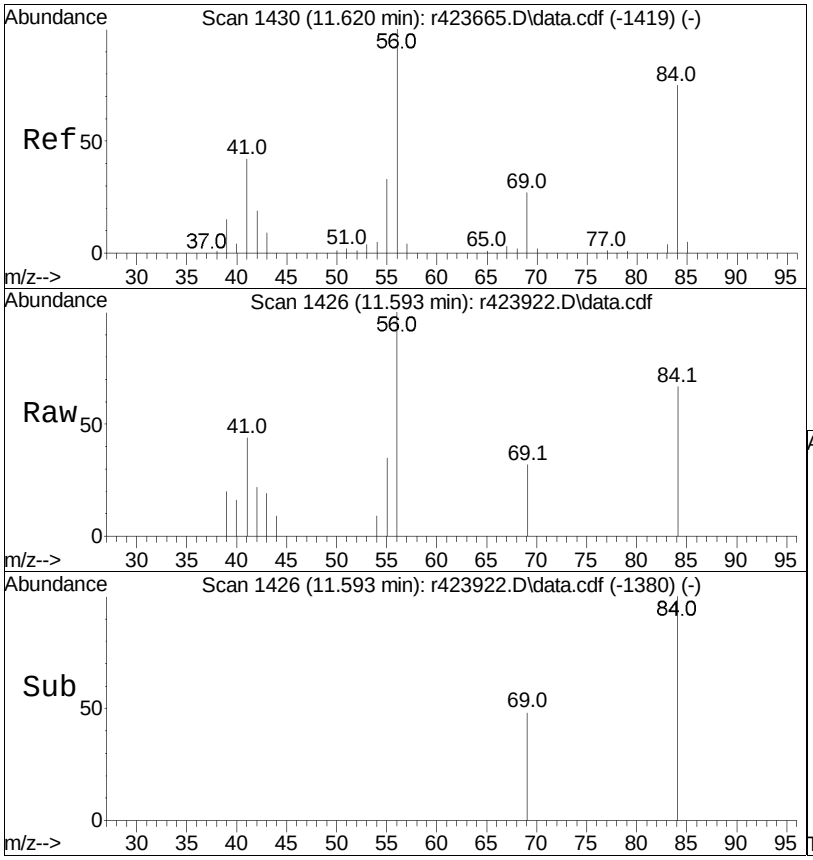


#50
benzene
Concen: 0.05 ppbV
RT: 11.273 min Scan# 1378
Delta R.T. -0.033 min
Lab File: r423922.D
Acq: 4 Oct 2022 9:46 PM

Tgt Ion: 78 Resp: 3984

Ion	Ratio	Lower	Upper
78	100		
52	19.1	13.0	19.6

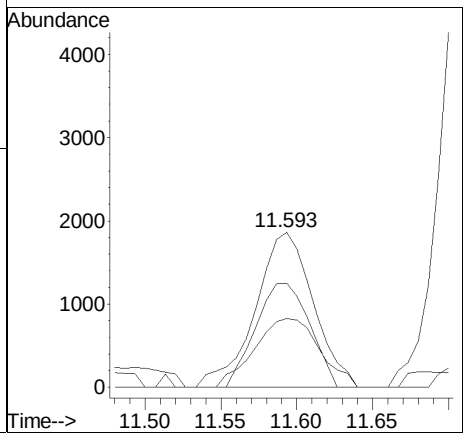


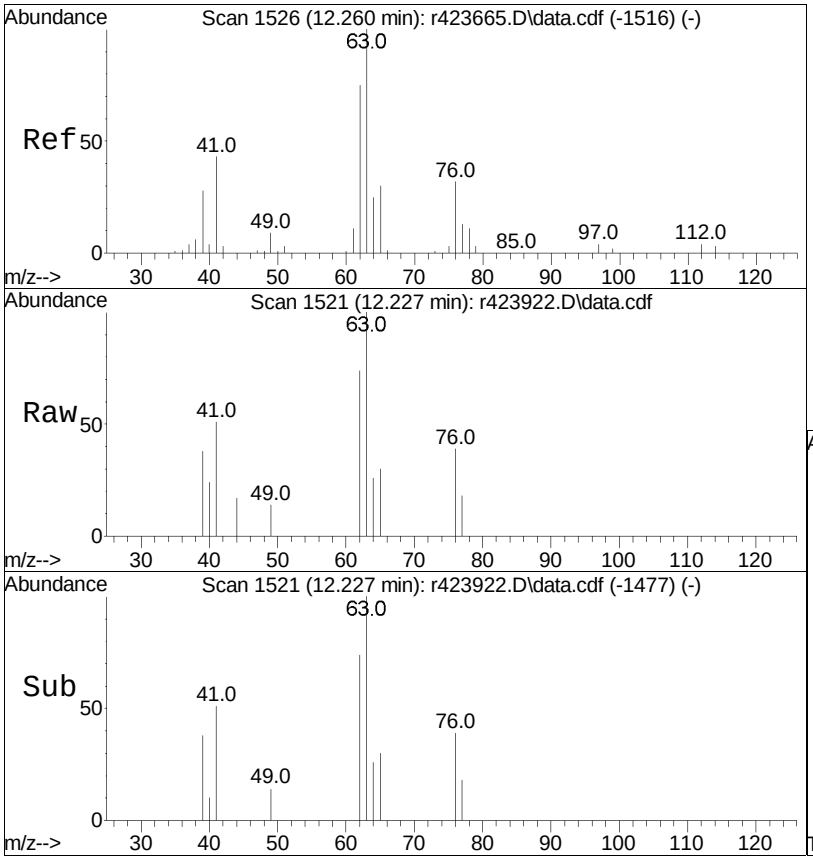


#53
cyclohexane
Concen: 0.10 ppbV
RT: 11.593 min Scan# 1426
Delta R.T. -0.027 min
Lab File: r423922.D
Acq: 4 Oct 2022 9:46 PM

Tgt Ion: 56 Resp: 4959

Ion	Ratio	Lower	Upper
56	100		
84	67.2	60.4	90.6
41	44.4	33.9	50.9

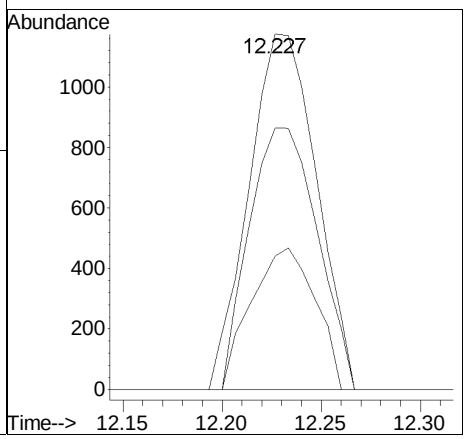


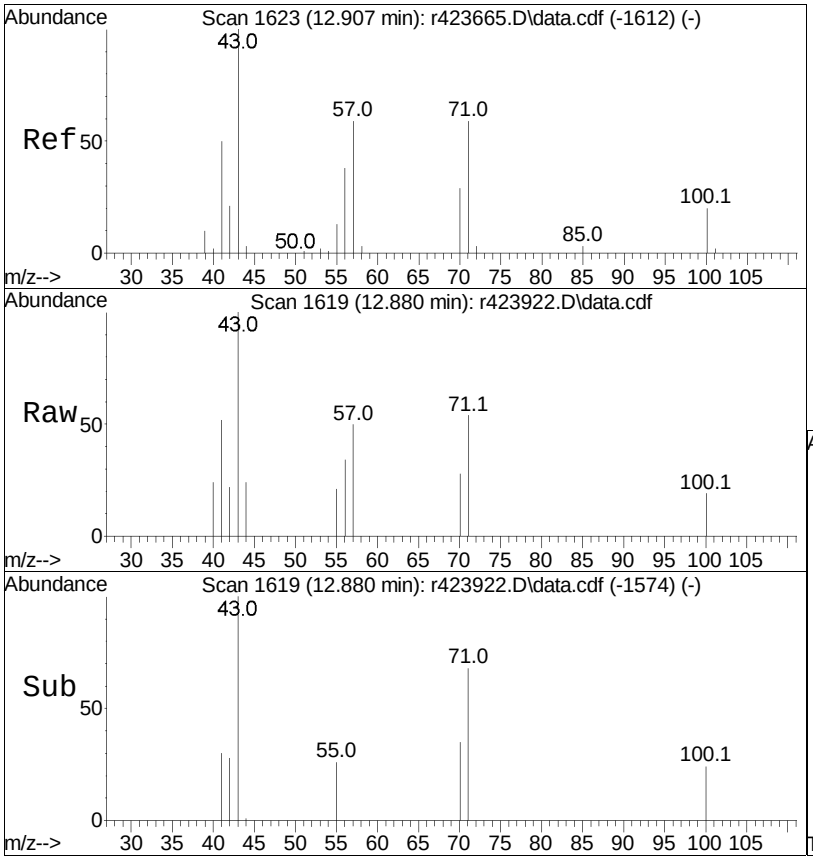


#56
1,2-dichloropropane
Concen: 0.10 ppbV
RT: 12.227 min Scan# 1521
Delta R.T. -0.033 min
Lab File: r423922.D
Acq: 4 Oct 2022 9:46 PM

Tgt Ion: 63 Resp: 2789

Ion	Ratio	Lower	Upper
63	100		
62	73.6	60.2	90.4
39	37.5	22.7	34.1#

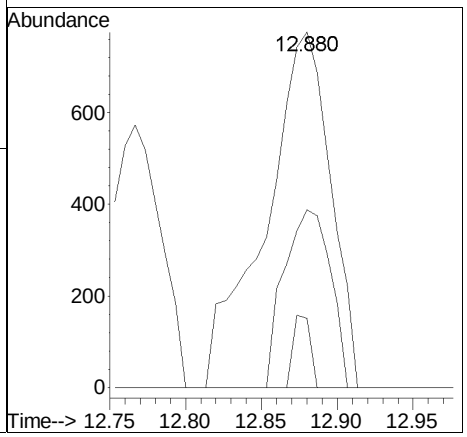


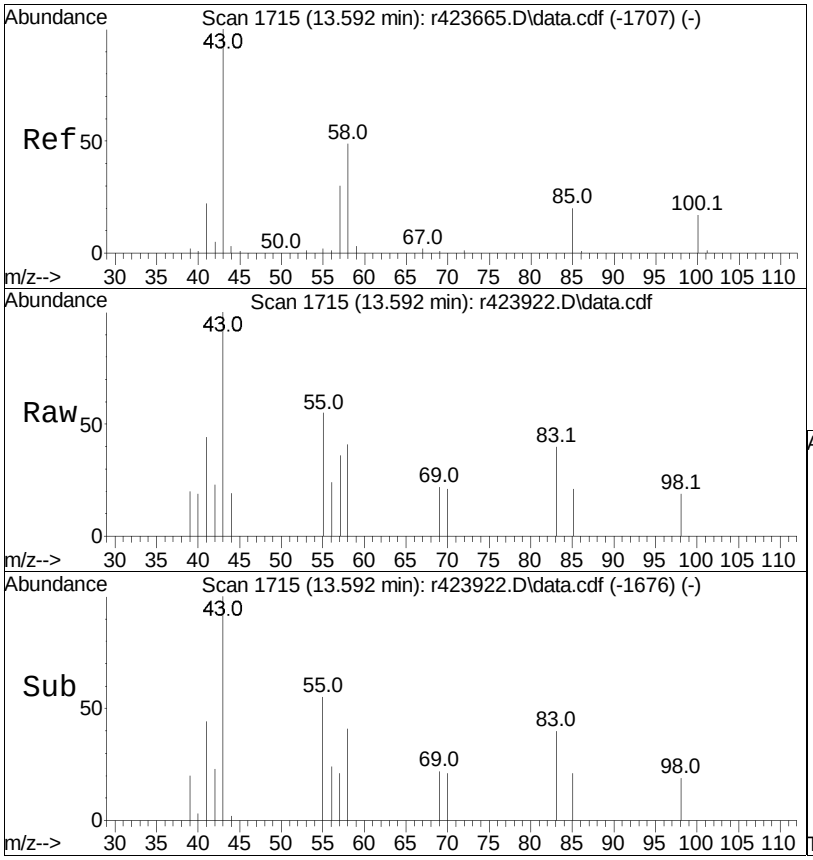


#62
heptane
Concen: 0.05 ppbV
RT: 12.880 min Scan# 1619
Delta R.T. -0.027 min
Lab File: r423922.D
Acq: 4 Oct 2022 9:46 PM

Tgt Ion: 43 Resp: 2323

Ion	Ratio	Lower	Upper
43	100		
57	50.0	47.1	70.7
100	19.5	16.7	25.1

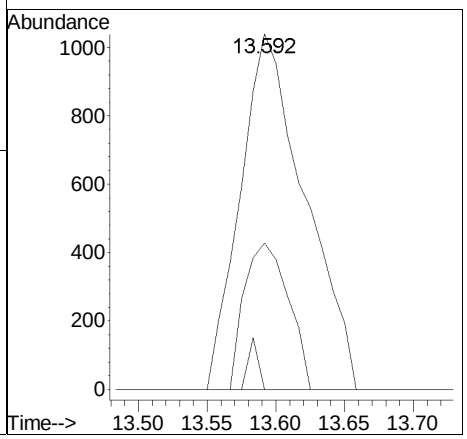


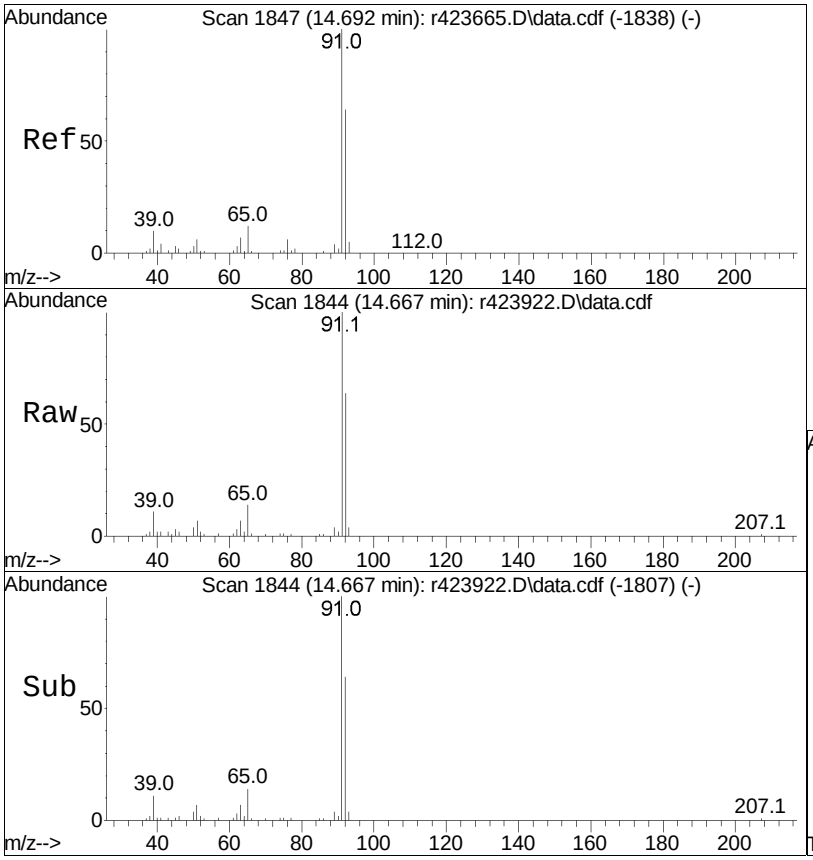


#64
4-methyl-2-pentanone
Concen: 0.06 ppbV
RT: 13.592 min Scan# 1715
Delta R.T. 0.000 min
Lab File: r423922.D
Acq: 4 Oct 2022 9:46 PM

Tgt Ion: 43 Resp: 3403

Ion	Ratio	Lower	Upper
43	100		
58	41.2	39.3	58.9
100	0.0	13.8	20.8#

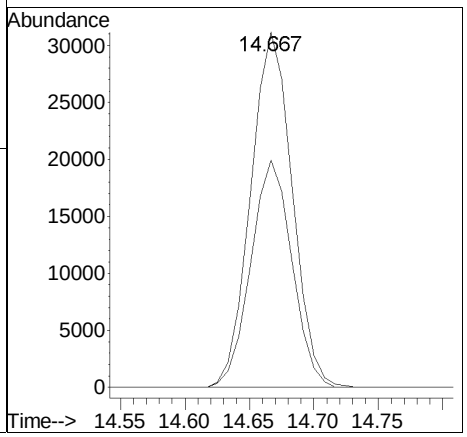


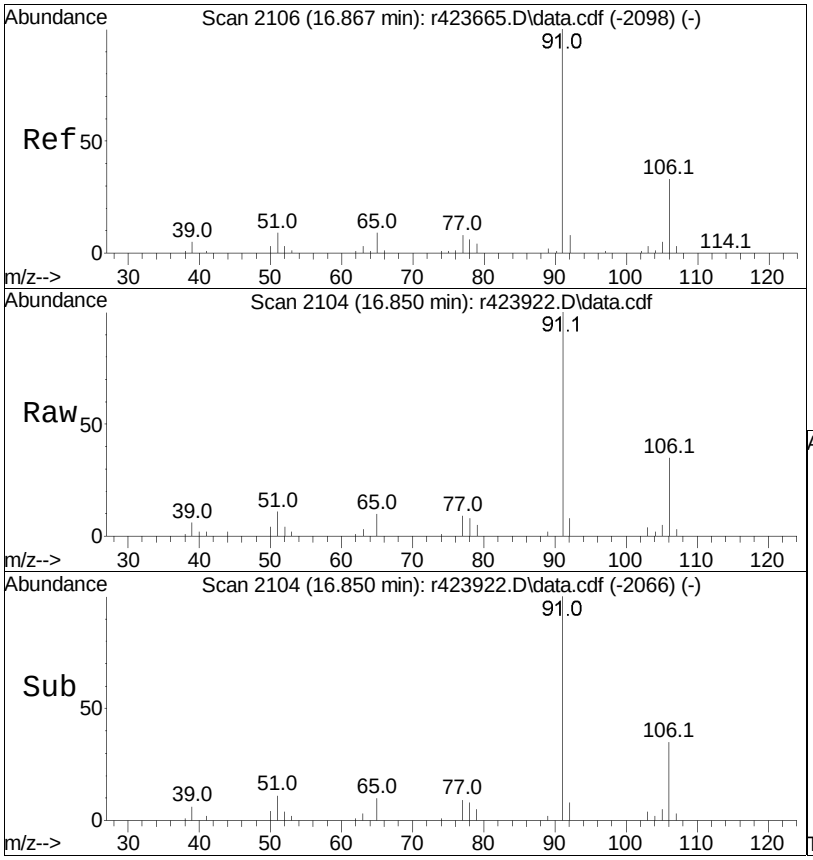


#68
toluene
Concen: 0.64 ppbV
RT: 14.667 min Scan# 1844
Delta R.T. -0.025 min
Lab File: r423922.D
Acq: 4 Oct 2022 9:46 PM

Tgt Ion: 91 Resp: 69877

Ion	Ratio	Lower	Upper
91	100		
92	64.0	50.8	76.2

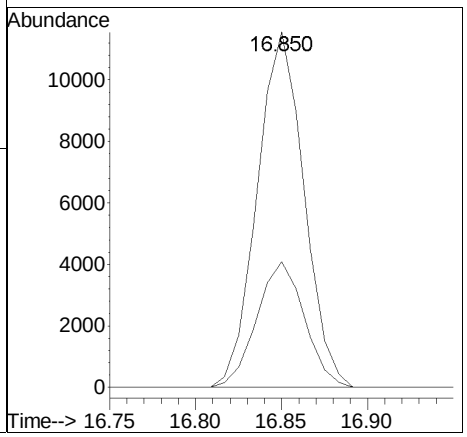


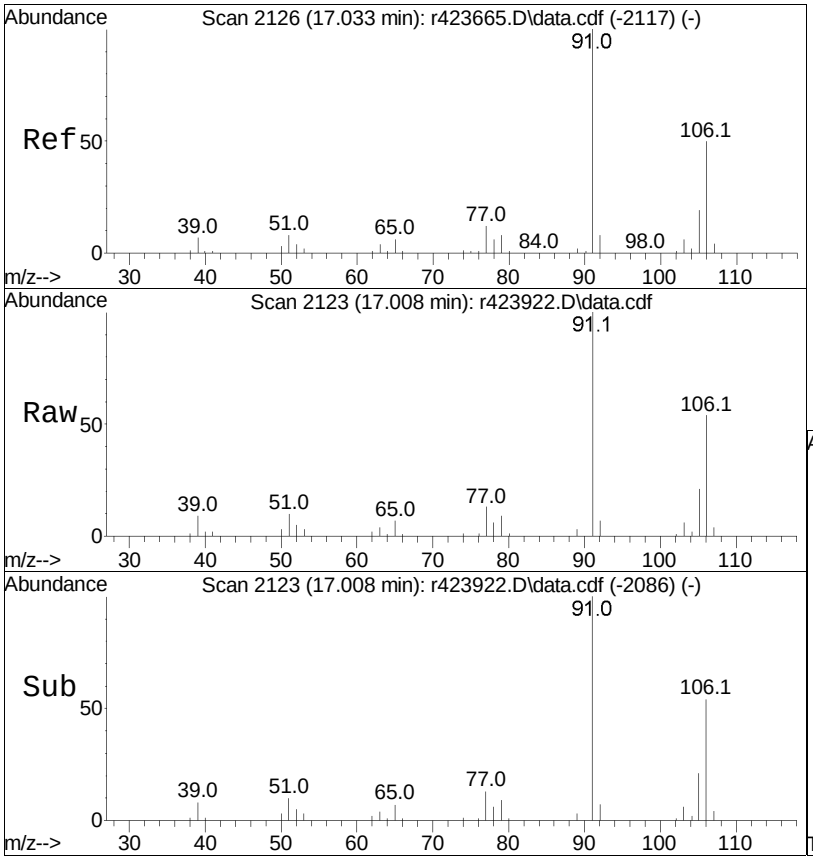


#81
ethylbenzene
Concen: 0.17 ppbV
RT: 16.850 min Scan# 2104
Delta R.T. -0.017 min
Lab File: r423922.D
Acq: 4 Oct 2022 9:46 PM

Tgt Ion: 91 Resp: 21870

Ion	Ratio	Lower	Upper
91	100		
106	35.4	26.6	39.8

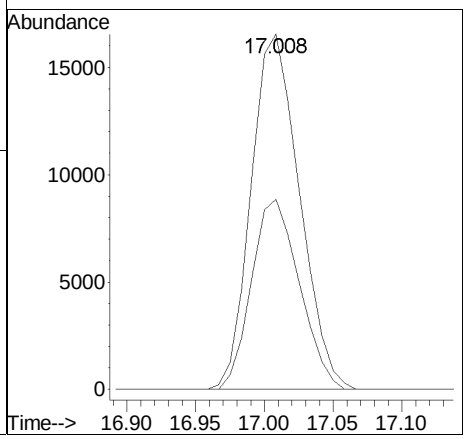


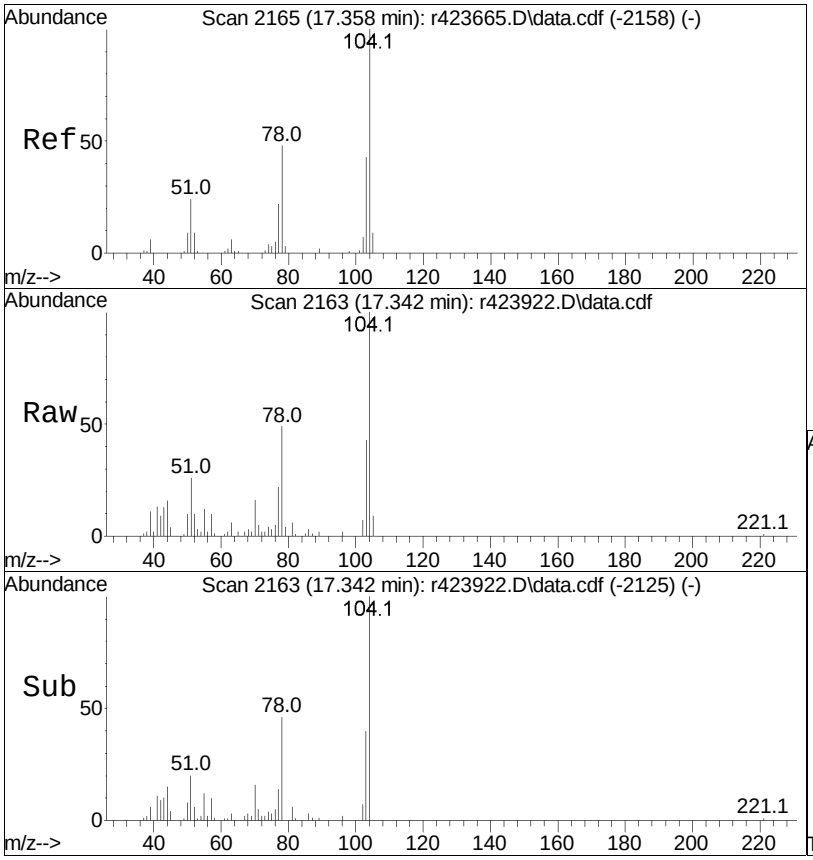


#83
m+p-xylene
Concen: 0.40 ppbV
RT: 17.008 min Scan# 2123
Delta R.T. -0.025 min
Lab File: r423922.D
Acq: 4 Oct 2022 9:46 PM

Tgt Ion: 91 Resp: 40484

Ion	Ratio	Lower	Upper
91	100		
106	53.5	39.8	59.6

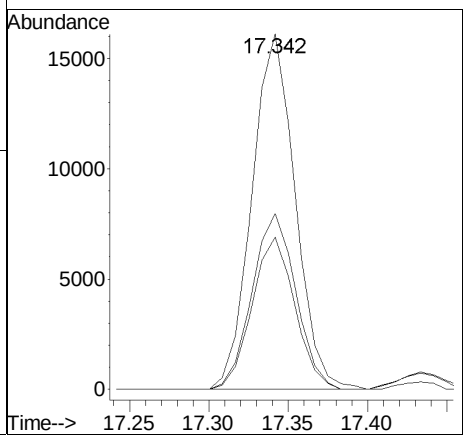


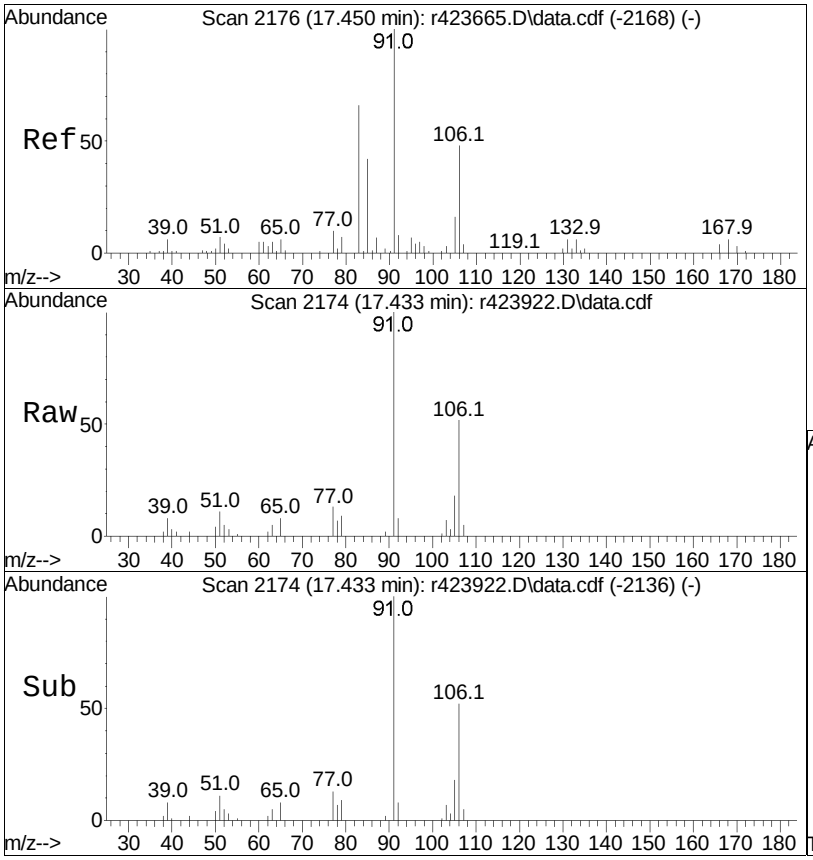


#85
styrene
Concen: 0.39 ppbV
RT: 17.342 min Scan# 2163
Delta R.T. -0.017 min
Lab File: r423922.D
Acq: 4 Oct 2022 9:46 PM

Tgt Ion:104 Resp: 30533

Ion	Ratio	Lower	Upper
104	100		
103	42.8	34.8	52.2
78	49.5	38.1	57.1

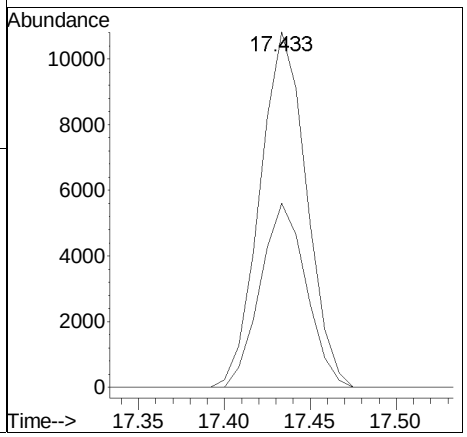


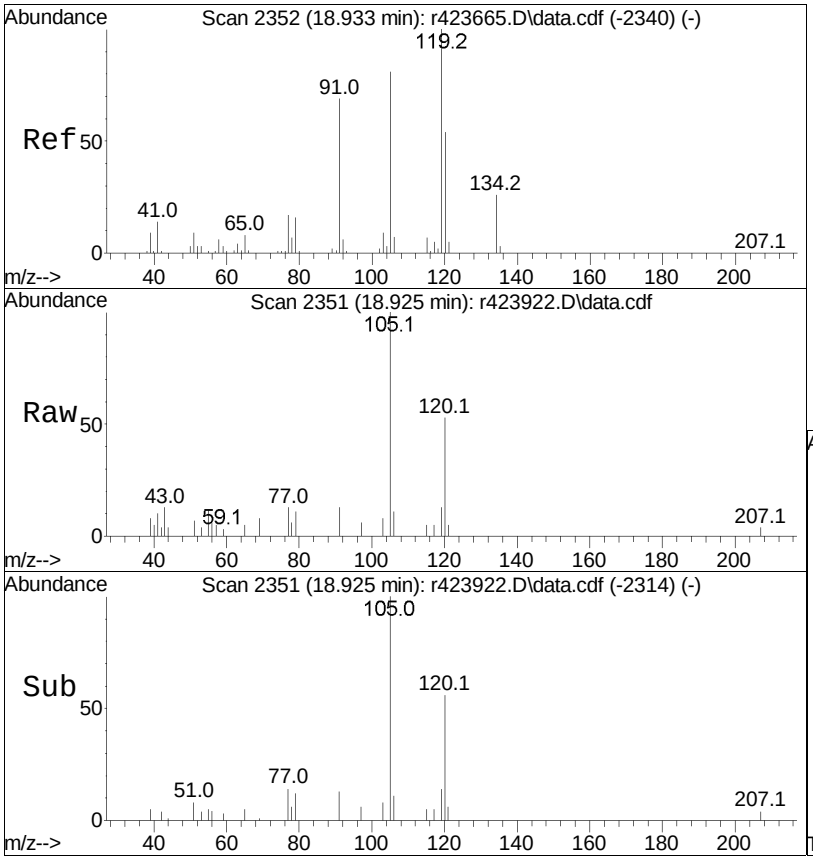


#87
o-xylene
Concen: 0.20 ppbV
RT: 17.433 min Scan# 2174
Delta R.T. -0.017 min
Lab File: r423922.D
Acq: 4 Oct 2022 9:46 PM

Tgt Ion: 91 Resp: 20426

Ion	Ratio	Lower	Upper
91	100		
106	51.8	38.2	57.4

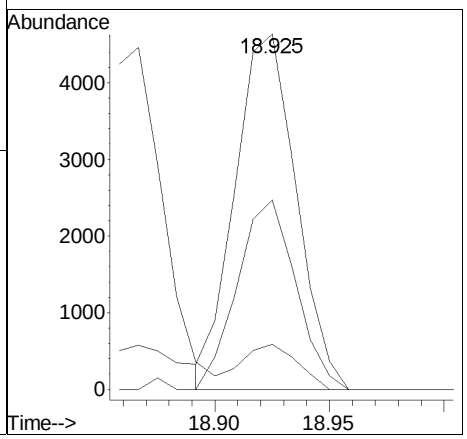




#99
1,2,4-trimethylbenzene
Concen: 0.08 ppbV
RT: 18.925 min Scan# 2351
Delta R.T. -0.008 min
Lab File: r423922.D
Acq: 4 Oct 2022 9:46 PM

Tgt Ion:105 Resp: 8619

Ion	Ratio	Lower	Upper
105	100		
120	53.3	53.0	79.6
91	12.7	67.5	101.3#

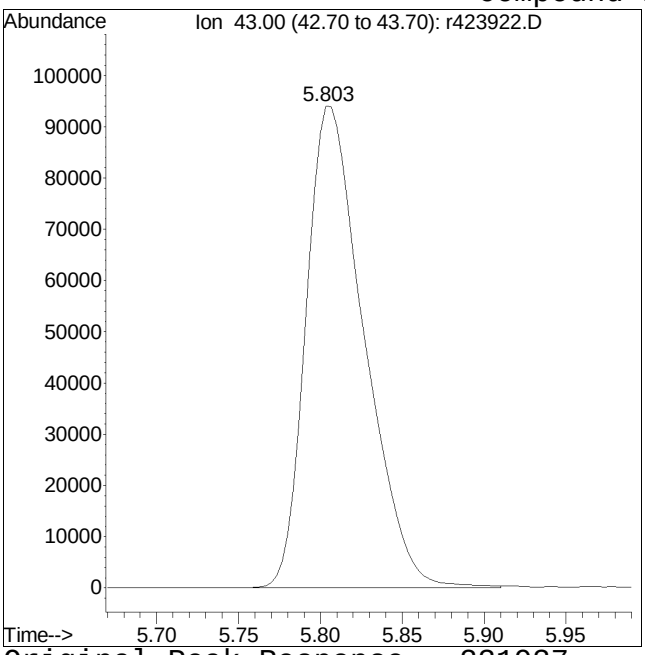


Manual Integration Report

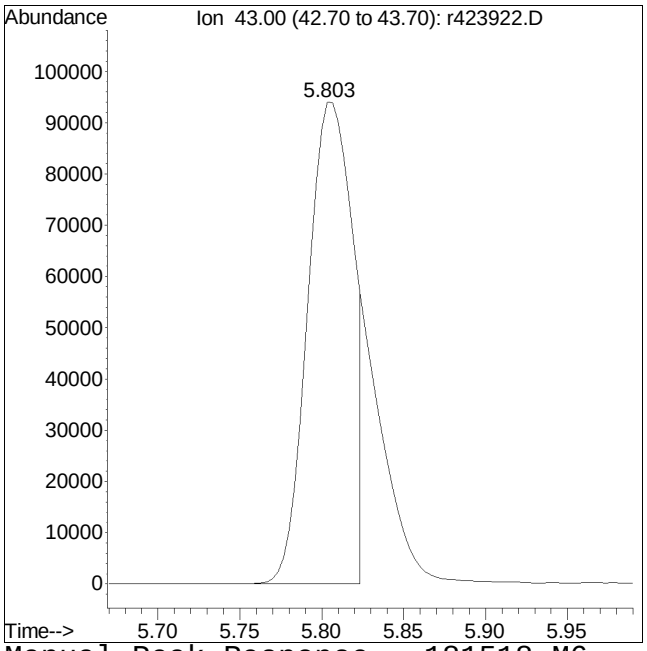
Data Path : O:\Forensics\Data\AirpianoQ
Data File : r423922.D
Date Inj'd : 10/4/2020 0:9: 6
Sample : L2253855-03,3,250,250

Method : TFS4_220921.M
Operator : AIRPIANO4:TJS
Instrument :
Quant Date : 10/5/2022 8:16 am

Compound #19: acetone



Original Peak Response = 231937



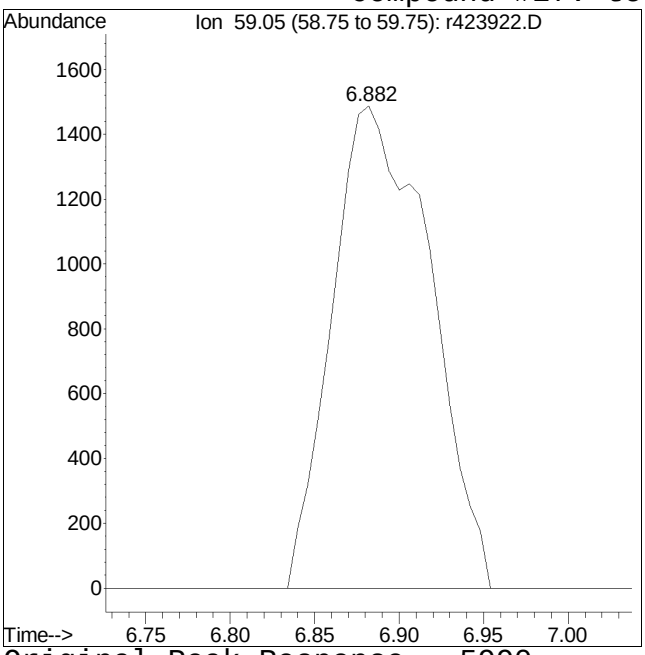
Manual Peak Response = 181518 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

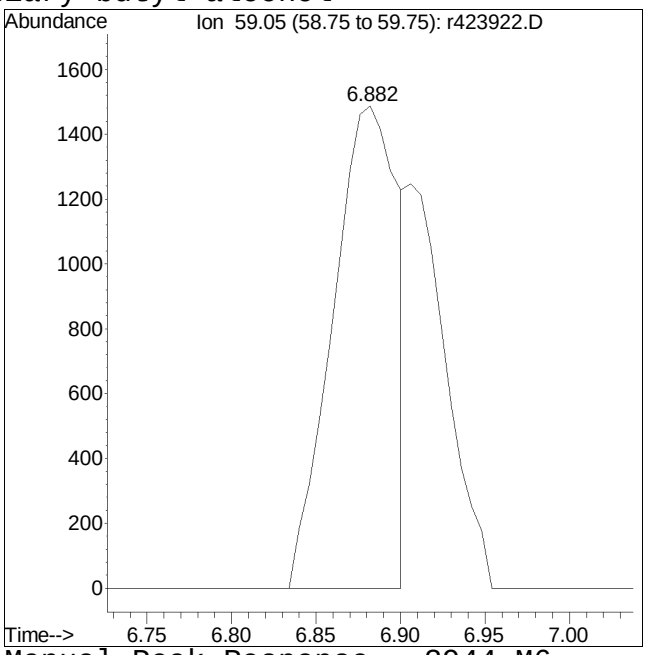
Manual Integration Report

Data Path : O:\Forensics\Data\AirpianoQMethod : TFS4_220921.M
Data File : r423922.D Operator : AIRPIANO4:TJS
Date Inj'd : 10/4/2020 0:9: 6 Instrument :
Sample : L2253855-03,3,250,250 Quant Date : 10/5/2022 8:16 am

Compound #27: tertiary butyl alcohol



Original Peak Response = 5990



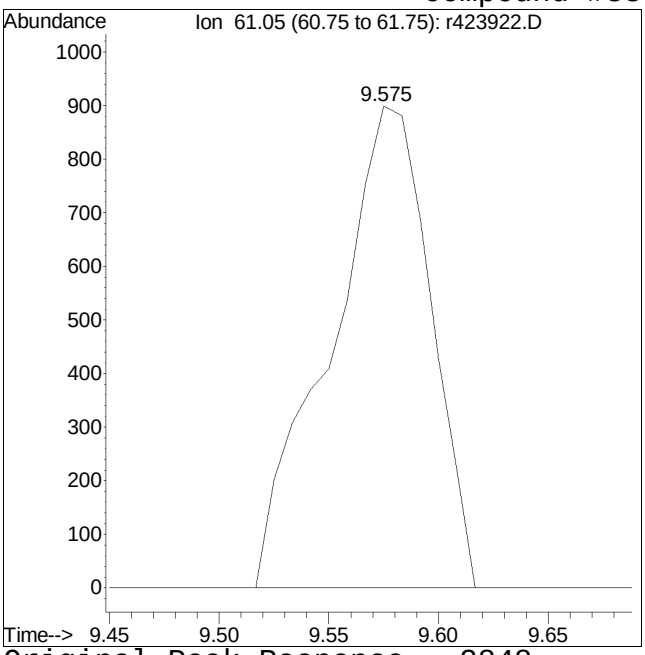
Manual Peak Response = 3944 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

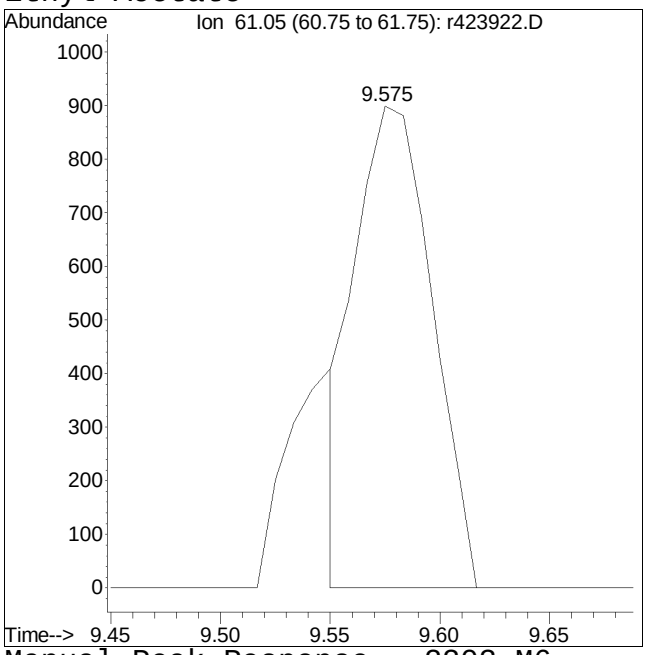
Manual Integration Report

Data Path : O:\Forensics\Data\AirpianoQMethod : TFS4_220921.M
Data File : r423922.D Operator : AIRPIANO4:TJS
Date Inj'd : 10/4/2020 0:9: 6 Instrument :
Sample : L2253855-03,3,250,250 Quant Date : 10/5/2022 8:16 am

Compound #38: Ethyl Acetate



Original Peak Response = 2848



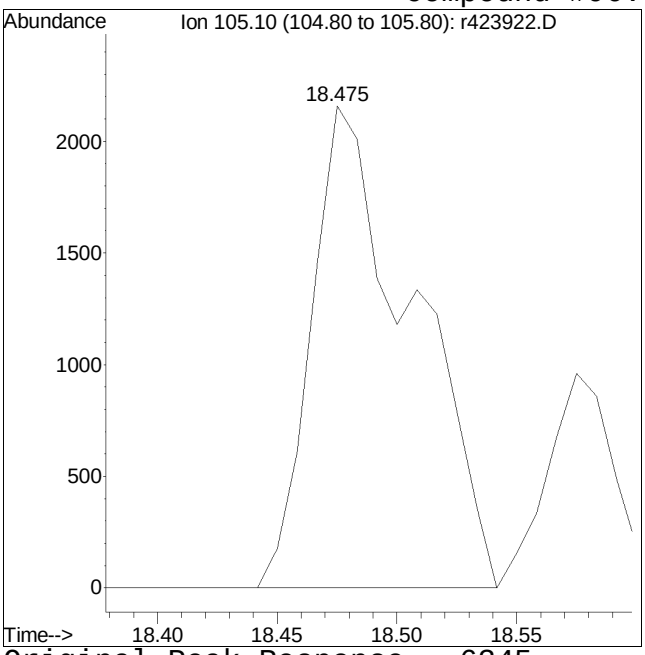
Manual Peak Response = 2203 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

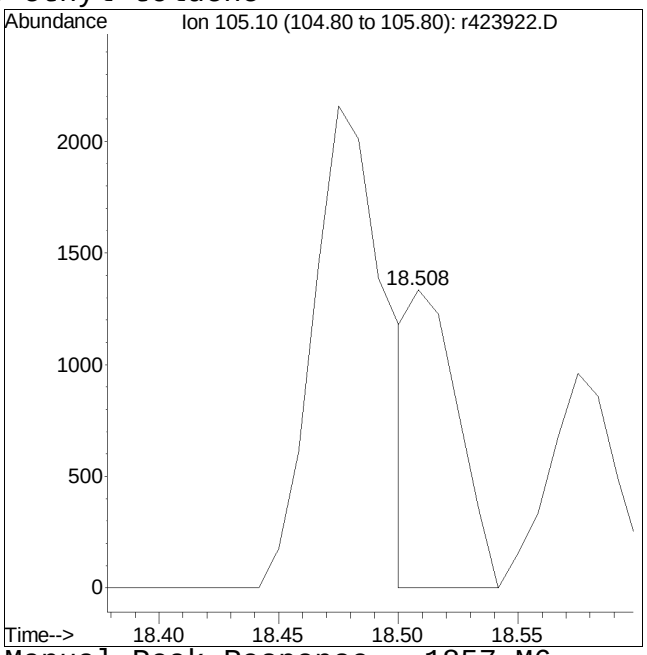
Manual Integration Report

Data Path : O:\Forensics\Data\AirpianoQMethod : TFS4_220921.M
Data File : r423922.D Operator : AIRPIANO4:TJS
Date Inj'd : 10/4/2020 0:9: 6 Instrument :
Sample : L2253855-03,3,250,250 Quant Date : 10/5/2022 8:16 am

Compound #96: 4-ethyl toluene



Original Peak Response = 6345



Manual Peak Response = 1857 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423923.D
Acq On : 4 Oct 2022 10:25 PM
Operator : AIRPIANO4:TJS
Sample : L2253855-05,3,250,250
Misc : WG1695439,ICAL19363
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 05 15:18:37 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004T\r423912.D
Sub List : TO15-NY-7-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.458	49	453177	10.000	ppbV	#-0.02
Standard Area = 462589			Recovery =	97.97%		
43) 1,4-difluorobenzene	11.713	114	1153623	10.000	ppbV	-0.03
Standard Area = 1229344			Recovery =	93.84%		
67) chlorobenzene-D5	16.458	54	228077	10.000	ppbV	-0.02
Standard Area = 234984			Recovery =	97.06%		
System Monitoring Compounds						
Target Compounds						Qvalue
5) dichlorodifluoromethane	3.958	85	20664	0.555	ppbV	98
6) chloromethane	4.132	50	9115	0.567	ppbV	100
7) Freon-114	4.258		0	N.D.		
10) 1,3-butadiene	0.000		0	N.D.		
13) bromomethane	0.000		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	5.272	31	13644795	1032.713	ppbV #	84
17) vinyl bromide	0.000		0	N.D.		
19) acetone	5.810	43	84940	3.544	ppbV #	93
21) trichlorofluoromethane	5.997	101	9237	0.321	ppbV	100
22) isopropyl alcohol	6.137	45	541348	16.006	ppbV	100
27) tertiary butyl alcohol	6.882	59	2272	0.045	ppbV #	71
28) methylene chloride	6.924	49	4630	0.184	ppbV	94
29) 3-chloropropene	0.000		0	N.D.		
30) carbon disulfide	7.212		0	N.D.		
31) Freon 113	7.248	101	2419	0.059	ppbV	87
32) trans-1,2-dichloroethene	0.000		0	N.D.		
33) 1,1-dichloroethane	0.000		0	N.D.		
34) MTBE	0.000		0	N.D.		
36) 2-butanone	8.775	43	8869	0.169	ppbV	97
38) Ethyl Acetate	9.575	61	5073	0.519	ppbV	98
39) chloroform	9.617	83	2385	0.057	ppbV #	97
40) Tetrahydrofuran	10.083	42	4257	0.123	ppbV	95
42) 1,2-dichloroethane	10.467		0	N.D.		
44) hexane	9.525		0	N.D.		
50) benzene	11.280	78	3749	0.047	ppbV #	89
53) cyclohexane	11.593		0	N.D.		

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423923.D
Acq On : 4 Oct 2022 10:25 PM
Operator : AIRPIANO4:TJS
Sample : L2253855-05,3,250,250
Misc : WG1695439,ICAL19363
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 05 15:18:37 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004T\r423912.D
Sub List : TO15-NY-7-SIM - .

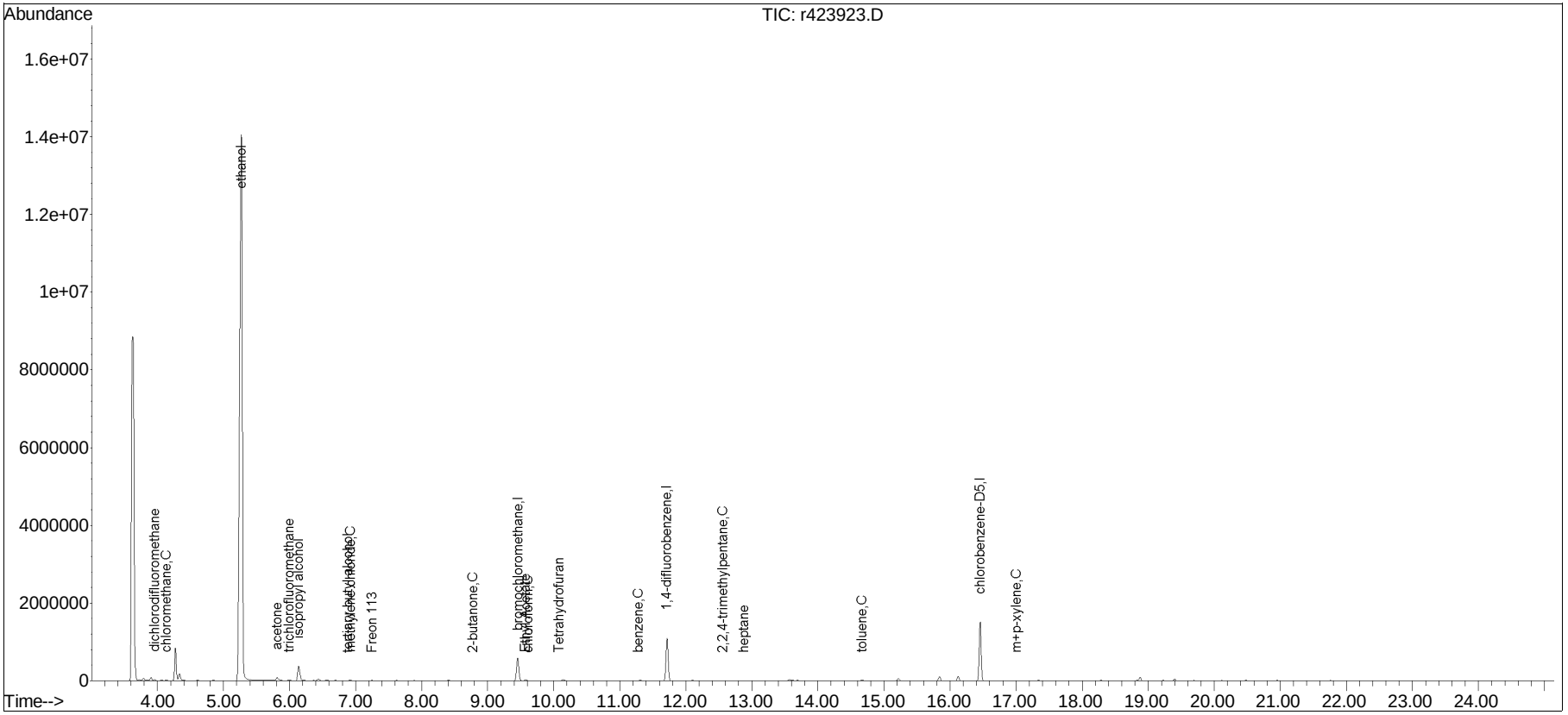
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
56) 1,2-dichloropropane	0.000		0	N.D.			
57) bromodichloromethane	0.000		0	N.D.			
58) 1,4-dioxane	0.000		0	N.D.			
60) 2,2,4-trimethylpentane	12.560	57	5192	0.035	ppbV	#	90
62) heptane	12.880	43	1574	0.032	ppbV	#	86
63) cis-1,3-dichloropropene	0.000		0	N.D.			
64) 4-methyl-2-pentanone	0.000		0	N.D.	d		
65) trans-1,3-dichloropropene	0.000		0	N.D.			
66) 1,1,2-trichloroethane	0.000		0	N.D.			
68) toluene	14.667	91	16724	0.150	ppbV		99
72) 2-hexanone	14.992		0	N.D.			
74) dibromochloromethane	0.000		0	N.D.			
75) 1,2-dibromoethane	0.000		0	N.D.			
80) chlorobenzene	0.000		0	N.D.			
81) ethylbenzene	16.850		0	N.D.			
83) m+p-xylene	17.008	91	6634	0.064	ppbV		91
84) bromoform	0.000		0	N.D.			
85) styrene	17.342		0	N.D.			
86) 1,1,2,2-tetrachloroethane	0.000		0	N.D.			
87) o-xylene	17.433		0	N.D.			
96) 4-ethyl toluene	18.475		0	N.D.			
97) 1,3,5-trimethylbenzene	18.575		0	N.D.			
99) 1,2,4-trimethylbenzene	18.925		0	N.D.			
101) Benzyl Chloride	18.925		0	N.D.			
102) 1,3-dichlorobenzene	19.117		0	N.D.			
103) 1,4-dichlorobenzene	19.117		0	N.D.			
107) 1,2-dichlorobenzene	0.000		0	N.D.			
115) 1,2,4-trichlorobenzene	20.908		0	N.D.			
119) hexachlorobutadiene	21.325		0	N.D.			

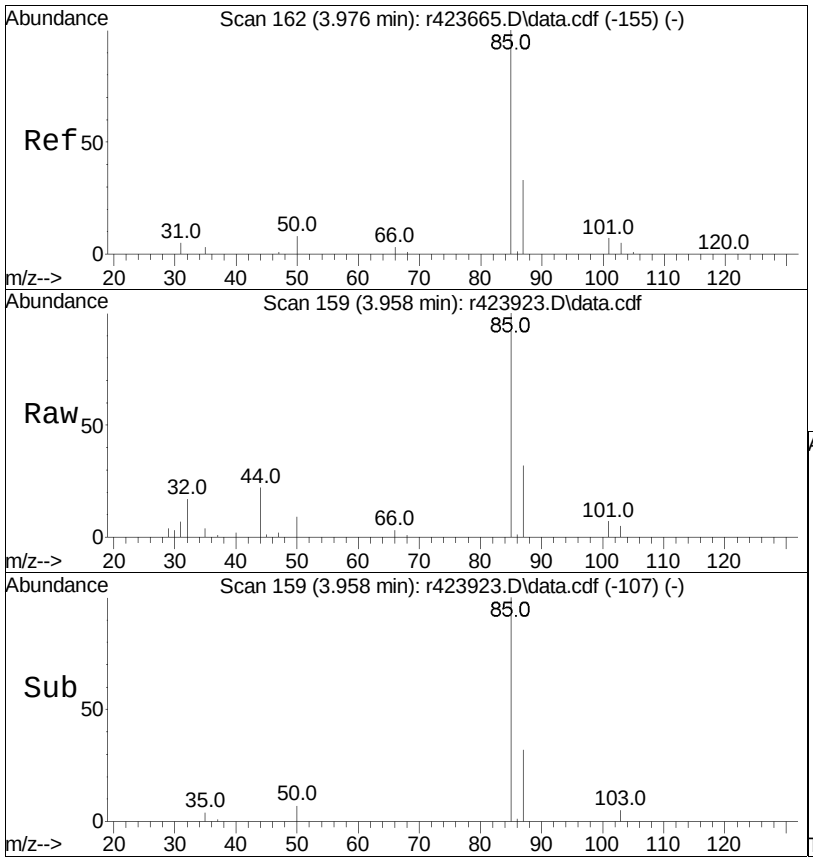
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : TO15-NY-7-SIM - .\Airpiano4\2022\10\1004T\r423912.D

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423923.D
Acq On : 4 Oct 2022 10:25 PM
Operator : AIRPIANO4:TJS
Sample : L2253855-05,3,250,250
Misc : WG1695439,ICAL19363
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 05 15:18:37 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

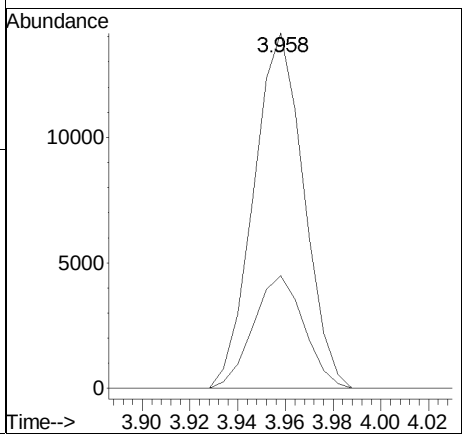


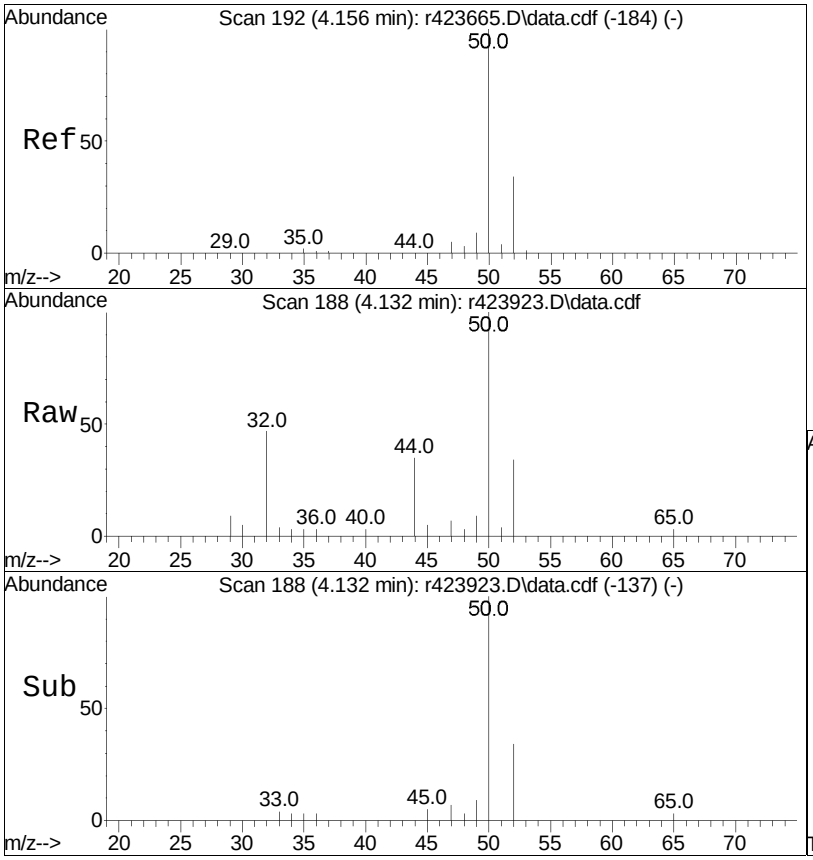


#5
dichlorodifluoromethane
Concen: 0.56 ppbV
RT: 3.958 min Scan# 159
Delta R.T. -0.018 min
Lab File: r423923.D
Acq: 4 Oct 2022 10:25 PM

Tgt Ion: 85 Resp: 20664

Ion	Ratio	Lower	Upper
85	100		
87	31.7	26.3	39.5

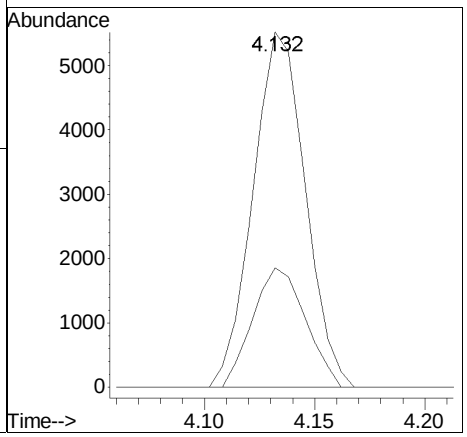


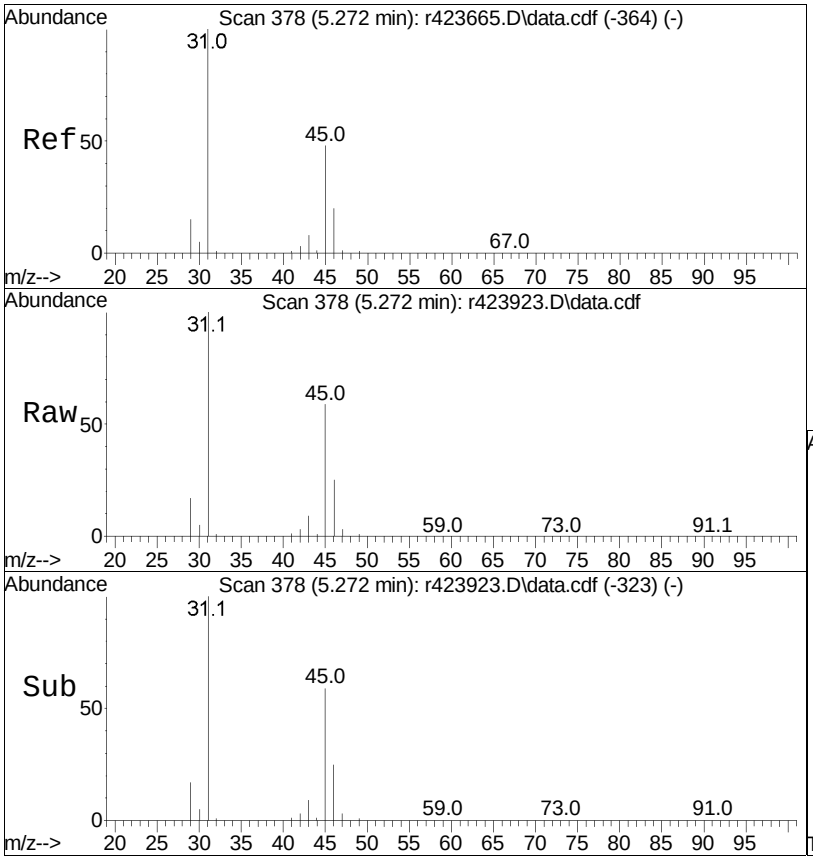


#6
chloromethane
Concen: 0.57 ppbV
RT: 4.132 min Scan# 188
Delta R.T. -0.024 min
Lab File: r423923.D
Acq: 4 Oct 2022 10:25 PM

Tgt Ion: 50 Resp: 9115

Ion	Ratio	Lower	Upper
50	100		
52	33.6	27.0	40.6

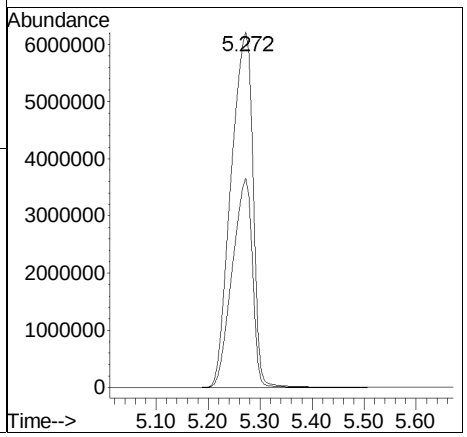


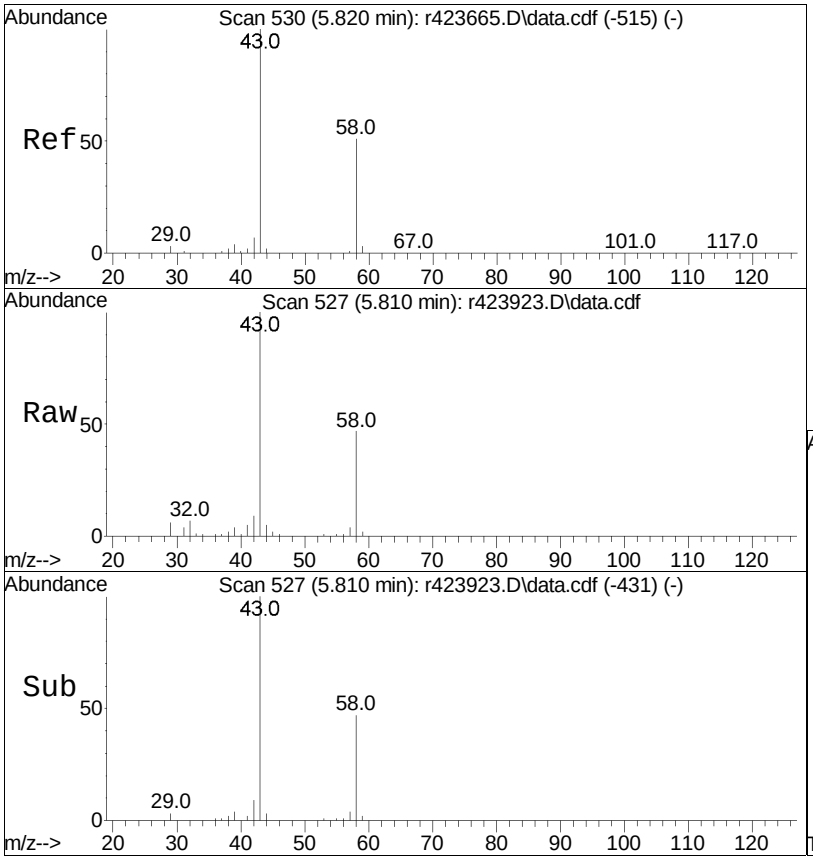


#15
ethanol
Concen: 1032.71 ppbV
RT: 5.272 min Scan# 378
Delta R.T. 0.000 min
Lab File: r423923.D
Acq: 4 Oct 2022 10:25 PM

Tgt Ion: 31 Resp:13644795

Ion	Ratio	Lower	Upper
31	100		
45	58.9	38.3	57.5#

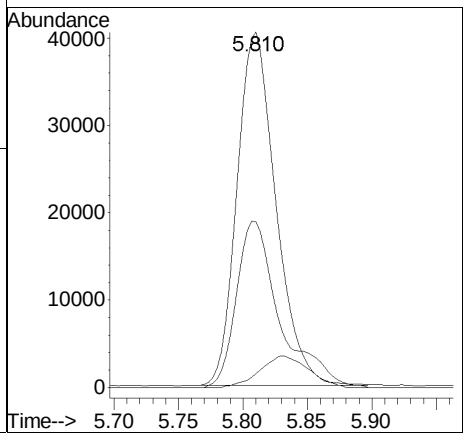


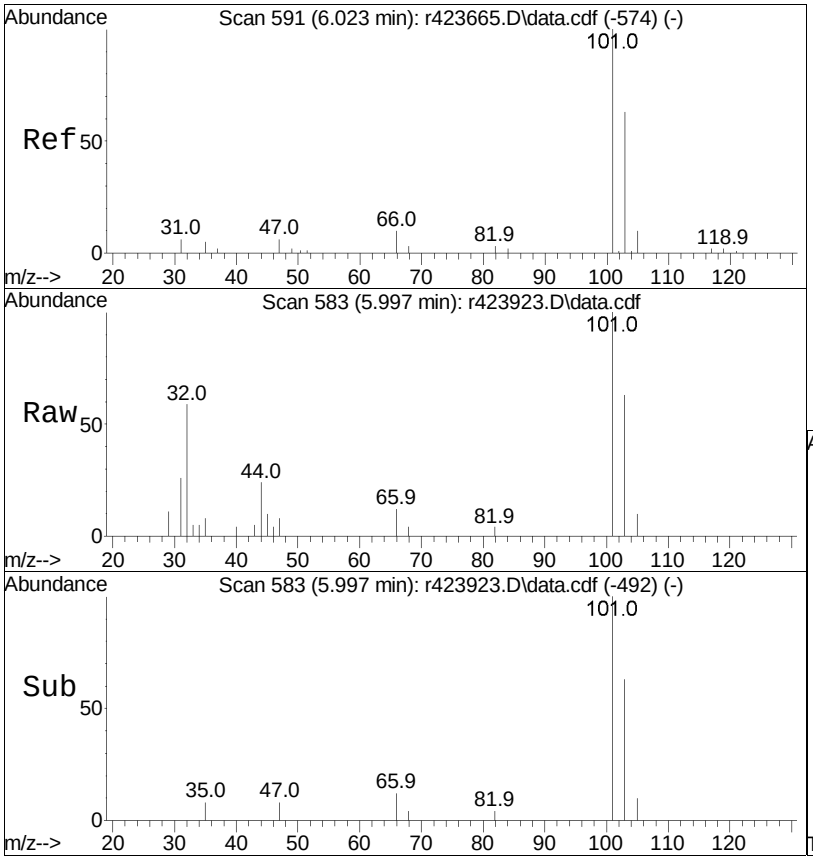


#19
acetone
Concen: 3.54 ppbV
RT: 5.810 min Scan# 527
Delta R.T. -0.010 min
Lab File: r423923.D
Acq: 4 Oct 2022 10:25 PM

Tgt Ion: 43 Resp: 84940

Ion	Ratio	Lower	Upper
43	100		
58	46.6	41.0	61.6
57	3.9	1.0	1.6#

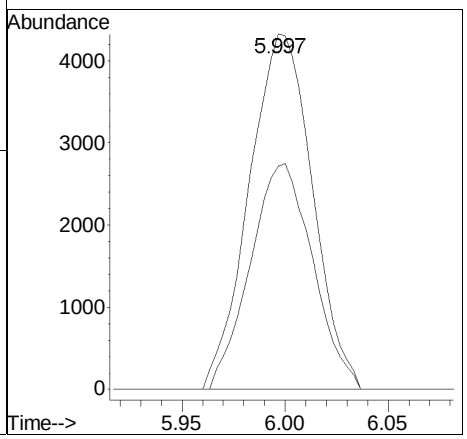


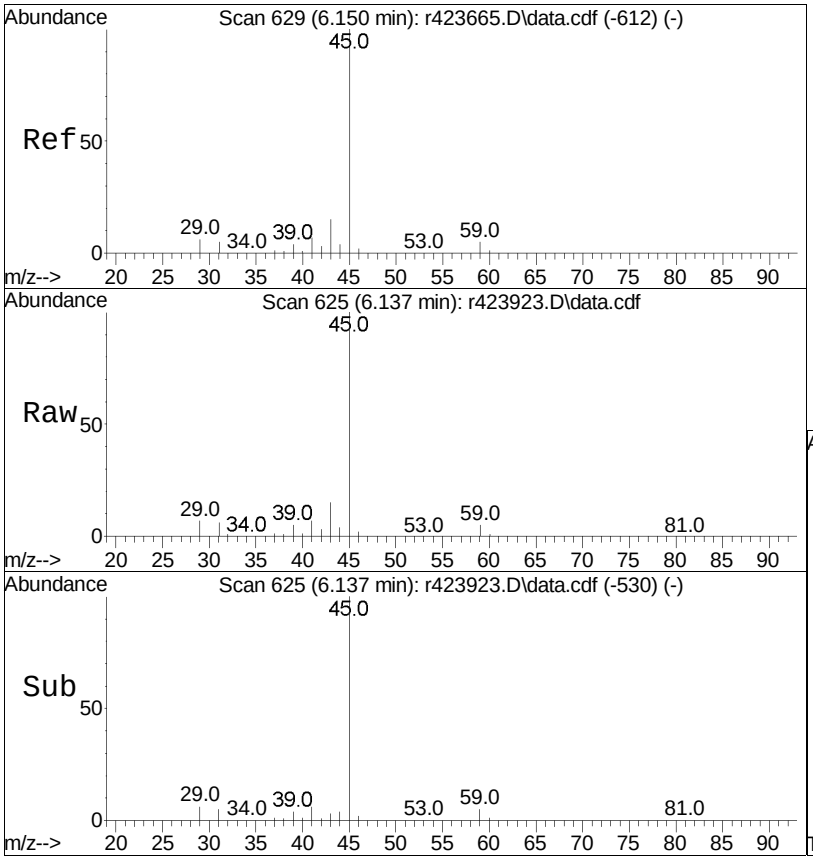


#21
trichlorofluoromethane
Concen: 0.32 ppbV
RT: 5.997 min Scan# 583
Delta R.T. -0.027 min
Lab File: r423923.D
Acq: 4 Oct 2022 10:25 PM

Tgt Ion:101 Resp: 9237

Ion	Ratio	Lower	Upper
101	100		
103	62.8	50.2	75.2

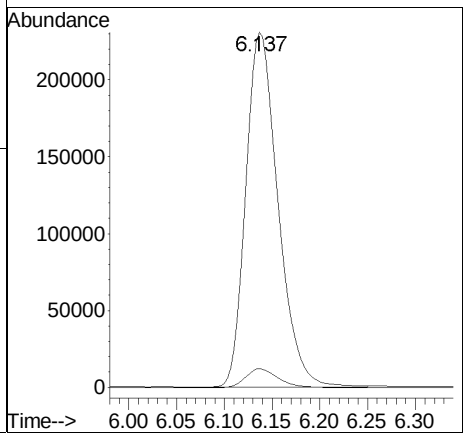


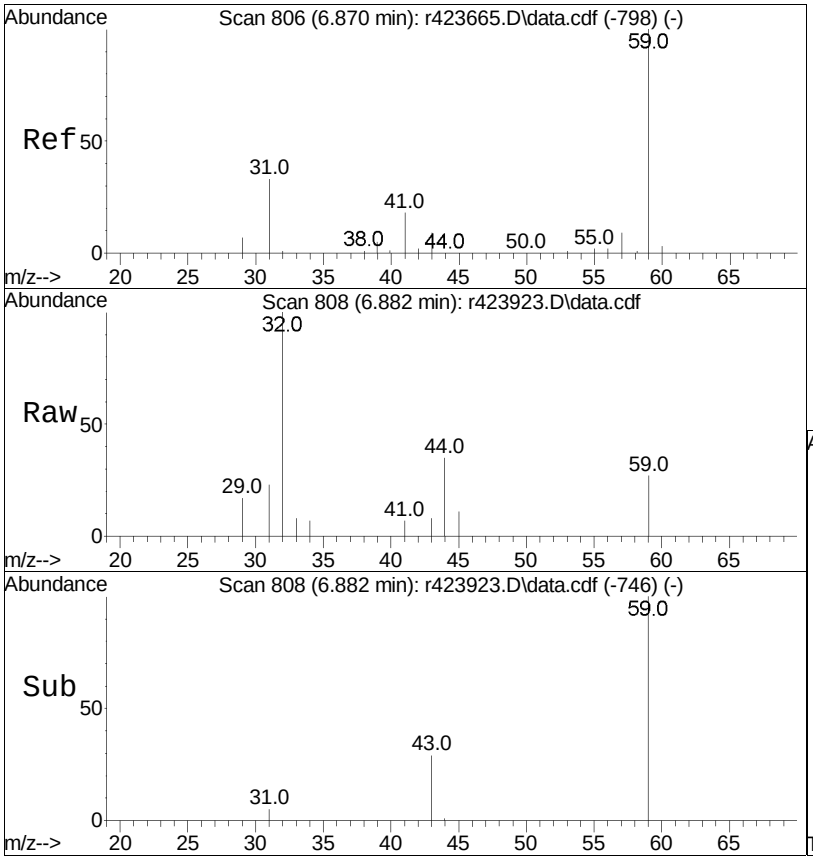


#22
isopropyl alcohol
Concen: 16.01 ppbV
RT: 6.137 min Scan# 625
Delta R.T. -0.013 min
Lab File: r423923.D
Acq: 4 Oct 2022 10:25 PM

Tgt Ion: 45 Resp: 541348

Ion	Ratio	Lower	Upper
45	100		
59	5.3	4.3	6.5

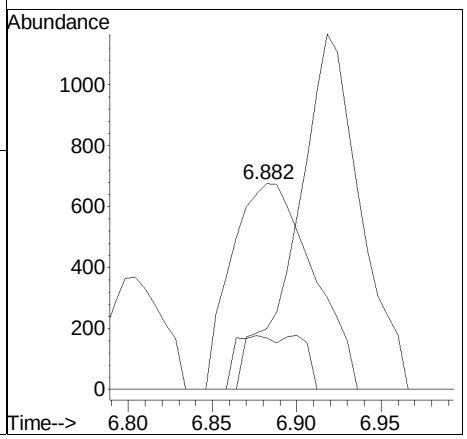


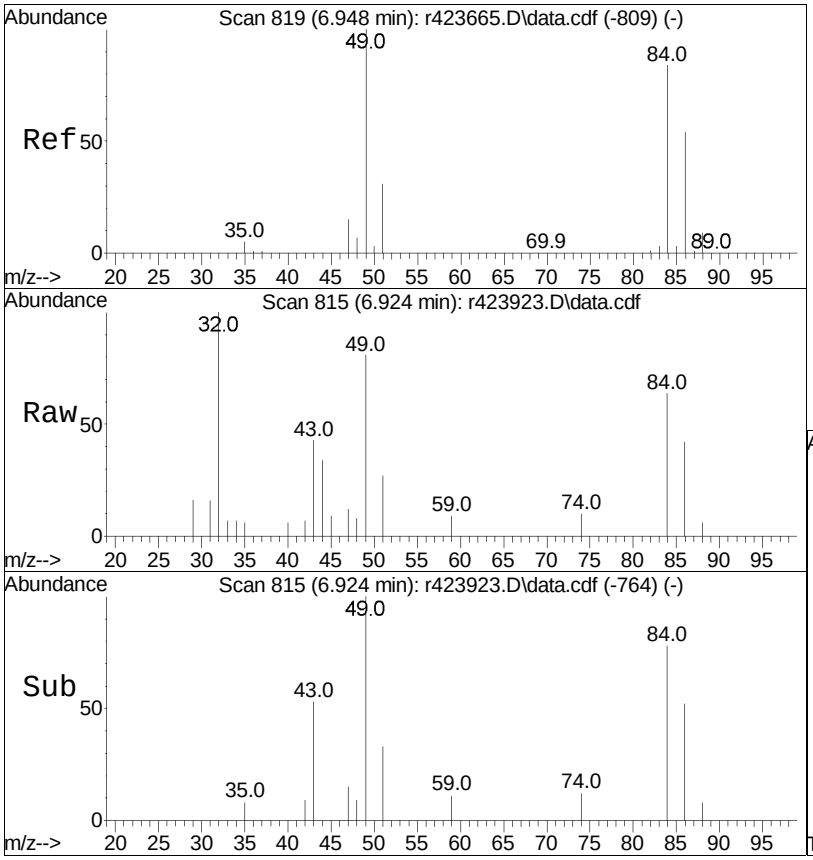


#27
tertiary butyl alcohol
Concen: 0.05 ppbV
RT: 6.882 min Scan# 808
Delta R.T. 0.012 min
Lab File: r423923.D
Acq: 4 Oct 2022 10:25 PM

Tgt Ion: 59 Resp: 2272

Ion	Ratio	Lower	Upper
59	100		
41	25.0	14.6	21.8#
43	29.4	7.0	10.6#

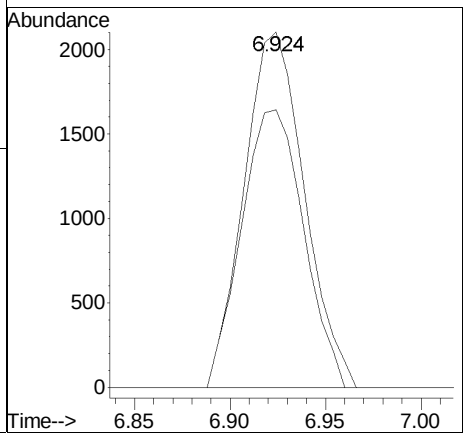


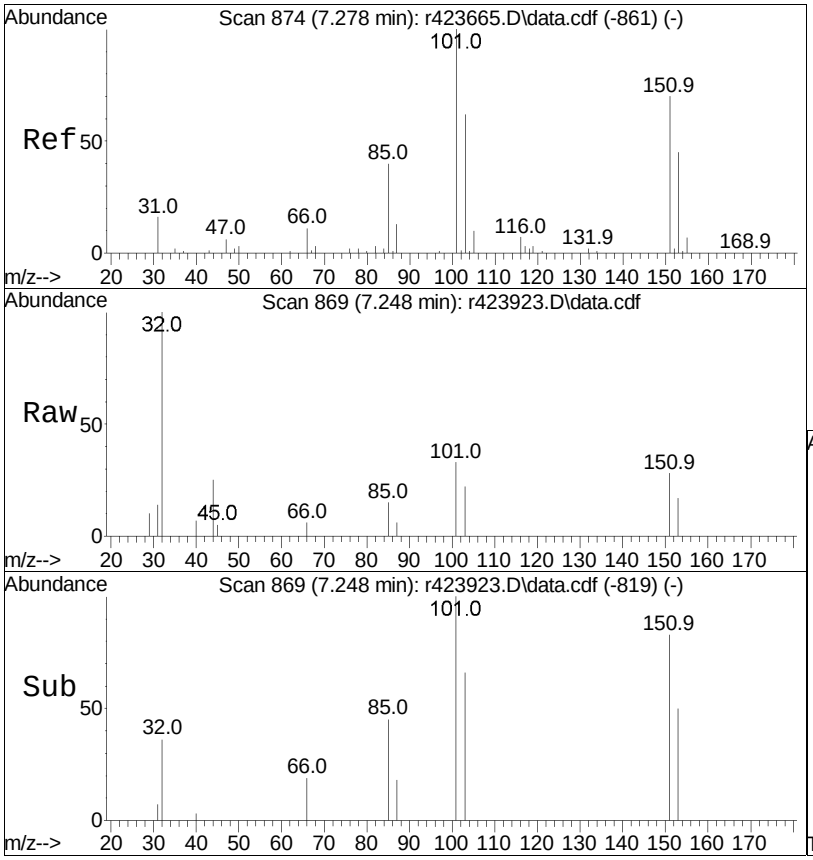


#28
methylene chloride
Concen: 0.18 ppbV
RT: 6.924 min Scan# 815
Delta R.T. -0.024 min
Lab File: r423923.D
Acq: 4 Oct 2022 10:25 PM

Tgt Ion: 49 Resp: 4630

Ion	Ratio	Lower	Upper
49	100		
84	78.1	66.8	100.2

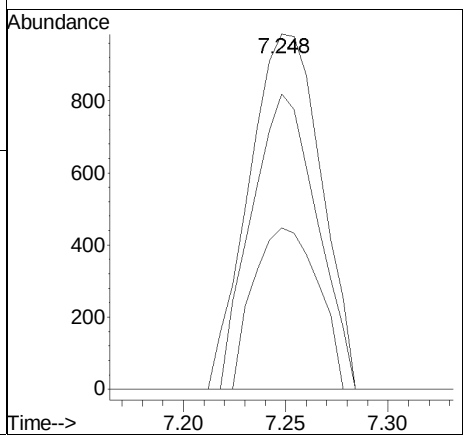


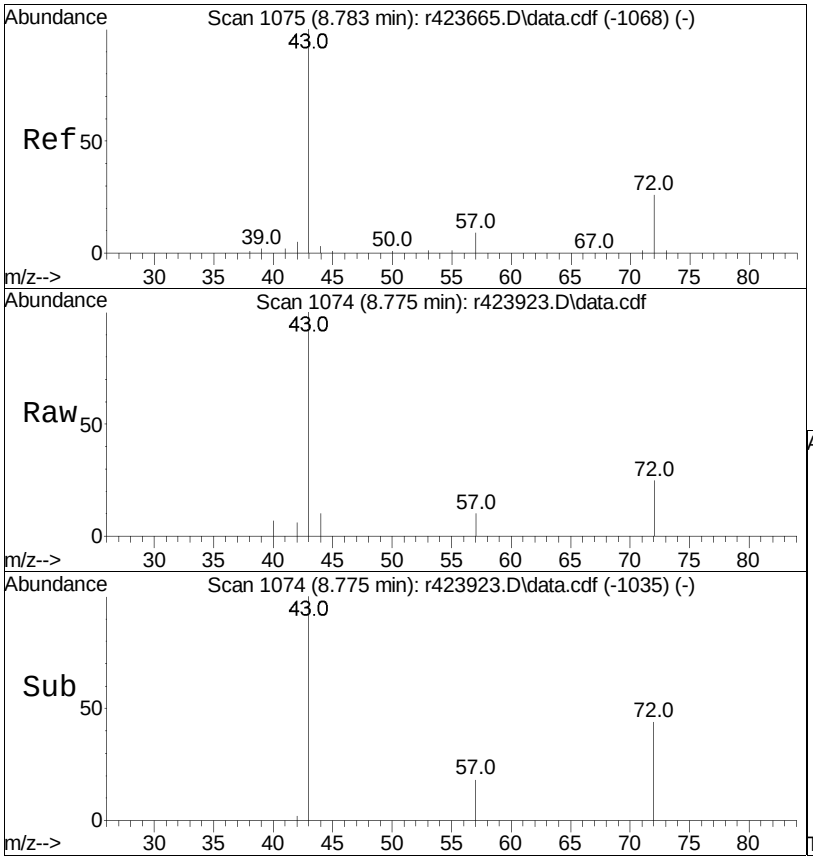


#31
Freon 113
Concen: 0.06 ppbV
RT: 7.248 min Scan# 869
Delta R.T. -0.030 min
Lab File: r423923.D
Acq: 4 Oct 2022 10:25 PM

Tgt Ion:101 Resp: 2419

Ion	Ratio	Lower	Upper
101	100		
85	45.4	32.2	48.2
151	83.1	56.3	84.5

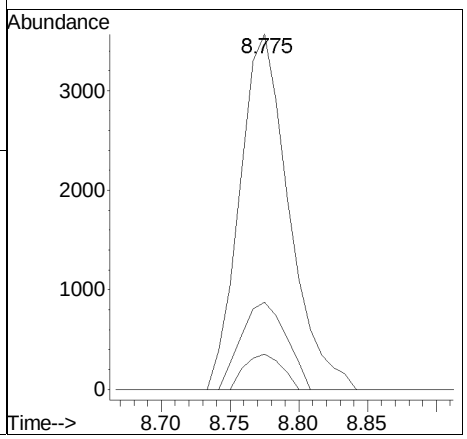


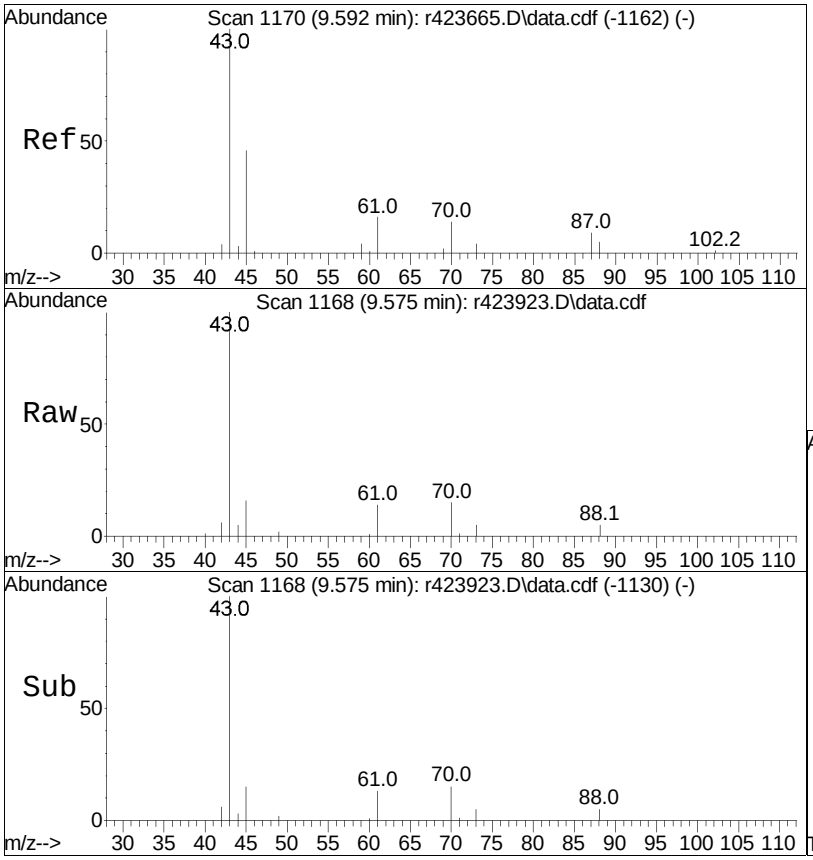


#36
2-butanone
Concen: 0.17 ppbV
RT: 8.775 min Scan# 1074
Delta R.T. -0.008 min
Lab File: r423923.D
Acq: 4 Oct 2022 10:25 PM

Tgt Ion: 43 Resp: 8869

Ion	Ratio	Lower	Upper
43	100		
72	24.5	21.0	31.6
57	9.9	7.4	11.0

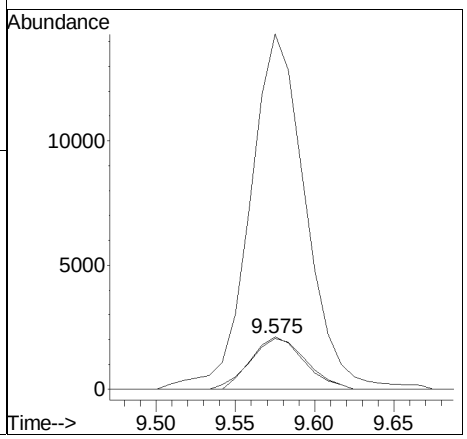


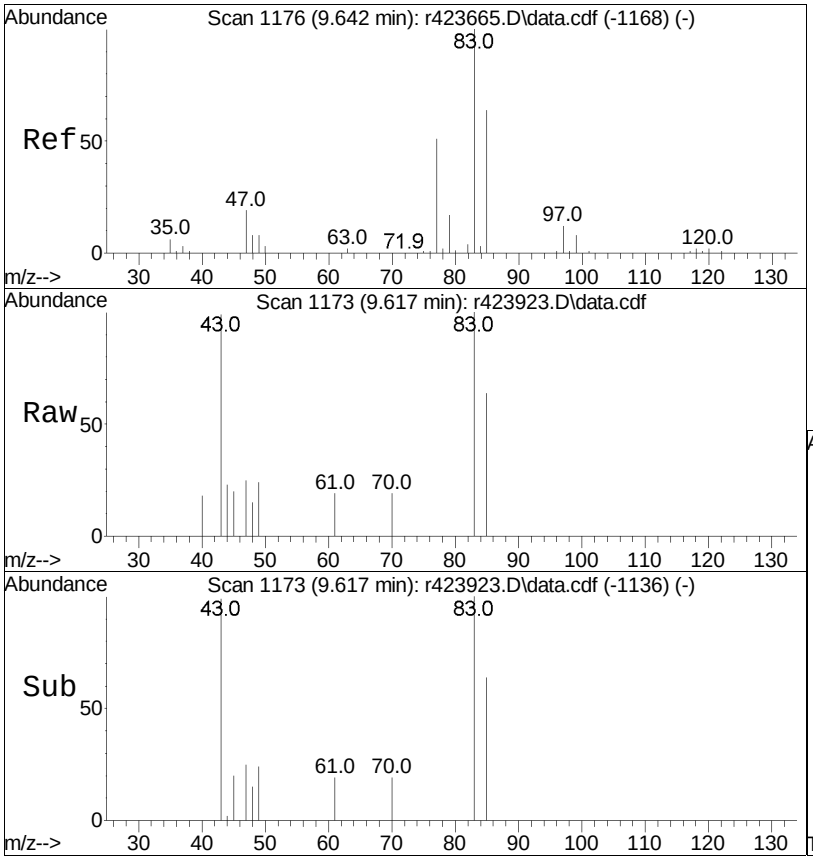


#38
Ethyl Acetate
Concen: 0.52 ppbV
RT: 9.575 min Scan# 1168
Delta R.T. -0.017 min
Lab File: r423923.D
Acq: 4 Oct 2022 10:25 PM

Tgt Ion: 61 Resp: 5073

Ion	Ratio	Lower	Upper
61	100		
70	103.1	71.0	106.6
43	696.2	558.9	838.3

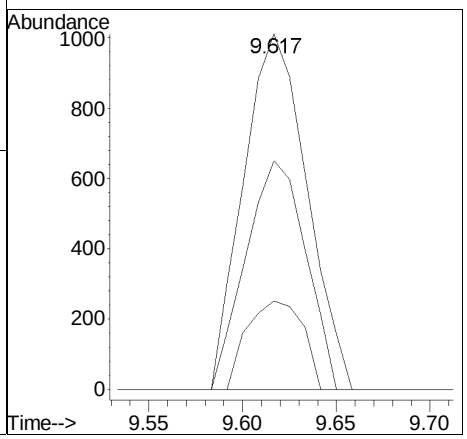


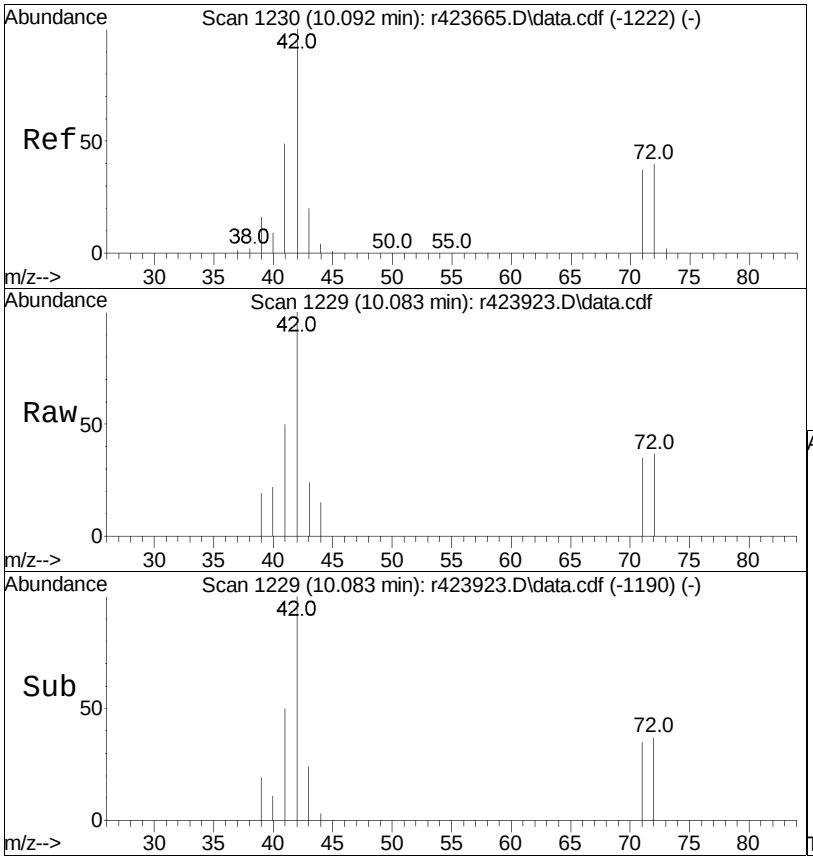


#39
chloroform
Concen: 0.06 ppbV
RT: 9.617 min Scan# 1173
Delta R.T. -0.025 min
Lab File: r423923.D
Acq: 4 Oct 2022 10:25 PM

Tgt Ion: 83 Resp: 2385

Ion	Ratio	Lower	Upper
83	100		
85	64.4	51.6	77.4
47	24.9	15.2	22.8#

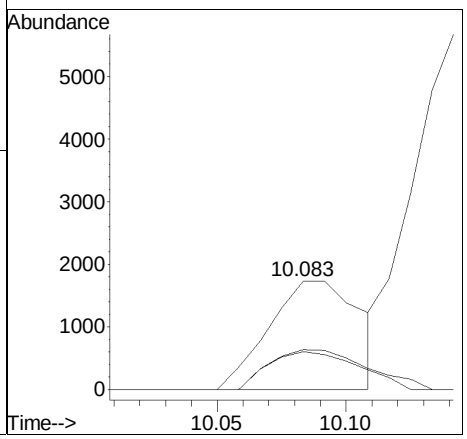


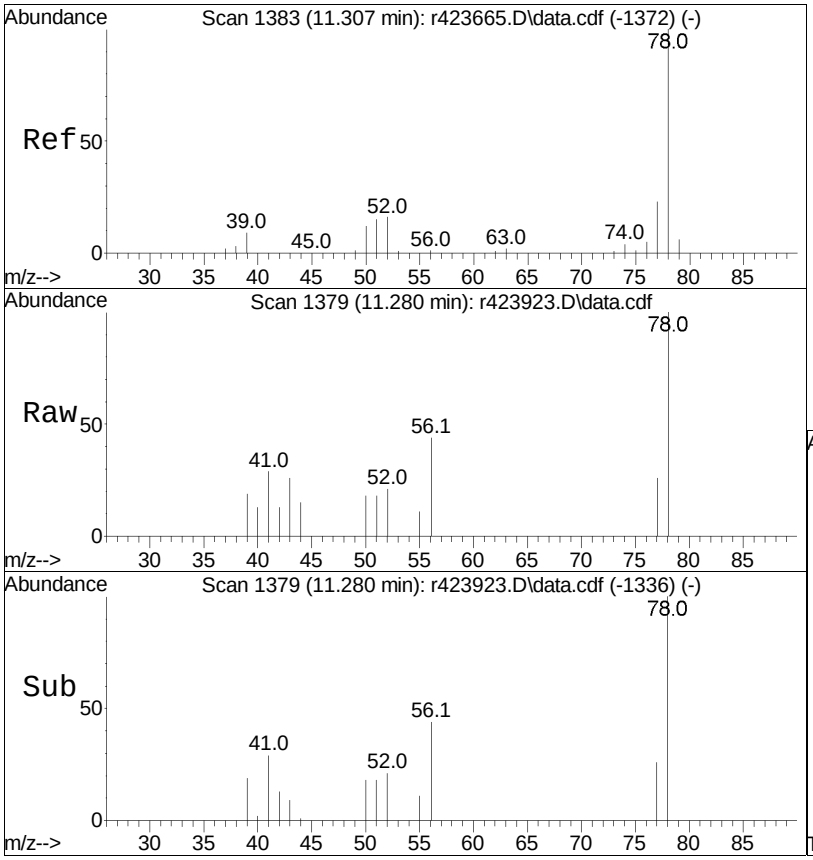


#40
Tetrahydrofuran
Concen: 0.12 ppbV
RT: 10.083 min Scan# 1229
Delta R.T. -0.008 min
Lab File: r423923.D
Acq: 4 Oct 2022 10:25 PM

Tgt Ion: 42 Resp: 4257

Ion	Ratio	Lower	Upper
42	100		
71	35.0	29.7	44.5
72	36.8	32.4	48.6

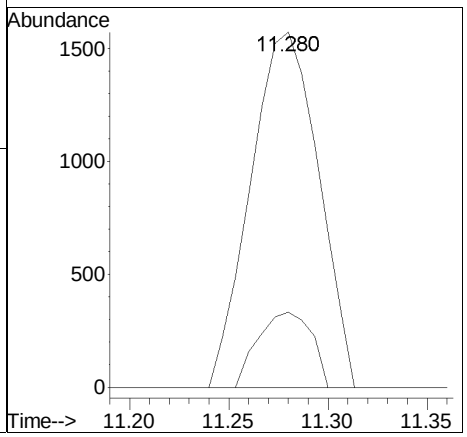


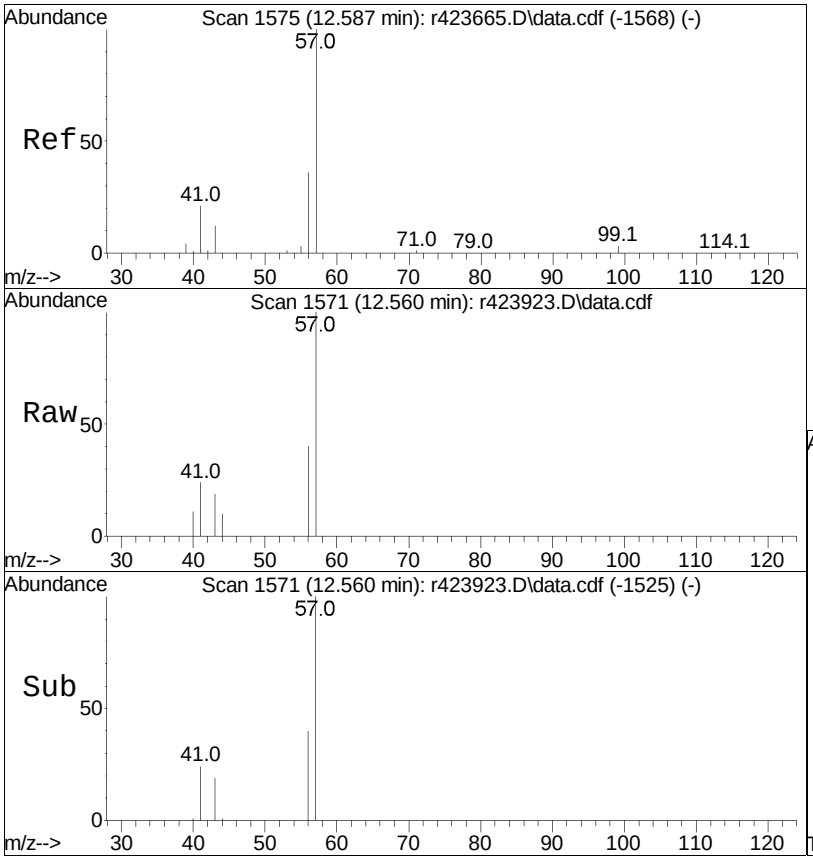


#50
benzene
Concen: 0.05 ppbV
RT: 11.280 min Scan# 1379
Delta R.T. -0.027 min
Lab File: r423923.D
Acq: 4 Oct 2022 10:25 PM

Tgt Ion: 78 Resp: 3749

Ion	Ratio	Lower	Upper
78	100		
52	21.2	13.0	19.6#

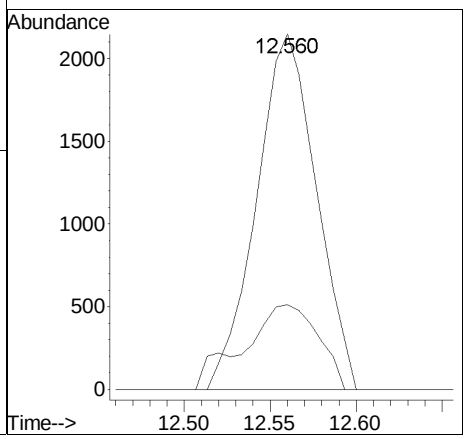


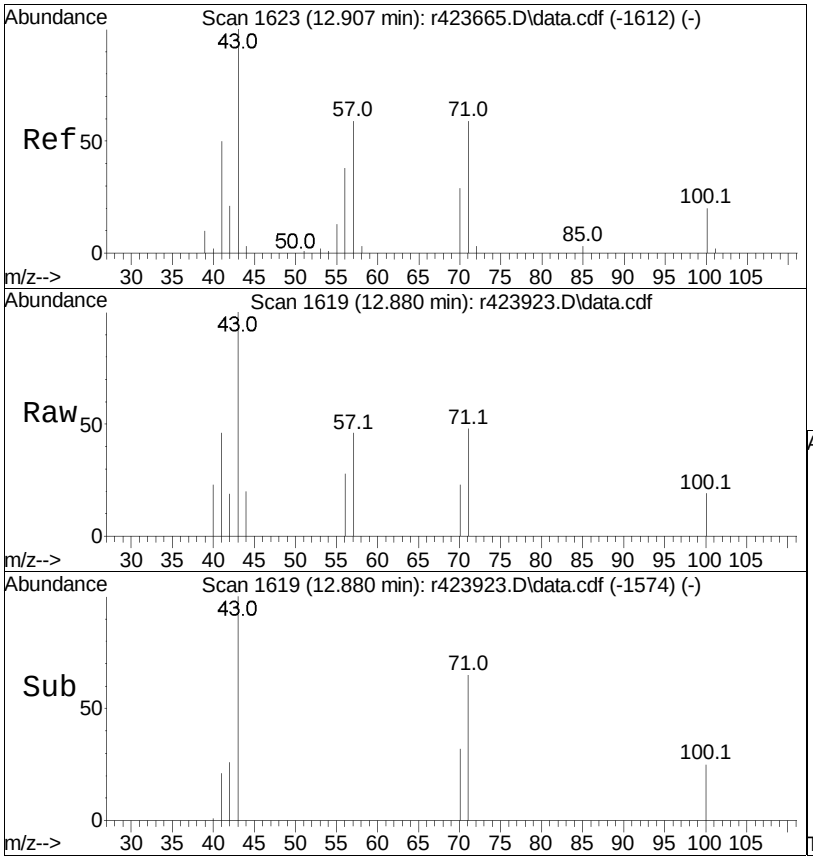


#60
2,2,4-trimethylpentane
Concen: 0.03 ppbV
RT: 12.560 min Scan# 1571
Delta R.T. -0.027 min
Lab File: r423923.D
Acq: 4 Oct 2022 10:25 PM

Tgt Ion: 57 Resp: 5192

Ion	Ratio	Lower	Upper
57	100		
99	0.0	4.4	6.6#
41	23.9	16.1	24.1

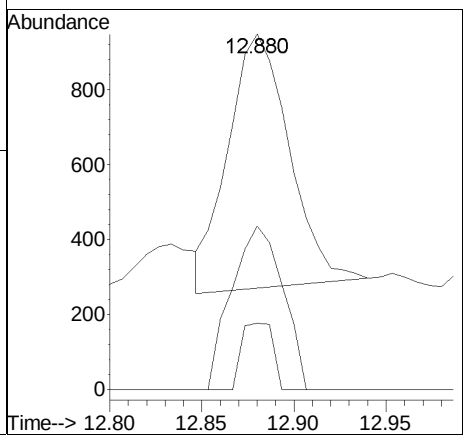


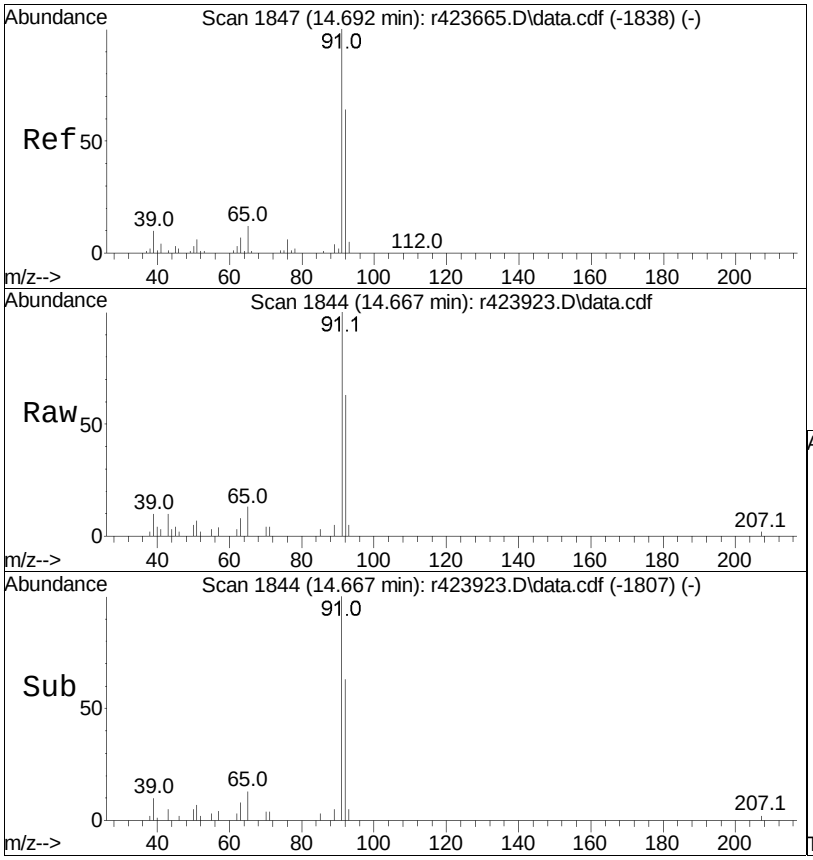


#62
heptane
Concen: 0.03 ppbV
RT: 12.880 min Scan# 1619
Delta R.T. -0.027 min
Lab File: r423923.D
Acq: 4 Oct 2022 10:25 PM

Tgt Ion: 43 Resp: 1574

Ion	Ratio	Lower	Upper
43	100		
57	46.0	47.1	70.7#
100	18.7	16.7	25.1

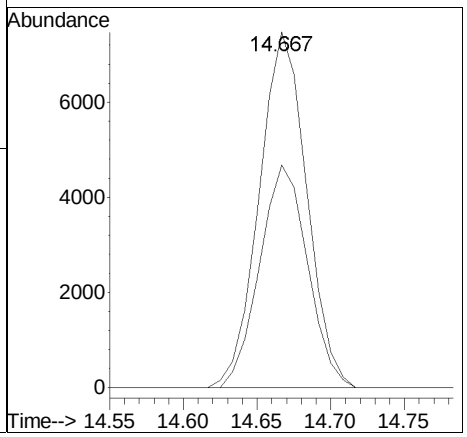


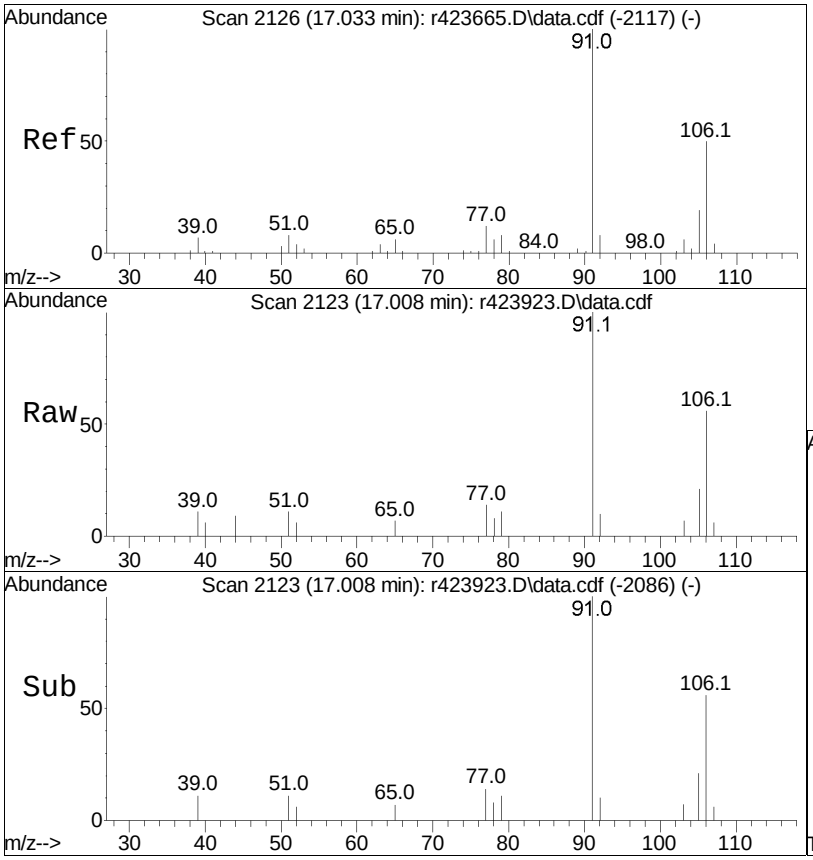


#68
toluene
Concen: 0.15 ppbV
RT: 14.667 min Scan# 1844
Delta R.T. -0.025 min
Lab File: r423923.D
Acq: 4 Oct 2022 10:25 PM

Tgt Ion: 91 Resp: 16724

Ion	Ratio	Lower	Upper
91	100		
92	62.6	50.8	76.2

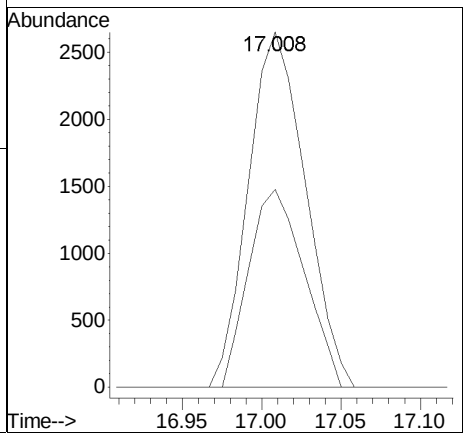




#83
m+p-xylene
Concen: 0.06 ppbV
RT: 17.008 min Scan# 2123
Delta R.T. -0.025 min
Lab File: r423923.D
Acq: 4 Oct 2022 10:25 PM

Tgt Ion: 91 Resp: 6634

Ion	Ratio	Lower	Upper
91	100		
106	55.7	39.8	59.6



Manual Integration Report

Data Path	: O:\Forensics\Data\Airpiano	QMethod	: TFS4_220921.M
Data File	: r423923.D	Operator	: AIRPIANO4:TJS
Date Inj'd	: 10/4/2020 0:0: 5	Instrument	:
Sample	: L2253855-05,3,250,250	Quant Date	: 10/5/2022 8:16 am

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423925.D
Acq On : 4 Oct 2022 11:41 PM
Operator : AIRPIANO4:TJS
Sample : L2253855-01D,3,3.72,250
Misc : WG1695439,ICAL19365
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 05 15:20:42 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004T\r423912.D
Sub List : TO15-NY - .

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) bromochloromethane	9.450	49	466320	10.000	ppbV		#-0.03
Standard Area = 462589			Recovery = 100.81%				
43) 1,4-difluorobenzene	11.713	114	1187935	10.000	ppbV		-0.03
Standard Area = 1229344			Recovery = 96.63%				
67) chlorobenzene-D5	16.458	54	235152	10.000	ppbV		-0.02
Standard Area = 234984			Recovery = 100.07%				
System Monitoring Compounds							
Target Compounds							Qvalue
5) dichlorodifluoromethane	3.958		0	N.D.			
6) chloromethane	0.000		0	N.D.			
7) Freon-114	0.000		0	N.D.			
9) vinyl chloride	0.000		0	N.D.			
10) 1,3-butadiene	4.504		0	N.D.			
13) bromomethane	0.000		0	N.D.			
14) chloroethane	0.000		0	N.D.			
15) ethanol	5.248	31	244041	17.950	ppbV		93
17) vinyl bromide	0.000		0	N.D.			
19) acetone	5.817	43	33007M6	1.339	ppbV		
21) trichlorofluoromethane	5.993		0	N.D.			
22) isopropyl alcohol	6.163	45	8172	0.235	ppbV	#	96
26) 1,1-dichloroethene	0.000		0	N.D.			
27) tertiary butyl alcohol	6.912		0	N.D.			
28) methylene chloride	6.918		0	N.D.			
29) 3-chloropropene	0.000		0	N.D.			
30) carbon disulfide	7.212		0	N.D.			
31) Freon 113	0.000		0	N.D.			
32) trans-1,2-dichloroethene	8.042		0	N.D.			
33) 1,1-dichloroethane	0.000		0	N.D.			
34) MTBE	0.000		0	N.D.			
36) 2-butanone	8.775	43	71120	1.321	ppbV		100
37) cis-1,2-dichloroethene	9.267	61	13926	0.372	ppbV		97
38) Ethyl Acetate	0.000		0	N.D.			
39) chloroform	9.617		0	N.D.			
40) Tetrahydrofuran	10.117		0	N.D.			
42) 1,2-dichloroethane	0.000		0	N.D.			

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423925.D
Acq On : 4 Oct 2022 11:41 PM
Operator : AIRPIANO4:TJS
Sample : L2253855-01D,3,3.72,250
Misc : WG1695439,ICAL19365
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 05 15:20:42 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004T\r423912.D
Sub List : TO15-NY - .

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44)	hexane	9.533		0	N.D.		
48)	1,1,1-trichloroethane	0.000		0	N.D.		
50)	benzene	11.280		0	N.D.		
52)	carbon tetrachloride	0.000		0	N.D.		
53)	cyclohexane	0.000		0	N.D.	d	
56)	1,2-dichloropropane	0.000		0	N.D.		
57)	bromodichloromethane	0.000		0	N.D.		
58)	1,4-dioxane	0.000		0	N.D.		
59)	trichloroethene	12.513	130	14017	0.451	ppbV	97
60)	2,2,4-trimethylpentane	12.560		0	N.D.		
62)	heptane	0.000		0	N.D.		
63)	cis-1,3-dichloropropene	0.000		0	N.D.		
64)	4-methyl-2-pentanone	13.600		0	N.D.		
65)	trans-1,3-dichloropropene	0.000		0	N.D.		
66)	1,1,2-trichloroethane	0.000		0	N.D.		
68)	toluene	14.667		0	N.D.		
72)	2-hexanone	14.992	43	4476	0.077	ppbV	89
74)	dibromochloromethane	0.000		0	N.D.		
75)	1,2-dibromoethane	0.000		0	N.D.		
78)	tetrachloroethene	15.842	166	2193286	50.051	ppbV	98
80)	chlorobenzene	0.000		0	N.D.		
81)	ethylbenzene	16.850		0	N.D.		
83)	m+p-xylene	17.008		0	N.D.		
84)	bromoform	0.000		0	N.D.		
85)	styrene	0.000		0	N.D.		
86)	1,1,2,2-tetrachloroethane	0.000		0	N.D.		
87)	o-xylene	17.433		0	N.D.		
96)	4-ethyl toluene	0.000		0	N.D.		
97)	1,3,5-trimethylbenzene	0.000		0	N.D.		
99)	1,2,4-trimethylbenzene	0.000		0	N.D.		
101)	Benzyl Chloride	0.000		0	N.D.		
102)	1,3-dichlorobenzene	0.000		0	N.D.		
103)	1,4-dichlorobenzene	0.000		0	N.D.		
107)	1,2-dichlorobenzene	0.000		0	N.D.		
115)	1,2,4-trichlorobenzene	20.908		0	N.D.		
119)	hexachlorobutadiene	0.000		0	N.D.		

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

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423925.D
Acq On : 4 Oct 2022 11:41 PM
Operator : AIRPIANO4:TJS
Sample : L2253855-01D,3,3.72,250
Misc : WG1695439,ICAL19365
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 05 15:20:42 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

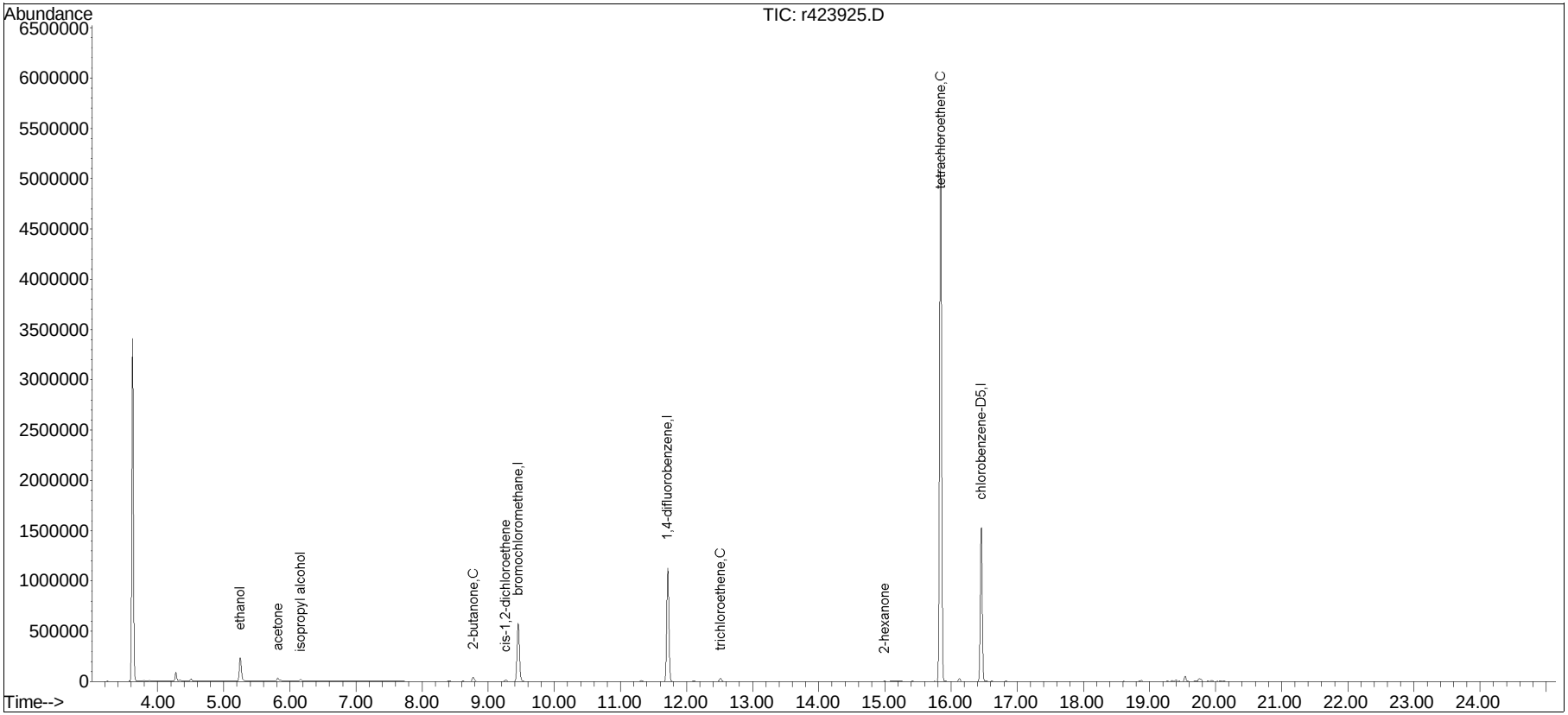
CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004T\r423912.D
Sub List : TO15-NY - .

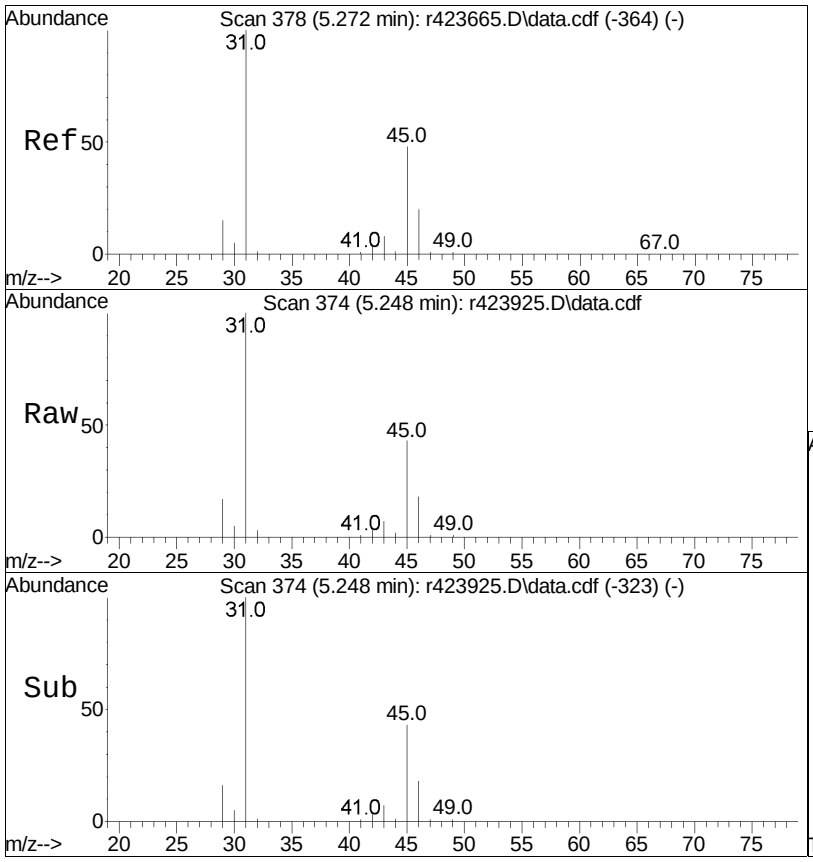
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Sub List : TO15-NY - .s\Data\Airpiano4\2022\10\1004T\r423912.D

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423925.D
Acq On : 4 Oct 2022 11:41 PM
Operator : AIRPIANO4:TJS
Sample : L2253855-01D,3,3.72,250
Misc : WG1695439,ICAL19365
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 05 15:20:42 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

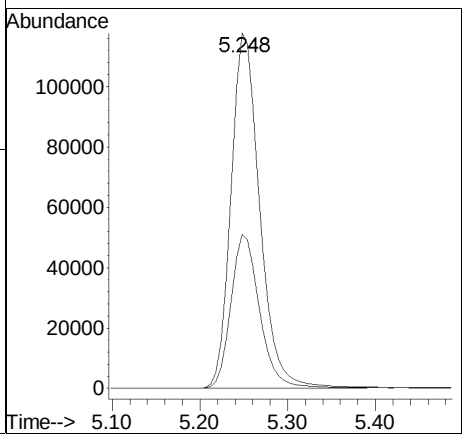


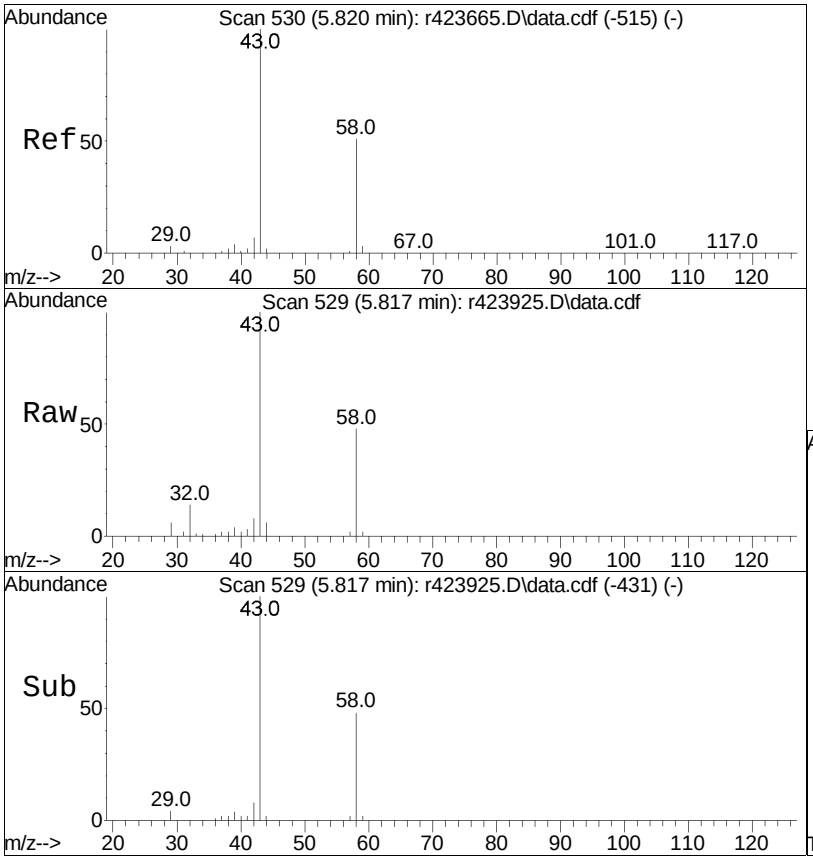


#15
ethanol
Concen: 17.95 ppbV
RT: 5.248 min Scan# 374
Delta R.T. -0.024 min
Lab File: r423925.D
Acq: 4 Oct 2022 11:41 PM

Tgt Ion: 31 Resp: 244041

Ion	Ratio	Lower	Upper
31	100		
45	43.3	38.3	57.5

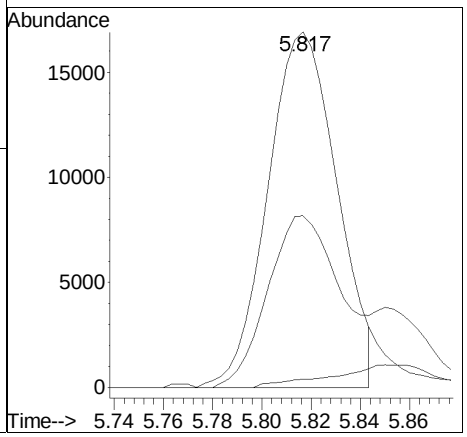


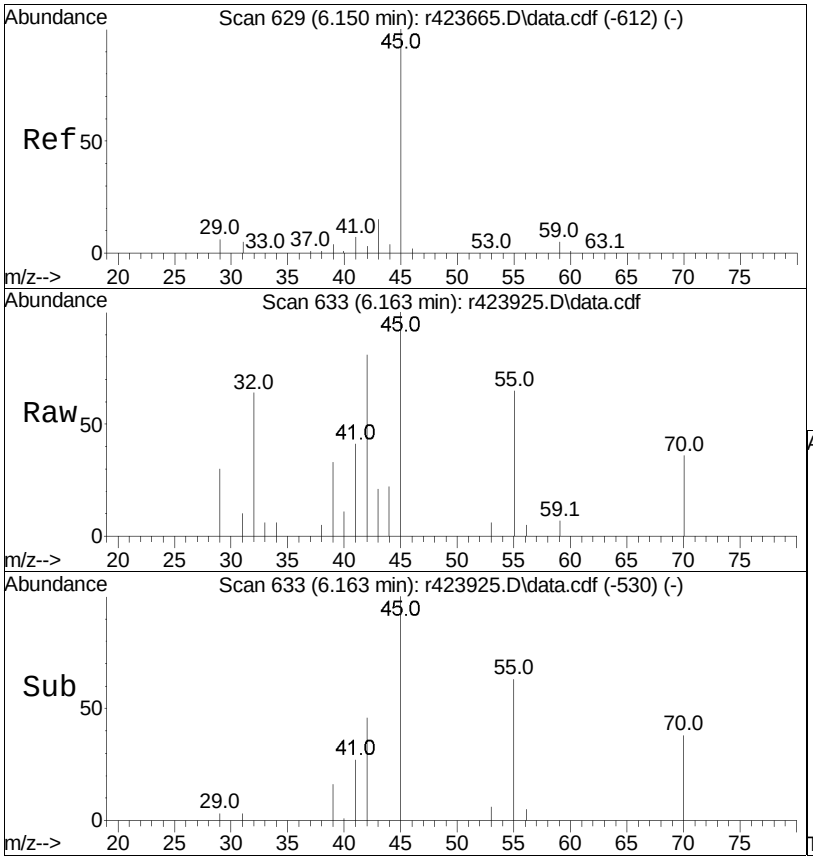


#19
acetone
Concen: 1.34 ppbV m
RT: 5.817 min Scan# 529
Delta R.T. -0.003 min
Lab File: r423925.D
Acq: 4 Oct 2022 11:41 PM

Tgt Ion: 43 Resp: 33007

Ion	Ratio	Lower	Upper
43	100		
58	48.3	41.0	61.6
57	2.3	1.0	1.6#

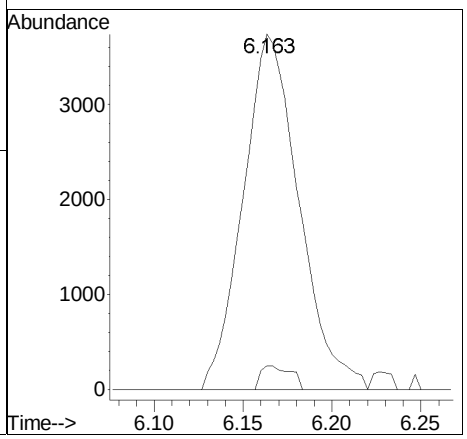


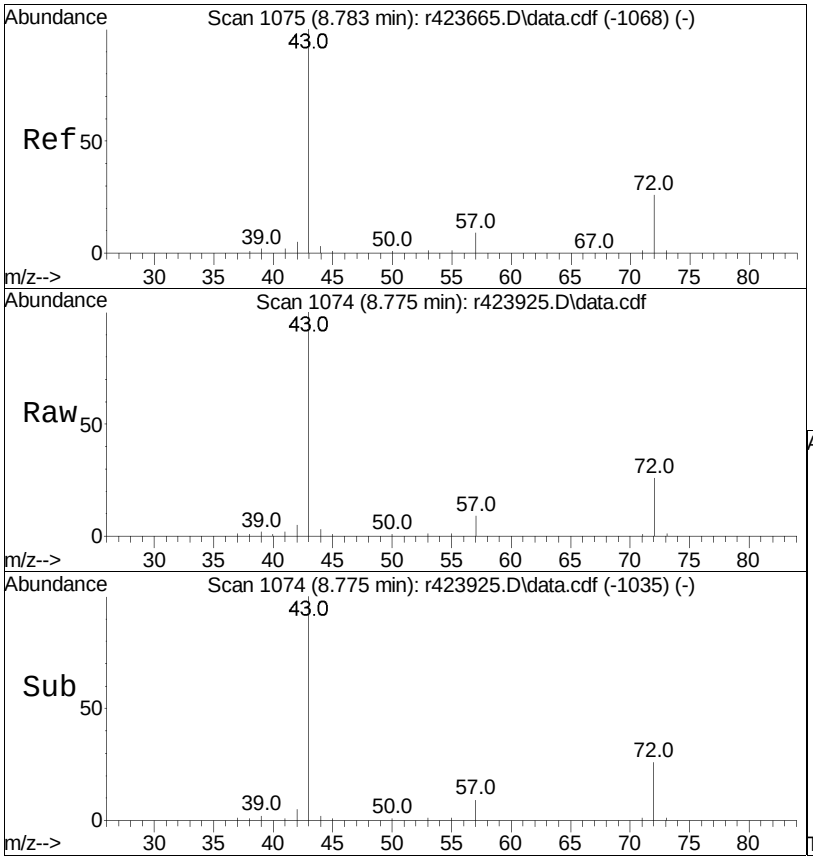


#22
isopropyl alcohol
Concen: 0.23 ppbV
RT: 6.163 min Scan# 633
Delta R.T. 0.013 min
Lab File: r423925.D
Acq: 4 Oct 2022 11:41 PM

Tgt Ion: 45 Resp: 8172

Ion	Ratio	Lower	Upper
45	100		
59	6.7	4.3	6.5#

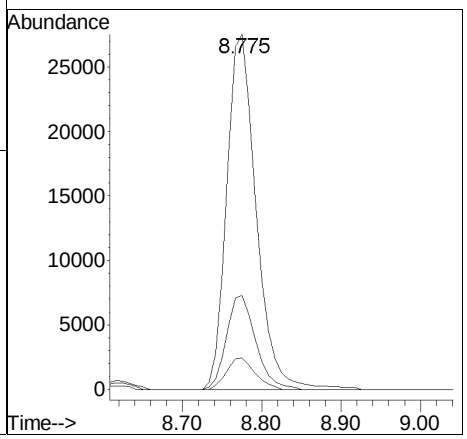


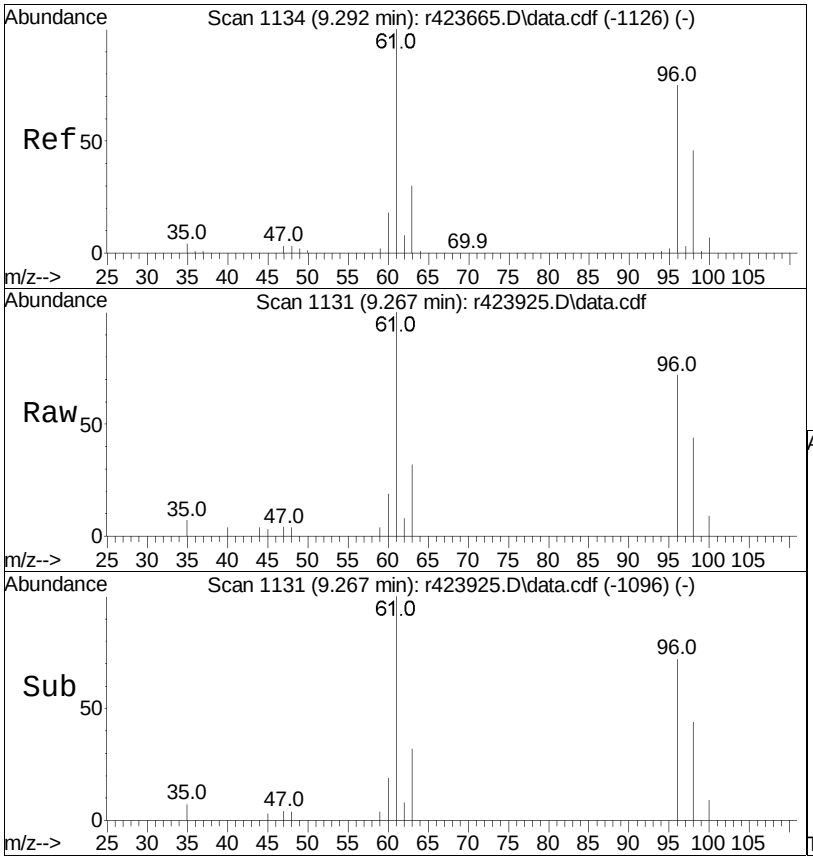


#36
2-butanone
Concen: 1.32 ppbV
RT: 8.775 min Scan# 1074
Delta R.T. -0.008 min
Lab File: r423925.D
Acq: 4 Oct 2022 11:41 PM

Tgt Ion: 43 Resp: 71120

Ion	Ratio	Lower	Upper
43	100		
72	26.4	21.0	31.6
57	8.8	7.4	11.0

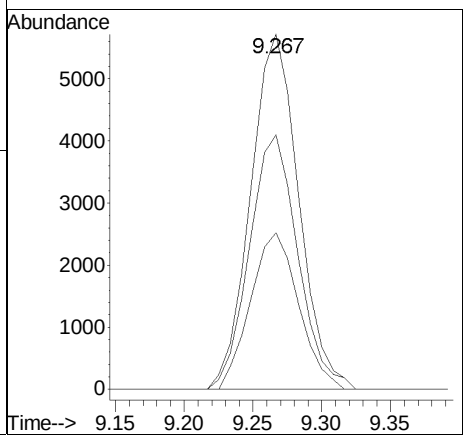


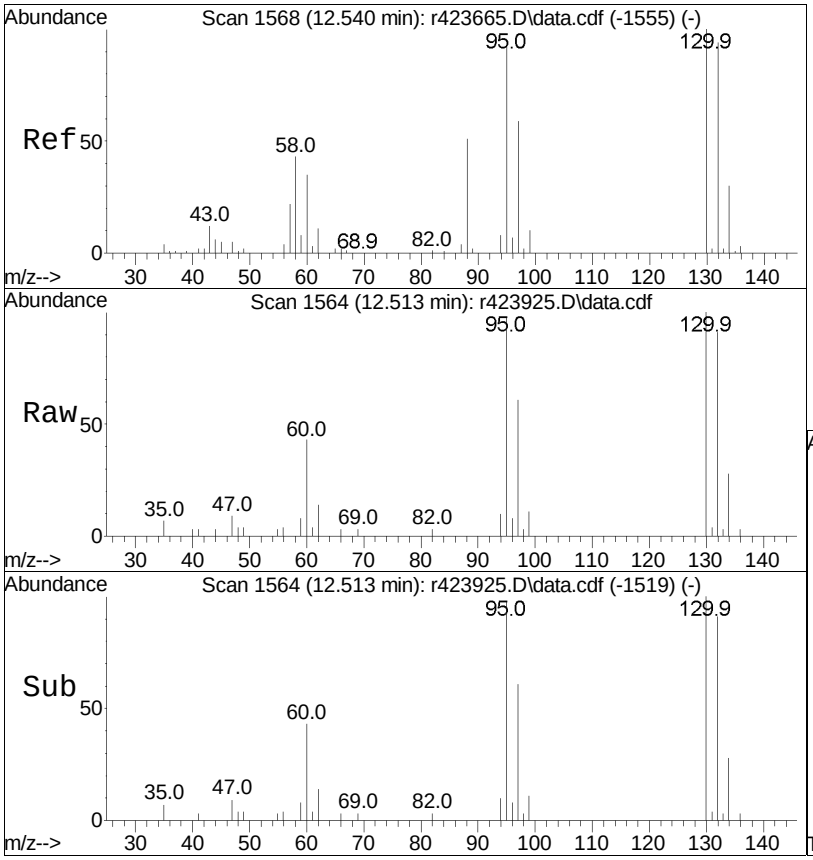


#37
cis-1,2-dichloroethene
Concen: 0.37 ppbV
RT: 9.267 min Scan# 1131
Delta R.T. -0.025 min
Lab File: r423925.D
Acq: 4 Oct 2022 11:41 PM

Tgt Ion: 61 Resp: 13926

Ion	Ratio	Lower	Upper
61	100		
96	71.6	59.6	89.4
98	44.1	36.8	55.2

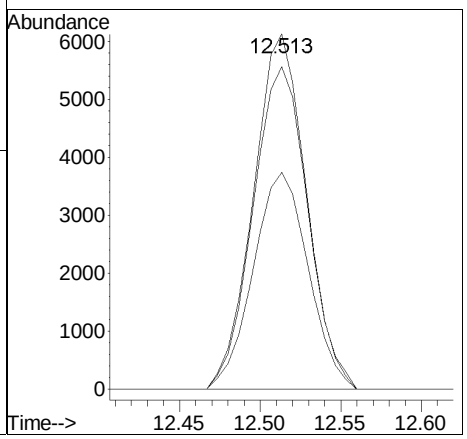


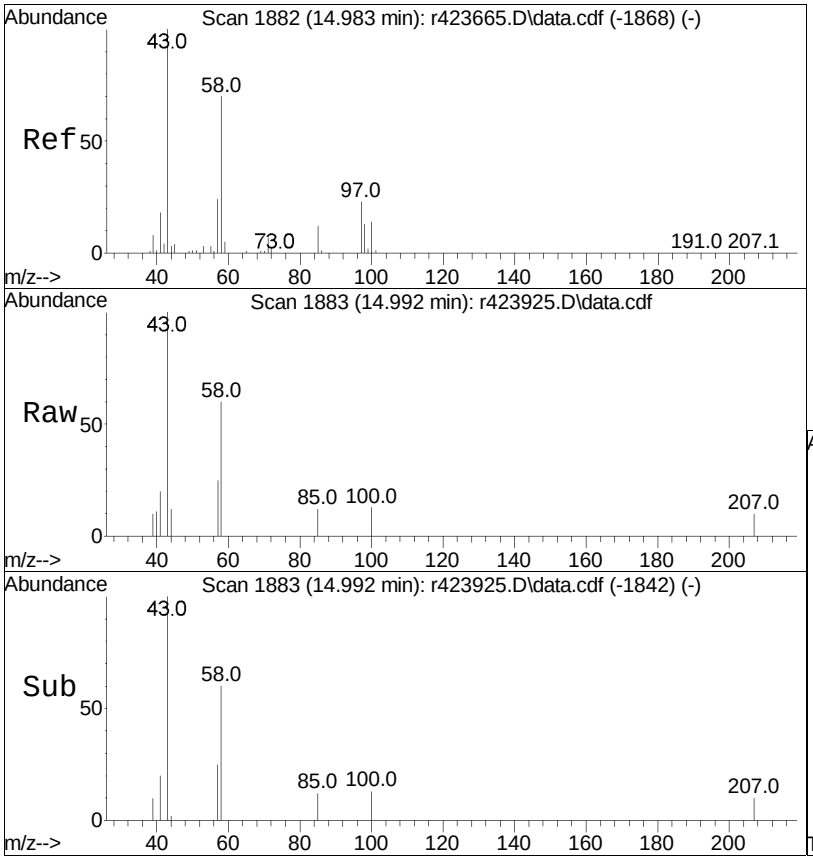


#59
trichloroethene
Concen: 0.45 ppbV
RT: 12.513 min Scan# 1564
Delta R.T. -0.027 min
Lab File: r423925.D
Acq: 4 Oct 2022 11:41 PM

Tgt Ion:130 Resp: 14017

Ion	Ratio	Lower	Upper
130	100		
132	90.8	75.3	112.9
97	61.1	47.2	70.8

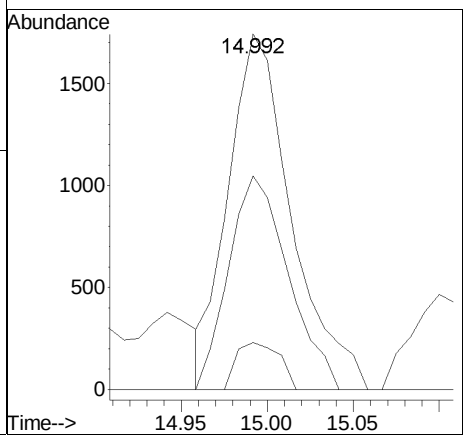


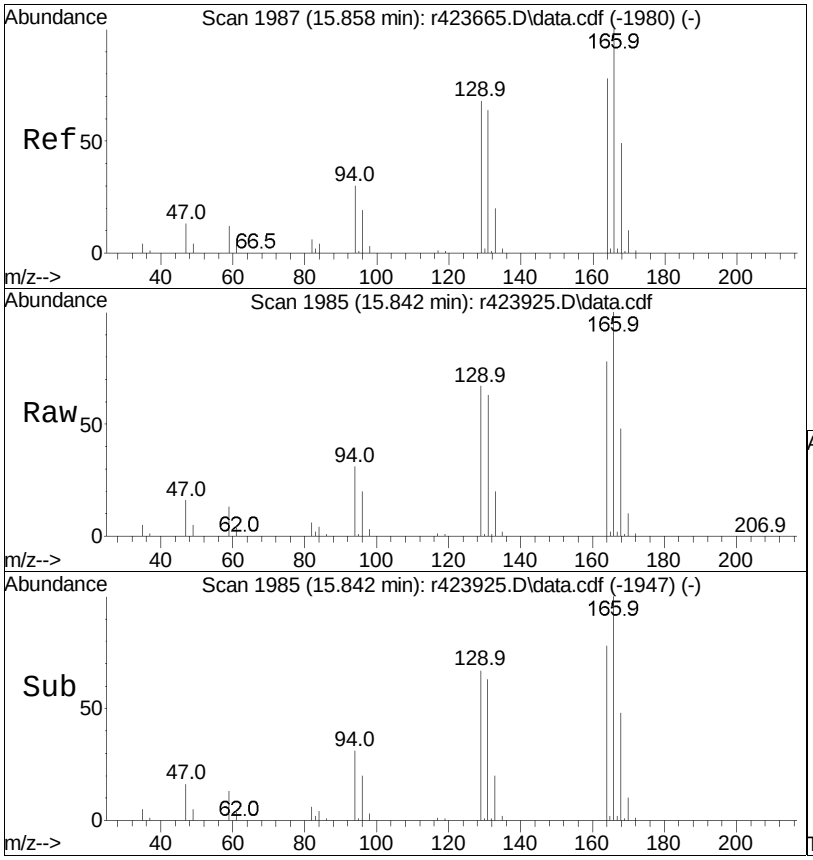


#72
2-hexanone
Concen: 0.08 ppbV
RT: 14.992 min Scan# 1883
Delta R.T. 0.008 min
Lab File: r423925.D
Acq: 4 Oct 2022 11:41 PM

Tgt Ion: 43 Resp: 4476

Ion	Ratio	Lower	Upper
43	100		
58	60.1	56.0	84.0
100	13.2	11.6	17.4

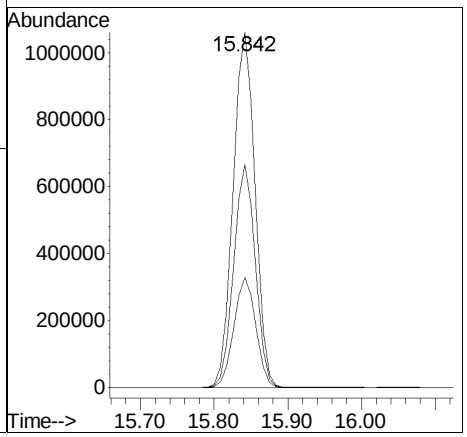




#78
tetrachloroethene
Concen: 50.05 ppbV
RT: 15.842 min Scan# 1985
Delta R.T. -0.017 min
Lab File: r423925.D
Acq: 4 Oct 2022 11:41 PM

Tgt Ion:166 Resp: 2193286

Ion	Ratio	Lower	Upper
166	100		
131	62.8	51.2	76.8
94	31.0	23.7	35.5

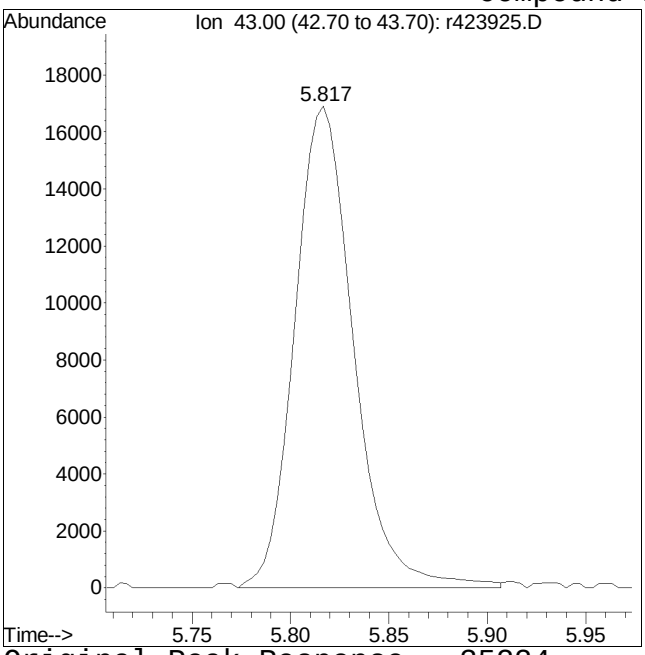


Manual Integration Report

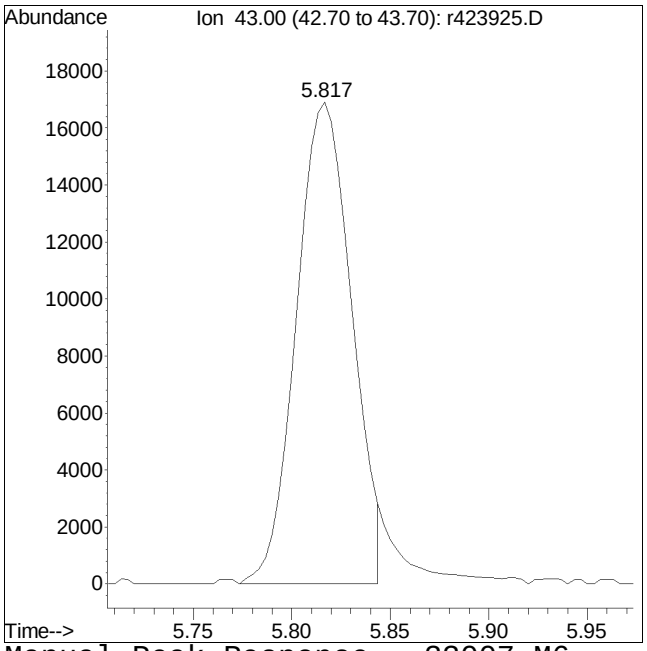
Data Path : O:\Forensics\Data\AirpianoQ
Data File : r423925.D
Date Inj'd : 10/4/2020 0:1: 1
Sample : L2253855-01D,3,3.72,250

Method : TFS4_220921.M
Operator : AIRPIANO4:TJS
Instrument :
Quant Date : 10/5/2022 8:19 am

Compound #19: acetone



Original Peak Response = 35224



Manual Peak Response = 33007 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423926.D
Acq On : 5 Oct 2022 12:17 AM
Operator : AIRPIANO4:TJS
Sample : L2253855-04D,3,100,250
Misc : WG1695439,ICAL19366
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 05 15:20:30 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004T\r423912.D
Sub List : TO15-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.458	49	449963	10.000	ppbV	#-0.02
Standard Area = 462589			Recovery =	97.27%		
43) 1,4-difluorobenzene	11.720	114	1153402	10.000	ppbV	-0.02
Standard Area = 1229344			Recovery =	93.82%		
67) chlorobenzene-D5	16.458	54	230471	10.000	ppbV	-0.02
Standard Area = 234984			Recovery =	98.08%		
System Monitoring Compounds						
Target Compounds						Qvalue
5) dichlorodifluoromethane	3.964	85	7902	0.214	ppbV	96
6) chloromethane	4.138	50	3828	0.240	ppbV	88
7) Freon-114	0.000		0	N.D.		
9) vinyl chloride	0.000		0	N.D.		
10) 1,3-butadiene	0.000		0	N.D.	d	
13) bromomethane	0.000		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	5.254	31	1260932	96.116	ppbV	94
17) vinyl bromide	0.000		0	N.D.		
19) acetone	5.803	43	1012144M6	42.537	ppbV	
21) trichlorofluoromethane	6.007	101	4769	0.167	ppbV	98
22) isopropyl alcohol	6.153	45	77720	2.314	ppbV	100
26) 1,1-dichloroethene	6.702		0	N.D.		
27) tertiary butyl alcohol	6.882	59	29987	0.599	ppbV	99
28) methylene chloride	6.930	49	6462	0.259	ppbV	96
29) 3-chloropropene	6.990		0	N.D.		
30) carbon disulfide	7.218	76	8258	0.115	ppbV #	1
31) Freon 113	7.260		0	N.D.		
32) trans-1,2-dichloroethene	0.000		0	N.D.		
33) 1,1-dichloroethane	0.000		0	N.D.		
34) MTBE	8.392		0	N.D.		
36) 2-butanone	8.758	43	2551273	49.103	ppbV	99
37) cis-1,2-dichloroethene	9.275		0	N.D.		
38) Ethyl Acetate	9.583	61	686	0.071	ppbV #	97
39) chloroform	9.625	83	2544	0.061	ppbV #	94
40) Tetrahydrofuran	10.092	42	8455M6	0.247	ppbV	
42) 1,2-dichloroethane	10.467	62	1644	0.059	ppbV	94

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423926.D
Acq On : 5 Oct 2022 12:17 AM
Operator : AIRPIANO4:TJS
Sample : L2253855-04D,3,100,250
Misc : WG1695439,ICAL19366
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 05 15:20:30 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004T\r423912.D
Sub List : TO15-NY - .

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44) hexane	9.533	57	3230	0.069	ppbV	#	57
48) 1,1,1-trichloroethane	0.000		0	N.D.			
50) benzene	11.287	78	13740	0.171	ppbV		94
52) carbon tetrachloride	11.453		0	N.D.			
53) cyclohexane	11.600		0	N.D.			
56) 1,2-dichloropropane	0.000		0	N.D.			
57) bromodichloromethane	12.520		0	N.D.			
58) 1,4-dioxane	0.000		0	N.D.			
59) trichloroethene	12.520	130	1586	0.053	ppbV		93
60) 2,2,4-trimethylpentane	12.567		0	N.D.			
62) heptane	0.000		0	N.D.	d		
63) cis-1,3-dichloropropene	0.000		0	N.D.			
64) 4-methyl-2-pentanone	13.592	43	2443	0.045	ppbV	#	78
65) trans-1,3-dichloropropene	0.000		0	N.D.			
66) 1,1,2-trichloroethane	0.000		0	N.D.			
68) toluene	14.667	91	14243	0.126	ppbV		100
72) 2-hexanone	14.975	43	164611	2.898	ppbV		91
74) dibromochloromethane	0.000		0	N.D.			
75) 1,2-dibromoethane	0.000		0	N.D.			
78) tetrachloroethene	15.842	166	314234	7.317	ppbV		95
80) chlorobenzene	16.500		0	N.D.			
81) ethylbenzene	16.850	91	8898	0.068	ppbV		98
83) m+p-xylene	17.008	91	26182	0.250	ppbV		93
84) bromoform	0.000		0	N.D.			
85) styrene	17.342		0	N.D.			
86) 1,1,2,2-tetrachloroethane	0.000		0	N.D.	d		
87) o-xylene	17.433	91	11705	0.114	ppbV		93
96) 4-ethyl toluene	18.483		0	N.D.			
97) 1,3,5-trimethylbenzene	18.575		0	N.D.			
99) 1,2,4-trimethylbenzene	18.925	105	3854M6	0.035	ppbV		
101) Benzyl Chloride	18.917		0	N.D.			
102) 1,3-dichlorobenzene	19.117		0	N.D.			
103) 1,4-dichlorobenzene	19.117		0	N.D.			
107) 1,2-dichlorobenzene	0.000		0	N.D.			
115) 1,2,4-trichlorobenzene	0.000		0	N.D.			
119) hexachlorobutadiene	0.000		0	N.D.			

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

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423926.D
Acq On : 5 Oct 2022 12:17 AM
Operator : AIRPIANO4:TJS
Sample : L2253855-04D,3,100,250
Misc : WG1695439,ICAL19366
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 05 15:20:30 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

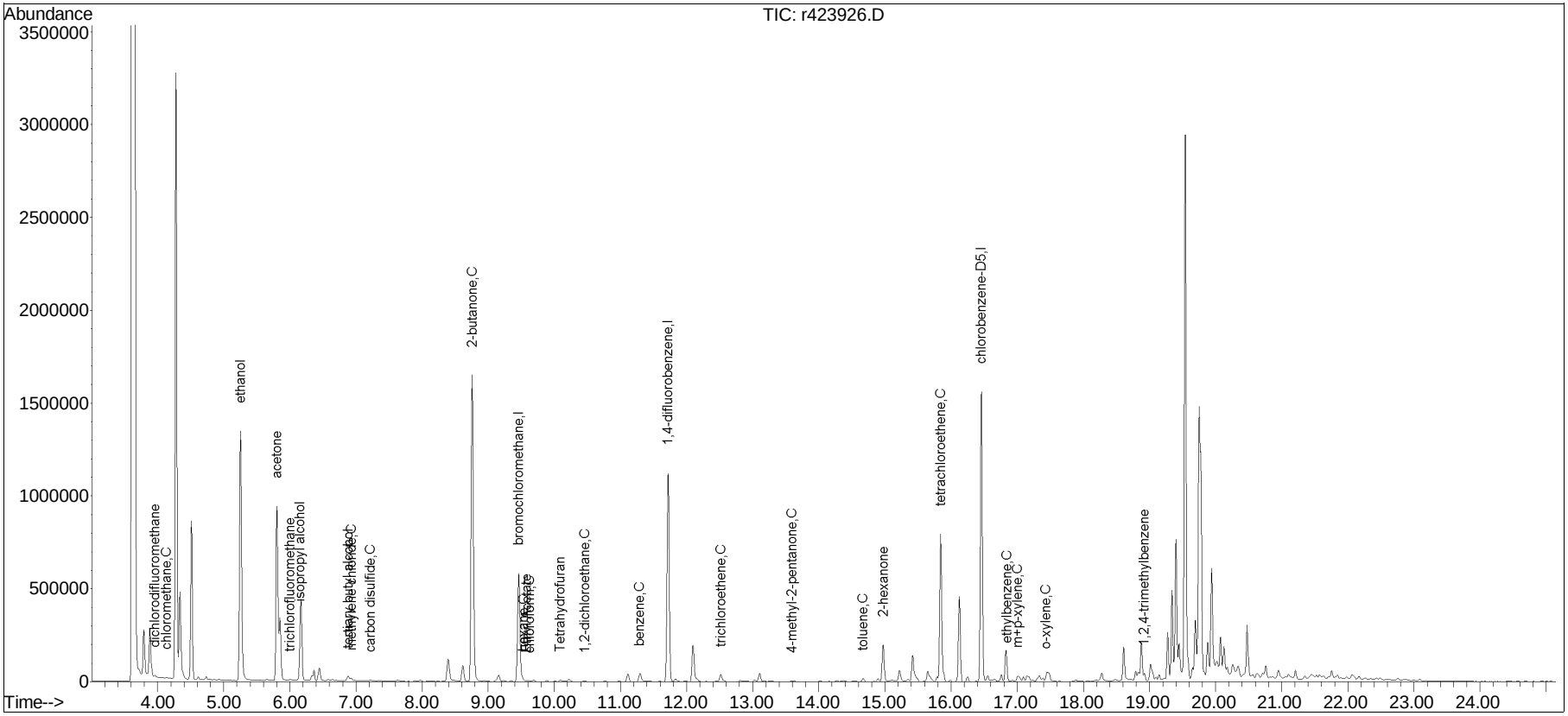
CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004T\r423912.D
Sub List : TO15-NY - .

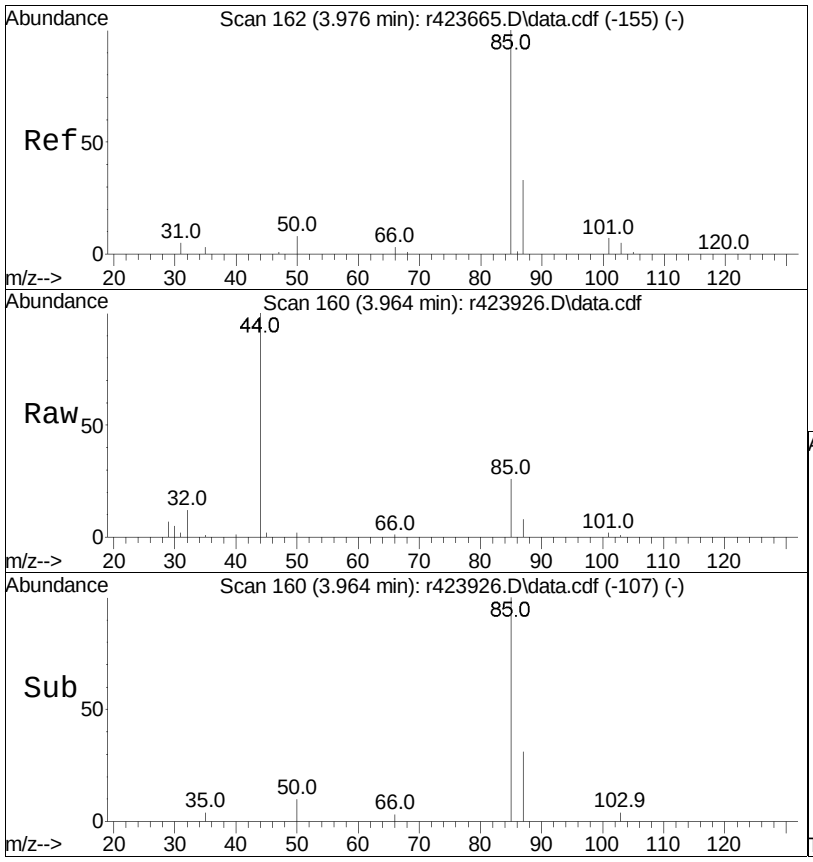
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Sub List : TO15-NY - .s\Data\Airpiano4\2022\10\1004T\r423912.D

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423926.D
Acq On : 5 Oct 2022 12:17 AM
Operator : AIRPIANO4:TJS
Sample : L2253855-04D,3,100,250
Misc : WG1695439,ICAL19366
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 05 15:20:30 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

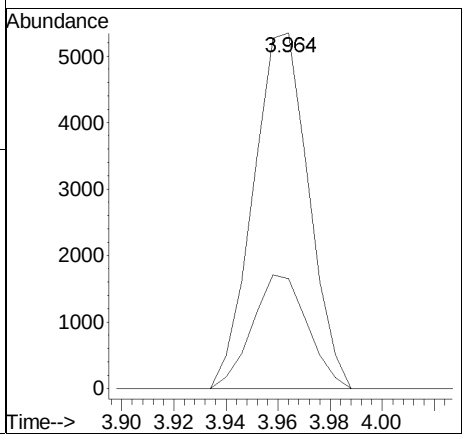


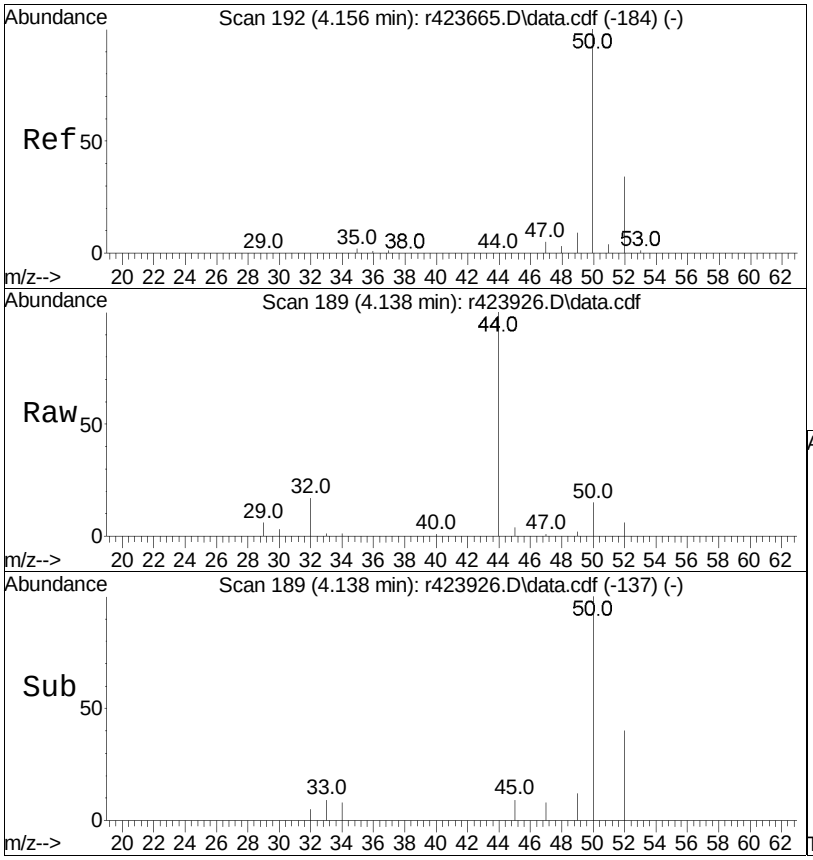


#5
dichlorodifluoromethane
Concen: 0.21 ppbV
RT: 3.964 min Scan# 160
Delta R.T. -0.012 min
Lab File: r423926.D
Acq: 5 Oct 2022 12:17 AM

Tgt Ion: 85 Resp: 7902

Ion	Ratio	Lower	Upper
85	100		
87	30.9	26.3	39.5

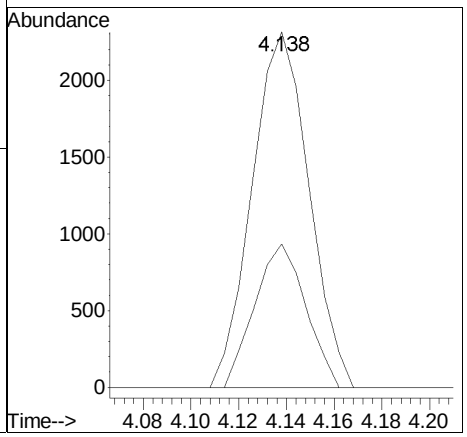


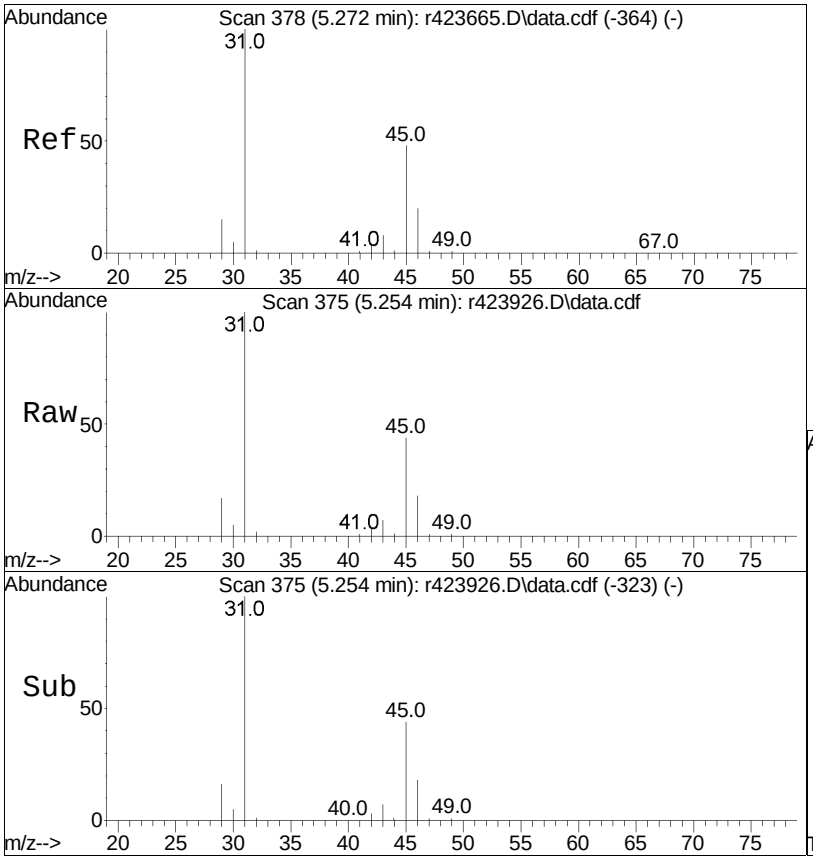


#6
chloromethane
Concen: 0.24 ppbV
RT: 4.138 min Scan# 189
Delta R.T. -0.018 min
Lab File: r423926.D
Acq: 5 Oct 2022 12:17 AM

Tgt Ion: 50 Resp: 3828

Ion	Ratio	Lower	Upper
50	100		
52	40.4	27.0	40.6

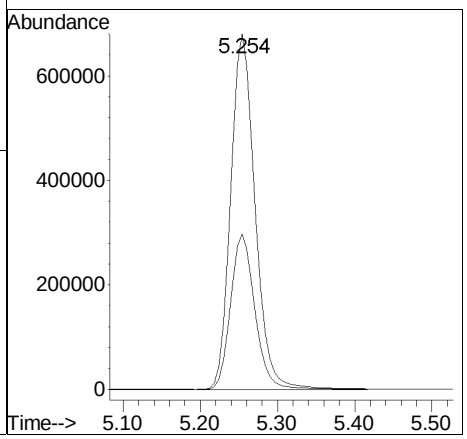


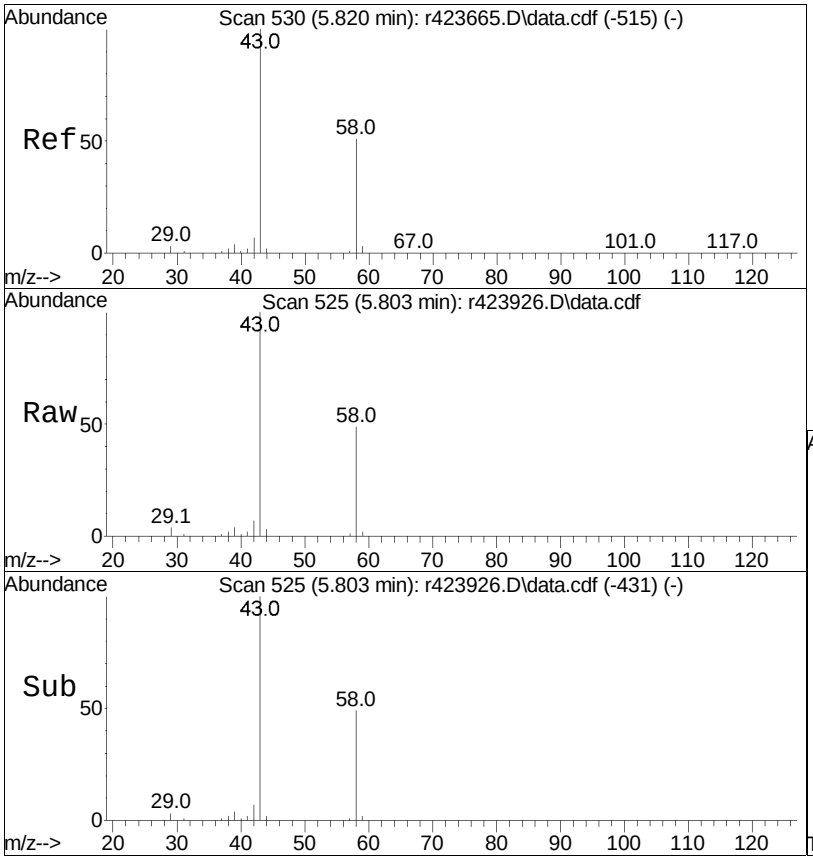


#15
ethanol
Concen: 96.12 ppbV
RT: 5.254 min Scan# 375
Delta R.T. -0.018 min
Lab File: r423926.D
Acq: 5 Oct 2022 12:17 AM

Tgt Ion: 31 Resp: 1260932

Ion	Ratio	Lower	Upper
31	100		
45	43.7	38.3	57.5

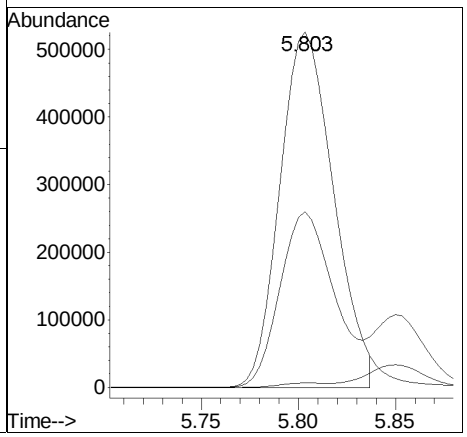


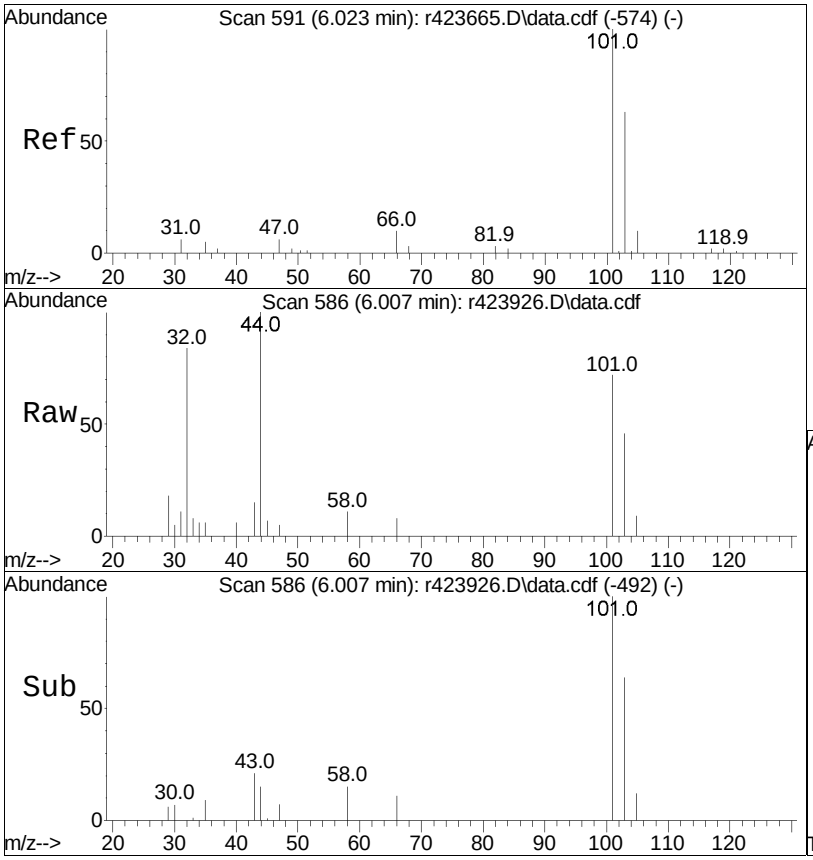


#19
acetone
Concen: 42.54 ppbV m
RT: 5.803 min Scan# 525
Delta R.T. -0.017 min
Lab File: r423926.D
Acq: 5 Oct 2022 12:17 AM

Tgt Ion: 43 Resp: 1012144

Ion	Ratio	Lower	Upper
43	100		
58	49.5	41.0	61.6
57	1.2	1.0	1.6

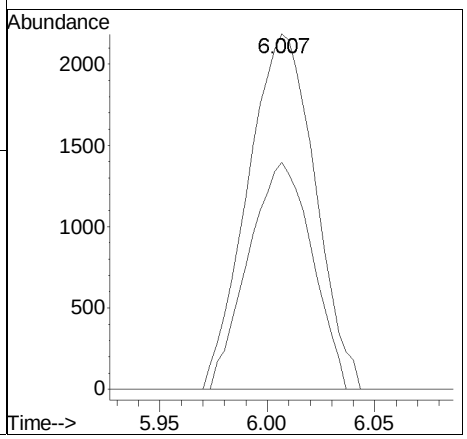


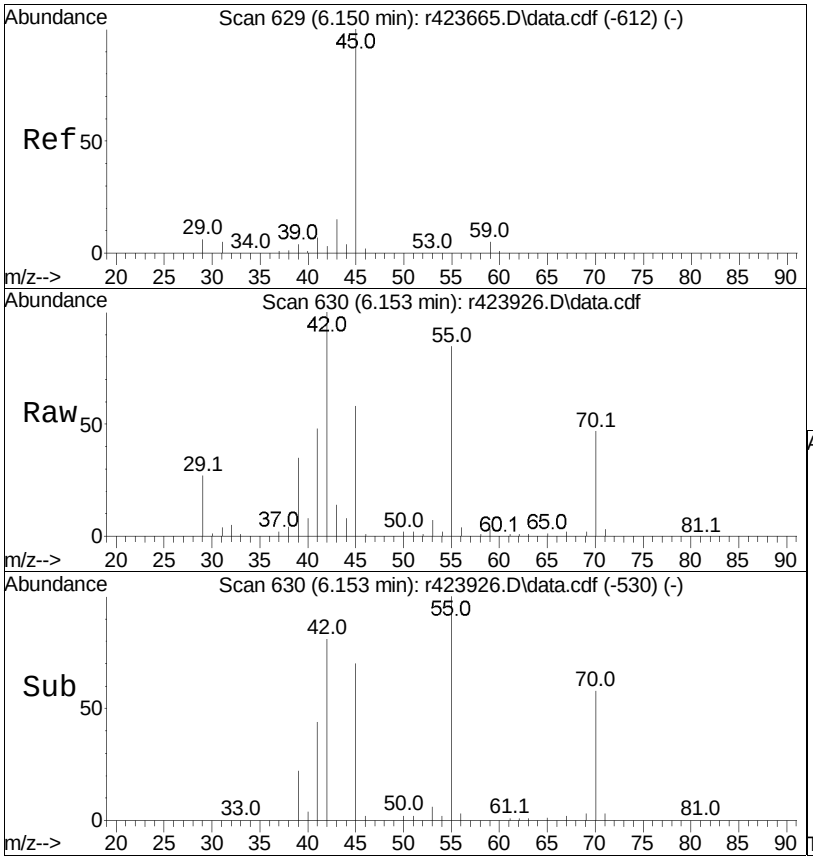


#21
trichlorofluoromethane
Concen: 0.17 ppbV
RT: 6.007 min Scan# 586
Delta R.T. -0.017 min
Lab File: r423926.D
Acq: 5 Oct 2022 12:17 AM

Tgt Ion:101 Resp: 4769

Ion	Ratio	Lower	Upper
101	100		
103	63.9	50.2	75.2

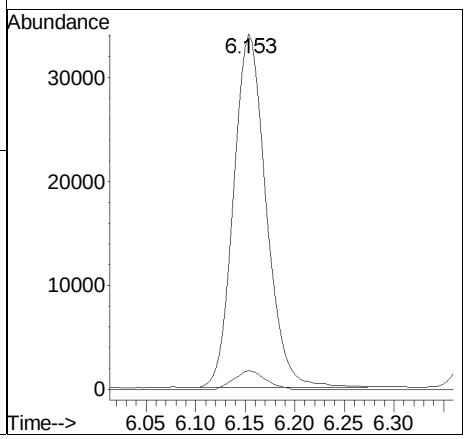


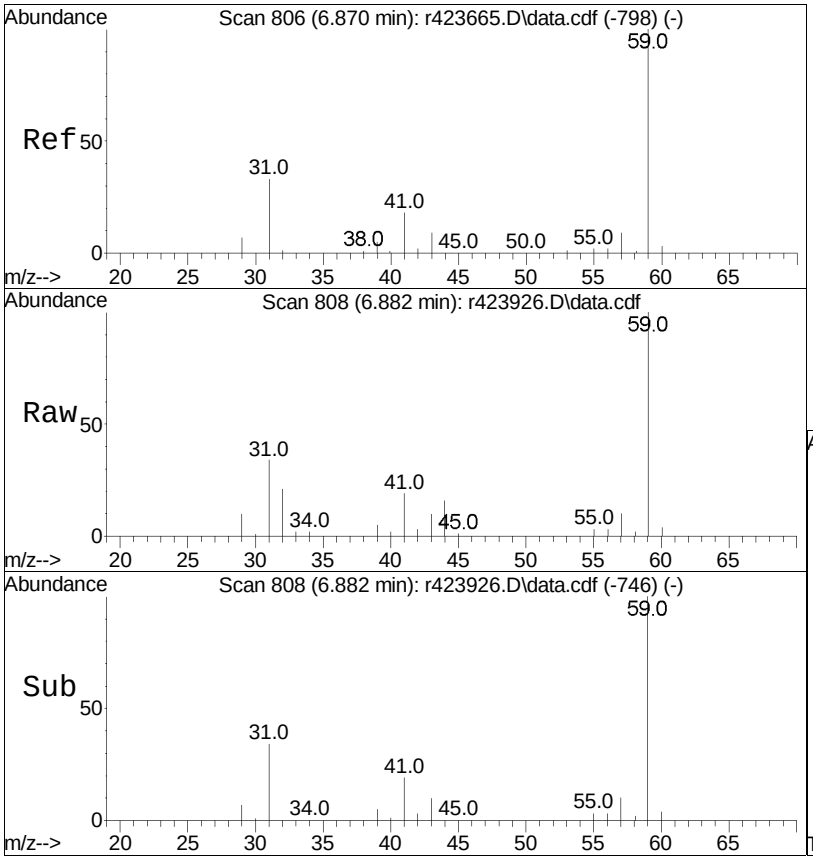


#22
isopropyl alcohol
Concen: 2.31 ppbV
RT: 6.153 min Scan# 630
Delta R.T. 0.003 min
Lab File: r423926.D
Acq: 5 Oct 2022 12:17 AM

Tgt Ion: 45 Resp: 77720

Ion	Ratio	Lower	Upper
45	100		
59	5.2	4.3	6.5

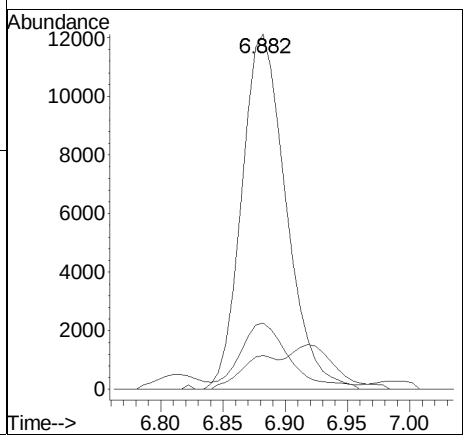


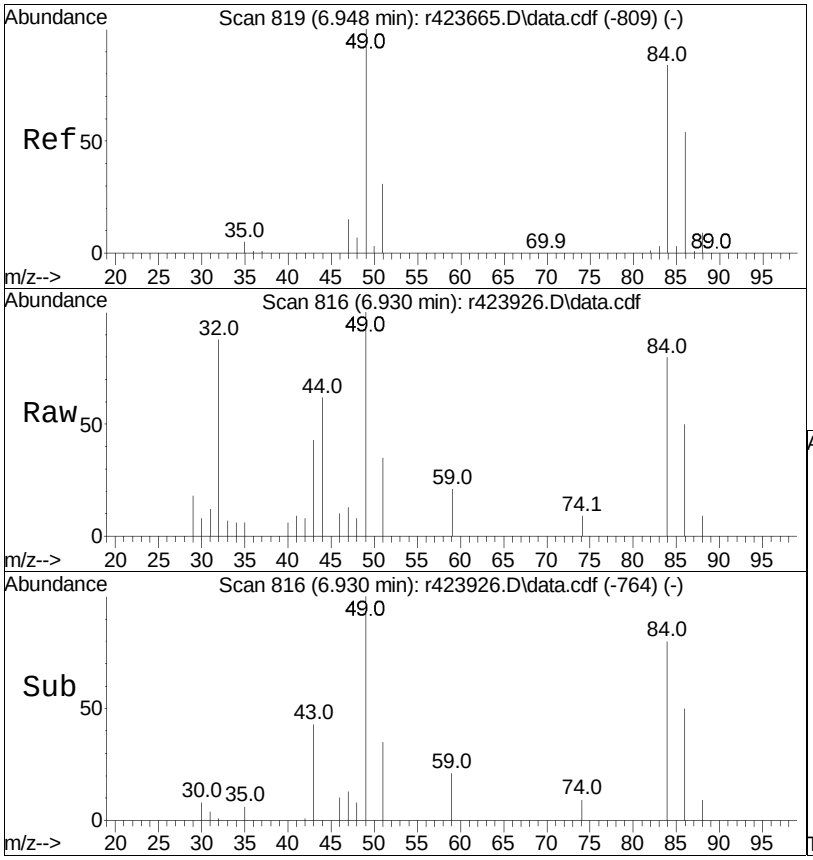


#27
tertiary butyl alcohol
Concen: 0.60 ppbV
RT: 6.882 min Scan# 808
Delta R.T. 0.012 min
Lab File: r423926.D
Acq: 5 Oct 2022 12:17 AM

Tgt Ion: 59 Resp: 29987

Ion	Ratio	Lower	Upper
59	100		
41	18.7	14.6	21.8
43	9.6	7.0	10.6

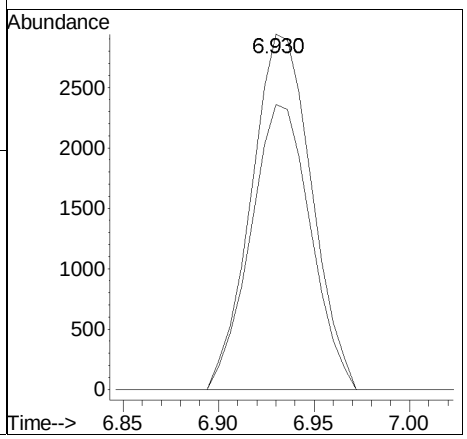


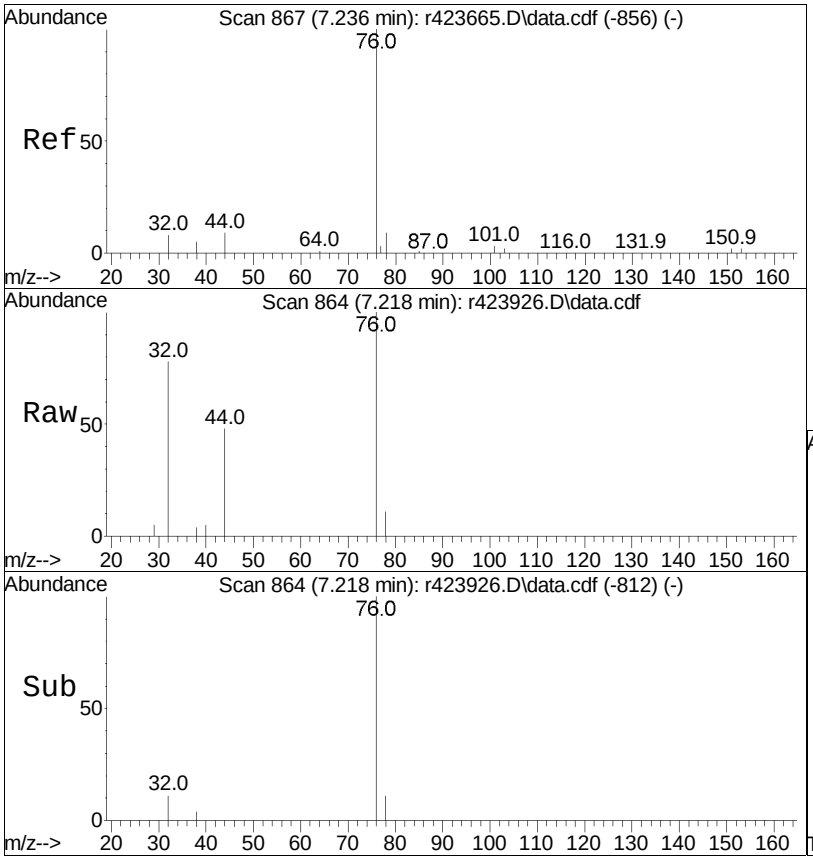


#28
methylene chloride
Concen: 0.26 ppbV
RT: 6.930 min Scan# 816
Delta R.T. -0.018 min
Lab File: r423926.D
Acq: 5 Oct 2022 12:17 AM

Tgt Ion: 49 Resp: 6462

Ion	Ratio	Lower	Upper
49	100		
84	80.2	66.8	100.2

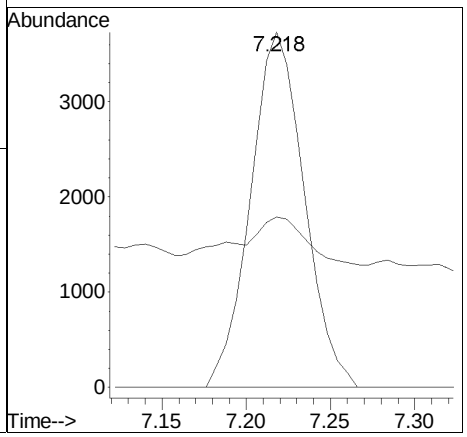


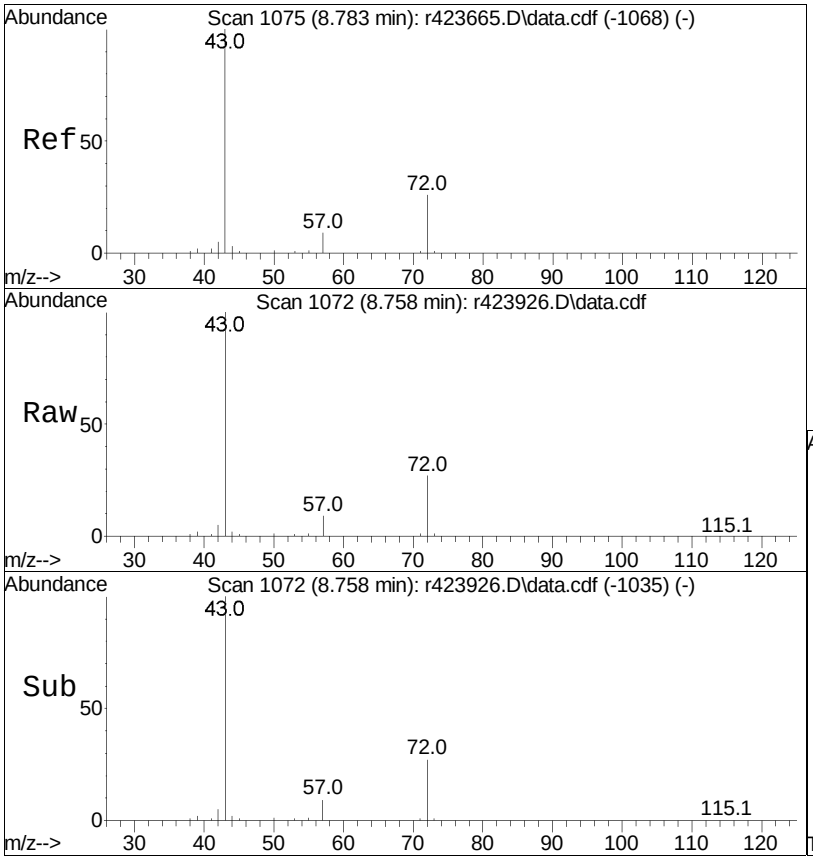


#30
carbon disulfide
Concen: 0.11 ppbV
RT: 7.218 min Scan# 864
Delta R.T. -0.018 min
Lab File: r423926.D
Acq: 5 Oct 2022 12:17 AM

Tgt Ion: 76 Resp: 8258

Ion	Ratio	Lower	Upper
76	100		
44	48.0	7.4	11.2#

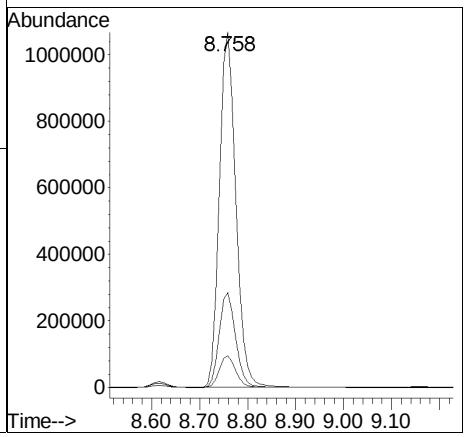


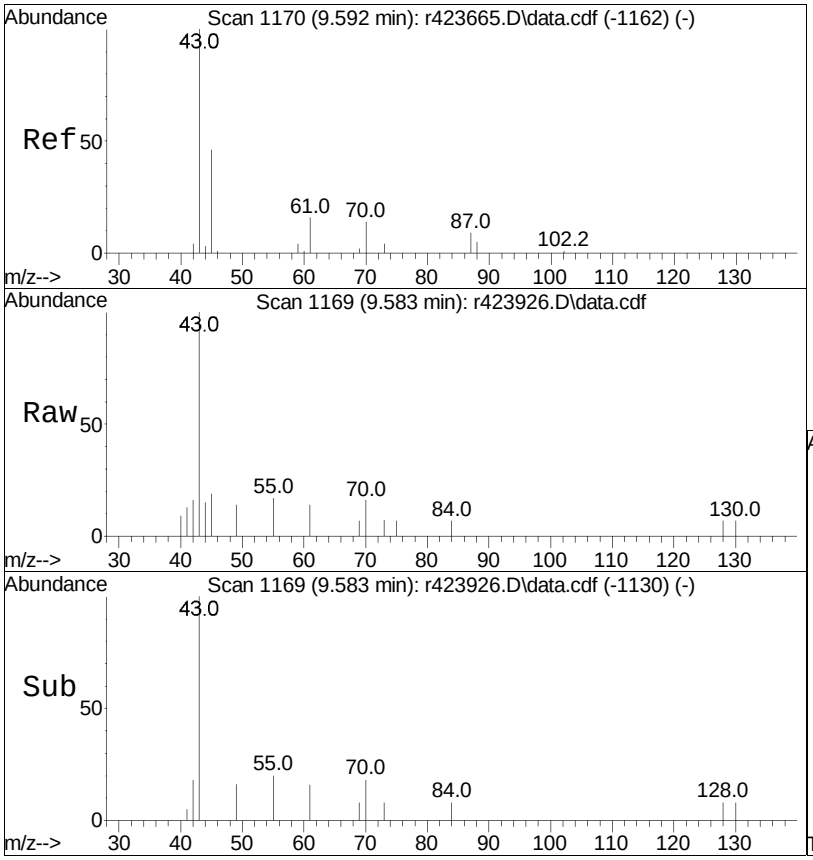


#36
2-butanone
Concen: 49.10 ppbV
RT: 8.758 min Scan# 1072
Delta R.T. -0.025 min
Lab File: r423926.D
Acq: 5 Oct 2022 12:17 AM

Tgt Ion: 43 Resp: 2551273

Ion	Ratio	Lower	Upper
43	100		
72	26.7	21.0	31.6
57	8.9	7.4	11.0

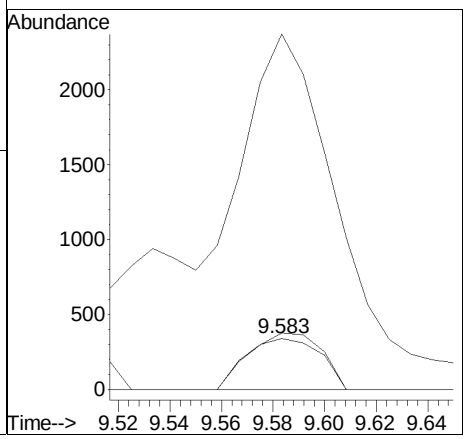


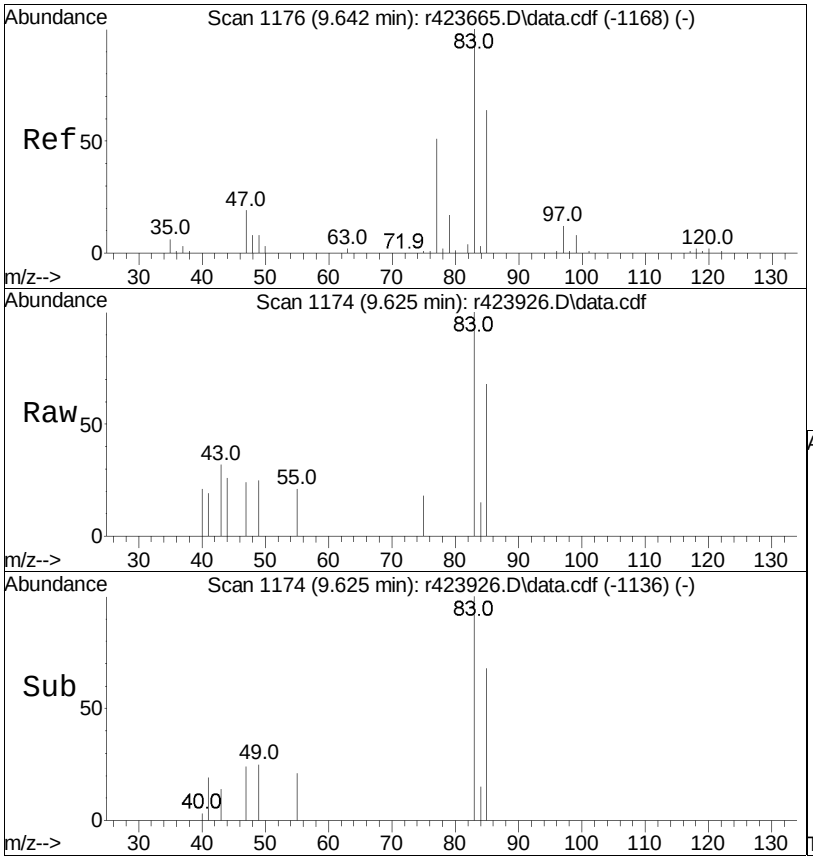


#38
Ethyl Acetate
Concen: 0.07 ppbV
RT: 9.583 min Scan# 1169
Delta R.T. -0.008 min
Lab File: r423926.D
Acq: 5 Oct 2022 12:17 AM

Tgt Ion: 61 Resp: 686

Ion	Ratio	Lower	Upper
61	100		
70	110.6	71.0	106.6#
43	697.6	558.9	838.3

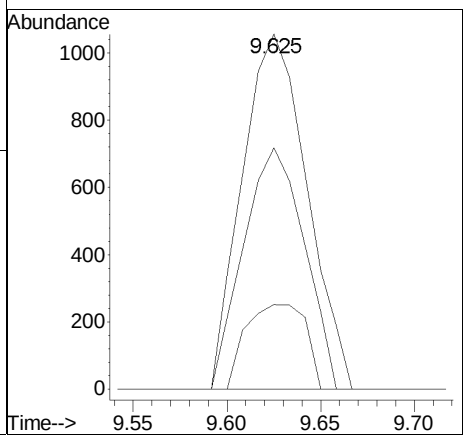


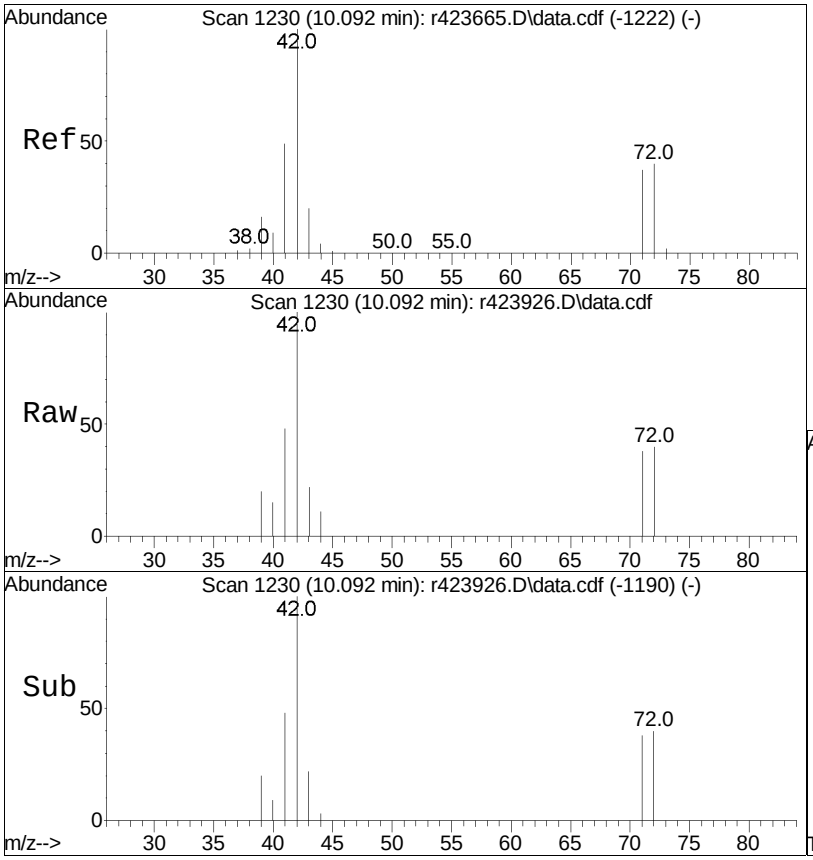


#39
chloroform
Concen: 0.06 ppbV
RT: 9.625 min Scan# 1174
Delta R.T. -0.017 min
Lab File: r423926.D
Acq: 5 Oct 2022 12:17 AM

Tgt Ion: 83 Resp: 2544

Ion	Ratio	Lower	Upper
83	100		
85	68.0	51.6	77.4
47	23.9	15.2	22.8#

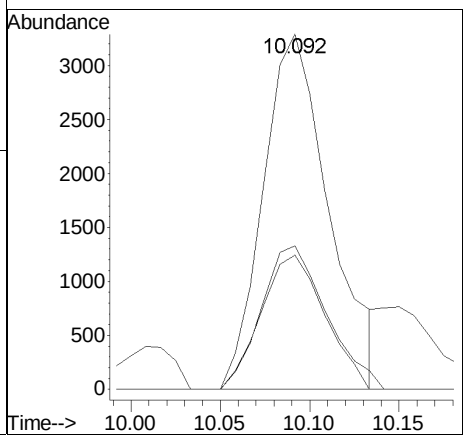


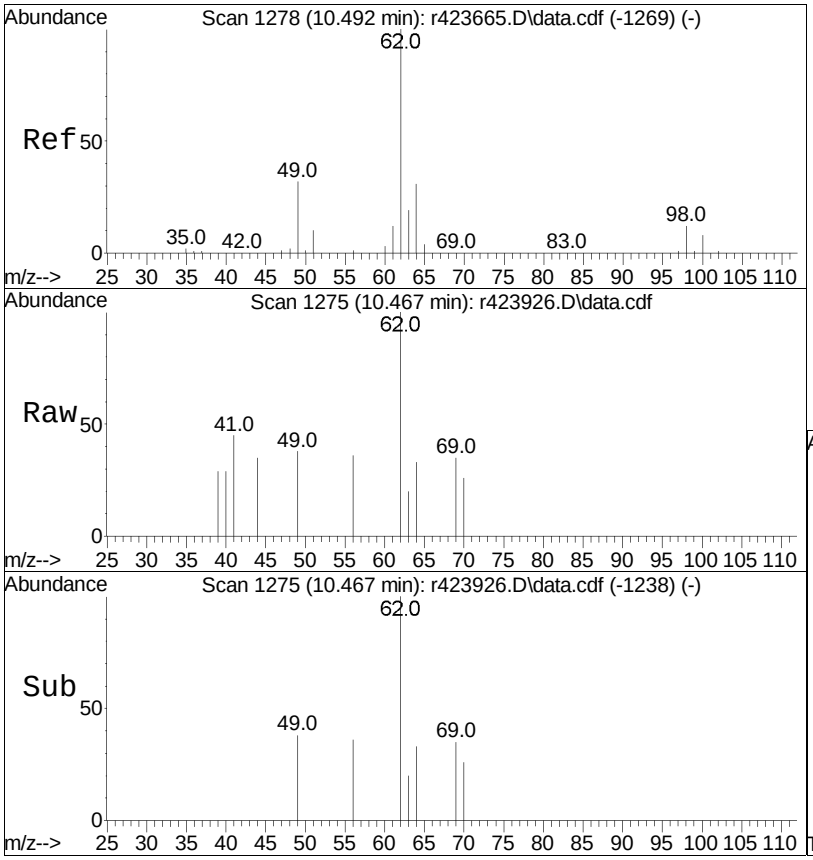


#40
Tetrahydrofuran
Concen: 0.25 ppbV m
RT: 10.092 min Scan# 1230
Delta R.T. 0.000 min
Lab File: r423926.D
Acq: 5 Oct 2022 12:17 AM

Tgt Ion: 42 Resp: 8455

Ion	Ratio	Lower	Upper
42	100		
71	37.8	29.7	44.5
72	40.4	32.4	48.6

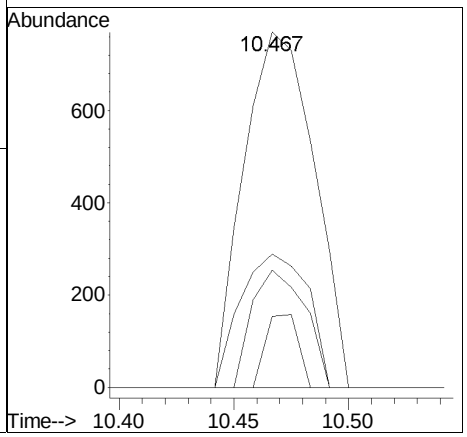


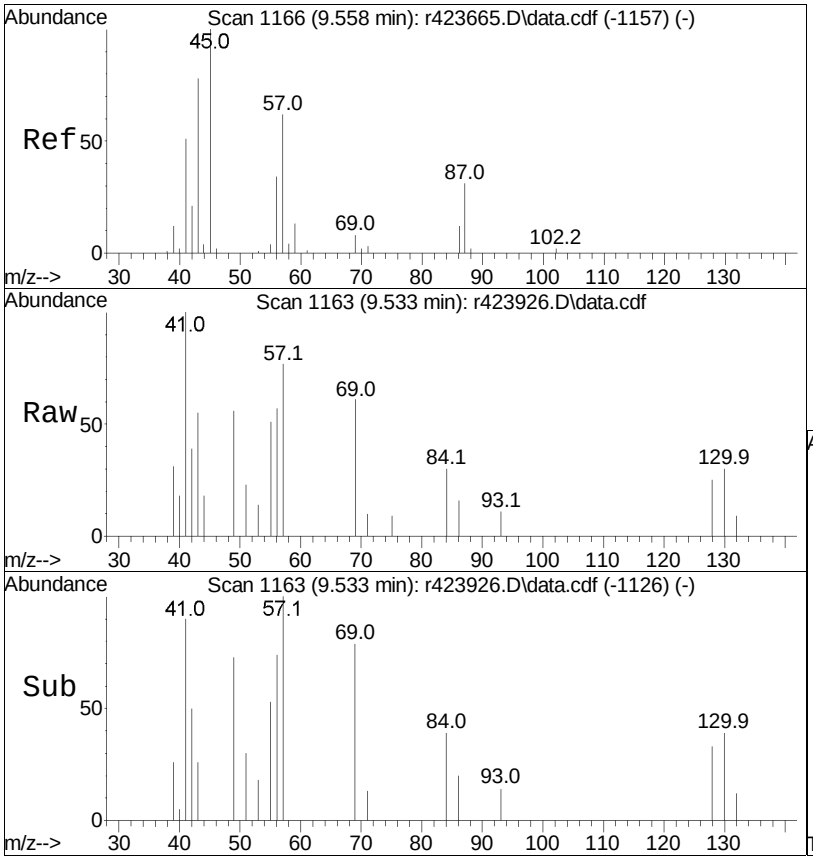


#42
1,2-dichloroethane
Concen: 0.06 ppbV
RT: 10.467 min Scan# 1275
Delta R.T. -0.025 min
Lab File: r423926.D
Acq: 5 Oct 2022 12:17 AM

Tgt Ion: 62 Resp: 1644

Ion	Ratio	Lower	Upper
62	100		
64	33.0	25.0	37.4
49	37.5	25.8	38.6
63	20.0	15.1	22.7

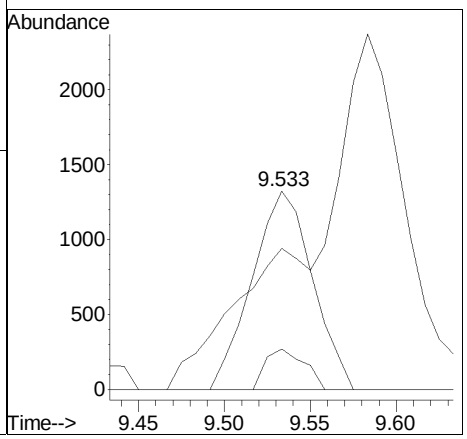


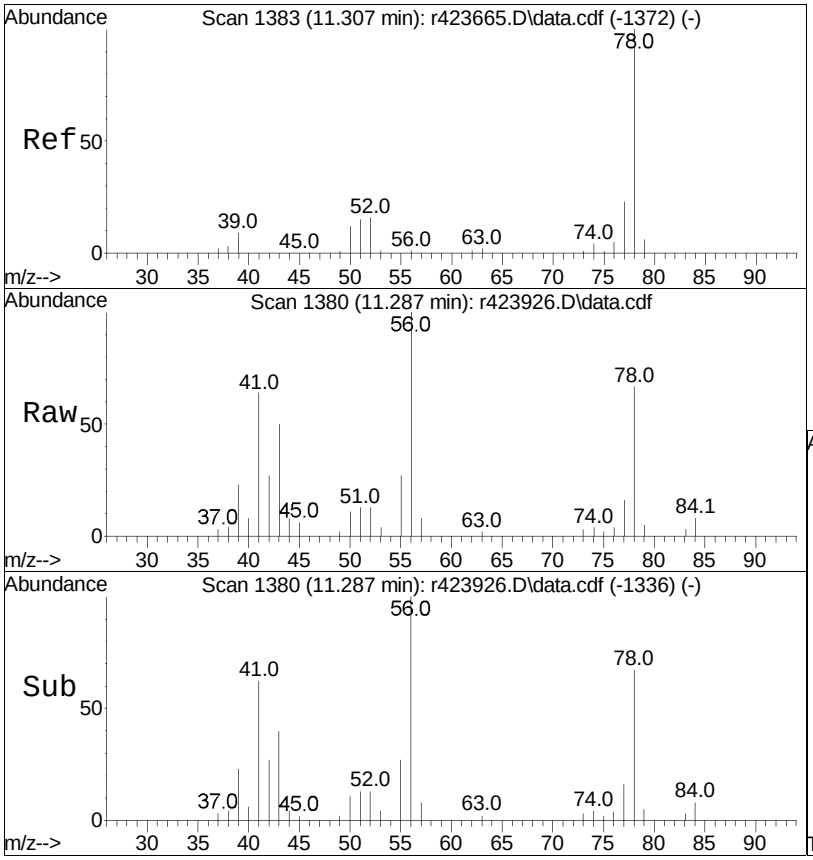


#44
hexane
Concen: 0.07 ppbV
RT: 9.533 min Scan# 1163
Delta R.T. -0.025 min
Lab File: r423926.D
Acq: 5 Oct 2022 12:17 AM

Tgt Ion: 57 Resp: 3230

Ion	Ratio	Lower	Upper
57	100		
43	71.1	101.0	151.4#
86	20.4	14.8	22.2

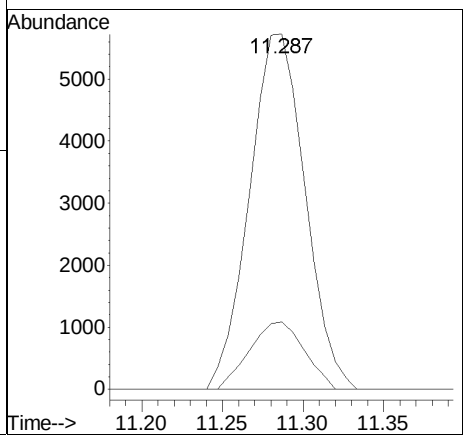


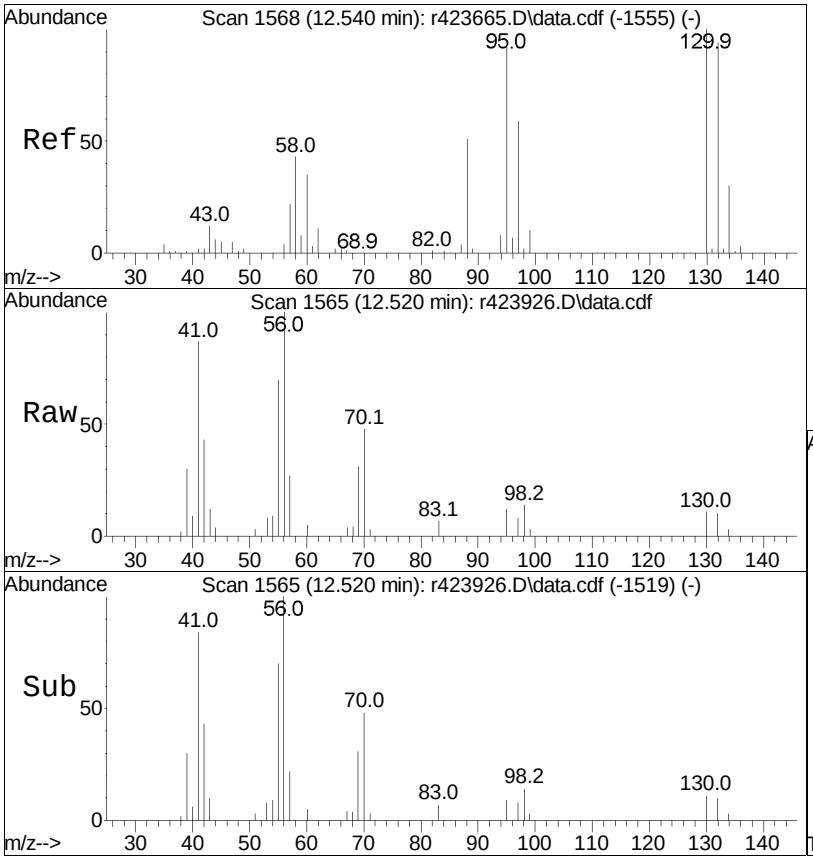


#50
benzene
Concen: 0.17 ppbV
RT: 11.287 min Scan# 1380
Delta R.T. -0.020 min
Lab File: r423926.D
Acq: 5 Oct 2022 12:17 AM

Tgt Ion: 78 Resp: 13740

Ion	Ratio	Lower	Upper
78	100		
52	19.0	13.0	19.6

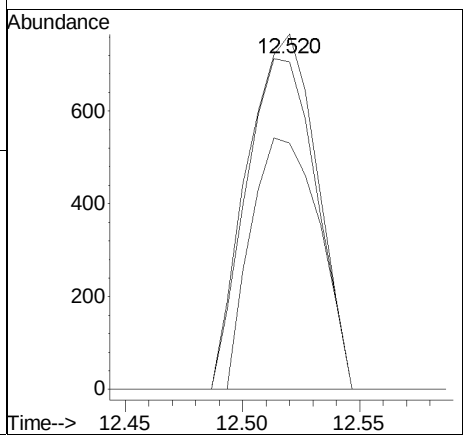


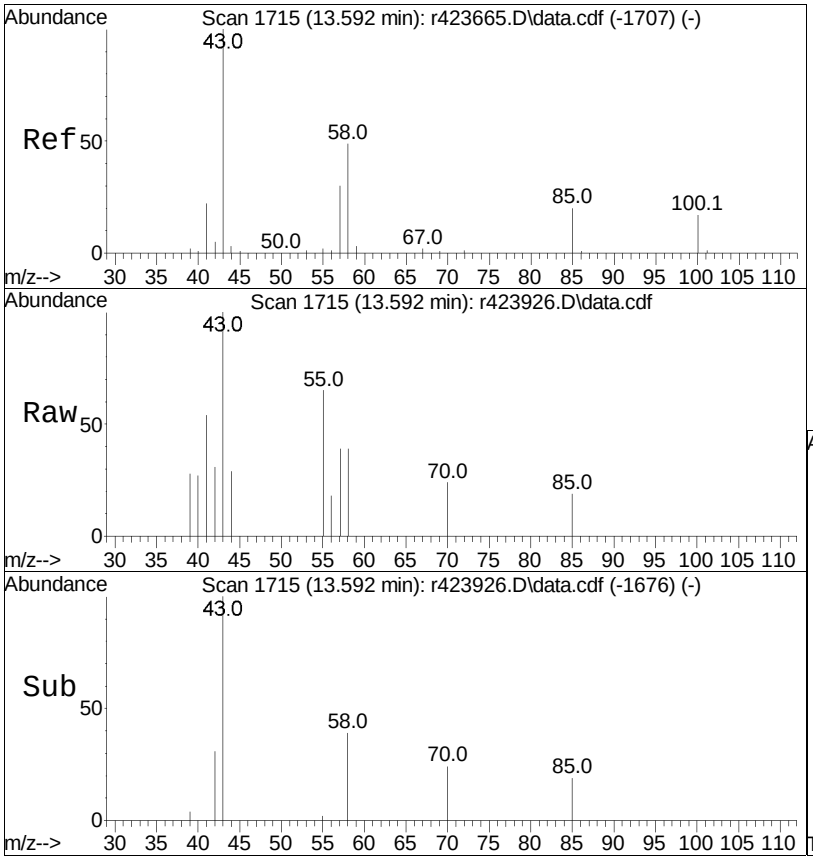


#59
trichloroethene
Concen: 0.05 ppbV
RT: 12.520 min Scan# 1565
Delta R.T. -0.020 min
Lab File: r423926.D
Acq: 5 Oct 2022 12:17 AM

Tgt Ion:130 Resp: 1586

Ion	Ratio	Lower	Upper
130	100		
132	92.2	75.3	112.9
97	69.3	47.2	70.8

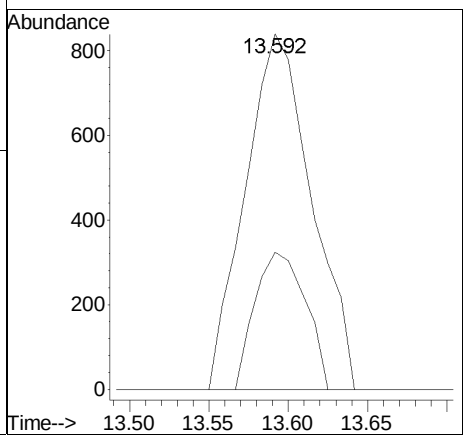


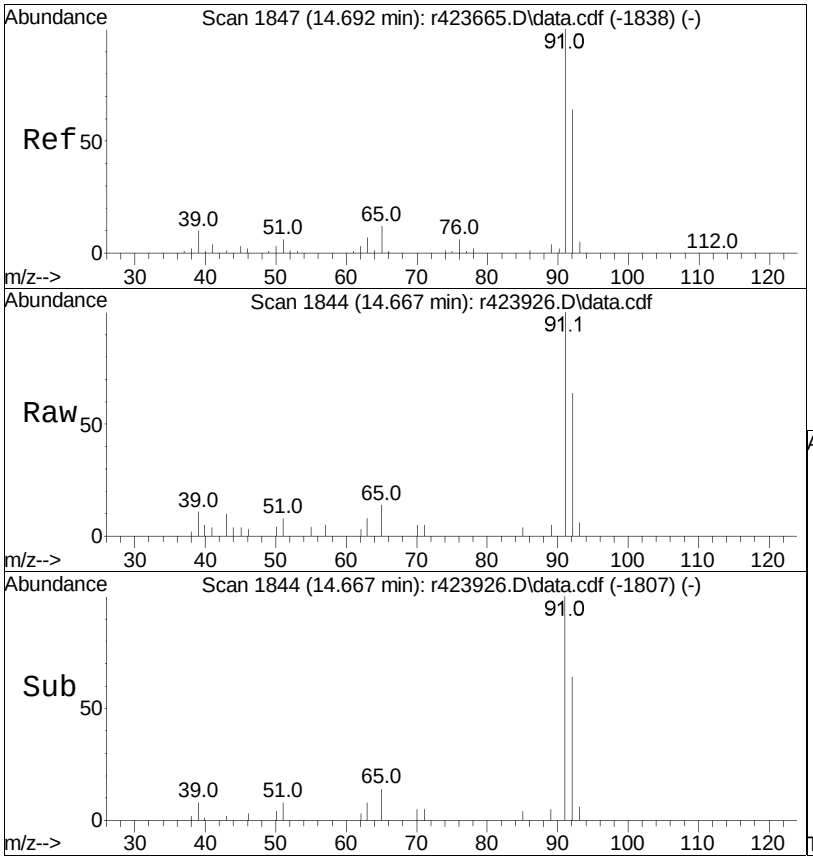


#64
4-methyl-2-pentanone
Concen: 0.04 ppbV
RT: 13.592 min Scan# 1715
Delta R.T. 0.000 min
Lab File: r423926.D
Acq: 5 Oct 2022 12:17 AM

Tgt Ion: 43 Resp: 2443

Ion	Ratio	Lower	Upper
43	100		
58	38.6	39.3	58.9#
100	0.0	13.8	20.8#

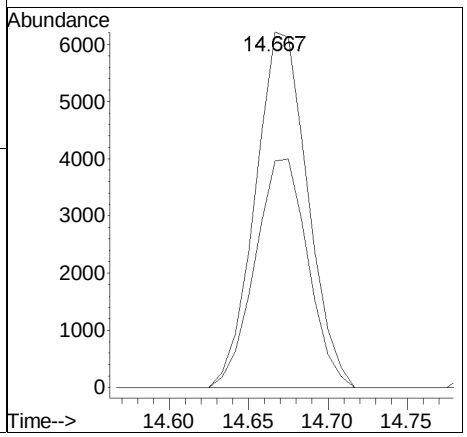


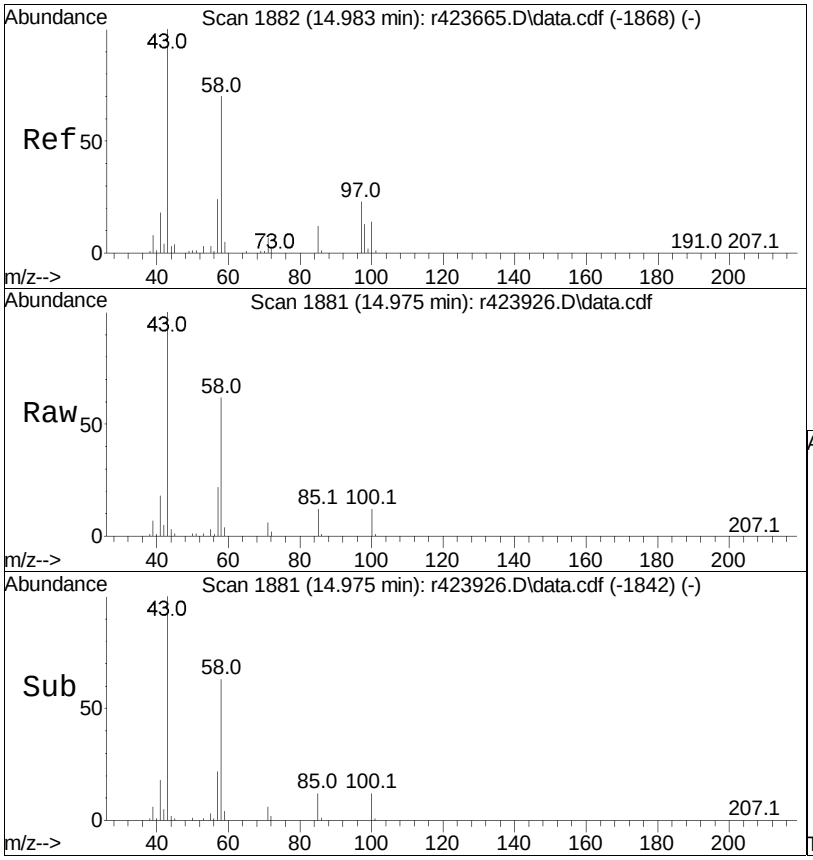


#68
toluene
Concen: 0.13 ppbV
RT: 14.667 min Scan# 1844
Delta R.T. -0.025 min
Lab File: r423926.D
Acq: 5 Oct 2022 12:17 AM

Tgt Ion: 91 Resp: 14243

Ion	Ratio	Lower	Upper
91	100		
92	63.7	50.8	76.2

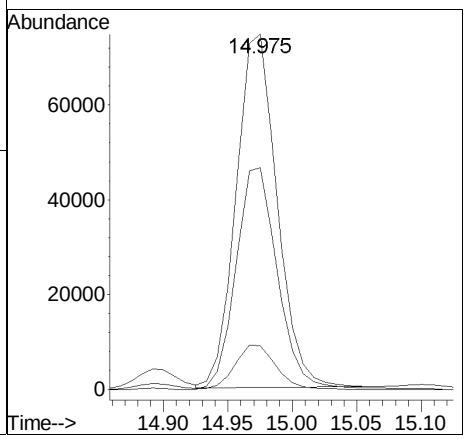


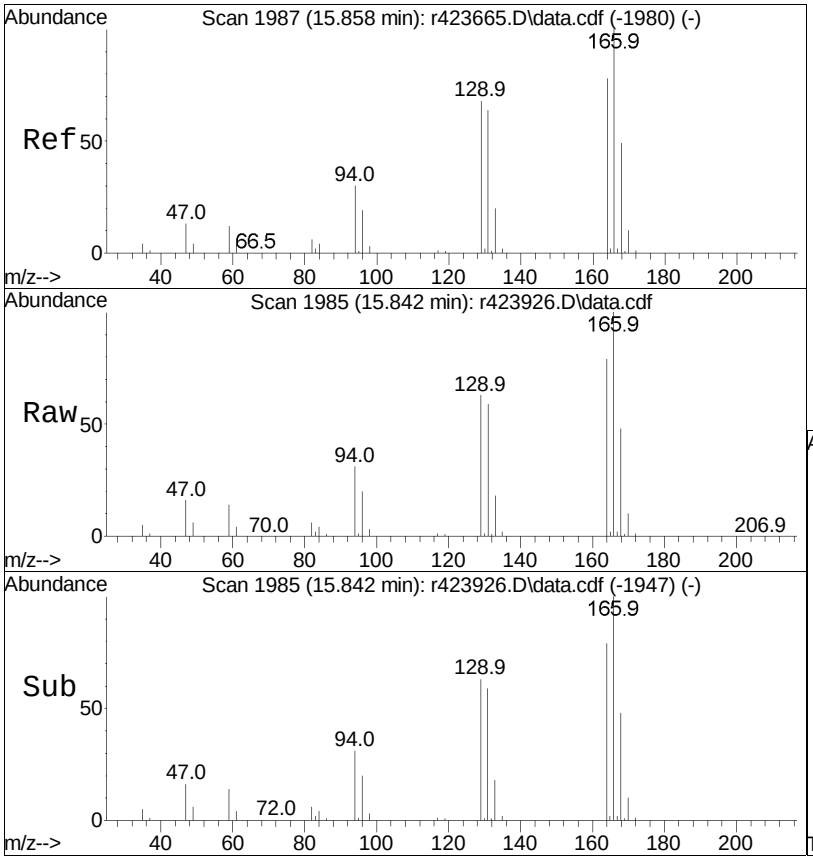


#72
2-hexanone
Concen: 2.90 ppbV
RT: 14.975 min Scan# 1881
Delta R.T. -0.008 min
Lab File: r423926.D
Acq: 5 Oct 2022 12:17 AM

Tgt Ion: 43 Resp: 164611

Ion	Ratio	Lower	Upper
43	100		
58	62.4	56.0	84.0
100	12.3	11.6	17.4

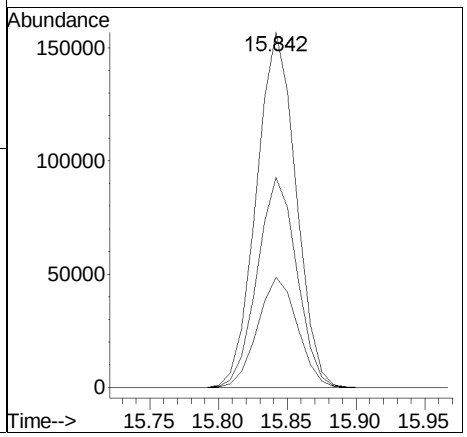


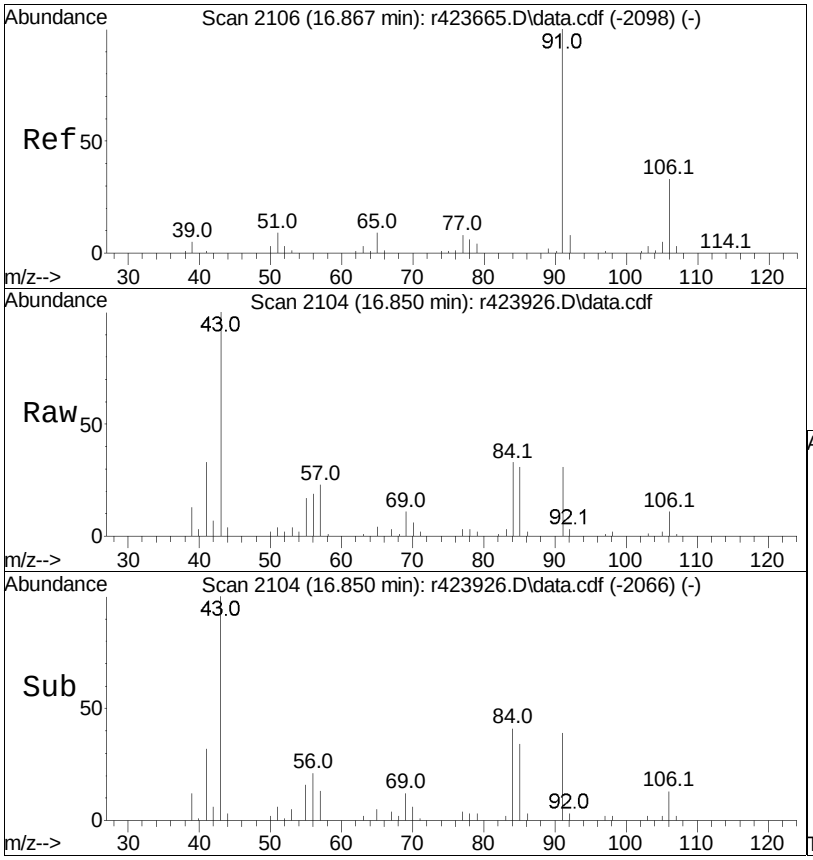


#78
tetrachloroethene
Concen: 7.32 ppbV
RT: 15.842 min Scan# 1985
Delta R.T. -0.017 min
Lab File: r423926.D
Acq: 5 Oct 2022 12:17 AM

Tgt Ion:166 Resp: 314234

Ion	Ratio	Lower	Upper
166	100		
131	59.1	51.2	76.8
94	31.0	23.7	35.5

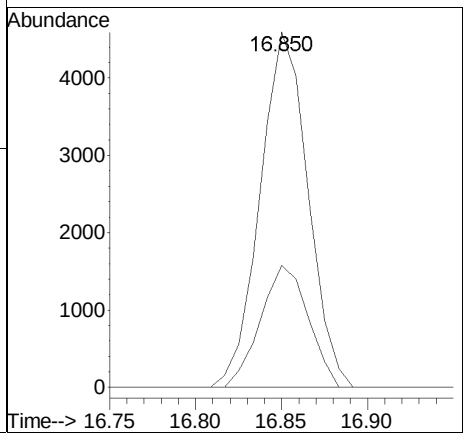


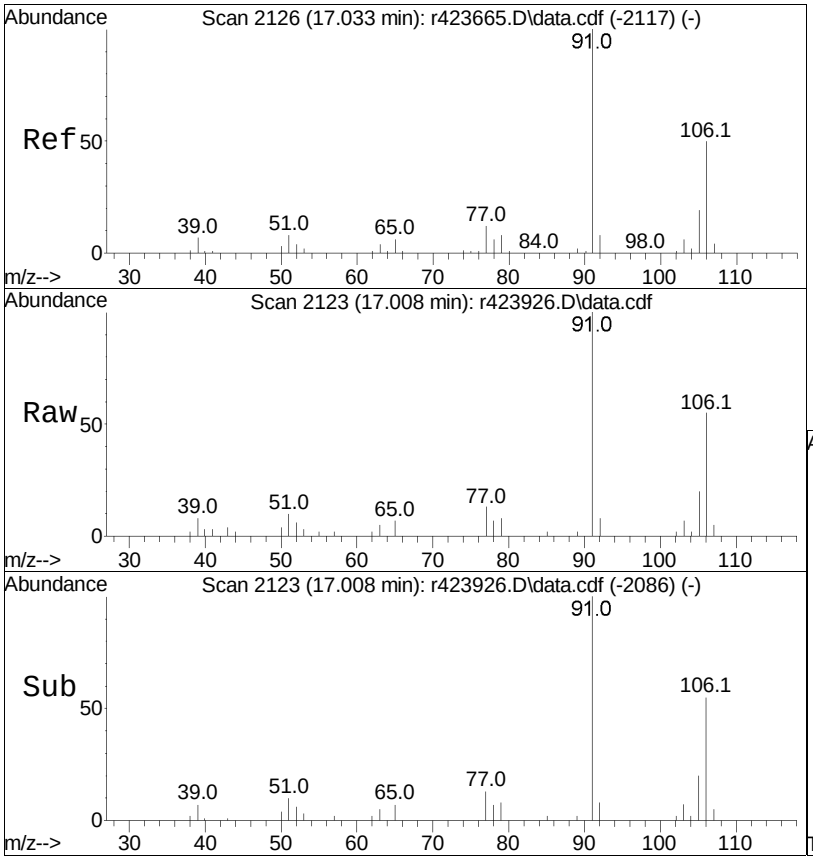


#81
ethylbenzene
Concen: 0.07 ppbV
RT: 16.850 min Scan# 2104
Delta R.T. -0.017 min
Lab File: r423926.D
Acq: 5 Oct 2022 12:17 AM

Tgt Ion: 91 Resp: 8898

Ion	Ratio	Lower	Upper
91	100		
106	34.3	26.6	39.8

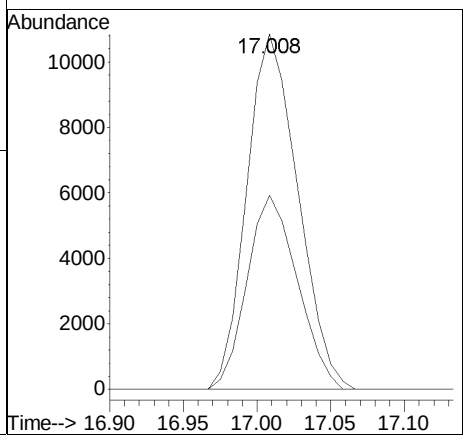


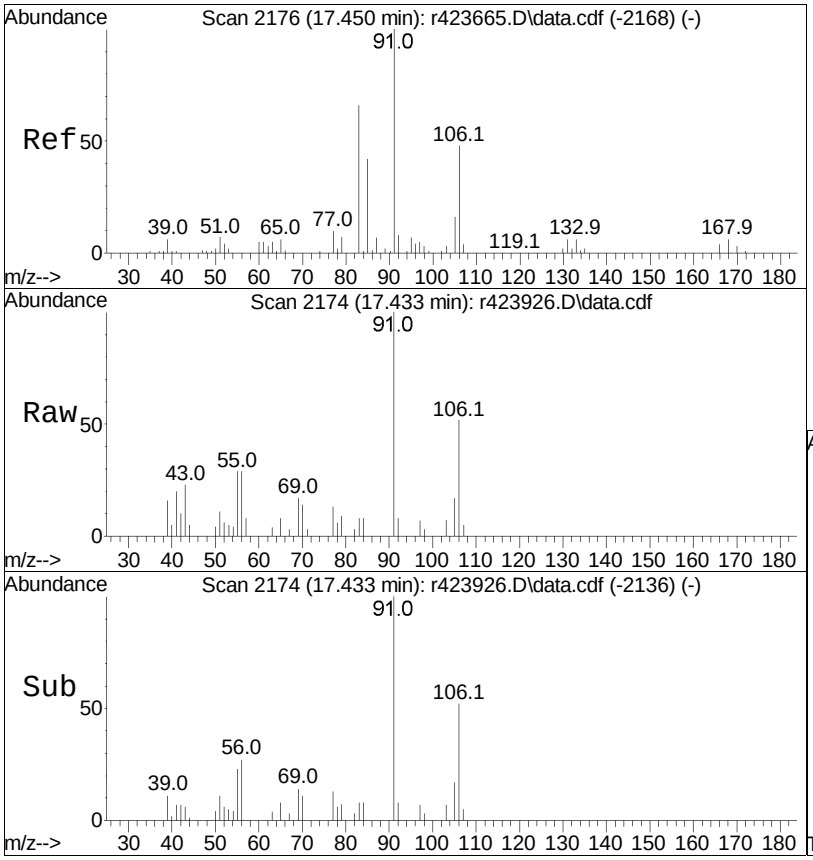


#83
m+p-xylene
Concen: 0.25 ppbV
RT: 17.008 min Scan# 2123
Delta R.T. -0.025 min
Lab File: r423926.D
Acq: 5 Oct 2022 12:17 AM

Tgt Ion: 91 Resp: 26182

Ion	Ratio	Lower	Upper
91	100		
106	54.6	39.8	59.6

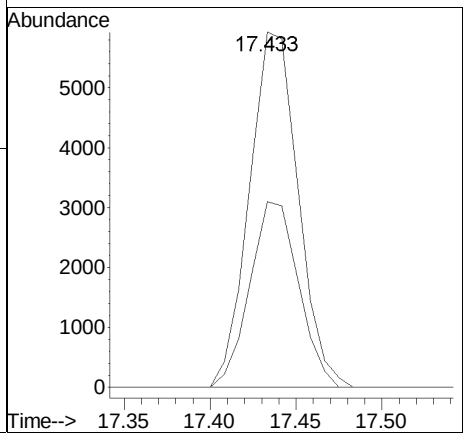


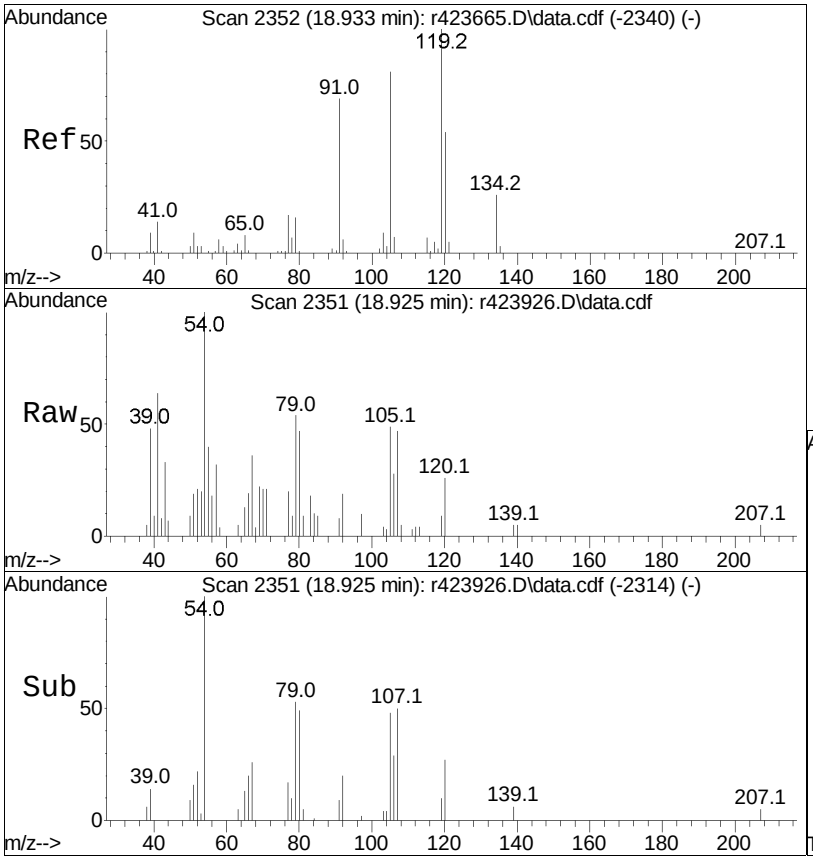


#87
o-xylene
Concen: 0.11 ppbV
RT: 17.433 min Scan# 2174
Delta R.T. -0.017 min
Lab File: r423926.D
Acq: 5 Oct 2022 12:17 AM

Tgt Ion: 91 Resp: 11705

Ion	Ratio	Lower	Upper
91	100		
106	52.2	38.2	57.4

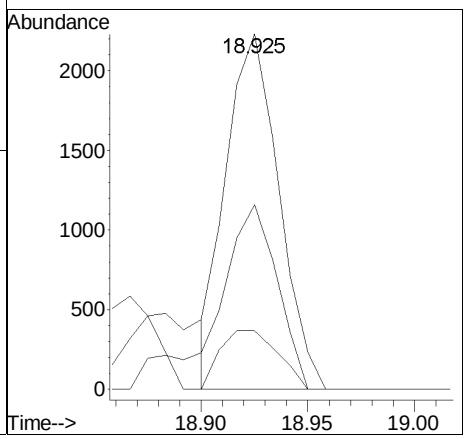




#99
1,2,4-trimethylbenzene
Concen: 0.04 ppbV m
RT: 18.925 min Scan# 2351
Delta R.T. -0.008 min
Lab File: r423926.D
Acq: 5 Oct 2022 12:17 AM

Tgt Ion:105 Resp: 3854

Ion	Ratio	Lower	Upper
105	100		
120	51.9	53.0	79.6#
91	16.5	67.5	101.3#

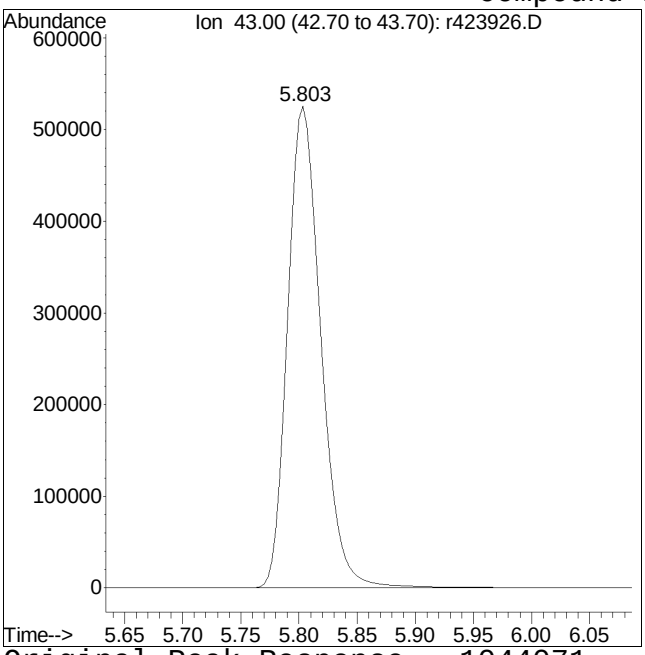


Manual Integration Report

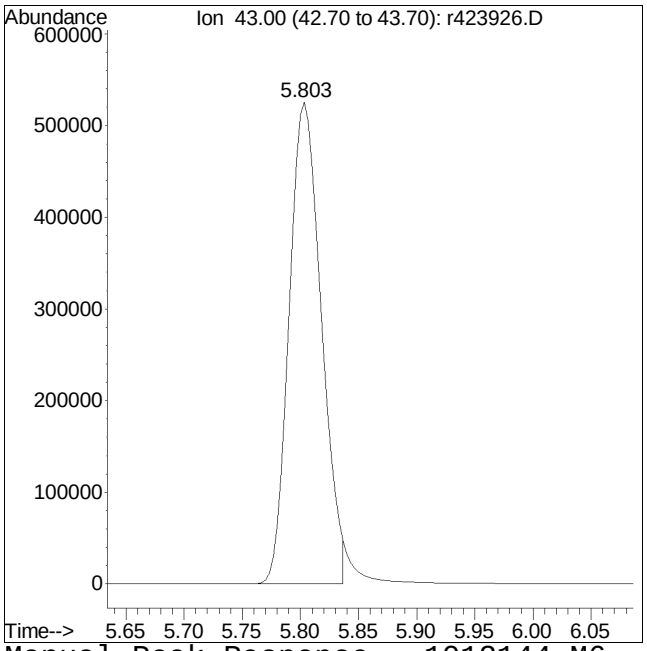
Data Path : O:\Forensics\Data\AirpianoQ
Data File : r423926.D
Date Inj'd : 10/5/2020 0:2: 7
Sample : L2253855-04D,3,100,250

Method : TFS4_220921.M
Operator : AIRPIANO4:TJS
Instrument :
Quant Date : 10/5/2022 8:20 am

Compound #19: acetone



Original Peak Response = 1044071



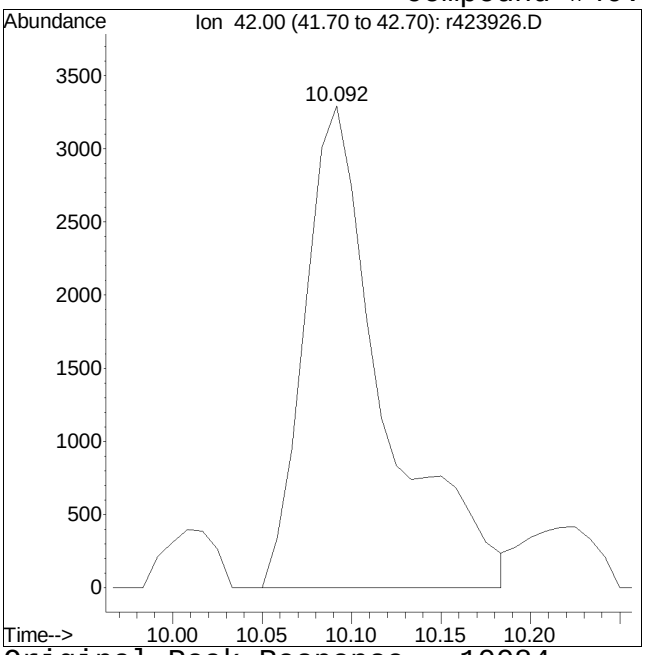
Manual Peak Response = 1012144 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

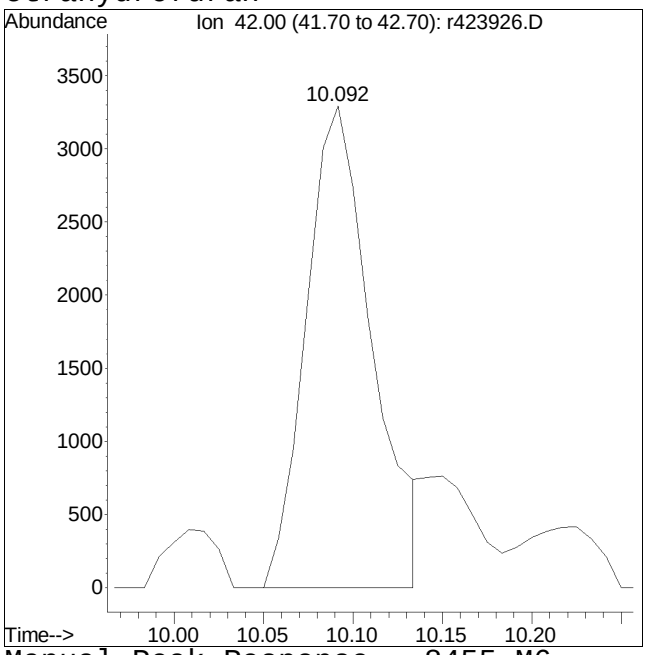
Manual Integration Report

Data Path : O:\Forensics\Data\AirpianoQMethod : TFS4_220921.M
Data File : r423926.D Operator : AIRPIANO4:TJS
Date Inj'd : 10/5/2020 0:2: 7 Instrument :
Sample : L2253855-04D,3,100,250 Quant Date : 10/5/2022 8:20 am

Compound #40: Tetrahydrofuran



Original Peak Response = 10084



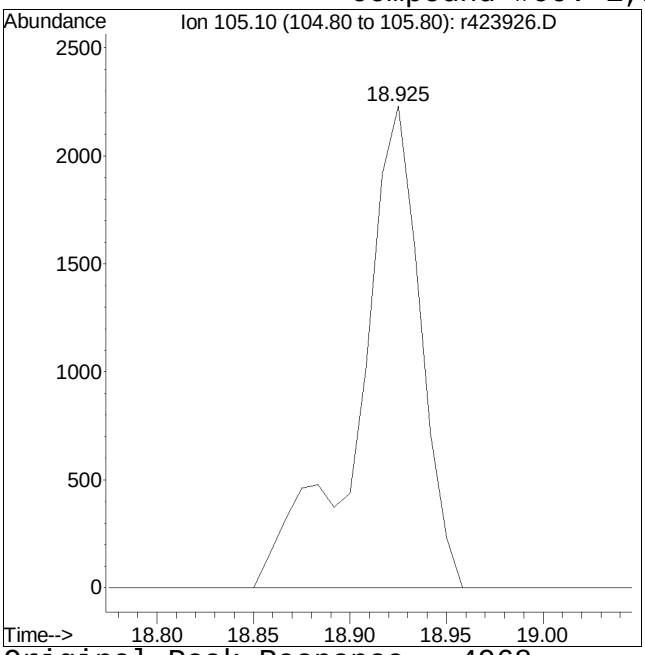
Manual Peak Response = 8455 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

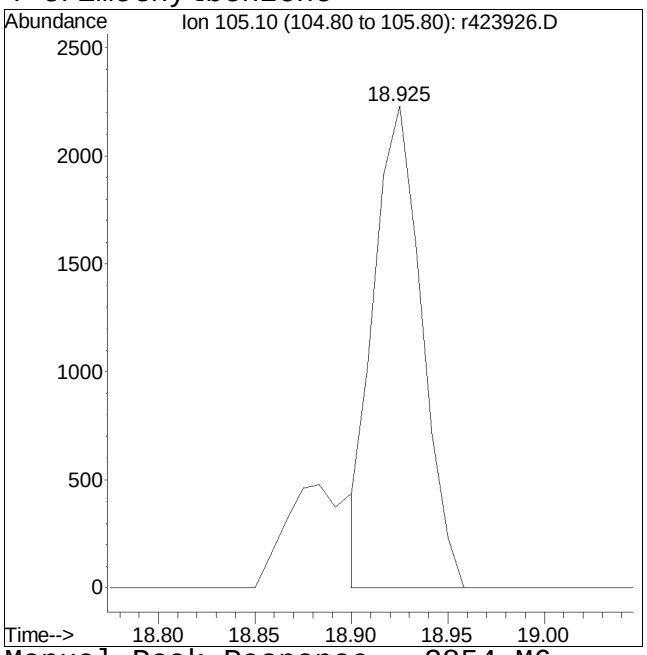
Manual Integration Report

Data Path : O:\Forensics\Data\AirpianoQMethod : TFS4_220921.M
Data File : r423926.D Operator : AIRPIANO4:TJS
Date Inj'd : 10/5/2020 0:2: 7 Instrument :
Sample : L2253855-04D,3,100,250 Quant Date : 10/5/2022 8:20 am

Compound #99: 1,2,4-trimethylbenzene



Original Peak Response = 4968



Manual Peak Response = 3854 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423933.D
Acq On : 5 Oct 2022 7:40 AM
Operator : AIRPIANO4:TJS
Sample : L2253855-05D,3,50,250
Misc : WG1695439,ICAL19357
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 05 09:49:20 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004T\r423912.D
Sub List : ETOH_Only - Sub List Unknown

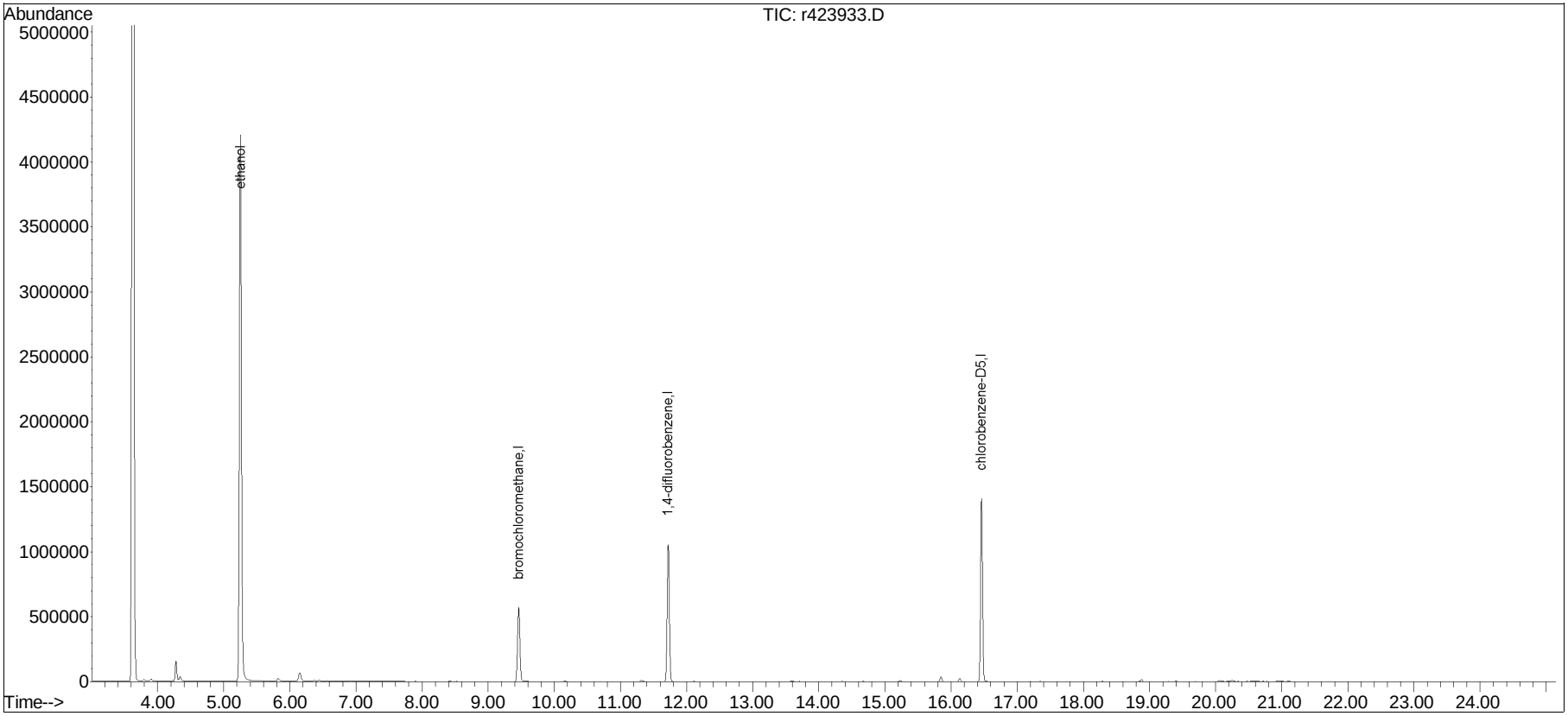
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.458	49	441361	10.000	ppbV	-0.02
Standard Area = 462589			Recovery =		95.41%	
43) 1,4-difluorobenzene	11.720	114	1126035	10.000	ppbV	-0.02
Standard Area = 1229344			Recovery =		91.60%	
67) chlorobenzene-D5	16.458	54	213079	10.000	ppbV	-0.02
Standard Area = 234984			Recovery =		90.68%	
System Monitoring Compounds						
Target Compounds						Qvalue
15) ethanol	5.254	31	3529951	274.319	ppbV	98

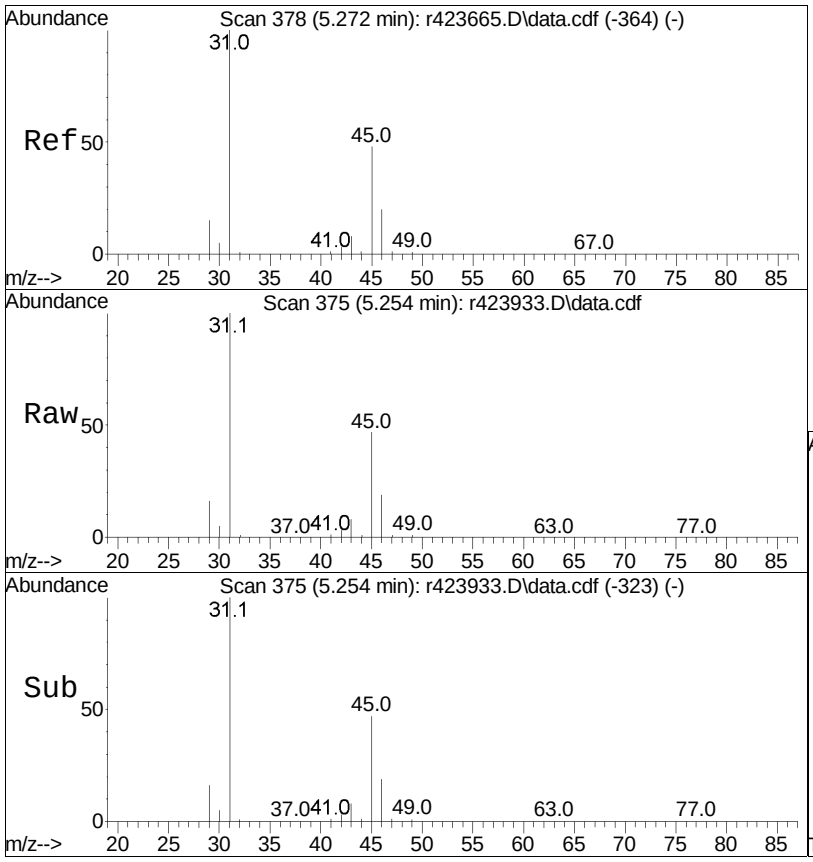
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : ETOH_Only - Sub List Unknown2022\10\1004T\r423912.D

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423933.D
Acq On : 5 Oct 2022 7:40 AM
Operator : AIRPIANO4:TJS
Sample : L2253855-05D,3,50,250
Misc : WG1695439,ICAL19357
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 05 09:49:20 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

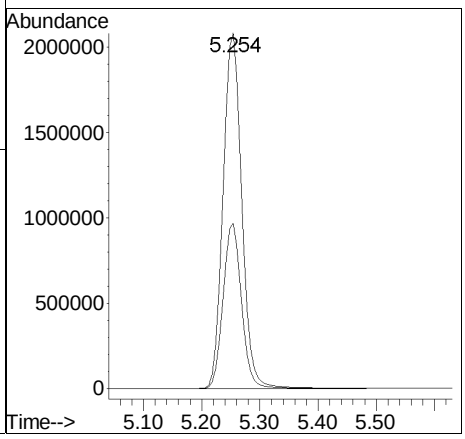




#15
ethanol
Concen: 274.32 ppbV
RT: 5.254 min Scan# 375
Delta R.T. -0.018 min
Lab File: r423933.D
Acq: 5 Oct 2022 7:40 AM

Tgt Ion: 31 Resp: 3529951

Ion	Ratio	Lower	Upper
31	100		
45	46.6	38.3	57.5



Manual Integration Report

Data Path	: O:\Forensics\Data\Airpiano	QMethod	: TFS4_220921.M
Data File	: r423933.D	Operator	: AIRPIANO4:TJS
Date Inj'd	: 10/5/2020 0:7: 0	Instrument	:
Sample	: L2253855-05D,3,50,250	Quant Date	: 10/5/2022 9:49 am

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

Volatiles Standards Data

Initial Calibration

Initial Calibration Summary
Form 6
Air Volatiles

Client	**: Roux Env. Eng. & Geology, DPC**	**Lab Number**	**: L2253855**
Project Name	**: FORMER CLEAN ZONE DRY CLEANERS**	**Project Number**	**: 2546.0007Y002**
Instrument ID	**: AIRPIANO4**	**Ical Ref**	**: ICAL19357**
Calibration dates	**: 09/21/22 23:28 09/22/22 04:09**		

Calibration Files

0.2 =r423661.D 0.5 =r423662.D 1.0 =r423663.D 5.0 =r423664.D 10 =r423665.D 20 =r423666.D

50 =r423667.D 100 =r423668.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
1)	I	bromochloromethane	----------ISTD----------									
2)		chlorodifluoromethane	0.866	0.789	0.775	0.703	0.675	0.631	0.594	0.570	0.7002	14.79
3)		propylene		0.553	0.530	0.455	0.444	0.427	0.416	0.433	0.4655	11.58
4)		propane		0.640	0.626	0.577	0.559	0.527	0.498	0.475	0.5574	11.11
5)		dichlorodifluoromethane	1.059	0.963	0.943	0.869	0.806	0.715	0.630	0.582	0.8209	20.55
6)	C	chloromethane	0.427	0.399	0.390	0.354	0.345	0.321	0.303	0.297	0.3545	13.32
7)		Freon-114	1.209	1.160	1.118	1.017	0.958	0.854	0.734	0.659	0.9636	20.87
8)	C	methanol			0.275	0.206	0.201	0.189	0.177	0.170	0.2031	18.74
9)	C	vinyl chloride	0.636	0.606	0.583	0.542	0.533	0.502	0.474	0.457	0.5417	11.71
10)	C	1,3-butadiene	0.494	0.465	0.456	0.397	0.388	0.374	0.347	0.330	0.4063	14.59
11)		butane	0.958	0.848	0.822	0.733	0.716	0.678	0.640	0.634	0.7536	15.04
12)	C	acetaldehyde		0.224	0.217	0.191	0.180	0.168	0.148	0.139	0.1809	17.99
13)	C	bromomethane	0.533	0.483	0.466	0.432	0.419	0.390	0.356	0.331	0.4262	15.78
14)	C	chloroethane	0.348	0.313	0.300	0.279	0.280	0.267	0.258	0.257	0.2878	10.80
15)		ethanol			0.376	0.307	0.308	0.281	0.256	0.221	0.2916	18.20
16)		dichlorofluoromethane	1.001	0.927	0.903	0.819	0.803	0.811	0.706	0.726	0.8371	12.03
17)	C	vinyl bromide	0.452	0.429	0.404	0.362	0.356	0.360	0.339	0.324	0.3782	11.93
18)	C	acrolein		0.250	0.240	0.241	0.237	0.208	0.196	0.185	0.2225	11.44
19)		acetone	0.724	0.603	0.588	0.514	0.504	0.475	0.427	0.397	0.5288	20.05
20)	C	acetonitrile	0.488	0.540	0.473	0.435	0.428	0.415	0.398	0.391	0.4458	11.41
21)		trichlorofluoromethane	0.768	0.719	0.709	0.643	0.633	0.593	0.529	0.478	0.6341	15.52
22)		isopropyl alcohol	1.292	0.826	0.760	0.660	0.645	0.632	0.595	0.560	0.7463	31.72#
23)	C	acrylonitrile	0.579	0.458	0.423	0.383	0.385	0.381	0.362	0.337	0.4135	18.42
24)		pentane	1.311	0.983	0.923	1.000	0.831	0.812	0.773	0.743	0.9220	19.92
25)		ethyl ether	1.227	0.824	1.034	0.996	0.857	0.841	0.778	0.646	0.9004	19.89
26)	C	1,1-dichloroethene	1.031	0.758	0.927	0.854	0.665	0.638	0.759	0.526	0.7697	21.29
27)		tertiary butyl alcohol		1.108	1.327	1.246	1.247	0.937	1.153	0.773	1.1132	17.57
28)	C	methylene chloride		0.585	0.664	0.594	0.589	0.436	0.540	0.472	0.5544	14.09
29)	C	3-chloropropene	0.944	0.907	0.874	0.789	0.788	0.785	0.776	0.741	0.8255	8.81
30)	C	carbon disulfide	1.894	1.779	1.704	1.534	1.534	1.564	1.454	1.327	1.5989	11.47
31)		Freon 113	1.073	0.999	0.970	0.898	0.888	0.860	0.804	0.741	0.9042	11.88
32)		trans-1,2-dichloroethene	1.029	0.978	0.958	0.854	0.846	0.865	0.821	0.746	0.8872	10.52
33)	C	1,1-dichloroethane	1.222	1.145	1.108	1.037	1.033	1.009	0.976	0.922	1.0563	9.15
34)	C	MTBE	1.674	1.557	1.532	1.368	1.361	1.401	1.296	1.160	1.4186	11.47
35)	C	vinyl acetate			1.089	1.106	1.107	0.991	0.995	0.964	1.0420	6.27
36)	C	2-butanone		1.310	1.254	1.095	1.112	1.141	1.118	1.054	1.1547	8.00

Initial Calibration Summary
Form 6
Air Volatiles

Client	**: Roux Env. Eng. & Geology, DPC**	**Lab Number**	**: L2253855**
Project Name	**: FORMER CLEAN ZONE DRY CLEANERS**	**Project Number**	**: 2546.0007Y002**
Instrument ID	**: AIRPIANO4**	**Ical Ref**	**: ICAL19357**
Calibration dates	**: 09/21/22 23:28 09/22/22 04:09**		

Calibration Files

0.2 =r423661.D 0.5 =r423662.D 1.0 =r423663.D 5.0 =r423664.D 10 =r423665.D 20 =r423666.D

50 =r423667.D 100 =r423668.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
37)		cis-1,2-dichloroethene	0.943	0.885	0.852	0.784	0.791	0.767	0.730	0.668	0.8026	10.94
38)		Ethyl Acetate	0.264	0.208	0.226	0.215	0.209	0.199	0.205	0.200	0.2158	9.85
39)	C	chloroform	1.133	1.039	1.007	0.927	0.923	0.882	0.788	0.663	0.9200	16.00
40)		Tetrahydrofuran	0.936	0.808	0.790	0.697	0.704	0.734	0.728	0.698	0.7619	10.73
41)		2,2-dichloropropane	0.955	0.890	0.867	0.781	0.776	0.749	0.652	0.543	0.7766	17.11
42)	C	1,2-dichloroethane	0.750	0.715	0.680	0.626	0.617	0.599	0.527	0.442	0.6194	16.17
43)	I	1,4-difluorobenzene	----------ISTD----------									
44)	C	hexane	0.494	0.450	0.439	0.389	0.389	0.394	0.359	0.318	0.4038	13.73
45)		diisopropyl ether	0.263	0.230	0.230	0.210	0.211	0.212	0.194	0.172	0.2151	12.51
46)		tert-butyl ethyl ether	0.874	0.808	0.783	0.732	0.730	0.732	0.672	0.596	0.7410	11.42
47)	s	1,2-dichloroethane-D4	0.269	0.268	0.266	0.258	0.257	0.258	0.238	0.214	0.2534	7.32
48)	C	1,1,1-trichloroethane	0.332	0.310	0.310	0.284	0.285	0.277	0.248	0.215	0.2828	13.20
49)		1,1-dichloropropene	0.337	0.311	0.308	0.280	0.282	0.283	0.264	0.239	0.2881	10.48
50)	C	benzene	0.951	0.779	0.728	0.647	0.650	0.647	0.609	0.564	0.6969	17.56
51)		thiophene	0.502	0.460	0.450	0.432	0.434	0.418	0.393	0.358	0.4309	10.11
52)	C	carbon tetrachloride	0.291	0.271	0.266	0.247	0.250	0.238	0.201	0.168	0.2413	16.55
53)		cyclohexane	0.520	0.472	0.457	0.405	0.411	0.421	0.399	0.371	0.4320	11.05
54)		tert-amyl methyl ether	0.702	0.654	0.640	0.588	0.592	0.599	0.558	0.507	0.6048	9.95
55)		dibromomethane	0.250	0.219	0.215	0.192	0.193	0.189	0.174	0.155	0.1984	14.74
56)	C	1,2-dichloropropane	0.284	0.259	0.254	0.236	0.238	0.236	0.229	0.217	0.2442	8.53
57)		bromodichloromethane	0.396	0.366	0.368	0.333	0.336	0.343	0.307	0.267	0.3395	11.76
58)	C	1,4-dioxane	0.179	0.168	0.161	0.140	0.142	0.156	0.150	0.134	0.1537	10.01
59)	C	trichloroethene	0.306	0.284	0.281	0.257	0.258	0.256	0.239	0.211	0.2615	11.19
60)	C	2,2,4-trimethylpentane	1.575	1.458	1.416	1.247	1.216	1.274	1.169	1.035	1.2988	13.41
61)		methyl methacrylate		0.269	0.263	0.267	0.269	0.256	0.245	0.229	0.2569	5.83
62)		heptane	0.512	0.467	0.460	0.409	0.407	0.423	0.397	0.364	0.4299	10.94
63)	C	cis-1,3-dichloropropene	0.348	0.337	0.336	0.311	0.317	0.322	0.302	0.277	0.3189	7.05
64)	C	4-methyl-2-pentanone		0.521	0.513	0.458	0.463	0.484	0.453	0.423	0.4734	7.34
65)		trans-1,3-dichloropropene	0.312	0.312	0.309	0.297	0.300	0.300	0.278	0.252	0.2950	7.04
66)	C	1,1,2-trichloroethane	0.269	0.250	0.246	0.225	0.227	0.230	0.224	0.214	0.2356	7.57
67)	I	chlorobenzene-D5	----------ISTD----------									
68)	C	toluene	6.609	5.508	5.068	4.423	4.441	4.486	4.439	4.149	4.8903	16.76
69)	s	toluene-D8	5.415	5.481	5.432	5.365	5.413	5.621	6.196	6.700	5.7029	8.51
70)		2-methylthiophene	3.946	3.756	3.624	3.506	3.557	3.454	3.539	3.433	3.6018	4.79
71)		1,3-dichloropropane	2.327	2.288	2.194	1.997	2.036	2.049	2.041	1.933	2.1080	6.79
72)		2-hexanone	2.564	2.600	2.482	2.342	2.385	2.517	2.458	2.368	2.4646	3.81

Initial Calibration Summary
Form 6
Air Volatiles

Client	**: Roux Env. Eng. & Geology, DPC**	**Lab Number**	**: L2253855**
Project Name	**: FORMER CLEAN ZONE DRY CLEANERS**	**Project Number**	**: 2546.0007Y002**
Instrument ID	**: AIRPIANO4**	**Ical Ref**	**: ICAL19357**
Calibration dates	**: 09/21/22 23:28 09/22/22 04:09**		

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50 =r423667.D 100 =r423668.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
73)		3-methylthiophene	3.998	3.777	3.811	3.634	3.656	3.519	3.591	3.418	3.6756	4.96
74)		dibromochloromethane	1.922	1.872	1.837	1.694	1.725	1.810	1.737	1.590	1.7732	6.06
75)	C	1,2-dibromoethane	2.005	1.944	1.902	1.754	1.779	1.785	1.753	1.687	1.8262	6.06
76)		butyl acetate		0.610	0.574	0.602	0.618	0.587	0.603	0.598	0.5990	2.45
77)		octane	2.237	2.152	2.045	1.895	1.906	1.929	1.900	1.766	1.9788	7.81
78)	C	tetrachloroethene	2.205	2.024	2.013	1.806	1.804	1.802	1.695	1.559	1.8635	11.05
79)		1,1,1,2-tetrachloroethane	1.651	1.548	1.535	1.408	1.415	1.406	1.281	1.122	1.4207	11.64
80)	C	chlorobenzene	3.961	3.617	3.551	3.162	3.178	3.197	2.992	2.736	3.2992	11.78
81)	C	ethylbenzene	6.436	6.236	6.007	5.385	5.424	5.527	5.292	4.876	5.6479	9.35
82)		2-ethylthiophene	4.650	4.472	4.356	4.226	4.196	4.016	3.898	3.583	4.1744	8.11
83)	C	m+p-xylene	5.390	5.120	5.023	4.456	4.456	4.426	3.986	3.469	4.5408	13.86
84)	C	bromoform	1.698	1.729	1.696	1.645	1.674	1.776	1.629	1.463	1.6638	5.60
85)	C	styrene	3.694	3.785	3.657	3.324	3.307	3.433	3.405	3.274	3.4850	5.68
86)	C	1,1,2,2-tetrachloroethane	3.511	3.420	3.332	2.930	2.940	2.941	2.679	2.354	3.0133	13.03
87)	C	o-xylene	5.376	5.225	5.038	4.475	4.383	4.299	3.715	3.196	4.4633	16.81
88)		1,2,3-trichloropropane	2.852	2.723	2.642	2.393	2.389	2.411	2.335	2.220	2.4957	8.71
89)		nonane	4.151	4.054	3.921	3.564	3.518	3.499	3.279	3.022	3.6260	10.74
90)	s	bromofluorobenzene	3.856	3.933	3.894	3.920	3.950	4.055	4.489	4.888	4.1232	8.95
91)	C	isopropylbenzene	6.733	6.462	6.345	5.629	5.596	5.448	5.075	4.614	5.7377	12.68
92)		bromobenzene	3.908	3.750	3.703	3.278	3.267	3.247	3.060	2.811	3.3780	11.12
93)		2-chlorotoluene	1.990	1.945	1.889	1.681	1.686	1.690	1.675	1.543	1.7624	8.97
94)		n-propylbenzene	2.354	2.271	2.235	1.978	1.983	2.006	1.873	1.664	2.0455	11.20
95)		4-chlorotoluene	1.905	1.848	1.863	1.648	1.679	1.705	1.625	1.538	1.7265	7.59
96)		4-ethyl toluene	7.099	6.876	6.729	5.673	5.618	5.767	5.313	4.885	5.9948	13.42
97)		1,3,5-trimethylbenzene	6.007	5.800	5.683	4.856	4.871	4.844	4.432	3.981	5.0593	14.01
98)		tert-butylbenzene	6.760	6.368	6.333	5.497	5.419	5.011	4.164	3.532	5.3856	20.86
99)		1,2,4-trimethylbenzene	6.014	5.623	5.694	4.775	4.568	4.432	3.756	3.222	4.7606	20.56
100)		decane	6.031	5.644	5.631	5.024	4.976	4.824	4.314	3.821	5.0329	14.56
101)	C	Benzyl Chloride	3.498	3.541	3.678	3.712	3.896	3.698	3.368	2.999	3.5489	7.71
102)		1,3-dichlorobenzene	3.283	3.238	3.177	2.711	2.778	2.841	2.639	2.491	2.8947	10.34
103)	C	1,4-dichlorobenzene	3.275	3.289	3.220	2.729	2.656	2.797	2.689	2.473	2.8911	11.09
104)		sec-butylbenzene	8.702	8.261	8.261	7.257	7.063	6.838	6.117	5.513	7.2516	15.34
105)		1,2,3-trimethylbenzene	5.497	5.154	5.163	4.530	4.337	3.988	3.429	2.955	4.3816	20.37
106)		p-isopropyltoluene	8.221	7.774	7.728	6.761	6.465	6.020	4.970	4.192	6.5164	21.75
107)		1,2-dichlorobenzene	3.076	2.979	3.014	2.535	2.542	2.652	2.562	2.483	2.7305	9.09
108)		n-butylbenzene	6.932	6.593	6.629	6.026	6.020	5.795	5.195	4.674	5.9830	12.73

Initial Calibration Summary
Form 6
Air Volatiles

Client	**: Roux Env. Eng. & Geology, DPC**	**Lab Number**	**: L2253855**
Project Name	**: FORMER CLEAN ZONE DRY CLEANERS**	**Project Number**	**: 2546.0007Y002**
Instrument ID	**: AIRPIANO4**	**Ical Ref**	**: ICAL19357**
Calibration dates	**: 09/21/22 23:28 09/22/22 04:09**		

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50 =r423667.D 100 =r423668.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
109)		indan	5.910	5.818	5.838	5.188	5.119	4.918	4.512	4.095	5.1746	12.80
110)		indene	4.047	3.891	3.953	4.008	4.043	3.594	3.413	3.181	3.7664	8.75
111)	C	1,2-dibromo-3-chloropropane	1.359	1.342	1.350	1.296	1.305	1.257	1.115	1.038	1.2577	9.41
112)		undecane	6.374	6.160	6.196	5.596	5.494	5.216	4.433	3.961	5.4288	15.94
113)		1,2,4,5-tetramethylbenzene	1.045	1.005	1.003	0.833	0.803	0.824	0.671	0.575	0.8448	19.79
114)		dodecane	5.337	5.628	5.816	6.025	5.871	5.206	4.374	3.854	5.2640	14.67
115)	C	1,2,4-trichlorobenzene	2.388	2.496	2.527	2.539	2.600	2.603	2.347	2.181	2.4601	5.91
116)		naphthalene	6.625	6.703	6.794	6.750	7.027	6.447	5.964	5.621	6.4914	7.24
117)		1,2,3-trichlorobenzene	2.359	2.493	2.492	2.704	2.753	2.551	2.323	2.210	2.4856	7.48
118)		benzothiophene	0.983	1.049	1.061	1.018	1.062	1.122	0.933	0.814	1.0052	9.53
119)	C	hexachlorobutadiene	2.569	2.660	2.601	2.416	2.289	2.100	1.746	1.527	2.2385	18.66
120)		2-methylnaphthalene			0.963	1.214	1.353	1.488	1.580	1.845	1.4073	21.70
121)		1-methylnaphthalene			1.977	1.950	2.093	2.545	2.551	2.806	2.3202	15.50

Response Factor Report

Method Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Method File : TFS4_220921.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Fri Sep 23 08:28:06 2022
Response Via : Initial Calibration

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		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
1)	I	bromochloromethane	ISTD									
2)		chlorodifluoromethane	0.866	0.789	0.775	0.703	0.675	0.631	0.594	0.570	0.7002	14.79
3)		propylene		0.553	0.530	0.455	0.444	0.427	0.416	0.433	0.4655	11.58
4)		propane		0.640	0.626	0.577	0.559	0.527	0.498	0.475	0.5574	11.11
5)		dichlorodifluoromethane	1.059	0.963	0.943	0.869	0.806	0.715	0.630	0.582	0.8209	20.55
6)	C	chloromethane	0.427	0.399	0.390	0.354	0.345	0.321	0.303	0.297	0.3545	13.32
7)		Freon-114	1.209	1.160	1.118	1.017	0.958	0.854	0.734	0.659	0.9636	20.87
8)	C	methanol			0.275	0.206	0.201	0.189	0.177	0.170	0.2031	18.74
9)	C	vinyl chloride	0.636	0.606	0.583	0.542	0.533	0.502	0.474	0.457	0.5417	11.71
10)	C	1,3-butadiene	0.494	0.465	0.456	0.397	0.388	0.374	0.347	0.330	0.4063	14.59
11)		butane	0.958	0.848	0.822	0.733	0.716	0.678	0.640	0.634	0.7536	15.04
12)	C	acetaldehyde		0.224	0.217	0.191	0.180	0.168	0.148	0.139	0.1809	17.99
13)	C	bromomethane	0.533	0.483	0.466	0.432	0.419	0.390	0.356	0.331	0.4262	15.78
14)	C	chloroethane	0.348	0.313	0.300	0.279	0.280	0.267	0.258	0.257	0.2878	10.80
15)		ethanol			0.376	0.307	0.308	0.281	0.256	0.221	0.2916	18.20
16)		dichlorofluoromethane	1.001	0.927	0.903	0.819	0.803	0.811	0.706	0.726	0.8371	12.03
17)	C	vinyl bromide	0.452	0.429	0.404	0.362	0.356	0.360	0.339	0.324	0.3782	11.93
18)	C	acrolein		0.250	0.240	0.241	0.237	0.208	0.196	0.185	0.2225	11.44
19)		acetone	0.724	0.603	0.588	0.514	0.504	0.475	0.427	0.397	0.5288	20.05
20)	C	acetonitrile	0.488	0.540	0.473	0.435	0.428	0.415	0.398	0.391	0.4458	11.41
21)		trichlorofluoromethane	0.768	0.719	0.709	0.643	0.633	0.593	0.529	0.478	0.6341	15.52
22)		isopropyl alcohol	1.292	0.826	0.760	0.660	0.645	0.632	0.595	0.560	0.7463	31.72#
23)	C	acrylonitrile	0.579	0.458	0.423	0.383	0.385	0.381	0.362	0.337	0.4135	18.42
24)		pentane	1.311	0.983	0.923	1.000	0.831	0.812	0.773	0.743	0.9220	19.92
25)		ethyl ether	1.227	0.824	1.034	0.996	0.857	0.841	0.778	0.646	0.9004	19.89
26)	C	1,1-dichloroethene	1.031	0.758	0.927	0.854	0.665	0.638	0.759	0.526	0.7697	21.29
27)		tertiary butyl alcohol		1.108	1.327	1.246	1.247	0.937	1.153	0.773	1.1132	17.57
28)	C	methylene chloride		0.585	0.664	0.594	0.589	0.436	0.540	0.472	0.5544	14.09
29)	C	3-chloropropene	0.944	0.907	0.874	0.789	0.788	0.785	0.776	0.741	0.8255	8.81
30)	C	carbon disulfide	1.894	1.779	1.704	1.534	1.534	1.564	1.454	1.327	1.5989	11.47
31)		Freon 113	1.073	0.999	0.970	0.898	0.888	0.860	0.804	0.741	0.9042	11.88

Response Factor Report

Method Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Method File : TFS4_220921.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Fri Sep 23 08:28:06 2022
Response Via : Initial Calibration

Calibration Files
0.2 =r423661.D 0.5 =r423662.D 1.0 =r423663.D 5.0 =r423664.D 10 =r423665.D 20 =r423666.D
50 =r423667.D 100 =r423668.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
32)		trans-1,2-dichloroethene	1.029	0.978	0.958	0.854	0.846	0.865	0.821	0.746	0.8872	10.52
33)	C	1,1-dichloroethane	1.222	1.145	1.108	1.037	1.033	1.009	0.976	0.922	1.0563	9.15
34)	C	MTBE	1.674	1.557	1.532	1.368	1.361	1.401	1.296	1.160	1.4186	11.47
35)	C	vinyl acetate			1.089	1.106	1.107	0.991	0.995	0.964	1.0420	6.27
36)	C	2-butanone		1.310	1.254	1.095	1.112	1.141	1.118	1.054	1.1547	8.00
37)		cis-1,2-dichloroethene	0.943	0.885	0.852	0.784	0.791	0.767	0.730	0.668	0.8026	10.94
38)		Ethyl Acetate	0.264	0.208	0.226	0.215	0.209	0.199	0.205	0.200	0.2158	9.85
39)	C	chloroform	1.133	1.039	1.007	0.927	0.923	0.882	0.788	0.663	0.9200	16.00
40)		Tetrahydrofuran	0.936	0.808	0.790	0.697	0.704	0.734	0.728	0.698	0.7619	10.73
41)		2,2-dichloropropane	0.955	0.890	0.867	0.781	0.776	0.749	0.652	0.543	0.7766	17.11
42)	C	1,2-dichloroethane	0.750	0.715	0.680	0.626	0.617	0.599	0.527	0.442	0.6194	16.17
43)	I	1,4-difluorobenzene	----------	ISTD	----------							
44)	C	hexane	0.494	0.450	0.439	0.389	0.389	0.394	0.359	0.318	0.4038	13.73
45)		diisopropyl ether	0.263	0.230	0.230	0.210	0.211	0.212	0.194	0.172	0.2151	12.51
46)		tert-butyl ethyl ether	0.874	0.808	0.783	0.732	0.730	0.732	0.672	0.596	0.7410	11.42
47)	s	1,2-dichloroethane-D4	0.269	0.268	0.266	0.258	0.257	0.258	0.238	0.214	0.2534	7.32
48)	C	1,1,1-trichloroethane	0.332	0.310	0.310	0.284	0.285	0.277	0.248	0.215	0.2828	13.20
49)		1,1-dichloropropene	0.337	0.311	0.308	0.280	0.282	0.283	0.264	0.239	0.2881	10.48
50)	C	benzene	0.951	0.779	0.728	0.647	0.650	0.647	0.609	0.564	0.6969	17.56
51)		thiophene	0.502	0.460	0.450	0.432	0.434	0.418	0.393	0.358	0.4309	10.11
52)	C	carbon tetrachloride	0.291	0.271	0.266	0.247	0.250	0.238	0.201	0.168	0.2413	16.55
53)		cyclohexane	0.520	0.472	0.457	0.405	0.411	0.421	0.399	0.371	0.4320	11.05
54)		tert-amyl methyl ether	0.702	0.654	0.640	0.588	0.592	0.599	0.558	0.507	0.6048	9.95
55)		dibromomethane	0.250	0.219	0.215	0.192	0.193	0.189	0.174	0.155	0.1984	14.74
56)	C	1,2-dichloropropane	0.284	0.259	0.254	0.236	0.238	0.236	0.229	0.217	0.2442	8.53
57)		bromodichloromethane	0.396	0.366	0.368	0.333	0.336	0.343	0.307	0.267	0.3395	11.76
58)	C	1,4-dioxane	0.179	0.168	0.161	0.140	0.142	0.156	0.150	0.134	0.1537	10.01
59)	C	trichloroethene	0.306	0.284	0.281	0.257	0.258	0.256	0.239	0.211	0.2615	11.19
60)	C	2,2,4-trimethylpentane	1.575	1.458	1.416	1.247	1.216	1.274	1.169	1.035	1.2988	13.41
61)		methyl methacrylate		0.269	0.263	0.267	0.269	0.256	0.245	0.229	0.2569	5.83
62)		heptane	0.512	0.467	0.460	0.409	0.407	0.423	0.397	0.364	0.4299	10.94

Response Factor Report

Method Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Method File : TFS4_220921.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Fri Sep 23 08:28:06 2022
Response Via : Initial Calibration

Calibration Files
0.2 =r423661.D 0.5 =r423662.D 1.0 =r423663.D 5.0 =r423664.D 10 =r423665.D 20 =r423666.D
50 =r423667.D 100 =r423668.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
63)	C	cis-1,3-dichloropropene	0.348	0.337	0.336	0.311	0.317	0.322	0.302	0.277	0.3189	7.05
64)	C	4-methyl-2-pentanone		0.521	0.513	0.458	0.463	0.484	0.453	0.423	0.4734	7.34
65)		trans-1,3-dichloropropene	0.312	0.312	0.309	0.297	0.300	0.300	0.278	0.252	0.2950	7.04
66)	C	1,1,2-trichloroethane	0.269	0.250	0.246	0.225	0.227	0.230	0.224	0.214	0.2356	7.57
67)	I	chlorobenzene-D5	ISTD									
68)	C	toluene	6.609	5.508	5.068	4.423	4.441	4.486	4.439	4.149	4.8903	16.76
69)	s	toluene-D8	5.415	5.481	5.432	5.365	5.413	5.621	6.196	6.700	5.7029	8.51
70)		2-methylthiophene	3.946	3.756	3.624	3.506	3.557	3.454	3.539	3.433	3.6018	4.79
71)		1,3-dichloropropane	2.327	2.288	2.194	1.997	2.036	2.049	2.041	1.933	2.1080	6.79
72)		2-hexanone	2.564	2.600	2.482	2.342	2.385	2.517	2.458	2.368	2.4646	3.81
73)		3-methylthiophene	3.998	3.777	3.811	3.634	3.656	3.519	3.591	3.418	3.6756	4.96
74)		dibromochloromethane	1.922	1.872	1.837	1.694	1.725	1.810	1.737	1.590	1.7732	6.06
75)	C	1,2-dibromoethane	2.005	1.944	1.902	1.754	1.779	1.785	1.753	1.687	1.8262	6.06
76)		butyl acetate		0.610	0.574	0.602	0.618	0.587	0.603	0.598	0.5990	2.45
77)		octane	2.237	2.152	2.045	1.895	1.906	1.929	1.900	1.766	1.9788	7.81
78)	C	tetrachloroethene	2.205	2.024	2.013	1.806	1.804	1.802	1.695	1.559	1.8635	11.05
79)		1,1,1,2-tetrachloroethane	1.651	1.548	1.535	1.408	1.415	1.406	1.281	1.122	1.4207	11.64
80)	C	chlorobenzene	3.961	3.617	3.551	3.162	3.178	3.197	2.992	2.736	3.2992	11.78
81)	C	ethylbenzene	6.436	6.236	6.007	5.385	5.424	5.527	5.292	4.876	5.6479	9.35
82)		2-ethylthiophene	4.650	4.472	4.356	4.226	4.196	4.016	3.898	3.583	4.1744	8.11
83)	C	m+p-xylene	5.390	5.120	5.023	4.456	4.456	4.426	3.986	3.469	4.5408	13.86
84)	C	bromoform	1.698	1.729	1.696	1.645	1.674	1.776	1.629	1.463	1.6638	5.60
85)	C	styrene	3.694	3.785	3.657	3.324	3.307	3.433	3.405	3.274	3.4850	5.68
86)	C	1,1,2,2-tetrachloroethane	3.511	3.420	3.332	2.930	2.940	2.941	2.679	2.354	3.0133	13.03
87)	C	o-xylene	5.376	5.225	5.038	4.475	4.383	4.299	3.715	3.196	4.4633	16.81
88)		1,2,3-trichloropropane	2.852	2.723	2.642	2.393	2.389	2.411	2.335	2.220	2.4957	8.71
89)		nonane	4.151	4.054	3.921	3.564	3.518	3.499	3.279	3.022	3.6260	10.74
90)	s	bromofluorobenzene	3.856	3.933	3.894	3.920	3.950	4.055	4.489	4.888	4.1232	8.95
91)	C	isopropylbenzene	6.733	6.462	6.345	5.629	5.596	5.448	5.075	4.614	5.7377	12.68
92)		bromobenzene	3.908	3.750	3.703	3.278	3.267	3.247	3.060	2.811	3.3780	11.12
93)		2-chlorotoluene	1.990	1.945	1.889	1.681	1.686	1.690	1.675	1.543	1.7624	8.97

Response Factor Report

Method Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Method File : TFS4_220921.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Fri Sep 23 08:28:06 2022
Response Via : Initial Calibration

Calibration Files
0.2 =r423661.D 0.5 =r423662.D 1.0 =r423663.D 5.0 =r423664.D 10 =r423665.D 20 =r423666.D
50 =r423667.D 100 =r423668.D

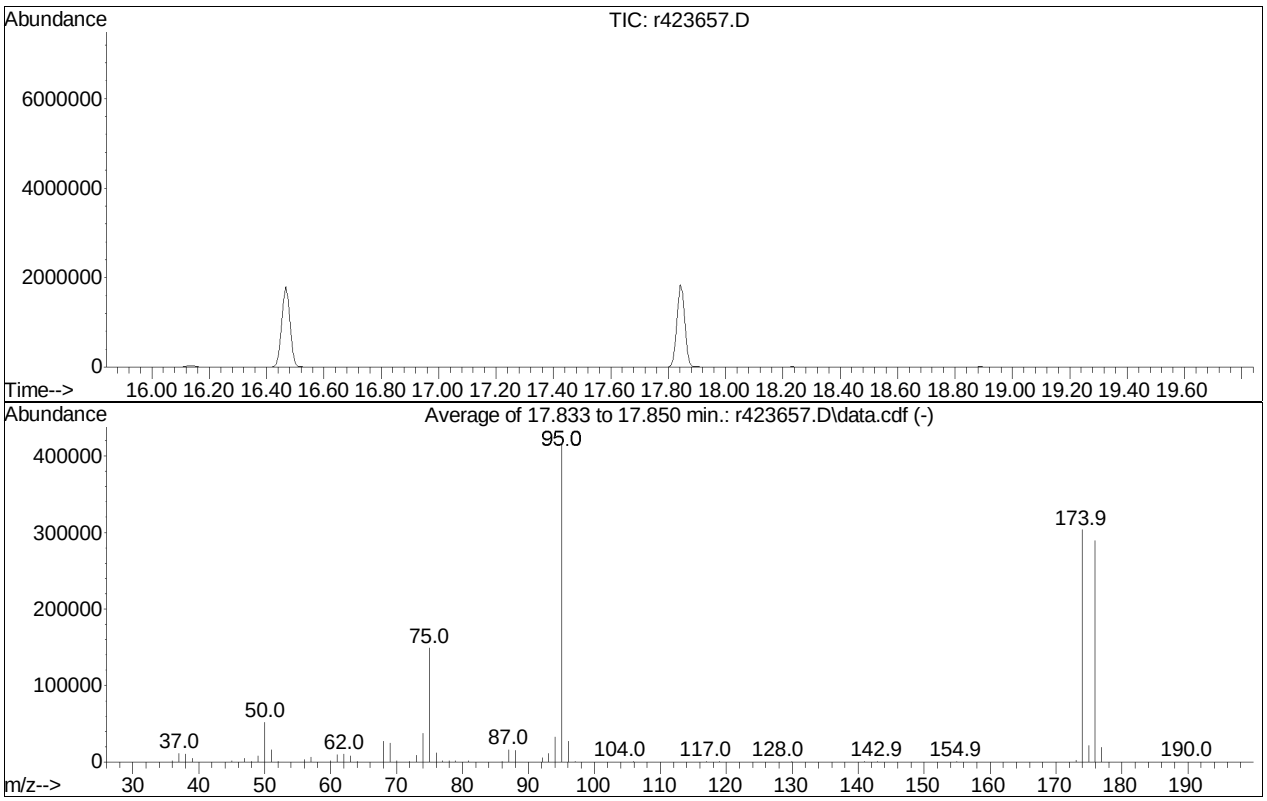
		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
94)		n-propylbenzene	2.354	2.271	2.235	1.978	1.983	2.006	1.873	1.664	2.0455	11.20
95)		4-chlorotoluene	1.905	1.848	1.863	1.648	1.679	1.705	1.625	1.538	1.7265	7.59
96)		4-ethyl toluene	7.099	6.876	6.729	5.673	5.618	5.767	5.313	4.885	5.9948	13.42
97)		1,3,5-trimethylbenzene	6.007	5.800	5.683	4.856	4.871	4.844	4.432	3.981	5.0593	14.01
98)		tert-butylbenzene	6.760	6.368	6.333	5.497	5.419	5.011	4.164	3.532	5.3856	20.86
99)		1,2,4-trimethylbenzene	6.014	5.623	5.694	4.775	4.568	4.432	3.756	3.222	4.7606	20.56
100)		decane	6.031	5.644	5.631	5.024	4.976	4.824	4.314	3.821	5.0329	14.56
101)	C	Benzyl Chloride	3.498	3.541	3.678	3.712	3.896	3.698	3.368	2.999	3.5489	7.71
102)		1,3-dichlorobenzene	3.283	3.238	3.177	2.711	2.778	2.841	2.639	2.491	2.8947	10.34
103)	C	1,4-dichlorobenzene	3.275	3.289	3.220	2.729	2.656	2.797	2.689	2.473	2.8911	11.09
104)		sec-butylbenzene	8.702	8.261	8.261	7.257	7.063	6.838	6.117	5.513	7.2516	15.34
105)		1,2,3-trimethylbenzene	5.497	5.154	5.163	4.530	4.337	3.988	3.429	2.955	4.3816	20.37
106)		p-isopropyltoluene	8.221	7.774	7.728	6.761	6.465	6.020	4.970	4.192	6.5164	21.75
107)		1,2-dichlorobenzene	3.076	2.979	3.014	2.535	2.542	2.652	2.562	2.483	2.7305	9.09
108)		n-butylbenzene	6.932	6.593	6.629	6.026	6.020	5.795	5.195	4.674	5.9830	12.73
109)		indan	5.910	5.818	5.838	5.188	5.119	4.918	4.512	4.095	5.1746	12.80
110)		indene	4.047	3.891	3.953	4.008	4.043	3.594	3.413	3.181	3.7664	8.75
111)	C	1,2-dibromo-3-chloropropane	1.359	1.342	1.350	1.296	1.305	1.257	1.115	1.038	1.2577	9.41
112)		undecane	6.374	6.160	6.196	5.596	5.494	5.216	4.433	3.961	5.4288	15.94
113)		1,2,4,5-tetramethylbenzene	1.045	1.005	1.003	0.833	0.803	0.824	0.671	0.575	0.8448	19.79
114)		dodecane	5.337	5.628	5.816	6.025	5.871	5.206	4.374	3.854	5.2640	14.67
115)	C	1,2,4-trichlorobenzene	2.388	2.496	2.527	2.539	2.600	2.603	2.347	2.181	2.4601	5.91
116)		naphthalene	6.625	6.703	6.794	6.750	7.027	6.447	5.964	5.621	6.4914	7.24
117)		1,2,3-trichlorobenzene	2.359	2.493	2.492	2.704	2.753	2.551	2.323	2.210	2.4856	7.48
118)		benzothiophene	0.983	1.049	1.061	1.018	1.062	1.122	0.933	0.814	1.0052	9.53
119)	C	hexachlorobutadiene	2.569	2.660	2.601	2.416	2.289	2.100	1.746	1.527	2.2385	18.66
120)		2-methylnaphthalene			0.963	1.214	1.353	1.488	1.580	1.845	1.4073	21.70
121)		1-methylnaphthalene			1.977	1.950	2.093	2.545	2.551	2.806	2.3202	15.50

(#) = Out of Range

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423657.D
Acq On : 21 Sep 2022 8:59 PM
Operator : AIRPIANO4:RY
Sample : WG1691174-1,3,250,250
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Integration File: rteint.p

Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Fri Sep 23 08:28:06 2022



Spectrum Information: Average of 17.833 to 17.850 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	12.4	51958	PASS
75	95	30	66	35.7	148821	PASS
95	95	100	100	100.0	417434	PASS
96	95	5	9	6.5	27049	PASS
173	174	0.00	2	0.8	2504	PASS
174	95	50	120	72.8	304009	PASS
175	174	4	9	7.2	21966	PASS
176	174	93	101	95.3	289805	PASS
177	176	5	9	6.7	19273	PASS

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423661.D
Acq On : 21 Sep 2022 11:28 PM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD0.2
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:16:57 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.47	49	460718	10.000	ppbV	-0.02
Standard Area = 486424			Recovery = 94.72%			
43) 1,4-difluorobenzene	11.73	114	1310587	10.000	ppbV	-0.01
Standard Area = 1380317			Recovery = 94.95%			
67) chlorobenzene-D5	16.47	54	238248	10.000	ppbV	0.00
Standard Area = 245056			Recovery = 97.22%			
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.35	65	352142	10.449	ppbV	-0.02
Spiked Amount 10.000	Range 70 - 130		Recovery = 104.49%			
69) toluene-D8	14.57	98	1290065	10.003	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.03%			
90) bromofluorobenzene	17.84	95	918767	9.763	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.63%			
Target Compounds						Qvalue
2) chlorodifluoromethane	3.86	51	7983	0.257	ppbV #	93
3) propylene	3.89	41	5871M6	0.287	ppbV	
4) propane	3.91	29	6843	0.266	ppbV	94
5) dichlorodifluoromethane	3.96	85	9759	0.263	ppbV	98
6) chloromethane	4.14	50	3932	0.247	ppbV	98
7) Freon-114	4.26	85	11137	0.252	ppbV	99
8) methanol	4.35	31	15900	1.715	ppbV #	56
9) vinyl chloride	4.40	62	5861	0.239	ppbV	99
10) 1,3-butadiene	4.56	54	4556	0.255	ppbV	90
11) butane	4.62	43	8829	0.268	ppbV	96
12) acetaldehyde	4.29	29	12262	1.476	ppbV #	85
13) bromomethane	4.86	94	4912	0.255	ppbV	98
14) chloroethane	5.08	64	3205	0.249	ppbV	98
15) ethanol	5.27	31	26320	1.856	ppbV	98
16) dichlorofluoromethane	5.22	67	9220	0.249	ppbV	98
17) vinyl bromide	5.50	106	4165	0.254	ppbV	99
18) acrolein	5.66	56	2692	0.247	ppbV #	1
19) acetone	5.83	43	33362	1.437	ppbV	90
20) acetonitrile	5.51	41	4501	0.228	ppbV #	1
21) trichlorofluoromethane	6.01	101	7075	0.242	ppbV	99
22) isopropyl alcohol	6.17	45	29758	1.001	ppbV	98
23) acrylonitrile	6.39	53	5331	0.301	ppbV #	95
24) pentane	6.45	43	12084	0.305	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423661.D
Acq On : 21 Sep 2022 11:28 PM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD0.2
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:16:57 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.51	31	11310	0.287	ppbV	97
26) 1,1-dichloroethene	6.77	61	9502	0.310	ppbV #	86
27) tertiary butyl alcohol	6.91	59	13384	0.233	ppbV #	89
28) methylene chloride	6.94	49	7137	0.263	ppbV	93
29) 3-chloropropene	7.07	41	8700	0.240	ppbV	95
30) carbon disulfide	7.23	76	17455	0.247	ppbV #	82
31) Freon 113	7.27	101	9885	0.242	ppbV	98
32) trans-1,2-dichloroethene	8.06	61	9479	0.243	ppbV	95
33) 1,1-dichloroethane	8.29	63	11256	0.236	ppbV	99
34) MTBE	8.40	73	15422	0.246	ppbV #	95
35) vinyl acetate	8.52	43	11315	0.222	ppbV	97
36) 2-butanone	8.80	43	12825	0.250	ppbV	96
37) cis-1,2-dichloroethene	9.28	61	8690	0.238	ppbV	93
38) Ethyl Acetate	9.60	61	2431M6	0.252	ppbV	
39) chloroform	9.63	83	10436	0.245	ppbV	97
40) Tetrahydrofuran	10.12	42	8625	0.266	ppbV	92
41) 2,2-dichloropropane	9.65	77	8796	0.246	ppbV #	88
42) 1,2-dichloroethane	10.48	62	6908	0.243	ppbV	96
44) hexane	9.54	57	12951	0.254	ppbV #	77
45) diisopropyl ether	9.57	87	6882	0.249	ppbV	91
46) tert-butyl ethyl ether	10.19	59	22920	0.240	ppbV	95
48) 1,1,1-trichloroethane	10.77	97	8703	0.233	ppbV	91
49) 1,1-dichloropropene	11.13	75	8826	0.239	ppbV #	87
50) benzene	11.29	78	24934	0.292	ppbV	98
51) thiophene	11.44	84	13166	0.232	ppbV	95
52) carbon tetrachloride	11.47	117	7636	0.233	ppbV	97
53) cyclohexane	11.61	56	13618	0.253	ppbV	96
54) tert-amyl methyl ether	12.02	73	18392	0.237	ppbV	93
55) dibromomethane	12.21	93	6546	0.258	ppbV	95
56) 1,2-dichloropropane	12.25	63	7446	0.239	ppbV #	93
57) bromodichloromethane	12.48	83	10379	0.235	ppbV	98
58) 1,4-dioxane	12.56	88	4702	0.253	ppbV #	70
59) trichloroethene	12.53	130	8027	0.238	ppbV	97
60) 2,2,4-trimethylpentane	12.57	57	41278	0.259	ppbV	96
61) methyl methacrylate	12.79	41	7530	0.213	ppbV	93
62) heptane	12.89	43	13422	0.252	ppbV	95
63) cis-1,3-dichloropropene	13.54	75	9131	0.220	ppbV #	90
64) 4-methyl-2-pentanone	13.61	43	14422	0.238	ppbV	94
65) trans-1,3-dichloropropene	14.17	75	8181	0.208	ppbV #	91
66) 1,1,2-trichloroethane	14.37	97	7041	0.236	ppbV	94

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423661.D
Acq On : 21 Sep 2022 11:28 PM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD0.2
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:16:57 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
68)	toluene	14.68	91	31490	0.298	ppbV		99
70)	2-methylthiophene	14.75	97	18803	0.222	ppbV		99
71)	1,3-dichloropropane	14.72	76	11087	0.229	ppbV	#	87
72)	2-hexanone	15.00	43	12218	0.215	ppbV		94
73)	3-methylthiophene	14.95	97	19052	0.219	ppbV		98
74)	dibromochloromethane	15.13	129	9157	0.223	ppbV		99
75)	1,2-dibromoethane	15.39	107	9555	0.225	ppbV		97
76)	butyl acetate	15.65	73	2915	0.198	ppbV		94
77)	octane	15.73	85	10660	0.235	ppbV		90
78)	tetrachloroethene	15.85	166	10508	0.245	ppbV		97
79)	1,1,1,2-tetrachloroethane	16.49	131	7868	0.233	ppbV		96
80)	chlorobenzene	16.51	112	18872	0.249	ppbV		99
81)	ethylbenzene	16.86	91	30665	0.237	ppbV		95
82)	2-ethylthiophene	16.90	97	22155	0.222	ppbV		94
83)	m+p-xylene	17.02	91	51363	0.484	ppbV		96
84)	bromoform	17.09	173	8091	0.203	ppbV		98
85)	styrene	17.35	104	17604	0.223	ppbV		98
86)	1,1,2,2-tetrachloroethane	17.45	83	16731	0.239	ppbV		99
87)	o-xylene	17.44	91	25615	0.245	ppbV		96
88)	1,2,3-trichloropropane	17.56	75	13590	0.239	ppbV	#	95
89)	nonane	17.64	43	19778	0.236	ppbV		95
91)	isopropylbenzene	17.96	105	32083	0.241	ppbV		100
92)	bromobenzene	18.03	77	18623	0.239	ppbV		99
93)	2-chlorotoluene	18.37	126	9483	0.236	ppbV		85
94)	n-propylbenzene	18.40	120	11218	0.237	ppbV		85
95)	4-chlorotoluene	18.43	126	9077	0.227	ppbV		97
96)	4-ethyl toluene	18.52	105	33825	0.253	ppbV		99
97)	1,3,5-trimethylbenzene	18.58	105	28625	0.247	ppbV		99
98)	tert-butylbenzene	18.93	119	32213	0.250	ppbV		97
99)	1,2,4-trimethylbenzene	18.93	105	28656	0.263	ppbV		97
100)	decane	19.02	57	28738	0.242	ppbV		97
101)	Benzyl Chloride	19.06	91	16670	0.180	ppbV		97
102)	1,3-dichlorobenzene	19.07	146	15641	0.236	ppbV	#	92
103)	1,4-dichlorobenzene	19.13	146	15607	0.247	ppbV	#	89
104)	sec-butylbenzene	19.16	105	41466	0.246	ppbV		98
105)	1,2,3-trimethylbenzene	19.29	105	26194	0.254	ppbV		100
106)	p-isopropyltoluene	19.29	119	39172	0.254	ppbV		96
107)	1,2-dichlorobenzene	19.42	146	14656	0.242	ppbV		96
108)	n-butylbenzene	19.65	91	33030	0.230	ppbV		94
109)	indan	19.47	117	28160	0.231	ppbV		99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423661.D
Acq On : 21 Sep 2022 11:28 PM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD0.2
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:16:57 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
110) indene	19.55	115	19286	0.200	ppbV		98
111) 1,2-dibromo-3-chloropr...	19.80	75	6474	0.208	ppbV	#	86
112) undecane	20.07	57	30370	0.232	ppbV		96
113) 1,2,4,5-tetramethylben...	20.29	119	49797	0.260	ppbV		96
114) dodecane	20.97	57	25432	0.182	ppbV		94
115) 1,2,4-trichlorobenzene	20.92	180	11377	0.184	ppbV		99
116) naphthalene	21.03	128	31567	0.189	ppbV		100
117) 1,2,3-trichlorobenzene	21.27	180	11239	0.171	ppbV		96
118) benzothiophene	21.09	134	46816	0.185	ppbV	#	96
119) hexachlorobutadiene	21.34	225	12241	0.224	ppbV		95
120) 2-methylnaphthalene	22.13	142	2626	0.081	ppbV		97
121) 1-methylnaphthalene	22.32	142	6359	0.128	ppbV		91

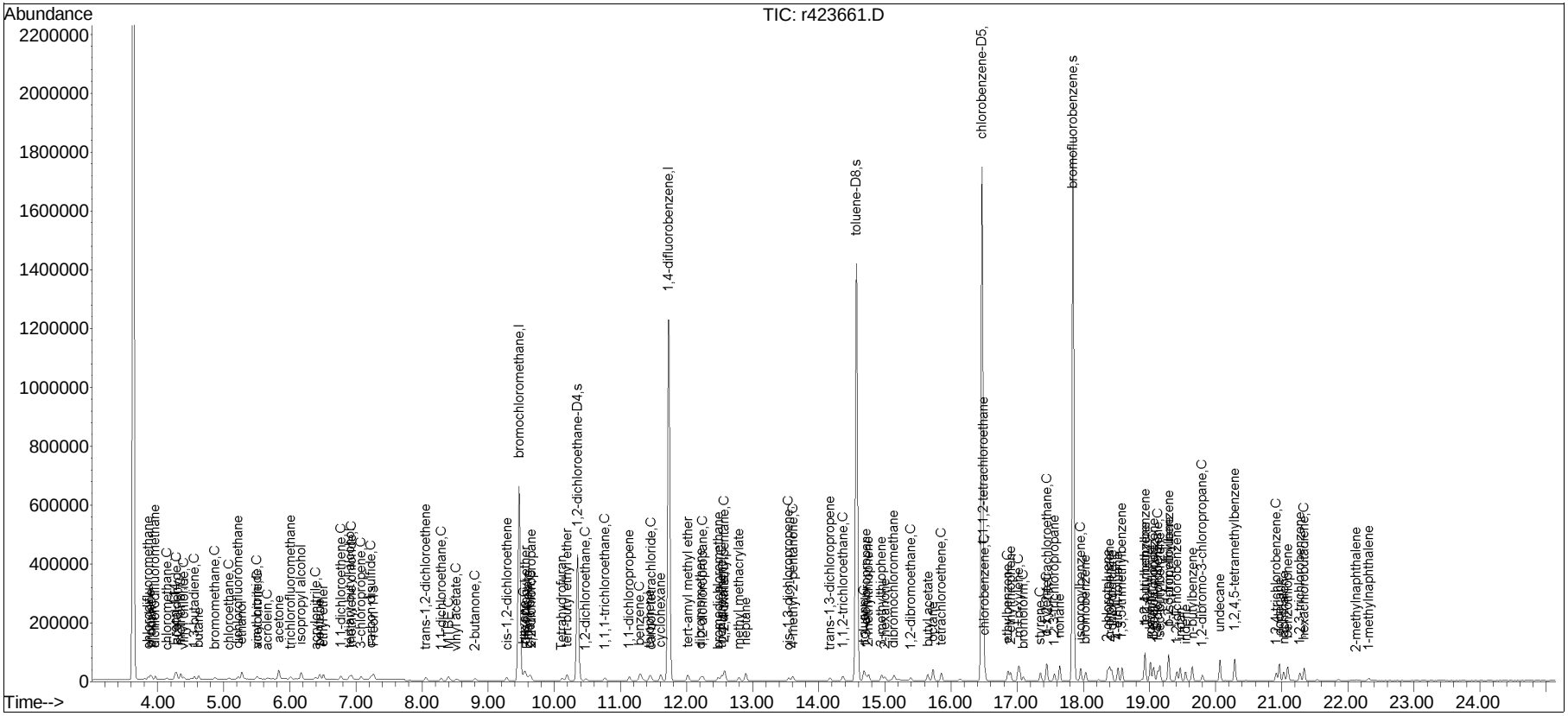
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423661.D
Acq On : 21 Sep 2022 11:28 PM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD0.2
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:16:57 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

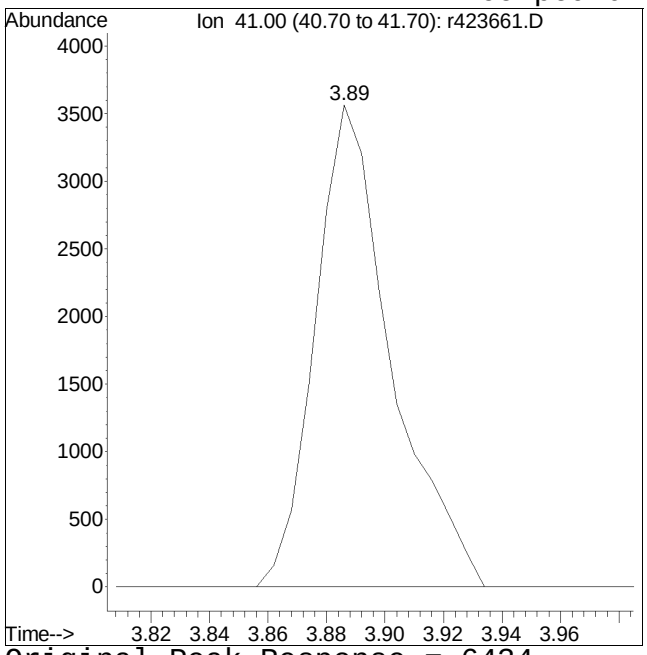
Sub List : Default - All compounds listed22\09\0921T_I\r423665.D



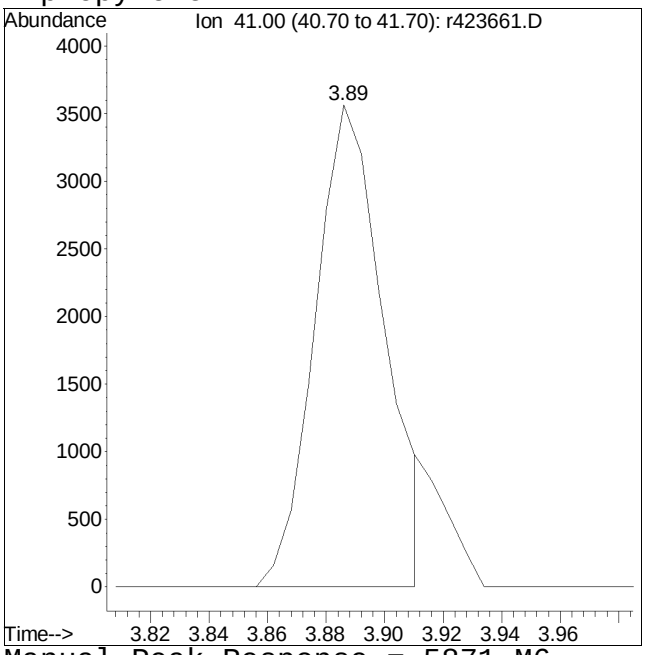
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423661.D
Date Inj'd : 9/21/2020 0:1: 8
Sample : ITO15-SIMSTD0.2
Method : TFS4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 9:40 am

Compound #3: propylene



Original Peak Response = 6434



Manual Peak Response = 5871 M6

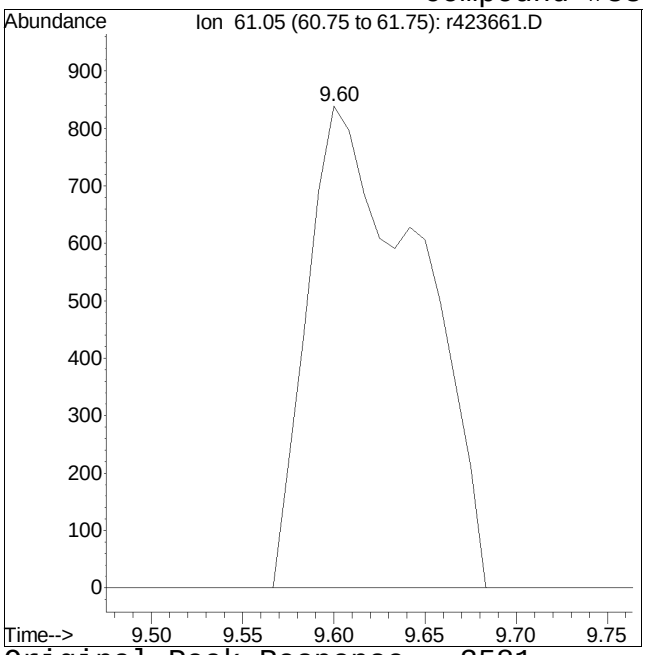
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

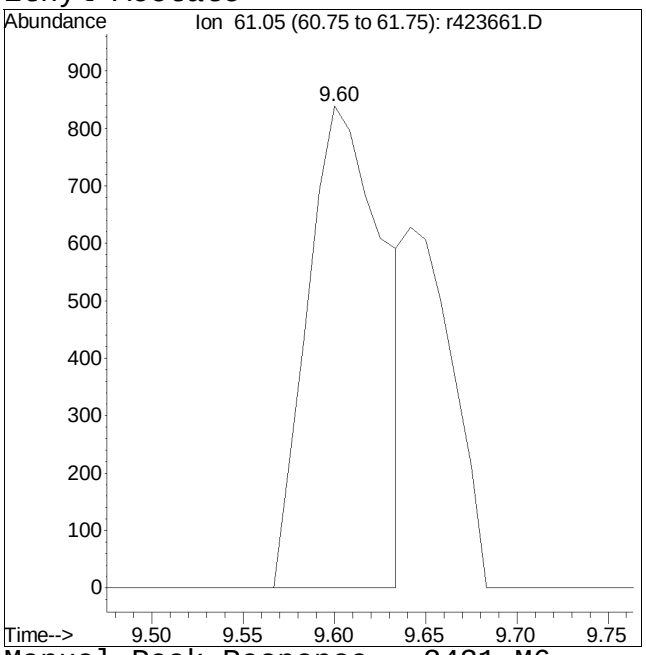
Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423661.D
Date Inj'd : 9/21/2020 0:1: 8
Sample : ITO15-SIMSTD0.2

Method : TFS4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 9:40 am

Compound #38: Ethyl Acetate



Original Peak Response = 3581



Manual Peak Response = 2431 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423662.D
Acq On : 22 Sep 2022 12:08 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD0.5
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:18:03 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.47	49	469981	10.000	ppbV	0.00
Standard Area = 486424			Recovery = 96.62%			
43) 1,4-difluorobenzene	11.73	114	1349596	10.000	ppbV	0.00
Standard Area = 1380317			Recovery = 97.77%			
67) chlorobenzene-D5	16.47	54	240006	10.000	ppbV	0.00
Standard Area = 245056			Recovery = 97.94%			
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.36	65	361272	10.410	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 104.10%			
69) toluene-D8	14.57	98	1315575	10.126	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.26%			
90) bromofluorobenzene	17.85	95	943891	9.956	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.56%			
Target Compounds						Qvalue
2) chlorodifluoromethane	3.86	51	18543	0.585	ppbV #	93
3) propylene	3.89	41	13003M6	0.624	ppbV	
4) propane	3.92	29	15035	0.573	ppbV #	95
5) dichlorodifluoromethane	3.97	85	22622	0.597	ppbV	100
6) chloromethane	4.15	50	9377	0.578	ppbV	99
7) Freon-114	4.27	85	27269	0.605	ppbV	97
8) methanol	4.35	31	34242	3.621	ppbV #	79
9) vinyl chloride	4.40	62	14242	0.568	ppbV	100
10) 1,3-butadiene	4.56	54	10925	0.599	ppbV	86
11) butane	4.62	43	19916	0.592	ppbV	97
12) acetaldehyde	4.29	29	26355	3.110	ppbV	92
13) bromomethane	4.87	94	11357	0.577	ppbV	100
14) chloroethane	5.09	64	7358	0.560	ppbV	99
15) ethanol	5.27	31	54521	3.768	ppbV	98
16) dichlorofluoromethane	5.22	67	21793	0.577	ppbV	98
17) vinyl bromide	5.51	106	10084	0.603	ppbV	96
18) acrolein	5.67	56	5871	0.528	ppbV #	38
19) acetone	5.83	43	70800	2.989	ppbV	91
20) acetonitrile	5.51	41	12683	0.631	ppbV #	28
21) trichlorofluoromethane	6.02	101	16905	0.568	ppbV	98
22) isopropyl alcohol	6.17	45	48538	1.601	ppbV	100
23) acrylonitrile	6.39	53	10768	0.596	ppbV	98
24) pentane	6.46	43	23091	0.572	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423662.D
Acq On : 22 Sep 2022 12:08 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD0.5
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:18:03 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) ethyl ether	6.51	31	19363	0.481	ppbV		97
26) 1,1-dichloroethene	6.78	61	17812	0.570	ppbV		96
27) tertiary butyl alcohol	6.90	59	26045	0.444	ppbV	#	92
28) methylene chloride	6.94	49	13756	0.497	ppbV		99
29) 3-chloropropene	7.08	41	21312	0.575	ppbV		92
30) carbon disulfide	7.23	76	41816	0.580	ppbV	#	89
31) Freon 113	7.27	101	23481	0.562	ppbV		96
32) trans-1,2-dichloroethene	8.06	61	22990	0.578	ppbV		95
33) 1,1-dichloroethane	8.29	63	26895	0.554	ppbV		99
34) MTBE	8.39	73	36592	0.572	ppbV		96
35) vinyl acetate	8.52	43	25089	0.482	ppbV		96
36) 2-butanone	8.80	43	30785	0.589	ppbV		95
37) cis-1,2-dichloroethene	9.28	61	20802	0.560	ppbV		94
38) Ethyl Acetate	9.60	61	4891	0.497	ppbV		91
39) chloroform	9.63	83	24405	0.563	ppbV		98
40) Tetrahydrofuran	10.11	42	18991	0.574	ppbV		93
41) 2,2-dichloropropane	9.65	77	20908	0.573	ppbV	#	87
42) 1,2-dichloroethane	10.48	62	16798	0.579	ppbV		96
44) hexane	9.55	57	30346	0.578	ppbV		91
45) diisopropyl ether	9.57	87	15534	0.546	ppbV		87
46) tert-butyl ethyl ether	10.19	59	54543	0.554	ppbV		96
48) 1,1,1-trichloroethane	10.77	97	20942	0.544	ppbV		93
49) 1,1-dichloropropene	11.14	75	20992	0.551	ppbV	#	87
50) benzene	11.30	78	52537	0.598	ppbV		99
51) thiophene	11.45	84	31068	0.531	ppbV		96
52) carbon tetrachloride	11.47	117	18282	0.543	ppbV		97
53) cyclohexane	11.61	56	31839	0.574	ppbV		93
54) tert-amyl methyl ether	12.02	73	44128	0.552	ppbV		95
55) dibromomethane	12.22	93	14750	0.565	ppbV		98
56) 1,2-dichloropropane	12.25	63	17490	0.544	ppbV		96
57) bromodichloromethane	12.48	83	24728	0.545	ppbV		99
58) 1,4-dioxane	12.55	88	11335	0.592	ppbV		83
59) trichloroethene	12.53	130	19131	0.550	ppbV		95
60) 2,2,4-trimethylpentane	12.58	57	98411	0.600	ppbV		96
61) methyl methacrylate	12.79	41	18167	0.500	ppbV		89
62) heptane	12.90	43	31513	0.574	ppbV		97
63) cis-1,3-dichloropropene	13.54	75	22729	0.531	ppbV	#	90
64) 4-methyl-2-pentanone	13.60	43	35154	0.563	ppbV		95
65) trans-1,3-dichloropropene	14.17	75	21057	0.520	ppbV	#	91
66) 1,1,2-trichloroethane	14.37	97	16878	0.550	ppbV		96

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423662.D
Acq On : 22 Sep 2022 12:08 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD0.5
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:18:03 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
68) toluene	14.68	91	66101	0.620	ppbV		99
70) 2-methylthiophene	14.76	97	45073	0.528	ppbV		98
71) 1,3-dichloropropane	14.72	76	27453	0.562	ppbV		89
72) 2-hexanone	14.99	43	31199	0.545	ppbV		93
73) 3-methylthiophene	14.95	97	45321	0.516	ppbV		99
74) dibromochloromethane	15.14	129	22462	0.543	ppbV		99
75) 1,2-dibromoethane	15.39	107	23328	0.546	ppbV		100
76) butyl acetate	15.64	73	7325	0.494	ppbV		94
77) octane	15.73	85	25819	0.564	ppbV		93
78) tetrachloroethene	15.86	166	24288	0.561	ppbV		93
79) 1,1,1,2-tetrachloroethane	16.49	131	18574	0.547	ppbV		98
80) chlorobenzene	16.51	112	43403	0.569	ppbV		97
81) ethylbenzene	16.87	91	74837	0.575	ppbV		94
82) 2-ethylthiophene	16.90	97	53668	0.533	ppbV		95
83) m+p-xylene	17.02	91	122892	1.149	ppbV		96
84) bromoform	17.09	173	20749	0.516	ppbV		100
85) styrene	17.35	104	45425	0.572	ppbV		99
86) 1,1,2,2-tetrachloroethane	17.45	83	41041	0.582	ppbV		98
87) o-xylene	17.45	91	62701	0.596	ppbV		93
88) 1,2,3-trichloropropane	17.56	75	32682	0.570	ppbV	#	97
89) nonane	17.64	43	48653	0.576	ppbV		96
91) isopropylbenzene	17.96	105	77545	0.577	ppbV		100
92) bromobenzene	18.03	77	45000	0.574	ppbV		98
93) 2-chlorotoluene	18.37	126	23339	0.577	ppbV		85
94) n-propylbenzene	18.40	120	27255	0.573	ppbV		89
95) 4-chlorotoluene	18.43	126	22182	0.550	ppbV		91
96) 4-ethyl toluene	18.52	105	82509	0.612	ppbV		99
97) 1,3,5-trimethylbenzene	18.58	105	69598	0.595	ppbV		99
98) tert-butylbenzene	18.93	119	76423	0.588	ppbV		97
99) 1,2,4-trimethylbenzene	18.93	105	67475	0.615	ppbV		97
100) decane	19.02	57	67729	0.567	ppbV		96
101) Benzyl Chloride	19.06	91	42489	0.454	ppbV		97
102) 1,3-dichlorobenzene	19.07	146	38862	0.583	ppbV	#	92
103) 1,4-dichlorobenzene	19.13	146	39467	0.619	ppbV	#	88
104) sec-butylbenzene	19.16	105	99133	0.585	ppbV		97
105) 1,2,3-trimethylbenzene	19.29	105	61853	0.594	ppbV		98
106) p-isopropyltoluene	19.29	119	93292	0.601	ppbV		97
107) 1,2-dichlorobenzene	19.42	146	35754	0.586	ppbV		97
108) n-butylbenzene	19.65	91	79112	0.548	ppbV		96
109) indan	19.47	117	69816	0.568	ppbV		99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423662.D
Acq On : 22 Sep 2022 12:08 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD0.5
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:18:03 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
110) indene	19.55	115	46692	0.481	ppbV		100
111) 1,2-dibromo-3-chloropr...	19.80	75	16103	0.514	ppbV	#	90
112) undecane	20.07	57	73927	0.561	ppbV		96
113) 1,2,4,5-tetramethylben...	20.29	119	120545	0.626	ppbV		96
114) dodecane	20.97	57	67540	0.479	ppbV		94
115) 1,2,4-trichlorobenzene	20.92	180	29958	0.480	ppbV		97
116) naphthalene	21.02	128	80442	0.477	ppbV		100
117) 1,2,3-trichlorobenzene	21.27	180	29917	0.453	ppbV		96
118) benzothiophene	21.09	134	125910	0.494	ppbV	#	98
119) hexachlorobutadiene	21.34	225	31920	0.581	ppbV		94
120) 2-methylnaphthalene	22.13	142	10241	0.315	ppbV		98
121) 1-methylnaphthalene	22.32	142	22503	0.448	ppbV		98

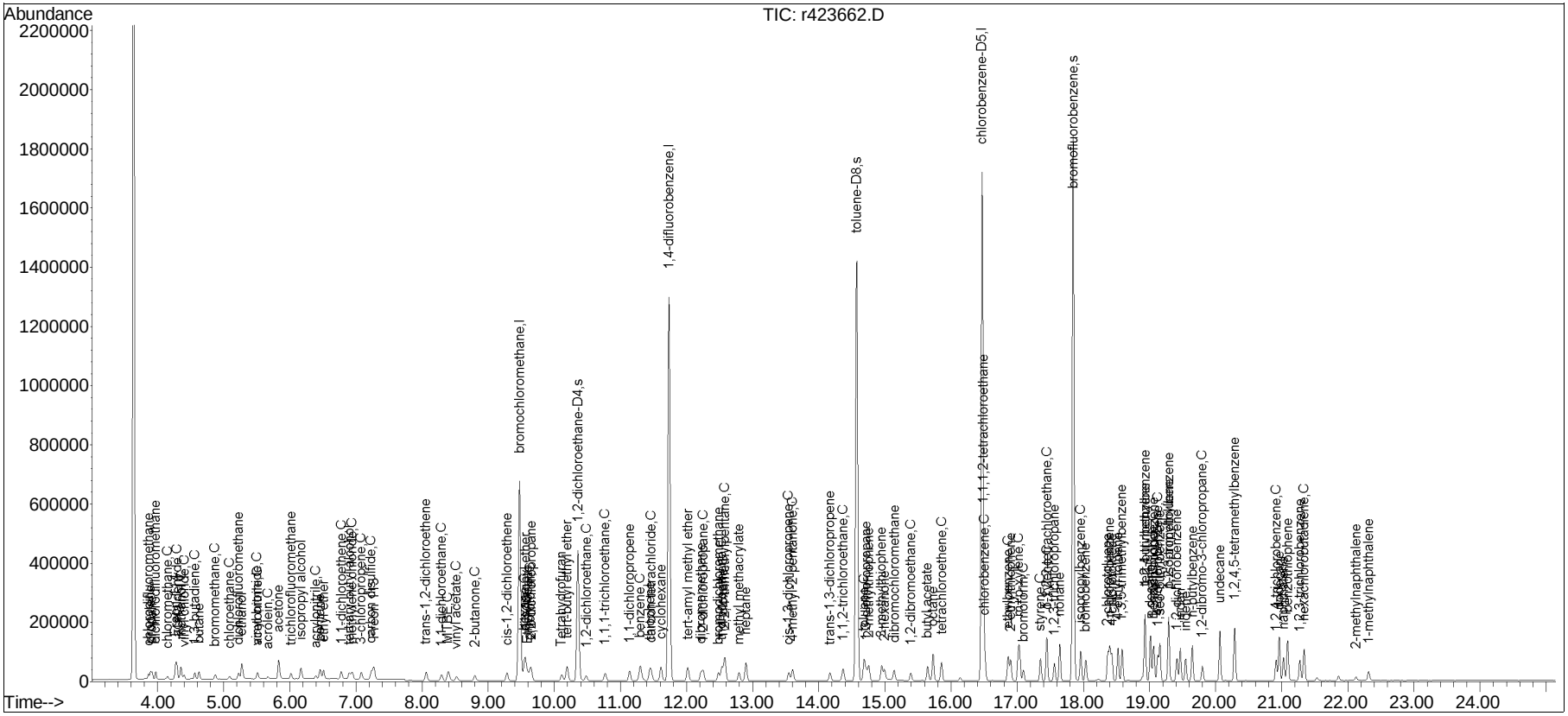
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423662.D
Acq On : 22 Sep 2022 12:08 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD0.5
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:18:03 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

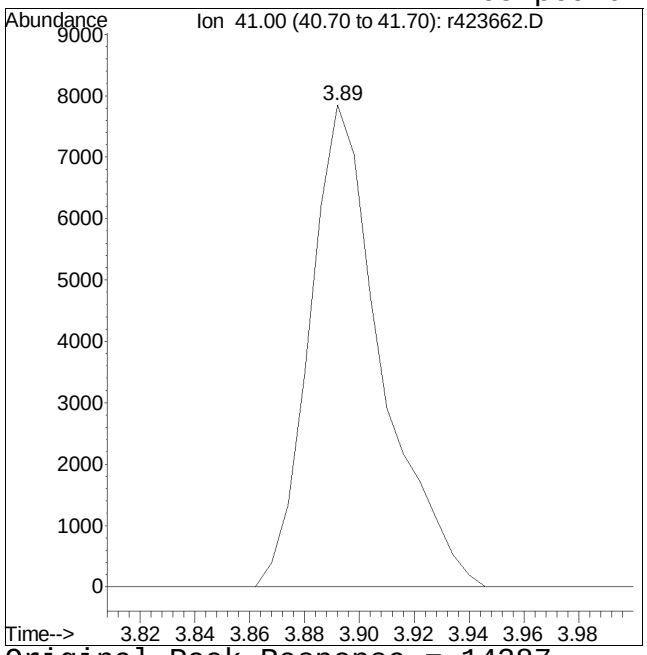
Sub List : Default - All compounds listed22\09\0921T_I\r423665.D



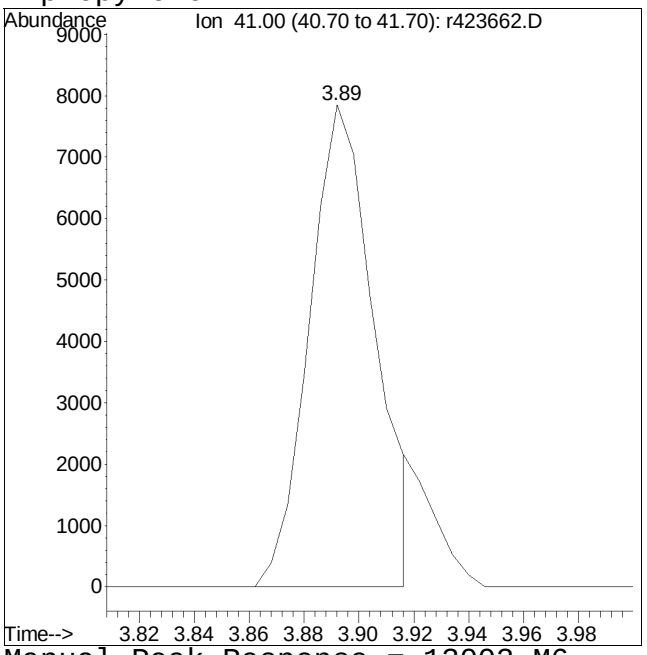
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423662.D
Date Inj'd : 9/22/2020 0:2: 8
Sample : ITO15-SIMSTD0.5
Method : TFS4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 9:40 am

Compound #3: propylene



Original Peak Response = 14287



Manual Peak Response = 13003 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423663.D
Acq On : 22 Sep 2022 12:49 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD1.0
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:20:18 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.47	49	469548	10.000	ppbV	0.00
Standard Area = 486424			Recovery = 96.53%			
43) 1,4-difluorobenzene	11.74	114	1344988	10.000	ppbV	0.00
Standard Area = 1380317			Recovery = 97.44%			
67) chlorobenzene-D5	16.48	54	240830	10.000	ppbV	0.00
Standard Area = 245056			Recovery = 98.28%			
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.36	65	357159	10.327	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.27%			
69) toluene-D8	14.57	98	1308216	10.035	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.35%			
90) bromofluorobenzene	17.85	95	937839	9.859	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.59%			
Target Compounds						Qvalue
2) chlorodifluoromethane	3.86	51	36398	1.149	ppbV	95
3) propylene	3.89	41	24896M6	1.195	ppbV	
4) propane	3.92	29	29381	1.120	ppbV #	95
5) dichlorodifluoromethane	3.98	85	44288	1.170	ppbV	99
6) chloromethane	4.15	50	18292	1.129	ppbV	99
7) Freon-114	4.28	85	52485	1.166	ppbV	97
8) methanol	4.35	31	64679	6.846	ppbV #	90
9) vinyl chloride	4.40	62	27389	1.094	ppbV	99
10) 1,3-butadiene	4.56	54	21417	1.176	ppbV	89
11) butane	4.63	43	38579	1.147	ppbV	97
12) acetaldehyde	4.29	29	50946	6.017	ppbV	99
13) bromomethane	4.88	94	21872	1.113	ppbV	99
14) chloroethane	5.09	64	14082	1.072	ppbV	100
15) ethanol	5.28	31	88348	6.112	ppbV	99
16) dichlorofluoromethane	5.23	67	42412	1.125	ppbV	99
17) vinyl bromide	5.51	106	18952	1.134	ppbV	99
18) acrolein	5.67	56	11278	1.015	ppbV #	70
19) acetone	5.83	43	138025	5.832	ppbV	92
20) acetonitrile	5.52	41	22187	1.105	ppbV #	62
21) trichlorofluoromethane	6.02	101	33290	1.119	ppbV	99
22) isopropyl alcohol	6.17	45	89238	2.946	ppbV	99
23) acrylonitrile	6.40	53	19871	1.101	ppbV	98
24) pentane	6.46	43	43341	1.075	ppbV	98

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423663.D
Acq On : 22 Sep 2022 12:49 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD1.0
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:20:18 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) ethyl ether	6.51	31	48531	1.206	ppbV		97
26) 1,1-dichloroethene	6.78	61	43509	1.394	ppbV		88
27) tertiary butyl alcohol	6.90	59	62312	1.064	ppbV	#	92
28) methylene chloride	6.95	49	31166	1.126	ppbV		96
29) 3-chloropropene	7.09	41	41031	1.109	ppbV		93
30) carbon disulfide	7.24	76	80020M3	1.111	ppbV		
31) Freon 113	7.27	101	45560	1.092	ppbV		97
32) trans-1,2-dichloroethene	8.07	61	44988	1.132	ppbV		94
33) 1,1-dichloroethane	8.30	63	52016	1.072	ppbV		99
34) MTBE	8.39	73	71935	1.126	ppbV		98
35) vinyl acetate	8.53	43	51122	0.983	ppbV		96
36) 2-butanone	8.79	43	58879	1.128	ppbV		96
37) cis-1,2-dichloroethene	9.29	61	39984	1.077	ppbV		92
38) Ethyl Acetate	9.60	61	10612	1.080	ppbV		95
39) chloroform	9.64	83	47275	1.091	ppbV		98
40) Tetrahydrofuran	10.11	42	37080	1.121	ppbV		94
41) 2,2-dichloropropane	9.66	77	40716	1.117	ppbV	#	88
42) 1,2-dichloroethane	10.48	62	31927	1.101	ppbV		96
44) hexane	9.55	57	59030	1.129	ppbV		90
45) diisopropyl ether	9.57	87	30883	1.088	ppbV		86
46) tert-butyl ethyl ether	10.19	59	105338	1.073	ppbV		97
48) 1,1,1-trichloroethane	10.78	97	41708	1.086	ppbV		94
49) 1,1-dichloropropene	11.14	75	41439	1.092	ppbV	#	89
50) benzene	11.30	78	97877	1.119	ppbV		98
51) thiophene	11.45	84	60551	1.038	ppbV		95
52) carbon tetrachloride	11.47	117	35722	1.064	ppbV		97
53) cyclohexane	11.61	56	61511	1.113	ppbV		95
54) tert-amyl methyl ether	12.02	73	86060	1.081	ppbV		96
55) dibromomethane	12.22	93	28950	1.113	ppbV		95
56) 1,2-dichloropropane	12.25	63	34111	1.065	ppbV	#	96
57) bromodichloromethane	12.49	83	49445	1.093	ppbV		100
58) 1,4-dioxane	12.55	88	21666	1.135	ppbV		86
59) trichloroethene	12.53	130	37802	1.090	ppbV		95
60) 2,2,4-trimethylpentane	12.58	57	190486	1.165	ppbV		97
61) methyl methacrylate	12.79	41	35323	0.975	ppbV		91
62) heptane	12.90	43	61897	1.130	ppbV		96
63) cis-1,3-dichloropropene	13.55	75	45162	1.058	ppbV	#	91
64) 4-methyl-2-pentanone	13.60	43	68944	1.108	ppbV		96
65) trans-1,3-dichloropropene	14.18	75	41559	1.030	ppbV	#	89
66) 1,1,2-trichloroethane	14.37	97	33064	1.081	ppbV		95

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423663.D
Acq On : 22 Sep 2022 12:49 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD1.0
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:20:18 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
68) toluene	14.68	91	122043	1.141	ppbV		99
70) 2-methylthiophene	14.76	97	87273	1.019	ppbV		99
71) 1,3-dichloropropane	14.72	76	52828	1.078	ppbV	#	87
72) 2-hexanone	14.99	43	59776	1.041	ppbV		95
73) 3-methylthiophene	14.95	97	91789	1.042	ppbV		99
74) dibromochloromethane	15.14	129	44232	1.065	ppbV		98
75) 1,2-dibromoethane	15.39	107	45812	1.069	ppbV		100
76) butyl acetate	15.64	73	13829	0.929	ppbV		83
77) octane	15.73	85	49250	1.073	ppbV		87
78) tetrachloroethene	15.86	166	48474	1.116	ppbV		96
79) 1,1,1,2-tetrachloroethane	16.50	131	36964	1.085	ppbV		98
80) chlorobenzene	16.51	112	85522	1.118	ppbV		99
81) ethylbenzene	16.87	91	144671	1.107	ppbV		94
82) 2-ethylthiophene	16.90	97	104905	1.038	ppbV		95
83) m+p-xylene	17.02	91	241938	2.254	ppbV		95
84) bromoform	17.09	173	40848	1.013	ppbV		98
85) styrene	17.35	104	88069	1.106	ppbV		99
86) 1,1,2,2-tetrachloroethane	17.45	83	80241	1.133	ppbV		99
87) o-xylene	17.45	91	121321	1.149	ppbV		93
88) 1,2,3-trichloropropane	17.57	75	63623	1.106	ppbV	#	95
89) nonane	17.65	43	94423	1.114	ppbV		96
91) isopropylbenzene	17.96	105	152804	1.134	ppbV		100
92) bromobenzene	18.04	77	89180	1.133	ppbV		97
93) 2-chlorotoluene	18.37	126	45501	1.121	ppbV		82
94) n-propylbenzene	18.40	120	53821	1.127	ppbV		86
95) 4-chlorotoluene	18.43	126	44869	1.109	ppbV		98
96) 4-ethyl toluene	18.52	105	162046	1.198	ppbV		99
97) 1,3,5-trimethylbenzene	18.58	105	136855	1.167	ppbV		98
98) tert-butylbenzene	18.93	119	152511	1.169	ppbV		99
99) 1,2,4-trimethylbenzene	18.93	105	137136	1.247	ppbV		98
100) decane	19.02	57	135604	1.132	ppbV		96
101) Benzyl Chloride	19.06	91	88571	0.944	ppbV		96
102) 1,3-dichlorobenzene	19.07	146	76508	1.144	ppbV	#	92
103) 1,4-dichlorobenzene	19.13	146	77553	1.213	ppbV	#	90
104) sec-butylbenzene	19.16	105	198949	1.170	ppbV		98
105) 1,2,3-trimethylbenzene	19.29	105	124337	1.190	ppbV		97
106) p-isopropyltoluene	19.29	119	186120	1.195	ppbV		98
107) 1,2-dichlorobenzene	19.42	146	72593	1.186	ppbV		97
108) n-butylbenzene	19.65	91	159658	1.101	ppbV		96
109) indan	19.47	117	140605	1.141	ppbV		100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423663.D
Acq On : 22 Sep 2022 12:49 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD1.0
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:20:18 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
110) indene	19.55	115	95199	0.978	ppbV		100
111) 1,2-dibromo-3-chloropr...	19.80	75	32501	1.034	ppbV	#	89
112) undecane	20.07	57	149229	1.128	ppbV		98
113) 1,2,4,5-tetramethylben...	20.29	119	241492	1.249	ppbV		97
114) dodecane	20.97	57	140059	0.991	ppbV		95
115) 1,2,4-trichlorobenzene	20.92	180	60861	0.972	ppbV		98
116) naphthalene	21.02	128	163610	0.967	ppbV		99
117) 1,2,3-trichlorobenzene	21.27	180	60024	0.905	ppbV		97
118) benzothiophene	21.09	134	255426	0.998	ppbV	#	97
119) hexachlorobutadiene	21.34	225	62647	1.136	ppbV		94
120) 2-methylnaphthalene	22.13	142	23183	0.711	ppbV		98
121) 1-methylnaphthalene	22.32	142	47606	0.945	ppbV		98

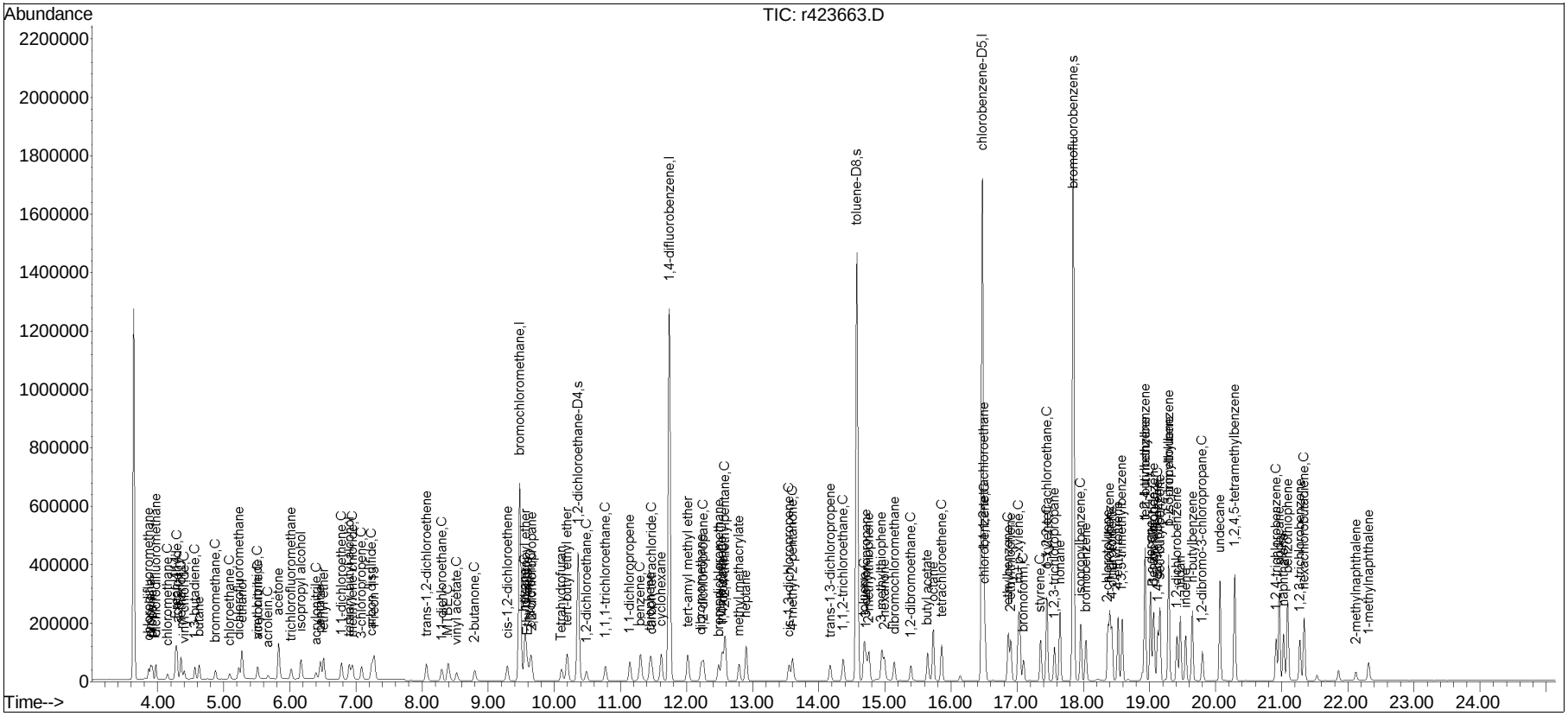
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423663.D
Acq On : 22 Sep 2022 12:49 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD1.0
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:20:18 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

Sub List : Default - All compounds listed22\09\0921T_I\r423665.D

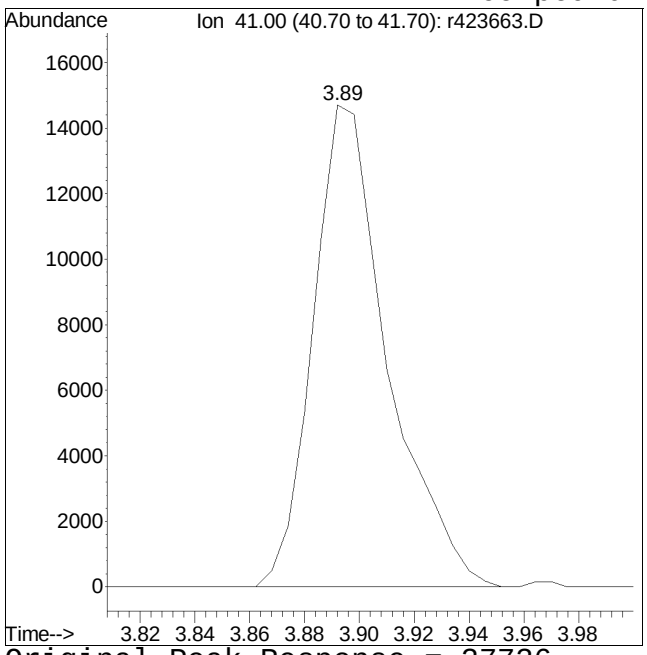


Manual Integration/Negative Proof Report

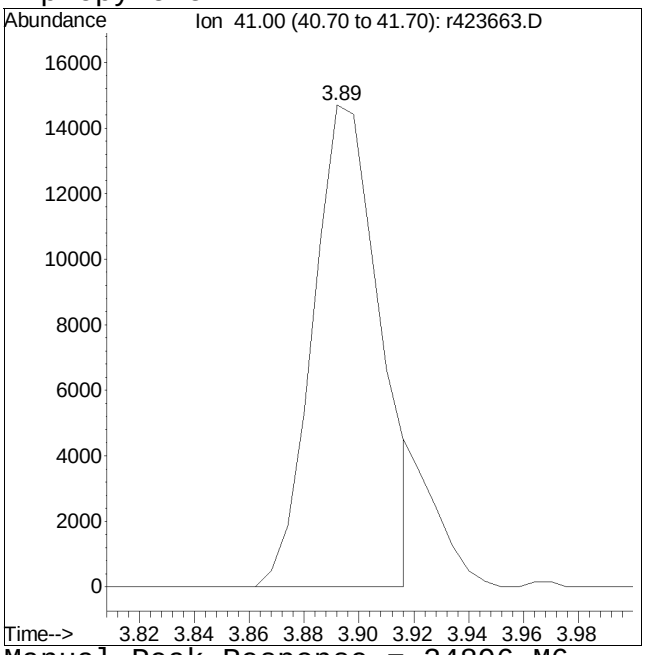
Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423663.D
Date Inj'd : 9/22/2020 0:2: 9
Sample : ITO15-SIMSTD1.0

Method : TFS4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 9:40 am

Compound #3: propylene



Original Peak Response = 27736



Manual Peak Response = 24896 M6

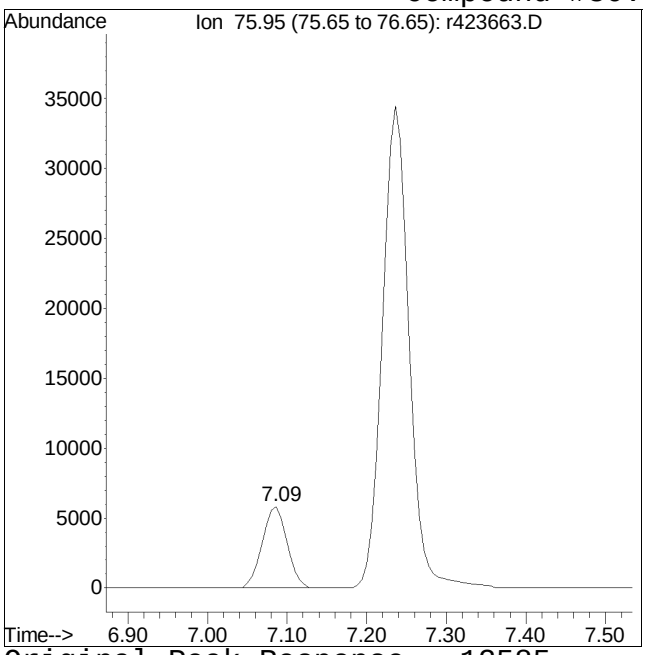
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

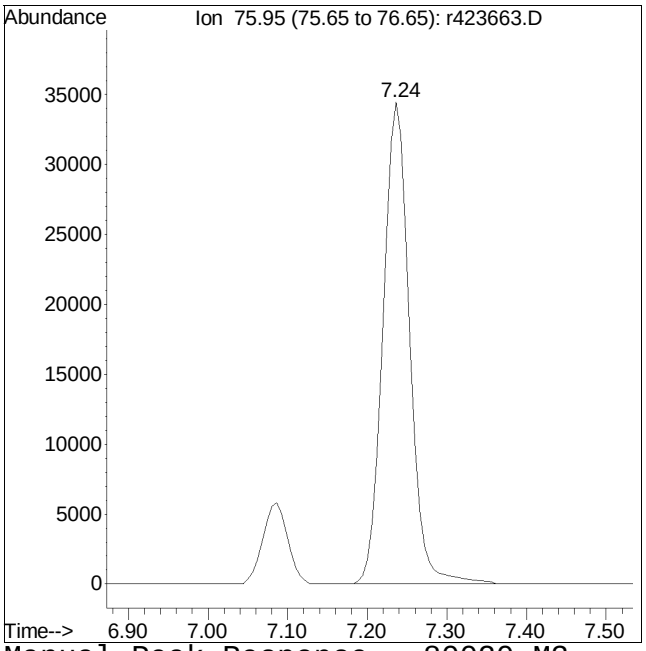
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423663.D
Date Inj'd : 9/22/2020 0:2: 9
Sample : ITO15-SIMSTD1.0

Method : TFS4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 9:40 am

Compound #30: carbon disulfide





Original Peak Response = 12585 Manual Peak Response = 80020 M3

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423664.D
Acq On : 22 Sep 2022 1:29 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD5.0
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:22:34 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.47	49	470846	10.000	ppbV	0.00
Standard Area = 486424			Recovery = 96.80%			
43) 1,4-difluorobenzene	11.73	114	1343117	10.000	ppbV	0.00
Standard Area = 1380317			Recovery = 97.30%			
67) chlorobenzene-D5	16.48	54	239421	10.000	ppbV	0.00
Standard Area = 245056			Recovery = 97.70%			
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.36	65	346706	10.039	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.39%			
69) toluene-D8	14.57	98	1284413	9.910	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.10%			
90) bromofluorobenzene	17.85	95	938643	9.925	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.25%			
Target Compounds						Qvalue
2) chlorodifluoromethane	3.86	51	165392	5.206	ppbV	95
3) propylene	3.89	41	107014M6	5.122	ppbV	
4) propane	3.92	29	135869	5.166	ppbV #	92
5) dichlorodifluoromethane	3.97	85	204697	5.394	ppbV	99
6) chloromethane	4.14	50	83396	5.131	ppbV	99
7) Freon-114	4.27	85	239488	5.307	ppbV	97
8) methanol	4.34	31	242740	25.621	ppbV	96
9) vinyl chloride	4.40	62	127662	5.086	ppbV	100
10) 1,3-butadiene	4.56	54	93514	5.120	ppbV	87
11) butane	4.62	43	172530	5.117	ppbV	98
12) acetaldehyde	4.28	29	224626	26.456	ppbV	96
13) bromomethane	4.87	94	101589	5.155	ppbV	100
14) chloroethane	5.09	64	65781	4.993	ppbV	99
15) ethanol	5.26	31	361354	24.928	ppbV	98
16) dichlorofluoromethane	5.22	67	192918	5.101	ppbV	100
17) vinyl bromide	5.51	106	85259	5.087	ppbV	99
18) acrolein	5.66	56	56689	5.085	ppbV #	93
19) acetone	5.82	43	604623	25.475	ppbV	92
20) acetonitrile	5.50	41	102461	5.089	ppbV	91
21) trichlorofluoromethane	6.02	101	151337	5.074	ppbV	100
22) isopropyl alcohol	6.15	45	388224	12.779	ppbV	99
23) acrylonitrile	6.39	53	90211	4.982	ppbV	97
24) pentane	6.46	43	235394M6	5.822	ppbV	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423664.D
Acq On : 22 Sep 2022 1:29 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD5.0
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:22:34 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) ethyl ether	6.50	31	234421	5.811	ppbV		94
26) 1,1-dichloroethene	6.78	61	201027	6.425	ppbV		87
27) tertiary butyl alcohol	6.87	59	293281	4.994	ppbV	#	93
28) methylene chloride	6.94	49	139821	5.039	ppbV		99
29) 3-chloropropene	7.08	41	185713	5.004	ppbV		93
30) carbon disulfide	7.23	76	361186	4.999	ppbV		96
31) Freon 113	7.27	101	211409	5.054	ppbV		96
32) trans-1,2-dichloroethene	8.06	61	200973	5.043	ppbV		96
33) 1,1-dichloroethane	8.29	63	244161	5.019	ppbV		100
34) MTBE	8.38	73	322087	5.027	ppbV		98
35) vinyl acetate	8.52	43	260291	4.992	ppbV		96
36) 2-butanone	8.78	43	257735	4.923	ppbV		96
37) cis-1,2-dichloroethene	9.28	61	184547	4.955	ppbV		95
38) Ethyl Acetate	9.59	61	50680	5.144	ppbV		95
39) chloroform	9.64	83	218199	5.023	ppbV		98
40) Tetrahydrofuran	10.09	42	163990	4.944	ppbV		92
41) 2,2-dichloropropane	9.65	77	183775	5.030	ppbV	#	89
42) 1,2-dichloroethane	10.48	62	147374	5.070	ppbV		96
44) hexane	9.55	57	261187	5.001	ppbV		88
45) diisopropyl ether	9.56	87	140876	4.971	ppbV		90
46) tert-butyl ethyl ether	10.18	59	491814	5.017	ppbV		96
48) 1,1,1-trichloroethane	10.77	97	190810	4.977	ppbV		95
49) 1,1-dichloropropene	11.14	75	188289	4.968	ppbV	#	89
50) benzene	11.30	78	434347	4.972	ppbV		98
51) thiophene	11.45	84	290089	4.982	ppbV		96
52) carbon tetrachloride	11.47	117	165938	4.950	ppbV		99
53) cyclohexane	11.61	56	272121	4.931	ppbV		96
54) tert-amyl methyl ether	12.01	73	394886	4.967	ppbV		96
55) dibromomethane	12.22	93	129246	4.977	ppbV		97
56) 1,2-dichloropropane	12.25	63	158655	4.962	ppbV		98
57) bromodichloromethane	12.48	83	223553	4.948	ppbV		99
58) 1,4-dioxane	12.53	88	93752	4.919	ppbV		97
59) trichloroethene	12.53	130	172767	4.990	ppbV		97
60) 2,2,4-trimethylpentane	12.58	57	837325	5.126	ppbV		96
61) methyl methacrylate	12.79	41	179150	4.951	ppbV		90
62) heptane	12.90	43	274336	5.017	ppbV		96
63) cis-1,3-dichloropropene	13.55	75	209126	4.908	ppbV	#	90
64) 4-methyl-2-pentanone	13.59	43	307772	4.953	ppbV		96
65) trans-1,3-dichloropropene	14.17	75	199733	4.959	ppbV	#	92
66) 1,1,2-trichloroethane	14.37	97	150968	4.941	ppbV		95

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423664.D
Acq On : 22 Sep 2022 1:29 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD5.0
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:22:34 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
68) toluene	14.68	91	529455	4.979	ppbV		98
70) 2-methylthiophene	14.76	97	419672	4.928	ppbV		99
71) 1,3-dichloropropane	14.72	76	239096	4.906	ppbV		88
72) 2-hexanone	14.98	43	280401	4.910	ppbV		94
73) 3-methylthiophene	14.95	97	434995	4.969	ppbV		100
74) dibromochloromethane	15.14	129	202796	4.911	ppbV		99
75) 1,2-dibromoethane	15.39	107	210007	4.930	ppbV		99
76) butyl acetate	15.64	73	72104	4.871	ppbV		81
77) octane	15.73	85	226888	4.972	ppbV		89
78) tetrachloroethene	15.86	166	216236	5.007	ppbV		95
79) 1,1,1,2-tetrachloroethane	16.50	131	168569	4.977	ppbV		98
80) chlorobenzene	16.51	112	378504	4.975	ppbV		100
81) ethylbenzene	16.87	91	644623	4.963	ppbV		94
82) 2-ethylthiophene	16.90	97	505856	5.036	ppbV		95
83) m+p-xylene	17.02	91	1066846	9.999	ppbV		95
84) bromoform	17.09	173	196931	4.914	ppbV		99
85) styrene	17.35	104	397950	5.026	ppbV		100
86) 1,1,2,2-tetrachloroethane	17.45	83	350744	4.984	ppbV		100
87) o-xylene	17.45	91	535761	5.105	ppbV		94
88) 1,2,3-trichloropropane	17.57	75	286475	5.009	ppbV	#	96
89) nonane	17.65	43	426613	5.064	ppbV		95
91) isopropylbenzene	17.97	105	673825	5.029	ppbV		98
92) bromobenzene	18.04	77	392447	5.017	ppbV		98
93) 2-chlorotoluene	18.38	126	201290	4.988	ppbV		96
94) n-propylbenzene	18.40	120	236750	4.987	ppbV		85
95) 4-chlorotoluene	18.43	126	197290	4.907	ppbV		97
96) 4-ethyl toluene	18.52	105	679084	5.048	ppbV		99
97) 1,3,5-trimethylbenzene	18.59	105	581372	4.985	ppbV		98
98) tert-butylbenzene	18.93	119	657999	5.072	ppbV		100
99) 1,2,4-trimethylbenzene	18.93	105	571619	5.227	ppbV		94
100) decane	19.02	57	601393	5.048	ppbV		97
101) Benzyl Chloride	19.06	91	444383	4.764	ppbV		98
102) 1,3-dichlorobenzene	19.07	146	324482	4.879	ppbV		95
103) 1,4-dichlorobenzene	19.13	146	326683	5.138	ppbV	#	90
104) sec-butylbenzene	19.16	105	868790	5.137	ppbV		99
105) 1,2,3-trimethylbenzene	19.29	105	542251	5.222	ppbV		96
106) p-isopropyltoluene	19.29	119	809401	5.229	ppbV		100
107) 1,2-dichlorobenzene	19.42	146	303451	4.986	ppbV		97
108) n-butylbenzene	19.65	91	721323	5.004	ppbV		96
109) indan	19.47	117	621026	5.067	ppbV		99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423664.D
Acq On : 22 Sep 2022 1:29 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD5.0
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:22:34 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
110) indene	19.55	115	479785	4.956	ppbV		98
111) 1,2-dibromo-3-chloropr...	19.80	75	155092	4.962	ppbV	#	92
112) undecane	20.07	57	669952	5.093	ppbV		98
113) 1,2,4,5-tetramethylben...	20.29	119	996601	5.185	ppbV		99
114) dodecane	20.97	57	721233	5.131	ppbV		94
115) 1,2,4-trichlorobenzene	20.92	180	303944	4.883	ppbV		98
116) naphthalene	21.02	128	808020	4.803	ppbV		98
117) 1,2,3-trichlorobenzene	21.27	180	323706	4.912	ppbV		96
118) benzothiophene	21.09	134	1218683	4.792	ppbV		99
119) hexachlorobutadiene	21.34	225	289226	5.277	ppbV		96
120) 2-methylnaphthalene	22.12	142	145387	4.488	ppbV		98
121) 1-methylnaphthalene	22.32	142	233397	4.659	ppbV		100

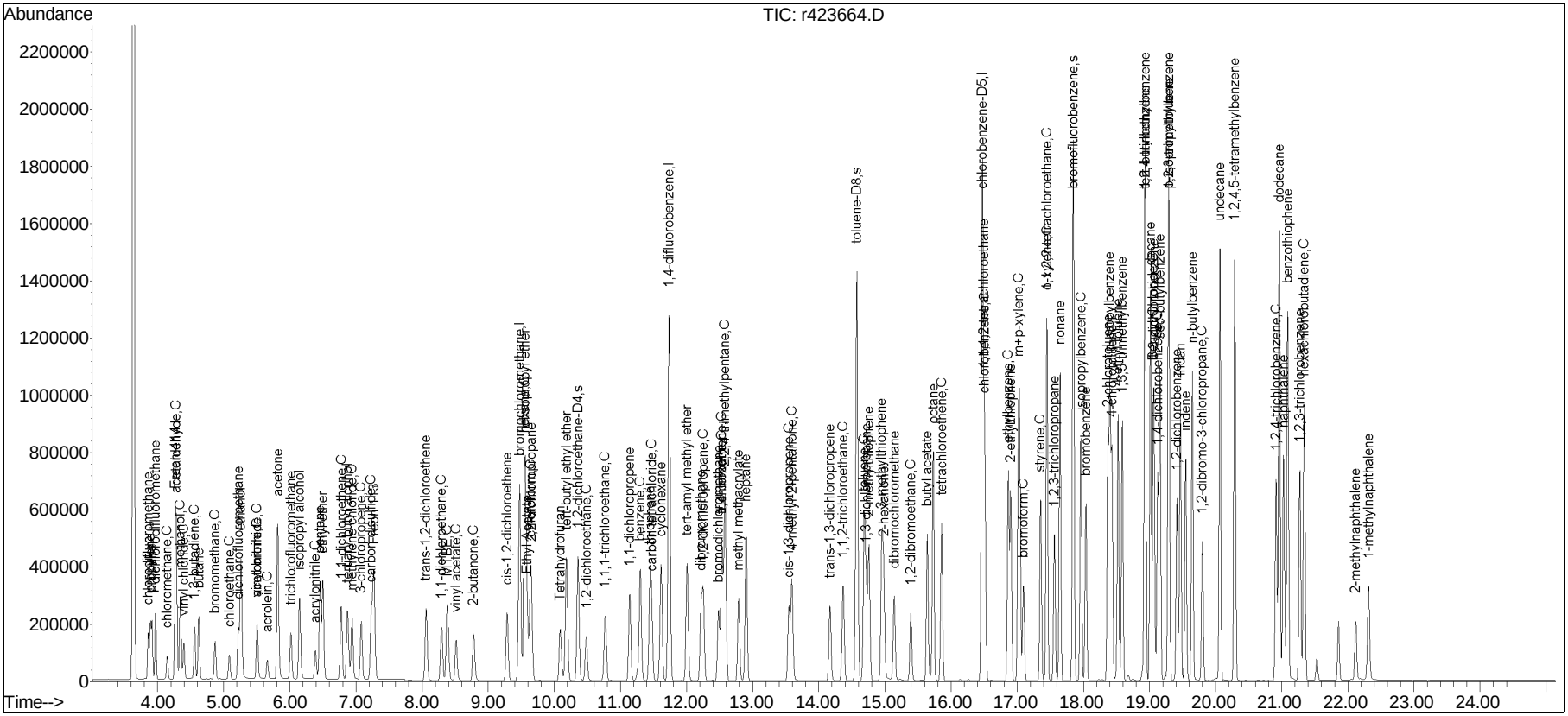
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423664.D
Acq On : 22 Sep 2022 1:29 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD5.0
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:22:34 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

Sub List : Default - All compounds listed22\09\0921T_I\r423665.D

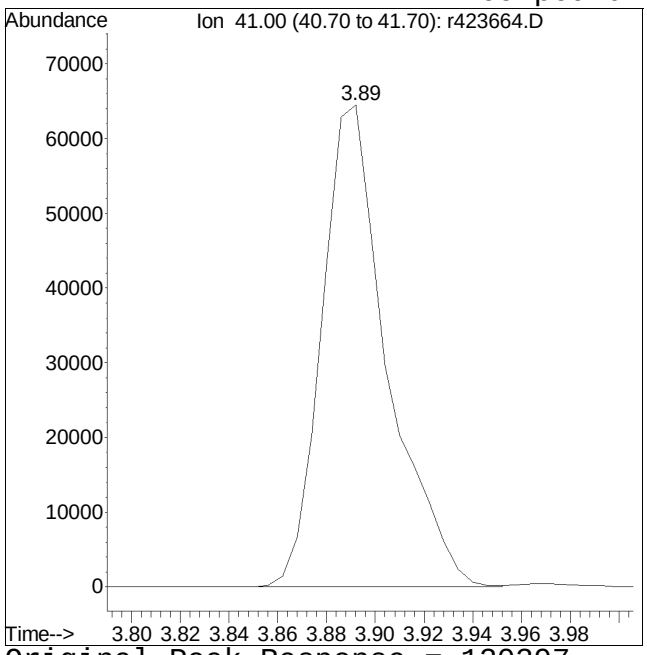


Manual Integration/Negative Proof Report

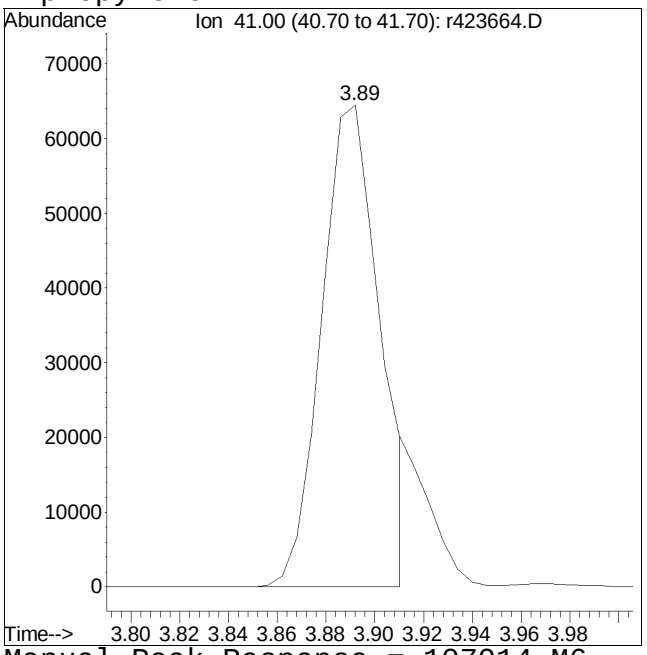
Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423664.D
Date Inj'd : 9/22/2020 0:1: 9
Sample : ITO15-SIMSTD5.0

Method : TFS4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 9:40 am

Compound #3: propylene



Original Peak Response = 120397



Manual Peak Response = 107014 M6

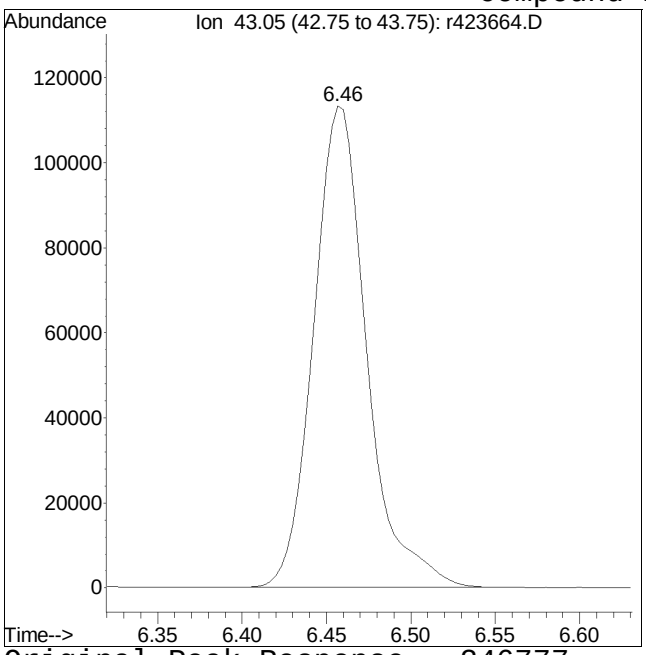
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

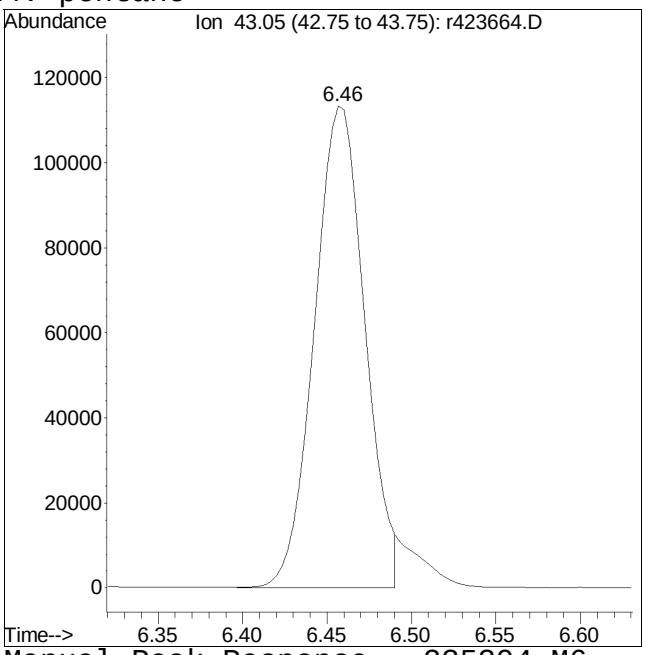
Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423664.D
Date Inj'd : 9/22/2020 0:1: 9
Sample : ITO15-SIMSTD5.0

Method : TFS4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 9:40 am

Compound #24: pentane



Original Peak Response = 246777



Manual Peak Response = 235394 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423665.D
Acq On : 22 Sep 2022 2:10 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD010
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:12:59 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Aug 22 10:40:04 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.48	49	486424	10.000	ppbV	0.02
Standard Area = 486424			Recovery = 100.00%			
43) 1,4-difluorobenzene	11.74	114	1380317	10.000	ppbV	0.02
Standard Area = 1380317			Recovery = 100.00%			
67) chlorobenzene-D5	16.48	54	245056	10.000	ppbV	0.02
Standard Area = 245056			Recovery = 100.00%			
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.37	65	354930	8.821	ppbV	0.03
Spiked Amount 10.000	Range 70 - 130		Recovery = 88.21%			
69) toluene-D8	14.57	98	1326557	9.601	ppbV	0.02
Spiked Amount 10.000	Range 70 - 130		Recovery = 96.01%			
90) bromofluorobenzene	17.85	95	967984	10.677	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 106.77%			
Target Compounds						Qvalue
2) chlorodifluoromethane	3.87	51	328211	9.863	ppbV	96
3) propylene	3.90	41	215826M6	11.984	ppbV	
4) propane	3.92	29	271683	10.019	ppbV #	89
5) dichlorodifluoromethane	3.98	85	392078	10.322	ppbV	100
6) chloromethane	4.16	50	167908	10.556	ppbV	99
7) Freon-114	4.28	85	466216	10.873	ppbV	99
8) methanol	4.35	31	489394	43.547	ppbV	98
9) vinyl chloride	4.41	62	259332	11.800	ppbV	100
10) 1,3-butadiene	4.57	54	188691	10.494	ppbV	87
11) butane	4.63	43	348330	11.598	ppbV	98
12) acetaldehyde	4.29	29	438580	53.075	ppbV	94
13) bromomethane	4.88	94	203583	11.451	ppbV	99
14) chloroethane	5.09	64	136105	12.017	ppbV	99
15) ethanol	5.27	31	748775	55.168	ppbV	98
16) dichlorofluoromethane	5.23	67	390671	11.560	ppbV	99
17) vinyl bromide	5.51	106	173152	10.724	ppbV	99
18) acrolein	5.67	56	115161	11.342	ppbV	97
19) acetone	5.82	43	1225957	61.124	ppbV	93
20) acetonitrile	5.51	41	207988	11.696	ppbV	96
21) trichlorofluoromethane	6.02	101	308130	11.767	ppbV	98
22) isopropyl alcohol	6.15	45	784630	28.435	ppbV	99
23) acrylonitrile	6.39	53	187047	10.601	ppbV	98
24) pentane	6.46	43	404100M6	11.766	ppbV	

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423665.D
Acq On : 22 Sep 2022 2:10 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD010
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:12:59 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Aug 22 10:40:04 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) ethyl ether	6.50	31	416763	13.421	ppbV		98
26) 1,1-dichloroethene	6.79	61	323242	11.832	ppbV		96
27) tertiary butyl alcohol	6.87	59	606720	14.906	ppbV	#	94
28) methylene chloride	6.95	49	286658	13.763	ppbV		98
29) 3-chloropropene	7.09	41	383380	13.764	ppbV		94
30) carbon disulfide	7.24	76	746390	9.976	ppbV		97
31) Freon 113	7.28	101	432109	10.551	ppbV		97
32) trans-1,2-dichloroethene	8.07	61	411684	11.119	ppbV		96
33) 1,1-dichloroethane	8.30	63	502522	11.440	ppbV		100
34) MTBE	8.38	73	661892	10.224	ppbV		98
35) vinyl acetate	8.52	43	538635	11.052	ppbV		97
36) 2-butanone	8.78	43	540812	11.165	ppbV		95
37) cis-1,2-dichloroethene	9.29	61	384773	11.639	ppbV		94
38) Ethyl Acetate	9.59	61	101779	10.984	ppbV		84
39) chloroform	9.64	83	448813	10.525	ppbV		99
40) Tetrahydrofuran	10.09	42	342648	11.316	ppbV		93
41) 2,2-dichloropropane	9.66	77	377478	10.455	ppbV	#	89
42) 1,2-dichloroethane	10.49	62	300295	11.322	ppbV		97
44) hexane	9.56	57	536697	10.951	ppbV	#	80
45) diisopropyl ether	9.57	87	291229	10.696	ppbV		89
46) tert-butyl ethyl ether	10.19	59	1007522	11.334	ppbV		97
48) 1,1,1-trichloroethane	10.78	97	393984	10.698	ppbV		96
49) 1,1-dichloropropene	11.15	75	389532	10.213	ppbV	#	89
50) benzene	11.31	78	897864	10.258	ppbV		98
51) thiophene	11.45	84	598458	10.873	ppbV		95
52) carbon tetrachloride	11.48	117	344500	10.386	ppbV		99
53) cyclohexane	11.62	56	567160	10.703	ppbV		96
54) tert-amyl methyl ether	12.01	73	816986	10.368	ppbV		96
55) dibromomethane	12.23	93	266853	11.024	ppbV		95
56) 1,2-dichloropropane	12.26	63	328604	11.301	ppbV		98
57) bromodichloromethane	12.49	83	464362	9.932	ppbV		99
58) 1,4-dioxane	12.53	88	195877	10.156	ppbV		99
59) trichloroethene	12.54	130	355846	11.103	ppbV		97
60) 2,2,4-trimethylpentane	12.59	57	1678728M6	10.687	ppbV		
61) methyl methacrylate	12.79	41	371904	12.215	ppbV		91
62) heptane	12.91	43	561938	10.939	ppbV		95
63) cis-1,3-dichloropropene	13.55	75	437889	10.173	ppbV	#	92
64) 4-methyl-2-pentanone	13.59	43	638549	11.167	ppbV		96
65) trans-1,3-dichloropropene	14.18	75	413933	10.315	ppbV	#	91
66) 1,1,2-trichloroethane	14.38	97	313978	10.371	ppbV		95

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423665.D
Acq On : 22 Sep 2022 2:10 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD010
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:12:59 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Aug 22 10:40:04 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
68) toluene	14.69	91	1088337	11.128	ppbV		99
70) 2-methylthiophene	14.76	97	871649	11.052	ppbV		98
71) 1,3-dichloropropane	14.73	76	498843	10.198	ppbV		88
72) 2-hexanone	14.98	43	584465	10.843	ppbV		95
73) 3-methylthiophene	14.96	97	895984	11.133	ppbV		100
74) dibromochloromethane	15.14	129	422698	10.326	ppbV		100
75) 1,2-dibromoethane	15.39	107	435994	9.748	ppbV		100
76) butyl acetate	15.64	73	151519	10.356	ppbV		87
77) octane	15.73	85	467083	10.685	ppbV		90
78) tetrachloroethene	15.86	166	442040	10.565	ppbV		97
79) 1,1,1,2-tetrachloroethane	16.50	131	346692	11.097	ppbV		98
80) chlorobenzene	16.52	112	778709	10.139	ppbV		99
81) ethylbenzene	16.87	91	1329300	10.924	ppbV		95
82) 2-ethylthiophene	16.91	97	1028183	11.021	ppbV		96
83) m+p-xylene	17.03	91	2184085	22.302	ppbV		95
84) bromoform	17.10	173	410176	10.199	ppbV		99
85) styrene	17.36	104	810404	9.865	ppbV		99
86) 1,1,2,2-tetrachloroethane	17.45	83	720358	10.621	ppbV		99
87) o-xylene	17.45	91	1074148	11.255	ppbV		94
88) 1,2,3-trichloropropane	17.57	75	585408	10.118	ppbV	#	96
89) nonane	17.65	43	862228	11.141	ppbV		95
91) isopropylbenzene	17.97	105	1371426	10.138	ppbV		98
92) bromobenzene	18.04	77	800602	10.091	ppbV		99
93) 2-chlorotoluene	18.38	126	413069	10.711	ppbV		96
94) n-propylbenzene	18.40	120	485904	10.485	ppbV		87
95) 4-chlorotoluene	18.43	126	411562	10.973	ppbV		99
96) 4-ethyl toluene	18.52	105	1376842	9.788	ppbV		98
97) 1,3,5-trimethylbenzene	18.59	105	1193678	10.113	ppbV		98
98) tert-butylbenzene	18.93	119	1327965	10.691	ppbV		98
99) 1,2,4-trimethylbenzene	18.93	105	1119335	10.096	ppbV		92
100) decane	19.02	57	1219292	11.442	ppbV		97
101) Benzyl Chloride	19.06	91	954775	11.487	ppbV		98
102) 1,3-dichlorobenzene	19.07	146	680772	10.005	ppbV		95
103) 1,4-dichlorobenzene	19.13	146	650786M6	9.561	ppbV		
104) sec-butylbenzene	19.16	105	1730899	10.263	ppbV		98
105) 1,2,3-trimethylbenzene	19.29	105	1062803	10.390	ppbV		93
106) p-isopropyltoluene	19.29	119	1584214M6	10.609	ppbV		
107) 1,2-dichlorobenzene	19.42	146	622976	9.331	ppbV		99
108) n-butylbenzene	19.65	91	1475335	11.243	ppbV		99
109) indan	19.47	117	1254452	10.767	ppbV		100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423665.D
Acq On : 22 Sep 2022 2:10 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD010
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:12:59 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Aug 22 10:40:04 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.55	115	990854	10.825	ppbV	100
111) 1,2-dibromo-3-chloropr...	19.80	75	319888	10.018	ppbV #	94
112) undecane	20.07	57	1346301	11.547	ppbV	98
113) 1,2,4,5-tetramethylben...	20.29	119	1967484	10.199	ppbV	96
114) dodecane	20.97	57	1438796	11.899	ppbV	95
115) 1,2,4-trichlorobenzene	20.92	180	637043	11.239	ppbV	97
116) naphthalene	21.02	128	1721968	12.151	ppbV	98
117) 1,2,3-trichlorobenzene	21.27	180	674528	11.890	ppbV	95
118) benzothiophene	21.09	134	2603075	11.106	ppbV	100
119) hexachlorobutadiene	21.34	225	560973	10.859	ppbV	99
120) 2-methylnaphthalene	22.12	142	331567	9.069	ppbV	99
121) 1-methylnaphthalene	22.32	142	512805	8.773	ppbV	99

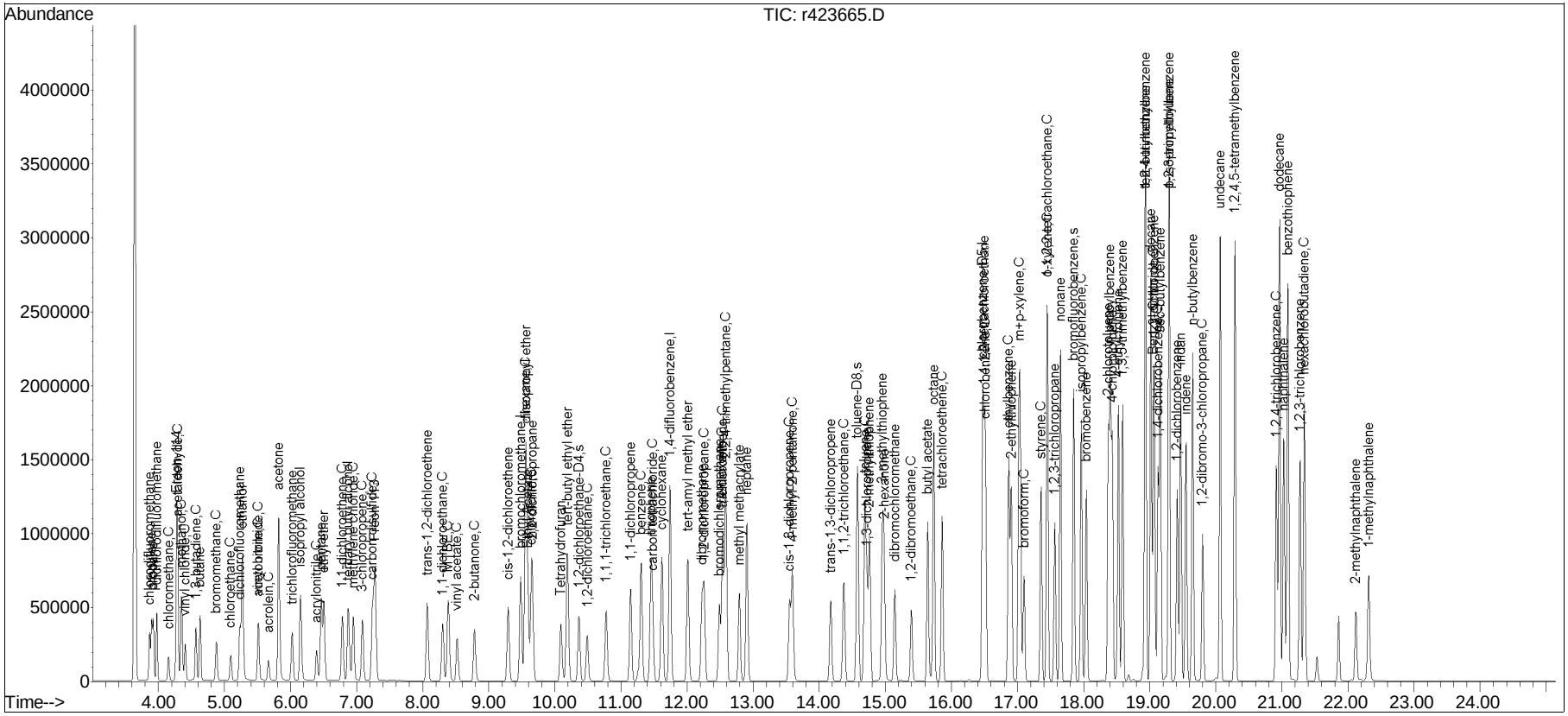
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423665.D
Acq On : 22 Sep 2022 2:10 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD010
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:12:59 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Mon Aug 22 10:40:04 2022
Response via : Initial Calibration

Sub List : Default - All compounds listed22\09\0921T_I\r423665.D

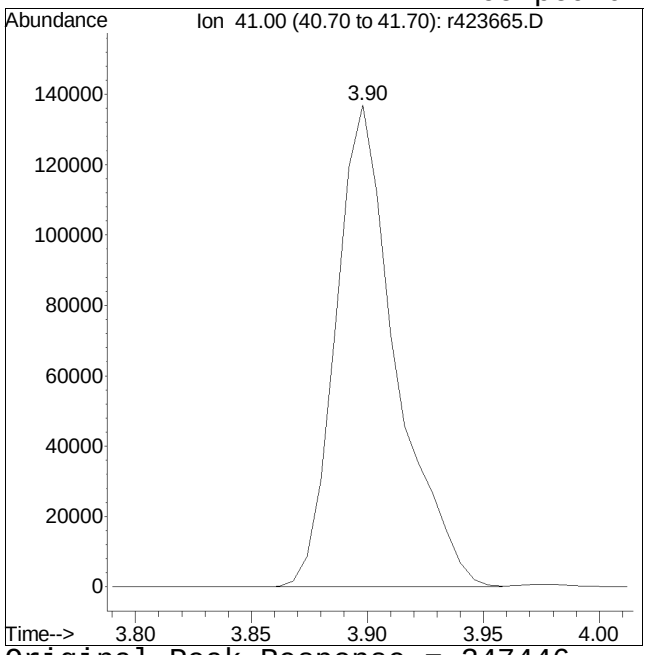


Manual Integration/Negative Proof Report

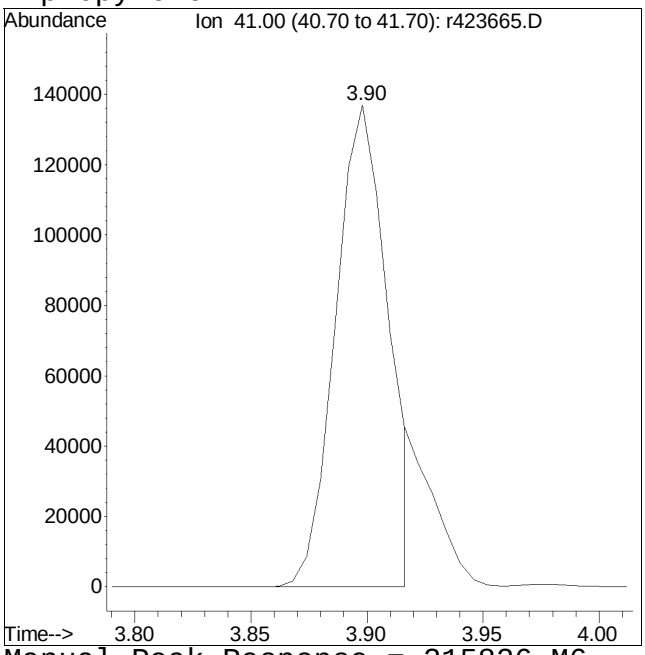
Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423665.D
Date Inj'd : 9/22/2020 0:2: 0
Sample : ITO15-SIMSTD010

Method : TFS4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 9:35 am

Compound #3: propylene



Original Peak Response = 247446



Manual Peak Response = 215826 M6

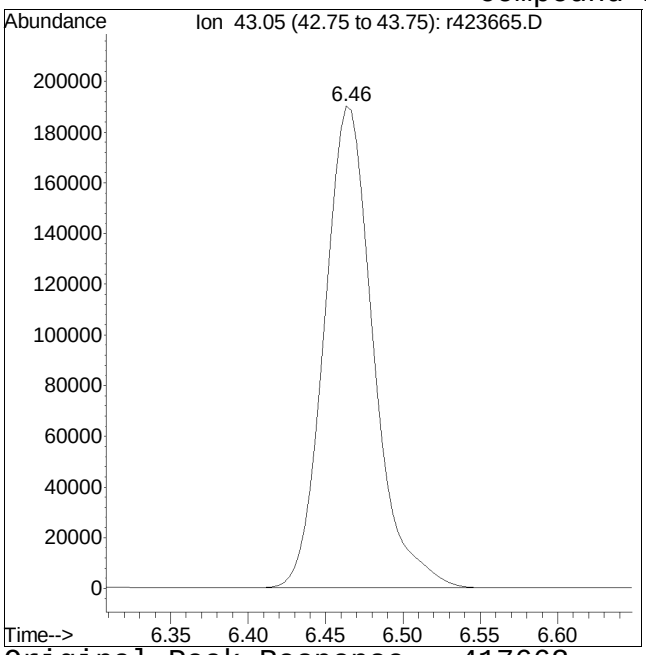
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

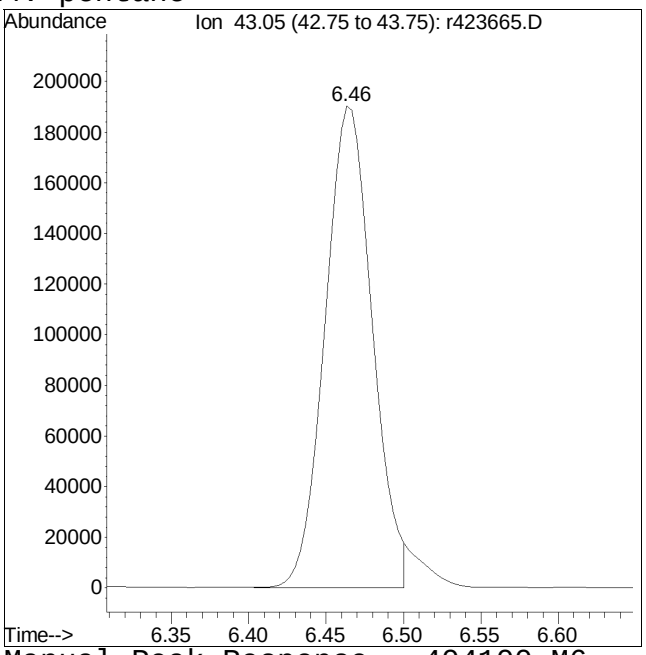
Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423665.D
Date Inj'd : 9/22/2020 0:2: 0
Sample : ITO15-SIMSTD010

Method : TFS4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 9:35 am

Compound #24: pentane



Original Peak Response = 417662



Manual Peak Response = 404100 M6

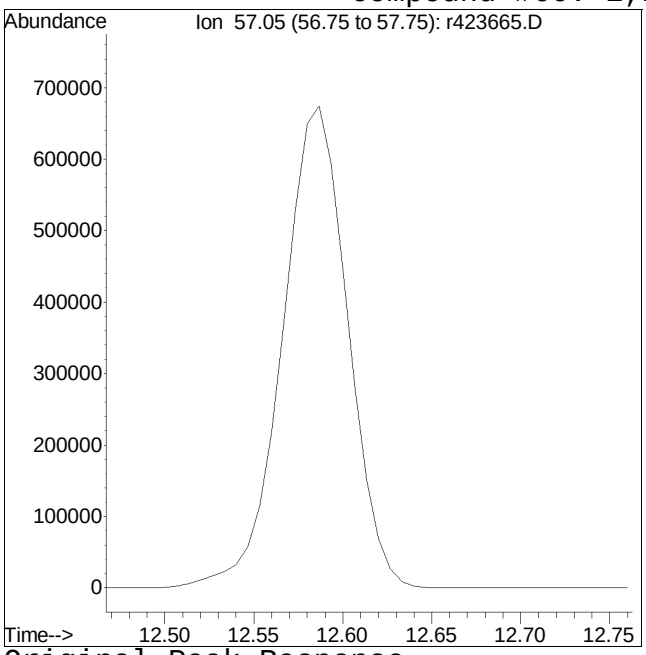
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

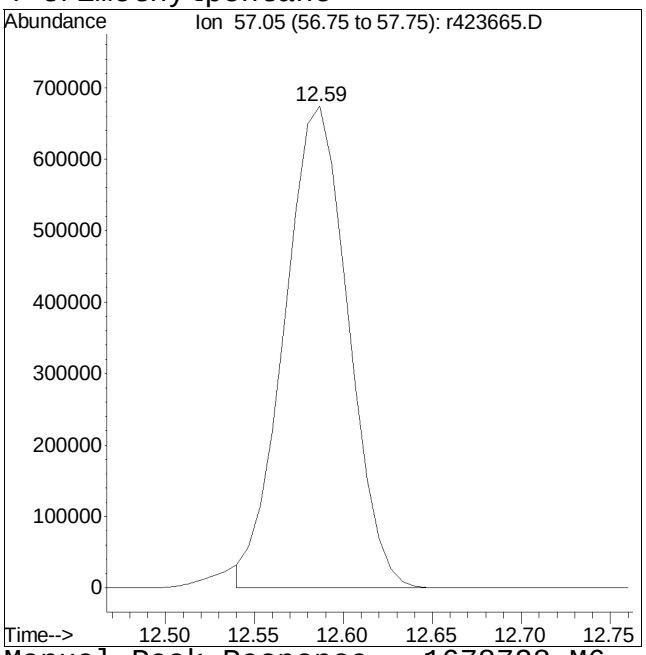
Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423665.D
Date Inj'd : 9/22/2020 0:2: 0
Sample : ITO15-SIMSTD010

Method : TFS4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 9:35 am

Compound #60: 2,2,4-trimethylpentane



Original Peak Response =



Manual Peak Response = 1678728 M6

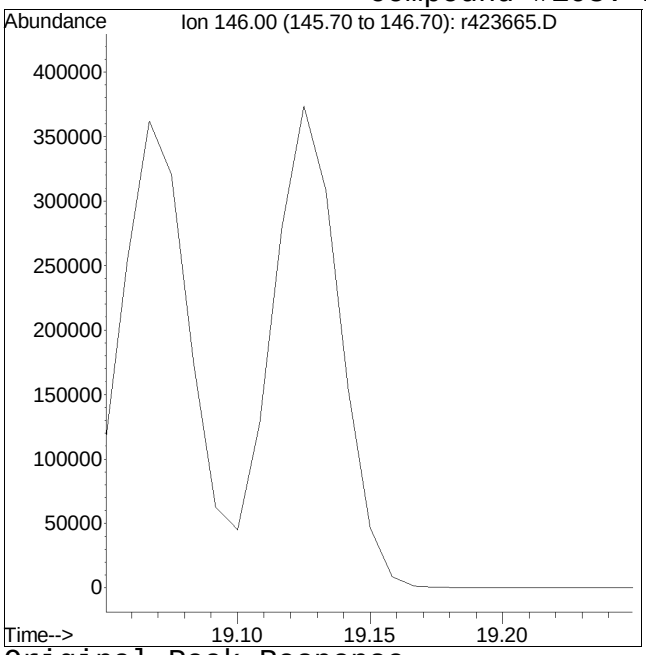
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

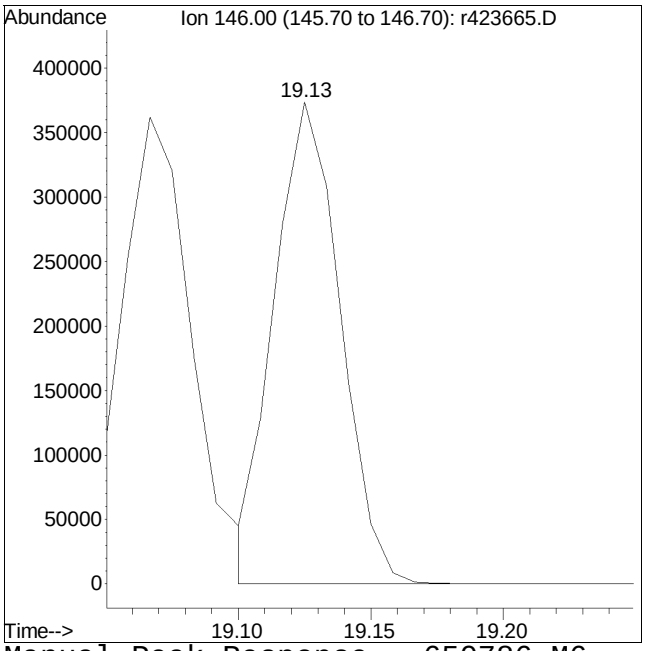
Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423665.D
Date Inj'd : 9/22/2020 0:2: 0
Sample : ITO15-SIMSTD010

Method : TFS4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 9:35 am

Compound #103: 1,4-dichlorobenzene



Original Peak Response =



Manual Peak Response = 650786 M6

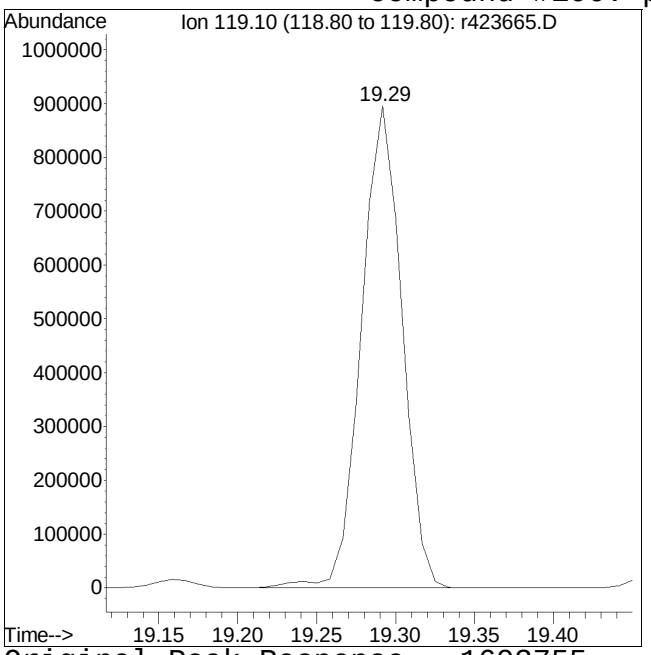
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

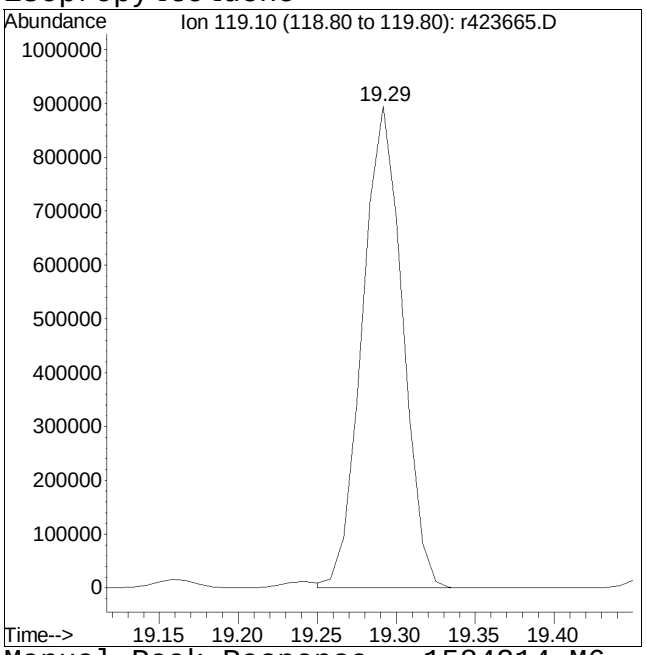
Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423665.D
Date Inj'd : 9/22/2020 0:2: 0
Sample : ITO15-SIMSTD010

Method : TFS4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 9:35 am

Compound #106: p-isopropyltoluene



Original Peak Response = 1603755



Manual Peak Response = 1584214 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423666.D
Acq On : 22 Sep 2022 2:48 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD020
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:24:03 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.48	49	488675	10.000	ppbV	0.00
Standard Area = 486424			Recovery = 100.46%			
43) 1,4-difluorobenzene	11.75	114	1369113	10.000	ppbV	0.00
Standard Area = 1380317			Recovery = 99.19%			
67) chlorobenzene-D5	16.48	54	239649	10.000	ppbV	0.00
Standard Area = 245056			Recovery = 97.79%			
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.37	65	352858	10.023	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.23%			
69) toluene-D8	14.58	98	1347124	10.384	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.84%			
90) bromofluorobenzene	17.85	95	971857	10.267	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.67%			
Target Compounds						Qvalue
2) chlorodifluoromethane	3.86	51	616248	18.689	ppbV	97
3) propylene	3.89	41	417464M6	19.254	ppbV	
4) propane	3.92	29	515148	18.874	ppbV #	87
5) dichlorodifluoromethane	3.97	85	699133	17.749	ppbV	100
6) chloromethane	4.15	50	313557	18.588	ppbV	98
7) Freon-114	4.27	85	834429	17.815	ppbV	98
8) methanol	4.35	31	924875	94.057	ppbV	98
9) vinyl chloride	4.40	62	490917	18.843	ppbV	100
10) 1,3-butadiene	4.56	54	365471	19.280	ppbV	85
11) butane	4.62	43	662785	18.940	ppbV	98
12) acetaldehyde	4.29	29	821544	93.228	ppbV	92
13) bromomethane	4.88	94	381483	18.652	ppbV	99
14) chloroethane	5.09	64	261098	19.095	ppbV	99
15) ethanol	5.27	31	1375604	91.434	ppbV	96
16) dichlorofluoromethane	5.23	67	792538	20.193	ppbV	99
17) vinyl bromide	5.51	106	351988	20.235	ppbV	99
18) acrolein	5.66	56	203699	17.607	ppbV	98
19) acetone	5.82	43	2319032	94.145	ppbV	93
20) acetonitrile	5.51	41	405312	19.398	ppbV	97
21) trichlorofluoromethane	6.02	101	579476	18.720	ppbV	98
22) isopropyl alcohol	6.15	45	1544281	48.977	ppbV	99
23) acrylonitrile	6.39	53	372513	19.824	ppbV	99
24) pentane	6.46	43	793412M6	18.909	ppbV	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423666.D
Acq On : 22 Sep 2022 2:48 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD020
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:24:03 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) ethyl ether	6.50	31	822094	19.635	ppbV		98
26) 1,1-dichloroethene	6.79	61	623373	19.196	ppbV		98
27) tertiary butyl alcohol	6.87	59	915894	15.026	ppbV		96
28) methylene chloride	6.95	49	426127	14.797	ppbV		98
29) 3-chloropropene	7.09	41	767142	19.918	ppbV		96
30) carbon disulfide	7.24	76	1528387	20.383	ppbV		98
31) Freon 113	7.27	101	840982	19.373	ppbV		98
32) trans-1,2-dichloroethene	8.07	61	845852	20.452	ppbV		97
33) 1,1-dichloroethane	8.30	63	985753	19.526	ppbV		99
34) MTBE	8.38	73	1369592	20.597	ppbV		98
35) vinyl acetate	8.53	43	968763	17.903	ppbV		96
36) 2-butanone	8.78	43	1115285	20.527	ppbV		95
37) cis-1,2-dichloroethene	9.29	61	750099	19.405	ppbV		96
38) Ethyl Acetate	9.59	61	194651	19.037	ppbV		81
39) chloroform	9.65	83	861600	19.109	ppbV		98
40) Tetrahydrofuran	10.08	42	717186	20.834	ppbV		93
41) 2,2-dichloropropane	9.66	77	732396	19.313	ppbV		90
42) 1,2-dichloroethane	10.49	62	585417	19.405	ppbV		97
44) hexane	9.56	57	1078582	20.261	ppbV		85
45) diisopropyl ether	9.57	87	580276	20.088	ppbV		92
46) tert-butyl ethyl ether	10.19	59	2003635	20.050	ppbV		97
48) 1,1,1-trichloroethane	10.78	97	759235	19.428	ppbV		96
49) 1,1-dichloropropene	11.15	75	775464	20.070	ppbV	#	91
50) benzene	11.31	78	1772488	19.903	ppbV		98
51) thiophene	11.45	84	1145460	19.297	ppbV		96
52) carbon tetrachloride	11.48	117	650670	19.042	ppbV		97
53) cyclohexane	11.62	56	1152750	20.491	ppbV		96
54) tert-amyl methyl ether	12.01	73	1640628	20.246	ppbV		96
55) dibromomethane	12.23	93	518699	19.597	ppbV		96
56) 1,2-dichloropropane	12.26	63	645389	19.801	ppbV		98
57) bromodichloromethane	12.49	83	939471	20.397	ppbV		100
58) 1,4-dioxane	12.53	88	426553	21.955	ppbV		100
59) trichloroethene	12.54	130	702318	19.898	ppbV		96
60) 2,2,4-trimethylpentane	12.59	57	3489864	20.959	ppbV		97
61) methyl methacrylate	12.79	41	701636	19.020	ppbV		91
62) heptane	12.91	43	1158227	20.780	ppbV		96
63) cis-1,3-dichloropropene	13.55	75	880893	20.281	ppbV		93
64) 4-methyl-2-pentanone	13.59	43	1324599	20.914	ppbV		97
65) trans-1,3-dichloropropene	14.18	75	822116	20.024	ppbV		92
66) 1,1,2-trichloroethane	14.38	97	629442	20.211	ppbV		96

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423666.D
Acq On : 22 Sep 2022 2:48 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD020
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:24:03 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.69	91	2150186	20.202	ppbV	100
70) 2-methylthiophene	14.77	97	1655545	19.422	ppbV	99
71) 1,3-dichloropropane	14.73	76	981888	20.127	ppbV	89
72) 2-hexanone	14.98	43	1206284	21.105	ppbV	96
73) 3-methylthiophene	14.96	97	1686816	19.251	ppbV	100
74) dibromochloromethane	15.14	129	867425	20.984	ppbV	99
75) 1,2-dibromoethane	15.39	107	855472	20.064	ppbV	100
76) butyl acetate	15.64	73	281286	18.983	ppbV	86
77) octane	15.73	85	924715	20.244	ppbV	93
78) tetrachloroethene	15.86	166	863805	19.982	ppbV	97
79) 1,1,1,2-tetrachloroethane	16.50	131	673997	19.879	ppbV	96
80) chlorobenzene	16.52	112	1532400	20.123	ppbV	99
81) ethylbenzene	16.87	91	2648922	20.377	ppbV	95
82) 2-ethylthiophene	16.91	97	1924809	19.143	ppbV	97
83) m+p-xylene	17.03	91	4242845	39.729	ppbV	96
84) bromoform	17.10	173	851124	21.218	ppbV	99
85) styrene	17.36	104	1645242	20.760	ppbV	100
86) 1,1,2,2-tetrachloroethane	17.45	83	1409547	20.009	ppbV	99
87) o-xylene	17.45	91	2060266	19.613	ppbV	96
88) 1,2,3-trichloropropane	17.57	75	1155613	20.186	ppbV	97
89) nonane	17.65	43	1677015	19.889	ppbV	96
91) isopropylbenzene	17.97	105	2611232	19.470	ppbV	96
92) bromobenzene	18.04	77	1556257	19.877	ppbV	100
93) 2-chlorotoluene	18.38	126	810052	20.053	ppbV	89
94) n-propylbenzene	18.40	120	961319	20.231	ppbV	94
95) 4-chlorotoluene	18.43	126	817205	20.304	ppbV	99
96) 4-ethyl toluene	18.52	105	2764021	20.528	ppbV	97
97) 1,3,5-trimethylbenzene	18.59	105	2321790	19.890	ppbV	95
98) tert-butylbenzene	18.93	119	2401829	18.495	ppbV	95
99) 1,2,4-trimethylbenzene	18.94	105	2124459	19.408	ppbV	95
100) decane	19.02	57	2311987	19.390	ppbV	96
101) Benzyl Chloride	19.06	91	1772680	18.985	ppbV	99
102) 1,3-dichlorobenzene	19.07	146	1361798	20.455	ppbV	98
103) 1,4-dichlorobenzene	19.13	146	1340631	21.065	ppbV	94
104) sec-butylbenzene	19.16	105	3277382	19.362	ppbV	96
105) 1,2,3-trimethylbenzene	19.29	105	1911271	18.389	ppbV	92
106) p-isopropyltoluene	19.29	119	2885407	18.624	ppbV	95
107) 1,2-dichlorobenzene	19.42	146	1271264	20.867	ppbV	99
108) n-butylbenzene	19.65	91	2777673	19.252	ppbV	98
109) indan	19.47	117	2357130	19.214	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423666.D
Acq On : 22 Sep 2022 2:48 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD020
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:24:03 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
110) indene	19.55	115	1722668	17.778	ppbV		99
111) 1,2-dibromo-3-chloropr...	19.80	75	602569	19.262	ppbV	#	91
112) undecane	20.07	57	2499848	18.987	ppbV		98
113) 1,2,4,5-tetramethylben...	20.29	119	3947289	20.515	ppbV		94
114) dodecane	20.97	57	2495382	17.735	ppbV		95
115) 1,2,4-trichlorobenzene	20.92	180	1247767	20.029	ppbV		95
116) naphthalene	21.03	128	3090153	18.350	ppbV		98
117) 1,2,3-trichlorobenzene	21.27	180	1222602	18.534	ppbV		94
118) benzothiophene	21.09	134	5377605	21.125	ppbV		99
119) hexachlorobutadiene	21.34	225	1006585	18.348	ppbV		98
120) 2-methylnaphthalene	22.12	142	713324	21.999	ppbV		98
121) 1-methylnaphthalene	22.32	142	1219850	24.324	ppbV		98

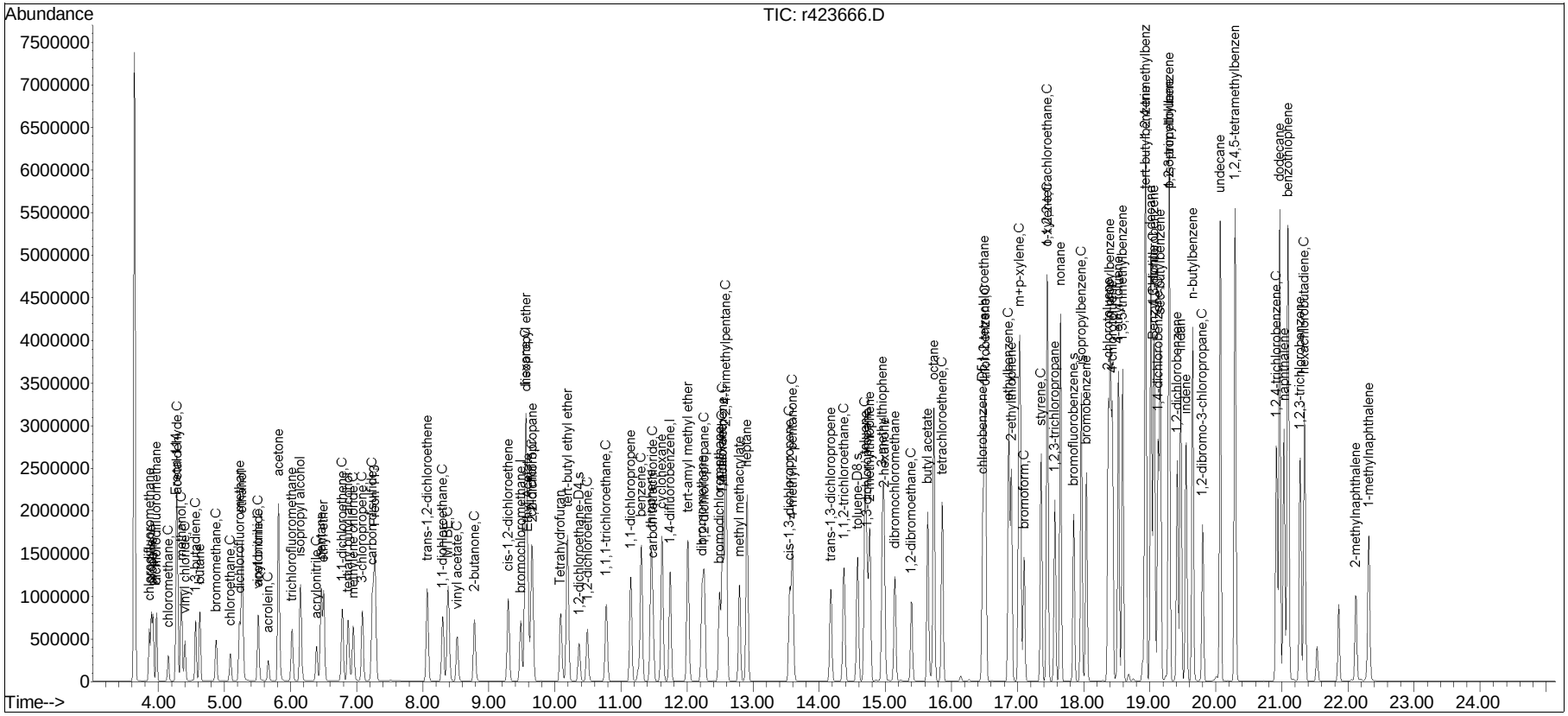
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423666.D
Acq On : 22 Sep 2022 2:48 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD020
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:24:03 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

Sub List : Default - All compounds listed22\09\0921T_I\r423665.D

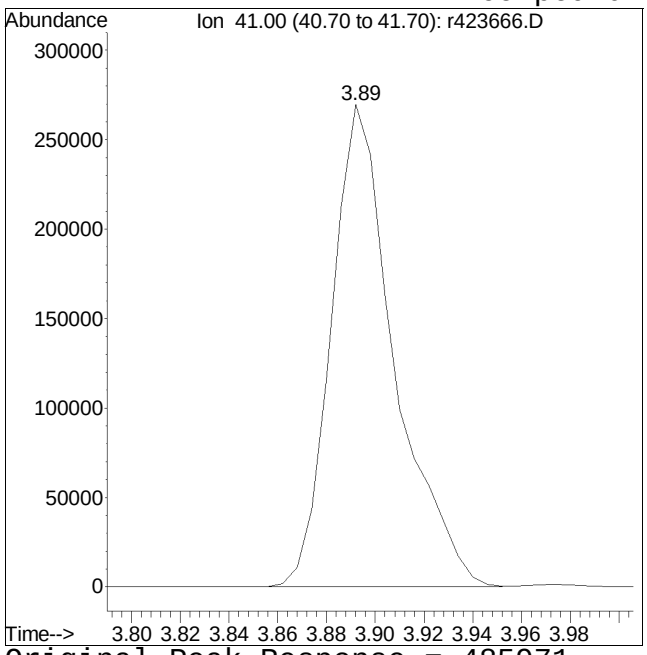


Manual Integration/Negative Proof Report

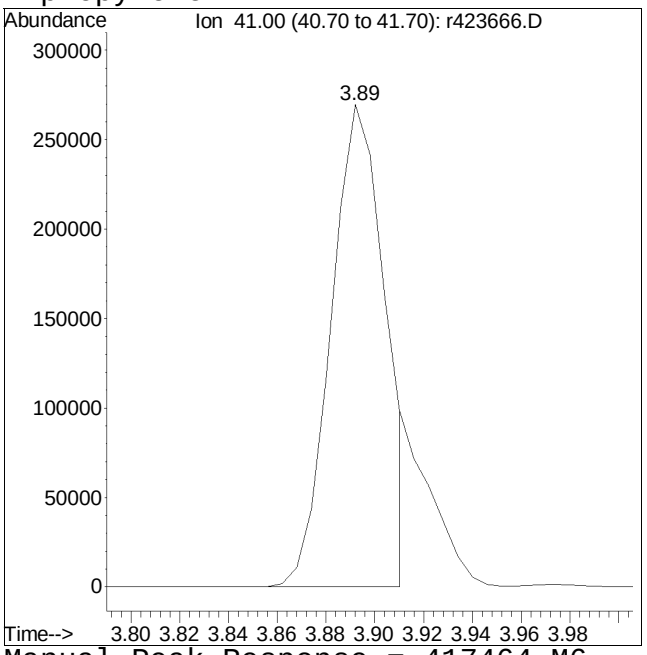
Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423666.D
Date Inj'd : 9/22/2020 0:2: 8
Sample : ITO15-SIMSTD020

Method : TFS4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 9:40 am

Compound #3: propylene



Original Peak Response = 485971



Manual Peak Response = 417464 M6

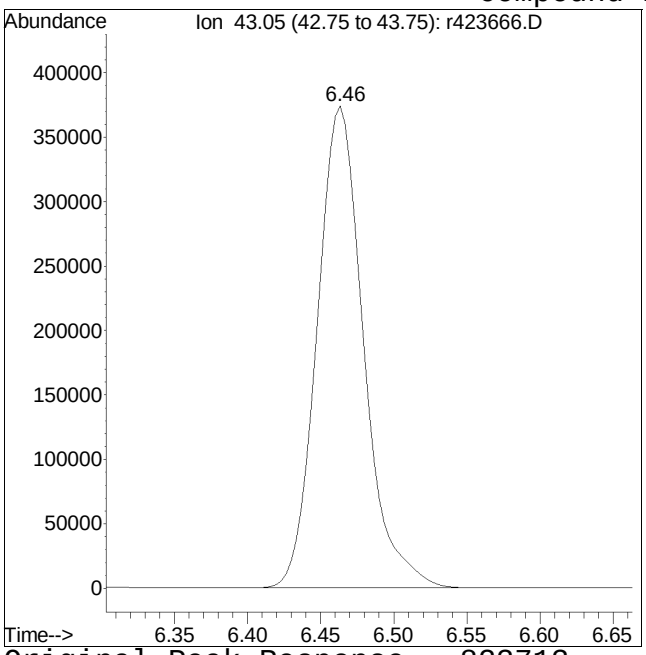
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

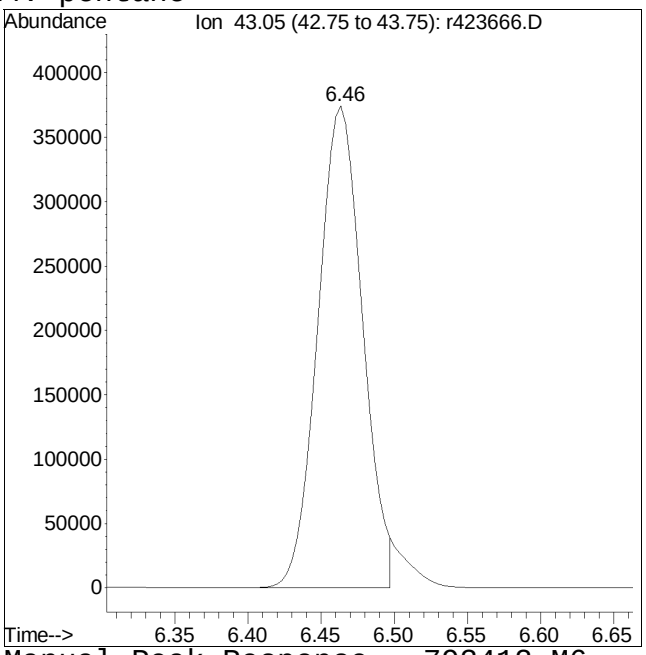
Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423666.D
Date Inj'd : 9/22/2020 0:2: 8
Sample : ITO15-SIMSTD020

Method : TFS4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 9:40 am

Compound #24: pentane



Original Peak Response = 823713



Manual Peak Response = 793412 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423667.D
Acq On : 22 Sep 2022 3:28 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD050
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:25:50 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.49	49	476356	10.000	ppbV	0.00
Standard Area = 486424			Recovery = 97.93%			
43) 1,4-difluorobenzene	11.75	114	1336900	10.000	ppbV	0.00
Standard Area = 1380317			Recovery = 96.85%			
67) chlorobenzene-D5	16.48	54	216997	10.000	ppbV	0.00
Standard Area = 245056			Recovery = 88.55%			
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.38	65	318306	9.259	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 92.59%			
69) toluene-D8	14.58	98	1344432	11.445	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 114.45%			
90) bromofluorobenzene	17.85	95	973992	11.363	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 113.63%			
Target Compounds						Qvalue
2) chlorodifluoromethane	3.87	51	1414113	43.996	ppbV	99
3) propylene	3.90	41	991238M6	46.898	ppbV	
4) propane	3.92	29	1187235	44.623	ppbV #	86
5) dichlorodifluoromethane	3.98	85	1500371	39.076	ppbV	99
6) chloromethane	4.16	50	721793	43.896	ppbV	98
7) Freon-114	4.28	85	1747993	38.286	ppbV	98
8) methanol	4.35	31	2109201	220.046	ppbV	98
9) vinyl chloride	4.41	62	1127858	44.410	ppbV	99
10) 1,3-butadiene	4.57	54	825445	44.670	ppbV	83
11) butane	4.64	43	1524886	44.702	ppbV	98
12) acetaldehyde	4.29	29	1757037	204.543	ppbV	89
13) bromomethane	4.88	94	847839	42.526	ppbV	99
14) chloroethane	5.10	64	614840	46.129	ppbV	99
15) ethanol	5.28	31	3047792	207.820	ppbV	92
16) dichlorofluoromethane	5.24	67	1680641	43.929	ppbV	99
17) vinyl bromide	5.52	106	808319	47.669	ppbV	99
18) acrolein	5.67	56	467181	41.425	ppbV	99
19) acetone	5.82	43	5085626	211.798	ppbV	94
20) acetonitrile	5.52	41	947447	46.516	ppbV	100
21) trichlorofluoromethane	6.03	101	1261144	41.794	ppbV	98
22) isopropyl alcohol	6.16	45	3545262	115.347	ppbV	99
23) acrylonitrile	6.40	53	862895	47.108	ppbV	99
24) pentane	6.47	43	1841811M6	45.030	ppbV	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423667.D
Acq On : 22 Sep 2022 3:28 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD050
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:25:50 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.51	31	1853746	45.420	ppbV	97
26) 1,1-dichloroethene	6.79	61	1808636	57.136	ppbV	93
27) tertiary butyl alcohol	6.88	59	2747253	46.237	ppbV	94
28) methylene chloride	6.95	49	1286876	45.841	ppbV	100
29) 3-chloropropene	7.09	41	1847275	49.202	ppbV	95
30) carbon disulfide	7.24	76	3462110	47.365	ppbV	98
31) Freon 113	7.28	101	1915402	45.264	ppbV	95
32) trans-1,2-dichloroethene	8.07	61	1954404	48.477	ppbV	99
33) 1,1-dichloroethane	8.31	63	2325657	47.258	ppbV	100
34) MTBE	8.38	73	3086656	47.619	ppbV	98
35) vinyl acetate	8.53	43	2369628	44.923	ppbV	97
36) 2-butanone	8.78	43	2661943	50.262	ppbV	96
37) cis-1,2-dichloroethene	9.30	61	1739429	46.162	ppbV	99
38) Ethyl Acetate	9.60	61	489175	49.078	ppbV	95
39) chloroform	9.65	83	1876885	42.703	ppbV	100
40) Tetrahydrofuran	10.08	42	1734009	51.676	ppbV	94
41) 2,2-dichloropropane	9.67	77	1553325	42.020	ppbV	88
42) 1,2-dichloroethane	10.49	62	1254296	42.652	ppbV	98
44) hexane	9.56	57	2397674	46.125	ppbV	94
45) diisopropyl ether	9.57	87	1297025	45.983	ppbV	97
46) tert-butyl ethyl ether	10.19	59	4494983	46.063	ppbV	98
48) 1,1,1-trichloroethane	10.78	97	1655624	43.387	ppbV	96
49) 1,1-dichloropropene	11.15	75	1763115	46.732	ppbV	94
50) benzene	11.31	78	4068248	46.782	ppbV	97
51) thiophene	11.46	84	2626097	45.306	ppbV	98
52) carbon tetrachloride	11.49	117	1341126	40.194	ppbV	100
53) cyclohexane	11.63	56	2667086	48.552	ppbV	97
54) tert-amyl methyl ether	12.01	73	3726696	47.097	ppbV	97
55) dibromomethane	12.23	93	1162938	44.995	ppbV	96
56) 1,2-dichloropropane	12.27	63	1532287	48.145	ppbV	99
57) bromodichloromethane	12.49	83	2048813	45.554	ppbV	99
58) 1,4-dioxane	12.53	88	1000560	52.740	ppbV	98
59) trichloroethene	12.55	130	1598066	46.367	ppbV	97
60) 2,2,4-trimethylpentane	12.59	57	7810948	48.040	ppbV	98
61) methyl methacrylate	12.79	41	1638534	45.489	ppbV	94
62) heptane	12.91	43	2652070	48.728	ppbV	97
63) cis-1,3-dichloropropene	13.56	75	2021053	47.653	ppbV	94
64) 4-methyl-2-pentanone	13.59	43	3029766	48.989	ppbV	98
65) trans-1,3-dichloropropene	14.18	75	1855305	46.277	ppbV	93
66) 1,1,2-trichloroethane	14.38	97	1498232	49.267	ppbV	94

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423667.D
Acq On : 22 Sep 2022 3:28 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD050
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:25:50 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.70	91	4816476	49.978	ppbV	98
70) 2-methylthiophene	14.77	97	3839715	49.747	ppbV	99
71) 1,3-dichloropropane	14.73	76	2214877	50.142	ppbV	92
72) 2-hexanone	14.98	43	2667088	51.534	ppbV	98
73) 3-methylthiophene	14.96	97	3896063	49.106	ppbV	100
74) dibromochloromethane	15.15	129	1884449	50.346	ppbV	99
75) 1,2-dibromoethane	15.40	107	1901925	49.263	ppbV	98
76) butyl acetate	15.64	73	653712	48.723	ppbV	90
77) octane	15.73	85	2061983	49.854	ppbV	97
78) tetrachloroethene	15.87	166	1838911	46.980	ppbV	96
79) 1,1,1,2-tetrachloroethane	16.50	131	1390031	45.279	ppbV	97
80) chlorobenzene	16.52	112	3245910	47.073	ppbV	98
81) ethylbenzene	16.88	91	5742176	48.783	ppbV	96
82) 2-ethylthiophene	16.91	97	4228974	46.449	ppbV	97
83) m+p-xylene	17.03	91	8648991	89.441	ppbV	100
84) bromoform	17.10	173	1767922	48.675	ppbV	97
85) styrene	17.36	104	3694222	51.479	ppbV	97
86) 1,1,2,2-tetrachloroethane	17.45	83	2906802	45.570	ppbV	99
87) o-xylene	17.46	91	4030564	42.375	ppbV	98
88) 1,2,3-trichloropropane	17.57	75	2533849	48.880	ppbV	98
89) nonane	17.65	43	3557244	46.591	ppbV	95
91) isopropylbenzene	17.97	105	5506312	45.342	ppbV	94
92) bromobenzene	18.04	77	3320204	46.834	ppbV	96
93) 2-chlorotoluene	18.38	126	1817702	49.695	ppbV	73
94) n-propylbenzene	18.41	120	2032254	47.232	ppbV	96
95) 4-chlorotoluene	18.44	126	1763258	48.383	ppbV	86
96) 4-ethyl toluene	18.53	105	5764415	47.281	ppbV	96
97) 1,3,5-trimethylbenzene	18.59	105	4808574	45.493	ppbV	93
98) tert-butylbenzene	18.94	119	4518240	38.423	ppbV	92
99) 1,2,4-trimethylbenzene	18.94	105	4075422	41.117	ppbV	93
100) decane	19.02	57	4680767	43.353	ppbV	96
101) Benzyl Chloride	19.06	91	3654244	43.222	ppbV	96
102) 1,3-dichlorobenzene	19.07	146	2862991	47.493	ppbV	97
103) 1,4-dichlorobenzene	19.13	146	2917933	50.635	ppbV	98
104) sec-butylbenzene	19.17	105	6637248	43.304	ppbV	94
105) 1,2,3-trimethylbenzene	19.30	105	3720719	39.535	ppbV	98
106) p-isopropyltoluene	19.30	119	5392413	38.440	ppbV	91
107) 1,2-dichlorobenzene	19.42	146	2780022	50.395	ppbV	94
108) n-butylbenzene	19.65	91	5636436	43.145	ppbV	92
109) indan	19.48	117	4895171	44.068	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423667.D
Acq On : 22 Sep 2022 3:28 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD050
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:25:50 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
110) indene	19.55	115	3703398	42.209	ppbV		100
111) 1,2-dibromo-3-chloropr...	19.81	75	1209818	42.710	ppbV	#	89
112) undecane	20.07	57	4810250	40.349	ppbV		97
113) 1,2,4,5-tetramethylben...	20.29	119	7285052	41.815	ppbV		92
114) dodecane	20.97	57	4746147	37.252	ppbV		96
115) 1,2,4-trichlorobenzene	20.92	180	2546779	45.148	ppbV		95
116) naphthalene	21.03	128	6471087	42.439	ppbV		97
117) 1,2,3-trichlorobenzene	21.27	180	2520784	42.203	ppbV		94
118) benzothiophene	21.10	134	10123394	43.919	ppbV		99
119) hexachlorobutadiene	21.34	225	1894074	38.130	ppbV		94
120) 2-methylnaphthalene	22.12	142	1714330	58.389	ppbV		97
121) 1-methylnaphthalene	22.32	142	2767702	60.951	ppbV		97

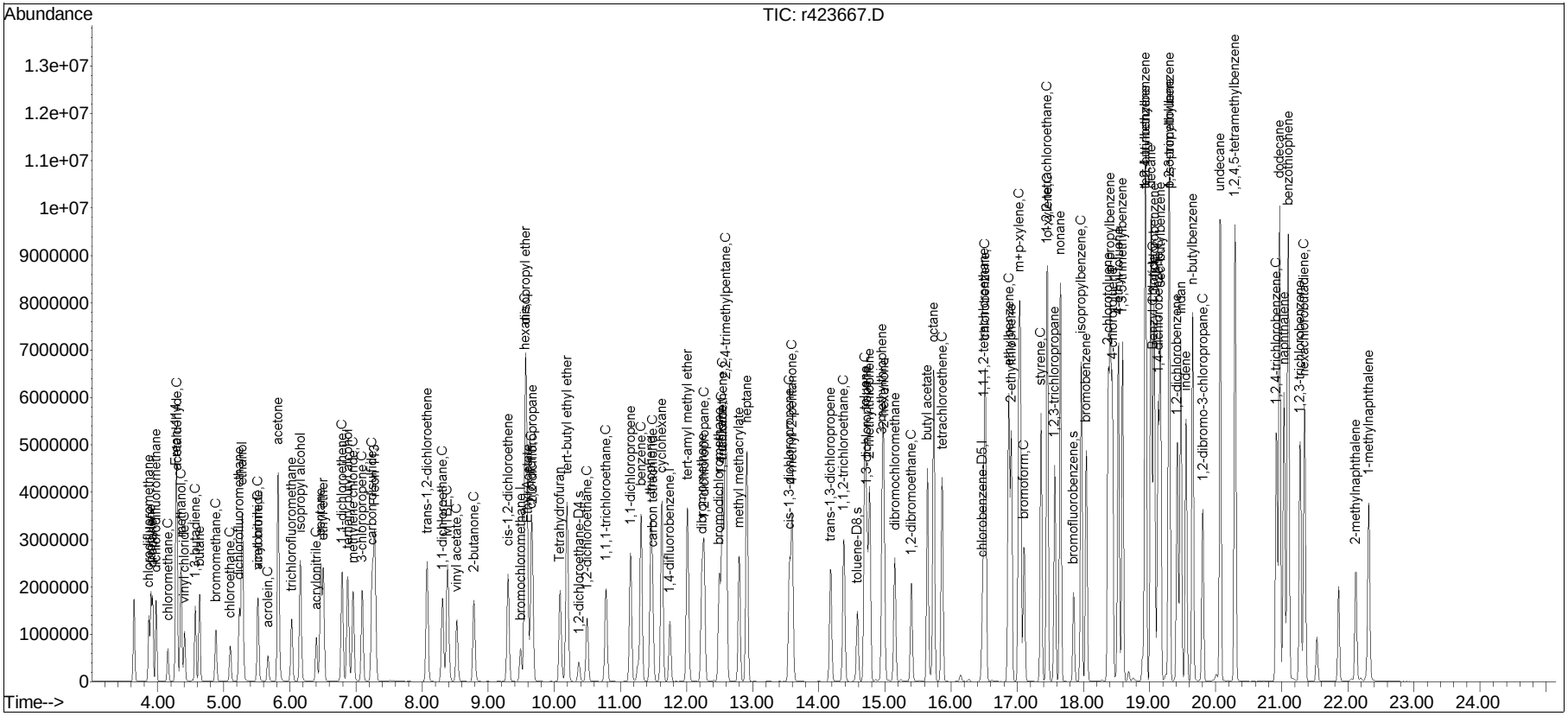
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423667.D
Acq On : 22 Sep 2022 3:28 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD050
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:25:50 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

Sub List : Default - All compounds listed22\09\0921T_I\r423665.D

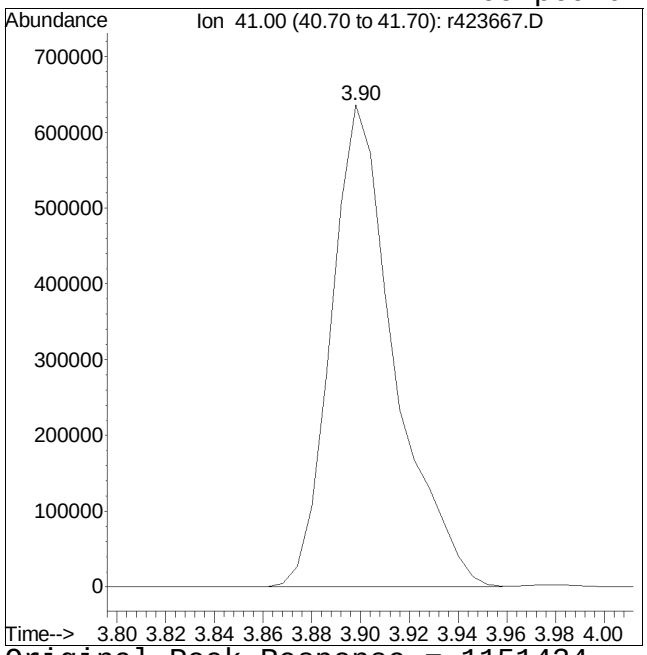


Manual Integration/Negative Proof Report

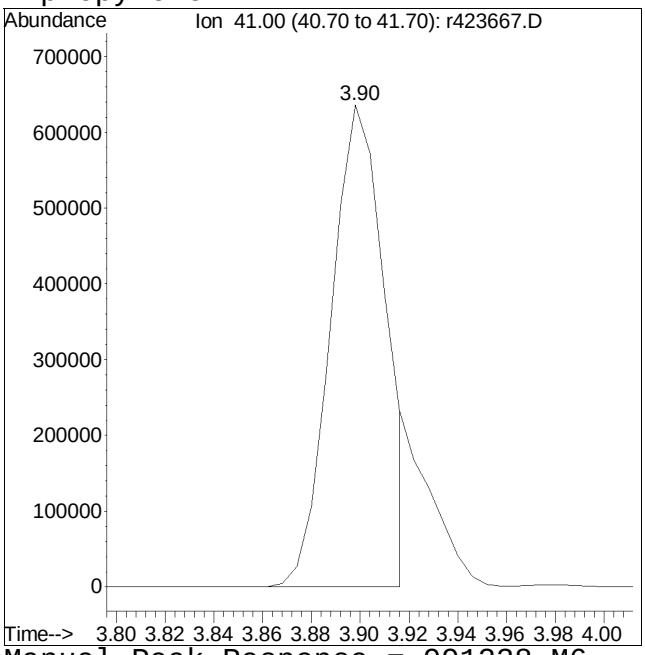
Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423667.D
Date Inj'd : 9/22/2020 0:3: 8
Sample : ITO15-SIMSTD050

Method : TFS4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 9:40 am

Compound #3: propylene



Original Peak Response = 1151434



Manual Peak Response = 991238 M6

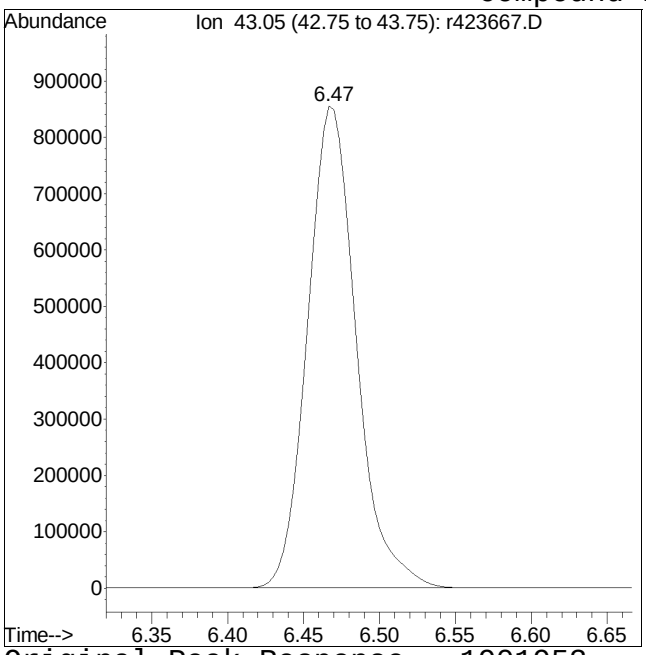
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

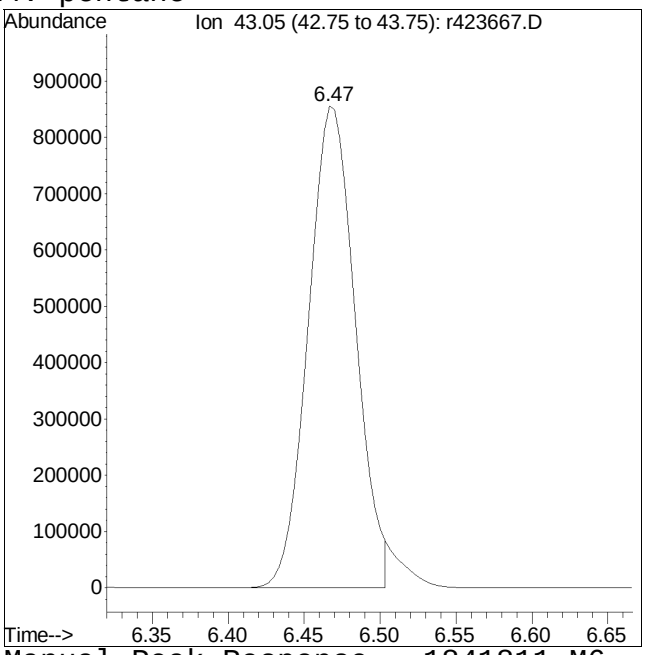
Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423667.D
Date Inj'd : 9/22/2020 0:3: 8
Sample : ITO15-SIMSTD050

Method : TFS4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 9:40 am

Compound #24: pentane



Original Peak Response = 1901953



Manual Peak Response = 1841811 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423668.D
Acq On : 22 Sep 2022 4:09 AM
Operator : AIRPIANO4:RY
Sample : ITO15-LLSTD100
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:27:17 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.50	49	434643	10.000	ppbV	0.02
Standard Area = 486424			Recovery = 89.35%			
43) 1,4-difluorobenzene	11.75	114	1199410	10.000	ppbV	0.01
Standard Area = 1380317			Recovery = 86.89%			
67) chlorobenzene-D5	16.48	54	184647	10.000	ppbV	# 0.00
Standard Area = 245056			Recovery = 75.35%			
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.38	65	256995	8.333	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 83.33%			
69) toluene-D8	14.59	98	1237194	12.378	ppbV	0.02
Spiked Amount 10.000	Range 70 - 130		Recovery = 123.78%			
90) bromofluorobenzene	17.86	95	902514	12.374	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 123.74%			
Target Compounds						Qvalue
2) chlorodifluoromethane	3.87	51	2475673	84.416	ppbV	99
3) propylene	3.90	41	1883411M6	97.662	ppbV	
4) propane	3.93	29	2064792	85.054	ppbV #	88
5) dichlorodifluoromethane	3.98	85	2528787	72.181	ppbV	100
6) chloromethane	4.16	50	1291146	86.057	ppbV	98
7) Freon-114	4.28	85	2863446	68.736	ppbV	98
8) methanol	4.36	31	3684003	421.225	ppbV	98
9) vinyl chloride	4.41	62	1987562	85.772	ppbV	98
10) 1,3-butadiene	4.57	54	1432277	84.949	ppbV #	78
11) butane	4.64	43	2757703	88.601	ppbV	97
12) acetaldehyde	4.29	29	3010088	384.045	ppbV	87
13) bromomethane	4.88	94	1437984	79.049	ppbV	98
14) chloroethane	5.10	64	1117864	91.917	ppbV	100
15) ethanol	5.30	31	4797168	358.497	ppbV	90
16) dichlorofluoromethane	5.24	67	3156607	90.426	ppbV	100
17) vinyl bromide	5.52	106	1406358	90.897	ppbV	98
18) acrolein	5.67	56	804529	78.184	ppbV	99
19) acetone	5.83	43	8617929	393.351	ppbV	90
20) acetonitrile	5.53	41	1698381	91.386	ppbV	100
21) trichlorofluoromethane	6.03	101	2078699	75.499	ppbV	100
22) isopropyl alcohol	6.17	45	6086732	217.041	ppbV	98
23) acrylonitrile	6.41	53	1465243	87.668	ppbV	99
24) pentane	6.47	43	3228637M6	86.512	ppbV	

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423668.D
Acq On : 22 Sep 2022 4:09 AM
Operator : AIRPIANO4:RY
Sample : ITO15-LLSTD100
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:27:17 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) ethyl ether	6.51	31	2809400	75.441	ppbV		97
26) 1,1-dichloroethene	6.79	61	2287873	79.211	ppbV		99
27) tertiary butyl alcohol	6.89	59	3360353	61.984	ppbV	#	93
28) methylene chloride	6.97	49	2053342	80.164	ppbV		97
29) 3-chloropropene	7.10	41	3221906	94.051	ppbV		93
30) carbon disulfide	7.25	76	5768933	86.499	ppbV		99
31) Freon 113	7.28	101	3218553	83.358	ppbV		95
32) trans-1,2-dichloroethene	8.08	61	3242553	88.147	ppbV		95
33) 1,1-dichloroethane	8.32	63	4005907	89.213	ppbV		100
34) MTBE	8.39	73	5041225	85.238	ppbV		97
35) vinyl acetate	8.53	43	4191831	87.095	ppbV		97
36) 2-butanone	8.79	43	4579684	94.770	ppbV		97
37) cis-1,2-dichloroethene	9.31	61	2904004	84.465	ppbV		95
38) Ethyl Acetate	9.61	61	867321	95.368	ppbV		84
39) chloroform	9.67	83	2883040	71.890	ppbV		99
40) Tetrahydrofuran	10.09	42	3034253	99.103	ppbV		94
41) 2,2-dichloropropane	9.68	77	2359045	69.940	ppbV	#	84
42) 1,2-dichloroethane	10.50	62	1921470	71.609	ppbV	#	95
44) hexane	9.57	57	3808699	81.669	ppbV		99
45) diisopropyl ether	9.58	87	2060496	81.423	ppbV		92
46) tert-butyl ethyl ether	10.20	59	7147659	81.643	ppbV		99
48) 1,1,1-trichloroethane	10.79	97	2582528	75.436	ppbV		95
49) 1,1-dichloropropene	11.16	75	2870084	84.794	ppbV		94
50) benzene	11.32	78	6768430	86.754	ppbV		97
51) thiophene	11.47	84	4292323	82.541	ppbV		99
52) carbon tetrachloride	11.49	117	2010900	67.176	ppbV		97
53) cyclohexane	11.63	56	4452511	90.346	ppbV		97
54) tert-amyl methyl ether	12.02	73	6077519	85.610	ppbV		97
55) dibromomethane	12.24	93	1854067	79.958	ppbV		98
56) 1,2-dichloropropane	12.27	63	2604315	91.208	ppbV		98
57) bromodichloromethane	12.50	83	3199058	79.282	ppbV		100
58) 1,4-dioxane	12.54	88	1609579	94.567	ppbV		97
59) trichloroethene	12.55	130	2528962	81.788	ppbV		97
60) 2,2,4-trimethylpentane	12.60	57	12410913	85.081	ppbV	#	97
61) methyl methacrylate	12.80	41	2748445	85.049	ppbV		97
62) heptane	12.92	43	4369130	89.478	ppbV		96
63) cis-1,3-dichloropropene	13.56	75	3326446	87.423	ppbV		96
64) 4-methyl-2-pentanone	13.60	43	5067926	91.337	ppbV		98
65) trans-1,3-dichloropropene	14.18	75	3018203	83.913	ppbV		93
66) 1,1,2-trichloroethane	14.38	97	2565497	94.034	ppbV		91

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423668.D
Acq On : 22 Sep 2022 4:09 AM
Operator : AIRPIANO4:RY
Sample : ITO15-LLSTD100
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:27:17 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
68) toluene	14.70	91	7660533	93.415	ppbV		97
70) 2-methylthiophene	14.78	97	6338927	96.516	ppbV		99
71) 1,3-dichloropropane	14.73	76	3569431	94.964	ppbV		92
72) 2-hexanone	14.99	43	4372814	99.295	ppbV		98
73) 3-methylthiophene	14.97	97	6311641	93.490	ppbV		100
74) dibromochloromethane	15.16	129	2935319	92.161	ppbV		99
75) 1,2-dibromoethane	15.41	107	3114654	94.810	ppbV		98
76) butyl acetate	15.65	73	1104254	96.722	ppbV		92
77) octane	15.74	85	3260538	92.644	ppbV		95
78) tetrachloroethene	15.87	166	2878348	86.418	ppbV		97
79) 1,1,1,2-tetrachloroethane	16.51	131	2071436	79.296	ppbV		97
80) chlorobenzene	16.52	112	5052637	86.112	ppbV		97
81) ethylbenzene	16.88	91	9003486	89.890	ppbV		100
82) 2-ethylthiophene	16.92	97	6615346	85.390	ppbV		98
83) m+p-xylene	17.04	91	12812589	155.711	ppbV		93
84) bromoform	17.11	173	2702274	87.434	ppbV		97
85) styrene	17.37	104	6045824	99.010	ppbV		96
86) 1,1,2,2-tetrachloroethane	17.46	83	4345669	80.063	ppbV		98
87) o-xylene	17.46	91	5901062	72.910	ppbV		90
88) 1,2,3-trichloropropane	17.57	75	4099407	92.936	ppbV		97
89) nonane	17.66	43	5580603	85.898	ppbV		94
91) isopropylbenzene	17.98	105	8518816	82.438	ppbV		93
92) bromobenzene	18.05	77	5189665	86.029	ppbV		94
93) 2-chlorotoluene	18.38	126	2848624	91.524	ppbV		77
94) n-propylbenzene	18.41	120	3073153	83.938	ppbV		90
95) 4-chlorotoluene	18.44	126	2838970	91.548	ppbV		84
96) 4-ethyl toluene	18.53	105	9019217	86.938	ppbV		95
97) 1,3,5-trimethylbenzene	18.60	105	7350705	81.727	ppbV		94
98) tert-butylbenzene	18.94	119	6521773	65.178	ppbV	#	90
99) 1,2,4-trimethylbenzene	18.95	105	5949533	70.542	ppbV		90
100) decane	19.02	57	7054644	76.787	ppbV	#	94
101) Benzyl Chloride	19.07	91	5538095	76.981	ppbV		94
102) 1,3-dichlorobenzene	19.08	146	4599612	89.669	ppbV		98
103) 1,4-dichlorobenzene	19.13	146	4566991	93.135	ppbV		99
104) sec-butylbenzene	19.17	105	10179007	78.047	ppbV		92
105) 1,2,3-trimethylbenzene	19.31	105	5455523	68.125	ppbV		99
106) p-isopropyltoluene	19.30	119	7739614	64.838	ppbV	#	89
107) 1,2-dichlorobenzene	19.43	146	4585160	97.680	ppbV		91
108) n-butylbenzene	19.66	91	8630348	77.636	ppbV	#	88
109) indan	19.48	117	7560596	79.988	ppbV		99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423668.D
Acq On : 22 Sep 2022 4:09 AM
Operator : AIRPIANO4:RY
Sample : ITO15-LLSTD100
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:27:17 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
110) indene	19.56	115	5874421	78.683	ppbV		98
111) 1,2-dibromo-3-chloropr...	19.81	75	1916915	79.529	ppbV	#	83
112) undecane	20.07	57	7313564	72.096	ppbV		94
113) 1,2,4,5-tetramethylben...	20.30	119	10622809	71.656	ppbV		89
114) dodecane	20.98	57	7116335	65.642	ppbV		92
115) 1,2,4-trichlorobenzene	20.93	180	4026740	83.890	ppbV		98
116) naphthalene	21.04	128	10379519	79.997	ppbV		98
117) 1,2,3-trichlorobenzene	21.28	180	4080953	80.294	ppbV		96
118) benzothiophene	21.10	134	15035443	76.657	ppbV		100
119) hexachlorobutadiene	21.35	225	2818744	66.686	ppbV		94
120) 2-methylnaphthalene	22.13	142	3407313	136.384	ppbV		97
121) 1-methylnaphthalene	22.32	142	5181019	134.087	ppbV		97

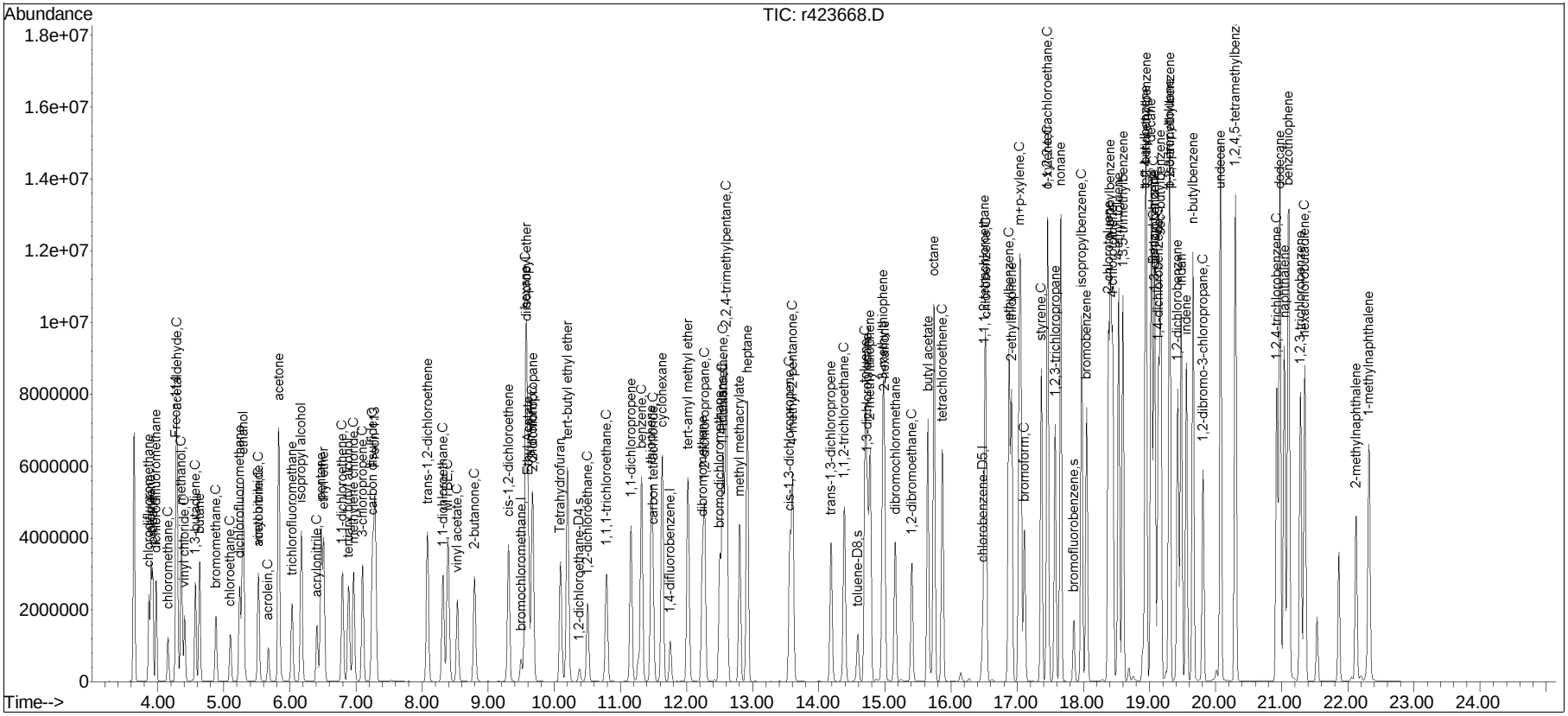
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423668.D
Acq On : 22 Sep 2022 4:09 AM
Operator : AIRPIANO4:RY
Sample : ITO15-LLSTD100
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:27:17 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 09:39:53 2022
Response via : Initial Calibration

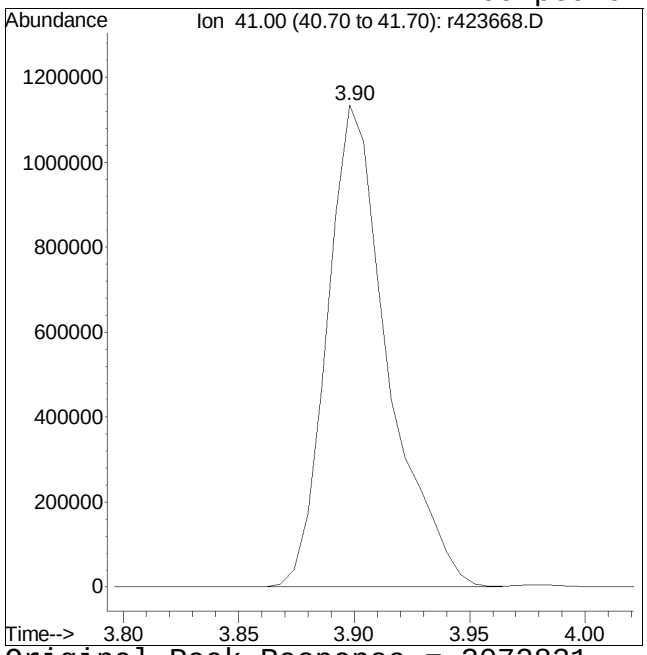
Sub List : Default - All compounds listed22\09\0921T_I\r423665.D



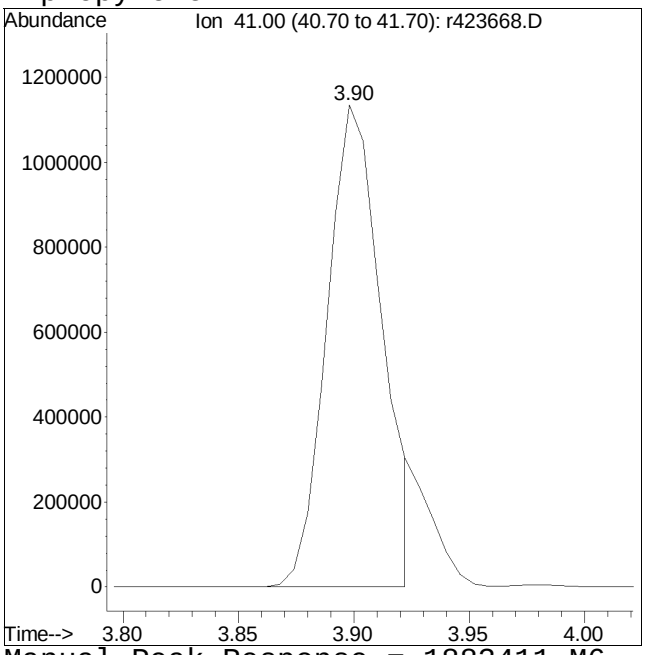
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423668.D
Date Inj'd : 9/22/2020 0:4: 9
Sample : ITO15-LLSTD100
Method : TFS4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 9:40 am

Compound #3: propylene



Original Peak Response = 2072831



Manual Peak Response = 1883411 M6

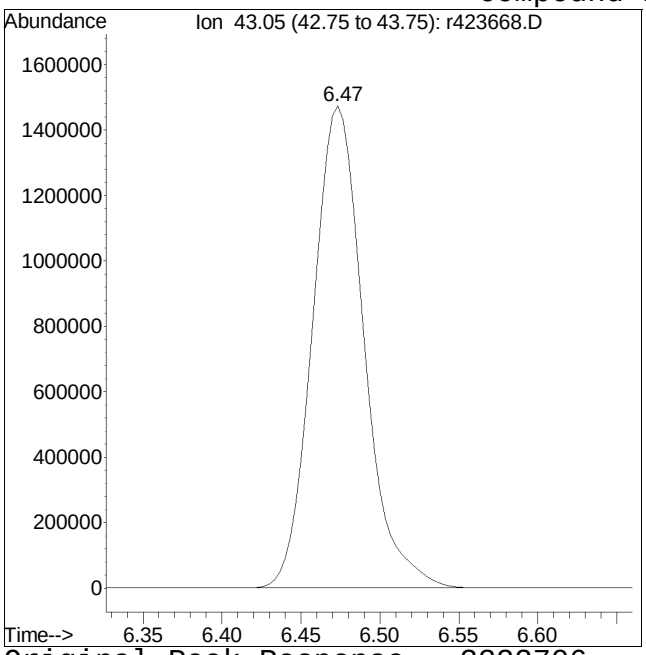
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

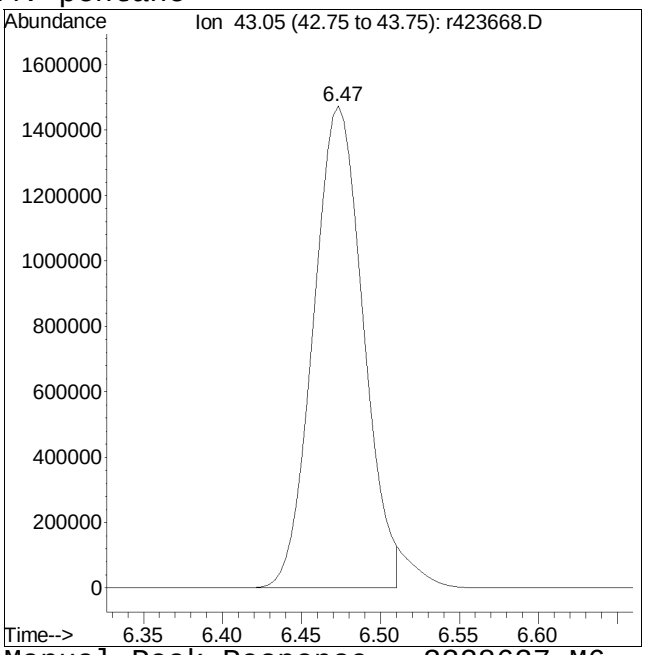
Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423668.D
Date Inj'd : 9/22/2020 0:4: 9
Sample : ITO15-LLSTD100

Method : TFS4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 9:40 am

Compound #24: pentane



Original Peak Response = 3322706



Manual Peak Response = 3228637 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423671.D
Acq On : 22 Sep 2022 10:35 AM
Operator : AIRPIANO4:RY
Sample : CTO15-LLSTD010
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:29:10 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	bromochloromethane	1.000	1.000	0.0	78	0.02
2		chlorodifluoromethane	0.700	0.541	22.7	63	0.00
3		propylene	0.465	0.486	-4.5	86	0.01
4		propane	0.557	0.461	17.2	64	0.01
5		dichlorodifluoromethane	0.821	0.654	20.3	63	0.01
6	C	chloromethane	0.354	0.302	14.7	68	0.01
7		Freon-114	0.964	0.811	15.9	66	0.01
8	C	methanol	0.203	0.258	-27.1	100	0.02
9	C	vinyl chloride	0.542	0.473	12.7	69	0.01
10	C	1,3-butadiene	0.406	0.351	13.5	71	0.01
11		butane	0.754	0.620	17.8	68	0.01
13	C	bromomethane	0.426	0.349	18.1	65	0.01
14	C	chloroethane	0.288	0.259	10.1	72	0.02
15		ethanol	0.292	0.250	14.4	63	0.02
16		dichlorofluoromethane	0.837	0.657	21.5	64	0.02
17	C	vinyl bromide	0.378	0.332	12.2	73	0.02
18	C	acrolein	0.222	0.184	17.1	61	0.02
19		acetone	0.529	0.487	7.9	75	0.02
20	C	acetonitrile	0.446	0.393	11.9	72	0.02
21		trichlorofluoromethane	0.634	0.504	20.5	62	0.02
22		isopropyl alcohol	0.746	0.603	19.2	73	0.02
23	C	acrylonitrile	0.414	0.313	24.4	64	0.02
24		pentane	0.922	0.742	19.5	70	0.02
25		ethyl ether	0.900	0.700	22.2	64	0.02
26	C	1,1-dichloroethene	0.770	0.564	26.8	66	0.02
27		tertiary butyl alcohol	1.113	0.780	29.9	49#	0.03
28	C	methylene chloride	0.554	0.414	25.3	55#	0.02
29	C	3-chloropropene	0.825	0.712	13.7	71	0.02
30	C	carbon disulfide	1.599	1.370	14.3	70	0.02
31		Freon 113	0.904	0.865	4.3	76	0.01
32		trans-1,2-dichloroethene	0.887	0.786	11.4	73	0.02
33	C	1,1-dichloroethane	1.056	0.981	7.1	74	0.02
34	C	MTBE	1.419	1.268	10.6	73	0.03
35	C	vinyl acetate	1.042	1.042	0.0	73	0.02
36	C	2-butanone	1.155	1.076	6.8	76	0.03
37		cis-1,2-dichloroethene	0.803	0.740	7.8	73	0.03
38		Ethyl Acetate	0.216	0.228	-5.6	85	0.03
39	C	chloroform	0.920	0.772	16.1	65	0.02
40		Tetrahydrofuran	0.762	0.702	7.9	78	0.03

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423671.D
Acq On : 22 Sep 2022 10:35 AM
Operator : AIRPIANO4:RY
Sample : CTO15-LLSTD010
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:29:10 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41		2,2-dichloropropane	0.777	0.562	27.7	57#	0.02
42	C	1,2-dichloroethane	0.619	0.461	25.5	58#	0.02
43	I	1,4-difluorobenzene	1.000	1.000	0.0	80	0.02
44	C	hexane	0.404	0.366	9.4	75	0.02
45		diisopropyl ether	0.215	0.178	17.2	67	0.02
46		tert-butyl ethyl ether	0.741	0.601	18.9	66	0.02
47	s	1,2-dichloroethane-D4	0.253	0.208	17.8	64	0.02
48	C	1,1,1-trichloroethane	0.283	0.229	19.1	64	0.03
49		1,1-dichloropropene	0.288	0.243	15.6	69	0.02
50	C	benzene	0.697	0.585	16.1	72	0.02
52	C	carbon tetrachloride	0.241	0.188	22.0	60	0.02
53		cyclohexane	0.432	0.389	10.0	76	0.02
54		tert-amyl methyl ether	0.605	0.513	15.2	69	0.02
55		dibromomethane	0.198	0.168	15.2	69	0.02
56	C	1,2-dichloropropane	0.244	0.239	2.0	80	0.02
57		bromodichloromethane	0.339	0.284	16.2	67	0.02
58	C	1,4-dioxane	0.154	0.135	12.3	76	0.03
59	C	trichloroethene	0.262	0.241	8.0	74	0.02
60	C	2,2,4-trimethylpentane	1.299	1.194	8.1	78	0.02
61		methyl methacrylate	0.257	0.253	1.6	75	0.02
62		heptane	0.430	0.407	5.3	80	0.02
63	C	cis-1,3-dichloropropene	0.319	0.300	6.0	75	0.02
64	C	4-methyl-2-pentanone	0.473	0.469	0.8	81	0.03
65		trans-1,3-dichloropropene	0.295	0.228	22.7	61	0.02
66	C	1,1,2-trichloroethane	0.236	0.231	2.1	81	0.02
67	I	chlorobenzene-D5	1.000	1.000	0.0	72	0.02
68	C	toluene	4.890	4.667	4.6	76	0.02
69	s	toluene-D8	5.703	6.143	-7.7	82	0.03
71		1,3-dichloropropane	2.108	1.876	11.0	67	0.02
72		2-hexanone	2.465	2.578	-4.6	78	0.02
74		dibromochloromethane	1.773	1.797	-1.4	75	0.02
75	C	1,2-dibromoethane	1.826	1.748	4.3	71	0.02
76		butyl acetate	0.599	0.610	-1.8	72	0.02
77		octane	1.979	1.808	8.6	69	0.02
78	C	tetrachloroethene	1.864	1.812	2.8	73	0.02
79		1,1,1,2-tetrachloroethane	1.421	1.367	3.8	70	0.02
80	C	chlorobenzene	3.299	3.280	0.6	75	0.02

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423671.D
Acq On : 22 Sep 2022 10:35 AM
Operator : AIRPIANO4:RY
Sample : CTO15-LLSTD010
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:29:10 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	C	ethylbenzene	5.648	5.854	-3.6	78	0.02
83	C	m+p-xylene	4.541	4.688	-3.2	76	0.00
84	C	bromoform	1.664	1.776	-6.7	77	0.00
85	C	styrene	3.485	3.574	-2.6	78	0.00
86	C	1,1,2,2-tetrachloroethane	3.013	2.978	1.2	73	0.02
87	C	o-xylene	4.463	4.706	-5.4	78	0.02
88		1,2,3-trichloropropane	2.496	2.290	8.3	69	0.00
89		nonane	3.626	3.573	1.5	74	0.00
90	s	bromofluorobenzene	4.123	4.379	-6.2	80	0.02
91	C	isopropylbenzene	5.738	5.719	0.3	74	0.00
92		bromobenzene	3.378	3.167	6.2	70	0.00
93		2-chlorotoluene	1.762	1.711	2.9	74	0.00
94		n-propylbenzene	2.045	1.967	3.8	72	0.02
95		4-chlorotoluene	1.726	1.659	3.9	72	0.00
96		4-ethyl toluene	5.995	5.733	4.4	74	0.02
97		1,3,5-trimethylbenzene	5.059	4.982	1.5	74	0.00
98		tert-butylbenzene	5.386	5.203	3.4	70	0.00
99		1,2,4-trimethylbenzene	4.761	4.731	0.6	75	0.02
100		decane	5.033	5.017	0.3	73	0.00
101	C	Benzyl Chloride	3.549	3.667	-3.3	68	0.00
102		1,3-dichlorobenzene	2.895	2.833	2.1	74	0.02
103	C	1,4-dichlorobenzene	2.891	2.834	2.0	77	0.00
104		sec-butylbenzene	7.252	7.256	-0.1	74	0.02
106		p-isopropyltoluene	6.516	6.216	4.6	70	0.00
107		1,2-dichlorobenzene	2.731	2.620	4.1	75	0.00
108		n-butylbenzene	5.983	6.430	-7.5	77	0.00
111	C	1,2-dibromo-3-chloropropane	1.258	1.204	4.3	67	0.02
112		undecane	5.429	5.645	-4.0	74	0.00
114		dodecane	5.264	5.665	-7.6	70	0.00
115	C	1,2,4-trichlorobenzene	2.460	1.927	21.7	54#	0.00
116		naphthalene	6.491	6.892	-6.2	71	0.02
117		1,2,3-trichlorobenzene	2.486	2.677	-7.7	70	0.02
119	C	hexachlorobutadiene	2.238	1.780	20.5	56#	0.00

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423671.D
Acq On : 22 Sep 2022 10:35 AM
Operator : AIRPIANO4:RY
Sample : CTO15-LLSTD010
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:29:10 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default-ICV-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.50	49	379923	10.000	ppbV	0.02
Standard Area = 486424			Recovery = 78.11%			
43) 1,4-difluorobenzene	11.76	114	1100630	10.000	ppbV	0.02
Standard Area = 1380317			Recovery = 79.74%			
67) chlorobenzene-D5	16.49	54	177500	10.000	ppbV	0.02
Standard Area = 245056			Recovery = 72.43%			
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.38	65	228499	8.193	ppbV	0.02
Spiked Amount 10.000	Range 70 - 130		Recovery = 81.93%			
69) toluene-D8	14.60	98	1090446	10.772	ppbV	0.03
Spiked Amount 10.000	Range 70 - 130		Recovery = 107.72%			
90) bromofluorobenzene	17.87	95	777318	10.621	ppbV	0.02
Spiked Amount 10.000	Range 70 - 130		Recovery = 106.21%			
Target Compounds						Qvalue
2) chlorodifluoromethane	3.87	51	205452	7.723	ppbV	97
3) propylene	3.91	41	184712M6	10.444	ppbV	
4) propane	3.93	29	174956	8.262	ppbV	98
5) dichlorodifluoromethane	3.99	85	248412	7.965	ppbV	100
6) chloromethane	4.17	50	114604	8.510	ppbV	100
7) Freon-114	4.29	85	307982	8.412	ppbV	99
8) methanol	4.37	31	489223	63.390	ppbV	98
9) vinyl chloride	4.42	62	179819	8.737	ppbV	99
10) 1,3-butadiene	4.58	54	133413	8.642	ppbV	91
11) butane	4.64	43	235647	8.230	ppbV	98
13) bromomethane	4.89	94	132533	8.185	ppbV	100
14) chloroethane	5.11	64	98565	9.014	ppbV	100
15) ethanol	5.29	31	474376	42.826	ppbV	95
16) dichlorofluoromethane	5.25	67	249767	7.854	ppbV	100
17) vinyl bromide	5.53	106	126094	8.775	ppbV	99
18) acrolein	5.68	56	69796	8.258	ppbV	98
19) acetone	5.84	43	924292	46.006	ppbV	96
20) acetonitrile	5.53	41	149393	8.820	ppbV	99
21) trichlorofluoromethane	6.04	101	191500	7.949	ppbV	99
22) isopropyl alcohol	6.17	45	572703	20.198	ppbV	99
23) acrylonitrile	6.41	53	118821	7.563	ppbV	100
24) pentane	6.48	43	281760M6	8.044	ppbV	
25) ethyl ether	6.52	31	265974	7.775	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423671.D
Acq On : 22 Sep 2022 10:35 AM
Operator : AIRPIANO4:RY
Sample : CTO15-LLSTD010
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:29:10 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default-ICV-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
26) 1,1-dichloroethene	6.80	61	214252	7.326	ppbV		98
27) tertiary butyl alcohol	6.90	59	296481	7.010	ppbV		99
28) methylene chloride	6.97	49	157235	7.464	ppbV		98
29) 3-chloropropene	7.10	41	270359	8.621	ppbV		94
30) carbon disulfide	7.25	76	520459	8.568	ppbV		99
31) Freon 113	7.29	101	328785	9.571	ppbV		95
32) trans-1,2-dichloroethene	8.08	61	298535	8.857	ppbV		93
33) 1,1-dichloroethane	8.32	63	372689	9.286	ppbV		100
34) MTBE	8.41	73	481567	8.935	ppbV		99
35) vinyl acetate	8.54	43	395836	9.998	ppbV		99
36) 2-butanone	8.81	43	408779	9.318	ppbV		99
37) cis-1,2-dichloroethene	9.32	61	281306	9.226	ppbV		93
38) Ethyl Acetate	9.62	61	86660	10.569	ppbV		77
39) chloroform	9.67	83	293188	8.388	ppbV		99
40) Tetrahydrofuran	10.12	42	266577	9.210	ppbV		99
41) 2,2-dichloropropane	9.68	77	213631	7.241	ppbV	#	93
42) 1,2-dichloroethane	10.51	62	175200	7.445	ppbV	#	94
44) hexane	9.57	57	403132	9.070	ppbV		85
45) diisopropyl ether	9.58	87	195533	8.259	ppbV		99
46) tert-butyl ethyl ether	10.21	59	661215	8.107	ppbV		100
48) 1,1,1-trichloroethane	10.80	97	251695	8.087	ppbV		98
49) 1,1-dichloropropene	11.17	75	267085	8.423	ppbV		97
50) benzene	11.33	78	643371	8.388	ppbV		98
52) carbon tetrachloride	11.50	117	207423	7.810	ppbV		99
53) cyclohexane	11.64	56	428515	9.012	ppbV		99
54) tert-amyl methyl ether	12.03	73	564347	8.477	ppbV		98
55) dibromomethane	12.25	93	185322	8.486	ppbV		99
56) 1,2-dichloropropane	12.28	63	263424	9.803	ppbV		98
57) bromodichloromethane	12.51	83	312883	8.374	ppbV		99
58) 1,4-dioxane	12.56	88	149002	8.808	ppbV		98
59) trichloroethene	12.56	130	265068	9.208	ppbV		99
60) 2,2,4-trimethylpentane	12.61	57	1314508	9.196	ppbV		99
61) methyl methacrylate	12.81	41	278544	9.850	ppbV		96
62) heptane	12.93	43	447632	9.461	ppbV		98
63) cis-1,3-dichloropropene	13.57	75	330445	9.415	ppbV		98
64) 4-methyl-2-pentanone	13.62	43	515686	9.897	ppbV		99
65) trans-1,3-dichloropropene	14.19	75	250694	7.722	ppbV		99
66) 1,1,2-trichloroethane	14.39	97	253808	9.788	ppbV		91
68) toluene	14.71	91	828416	9.544	ppbV		97
71) 1,3-dichloropropane	14.74	76	332925	8.898	ppbV		99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423671.D
Acq On : 22 Sep 2022 10:35 AM
Operator : AIRPIANO4:RY
Sample : CTO15-LLSTD010
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:29:10 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default-ICV-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
72) 2-hexanone	15.00	43	457637	10.461	ppbV	99
74) dibromochloromethane	15.16	129	318989	10.135	ppbV	98
75) 1,2-dibromoethane	15.41	107	310323	9.573	ppbV	98
76) butyl acetate	15.66	73	108356	10.192	ppbV	95
77) octane	15.75	85	320988	9.139	ppbV	95
78) tetrachloroethene	15.88	166	321592	9.722	ppbV	97
79) 1,1,1,2-tetrachloroethane	16.52	131	242636	9.621	ppbV	98
80) chlorobenzene	16.53	112	582167	9.941	ppbV	98
81) ethylbenzene	16.88	91	1039074	10.365	ppbV	99
83) m+p-xylene	17.04	91	1664109	20.647	ppbV	100
84) bromoform	17.11	173	315196	10.673	ppbV	99
85) styrene	17.37	104	634329	10.255	ppbV	95
86) 1,1,2,2-tetrachloroethane	17.47	83	528682	9.885	ppbV	100
87) o-xylene	17.47	91	835379	10.545	ppbV	100
88) 1,2,3-trichloropropane	17.57	75	406423	9.175	ppbV	99
89) nonane	17.66	43	634234	9.854	ppbV	99
91) isopropylbenzene	17.98	105	1015052	9.967	ppbV	100
92) bromobenzene	18.05	77	562067	9.374	ppbV	97
93) 2-chlorotoluene	18.38	126	303679	9.707	ppbV	88
94) n-propylbenzene	18.42	120	349206	9.618	ppbV	94
95) 4-chlorotoluene	18.44	126	294435	9.608	ppbV	95
96) 4-ethyl toluene	18.54	105	1017666	9.564	ppbV	100
97) 1,3,5-trimethylbenzene	18.60	105	884294	9.847	ppbV	97
98) tert-butylbenzene	18.94	119	923532	9.661	ppbV	95
99) 1,2,4-trimethylbenzene	18.95	105	839718	9.938	ppbV	91
100) decane	19.02	57	890461	9.968	ppbV	98
101) Benzyl Chloride	19.07	91	650882	10.333	ppbV	98
102) 1,3-dichlorobenzene	19.08	146	502921	9.788	ppbV	95
103) 1,4-dichlorobenzene	19.13	146	503039	9.803	ppbV	94
104) sec-butylbenzene	19.18	105	1288021	10.007	ppbV	100
106) p-isopropyltoluene	19.30	119	1103403	9.540	ppbV	92
107) 1,2-dichlorobenzene	19.43	146	465012	9.594	ppbV	95
108) n-butylbenzene	19.66	91	1141396	10.748	ppbV	98
111) 1,2-dibromo-3-chloropr...	19.82	75	213686	9.572	ppbV	96
112) undecane	20.07	57	1001955	10.398	ppbV	99
114) dodecane	20.98	57	1005476	10.761	ppbV	99
115) 1,2,4-trichlorobenzene	20.93	180	342039	7.833	ppbV	97
116) naphthalene	21.04	128	1223310	10.617	ppbV	99
117) 1,2,3-trichlorobenzene	21.29	180	475163	10.770	ppbV	99
119) hexachlorobutadiene	21.35	225	315941	7.952	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423671.D
Acq On : 22 Sep 2022 10:35 AM
Operator : AIRPIANO4:RY
Sample : CTO15-LLSTD010
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:29:10 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\r423665.D
Sub List : Default-ICV-AP2 - All compounds listed

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

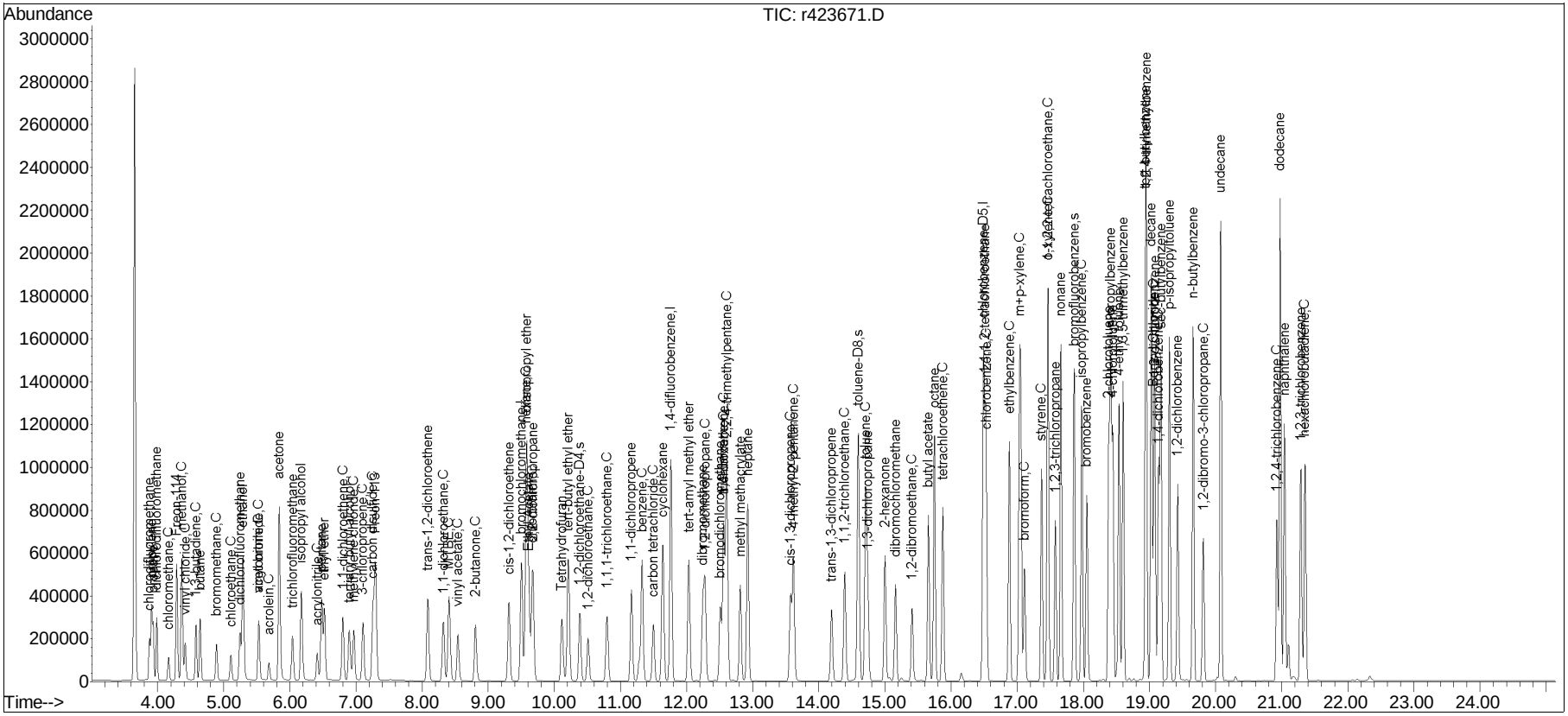
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\
Data File : r423671.D
Acq On : 22 Sep 2022 10:35 AM
Operator : AIRPIANO4:RY
Sample : CTO15-LLSTD010
Misc : WG1691174
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:29:10 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921T_I\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

Sub List : Default-ICV-AP2 - All compounds listed21T_I\r423665.D

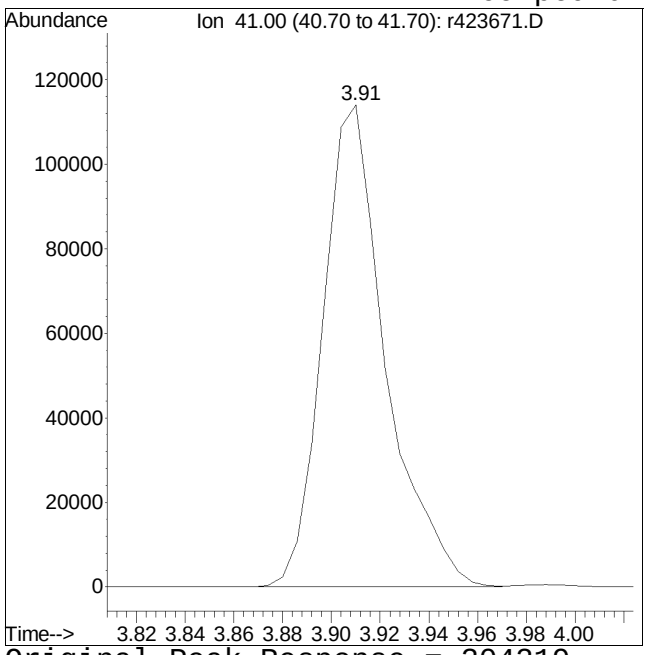


Manual Integration/Negative Proof Report

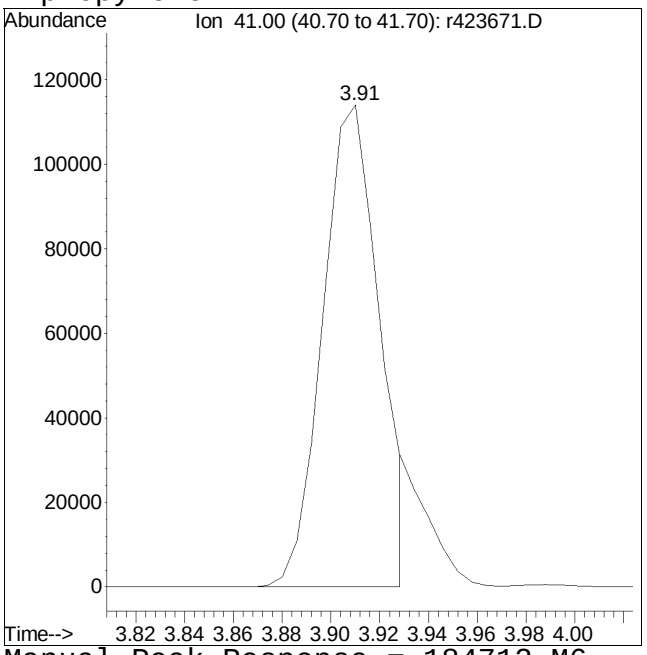
Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423671.D
Date Inj'd : 9/22/2020 0:0: 5
Sample : CTO15-LLSTD010

Method : TFS4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/23/2022 8:28 am

Compound #3: propylene



Original Peak Response = 204219



Manual Peak Response = 184712 M6

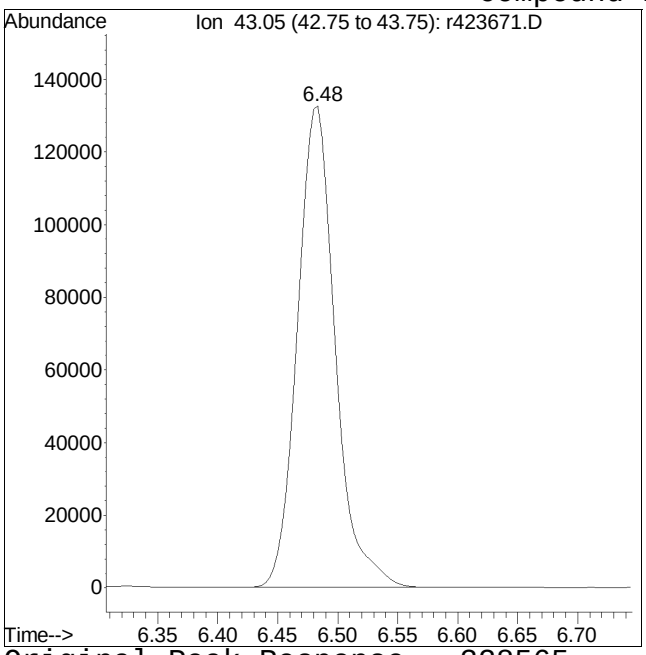
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

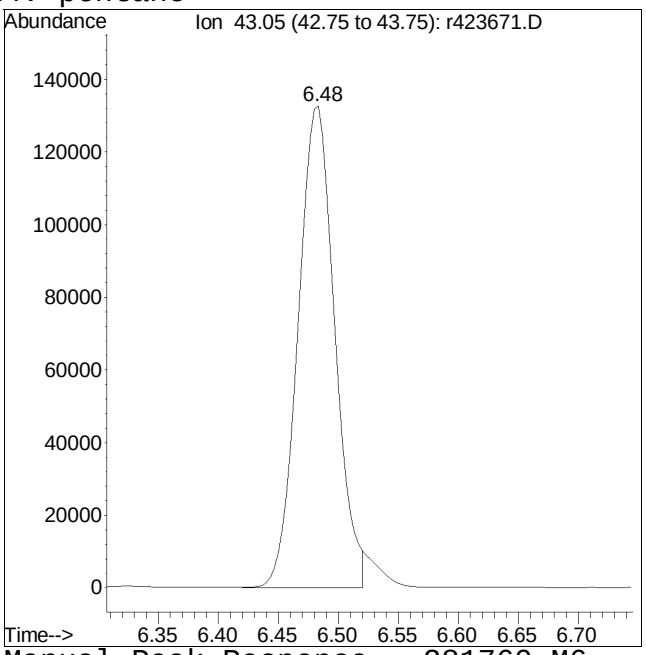
Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423671.D
Date Inj'd : 9/22/2020 0:0: 5
Sample : CTO15-LLSTD010

Method : TFS4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/23/2022 8:28 am

Compound #24: pentane



Original Peak Response = 328565



Manual Peak Response = 281760 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Continuing Calibration

Calibration Verification Summary
Form 7
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855		
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002		
Instrument ID	: AIRPIANO4	**Calibration Date**	: 10/04/22 13:03		
Lab File ID	: R423912	**Init. Calib. Date(s)**	: 09/21/22	09/22/22	
Sample No	: WG1695439-2	**Init. Calib. Times**	: 23:28	04:09	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
bromochloromethane	1	1	-	0	30	95	-.03
chlorodifluoromethane	0.7	0.672	-	4	30	95	-.02
propylene	0.465	0.358	-	23	30	77	-.02
propane	0.557	0.557	-	0	30	95	-.02
dichlorodifluoromethane	0.821	0.835	-	-1.7	30	98	-.02
chloromethane	0.354	0.372	-	-5.1	30	103	-.03
Freon-114	0.964	1.038	-	-7.7	30	103	-.02
methanol	0.203	0.256	-	-26.1	30	121	-.02
vinyl chloride	0.542	0.525	-	3.1	30	94	-.03
1,3-butadiene	0.406	0.413	-	-1.7	30	101	-.03
butane	0.754	0.705	-	6.5	30	94	-.02
bromomethane	0.426	0.416	-	2.3	30	95	-.03
chloroethane	0.288	0.264	-	8.3	30	90	-.03
ethanol	0.292	0.37	-	-26.7	30	114	-.03
dichlorofluoromethane	0.837	0.8	-	4.4	30	95	-.03
vinyl bromide	0.378	0.34	-	10.1	30	91	-.03
acrolein	0.222	0.237	-	-6.8	30	95	-.03
acetone	0.529	0.525	-	0.8	30	99	-.03
acetonitrile	0.446	0.422	-	5.4	30	94	-.03
trichlorofluoromethane	0.634	0.679	-	-7.1	30	102	-.03
isopropyl alcohol	0.746	0.659	-	11.7	30	97	-.03
acrylonitrile	0.414	0.405	-	2.2	30	100	-.03
pentane	0.922	0.865	-	6.2	30	99	-.03
ethyl ether	0.9	0.876	-	2.7	30	97	-.03
1,1-dichloroethene	0.77	0.693	-	10	30	99	-.04
tertiary butyl alcohol	1.113	1.021	-	8.3	30	78	-.03
methylene chloride	0.554	0.489	-	11.7	30	79	-.03
3-chloropropene	0.825	0.622	-	24.6	30	75	-.03
carbon disulfide	1.599	1.242	-	22.3	30	77	-.03
Freon 113	0.904	0.771	-	14.7	30	83	-.04
trans-1,2-dichloroethene	0.887	0.727	-	18	30	82	-.03
1,1-dichloroethane	1.056	0.871	-	17.5	30	80	-.03
MTBE	1.419	1.189	-	16.2	30	83	-.03
vinyl acetate	1.042	1.013	-	2.8	30	87	-.03
2-butanone	1.155	0.973	-	15.8	30	83	-.03
cis-1,2-dichloroethene	0.803	0.667	-	16.9	30	80	-.02
Ethyl Acetate	0.216	0.18	-	16.7	30	82	-.03
chloroform	0.92	0.865	-	6	30	89	-.03
Tetrahydrofuran	0.762	0.598	-	21.5	30	81	-.03
2,2-dichloropropane	0.777	0.696	-	10.4	30	85	-.03
1,2-dichloroethane	0.619	0.554	-	10.5	30	85	-.03
1,4-difluorobenzene	1	1	-	0	30	89	-.03
hexane	0.404	0.362	-	10.4	30	83	-.03

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855		
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002		
Instrument ID	: AIRPIANO4	**Calibration Date**	: 10/04/22 13:03		
Lab File ID	: R423912	**Init. Calib. Date(s)**	: 09/21/22	09/22/22	
Sample No	: WG1695439-2	**Init. Calib. Times**	: 23:28	04:09	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
diisopropyl ether	0.215	0.201	-	6.5	30	85	-.03
tert-butyl ethyl ether	0.741	0.67	-	9.6	30	82	-.03
1,1,1-trichloroethane	0.283	0.259	-	8.5	30	81	-.03
1,1-dichloropropene	0.288	0.267	-	7.3	30	84	-.03
benzene	0.697	0.618	-	11.3	30	85	-.03
carbon tetrachloride	0.241	0.24	-	0.4	30	86	-.03
cyclohexane	0.432	0.379	-	12.3	30	82	-.03
tert-amyl methyl ether	0.605	0.552	-	8.8	30	83	-.03
dibromomethane	0.198	0.178	-	10.1	30	82	-.03
1,2-dichloropropane	0.244	0.214	-	12.3	30	80	-.03
bromodichloromethane	0.339	0.327	-	3.5	30	87	-.03
1,4-dioxane	0.154	0.131	-	14.9	30	82	-.03
trichloroethene	0.262	0.233	-	11.1	30	81	-.03
2,2,4-trimethylpentane	1.299	1.165	-	10.3	30	85	-.03
methyl methacrylate	0.257	0.248	-	3.5	30	82	-.03
heptane	0.43	0.382	-	11.2	30	84	-.03
cis-1,3-dichloropropene	0.319	0.301	-	5.6	30	85	-.03
4-methyl-2-pentanone	0.473	0.431	-	8.9	30	83	-.03
trans-1,3-dichloropropene	0.295	0.28	-	5.1	30	83	-.03
1,1,2-trichloroethane	0.236	0.206	-	12.7	30	80	-.03
chlorobenzene-D5	1	1	-	0	30	96	-.03
toluene	4.89	3.786	-	22.6	30	82	-.03
1,3-dichloropropane	2.108	1.796	-	14.8	30	85	-.03
2-hexanone	2.465	2.092	-	15.1	30	84	-.02
dibromochloromethane	1.773	1.474	-	16.9	30	82	-.03
1,2-dibromoethane	1.826	1.6	-	12.4	30	86	-.03
butyl acetate	0.599	0.539	-	10	30	84	-.03
octane	1.979	1.693	-	14.5	30	85	-.02
tetrachloroethene	1.864	1.6	-	14.2	30	85	-.02
1,1,1,2-tetrachloroethane	1.421	1.183	-	16.7	30	80	-.02
chlorobenzene	3.299	2.802	-	15.1	30	85	-.02
ethylbenzene	5.648	4.582	-	18.9	30	81	-.03
m+p-xylene	4.541	3.793	-	16.5	30	82	-.03
bromoform	1.664	1.47	-	11.7	30	84	-.03
styrene	3.485	2.875	-	17.5	30	83	-.03
1,1,2,2-tetrachloroethane	3.013	2.676	-	11.2	30	87	-.02
o-xylene	4.463	3.806	-	14.7	30	83	-.02
1,2,3-trichloropropane	2.496	2.077	-	16.8	30	83	-.02
nonane	3.626	3.045	-	16	30	83	-.02
isopropylbenzene	5.738	4.822	-	16	30	83	-.02
bromobenzene	3.378	2.859	-	15.4	30	84	-.02
2-chlorotoluene	1.762	1.407	-	20.1	30	80	-.02
n-propylbenzene	2.045	1.731	-	15.4	30	84	-.02

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855		
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002		
Instrument ID	: AIRPIANO4	**Calibration Date**	: 10/04/22 13:03		
Lab File ID	: R423912	**Init. Calib. Date(s)**	: 09/21/22	09/22/22	
Sample No	: WG1695439-2	**Init. Calib. Times**	: 23:28	04:09	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
4-chlorotoluene	1.726	1.402	-	18.8	30	80	-.02
4-ethyl toluene	5.995	4.902	-	18.2	30	84	-.02
1,3,5-trimethylbenzene	5.059	4.239	-	16.2	30	83	-.02
tert-butylbenzene	5.386	4.739	-	12	30	84	-.02
1,2,4-trimethylbenzene	4.761	4.118	-	13.5	30	86	-.02
decane	5.033	4.366	-	13.3	30	84	-.02
Benzyl Chloride	3.549	3.104	-	12.5	30	76	-.02
1,3-dichlorobenzene	2.895	2.463	-	14.9	30	85	-.02
1,4-dichlorobenzene	2.891	2.498	-	13.6	30	90	-.02
sec-butylbenzene	7.252	6.3	-	13.1	30	86	-.02
p-isopropyltoluene	6.516	5.88	-	9.8	30	87	-.02
1,2-dichlorobenzene	2.731	2.334	-	14.5	30	88	-.02
n-butylbenzene	5.983	5.215	-	12.8	30	83	-.02
1,2-dibromo-3-chloropropan	1.258	1.146	-	8.9	30	84	-.02
undecane	5.429	4.949	-	8.8	30	86	-.02
dodecane	5.264	5.318	-	-1	30	87	-.02
1,2,4-trichlorobenzene	2.46	2.285	-	7.1	30	84	-.02
naphthalene	6.491	5.83	-	10.2	30	80	-.02
1,2,3-trichlorobenzene	2.486	2.439	-	1.9	30	85	-.02
hexachlorobutadiene	2.238	2.135	-	4.6	30	89	-.02

* Value outside of QC limits.

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423912.D
Acq On : 4 Oct 2022 1:03 PM
Operator : AIRPIANO4:TJS
Sample : WG1695439-2,3,250,250
Misc : WG1695439,ICAL19357
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 04 15:52:34 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	bromochloromethane	1.000	1.000	0.0	95	-0.03
2		chlorodifluoromethane	0.700	0.672	4.0	95	-0.02
3		propylene	0.465	0.358	23.0	77	-0.02
4		propane	0.557	0.557	0.0	95	-0.02
5		dichlorodifluoromethane	0.821	0.835	-1.7	98	-0.02
6	C	chloromethane	0.354	0.372	-5.1	103	-0.03
7		Freon-114	0.964	1.038	-7.7	103	-0.02
8	C	methanol	0.203	0.256	-26.1	121	-0.02
9	C	vinyl chloride	0.542	0.525	3.1	94	-0.03
10	C	1,3-butadiene	0.406	0.413	-1.7	101	-0.03
11		butane	0.754	0.705	6.5	94	-0.02
13	C	bromomethane	0.426	0.416	2.3	95	-0.03
14	C	chloroethane	0.288	0.264	8.3	90	-0.03
15		ethanol	0.292	0.370	-26.7	114	-0.03
16		dichlorofluoromethane	0.837	0.800	4.4	95	-0.03
17	C	vinyl bromide	0.378	0.340	10.1	91	-0.03
18	C	acrolein	0.222	0.237	-6.8	95	-0.03
19		acetone	0.529	0.525	0.8	99	-0.03
20	C	acetonitrile	0.446	0.422	5.4	94	-0.03
21		trichlorofluoromethane	0.634	0.679	-7.1	102	-0.03
22		isopropyl alcohol	0.746	0.659	11.7	97	-0.03
23	C	acrylonitrile	0.414	0.405	2.2	100	-0.03
24		pentane	0.922	0.865	6.2	99	-0.03
25		ethyl ether	0.900	0.876	2.7	97	-0.03
26	C	1,1-dichloroethene	0.770	0.693	10.0	99	-0.04
27		tertiary butyl alcohol	1.113	1.021	8.3	78	-0.03
28	C	methylene chloride	0.554	0.489	11.7	79	-0.03
29	C	3-chloropropene	0.825	0.622	24.6	75	-0.03
30	C	carbon disulfide	1.599	1.242	22.3	77	-0.03
31		Freon 113	0.904	0.771	14.7	83	-0.04
32		trans-1,2-dichloroethene	0.887	0.727	18.0	82	-0.03
33	C	1,1-dichloroethane	1.056	0.871	17.5	80	-0.03
34	C	MTBE	1.419	1.189	16.2	83	-0.03
35	C	vinyl acetate	1.042	1.013	2.8	87	-0.03
36	C	2-butanone	1.155	0.973	15.8	83	-0.03
37		cis-1,2-dichloroethene	0.803	0.667	16.9	80	-0.02
38		Ethyl Acetate	0.216	0.180	16.7	82	-0.03
39	C	chloroform	0.920	0.865	6.0	89	-0.03
40		Tetrahydrofuran	0.762	0.598	21.5	81	-0.03

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423912.D
Acq On : 4 Oct 2022 1:03 PM
Operator : AIRPIANO4:TJS
Sample : WG1695439-2,3,250,250
Misc : WG1695439,ICAL19357
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 04 15:52:34 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41		2,2-dichloropropane	0.777	0.696	10.4	85	-0.03
42	C	1,2-dichloroethane	0.619	0.554	10.5	85	-0.03
43	I	1,4-difluorobenzene	1.000	1.000	0.0	89	-0.03
44	C	hexane	0.404	0.362	10.4	83	-0.03
45		diisopropyl ether	0.215	0.201	6.5	85	-0.03
46		tert-butyl ethyl ether	0.741	0.670	9.6	82	-0.03
48	C	1,1,1-trichloroethane	0.283	0.259	8.5	81	-0.03
49		1,1-dichloropropene	0.288	0.267	7.3	84	-0.03
50	C	benzene	0.697	0.618	11.3	85	-0.03
52	C	carbon tetrachloride	0.241	0.240	0.4	86	-0.03
53		cyclohexane	0.432	0.379	12.3	82	-0.03
54		tert-amyl methyl ether	0.605	0.552	8.8	83	-0.03
55		dibromomethane	0.198	0.178	10.1	82	-0.03
56	C	1,2-dichloropropane	0.244	0.214	12.3	80	-0.03
57		bromodichloromethane	0.339	0.327	3.5	87	-0.03
58	C	1,4-dioxane	0.154	0.131	14.9	82	-0.03
59	C	trichloroethene	0.262	0.233	11.1	81	-0.03
60	C	2,2,4-trimethylpentane	1.299	1.165	10.3	85	-0.03
61		methyl methacrylate	0.257	0.248	3.5	82	-0.03
62		heptane	0.430	0.382	11.2	84	-0.03
63	C	cis-1,3-dichloropropene	0.319	0.301	5.6	85	-0.03
64	C	4-methyl-2-pentanone	0.473	0.431	8.9	83	-0.03
65		trans-1,3-dichloropropene	0.295	0.280	5.1	83	-0.03
66	C	1,1,2-trichloroethane	0.236	0.206	12.7	80	-0.03
67	I	chlorobenzene-D5	1.000	1.000	0.0	96	-0.03
68	C	toluene	4.890	3.786	22.6	82	-0.03
71		1,3-dichloropropane	2.108	1.796	14.8	85	-0.03
72		2-hexanone	2.465	2.092	15.1	84	-0.02
74		dibromochloromethane	1.773	1.474	16.9	82	-0.03
75	C	1,2-dibromoethane	1.826	1.600	12.4	86	-0.03
76		butyl acetate	0.599	0.539	10.0	84	-0.03
77		octane	1.979	1.693	14.5	85	-0.02
78	C	tetrachloroethene	1.864	1.600	14.2	85	-0.02
79		1,1,1,2-tetrachloroethane	1.421	1.183	16.7	80	-0.02
80	C	chlorobenzene	3.299	2.802	15.1	85	-0.02
81	C	ethylbenzene	5.648	4.582	18.9	81	-0.03
83	C	m+p-xylene	4.541	3.793	16.5	82	-0.03

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423912.D
Acq On : 4 Oct 2022 1:03 PM
Operator : AIRPIANO4:TJS
Sample : WG1695439-2,3,250,250
Misc : WG1695439,ICAL19357
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 04 15:52:34 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
84	C	bromoform	1.664	1.470	11.7	84	-0.03
85	C	styrene	3.485	2.875	17.5	83	-0.03
86	C	1,1,2,2-tetrachloroethane	3.013	2.676	11.2	87	-0.02
87	C	o-xylene	4.463	3.806	14.7	83	-0.02
88		1,2,3-trichloropropane	2.496	2.077	16.8	83	-0.02
89		nonane	3.626	3.045	16.0	83	-0.02
91	C	isopropylbenzene	5.738	4.822	16.0	83	-0.02
92		bromobenzene	3.378	2.859	15.4	84	-0.02
93		2-chlorotoluene	1.762	1.407	20.1	80	-0.02
94		n-propylbenzene	2.045	1.731	15.4	84	-0.02
95		4-chlorotoluene	1.726	1.402	18.8	80	-0.02
96		4-ethyl toluene	5.995	4.902	18.2	84	-0.02
97		1,3,5-trimethylbenzene	5.059	4.239	16.2	83	-0.02
98		tert-butylbenzene	5.386	4.739	12.0	84	-0.02
99		1,2,4-trimethylbenzene	4.761	4.118	13.5	86	-0.02
100		decane	5.033	4.366	13.3	84	-0.02
101	C	Benzyl Chloride	3.549	3.104	12.5	76	-0.02
102		1,3-dichlorobenzene	2.895	2.463	14.9	85	-0.02
103	C	1,4-dichlorobenzene	2.891	2.498	13.6	90	-0.02
104		sec-butylbenzene	7.252	6.300	13.1	86	-0.02
106		p-isopropyltoluene	6.516	5.880	9.8	87	-0.02
107		1,2-dichlorobenzene	2.731	2.334	14.5	88	-0.02
108		n-butylbenzene	5.983	5.215	12.8	83	-0.02
111	C	1,2-dibromo-3-chloropropane	1.258	1.146	8.9	84	-0.02
112		undecane	5.429	4.949	8.8	86	-0.02
114		dodecane	5.264	5.318	-1.0	87	-0.02
115	C	1,2,4-trichlorobenzene	2.460	2.285	7.1	84	-0.02
116		naphthalene	6.491	5.830	10.2	80	-0.02
117		1,2,3-trichlorobenzene	2.486	2.439	1.9	85	-0.02
119	C	hexachlorobutadiene	2.238	2.135	4.6	89	-0.02

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423912.D
Acq On : 4 Oct 2022 1:03 PM
Operator : AIRPIANO4:TJS
Sample : WG1695439-2,3,250,250
Misc : WG1695439,ICAL19357
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 04 15:52:34 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004T\r423912.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.450	49	462589	10.000	ppbV	-0.03
Standard Area = 462589			Recovery = 100.00%			
43) 1,4-difluorobenzene	11.713	114	1229344	10.000	ppbV	-0.03
Standard Area = 1229344			Recovery = 100.00%			
67) chlorobenzene-D5	16.450	54	234984	10.000	ppbV	-0.03
Standard Area = 234984			Recovery = 100.00%			
System Monitoring Compounds						
Target Compounds						Qvalue
2) chlorodifluoromethane	3.844	51	311077	9.604	ppbV	99
3) propylene	3.874	41	165406M6	7.681	ppbV	
4) propane	3.898	29	257656	9.993	ppbV	94
5) dichlorodifluoromethane	3.952	85	386109	10.167	ppbV	100
6) chloromethane	4.126	50	172109	10.496	ppbV	99
7) Freon-114	4.252	85	480030	10.769	ppbV	96
8) methanol	4.324	31	593223	63.130	ppbV	97
9) vinyl chloride	4.378	62	242782	9.688	ppbV	99
10) 1,3-butadiene	4.540	54	190913	10.157	ppbV	95
11) butane	4.606	43	325895	9.348	ppbV	99
13) bromomethane	4.846	94	192578	9.768	ppbV	98
14) chloroethane	5.062	64	122227	9.180	ppbV	100
15) ethanol	5.242	31	855202	63.409	ppbV	93
16) dichlorofluoromethane	5.200	67	370230	9.561	ppbV	99
17) vinyl bromide	5.483	106	157258	8.988	ppbV	100
18) acrolein	5.637	56	109702	10.660	ppbV	98
19) acetone	5.790	43	1214763	49.659	ppbV	98
20) acetonitrile	5.480	41	195325	9.471	ppbV	97
21) trichlorofluoromethane	5.993	101	314015	10.705	ppbV	100
22) isopropyl alcohol	6.120	45	762616	22.089	ppbV	100
23) acrylonitrile	6.363	53	187524	9.803	ppbV	99
24) pentane	6.433	43	399912	9.377	ppbV	99
25) ethyl ether	6.473	31	405069	9.725	ppbV	94
26) 1,1-dichloroethene	6.750	61	320664	9.006	ppbV	96
27) tertiary butyl alcohol	6.840	59	472180	9.170	ppbV	98
28) methylene chloride	6.918	49	226127	8.817	ppbV	98
29) 3-chloropropene	7.056	41	287864	7.539	ppbV	98
30) carbon disulfide	7.206	76	574601	7.769	ppbV	99
31) Freon 113	7.242	101	356556	8.524	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423912.D
Acq On : 4 Oct 2022 1:03 PM
Operator : AIRPIANO4:TJS
Sample : WG1695439-2,3,250,250
Misc : WG1695439,ICAL19357
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 04 15:52:34 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004T\r423912.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
32) trans-1,2-dichloroethene	8.033	61	336477	8.199	ppbV	99
33) 1,1-dichloroethane	8.275	63	402945	8.246	ppbV	100
34) MTBE	8.358	73	550162	8.384	ppbV	99
35) vinyl acetate	8.492	43	468557	9.720	ppbV	100
36) 2-butanone	8.758	43	450124	8.427	ppbV	100
37) cis-1,2-dichloroethene	9.267	61	308610	8.312	ppbV	98
38) Ethyl Acetate	9.567	61	83124	8.326	ppbV	97
39) chloroform	9.617	83	400350	9.407	ppbV	99
40) Tetrahydrofuran	10.058	42	276814	7.855	ppbV	99
41) 2,2-dichloropropane	9.625	77	321916	8.961	ppbV	98
42) 1,2-dichloroethane	10.458	62	256497	8.951	ppbV	99
44) hexane	9.525	57	445361	8.971	ppbV	88
45) diisopropyl ether	9.533	87	247114	9.345	ppbV	98
46) tert-butyl ethyl ether	10.158	59	823060	9.035	ppbV	99
48) 1,1,1-trichloroethane	10.742	97	318411	9.159	ppbV	97
49) 1,1-dichloropropene	11.113	75	328284	9.269	ppbV	99
50) benzene	11.273	78	759460	8.865	ppbV	97
52) carbon tetrachloride	11.447	117	294882	9.941	ppbV	100
53) cyclohexane	11.587	56	466309	8.780	ppbV	98
54) tert-amyl methyl ether	11.980	73	678524	9.125	ppbV	100
55) dibromomethane	12.193	93	218494	8.958	ppbV	98
56) 1,2-dichloropropane	12.227	63	262482	8.745	ppbV	99
57) bromodichloromethane	12.460	83	402218	9.638	ppbV	99
58) 1,4-dioxane	12.507	88	161481	8.546	ppbV	99
59) trichloroethene	12.507	130	286769	8.919	ppbV	100
60) 2,2,4-trimethylpentane	12.553	57	1431607	8.966	ppbV	100
61) methyl methacrylate	12.760	41	304992	9.656	ppbV	99
62) heptane	12.873	43	469926	8.893	ppbV	100
63) cis-1,3-dichloropropene	13.525	75	370041	9.440	ppbV	99
64) 4-methyl-2-pentanone	13.567	43	529623	9.100	ppbV	99
65) trans-1,3-dichloropropene	14.142	75	343649	9.476	ppbV	100
66) 1,1,2-trichloroethane	14.342	97	252677	8.724	ppbV	94
68) toluene	14.667	91	889675	7.742	ppbV	100
71) 1,3-dichloropropane	14.692	76	422066	8.521	ppbV	98
72) 2-hexanone	14.958	43	491654	8.489	ppbV	99
74) dibromochloromethane	15.117	129	346409	8.314	ppbV	99
75) 1,2-dibromoethane	15.367	107	376025	8.763	ppbV	99
76) butyl acetate	15.617	73	126717	9.003	ppbV	100
77) octane	15.708	85	397727	8.553	ppbV	97
78) tetrachloroethene	15.833	166	376088	8.589	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423912.D
Acq On : 4 Oct 2022 1:03 PM
Operator : AIRPIANO4:TJS
Sample : WG1695439-2,3,250,250
Misc : WG1695439,ICAL19357
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 04 15:52:34 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004T\r423912.D
Sub List : Default-LCS-AP2 - All compounds listed

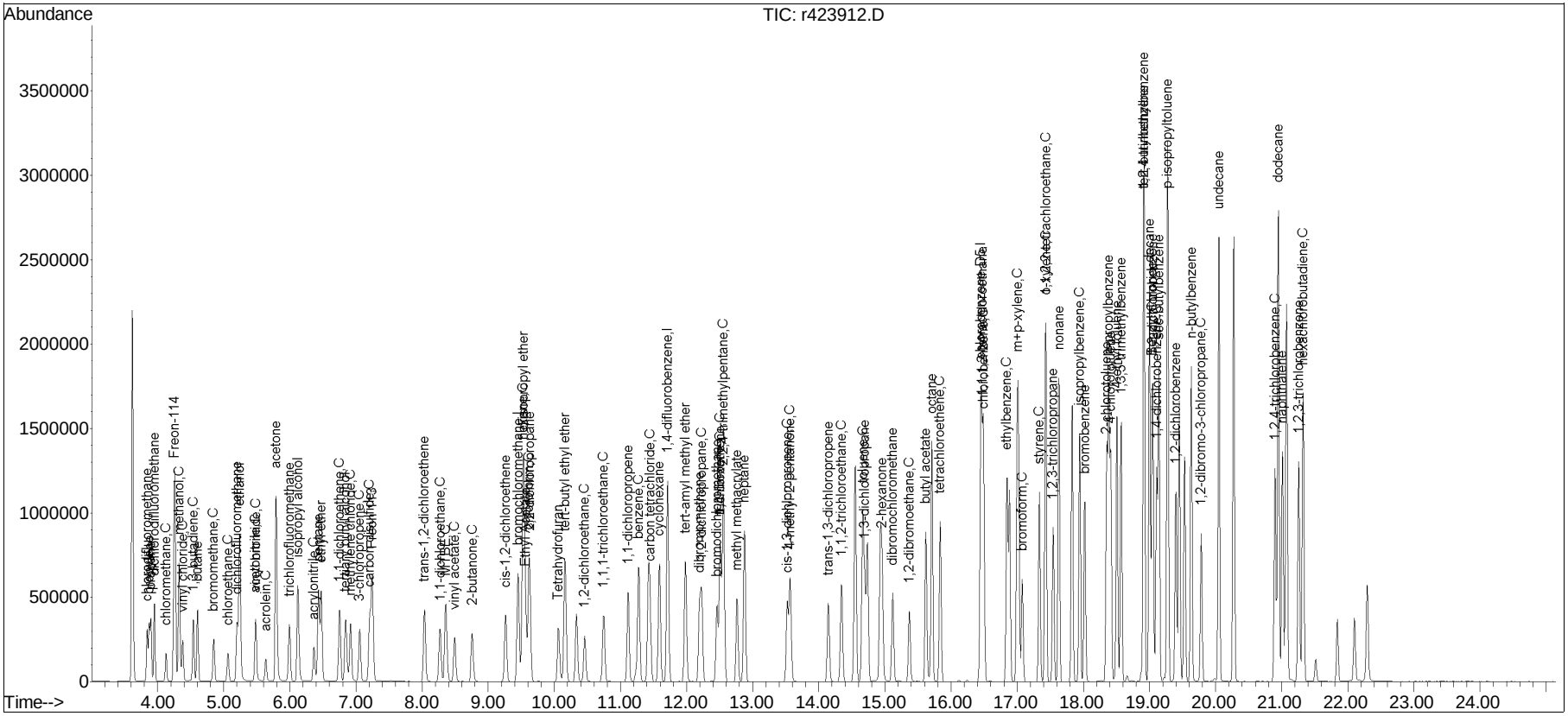
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	1,1,1,2-tetrachloroethane	16.475	131	278055	8.329	ppbV	99
80)	chlorobenzene	16.492	112	658360	8.492	ppbV	99
81)	ethylbenzene	16.842	91	1076810	8.114	ppbV	98
83)	m+p-xylene	17.008	91	1782554	16.706	ppbV	98
84)	bromoform	17.075	173	345356	8.833	ppbV	99
85)	styrene	17.333	104	675566	8.250	ppbV	99
86)	1,1,2,2-tetrachloroethane	17.433	83	628726	8.879	ppbV	99
87)	o-xylene	17.433	91	894400	8.528	ppbV	98
88)	1,2,3-trichloropropane	17.542	75	488105	8.323	ppbV	98
89)	nonane	17.633	43	715579	8.398	ppbV	99
91)	isopropylbenzene	17.942	105	1133064	8.404	ppbV	100
92)	bromobenzene	18.025	77	671871	8.464	ppbV	99
93)	2-chlorotoluene	18.350	126	330685	7.985	ppbV	89
94)	n-propylbenzene	18.383	120	406786	8.463	ppbV	94
95)	4-chlorotoluene	18.417	126	329449	8.121	ppbV	99
96)	4-ethyl toluene	18.508	105	1151913	8.177	ppbV	99
97)	1,3,5-trimethylbenzene	18.575	105	996020	8.378	ppbV	99
98)	tert-butylbenzene	18.917	119	1113516	8.799	ppbV	98
99)	1,2,4-trimethylbenzene	18.917	105	967768	8.651	ppbV	96
100)	decane	19.000	57	1025867	8.674	ppbV	99
101)	Benzyl Chloride	19.042	91	729303	8.745	ppbV	100
102)	1,3-dichlorobenzene	19.050	146	578759	8.509	ppbV	99
103)	1,4-dichlorobenzene	19.108	146	587030	8.641	ppbV	98
104)	sec-butylbenzene	19.142	105	1480485	8.688	ppbV	96
106)	p-isopropyltoluene	19.275	119	1381728	9.024	ppbV	97
107)	1,2-dichlorobenzene	19.400	146	548448	8.548	ppbV	98
108)	n-butylbenzene	19.633	91	1225445	8.716	ppbV	98
111)	1,2-dibromo-3-chloropr...	19.783	75	269338	9.114	ppbV	96
112)	undecane	20.050	57	1162820	9.115	ppbV	99
114)	dodecane	20.950	57	1249587	10.102	ppbV	100
115)	1,2,4-trichlorobenzene	20.900	180	537050	9.290	ppbV	98
116)	naphthalene	21.008	128	1369892	8.981	ppbV	99
117)	1,2,3-trichlorobenzene	21.258	180	573108	9.812	ppbV	98
119)	hexachlorobutadiene	21.325	225	501620	9.536	ppbV	96

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

Sub List : Default-LCS-AP2 - All compounds listed04T\r423912.D

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423912.D
Acq On : 4 Oct 2022 1:03 PM
Operator : AIRPIANO4:TJS
Sample : WG1695439-2,3,250,250
Misc : WG1695439,ICAL19357
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 04 15:52:34 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

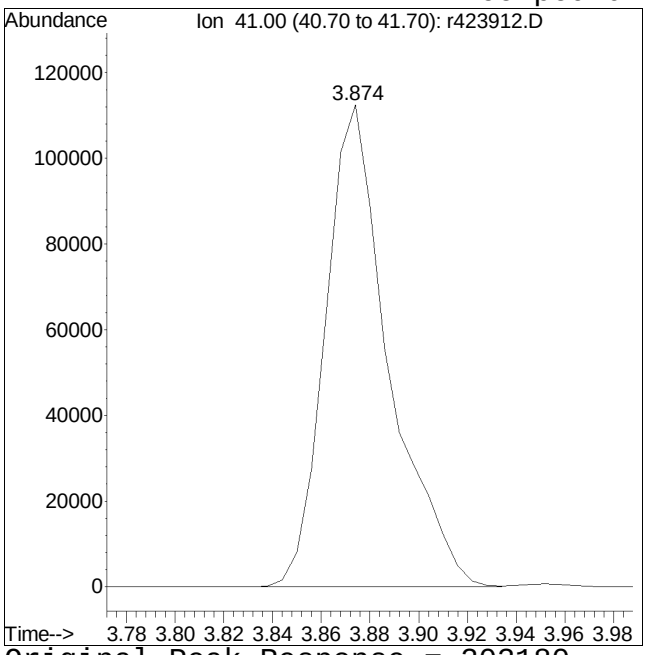


Manual Integration Report

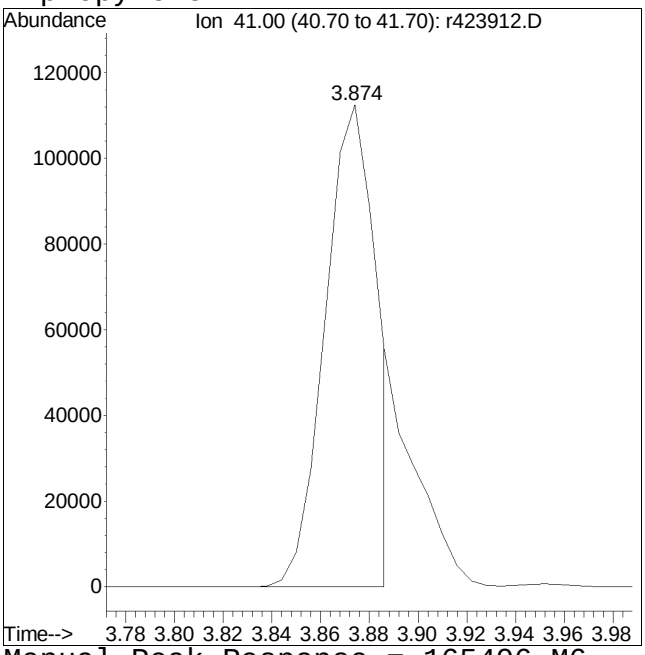
Data Path : O:\Forensics\Data\AirpianoQ
Data File : r423912.D
Date Inj'd : 10/4/2020 0:1: 3
Sample : WG1695439-2,3,250,250

Method : TFS4_220921.M
Operator : AIRPIANO4:TJS
Instrument :
Quant Date : 10/4/2022 2:52 pm

Compound #3: propylene



Original Peak Response = 203180



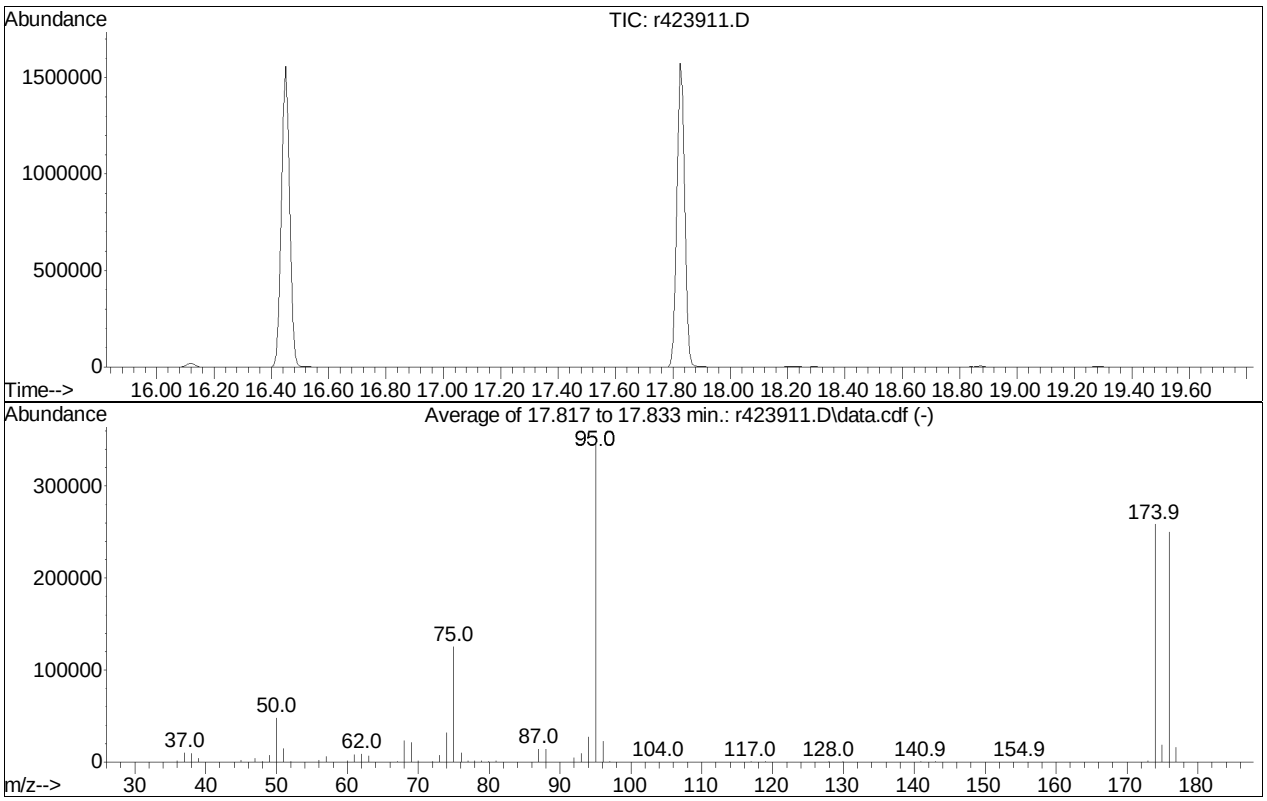
Manual Peak Response = 165406 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423911.D
Acq On : 4 Oct 2022 12:21 PM
Operator : AIRPIANO4:TJS
Sample : WG1695439-1,3,250,250
Misc : WG1695439,ICAL19357
ALS Vial : 0 Sample Multiplier: 1

Integration File: rteint.p

Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Fri Sep 23 08:28:06 2022



Spectrum Information: Average of 17.817 to 17.833 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	13.9	48279	PASS
75	95	30	66	36.1	125513	PASS
95	95	100	100	100.0	347221	PASS
96	95	5	9	6.5	22606	PASS
173	174	0.00	2	0.6	1607	PASS
174	95	50	120	74.5	258716	PASS
175	174	4	9	7.2	18511	PASS
176	174	93	101	96.7	250069	PASS
177	176	5	9	6.5	16311	PASS

Volatiles Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423916.D
Acq On : 4 Oct 2022 5:00 PM
Operator : AIRPIANO4:TJS
Sample : WG1695439-4,3,250,250
Misc : WG1695439,ICAL19357
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 04 18:50:19 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004T\r423912.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.458	49	468822	10.000	ppbV	-0.02
Standard Area = 462589			Recovery = 101.35%			
43) 1,4-difluorobenzene	11.713	114	1204960	10.000	ppbV	-0.03
Standard Area = 1229344			Recovery = 98.02%			
67) chlorobenzene-D5	16.458	54	233128	10.000	ppbV	-0.02
Standard Area = 234984			Recovery = 99.21%			
System Monitoring Compounds						
Target Compounds						Qvalue
3) propylene	3.880		0	N.D.		
5) dichlorodifluoromethane	0.000		0	N.D.		
6) chloromethane	0.000		0	N.D.		
7) Freon-114	0.000		0	N.D.		
9) vinyl chloride	0.000		0	N.D.		
10) 1,3-butadiene	0.000		0	N.D.		
13) bromomethane	0.000		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	5.272	31	2130	0.156	ppbV	99
17) vinyl bromide	0.000		0	N.D.		
19) acetone	5.837	43	2701	0.109	ppbV #	88
21) trichlorofluoromethane	0.000		0	N.D.		
22) isopropyl alcohol	6.170	45	4311	0.123	ppbV #	84
26) 1,1-dichloroethene	0.000		0	N.D.		
27) tertiary butyl alcohol	0.000		0	N.D.		
28) methylene chloride	6.924		0	N.D.		
29) 3-chloropropene	0.000		0	N.D.		
30) carbon disulfide	7.212		0	N.D.		
31) Freon 113	0.000		0	N.D.		
32) trans-1,2-dichloroethene	0.000		0	N.D.		
33) 1,1-dichloroethane	0.000		0	N.D.		
34) MTBE	0.000		0	N.D.		
35) vinyl acetate	8.492		0	N.D.		
36) 2-butanone	8.817		0	N.D.		
37) cis-1,2-dichloroethene	0.000		0	N.D.		
38) Ethyl Acetate	0.000		0	N.D.		
39) chloroform	0.000		0	N.D.		

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423916.D
Acq On : 4 Oct 2022 5:00 PM
Operator : AIRPIANO4:TJS
Sample : WG1695439-4,3,250,250
Misc : WG1695439,ICAL19357
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 04 18:50:19 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004T\r423912.D
Sub List : Default-LCS-AP2 - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40)	Tetrahydrofuran	10.133		0	N.D.		
42)	1,2-dichloroethane	0.000		0	N.D.		
44)	hexane	0.000		0	N.D.		
48)	1,1,1-trichloroethane	0.000		0	N.D.		
50)	benzene	0.000		0	N.D.		
52)	carbon tetrachloride	0.000		0	N.D.		
53)	cyclohexane	0.000		0	N.D.	d	
56)	1,2-dichloropropane	0.000		0	N.D.		
57)	bromodichloromethane	0.000		0	N.D.		
58)	1,4-dioxane	0.000		0	N.D.		
59)	trichloroethene	0.000		0	N.D.		
60)	2,2,4-trimethylpentane	12.560		0	N.D.		
62)	heptane	0.000		0	N.D.		
63)	cis-1,3-dichloropropene	0.000		0	N.D.		
64)	4-methyl-2-pentanone	0.000		0	N.D.		
65)	trans-1,3-dichloropropene	0.000		0	N.D.		
66)	1,1,2-trichloroethane	0.000		0	N.D.		
68)	toluene	0.000		0	N.D.		
72)	2-hexanone	0.000		0	N.D.		
74)	dibromochloromethane	0.000		0	N.D.		
75)	1,2-dibromoethane	0.000		0	N.D.		
78)	tetrachloroethene	0.000		0	N.D.		
80)	chlorobenzene	0.000		0	N.D.		
81)	ethylbenzene	0.000		0	N.D.		
83)	m+p-xylene	0.000		0	N.D.		
84)	bromoform	0.000		0	N.D.		
85)	styrene	0.000		0	N.D.		
86)	1,1,2,2-tetrachloroethane	0.000		0	N.D.		
87)	o-xylene	0.000		0	N.D.		
96)	4-ethyl toluene	0.000		0	N.D.		
97)	1,3,5-trimethylbenzene	0.000		0	N.D.		
99)	1,2,4-trimethylbenzene	0.000		0	N.D.		
101)	Benzyl Chloride	0.000		0	N.D.		
102)	1,3-dichlorobenzene	19.117		0	N.D.		
103)	1,4-dichlorobenzene	19.117		0	N.D.		
107)	1,2-dichlorobenzene	19.408		0	N.D.		
115)	1,2,4-trichlorobenzene	20.900		0	N.D.		
119)	hexachlorobutadiene	21.325		0	N.D.		

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423916.D
Acq On : 4 Oct 2022 5:00 PM
Operator : AIRPIANO4:TJS
Sample : WG1695439-4,3,250,250
Misc : WG1695439,ICAL19357
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 04 18:50:19 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004T\r423912.D
Sub List : Default-LCS-AP2 - All compounds listed

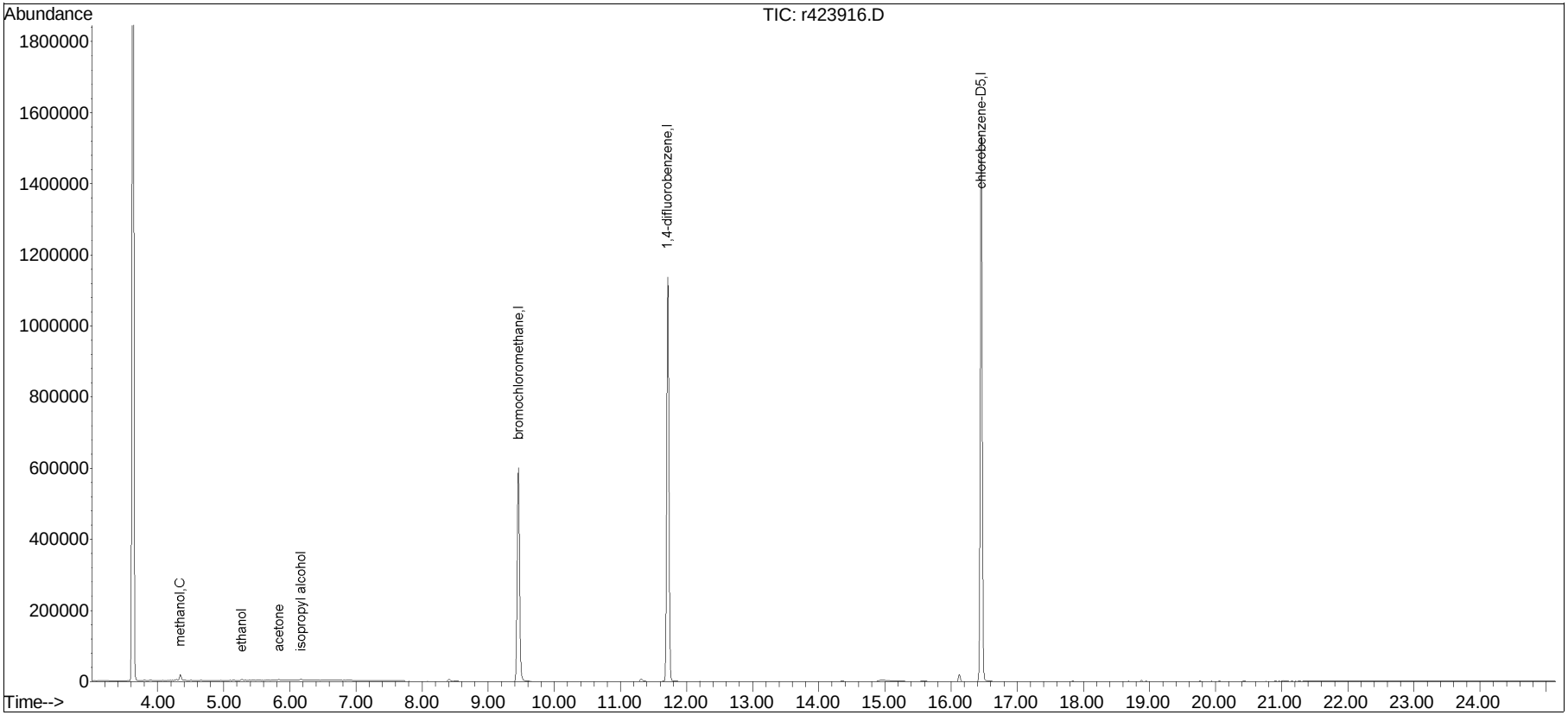
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

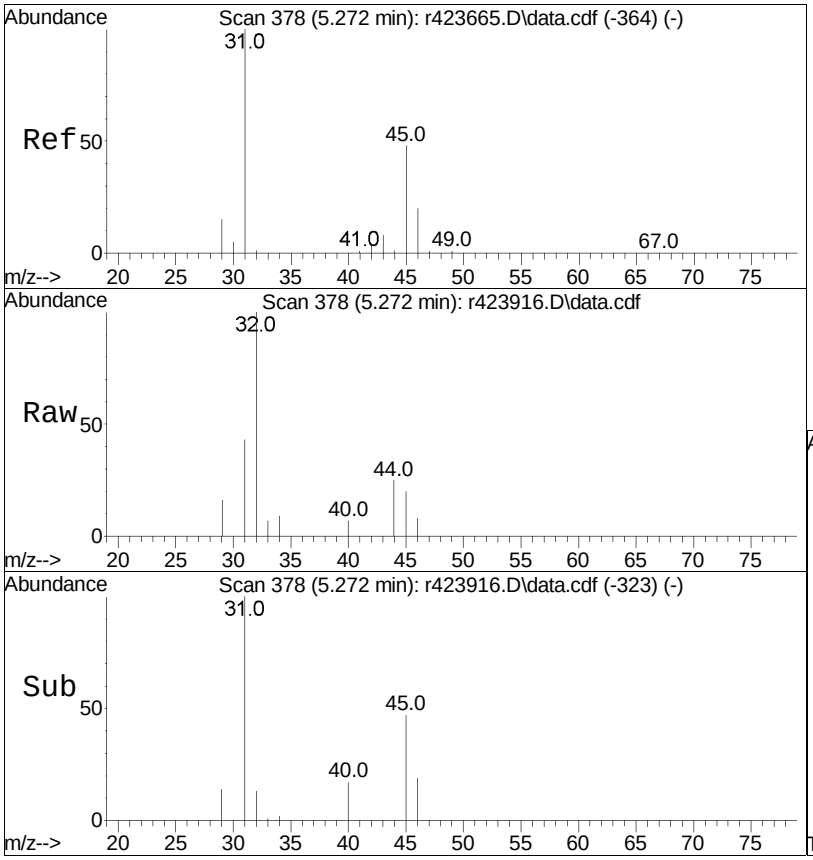
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : Default-LCS-AP2 - All compounds listed04T\r423912.D

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423916.D
Acq On : 4 Oct 2022 5:00 PM
Operator : AIRPIANO4:TJS
Sample : WG1695439-4,3,250,250
Misc : WG1695439,ICAL19357
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 04 18:50:19 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

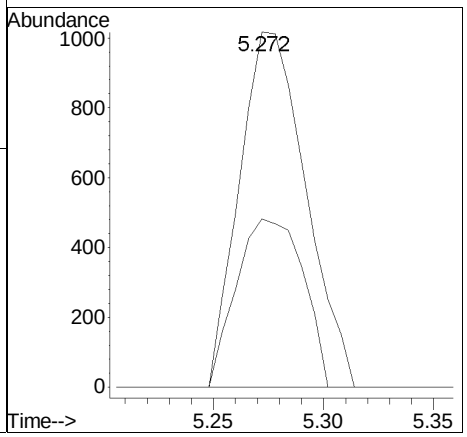


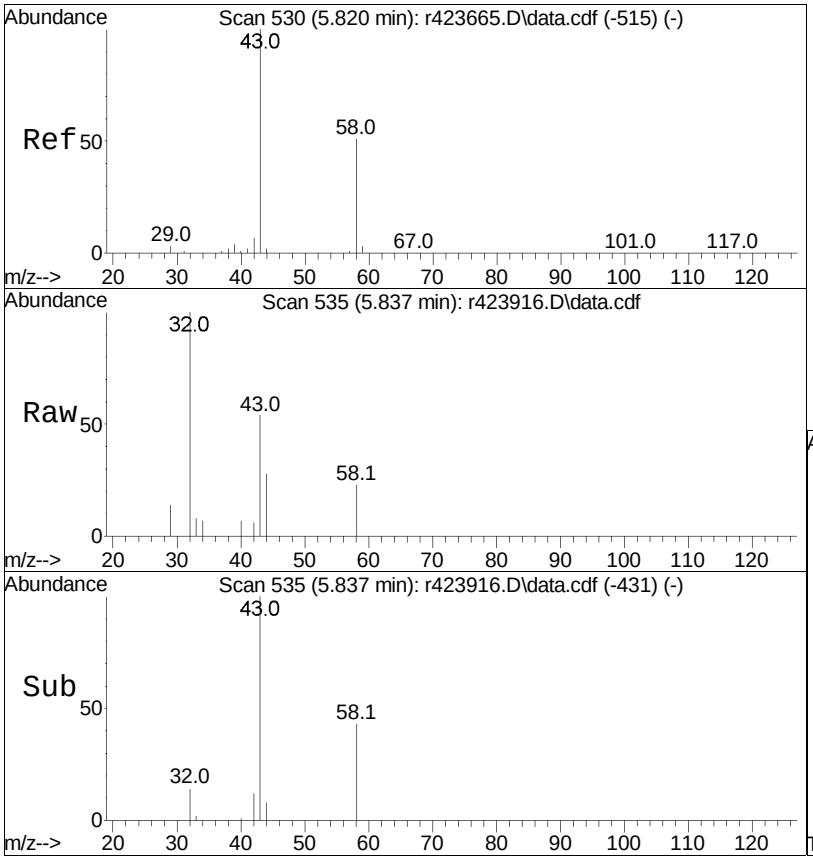


#15
ethanol
Concen: 0.16 ppbV
RT: 5.272 min Scan# 378
Delta R.T. 0.000 min
Lab File: r423916.D
Acq: 4 Oct 2022 5:00 PM

Tgt Ion: 31 Resp: 2130

Ion	Ratio	Lower	Upper
31	100		
45	47.4	38.3	57.5

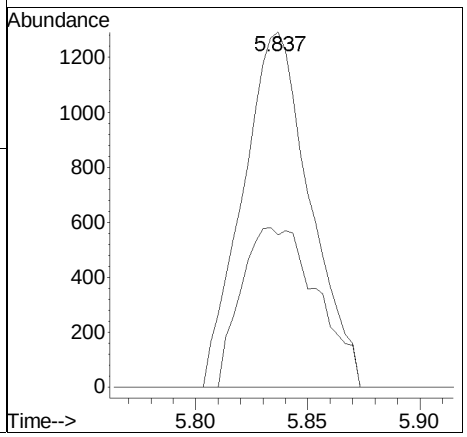


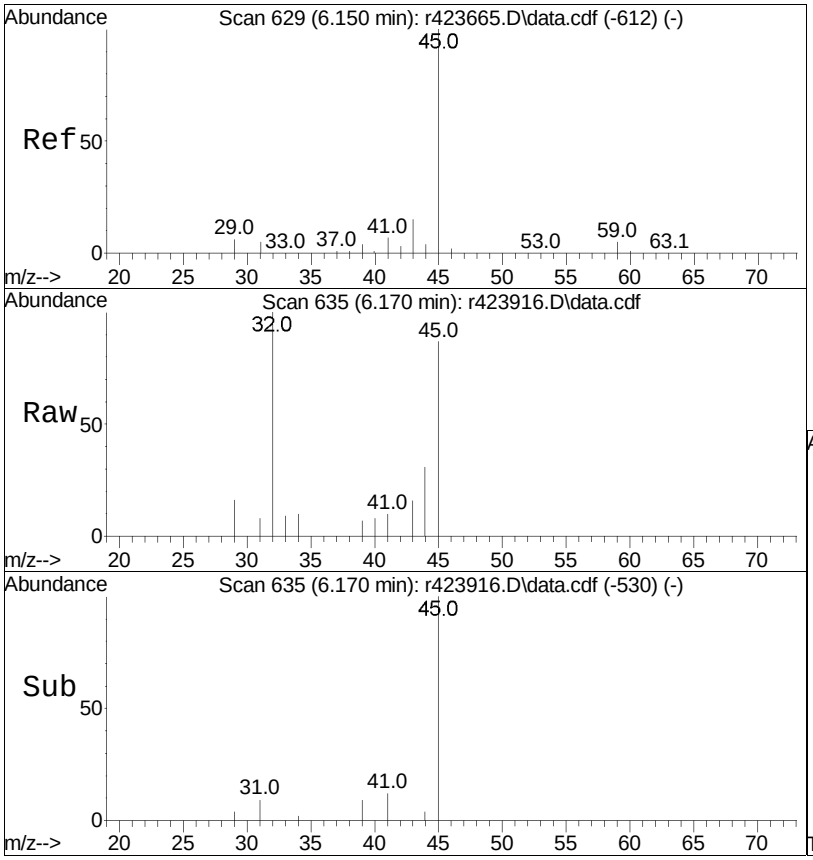


#19
acetone
Concen: 0.11 ppbV
RT: 5.837 min Scan# 535
Delta R.T. 0.017 min
Lab File: r423916.D
Acq: 4 Oct 2022 5:00 PM

Tgt Ion: 43 Resp: 2701

Ion	Ratio	Lower	Upper
43	100		
58	42.9	41.0	61.6
57	0.0	1.0	1.6#

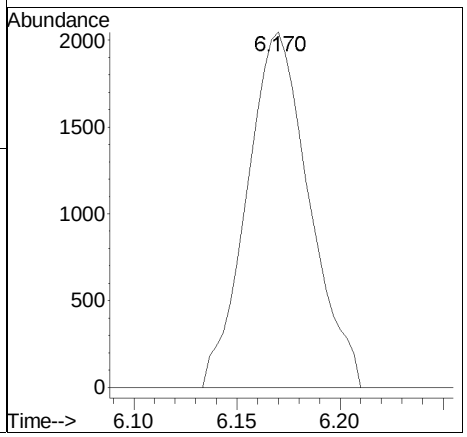




#22
isopropyl alcohol
Concen: 0.12 ppbV
RT: 6.170 min Scan# 635
Delta R.T. 0.020 min
Lab File: r423916.D
Acq: 4 Oct 2022 5:00 PM

Tgt Ion: 45 Resp: 4311

Ion	Ratio	Lower	Upper
45	100		
59	0.0	4.3	6.5#



Manual Integration Report

Data Path	: O:\Forensics\Data\Airpiano	QMethod	: TFS4_220921.M
Data File	: r423916.D	Operator	: AIRPIANO4:TJS
Date Inj'd	: 10/4/2020 0:5: 0	Instrument	:
Sample	: WG1695439-4,3,250,250	Quant Date	: 10/4/2022 5:49 pm

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

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423913.D
Acq On : 4 Oct 2022 1:45 PM
Operator : AIRPIANO4:TJS
Sample : WG1695439-3,3,250,250
Misc : WG1695439,ICAL19357
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 04 15:53:26 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	bromochloromethane	10.000	10.000	0.0	99	-0.03
2		chlorodifluoromethane	10.000	9.187	8.1	94	-0.02
3		propylene	10.000	9.346	6.5	97	-0.02
4		propane	10.000	9.718	2.8	96	-0.02
5		dichlorodifluoromethane	10.000	10.643	-6.4	107	-0.02
6	C	chloromethane	10.000	11.244	-12.4	114	-0.02
7		Freon-114	10.000	11.396	-14.0	113	-0.02
8	C	methanol	50.000	51.357	-2.7	102	-0.02
9	C	vinyl chloride	10.000	10.442	-4.4	105	-0.02
10	C	1,3-butadiene	10.000	11.607	-16.1	120	-0.02
11		butane	10.000	9.436	5.6	98	-0.02
13	C	bromomethane	10.000	10.339	-3.4	104	-0.02
14	C	chloroethane	10.000	9.810	1.9	99	-0.02
15		ethanol	50.000	62.420	-24.8	117	-0.03
16		dichlorofluoromethane	10.000	9.289	7.1	95	-0.02
17	C	vinyl bromide	10.000	9.521	4.8	100	-0.03
18	C	acrolein	10.000	10.729	-7.3	99	-0.03
19		acetone	50.000	53.874	-7.7	111	-0.03
20	C	acetonitrile	10.000	9.667	3.3	99	-0.03
21		trichlorofluoromethane	10.000	11.402	-14.0	113	-0.03
22		isopropyl alcohol	25.000	25.993	-4.0	119	-0.03
23	C	acrylonitrile	10.000	10.189	-1.9	108	-0.03
24		pentane	10.000	9.292	7.1	102	-0.03
25		ethyl ether	10.000	9.437	5.6	98	-0.03
26	C	1,1-dichloroethene	10.000	9.579	4.2	109	-0.03
27		tertiary butyl alcohol	10.000	9.574	4.3	84	-0.03
28	C	methylene chloride	10.000	9.517	4.8	88	-0.03
29	C	3-chloropropene	10.000	8.589	14.1	89	-0.03
30	C	carbon disulfide	10.000	7.998	20.0	82	-0.03
31		Freon 113	10.000	9.077	9.2	91	-0.04
32		trans-1,2-dichloroethene	10.000	8.673	13.3	90	-0.03
33	C	1,1-dichloroethane	10.000	8.896	11.0	90	-0.03
34	C	MTBE	10.000	9.343	6.6	96	-0.03
35	C	vinyl acetate	10.000	9.782	2.2	91	-0.03
36	C	2-butanone	10.000	9.330	6.7	96	-0.03
37		cis-1,2-dichloroethene	10.000	9.152	8.5	92	-0.03
38		Ethyl Acetate	10.000	9.502	5.0	97	-0.03
39	C	chloroform	10.000	10.214	-2.1	100	-0.03
40		Tetrahydrofuran	10.000	8.660	13.4	92	-0.03

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423913.D
Acq On : 4 Oct 2022 1:45 PM
Operator : AIRPIANO4:TJS
Sample : WG1695439-3,3,250,250
Misc : WG1695439,ICAL19357
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 04 15:53:26 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
41		2,2-dichloropropane	10.000	8.972	10.3	89	-0.03
42	C	1,2-dichloroethane	10.000	9.536	4.6	94	-0.03
43	I	1,4-difluorobenzene	10.000	10.000	0.0	91	-0.03
44	C	hexane	10.000	9.923	0.8	94	-0.03
45		diisopropyl ether	10.000	9.506	4.9	88	-0.03
46		tert-butyl ethyl ether	10.000	9.077	9.2	84	-0.03
48	C	1,1,1-trichloroethane	10.000	10.227	-2.3	92	-0.03
49		1,1-dichloropropene	10.000	9.793	2.1	91	-0.03
50	C	benzene	10.000	9.520	4.8	93	-0.03
52	C	carbon tetrachloride	10.000	11.081	-10.8	98	-0.03
53		cyclohexane	10.000	9.760	2.4	94	-0.03
54		tert-amyl methyl ether	10.000	9.405	6.0	88	-0.03
55		dibromomethane	10.000	9.032	9.7	85	-0.03
56	C	1,2-dichloropropane	10.000	9.649	3.5	90	-0.03
57		bromodichloromethane	10.000	10.964	-9.6	101	-0.03
58	C	1,4-dioxane	10.000	10.580	-5.8	105	-0.03
59	C	trichloroethene	10.000	9.793	2.1	91	-0.03
60	C	2,2,4-trimethylpentane	10.000	9.824	1.8	96	-0.03
61		methyl methacrylate	10.000	10.666	-6.7	93	-0.03
62		heptane	10.000	9.952	0.5	96	-0.03
63	C	cis-1,3-dichloropropene	10.000	10.841	-8.4	99	-0.03
64	C	4-methyl-2-pentanone	10.000	10.740	-7.4	100	-0.03
65		trans-1,3-dichloropropene	10.000	9.406	5.9	84	-0.03
66	C	1,1,2-trichloroethane	10.000	9.870	1.3	93	-0.03
67	I	chlorobenzene-D5	10.000	10.000	0.0	99	-0.03
68	C	toluene	10.000	8.250	17.5	90	-0.03
71		1,3-dichloropropane	10.000	8.488	15.1	87	-0.03
72		2-hexanone	10.000	9.698	3.0	99	-0.02
74		dibromochloromethane	10.000	9.483	5.2	97	-0.03
75	C	1,2-dibromoethane	10.000	9.629	3.7	98	-0.03
76		butyl acetate	10.000	9.118	8.8	88	-0.03
77		octane	10.000	8.510	14.9	88	-0.02
78	C	tetrachloroethene	10.000	9.548	4.5	98	-0.02
79		1,1,1,2-tetrachloroethane	10.000	8.379	16.2	83	-0.02
80	C	chlorobenzene	10.000	9.537	4.6	98	-0.02
81	C	ethylbenzene	10.000	8.927	10.7	92	-0.03
83	C	m+p-xylene	20.000	18.421	7.9	93	-0.03

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423913.D
Acq On : 4 Oct 2022 1:45 PM
Operator : AIRPIANO4:TJS
Sample : WG1695439-3,3,250,250
Misc : WG1695439,ICAL19357
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 04 15:53:26 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
84	C	bromoform	10.000	10.085	-0.9	99	-0.03
85	C	styrene	10.000	9.282	7.2	97	-0.03
86	C	1,1,2,2-tetrachloroethane	10.000	10.125	-1.3	103	-0.02
87	C	o-xylene	10.000	9.536	4.6	96	-0.02
88		1,2,3-trichloropropane	10.000	8.481	15.2	88	-0.02
89		nonane	10.000	8.392	16.1	86	-0.02
91	C	isopropylbenzene	10.000	8.898	11.0	90	-0.02
92		bromobenzene	10.000	8.696	13.0	89	-0.02
93		2-chlorotoluene	10.000	8.024	19.8	83	-0.02
94		n-propylbenzene	10.000	8.695	13.0	89	-0.02
95		4-chlorotoluene	10.000	8.075	19.3	82	-0.02
96		4-ethyl toluene	10.000	9.063	9.4	96	-0.02
97		1,3,5-trimethylbenzene	10.000	9.368	6.3	97	-0.02
98		tert-butylbenzene	10.000	9.090	9.1	90	-0.02
99		1,2,4-trimethylbenzene	10.000	10.105	-1.1	104	-0.02
100		decane	10.000	8.710	12.9	87	-0.02
101	C	Benzyl Chloride	10.000	9.701	3.0	88	-0.02
102		1,3-dichlorobenzene	10.000	10.363	-3.6	107	-0.02
103	C	1,4-dichlorobenzene	10.000	9.774	2.3	106	-0.02
104		sec-butylbenzene	10.000	8.771	12.3	89	-0.02
106		p-isopropyltoluene	10.000	8.512	14.9	85	-0.02
107		1,2-dichlorobenzene	10.000	10.234	-2.3	109	-0.02
108		n-butylbenzene	10.000	9.159	8.4	90	-0.02
111	C	1,2-dibromo-3-chloropropane	10.000	9.352	6.5	89	-0.02
112		undecane	10.000	9.170	8.3	90	-0.02
114		dodecane	10.000	9.621	3.8	86	-0.02
115	C	1,2,4-trichlorobenzene	10.000	10.380	-3.8	97	-0.02
116		naphthalene	10.000	8.685	13.1	80	0.00
117		1,2,3-trichlorobenzene	10.000	9.343	6.6	84	-0.02
119	C	hexachlorobutadiene	10.000	10.420	-4.2	101	-0.02

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423913.D
Acq On : 4 Oct 2022 1:45 PM
Operator : AIRPIANO4:TJS
Sample : WG1695439-3,3,250,250
Misc : WG1695439,ICAL19357
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 04 15:53:26 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004T\r423912.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.450	49	479547	10.000	ppbV	-0.03
Standard Area = 462589			Recovery = 103.67%			
43) 1,4-difluorobenzene	11.713	114	1259040	10.000	ppbV	-0.03
Standard Area = 1229344			Recovery = 102.42%			
67) chlorobenzene-D5	16.450	54	243087	10.000	ppbV	-0.03
Standard Area = 234984			Recovery = 103.45%			
System Monitoring Compounds						
Target Compounds						Qvalue
3) propylene	3.880	41	208623M6	9.346	ppbV	
5) dichlorodifluoromethane	3.958	85	418994	10.643	ppbV	100
6) chloromethane	4.132	50	191127	11.244	ppbV	100
7) Freon-114	4.252	85	526620	11.396	ppbV	97
9) vinyl chloride	4.384	62	271275	10.442	ppbV	99
10) 1,3-butadiene	4.546	54	226161	11.607	ppbV	95
13) bromomethane	4.852	94	211294	10.339	ppbV	99
14) chloroethane	5.068	64	135404	9.810	ppbV	99
15) ethanol	5.242	31	872721	62.420	ppbV	94
17) vinyl bromide	5.487	106	172706	9.521	ppbV	98
19) acetone	5.793	43	1366198	53.874	ppbV	100
21) trichlorofluoromethane	5.993	101	346723	11.402	ppbV	97
22) isopropyl alcohol	6.120	45	930285	25.993	ppbV	100
26) 1,1-dichloroethene	6.756	61	353562	9.579	ppbV	96
27) tertiary butyl alcohol	6.840	59	511056	9.574	ppbV	97
28) methylene chloride	6.918	49	253046	9.517	ppbV	98
29) 3-chloropropene	7.056	41	339985	8.589	ppbV	97
30) carbon disulfide	7.206	76	613276	7.998	ppbV	99
31) Freon 113	7.242	101	393578	9.077	ppbV	99
32) trans-1,2-dichloroethene	8.033	61	368964	8.673	ppbV	98
33) 1,1-dichloroethane	8.267	63	450661	8.896	ppbV	100
34) MTBE	8.358	73	635562	9.343	ppbV	100
35) vinyl acetate	8.492	43	488836	9.782	ppbV	100
36) 2-butanone	8.750	43	516651	9.330	ppbV	99
37) cis-1,2-dichloroethene	9.258	61	352222	9.152	ppbV	99
38) Ethyl Acetate	9.567	61	98339	9.502	ppbV	95
39) chloroform	9.617	83	450635	10.214	ppbV	99

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423913.D
Acq On : 4 Oct 2022 1:45 PM
Operator : AIRPIANO4:TJS
Sample : WG1695439-3,3,250,250
Misc : WG1695439,ICAL19357
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 04 15:53:26 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004T\r423912.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Tetrahydrofuran	10.058	42	316405	8.660	ppbV	99
42) 1,2-dichloroethane	10.458	62	283282	9.536	ppbV	98
44) hexane	9.525	57	504525	9.923	ppbV	86
48) 1,1,1-trichloroethane	10.742	97	364129	10.227	ppbV	97
50) benzene	11.273	78	835248	9.520	ppbV	98
52) carbon tetrachloride	11.447	117	336660	11.081	ppbV	100
53) cyclohexane	11.587	56	530846	9.760	ppbV	98
56) 1,2-dichloropropane	12.227	63	296626	9.649	ppbV	98
57) bromodichloromethane	12.460	83	468586	10.964	ppbV	100
58) 1,4-dioxane	12.507	88	204749	10.580	ppbV	100
59) trichloroethene	12.507	130	322454	9.793	ppbV	99
60) 2,2,4-trimethylpentane	12.553	57	1606448	9.824	ppbV	100
62) heptane	12.873	43	538626	9.952	ppbV	100
63) cis-1,3-dichloropropene	13.525	75	435237	10.841	ppbV	99
64) 4-methyl-2-pentanone	13.567	43	640199	10.740	ppbV	98
65) trans-1,3-dichloropropene	14.142	75	349326	9.406	ppbV	99
66) 1,1,2-trichloroethane	14.342	97	292772	9.870	ppbV	94
68) toluene	14.667	91	980789	8.250	ppbV	100
72) 2-hexanone	14.958	43	581002	9.698	ppbV	97
74) dibromochloromethane	15.117	129	408733	9.483	ppbV	99
75) 1,2-dibromoethane	15.367	107	427466	9.629	ppbV	99
78) tetrachloroethene	15.833	166	432499	9.548	ppbV	97
80) chlorobenzene	16.492	112	764826	9.537	ppbV	99
81) ethylbenzene	16.842	91	1225661	8.927	ppbV	97
83) m+p-xylene	17.008	91	2033379	18.421	ppbV	97
84) bromoform	17.075	173	407878	10.085	ppbV	99
85) styrene	17.333	104	786310	9.282	ppbV	100
86) 1,1,2,2-tetrachloroethane	17.433	83	741633	10.125	ppbV	99
87) o-xylene	17.433	91	1034630	9.536	ppbV	98
96) 4-ethyl toluene	18.508	105	1320732	9.063	ppbV	99
97) 1,3,5-trimethylbenzene	18.575	105	1152174	9.368	ppbV	99
99) 1,2,4-trimethylbenzene	18.917	105	1169426	10.105	ppbV	90
101) Benzyl Chloride	19.042	91	836921	9.701	ppbV	100
102) 1,3-dichlorobenzene	19.050	146	729166	10.363	ppbV	97
103) 1,4-dichlorobenzene	19.108	146	686873	9.774	ppbV	97
107) 1,2-dichlorobenzene	19.400	146	679299	10.234	ppbV	97
115) 1,2,4-trichlorobenzene	20.900	180	620752	10.380	ppbV	98
119) hexachlorobutadiene	21.325	225	567005	10.420	ppbV	98

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423913.D
Acq On : 4 Oct 2022 1:45 PM
Operator : AIRPIANO4:TJS
Sample : WG1695439-3,3,250,250
Misc : WG1695439,ICAL19357
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 04 15:53:26 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004T\r423912.D
Sub List : Default-LCS-AP2 - All compounds listed

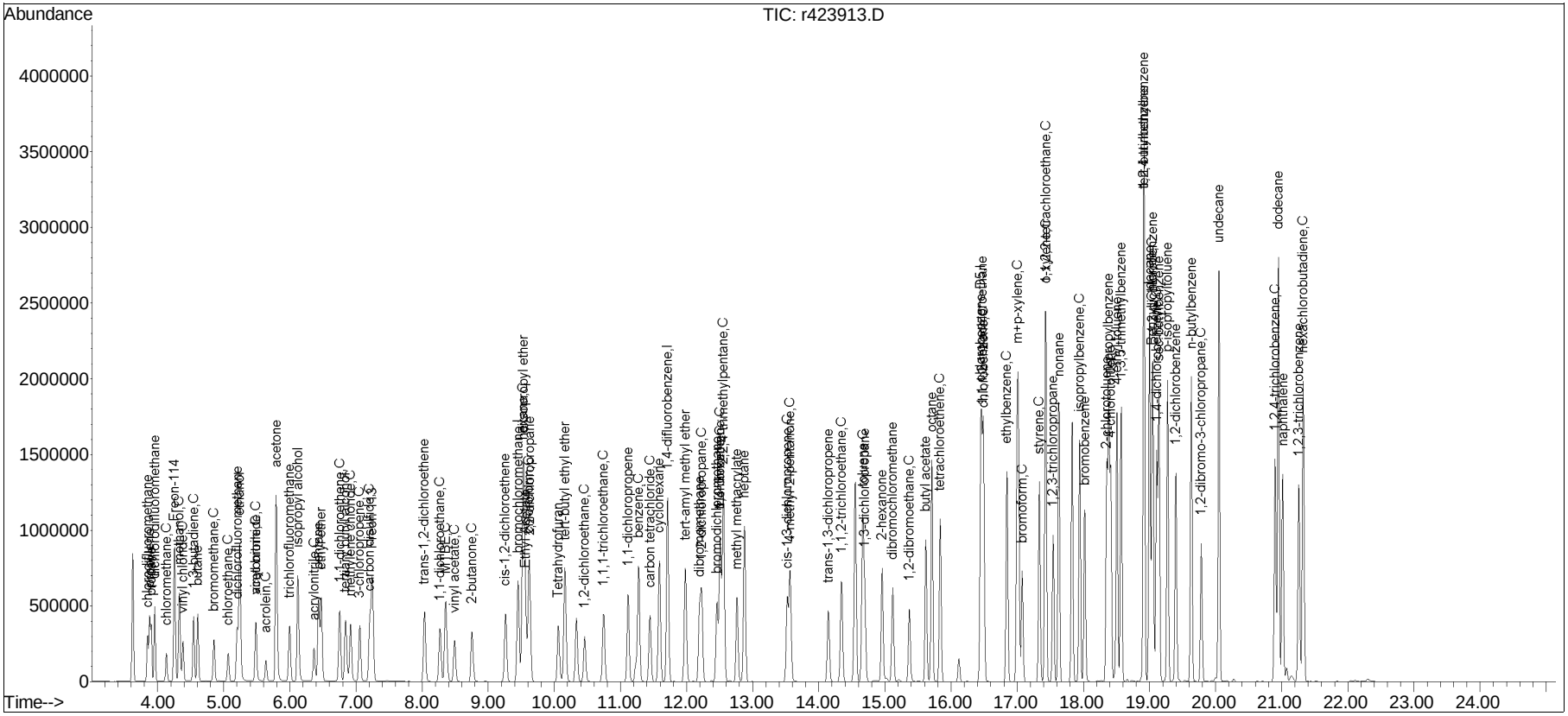
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

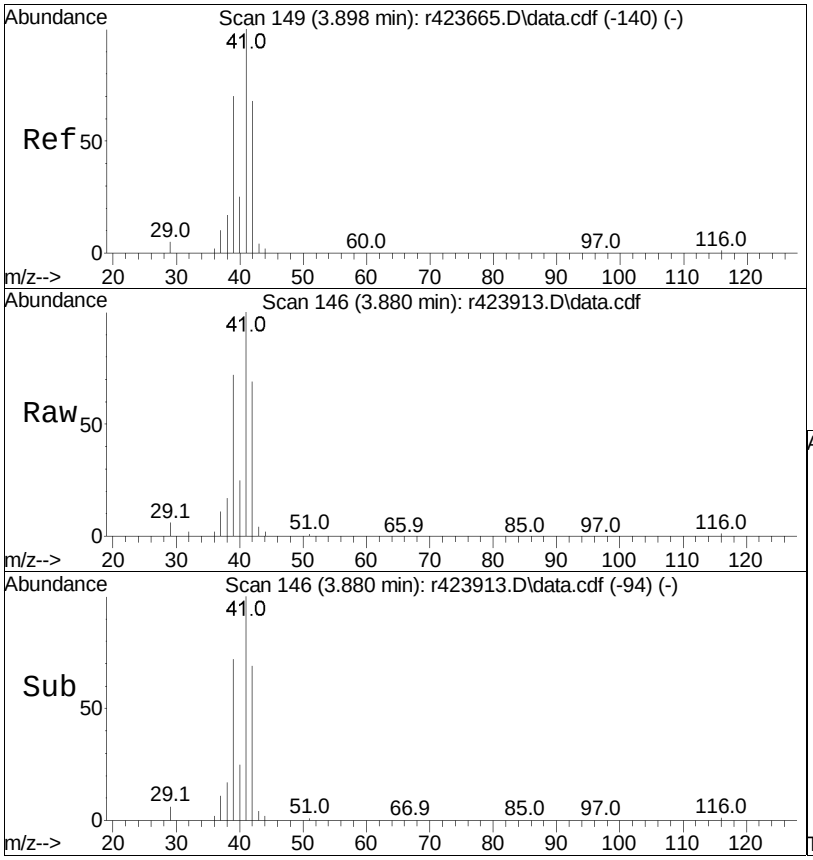
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Sub List : Default-LCS-AP2 - All compounds listed04T\r423912.D

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423913.D
Acq On : 4 Oct 2022 1:45 PM
Operator : AIRPIANO4:TJS
Sample : WG1695439-3,3,250,250
Misc : WG1695439,ICAL19357
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 04 15:53:26 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

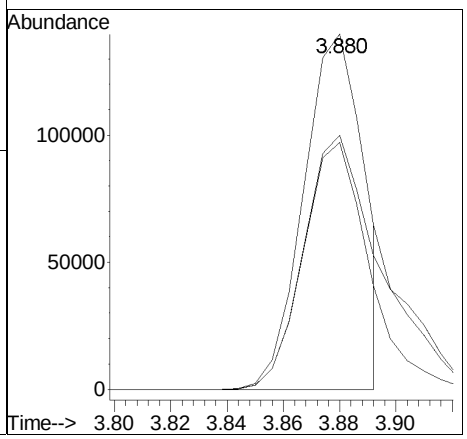


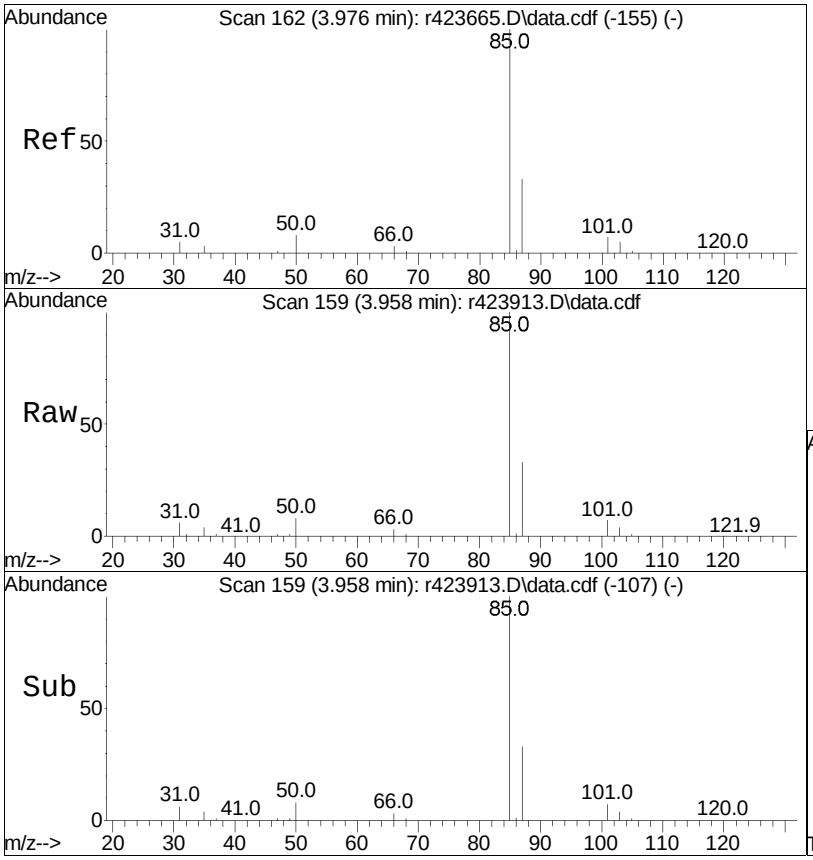


#3
propylene
Concen: 9.35 ppbV m
RT: 3.880 min Scan# 146
Delta R.T. -0.018 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 41 Resp: 208623

Ion	Ratio	Lower	Upper
41	100		
42	69.5	54.7	82.1
39	71.5	56.1	84.1

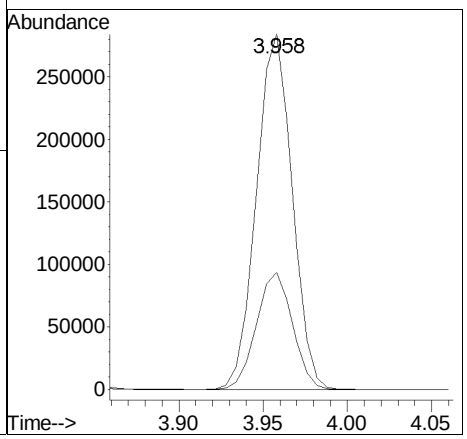


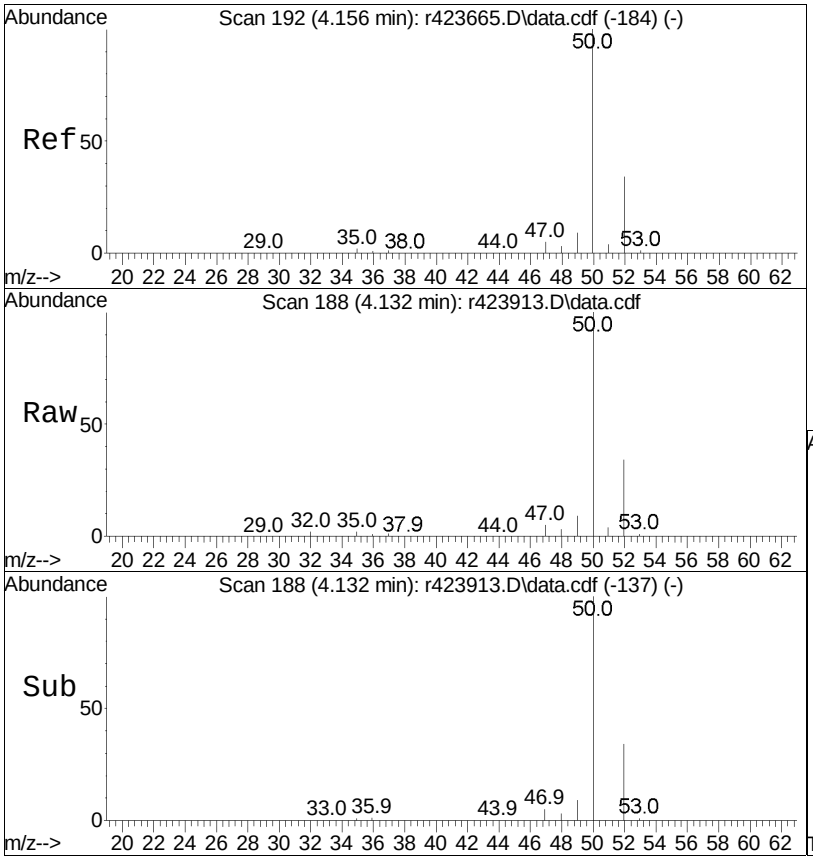


#5
dichlorodifluoromethane
Concen: 10.64 ppbV
RT: 3.958 min Scan# 159
Delta R.T. -0.018 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 85 Resp: 418994

Ion	Ratio	Lower	Upper
85	100		
87	33.0	26.3	39.5

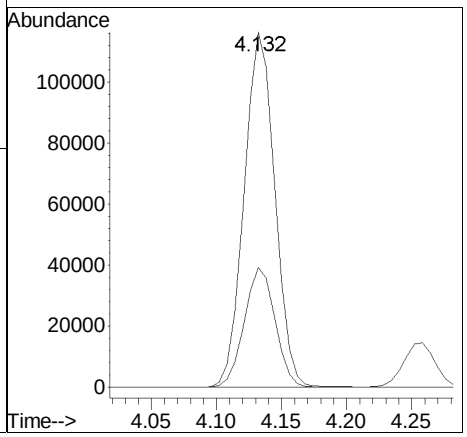


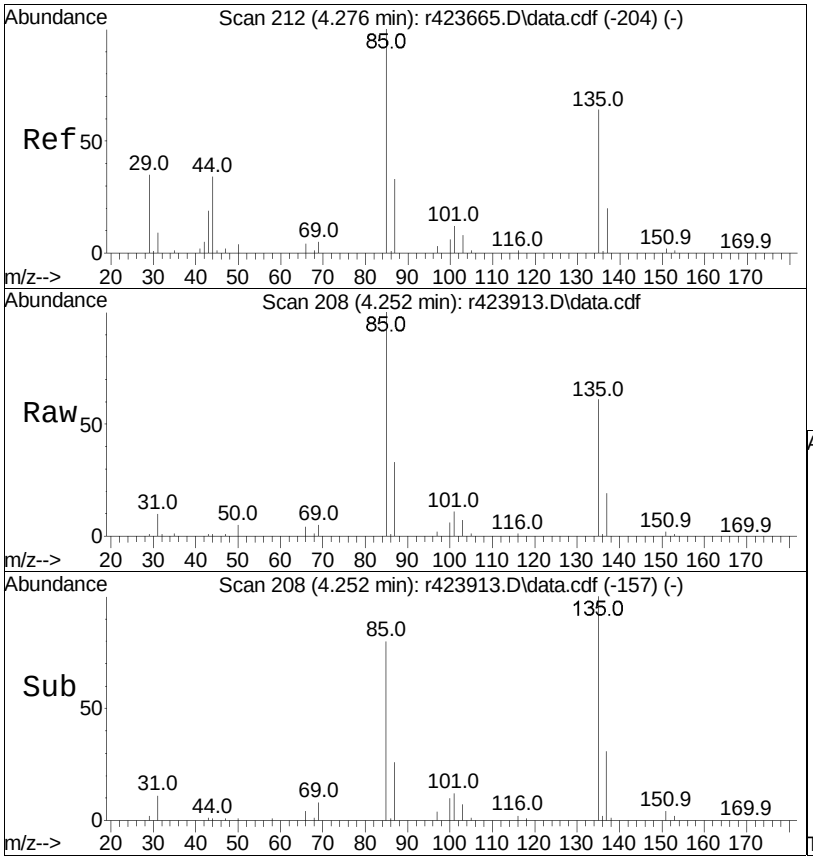


#6
chloromethane
Concen: 11.24 ppbV
RT: 4.132 min Scan# 188
Delta R.T. -0.024 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 50 Resp: 191127

Ion	Ratio	Lower	Upper
50	100		
52	33.8	27.0	40.6

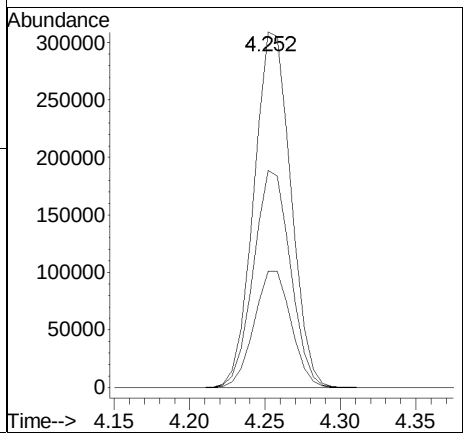


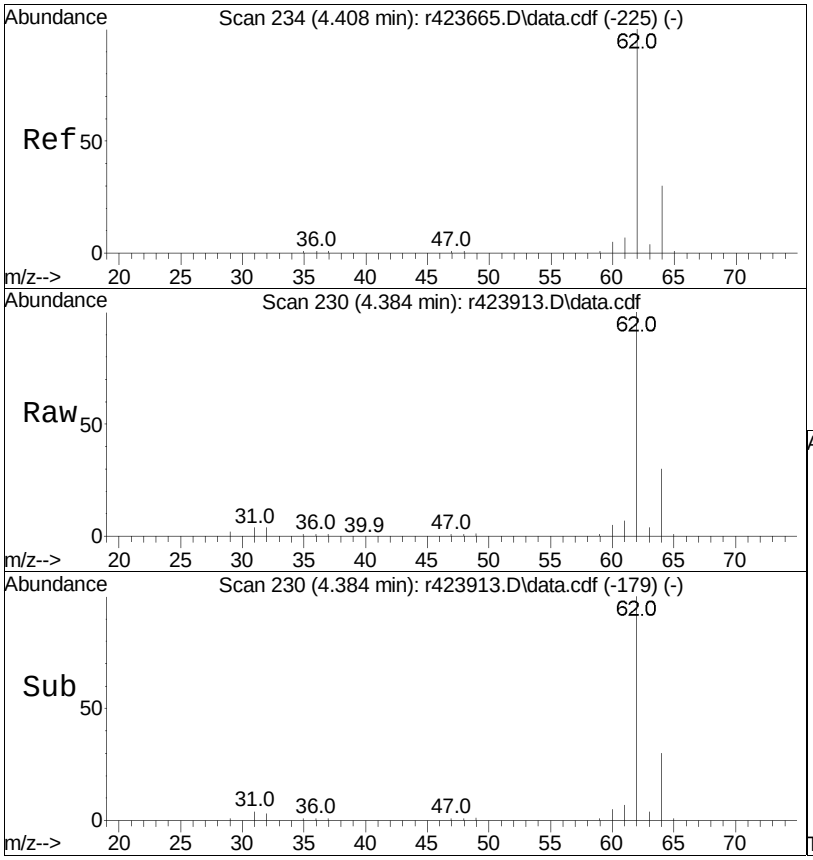


#7
Freon-114
Concen: 11.40 ppbV
RT: 4.252 min Scan# 208
Delta R.T. -0.024 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 85 Resp: 526620

Ion	Ratio	Lower	Upper
85	100		
87	32.7	26.3	39.5
135	61.0	51.4	77.0

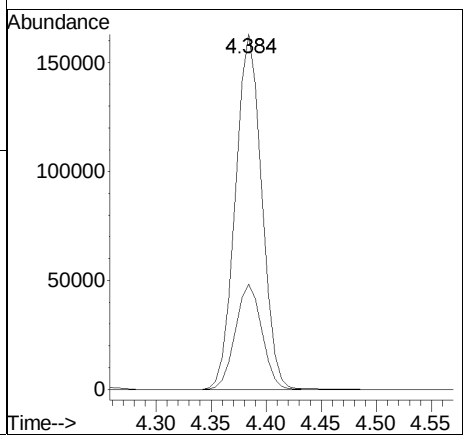


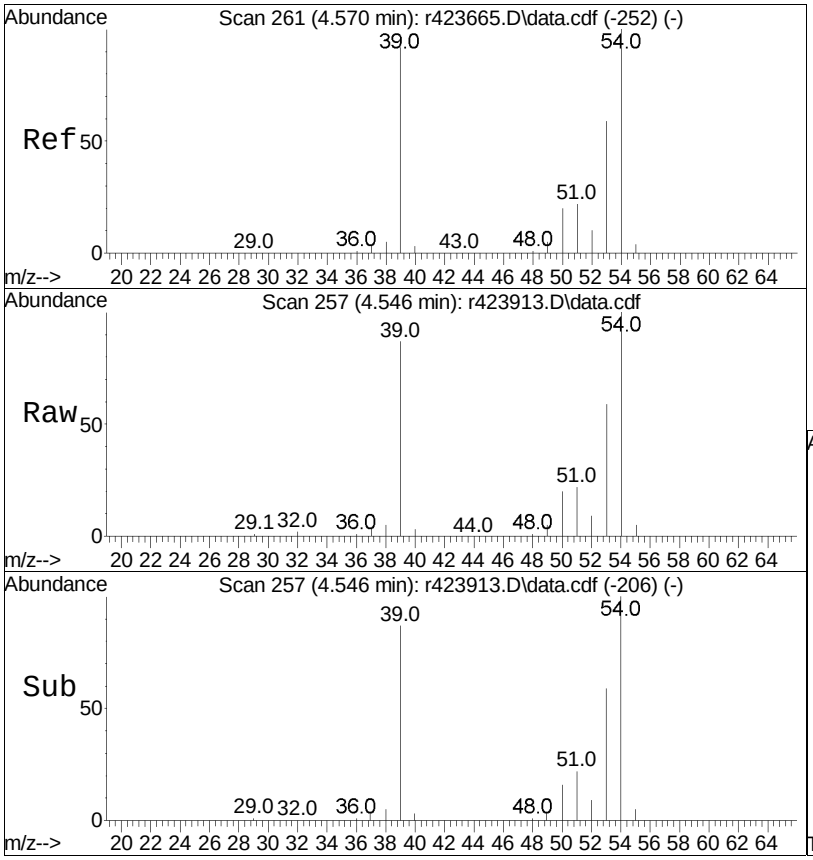


#9
vinyl chloride
Concen: 10.44 ppbV
RT: 4.384 min Scan# 230
Delta R.T. -0.024 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 62 Resp: 271275

Ion	Ratio	Lower	Upper
62	100		
64	29.6	24.3	36.5

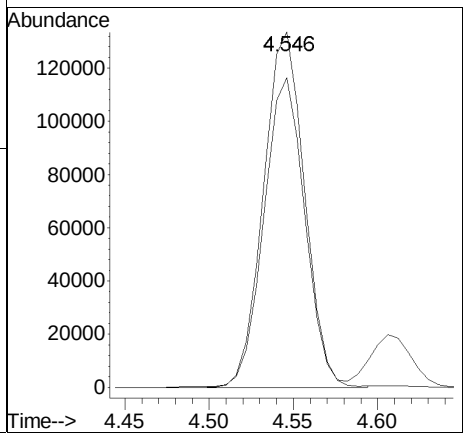


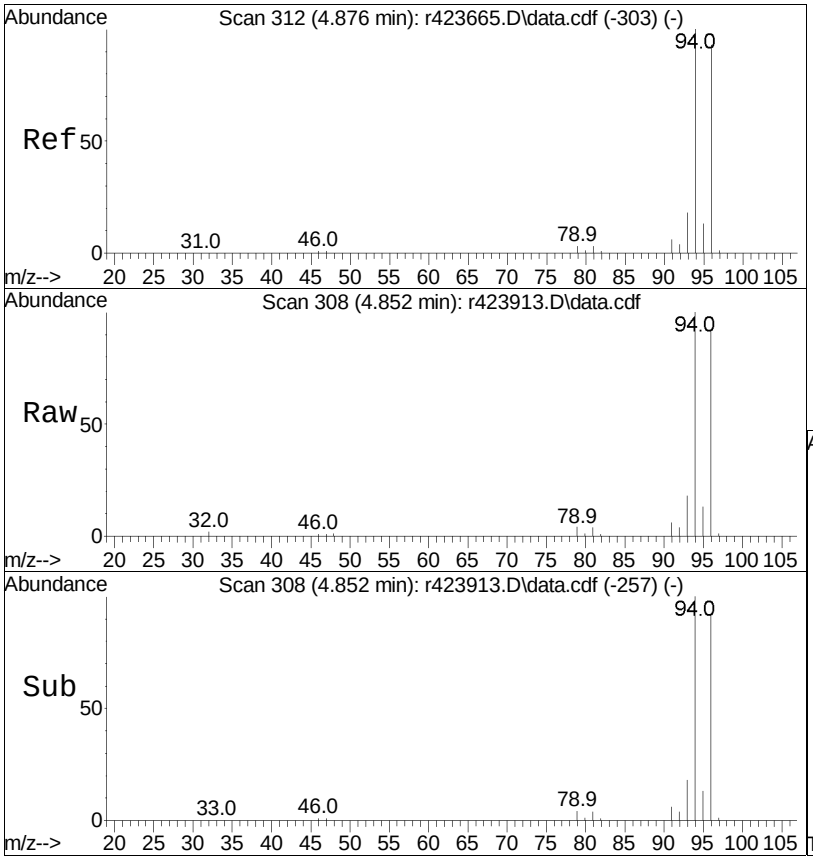


#10
1,3-butadiene
Concen: 11.61 ppbV
RT: 4.546 min Scan# 257
Delta R.T. -0.024 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 54 Resp: 226161

Ion	Ratio	Lower	Upper
54	100		
39	87.1	73.9	110.9

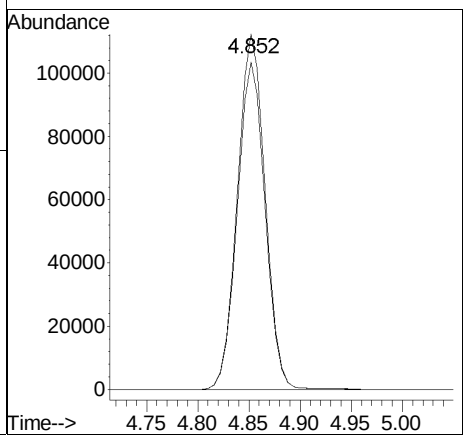


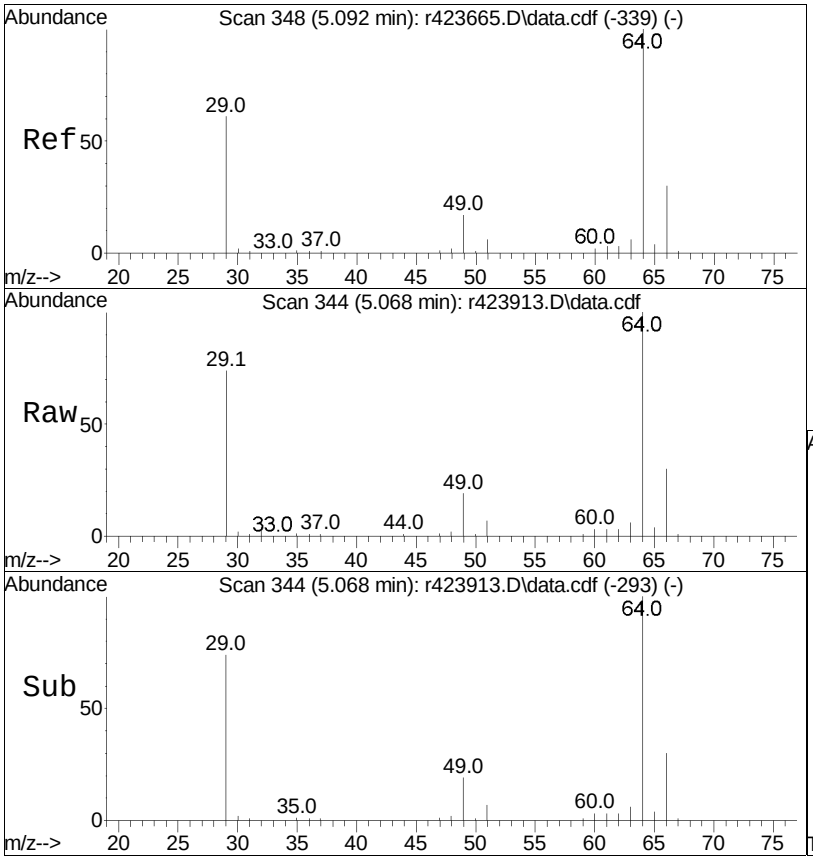


#13
bromomethane
Concen: 10.34 ppbV
RT: 4.852 min Scan# 308
Delta R.T. -0.024 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 94 Resp: 211294

Ion	Ratio	Lower	Upper
94	100		
96	92.2	74.8	112.2

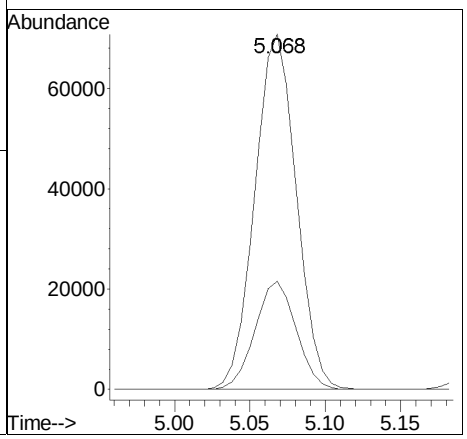


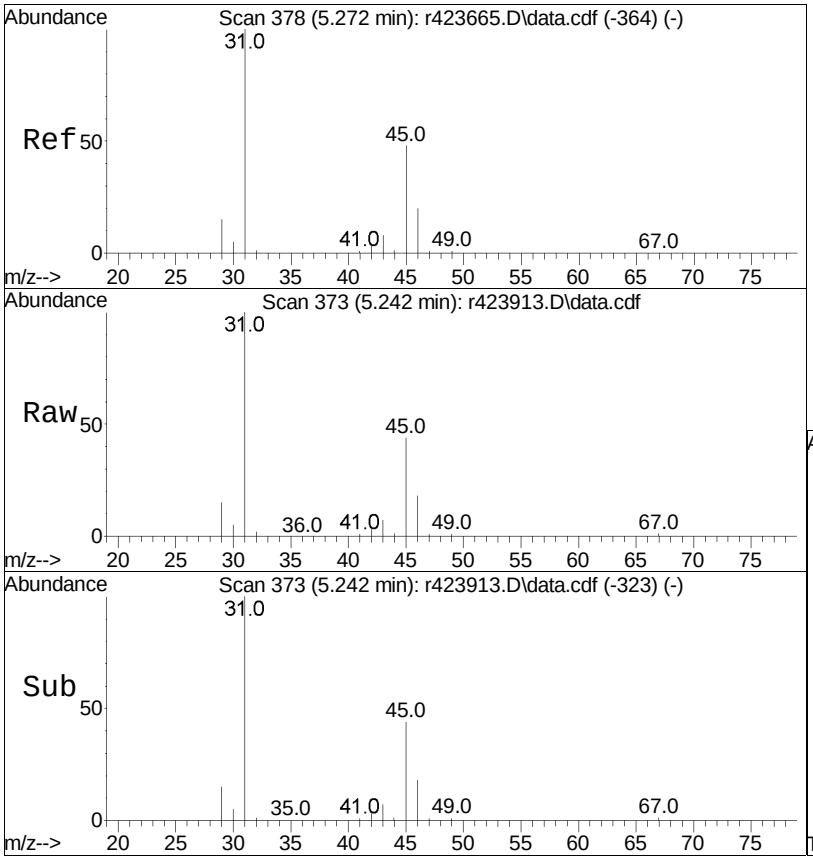


#14
chloroethane
Concen: 9.81 ppbV
RT: 5.068 min Scan# 344
Delta R.T. -0.024 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 64 Resp: 135404

Ion	Ratio	Lower	Upper
64	100		
66	30.4	24.1	36.1

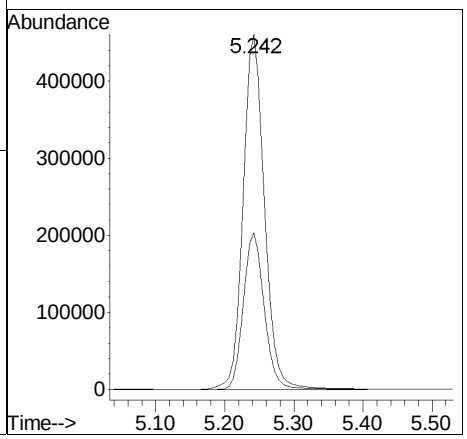


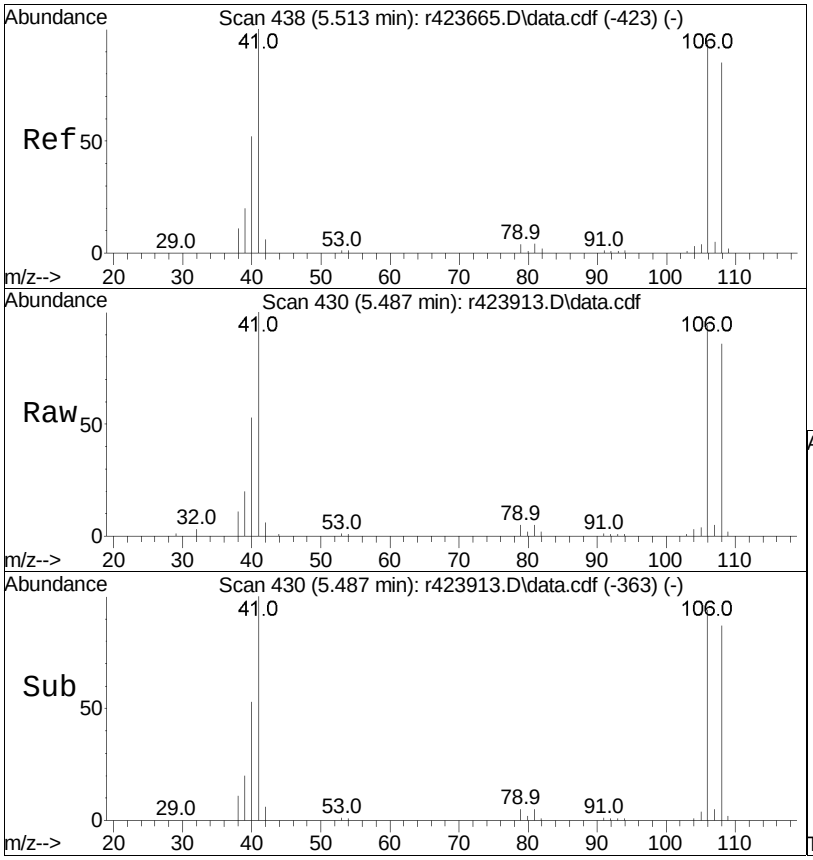


#15
ethanol
Concen: 62.42 ppbV
RT: 5.242 min Scan# 373
Delta R.T. -0.030 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 31 Resp: 872721

Ion	Ratio	Lower	Upper
31	100		
45	44.1	38.3	57.5

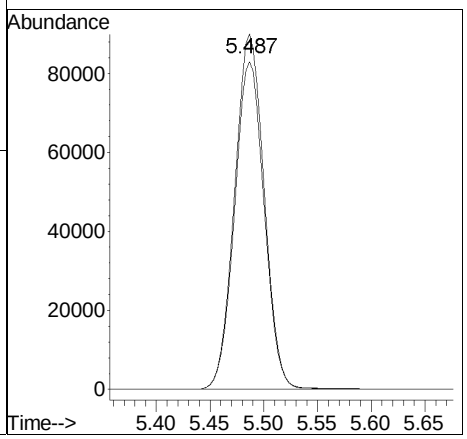


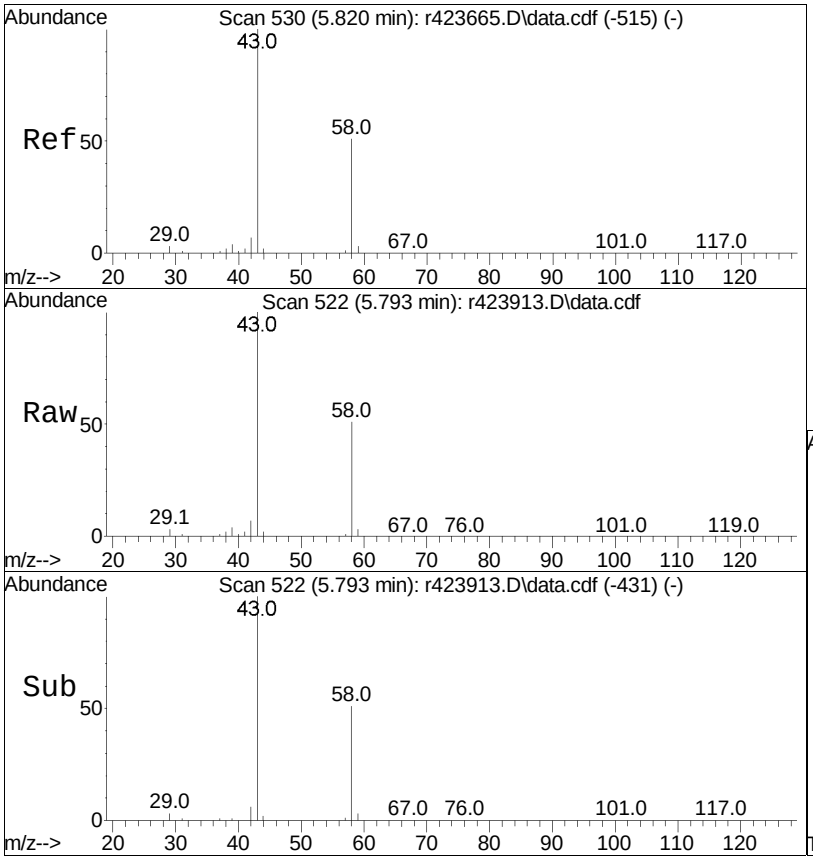


#17
vinyl bromide
Concen: 9.52 ppbV
RT: 5.487 min Scan# 430
Delta R.T. -0.027 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion:106 Resp: 172706

Ion	Ratio	Lower	Upper
106	100		
108	92.2	72.3	108.5

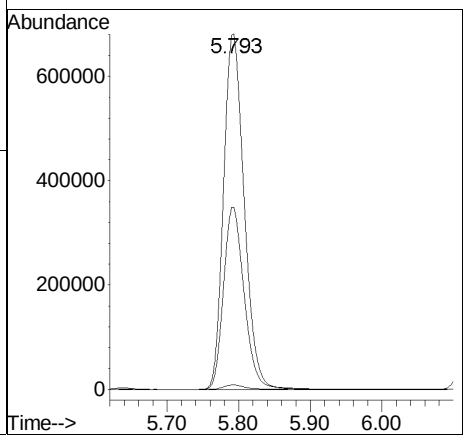


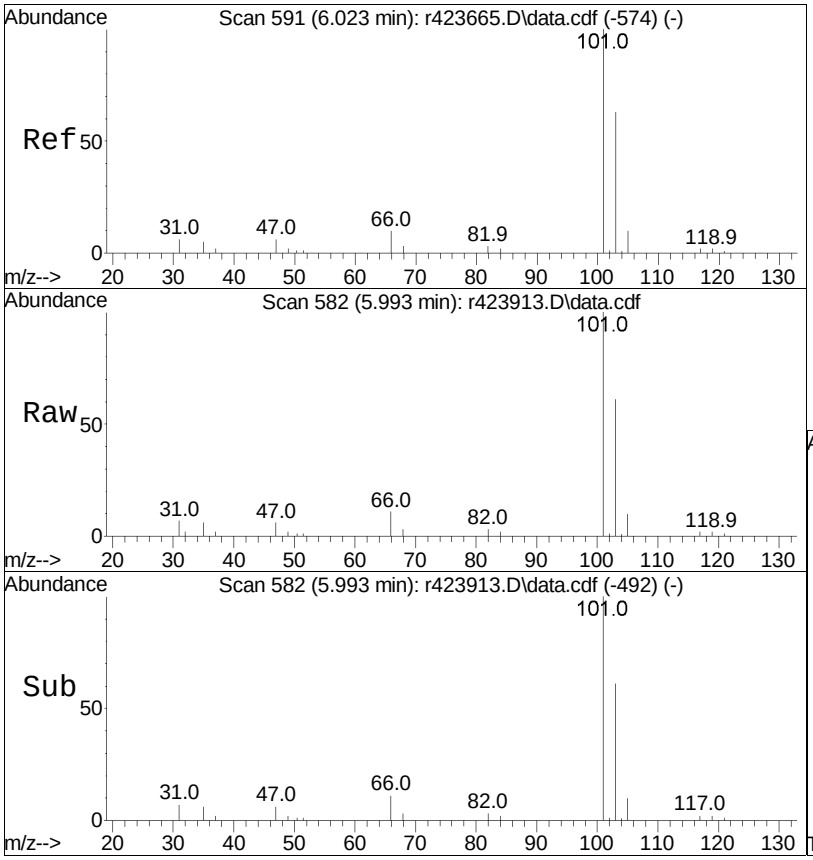


#19
acetone
Concen: 53.87 ppbV
RT: 5.793 min Scan# 522
Delta R.T. -0.027 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 43 Resp: 1366198

Ion	Ratio	Lower	Upper
43	100		
58	51.2	41.0	61.6
57	1.3	1.0	1.6

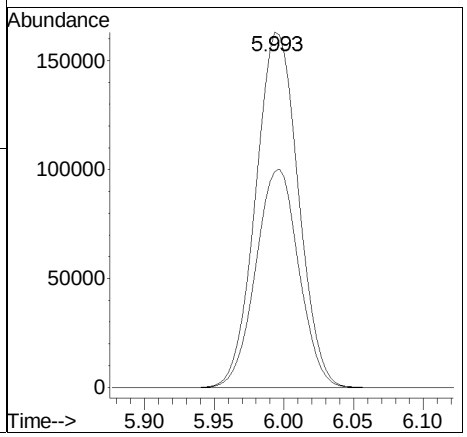


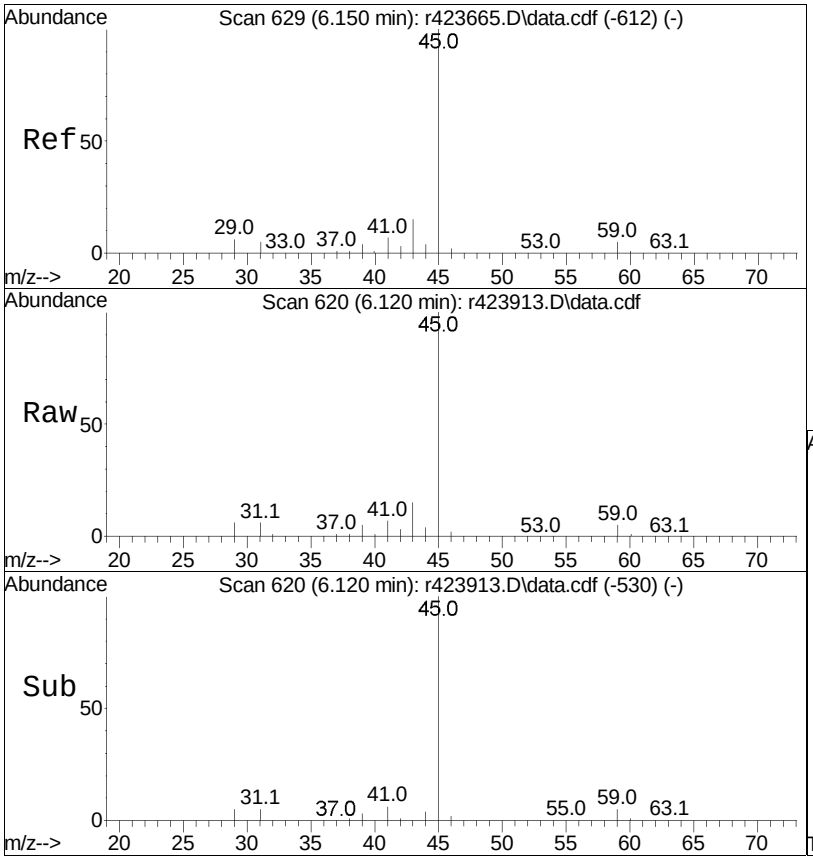


#21
trichlorofluoromethane
Concen: 11.40 ppbV
RT: 5.993 min Scan# 582
Delta R.T. -0.030 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion:101 Resp: 346723

Ion	Ratio	Lower	Upper
101	100		
103	60.8	50.2	75.2

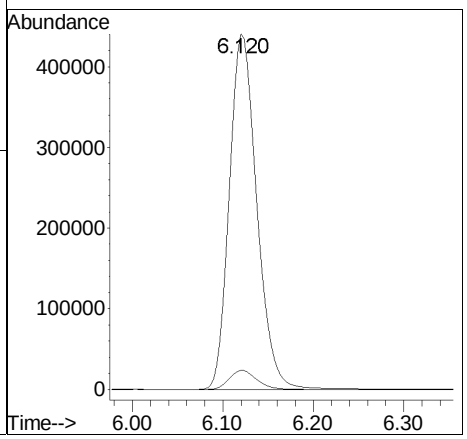


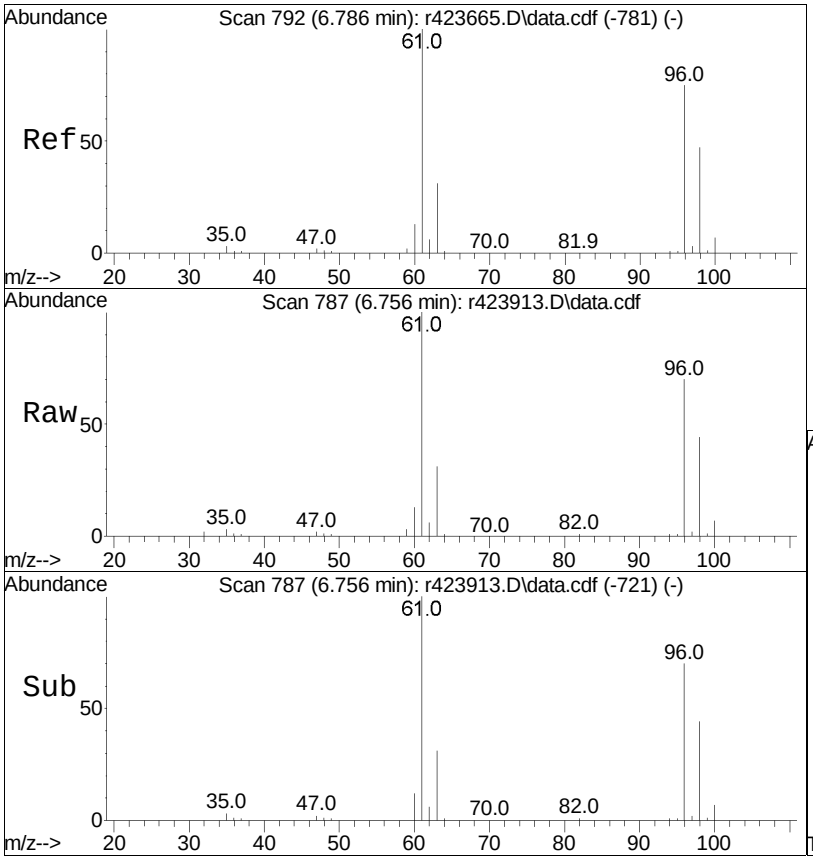


#22
isopropyl alcohol
Concen: 25.99 ppbV
RT: 6.120 min Scan# 620
Delta R.T. -0.030 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 45 Resp: 930285

Ion	Ratio	Lower	Upper
45	100		
59	5.4	4.3	6.5

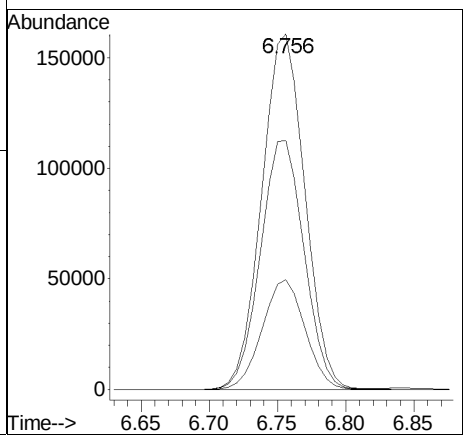


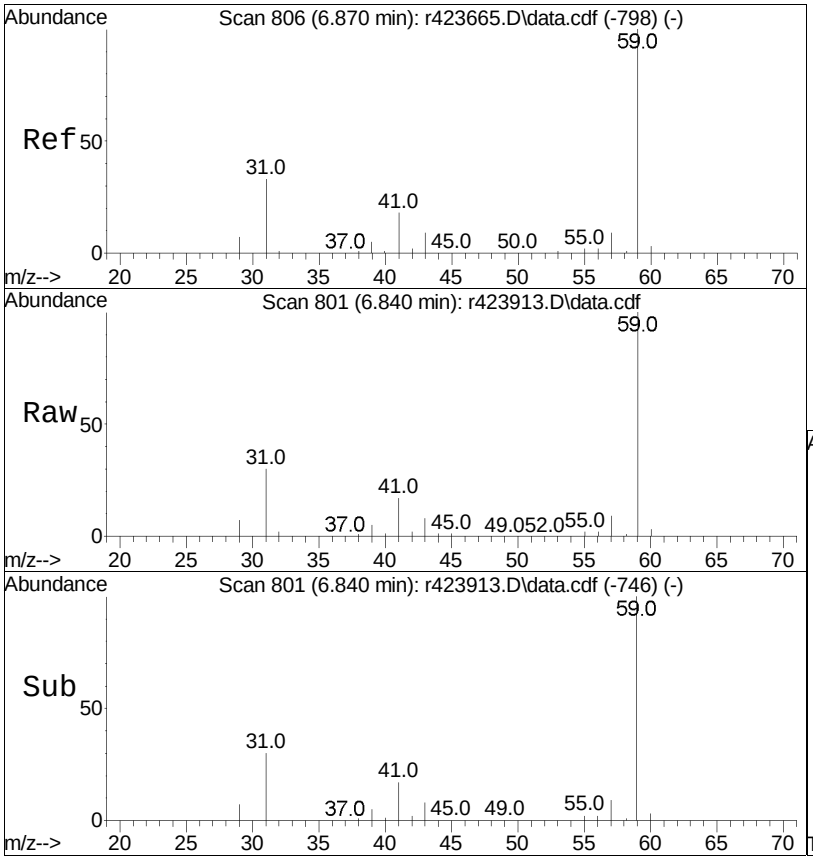


#26
1,1-dichloroethene
Concen: 9.58 ppbV
RT: 6.756 min Scan# 787
Delta R.T. -0.030 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 61 Resp: 353562

Ion	Ratio	Lower	Upper
61	100		
96	70.0	59.8	89.6
63	30.9	25.0	37.4

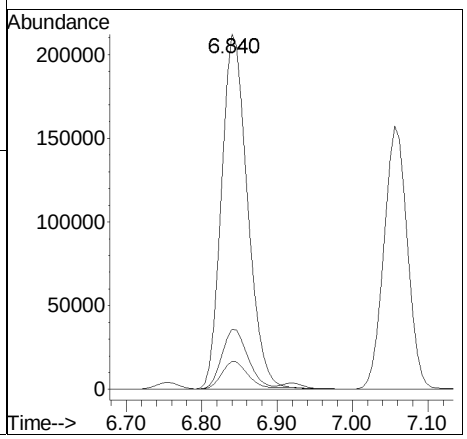


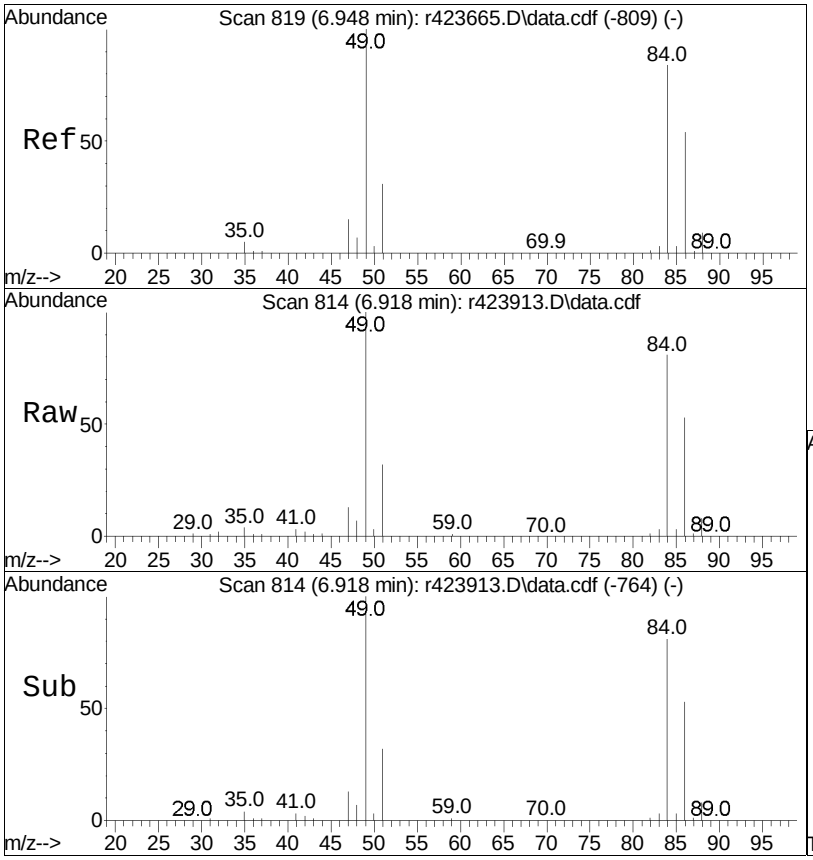


#27
tertiary butyl alcohol
Concen: 9.57 ppbV
RT: 6.840 min Scan# 801
Delta R.T. -0.030 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 59 Resp: 511056

Ion	Ratio	Lower	Upper
59	100		
41	17.0	14.6	21.8
43	7.9	7.0	10.6

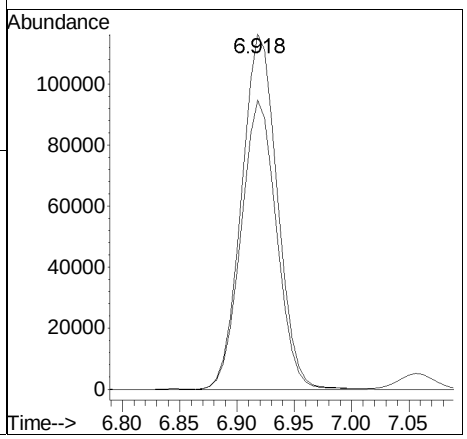


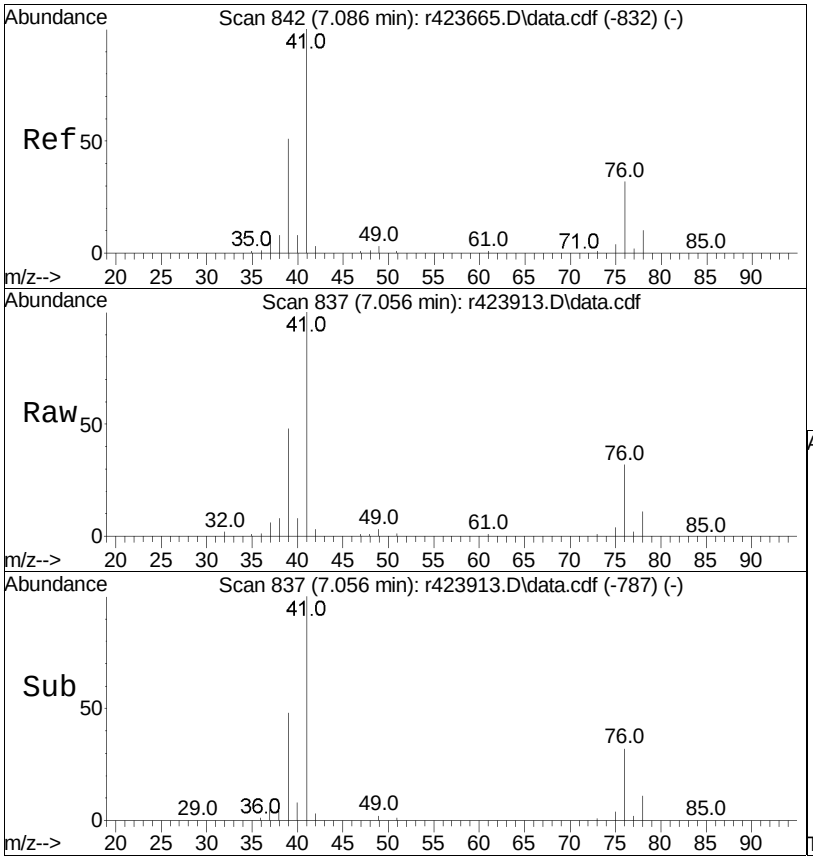


#28
methylene chloride
Concen: 9.52 ppbV
RT: 6.918 min Scan# 814
Delta R.T. -0.030 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 49 Resp: 253046

Ion	Ratio	Lower	Upper
49	100		
84	81.4	66.8	100.2

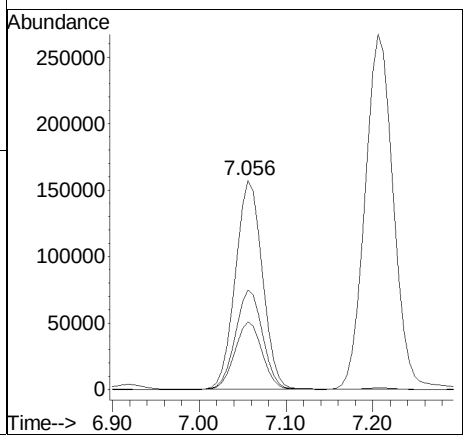


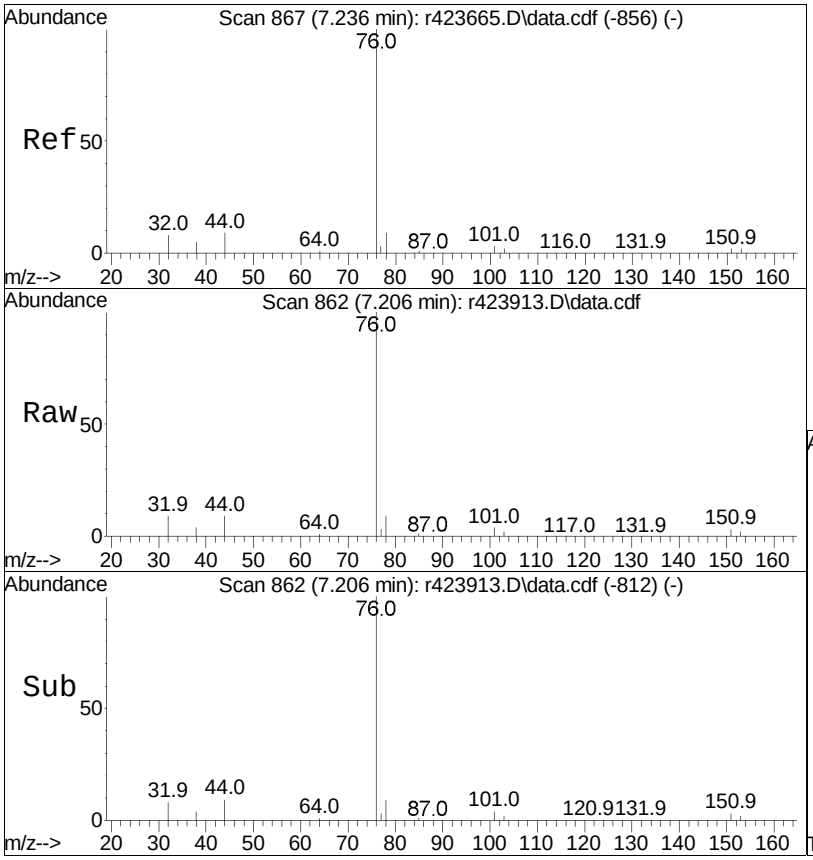


#29
3-chloropropene
Concen: 8.59 ppbV
RT: 7.056 min Scan# 837
Delta R.T. -0.030 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 41 Resp: 339985

Ion	Ratio	Lower	Upper
41	100		
39	47.6	40.6	60.8
76	32.3	25.7	38.5

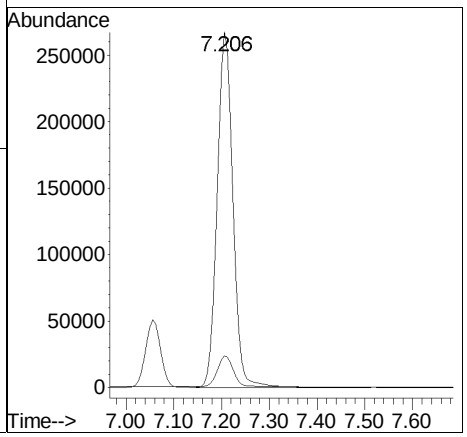


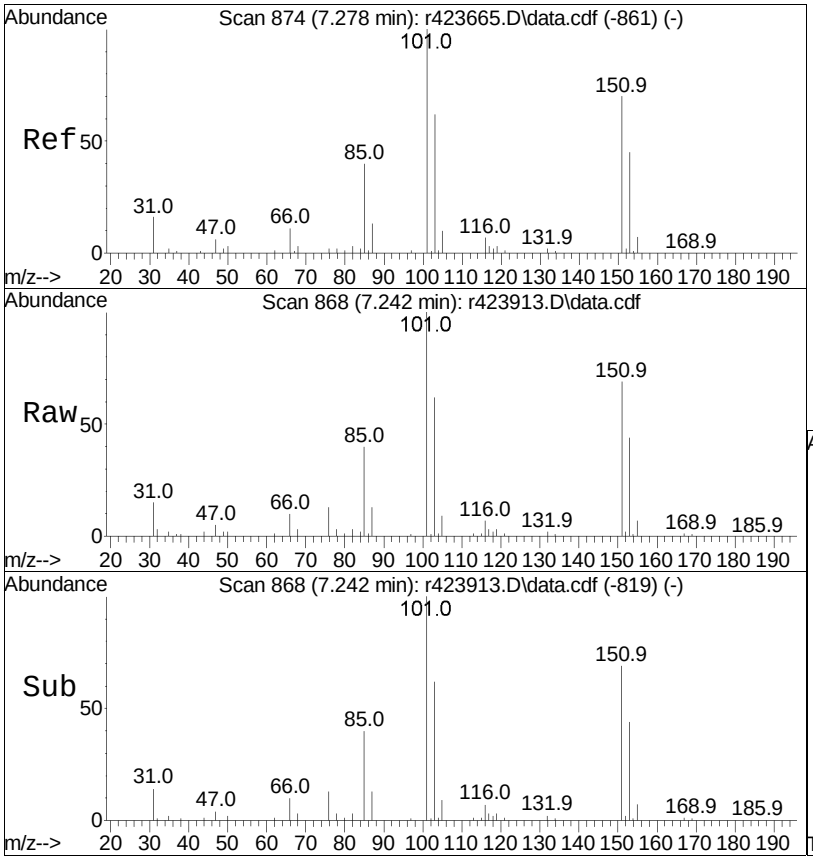


#30
carbon disulfide
Concen: 8.00 ppbV
RT: 7.206 min Scan# 862
Delta R.T. -0.030 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 76 Resp: 613276

Ion	Ratio	Lower	Upper
76	100		
44	8.9	7.4	11.2

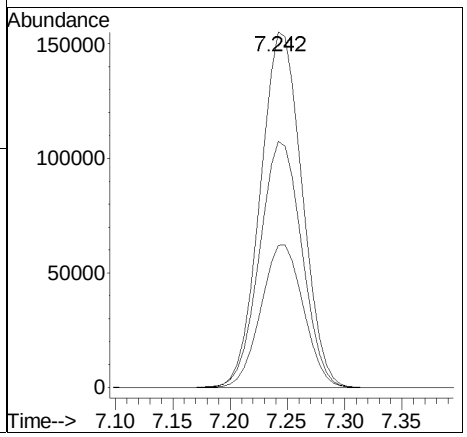


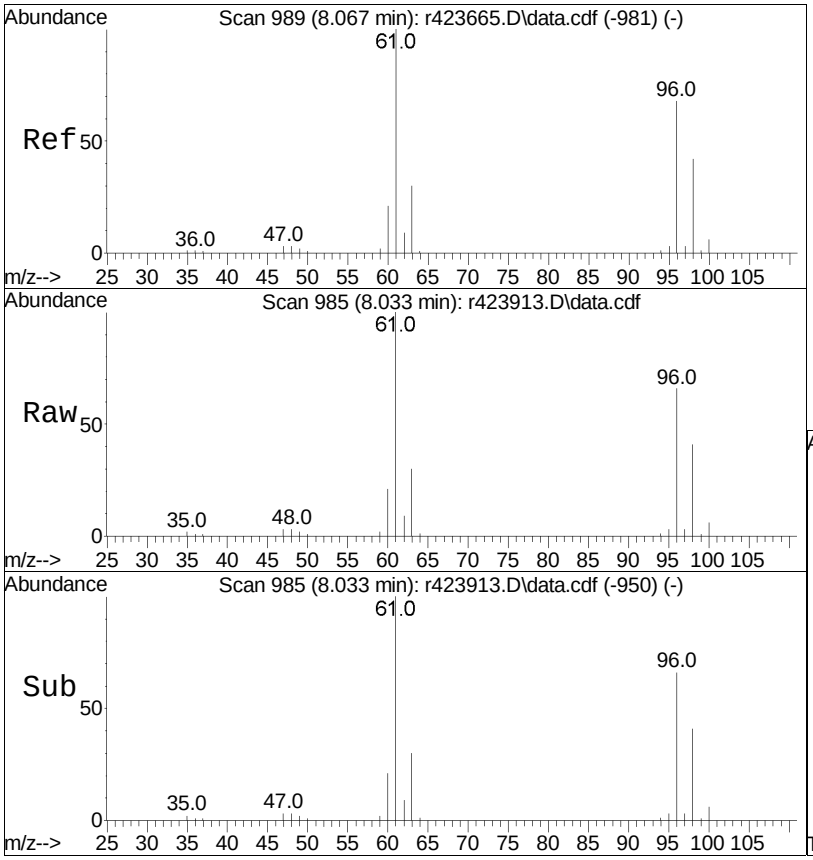


#31
Freon 113
Concen: 9.08 ppbV
RT: 7.242 min Scan# 868
Delta R.T. -0.036 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion:101 Resp: 393578

Ion	Ratio	Lower	Upper
101	100		
85	40.0	32.2	48.2
151	69.2	56.3	84.5

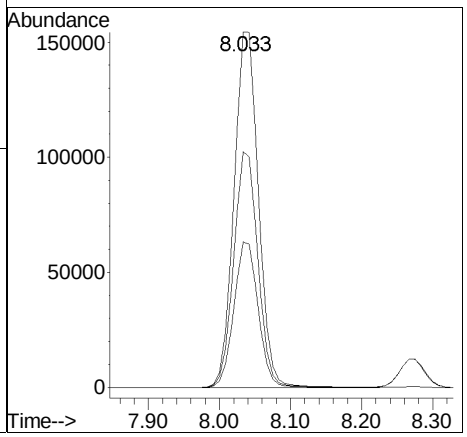


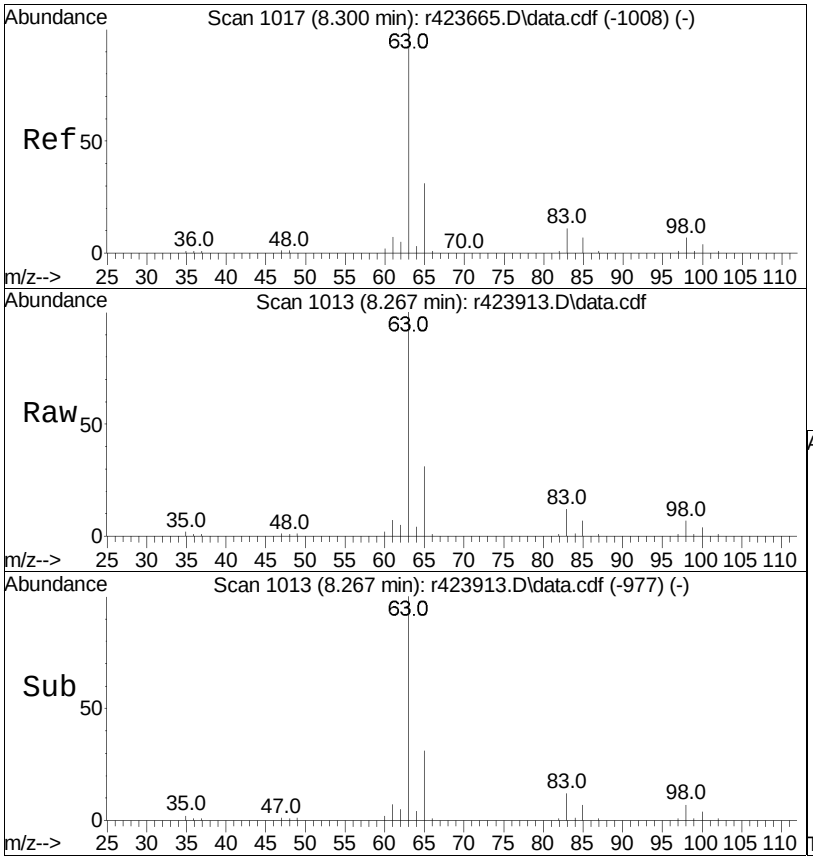


#32
trans-1,2-dichloroethene
Concen: 8.67 ppbV
RT: 8.033 min Scan# 985
Delta R.T. -0.033 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 61 Resp: 368964

Ion	Ratio	Lower	Upper
61	100		
96	66.3	54.2	81.4
98	40.9	33.3	49.9

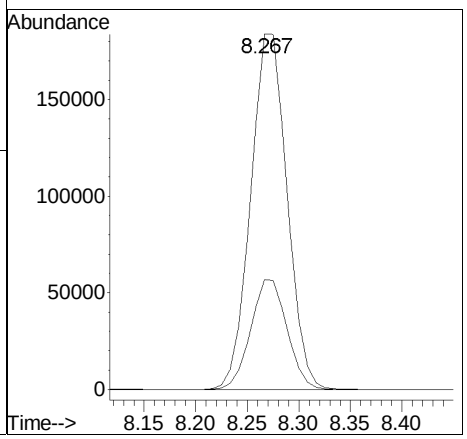


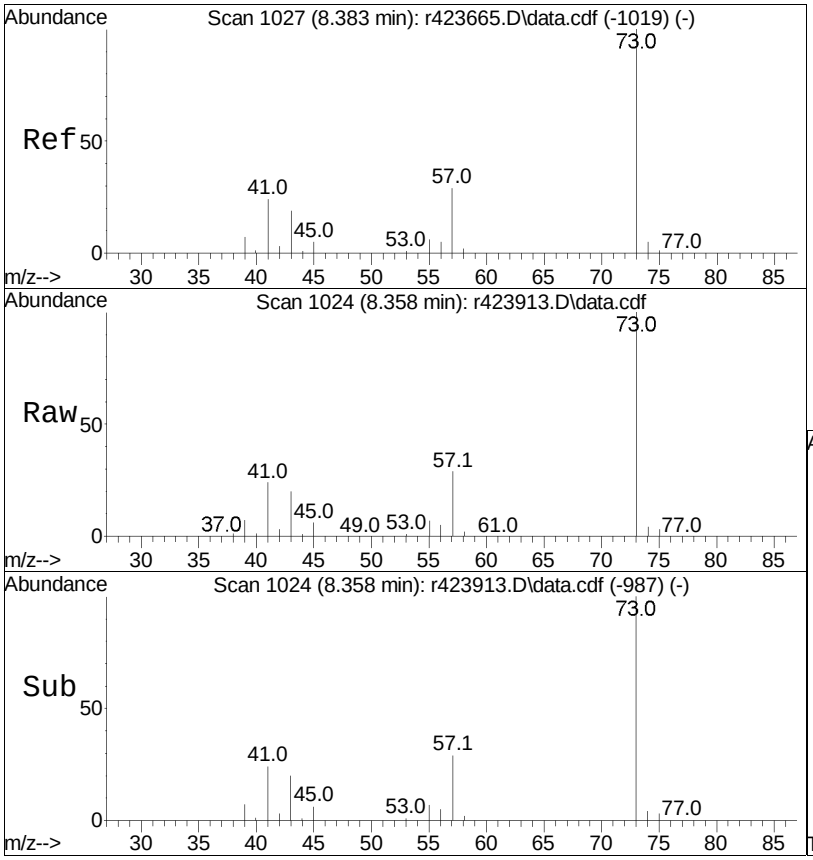


#33
1,1-dichloroethane
Concen: 8.90 ppbV
RT: 8.267 min Scan# 1013
Delta R.T. -0.033 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 63 Resp: 450661

Ion	Ratio	Lower	Upper
63	100		
65	30.9	24.6	36.8

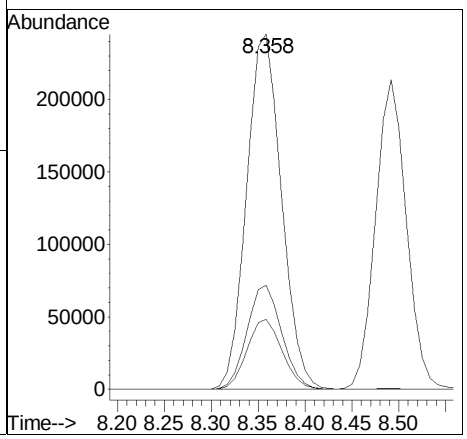


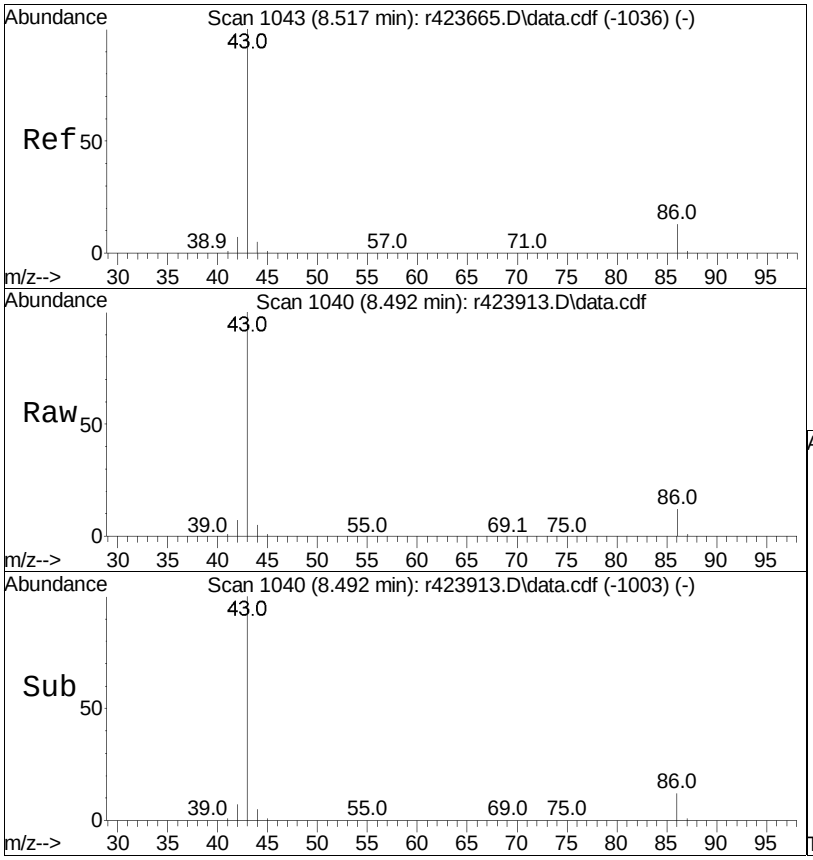


#34
MTBE
Concen: 9.34 ppbV
RT: 8.358 min Scan# 1024
Delta R.T. -0.025 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 73 Resp: 635562

Ion	Ratio	Lower	Upper
73	100		
57	29.3	23.5	35.3
43	19.7	15.4	23.2

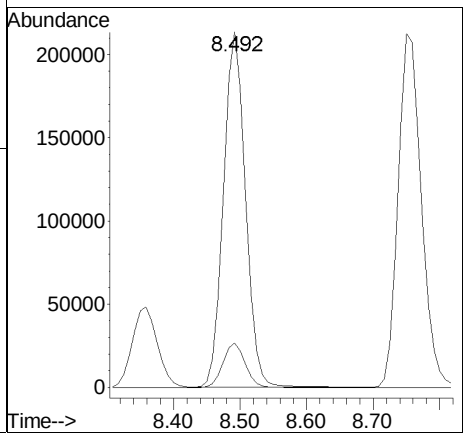


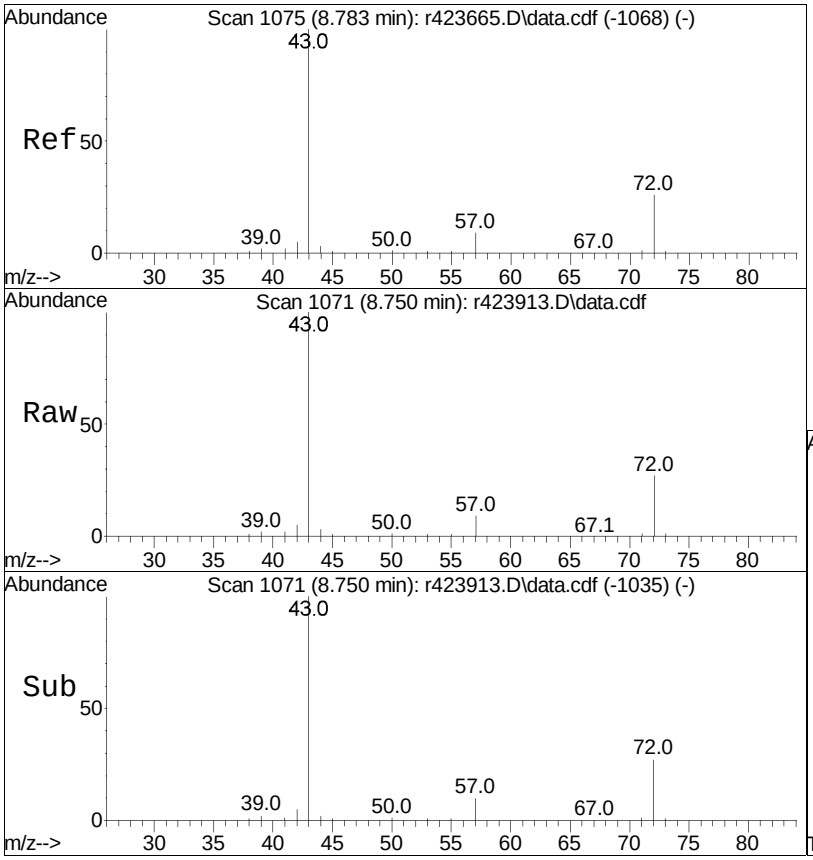


#35
vinyl acetate
Concen: 9.78 ppbV
RT: 8.492 min Scan# 1040
Delta R.T. -0.025 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 43 Resp: 488836

Ion	Ratio	Lower	Upper
43	100		
86	12.5	10.0	15.0

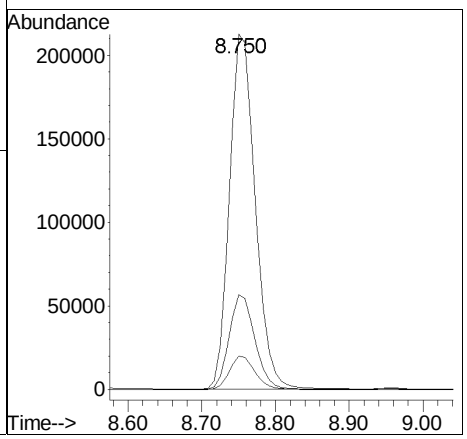


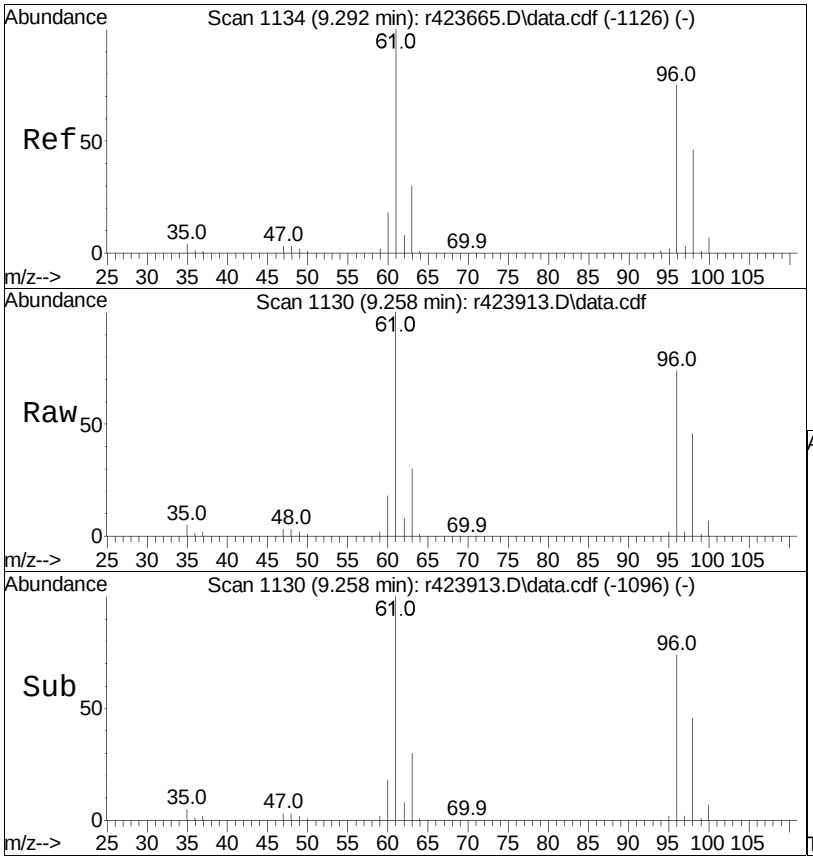


#36
2-butanone
Concen: 9.33 ppbV
RT: 8.750 min Scan# 1071
Delta R.T. -0.033 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 43 Resp: 516651

Ion	Ratio	Lower	Upper
43	100		
72	26.6	21.0	31.6
57	9.4	7.4	11.0

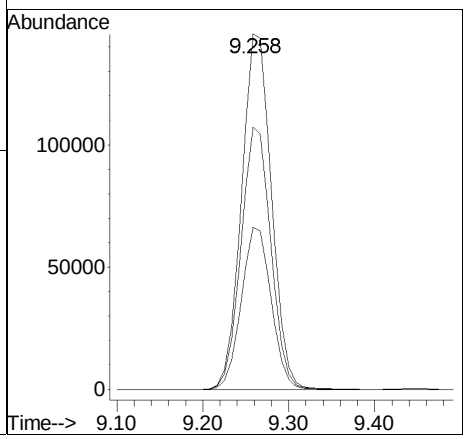


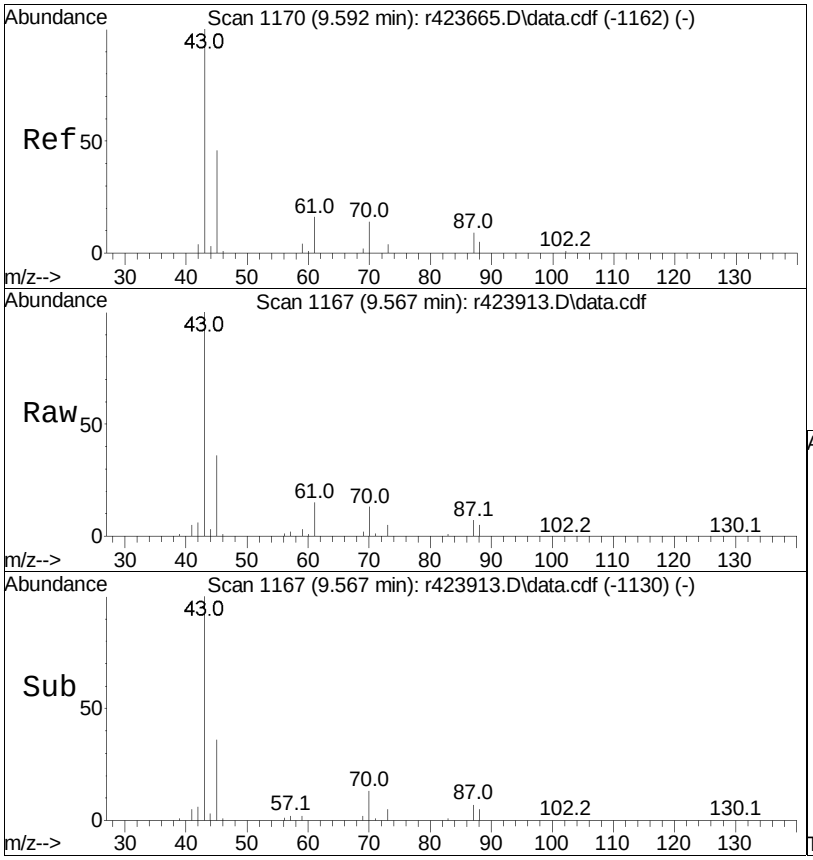


#37
cis-1,2-dichloroethene
Concen: 9.15 ppbV
RT: 9.258 min Scan# 1130
Delta R.T. -0.033 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 61 Resp: 352222

Ion	Ratio	Lower	Upper
61	100		
96	73.8	59.6	89.4
98	45.6	36.8	55.2

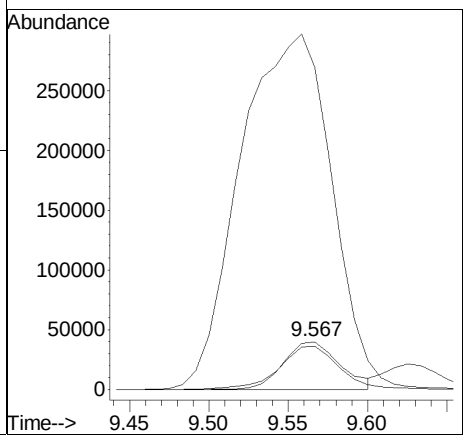


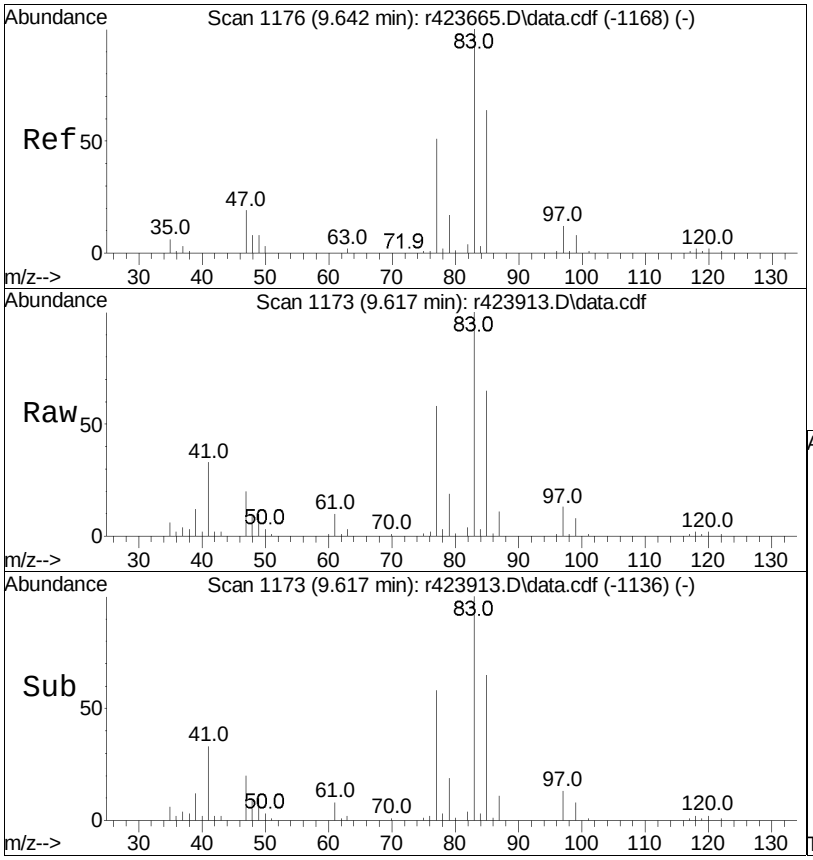


#38
Ethyl Acetate
Concen: 9.50 ppbV
RT: 9.567 min Scan# 1167
Delta R.T. -0.025 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 61 Resp: 98339

Ion	Ratio	Lower	Upper
61	100		
70	91.2	71.0	106.6
43	678.7	558.9	838.3

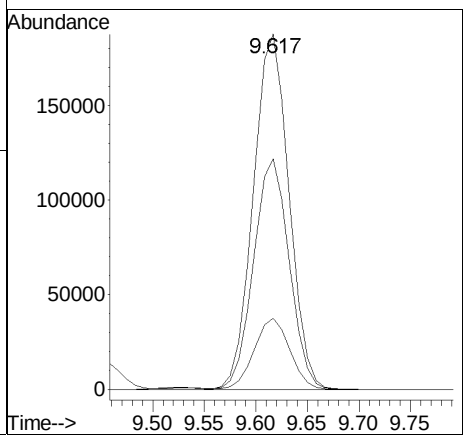


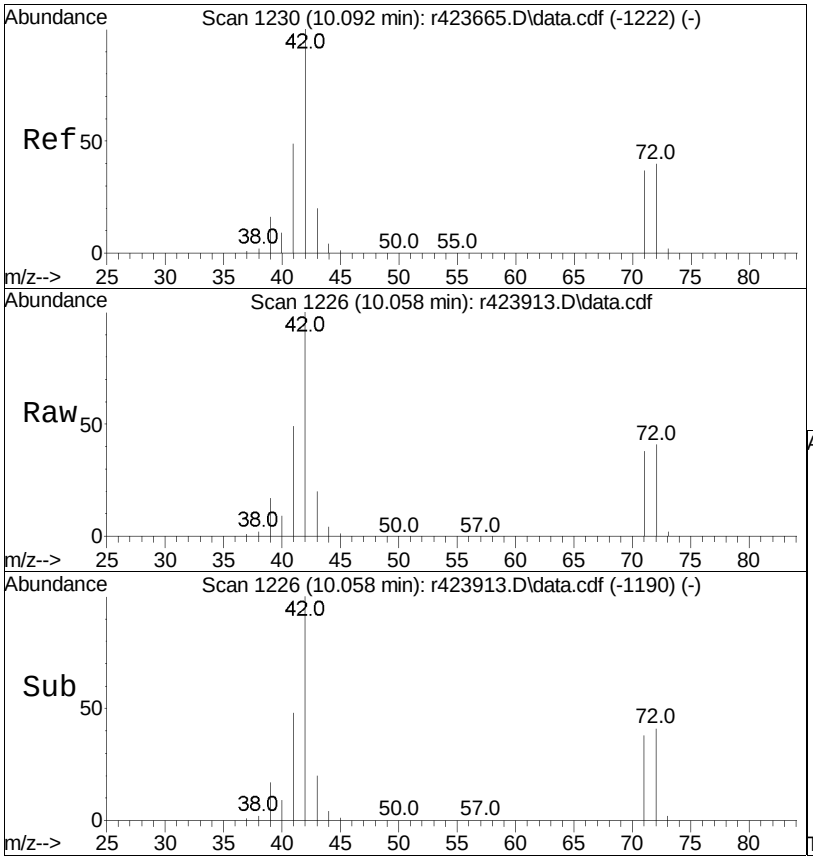


#39
chloroform
Concen: 10.21 ppbV
RT: 9.617 min Scan# 1173
Delta R.T. -0.025 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 83 Resp: 450635

Ion	Ratio	Lower	Upper
83	100		
85	64.9	51.6	77.4
47	20.0	15.2	22.8

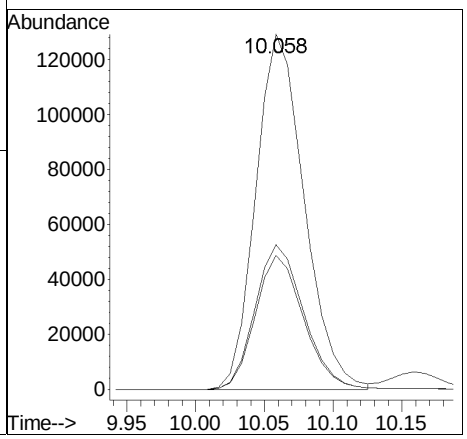


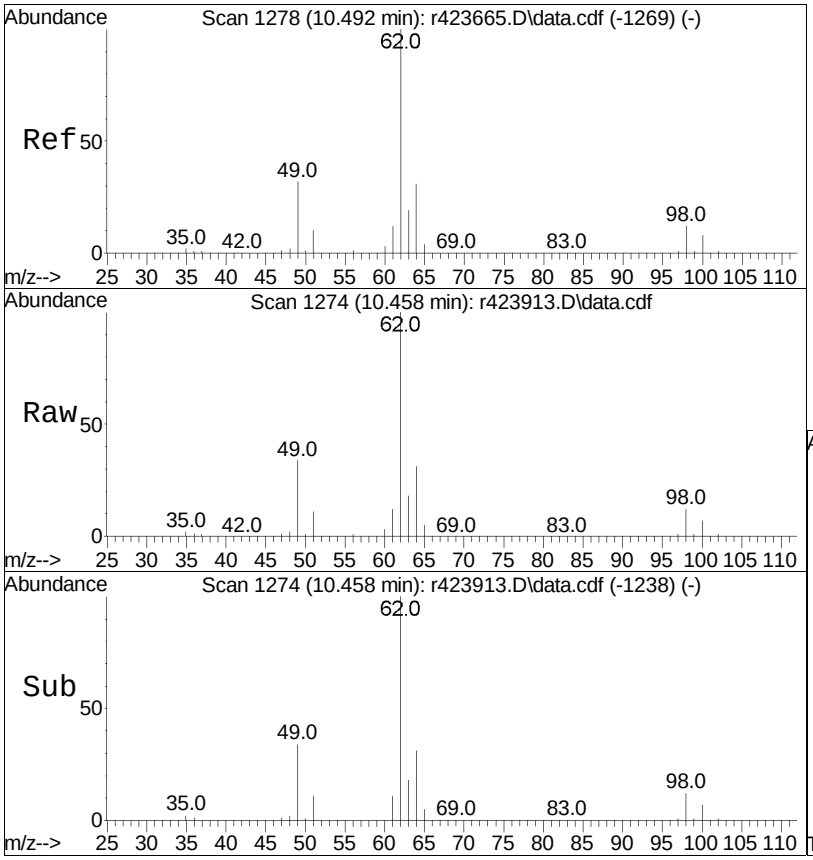


#40
Tetrahydrofuran
Concen: 8.66 ppbV
RT: 10.058 min Scan# 1226
Delta R.T. -0.033 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 42 Resp: 316405

Ion	Ratio	Lower	Upper
42	100		
71	37.7	29.7	44.5
72	40.7	32.4	48.6

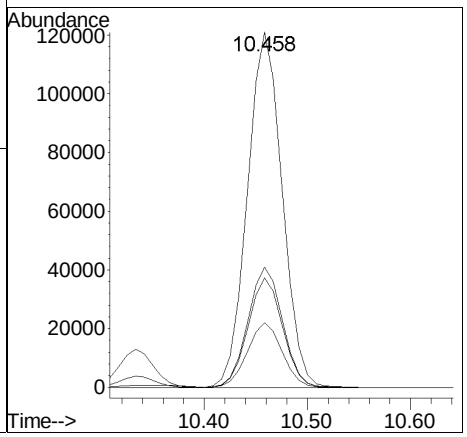


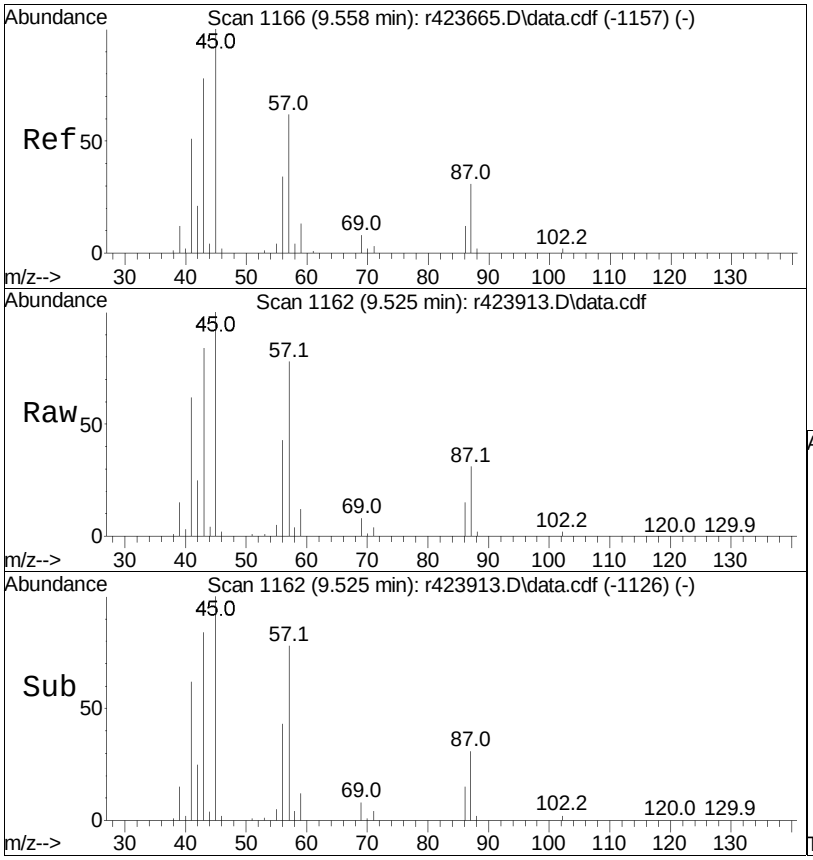


#42
1,2-dichloroethane
Concen: 9.54 ppbV
RT: 10.458 min Scan# 1274
Delta R.T. -0.033 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 62 Resp: 283282

Ion	Ratio	Lower	Upper
62	100		
64	30.8	25.0	37.4
49	33.9	25.8	38.6
63	18.2	15.1	22.7

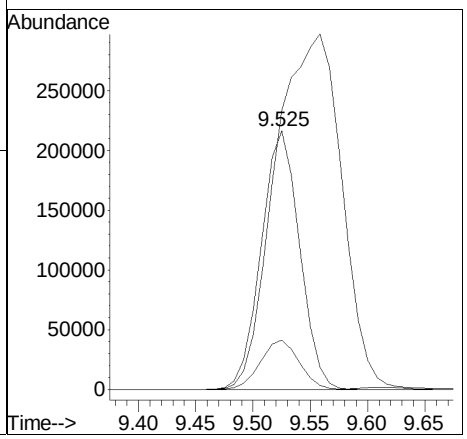


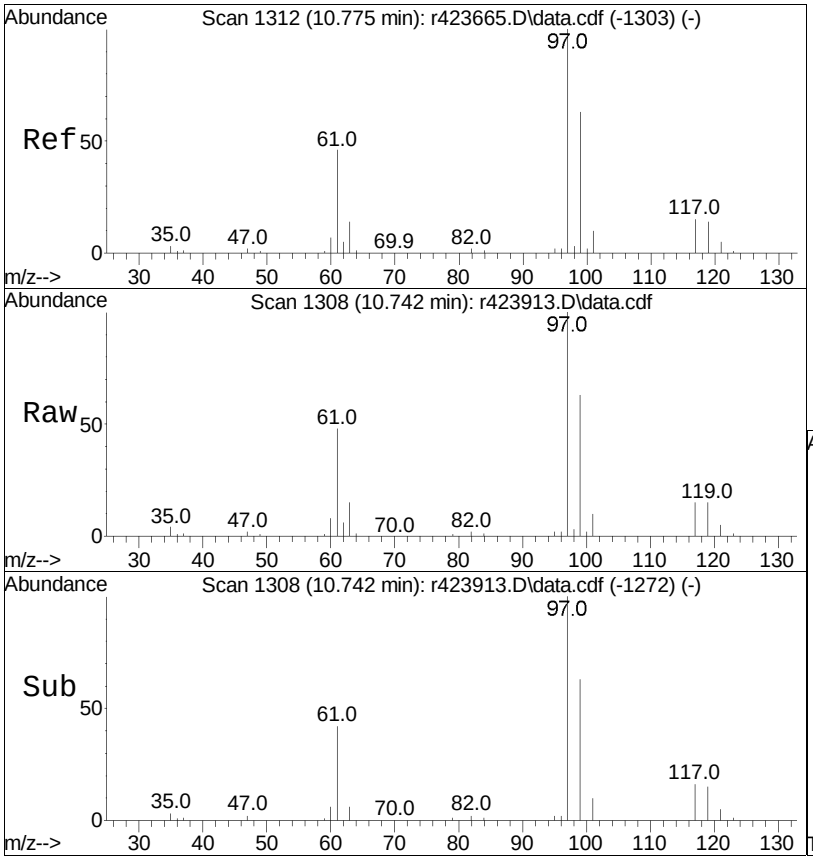


#44
hexane
Concen: 9.92 ppbV
RT: 9.525 min Scan# 1162
Delta R.T. -0.033 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 57 Resp: 504525

Ion	Ratio	Lower	Upper
57	100		
43	107.9	101.0	151.4
86	19.1	14.8	22.2

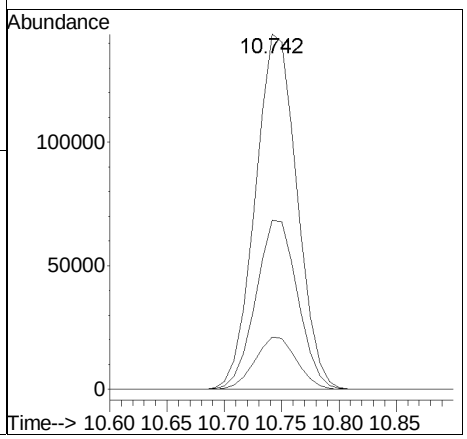


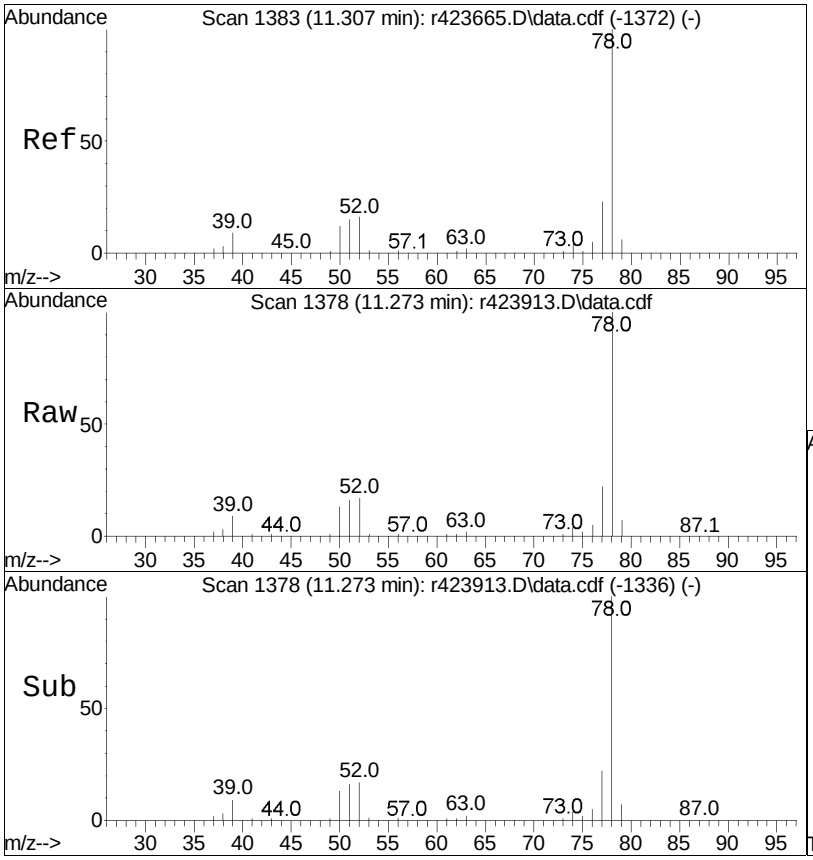


#48
1,1,1-trichloroethane
Concen: 10.23 ppbV
RT: 10.742 min Scan# 1308
Delta R.T. -0.033 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 97 Resp: 364129

Ion	Ratio	Lower	Upper
97	100		
61	47.6	36.5	54.7
119	14.8	11.2	16.8

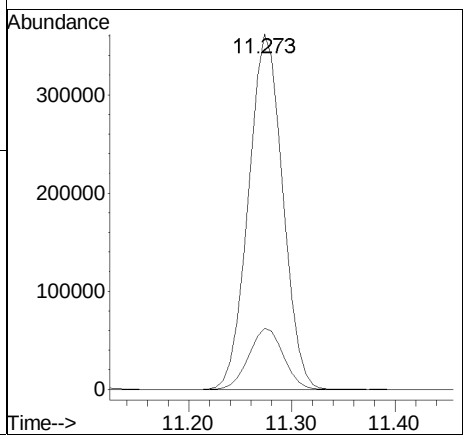


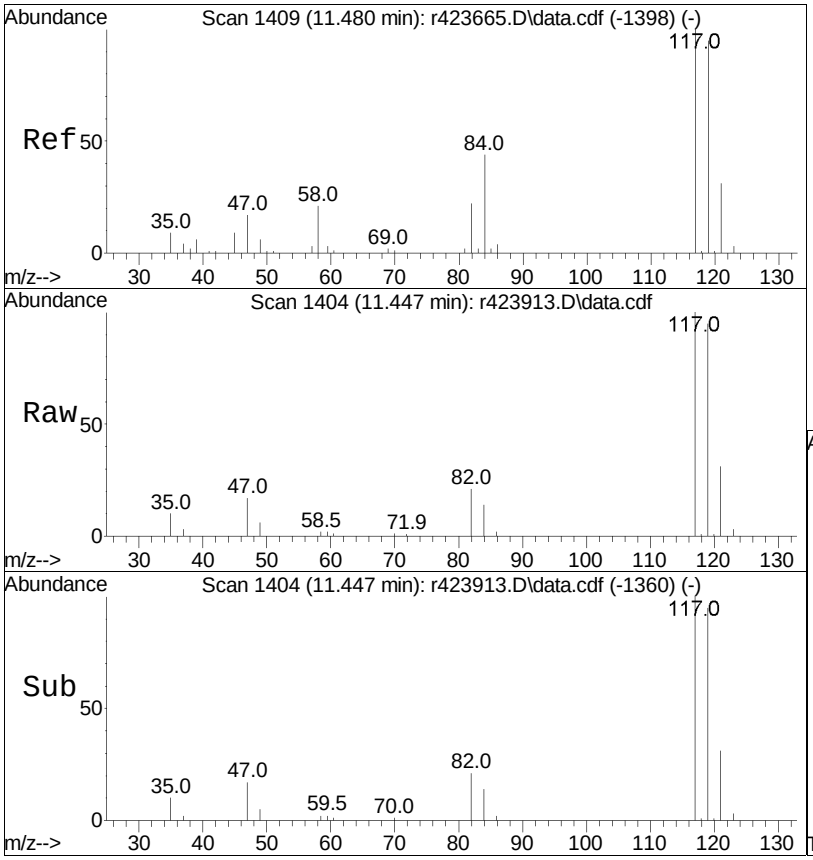


#50
benzene
Concen: 9.52 ppbV
RT: 11.273 min Scan# 1378
Delta R.T. -0.033 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 78 Resp: 835248

Ion	Ratio	Lower	Upper
78	100		
52	17.2	13.0	19.6

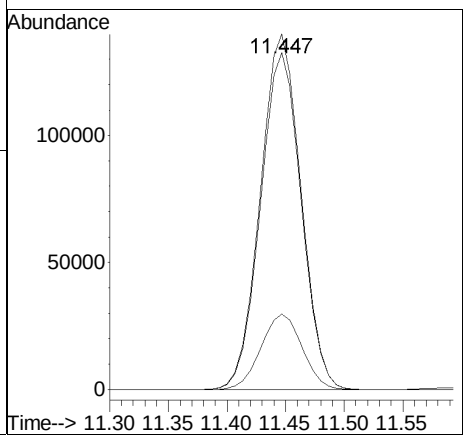


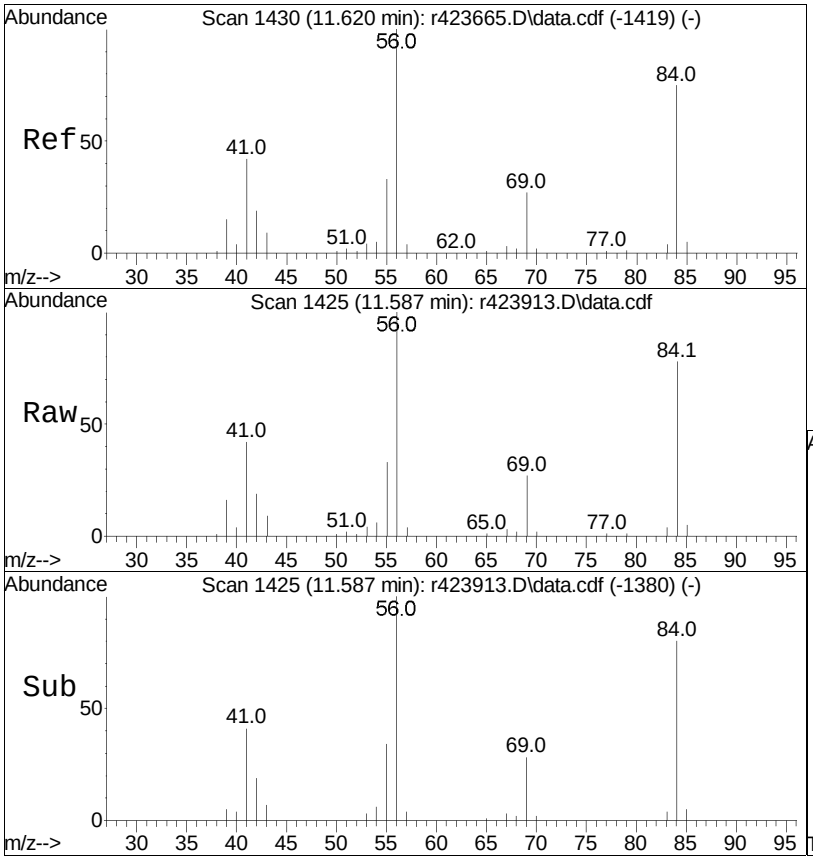


#52
carbon tetrachloride
Concen: 11.08 ppbV
RT: 11.447 min Scan# 1404
Delta R.T. -0.033 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion:117 Resp: 336660

Ion	Ratio	Lower	Upper
117	100		
119	94.8	76.1	114.1
82	21.2	17.2	25.8

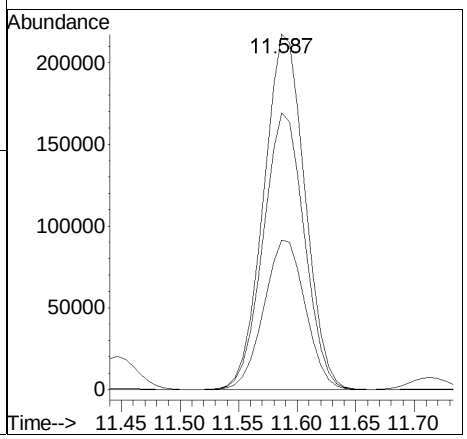


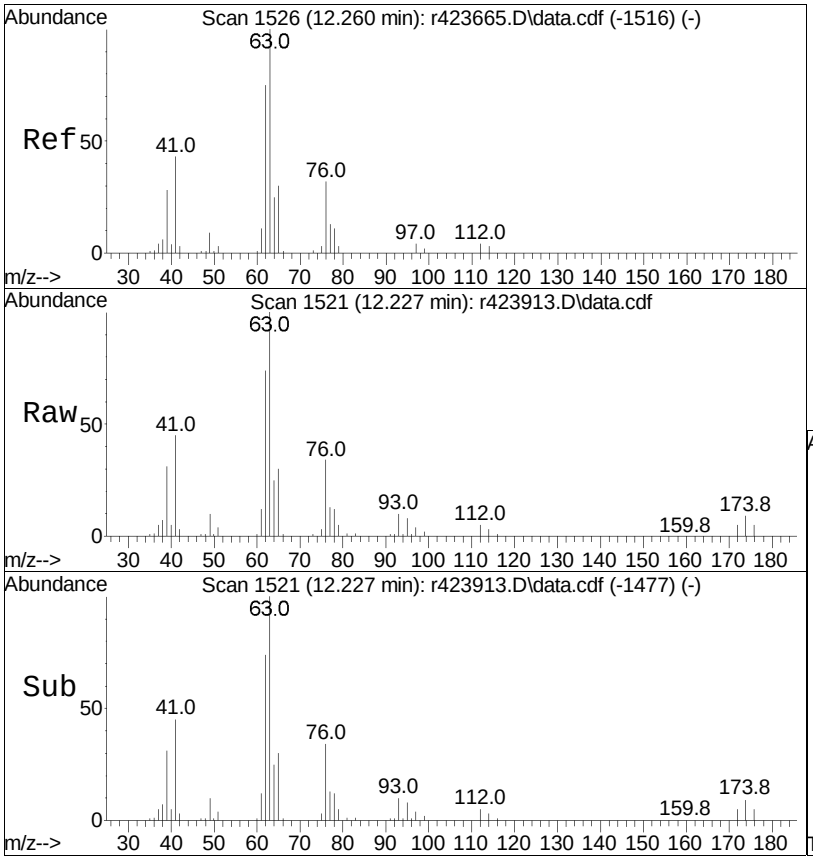


#53
cyclohexane
Concen: 9.76 ppbV
RT: 11.587 min Scan# 1425
Delta R.T. -0.033 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 56 Resp: 530846

Ion	Ratio	Lower	Upper
56	100		
84	77.8	60.4	90.6
41	42.1	33.9	50.9

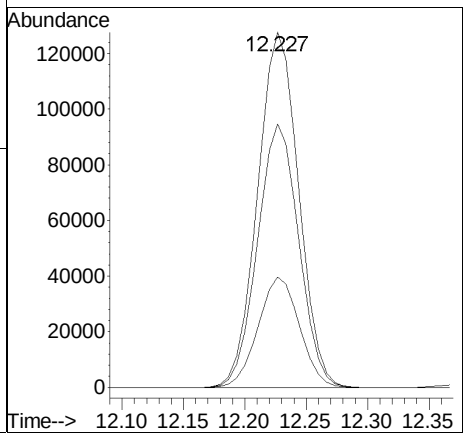


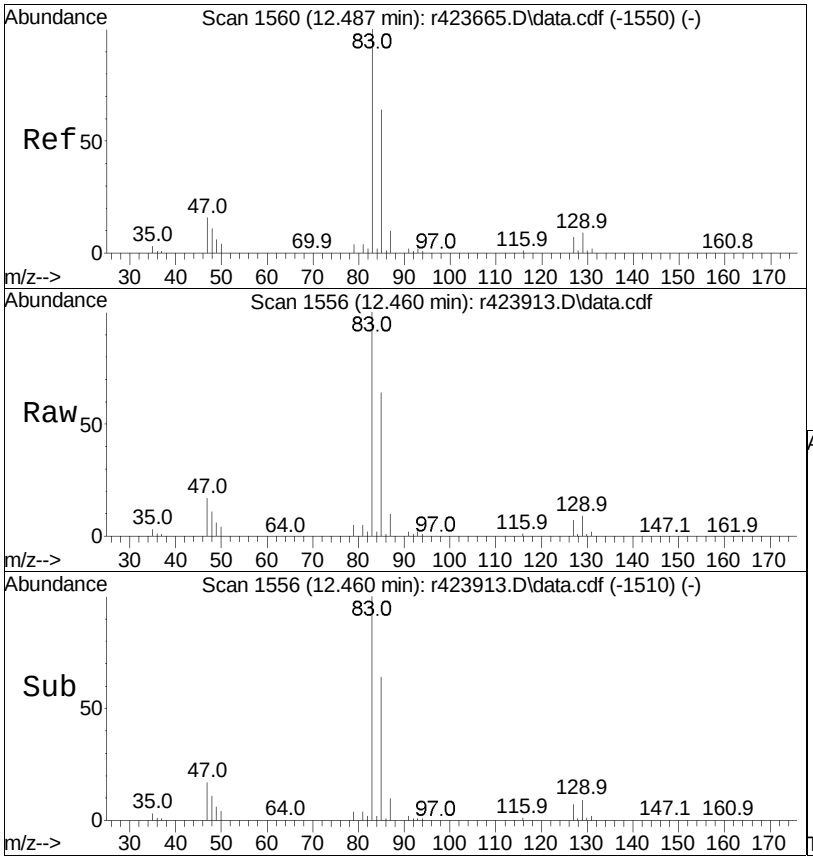


#56
1,2-dichloropropane
Concen: 9.65 ppbV
RT: 12.227 min Scan# 1521
Delta R.T. -0.033 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 63 Resp: 296626

Ion	Ratio	Lower	Upper
63	100		
62	74.2	60.2	90.4
39	31.1	22.7	34.1

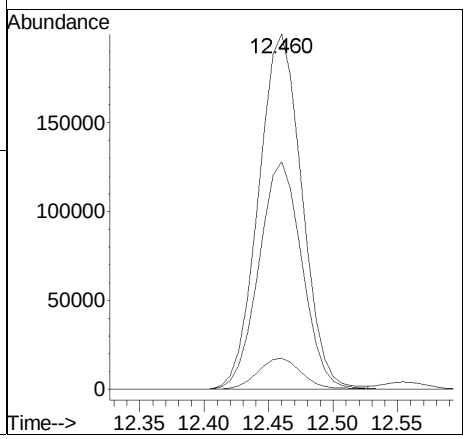


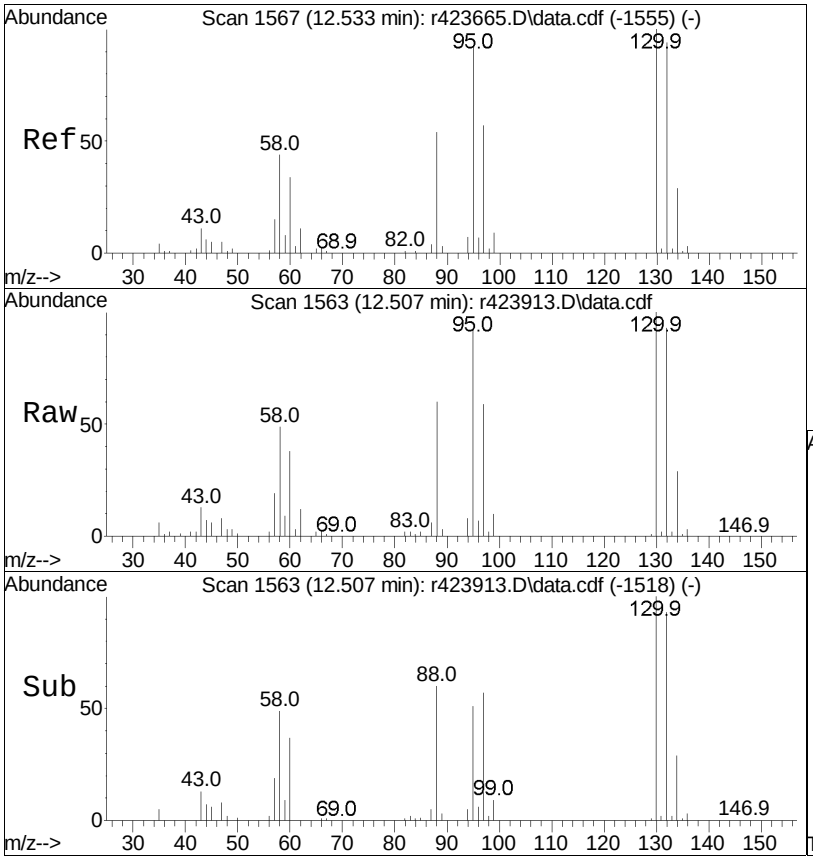


#57
bromodichloromethane
Concen: 10.96 ppbV
RT: 12.460 min Scan# 1556
Delta R.T. -0.027 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 83 Resp: 468586

Ion	Ratio	Lower	Upper
83	100		
85	64.1	51.1	76.7
129	8.8	7.6	11.4

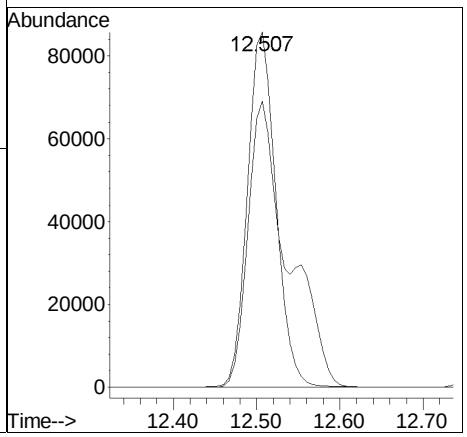


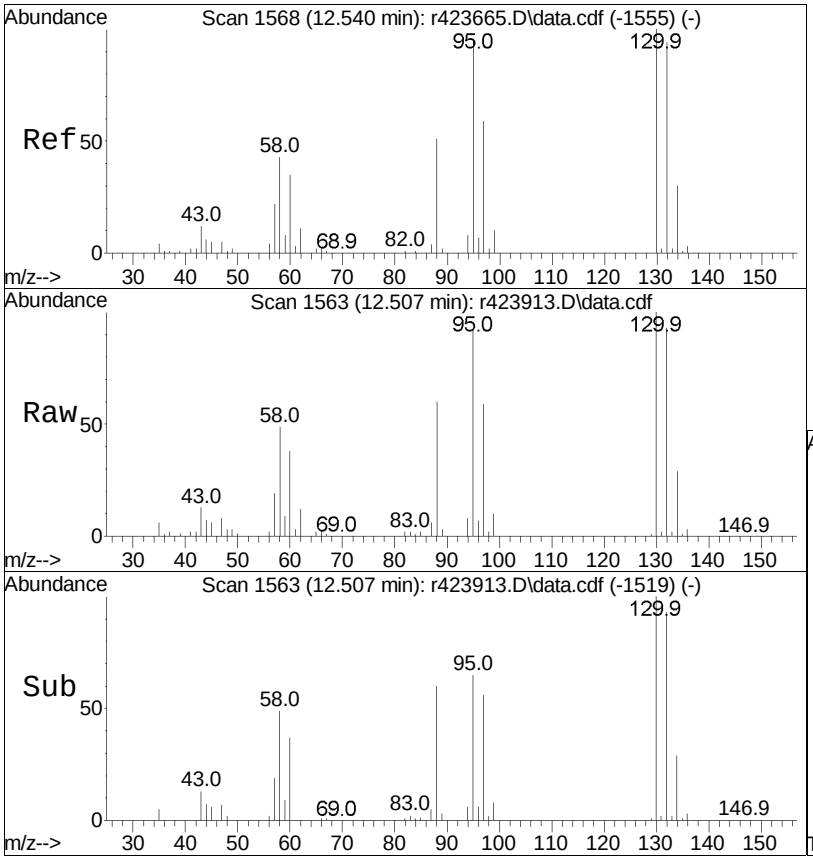


#58
1,4-dioxane
Concen: 10.58 ppbV
RT: 12.507 min Scan# 1563
Delta R.T. -0.027 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 88 Resp: 204749

Ion	Ratio	Lower	Upper
88	100		
58	80.5	64.6	96.8

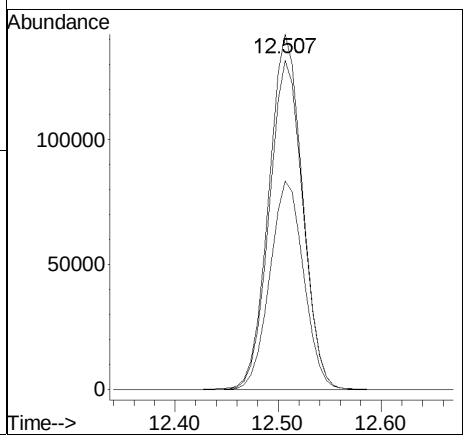


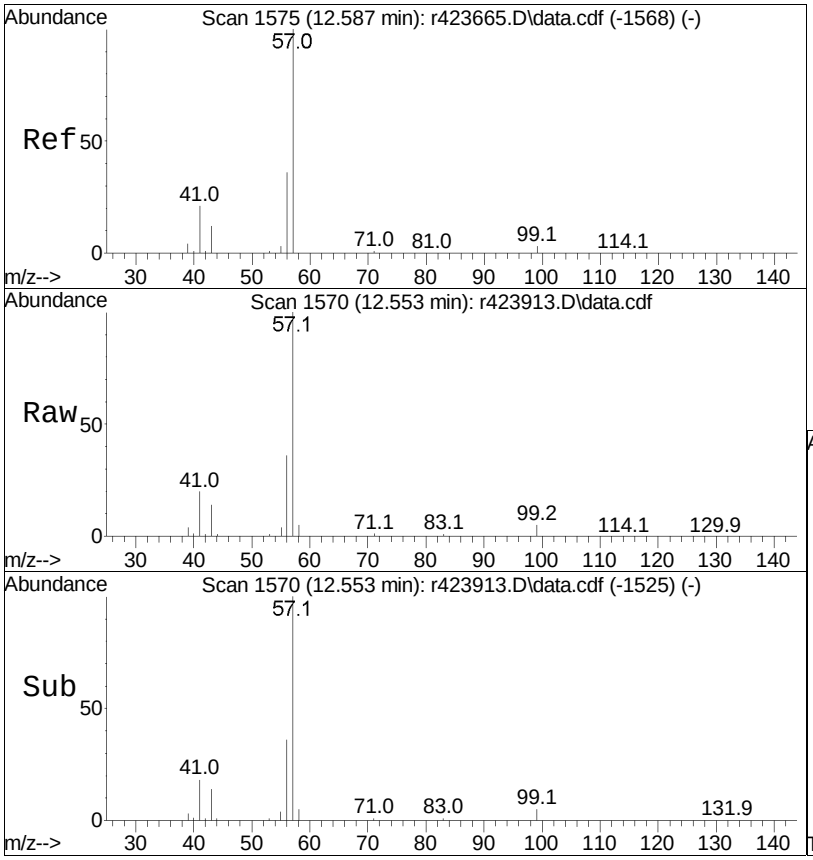


#59
trichloroethene
Concen: 9.79 ppbV
RT: 12.507 min Scan# 1563
Delta R.T. -0.033 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion:130 Resp: 322454

Ion	Ratio	Lower	Upper
130	100		
132	92.6	75.3	112.9
97	58.6	47.2	70.8

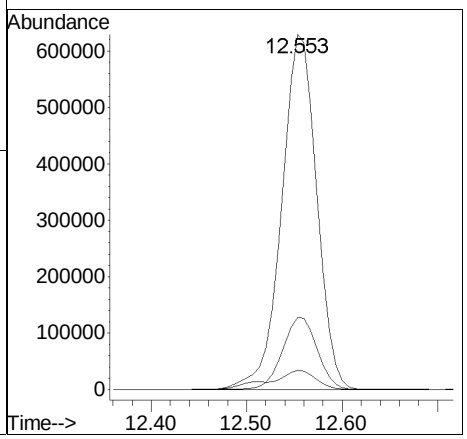


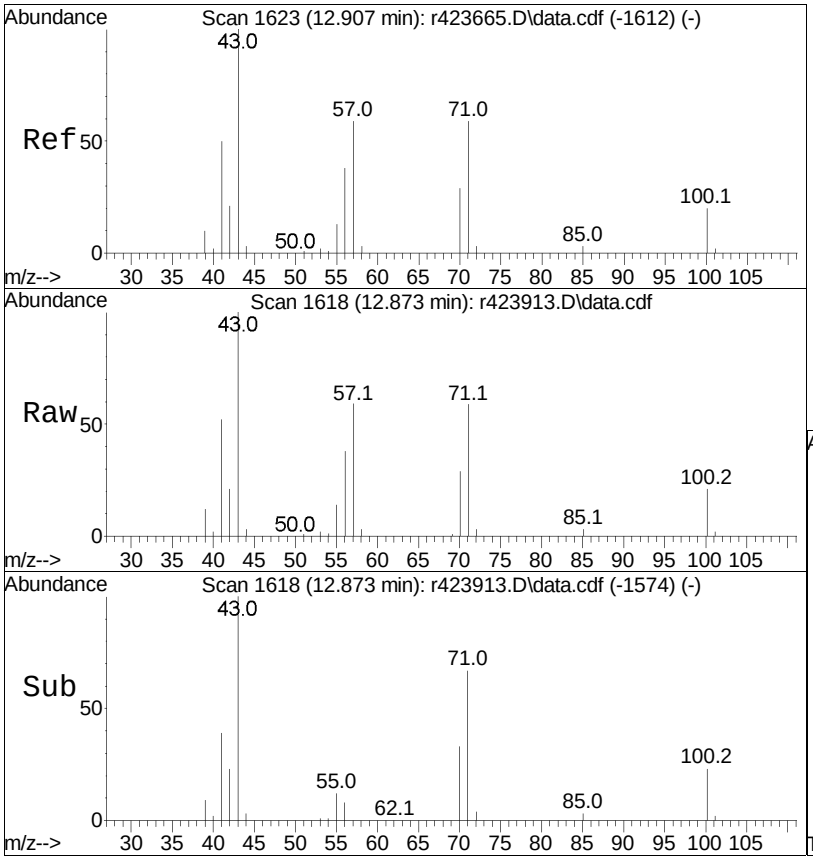


#60
2,2,4-trimethylpentane
Concen: 9.82 ppbV
RT: 12.553 min Scan# 1570
Delta R.T. -0.033 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 57 Resp: 1606448

Ion	Ratio	Lower	Upper
57	100		
99	5.4	4.4	6.6
41	20.3	16.1	24.1

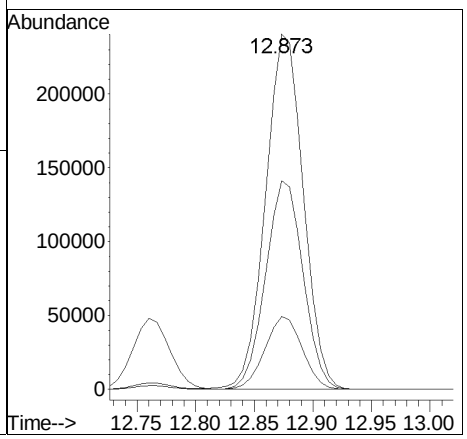


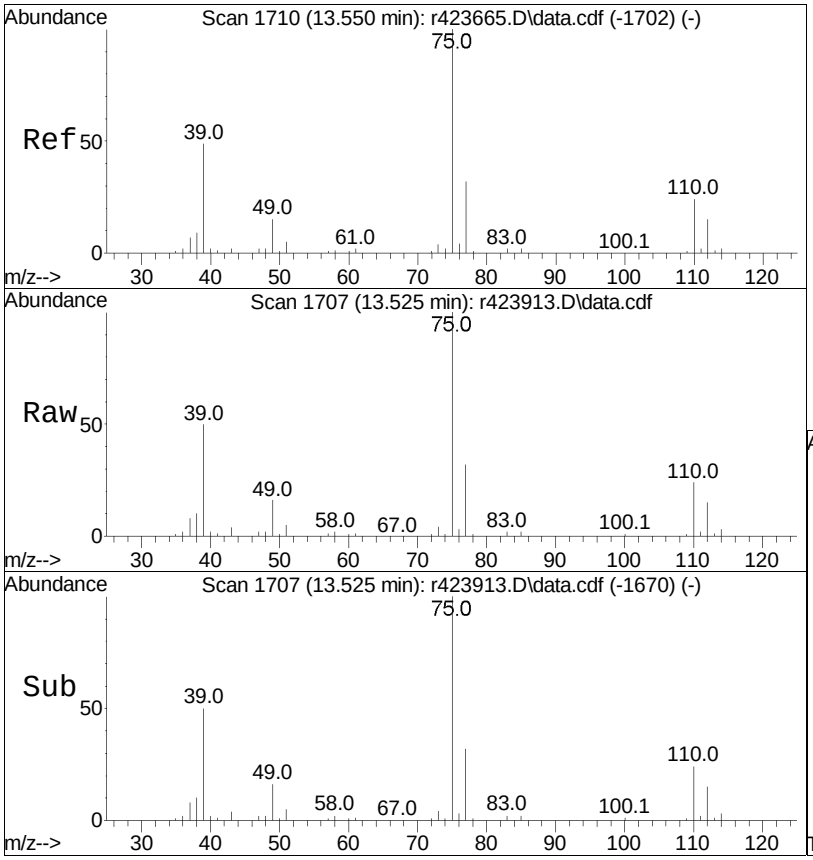


#62
heptane
Concen: 9.95 ppbV
RT: 12.873 min Scan# 1618
Delta R.T. -0.033 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 43 Resp: 538626

Ion	Ratio	Lower	Upper
43	100		
57	58.7	47.1	70.7
100	20.5	16.7	25.1

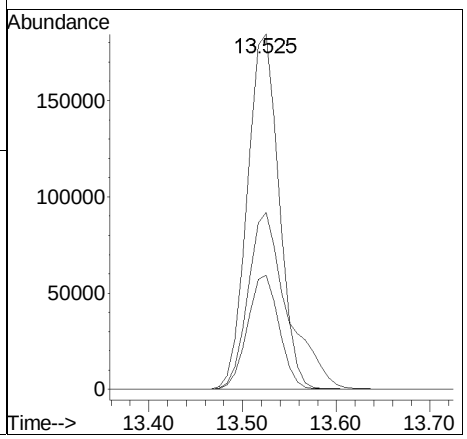


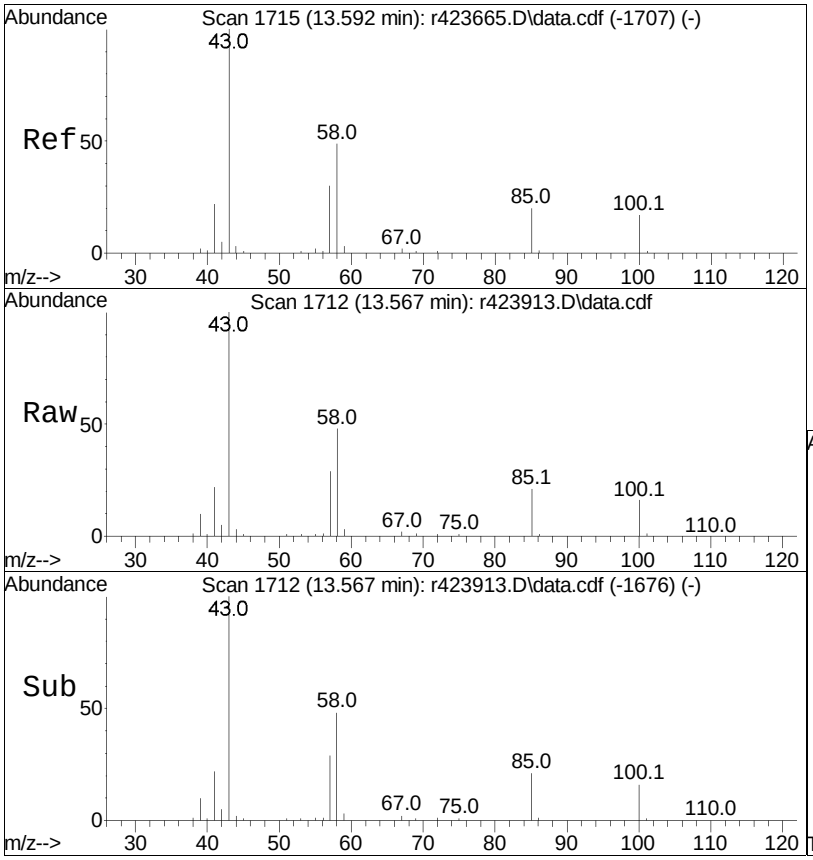


#63
cis-1,3-dichloropropene
Concen: 10.84 ppbV
RT: 13.525 min Scan# 1707
Delta R.T. -0.025 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 75 Resp: 435237

Ion	Ratio	Lower	Upper
75	100		
39	49.8	39.0	58.6
77	32.1	25.5	38.3

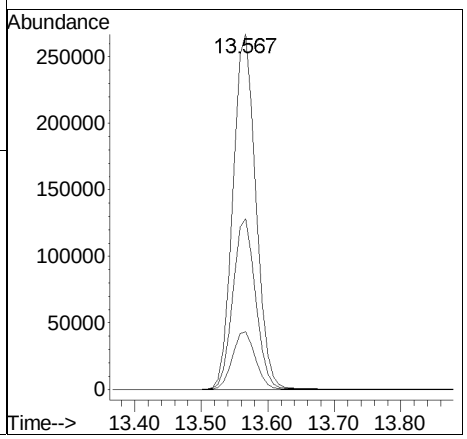


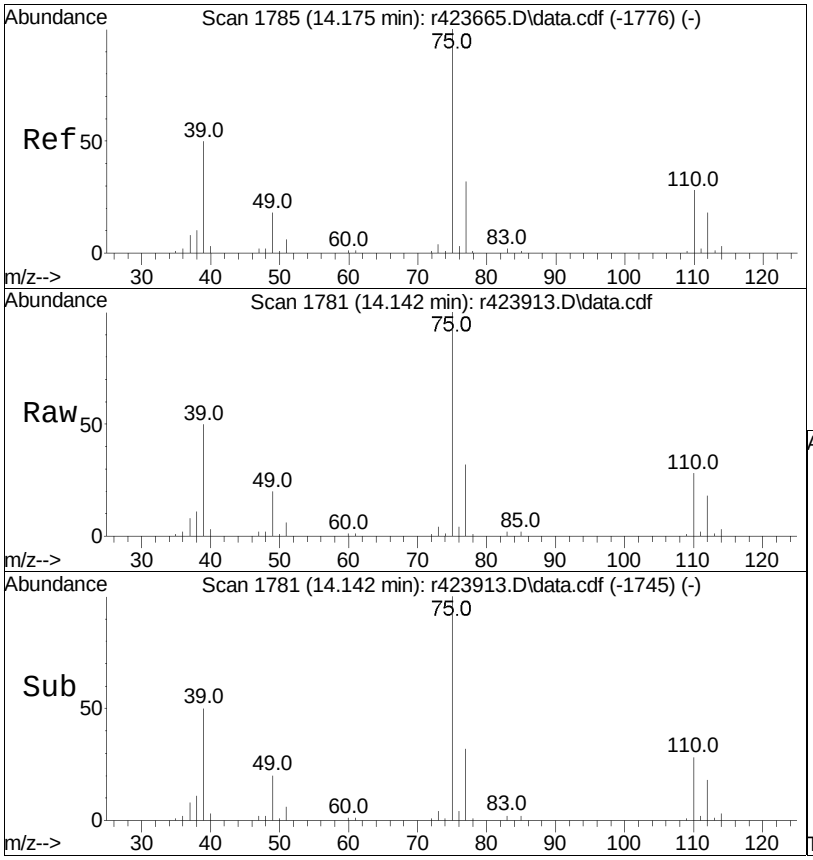


#64
4-methyl-2-pentanone
Concen: 10.74 ppbV
RT: 13.567 min Scan# 1712
Delta R.T. -0.025 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 43 Resp: 640199

Ion	Ratio	Lower	Upper
43	100		
58	48.0	39.3	58.9
100	16.2	13.8	20.8

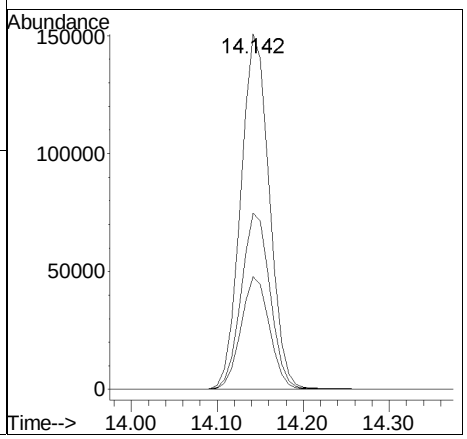


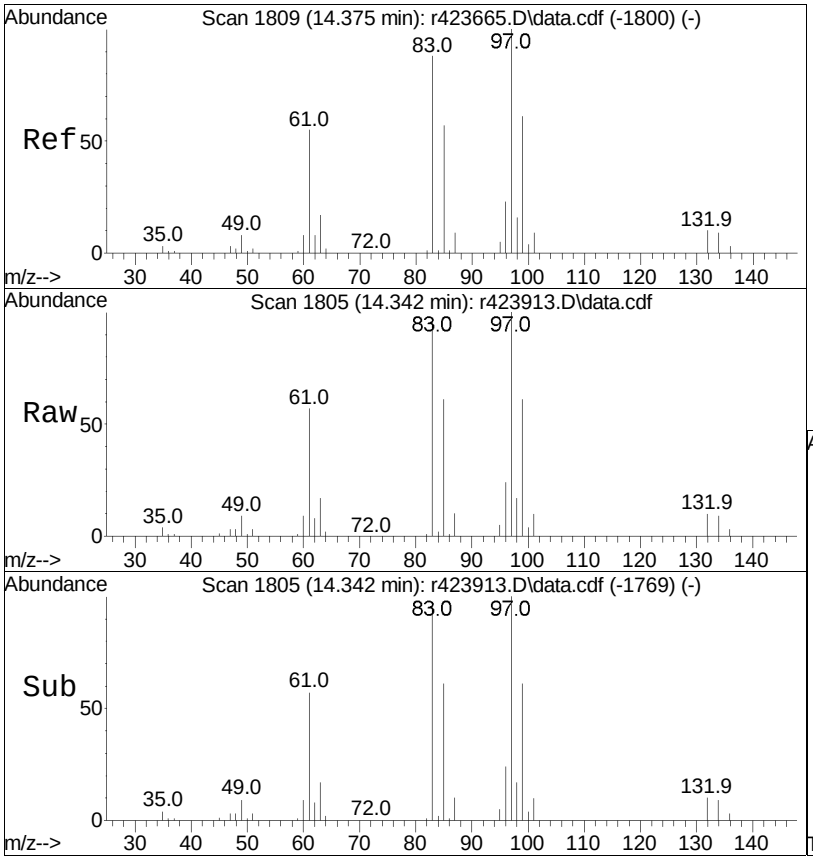


#65
trans-1,3-dichloropropene
Concen: 9.41 ppbV
RT: 14.142 min Scan# 1781
Delta R.T. -0.033 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 75 Resp: 349326

Ion	Ratio	Lower	Upper
75	100		
77	31.7	25.6	38.4
39	49.6	40.3	60.5

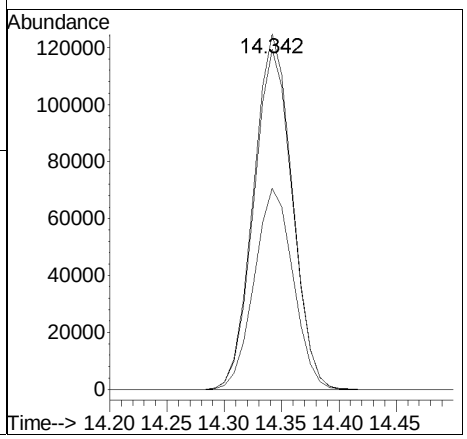


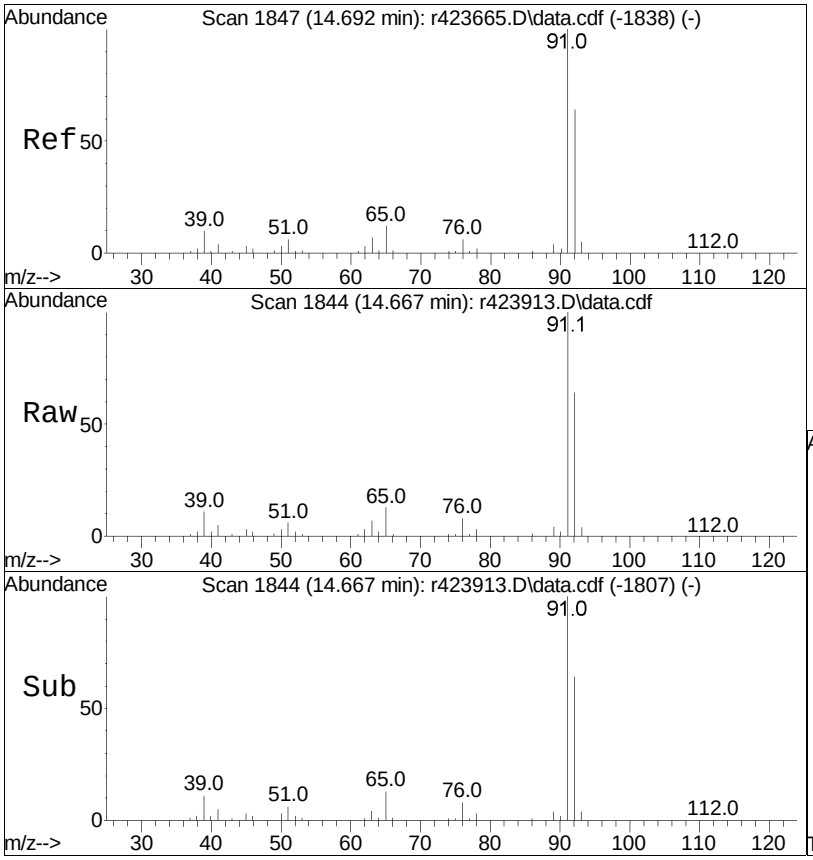


#66
1,1,2-trichloroethane
Concen: 9.87 ppbV
RT: 14.342 min Scan# 1805
Delta R.T. -0.033 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 97 Resp: 292772

Ion	Ratio	Lower	Upper
97	100		
83	95.7	70.3	105.5
61	56.6	43.9	65.9

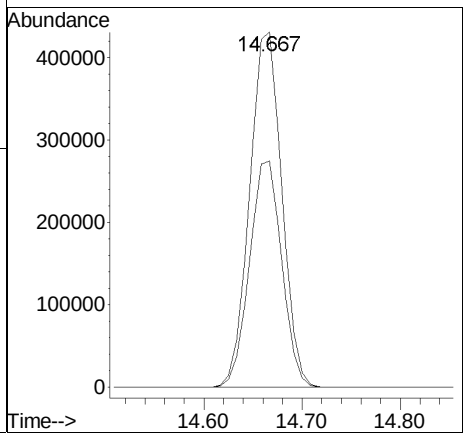


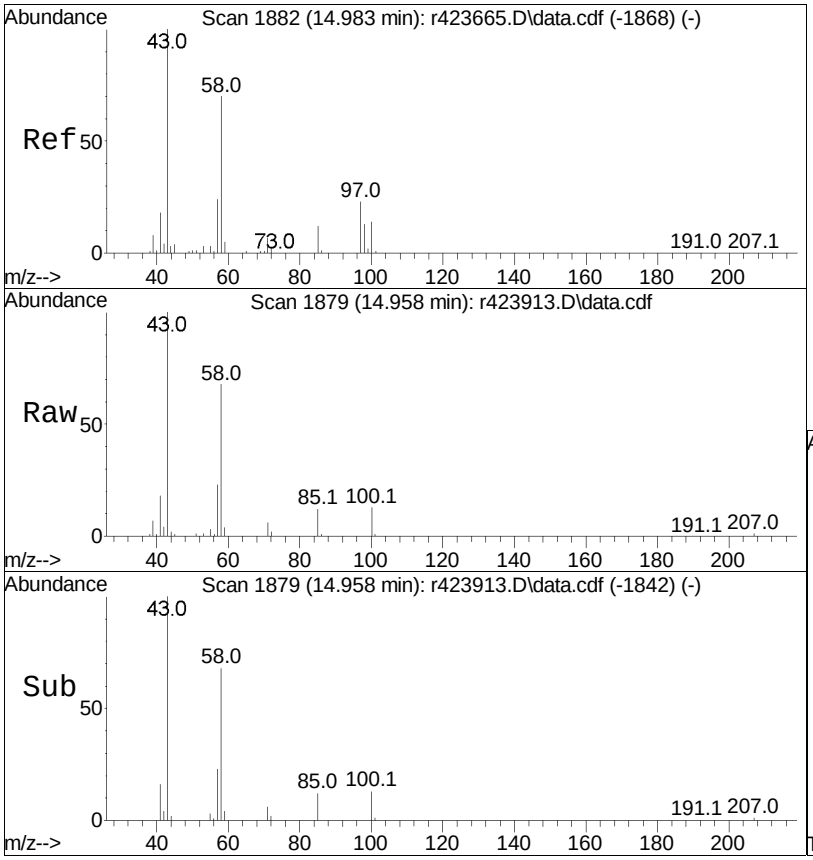


#68
toluene
Concen: 8.25 ppbV
RT: 14.667 min Scan# 1844
Delta R.T. -0.025 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 91 Resp: 980789

Ion	Ratio	Lower	Upper
91	100		
92	63.7	50.8	76.2

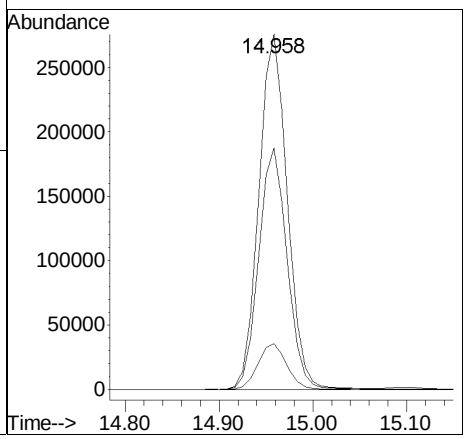


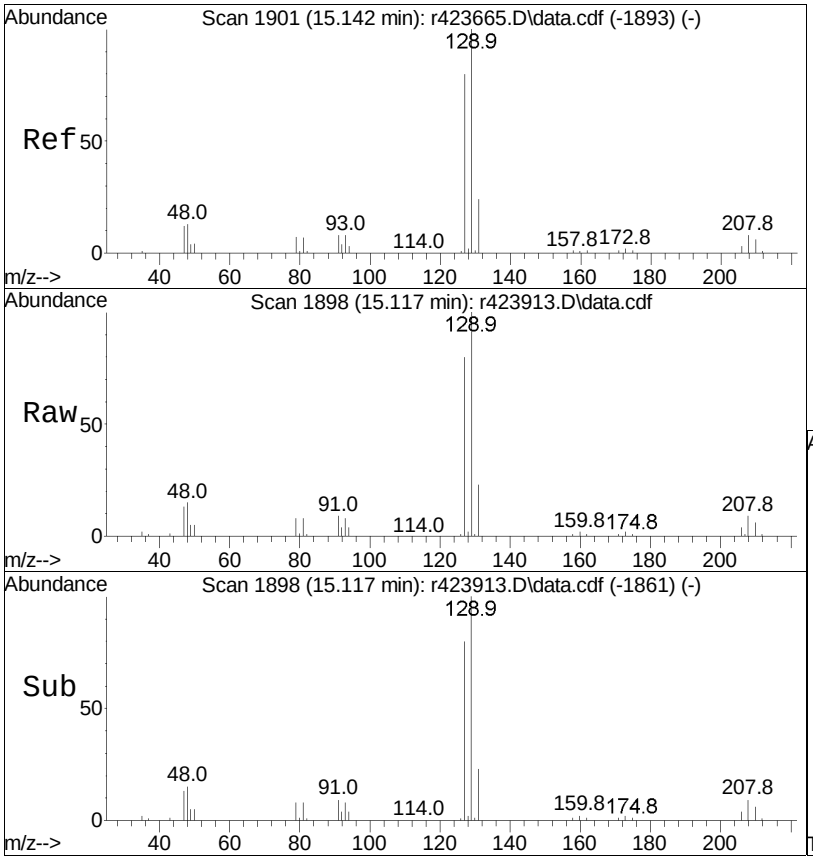


#72
2-hexanone
Concen: 9.70 ppbV
RT: 14.958 min Scan# 1879
Delta R.T. -0.025 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 43 Resp: 581002

Ion	Ratio	Lower	Upper
43	100		
58	67.9	56.0	84.0
100	12.9	11.6	17.4

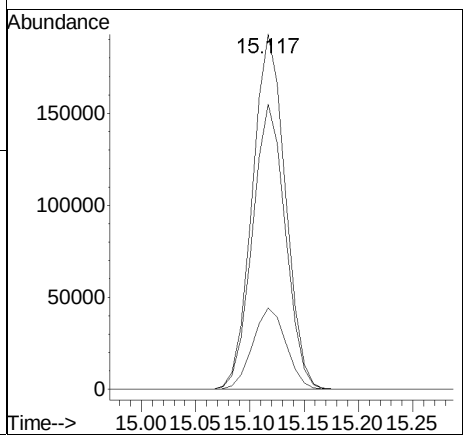


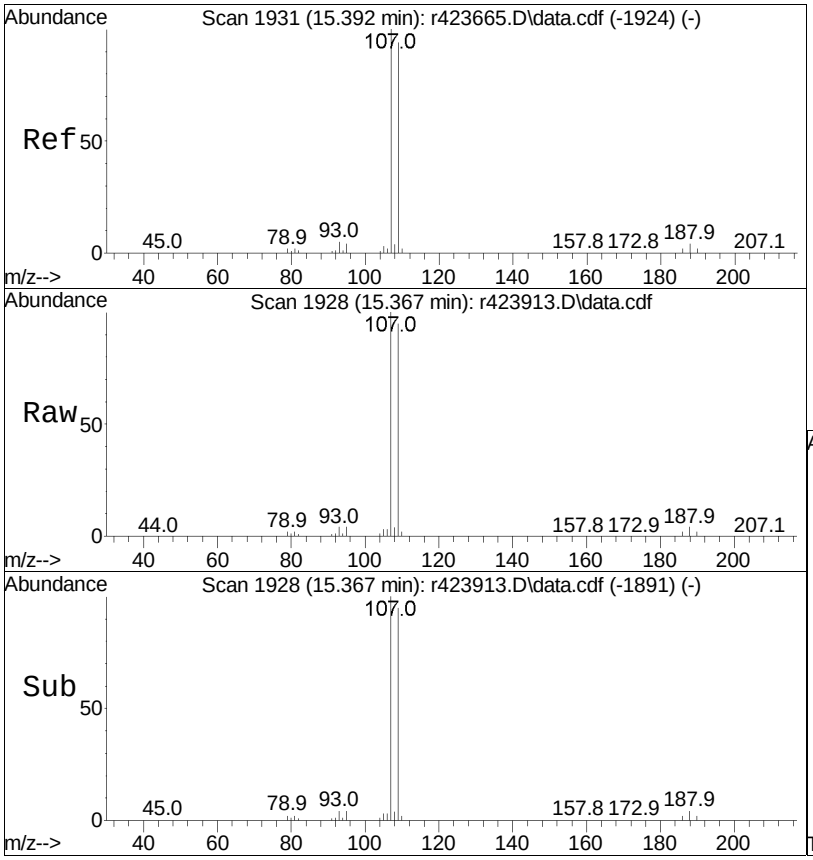


#74
dibromochloromethane
Concen: 9.48 ppbV
RT: 15.117 min Scan# 1898
Delta R.T. -0.025 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion:129 Resp: 408733

Ion	Ratio	Lower	Upper
129	100		
127	80.3	63.8	95.8
131	22.9	18.9	28.3

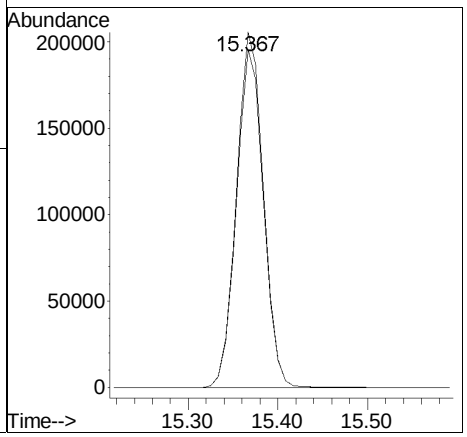


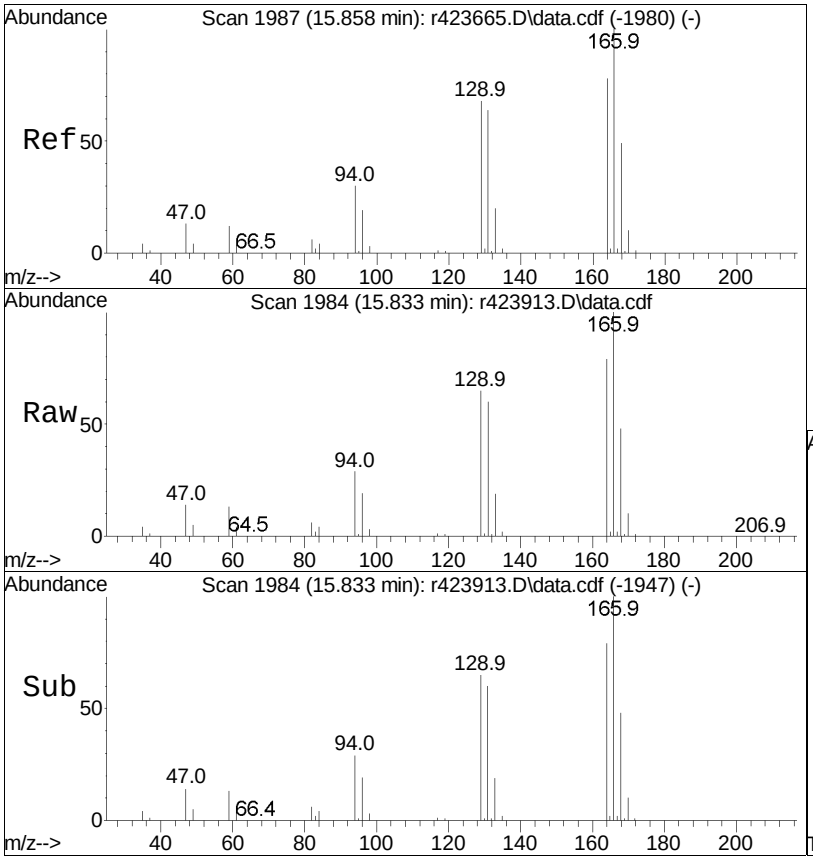


#75
1,2-dibromoethane
Concen: 9.63 ppbV
RT: 15.367 min Scan# 1928
Delta R.T. -0.025 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion:107 Resp: 427466

Ion	Ratio	Lower	Upper
107	100		
109	95.1	75.3	112.9

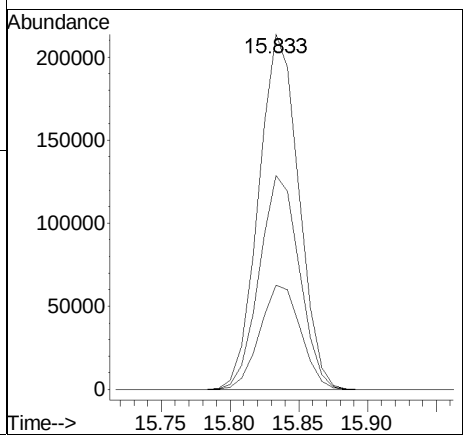


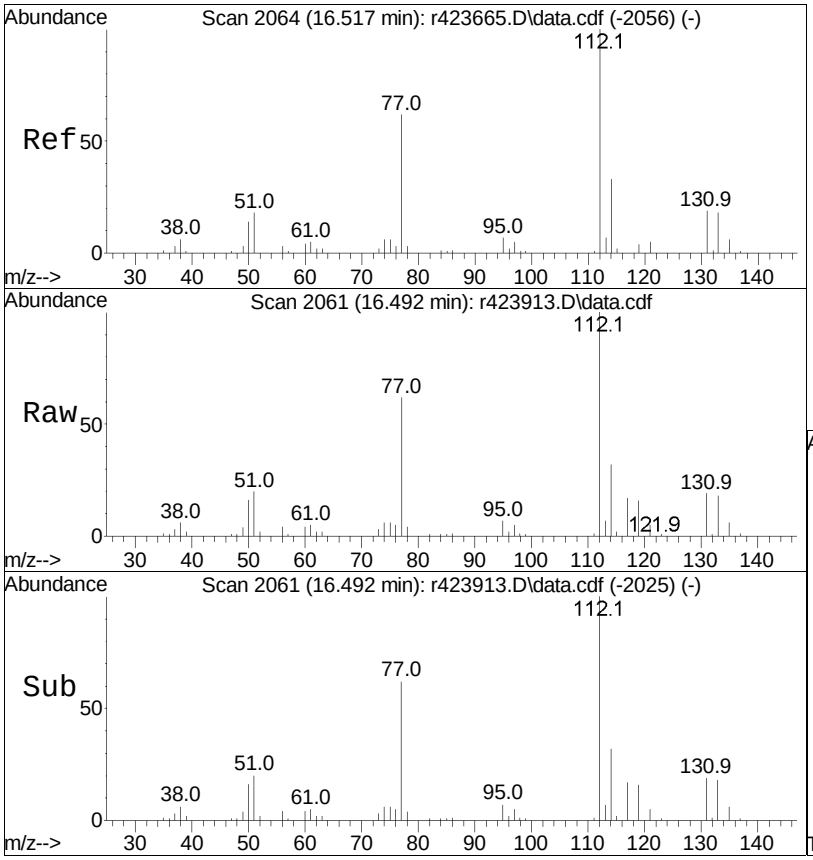


#78
tetrachloroethene
Concen: 9.55 ppbV
RT: 15.833 min Scan# 1984
Delta R.T. -0.025 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion:166 Resp: 432499

Ion	Ratio	Lower	Upper
166	100		
131	60.2	51.2	76.8
94	29.3	23.7	35.5

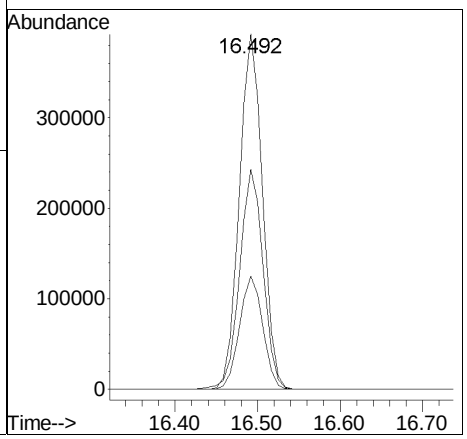


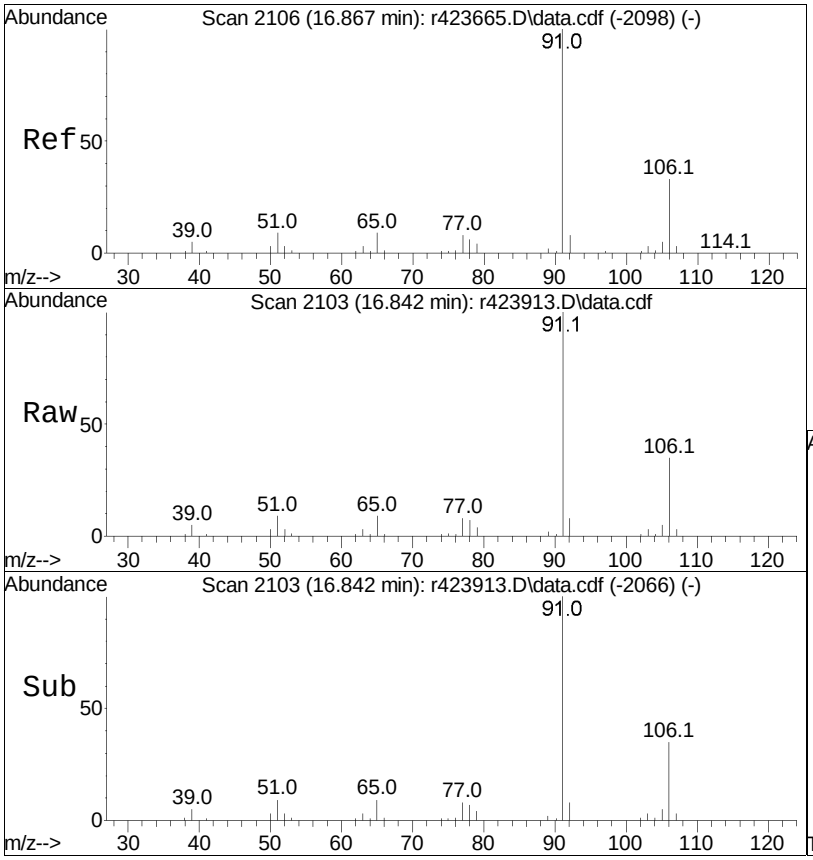


#80
chlorobenzene
Concen: 9.54 ppbV
RT: 16.492 min Scan# 2061
Delta R.T. -0.025 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion:112 Resp: 764826

Ion	Ratio	Lower	Upper
112	100		
114	31.9	26.2	39.2
77	61.9	49.8	74.8

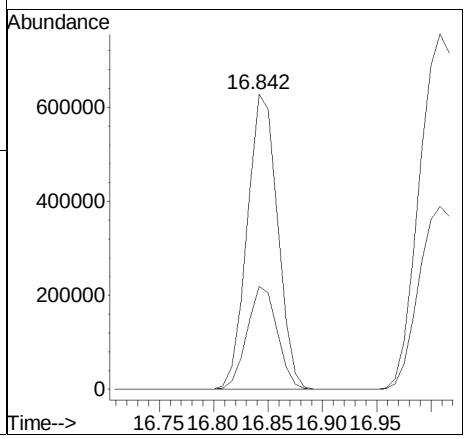


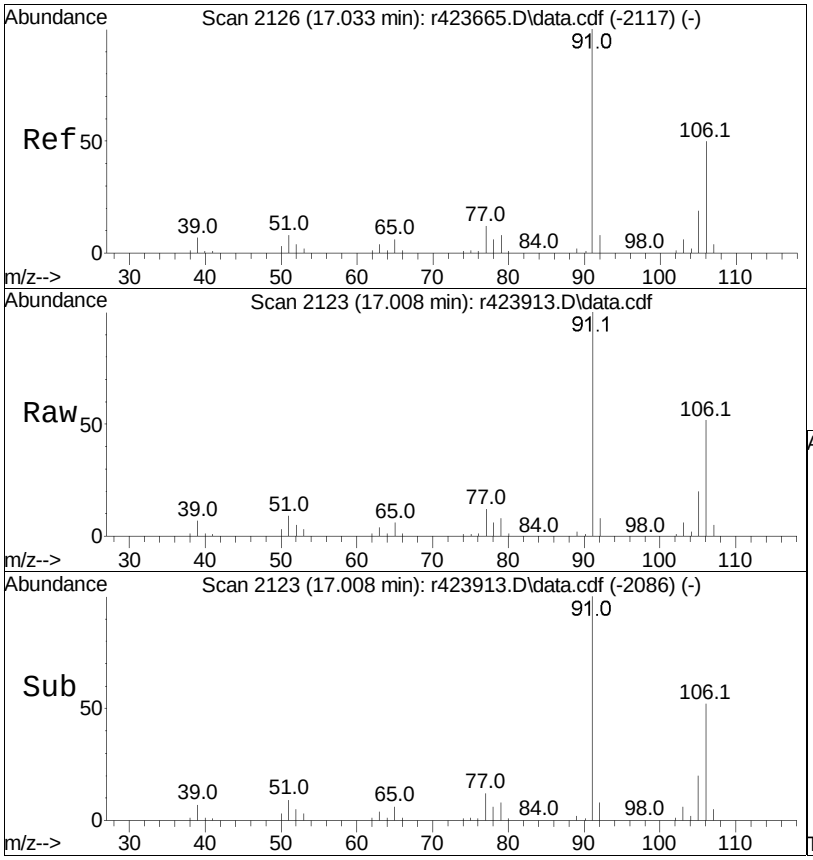


#81
ethylbenzene
Concen: 8.93 ppbV
RT: 16.842 min Scan# 2103
Delta R.T. -0.025 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 91 Resp: 1225661

Ion	Ratio	Lower	Upper
91	100		
106	34.9	26.6	39.8

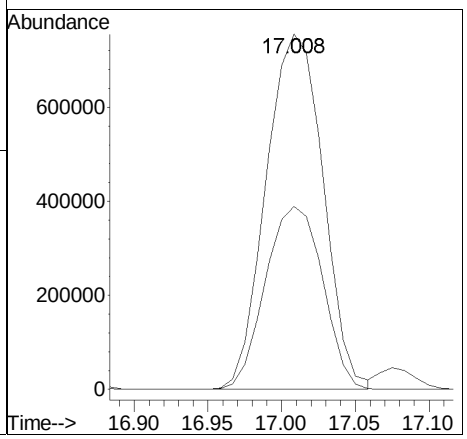


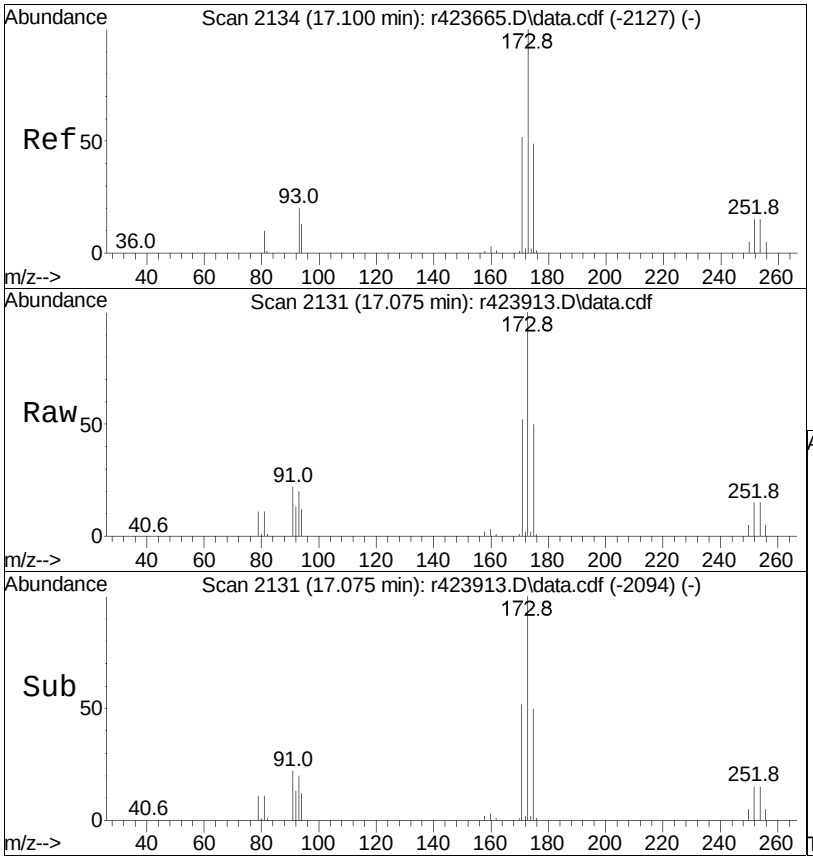


#83
m+p-xylene
Concen: 18.42 ppbV
RT: 17.008 min Scan# 2123
Delta R.T. -0.025 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 91 Resp: 2033379

Ion	Ratio	Lower	Upper
91	100		
106	51.5	39.8	59.6

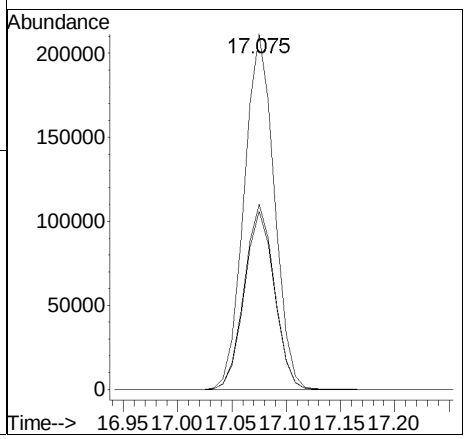


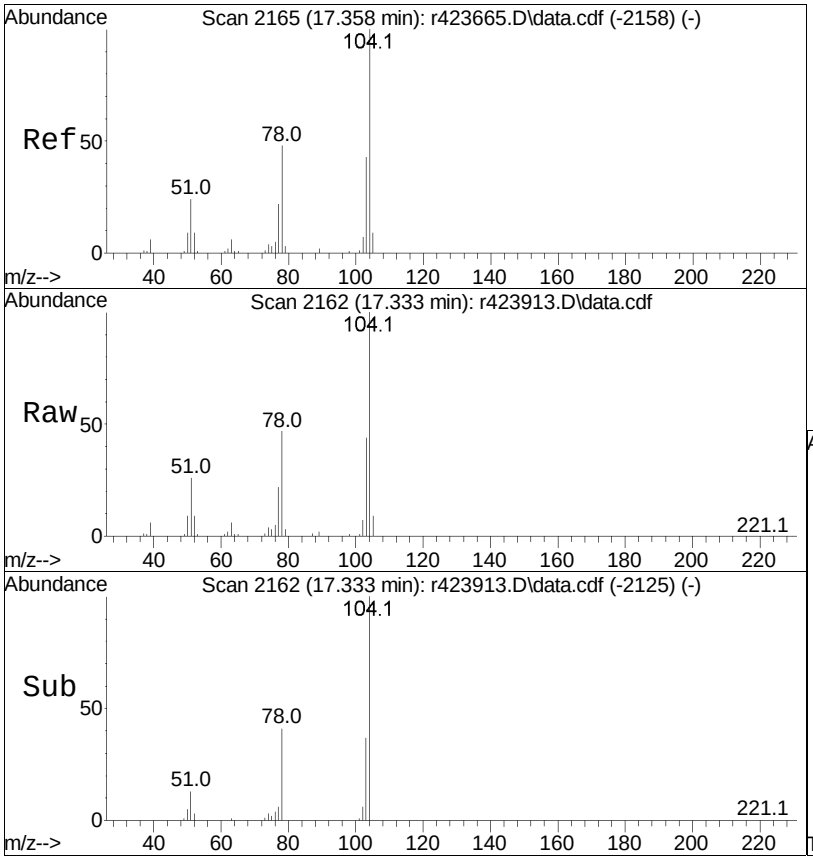


#84
bromoform
Concen: 10.08 ppbV
RT: 17.075 min Scan# 2131
Delta R.T. -0.025 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion:173 Resp: 407878

Ion	Ratio	Lower	Upper
173	100		
175	50.1	39.4	59.0
171	52.1	42.0	63.0

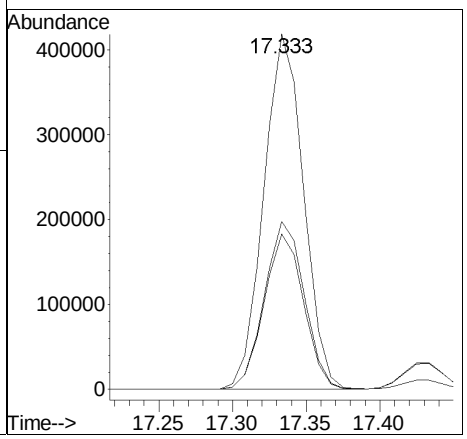


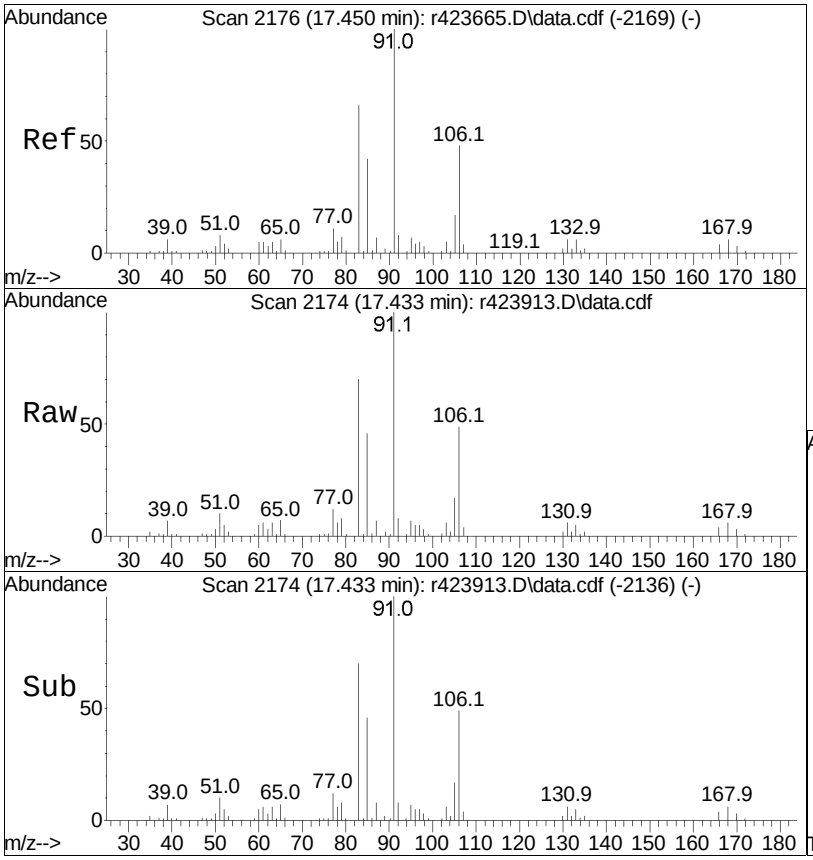


#85
styrene
Concen: 9.28 ppbV
RT: 17.333 min Scan# 2162
Delta R.T. -0.025 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion:104 Resp: 786310

Ion	Ratio	Lower	Upper
104	100		
103	43.8	34.8	52.2
78	47.3	38.1	57.1

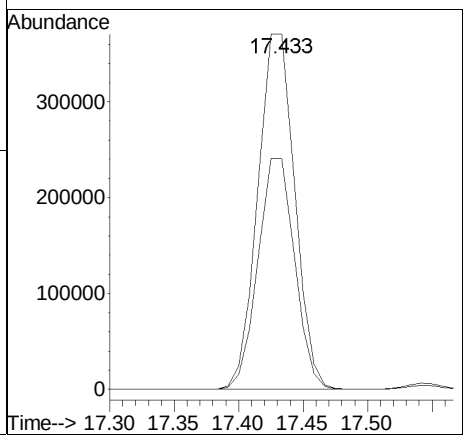


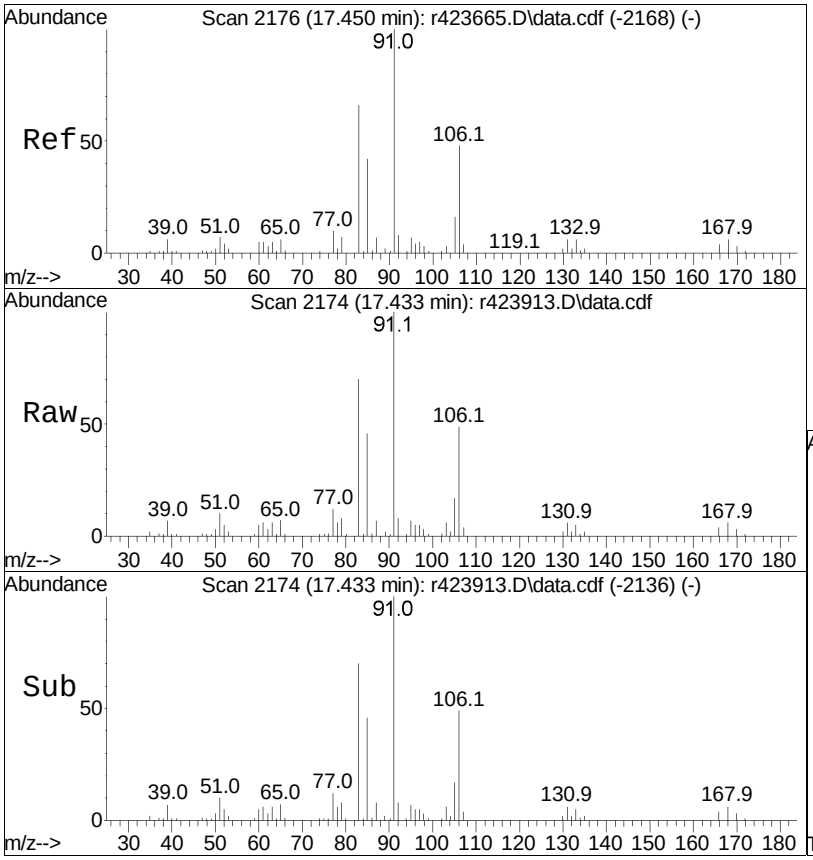


#86
1,1,2,2-tetrachloroethane
Concen: 10.12 ppbV
RT: 17.433 min Scan# 2174
Delta R.T. -0.017 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 83 Resp: 741633

Ion	Ratio	Lower	Upper
83	100		
85	64.9	51.1	76.7

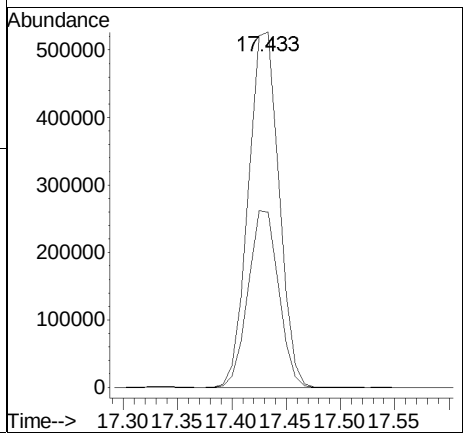


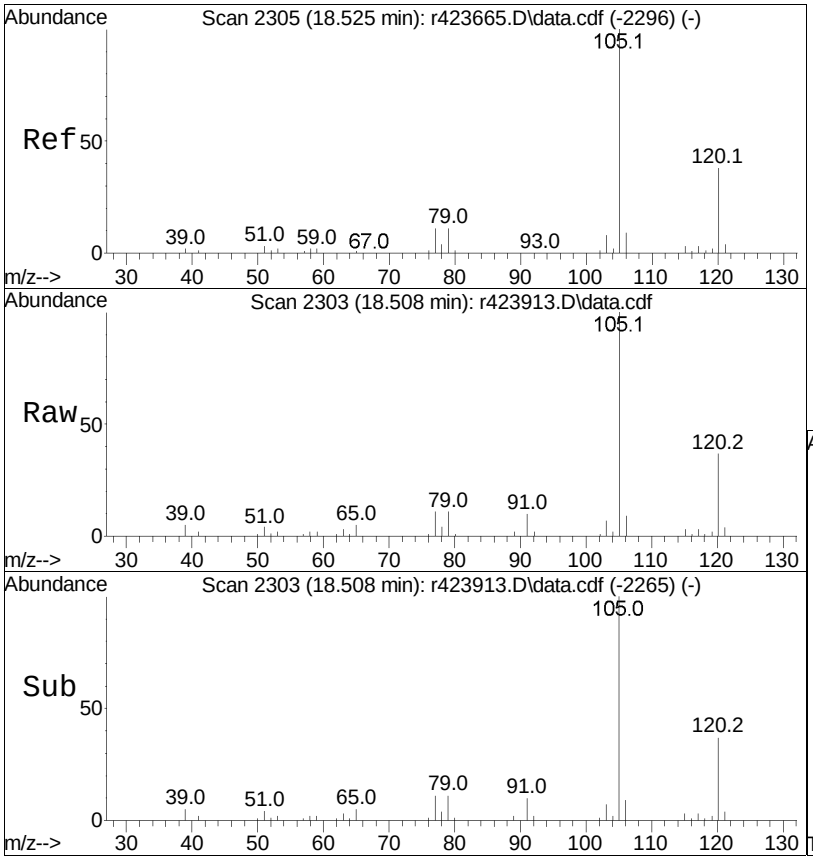


#87
o-xylene
Concen: 9.54 ppbV
RT: 17.433 min Scan# 2174
Delta R.T. -0.017 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 91 Resp: 1034630

Ion	Ratio	Lower	Upper
91	100		
106	49.3	38.2	57.4

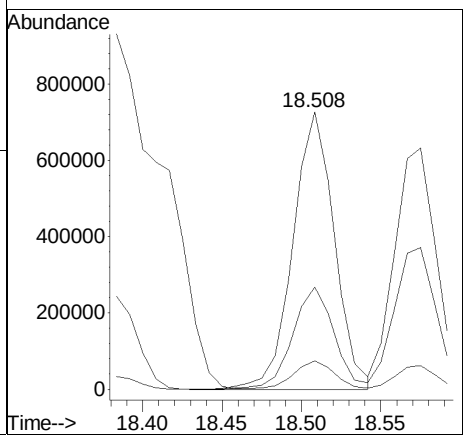


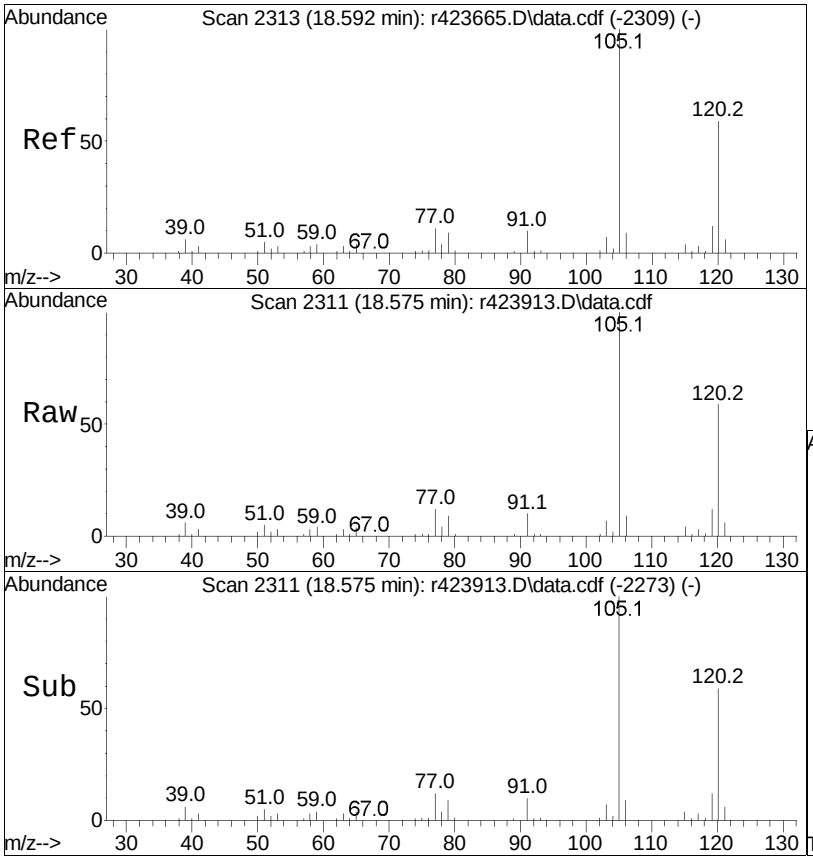


#96
4-ethyl toluene
Concen: 9.06 ppbV
RT: 18.508 min Scan# 2303
Delta R.T. -0.017 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion:105 Resp: 1320732

Ion	Ratio	Lower	Upper
105	100		
120	36.9	30.2	45.4
91	10.3	8.5	12.7

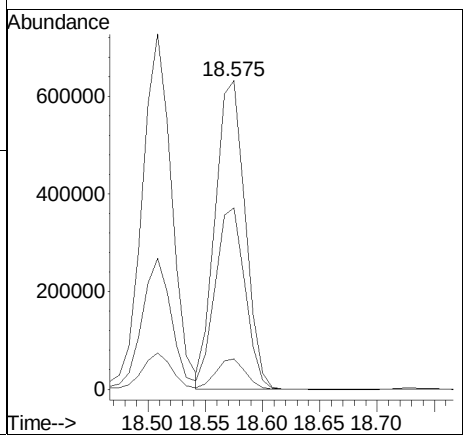


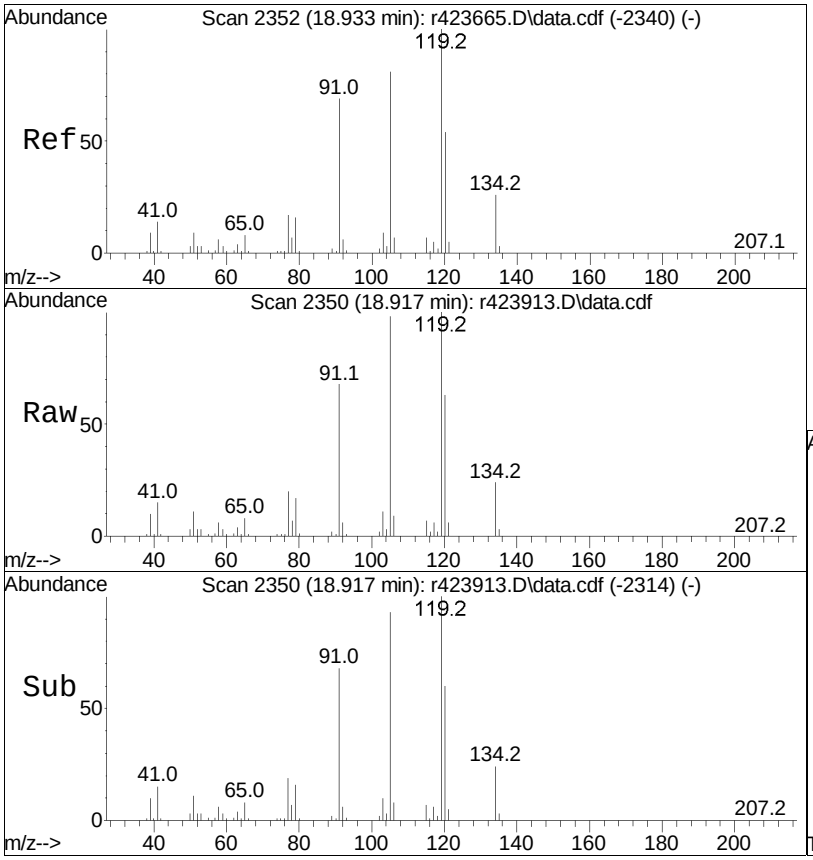


#97
1,3,5-trimethylbenzene
Concen: 9.37 ppbV
RT: 18.575 min Scan# 2311
Delta R.T. -0.017 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion:105 Resp: 1152174

Ion	Ratio	Lower	Upper
105	100		
120	58.8	46.5	69.7
91	9.9	7.9	11.9

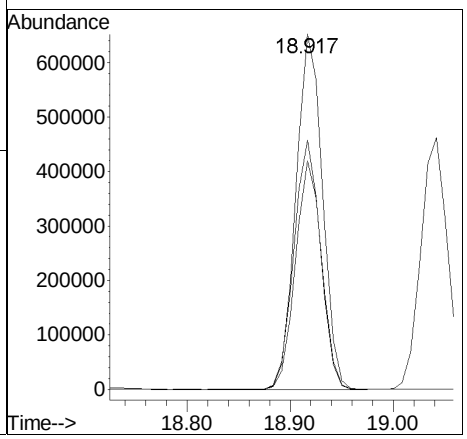


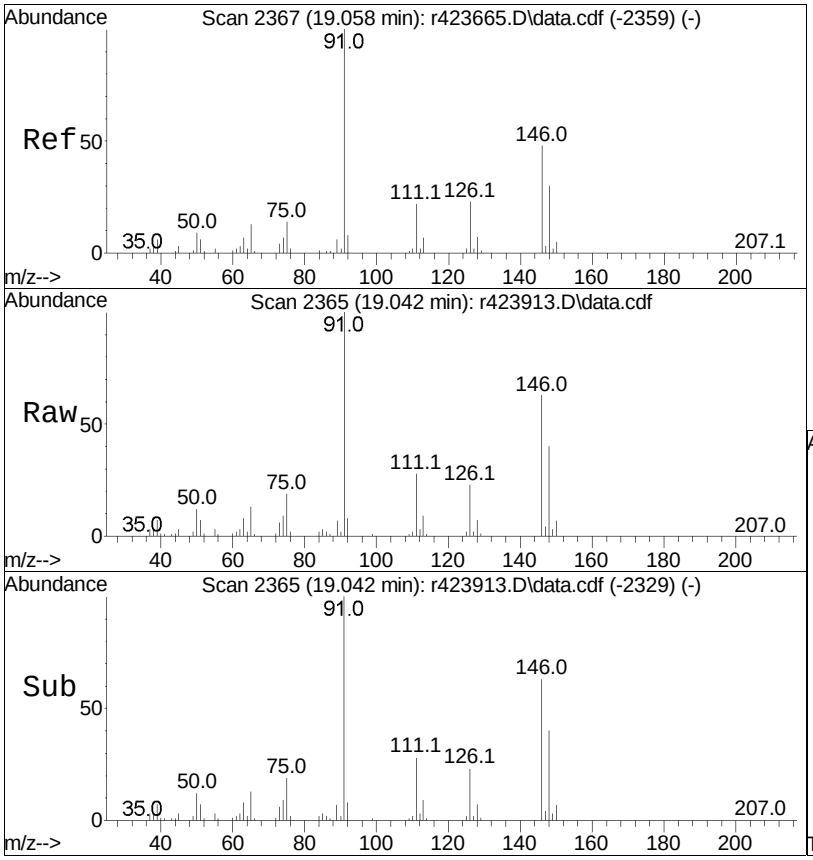


#99
1,2,4-trimethylbenzene
Concen: 10.11 ppbV
RT: 18.917 min Scan# 2350
Delta R.T. -0.017 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion:105 Resp: 1169426

Ion	Ratio	Lower	Upper
105	100		
120	64.4	53.0	79.6
91	70.1	67.5	101.3

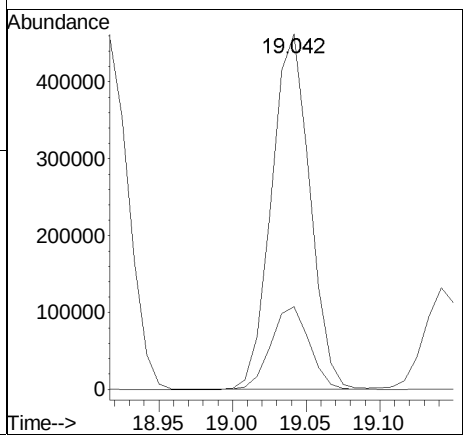


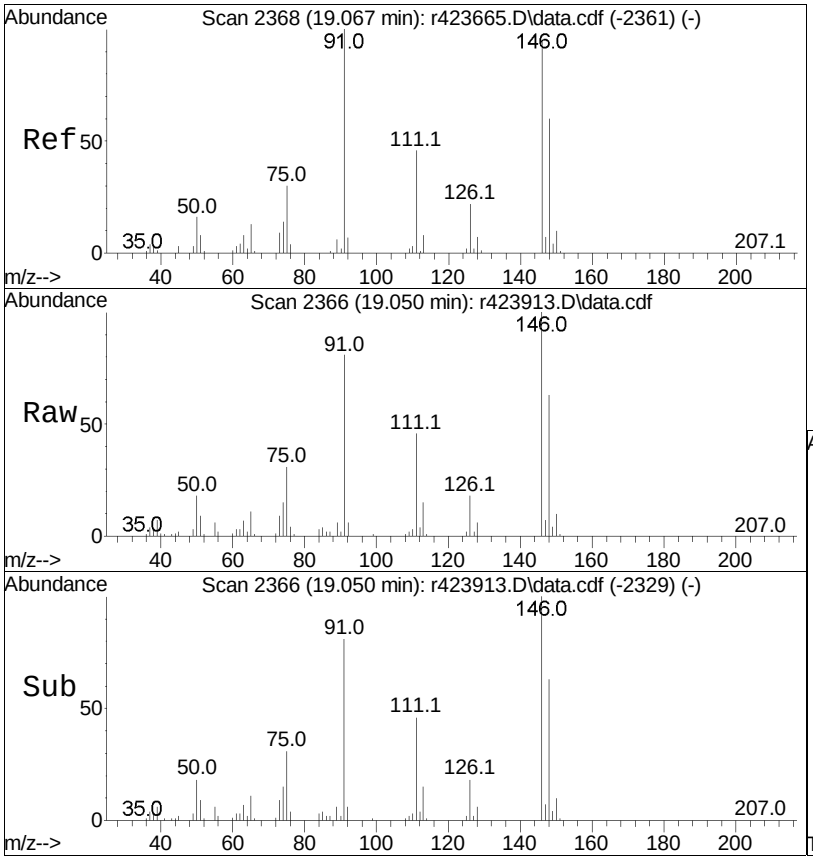


#101
Benzyl Chloride
Concen: 9.70 ppbV
RT: 19.042 min Scan# 2365
Delta R.T. -0.017 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion: 91 Resp: 836921

Ion	Ratio	Lower	Upper
91	100		
126	23.3	18.6	28.0

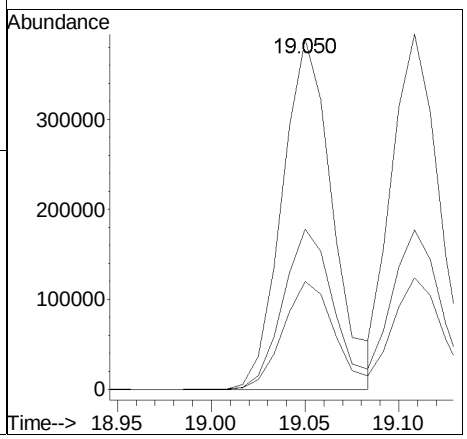


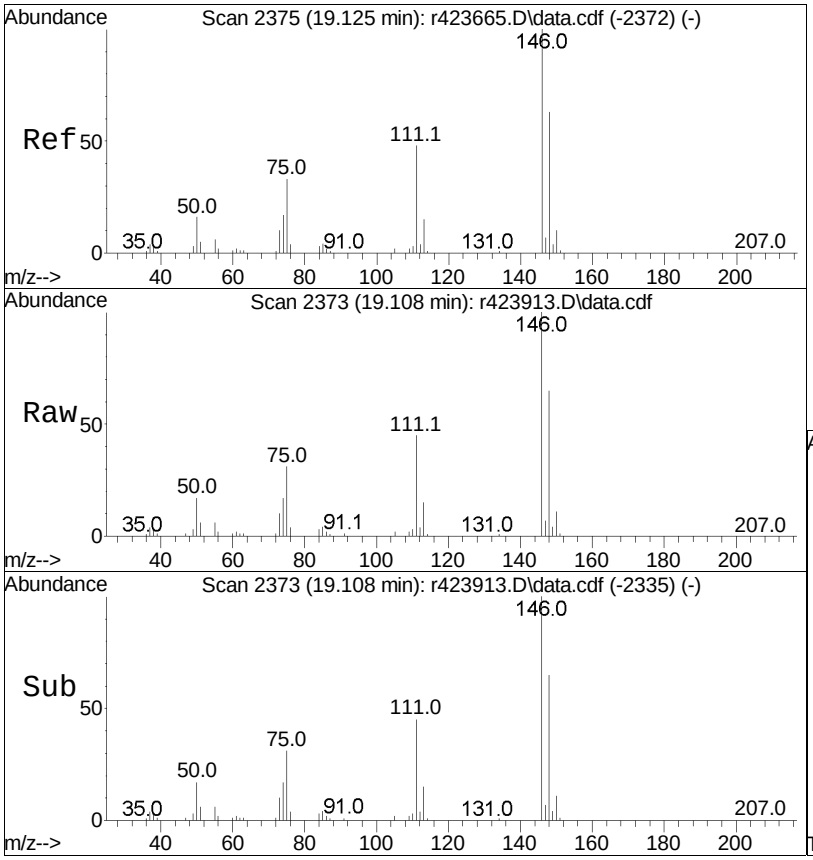


#102
1,3-dichlorobenzene
Concen: 10.36 ppbV
RT: 19.050 min Scan# 2366
Delta R.T. -0.017 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion:146 Resp: 729166

Ion	Ratio	Lower	Upper
146	100		
111	45.8	38.5	57.7
75	30.8	25.3	37.9

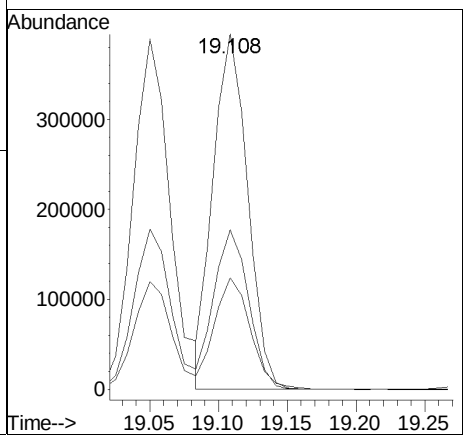


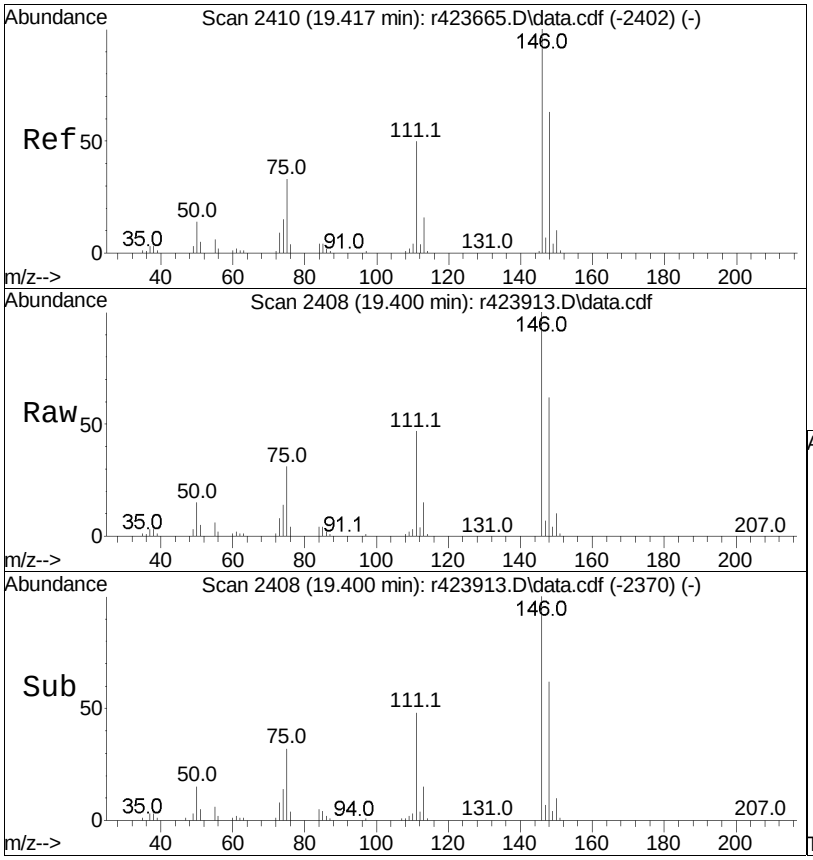


#103
1,4-dichlorobenzene
Concen: 9.77 ppbV
RT: 19.108 min Scan# 2373
Delta R.T. -0.017 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion:146 Resp: 686873

Ion	Ratio	Lower	Upper
146	100		
111	44.9	37.9	56.9
75	31.4	26.0	39.0

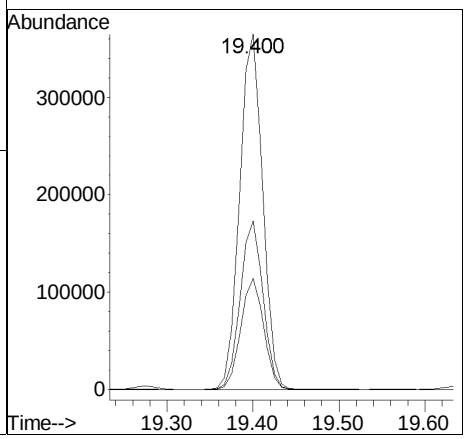


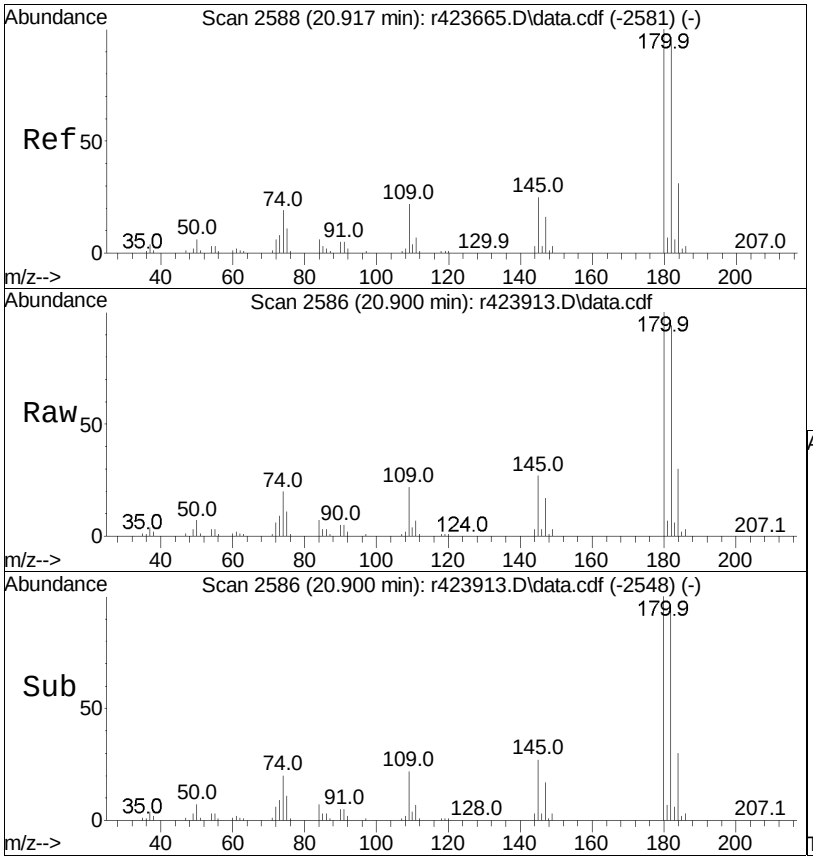


#107
1,2-dichlorobenzene
Concen: 10.23 ppbV
RT: 19.400 min Scan# 2408
Delta R.T. -0.017 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion:146 Resp: 679299

Ion	Ratio	Lower	Upper
146	100		
111	47.4	39.8	59.8
75	31.2	26.5	39.7

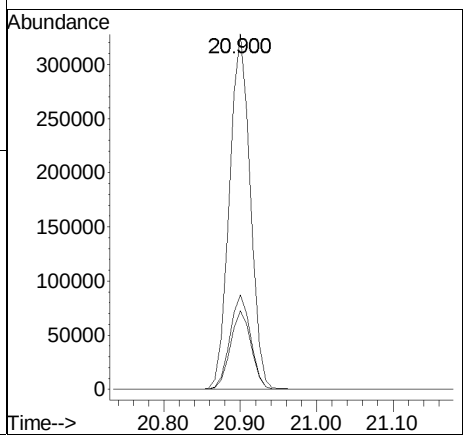


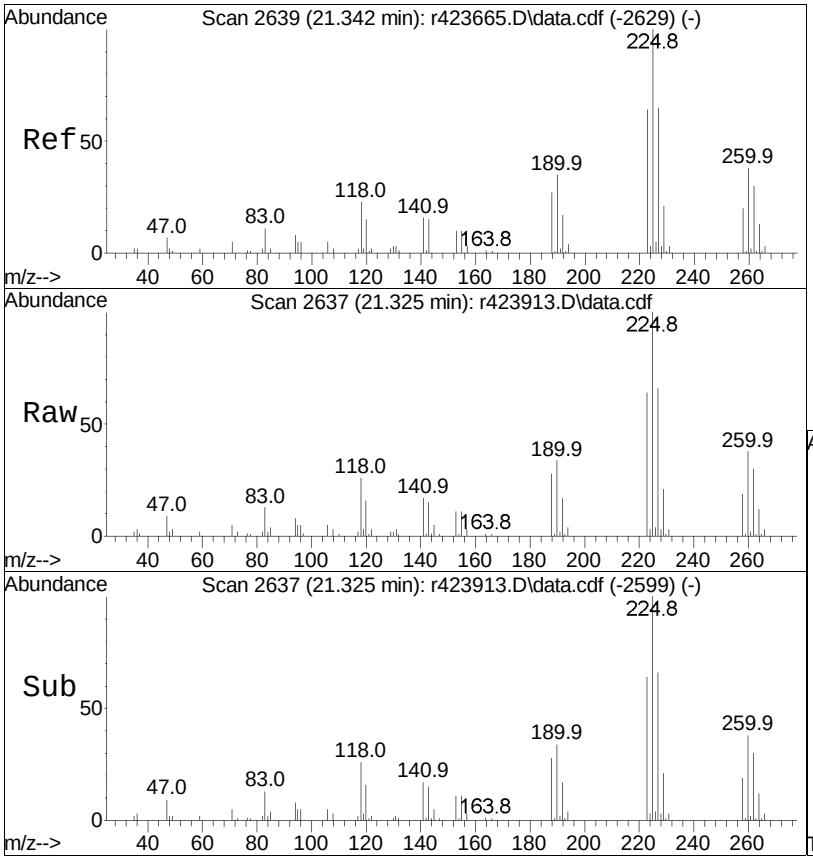


#115
1,2,4-trichlorobenzene
Concen: 10.38 ppbV
RT: 20.900 min Scan# 2586
Delta R.T. -0.017 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion:180 Resp: 620752

Ion	Ratio	Lower	Upper
180	100		
145	26.6	20.3	30.5
109	22.1	17.2	25.8

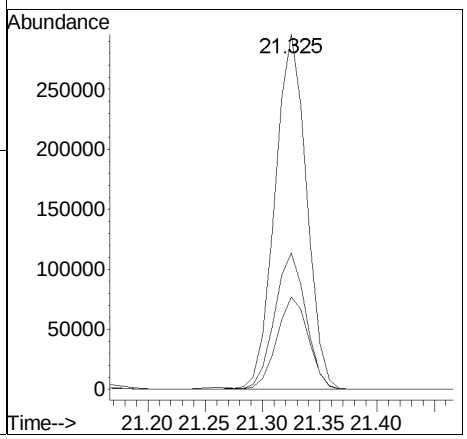




#119
hexachlorobutadiene
Concen: 10.42 ppbV
RT: 21.325 min Scan# 2637
Delta R.T. -0.017 min
Lab File: r423913.D
Acq: 4 Oct 2022 1:45 PM

Tgt Ion:225 Resp: 567005

Ion	Ratio	Lower	Upper
225	100		
260	38.4	30.7	46.1
118	26.0	18.6	27.8

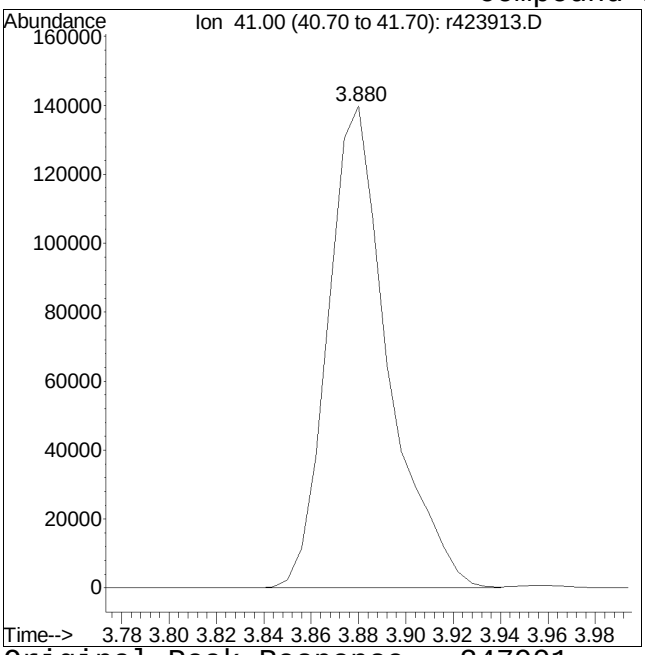


Manual Integration Report

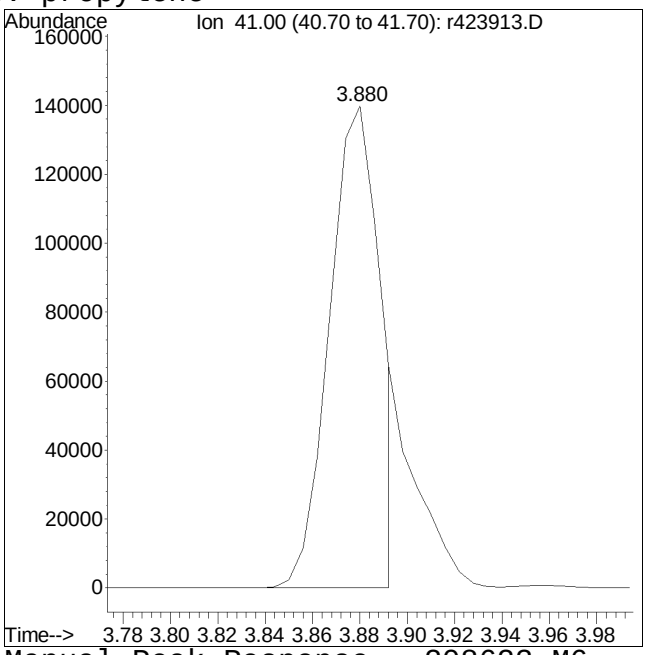
Data Path : O:\Forensics\Data\AirpianoQ
Data File : r423913.D
Date Inj'd : 10/4/2020 0:1: 5
Sample : WG1695439-3,3,250,250

Method : TFS4_220921.M
Operator : AIRPIANO4:TJS
Instrument :
Quant Date : 10/4/2022 2:53 pm

Compound #3: propylene



Original Peak Response = 247901



Manual Peak Response = 208623 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423924.D
Acq On : 4 Oct 2022 11:04 PM
Operator : AIRPIANO4:TJS
Sample : WG1695439-5,3,250,250
Misc : WG1695439,ICAL19364
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 05 15:19:03 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004T\r423912.D
Sub List : TO15-NY-7-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.458	49	447278	10.000	ppbV	#-0.02
Standard Area = 462589			Recovery =	96.69%		
43) 1,4-difluorobenzene	11.720	114	1140540	10.000	ppbV	-0.02
Standard Area = 1229344			Recovery =	92.78%		
67) chlorobenzene-D5	16.458	54	223216	10.000	ppbV	-0.02
Standard Area = 234984			Recovery =	94.99%		
System Monitoring Compounds						
Target Compounds						Qvalue
5) dichlorodifluoromethane	3.952	85	20187	0.550	ppbV	98
6) chloromethane	4.132	50	8880	0.560	ppbV	100
7) Freon-114	4.252		0	N.D.		
10) 1,3-butadiene	0.000		0	N.D.		
13) bromomethane	0.000		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	5.278	31	12947379	992.853	ppbV #	85
17) vinyl bromide	0.000		0	N.D.		
19) acetone	5.813	43	83321	3.523	ppbV #	93
21) trichlorofluoromethane	5.997	101	8832	0.311	ppbV	100
22) isopropyl alcohol	6.140	45	532038	15.938	ppbV	99
27) tertiary butyl alcohol	6.888	59	2156	0.043	ppbV #	57
28) methylene chloride	6.930	49	4708	0.190	ppbV	94
29) 3-chloropropene	0.000		0	N.D.		
30) carbon disulfide	7.212		0	N.D.		
31) Freon 113	7.254	101	2439	0.060	ppbV	86
32) trans-1,2-dichloroethene	0.000		0	N.D.		
33) 1,1-dichloroethane	0.000		0	N.D.		
34) MTBE	0.000		0	N.D.		
36) 2-butanone	8.775	43	8285	0.160	ppbV	99
38) Ethyl Acetate	9.575	61	4865	0.504	ppbV	89
39) chloroform	9.625	83	2312	0.056	ppbV #	91
40) Tetrahydrofuran	10.092	42	3806	0.112	ppbV	97
42) 1,2-dichloroethane	10.467		0	N.D.		
44) hexane	9.533	57	1461	0.032	ppbV #	53
50) benzene	11.280	78	3664	0.046	ppbV #	92
53) cyclohexane	11.593		0	N.D.		

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423924.D
Acq On : 4 Oct 2022 11:04 PM
Operator : AIRPIANO4:TJS
Sample : WG1695439-5,3,250,250
Misc : WG1695439,ICAL19364
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 05 15:19:03 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004T\r423912.D
Sub List : TO15-NY-7-SIM - .

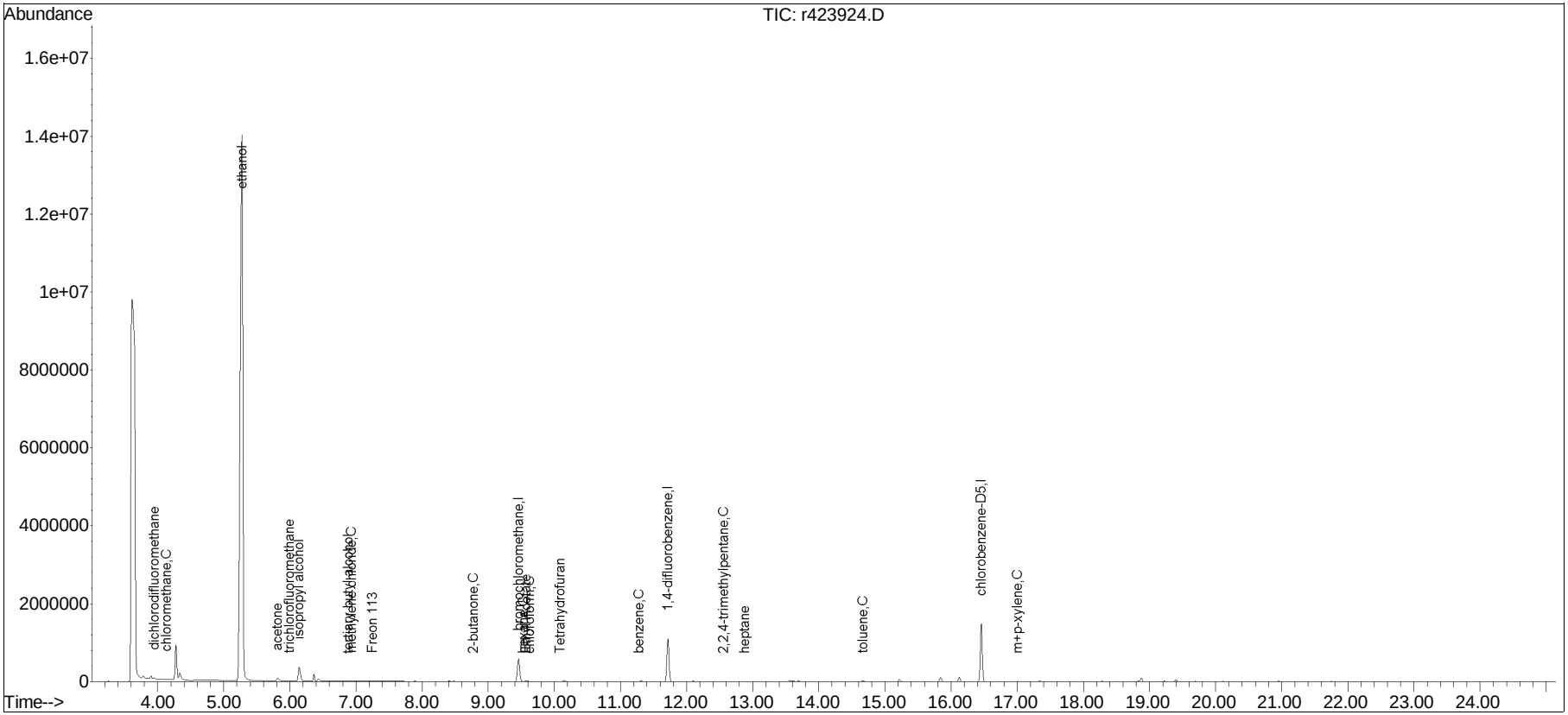
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
56) 1,2-dichloropropane	0.000		0	N.D.			
57) bromodichloromethane	0.000		0	N.D.			
58) 1,4-dioxane	0.000		0	N.D.			
60) 2,2,4-trimethylpentane	12.560	57	5174	0.035	ppbV	#	86
62) heptane	12.880	43	1656	0.034	ppbV	#	81
63) cis-1,3-dichloropropene	0.000		0	N.D.			
64) 4-methyl-2-pentanone	0.000		0	N.D.	d		
65) trans-1,3-dichloropropene	0.000		0	N.D.			
66) 1,1,2-trichloroethane	0.000		0	N.D.			
68) toluene	14.667	91	16301	0.149	ppbV		99
72) 2-hexanone	14.992		0	N.D.			
74) dibromochloromethane	0.000		0	N.D.			
75) 1,2-dibromoethane	0.000		0	N.D.			
80) chlorobenzene	0.000		0	N.D.			
81) ethylbenzene	16.850		0	N.D.			
83) m+p-xylene	17.008	91	6395	0.063	ppbV	#	85
84) bromoform	0.000		0	N.D.			
85) styrene	17.342		0	N.D.			
86) 1,1,2,2-tetrachloroethane	0.000		0	N.D.			
87) o-xylene	17.433		0	N.D.			
96) 4-ethyl toluene	18.475		0	N.D.			
97) 1,3,5-trimethylbenzene	18.575		0	N.D.			
99) 1,2,4-trimethylbenzene	18.925		0	N.D.			
101) Benzyl Chloride	18.925		0	N.D.			
102) 1,3-dichlorobenzene	19.117		0	N.D.			
103) 1,4-dichlorobenzene	19.117		0	N.D.			
107) 1,2-dichlorobenzene	0.000		0	N.D.			
115) 1,2,4-trichlorobenzene	0.000		0	N.D.			
119) hexachlorobutadiene	0.000		0	N.D.			

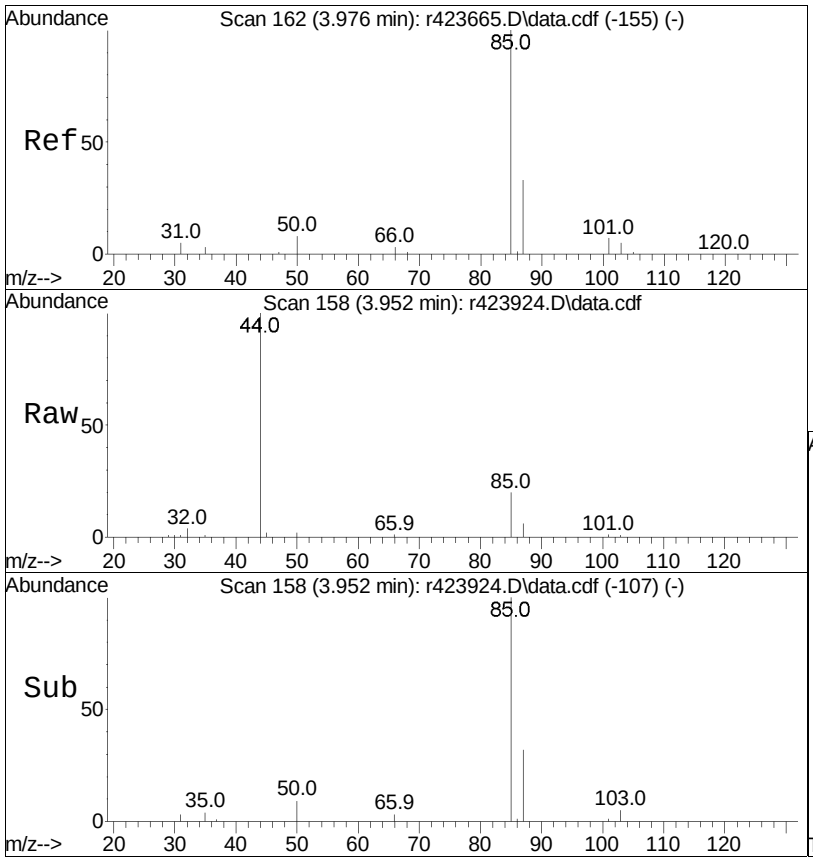
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : TO15-NY-7-SIM - .\Airpiano4\2022\10\1004T\r423912.D

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423924.D
Acq On : 4 Oct 2022 11:04 PM
Operator : AIRPIANO4:TJS
Sample : WG1695439-5,3,250,250
Misc : WG1695439,ICAL19364
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 05 15:19:03 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

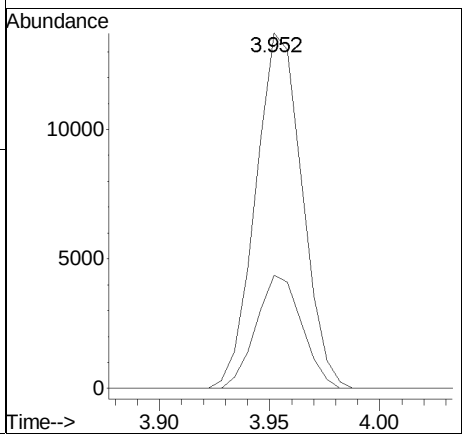


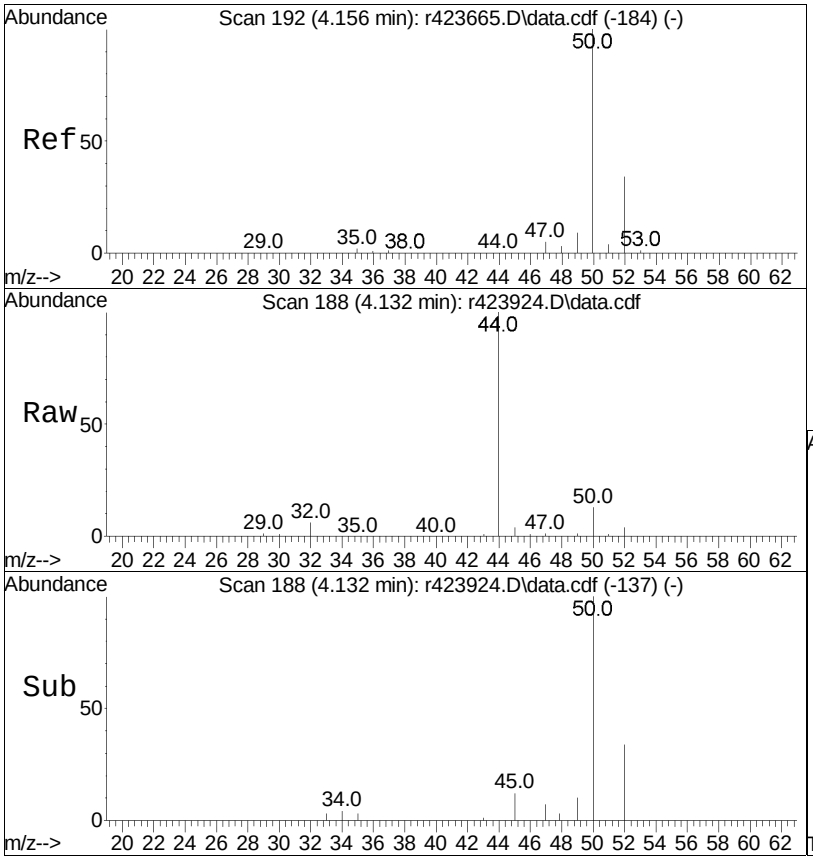


#5
dichlorodifluoromethane
Concen: 0.55 ppbV
RT: 3.952 min Scan# 158
Delta R.T. -0.024 min
Lab File: r423924.D
Acq: 4 Oct 2022 11:04 PM

Tgt Ion: 85 Resp: 20187

Ion	Ratio	Lower	Upper
85	100		
87	31.8	26.3	39.5

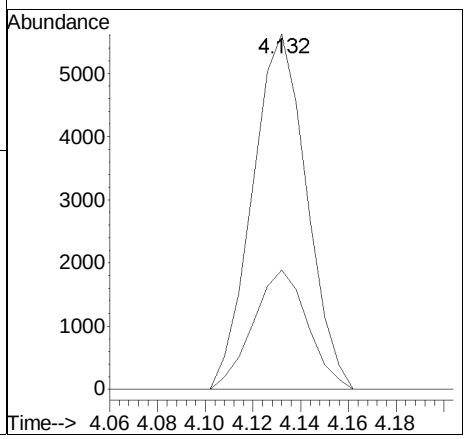


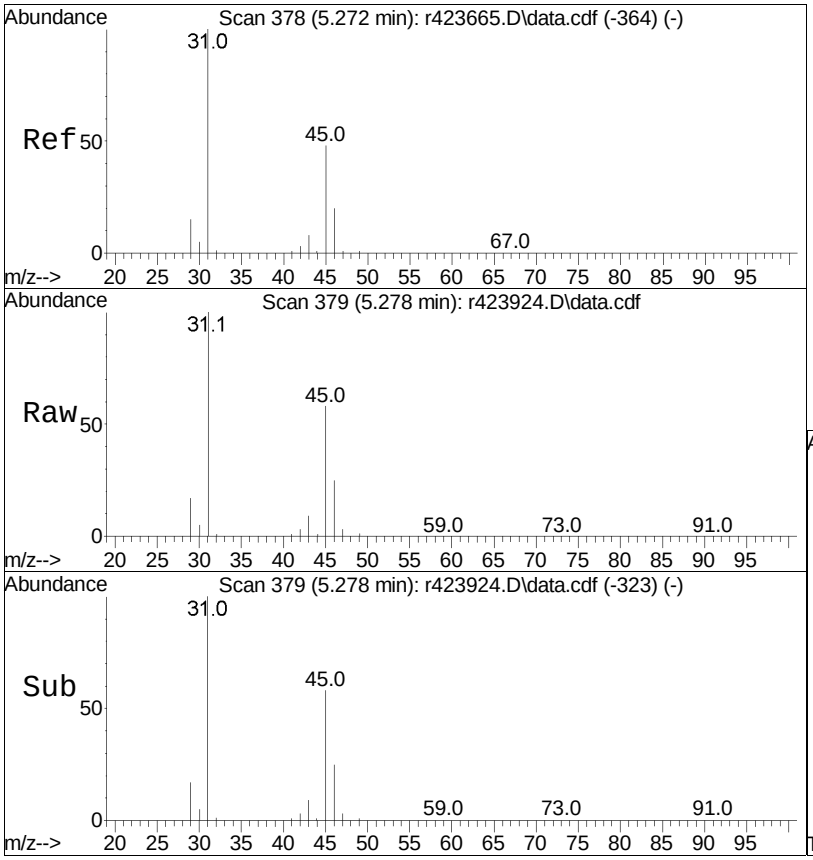


#6
chloromethane
Concen: 0.56 ppbV
RT: 4.132 min Scan# 188
Delta R.T. -0.024 min
Lab File: r423924.D
Acq: 4 Oct 2022 11:04 PM

Tgt Ion: 50 Resp: 8880

Ion	Ratio	Lower	Upper
50	100		
52	33.6	27.0	40.6

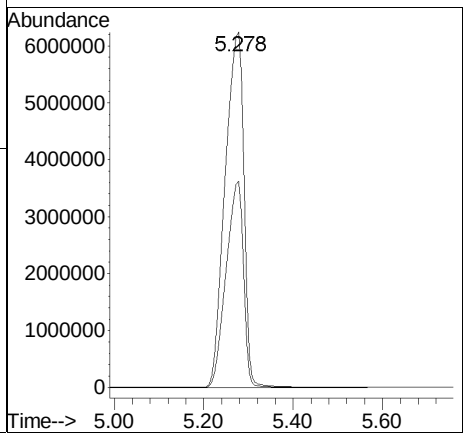


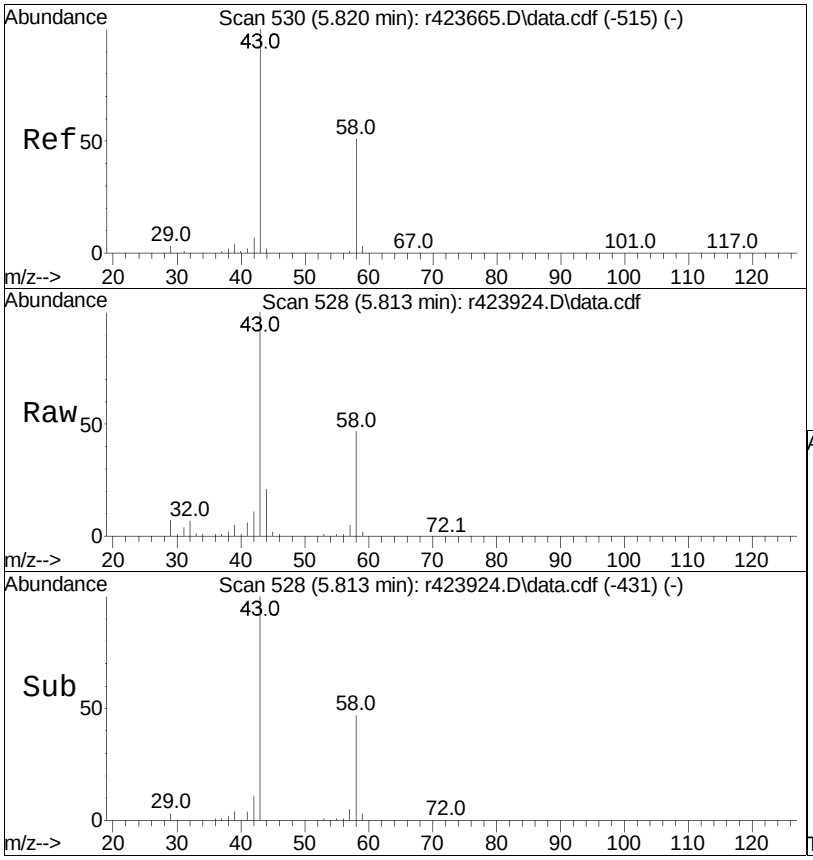


#15
ethanol
Concen: 992.85 ppbV
RT: 5.278 min Scan# 379
Delta R.T. 0.006 min
Lab File: r423924.D
Acq: 4 Oct 2022 11:04 PM

Tgt Ion: 31 Resp:12947379

Ion	Ratio	Lower	Upper
31	100		
45	58.0	38.3	57.5#

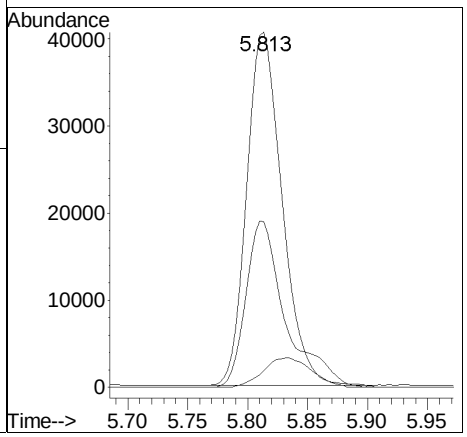


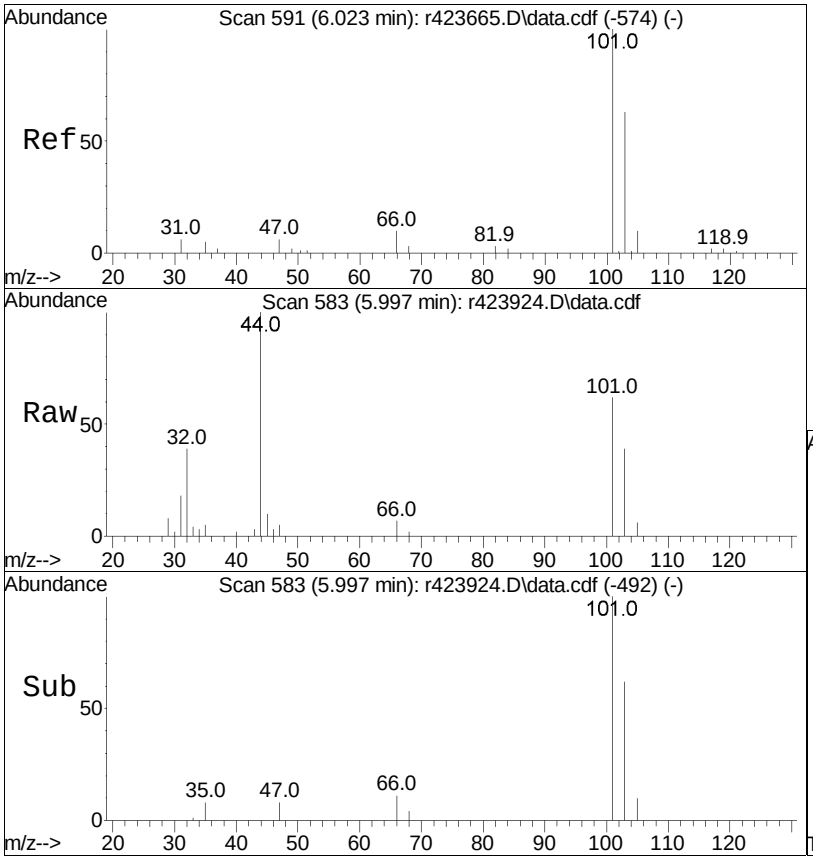


#19
acetone
Concen: 3.52 ppbV
RT: 5.813 min Scan# 528
Delta R.T. -0.007 min
Lab File: r423924.D
Acq: 4 Oct 2022 11:04 PM

Tgt Ion: 43 Resp: 83321

Ion	Ratio	Lower	Upper
43	100		
58	46.6	41.0	61.6
57	4.6	1.0	1.6#

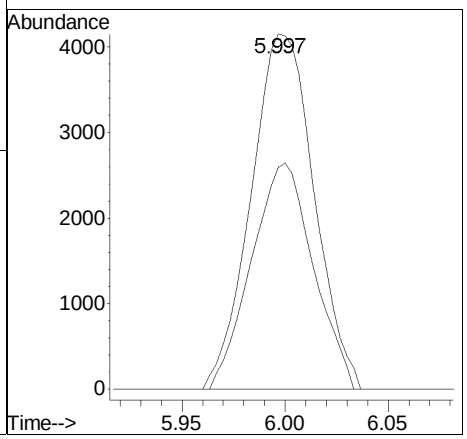


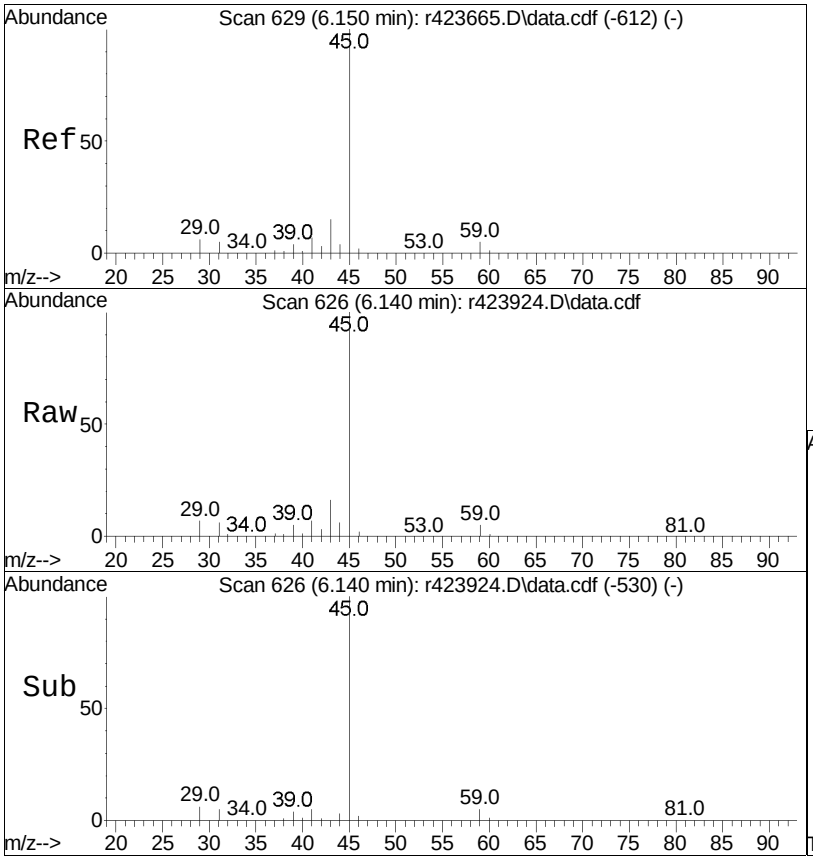


#21
trichlorofluoromethane
Concen: 0.31 ppbV
RT: 5.997 min Scan# 583
Delta R.T. -0.027 min
Lab File: r423924.D
Acq: 4 Oct 2022 11:04 PM

Tgt Ion:101 Resp: 8832

Ion	Ratio	Lower	Upper
101	100		
103	62.5	50.2	75.2

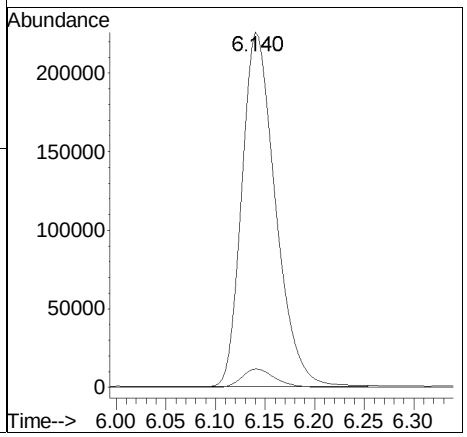


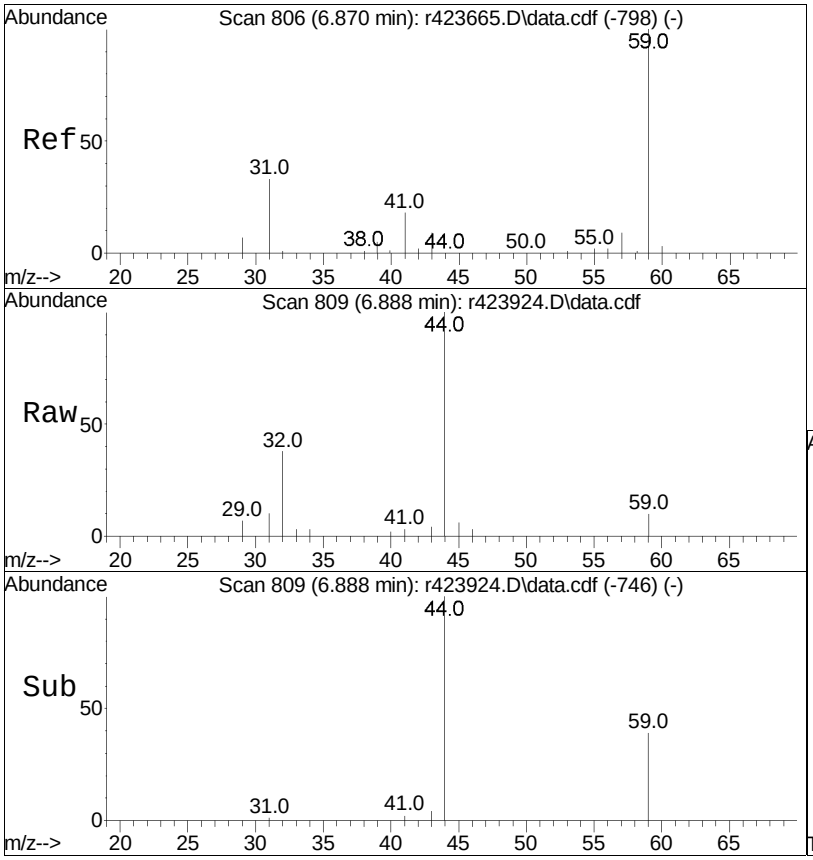


#22
isopropyl alcohol
Concen: 15.94 ppbV
RT: 6.140 min Scan# 626
Delta R.T. -0.010 min
Lab File: r423924.D
Acq: 4 Oct 2022 11:04 PM

Tgt Ion: 45 Resp: 532038

Ion	Ratio	Lower	Upper
45	100		
59	5.2	4.3	6.5

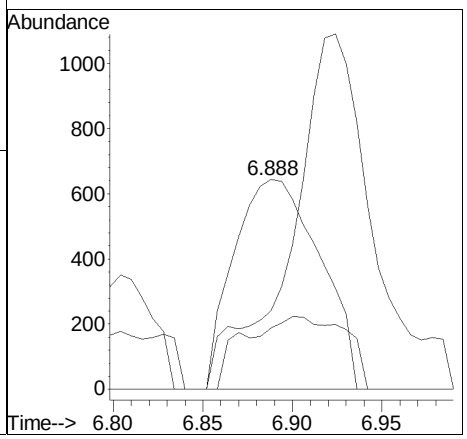


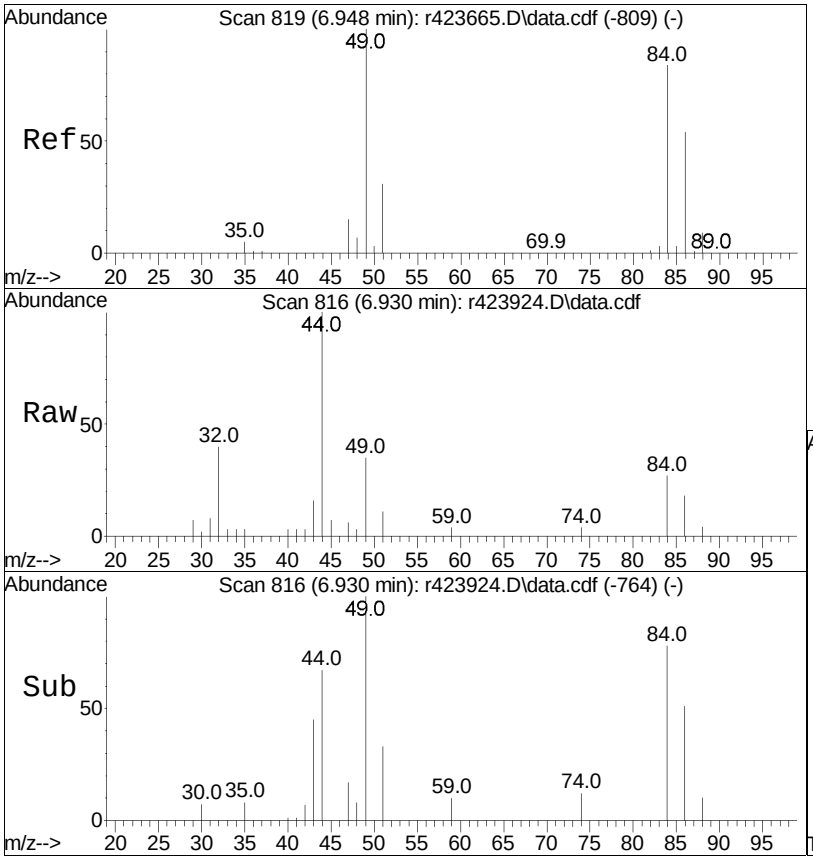


#27
tertiary butyl alcohol
Concen: 0.04 ppbV
RT: 6.888 min Scan# 809
Delta R.T. 0.018 min
Lab File: r423924.D
Acq: 4 Oct 2022 11:04 PM

Tgt Ion: 59 Resp: 2156

Ion	Ratio	Lower	Upper
59	100		
41	29.2	14.6	21.8#
43	37.4	7.0	10.6#

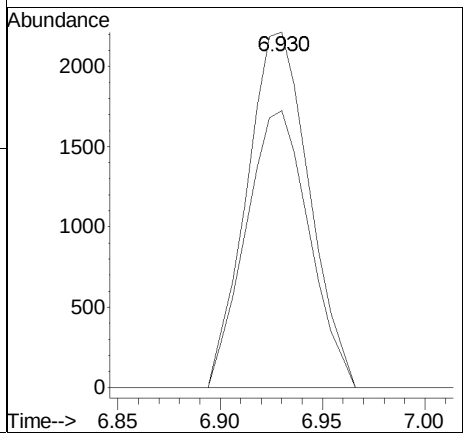


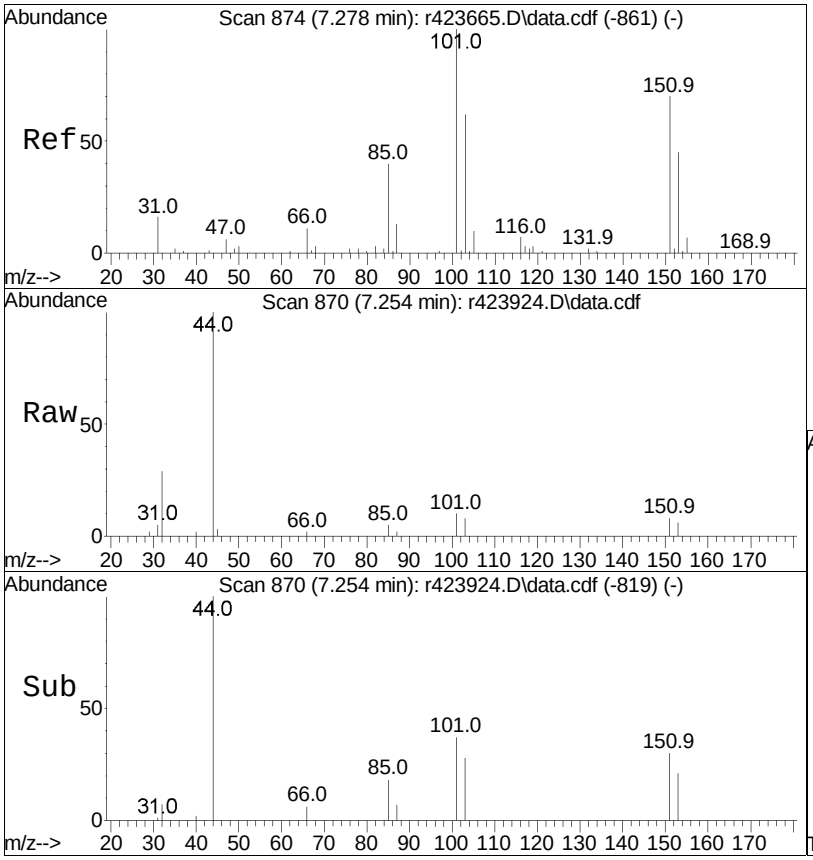


#28
methylene chloride
Concen: 0.19 ppbV
RT: 6.930 min Scan# 816
Delta R.T. -0.018 min
Lab File: r423924.D
Acq: 4 Oct 2022 11:04 PM

Tgt Ion: 49 Resp: 4708

Ion	Ratio	Lower	Upper
49	100		
84	77.9	66.8	100.2

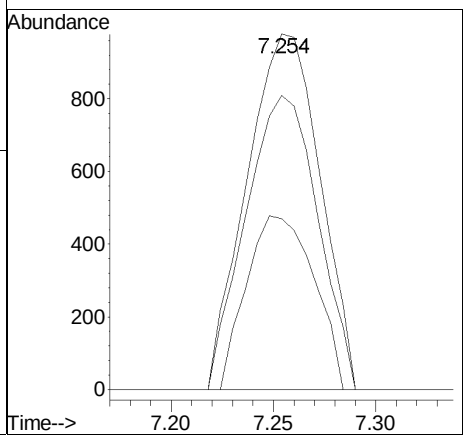


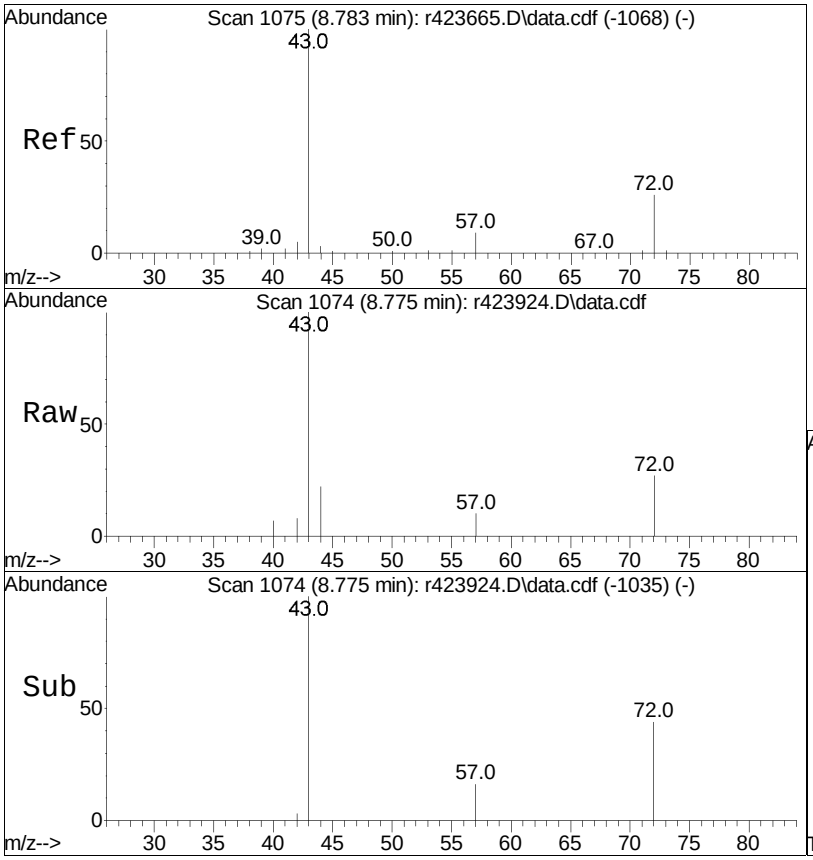


#31
Freon 113
Concen: 0.06 ppbV
RT: 7.254 min Scan# 870
Delta R.T. -0.024 min
Lab File: r423924.D
Acq: 4 Oct 2022 11:04 PM

Tgt Ion:101 Resp: 2439

Ion	Ratio	Lower	Upper
101	100		
85	48.1	32.2	48.2
151	82.7	56.3	84.5

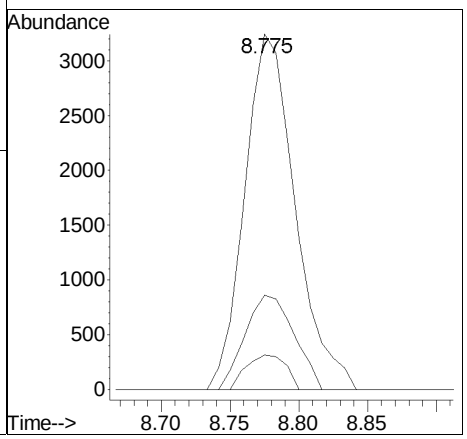


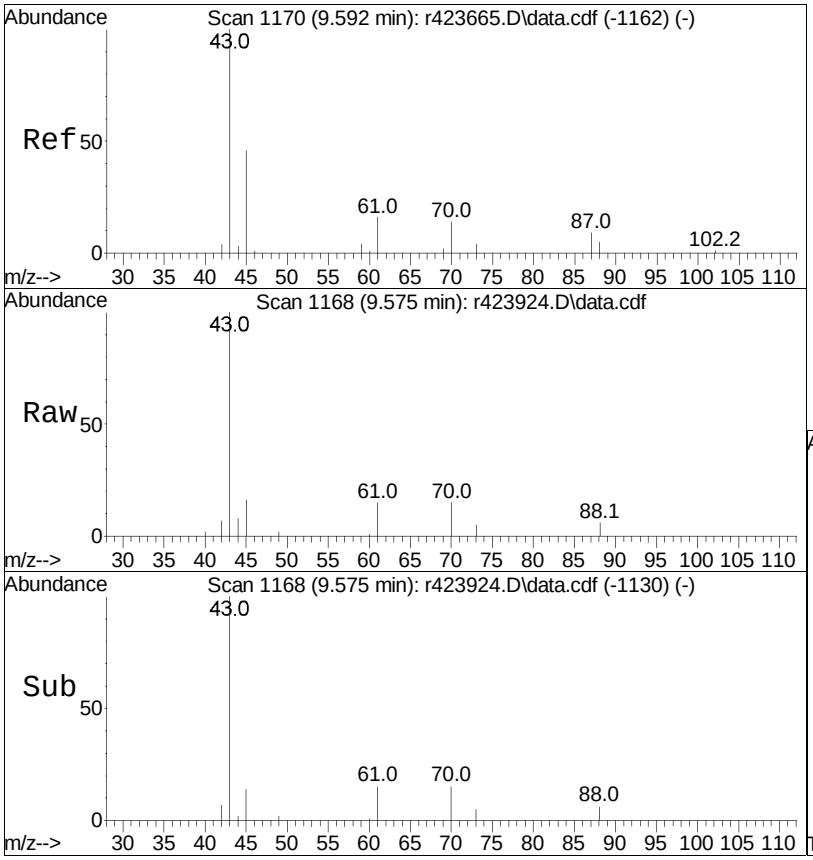


#36
2-butanone
Concen: 0.16 ppbV
RT: 8.775 min Scan# 1074
Delta R.T. -0.008 min
Lab File: r423924.D
Acq: 4 Oct 2022 11:04 PM

Tgt Ion: 43 Resp: 8285

Ion	Ratio	Lower	Upper
43	100		
72	26.5	21.0	31.6
57	9.7	7.4	11.0

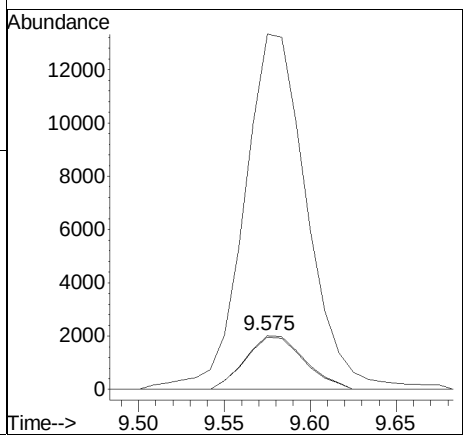


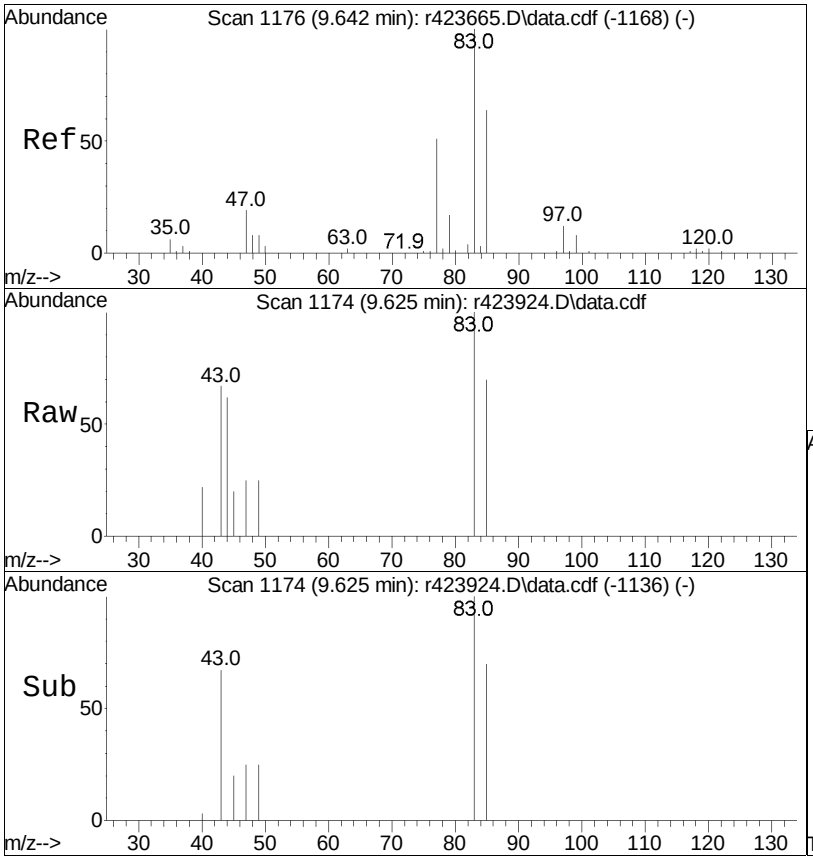


#38
Ethyl Acetate
Concen: 0.50 ppbV
RT: 9.575 min Scan# 1168
Delta R.T. -0.017 min
Lab File: r423924.D
Acq: 4 Oct 2022 11:04 PM

Tgt Ion: 61 Resp: 4865

Ion	Ratio	Lower	Upper
61	100		
70	97.4	71.0	106.6
43	660.8	558.9	838.3

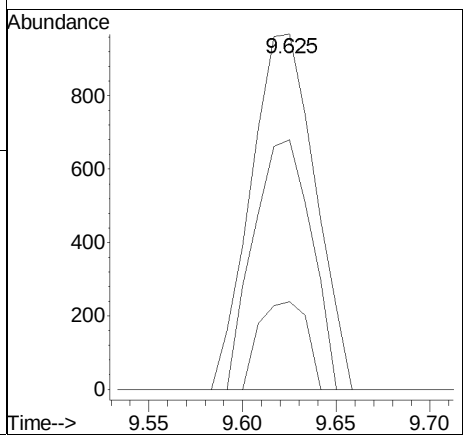


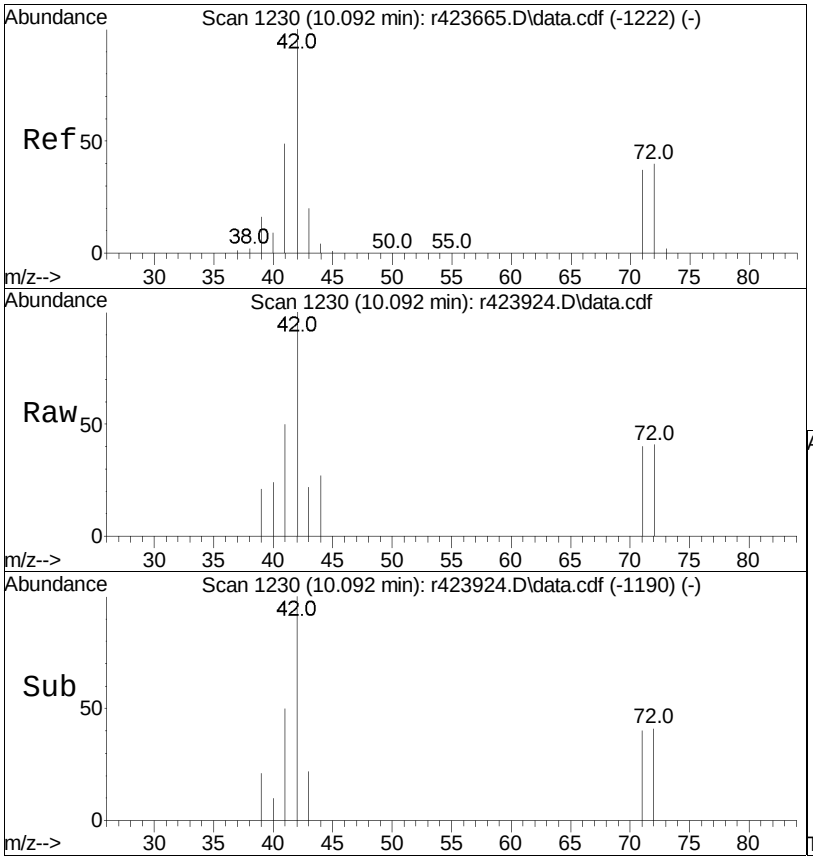


#39
chloroform
Concen: 0.06 ppbV
RT: 9.625 min Scan# 1174
Delta R.T. -0.017 min
Lab File: r423924.D
Acq: 4 Oct 2022 11:04 PM

Tgt Ion: 83 Resp: 2312

Ion	Ratio	Lower	Upper
83	100		
85	70.2	51.6	77.4
47	24.7	15.2	22.8#

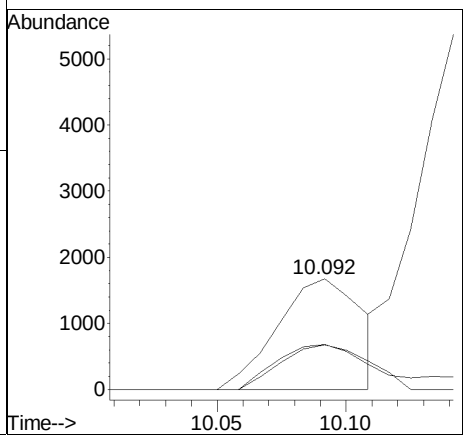


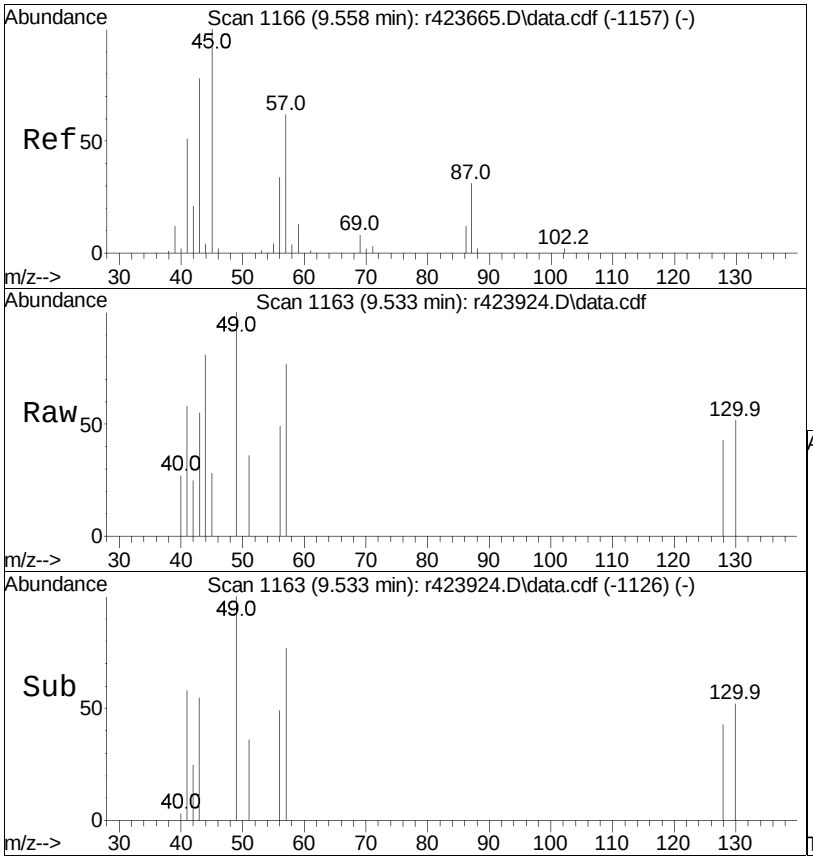


#40
Tetrahydrofuran
Concen: 0.11 ppbV
RT: 10.092 min Scan# 1230
Delta R.T. 0.000 min
Lab File: r423924.D
Acq: 4 Oct 2022 11:04 PM

Tgt Ion: 42 Resp: 3806

Ion	Ratio	Lower	Upper
42	100		
71	40.4	29.7	44.5
72	40.6	32.4	48.6

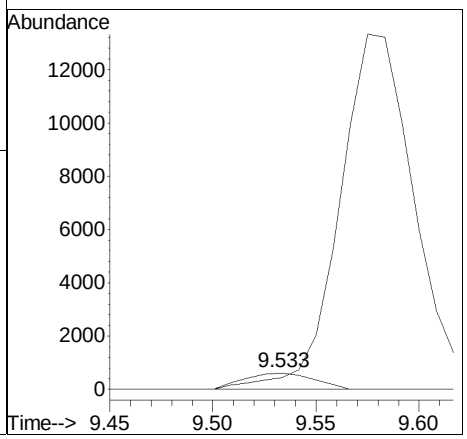


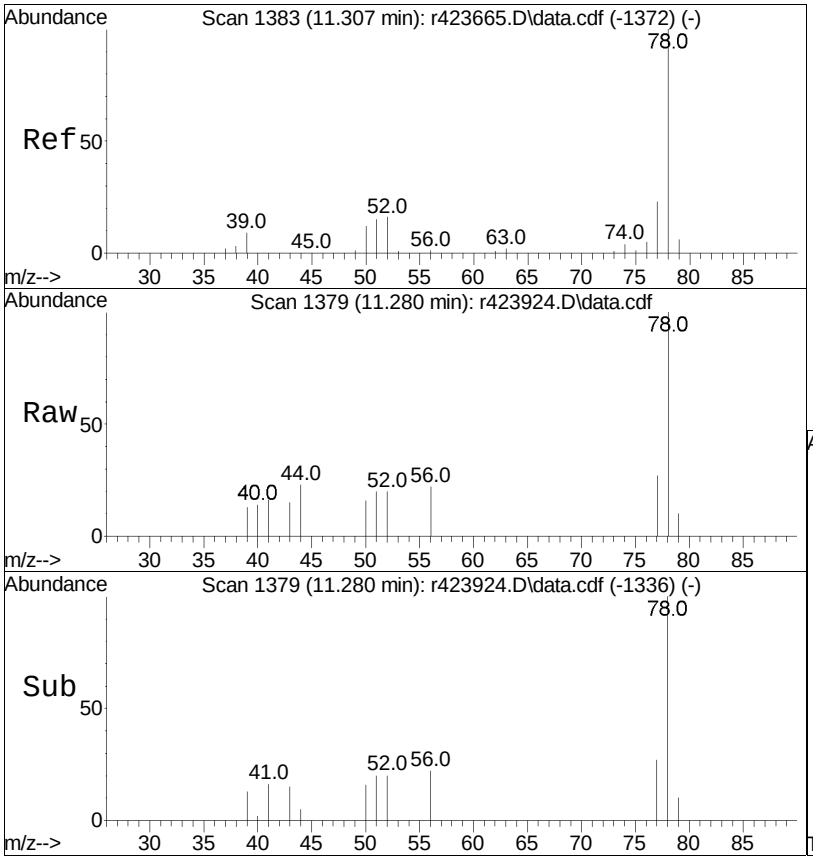


#44
hexane
Concen: 0.03 ppbV
RT: 9.533 min Scan# 1163
Delta R.T. -0.025 min
Lab File: r423924.D
Acq: 4 Oct 2022 11:04 PM

Tgt Ion: 57 Resp: 1461

Ion	Ratio	Lower	Upper
57	100		
43	71.8	101.0	151.4#
86	0.0	14.8	22.2#

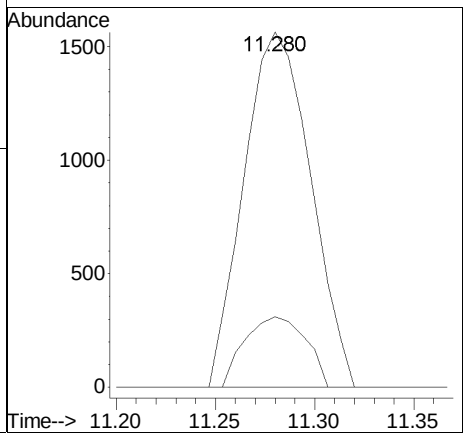


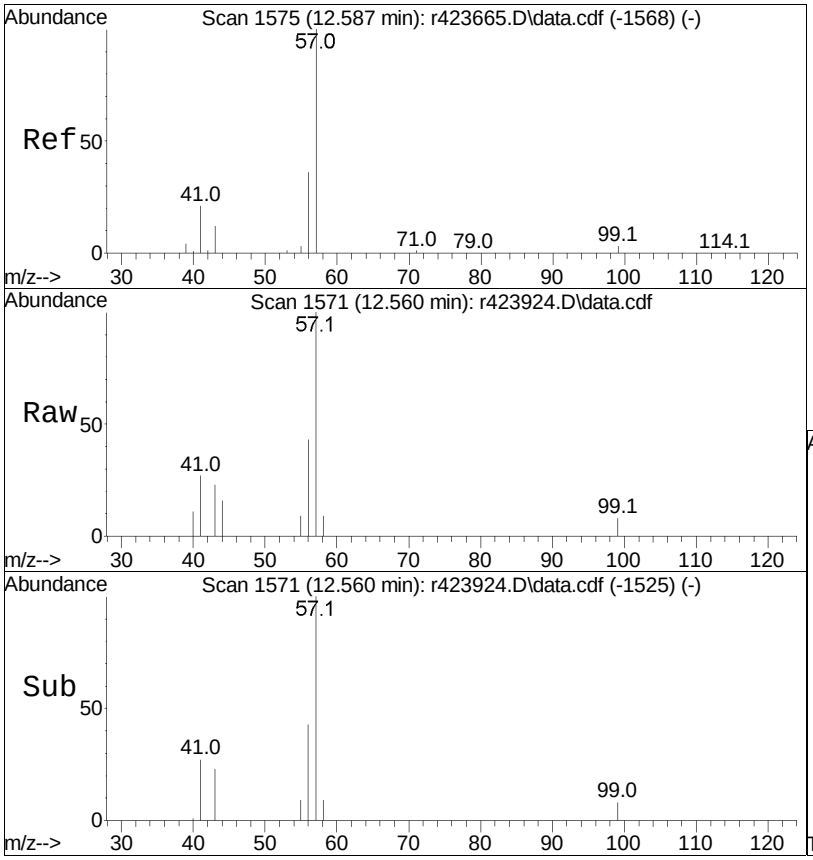


#50
benzene
Concen: 0.05 ppbV
RT: 11.280 min Scan# 1379
Delta R.T. -0.027 min
Lab File: r423924.D
Acq: 4 Oct 2022 11:04 PM

Tgt Ion: 78 Resp: 3664

Ion	Ratio	Lower	Upper
78	100		
52	19.9	13.0	19.6#

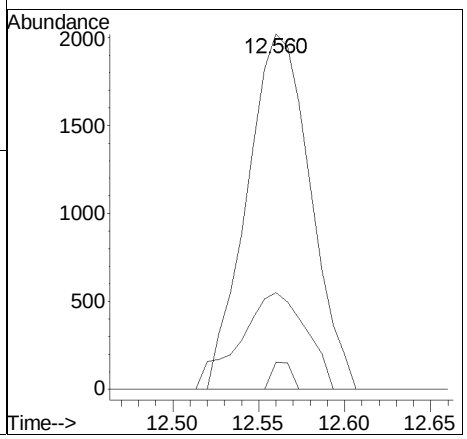


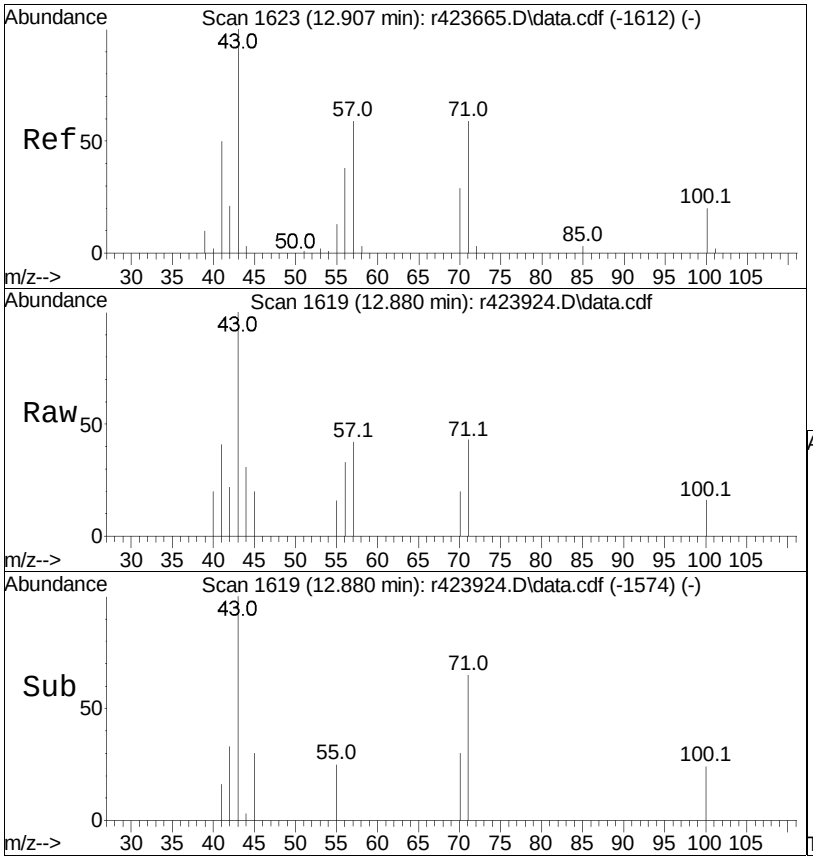


#60
2,2,4-trimethylpentane
Concen: 0.03 ppbV
RT: 12.560 min Scan# 1571
Delta R.T. -0.027 min
Lab File: r423924.D
Acq: 4 Oct 2022 11:04 PM

Tgt Ion: 57 Resp: 5174

Ion	Ratio	Lower	Upper
57	100		
99	7.6	4.4	6.6#
41	27.2	16.1	24.1#

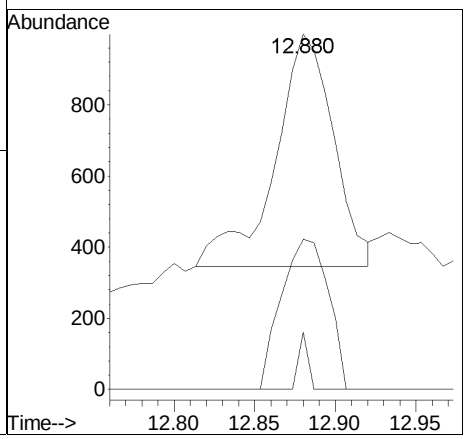


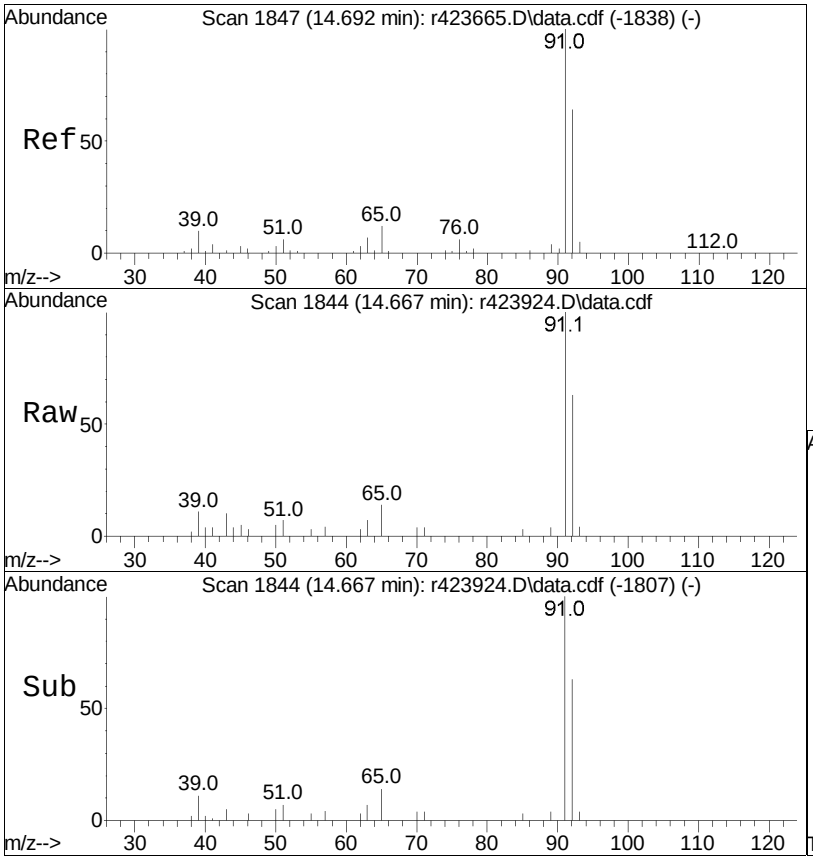


#62
heptane
Concen: 0.03 ppbV
RT: 12.880 min Scan# 1619
Delta R.T. -0.027 min
Lab File: r423924.D
Acq: 4 Oct 2022 11:04 PM

Tgt Ion: 43 Resp: 1656

Ion	Ratio	Lower	Upper
43	100		
57	42.2	47.1	70.7#
100	16.1	16.7	25.1#

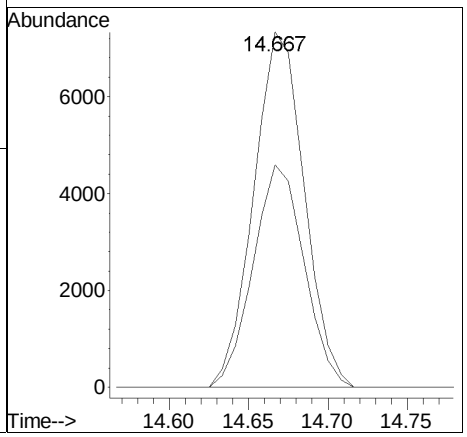


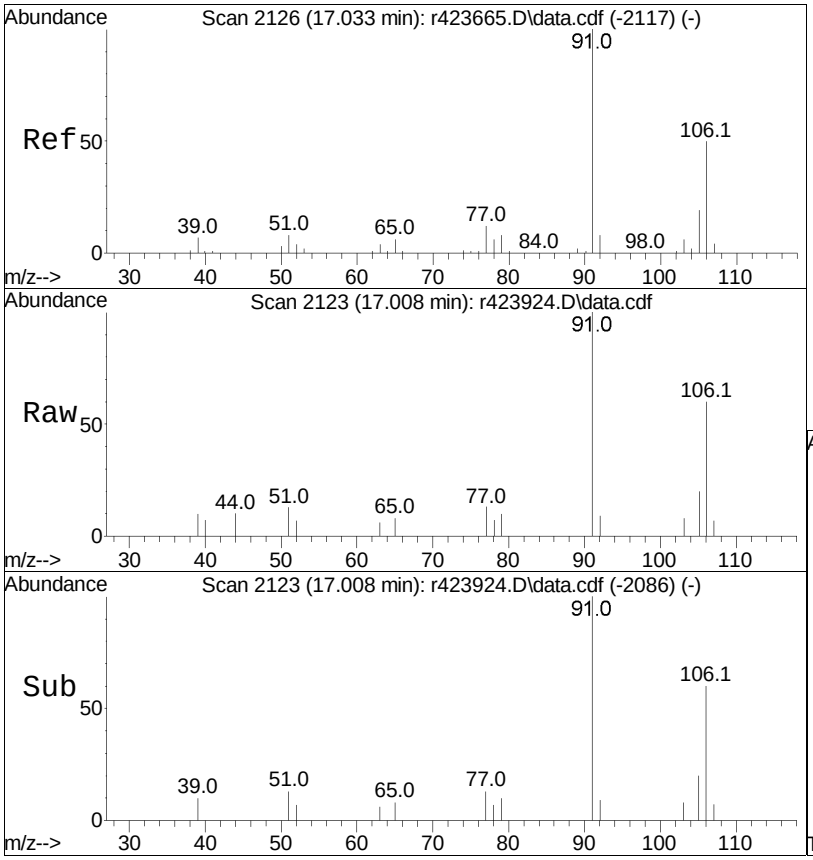


#68
toluene
Concen: 0.15 ppbV
RT: 14.667 min Scan# 1844
Delta R.T. -0.025 min
Lab File: r423924.D
Acq: 4 Oct 2022 11:04 PM

Tgt Ion: 91 Resp: 16301

Ion	Ratio	Lower	Upper
91	100		
92	62.6	50.8	76.2

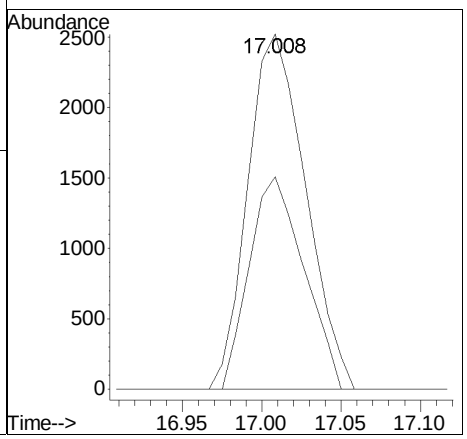




#83
m+p-xylene
Concen: 0.06 ppbV
RT: 17.008 min Scan# 2123
Delta R.T. -0.025 min
Lab File: r423924.D
Acq: 4 Oct 2022 11:04 PM

Tgt Ion: 91 Resp: 6395

Ion	Ratio	Lower	Upper
91	100		
106	59.8	39.8	59.6#



Manual Integration Report

Data Path	: O:\Forensics\Data\Airpiano	QMethod	: TFS4_220921.M
Data File	: r423924.D	Operator	: AIRPIANO4:TJS
Date Inj'd	: 10/4/2020 0:1: 4	Instrument	:
Sample	: WG1695439-5,3,250,250	Quant Date	: 10/5/2022 8:16 am

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423934.D
Acq On : 5 Oct 2022 8:16 AM
Operator : AIRPIANO4:TJS
Sample : WG1695439-5D,3,50,250
Misc : WG1695439,ICAL19357
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 05 09:49:32 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004T\r423912.D
Sub List : ETOH_Only - Sub List Unknown

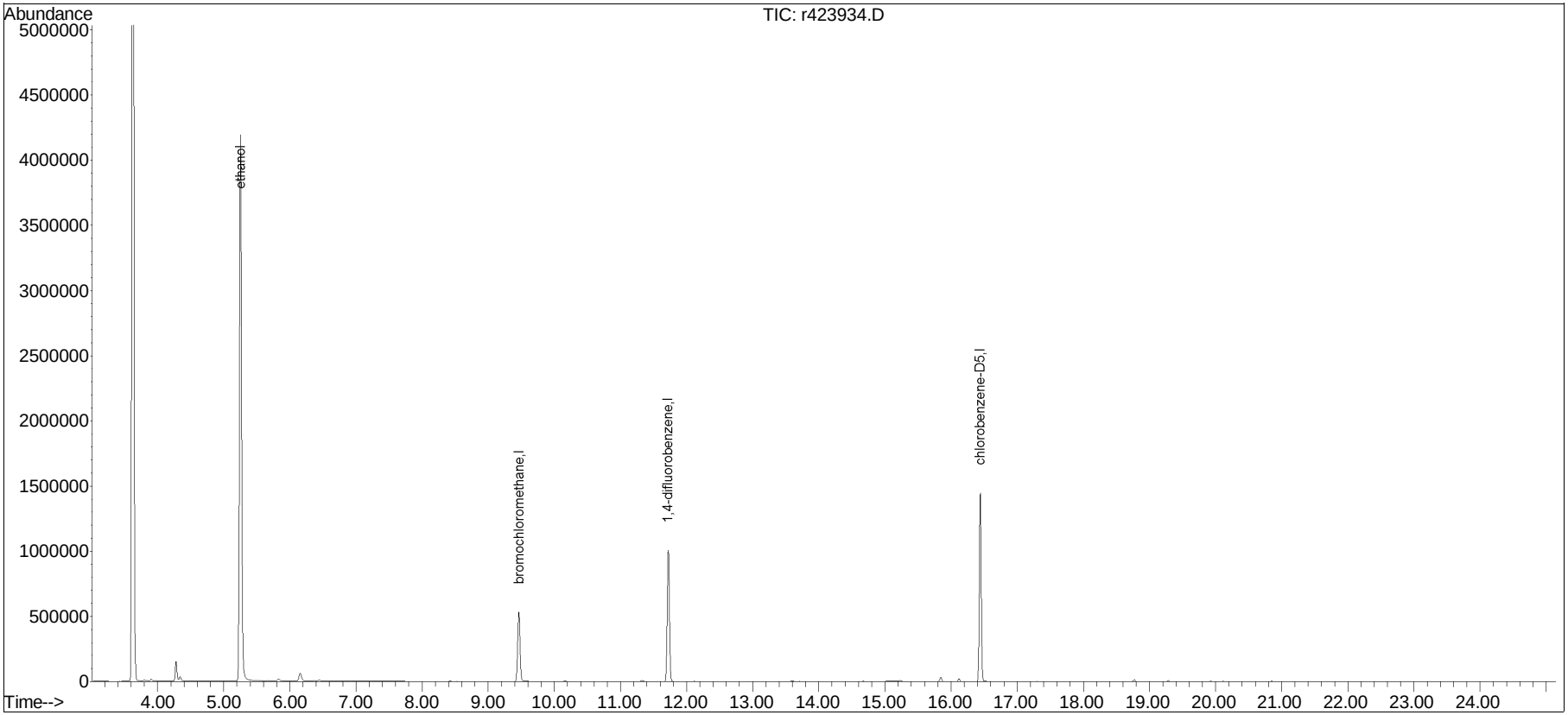
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.467	49	428123	10.000	ppbV	#-0.02
Standard Area = 462589			Recovery =		92.55%	
43) 1,4-difluorobenzene	11.720	114	1074519	10.000	ppbV	-0.02
Standard Area = 1229344			Recovery =		87.41%	
67) chlorobenzene-D5	16.442	54	211680	10.000	ppbV	-0.03
Standard Area = 234984			Recovery =		90.08%	
System Monitoring Compounds						
Target Compounds						Qvalue
15) ethanol	5.254	31	3552272	284.589	ppbV	98

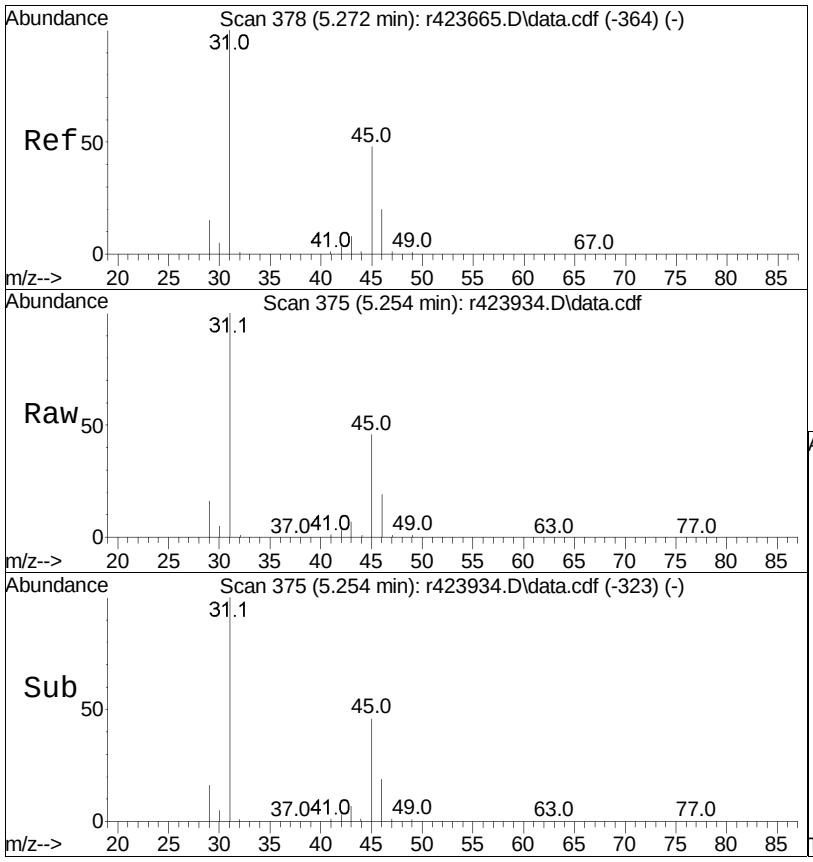
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : ETOH_Only - Sub List Unknown2022\10\1004T\r423912.D

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004T\
Data File : r423934.D
Acq On : 5 Oct 2022 8:16 AM
Operator : AIRPIANO4:TJS
Sample : WG1695439-5D,3,50,250
Misc : WG1695439,ICAL19357
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 05 09:49:32 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004T\TFS4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 08:28:06 2022
Response via : Initial Calibration

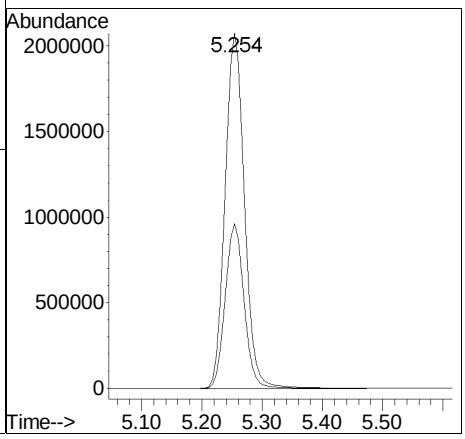




#15
ethanol
Concen: 284.59 ppbV
RT: 5.254 min Scan# 375
Delta R.T. -0.018 min
Lab File: r423934.D
Acq: 5 Oct 2022 8:16 AM

Tgt Ion: 31 Resp: 3552272

Ion	Ratio	Lower	Upper
31	100		
45	46.4	38.3	57.5



Manual Integration Report

Data Path	: O:\Forensics\Data\Airpiano	QMethod	: TFS4_220921.M
Data File	: r423934.D	Operator	: AIRPIANO4:TJS
Date Inj'd	: 10/5/2020 0:8: 6	Instrument	:
Sample	: WG1695439-5D,3,50,250	Quant Date	: 10/5/2022 9:49 am

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

Calculation of Volatile Organic Compounds in Air

The instrument will calculate the concentration (ppbv). If the sample is diluted (DF), the result is multiplied by the DF to generate the final result.

Result, ppbv = C_s x DF
Where:
C_s = Concentration of sample (ppbv)
DF = Dilution Factor

Calculation of Instrument Dilution Factor

For dilutions, smaller sample volumes (< 250mL) are analyzed. The smallest volume that can be analyzed with accuracy is 10 mL.

Samples that arrive at the laboratory with pressures below -15 inches Hg must be pressurized with zero air to greater than -15 inches Hg. This pressurization results in a dilution factor.

Calculation of Dilution Factor
$DF = V_{cf} / V_{ci}$
Where:
V_{ci} = volume of air in canister prior to pressurization, L
P =

Conversion of ppbv to ug/m^3
ug/m^3 = (ppbv) * MW / 24.47
Where:
24.47 = molar gas constant (g/g-mole)
MW = molecular weight of the compound of interest

Dilution Factor for Pressurization of Subatmospheric Samples: Three Steps

Step 1: Calculate the volume in the canister prior to pressurization (Assume a 2.7 liter canister is used).

Dilution Factor for Pressurization of Subatmospheric Samples: Three Steps

Step 1: Calculate the volume in the canister prior to pressurization (Assume a 2.7 liter canister is used).

$V_{ci} = 2.7 * Pl/14.696$

Step 2: Calculate the volume in the canister after pressurization.

$V_{cf} = 2.7 * PF/14.696$

Step 3: Calculate the dilution factor.

$DF = V_{cf} / V_{ci}$

Where:

V_{ci} = volume of air in canister prior to pressurization, L
PI = pressure reading of canister prior to pressurization (psia)
V_{cf} = volume of air in canister after pressurization, L
PF = pressure reading of canister after pressurization (psia)
DF = dilution factor
14.696 = atmospheric pressure (psia)

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Oct 06 2022, 10:44 am

Work Group: WG1695439 for Department: 3 GC/MS

Created: 04-OCT-22 Due: Operator: NL

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2252399-01	SSDS-E	S	TO15-LL	SOIL_VAPOR	DONE	U	1022	1006	S0	Can-6
L2252399-02	SSDS-W	S	TO15-LL	SOIL_VAPOR	DONE	U	1022	1006	S0	Can-6
L2253855-01	VE-2	S	TO15-LL	SOIL_VAPOR	DONE	U	1029	1006	2F	Can-6
L2253855-02	VE-2-IA	S	TO15-LL	AIR	DONE	U	1029	1006	2F	Can-6
L2253855-03	DUP-092922	S	TO15-LL	AIR	DONE	U	1029	1006	2F	Can-6
L2253855-04	VE-1	S	TO15-LL	SOIL_VAPOR	DONE	U	1029	1006	2F	Can-6
L2253855-05	VE-1-IA	S	TO15-LL	AIR	DONE	U	1029	1006	2F	Can-6
L2254199-01	SSV01_093022	S	TO15-LL	SOIL_VAPOR	DONE	U	1030	1007	2F	Can-2.7
L2254199-02	SSV02_093022	S	TO15-LL	SOIL_VAPOR	DONE	U	1030	1007	2F	Can-2.7
L2254402-01	CC-VOC-UW13-093022-R	S	TO15-LL	AIR	DONE	U	1030	1006	3C	Can-6
L2254402-02	CC-VOC-DW13-093022-R	S	TO15-LL	AIR	DONE	U	1030	1006	3C	Can-6
WG1695439-1	MS BFB Tune Standard	S	TO15-LL	SOIL_VAPOR	DONE	U				
WG1695439-1	MS BFB Tune Standard	S	TO15-LL	AIR	DONE	U				
WG1695439-2	Continuing Calibrati	S	TO15-LL	SOIL_VAPOR	DONE	U				
WG1695439-2	Continuing Calibrati	S	TO15-LL	AIR	DONE	U				
WG1695439-3	Laboratory Control S	S	TO15-LL	AIR	DONE	U				
WG1695439-3	Laboratory Control S	S	TO15-LL	SOIL_VAPOR	DONE	U				
WG1695439-4	Laboratory Method Bl	S	TO15-LL	AIR	DONE	U				
WG1695439-4	Laboratory Method Bl	S	TO15-LL	SOIL_VAPOR	DONE	U				
WG1695439-5	Duplicate Sample	S	TO15-LL	AIR	DONE	U				
WG1695439-5	Duplicate Sample	S	TO15-LL	SOIL_VAPOR	DONE	U				

Comments:

WG1695439-5 L2253855-05

Alpha Analytical Air Lab
Instrument Run Log

nt ID:	Airpiano4	Internal Standard/Surrogate IDs:	SS20-035 / SS21-026
Date:	09/21/2022	Internal Standard/Surrogate Volume:	100 ml
Initials:	NL	Sequence File Name:	220921.S

AS Position #	Sample ID	S	Data File ID	Standard ID or Batch ID #, ICAL Ref #	Comment (s)	Product/ sublist	Leak Check Pass ? Y/N
1	BA4092101	TO15_SFS.qgm	R423654.qgd	250ml			NA
1	BA4092102	TO15_SFS.qgm	R423655.qgd	250ml			NA
1	BA4092103	TO15_SFS.qgm	R423656.qgd	250ml			NA
1	TA4092101	TO15_SFS.qgm	R423657.qgd	250ml	TUNE		NA
5	ITO15-SIMSTD0.02	TO15_SFS.qgm	R423658.qgd	50 mL SS22-011D	SIM ONLY	DEFAULT	NA
5	ITO15-SIMSTD0.05	TO15_SFS.qgm	R423659.qgd	125 mL SS22-011D	SIM ONLY	DEFAULT	NA
5	ITO15-SIMSTD0.1	TO15_SFS.qgm	R423660.qgd	250 mL SS22-011D	SIM ONLY	DEFAULT	NA
6	ITO15-SIMSTD0.2	TO15_SFS.qgm	R423661.qgd	50 mL SS22-011C		DEFAULT	NA
6	ITO15-SIMSTD0.5	TO15_SFS.qgm	R423662.qgd	125 mL SS22-011C		DEFAULT	NA
6	ITO15-SIMSTD1.0	TO15_SFS.qgm	R423663.qgd	250 mL SS22-011C		DEFAULT	NA
7	ITO15-SIMSTD5.0	TO15_SFS.qgm	R423664.qgd	125 mL SS22-011B		DEFAULT	NA
7	ITO15-SIMSTD010	TO15_SFS.qgm	R423665.qgd	250 mL SS22-011B		DEFAULT	NA
8	ITO15-SIMSTD020	TO15_SFS.qgm	R423666.qgd	50 mL SS22-011A		DEFAULT	NA
8	ITO15-SIMSTD050	TO15_SFS.qgm	R423667.qgd	125 mL SS22-011A		DEFAULT	NA
8	ITO15-LLSTD100	TO15_SFS.qgm	R423668.qgd	250 mL SS22-011A	LL ONLY	DEFAULT	NA
1	BA4092101	TO15_SFS.qgm	R423669.qgd	250 mL		DEFAULT	NA
1	BA4092102	TO15_SFS.qgm	R423670.qgd	250 mL		DEFAULT	NA
2	CTO15-LLSTD010	TO15_SFS.qgm	R423671.qgd	250 mL SS22-015B	LL ICV	DEF ICV AP2	NA
2	CTO15-SIMSTD5.0	TO15_SFS.qgm	R423672.qgd	125 mL SS22-015B	SIM ICV	DEF ICV AP2	NA

Alpha Analytical Air Lab
Instrument Run Log

Instrument ID: AIRPIANO4

Internal Standard/Surrogate IDs: SS22-001 / SS21-026

Date: 10/04/2022

Internal Standard/Surrogate Volume: 100 ml

Analyst Initials: NL

Sequence File Name: 220916.S

Position #	Sample ID	Acquisition Method	Data File ID	Batch ID #, ICAL Ref #	Comment (s)	Product/ sublist	CK Pass ? Y/N
1	TA4100401	TO15_SFS.qgm	R423911.qgd	250ml	TUNE		NA
2	CA4100401	TO15_SFS.qgm	R423912.qgd	250 mL SS22-011B	LL CC		NA
3	CTO15-LLSTD010	TO15_SFS.qgm	R423913.qgd	250 mL SS22-020E	LL LCS		NA
3	CTO15-SIMSTD5.0	TO15_SFS.qgm	R423914.qgd	125 mL SS22-020E	SIM LCS		NA
1	BA4100401	TO15_SFS.qgm	R423915.qgd	250 mL	FAILED BLANK		NA
1	BA4100402	TO15_SFS.qgm	R423916.qgd	250 mL	LL/SIM BLANK		NA
1	L2254221-02,3,250,250	TO15_SFS.qgm	R423917.qgd	WG1695439,ICAL19357		PCE& TCE VIA SIM	Y
2	L2254221-01,3,250,250	TO15_SFS.qgm	R423918.qgd	WG1695439,ICAL19357		PCE& TCE VIA SIM	Y
3	L2254402-01,3,250,250	TO15_SFS.qgm	R423919.qgd	WG1695439,ICAL19357		STD + NAPH	Y
4	L2254402-02,3,250,250	TO15_SFS.qgm	R423920.qgd	WG1695439,ICAL19357		STD + NAPH	Y
5	L2253855-02,3,250,250	TO15_SFS.qgm	R423921.qgd	WG1695439,ICAL19357		NY-7SIM	Y
6	L2253855-03,3,250,250	TO15_SFS.qgm	R423922.qgd	WG1695439,ICAL19357		NY-7SIM	Y
7	L2253855-05,3,250,250	TO15_SFS.qgm	R423923.qgd	WG1695439,ICAL19357	ETOH OVERCAL	NY-7SIM	Y
7	L2253855-05DUP,3,250,250	TO15_SFS.qgm	R423924.qgd	WG1695439,ICAL19357	LL/SIM DUP	NY-7SIM	Y
8	L2253855-01D,3,3.72,250	TO15_SFS.qgm	R423925.qgd	WG1695439,ICAL19357	T	NY	Y
9	L2253855-04D,3,100,250	TO15_SFS.qgm	R423926.qgd	WG1695439,ICAL19357	T	NY	Y
10	L2252399-01,3,250,250	TO15_SFS.qgm	R423927.qgd	WG1695439,ICAL19357		NY	Y
11	L2252399-02,3,250,250	TO15_SFS.qgm	R423928.qgd	WG1695439,ICAL19357		NY	Y
12	L2254199-01,3,250,250	TO15_SFS.qgm	R423929.qgd	WG1695439,ICAL19357		NY	Y
13	L2254199-02D,3,204.17,250	TO15_SFS.qgm	R423930.qgd	WG1695439,ICAL19357	905	NY	Y
14	L2254112-03D,3,110,250	TO15_SFS.qgm	R423931.qgd	WG1695439,ICAL19357		5 CHLOR VIA SIM	Y
15	L2254112-04D,3,122.91,250	TO15_SFS.qgm	R423932.qgd	WG1695439,ICAL19357		5 CHLOR VIA SIM	Y
7	L2253855-05D,3,50,250	TO15_SFS.qgm	R423933.qgd	WG1695439,ICAL19357		ETOH	Y
7	L2253855-05DUPD,3,50,250	TO15_SFS.qgm	R423934.qgd	WG1695439,ICAL19357	LL DUP	ETOH	Y

Alpha Analytical Air Lab
Instrument Run Log

Date(s) of Initial Calibration: Refer to Initial Calibration Summary Form 6

Date Acquired: see Instrument Performance Check Summary and/or quantitation report.

Sample ID information: L1301234-01,3,250,250 { Lab sample ID, dilution, actual volume analyzed (mL), nominal volume

Dilution Factor: See Form 1 report, or divide nominal volume by actual volume analyzed

Alpha Analytical, Inc.
Canister Dilution Worksheet

	NJDEP Required Information							Pressurization Dilution				Can Dilution				Instrument Dilution				
Sample ID	Can size, L	P_1, in Hg	P_1, atm	V_1, L	P_2, in Hg	P_2, atm	V_2, L	P_1, psia	P_2, psia	Dilution factor	Gas Used*	Volume injected, mL	Final Pressure, psia	Volume of Dilution Gas in Can, L	Can dilution factor	Volume of Bag or Can Analyzed, mL	Instrument Dilution Factor	Final Dilution Factor **	Final Volume Injected, mL ***	Analyst Initials
L2253855-01D	6.0	-8.31	0.72	4.34	11.90	1.40	8.38	10.6	20.5	1.93	N2	160	29.4	2.00	12.53	90	2.78	67.29	3.72	NL

*N2 = Nitrogen and H2= Hydrogen

** Dilution factor on this spreadsheet may differ from reported dilution factor (calculated by LIMs) due to different rounding rules

*** Reported to 2 decimal places unless 0.01 or less; then 3 decimal places are reported

Analyst data input fields

Analyst Comments:

in Hg = ((psia/14.67)*29.94)-29.94 atm =psia/14.67 psig=psia - 14.67 psia = dilution instrument reading

GC/MS VOA
Air Analysis
Selective Ion Monitoring

Volatiles QC Summary

Lab Duplicate Sample Summary
Form 3
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Client Sample ID	: VE-1-IA	**Matrix**	: AIR
Lab Sample ID	: L2253855-05	**Analysis Date**	: 10/04/22 22:25
Lab File ID	: R423923_EV2	**DUP File ID**	: r423924_Ev2
Dup Sample ID	: WG1695438-5	**DUP Analysis Date**	: 10/04/22 23:04

Parameter	Sample Concentration (ppbV)	Duplicate Concentration (ppbV)	RPD	RPD Limit
Vinyl chloride	ND	ND	NC	25
1,1-Dichloroethene	ND	ND	NC	25
cis-1,2-Dichloroethene	ND	ND	NC	25
1,1,1-Trichloroethane	ND	ND	NC	25
Carbon tetrachloride	0.079	0.079	0	25
Trichloroethene	ND	ND	NC	25
Tetrachloroethene	1.01	1.03	2	25

Laboratory Control Sample Summary
Form 3
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Matrix	: AIR		
LCS Sample ID	: WG1695438-3 **Analysis Date** : 10/04/22 14:25	**File ID**	: r423914_Ev2
LCSD Sample ID	: **Analysis Date** :	**File ID**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	**True (ppbV)**	**Found (ppbV)**	**%R**	**True (ppbV)**	**Found (ppbV)**	**%R**	**RPD**	**Recovery Limits**	**RPD Limit**
Vinyl chloride	5	4.91	98				-	70-130	25
1,1-Dichloroethene	5	4.84	97				-	70-130	25
cis-1,2-Dichloroethene	5	4.40	88				-	70-130	25
1,1,1-Trichloroethane	5	4.94	99				-	70-130	25
Carbon tetrachloride	5	5.32	106				-	70-130	25
Trichloroethene	5	4.64	93				-	70-130	25
Tetrachloroethene	5	4.78	96				-	70-130	25

Method Blank Summary
Form 4
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Lab Sample ID	: WG1695438-4	**Lab File ID**	: r423916_Ev2
Instrument ID	: AIRPIANO4		
Matrix	: AIR	**Analysis Date**	: 10/04/22 17:00

Client Sample No.	Lab Sample ID	Analysis Date
WG1695438-3LCS	WG1695438-3	10/04/22 14:25
VE-2-IA	L2253855-02	10/04/22 21:06
DUP-092922	L2253855-03	10/04/22 21:46
VE-1-IA	L2253855-05	10/04/22 22:25
VE-1-IADUP	WG1695438-5	10/04/22 23:04

Instrument Performance Check (Tune) Summary
Form 5
Air Volatiles
Bromofluorobenzene (BFB)

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Instrument ID	: AIRPIANO4	**Analysis Date**	: 09/21/22 20:59
Tune Standard	: WG1691192-1	**Tune File ID**	: r423657_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	8.0 - 40.0% of mass 95	12.4
75	30.0 - 66.0% of mass 95	35.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.6 (.8)1
174	50.0 - 120.0% of mass 95	72.8
175	4.0 - 9.0% of mass 174	5.3 (7.2)1
176	93.0 - 101% of mass 174	69.4 (95.3)1
177	5.0 - 9.0% of mass 176	4.6 (6.7)2

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

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

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STD0.02	R1612990-1	R423658_EV2	09/21/22 21:35
STD0.05	R1612990-2	R423659_EV2	09/21/22 22:11
STD0.1	R1612990-3	R423660_EV2	09/21/22 22:50
STD0.2	R1612990-4	R423661_EV2	09/21/22 23:28
STD0.5	R1612990-5	R423662_EV2	09/22/22 00:08
STD1.0	R1612990-6	R423663_EV2	09/22/22 00:49
STD5.0	R1612990-7	R423664_EV2	09/22/22 01:29
STD010	R1612990-8	R423665_EV2	09/22/22 02:10
STD020	R1612990-9	R423666_EV2	09/22/22 02:48
STD050	R1612990-10	R423667_EV2	09/22/22 03:28
ICV Quant	R1612990-11	R423672_EV2	09/22/22 11:16

Instrument Performance Check (Tune) Summary
Form 5
Air Volatiles
Bromofluorobenzene (BFB)

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Instrument ID	: AIRPIANO4	**Analysis Date**	: 10/04/22 12:21
Tune Standard	: WG1695438-1	**Tune File ID**	: r423911_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	8.0 - 40.0% of mass 95	13.9
75	30.0 - 66.0% of mass 95	36.1
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.5 (.6)1
174	50.0 - 120.0% of mass 95	74.5
175	4.0 - 9.0% of mass 174	5.3 (7.2)1
176	93.0 - 101% of mass 174	72 (96.7)1
177	5.0 - 9.0% of mass 176	4.7 (6.5)2

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

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

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1695438-2CCAL	WG1695438-2	R423914_EV2	10/04/22 14:25
WG1695438-3LCS	WG1695438-3	R423914_EV2	10/04/22 14:25
WG1695438-4BLANK	WG1695438-4	R423916_EV2	10/04/22 17:00
VE-2-IA	L2253855-02	R423921_EV2	10/04/22 21:06
DUP-092922	L2253855-03	R423922_EV2	10/04/22 21:46
VE-1-IA	L2253855-05	R423923_EV2	10/04/22 22:25
WG1695438-5DUP	WG1695438-5	R423924_EV2	10/04/22 23:04

Internal Standard Area and RT Summary
Form 8a
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Instrument ID	: AIRPIANO4	**Analysis Date**	: 10/04/22 14:25:00
Sample No	: WG1695438-2	**Lab File ID**	: R423914_EV2

	Bromochloromethane		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	RT	Area	RT	Area	RT
WG1695438-2	302847	9.45	816313	11.71	151842	16.45
Upper Limit	423986	9.78	1142838	12.04	212579	16.78
Lower Limit	181708	9.12	489788	11.38	91105	16.12
Sample ID						
WG1695438-3 LCS	302847	9.45	816313	11.71	151842	16.45
WG1695438-4 BLANK	292863	9.45	761664	11.71	145423	16.45
VE-2-IA	278727	9.45	712946	11.71	139304	16.45
DUP-092922	277312	9.45	717282	11.71	140046	16.45
VE-1-IA	283443	9.45	733423	11.71	142697	16.45
VE-1-IA DUP	281691	9.45	722042	11.71	138739	16.45

Area Upper Limit = +40% of internal standard area

Area Lower Limit = - 40% of internal standard area

RT Upper Limit = +0.33 minutes of internal standard RT

RT Lower Limit = -0.33 minutes of internal standard RT

* Values outside of QC limits

Date Created: 02/18/22
Created By: Jason Hebert
File: PM11916-1
Page: 1

Volatile Organics in Air by TO-15 SIM (AIR)

Holding Time: 30 days
Container/Sample Preservation: 1 - Canister - 2.7 Liter

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
1,1,1-Trichloroethane	71-55-6	0.02	0.0083	ppbV	70-130	25		25	25			
1,1,1,2-Tetrachloroethane	630-20-6	0.02	0.0053	ppbV	70-130	25		25	25			
1,1,2,2-Tetrachloroethane	79-34-5	0.02	0.0056	ppbV	70-130	25		25	25			
1,1,2-Trichloroethane	79-00-5	0.02	0.0058	ppbV	70-130	25		25	25			
1,1-Dichloroethane	75-34-3	0.02	0.0073	ppbV	70-130	25		25	25			
1,1-Dichloroethene	75-35-4	0.02	0.0084	ppbV	70-130	25		25	25			
1,2,4-Trimethylbenzene	95-63-6	0.02	0.0043	ppbV	70-130	25		25	25			
1,2-Dibromoethane	106-93-4	0.02	0.008	ppbV	70-130	25		25	25			
1,2-Dichlorobenzene	95-50-1	0.02	0.0098	ppbV	70-130	25		25	25			
1,2-Dichloroethane	107-06-2	0.02	0.0097	ppbV	70-130	25		25	25			
1,2-Dichloropropane	78-87-5	0.02	0.0054	ppbV	70-130	25		25	25			
1,3,5-Trimethylbenzene	108-67-8	0.02	0.0056	ppbV	70-130	25		25	25			
1,3-Butadiene	106-99-0	0.02	0.0097	ppbV	70-130	25		25	25			
1,3-Dichlorobenzene	541-73-1	0.02	0.0056	ppbV	70-130	25		25	25			
1,4-Dichlorobenzene	106-46-7	0.02	0.0053	ppbV	70-130	25		25	25			
1,4-Dioxane	123-91-1	0.1	0.032	ppbV	70-130	25		25	25			
2,2,4-Trimethylpentane	540-84-1	0.2	0.0063	ppbV	70-130	25		25	25			
2-Hexanone	591-78-6	0.2	0.015	ppbV	70-130	25		25	25			
3-Chloropropene	107-05-1	0.2	0.0067	ppbV	70-130	25		25	25			
4-Ethyltoluene	622-96-8	0.02	0.0042	ppbV	70-130	25		25	25			
Benzene	71-43-2	0.1	0.005	ppbV	70-130	25		25	25			
Benzyl chloride	100-44-7	0.1	0.0072	ppbV	70-130	25		25	25			
Bromodichloromethane	75-27-4	0.02	0.0067	ppbV	70-130	25		25	25			
Bromoform	75-25-2	0.02	0.0065	ppbV	70-130	25		25	25			
Bromomethane	74-83-9	0.02	0.0085	ppbV	70-130	25		25	25			
Carbon disulfide	75-15-0	0.2	0.0138	ppbV	70-130	25		25	25			
Carbon tetrachloride	56-23-5	0.02	0.01	ppbV	70-130	25		25	25			
Chlorobenzene	108-90-7	0.1	0.0064	ppbV	70-130	25		25	25			
Chloroethane	75-00-3	0.1	0.0135	ppbV	70-130	25		25	25			
Chloroform	67-66-3	0.02	0.0089	ppbV	70-130	25		25	25			
Chloromethane	74-87-3	0.2	0.024	ppbV	70-130	25		25	25			
cis-1,2-Dichloroethene	156-59-2	0.02	0.0096	ppbV	70-130	25		25	25			
trans-1,2-Dichloroethene	156-60-5	0.02	0.0076	ppbV	70-130	25		25	25			
1,2-Dichloroethene (total)	540-59-0	0.02	0.0076	ppbV				25	25			
cis-1,3-Dichloropropene	10061-01-5	0.02	0.007	ppbV	70-130	25		25	25			
1,3-Dichloropropene, Total	542-75-6	0.02	0.007	ppbV				25	25			
Cyclohexane	110-82-7	0.2	0.0064	ppbV	70-130	25		25	25			
Dibromochloromethane	124-48-1	0.02	0.0086	ppbV	70-130	25		25	25			
Dichlorodifluoromethane	75-71-8	0.2	0.018	ppbV	70-130	25		25	25			
Ethyl Alcohol	64-17-5	5	0.329	ppbV	40-160	25		25	25			
Ethyl Acetate	141-78-6	0.5	0.0307	ppbV	70-130	25		25	25			
Ethylbenzene	100-41-4	0.02	0.0049	ppbV	70-130	25		25	25			

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

Date Created: 02/18/22
Created By: Jason Hebert
File: PM11916-1
Page: 2

Volatile Organics in Air by TO-15 SIM (AIR)

Holding Time: 30 days
Container/Sample Preservation: 1 - Canister - 2.7 Liter

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	0.05	0.0088	ppbV	70-130	25		25	25			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	0.05	0.0072	ppbV	70-130	25		25	25			
Methylene chloride	75-09-2	0.5	0.0131	ppbV	70-130	25		25	25			
Methyl tert butyl ether	1634-04-4	0.2	0.0083	ppbV	70-130	25		25	25			
Naphthalene	91-20-3	0.05	0.035	ppbV	70-130	25		25	25			
p/m-Xylene	179601-23-1	0.04	0.019	ppbV	70-130	25		25	25			
o-Xylene	95-47-6	0.02	0.0067	ppbV	70-130	25		25	25			
Heptane	142-82-5	0.2	0.0041	ppbV	70-130	25		25	25			
n-Hexane	110-54-3	0.2	0.0048	ppbV	70-130	25		25	25			
Propylene	115-07-1	0.5	0.0465	ppbV	70-130	25		25	25			
Styrene	100-42-5	0.02	0.0049	ppbV	70-130	25		25	25			
Tetrachloroethene	127-18-4	0.02	0.0078	ppbV	70-130	25		25	25			
Tetrahydrofuran	109-99-9	0.5	0.0066	ppbV	70-130	25		25	25			
Toluene	108-88-3	0.1	0.014	ppbV	70-130	25		25	25			
trans-1,3-Dichloropropene	10061-02-6	0.02	0.007	ppbV	70-130	25		25	25			
Trichloroethene	79-01-6	0.02	0.0062	ppbV	70-130	25		25	25			
1,2,4-Trichlorobenzene	120-82-1	0.05	0.03	ppbV	70-130	25		25	25			
Trichlorofluoromethane	75-69-4	0.05	0.0095	ppbV	70-130	25		25	25			
Vinyl acetate	108-05-4	1	0.0111	ppbV	70-130	25		25	25			
Vinyl bromide	593-60-2	0.2	0.0099	ppbV	70-130	25		25	25			
Hexachlorobutadiene	87-68-3	0.05	0.017	ppbV	70-130	25		25	25			
iso-Propyl Alcohol	67-63-0	0.5	0.179	ppbV	40-160	25		25	25			
Vinyl chloride	75-01-4	0.02	0.0072	ppbV	70-130	25		25	25			
Acrylonitrile	107-13-1	0.5	0.0245	ppbV	70-130	25		25	25			
n-Butylbenzene	104-51-8	0.2	0.0048	ppbV	70-130	25		25	25			
sec-Butylbenzene	135-98-8	0.2	0.0032	ppbV	70-130	25		25	25			
Isopropylbenzene	98-82-8	0.2	0.0053	ppbV	70-130	25		25	25			
Xylene (Total)	1330-20-7	0.02	0.0067	ppbV				25	25			
p-Isopropyltoluene	99-87-6	0.2	0.0045	ppbV	70-130	25		25	25			
Acetone	67-64-1	1	0.299	ppbV	40-160	25		25	25			
2-Butanone	78-93-3	0.5	0.027	ppbV	70-130	25		25	25			
4-Methyl-2-pentanone	108-10-1	0.5	0.012	ppbV	70-130	25		25	25			
1,2,3-Trichlorobenzene	87-61-6	0.05	0.0134	ppbV	70-130	25		25	25			
Acrolein	107-02-8	0.05	0.0387	ppbV	60-113	25		25	25			
1,2-Dichloroethane-d4	*17060-07-0*									*70-130*		
Toluene-d8	*2037-26-5*									*70-130*		
Bromofluorobenzene	*460-00-4*									*70-130*		

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

Volatiles Sample Data

Results Summary
Form 1
Volatile Organics in Air by SIM

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Lab ID	: L2253855-02	**Date Collected**	: 09/29/22 12:10
Client ID	: VE-2-IA	**Date Received**	: 09/29/22
Sample Location	: YONKERS, NY	**Date Analyzed**	: 10/04/22 21:06
Sample Matrix	: AIR	**Dilution Factor**	: 1
Analytical Method	: 48,TO-15-SIM	**Analyst**	: TJS
Lab File ID	: R423921_EV2	**Instrument ID**	: AIRPIANO4
Sample Amount	: 250 ml	**GC Column**	: RTX-1

		ppbV			ug/m3			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
56-23-5	Carbon tetrachloride	0.079	0.020	--	0.497	0.126	--	
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	0.085	0.020	--	0.576	0.136	--	

Results Summary
Form 1
Volatile Organics in Air by SIM

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Lab ID	: L2253855-03	**Date Collected**	: 09/29/22 12:11
Client ID	: DUP-092922	**Date Received**	: 09/29/22
Sample Location	: YONKERS, NY	**Date Analyzed**	: 10/04/22 21:46
Sample Matrix	: AIR	**Dilution Factor**	: 1
Analytical Method	: 48,TO-15-SIM	**Analyst**	: TJS
Lab File ID	: R423922_EV2	**Instrument ID**	: AIRPIANO4
Sample Amount	: 250 ml	**GC Column**	: RTX-1

		ppbV			ug/m3			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
56-23-5	Carbon tetrachloride	0.077	0.020	--	0.484	0.126	--	
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	0.095	0.020	--	0.644	0.136	--	

Results Summary
Form 1
Volatile Organics in Air by SIM

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Lab ID	: L2253855-05	**Date Collected**	: 09/29/22 13:19
Client ID	: VE-1-IA	**Date Received**	: 09/29/22
Sample Location	: YONKERS, NY	**Date Analyzed**	: 10/04/22 22:25
Sample Matrix	: AIR	**Dilution Factor**	: 1
Analytical Method	: 48,TO-15-SIM	**Analyst**	: TJS
Lab File ID	: R423923_EV2	**Instrument ID**	: AIRPIANO4
Sample Amount	: 250 ml	**GC Column**	: RTX-1

		ppbV			ug/m3			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
56-23-5	Carbon tetrachloride	0.079	0.020	--	0.497	0.126	--	
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	1.01	0.020	--	6.85	0.136	--	

Results Summary
Form 1
Volatile Organics in Air by SIM

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Lab ID	: WG1695438-4	**Date Collected**	: NA
Client ID	: WG1695438-4BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 10/04/22 17:00
Sample Matrix	: AIR	**Dilution Factor**	: 1
Analytical Method	: 48,TO-15-SIM	**Analyst**	: TJS
Lab File ID	: R423916_EV2	**Instrument ID**	: AIRPIANO4
Sample Amount	: 250 ml	**GC Column**	: RTX-1

		ppbV			ug/m3			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
56-23-5	Carbon tetrachloride	ND	0.020	--	ND	0.126	--	U
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	ND	0.020	--	ND	0.136	--	U

Results Summary
Form 1
Volatile Organics in Air by SIM

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002
Lab ID	: WG1695438-5	**Date Collected**	: 09/29/22 13:19
Client ID	: VE-1-IADUP	**Date Received**	: 09/29/22
Sample Location	:	**Date Analyzed**	: 10/04/22 23:04
Sample Matrix	: AIR	**Dilution Factor**	: 1
Analytical Method	: 48,TO-15-SIM	**Analyst**	: TJS
Lab File ID	: R423924_EV2	**Instrument ID**	: AIRPIANO4
Sample Amount	: 250 ml	**GC Column**	: RTX-1

		ppbV			ug/m3			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
56-23-5	Carbon tetrachloride	0.079	0.020	--	0.497	0.126	--	
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	1.03	0.020	--	6.98	0.136	--	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\
Data File : r423921_Ev2.D
Acq On : 4 Oct 2022 9:06 PM
Operator : AIRPIANO4:TJS
Sample : L2253855-02,3,250,250
Misc : WG1695438,ICAL19358
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 05 08:28:09 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 09:00:39 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\r423914_Ev2.D
Sub List : 7-NY-SIM - .

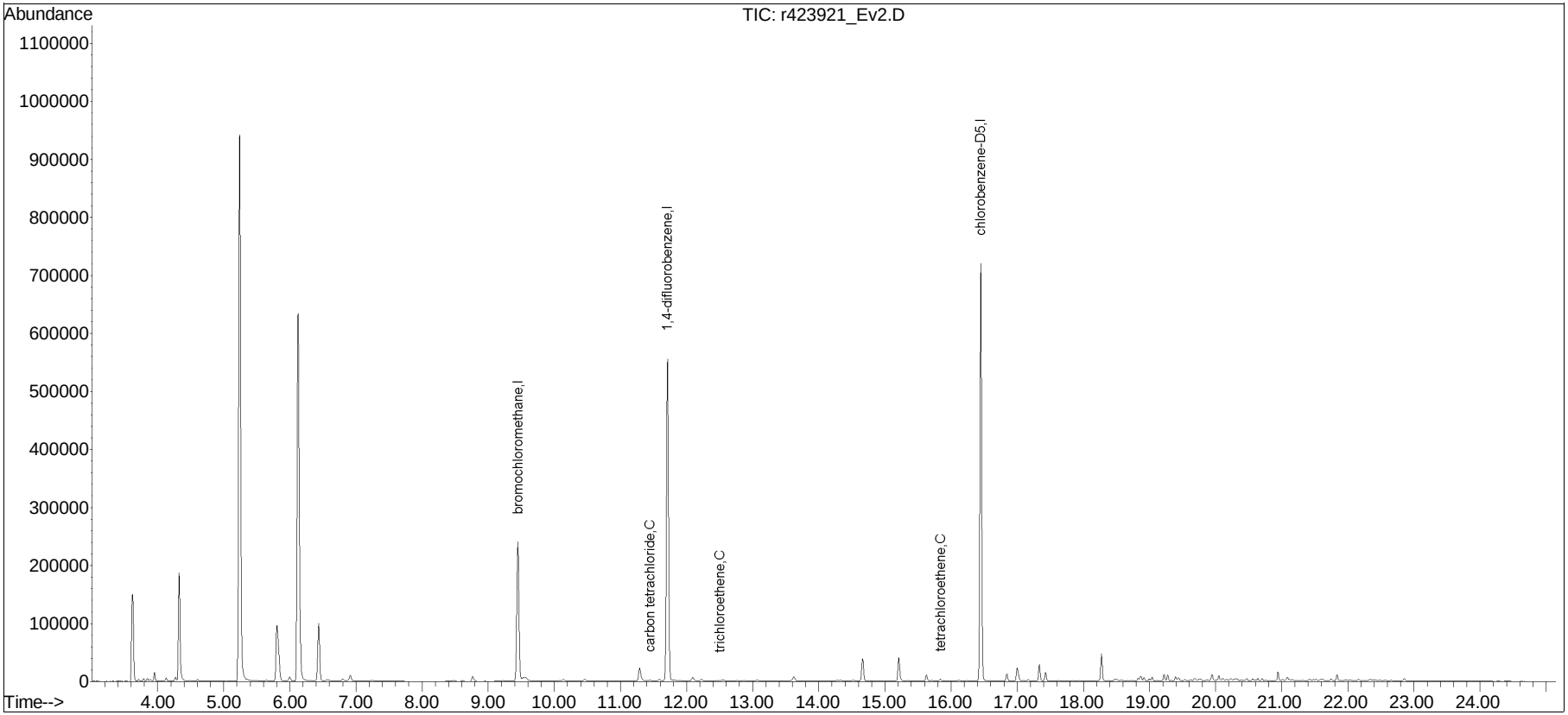
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.450	49	278727M6	10.000	ppbV	-0.02
Standard Area = 302847			Recovery =		92.04%	
33) 1,4-difluorobenzene	11.713	114	712946M6	10.000	ppbV	-0.02
Standard Area = 816313			Recovery =		87.34%	
51) chlorobenzene-D5	16.450	54	139304	10.000	ppbV	-0.02
Standard Area = 151842			Recovery =		91.74%	
System Monitoring Compounds						
Target Compounds						Qvalue
6) vinyl chloride	0.000		0	N.D.		
17) 1,1-dichloroethene	0.000		0	N.D.	d	
28) cis-1,2-dichloroethene	0.000		0	N.D.	d	
36) 1,1,1-trichloroethane	0.000		0	N.D.		
38) carbon tetrachloride	11.447	117	1404	0.079	ppbV #	96
44) trichloroethene	12.507	130	310	0.016	ppbV #	84
57) tetrachloroethene	15.842	166	2280	0.085	ppbV	94

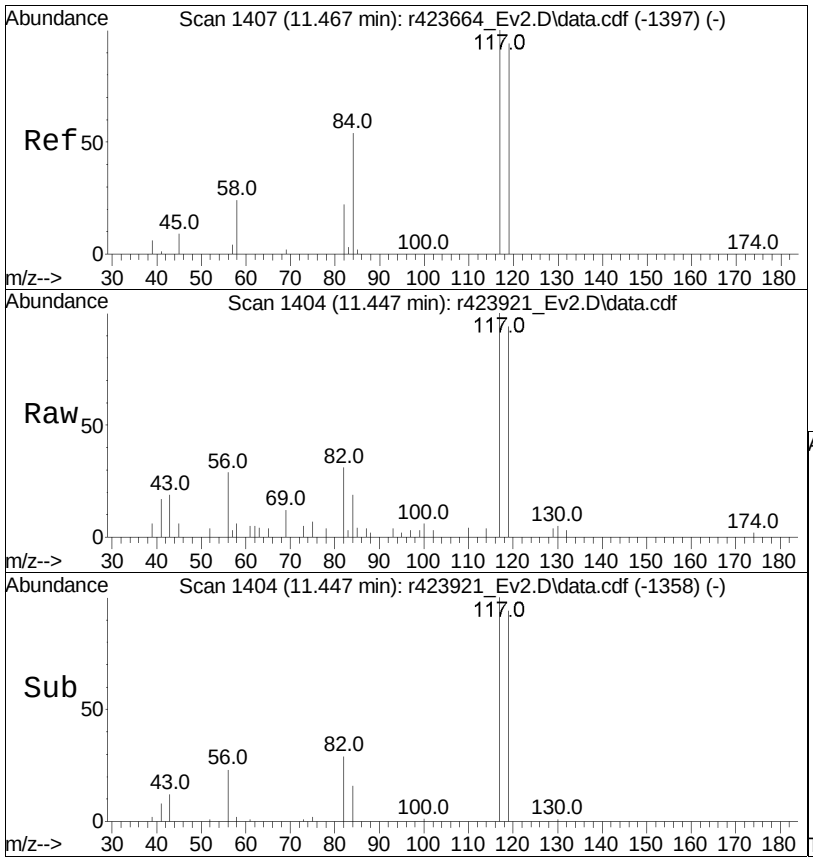
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : 7-NY-SIM - .\Data\Airpiano4\2022\10\1004SIM\r423914_Ev2.D

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\
Data File : r423921_Ev2.D
Acq On : 4 Oct 2022 9:06 PM
Operator : AIRPIANO4:TJS
Sample : L2253855-02,3,250,250
Misc : WG1695438,ICAL19358
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 05 08:28:09 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 09:00:39 2022
Response via : Initial Calibration

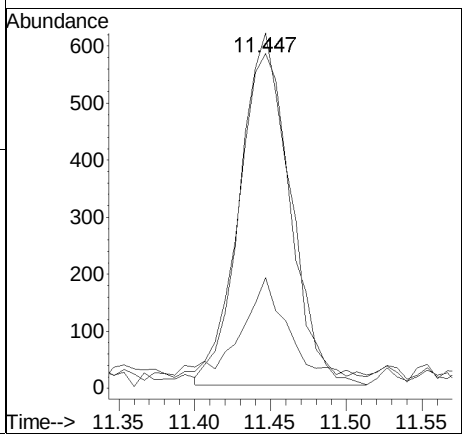


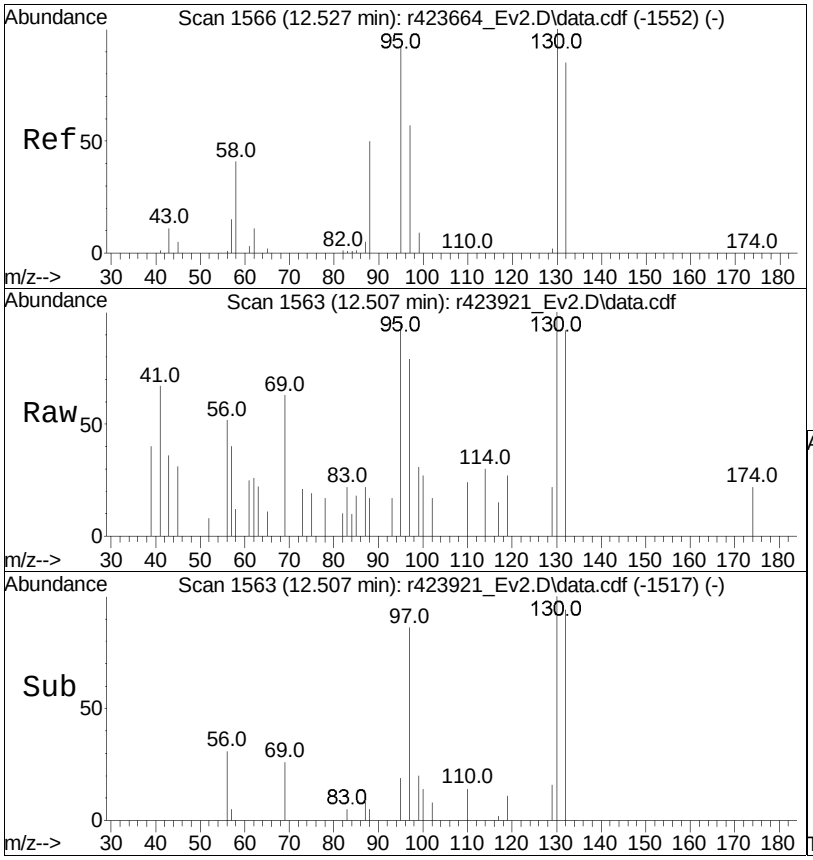


#38
carbon tetrachloride
Concen: 0.08 ppbV
RT: 11.447 min Scan# 1404
Delta R.T. -0.020 min
Lab File: r423921_Ev2.D
Acq: 4 Oct 2022 9:06 PM

Tgt Ion:117 Resp: 1404

Ion	Ratio	Lower	Upper
117	100		
119	94.2	75.4	113.0
82	31.1	17.9	26.9#

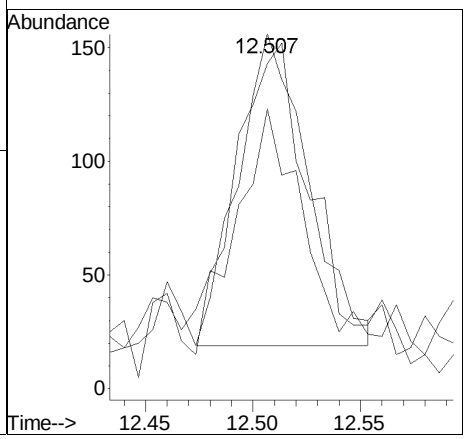


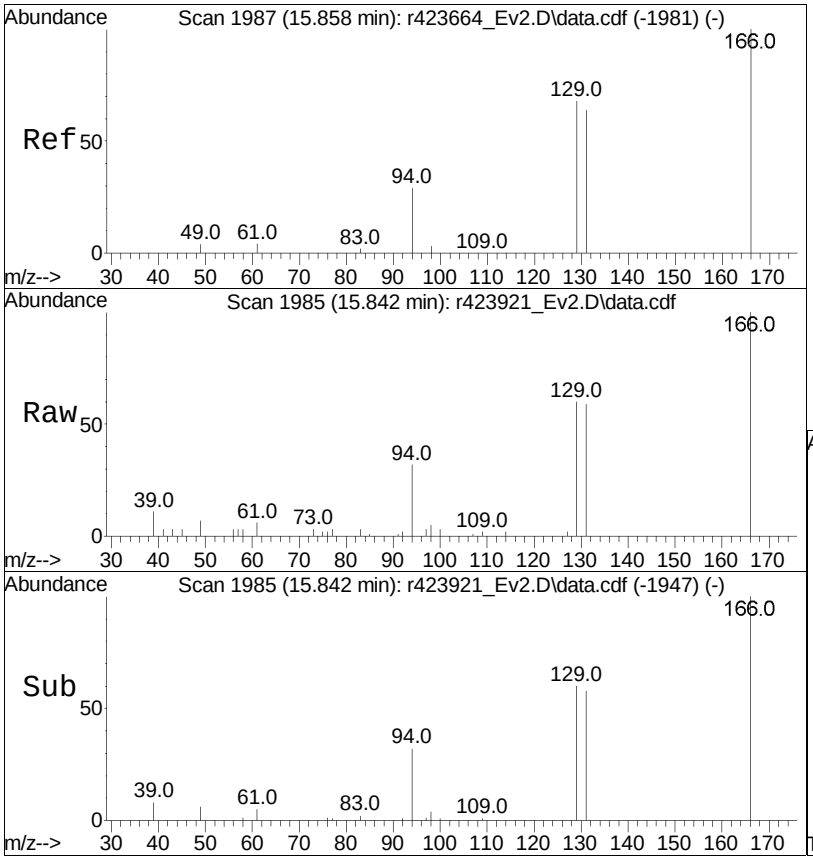


#44
trichloroethene
Concen: 0.02 ppbV
RT: 12.507 min Scan# 1563
Delta R.T. -0.020 min
Lab File: r423921_Ev2.D
Acq: 4 Oct 2022 9:06 PM

Tgt Ion:130 Resp: 310

Ion	Ratio	Lower	Upper
130	100		
132	91.7	67.9	101.9
97	78.8	45.9	68.9#

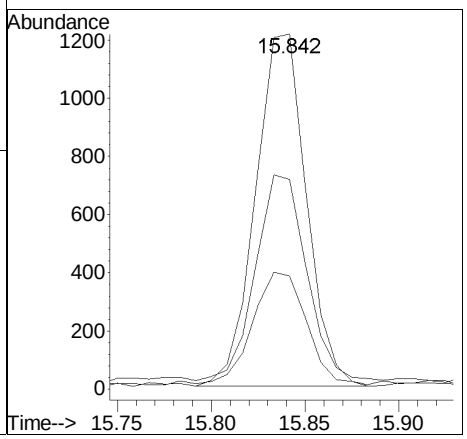




#57
tetrachloroethene
Concen: 0.08 ppbV
RT: 15.842 min Scan# 1985
Delta R.T. -0.017 min
Lab File: r423921_Ev2.D
Acq: 4 Oct 2022 9:06 PM

Tgt Ion:166 Resp: 2280

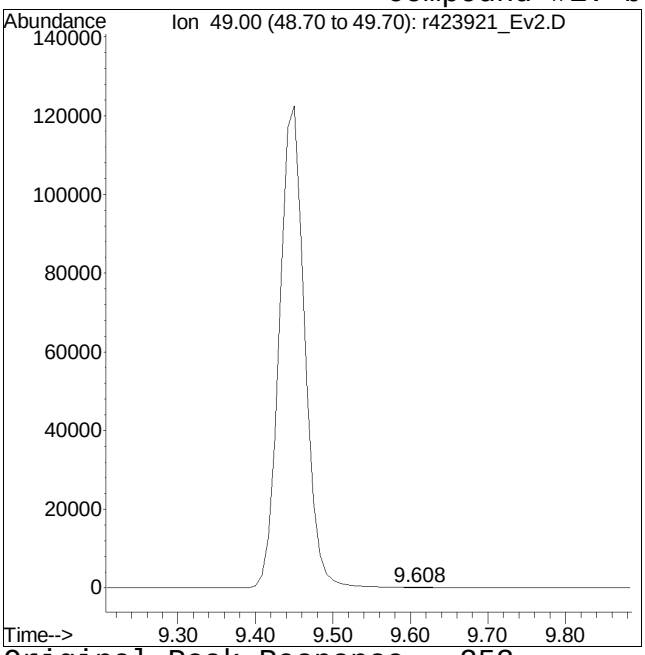
Ion	Ratio	Lower	Upper
166	100		
131	59.1	51.4	77.0
94	31.9	23.6	35.4



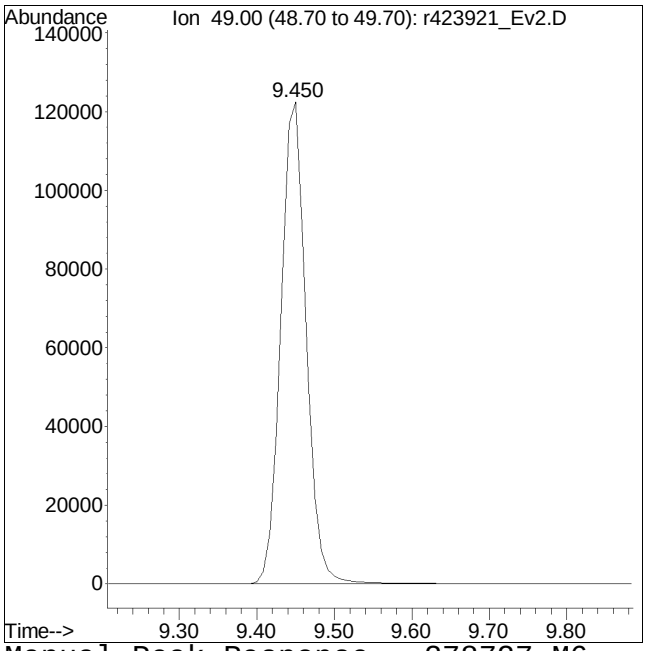
Manual Integration Report

Data Path : O:\Forensics\Data\AirpianoQMethod : TSIM4_220921.M
Data File : r423921_Ev2.D Operator : AIRPIANO4:TJS
Date Inj'd : 10/4/2020 0:9: 6 Instrument :
Sample : L2253855-02,3,250,250 Quant Date : 10/5/2022 8:27 am

Compound #1: bromochloromethane



Original Peak Response = 253



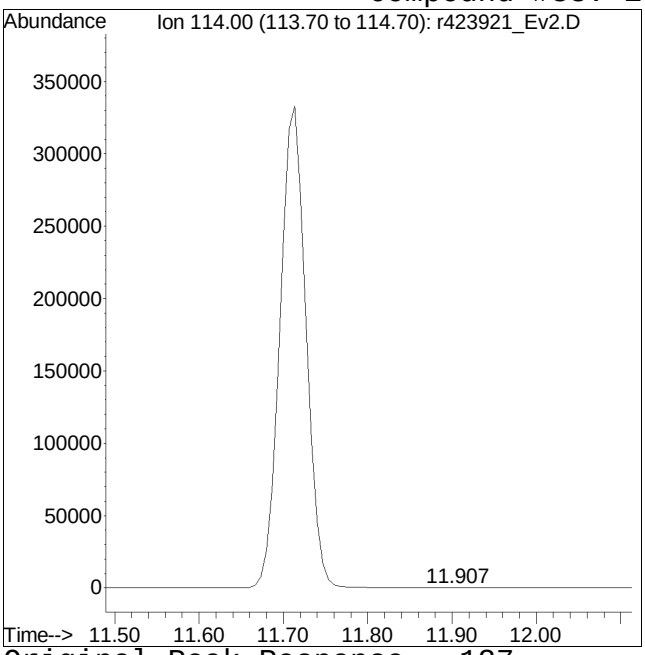
Manual Peak Response = 278727 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

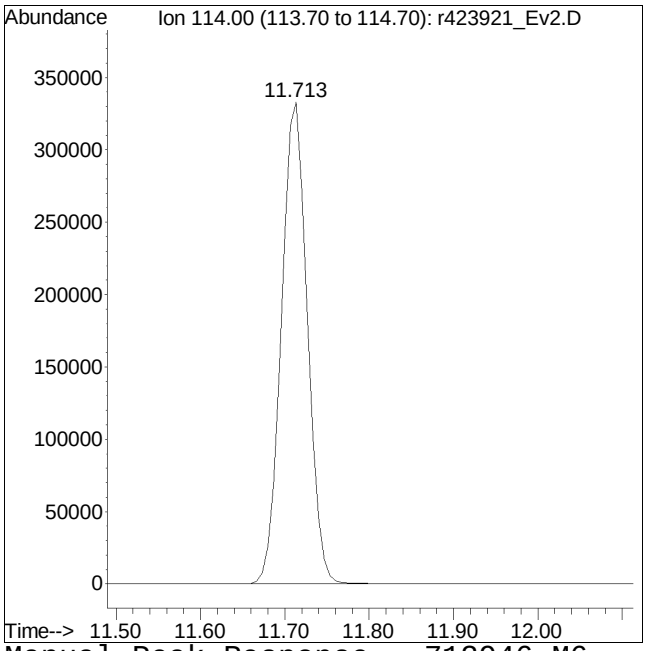
Manual Integration Report

Data Path : O:\Forensics\Data\AirpianoQMethod : TSIM4_220921.M
Data File : r423921_Ev2.D Operator : AIRPIANO4:TJS
Date Inj'd : 10/4/2020 0:9: 6 Instrument :
Sample : L2253855-02,3,250,250 Quant Date : 10/5/2022 8:27 am

Compound #33: 1,4-difluorobenzene



Original Peak Response = 127



Manual Peak Response = 712946 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\
Data File : r423922_Ev2.D
Acq On : 4 Oct 2022 9:46 PM
Operator : AIRPIANO4:TJS
Sample : L2253855-03,3,250,250
Misc : WG1695438,ICAL19358
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 05 08:28:21 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 09:00:39 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\r423914_Ev2.D
Sub List : 7-NY-SIM - .

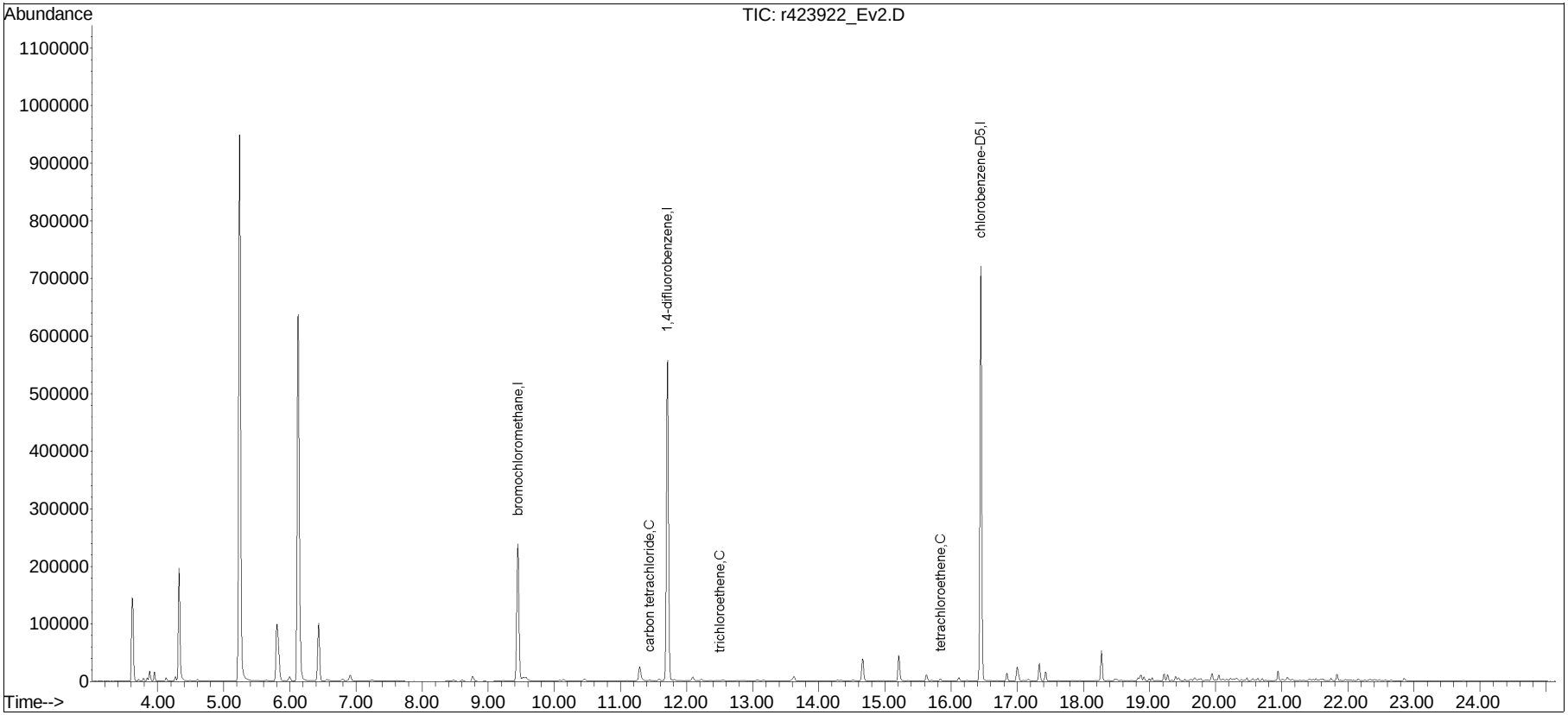
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.450	49	277312	10.000	ppbV	#-0.02
Standard Area = 302847			Recovery =		91.57%	
33) 1,4-difluorobenzene	11.713	114	717282	10.000	ppbV	-0.02
Standard Area = 816313			Recovery =		87.87%	
51) chlorobenzene-D5	16.450	54	140046	10.000	ppbV	-0.02
Standard Area = 151842			Recovery =		92.23%	
System Monitoring Compounds						
Target Compounds						Qvalue
6) vinyl chloride	0.000		0	N.D.		
17) 1,1-dichloroethene	6.804		0	N.D.		
28) cis-1,2-dichloroethene	0.000		0	N.D.		
36) 1,1,1-trichloroethane	0.000		0	N.D.		
38) carbon tetrachloride	11.440	117	1386	0.077	ppbV	96
44) trichloroethene	12.507	130	356	0.018	ppbV #	72
57) tetrachloroethene	15.842	166	2576	0.095	ppbV	94

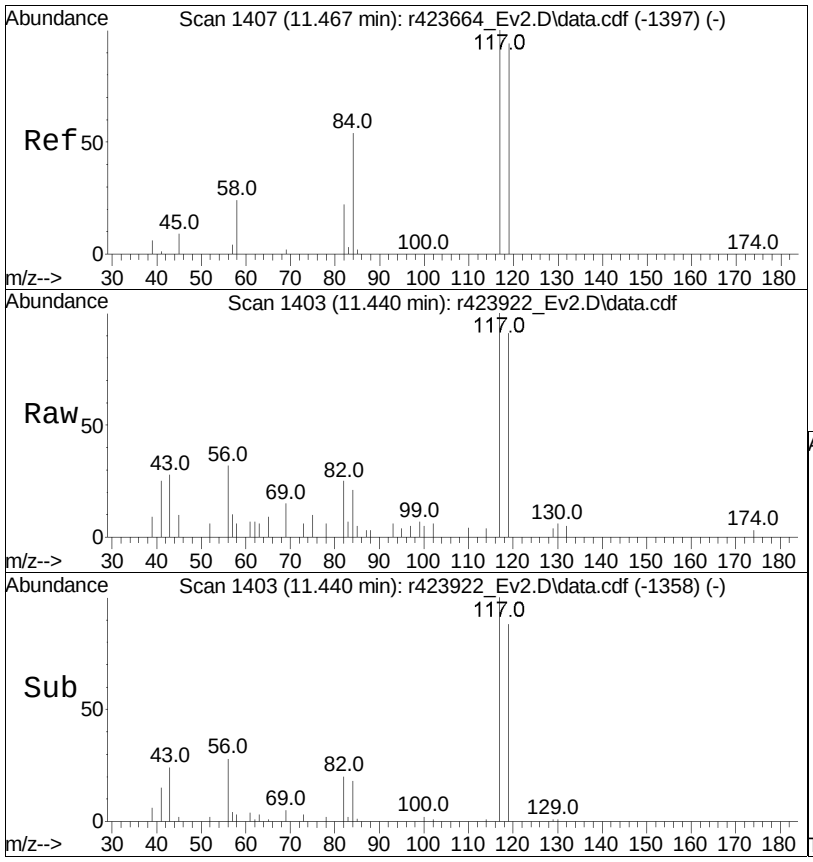
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : 7-NY-SIM - .\Data\Airpiano4\2022\10\1004SIM\r423914_Ev2.D

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\
Data File : r423922_Ev2.D
Acq On : 4 Oct 2022 9:46 PM
Operator : AIRPIANO4:TJS
Sample : L2253855-03,3,250,250
Misc : WG1695438,ICAL19358
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 05 08:28:21 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 09:00:39 2022
Response via : Initial Calibration

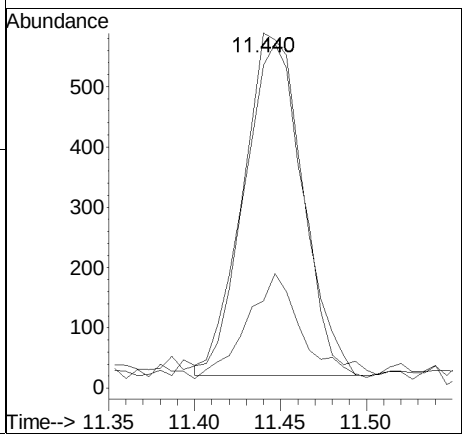


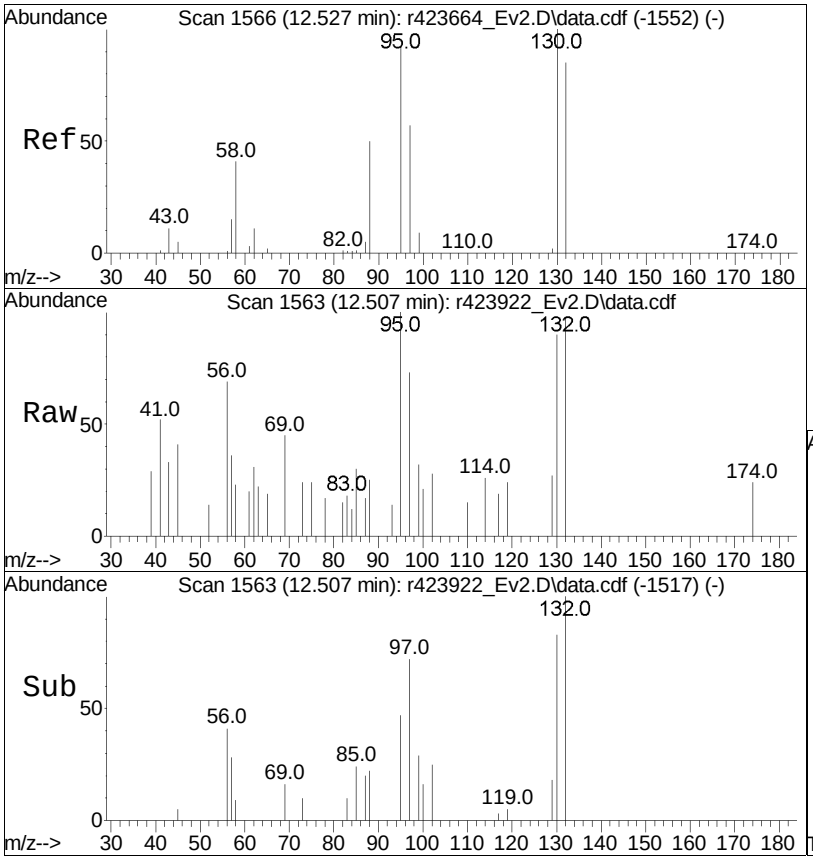


#38
carbon tetrachloride
Concen: 0.08 ppbV
RT: 11.440 min Scan# 1403
Delta R.T. -0.027 min
Lab File: r423922_Ev2.D
Acq: 4 Oct 2022 9:46 PM

Tgt Ion:117 Resp: 1386

Ion	Ratio	Lower	Upper
117	100		
119	91.0	75.4	113.0
82	24.6	17.9	26.9

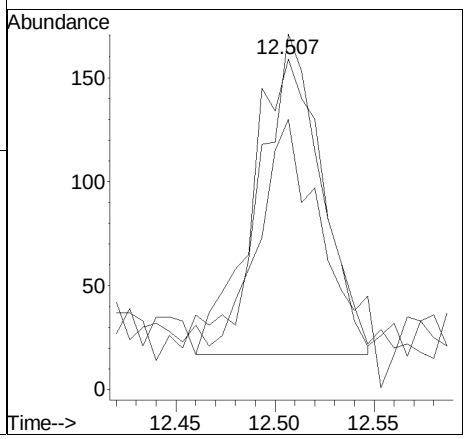


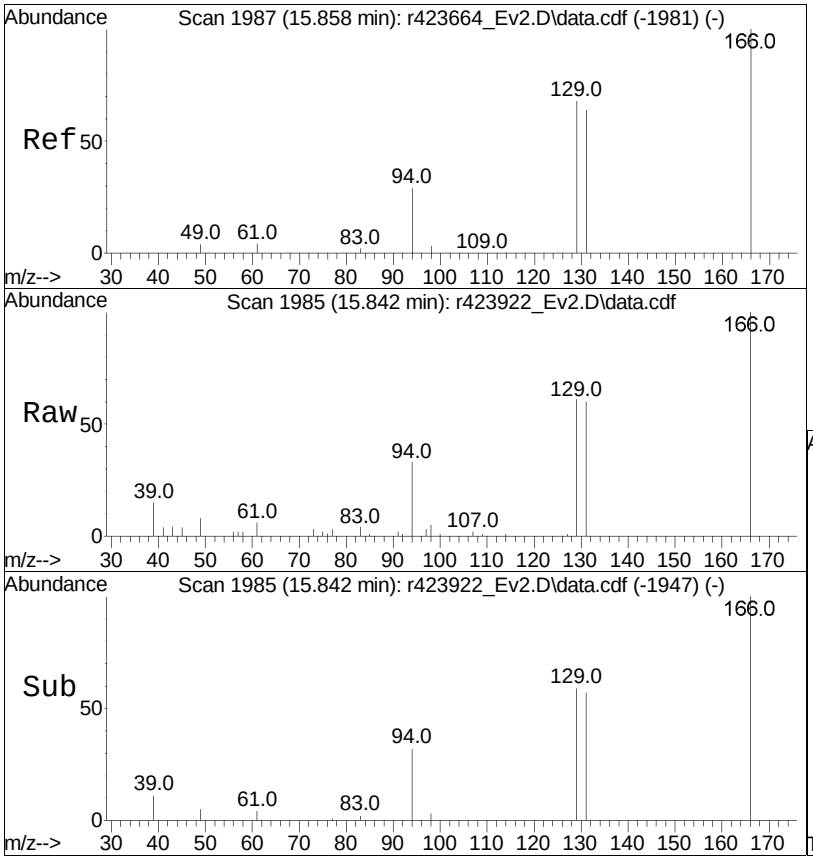


#44
trichloroethene
Concen: 0.02 ppbV
RT: 12.507 min Scan# 1563
Delta R.T. -0.020 min
Lab File: r423922_Ev2.D
Acq: 4 Oct 2022 9:46 PM

Tgt Ion:130 Resp: 356

Ion	Ratio	Lower	Upper
130	100		
132	107.5	67.9	101.9#
97	81.8	45.9	68.9#

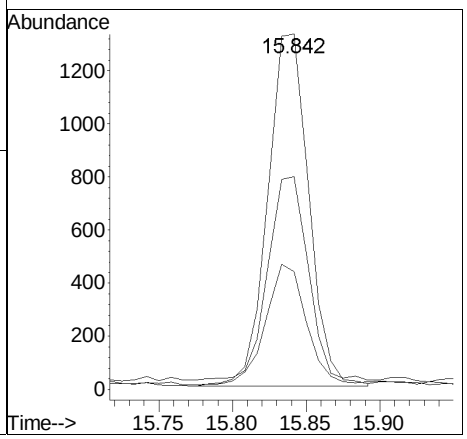




#57
tetrachloroethene
Concen: 0.09 ppbV
RT: 15.842 min Scan# 1985
Delta R.T. -0.017 min
Lab File: r423922_Ev2.D
Acq: 4 Oct 2022 9:46 PM

Tgt Ion:166 Resp: 2576

Ion	Ratio	Lower	Upper
166	100		
131	59.9	51.4	77.0
94	33.2	23.6	35.4



Manual Integration Report

Data Path	: O:\Forensics\Data\Airpiano	QMethod	: TSIM4_220921.M
Data File	: r423922_Ev2.D	Operator	: AIRPIANO4:TJS
Date Inj'd	: 10/4/2020 0:9: 6	Instrument	:
Sample	: L2253855-03,3,250,250	Quant Date	: 10/5/2022 8:28 am

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\
Data File : r423923_Ev2.D
Acq On : 4 Oct 2022 10:25 PM
Operator : AIRPIANO4:TJS
Sample : L2253855-05,3,250,250
Misc : WG1695438,ICAL19358
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 05 15:00:16 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 09:00:39 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\r423914_Ev2.D
Sub List : 7-NY-SIM - .

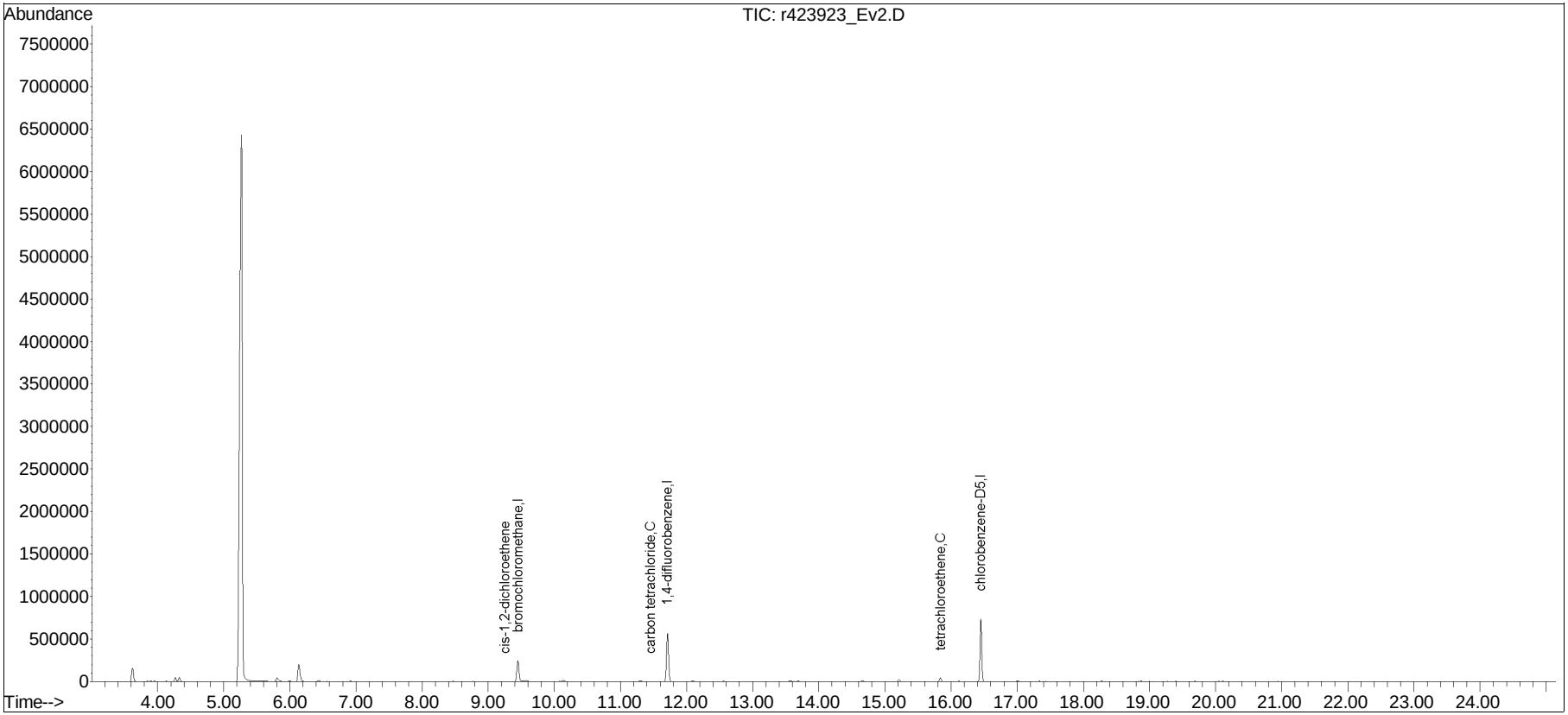
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.450	49	283443	10.000	ppbV	-0.02
Standard Area = 302847			Recovery =		93.59%	
33) 1,4-difluorobenzene	11.713	114	733423	10.000	ppbV	-0.02
Standard Area = 816313			Recovery =		89.85%	
51) chlorobenzene-D5	16.450	54	142697	10.000	ppbV	-0.02
Standard Area = 151842			Recovery =		93.98%	
System Monitoring Compounds						
Target Compounds						Qvalue
6) vinyl chloride	0.000		0	N.D.		
17) 1,1-dichloroethene	0.000		0	N.D.	d	
28) cis-1,2-dichloroethene	9.258	61	249	0.011	ppbV #	88
36) 1,1,1-trichloroethane	0.000		0	N.D.		
38) carbon tetrachloride	11.453	117	1447	0.079	ppbV	94
44) trichloroethene	12.507		0	N.D.		
57) tetrachloroethene	15.842	166	27976	1.012	ppbV	94

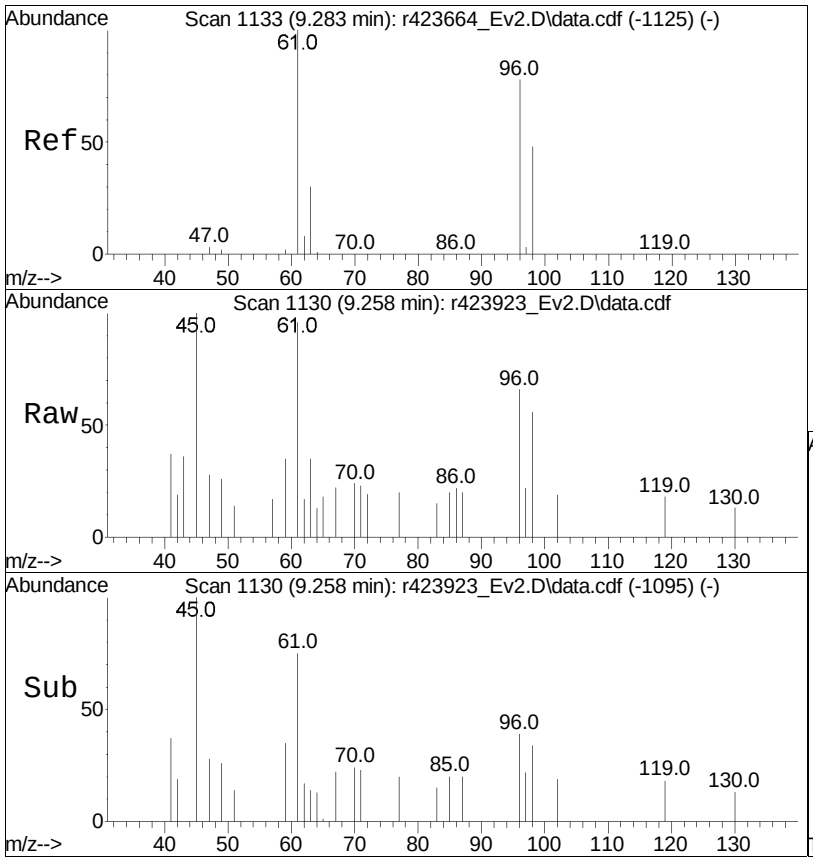
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : 7-NY-SIM - .\Data\Airpiano4\2022\10\1004SIM\r423914_Ev2.D

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\
Data File : r423923_Ev2.D
Acq On : 4 Oct 2022 10:25 PM
Operator : AIRPIANO4:TJS
Sample : L2253855-05,3,250,250
Misc : WG1695438,ICAL19358
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 05 15:00:16 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 09:00:39 2022
Response via : Initial Calibration

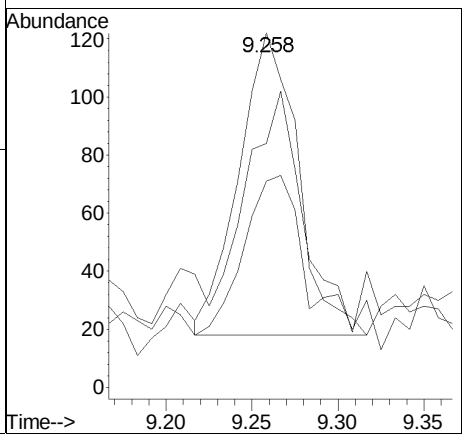


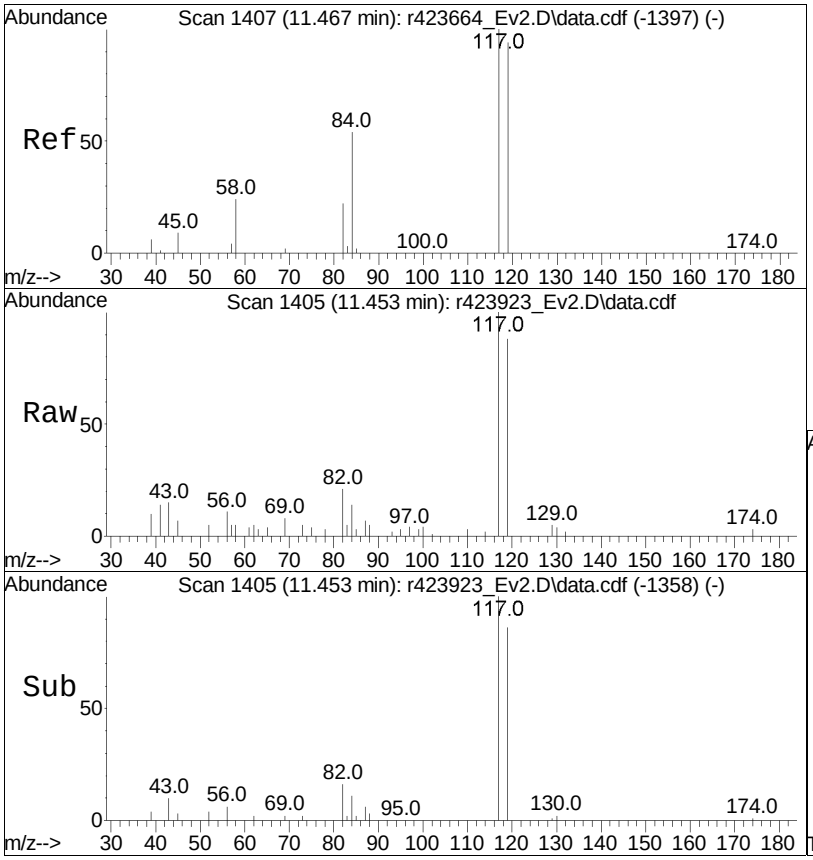


#28
cis-1,2-dichloroethene
Concen: 0.01 ppbV
RT: 9.258 min Scan# 1130
Delta R.T. -0.025 min
Lab File: r423923_Ev2.D
Acq: 4 Oct 2022 10:25 PM

Tgt Ion: 61 Resp: 249

Ion	Ratio	Lower	Upper
61	100		
96	68.9	62.7	94.1
98	58.2	38.7	58.1#

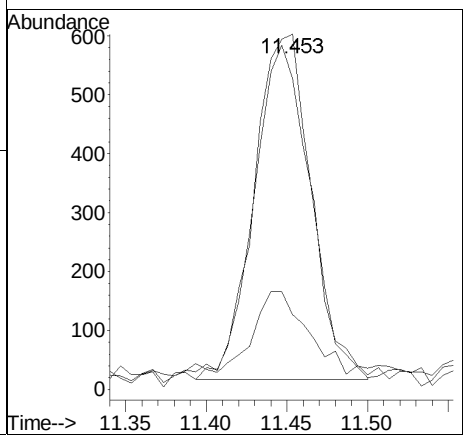


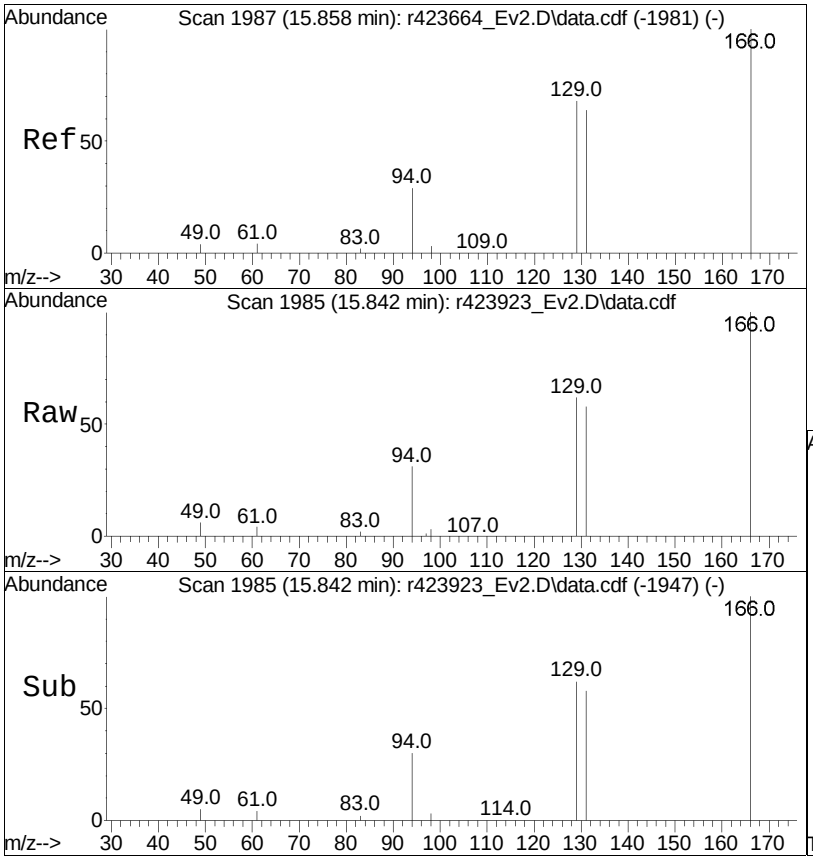


#38
carbon tetrachloride
Concen: 0.08 ppbV
RT: 11.453 min Scan# 1405
Delta R.T. -0.013 min
Lab File: r423923_Ev2.D
Acq: 4 Oct 2022 10:25 PM

Tgt Ion:117 Resp: 1447

Ion	Ratio	Lower	Upper
117	100		
119	87.6	75.4	113.0
82	21.1	17.9	26.9

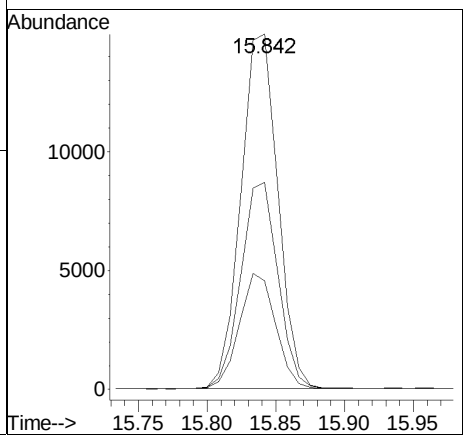




#57
tetrachloroethene
Concen: 1.01 ppbV
RT: 15.842 min Scan# 1985
Delta R.T. -0.017 min
Lab File: r423923_Ev2.D
Acq: 4 Oct 2022 10:25 PM

Tgt Ion:166 Resp: 27976

Ion	Ratio	Lower	Upper
166	100		
131	58.2	51.4	77.0
94	30.6	23.6	35.4



Manual Integration Report

Data Path	: O:\Forensics\Data\Airpiano	QMethod	: TSIM4_220921.M
Data File	: r423923_Ev2.D	Operator	: AIRPIANO4:TJS
Date Inj'd	: 10/4/2020 0:0: 5	Instrument	:
Sample	: L2253855-05,3,250,250	Quant Date	: 10/5/2022 8:28 am

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

Volatiles Standards Data

Initial Calibration

Initial Calibration Summary
Form 6
Air Volatiles

Client	**: Roux Env. Eng. & Geology, DPC**	**Lab Number**	**: L2253855**
Project Name	**: FORMER CLEAN ZONE DRY CLEANERS**	**Project Number**	**: 2546.0007Y002**
Instrument ID	**: AIRPIANO4**	**Ical Ref**	**: ICAL19358**
Calibration dates	**: 09/21/22 21:35 09/22/22 03:28**		

Calibration Files

0.02=r423658_Ev2.D 0.05=r423659_Ev2.D 0.1 =r423660_Ev2.D 0.2 =r423661_Ev2.D 0.5 =r423662_Ev2.D

1.0 =r423663_Ev2.D 5.0 =r423664_Ev2.D 10.0=r423665_Ev2.D 20.0=r423666_Ev2.D 50.0=r423667_Ev2.D

		Compound	0.02	0.05	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
1)	I	bromochloromethane	----------ISTD----------											
2)		propylene				0.601	0.504	0.514	0.447	0.432	0.448	0.431	0.4823	12.87
3)		dichlorodifluoromethane				1.067	0.978	0.959	0.880	0.816	0.727	0.636	0.8661	17.41
4)	C	chloromethane				0.430	0.405	0.385	0.355	0.344	0.322	0.301	0.3632	12.63
5)		Freon-114		1.164	1.108	1.251	1.176	1.140	1.037	0.978	0.878	0.750	1.0536	15.22
6)	C	vinyl chloride	0.614	0.598	0.565	0.650	0.593	0.578	0.537	0.527	0.499	0.468	0.5628	9.85
7)	C	1,3-butadiene	0.464	0.458	0.444	0.492	0.467	0.451	0.403	0.389	0.379	0.347	0.4294	10.86
8)	C	bromomethane	0.517	0.518	0.465	0.531	0.485	0.473	0.442	0.432	0.401	0.363	0.4626	11.71
9)	C	chloroethane			0.283	0.340	0.310	0.299	0.277	0.273	0.264	0.254	0.2875	9.64
10)		ethanol					0.458	0.422	0.365	0.324	0.311	0.252	0.3553	21.35
11)	C	vinyl bromide				0.448	0.420	0.407	0.364	0.358	0.361	0.337	0.3851	10.45
12)	C	acrolein		0.252	0.229	0.259	0.238	0.235	0.243	0.239	0.214	0.200	0.2344	7.77
13)		acetone				0.661	0.577	0.559	0.495	0.482	0.457	0.407	0.5198	16.37
14)		trichlorofluoromethane		0.702	0.693	0.782	0.730	0.707	0.656	0.637	0.602	0.536	0.6716	10.90
15)		isopropyl alcohol				1.245	0.809	0.743	0.647	0.632	0.618	0.576	0.7529	30.73#
16)	C	acrylonitrile				0.560	0.424	0.418	0.388	0.389	0.386	0.366	0.4188	15.57
17)	C	1,1-dichloroethene	0.719	0.715	0.710	1.000	0.755	0.910	0.854	0.663	0.639	0.750	0.7713	14.86
18)		tertiary butyl alcohol					1.102	1.315	1.241	1.242	0.942	1.142	1.1643	11.41
19)	C	methylene chloride					0.600	0.665	0.595	0.589	0.440	0.539	0.5712	13.27
20)	C	3-chloropropene				0.907	0.858	0.836	0.768	0.769	0.772	0.756	0.8094	7.17
21)	C	carbon disulfide				1.889	1.767	1.702	1.524	1.522	1.567	1.439	1.6298	9.85
22)		Freon 113	1.070	0.968	0.935	1.078	1.012	0.978	0.910	0.892	0.864	0.800	0.9507	9.32
23)		trans-1,2-dichloroethene	0.943	0.940	0.924	1.048	0.973	0.937	0.846	0.839	0.860	0.809	0.9117	7.98
24)	C	1,1-dichloroethane	1.223	1.086	1.071	1.190	1.118	1.087	1.017	1.016	0.991	0.950	1.0749	8.01
25)	C	MTBE	1.734	1.547	1.493	1.713	1.599	1.544	1.384	1.376	1.417	1.298	1.5105	9.61
26)	C	vinyl acetate					1.037	1.039	1.074	1.075	0.962	0.957	1.0241	5.13
27)	C	2-butanone				1.313	1.223	1.181	1.063	1.075	1.107	1.072	1.1477	8.26
28)		cis-1,2-dichloroethene	0.869	0.838	0.829	0.928	0.863	0.844	0.779	0.781	0.765	0.723	0.8218	7.31
29)		Ethyl Acetate				0.216	0.221	0.213	0.207	0.214	0.206	0.201	0.2110	3.14
30)	C	chloroform	0.977	1.038	0.975	1.121	1.054	1.033	0.945	0.931	0.897	0.794	0.9765	9.44
31)		Tetrahydrofuran				0.823	0.777	0.763	0.684	0.695	0.723	0.715	0.7399	6.72
32)	C	1,2-dichloroethane	0.703	0.719	0.653	0.741	0.700	0.678	0.623	0.612	0.594	0.518	0.6539	10.39
33)	I	1,4-difluorobenzene	----------ISTD----------											
34)	C	hexane				0.475	0.434	0.424	0.377	0.379	0.384	0.353	0.4037	10.51
35)	s	1,2-dichloroethane-D4				0.257	0.257	0.256	0.248	0.249	0.248	0.230	0.2494	3.78
36)	C	1,1,1-trichloroethane	0.318	0.296	0.287	0.333	0.309	0.300	0.277	0.280	0.272	0.243	0.2915	8.77

Initial Calibration Summary
Form 6
Air Volatiles

Client	**: Roux Env. Eng. & Geology, DPC**	**Lab Number**	**: L2253855**
Project Name	**: FORMER CLEAN ZONE DRY CLEANERS**	**Project Number**	**: 2546.0007Y002**
Instrument ID	**: AIRPIANO4**	**Ical Ref**	**: ICAL19358**
Calibration dates	**: 09/21/22 21:35 09/22/22 03:28**		

Calibration Files

0.02=r423658_Ev2.D 0.05=r423659_Ev2.D 0.1 =r423660_Ev2.D 0.2 =r423661_Ev2.D 0.5 =r423662_Ev2.D

1.0 =r423663_Ev2.D 5.0 =r423664_Ev2.D 10.0=r423665_Ev2.D 20.0=r423666_Ev2.D 50.0=r423667_Ev2.D

		Compound	0.02	0.05	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
37)	C	benzene			0.691	0.944	0.787	0.728	0.647	0.653	0.645	0.611	0.7133	15.21
38)	C	carbon tetrachloride	0.248	0.270	0.251	0.277	0.265	0.262	0.246	0.249	0.237	0.200	0.2506	8.62
39)		cyclohexane				0.492	0.454	0.445	0.397	0.403	0.414	0.394	0.4285	8.58
40)		Dibromomethane		0.276	0.247	0.245	0.217	0.213	0.190	0.191	0.188	0.174	0.2157	15.81
41)	C	1,2-dichloropropane	0.306	0.250	0.247	0.271	0.247	0.246	0.227	0.230	0.228	0.221	0.2473	10.23
42)		bromodichloromethane	0.380	0.369	0.352	0.400	0.369	0.368	0.329	0.334	0.340	0.307	0.3547	7.81
43)	C	1,4-dioxane			0.152	0.179	0.162	0.157	0.137	0.141	0.155	0.149	0.1540	8.35
44)	C	trichloroethene	0.300	0.291	0.251	0.307	0.287	0.279	0.255	0.257	0.256	0.239	0.2723	8.57
45)	C	2,2,4-trimethylpentane		1.616	1.521	1.522	1.414	1.385	1.186	1.223	1.254	1.127	1.3609	12.61
46)		heptane				0.497	0.455	0.446	0.396	0.399	0.413	0.388	0.4276	9.29
47)	C	cis-1,3-dichloropropene	0.286	0.266	0.276	0.318	0.303	0.301	0.291	0.296	0.294	0.271	0.2902	5.42
48)	C	4-methyl-2-pentanone					0.484	0.478	0.432	0.440	0.459	0.431	0.4541	5.13
49)		trans-1,3-dichloropropene	0.320	0.308	0.304	0.349	0.337	0.327	0.306	0.315	0.316	0.296	0.3178	5.05
50)	C	1,1,2-trichloroethane	0.244	0.232	0.221	0.260	0.245	0.242	0.220	0.224	0.225	0.222	0.2335	5.79
51)	I	chlorobenzene-D5	----------ISTD----------											
52)	C	toluene			5.299	6.623	5.602	5.175	4.516	4.534	4.564	4.526	5.1050	14.61
53)	s	toluene-D8				5.380	5.462	5.392	5.293	5.393	5.571	6.139	5.5188	5.19
54)		2-hexanone				2.446	2.449	2.449	2.255	2.311	2.444	2.390	2.3920	3.32
55)		dibromochloromethane	2.009	1.721	1.656	1.922	1.869	1.839	1.686	1.732	1.818	1.737	1.7988	6.24
56)	C	1,2-dibromoethane	1.851	1.848	1.751	2.067	1.978	1.928	1.772	1.801	1.828	1.780	1.8604	5.44
57)	C	tetrachloroethene	2.201	2.008	1.969	2.158	2.023	1.974	1.786	1.788	1.778	1.684	1.9367	8.90
58)		1,1,1,2-tetrachloroethane	1.558	1.355	1.427	1.634	1.559	1.539	1.410	1.430	1.417	1.301	1.4631	7.16
59)	C	chlorobenzene	3.507	3.422	3.313	3.908	3.664	3.599	3.203	3.210	3.227	3.037	3.4090	7.72
60)	C	ethylbenzene	6.036	5.682	5.580	6.532	6.248	6.066	5.472	5.481	5.577	5.373	5.8046	6.71
61)	C	m+p-xylene	4.899	4.676	4.537	5.409	5.152	5.052	4.480	4.485	4.469	4.024	4.7182	8.65
62)	C	bromoform	1.366	1.455	1.409	1.694	1.703	1.740	1.636	1.693	1.786	1.647	1.6129	9.15
63)	C	styrene	3.328	3.246	3.245	3.849	3.854	3.710	3.365	3.408	3.519	3.443	3.4967	6.61
64)	C	1,1,2,2-tetrachloroethane	3.274	3.145	3.079	3.623	3.450	3.365	2.967	2.964	3.005	2.733	3.1603	8.45
65)	C	o-xylene	5.220	4.646	4.591	5.436	5.315	5.072	4.512	4.442	4.365	3.806	4.7407	10.76
66)		1,2,3-Trichloropropane	2.509	2.404	2.333	2.847	2.734	2.644	2.399	2.413	2.424	2.332	2.5039	7.10
67)	s	bromofluorobenzene				3.918	3.963	3.931	3.913	3.958	4.071	4.538	4.0417	5.58
68)	C	isopropylbenzene				6.810	6.526	6.376	5.658	5.607	5.480	5.088	5.9351	10.70
69)		Bromobenzene	3.397	3.329	3.207	3.950	3.873	3.753	3.354	3.328	3.321	3.106	3.4618	8.37
70)		4-ethyl toluene	5.233	5.711	5.531	7.038	6.744	6.725	5.666	5.615	5.821	5.319	5.9402	10.89
71)		1,3,5-trimethylbenzene	5.752	4.953	4.883	6.092	5.790	5.776	4.946	4.878	4.850	4.422	5.2341	10.70
72)		tert-butylbenzene				6.731	6.338	6.399	5.501	5.420	5.032	4.169	5.6558	15.90

Initial Calibration Summary
Form 6
Air Volatiles

Client	**: Roux Env. Eng. & Geology, DPC**	**Lab Number**	**: L2253855**
Project Name	**: FORMER CLEAN ZONE DRY CLEANERS**	**Project Number**	**: 2546.0007Y002**
Instrument ID	**: AIRPIANO4**	**Ical Ref**	**: ICAL19358**
Calibration dates	**: 09/21/22 21:35 09/22/22 03:28**		

Calibration Files

0.02=r423658_Ev2.D 0.05=r423659_Ev2.D 0.1 =r423660_Ev2.D 0.2 =r423661_Ev2.D 0.5 =r423662_Ev2.D

1.0 =r423663_Ev2.D 5.0 =r423664_Ev2.D 10.0=r423665_Ev2.D 20.0=r423666_Ev2.D 50.0=r423667_Ev2.D

		Compound	0.02	0.05	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
73)		1,2,4-trimethylbenzene	5.006	4.914	4.800	5.927	5.642	5.677	4.736	4.587	4.410	3.789	4.9489	13.14
74)	C	Benzyl Chloride			2.720	3.516	3.520	3.652	3.766	3.900	3.764	3.404	3.5303	10.35
75)		1,3-dichlorobenzene	2.597	2.571	2.589	3.285	3.250	3.199	2.708	2.678	2.772	2.621	2.8270	10.44
76)	C	1,4-dichlorobenzene	2.575	2.557	2.656	3.218	3.213	3.192	2.687	2.699	2.839	2.664	2.8301	9.59
77)		sec-butylbenzene				8.757	8.223	8.258	7.223	7.104	6.838	6.140	7.5061	12.40
78)		p-isopropyltoluene				8.053	7.630	7.586	6.647	6.456	5.994	4.905	6.7532	16.27
79)		1,2-dichlorobenzene	2.497	2.513	2.389	3.045	2.978	2.972	2.528	2.539	2.632	2.547	2.6640	8.97
80)		n-butylbenzene				6.991	6.657	6.683	6.064	6.097	5.925	5.282	6.2425	9.25
81)		1,2-dibromo-3-chloropr...	1.237	1.022	1.026	1.336	1.323	1.334	1.297	1.313	1.256	1.113	1.2257	10.22
82)	C	1,2,4-trichlorobenzene		1.874	1.748	2.418	2.526	2.557	2.554	2.647	2.647	2.427	2.3774	13.99
83)		naphthalene		7.940	6.225	6.649	6.766	6.817	6.861	7.091	6.513	6.012	6.7638	8.15
84)		1,2,3-trichlorobenzene		1.901	1.744	2.340	2.488	2.510	2.741	2.781	2.585	2.384	2.3860	14.80
85)	C	hexachlorobutadiene		2.161	2.117	2.603	2.592	2.606	2.388	2.283	2.072	1.737	2.2843	12.93

Response Factor Report

Method Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Method File : TSIM4_220921.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Fri Sep 23 09:00:39 2022
Response Via : Initial Calibration

Calibration Files
0.02=r423658_Ev2.D 0.05=r423659_Ev2.D 0.1 =r423660_Ev2.D 0.2 =r423661_Ev2.D 0.5 =r423662_Ev2.D
1.0 =r423663_Ev2.D 5.0 =r423664_Ev2.D 10.0=r423665_Ev2.D 20.0=r423666_Ev2.D 50.0=r423667_Ev2.D

		Compound	0.02	0.05	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
1)	I	bromochloromethane	ISTD											
2)		propylene				0.601	0.504	0.514	0.447	0.432	0.448	0.431	0.4823	12.87
3)		dichlorodifluorome...				1.067	0.978	0.959	0.880	0.816	0.727	0.636	0.8661	17.41
4)	C	chloromethane				0.430	0.405	0.385	0.355	0.344	0.322	0.301	0.3632	12.63
5)		Freon-114		1.164	1.108	1.251	1.176	1.140	1.037	0.978	0.878	0.750	1.0536	15.22
6)	C	vinyl chloride	0.614	0.598	0.565	0.650	0.593	0.578	0.537	0.527	0.499	0.468	0.5628	9.85
7)	C	1,3-butadiene	0.464	0.458	0.444	0.492	0.467	0.451	0.403	0.389	0.379	0.347	0.4294	10.86
8)	C	bromomethane	0.517	0.518	0.465	0.531	0.485	0.473	0.442	0.432	0.401	0.363	0.4626	11.71
9)	C	chloroethane			0.283	0.340	0.310	0.299	0.277	0.273	0.264	0.254	0.2875	9.64
10)		ethanol					0.458	0.422	0.365	0.324	0.311	0.252	0.3553	21.35
11)	C	vinyl bromide				0.448	0.420	0.407	0.364	0.358	0.361	0.337	0.3851	10.45
12)	C	acrolein		0.252	0.229	0.259	0.238	0.235	0.243	0.239	0.214	0.200	0.2344	7.77
13)		acetone				0.661	0.577	0.559	0.495	0.482	0.457	0.407	0.5198	16.37
14)		trichlorofluoromet...		0.702	0.693	0.782	0.730	0.707	0.656	0.637	0.602	0.536	0.6716	10.90
15)		isopropyl alcohol				1.245	0.809	0.743	0.647	0.632	0.618	0.576	0.7529	30.73#
16)	C	acrylonitrile				0.560	0.424	0.418	0.388	0.389	0.386	0.366	0.4188	15.57
17)	C	1,1-dichloroethene	0.719	0.715	0.710	1.000	0.755	0.910	0.854	0.663	0.639	0.750	0.7713	14.86
18)		tertiary butyl alc...					1.102	1.315	1.241	1.242	0.942	1.142	1.1643	11.41
19)	C	methylene chloride					0.600	0.665	0.595	0.589	0.440	0.539	0.5712	13.27
20)	C	3-chloropropene				0.907	0.858	0.836	0.768	0.769	0.772	0.756	0.8094	7.17
21)	C	carbon disulfide				1.889	1.767	1.702	1.524	1.522	1.567	1.439	1.6298	9.85
22)		Freon 113	1.070	0.968	0.935	1.078	1.012	0.978	0.910	0.892	0.864	0.800	0.9507	9.32
23)		trans-1,2-dichloro...	0.943	0.940	0.924	1.048	0.973	0.937	0.846	0.839	0.860	0.809	0.9117	7.98
24)	C	1,1-dichloroethane	1.223	1.086	1.071	1.190	1.118	1.087	1.017	1.016	0.991	0.950	1.0749	8.01
25)	C	MTBE	1.734	1.547	1.493	1.713	1.599	1.544	1.384	1.376	1.417	1.298	1.5105	9.61
26)	C	vinyl acetate					1.037	1.039	1.074	1.075	0.962	0.957	1.0241	5.13
27)	C	2-butanone				1.313	1.223	1.181	1.063	1.075	1.107	1.072	1.1477	8.26
28)		cis-1,2-dichloroet...	0.869	0.838	0.829	0.928	0.863	0.844	0.779	0.781	0.765	0.723	0.8218	7.31
29)		Ethyl Acetate				0.216	0.221	0.213	0.207	0.214	0.206	0.201	0.2110	3.14
30)	C	chloroform	0.977	1.038	0.975	1.121	1.054	1.033	0.945	0.931	0.897	0.794	0.9765	9.44
31)		Tetrahydrofuran				0.823	0.777	0.763	0.684	0.695	0.723	0.715	0.7399	6.72

Response Factor Report

Method Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Method File : TSIM4_220921.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Fri Sep 23 09:00:39 2022
Response Via : Initial Calibration

Calibration Files
0.02=r423658_Ev2.D 0.05=r423659_Ev2.D 0.1 =r423660_Ev2.D 0.2 =r423661_Ev2.D 0.5 =r423662_Ev2.D
1.0 =r423663_Ev2.D 5.0 =r423664_Ev2.D 10.0=r423665_Ev2.D 20.0=r423666_Ev2.D 50.0=r423667_Ev2.D

		Compound	0.02	0.05	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
32)	C	1,2-dichloroethane	0.703	0.719	0.653	0.741	0.700	0.678	0.623	0.612	0.594	0.518	0.6539	10.39
33)	I	1,4-difluorobenzene	ISTD											
34)	C	hexane				0.475	0.434	0.424	0.377	0.379	0.384	0.353	0.4037	10.51
35)	s	1,2-dichloroethane-D4				0.257	0.257	0.256	0.248	0.249	0.248	0.230	0.2494	3.78
36)	C	1,1,1-trichloroethane	0.318	0.296	0.287	0.333	0.309	0.300	0.277	0.280	0.272	0.243	0.2915	8.77
37)	C	benzene			0.691	0.944	0.787	0.728	0.647	0.653	0.645	0.611	0.7133	15.21
38)	C	carbon tetrachloride	0.248	0.270	0.251	0.277	0.265	0.262	0.246	0.249	0.237	0.200	0.2506	8.62
39)		cyclohexane				0.492	0.454	0.445	0.397	0.403	0.414	0.394	0.4285	8.58
40)		Dibromomethane		0.276	0.247	0.245	0.217	0.213	0.190	0.191	0.188	0.174	0.2157	15.81
41)	C	1,2-dichloropropane	0.306	0.250	0.247	0.271	0.247	0.246	0.227	0.230	0.228	0.221	0.2473	10.23
42)		bromodichloromethane	0.380	0.369	0.352	0.400	0.369	0.368	0.329	0.334	0.340	0.307	0.3547	7.81
43)	C	1,4-dioxane			0.152	0.179	0.162	0.157	0.137	0.141	0.155	0.149	0.1540	8.35
44)	C	trichloroethene	0.300	0.291	0.251	0.307	0.287	0.279	0.255	0.257	0.256	0.239	0.2723	8.57
45)	C	2,2,4-trimethylpen...		1.616	1.521	1.522	1.414	1.385	1.186	1.223	1.254	1.127	1.3609	12.61
46)		heptane				0.497	0.455	0.446	0.396	0.399	0.413	0.388	0.4276	9.29
47)	C	cis-1,3-dichloropr...	0.286	0.266	0.276	0.318	0.303	0.301	0.291	0.296	0.294	0.271	0.2902	5.42
48)	C	4-methyl-2-pentanone					0.484	0.478	0.432	0.440	0.459	0.431	0.4541	5.13
49)		trans-1,3-dichloro...	0.320	0.308	0.304	0.349	0.337	0.327	0.306	0.315	0.316	0.296	0.3178	5.05
50)	C	1,1,2-trichloroethane	0.244	0.232	0.221	0.260	0.245	0.242	0.220	0.224	0.225	0.222	0.2335	5.79
51)	I	chlorobenzene-D5	ISTD											
52)	C	toluene			5.299	6.623	5.602	5.175	4.516	4.534	4.564	4.526	5.1050	14.61
53)	s	toluene-D8				5.380	5.462	5.392	5.293	5.393	5.571	6.139	5.5188	5.19
54)		2-hexanone				2.446	2.449	2.449	2.255	2.311	2.444	2.390	2.3920	3.32
55)		dibromochloromethane	2.009	1.721	1.656	1.922	1.869	1.839	1.686	1.732	1.818	1.737	1.7988	6.24
56)	C	1,2-dibromoethane	1.851	1.848	1.751	2.067	1.978	1.928	1.772	1.801	1.828	1.780	1.8604	5.44
57)	C	tetrachloroethene	2.201	2.008	1.969	2.158	2.023	1.974	1.786	1.788	1.778	1.684	1.9367	8.90
58)		1,1,1,2-tetrachlor...	1.558	1.355	1.427	1.634	1.559	1.539	1.410	1.430	1.417	1.301	1.4631	7.16
59)	C	chlorobenzene	3.507	3.422	3.313	3.908	3.664	3.599	3.203	3.210	3.227	3.037	3.4090	7.72
60)	C	ethylbenzene	6.036	5.682	5.580	6.532	6.248	6.066	5.472	5.481	5.577	5.373	5.8046	6.71
61)	C	m+p-xylene	4.899	4.676	4.537	5.409	5.152	5.052	4.480	4.485	4.469	4.024	4.7182	8.65

Response Factor Report

Method Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Method File : TSIM4_220921.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Fri Sep 23 09:00:39 2022
Response Via : Initial Calibration

Calibration Files
0.02=r423658_Ev2.D 0.05=r423659_Ev2.D 0.1 =r423660_Ev2.D 0.2 =r423661_Ev2.D 0.5 =r423662_Ev2.D
1.0 =r423663_Ev2.D 5.0 =r423664_Ev2.D 10.0=r423665_Ev2.D 20.0=r423666_Ev2.D 50.0=r423667_Ev2.D

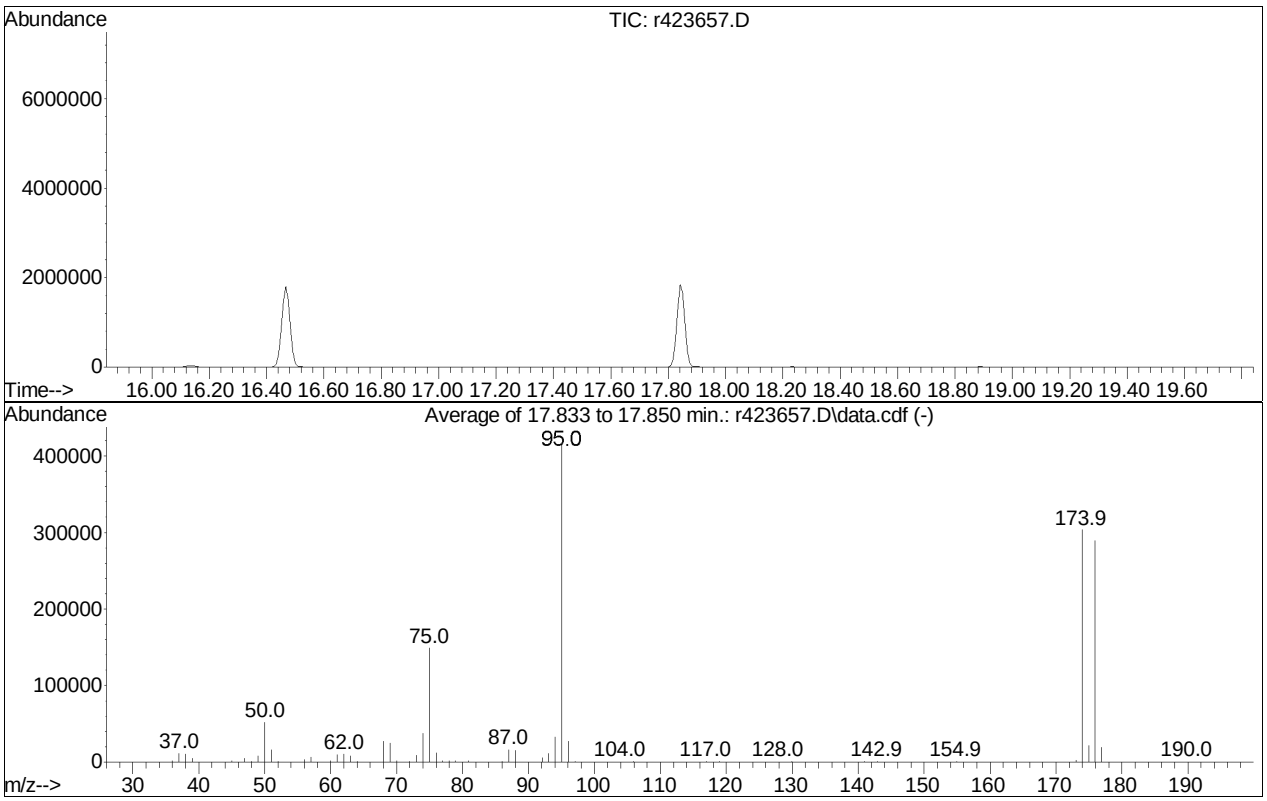
		Compound	0.02	0.05	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
62)	C	bromoform	1.366	1.455	1.409	1.694	1.703	1.740	1.636	1.693	1.786	1.647	1.6129	9.15
63)	C	styrene	3.328	3.246	3.245	3.849	3.854	3.710	3.365	3.408	3.519	3.443	3.4967	6.61
64)	C	1,1,2,2-tetrachlor...	3.274	3.145	3.079	3.623	3.450	3.365	2.967	2.964	3.005	2.733	3.1603	8.45
65)	C	o-xylene	5.220	4.646	4.591	5.436	5.315	5.072	4.512	4.442	4.365	3.806	4.7407	10.76
66)		1,2,3-Trichloropro...	2.509	2.404	2.333	2.847	2.734	2.644	2.399	2.413	2.424	2.332	2.5039	7.10
67)	s	bromofluorobenzene				3.918	3.963	3.931	3.913	3.958	4.071	4.538	4.0417	5.58
68)	C	isopropylbenzene				6.810	6.526	6.376	5.658	5.607	5.480	5.088	5.9351	10.70
69)		Bromobenzene	3.397	3.329	3.207	3.950	3.873	3.753	3.354	3.328	3.321	3.106	3.4618	8.37
70)		4-ethyl toluene	5.233	5.711	5.531	7.038	6.744	6.725	5.666	5.615	5.821	5.319	5.9402	10.89
71)		1,3,5-trimethylben...	5.752	4.953	4.883	6.092	5.790	5.776	4.946	4.878	4.850	4.422	5.2341	10.70
72)		tert-butylbenzene				6.731	6.338	6.399	5.501	5.420	5.032	4.169	5.6558	15.90
73)		1,2,4-trimethylben...	5.006	4.914	4.800	5.927	5.642	5.677	4.736	4.587	4.410	3.789	4.9489	13.14
74)	C	Benzyl Chloride			2.720	3.516	3.520	3.652	3.766	3.900	3.764	3.404	3.5303	10.35
75)		1,3-dichlorobenzene	2.597	2.571	2.589	3.285	3.250	3.199	2.708	2.678	2.772	2.621	2.8270	10.44
76)	C	1,4-dichlorobenzene	2.575	2.557	2.656	3.218	3.213	3.192	2.687	2.699	2.839	2.664	2.8301	9.59
77)		sec-butylbenzene				8.757	8.223	8.258	7.223	7.104	6.838	6.140	7.5061	12.40
78)		p-isopropyltoluene				8.053	7.630	7.586	6.647	6.456	5.994	4.905	6.7532	16.27
79)		1,2-dichlorobenzene	2.497	2.513	2.389	3.045	2.978	2.972	2.528	2.539	2.632	2.547	2.6640	8.97
80)		n-butylbenzene				6.991	6.657	6.683	6.064	6.097	5.925	5.282	6.2425	9.25
81)		1,2-dibromo-3-chlo...	1.237	1.022	1.026	1.336	1.323	1.334	1.297	1.313	1.256	1.113	1.2257	10.22
82)	C	1,2,4-trichloroben...		1.874	1.748	2.418	2.526	2.557	2.554	2.647	2.647	2.427	2.3774	13.99
83)		naphthalene		7.940	6.225	6.649	6.766	6.817	6.861	7.091	6.513	6.012	6.7638	8.15
84)		1,2,3-trichloroben...		1.901	1.744	2.340	2.488	2.510	2.741	2.781	2.585	2.384	2.3860	14.80
85)	C	hexachlorobutadiene		2.161	2.117	2.603	2.592	2.606	2.388	2.283	2.072	1.737	2.2843	12.93

(#) = Out of Range

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423657.D
Acq On : 21 Sep 2022 8:59 PM
Operator : AIRPIANO4:RY
Sample : WG1691192-1,3,250,250
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Integration File: rteint.p

Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Fri Sep 23 09:00:39 2022



Spectrum Information: Average of 17.833 to 17.850 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	12.4	51958	PASS
75	95	30	66	35.7	148821	PASS
95	95	100	100	100.0	417434	PASS
96	95	5	9	6.5	27049	PASS
173	174	0.00	2	0.8	2504	PASS
174	95	50	120	72.8	304009	PASS
175	174	4	9	7.2	21966	PASS
176	174	93	101	95.3	289805	PASS
177	176	5	9	6.7	19273	PASS

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423658_Ev2.D
Acq On : 21 Sep 2022 9:35 PM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD0.02
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:49:45 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.47	49	310263	10.000	ppbV	0.00
Standard Area = 305189			Recovery = 101.66%			
33) 1,4-difluorobenzene	11.73	114	911136	10.000	ppbV	0.00
Standard Area = 898219			Recovery = 101.44%			
51) chlorobenzene-D5	16.46	54	158807	10.000	ppbV	0.00
Standard Area = 156074			Recovery = 101.75%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.35	65	50	0.002	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 0.02%#			
53) toluene-D8	14.57	98	589	0.007	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 0.07%#			
67) bromofluorobenzene	17.84	95	2728	0.044	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 0.44%#			
Target Compounds						Qvalue
2) propylene	3.89	41	523M6	0.038	ppbV	
3) dichlorodifluoromethane	3.96	85	627	0.023	ppbV	95
4) chloromethane	4.14	50	270	0.025	ppbV	91
5) Freon-114	4.26	85	714	0.022	ppbV	97
6) vinyl chloride	4.40	62	381	0.023	ppbV #	85
7) 1,3-butadiene	4.56	54	288	0.023	ppbV #	47
8) bromomethane	4.86	94	321	0.023	ppbV	99
9) chloroethane	5.08	64	179	0.021	ppbV #	69
10) ethanol	5.28	31	1614	0.142	ppbV	98
11) vinyl bromide	5.51	106	285M4	0.025	ppbV	
12) acrolein	5.67	56	166	0.022	ppbV #	54
13) acetone	5.85	43	2267	0.148	ppbV #	96
14) trichlorofluoromethane	6.01	101	500M4	0.025	ppbV	
15) isopropyl alcohol	6.18	45	3568	0.178	ppbV #	92
16) acrylonitrile	6.40	53	272	0.023	ppbV #	88
17) 1,1-dichloroethene	6.77	61	446	0.017	ppbV #	82
18) tertiary butyl alcohol	6.92	59	964	0.025	ppbV #	84
19) methylene chloride	6.94	49	831	0.045	ppbV	91
20) 3-chloropropene	7.07	41	575	0.024	ppbV #	80
21) carbon disulfide	7.22	76	1504	0.032	ppbV #	1
22) Freon 113	7.27	101	664	0.024	ppbV	95
23) trans-1,2-dichloroethene	8.05	61	585	0.022	ppbV	95
24) 1,1-dichloroethane	8.28	63	759	0.024	ppbV	92

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423658_Ev2.D
Acq On : 21 Sep 2022 9:35 PM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD0.02
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:49:45 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	8.41	73	1076	0.025	ppbV	#	76
26) vinyl acetate	8.52	43	919	0.028	ppbV		98
27) 2-butanone	8.82	43	837	0.025	ppbV	#	91
28) cis-1,2-dichloroethene	9.28	61	539	0.022	ppbV		94
29) Ethyl Acetate	9.62	61	282	0.044	ppbV	#	34
30) chloroform	9.63	83	606	0.021	ppbV	#	93
31) Tetrahydrofuran	10.13	42	518	0.024	ppbV		94
32) 1,2-dichloroethane	10.48	62	436	0.023	ppbV	#	82
34) hexane	9.53	57	898	0.026	ppbV	#	58
36) 1,1,1-trichloroethane	10.76	97	580	0.023	ppbV	#	87
37) benzene	11.29	78	1489	0.025	ppbV	#	91
38) carbon tetrachloride	11.47	117	452	0.020	ppbV	#	93
39) cyclohexane	11.60	56	919	0.025	ppbV		90
40) Dibromomethane	12.21	93	740	0.043	ppbV	#	97
41) 1,2-dichloropropane	12.25	63	557	0.027	ppbV	#	88
42) bromodichloromethane	12.47	83	692	0.023	ppbV	#	92
43) 1,4-dioxane	12.59	88	380M4	0.030	ppbV		
44) trichloroethene	12.52	130	546M4	0.023	ppbV		
45) 2,2,4-trimethylpentane	12.57	57	3474	0.032	ppbV		97
46) heptane	12.89	43	840	0.023	ppbV	#	97
47) cis-1,3-dichloropropene	14.17	75	521	0.020	ppbV	#	62
48) 4-methyl-2-pentanone	13.62	43	1015	0.026	ppbV	#	91
49) trans-1,3-dichloropropene	13.54	75	584	0.021	ppbV	#	66
50) 1,1,2-trichloroethane	14.36	97	444	0.022	ppbV		97
52) toluene	14.68	91	1925	0.027	ppbV		93
54) 2-hexanone	15.00	43	621	0.017	ppbV		90
55) dibromochloromethane	15.13	129	638	0.024	ppbV	#	93
56) 1,2-dibromoethane	15.38	107	588	0.021	ppbV		98
57) tetrachloroethene	15.85	166	699	0.025	ppbV	#	90
58) 1,1,1,2-tetrachloroethane	16.49	131	495	0.022	ppbV	#	92
59) chlorobenzene	16.51	112	1114	0.022	ppbV	#	93
60) ethylbenzene	16.86	91	1917	0.022	ppbV		97
61) m+p-xylene	17.02	91	3112	0.044	ppbV		99
62) bromoform	17.09	173	434	0.017	ppbV		96
63) styrene	17.35	104	1057	0.020	ppbV		94
64) 1,1,2,2-tetrachloroethane	17.44	83	1040	0.022	ppbV		93
65) o-xylene	17.44	91	1658	0.023	ppbV		94
66) 1,2,3-Trichloropropane	17.56	75	797	0.021	ppbV		96
68) isopropylbenzene	17.96	105	2067	0.023	ppbV		98
69) Bromobenzene	18.03	77	1079	0.020	ppbV		99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423658_Ev2.D
Acq On : 21 Sep 2022 9:35 PM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD0.02
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:49:45 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.52	105	1662	0.018	ppbV	98
71) 1,3,5-trimethylbenzene	18.58	105	1827	0.023	ppbV #	99
72) tert-butylbenzene	18.93	119	1880	0.022	ppbV	98
73) 1,2,4-trimethylbenzene	18.93	105	1590	0.021	ppbV	98
74) Benzyl Chloride	19.05	91	862	0.014	ppbV	98
75) 1,3-dichlorobenzene	19.07	146	825M3	0.019	ppbV	
76) 1,4-dichlorobenzene	19.13	146	818	0.019	ppbV	94
77) sec-butylbenzene	19.15	105	2287	0.020	ppbV	98
78) p-isopropyltoluene	19.28	119	2621	0.025	ppbV	99
79) 1,2-dichlorobenzene	19.41	146	793	0.020	ppbV	92
80) n-butylbenzene	19.64	91	1786	0.019	ppbV	96
81) 1,2-dibromo-3-chloropr...	19.80	75	393	0.019	ppbV	88
82) 1,2,4-trichlorobenzene	20.92	180	636	0.016	ppbV #	87
83) naphthalene	21.02	128	13282	0.122	ppbV	98
84) 1,2,3-trichlorobenzene	21.27	180	745	0.017	ppbV #	86
85) hexachlorobutadiene	21.33	225	768	0.020	ppbV #	93

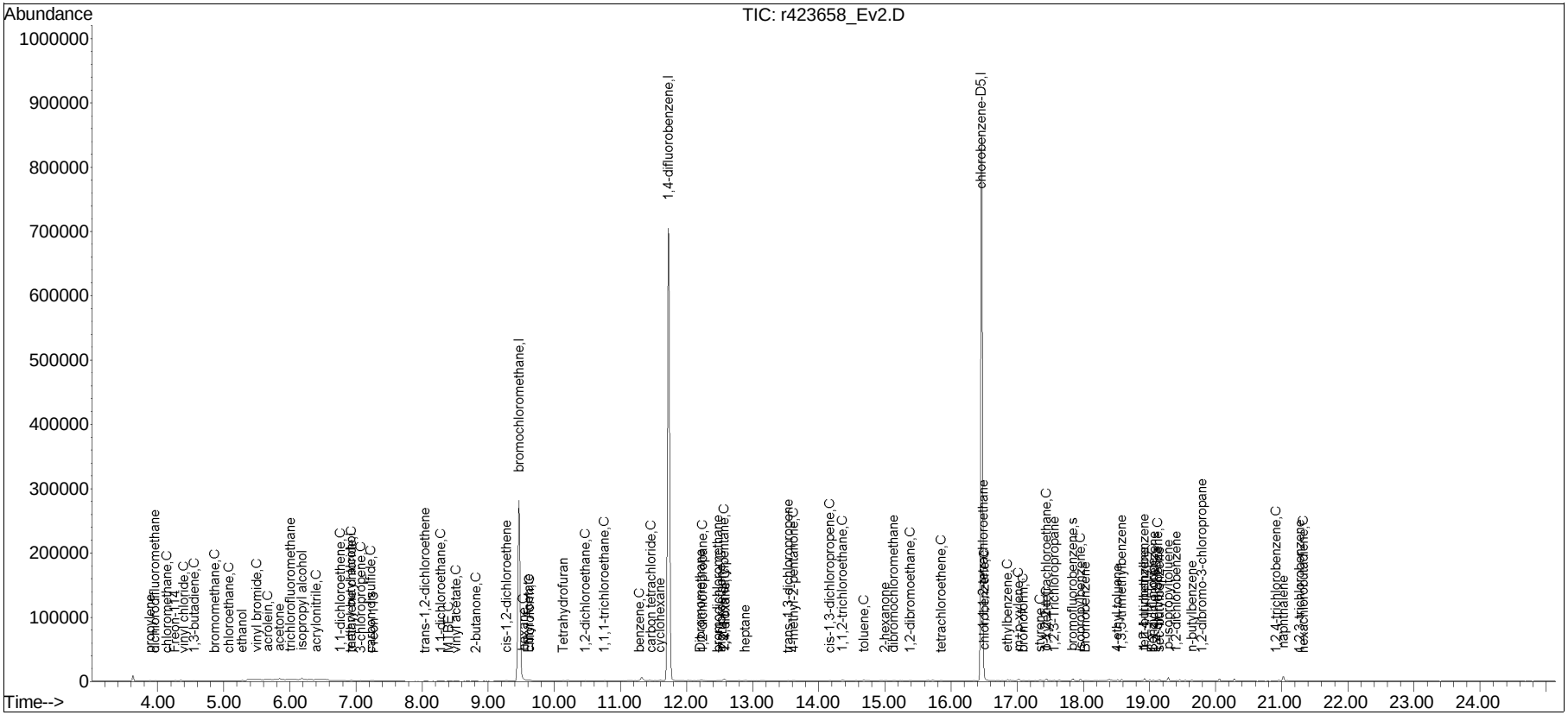
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423658_Ev2.D
Acq On : 21 Sep 2022 9:35 PM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD0.02
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:49:45 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

Sub List : Default - All compounds listed22\09\0921SIM_I\r423664_Ev2.D

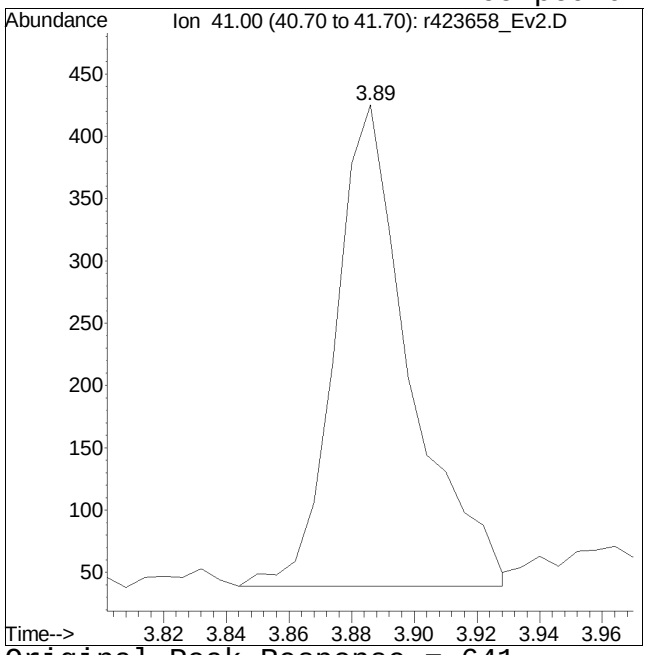


Manual Integration/Negative Proof Report

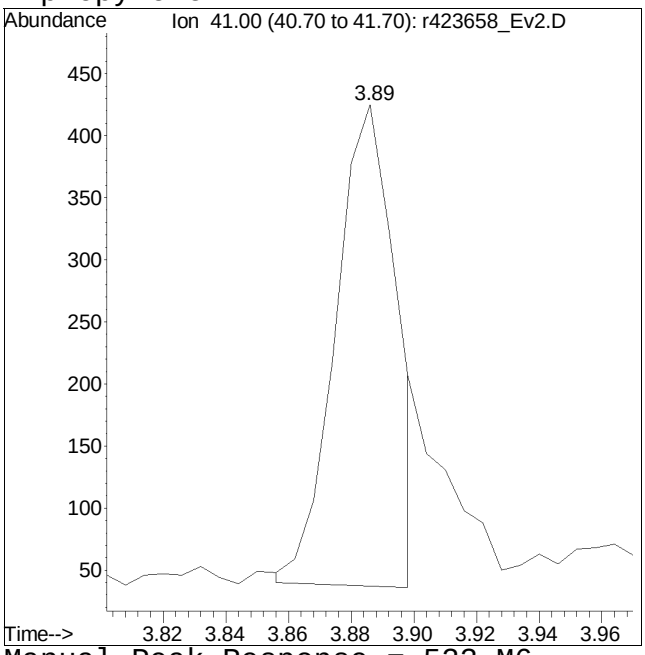
Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423658_Ev2.D
Date Inj'd : 9/21/2020 0:9: 5
Sample : ITO15-SIMSTD0.02

Method : TSIM4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 12:17 pm

Compound #2: propylene



Original Peak Response = 641



Manual Peak Response = 523 M6

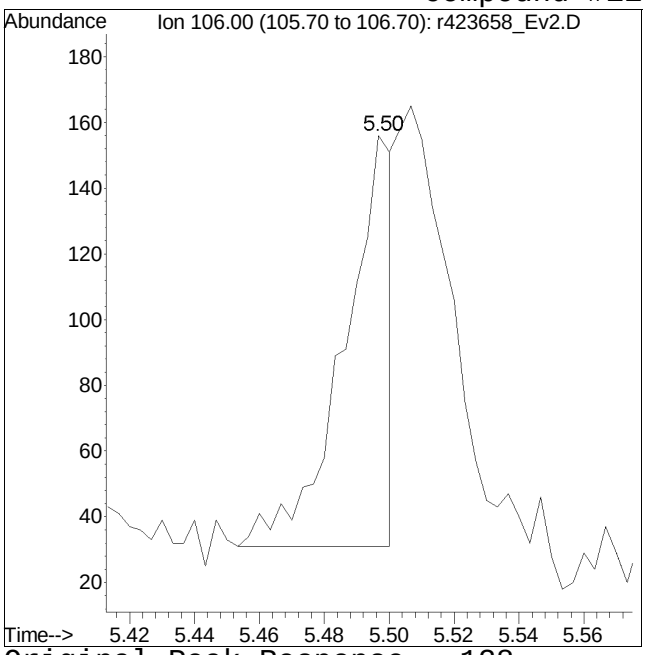
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

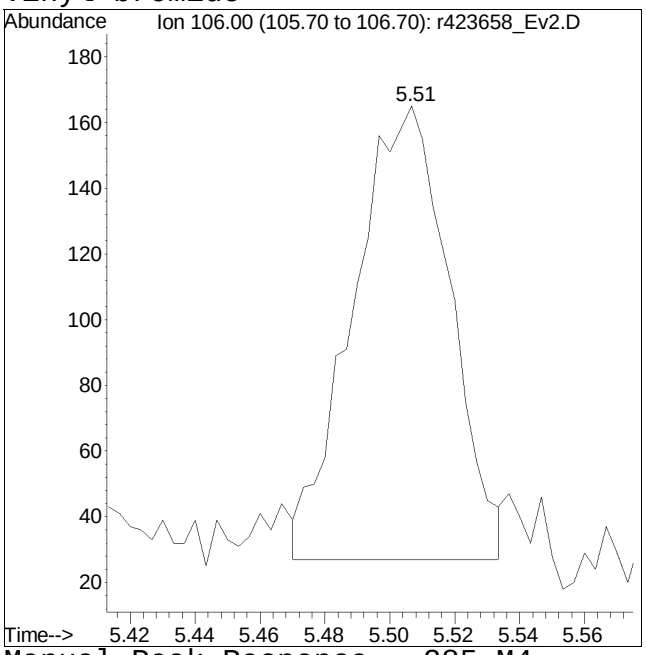
Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423658_Ev2.D
Date Inj'd : 9/21/2020 0:9: 5
Sample : ITO15-SIMSTD0.02

Method : TSIM4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 12:17 pm

Compound #11: vinyl bromide



Original Peak Response = 128



Manual Peak Response = 285 M4

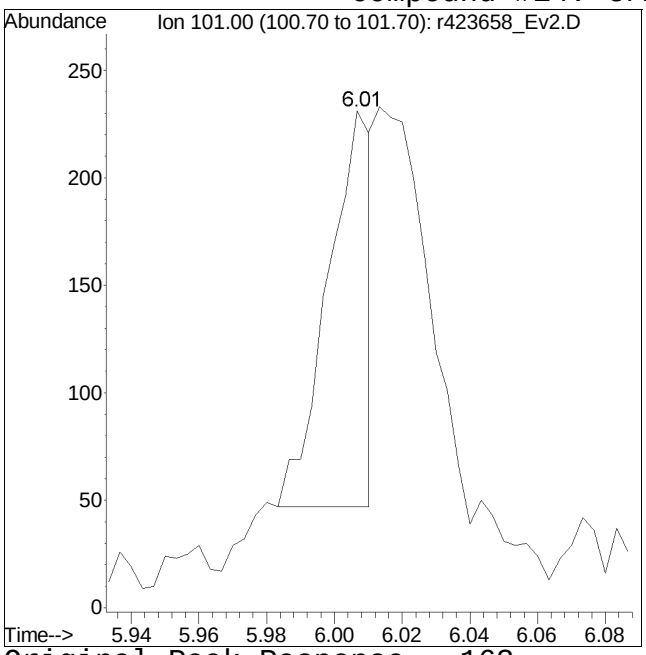
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

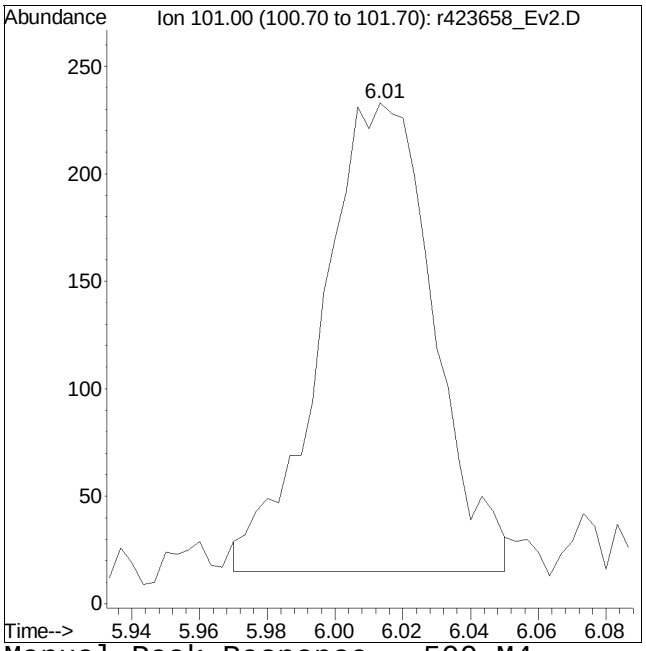
Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423658_Ev2.D
Date Inj'd : 9/21/2020 0:9: 5
Sample : ITO15-SIMSTD0.02

Method : TSIM4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 12:17 pm

Compound #14: trichlorofluoromethane



Original Peak Response = 163



Manual Peak Response = 500 M4

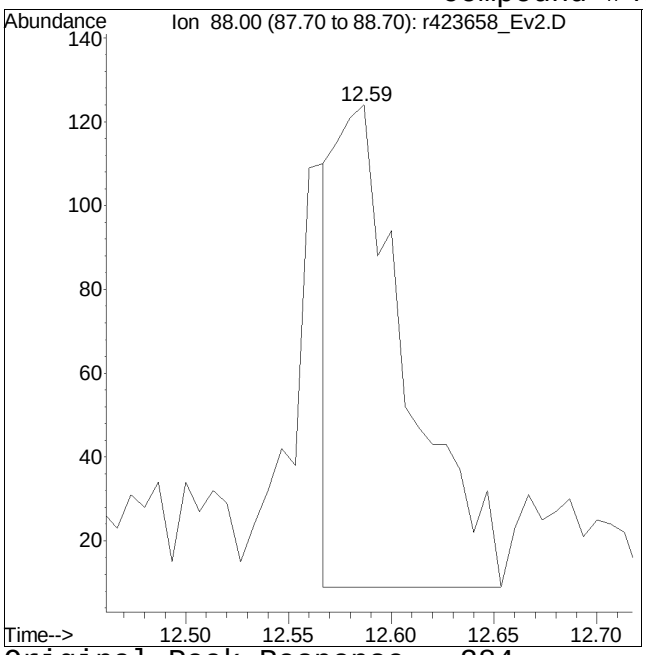
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

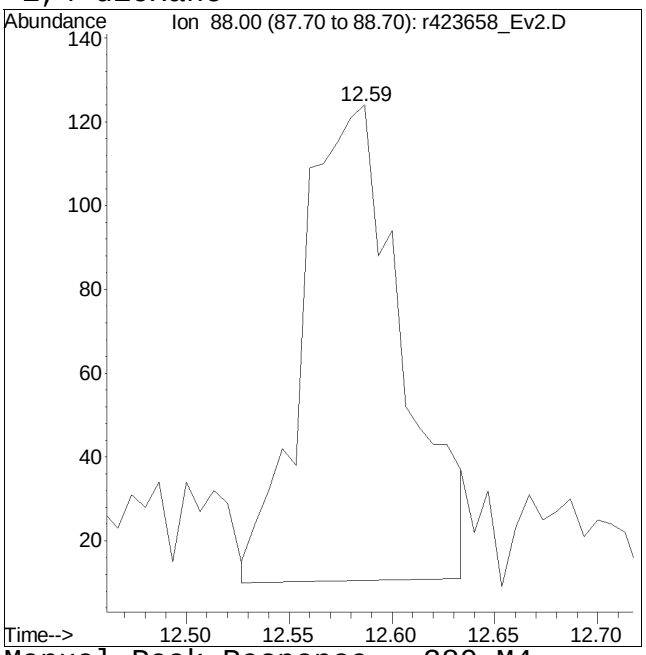
Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423658_Ev2.D
Date Inj'd : 9/21/2020 0:9: 5
Sample : ITO15-SIMSTD0.02

Method : TSIM4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 12:17 pm

Compound #43: 1,4-dioxane



Original Peak Response = 284



Manual Peak Response = 380 M4

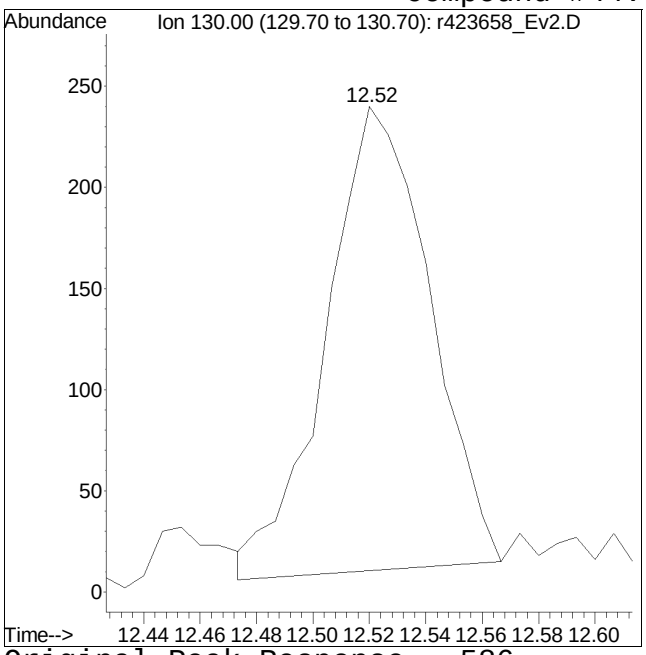
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

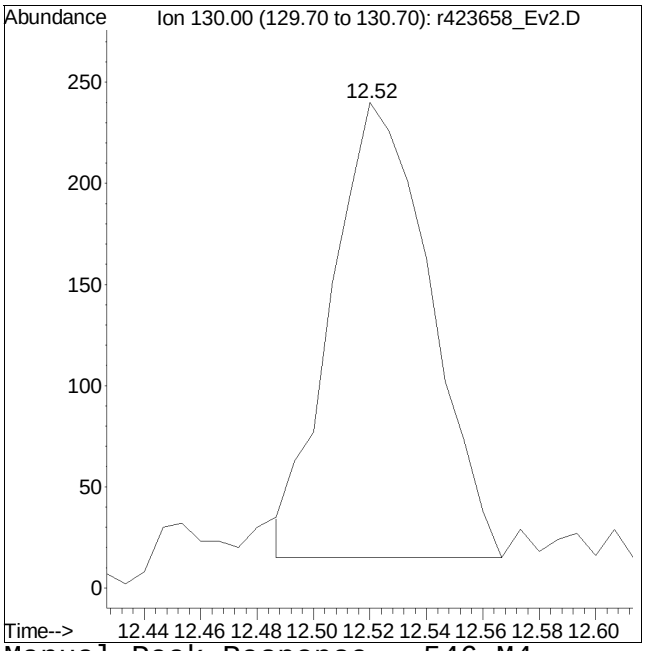
Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423658_Ev2.D
Date Inj'd : 9/21/2020 0:9: 5
Sample : ITO15-SIMSTD0.02

Method : TSIM4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 12:17 pm

Compound #44: trichloroethene



Original Peak Response = 586



Manual Peak Response = 546 M4

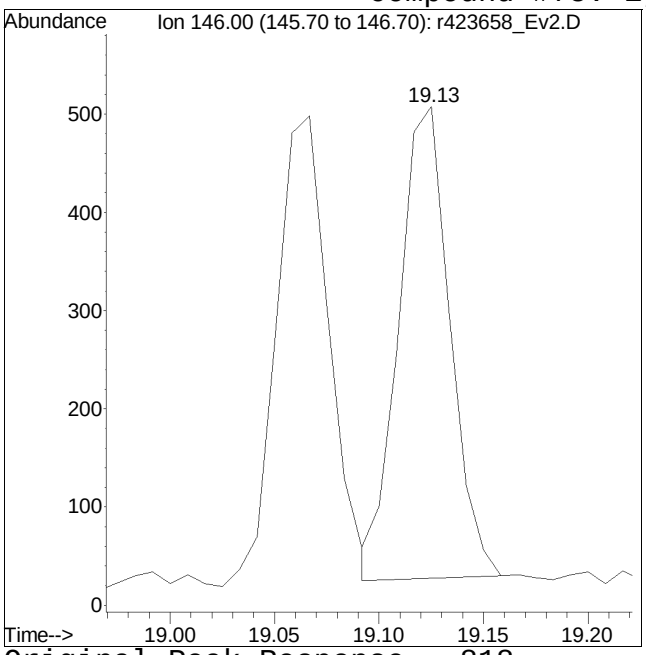
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

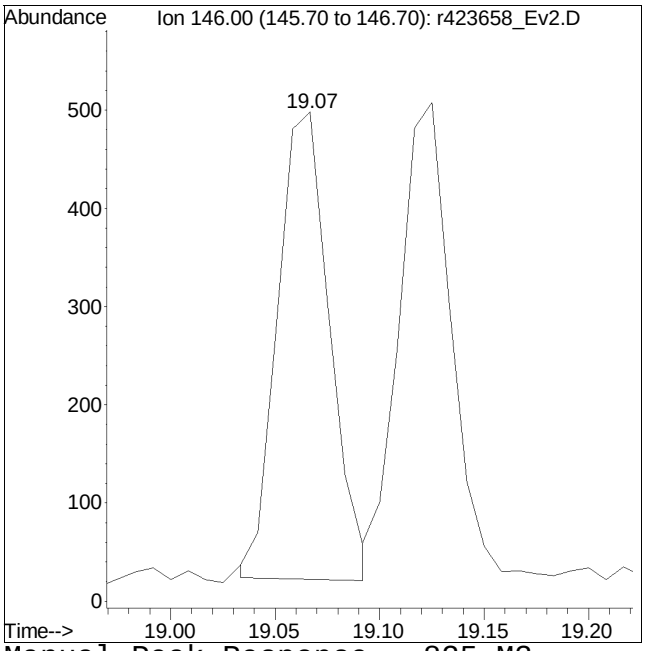
Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423658_Ev2.D
Date Inj'd : 9/21/2020 0:9: 5
Sample : ITO15-SIMSTD0.02

Method : TSIM4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 12:17 pm

Compound #75: 1,3-dichlorobenzene



Original Peak Response = 818



Manual Peak Response = 825 M3

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423659_Ev2.D
Acq On : 21 Sep 2022 10:11 PM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD0.05
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:51:52 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.47	49	305910	10.000	ppbV	0.00
Standard Area = 305189			Recovery = 100.24%			
33) 1,4-difluorobenzene	11.73	114	907525	10.000	ppbV	0.00
Standard Area = 898219			Recovery = 101.04%			
51) chlorobenzene-D5	16.46	54	158370	10.000	ppbV	0.00
Standard Area = 156074			Recovery = 101.47%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	0.00	65	0d	0.000	ppbV	
Spiked Amount 10.000	Range 70 - 130		Recovery = 0.00%#			
53) toluene-D8	14.57	98	238	0.003	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 0.03%#			
67) bromofluorobenzene	17.84	95	786	0.013	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 0.13%#			
Target Compounds						Qvalue
2) propylene	3.89	41	969M6	0.071	ppbV	
3) dichlorodifluoromethane	3.97	85	1472	0.055	ppbV	100
4) chloromethane	4.14	50	623	0.057	ppbV	91
5) Freon-114	4.27	85	1780	0.056	ppbV	97
6) vinyl chloride	4.40	62	915	0.056	ppbV	90
7) 1,3-butadiene	4.56	54	700	0.057	ppbV	82
8) bromomethane	4.87	94	793	0.059	ppbV	100
9) chloroethane	5.09	64	486	0.057	ppbV #	83
10) ethanol	5.28	31	3943	0.353	ppbV	95
11) vinyl bromide	5.51	106	602	0.054	ppbV	99
12) acrolein	5.68	56	385M4	0.052	ppbV	
13) acetone	5.85	43	4546	0.300	ppbV #	98
14) trichlorofluoromethane	6.02	101	1074	0.053	ppbV	92
15) isopropyl alcohol	6.18	45	5106	0.258	ppbV	97
16) acrylonitrile	6.40	53	586	0.049	ppbV #	94
17) 1,1-dichloroethene	6.77	61	1093	0.042	ppbV #	87
18) tertiary butyl alcohol	6.92	59	1714	0.045	ppbV #	89
19) methylene chloride	6.94	49	1350	0.074	ppbV	96
20) 3-chloropropene	7.07	41	1263	0.054	ppbV #	88
21) carbon disulfide	7.23	76	2946	0.063	ppbV #	23
22) Freon 113	7.27	101	1480	0.053	ppbV	97
23) trans-1,2-dichloroethene	8.05	61	1438	0.056	ppbV	95
24) 1,1-dichloroethane	8.28	63	1661	0.053	ppbV	92

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423659_Ev2.D
Acq On : 21 Sep 2022 10:11 PM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD0.05
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:51:52 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	8.41	73	2366	0.056	ppbV	#	90
26) vinyl acetate	8.52	43	1957	0.060	ppbV		99
27) 2-butanone	8.81	43	1785	0.055	ppbV	#	94
28) cis-1,2-dichloroethene	9.28	61	1282	0.054	ppbV		99
29) Ethyl Acetate	9.61	61	379M6	0.060	ppbV		
30) chloroform	9.63	83	1588	0.055	ppbV	#	97
31) Tetrahydrofuran	10.13	42	1166	0.056	ppbV		96
32) 1,2-dichloroethane	10.48	62	1099	0.058	ppbV		93
34) hexane	9.54	57	1986	0.058	ppbV	#	60
36) 1,1,1-trichloroethane	10.76	97	1342	0.053	ppbV	#	92
37) benzene	11.29	78	3169	0.054	ppbV		97
38) carbon tetrachloride	11.47	117	1225	0.055	ppbV	#	95
39) cyclohexane	11.61	56	1988	0.055	ppbV		90
40) Dibromomethane	12.22	93	1252	0.073	ppbV	#	100
41) 1,2-dichloropropane	12.25	63	1134	0.055	ppbV	#	90
42) bromodichloromethane	12.47	83	1673	0.056	ppbV	#	91
43) 1,4-dioxane	12.57	88	702	0.056	ppbV	#	67
44) trichloroethene	12.53	130	1322	0.057	ppbV		94
45) 2,2,4-trimethylpentane	12.57	57	7331	0.068	ppbV		96
46) heptane	12.89	43	2080	0.058	ppbV		95
47) cis-1,3-dichloropropene	14.17	75	1209	0.046	ppbV	#	76
48) 4-methyl-2-pentanone	13.61	43	2132	0.054	ppbV		98
49) trans-1,3-dichloropropene	13.54	75	1396	0.050	ppbV		89
50) 1,1,2-trichloroethane	14.37	97	1051	0.053	ppbV		97
52) toluene	14.68	91	4252	0.059	ppbV		98
54) 2-hexanone	15.00	43	1814	0.051	ppbV		96
55) dibromochloromethane	15.13	129	1363	0.051	ppbV	#	92
56) 1,2-dibromoethane	15.38	107	1463	0.052	ppbV		97
57) tetrachloroethene	15.85	166	1590	0.056	ppbV	#	94
58) 1,1,1,2-tetrachloroethane	16.49	131	1073	0.048	ppbV		98
59) chlorobenzene	16.50	112	2710	0.053	ppbV		95
60) ethylbenzene	16.86	91	4499	0.052	ppbV		97
61) m+p-xylene	17.02	91	7405	0.104	ppbV		98
62) bromoform	17.09	173	1152	0.044	ppbV		98
63) styrene	17.35	104	2570	0.048	ppbV		95
64) 1,1,2,2-tetrachloroethane	17.44	83	2490	0.053	ppbV		99
65) o-xylene	17.44	91	3679	0.051	ppbV		99
66) 1,2,3-Trichloropropane	17.56	75	1904	0.050	ppbV		94
68) isopropylbenzene	17.96	105	4496	0.050	ppbV		100
69) Bromobenzene	18.03	77	2636	0.050	ppbV		98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423659_Ev2.D
Acq On : 21 Sep 2022 10:11 PM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD0.05
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:51:52 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.52	105	4522	0.050	ppbV	99
71) 1,3,5-trimethylbenzene	18.58	105	3922	0.050	ppbV #	99
72) tert-butylbenzene	18.93	119	4396	0.050	ppbV	98
73) 1,2,4-trimethylbenzene	18.93	105	3891	0.052	ppbV	98
74) Benzyl Chloride	19.05	91	2212	0.037	ppbV	99
75) 1,3-dichlorobenzene	19.07	146	2036	0.047	ppbV	95
76) 1,4-dichlorobenzene	19.12	146	2025M3	0.048	ppbV	
77) sec-butylbenzene	19.15	105	5583	0.049	ppbV	99
78) p-isopropyltoluene	19.28	119	5252	0.050	ppbV	98
79) 1,2-dichlorobenzene	19.41	146	1990	0.050	ppbV	99
80) n-butylbenzene	19.64	91	4301	0.045	ppbV	100
81) 1,2-dibromo-3-chloropr...	19.80	75	809	0.039	ppbV #	89
82) 1,2,4-trichlorobenzene	20.91	180	1484	0.037	ppbV	93
83) naphthalene	21.02	128	6287	0.058	ppbV	96
84) 1,2,3-trichlorobenzene	21.27	180	1505	0.035	ppbV #	86
85) hexachlorobutadiene	21.33	225	1711	0.045	ppbV #	94

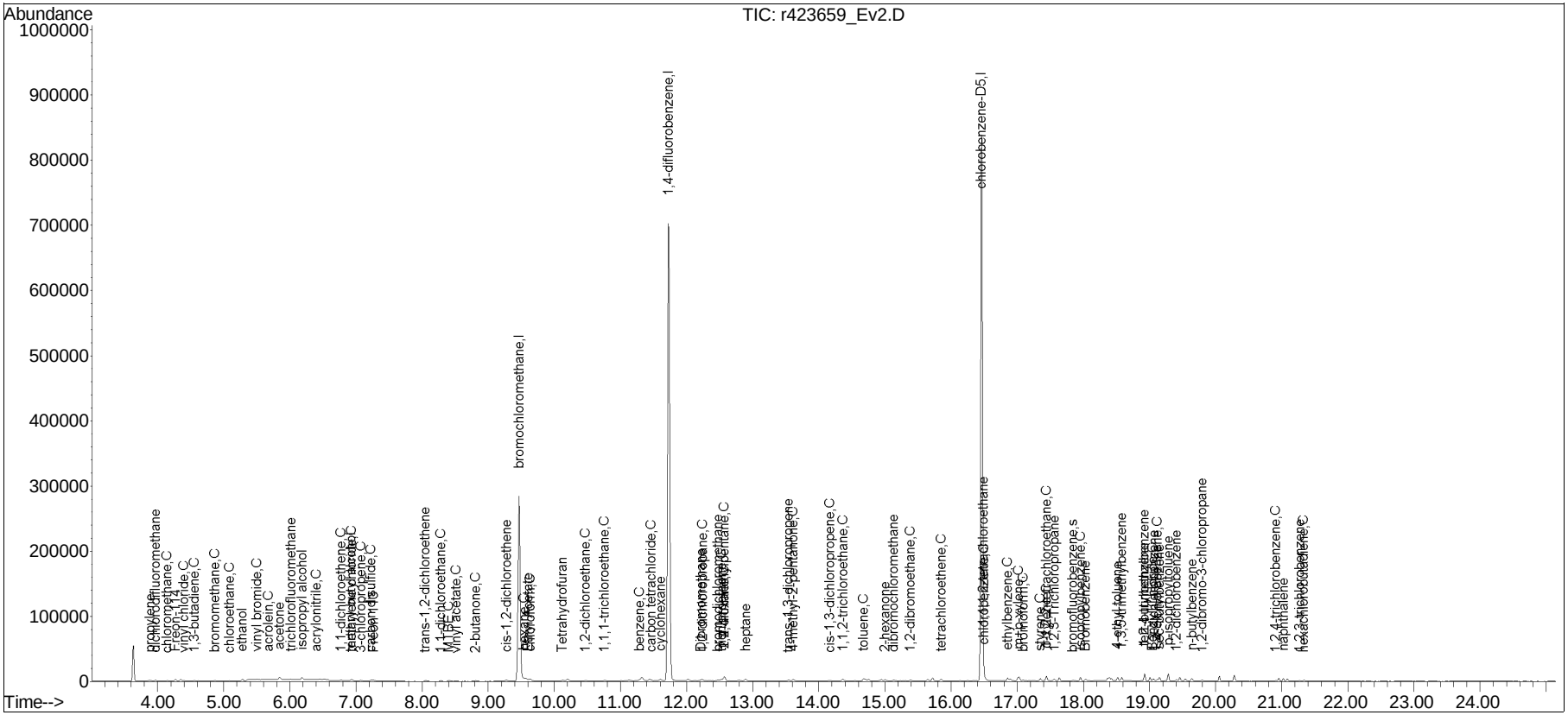
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423659_Ev2.D
Acq On : 21 Sep 2022 10:11 PM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD0.05
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:51:52 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

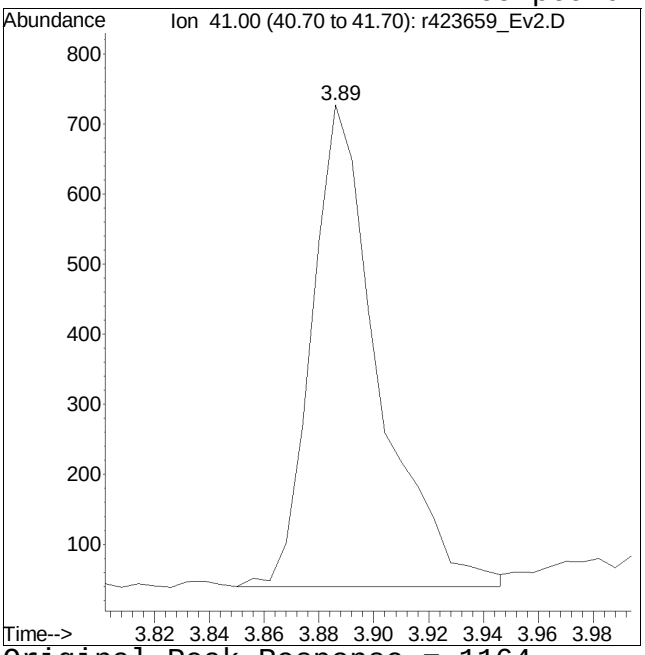
Sub List : Default - All compounds listed22\09\0921SIM_I\r423664_Ev2.D



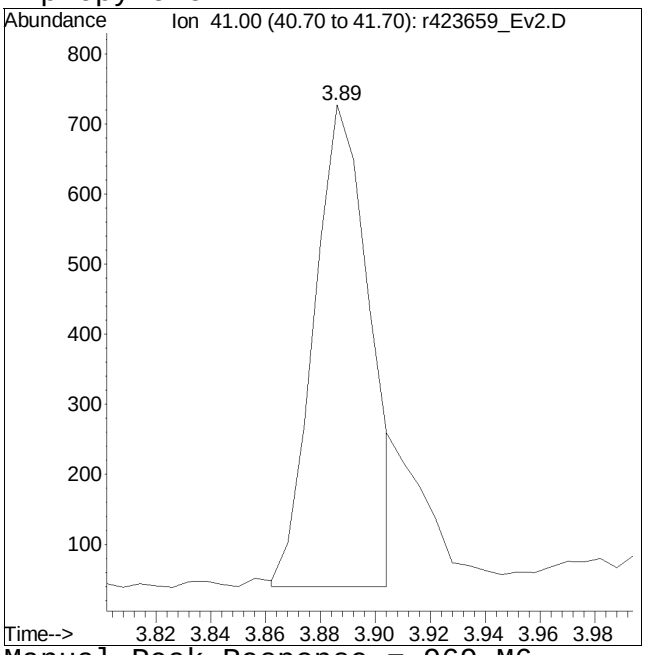
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airpiano4QMethod : TSIM4_220921.M
Data File : r423659_Ev2.D Operator : AIRPIANO4:RY
Date Inj'd : 9/21/2020 0:0: 1 Instrument :
Sample : ITO15-SIMSTD0.05 Quant Date : 9/22/2022 12:17 pm

Compound #2: propylene



Original Peak Response = 1164



Manual Peak Response = 969 M6

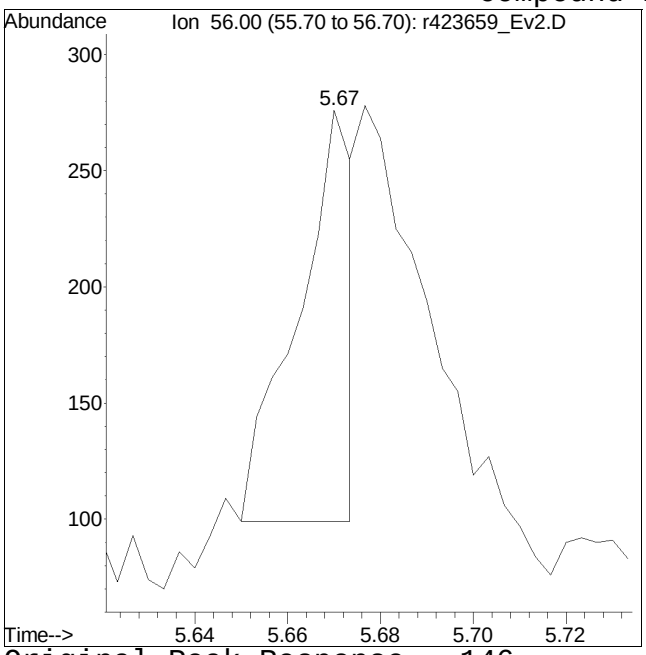
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

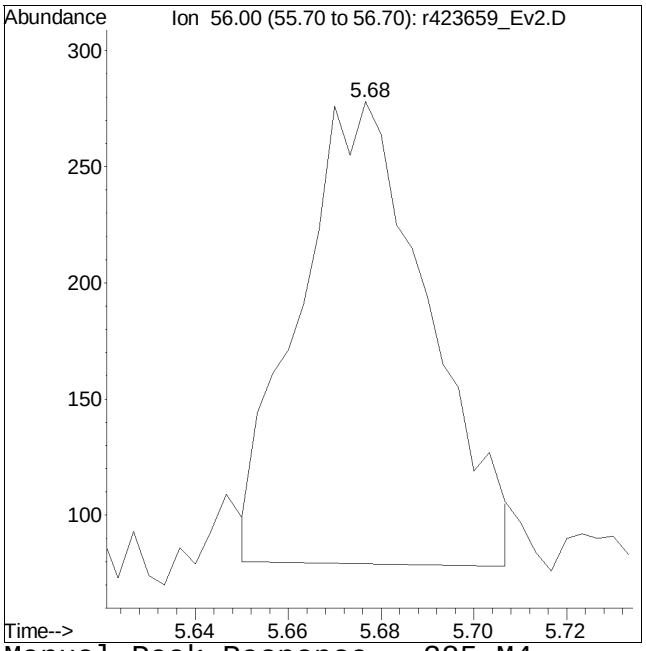
Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423659_Ev2.D
Date Inj'd : 9/21/2020 0:0: 1
Sample : ITO15-SIMSTD0.05

Method : TSIM4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 12:17 pm

Compound #12: acrolein



Original Peak Response = 146



Manual Peak Response = 385 M4

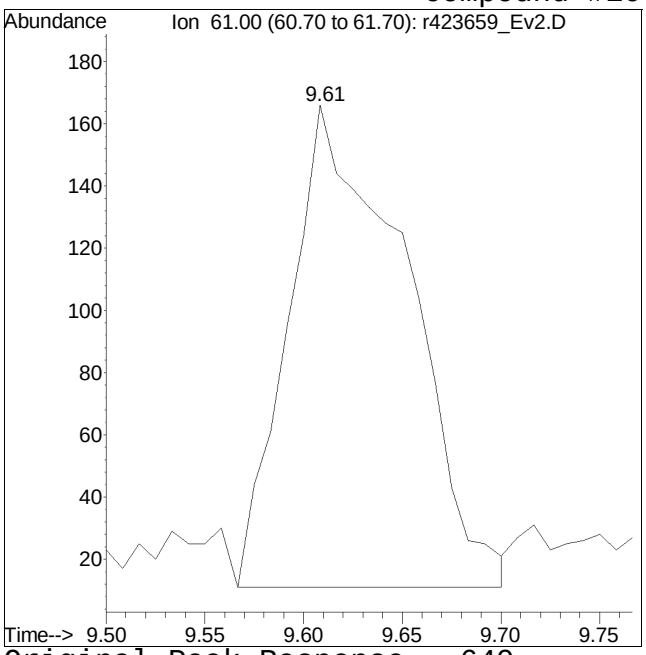
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

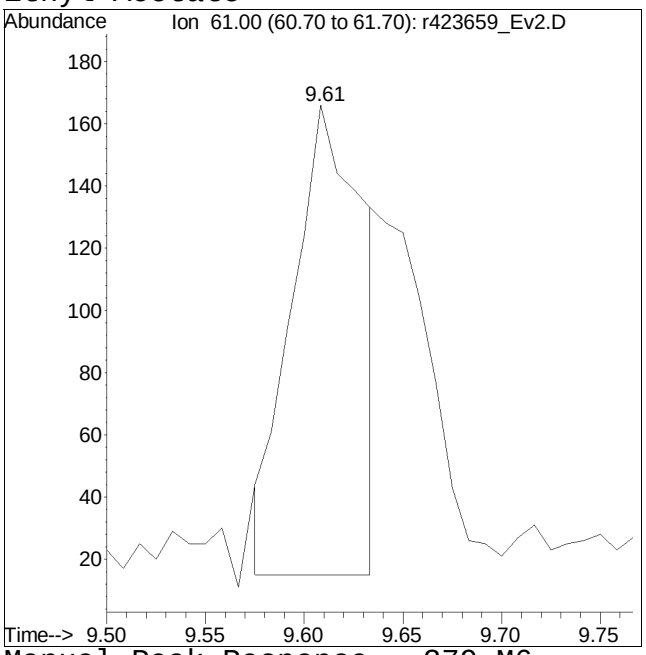
Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423659_Ev2.D
Date Inj'd : 9/21/2020 0:0: 1
Sample : ITO15-SIMSTD0.05

Method : TSIM4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 12:17 pm

Compound #29: Ethyl Acetate



Original Peak Response = 640



Manual Peak Response = 379 M6

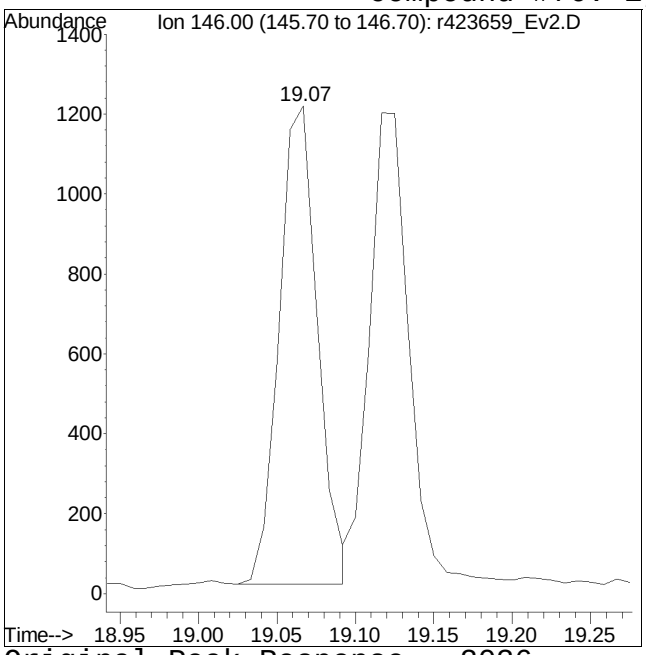
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

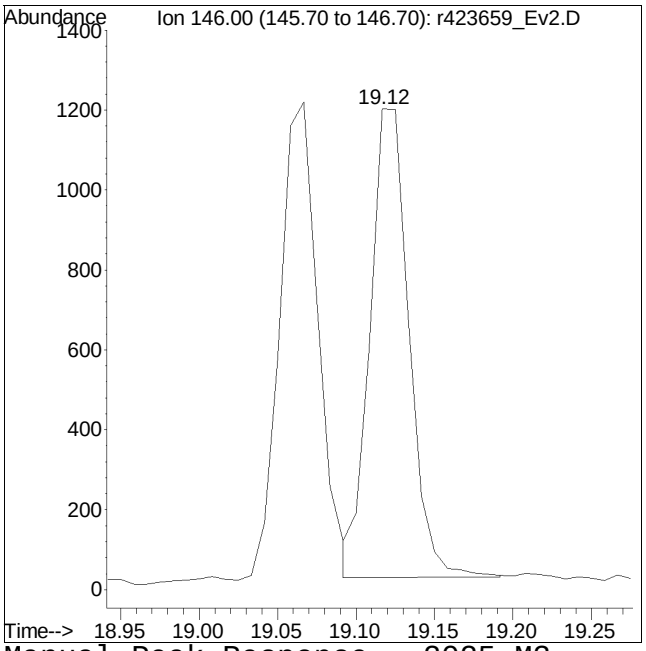
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423659_Ev2.D
Date Inj'd : 9/21/2020 0:0: 1
Sample : ITO15-SIMSTD0.05

Method : TSIM4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 12:17 pm

Compound #76: 1,4-dichlorobenzene





Original Peak Response = 2036 Manual Peak Response = 2025 M3

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423660_Ev2.D
Acq On : 21 Sep 2022 10:50 PM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD0.1
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:53:37 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.47	49	309090	10.000	ppbV	0.00
Standard Area = 305189			Recovery = 101.28%			
33) 1,4-difluorobenzene	11.73	114	902415	10.000	ppbV	0.00
Standard Area = 898219			Recovery = 100.47%			
51) chlorobenzene-D5	16.46	54	159235	10.000	ppbV	0.00
Standard Area = 156074			Recovery = 102.03%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	0.00	65	0d	0.000	ppbV	
Spiked Amount 10.000	Range 70 - 130		Recovery = 0.00%#			
53) toluene-D8	14.57	98	283	0.003	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 0.03%#			
67) bromofluorobenzene	17.84	95	785	0.013	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 0.13%#			
Target Compounds						Qvalue
2) propylene	3.89	41	1611M6	0.117	ppbV	
3) dichlorodifluoromethane	3.96	85	2903	0.107	ppbV	96
4) chloromethane	4.14	50	1210	0.110	ppbV	95
5) Freon-114	4.26	85	3424	0.107	ppbV	99
6) vinyl chloride	4.40	62	1745	0.105	ppbV	98
7) 1,3-butadiene	4.56	54	1372	0.110	ppbV	88
8) bromomethane	4.86	94	1436	0.105	ppbV	100
9) chloroethane	5.08	64	876	0.102	ppbV	92
10) ethanol	5.28	31	7384	0.654	ppbV	98
11) vinyl bromide	5.50	106	1257	0.112	ppbV	98
12) acrolein	5.67	56	708	0.094	ppbV #	89
13) acetone	5.84	43	8730	0.571	ppbV #	98
14) trichlorofluoromethane	6.01	101	2142	0.106	ppbV	97
15) isopropyl alcohol	6.18	45	7541	0.377	ppbV	99
16) acrylonitrile	6.40	53	1287	0.107	ppbV	96
17) 1,1-dichloroethene	6.77	61	2193	0.083	ppbV #	86
18) tertiary butyl alcohol	6.91	59	3167	0.083	ppbV	98
19) methylene chloride	6.94	49	2003	0.109	ppbV	94
20) 3-chloropropene	7.07	41	2552	0.108	ppbV	93
21) carbon disulfide	7.22	76	5351	0.114	ppbV #	57
22) Freon 113	7.27	101	2890	0.103	ppbV	98
23) trans-1,2-dichloroethene	8.05	61	2855	0.109	ppbV	97
24) 1,1-dichloroethane	8.28	63	3310	0.105	ppbV	97

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423660_Ev2.D
Acq On : 21 Sep 2022 10:50 PM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD0.1
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:53:37 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) MTBE	8.40	73	4616	0.108	ppbV #	93
26) vinyl acetate	8.52	43	3538	0.107	ppbV	99
27) 2-butanone	8.80	43	3500	0.106	ppbV #	97
28) cis-1,2-dichloroethene	9.28	61	2563	0.106	ppbV	95
29) Ethyl Acetate	9.61	61	702	0.110	ppbV	74
30) chloroform	9.63	83	3013	0.103	ppbV	96
31) Tetrahydrofuran	10.13	42	2334M4	0.110	ppbV	
32) 1,2-dichloroethane	10.48	62	2017	0.105	ppbV	95
34) hexane	9.54	57	3925	0.115	ppbV #	65
36) 1,1,1-trichloroethane	10.77	97	2594	0.104	ppbV #	97
37) benzene	11.29	78	6240	0.107	ppbV	97
38) carbon tetrachloride	11.47	117	2269	0.102	ppbV	99
39) cyclohexane	11.61	56	3948	0.110	ppbV	98
40) Dibromomethane	12.21	93	2231	0.130	ppbV #	95
41) 1,2-dichloropropane	12.25	63	2225	0.109	ppbV #	93
42) bromodichloromethane	12.47	83	3178	0.107	ppbV #	99
43) 1,4-dioxane	12.57	88	1376	0.111	ppbV #	45
44) trichloroethene	12.52	130	2265	0.098	ppbV	99
45) 2,2,4-trimethylpentane	12.57	57	13722	0.128	ppbV	98
46) heptane	12.89	43	3855	0.108	ppbV	99
47) cis-1,3-dichloropropene	14.17	75	2492	0.095	ppbV	92
48) 4-methyl-2-pentanone	13.61	43	4068	0.104	ppbV	98
49) trans-1,3-dichloropropene	13.54	75	2745	0.099	ppbV	94
50) 1,1,2-trichloroethane	14.36	97	1997	0.100	ppbV	95
52) toluene	14.68	91	8438	0.117	ppbV	99
54) 2-hexanone	14.99	43	3282	0.091	ppbV	95
55) dibromochloromethane	15.13	129	2637	0.098	ppbV	99
56) 1,2-dibromoethane	15.38	107	2789	0.099	ppbV	99
57) tetrachloroethene	15.85	166	3136	0.110	ppbV	96
58) 1,1,1,2-tetrachloroethane	16.49	131	2272	0.101	ppbV	99
59) chlorobenzene	16.51	112	5275	0.103	ppbV	99
60) ethylbenzene	16.86	91	8885	0.102	ppbV	98
61) m+p-xylene	17.02	91	14448	0.203	ppbV	98
62) bromoform	17.09	173	2244	0.086	ppbV	99
63) styrene	17.35	104	5167	0.096	ppbV	100
64) 1,1,2,2-tetrachloroethane	17.44	83	4903	0.104	ppbV	99
65) o-xylene	17.44	91	7311	0.102	ppbV	98
66) 1,2,3-Trichloropropane	17.56	75	3715	0.097	ppbV	98
68) isopropylbenzene	17.96	105	9097	0.101	ppbV	100
69) Bromobenzene	18.03	77	5107	0.096	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423660_Ev2.D
Acq On : 21 Sep 2022 10:50 PM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD0.1
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:53:37 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
70) 4-ethyl toluene	18.52	105	8808	0.098	ppbV		99
71) 1,3,5-trimethylbenzene	18.58	105	7776	0.099	ppbV		99
72) tert-butylbenzene	18.93	119	8707	0.099	ppbV		98
73) 1,2,4-trimethylbenzene	18.93	105	7644	0.101	ppbV		97
74) Benzyl Chloride	19.05	91	4331	0.072	ppbV		99
75) 1,3-dichlorobenzene	19.07	146	4122	0.096	ppbV		95
76) 1,4-dichlorobenzene	19.12	146	4229M3	0.099	ppbV		
77) sec-butylbenzene	19.15	105	11061	0.096	ppbV		99
78) p-isopropyltoluene	19.28	119	10238	0.097	ppbV		96
79) 1,2-dichlorobenzene	19.41	146	3804	0.095	ppbV		99
80) n-butylbenzene	19.64	91	8470	0.088	ppbV		99
81) 1,2-dibromo-3-chloropr...	19.79	75	1634	0.079	ppbV		93
82) 1,2,4-trichlorobenzene	20.92	180	2783	0.068	ppbV		97
83) naphthalene	21.02	128	9912	0.091	ppbV		97
84) 1,2,3-trichlorobenzene	21.27	180	2777	0.064	ppbV		93
85) hexachlorobutadiene	21.33	225	3371	0.089	ppbV	#	95

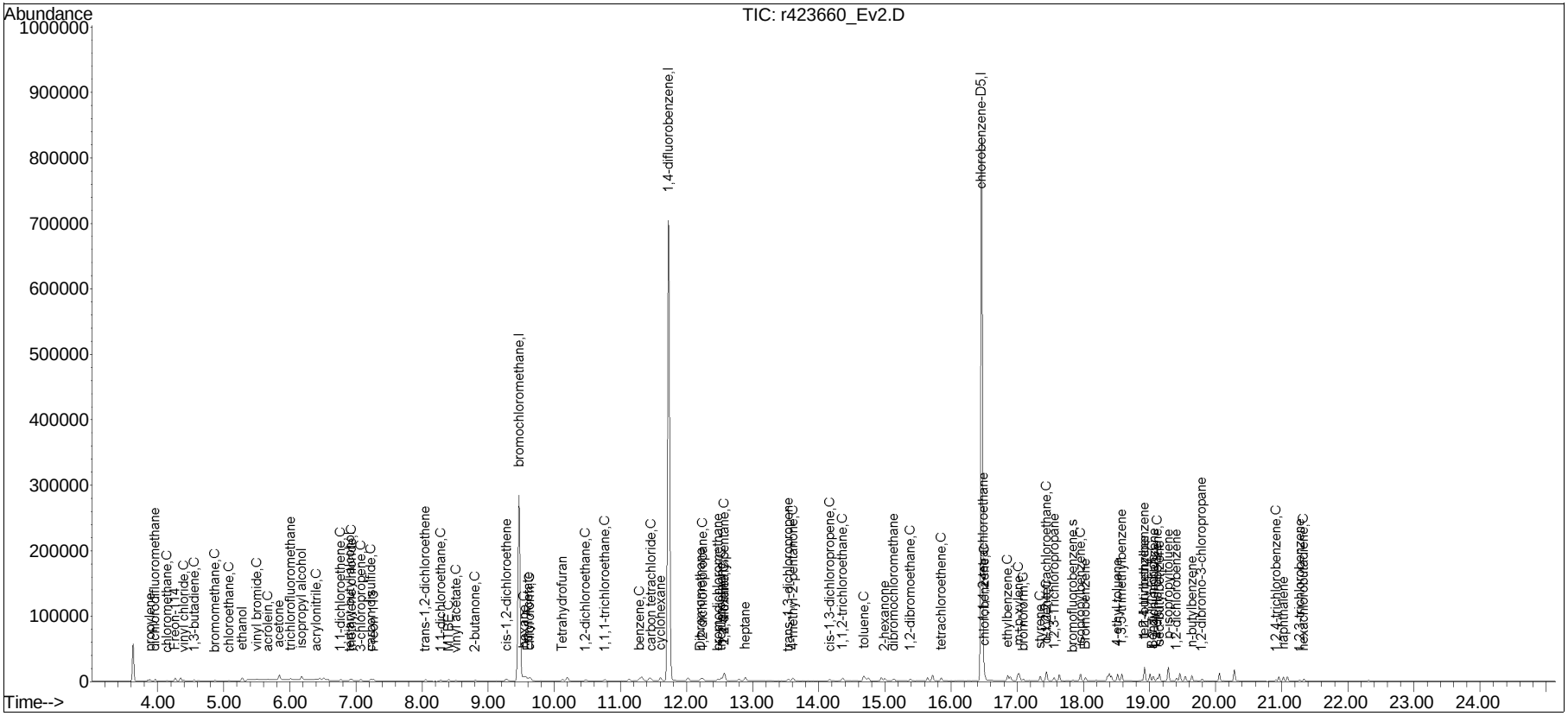
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423660_Ev2.D
Acq On : 21 Sep 2022 10:50 PM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD0.1
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:53:37 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

Sub List : Default - All compounds listed22\09\0921SIM_I\r423664_Ev2.D

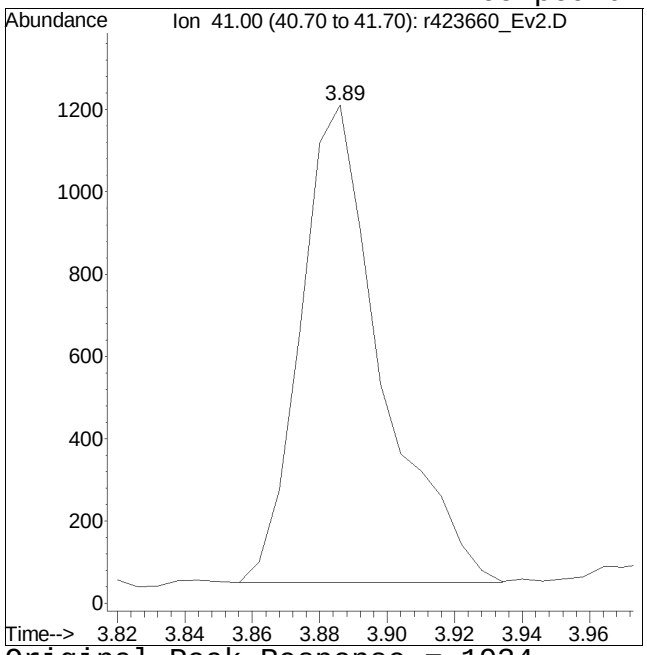


Manual Integration/Negative Proof Report

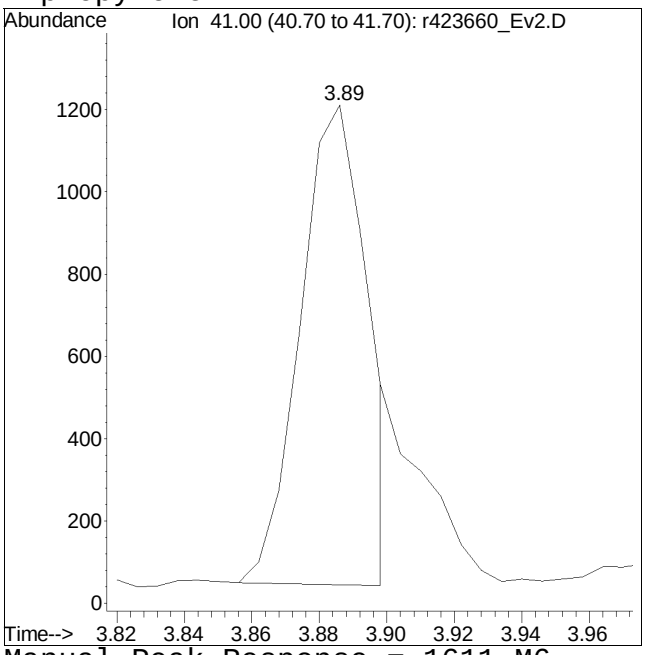
Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423660_Ev2.D
Date Inj'd : 9/21/2020 0:0: 0
Sample : ITO15-SIMSTD0.1

Method : TSIM4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 12:17 pm

Compound #2: propylene



Original Peak Response = 1934



Manual Peak Response = 1611 M6

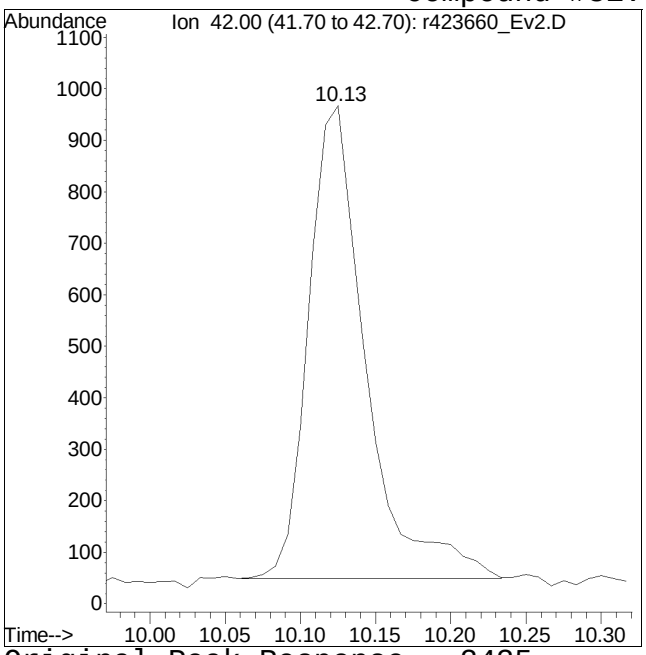
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

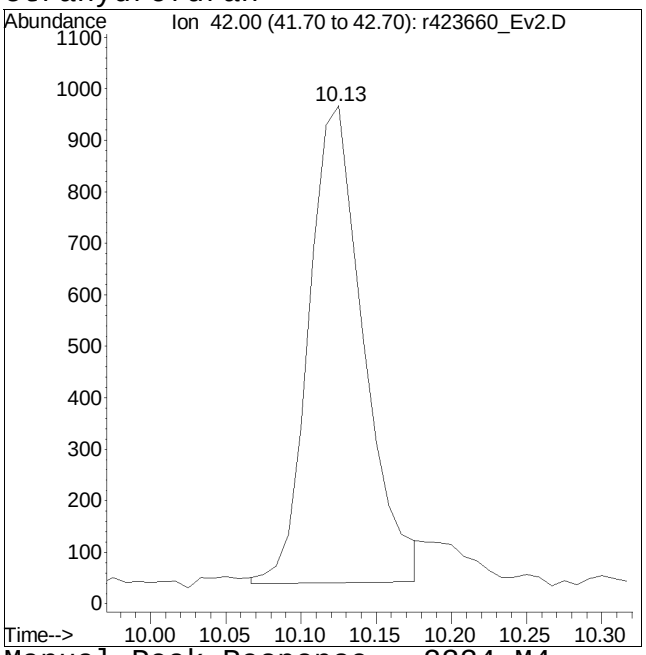
Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423660_Ev2.D
Date Inj'd : 9/21/2020 0:0: 0
Sample : ITO15-SIMSTD0.1

Method : TSIM4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 12:17 pm

Compound #31: Tetrahydrofuran



Original Peak Response = 2435



Manual Peak Response = 2334 M4

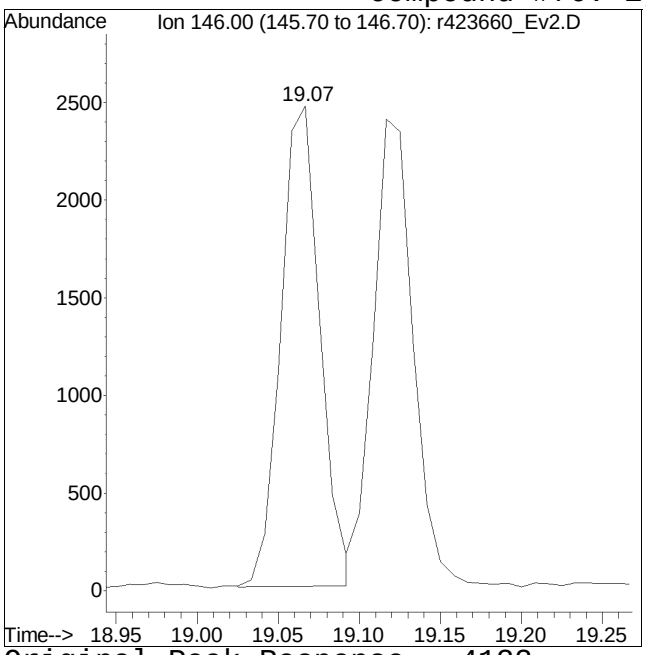
M4 = Poor automated baseline construction.

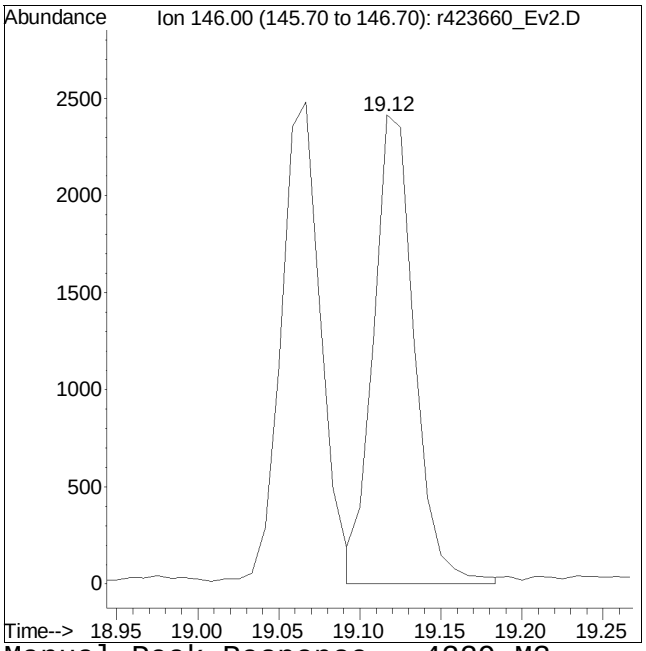
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423660_Ev2.D
Date Inj'd : 9/21/2020 0:0: 0
Sample : ITO15-SIMSTD0.1

Method : TSIM4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 12:17 pm

Compound #76: 1,4-dichlorobenzene





Original Peak Response = 4122 Manual Peak Response = 4229 M3

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423661_Ev2.D
Acq On : 21 Sep 2022 11:28 PM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD0.2
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:54:34 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.46	49	299996	10.000	ppbV	0.00
Standard Area = 305189			Recovery = 98.30%			
33) 1,4-difluorobenzene	11.73	114	877983	10.000	ppbV	0.00
Standard Area = 898219			Recovery = 97.75%			
51) chlorobenzene-D5	16.46	54	155109	10.000	ppbV	0.00
Standard Area = 156074			Recovery = 99.38%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.34	65	226057	10.378	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.78%			
53) toluene-D8	14.57	98	834530	10.164	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.64%			
67) bromofluorobenzene	17.84	95	607780	10.015	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.15%			
Target Compounds						Qvalue
2) propylene	3.88	41	3606M6	0.269	ppbV	
3) dichlorodifluoromethane	3.96	85	6400	0.242	ppbV	99
4) chloromethane	4.14	50	2579	0.242	ppbV	100
5) Freon-114	4.26	85	7507	0.241	ppbV	98
6) vinyl chloride	4.39	62	3898	0.242	ppbV	100
7) 1,3-butadiene	4.55	54	2952	0.244	ppbV	92
8) bromomethane	4.86	94	3183	0.240	ppbV	99
9) chloroethane	5.08	64	2037	0.245	ppbV	95
10) ethanol	5.27	31	16809	1.535	ppbV	100
11) vinyl bromide	5.50	106	2688	0.246	ppbV	99
12) acrolein	5.67	56	1554	0.213	ppbV #	82
13) acetone	5.83	43	19834	1.336	ppbV #	98
14) trichlorofluoromethane	6.01	101	4690	0.238	ppbV	94
15) isopropyl alcohol	6.17	45	18678	0.962	ppbV	100
16) acrylonitrile	6.39	53	3358	0.289	ppbV	93
17) 1,1-dichloroethene	6.77	61	5999	0.234	ppbV	99
18) tertiary butyl alcohol	6.90	59	8694	0.234	ppbV	95
19) methylene chloride	6.93	49	4649	0.260	ppbV	99
20) 3-chloropropene	7.07	41	5440	0.236	ppbV	96
21) carbon disulfide	7.22	76	11336	0.248	ppbV #	87
22) Freon 113	7.27	101	6467	0.237	ppbV	99
23) trans-1,2-dichloroethene	8.05	61	6285	0.248	ppbV	97
24) 1,1-dichloroethane	8.28	63	7141	0.234	ppbV	99

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423661_Ev2.D
Acq On : 21 Sep 2022 11:28 PM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD0.2
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:54:34 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	8.39	73	10277	0.248	ppbV		99
26) vinyl acetate	8.51	43	6699	0.208	ppbV		100
27) 2-butanone	8.79	43	7877	0.247	ppbV		97
28) cis-1,2-dichloroethene	9.28	61	5565	0.238	ppbV		98
29) Ethyl Acetate	9.60	61	1293	0.208	ppbV		81
30) chloroform	9.63	83	6724	0.237	ppbV		98
31) Tetrahydrofuran	10.11	42	4939M6	0.241	ppbV		
32) 1,2-dichloroethane	10.48	62	4447	0.238	ppbV		96
34) hexane	9.54	57	8349	0.252	ppbV	#	81
36) 1,1,1-trichloroethane	10.76	97	5841	0.240	ppbV		98
37) benzene	11.29	78	16572	0.292	ppbV		97
38) carbon tetrachloride	11.46	117	4862	0.225	ppbV		97
39) cyclohexane	11.61	56	8648	0.248	ppbV		98
40) Dibromomethane	12.21	93	4305	0.259	ppbV	#	100
41) 1,2-dichloropropane	12.25	63	4759	0.239	ppbV		96
42) bromodichloromethane	12.47	83	7025	0.243	ppbV		96
43) 1,4-dioxane	12.56	88	3140	0.261	ppbV	#	67
44) trichloroethene	12.53	130	5394	0.241	ppbV		99
45) 2,2,4-trimethylpentane	12.57	57	26726	0.257	ppbV		99
46) heptane	12.89	43	8724	0.251	ppbV		98
47) cis-1,3-dichloropropene	14.16	75	5579	0.219	ppbV		95
48) 4-methyl-2-pentanone	13.60	43	9100	0.240	ppbV		98
49) trans-1,3-dichloropropene	13.54	75	6123	0.228	ppbV		97
50) 1,1,2-trichloroethane	14.36	97	4567	0.236	ppbV		98
52) toluene	14.68	91	20547	0.293	ppbV		99
54) 2-hexanone	14.99	43	7589	0.217	ppbV		99
55) dibromochloromethane	15.13	129	5961	0.228	ppbV		99
56) 1,2-dibromoethane	15.38	107	6413	0.233	ppbV		98
57) tetrachloroethene	15.85	166	6693	0.242	ppbV		98
58) 1,1,1,2-tetrachloroethane	16.49	131	5070	0.232	ppbV		99
59) chlorobenzene	16.50	112	12123	0.244	ppbV		96
60) ethylbenzene	16.86	91	20264	0.239	ppbV		99
61) m+p-xylene	17.02	91	33560	0.483	ppbV		98
62) bromoform	17.09	173	5256	0.207	ppbV		99
63) styrene	17.35	104	11940	0.229	ppbV		99
64) 1,1,2,2-tetrachloroethane	17.44	83	11238	0.244	ppbV		100
65) o-xylene	17.44	91	16865	0.241	ppbV		98
66) 1,2,3-Trichloropropane	17.56	75	8831	0.237	ppbV		99
68) isopropylbenzene	17.96	105	21126	0.241	ppbV		99
69) Bromobenzene	18.03	77	12254	0.236	ppbV		97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423661_Ev2.D
Acq On : 21 Sep 2022 11:28 PM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD0.2
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:54:34 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.52	105	21834	0.248	ppbV	99
71) 1,3,5-trimethylbenzene	18.58	105	18897	0.246	ppbV	100
72) tert-butylbenzene	18.93	119	20880	0.245	ppbV	98
73) 1,2,4-trimethylbenzene	18.93	105	18387	0.250	ppbV	98
74) Benzyl Chloride	19.05	91	10907	0.187	ppbV	99
75) 1,3-dichlorobenzene	19.07	146	10191	0.243	ppbV	99
76) 1,4-dichlorobenzene	19.12	146	9984	0.240	ppbV	89
77) sec-butylbenzene	19.15	105	27165	0.242	ppbV	100
78) p-isopropyltoluene	19.28	119	24983	0.242	ppbV	98
79) 1,2-dichlorobenzene	19.41	146	9445	0.241	ppbV	99
80) n-butylbenzene	19.64	91	21686	0.231	ppbV	100
81) 1,2-dibromo-3-chloropr...	19.79	75	4145	0.206	ppbV	95
82) 1,2,4-trichlorobenzene	20.92	180	7500	0.189	ppbV	98
83) naphthalene	21.02	128	20626	0.194	ppbV	99
84) 1,2,3-trichlorobenzene	21.27	180	7258	0.171	ppbV	95
85) hexachlorobutadiene	21.34	225	8074	0.218	ppbV	97

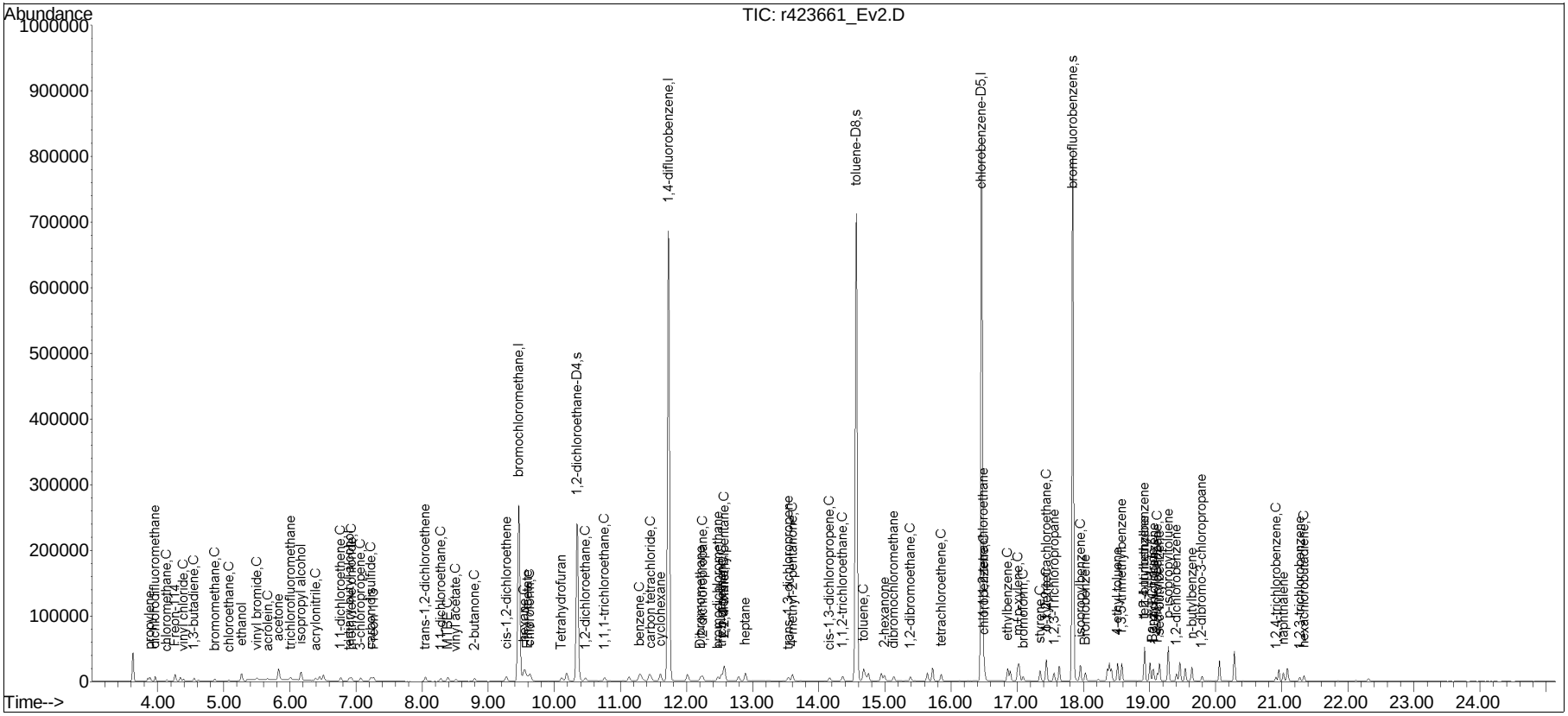
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423661_Ev2.D
Acq On : 21 Sep 2022 11:28 PM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD0.2
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:54:34 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

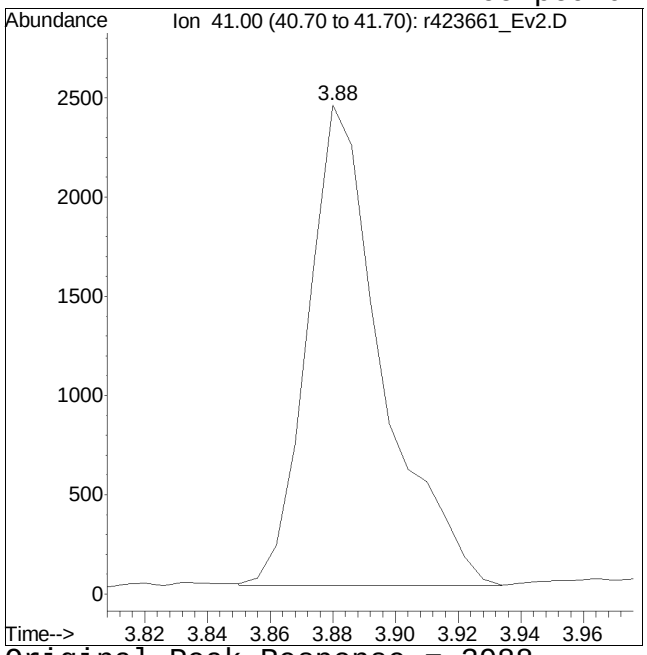
Sub List : Default - All compounds listed22\09\0921SIM_I\r423664_Ev2.D



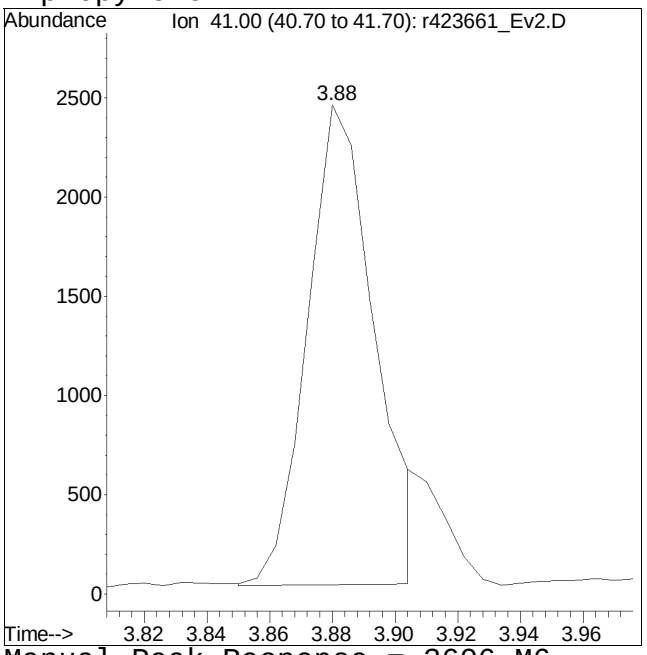
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423661_Ev2.D
Date Inj'd : 9/21/2020 0:1: 8
Sample : ITO15-SIMSTD0.2
Method : TSIM4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 12:17 pm

Compound #2: propylene



Original Peak Response = 3988



Manual Peak Response = 3606 M6

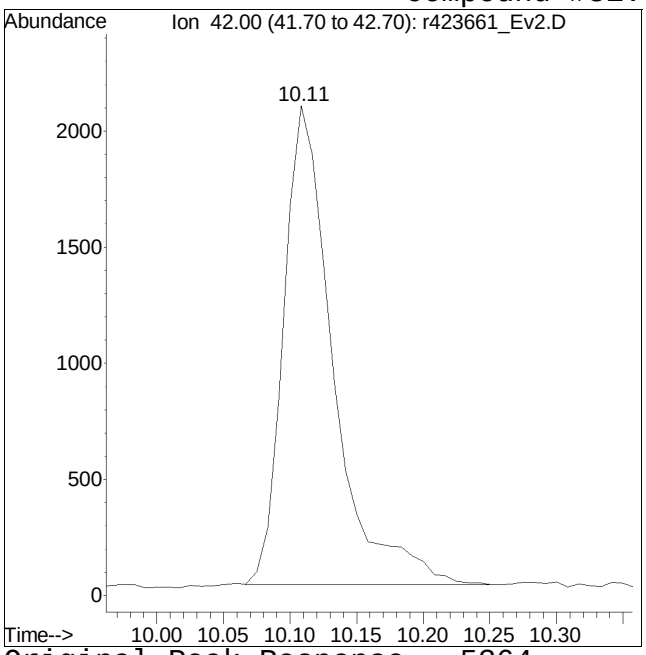
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

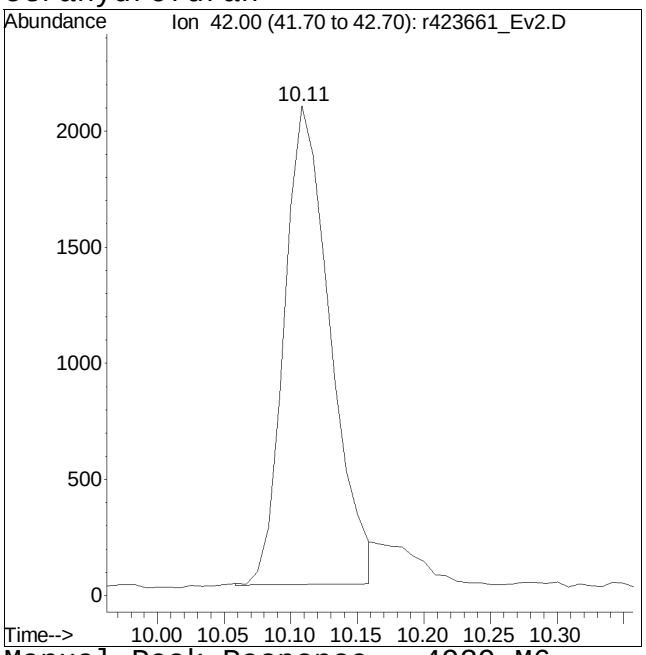
Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423661_Ev2.D
Date Inj'd : 9/21/2020 0:1: 8
Sample : ITO15-SIMSTD0.2

Method : TSIM4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 12:17 pm

Compound #31: Tetrahydrofuran



Original Peak Response = 5364



Manual Peak Response = 4939 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423662_Ev2.D
Acq On : 22 Sep 2022 12:08 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD0.5
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:55:29 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.47	49	305271	10.000	ppbV	0.00
Standard Area = 305189			Recovery = 100.03%			
33) 1,4-difluorobenzene	11.73	114	901209	10.000	ppbV	0.00
Standard Area = 898219			Recovery = 100.33%			
51) chlorobenzene-D5	16.46	54	156376	10.000	ppbV	0.00
Standard Area = 156074			Recovery = 100.19%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.35	65	231994	10.377	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.77%			
53) toluene-D8	14.57	98	854124	10.319	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.19%			
67) bromofluorobenzene	17.84	95	619731	10.129	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.29%			
Target Compounds						Qvalue
2) propylene	3.89	41	7689M6	0.563	ppbV	
3) dichlorodifluoromethane	3.97	85	14929	0.556	ppbV	100
4) chloromethane	4.14	50	6181	0.571	ppbV	99
5) Freon-114	4.27	85	17950	0.567	ppbV	99
6) vinyl chloride	4.40	62	9057	0.553	ppbV	99
7) 1,3-butadiene	4.56	54	7124	0.580	ppbV	93
8) bromomethane	4.87	94	7403	0.549	ppbV	100
9) chloroethane	5.09	64	4737	0.559	ppbV	98
10) ethanol	5.27	31	34987	3.139	ppbV	99
11) vinyl bromide	5.51	106	6409	0.576	ppbV	98
12) acrolein	5.67	56	3639	0.490	ppbV	96
13) acetone	5.83	43	44007	2.914	ppbV #	98
14) trichlorofluoromethane	6.02	101	11141	0.556	ppbV	99
15) isopropyl alcohol	6.17	45	30888	1.563	ppbV	100
16) acrylonitrile	6.39	53	6477	0.547	ppbV	96
17) 1,1-dichloroethene	6.77	61	11524	0.442	ppbV #	88
18) tertiary butyl alcohol	6.89	59	16827	0.444	ppbV	95
19) methylene chloride	6.94	49	9152	0.504	ppbV	100
20) 3-chloropropene	7.07	41	13100	0.559	ppbV	98
21) carbon disulfide	7.23	76	26964	0.580	ppbV #	93
22) Freon 113	7.27	101	15448	0.556	ppbV	99
23) trans-1,2-dichloroethene	8.06	61	14845	0.575	ppbV	100
24) 1,1-dichloroethane	8.29	63	17064	0.550	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423662_Ev2.D
Acq On : 22 Sep 2022 12:08 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD0.5
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:55:29 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	8.39	73	24403	0.578	ppbV		100
26) vinyl acetate	8.51	43	15828	0.483	ppbV		98
27) 2-butanone	8.79	43	18670	0.575	ppbV		97
28) cis-1,2-dichloroethene	9.28	61	13175	0.554	ppbV		95
29) Ethyl Acetate	9.59	61	3367	0.533	ppbV		99
30) chloroform	9.63	83	16093	0.558	ppbV		100
31) Tetrahydrofuran	10.10	42	11855	0.568	ppbV		98
32) 1,2-dichloroethane	10.48	62	10677	0.562	ppbV		99
34) hexane	9.54	57	19567	0.575	ppbV	#	79
36) 1,1,1-trichloroethane	10.77	97	13927	0.558	ppbV		99
37) benzene	11.29	78	35467	0.608	ppbV		99
38) carbon tetrachloride	11.47	117	11954	0.539	ppbV		100
39) cyclohexane	11.61	56	20472	0.572	ppbV		99
40) Dibromomethane	12.21	93	9778	0.572	ppbV	#	99
41) 1,2-dichloropropane	12.25	63	11137	0.544	ppbV		99
42) bromodichloromethane	12.48	83	16618	0.561	ppbV		97
43) 1,4-dioxane	12.55	88	7299	0.590	ppbV	#	80
44) trichloroethene	12.53	130	12927	0.562	ppbV		98
45) 2,2,4-trimethylpentane	12.57	57	63729	0.596	ppbV		99
46) heptane	12.89	43	20504	0.574	ppbV		100
47) cis-1,3-dichloropropene	14.17	75	13642	0.521	ppbV		98
48) 4-methyl-2-pentanone	13.60	43	21802	0.560	ppbV		99
49) trans-1,3-dichloropropene	13.54	75	15202	0.551	ppbV		99
50) 1,1,2-trichloroethane	14.37	97	11046	0.557	ppbV		99
52) toluene	14.68	91	43800	0.620	ppbV		100
54) 2-hexanone	14.98	43	19150	0.543	ppbV		99
55) dibromochloromethane	15.13	129	14614	0.554	ppbV		98
56) 1,2-dibromoethane	15.38	107	15463	0.558	ppbV		99
57) tetrachloroethene	15.85	166	15815	0.566	ppbV		98
58) 1,1,1,2-tetrachloroethane	16.49	131	12191	0.553	ppbV		99
59) chlorobenzene	16.51	112	28645	0.572	ppbV		99
60) ethylbenzene	16.86	91	48849	0.571	ppbV		100
61) m+p-xylene	17.02	91	80564	1.150	ppbV		100
62) bromoform	17.09	173	13313	0.520	ppbV		100
63) styrene	17.35	104	30131	0.573	ppbV		99
64) 1,1,2,2-tetrachloroethane	17.44	83	26973	0.581	ppbV		100
65) o-xylene	17.44	91	41558	0.589	ppbV		99
66) 1,2,3-Trichloropropane	17.56	75	21378	0.570	ppbV		99
68) isopropylbenzene	17.96	105	51026	0.577	ppbV		99
69) Bromobenzene	18.03	77	30283	0.577	ppbV		98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423662_Ev2.D
Acq On : 22 Sep 2022 12:08 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD0.5
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:55:29 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.52	105	52728	0.595	ppbV	99
71) 1,3,5-trimethylbenzene	18.58	105	45267	0.585	ppbV	99
72) tert-butylbenzene	18.93	119	49557	0.576	ppbV	98
73) 1,2,4-trimethylbenzene	18.93	105	44112	0.596	ppbV	97
74) Benzyl Chloride	19.05	91	27525	0.467	ppbV	98
75) 1,3-dichlorobenzene	19.07	146	25412	0.600	ppbV	99
76) 1,4-dichlorobenzene	19.13	146	25119	0.598	ppbV	99
77) sec-butylbenzene	19.15	105	64291	0.569	ppbV	99
78) p-isopropyltoluene	19.28	119	59655	0.574	ppbV	98
79) 1,2-dichlorobenzene	19.41	146	23288	0.589	ppbV	100
80) n-butylbenzene	19.64	91	52047	0.549	ppbV	99
81) 1,2-dibromo-3-chloropr...	19.79	75	10343	0.510	ppbV	97
82) 1,2,4-trichlorobenzene	20.91	180	19749	0.494	ppbV	96
83) naphthalene	21.02	128	52905	0.493	ppbV	99
84) 1,2,3-trichlorobenzene	21.27	180	19452	0.454	ppbV	97
85) hexachlorobutadiene	21.33	225	20269	0.543	ppbV	96

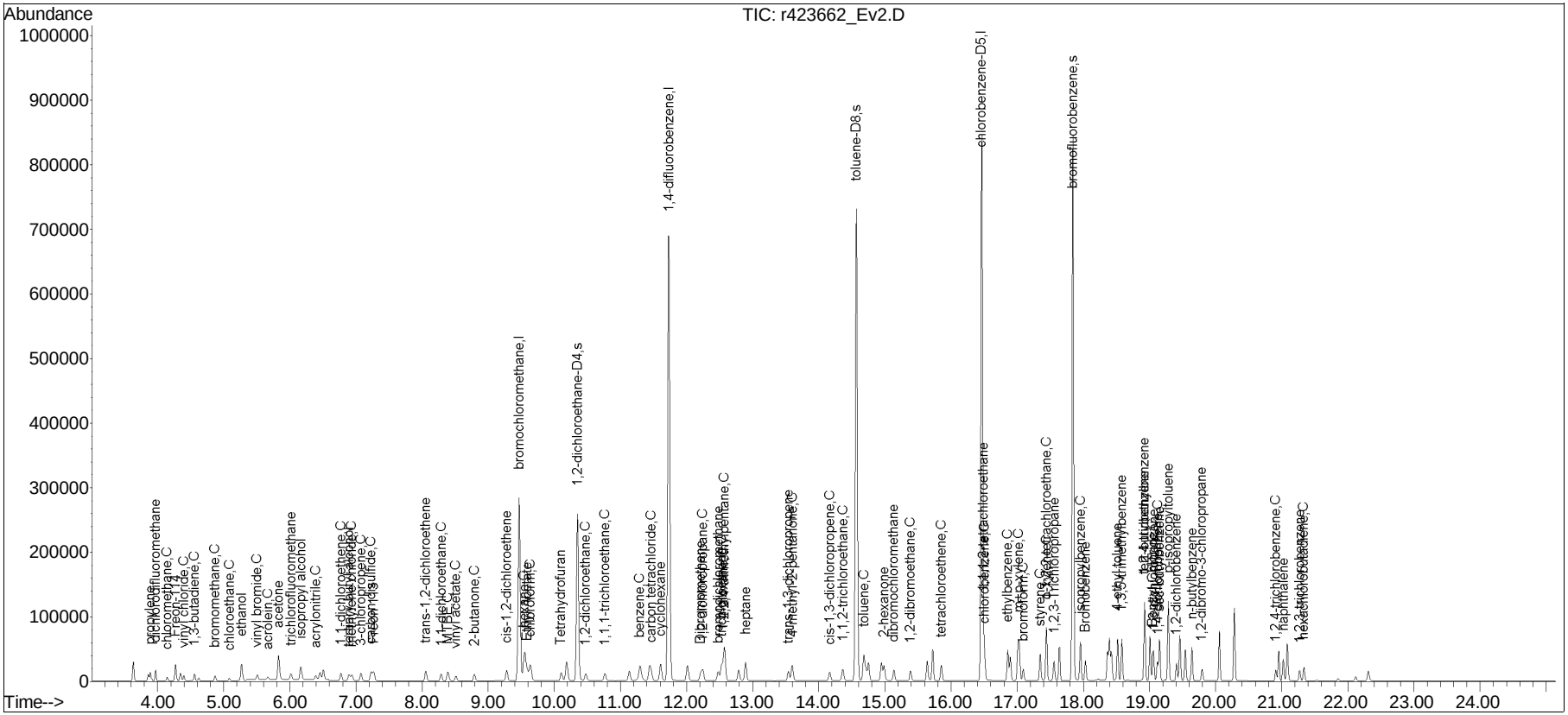
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423662_Ev2.D
Acq On : 22 Sep 2022 12:08 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD0.5
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:55:29 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

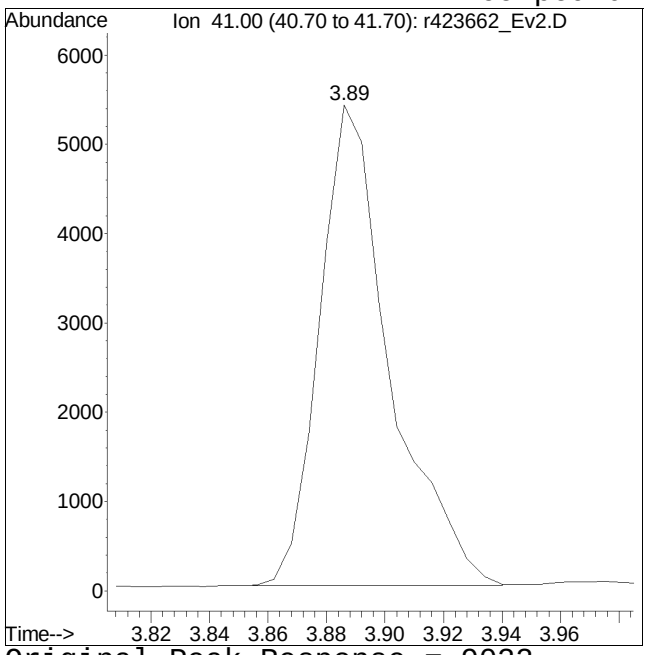
Sub List : Default - All compounds listed22\09\0921SIM_I\r423664_Ev2.D



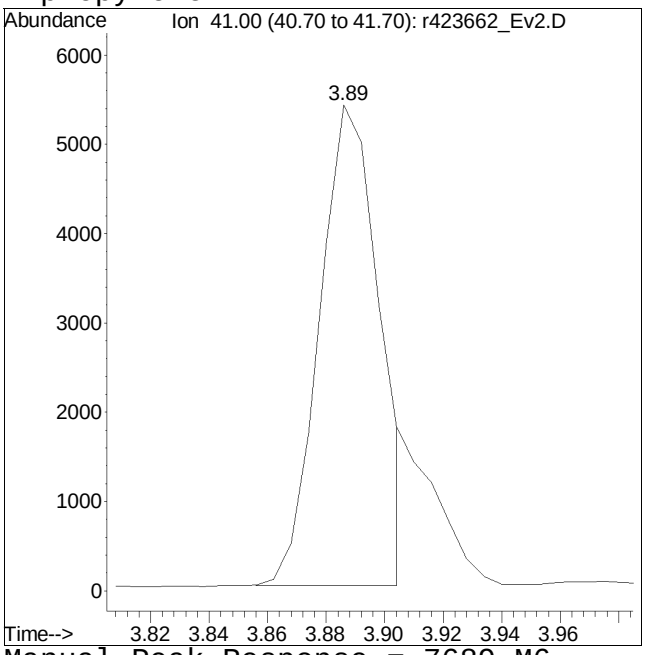
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423662_Ev2.D
Date Inj'd : 9/22/2020 0:2: 8
Sample : ITO15-SIMSTD0.5
Method : TSIM4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 12:17 pm

Compound #2: propylene



Original Peak Response = 9022



Manual Peak Response = 7689 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423663_Ev2.D
Acq On : 22 Sep 2022 12:49 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD1.0
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:56:34 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.47	49	305740	10.000	ppbV	0.00
Standard Area = 305189			Recovery = 100.18%			
33) 1,4-difluorobenzene	11.73	114	899940	10.000	ppbV	0.00
Standard Area = 898219			Recovery = 100.19%			
51) chlorobenzene-D5	16.47	54	157199	10.000	ppbV	0.00
Standard Area = 156074			Recovery = 100.72%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.35	65	229986	10.301	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.01%			
53) toluene-D8	14.57	98	847632	10.187	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.87%			
67) bromofluorobenzene	17.84	95	617942	10.047	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.47%			
Target Compounds						Qvalue
2) propylene	3.89	41	15702M6	1.149	ppbV	
3) dichlorodifluoromethane	3.97	85	29322	1.090	ppbV	99
4) chloromethane	4.14	50	11779	1.086	ppbV	99
5) Freon-114	4.27	85	34860	1.099	ppbV	100
6) vinyl chloride	4.40	62	17677	1.077	ppbV	99
7) 1,3-butadiene	4.56	54	13793	1.120	ppbV	100
8) bromomethane	4.87	94	14452	1.070	ppbV	100
9) chloroethane	5.09	64	9136	1.077	ppbV	99
10) ethanol	5.27	31	64446	5.773	ppbV	100
11) vinyl bromide	5.51	106	12458	1.118	ppbV	99
12) acrolein	5.67	56	7187	0.967	ppbV	99
13) acetone	5.83	43	85489	5.652	ppbV	99
14) trichlorofluoromethane	6.02	101	21606	1.077	ppbV	98
15) isopropyl alcohol	6.17	45	56755	2.868	ppbV	100
16) acrylonitrile	6.39	53	12786	1.079	ppbV	99
17) 1,1-dichloroethene	6.78	61	27826	1.066	ppbV	99
18) tertiary butyl alcohol	6.89	59	40214	1.060	ppbV	96
19) methylene chloride	6.94	49	20326	1.117	ppbV	98
20) 3-chloropropene	7.08	41	25556	1.089	ppbV	99
21) carbon disulfide	7.24	76	52024	1.117	ppbV	98
22) Freon 113	7.27	101	29908	1.075	ppbV	99
23) trans-1,2-dichloroethene	8.06	61	28639	1.108	ppbV	97
24) 1,1-dichloroethane	8.29	63	33228	1.069	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423663_Ev2.D
Acq On : 22 Sep 2022 12:49 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD1.0
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:56:34 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	8.39	73	47204	1.116	ppbV		99
26) vinyl acetate	8.52	43	31757	0.967	ppbV		99
27) 2-butanone	8.78	43	36102	1.110	ppbV		100
28) cis-1,2-dichloroethene	9.28	61	25814	1.084	ppbV		98
29) Ethyl Acetate	9.59	61	6509	1.028	ppbV		93
30) chloroform	9.63	83	31577	1.093	ppbV		100
31) Tetrahydrofuran	10.10	42	23313	1.115	ppbV		98
32) 1,2-dichloroethane	10.48	62	20724	1.089	ppbV		98
34) hexane	9.54	57	38142	1.123	ppbV	#	80
36) 1,1,1-trichloroethane	10.77	97	26990	1.083	ppbV		99
37) benzene	11.30	78	65502	1.124	ppbV		99
38) carbon tetrachloride	11.47	117	23616	1.066	ppbV		99
39) cyclohexane	11.61	56	40070	1.122	ppbV		97
40) Dibromomethane	12.22	93	19171	1.123	ppbV	#	99
41) 1,2-dichloropropane	12.25	63	22161	1.084	ppbV		99
42) bromodichloromethane	12.48	83	33135	1.120	ppbV		97
43) 1,4-dioxane	12.55	88	14117	1.143	ppbV		91
44) trichloroethene	12.53	130	25105	1.093	ppbV		99
45) 2,2,4-trimethylpentane	12.57	57	124678	1.168	ppbV		100
46) heptane	12.89	43	40120	1.125	ppbV		98
47) cis-1,3-dichloropropene	14.17	75	27111	1.037	ppbV		98
48) 4-methyl-2-pentanone	13.59	43	43043	1.107	ppbV		100
49) trans-1,3-dichloropropene	13.54	75	29404	1.067	ppbV		99
50) 1,1,2-trichloroethane	14.37	97	21783	1.099	ppbV		100
52) toluene	14.68	91	81353	1.146	ppbV		100
54) 2-hexanone	14.98	43	38501	1.086	ppbV		98
55) dibromochloromethane	15.13	129	28904	1.091	ppbV		99
56) 1,2-dibromoethane	15.39	107	30309	1.088	ppbV		100
57) tetrachloroethene	15.86	166	31024	1.105	ppbV		99
58) 1,1,1,2-tetrachloroethane	16.49	131	24190	1.091	ppbV		99
59) chlorobenzene	16.51	112	56580	1.124	ppbV		100
60) ethylbenzene	16.86	91	95350	1.108	ppbV		100
61) m+p-xylene	17.02	91	158819	2.255	ppbV		100
62) bromoform	17.09	173	27352	1.063	ppbV		99
63) styrene	17.35	104	58323	1.102	ppbV		99
64) 1,1,2,2-tetrachloroethane	17.44	83	52891	1.134	ppbV		99
65) o-xylene	17.44	91	79733	1.124	ppbV		99
66) 1,2,3-Trichloropropane	17.56	75	41559	1.102	ppbV		99
68) isopropylbenzene	17.96	105	100231	1.127	ppbV		99
69) Bromobenzene	18.03	77	58997	1.119	ppbV		100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423663_Ev2.D
Acq On : 22 Sep 2022 12:49 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD1.0
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:56:34 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.52	105	105714	1.187	ppbV	99
71) 1,3,5-trimethylbenzene	18.58	105	90793	1.168	ppbV	99
72) tert-butylbenzene	18.93	119	100593	1.163	ppbV	97
73) 1,2,4-trimethylbenzene	18.93	105	89240	1.199	ppbV	97
74) Benzyl Chloride	19.05	91	57415	0.970	ppbV	98
75) 1,3-dichlorobenzene	19.07	146	50285	1.181	ppbV	99
76) 1,4-dichlorobenzene	19.13	146	50181	1.188	ppbV	100
77) sec-butylbenzene	19.15	105	129819	1.143	ppbV	99
78) p-isopropyltoluene	19.28	119	119248	1.141	ppbV	97
79) 1,2-dichlorobenzene	19.41	146	46726	1.176	ppbV	100
80) n-butylbenzene	19.64	91	105052	1.102	ppbV	99
81) 1,2-dibromo-3-chloropr...	19.79	75	20969	1.029	ppbV	98
82) 1,2,4-trichlorobenzene	20.91	180	40192	1.001	ppbV	97
83) naphthalene	21.02	128	107157	0.993	ppbV	99
84) 1,2,3-trichlorobenzene	21.27	180	39461	0.916	ppbV	98
85) hexachlorobutadiene	21.33	225	40963	1.091	ppbV	95

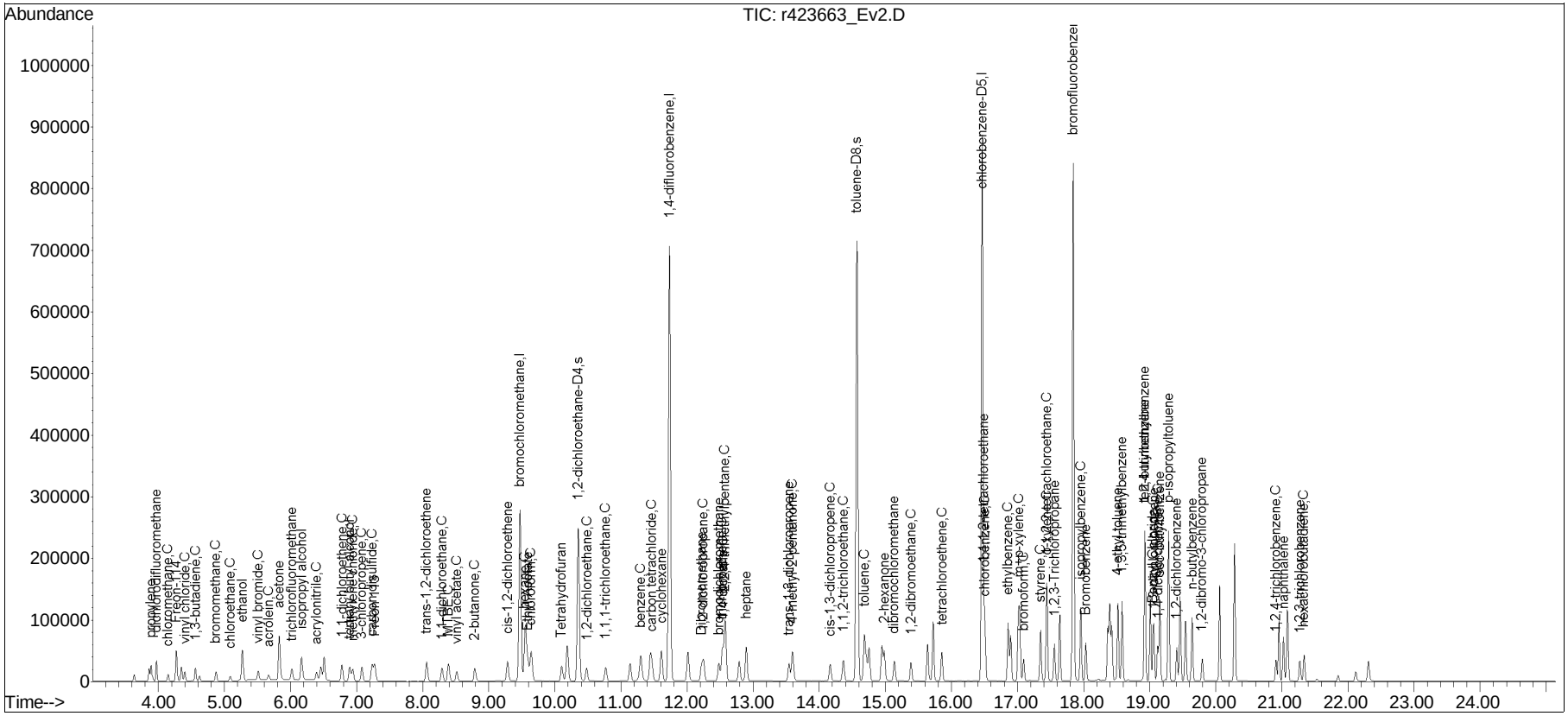
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423663_Ev2.D
Acq On : 22 Sep 2022 12:49 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD1.0
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:56:34 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

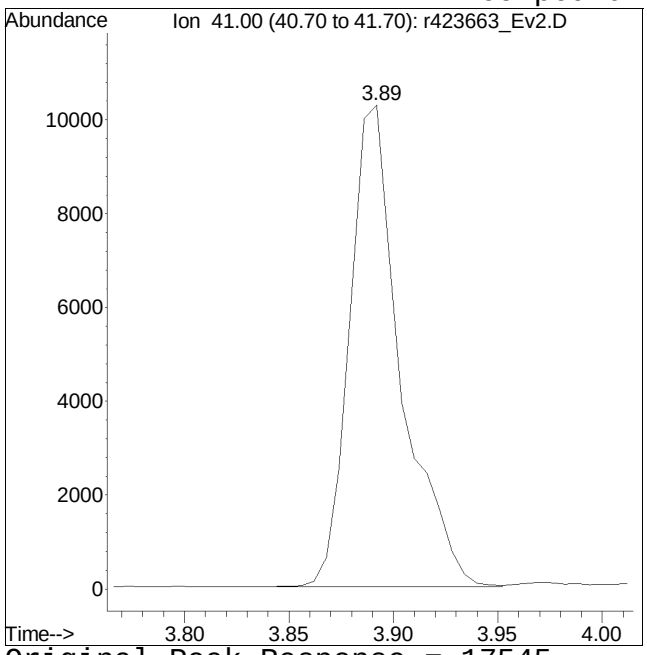
Sub List : Default - All compounds listed22\09\0921SIM_I\r423664_Ev2.D



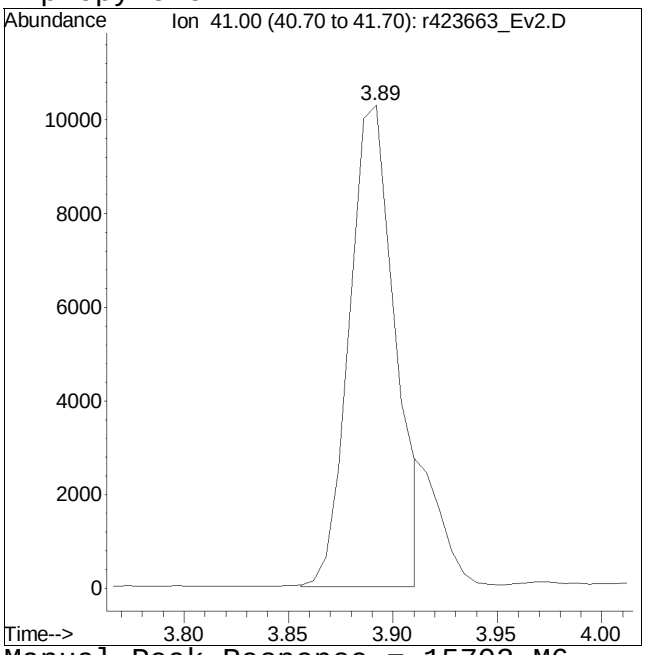
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423663_Ev2.D
Date Inj'd : 9/22/2020 0:2: 9
Sample : ITO15-SIMSTD1.0
Method : TSIM4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 12:18 pm

Compound #2: propylene



Original Peak Response = 17545



Manual Peak Response = 15702 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423664_Ev2.D
Acq On : 22 Sep 2022 1:29 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD5.0
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 22 12:16:05 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Aug 19 13:53:24 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.47	49	305189	10.000	ppbV	0.00
Standard Area = 305189			Recovery = 100.00%			
33) 1,4-difluorobenzene	11.73	114	898219	10.000	ppbV	0.01
Standard Area = 898219			Recovery = 100.00%			
51) chlorobenzene-D5	16.47	54	156074	10.000	ppbV	0.00
Standard Area = 156074			Recovery = 100.00%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.35	65	222833	8.551	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 85.51%			
53) toluene-D8	14.57	98	826155	9.504	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 95.04%			
67) bromofluorobenzene	17.84	95	610650	10.756	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 107.56%			
Target Compounds						Qvalue
2) propylene	3.89	41	68220M4	6.041	ppbV	
3) dichlorodifluoromethane	3.96	85	134272	5.407	ppbV	99
4) chloromethane	4.14	50	54147	5.217	ppbV	99
5) Freon-114	4.26	85	158270	5.559	ppbV	99
6) vinyl chloride	4.40	62	81934	5.933	ppbV	100
7) 1,3-butadiene	4.56	54	61442	5.482	ppbV	83
8) bromomethane	4.86	94	67422	6.077	ppbV	99
9) chloroethane	5.08	64	42333	5.909	ppbV	98
10) ethanol	5.25	31	278564	28.604	ppbV	100
11) vinyl bromide	5.50	106	55610	5.194	ppbV	98
12) acrolein	5.66	56	37099	5.037	ppbV	97
13) acetone	5.81	43	377433	30.170	ppbV	95
14) trichlorofluoromethane	6.01	101	100171	5.528	ppbV	97
15) isopropyl alcohol	6.14	45	246930	14.144	ppbV	100
16) acrylonitrile	6.38	53	59166	5.124	ppbV	99
17) 1,1-dichloroethene	6.77	61	130285	7.777	ppbV	88
18) tertiary butyl alcohol	6.86	59	189345	7.252	ppbV	95
19) methylene chloride	6.94	49	90791	6.770	ppbV	96
20) 3-chloropropene	7.07	41	117166	6.944	ppbV	90
21) carbon disulfide	7.23	76	232492	4.799	ppbV	98
22) Freon 113	7.27	101	138847	5.215	ppbV	96
23) trans-1,2-dichloroethene	8.06	61	129048	5.631	ppbV	98
24) 1,1-dichloroethane	8.29	63	155203	5.697	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423664_Ev2.D
Acq On : 22 Sep 2022 1:29 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD5.0
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 22 12:16:05 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Aug 19 13:53:24 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	8.38	73	211167	5.072	ppbV		96
26) vinyl acetate	8.51	43	163949	5.216	ppbV		98
27) 2-butanone	8.77	43	162257	5.273	ppbV		97
28) cis-1,2-dichloroethene	9.28	61	118835	5.759	ppbV		99
29) Ethyl Acetate	9.58	61	31597	5.481	ppbV		96
30) chloroform	9.63	83	144250	5.241	ppbV		99
31) Tetrahydrofuran	10.08	42	104364	5.527	ppbV		98
32) 1,2-dichloroethane	10.48	62	95005	5.598	ppbV		96
34) hexane	9.54	57	169436	5.345	ppbV		95
36) 1,1,1-trichloroethane	10.77	97	124334	5.110	ppbV		94
37) benzene	11.29	78	290707	4.997	ppbV		99
38) carbon tetrachloride	11.47	117	110512	4.449	ppbV		98
39) cyclohexane	11.61	56	178228	5.233	ppbV		95
40) Dibromomethane	12.21	93	85171	4.934	ppbV	#	99
41) 1,2-dichloropropane	12.25	63	102046	5.542	ppbV		98
42) bromodichloromethane	12.48	83	147603	4.824	ppbV		97
43) 1,4-dioxane	12.53	88	61654	4.945	ppbV		97
44) trichloroethene	12.53	130	114608	5.432	ppbV		92
45) 2,2,4-trimethylpentane	12.57	57	532726M6	5.149	ppbV		
46) heptane	12.89	43	177900	5.361	ppbV		98
47) cis-1,3-dichloropropene	14.17	75	130479	5.012	ppbV	#	92
48) 4-methyl-2-pentanone	13.58	43	194048	5.277	ppbV		98
49) trans-1,3-dichloropropene	13.54	75	137512	4.866	ppbV	#	92
50) 1,1,2-trichloroethane	14.37	97	98912	5.068	ppbV		97
52) toluene	14.68	91	352451	5.338	ppbV		100
54) 2-hexanone	14.98	43	175935	5.173	ppbV		99
55) dibromochloromethane	15.13	129	131567	4.871	ppbV		100
56) 1,2-dibromoethane	15.38	107	138298	4.703	ppbV		99
57) tetrachloroethene	15.86	166	139342	5.151	ppbV		98
58) 1,1,1,2-tetrachloroethane	16.49	131	110069	5.178	ppbV		96
59) chlorobenzene	16.51	112	249943	4.898	ppbV		99
60) ethylbenzene	16.86	91	427055	5.477	ppbV		93
61) m+p-xylene	17.02	91	699170	10.733	ppbV		91
62) bromoform	17.09	173	127700	5.076	ppbV		97
63) styrene	17.35	104	262626	4.815	ppbV		99
64) 1,1,2,2-tetrachloroethane	17.44	83	231543	5.185	ppbV		99
65) o-xylene	17.44	91	352116	5.472	ppbV		90
66) 1,2,3-Trichloropropane	17.56	75	187188	4.947	ppbV	#	96
68) isopropylbenzene	17.96	105	441539	4.864	ppbV		96
69) Bromobenzene	18.03	77	261733	5.090	ppbV		99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423664_Ev2.D
Acq On : 22 Sep 2022 1:29 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD5.0
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 22 12:16:05 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Aug 19 13:53:24 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
70) 4-ethyl toluene	18.52	105	442123	4.806	ppbV		95
71) 1,3,5-trimethylbenzene	18.58	105	385947	5.049	ppbV		94
72) tert-butylbenzene	18.93	119	429307	5.225	ppbV		99
73) 1,2,4-trimethylbenzene	18.93	105	369570	4.936	ppbV		92
74) Benzyl Chloride	19.05	91	293872	5.553	ppbV		99
75) 1,3-dichlorobenzene	19.07	146	211357	4.779	ppbV		97
76) 1,4-dichlorobenzene	19.13	146	209706	4.620	ppbV		96
77) sec-butylbenzene	19.15	105	563697	4.967	ppbV		99
78) p-isopropyltoluene	19.28	119	518736	5.224	ppbV		99
79) 1,2-dichlorobenzene	19.41	146	197265	4.529	ppbV		95
80) n-butylbenzene	19.64	91	473208	5.556	ppbV		94
81) 1,2-dibromo-3-chloropr...	19.79	75	101183	4.708	ppbV	#	92
82) 1,2,4-trichlorobenzene	20.91	180	199331	5.412	ppbV		93
83) naphthalene	21.02	128	535446	5.900	ppbV		98
84) 1,2,3-trichlorobenzene	21.27	180	213883	5.769	ppbV		91
85) hexachlorobutadiene	21.34	225	186374	5.495	ppbV		96

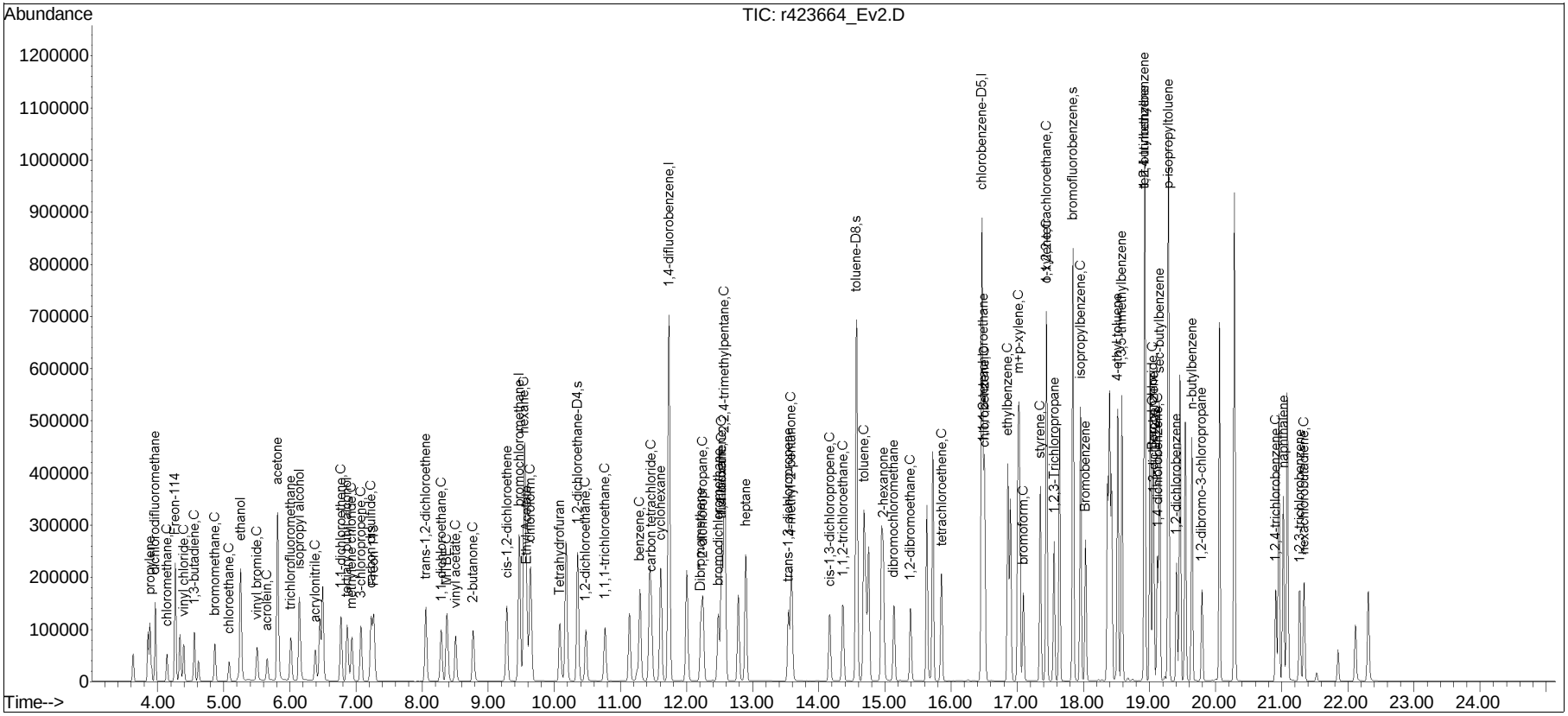
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423664_Ev2.D
Acq On : 22 Sep 2022 1:29 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD5.0
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 22 12:16:05 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Aug 19 13:53:24 2022
Response via : Initial Calibration

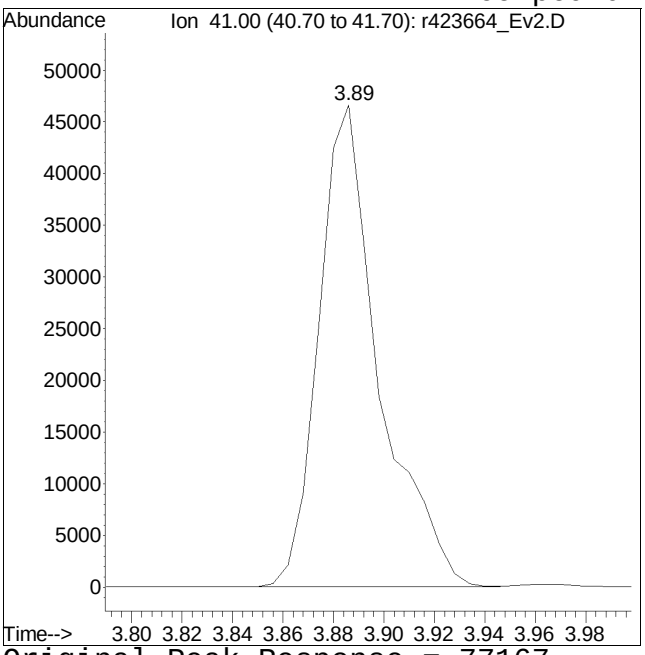
Sub List : Default - All compounds listed22\09\0921SIM_I\r423664_Ev2.D

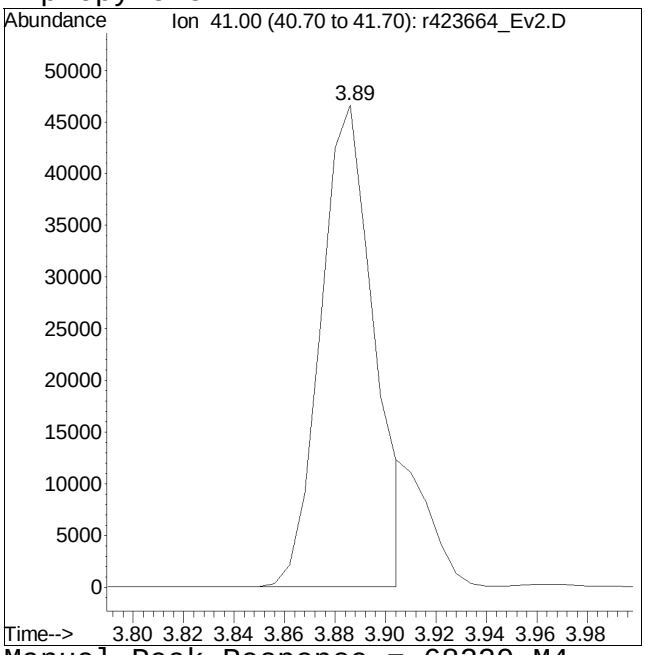


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airpiano4QMethod : TSIM4_220921.M
Data File : r423664_Ev2.D Operator : AIRPIANO4:RY
Date Inj'd : 9/22/2020 0:1: 9 Instrument :
Sample : ITO15-SIMSTD5.0 Quant Date : 9/22/2022 12:10 pm

Compound #2: propylene





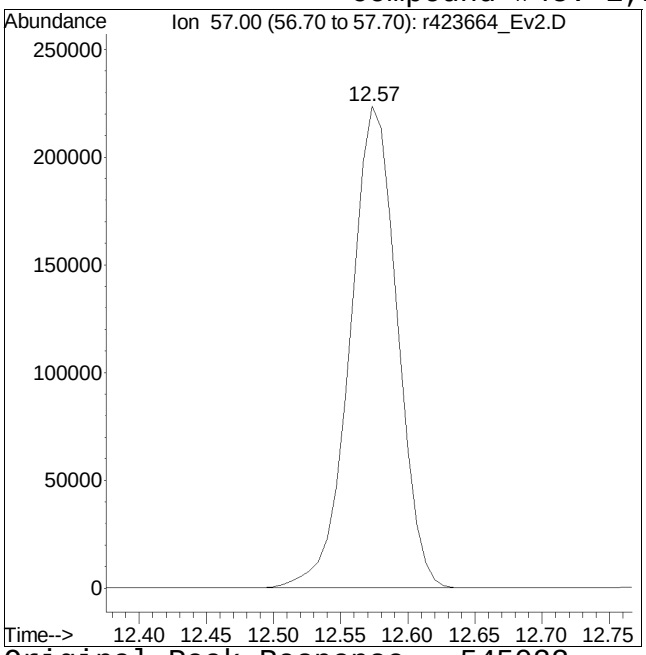
Original Peak Response = 77167 Manual Peak Response = 68220 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

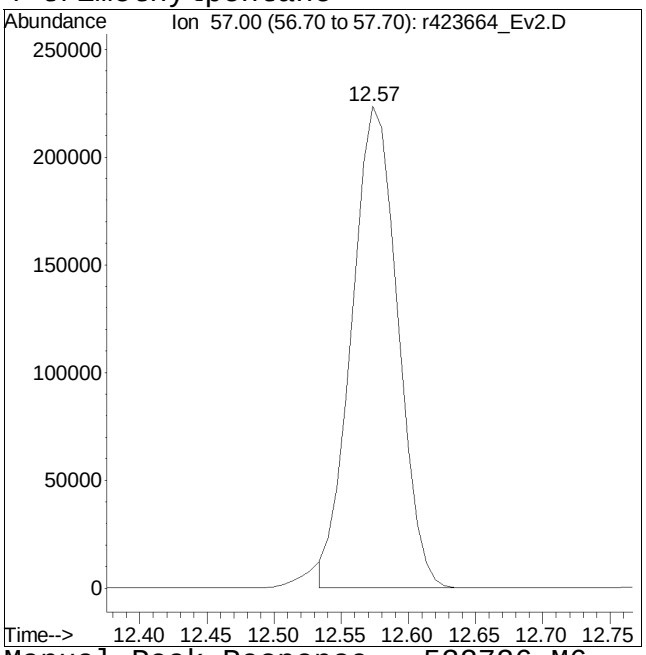
Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423664_Ev2.D
Date Inj'd : 9/22/2020 0:1: 9
Sample : ITO15-SIMSTD5.0

Method : TSIM4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 12:10 pm

Compound #45: 2,2,4-trimethylpentane



Original Peak Response = 545022



Manual Peak Response = 532726 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423665_Ev2.D
Acq On : 22 Sep 2022 2:10 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD010
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:57:42 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.47	49	316204	10.000	ppbV	0.00
Standard Area = 305189			Recovery = 103.61%			
33) 1,4-difluorobenzene	11.74	114	917545	10.000	ppbV	0.00
Standard Area = 898219			Recovery = 102.15%			
51) chlorobenzene-D5	16.47	54	159331	10.000	ppbV	0.00
Standard Area = 156074			Recovery = 102.09%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.36	65	228375	10.033	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.33%			
53) toluene-D8	14.57	98	859251	10.188	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.88%			
67) bromofluorobenzene	17.84	95	630643	10.116	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.16%			
Target Compounds						Qvalue
2) propylene	3.89	41	136711M6	9.671	ppbV	
3) dichlorodifluoromethane	3.98	85	258099	9.276	ppbV	99
4) chloromethane	4.15	50	108714	9.689	ppbV	100
5) Freon-114	4.28	85	309267	9.430	ppbV	97
6) vinyl chloride	4.40	62	166641	9.815	ppbV	99
7) 1,3-butadiene	4.56	54	123027	9.663	ppbV	96
8) bromomethane	4.88	94	136601	9.777	ppbV	100
9) chloroethane	5.09	64	86368	9.846	ppbV	99
10) ethanol	5.27	31	512285	44.374	ppbV	98
11) vinyl bromide	5.51	106	113265	9.829	ppbV	100
12) acrolein	5.66	56	75570	9.830	ppbV	98
13) acetone	5.82	43	762710	48.760	ppbV	100
14) trichlorofluoromethane	6.02	101	201279	9.697	ppbV	99
15) isopropyl alcohol	6.15	45	499415	24.401	ppbV	100
16) acrylonitrile	6.39	53	123040	10.036	ppbV	100
17) 1,1-dichloroethene	6.78	61	209513	7.760	ppbV #	89
18) tertiary butyl alcohol	6.87	59	392879	10.013	ppbV	100
19) methylene chloride	6.95	49	186236	9.899	ppbV	98
20) 3-chloropropene	7.08	41	243183	10.016	ppbV	99
21) carbon disulfide	7.24	76	481168	9.988	ppbV	100
22) Freon 113	7.27	101	282117	9.805	ppbV	100
23) trans-1,2-dichloroethene	8.06	61	265335	9.922	ppbV	94
24) 1,1-dichloroethane	8.29	63	321128	9.985	ppbV	99

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423665_Ev2.D
Acq On : 22 Sep 2022 2:10 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD010
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:57:42 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	8.38	73	435074	9.943	ppbV		99
26) vinyl acetate	8.51	43	339905	10.005	ppbV		98
27) 2-butanone	8.78	43	339812	10.107	ppbV		98
28) cis-1,2-dichloroethene	9.28	61	247004	10.031	ppbV		95
29) Ethyl Acetate	9.58	61	67693	10.339	ppbV		84
30) chloroform	9.64	83	294535	9.854	ppbV		99
31) Tetrahydrofuran	10.08	42	219678	10.158	ppbV		99
32) 1,2-dichloroethane	10.48	62	193545	9.831	ppbV		100
34) hexane	9.55	57	347709	10.045	ppbV		95
36) 1,1,1-trichloroethane	10.78	97	256788	10.109	ppbV		98
37) benzene	11.30	78	599469	10.093	ppbV		99
38) carbon tetrachloride	11.47	117	228485	10.120	ppbV		99
39) cyclohexane	11.61	56	369571	10.150	ppbV		98
40) Dibromomethane	12.22	93	175108	10.063	ppbV	#	99
41) 1,2-dichloropropane	12.25	63	211460	10.143	ppbV		99
42) bromodichloromethane	12.49	83	306384	10.160	ppbV		98
43) 1,4-dioxane	12.53	88	129683	10.295	ppbV		95
44) trichloroethene	12.53	130	236131	10.085	ppbV		97
45) 2,2,4-trimethylpentane	12.58	57	1121699	10.306	ppbV		100
46) heptane	12.90	43	366051	10.071	ppbV		99
47) cis-1,3-dichloropropene	14.17	75	272003	10.204	ppbV		99
48) 4-methyl-2-pentanone	13.58	43	403805	10.186	ppbV		100
49) trans-1,3-dichloropropene	13.54	75	289057	10.289	ppbV		100
50) 1,1,2-trichloroethane	14.37	97	205423	10.165	ppbV		98
52) toluene	14.68	91	722429	10.039	ppbV		100
54) 2-hexanone	14.98	43	368135	10.248	ppbV		99
55) dibromochloromethane	15.14	129	275970	10.273	ppbV		100
56) 1,2-dibromoethane	15.39	107	286922	10.161	ppbV		99
57) tetrachloroethene	15.86	166	284917	10.015	ppbV		100
58) 1,1,1,2-tetrachloroethane	16.50	131	227889	10.140	ppbV		98
59) chlorobenzene	16.51	112	511381	10.021	ppbV		98
60) ethylbenzene	16.86	91	873330	10.016	ppbV		99
61) m+p-xylene	17.02	91	1429050	20.021	ppbV		100
62) bromoform	17.09	173	269671	10.343	ppbV		99
63) styrene	17.35	104	542951	10.126	ppbV		100
64) 1,1,2,2-tetrachloroethane	17.44	83	472217	9.989	ppbV		100
65) o-xylene	17.44	91	707814	9.845	ppbV		100
66) 1,2,3-Trichloropropane	17.56	75	384429	10.059	ppbV		99
68) isopropylbenzene	17.96	105	893380	9.910	ppbV		100
69) Bromobenzene	18.03	77	530218	9.922	ppbV		96

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423665_Ev2.D
Acq On : 22 Sep 2022 2:10 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD010
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:57:42 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.52	105	894610	9.910	ppbV	96
71) 1,3,5-trimethylbenzene	18.58	105	777237	9.863	ppbV	99
72) tert-butylbenzene	18.93	119	863634	9.853	ppbV	99
73) 1,2,4-trimethylbenzene	18.93	105	730887	9.686	ppbV	91
74) Benzyl Chloride	19.05	91	621469	10.358	ppbV	100
75) 1,3-dichlorobenzene	19.07	146	426682	9.888	ppbV	98
76) 1,4-dichlorobenzene	19.13	146	429986	10.043	ppbV	99
77) sec-butylbenzene	19.16	105	1131826	9.834	ppbV	92
78) p-isopropyltoluene	19.28	119	1028703	9.713	ppbV	98
79) 1,2-dichlorobenzene	19.41	146	404474	10.042	ppbV	100
80) n-butylbenzene	19.64	91	971414	10.054	ppbV	100
81) 1,2-dibromo-3-chloropr...	19.79	75	209229	10.128	ppbV	98
82) 1,2,4-trichlorobenzene	20.91	180	421682	10.361	ppbV	99
83) naphthalene	21.02	128	1129764	10.334	ppbV	99
84) 1,2,3-trichlorobenzene	21.27	180	443159	10.148	ppbV	99
85) hexachlorobutadiene	21.34	225	363763	9.559	ppbV	98

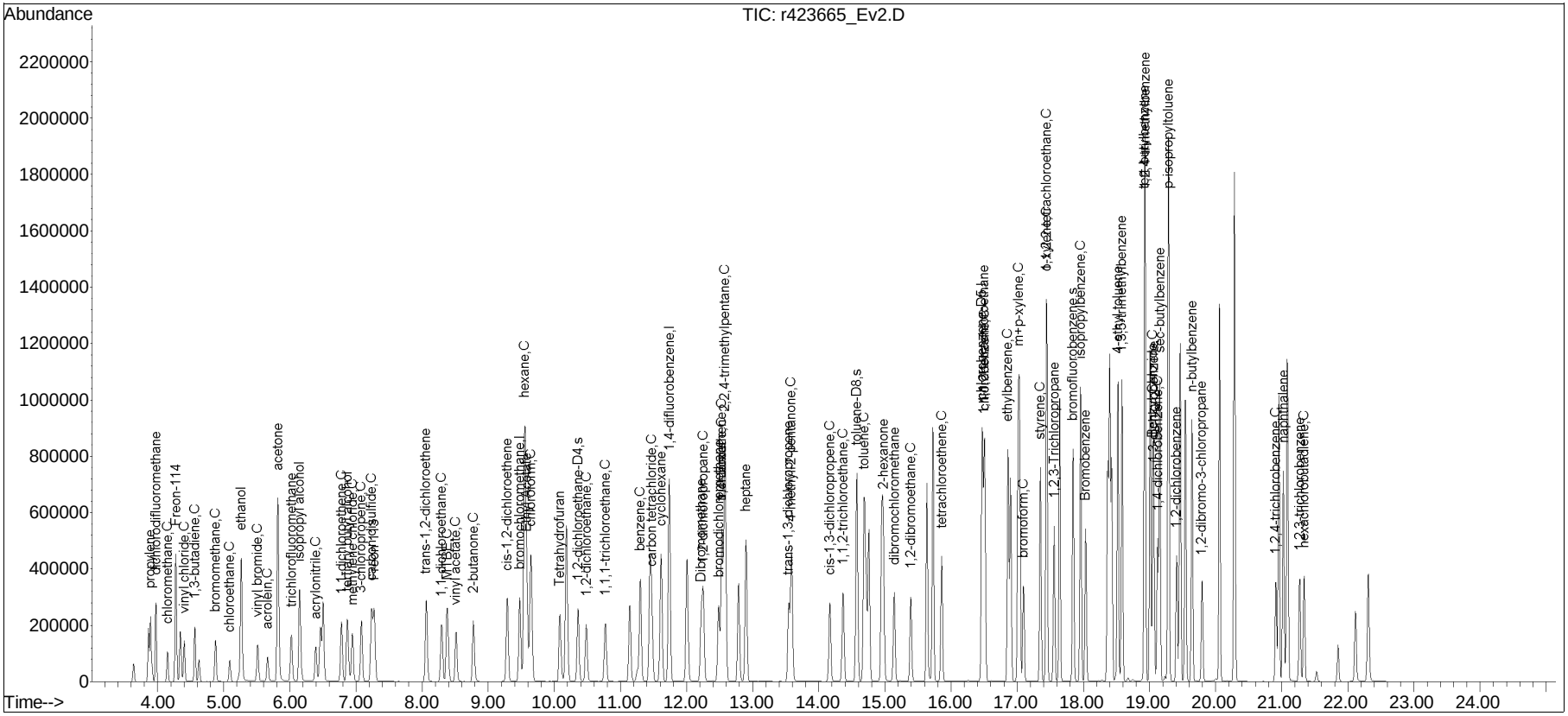
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423665_Ev2.D
Acq On : 22 Sep 2022 2:10 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD010
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:57:42 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

Sub List : Default - All compounds listed22\09\0921SIM_I\r423664_Ev2.D

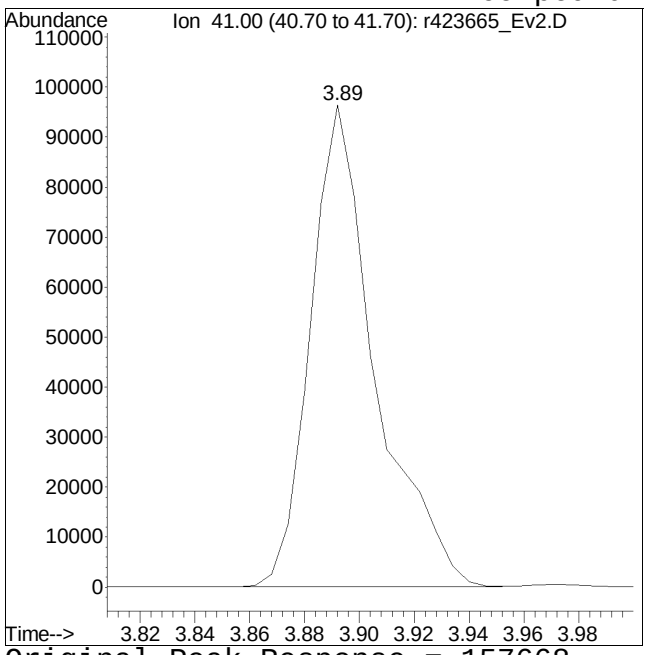


Manual Integration/Negative Proof Report

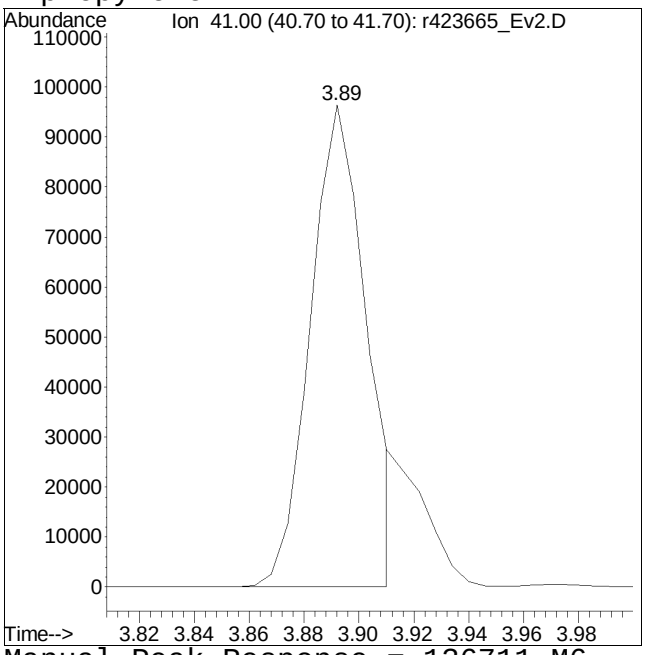
Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423665_Ev2.D
Date Inj'd : 9/22/2020 0:2: 0
Sample : ITO15-SIMSTD010

Method : TSIM4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 12:18 pm

Compound #2: propylene



Original Peak Response = 157668



Manual Peak Response = 136711 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423666_Ev2.D
Acq On : 22 Sep 2022 2:48 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD020
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:58:40 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.47	49	316136	10.000	ppbV	0.00
Standard Area = 305189			Recovery = 103.59%			
33) 1,4-difluorobenzene	11.74	114	911662	10.000	ppbV	0.00
Standard Area = 898219			Recovery = 101.50%			
51) chlorobenzene-D5	16.47	54	155598	10.000	ppbV	0.00
Standard Area = 156074			Recovery = 99.70%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.36	65	226175	10.000	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.00%			
53) toluene-D8	14.57	98	866898	10.525	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 105.25%			
67) bromofluorobenzene	17.84	95	633410	10.404	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 104.04%			
Target Compounds						Qvalue
2) propylene	3.89	41	283083M6	20.029	ppbV	
3) dichlorodifluoromethane	3.97	85	459360	16.513	ppbV	100
4) chloromethane	4.14	50	203706	18.159	ppbV	99
5) Freon-114	4.27	85	555407	16.939	ppbV	99
6) vinyl chloride	4.40	62	315258	18.572	ppbV	99
7) 1,3-butadiene	4.56	54	239880	18.845	ppbV	93
8) bromomethane	4.87	94	253760	18.167	ppbV	100
9) chloroethane	5.09	64	166742	19.012	ppbV	98
10) ethanol	5.26	31	983586	85.216	ppbV	98
11) vinyl bromide	5.51	106	228215	19.809	ppbV	100
12) acrolein	5.66	56	135160	17.585	ppbV	99
13) acetone	5.81	43	1445985	92.461	ppbV	99
14) trichlorofluoromethane	6.02	101	380747	18.347	ppbV	99
15) isopropyl alcohol	6.15	45	977044	47.747	ppbV	100
16) acrylonitrile	6.39	53	244271	19.928	ppbV	99
17) 1,1-dichloroethene	6.78	61	403923	14.965	ppbV #	87
18) tertiary butyl alcohol	6.86	59	595869	15.190	ppbV	97
19) methylene chloride	6.94	49	278210	14.791	ppbV	100
20) 3-chloropropene	7.08	41	488318	20.117	ppbV	98
21) carbon disulfide	7.24	76	990526	20.565	ppbV	99
22) Freon 113	7.27	101	546514	18.999	ppbV	99
23) trans-1,2-dichloroethene	8.06	61	543608	20.333	ppbV	95
24) 1,1-dichloroethane	8.30	63	626873	19.496	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423666_Ev2.D
Acq On : 22 Sep 2022 2:48 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD020
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:58:40 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	8.38	73	896182	20.485	ppbV		99
26) vinyl acetate	8.52	43	608258	17.908	ppbV		99
27) 2-butanone	8.78	43	700208	20.830	ppbV		98
28) cis-1,2-dichloroethene	9.29	61	483520	19.640	ppbV		100
29) Ethyl Acetate	9.58	61	129963	19.854	ppbV		82
30) chloroform	9.64	83	567172	18.979	ppbV		100
31) Tetrahydrofuran	10.07	42	457365	21.153	ppbV		96
32) 1,2-dichloroethane	10.48	62	375443	19.075	ppbV		99
34) hexane	9.55	57	700007	20.352	ppbV		98
36) 1,1,1-trichloroethane	10.78	97	496561	19.674	ppbV		99
37) benzene	11.30	78	1175990	19.928	ppbV		100
38) carbon tetrachloride	11.47	117	431496	19.235	ppbV		97
39) cyclohexane	11.61	56	754035	20.842	ppbV		98
40) Dibromomethane	12.22	93	342934	19.835	ppbV	#	99
41) 1,2-dichloropropane	12.25	63	414975	20.033	ppbV		98
42) bromodichloromethane	12.49	83	620219	20.700	ppbV		98
43) 1,4-dioxane	12.53	88	282059	22.537	ppbV		96
44) trichloroethene	12.53	130	466625	20.057	ppbV		98
45) 2,2,4-trimethylpentane	12.58	57	2286207	21.141	ppbV		99
46) heptane	12.90	43	752127	20.827	ppbV		98
47) cis-1,3-dichloropropene	14.17	75	535348	20.212	ppbV		99
48) 4-methyl-2-pentanone	13.58	43	837514	21.262	ppbV		100
49) trans-1,3-dichloropropene	13.55	75	575657	20.623	ppbV		98
50) 1,1,2-trichloroethane	14.37	97	410773	20.458	ppbV		98
52) toluene	14.69	91	1420278	20.210	ppbV		99
54) 2-hexanone	14.98	43	760675	21.684	ppbV		98
55) dibromochloromethane	15.14	129	565606	21.561	ppbV		100
56) 1,2-dibromoethane	15.39	107	568774	20.626	ppbV		98
57) tetrachloroethene	15.86	166	553215	19.912	ppbV		98
58) 1,1,1,2-tetrachloroethane	16.50	131	441010	20.095	ppbV		98
59) chlorobenzene	16.51	112	1004190	20.150	ppbV		98
60) ethylbenzene	16.86	91	1735501	20.382	ppbV		99
61) m+p-xylene	17.02	91	2781670	39.907	ppbV		99
62) bromoform	17.10	173	555851	21.831	ppbV		99
63) styrene	17.35	104	1095242	20.916	ppbV		99
64) 1,1,2,2-tetrachloroethane	17.44	83	935047	20.253	ppbV		99
65) o-xylene	17.44	91	1358346	19.347	ppbV		99
66) 1,2,3-Trichloropropane	17.56	75	754411	20.213	ppbV		99
68) isopropylbenzene	17.96	105	1705278	19.370	ppbV		98
69) Bromobenzene	18.03	77	1033386	19.802	ppbV		95

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423666_Ev2.D
Acq On : 22 Sep 2022 2:48 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD020
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:58:40 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.52	105	1811586	20.550	ppbV	95
71) 1,3,5-trimethylbenzene	18.58	105	1509319	19.613	ppbV	98
72) tert-butylbenzene	18.93	119	1566074	18.295	ppbV	93
73) 1,2,4-trimethylbenzene	18.93	105	1372478	18.625	ppbV	89
74) Benzyl Chloride	19.05	91	1171236	19.989	ppbV	98
75) 1,3-dichlorobenzene	19.07	146	862499	20.466	ppbV	99
76) 1,4-dichlorobenzene	19.13	146	883473	21.129	ppbV	99
77) sec-butylbenzene	19.16	105	2128026	18.933	ppbV #	91
78) p-isopropyltoluene	19.29	119	1865418	18.035	ppbV	93
79) 1,2-dichlorobenzene	19.42	146	819156	20.826	ppbV	91
80) n-butylbenzene	19.64	91	1843719	19.541	ppbV	97
81) 1,2-dibromo-3-chloropr...	19.80	75	390897	19.375	ppbV	96
82) 1,2,4-trichlorobenzene	20.92	180	823693	20.725	ppbV	96
83) naphthalene	21.02	128	2026945	18.986	ppbV	99
84) 1,2,3-trichlorobenzene	21.27	180	804364	18.861	ppbV	99
85) hexachlorobutadiene	21.34	225	644740	17.350	ppbV	96

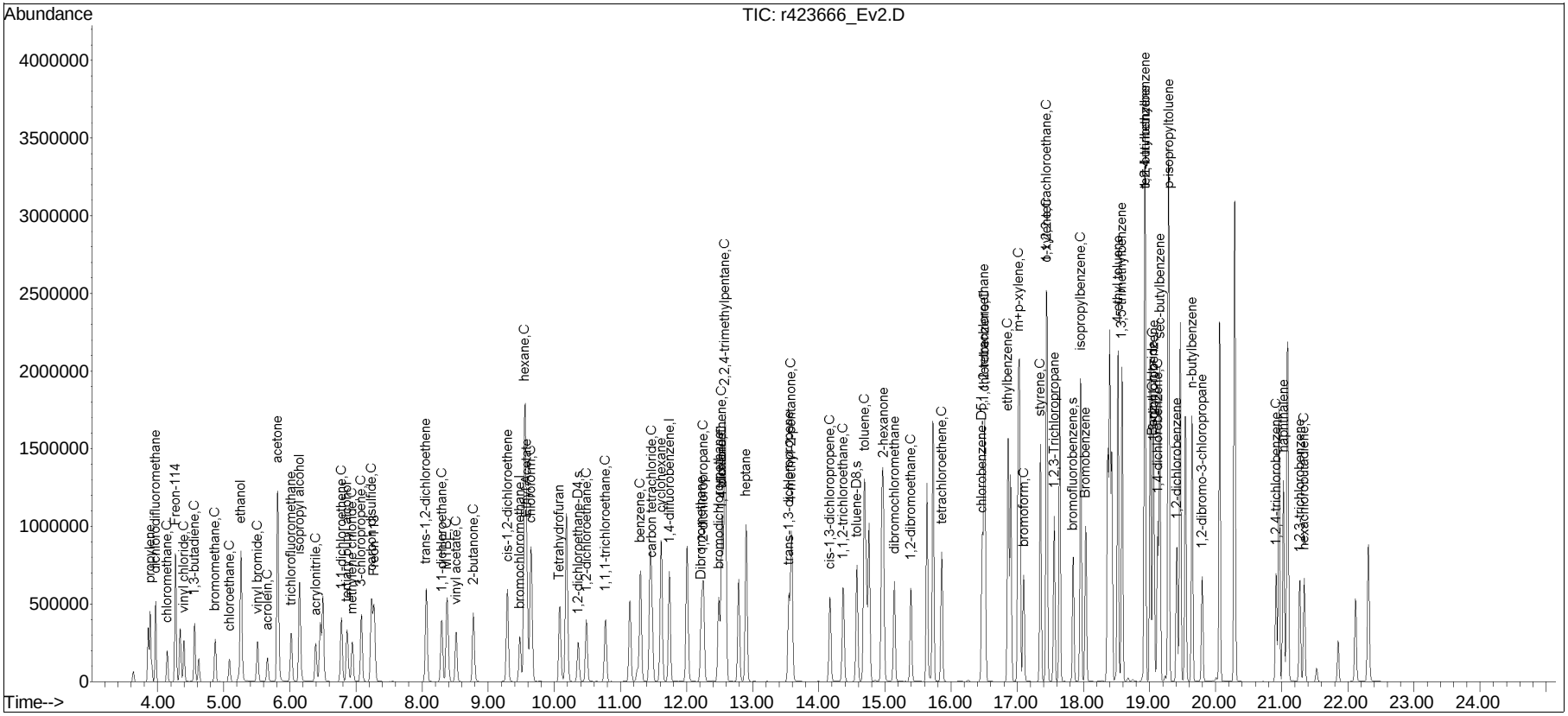
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423666_Ev2.D
Acq On : 22 Sep 2022 2:48 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD020
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 08:58:40 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

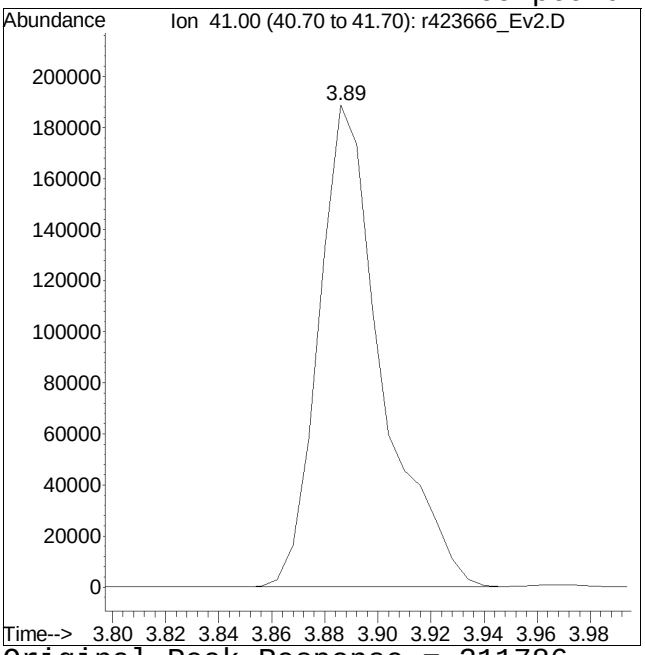
Sub List : Default - All compounds listed22\09\0921SIM_I\r423664_Ev2.D



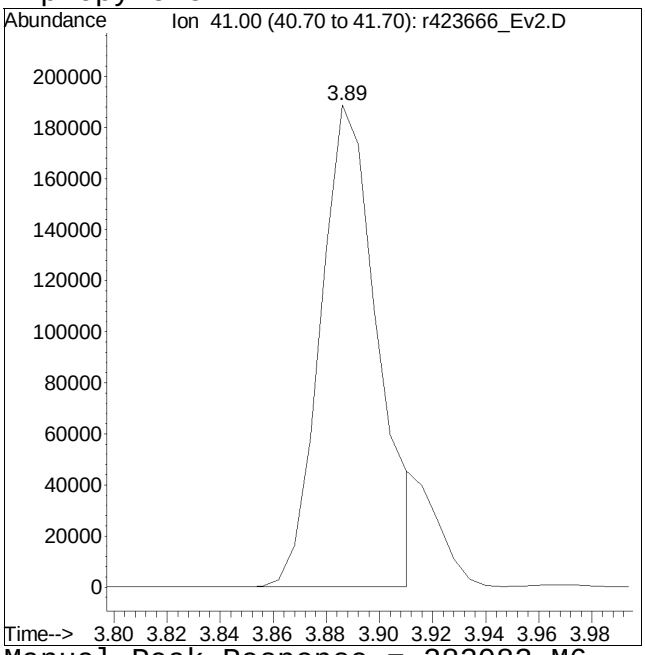
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airpiano4QMethod : TSIM4_220921.M
Data File : r423666_Ev2.D Operator : AIRPIANO4:RY
Date Inj'd : 9/22/2020 0:2: 8 Instrument :
Sample : ITO15-SIMSTD020 Quant Date : 9/22/2022 12:18 pm

Compound #2: propylene



Original Peak Response = 311786



Manual Peak Response = 283083 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423667_Ev2.D
Acq On : 22 Sep 2022 3:28 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD050
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 09:00:28 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.48	49	310983	10.000	ppbV	0.02
Standard Area = 305189			Recovery = 101.90%			
33) 1,4-difluorobenzene	11.75	114	890109	10.000	ppbV	0.01
Standard Area = 898219			Recovery = 99.10%			
51) chlorobenzene-D5	16.47	54	140829	10.000	ppbV	0.00
Standard Area = 156074			Recovery = 90.23%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.37	65	205028	9.285	ppbV	0.02
Spiked Amount 10.000	Range 70 - 130		Recovery = 92.85%			
53) toluene-D8	14.57	98	864588	11.598	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 115.98%			
67) bromofluorobenzene	17.85	95	639112	11.599	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 115.99%			
Target Compounds						Qvalue
2) propylene	3.89	41	669750M6	48.173	ppbV	
3) dichlorodifluoromethane	3.98	85	989389	36.156	ppbV	99
4) chloromethane	4.15	50	468635	42.468	ppbV	99
5) Freon-114	4.28	85	1165480	36.133	ppbV	98
6) vinyl chloride	4.40	62	727429	43.564	ppbV	99
7) 1,3-butadiene	4.56	54	540166	43.138	ppbV	91
8) bromomethane	4.88	94	563955	41.044	ppbV	100
9) chloroethane	5.10	64	394738	45.754	ppbV	96
10) ethanol	5.27	31	1957576	172.411	ppbV	96
11) vinyl bromide	5.52	106	524101	46.245	ppbV	97
12) acrolein	5.67	56	311083	41.145	ppbV	99
13) acetone	5.82	43	3163862	205.660	ppbV	98
14) trichlorofluoromethane	6.03	101	833222	40.815	ppbV	99
15) isopropyl alcohol	6.16	45	2237594	111.160	ppbV	100
16) acrylonitrile	6.40	53	569690	47.246	ppbV	99
17) 1,1-dichloroethene	6.79	61	1166848	43.946	ppbV	93
18) tertiary butyl alcohol	6.87	59	1776172	46.029	ppbV	99
19) methylene chloride	6.95	49	837795	45.279	ppbV	97
20) 3-chloropropene	7.09	41	1174779	49.199	ppbV	96
21) carbon disulfide	7.24	76	2237869	47.231	ppbV	98
22) Freon 113	7.28	101	1243920	43.960	ppbV	99
23) trans-1,2-dichloroethene	8.07	61	1257315	47.807	ppbV	97
24) 1,1-dichloroethane	8.30	63	1477746	46.720	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423667_Ev2.D
Acq On : 22 Sep 2022 3:28 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD050
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 09:00:28 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	8.38	73	2018119	46.895	ppbV		97
26) vinyl acetate	8.52	43	1488816	44.559	ppbV		100
27) 2-butanone	8.78	43	1666704	50.403	ppbV		97
28) cis-1,2-dichloroethene	9.29	61	1123650	46.397	ppbV		98
29) Ethyl Acetate	9.59	61	313099	48.623	ppbV		88
30) chloroform	9.65	83	1234285	41.986	ppbV		99
31) Tetrahydrofuran	10.07	42	1112113	52.288	ppbV		97
32) 1,2-dichloroethane	10.49	62	806033	41.630	ppbV		95
34) hexane	9.55	57	1568954	46.721	ppbV		95
36) 1,1,1-trichloroethane	10.78	97	1081892	43.904	ppbV		99
37) benzene	11.31	78	2718146	47.177	ppbV		99
38) carbon tetrachloride	11.48	117	890557	40.659	ppbV		99
39) cyclohexane	11.62	56	1754270	49.663	ppbV		97
40) Dibromomethane	12.23	93	774434	45.878	ppbV	#	98
41) 1,2-dichloropropane	12.26	63	982134	48.561	ppbV		97
42) bromodichloromethane	12.49	83	1364229	46.634	ppbV		98
43) 1,4-dioxane	12.53	88	662210	54.193	ppbV		94
44) trichloroethene	12.54	130	1065584	46.912	ppbV		96
45) 2,2,4-trimethylpentane	12.59	57	5017663	47.523	ppbV		98
46) heptane	12.91	43	1728042	49.010	ppbV		98
47) cis-1,3-dichloropropene	14.18	75	1207094	46.678	ppbV		98
48) 4-methyl-2-pentanone	13.59	43	1917793	49.866	ppbV		96
49) trans-1,3-dichloropropene	13.55	75	1319211	48.404	ppbV		97
50) 1,1,2-trichloroethane	14.38	97	986795	50.337	ppbV		95
52) toluene	14.69	91	3186916	50.105	ppbV		98
54) 2-hexanone	14.98	43	1682765	53.000	ppbV		96
55) dibromochloromethane	15.14	129	1223057	51.512	ppbV		99
56) 1,2-dibromoethane	15.40	107	1253188	50.212	ppbV		98
57) tetrachloroethene	15.86	166	1185431	47.141	ppbV		99
58) 1,1,1,2-tetrachloroethane	16.50	131	915766	46.103	ppbV		98
59) chlorobenzene	16.52	112	2138632	47.414	ppbV		99
60) ethylbenzene	16.87	91	3783146	49.088	ppbV		97
61) m+p-xylene	17.03	91	5667234	89.831	ppbV		95
62) bromoform	17.10	173	1159453	50.312	ppbV		98
63) styrene	17.36	104	2424342	51.152	ppbV		96
64) 1,1,2,2-tetrachloroethane	17.45	83	1924369	46.054	ppbV		100
65) o-xylene	17.45	91	2679877	42.173	ppbV		90
66) 1,2,3-Trichloropropane	17.56	75	1641802	48.602	ppbV		98
68) isopropylbenzene	17.97	105	3582967	44.966	ppbV		95
69) Bromobenzene	18.04	77	2187060	46.303	ppbV		95

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423667_Ev2.D
Acq On : 22 Sep 2022 3:28 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD050
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 09:00:28 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.52	105	3745314	46.941	ppbV	95
71) 1,3,5-trimethylbenzene	18.59	105	3113554	44.703	ppbV	94
72) tert-butylbenzene	18.93	119	2935339	37.888	ppbV #	90
73) 1,2,4-trimethylbenzene	18.93	105	2668169	40.006	ppbV	90
74) Benzyl Chloride	19.06	91	2397108	45.200	ppbV	92
75) 1,3-dichlorobenzene	19.07	146	1845423	48.382	ppbV	93
76) 1,4-dichlorobenzene	19.13	146	1875710	49.564	ppbV	99
77) sec-butylbenzene	19.16	105	4323493M3	42.501	ppbV	
78) p-isopropyltoluene	19.29	119	3454016	36.897	ppbV	90
79) 1,2-dichlorobenzene	19.42	146	1793156	50.371	ppbV #	90
80) n-butylbenzene	19.65	91	3719551	43.556	ppbV #	87
81) 1,2-dibromo-3-chloropr...	19.80	75	783737	42.921	ppbV	92
82) 1,2,4-trichlorobenzene	20.92	180	1708744	47.502	ppbV	96
83) naphthalene	21.03	128	4233304	43.810	ppbV	98
84) 1,2,3-trichlorobenzene	21.27	180	1678934	43.498	ppbV	98
85) hexachlorobutadiene	21.34	225	1223363	36.373	ppbV	93

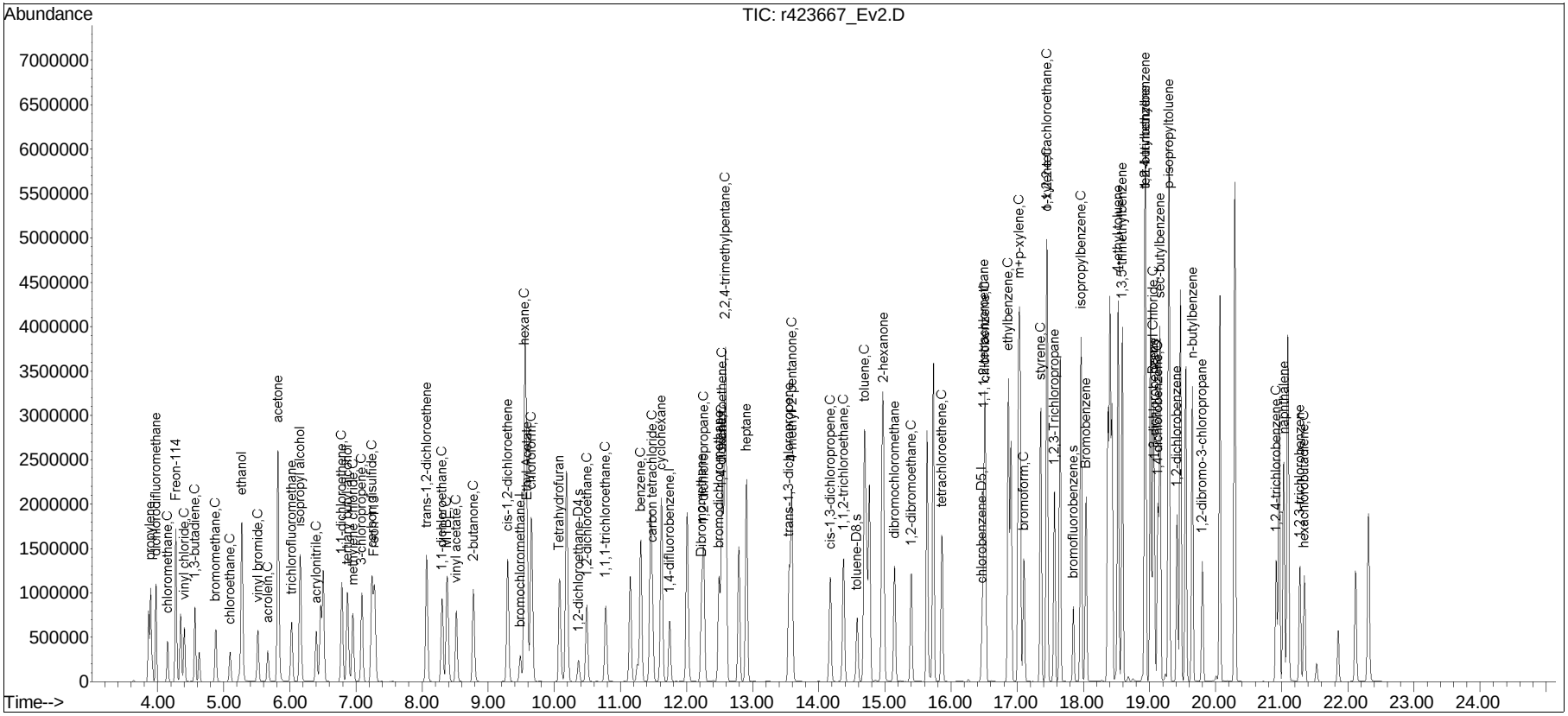
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423667_Ev2.D
Acq On : 22 Sep 2022 3:28 AM
Operator : AIRPIANO4:RY
Sample : ITO15-SIMSTD050
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 09:00:28 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Sep 22 12:17:07 2022
Response via : Initial Calibration

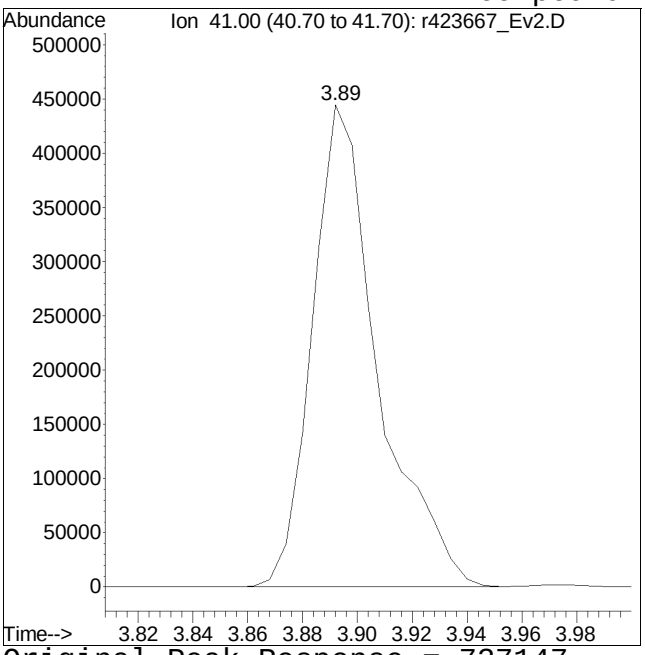
Sub List : Default - All compounds listed22\09\0921SIM_I\r423664_Ev2.D



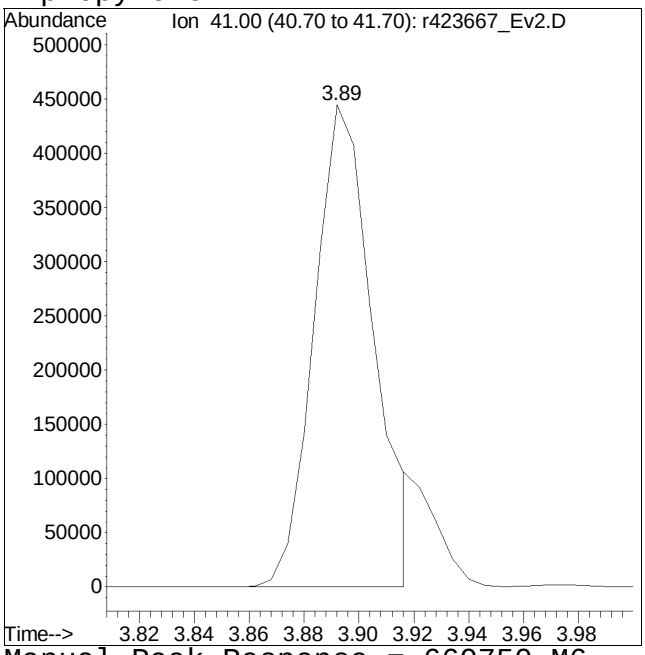
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airpiano4QMethod : TSIM4_220921.M
Data File : r423667_Ev2.D Operator : AIRPIANO4:RY
Date Inj'd : 9/22/2020 0:3: 8 Instrument :
Sample : ITO15-SIMSTD050 Quant Date : 9/22/2022 12:18 pm

Compound #2: propylene



Original Peak Response = 737147



Manual Peak Response = 669750 M6

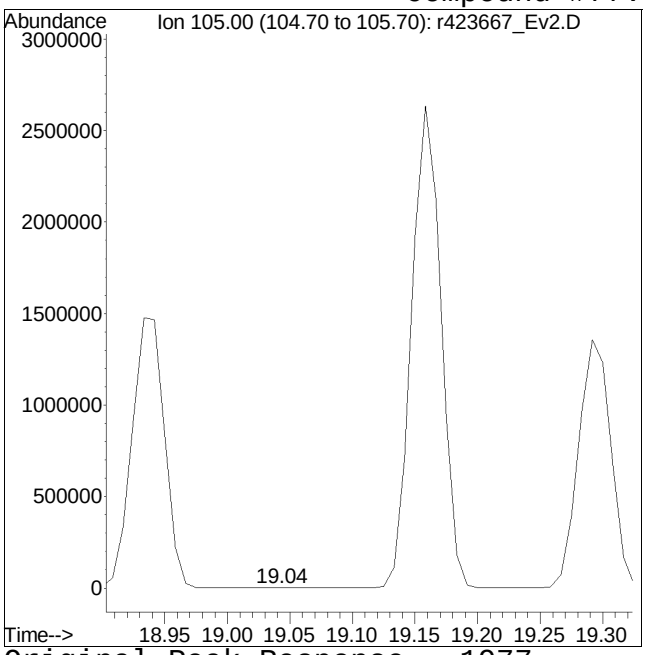
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

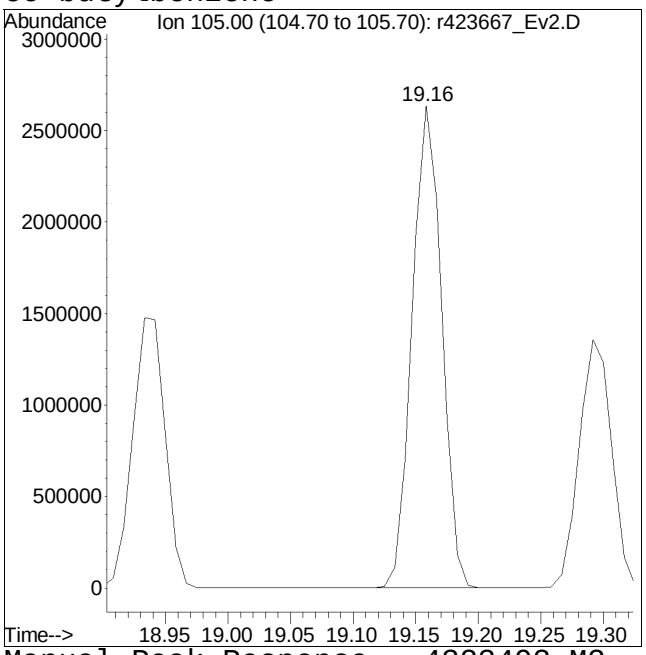
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423667_Ev2.D
Date Inj'd : 9/22/2020 0:3: 8
Sample : ITO15-SIMSTD050

Method : TSIM4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/22/2022 12:18 pm

Compound #77: sec-butylbenzene





Original Peak Response = 1977 Manual Peak Response = 4323493 M3

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

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423672_Ev2.D
Acq On : 22 Sep 2022 11:16 AM
Operator : AIRPIANO4:RY
Sample : CTO15-SIMSTD5.0
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 09:02:18 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 09:00:39 2022
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	bromochloromethane	1.000	1.000	0.0	81	0.03
2		propylene	0.482	0.483	-0.2	88	0.02
3		dichlorodifluoromethane	0.866	0.660	23.8	61	0.02
4	C	chloromethane	0.363	0.309	14.9	71	0.02
5		Freon-114	1.054	0.851	19.3	66	0.03
6	C	vinyl chloride	0.563	0.479	14.9	72	0.02
7	C	1,3-butadiene	0.429	0.362	15.6	73	0.02
8	C	bromomethane	0.463	0.366	21.0	67	0.04
9	C	chloroethane	0.288	0.260	9.7	76	0.04
10		ethanol	0.355	0.281	20.8	62	0.04
11	C	vinyl bromide	0.385	0.332	13.8	74	0.03
12	C	acrolein	0.234	0.188	19.7	63	0.03
13		acetone	0.520	0.470	9.6	77	0.03
14		trichlorofluoromethane	0.672	0.519	22.8	64	0.03
15		isopropyl alcohol	0.753	0.594	21.1	74	0.03
16	C	acrylonitrile	0.419	0.319	23.9	67	0.03
17	C	1,1-dichloroethene	0.771	0.580	24.8	55#	0.03
18		tertiary butyl alcohol	1.164	0.803	31.0#	52#	0.04
19	C	methylene chloride	0.571	0.420	26.4	57#	0.04
20	C	3-chloropropene	0.809	0.643	20.5	68	0.03
21	C	carbon disulfide	1.630	1.066	34.6#	57#	0.03
22		Freon 113	0.951	0.773	18.7	69	0.03
23		trans-1,2-dichloroethene	0.912	0.796	12.7	76	0.03
24	C	1,1-dichloroethane	1.075	0.971	9.7	77	0.03
25	C	MTBE	1.510	1.299	14.0	76	0.03
26	C	vinyl acetate	1.024	1.000	2.3	75	0.03
27	C	2-butanone	1.148	1.039	9.5	79	0.03
28		cis-1,2-dichloroethene	0.822	0.745	9.4	78	0.03
29		Ethyl Acetate	0.211	0.229	-8.5	90	0.03
30	C	chloroform	0.977	0.805	17.6	69	0.03
31		Tetrahydrofuran	0.740	0.693	6.4	82	0.02
32	C	1,2-dichloroethane	0.654	0.471	28.0	61	0.03
33	I	1,4-difluorobenzene	1.000	1.000	0.0	83	0.03
34	C	hexane	0.404	0.366	9.4	80	0.03
35	s	1,2-dichloroethane-D4	0.249	0.204	18.1	68	0.03
36	C	1,1,1-trichloroethane	0.292	0.230	21.2	69	0.02
37	C	benzene	0.713	0.593	16.8	76	0.03
38	C	carbon tetrachloride	0.251	0.191	23.9	64	0.03

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423672_Ev2.D
Acq On : 22 Sep 2022 11:16 AM
Operator : AIRPIANO4:RY
Sample : CTO15-SIMSTD5.0
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 09:02:18 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 09:00:39 2022
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
39		cyclohexane	0.428	0.386	9.8	80	0.03
40		Dibromomethane	0.216	0.170	21.3	74	0.03
41	C	1,2-dichloropropane	0.247	0.231	6.5	84	0.03
42		bromodichloromethane	0.355	0.286	19.4	72	0.03
43	C	1,4-dioxane	0.154	0.138	10.4	83	0.03
44	C	trichloroethene	0.272	0.248	8.8	80	0.03
45	C	2,2,4-trimethylpentane	1.361	1.217	10.6	85	0.03
46		heptane	0.428	0.402	6.1	84	0.03
47	C	cis-1,3-dichloropropene	0.290	0.222	23.4	63	0.03
48	C	4-methyl-2-pentanone	0.454	0.443	2.4	85	0.02
49		trans-1,3-dichloropropene	0.318	0.295	7.2	80	0.03
50	C	1,1,2-trichloroethane	0.233	0.228	2.1	85	0.03
51	I	chlorobenzene-D5	1.000	1.000	0.0	76	0.02
52	C	toluene	5.105	4.870	4.6	82	0.03
53	s	toluene-D8	5.519	6.094	-10.4	87	0.03
54		2-hexanone	2.392	2.441	-2.0	82	0.03
55		dibromochloromethane	1.799	1.788	0.6	80	0.03
56	C	1,2-dibromoethane	1.860	1.761	5.3	75	0.03
57	C	tetrachloroethene	1.937	1.831	5.5	78	0.02
58		1,1,1,2-tetrachloroethane	1.463	1.399	4.4	75	0.02
59	C	chlorobenzene	3.409	3.327	2.4	79	0.02
60	C	ethylbenzene	5.805	6.014	-3.6	83	0.02
61	C	m+p-xylene	4.718	4.790	-1.5	81	0.02
62	C	bromoform	1.613	1.769	-9.7	82	0.02
63	C	styrene	3.497	3.603	-3.0	81	0.02
64	C	1,1,2,2-tetrachloroethane	3.160	3.029	4.1	77	0.02
65	C	o-xylene	4.741	4.863	-2.6	82	0.02
66		1,2,3-Trichloropropane	2.504	2.303	8.0	73	0.02
67	s	bromofluorobenzene	4.042	4.375	-8.2	85	0.02
68	C	isopropylbenzene	5.935	5.784	2.5	78	0.02
69		Bromobenzene	3.462	3.227	6.8	73	0.02
70		4-ethyl toluene	5.940	5.856	1.4	78	0.02
71		1,3,5-trimethylbenzene	5.234	5.089	2.8	78	0.02
72		tert-butylbenzene	5.656	5.362	5.2	74	0.02
73		1,2,4-trimethylbenzene	4.949	4.914	0.7	79	0.02
74	C	Benzyl Chloride	3.530	3.711	-5.1	75	0.02
75		1,3-dichlorobenzene	2.827	2.784	1.5	78	0.02
76	C	1,4-dichlorobenzene	2.830	2.761	2.4	78	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423672_Ev2.D
Acq On : 22 Sep 2022 11:16 AM
Operator : AIRPIANO4:RY
Sample : CTO15-SIMSTD5.0
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 09:02:18 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 09:00:39 2022
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
77		sec-butylbenzene	7.506	7.262	3.3	76	0.02
78		p-isopropyltoluene	6.753	6.138	9.1	70	0.02
79		1,2-dichlorobenzene	2.664	2.524	5.3	76	0.02
80		n-butylbenzene	6.243	6.414	-2.7	80	0.02
81		1,2-dibromo-3-chloropropane	1.226	1.159	5.5	68	0.02
82	C	1,2,4-trichlorobenzene	2.377	1.839	22.6	55#	0.02
83		naphthalene	6.764	6.635	1.9	73	0.02
84		1,2,3-trichlorobenzene	2.386	2.619	-9.8	72	0.02
85	C	hexachlorobutadiene	2.284	1.772	22.4	56#	0.02

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 1

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423672_Ev2.D
Acq On : 22 Sep 2022 11:16 AM
Operator : AIRPIANO4:RY
Sample : CTO15-SIMSTD5.0
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 09:02:18 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 09:00:39 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.50	49	247393	10.000	ppbV	0.03
Standard Area = 305189			Recovery = 81.06%			
33) 1,4-difluorobenzene	11.76	114	742480	10.000	ppbV	0.03
Standard Area = 898219			Recovery = 82.66%			
51) chlorobenzene-D5	16.48	54	118358	10.000	ppbV	0.02
Standard Area = 156074			Recovery = 75.83%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.38	65	151500	8.181	ppbV	0.03
Spiked Amount 10.000	Range 70 - 130		Recovery = 81.81%			
53) toluene-D8	14.59	98	721295	11.043	ppbV	0.03
Spiked Amount 10.000	Range 70 - 130		Recovery = 110.43%			
67) bromofluorobenzene	17.86	95	517765	10.824	ppbV	0.02
Spiked Amount 10.000	Range 70 - 130		Recovery = 108.24%			
Target Compounds						Qvalue
2) propylene	3.91	41	59766M6	5.009	ppbV	
3) dichlorodifluoromethane	3.99	85	81640	3.810	ppbV	100
4) chloromethane	4.17	50	38209	4.253	ppbV	99
5) Freon-114	4.29	85	105241	4.038	ppbV	99
6) vinyl chloride	4.42	62	59239	4.254	ppbV	99
7) 1,3-butadiene	4.58	54	44720	4.210	ppbV	84
8) bromomethane	4.90	94	45240	3.953	ppbV	97
9) chloroethane	5.12	64	32161	4.521	ppbV	95
10) ethanol	5.29	31	173539	19.741	ppbV	96
11) vinyl bromide	5.54	106	41088	4.312	ppbV	98
12) acrolein	5.69	56	23216	4.004	ppbV	99
13) acetone	5.84	43	290646	22.603	ppbV	98
14) trichlorofluoromethane	6.05	101	64142	3.860	ppbV	97
15) isopropyl alcohol	6.18	45	183833	9.870	ppbV	99
16) acrylonitrile	6.41	53	39486	3.811	ppbV	99
17) 1,1-dichloroethene	6.80	61	71722	3.759	ppbV #	87
18) tertiary butyl alcohol	6.90	59	99365	3.450	ppbV	100
19) methylene chloride	6.97	49	51926	3.675	ppbV	99
20) 3-chloropropene	7.10	41	79531	3.972	ppbV	92
21) carbon disulfide	7.26	76	131829	3.270	ppbV	100
22) Freon 113	7.30	101	95668	4.067	ppbV #	91
23) trans-1,2-dichloroethene	8.08	61	98438	4.365	ppbV	98
24) 1,1-dichloroethane	8.32	63	120151	4.518	ppbV	99

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423672_Ev2.D
Acq On : 22 Sep 2022 11:16 AM
Operator : AIRPIANO4:RY
Sample : CTO15-SIMSTD5.0
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 09:02:18 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 09:00:39 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	8.41	73	160672	4.300	ppbV		98
26) vinyl acetate	8.54	43	123713	4.883	ppbV		99
27) 2-butanone	8.80	43	128534	4.527	ppbV		99
28) cis-1,2-dichloroethene	9.31	61	92098	4.530	ppbV		99
29) Ethyl Acetate	9.62	61	28296	5.421	ppbV		81
30) chloroform	9.67	83	99604	4.123	ppbV		98
31) Tetrahydrofuran	10.11	42	85758	4.685	ppbV		95
32) 1,2-dichloroethane	10.51	62	58268	3.602	ppbV	#	94
34) hexane	9.57	57	135813	4.531	ppbV		99
36) 1,1,1-trichloroethane	10.79	97	85266	3.939	ppbV		99
37) benzene	11.32	78	219989	4.154	ppbV		98
38) carbon tetrachloride	11.49	117	70882	3.810	ppbV		99
39) cyclohexane	11.63	56	143117	4.498	ppbV		100
40) Dibromomethane	12.24	93	63190	3.946	ppbV	#	97
41) 1,2-dichloropropane	12.27	63	85615	4.664	ppbV		97
42) bromodichloromethane	12.51	83	106306	4.037	ppbV		99
43) 1,4-dioxane	12.56	88	51288	4.485	ppbV		99
44) trichloroethene	12.55	130	92176	4.559	ppbV		96
45) 2,2,4-trimethylpentane	12.60	57	451794	4.471	ppbV		98
46) heptane	12.92	43	149362	4.704	ppbV		99
47) cis-1,3-dichloropropene	14.19	75	82452	3.827	ppbV		100
48) 4-methyl-2-pentanone	13.61	43	164519	4.880	ppbV		99
49) trans-1,3-dichloropropene	13.57	75	109393	4.635	ppbV		98
50) 1,1,2-trichloroethane	14.39	97	84565	4.878	ppbV		91
52) toluene	14.71	91	288225	4.770	ppbV		98
54) 2-hexanone	15.00	43	144474	5.103	ppbV		97
55) dibromochloromethane	15.16	129	105831	4.971	ppbV		98
56) 1,2-dibromoethane	15.41	107	104210	4.733	ppbV		98
57) tetrachloroethene	15.88	166	108349	4.727	ppbV		97
58) 1,1,1,2-tetrachloroethane	16.52	131	82772	4.780	ppbV		97
59) chlorobenzene	16.52	112	196886	4.880	ppbV		100
60) ethylbenzene	16.88	91	355880	5.180	ppbV		97
61) m+p-xylene	17.04	91	566887	10.151	ppbV		99
62) bromoform	17.11	173	104671	5.483	ppbV		99
63) styrene	17.37	104	213204	5.152	ppbV		97
64) 1,1,2,2-tetrachloroethane	17.46	83	179266	4.793	ppbV		100
65) o-xylene	17.46	91	287789	5.129	ppbV		99
66) 1,2,3-Trichloropropane	17.57	75	136272	4.598	ppbV		98
68) isopropylbenzene	17.98	105	342309	4.873	ppbV		99
69) Bromobenzene	18.05	77	190968	4.661	ppbV		98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423672_Ev2.D
Acq On : 22 Sep 2022 11:16 AM
Operator : AIRPIANO4:RY
Sample : CTO15-SIMSTD5.0
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 09:02:18 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 09:00:39 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\r423664_Ev2.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.53	105	346561	4.929	ppbV	100
71) 1,3,5-trimethylbenzene	18.60	105	301167	4.861	ppbV	98
72) tert-butylbenzene	18.94	119	317320	4.740	ppbV	95
73) 1,2,4-trimethylbenzene	18.94	105	290829	4.965	ppbV	95
74) Benzyl Chloride	19.07	91	219596	5.255	ppbV	99
75) 1,3-dichlorobenzene	19.08	146	164770	4.924	ppbV	96
76) 1,4-dichlorobenzene	19.13	146	163411	4.879	ppbV	95
77) sec-butylbenzene	19.17	105	429781	4.838	ppbV	96
78) p-isopropyltoluene	19.30	119	363256	4.545	ppbV	92
79) 1,2-dichlorobenzene	19.43	146	149347	4.737	ppbV	94
80) n-butylbenzene	19.66	91	379547	5.137	ppbV	98
81) 1,2-dibromo-3-chloropr...	19.81	75	68596	4.728	ppbV	92
82) 1,2,4-trichlorobenzene	20.93	180	108824	3.867	ppbV	96
83) naphthalene	21.04	128	392677	4.905	ppbV	98
84) 1,2,3-trichlorobenzene	21.29	180	154990	5.488	ppbV	96
85) hexachlorobutadiene	21.36	225	104888	3.879	ppbV	98

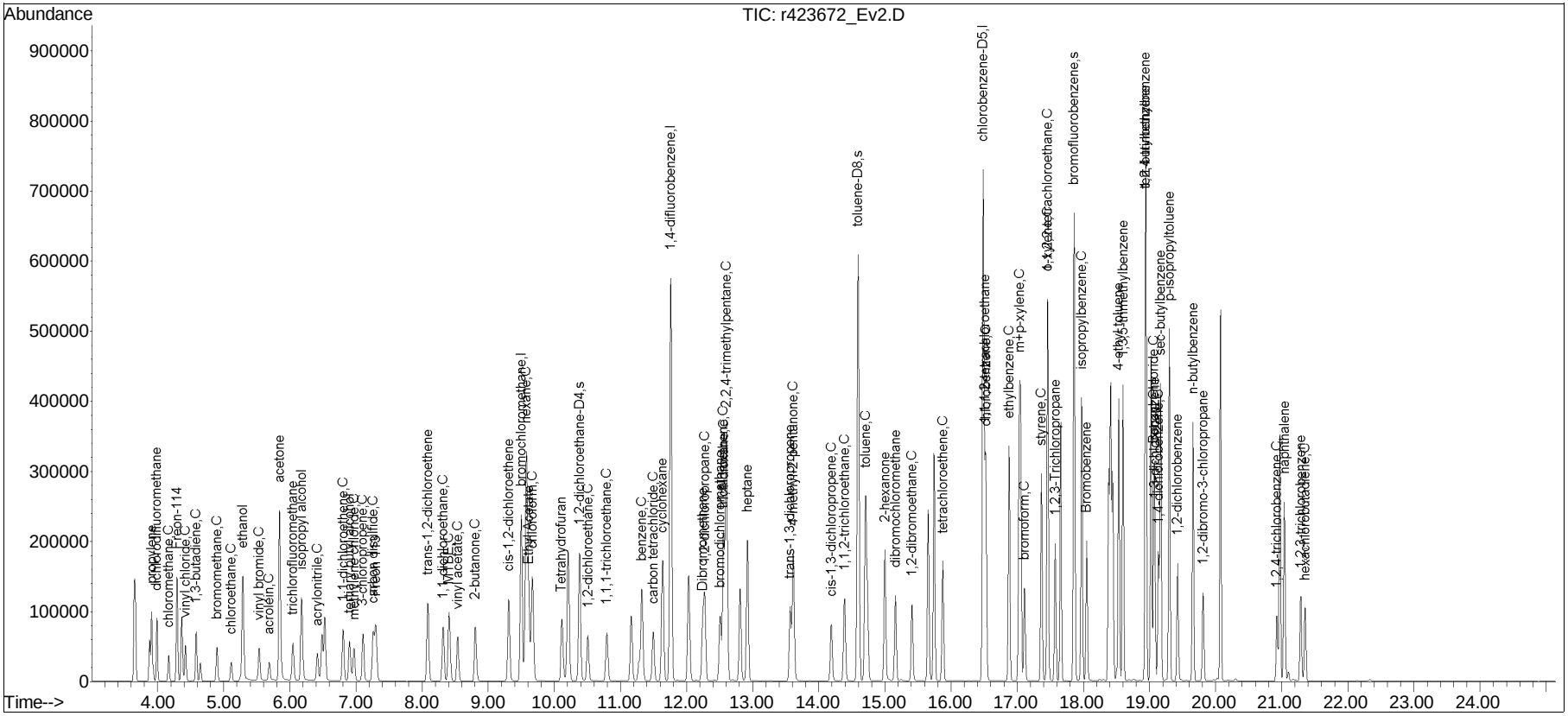
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\
Data File : r423672_Ev2.D
Acq On : 22 Sep 2022 11:16 AM
Operator : AIRPIANO4:RY
Sample : CTO15-SIMSTD5.0
Misc : WG1691192
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 23 09:02:18 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\09\0921SIM_I\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 09:00:39 2022
Response via : Initial Calibration

Sub List : Default - All compounds listed22\09\0921SIM_I\r423664_Ev2.D

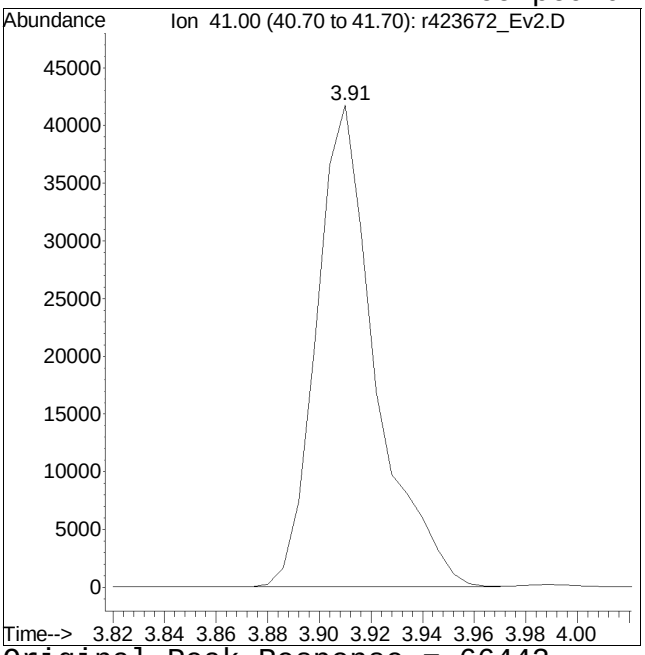


Manual Integration/Negative Proof Report

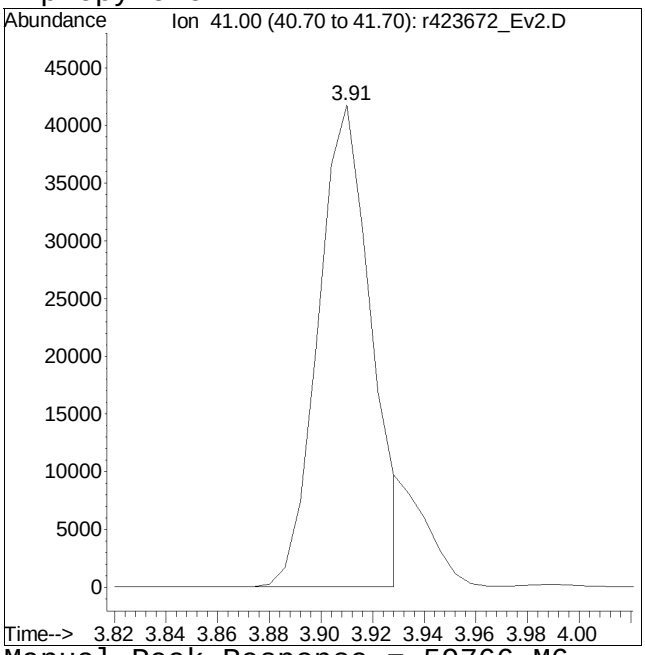
Data Path : O:\Forensics\Data\Airpiano4Q
Data File : r423672_Ev2.D
Date Inj'd : 9/22/2020 0:1: 6
Sample : CTO15-SIMSTD5.0

Method : TSIM4_220921.M
Operator : AIRPIANO4:RY
Instrument :
Quant Date : 9/23/2022 9:01 am

Compound #2: propylene



Original Peak Response = 66442



Manual Peak Response = 59766 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Continuing Calibration

Calibration Verification Summary
Form 7
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855		
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002		
Instrument ID	: AIRPIANO4	**Calibration Date**	: 10/04/22 14:25		
Lab File ID	: R423914_EV2	**Init. Calib. Date(s)**	: 09/21/22	09/22/22	
Sample No	: WG1695438-2	**Init. Calib. Times**	: 21:35	03:28	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
bromochloromethane	1	1	-	0	30	99	-.02
propylene	0.482	0.419	-	13.1	30	93	-.01
dichlorodifluoromethane	0.866	0.935	-	-8	30	105	0
chloromethane	0.363	0.412	-	-13.5	30	115	-.01
Freon-114	1.054	1.198	-	-13.7	30	115	-.01
vinyl chloride	0.563	0.553	-	1.8	30	102	-.01
1,3-butadiene	0.429	0.486	-	-13.3	30	120	-.02
bromomethane	0.463	0.452	-	2.4	30	102	-.01
chloroethane	0.288	0.278	-	3.5	30	99	-.01
ethanol	0.355	0.382	-	-7.6	30	104	-.01
vinyl bromide	0.385	0.371	-	3.6	30	101	-.01
acrolein	0.234	0.244	-	-4.3	30	100	-.02
acetone	0.52	0.561	-	-7.9	30	112	-.02
trichlorofluoromethane	0.672	0.752	-	-11.9	30	114	-.02
isopropyl alcohol	0.753	0.781	-	-3.7	30	120	-.02
acrylonitrile	0.419	0.441	-	-5.3	30	113	-.02
1,1-dichloroethene	0.771	0.746	-	3.2	30	87	-.02
tertiary butyl alcohol	1.164	1.059	-	9	30	85	-.02
methylene chloride	0.571	0.575	-	-0.7	30	96	-.02
3-chloropropene	0.809	0.782	-	3.3	30	101	-.02
carbon disulfide	1.63	1.455	-	10.7	30	95	-.02
Freon 113	0.951	0.876	-	7.9	30	96	-.02
trans-1,2-dichloroethene	0.912	0.758	-	16.9	30	89	-.03
1,1-dichloroethane	1.075	0.924	-	14	30	90	-.02
MTBE	1.51	1.381	-	8.5	30	99	-.02
vinyl acetate	1.024	1.01	-	1.4	30	93	-.03
2-butanone	1.148	1.052	-	8.4	30	98	-.02
cis-1,2-dichloroethene	0.822	0.724	-	11.9	30	92	-.03
Ethyl Acetate	0.211	0.192	-	9	30	92	-.03
chloroform	0.977	0.964	-	1.3	30	101	-.03
Tetrahydrofuran	0.74	0.645	-	12.8	30	94	-.03
1,2-dichloroethane	0.654	0.594	-	9.2	30	95	-.02
1,4-difluorobenzene	1	1	-	0	30	91	-.02
hexane	0.404	0.388	-	4	30	93	-.02
1,1,1-trichloroethane	0.292	0.288	-	1.4	30	95	-.03
benzene	0.713	0.672	-	5.8	30	94	-.02
carbon tetrachloride	0.251	0.266	-	-6	30	98	-.02
cyclohexane	0.428	0.411	-	4	30	94	-.02
Dibromomethane	0.216	0.179	-	17.1	30	86	-.02
1,2-dichloropropane	0.247	0.228	-	7.7	30	91	-.02
bromodichloromethane	0.355	0.366	-	-3.1	30	101	-.03
1,4-dioxane	0.154	0.162	-	-5.2	30	107	-.03
trichloroethene	0.272	0.253	-	7	30	90	-.02

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Air Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253855		
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.0007Y002		
Instrument ID	: AIRPIANO4	**Calibration Date**	: 10/04/22 14:25		
Lab File ID	: R423914_EV2	**Init. Calib. Date(s)**	: 09/21/22	09/22/22	
Sample No	: WG1695438-2	**Init. Calib. Times**	: 21:35	03:28	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
2,2,4-trimethylpentane	1.361	1.276	-	6.2	30	98	-.02
heptane	0.428	0.419	-	2.1	30	96	-.02
cis-1,3-dichloropropene	0.29	0.269	-	7.2	30	84	-.02
4-methyl-2-pentanone	0.454	0.484	-	-6.6	30	102	-.03
trans-1,3-dichloropropene	0.318	0.34	-	-6.9	30	101	-.02
1,1,2-trichloroethane	0.233	0.228	-	2.1	30	94	-.03
chlorobenzene-D5	1	1	-	0	30	97	-.02
toluene	5.105	4.159	-	18.5	30	90	-.03
2-hexanone	2.392	2.35	-	1.8	30	101	-.03
dibromochloromethane	1.799	1.693	-	5.9	30	98	-.02
1,2-dibromoethane	1.86	1.808	-	2.8	30	99	-.02
tetrachloroethene	1.937	1.851	-	4.4	30	101	-.02
1,1,1,2-tetrachloroethane	1.463	1.186	-	18.9	30	82	-.02
chlorobenzene	3.409	3.269	-	4.1	30	99	-.02
ethylbenzene	5.805	5.125	-	11.7	30	91	-.02
m+p-xylene	4.718	4.234	-	10.3	30	92	-.02
bromoform	1.613	1.679	-	-4.1	30	100	-.02
styrene	3.497	3.384	-	3.2	30	98	-.02
1,1,2,2-tetrachloroethane	3.16	3.136	-	0.8	30	103	-.02
o-xylene	4.741	4.347	-	8.3	30	94	-.02
1,2,3-Trichloropropane	2.504	2.162	-	13.7	30	88	-.02
isopropylbenzene	5.935	5.297	-	10.7	30	91	-.02
Bromobenzene	3.462	3.02	-	12.8	30	88	-.02
4-ethyl toluene	5.94	5.586	-	6	30	96	0
1,3,5-trimethylbenzene	5.234	5.017	-	4.1	30	99	-.02
tert-butylbenzene	5.656	5.001	-	11.6	30	88	-.02
1,2,4-trimethylbenzene	4.949	5.025	-	-1.5	30	103	0
Benzyl Chloride	3.53	3.36	-	4.8	30	87	-.02
1,3-dichlorobenzene	2.827	3.047	-	-7.8	30	109	-.02
1,4-dichlorobenzene	2.83	3.06	-	-8.1	30	111	-.02
sec-butylbenzene	7.506	6.676	-	11.1	30	90	0
p-isopropyltoluene	6.753	5.59	-	17.2	30	82	-.02
1,2-dichlorobenzene	2.664	2.859	-	-7.3	30	110	-.02
n-butylbenzene	6.243	5.444	-	12.8	30	87	-.02
1,2-dibromo-3-chloropropan	1.226	1.162	-	5.2	30	87	0
1,2,4-trichlorobenzene	2.377	2.613	-	-9.9	30	100	0
naphthalene	6.764	5.635	-	16.7	30	80	-.02
1,2,3-trichlorobenzene	2.386	2.413	-	-1.1	30	86	-.02
hexachlorobutadiene	2.284	2.515	-	-10.1	30	102	-.02

* Value outside of QC limits.

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\
Data File : r423914_Ev2.D
Acq On : 4 Oct 2022 2:25 PM
Operator : AIRPIANO4:TJS
Sample : WG1695438-2,3,250,250
Misc : WG1695438,ICAL19358
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 04 15:54:30 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 09:00:39 2022
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	bromochloromethane	1.000	1.000	0.0	99	-0.02
2		propylene	0.482	0.419	13.1	93	-0.01
3		dichlorodifluoromethane	0.866	0.935	-8.0	105	0.00
4	C	chloromethane	0.363	0.412	-13.5	115	-0.01
5		Freon-114	1.054	1.198	-13.7	115	-0.01
6	C	vinyl chloride	0.563	0.553	1.8	102	-0.01
7	C	1,3-butadiene	0.429	0.486	-13.3	120	-0.02
8	C	bromomethane	0.463	0.452	2.4	102	-0.01
9	C	chloroethane	0.288	0.278	3.5	99	-0.01
10		ethanol	0.355	0.382	-7.6	104	-0.01
11	C	vinyl bromide	0.385	0.371	3.6	101	-0.01
12	C	acrolein	0.234	0.244	-4.3	100	-0.02
13		acetone	0.520	0.561	-7.9	112	-0.02
14		trichlorofluoromethane	0.672	0.752	-11.9	114	-0.02
15		isopropyl alcohol	0.753	0.781	-3.7	120	-0.02
16	C	acrylonitrile	0.419	0.441	-5.3	113	-0.02
17	C	1,1-dichloroethene	0.771	0.746	3.2	87	-0.02
18		tertiary butyl alcohol	1.164	1.059	9.0	85	-0.02
19	C	methylene chloride	0.571	0.575	-0.7	96	-0.02
20	C	3-chloropropene	0.809	0.782	3.3	101	-0.02
21	C	carbon disulfide	1.630	1.455	10.7	95	-0.02
22		Freon 113	0.951	0.876	7.9	96	-0.02
23		trans-1,2-dichloroethene	0.912	0.758	16.9	89	-0.03
24	C	1,1-dichloroethane	1.075	0.924	14.0	90	-0.02
25	C	MTBE	1.510	1.381	8.5	99	-0.02
26	C	vinyl acetate	1.024	1.010	1.4	93	-0.03
27	C	2-butanone	1.148	1.052	8.4	98	-0.02
28		cis-1,2-dichloroethene	0.822	0.724	11.9	92	-0.03
29		Ethyl Acetate	0.211	0.192	9.0	92	-0.03
30	C	chloroform	0.977	0.964	1.3	101	-0.03
31		Tetrahydrofuran	0.740	0.645	12.8	94	-0.03
32	C	1,2-dichloroethane	0.654	0.594	9.2	95	-0.02
33	I	1,4-difluorobenzene	1.000	1.000	0.0	91	-0.02
34	C	hexane	0.404	0.388	4.0	93	-0.02
36	C	1,1,1-trichloroethane	0.292	0.288	1.4	95	-0.03
37	C	benzene	0.713	0.672	5.8	94	-0.02
38	C	carbon tetrachloride	0.251	0.266	-6.0	98	-0.02
39		cyclohexane	0.428	0.411	4.0	94	-0.02

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\
Data File : r423914_Ev2.D
Acq On : 4 Oct 2022 2:25 PM
Operator : AIRPIANO4:TJS
Sample : WG1695438-2,3,250,250
Misc : WG1695438,ICAL19358
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 04 15:54:30 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 09:00:39 2022
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40		Dibromomethane	0.216	0.179	17.1	86	-0.02
41	C	1,2-dichloropropane	0.247	0.228	7.7	91	-0.02
42		bromodichloromethane	0.355	0.366	-3.1	101	-0.03
43	C	1,4-dioxane	0.154	0.162	-5.2	107	-0.03
44	C	trichloroethene	0.272	0.253	7.0	90	-0.02
45	C	2,2,4-trimethylpentane	1.361	1.276	6.2	98	-0.02
46		heptane	0.428	0.419	2.1	96	-0.02
47	C	cis-1,3-dichloropropene	0.290	0.269	7.2	84	-0.02
48	C	4-methyl-2-pentanone	0.454	0.484	-6.6	102	-0.03
49		trans-1,3-dichloropropene	0.318	0.340	-6.9	101	-0.02
50	C	1,1,2-trichloroethane	0.233	0.228	2.1	94	-0.03
51	I	chlorobenzene-D5	1.000	1.000	0.0	97	-0.02
52	C	toluene	5.105	4.159	18.5	90	-0.03
54		2-hexanone	2.392	2.350	1.8	101	-0.03
55		dibromochloromethane	1.799	1.693	5.9	98	-0.02
56	C	1,2-dibromoethane	1.860	1.808	2.8	99	-0.02
57	C	tetrachloroethene	1.937	1.851	4.4	101	-0.02
58		1,1,1,2-tetrachloroethane	1.463	1.186	18.9	82	-0.02
59	C	chlorobenzene	3.409	3.269	4.1	99	-0.02
60	C	ethylbenzene	5.805	5.125	11.7	91	-0.02
61	C	m+p-xylene	4.718	4.234	10.3	92	-0.02
62	C	bromoform	1.613	1.679	-4.1	100	-0.02
63	C	styrene	3.497	3.384	3.2	98	-0.02
64	C	1,1,2,2-tetrachloroethane	3.160	3.136	0.8	103	-0.02
65	C	o-xylene	4.741	4.347	8.3	94	-0.02
66		1,2,3-Trichloropropane	2.504	2.162	13.7	88	-0.02
68	C	isopropylbenzene	5.935	5.297	10.7	91	-0.02
69		Bromobenzene	3.462	3.020	12.8	88	-0.02
70		4-ethyl toluene	5.940	5.586	6.0	96	0.00
71		1,3,5-trimethylbenzene	5.234	5.017	4.1	99	-0.02
72		tert-butylbenzene	5.656	5.001	11.6	88	-0.02
73		1,2,4-trimethylbenzene	4.949	5.025	-1.5	103	0.00
74	C	Benzyl Chloride	3.530	3.360	4.8	87	-0.02
75		1,3-dichlorobenzene	2.827	3.047	-7.8	109	-0.02
76	C	1,4-dichlorobenzene	2.830	3.060	-8.1	111	-0.02
77		sec-butylbenzene	7.506	6.676	11.1	90	0.00
78		p-isopropyltoluene	6.753	5.590	17.2	82	-0.02
79		1,2-dichlorobenzene	2.664	2.859	-7.3	110	-0.02

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\
Data File : r423914_Ev2.D
Acq On : 4 Oct 2022 2:25 PM
Operator : AIRPIANO4:TJS
Sample : WG1695438-2,3,250,250
Misc : WG1695438,ICAL19358
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 04 15:54:30 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 09:00:39 2022
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
80	n-butylbenzene	6.243	5.444	12.8	87	-0.02
81	1,2-dibromo-3-chloropropane	1.226	1.162	5.2	87	0.00
82 C	1,2,4-trichlorobenzene	2.377	2.613	-9.9	100	0.00
83	naphthalene	6.764	5.635	16.7	80	-0.02
84	1,2,3-trichlorobenzene	2.386	2.413	-1.1	86	-0.02
85 C	hexachlorobutadiene	2.284	2.515	-10.1	102	-0.02

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\
Data File : r423914_Ev2.D
Acq On : 4 Oct 2022 2:25 PM
Operator : AIRPIANO4:TJS
Sample : WG1695438-2,3,250,250
Misc : WG1695438,ICAL19358
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 04 15:54:30 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 09:00:39 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\r423914_Ev2.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.450	49	302847	10.000	ppbV	-0.02
Standard Area = 302847			Recovery = 100.00%			
33) 1,4-difluorobenzene	11.713	114	816313	10.000	ppbV	-0.02
Standard Area = 816313			Recovery = 100.00%			
51) chlorobenzene-D5	16.450	54	151842	10.000	ppbV	-0.02
Standard Area = 151842			Recovery = 100.00%			
System Monitoring Compounds						
Target Compounds						Qvalue
2) propylene	3.874	41	63416M6	4.342	ppbV	
3) dichlorodifluoromethane	3.958	85	141612	5.399	ppbV	99
4) chloromethane	4.132	50	62366	5.670	ppbV	100
5) Freon-114	4.252	85	181360	5.684	ppbV	95
6) vinyl chloride	4.384	62	83717	4.911	ppbV	99
7) 1,3-butadiene	4.540	54	73591	5.659	ppbV	100
8) bromomethane	4.852	94	68459	4.886	ppbV	97
9) chloroethane	5.068	64	42076	4.832	ppbV	96
10) ethanol	5.242	31	288978	26.853	ppbV	95
11) vinyl bromide	5.490	106	56250	4.823	ppbV	96
12) acrolein	5.640	56	36918	5.202	ppbV	96
13) acetone	5.797	43	424491	26.967	ppbV	98
14) trichlorofluoromethane	5.997	101	113913	5.601	ppbV	99
15) isopropyl alcohol	6.127	45	295557	12.963	ppbV	99
16) acrylonitrile	6.367	53	66748	5.262	ppbV	99
17) 1,1-dichloroethene	6.756	61	113020	4.838	ppbV	93
18) tertiary butyl alcohol	6.846	59	160359	4.548	ppbV	98
19) methylene chloride	6.918	49	86999	5.029	ppbV	99
20) 3-chloropropene	7.056	41	118486	4.834	ppbV	97
21) carbon disulfide	7.206	76	220392	4.465	ppbV	99
22) Freon 113	7.248	101	132652	4.607	ppbV	92
23) trans-1,2-dichloroethene	8.033	61	114801	4.158	ppbV	95
24) 1,1-dichloroethane	8.267	63	139983	4.300	ppbV	100
25) MTBE	8.358	73	209118	4.571	ppbV	99
26) vinyl acetate	8.483	43	152963	4.932	ppbV	97
27) 2-butanone	8.750	43	159368	4.585	ppbV	99
28) cis-1,2-dichloroethene	9.258	61	109628	4.405	ppbV	95
29) Ethyl Acetate	9.558	61	29054	4.547	ppbV	77
30) chloroform	9.608	83	146026	4.938	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\
Data File : r423914_Ev2.D
Acq On : 4 Oct 2022 2:25 PM
Operator : AIRPIANO4:TJS
Sample : WG1695438-2,3,250,250
Misc : WG1695438,ICAL19358
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 04 15:54:30 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 09:00:39 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\r423914_Ev2.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
31) Tetrahydrofuran	10.058	42	97700	4.360	ppbV		99
32) 1,2-dichloroethane	10.458	62	89895	4.539	ppbV		98
34) hexane	9.517	57	158400	4.806	ppbV		88
36) 1,1,1-trichloroethane	10.742	97	117610	4.942	ppbV		97
37) benzene	11.273	78	274326	4.711	ppbV		97
38) carbon tetrachloride	11.447	117	108752	5.316	ppbV		99
39) cyclohexane	11.587	56	167671	4.794	ppbV		98
40) Dibromomethane	12.193	93	72880	4.140	ppbV	#	95
41) 1,2-dichloropropane	12.227	63	93053	4.610	ppbV		97
42) bromodichloromethane	12.453	83	149369	5.159	ppbV		97
43) 1,4-dioxane	12.507	88	66170	5.263	ppbV		97
44) trichloroethene	12.507	130	103082	4.638	ppbV		96
45) 2,2,4-trimethylpentane	12.553	57	520950	4.689	ppbV		100
46) heptane	12.873	43	170862	4.894	ppbV		99
47) cis-1,3-dichloropropene	14.142	75	109952	4.641	ppbV		99
48) 4-methyl-2-pentanone	13.558	43	197719	5.334	ppbV		96
49) trans-1,3-dichloropropene	13.517	75	138746	5.347	ppbV		99
50) 1,1,2-trichloroethane	14.342	97	93238	4.892	ppbV		94
52) toluene	14.658	91	315773	4.074	ppbV		99
54) 2-hexanone	14.950	43	178432	4.913	ppbV		94
55) dibromochloromethane	15.117	129	128569	4.707	ppbV		100
56) 1,2-dibromoethane	15.367	107	137247	4.859	ppbV		99
57) tetrachloroethene	15.833	166	140494	4.778	ppbV		94
58) 1,1,1,2-tetrachloroethane	16.475	131	90075	4.054	ppbV		99
59) chlorobenzene	16.492	112	248206	4.795	ppbV		97
60) ethylbenzene	16.842	91	389099	4.415	ppbV		97
61) m+p-xylene	17.008	91	642930	8.974	ppbV		95
62) bromoform	17.075	173	127451	5.204	ppbV		98
63) styrene	17.333	104	256901	4.839	ppbV		99
64) 1,1,2,2-tetrachloroethane	17.425	83	238069	4.961	ppbV		100
65) o-xylene	17.425	91	330025	4.585	ppbV		95
66) 1,2,3-Trichloropropane	17.542	75	164139	4.317	ppbV		99
68) isopropylbenzene	17.942	105	402133	4.462	ppbV		100
69) Bromobenzene	18.017	77	229288	4.362	ppbV		96
70) 4-ethyl toluene	18.508	105	424098	4.702	ppbV		98
71) 1,3,5-trimethylbenzene	18.567	105	380868	4.792	ppbV		99
72) tert-butylbenzene	18.908	119	379690	4.421	ppbV		96
73) 1,2,4-trimethylbenzene	18.917	105	381534	5.077	ppbV	#	85
74) Benzyl Chloride	19.033	91	255091	4.759	ppbV		97
75) 1,3-dichlorobenzene	19.050	146	231363	5.390	ppbV		97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\
Data File : r423914_Ev2.D
Acq On : 4 Oct 2022 2:25 PM
Operator : AIRPIANO4:TJS
Sample : WG1695438-2,3,250,250
Misc : WG1695438,ICAL19358
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 04 15:54:30 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 09:00:39 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\r423914_Ev2.D
Sub List : Default-LCS-AP2 - All compounds listed

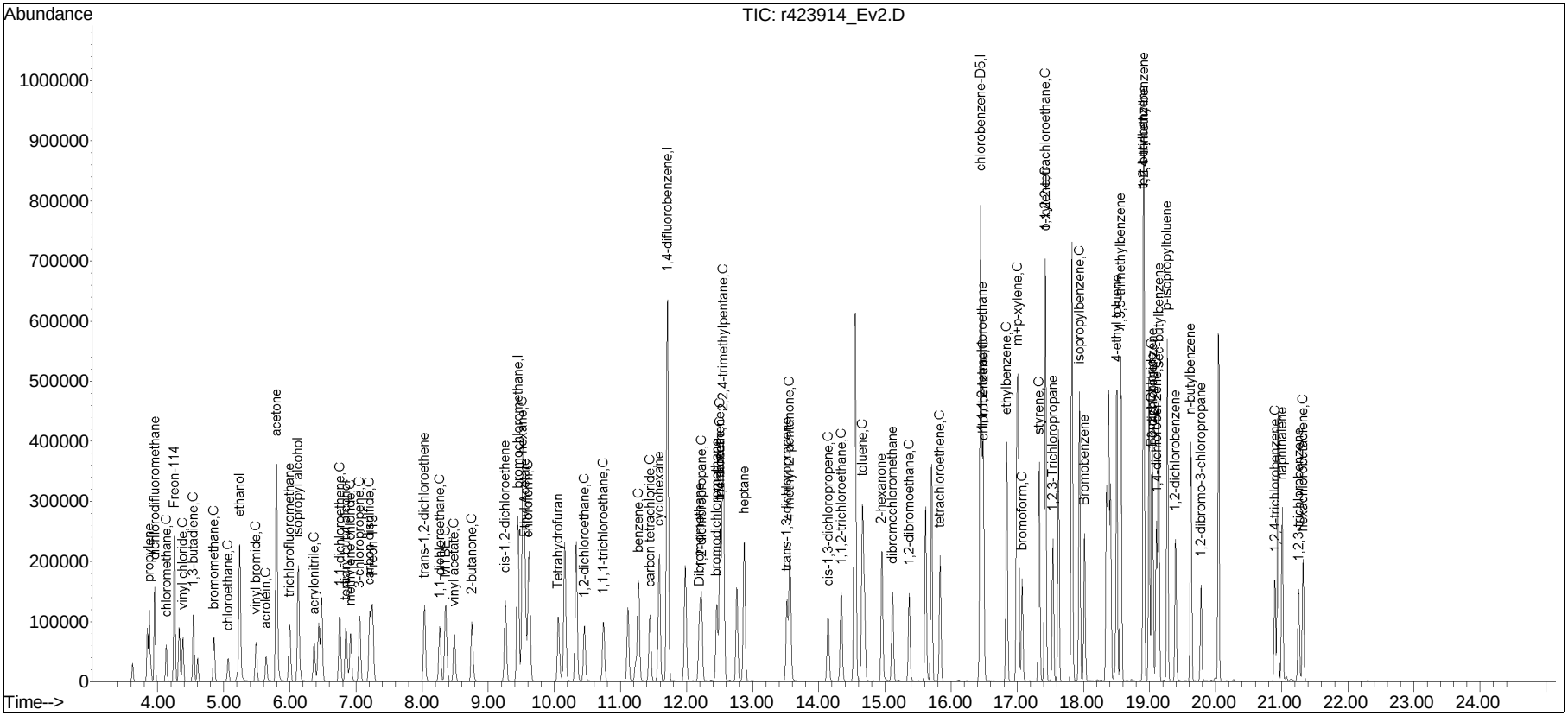
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
76) 1,4-dichlorobenzene	19.108	146	232282	5.405	ppbV	97
77) sec-butylbenzene	19.142	105	506884	4.447	ppbV	98
78) p-isopropyltoluene	19.267	119	424406	4.139	ppbV	99
79) 1,2-dichlorobenzene	19.392	146	217069	5.366	ppbV	97
80) n-butylbenzene	19.625	91	413289	4.360	ppbV	97
81) 1,2-dibromo-3-chloropr...	19.783	75	88237	4.741	ppbV	93
82) 1,2,4-trichlorobenzene	20.900	180	198396	5.496	ppbV	96
83) naphthalene	21.008	128	427819	4.166	ppbV	98
84) 1,2,3-trichlorobenzene	21.258	180	183202	5.057	ppbV	98
85) hexachlorobutadiene	21.325	225	190963	5.505	ppbV	98

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

```
Sub List     : Default-LCS-AP2 - All compounds listed04SIM\r423914_Ev2.D

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\
Data File : r423914_Ev2.D
Acq On    :  4 Oct 2022   2:25 PM
Operator  : AIRPIANO4:TJS
Sample    : WG1695438-2,3,250,250
Misc      : WG1695438,ICAL19358
ALS Vial  : 0   Sample Multiplier: 1

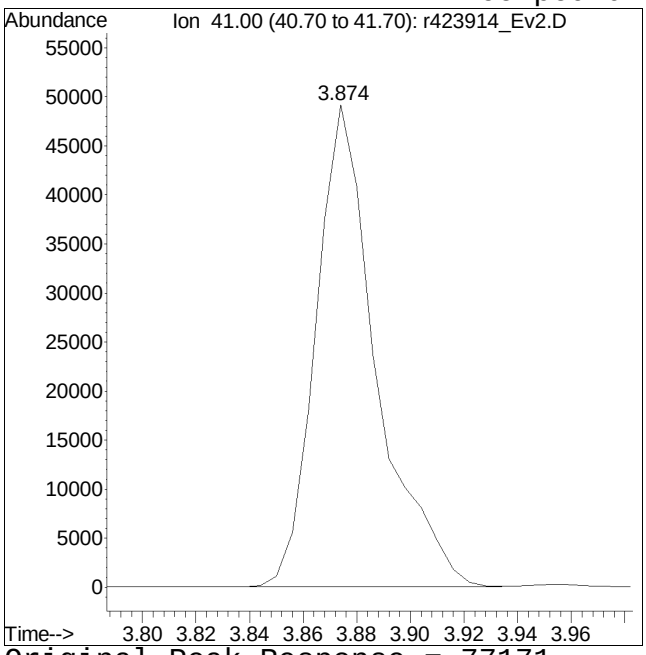
Quant Time: Oct 04 15:54:30 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\TSIM4_220921.M
Quant Title  : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 09:00:39 2022
Response via : Initial Calibration
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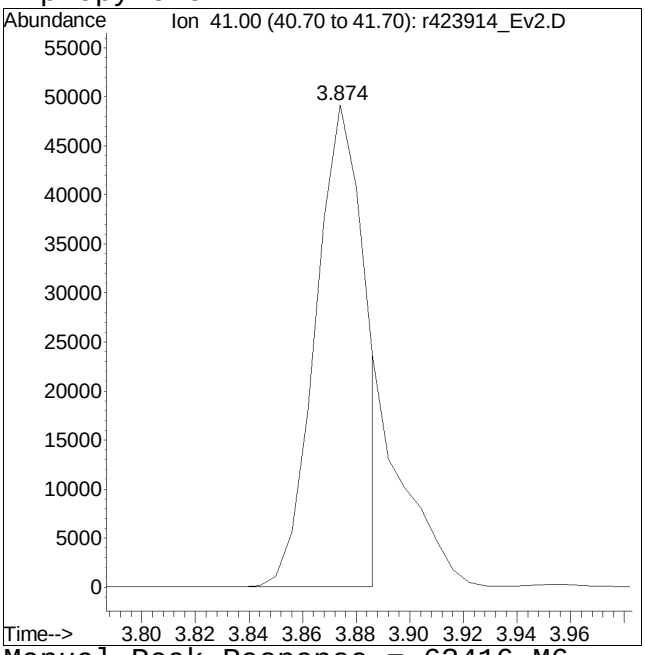
Manual Integration Report

Data Path : O:\Forensics\Data\AirpianoQMethod : TSIM4_220921.M
Data File : r423914_Ev2.D Operator : AIRPIANO4:TJS
Date Inj'd : 10/4/2020 0:2: 5 Instrument :
Sample : WG1695438-2,3,250,250 Quant Date : 10/4/2022 2:54 pm

Compound #2: propylene



Original Peak Response = 77171



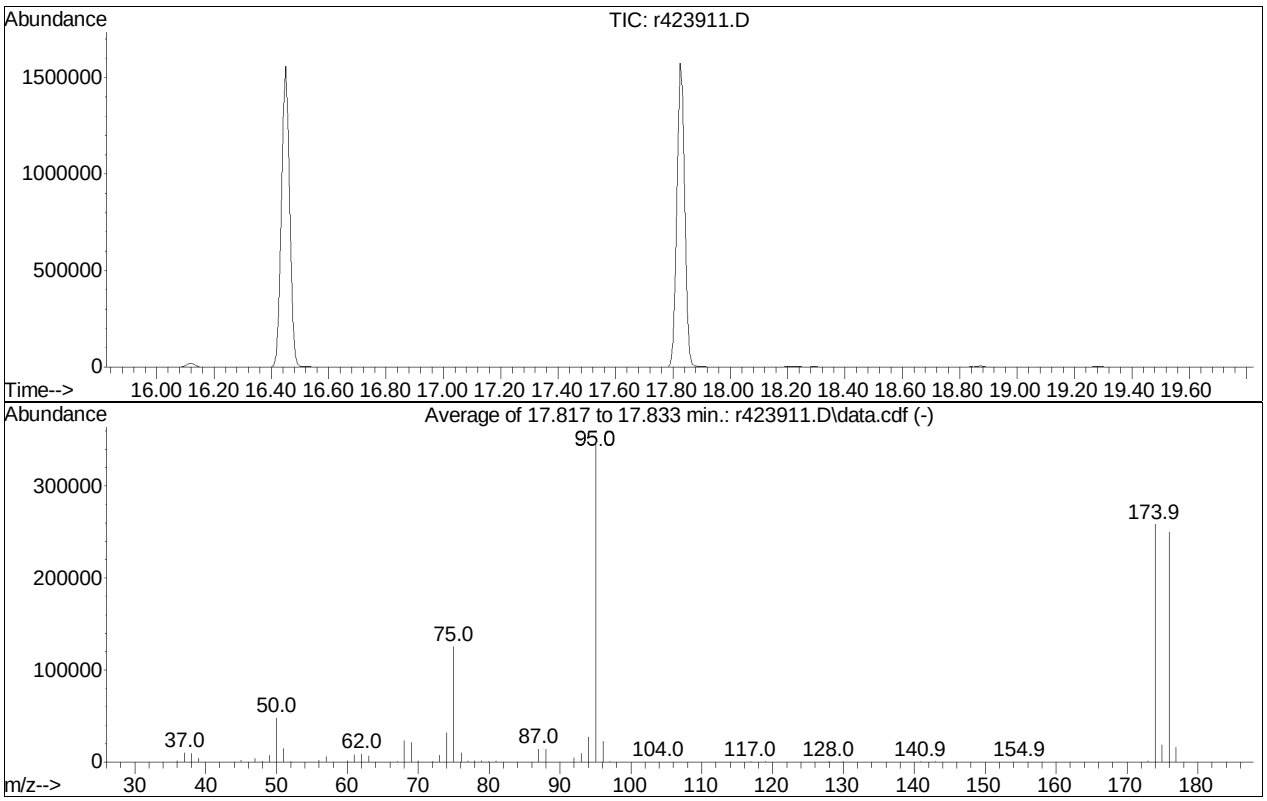
Manual Peak Response = 63416 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\
Data File : r423911.D
Acq On : 4 Oct 2022 12:21 PM
Operator : AIRPIANO4:TJS
Sample : WG1695438-1,3,250,250
Misc : WG1695438,ICAL19358
ALS Vial : 0 Sample Multiplier: 1

Integration File: rteint.p

Method : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\TSIM4_220921.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Fri Sep 23 09:00:39 2022



Spectrum Information: Average of 17.817 to 17.833 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	13.9	48279	PASS
75	95	30	66	36.1	125513	PASS
95	95	100	100	100.0	347221	PASS
96	95	5	9	6.5	22606	PASS
173	174	0.00	2	0.6	1607	PASS
174	95	50	120	74.5	258716	PASS
175	174	4	9	7.2	18511	PASS
176	174	93	101	96.7	250069	PASS
177	176	5	9	6.5	16311	PASS

Volatiles Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\
Data File : r423916_Ev2.D
Acq On : 4 Oct 2022 5:00 PM
Operator : AIRPIANO4:TJS
Sample : WG1695438-4,3,250,250
Misc : WG1695438,ICAL19358
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 04 18:50:51 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 09:00:39 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\r423914_Ev2.D
Sub List : Default-LCS-AP2 - All compounds listed

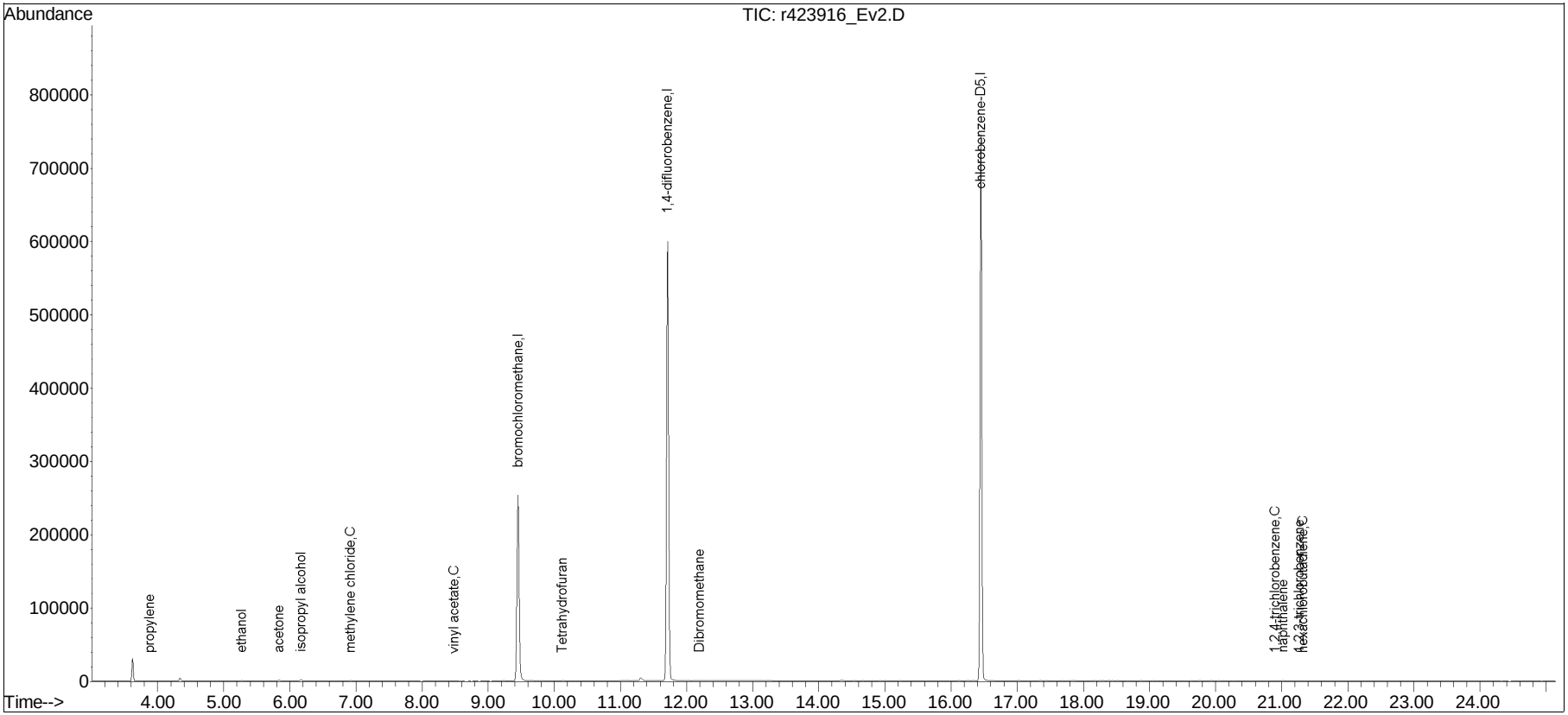
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.450	49	292863	10.000	ppbV	-0.02
Standard Area = 302847			Recovery = 96.70%			
33) 1,4-difluorobenzene	11.713	114	761664	10.000	ppbV	-0.02
Standard Area = 816313			Recovery = 93.31%			
51) chlorobenzene-D5	16.450	54	145423	10.000	ppbV	-0.02
Standard Area = 151842			Recovery = 95.77%			
System Monitoring Compounds						
Target Compounds						Qvalue
6) vinyl chloride	0.000		0		N.D.	
17) 1,1-dichloroethene	0.000		0		N.D.	
28) cis-1,2-dichloroethene	0.000		0		N.D.	
36) 1,1,1-trichloroethane	0.000		0		N.D.	
38) carbon tetrachloride	0.000		0		N.D.	
44) trichloroethene	0.000		0		N.D.	
57) tetrachloroethene	15.850		0		N.D.	

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

Sub List : Default-LCS-AP2 - All compounds listed04SIM\r423914_Ev2.D

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\
Data File : r423916_Ev2.D
Acq On : 4 Oct 2022 5:00 PM
Operator : AIRPIANO4:TJS
Sample : WG1695438-4,3,250,250
Misc : WG1695438,ICAL19358
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 04 18:50:51 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 09:00:39 2022
Response via : Initial Calibration



Manual Integration Report

Data Path	: O:\Forensics\Data\Airpiano	QMethod	: TSIM4_220921.M
Data File	: r423916_Ev2.D	Operator	: AIRPIANO4:TJS
Date Inj'd	: 10/4/2020 0:5: 0	Instrument	:
Sample	: WG1695438-4,3,250,250	Quant Date	: 10/4/2022 5:50 pm

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

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\
Data File : r423914_Ev2.D
Acq On : 4 Oct 2022 2:25 PM
Operator : AIRPIANO4:TJS
Sample : WG1695438-3,3,250,250
Misc : WG1695438,ICAL19358
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 04 15:54:30 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 09:00:39 2022
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	bromochloromethane	10.000	10.000	0.0	99	-0.02
2		propylene	5.000	4.342	13.2	93	-0.01
3		dichlorodifluoromethane	5.000	5.399	-8.0	105	0.00
4	C	chloromethane	5.000	5.670	-13.4	115	-0.01
5		Freon-114	5.000	5.684	-13.7	115	-0.01
6	C	vinyl chloride	5.000	4.911	1.8	102	-0.01
7	C	1,3-butadiene	5.000	5.659	-13.2	120	-0.02
8	C	bromomethane	5.000	4.886	2.3	102	-0.01
9	C	chloroethane	5.000	4.832	3.4	99	-0.01
10		ethanol	25.000	26.853	-7.4	104	-0.01
11	C	vinyl bromide	5.000	4.823	3.5	101	-0.01
12	C	acrolein	5.000	5.202	-4.0	100	-0.02
13		acetone	25.000	26.967	-7.9	112	-0.02
14		trichlorofluoromethane	5.000	5.601	-12.0	114	-0.02
15		isopropyl alcohol	12.500	12.963	-3.7	120	-0.02
16	C	acrylonitrile	5.000	5.262	-5.2	113	-0.02
17	C	1,1-dichloroethene	5.000	4.838	3.2	87	-0.02
18		tertiary butyl alcohol	5.000	4.548	9.0	85	-0.02
19	C	methylene chloride	5.000	5.029	-0.6	96	-0.02
20	C	3-chloropropene	5.000	4.834	3.3	101	-0.02
21	C	carbon disulfide	5.000	4.465	10.7	95	-0.02
22		Freon 113	5.000	4.607	7.9	96	-0.02
23		trans-1,2-dichloroethene	5.000	4.158	16.8	89	-0.03
24	C	1,1-dichloroethane	5.000	4.300	14.0	90	-0.02
25	C	MTBE	5.000	4.571	8.6	99	-0.02
26	C	vinyl acetate	5.000	4.932	1.4	93	-0.03
27	C	2-butanone	5.000	4.585	8.3	98	-0.02
28		cis-1,2-dichloroethene	5.000	4.405	11.9	92	-0.03
29		Ethyl Acetate	5.000	4.547	9.1	92	-0.03
30	C	chloroform	5.000	4.938	1.2	101	-0.03
31		Tetrahydrofuran	5.000	4.360	12.8	94	-0.03
32	C	1,2-dichloroethane	5.000	4.539	9.2	95	-0.02
33	I	1,4-difluorobenzene	10.000	10.000	0.0	91	-0.02
34	C	hexane	5.000	4.806	3.9	93	-0.02
36	C	1,1,1-trichloroethane	5.000	4.942	1.2	95	-0.03
37	C	benzene	5.000	4.711	5.8	94	-0.02
38	C	carbon tetrachloride	5.000	5.316	-6.3	98	-0.02
39		cyclohexane	5.000	4.794	4.1	94	-0.02

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\
Data File : r423914_Ev2.D
Acq On : 4 Oct 2022 2:25 PM
Operator : AIRPIANO4:TJS
Sample : WG1695438-3,3,250,250
Misc : WG1695438,ICAL19358
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 04 15:54:30 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 09:00:39 2022
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
40		Dibromomethane	5.000	4.140	17.2	86	-0.02
41	C	1,2-dichloropropane	5.000	4.610	7.8	91	-0.02
42		bromodichloromethane	5.000	5.159	-3.2	101	-0.03
43	C	1,4-dioxane	5.000	5.263	-5.3	107	-0.03
44	C	trichloroethene	5.000	4.638	7.2	90	-0.02
45	C	2,2,4-trimethylpentane	5.000	4.689	6.2	98	-0.02
46		heptane	5.000	4.894	2.1	96	-0.02
47	C	cis-1,3-dichloropropene	5.000	4.641	7.2	84	-0.02
48	C	4-methyl-2-pentanone	5.000	5.334	-6.7	102	-0.03
49		trans-1,3-dichloropropene	5.000	5.347	-6.9	101	-0.02
50	C	1,1,2-trichloroethane	5.000	4.892	2.2	94	-0.03
51	I	chlorobenzene-D5	10.000	10.000	0.0	97	-0.02
52	C	toluene	5.000	4.074	18.5	90	-0.03
54		2-hexanone	5.000	4.913	1.7	101	-0.03
55		dibromochloromethane	5.000	4.707	5.9	98	-0.02
56	C	1,2-dibromoethane	5.000	4.859	2.8	99	-0.02
57	C	tetrachloroethene	5.000	4.778	4.4	101	-0.02
58		1,1,1,2-tetrachloroethane	5.000	4.054	18.9	82	-0.02
59	C	chlorobenzene	5.000	4.795	4.1	99	-0.02
60	C	ethylbenzene	5.000	4.415	11.7	91	-0.02
61	C	m+p-xylene	10.000	8.974	10.3	92	-0.02
62	C	bromoform	5.000	5.204	-4.1	100	-0.02
63	C	styrene	5.000	4.839	3.2	98	-0.02
64	C	1,1,2,2-tetrachloroethane	5.000	4.961	0.8	103	-0.02
65	C	o-xylene	5.000	4.585	8.3	94	-0.02
66		1,2,3-Trichloropropane	5.000	4.317	13.7	88	-0.02
68	C	isopropylbenzene	5.000	4.462	10.8	91	-0.02
69		Bromobenzene	5.000	4.362	12.8	88	-0.02
70		4-ethyl toluene	5.000	4.702	6.0	96	0.00
71		1,3,5-trimethylbenzene	5.000	4.792	4.2	99	-0.02
72		tert-butylbenzene	5.000	4.421	11.6	88	-0.02
73		1,2,4-trimethylbenzene	5.000	5.077	-1.5	103	0.00
74	C	Benzyl Chloride	5.000	4.759	4.8	87	-0.02
75		1,3-dichlorobenzene	5.000	5.390	-7.8	109	-0.02
76	C	1,4-dichlorobenzene	5.000	5.405	-8.1	111	-0.02
77		sec-butylbenzene	5.000	4.447	11.1	90	0.00
78		p-isopropyltoluene	5.000	4.139	17.2	82	-0.02
79		1,2-dichlorobenzene	5.000	5.366	-7.3	110	-0.02

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\
Data File : r423914_Ev2.D
Acq On : 4 Oct 2022 2:25 PM
Operator : AIRPIANO4:TJS
Sample : WG1695438-3,3,250,250
Misc : WG1695438,ICAL19358
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 04 15:54:30 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 09:00:39 2022
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
80	n-butylbenzene	5.000	4.360	12.8	87	-0.02
81	1,2-dibromo-3-chloropropane	5.000	4.741	5.2	87	0.00
82 C	1,2,4-trichlorobenzene	5.000	5.496	-9.9	100	0.00
83	naphthalene	5.000	4.166	16.7	80	-0.02
84	1,2,3-trichlorobenzene	5.000	5.057	-1.1	86	-0.02
85 C	hexachlorobutadiene	5.000	5.505	-10.1	102	-0.02

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\
Data File : r423914_Ev2.D
Acq On : 4 Oct 2022 2:25 PM
Operator : AIRPIANO4:TJS
Sample : WG1695438-3,3,250,250
Misc : WG1695438,ICAL19358
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 04 15:54:30 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 09:00:39 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\r423914_Ev2.D
Sub List : Default-LCS-AP2 - All compounds listed

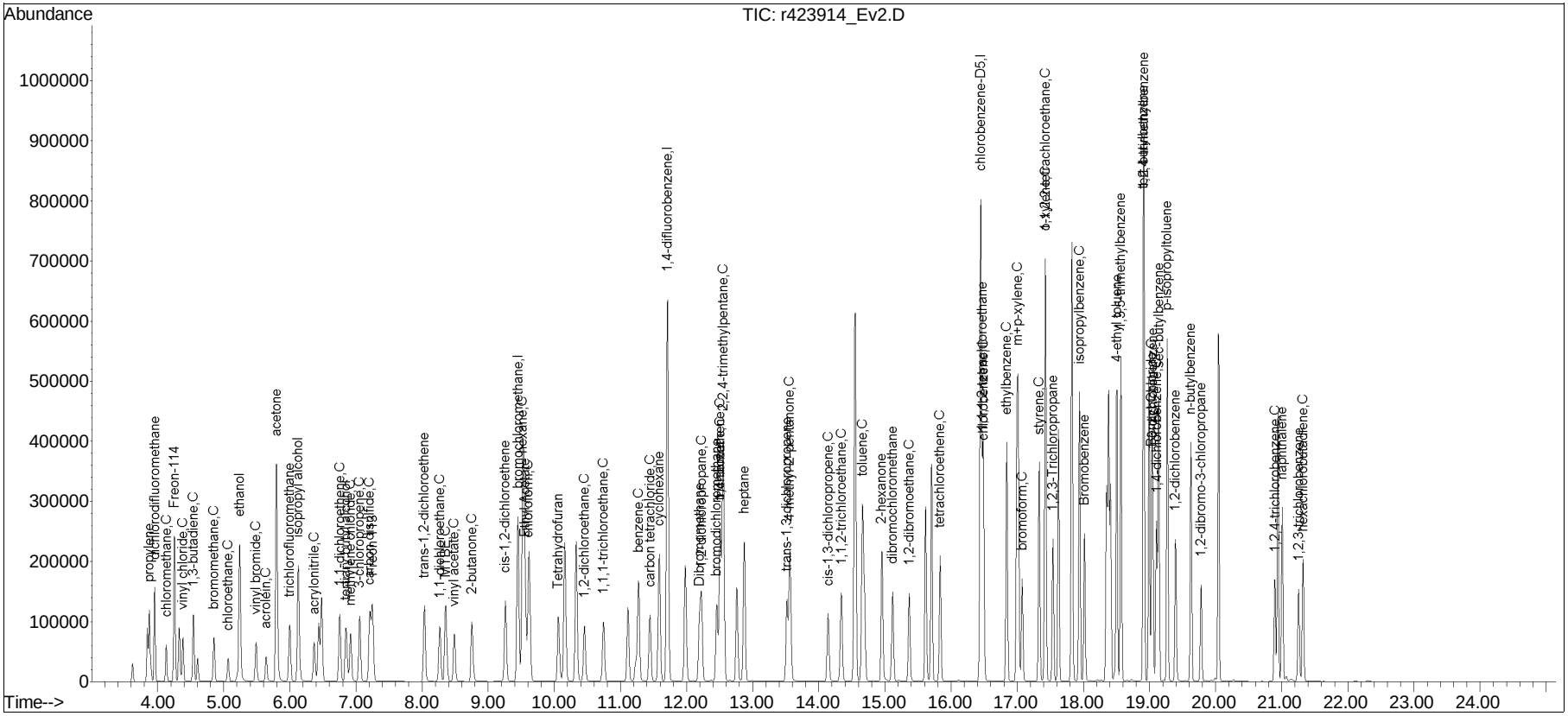
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.450	49	302847	10.000	ppbV	-0.02
Standard Area = 302847			Recovery = 100.00%			
33) 1,4-difluorobenzene	11.713	114	816313	10.000	ppbV	-0.02
Standard Area = 816313			Recovery = 100.00%			
51) chlorobenzene-D5	16.450	54	151842	10.000	ppbV	-0.02
Standard Area = 151842			Recovery = 100.00%			
System Monitoring Compounds						
Target Compounds						Qvalue
6) vinyl chloride	4.384	62	83717	4.911	ppbV	99
17) 1,1-dichloroethene	6.756	61	113020	4.838	ppbV	93
28) cis-1,2-dichloroethene	9.258	61	109628	4.405	ppbV	95
36) 1,1,1-trichloroethane	10.742	97	117610	4.942	ppbV	97
38) carbon tetrachloride	11.447	117	108752	5.316	ppbV	99
44) trichloroethene	12.507	130	103082	4.638	ppbV	96
57) tetrachloroethene	15.833	166	140494	4.778	ppbV	94

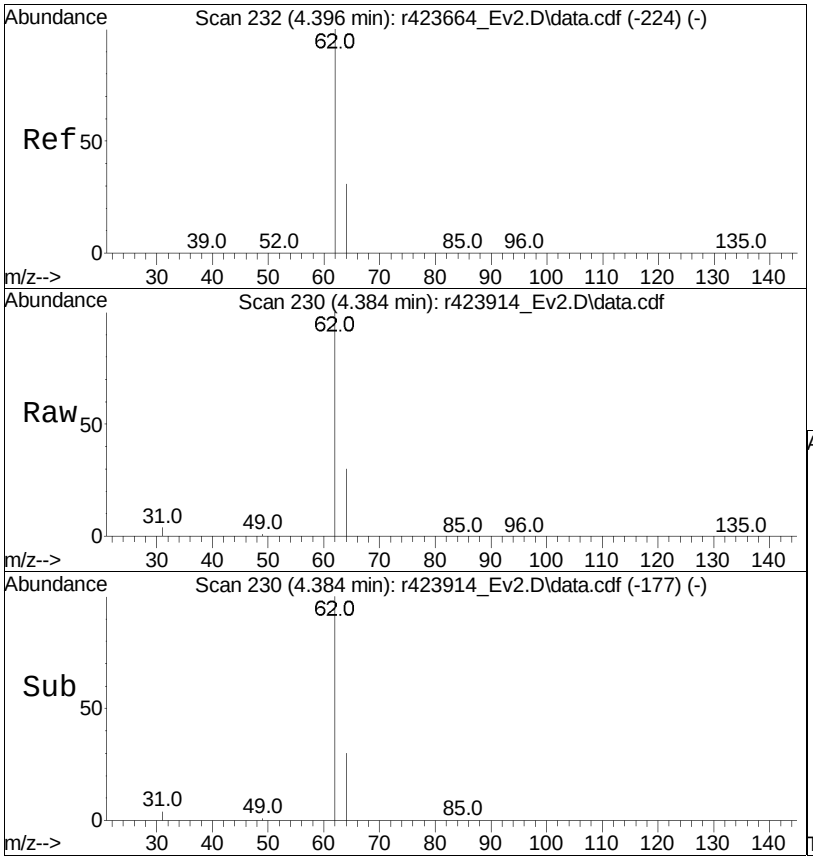
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : Default-LCS-AP2 - All compounds listed04SIM\r423914_Ev2.D

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\
Data File : r423914_Ev2.D
Acq On : 4 Oct 2022 2:25 PM
Operator : AIRPIANO4:TJS
Sample : WG1695438-3,3,250,250
Misc : WG1695438,ICAL19358
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 04 15:54:30 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 09:00:39 2022
Response via : Initial Calibration

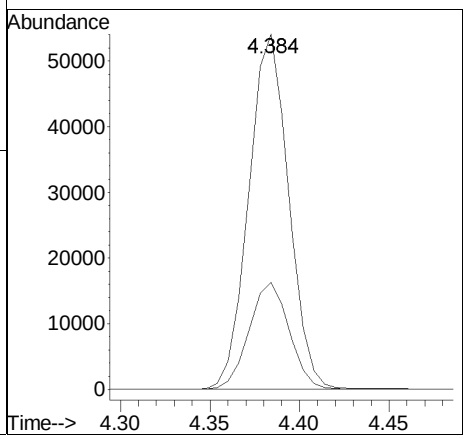


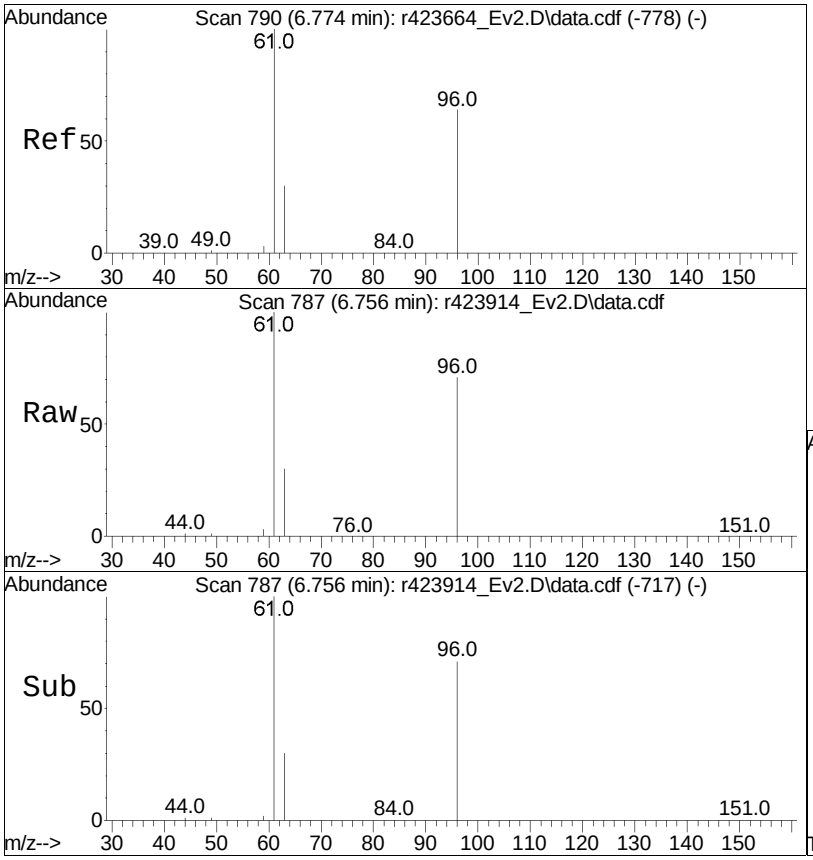


#6
vinyl chloride
Concen: 4.91 ppbV
RT: 4.384 min Scan# 230
Delta R.T. -0.012 min
Lab File: r423914_Ev2.D
Acq: 4 Oct 2022 2:25 PM

Tgt Ion: 62 Resp: 83717

Ion	Ratio	Lower	Upper
62	100		
64	30.1	24.6	37.0

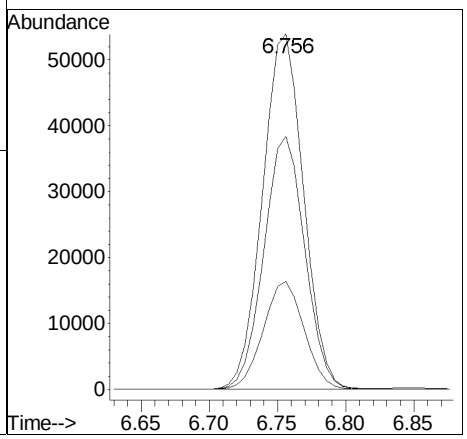


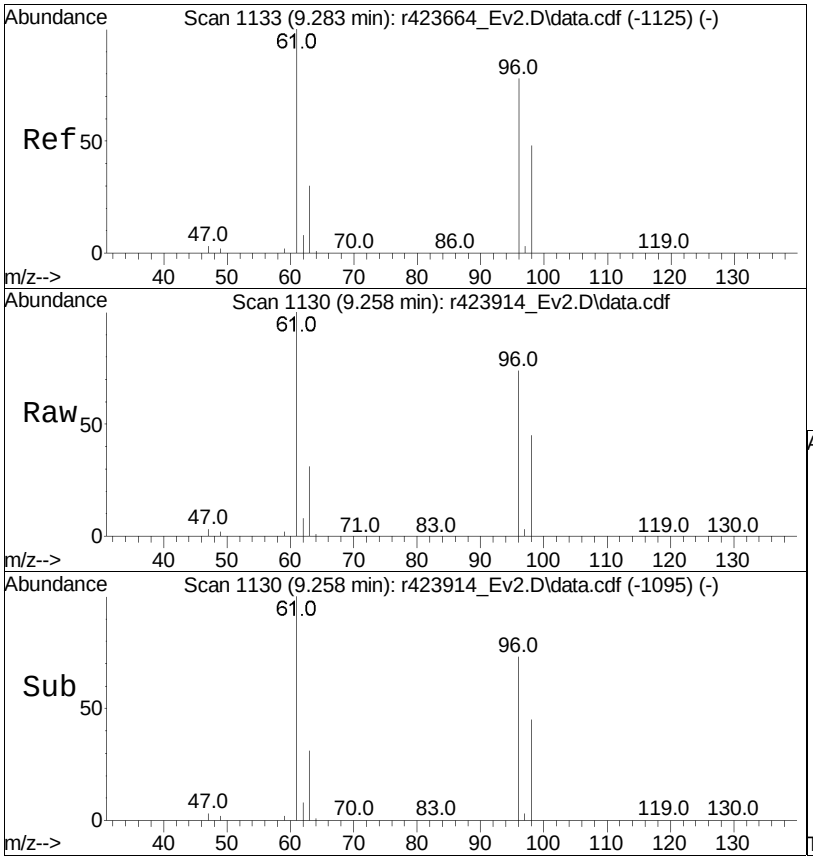


#17
1,1-dichloroethene
Concen: 4.84 ppbV
RT: 6.756 min Scan# 787
Delta R.T. -0.018 min
Lab File: r423914_Ev2.D
Acq: 4 Oct 2022 2:25 PM

Tgt Ion: 61 Resp: 113020

Ion	Ratio	Lower	Upper
61	100		
96	71.3	51.4	77.0
63	30.4	23.8	35.8

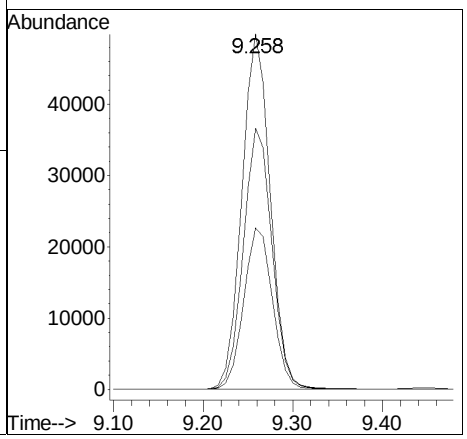


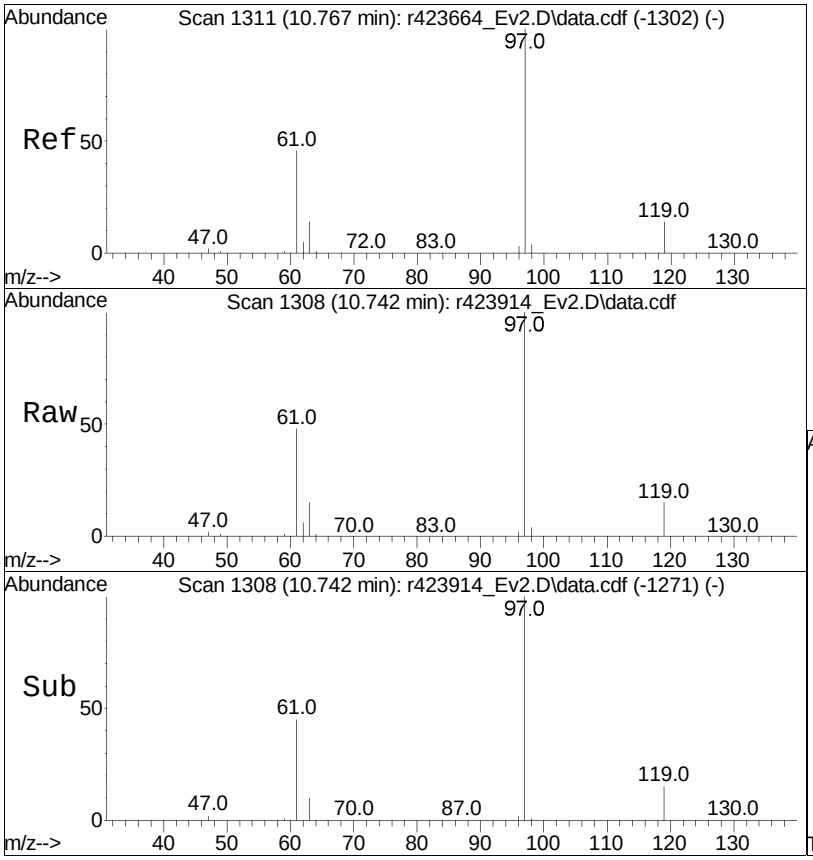


#28
cis-1,2-dichloroethene
Concen: 4.40 ppbV
RT: 9.258 min Scan# 1130
Delta R.T. -0.025 min
Lab File: r423914_Ev2.D
Acq: 4 Oct 2022 2:25 PM

Tgt Ion: 61 Resp: 109628

Ion	Ratio	Lower	Upper
61	100		
96	73.5	62.7	94.1
98	45.4	38.7	58.1

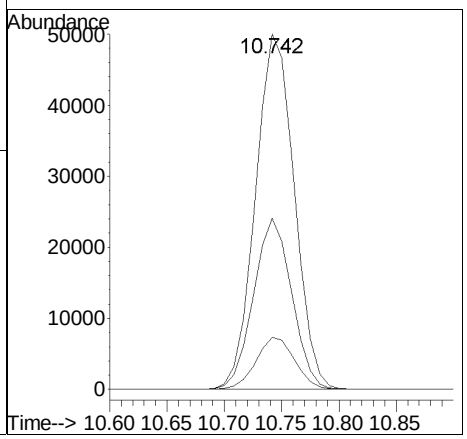


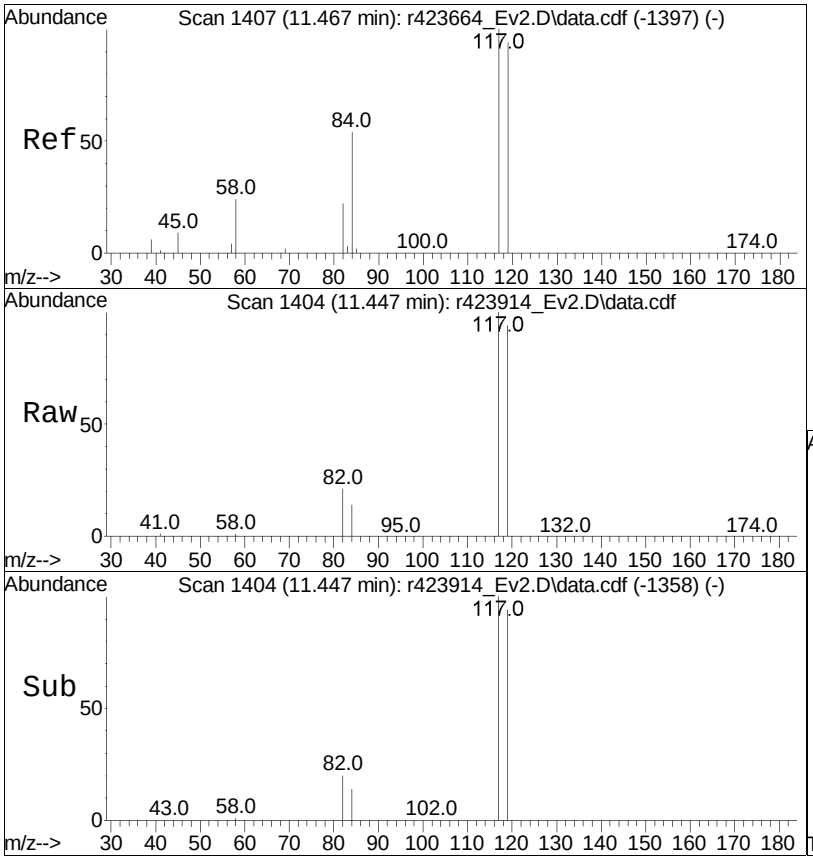


#36
1,1,1-trichloroethane
Concen: 4.94 ppbV
RT: 10.742 min Scan# 1308
Delta R.T. -0.025 min
Lab File: r423914_Ev2.D
Acq: 4 Oct 2022 2:25 PM

Tgt Ion: 97 Resp: 117610

Ion	Ratio	Lower	Upper
97	100		
61	48.2	36.5	54.7
119	14.7	11.1	16.7

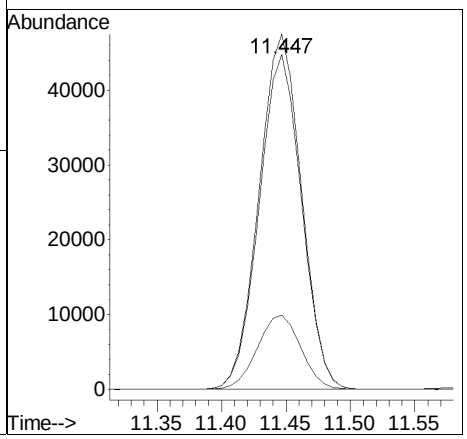


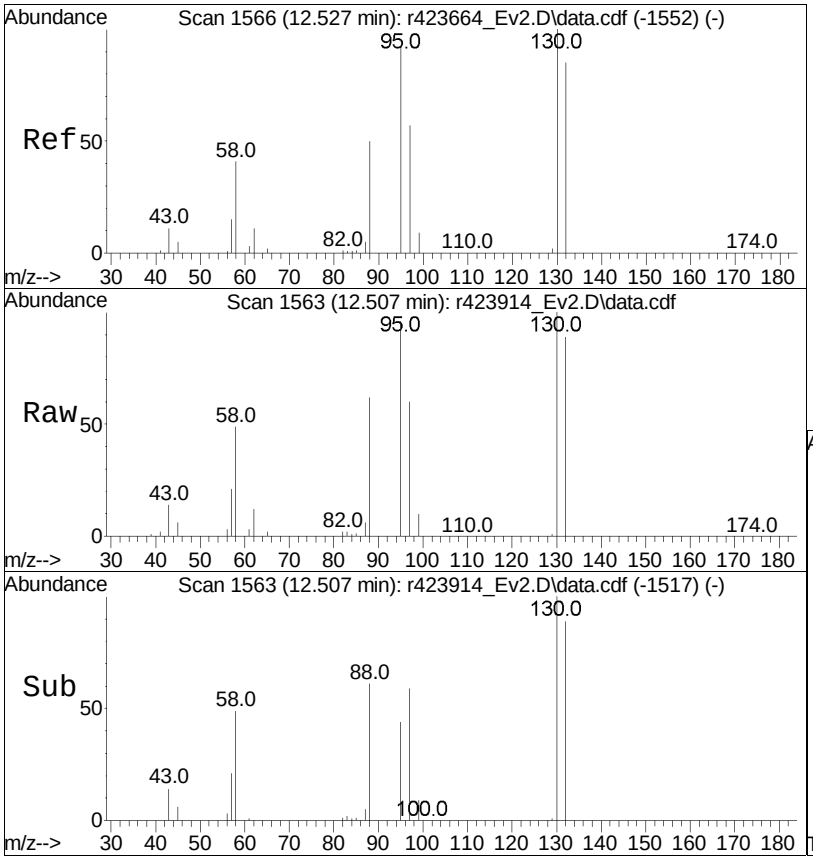


#38
carbon tetrachloride
Concen: 5.32 ppbV
RT: 11.447 min Scan# 1404
Delta R.T. -0.020 min
Lab File: r423914_Ev2.D
Acq: 4 Oct 2022 2:25 PM

Tgt Ion:117 Resp: 108752

Ion	Ratio	Lower	Upper
117	100		
119	94.2	75.4	113.0
82	20.9	17.9	26.9

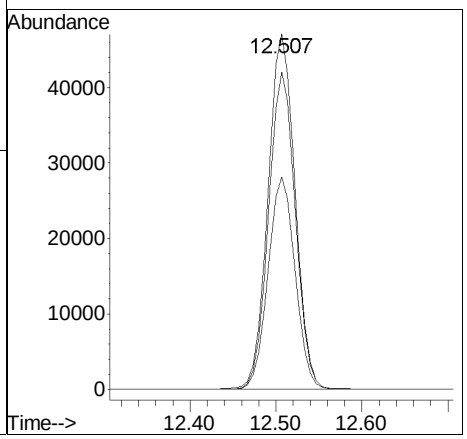


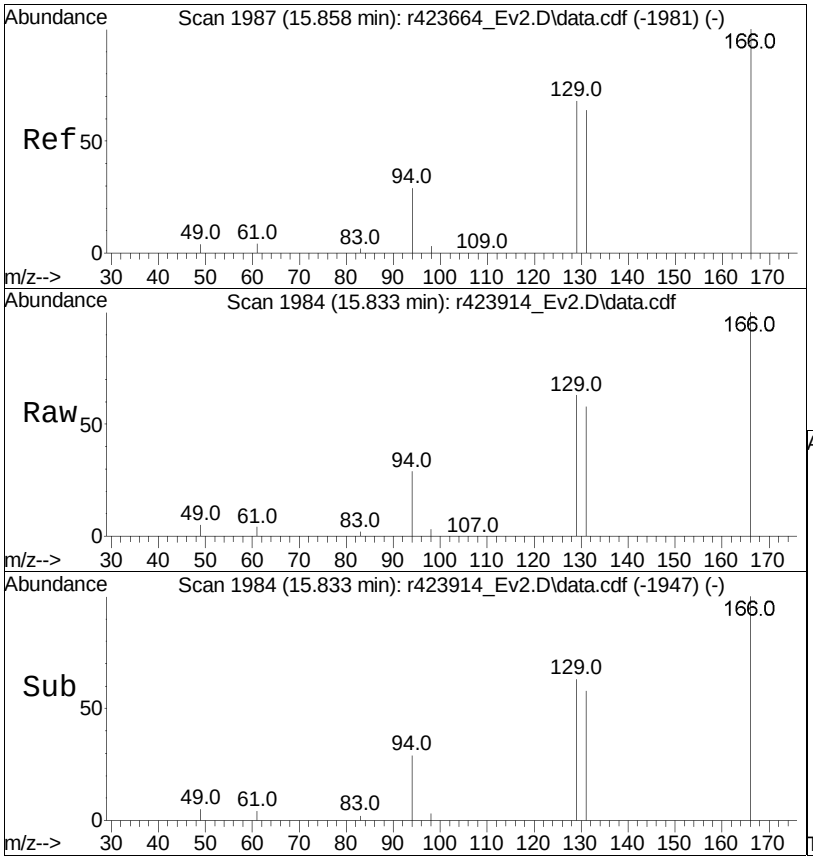


#44
trichloroethene
Concen: 4.64 ppbV
RT: 12.507 min Scan# 1563
Delta R.T. -0.020 min
Lab File: r423914_Ev2.D
Acq: 4 Oct 2022 2:25 PM

Tgt Ion:130 Resp: 103082

Ion	Ratio	Lower	Upper
130	100		
132	89.3	67.9	101.9
97	59.8	45.9	68.9

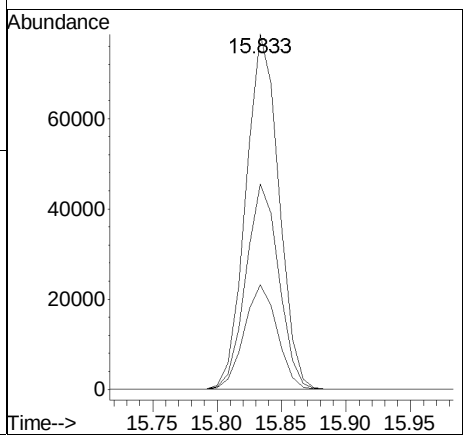




#57
tetrachloroethene
Concen: 4.78 ppbV
RT: 15.833 min Scan# 1984
Delta R.T. -0.025 min
Lab File: r423914_Ev2.D
Acq: 4 Oct 2022 2:25 PM

Tgt Ion:166 Resp: 140494

Ion	Ratio	Lower	Upper
166	100		
131	57.8	51.4	77.0
94	29.5	23.6	35.4



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\
Data File : r423924_Ev2.D
Acq On : 4 Oct 2022 11:04 PM
Operator : AIRPIANO4:TJS
Sample : WG1695438-5,3,250,250
Misc : WG1695438,ICAL19358
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 05 15:00:36 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 09:00:39 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\r423914_Ev2.D
Sub List : 7-NY-SIM - .

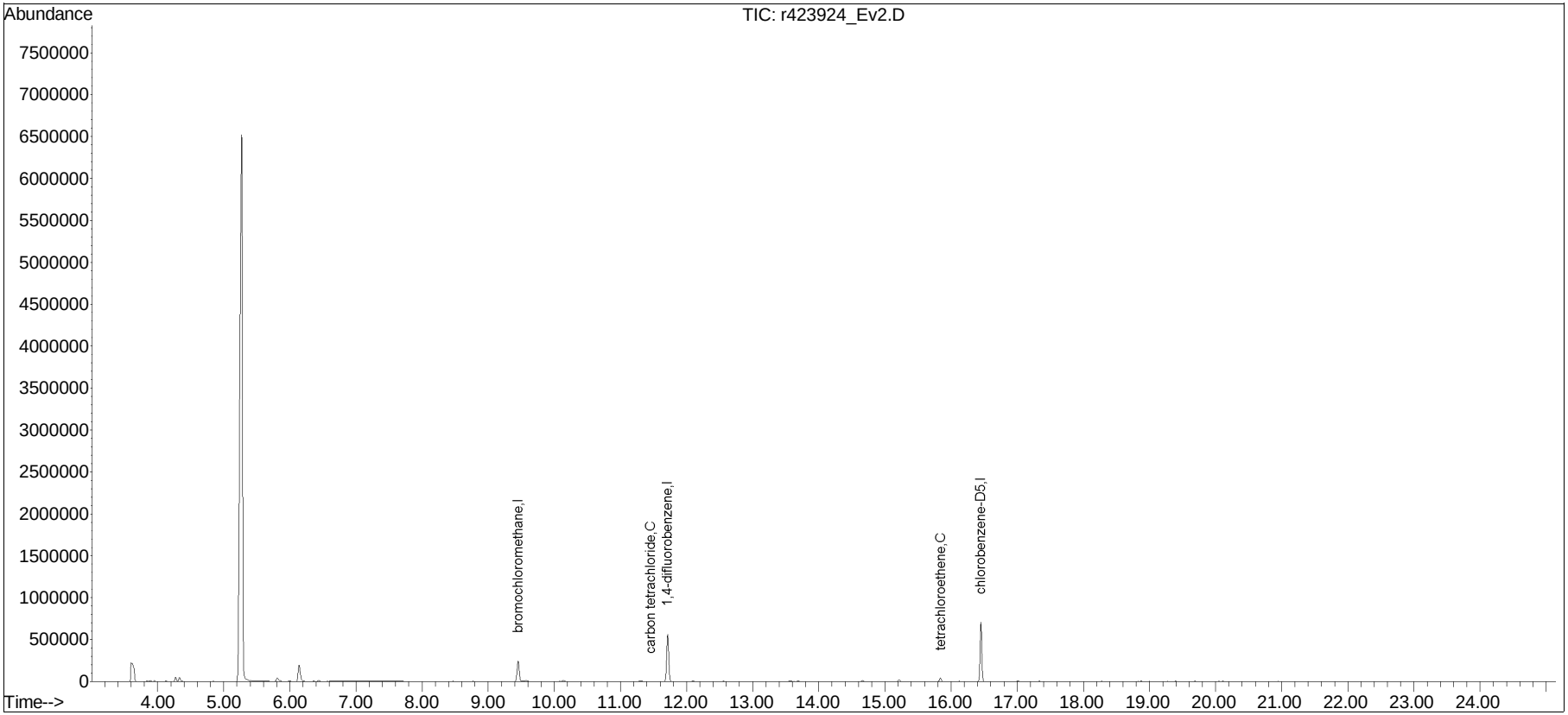
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.450	49	281691	10.000	ppbV	#-0.02
Standard Area = 302847			Recovery =		93.01%	
33) 1,4-difluorobenzene	11.713	114	722042	10.000	ppbV	-0.02
Standard Area = 816313			Recovery =		88.45%	
51) chlorobenzene-D5	16.450	54	138739	10.000	ppbV	-0.02
Standard Area = 151842			Recovery =		91.37%	
System Monitoring Compounds						
Target Compounds						Qvalue
6) vinyl chloride	0.000		0	N.D.		
17) 1,1-dichloroethene	0.000		0	N.D.	d	
28) cis-1,2-dichloroethene	9.258		0	N.D.		
36) 1,1,1-trichloroethane	0.000		0	N.D.		
38) carbon tetrachloride	11.453	117	1421M4	0.079	ppbV	
44) trichloroethene	12.507		0	N.D.		
57) tetrachloroethene	15.842	166	27725	1.032	ppbV	95

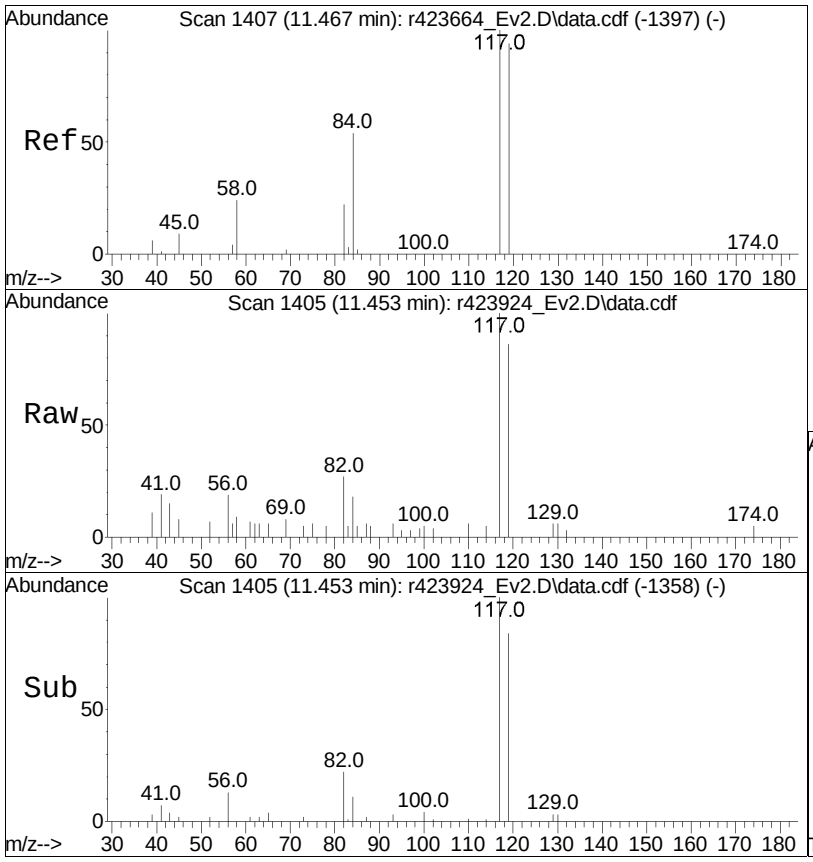
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : 7-NY-SIM - .\Data\Airpiano4\2022\10\1004SIM\r423914_Ev2.D

Data Path : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\
Data File : r423924_Ev2.D
Acq On : 4 Oct 2022 11:04 PM
Operator : AIRPIANO4:TJS
Sample : WG1695438-5,3,250,250
Misc : WG1695438,ICAL19358
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Oct 05 15:00:36 2022
Quant Method : O:\Forensics\Data\Airpiano4\2022\10\1004SIM\TSIM4_220921.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Fri Sep 23 09:00:39 2022
Response via : Initial Calibration

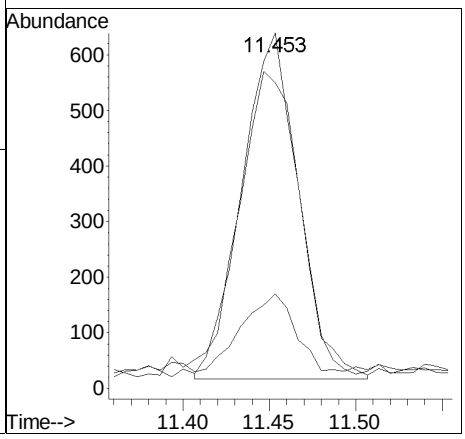


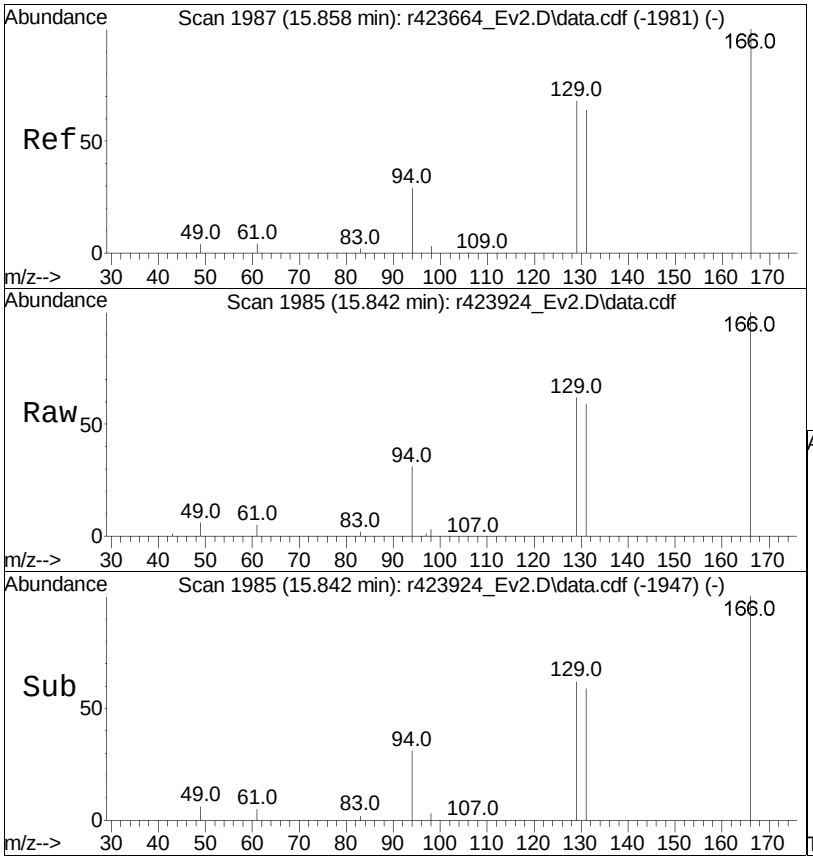


#38
carbon tetrachloride
Concen: 0.08 ppbV m
RT: 11.453 min Scan# 1405
Delta R.T. -0.013 min
Lab File: r423924_Ev2.D
Acq: 4 Oct 2022 11:04 PM

Tgt Ion:117 Resp: 1421

Ion	Ratio	Lower	Upper
117	100		
119	86.1	75.4	113.0
82	26.6	17.9	26.9

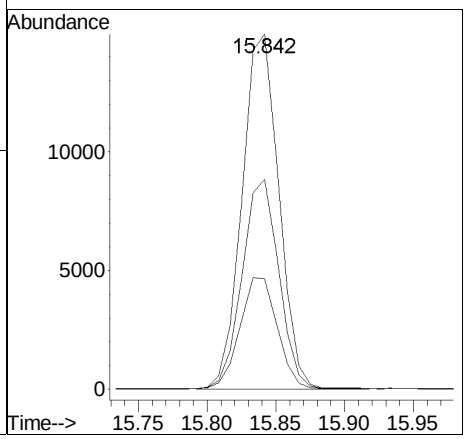




#57
tetrachloroethene
Concen: 1.03 ppbV
RT: 15.842 min Scan# 1985
Delta R.T. -0.017 min
Lab File: r423924_Ev2.D
Acq: 4 Oct 2022 11:04 PM

Tgt Ion:166 Resp: 27725

Ion	Ratio	Lower	Upper
166	100		
131	59.1	51.4	77.0
94	31.1	23.6	35.4

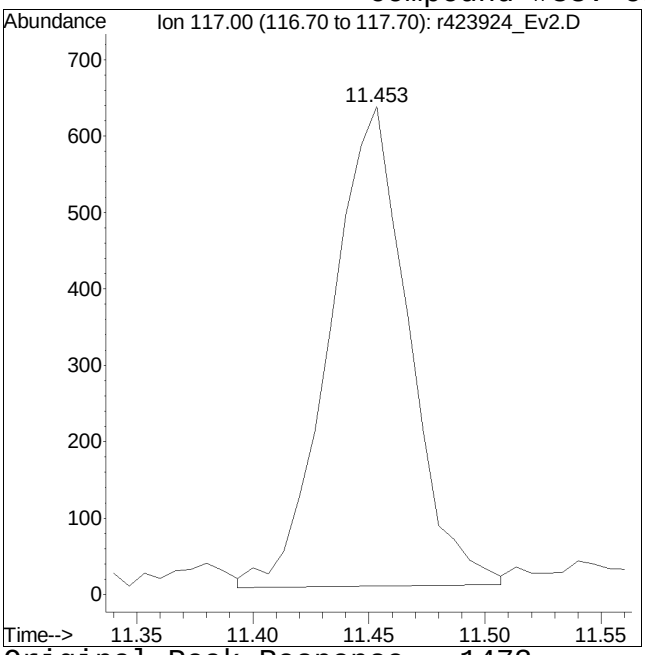


Manual Integration Report

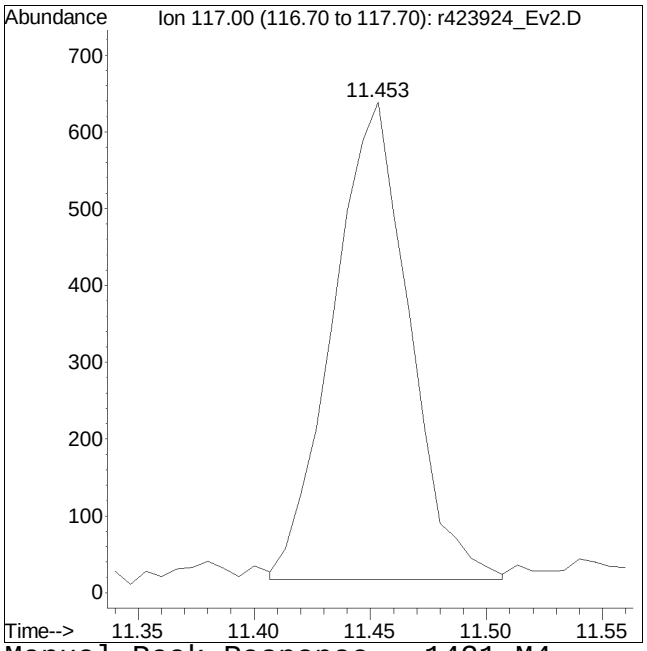
Data Path : O:\Forensics\Data\AirpianoQ
Data File : r423924_Ev2.D
Date Inj'd : 10/4/2020 0:1: 4
Sample : WG1695438-5,3,250,250

Method : TSIM4_220921.M
Operator : AIRPIANO4:TJS
Instrument :
Quant Date : 10/5/2022 8:28 am

Compound #38: carbon tetrachloride



Original Peak Response = 1473



Manual Peak Response = 1421 M4

M4 = Poor automated baseline construction.

Calculation of Volatile Organic Compounds in Air

The instrument will calculate the concentration (ppbv). If the sample is diluted (DF), the result is multiplied by the DF to generate the final result.

Result, ppbv = C_s x DF
Where:
C_s = Concentration of sample (ppbv)
DF = Dilution Factor

Calculation of Instrument Dilution Factor

For dilutions, smaller sample volumes (< 250mL) are analyzed. The smallest volume that can be analyzed with accuracy is 10 mL.

Samples that arrive at the laboratory with pressures below -15 inches Hg must be pressurized with zero air to greater than -15 inches Hg. This pressurization results in a dilution factor.

Calculation of Dilution Factor
$DF = V_{cf} / V_{ci}$
Where:
V_{ci} = volume of air in canister prior to pressurization, L
P =

Conversion of ppbv to ug/m^3
ug/m^3 = (ppbv) * MW / 24.47
Where:
24.47 = molar gas constant (g/g-mole)
MW = molecular weight of the compound of interest

Dilution Factor for Pressurization of Subatmospheric Samples: Three Steps

Step 1: Calculate the volume in the canister prior to pressurization (Assume a 2.7 liter canister is used).

Dilution Factor for Pressurization of Subatmospheric Samples: Three Steps

Step 1: Calculate the volume in the canister prior to pressurization (Assume a 2.7 liter canister is used).

$V_{ci} = 2.7 * Pl/14.696$

Step 2: Calculate the volume in the canister after pressurization.

$V_{cf} = 2.7 * PF/14.696$

Step 3: Calculate the dilution factor.

$DF = V_{cf} / V_{ci}$

Where:

V_{ci} = volume of air in canister prior to pressurization, L
PI = pressure reading of canister prior to pressurization (psia)
V_{cf} = volume of air in canister after pressurization, L
PF = pressure reading of canister after pressurization (psia)
DF = dilution factor
14.696 = atmospheric pressure (psia)

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Oct 06 2022, 09:50 am

Work Group: WG1695438 for Department: 3 GC/MS

Created: 04-OCT-22 Due: Operator: NL

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2253855-02	VE-2-IA	S	TO15-SIM	AIR	DONE	U	1029	1006	2F	Can-6
L2253855-03	DUP-092922	S	TO15-SIM	AIR	DONE	U	1029	1006	2F	Can-6
L2253855-05	VE-1-IA	S	TO15-SIM	AIR	DONE	U	1029	1006	2F	Can-6
L2254112-03	SS-1-7PH052-093022	S	TO15-SIM	SOIL_VAPOR	DONE	U	1030	1007	3E	Can-1
L2254112-04	SS-2-7PH052-093022	S	TO15-SIM	SOIL_VAPOR	DONE	U	1030	1007	3E	Can-1
L2254221-01	IA01_093022	S	TO15-SIM	AIR	DONE	U	1030	1007	2F	Can-2.7
L2254221-02	AA01_093022	S	TO15-SIM	AIR	DONE	U	1030	1007	2F	Can-2.7
WG1695438-1	MS BFB Tune Standard	S	TO15-SIM	AIR	DONE	U				
WG1695438-2	Continuing Calibrati	S	TO15-SIM	AIR	DONE	U				
WG1695438-3	Laboratory Control S	S	TO15-SIM	AIR	DONE	U				
WG1695438-4	Laboratory Method Bl	S	TO15-SIM	AIR	DONE	U				
WG1695438-5	Duplicate Sample	S	TO15-SIM	AIR	DONE	U				

Comments:

WG1695438-5 L2253855-05

Alpha Analytical Air Lab
Instrument Run Log

nt ID:	Airpiano4	Internal Standard/Surrogate IDs:	SS20-035 / SS21-026
Date:	09/21/2022	Internal Standard/Surrogate Volume:	100 ml
Initials:	NL	Sequence File Name:	220921.S

AS Position #	Sample ID	S	Data File ID	Standard ID or Batch ID #, ICAL Ref #	Comment (s)	Product/ sublist	Leak Check Pass ? Y/N
1	BA4092101	TO15_SFS.qgm	R423654.qgd	250ml			NA
1	BA4092102	TO15_SFS.qgm	R423655.qgd	250ml			NA
1	BA4092103	TO15_SFS.qgm	R423656.qgd	250ml			NA
1	TA4092101	TO15_SFS.qgm	R423657.qgd	250ml	TUNE		NA
5	ITO15-SIMSTD0.02	TO15_SFS.qgm	R423658.qgd	50 mL SS22-011D	SIM ONLY	DEFAULT	NA
5	ITO15-SIMSTD0.05	TO15_SFS.qgm	R423659.qgd	125 mL SS22-011D	SIM ONLY	DEFAULT	NA
5	ITO15-SIMSTD0.1	TO15_SFS.qgm	R423660.qgd	250 mL SS22-011D	SIM ONLY	DEFAULT	NA
6	ITO15-SIMSTD0.2	TO15_SFS.qgm	R423661.qgd	50 mL SS22-011C		DEFAULT	NA
6	ITO15-SIMSTD0.5	TO15_SFS.qgm	R423662.qgd	125 mL SS22-011C		DEFAULT	NA
6	ITO15-SIMSTD1.0	TO15_SFS.qgm	R423663.qgd	250 mL SS22-011C		DEFAULT	NA
7	ITO15-SIMSTD5.0	TO15_SFS.qgm	R423664.qgd	125 mL SS22-011B		DEFAULT	NA
7	ITO15-SIMSTD010	TO15_SFS.qgm	R423665.qgd	250 mL SS22-011B		DEFAULT	NA
8	ITO15-SIMSTD020	TO15_SFS.qgm	R423666.qgd	50 mL SS22-011A		DEFAULT	NA
8	ITO15-SIMSTD050	TO15_SFS.qgm	R423667.qgd	125 mL SS22-011A		DEFAULT	NA
8	ITO15-LLSTD100	TO15_SFS.qgm	R423668.qgd	250 mL SS22-011A	LL ONLY	DEFAULT	NA
1	BA4092101	TO15_SFS.qgm	R423669.qgd	250 mL		DEFAULT	NA
1	BA4092102	TO15_SFS.qgm	R423670.qgd	250 mL		DEFAULT	NA
2	CTO15-LLSTD010	TO15_SFS.qgm	R423671.qgd	250 mL SS22-015B	LL ICV	DEF ICV AP2	NA
2	CTO15-SIMSTD5.0	TO15_SFS.qgm	R423672.qgd	125 mL SS22-015B	SIM ICV	DEF ICV AP2	NA

Alpha Analytical Air Lab
Instrument Run Log

Instrument ID: AIRPIANO4

Internal Standard/Surrogate IDs: SS22-001 / SS21-026

Date: 10/04/2022

Internal Standard/Surrogate Volume: 100 ml

Analyst Initials: NL

Sequence File Name: 220916.S

Position #	Sample ID	Acquisition Method	Data File ID	Batch ID #, ICAL Ref #	Comment (s)	Product/ sublist	CK Pass ? Y/N
1	TA4100401	TO15_SFS.qgm	R423911.qgd	250ml	TUNE		NA
2	CA4100401	TO15_SFS.qgm	R423912.qgd	250 mL SS22-011B	LL CC		NA
3	CTO15-LLSTD010	TO15_SFS.qgm	R423913.qgd	250 mL SS22-020E	LL LCS		NA
3	CTO15-SIMSTD5.0	TO15_SFS.qgm	R423914.qgd	125 mL SS22-020E	SIM LCS		NA
1	BA4100401	TO15_SFS.qgm	R423915.qgd	250 mL	FAILED BLANK		NA
1	BA4100402	TO15_SFS.qgm	R423916.qgd	250 mL	LL/SIM BLANK		NA
1	L2254221-02,3,250,250	TO15_SFS.qgm	R423917.qgd	WG1695439,ICAL19357		PCE& TCE VIA SIM	Y
2	L2254221-01,3,250,250	TO15_SFS.qgm	R423918.qgd	WG1695439,ICAL19357		PCE& TCE VIA SIM	Y
3	L2254402-01,3,250,250	TO15_SFS.qgm	R423919.qgd	WG1695439,ICAL19357		STD + NAPH	Y
4	L2254402-02,3,250,250	TO15_SFS.qgm	R423920.qgd	WG1695439,ICAL19357		STD + NAPH	Y
5	L2253855-02,3,250,250	TO15_SFS.qgm	R423921.qgd	WG1695439,ICAL19357		NY-7SIM	Y
6	L2253855-03,3,250,250	TO15_SFS.qgm	R423922.qgd	WG1695439,ICAL19357		NY-7SIM	Y
7	L2253855-05,3,250,250	TO15_SFS.qgm	R423923.qgd	WG1695439,ICAL19357	ETOH OVERCAL	NY-7SIM	Y
7	L2253855-05DUP,3,250,250	TO15_SFS.qgm	R423924.qgd	WG1695439,ICAL19357	LL/SIM DUP	NY-7SIM	Y
8	L2253855-01D,3,3.72,250	TO15_SFS.qgm	R423925.qgd	WG1695439,ICAL19357	T	NY	Y
9	L2253855-04D,3,100,250	TO15_SFS.qgm	R423926.qgd	WG1695439,ICAL19357	T	NY	Y
10	L2252399-01,3,250,250	TO15_SFS.qgm	R423927.qgd	WG1695439,ICAL19357		NY	Y
11	L2252399-02,3,250,250	TO15_SFS.qgm	R423928.qgd	WG1695439,ICAL19357		NY	Y
12	L2254199-01,3,250,250	TO15_SFS.qgm	R423929.qgd	WG1695439,ICAL19357		NY	Y
13	L2254199-02D,3,204.17,250	TO15_SFS.qgm	R423930.qgd	WG1695439,ICAL19357	905	NY	Y
14	L2254112-03D,3,110,250	TO15_SFS.qgm	R423931.qgd	WG1695439,ICAL19357		5 CHLOR VIA SIM	Y
15	L2254112-04D,3,122.91,250	TO15_SFS.qgm	R423932.qgd	WG1695439,ICAL19357		5 CHLOR VIA SIM	Y
7	L2253855-05D,3,50,250	TO15_SFS.qgm	R423933.qgd	WG1695439,ICAL19357		ETOH	Y
7	L2253855-05DUPD,3,50,250	TO15_SFS.qgm	R423934.qgd	WG1695439,ICAL19357	LL DUP	ETOH	Y

Alpha Analytical Air Lab
Instrument Run Log

Date(s) of Initial Calibration: Refer to Initial Calibration Summary Form 6

Date Acquired: see Instrument Performance Check Summary and/or quantitation report.

Sample ID information: L1301234-01,3,250,250 { Lab sample ID, dilution, actual volume analyzed (mL), nominal volume

Dilution Factor: See Form 1 report, or divide nominal volume by actual volume analyzed

www.alphalab.com



Alpha Analytical

Laboratory Code: 11148

SDG Number: L2253856

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Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Number: 2546.007Y002

Lab Number: L2253856
Report Date: 10/05/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2253856-01	MW-D	WATER	YONKERS, NY	09/29/22 08:10	09/29/22
L2253856-02	TRC-MW-F	WATER	YONKERS, NY	09/29/22 09:10	09/29/22
L2253856-03	MW-E	WATER	YONKERS, NY	09/29/22 10:55	09/29/22
L2253856-04	MW-C(SVE)	WATER	YONKERS, NY	09/29/22 11:50	09/29/22
L2253856-05	MW-1	WATER	YONKERS, NY	09/29/22 13:00	09/29/22
L2253856-06	DUP-GW-092922	WATER	YONKERS, NY	09/29/22 10:55	09/29/22
L2253856-07	FIELD BLANK-GW-092922	WATER	YONKERS, NY	09/29/22 11:00	09/29/22
L2253856-08	TRIP BLANK-GW-092922	WATER	YONKERS, NY	09/29/22 00:00	09/29/22

Case Narrative

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

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

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

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

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

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

Case Narrative (continued)

Report Submission

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

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

Authorized Signature: Melissa Sturgis Report Date: 10/05/22

Title: Technical Director/Representative

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Footnotes

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

Terms

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

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

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

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

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

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

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

Report Format: DU Report with 'J' Qualifiers

Data Qualifiers

the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Volatile Organics Instruments

Volatile Organics:

Instrument: Agilent 7890 GC/5975C MSD	Columns (length x ID x df):
Trap: Supelco K Trap (VOACARB 3000)	RTX-VMS 20m x 0.18mm x 1um
Concentrator: EST Encon (or equivalent)	RTX-VMS 30m x 0.25mm x 1.4um
Autosampler: EST Centurion (or equivalent)	RTX-502.2 40m x 0.18mm x 1um
Purge time: 11 min	

Volatile Organics: VPH

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

Volatile Organics: PIANO

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

Volatile Organics: Dissolved Gas

Instrument: Agilent 7890 (or equivalent) with FID/TCD	
	Column Type: Haysep S Column
	Column Length: 2 Meters packed (100/200 mesh)
Autosampler: LEAP Headspace	Purge time: 0.6 min

Volatile Organics in Air Instruments

Volatile Organics in Air:

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

Concentrator: Entech 7100A or 7200	Column Type: Restek RTX-1
Autosampler: Entech 7016CA or 7016D	Column Length: 60 Meters
	df: 1.00 um
	ID: 0.25 mm or 0.32 mm

Trap 1: Glass Bead: manufacturer-Entech: 20 cm packing material
Trap 2: Tenax: manufacturer-Entech: 20 cm packing material

Semivolatile Organics Instruments - Westborough

Semivolatile Organics (Acid/Base/Neutral Extractables):

Instrument: Agilent 5973N MSD	Injection volume: 1 ul;2 uL LVI
Column Type: Restek RXI-5SILMS	df: 0.32 um
Column Length: 30 Meters	ID: 0.25 mm

Polynuclear Aromatic Hydrocarbons by 8270 SIM:

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

Pesticides/PCB/Herbicides:

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

Petroleum/EPH:

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

Semivolatile Organic Instruments - Mansfield

Semivolatile Organics (ALK-PAH Extractables):

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

Semivolatile Organics (8270):

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

Semivolatile Organics (8270 SIM):

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

Semivolatile Organics (1,4-Dioxane):

Instrument: Agilent 5973N / 5975 / 5977 MSD	Injection volume: 3 ul
Column Type: RTX-5	df: 0.25um, 0.18 um
Column Length: 30 Meters	ID: 0.25um, 0.18 mm

Semivolatile Organics (209 Congener):

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

Semivolatile Organics (8081):

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

Semivolatile Organics (8082):

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

Semivolatile Organics (SHC Extractables):

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

Sample Delivery Group Summary

Alpha Job Number : L2253856

Received : 29-SEP-2022
Reviewer : Sarah Hayward-Savage

Account Name : Roux Env. Eng. & Geology, DPC
Project Number : 2546.007Y002
Project Name : FORMER CLEAN ZONE DRY CLEANERS

Delivery Information

Samples Delivered By : Alpha Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	3.3	

Condition Information

1) All samples on COC received?	**YES**
2) Extra samples received?	**NO**
3) Are there any sample container discrepancies?	**NO**
4) Are there any discrepancies between sample labels & COC?	**NO**
5) Are samples in appropriate containers for requested analysis?	**YES**
6) Are samples properly preserved for requested analysis? Following containers were received with headspace: -08B	**NO**
7) Are samples within holding time for requested analysis?	**YES**
8) All sampling equipment returned?	**NA**

Volatile Organics/VPH

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

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Oct 05 2022, 12:34 pm

Login Number: L2253856
Account: ROUX-NY Roux Env. Eng. & Geology, DPCProject: 2546.007Y002
Received: 29SEP22 Due Date: 05OCT22

Sample #	Client ID	Mat	PR	Collected
L2253856-01	MW-D	S0	1	29SEP22 08:10

Only one result per compound. If a sample requires High AND Low Levels, ok to report both as long as each compound is only reported once (can't have a result reported for a compound from both high AND low runs) 8260: Reporting list built for PCE, TCE, Cis 1,2 DCE, Trans 1,2-DCE, VC, 1,1 DCE L2253856-01 MS L2253856-01 MSD ASP-B Package Due Date: 10/05/22

ASP-B,E&I-FEE,MS/MSD,NYTCL-8260

Sample #	Client ID	Mat	PR	Collected
L2253856-02	TRC-MW-F	S0	1	29SEP22 09:10

8260: Reporting list built for PCE, TCE, Cis 1,2 DCE, Trans 1,2-DCE, VC, 1,1 DCE Only one result per compound. If a sample requires High AND Low Levels, ok to report both as long as each compound is only reported once (can't have a result reported for a compound from both high AND low runs) Package Due Date: 10/05/22

NYTCL-8260

Sample #	Client ID	Mat	PR	Collected
L2253856-03	MW-E	S0	1	29SEP22 10:55

8260: Reporting list built for PCE, TCE, Cis 1,2 DCE, Trans 1,2-DCE, VC, 1,1 DCE Only one result per compound. If a sample requires High AND Low Levels, ok to report both as long as each compound is only reported once (can't have a result reported for a compound from both high AND low runs) Package Due Date: 10/05/22

NYTCL-8260

Sample #	Client ID	Mat	PR	Collected
L2253856-04	MW-C(SVE)	S0	1	29SEP22 11:50

8260: Reporting list built for PCE, TCE, Cis 1,2 DCE, Trans 1,2-DCE, VC, 1,1 DCE Only one result per compound. If a sample requires High AND Low Levels, ok to report both as long as each compound is only reported once (can't have a result reported for a compound from both high AND low runs) Package Due Date: 10/05/22

NYTCL-8260

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Oct 05 2022, 12:34 pm

Login Number: L2253856

Account: ROUX-NY Roux Env. Eng. & Geology, DPCProject: 2546.007Y002

Received: 29SEP22 Due Date: 05OCT22

Sample #	Client ID	Mat	PR	Collected
L2253856-05	MW-1		1 S0	29SEP22 13:00

8260: Reporting list built for PCE, TCE, Cis 1,2 DCE, Trans 1,2-DCE, VC, 1,1 DCE Only one result per compound. If a sample requires High AND Low Levels, ok to report both as long as each compound is only reported once (can't have a result reported for a compound from both high AND low runs) Package Due Date: 10/05/22

NYTCL-8260

Sample #	Client ID	Mat	PR	Collected
L2253856-06	DUP-GW-092922		1 S0	29SEP22 10:55

8260: Reporting list built for PCE, TCE, Cis 1,2 DCE, Trans 1,2-DCE, VC, 1,1 DCE Only one result per compound. If a sample requires High AND Low Levels, ok to report both as long as each compound is only reported once (can't have a result reported for a compound from both high AND low runs) Package Due Date: 10/05/22

NYTCL-8260

Sample #	Client ID	Mat	PR	Collected
L2253856-07	FIELD BLANK-GW-092922		1 S0	29SEP22 11:00

8260: Reporting list built for PCE, TCE, Cis 1,2 DCE, Trans 1,2-DCE, VC, 1,1 DCE Only one result per compound. If a sample requires High AND Low Levels, ok to report both as long as each compound is only reported once (can't have a result reported for a compound from both high AND low runs) Package Due Date: 10/05/22

NYTCL-8260

Sample #	Client ID	Mat	PR	Collected
L2253856-08	TRIP BLANK-GW-092922		1 S0	29SEP22 00:00

8260: Reporting list built for PCE, TCE, Cis 1,2 DCE, Trans 1,2-DCE, VC, 1,1 DCE Only one result per compound. If a sample requires High AND Low Levels, ok to report both as long as each compound is only reported once (can't have a result reported for a compound from both high AND low runs) Package Due Date: 10/05/22

NYTCL-8260

Logged By: Jennifer Byrnes

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page of

Date Rec'd in Lab: 9/29/22

ALPHA Job #: L2253856

Client Information

Client: ROUX
Address: 209 SHAFTER ST.
ISLANDIA, NY 11749
Phone: 631-2322600
Fax: 631-2329898
Email: RHENKE@ROUXINC.COM

Project Information

Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Location: YONKERS, NY
Project # 2546.007Y002
(Use Project name as Project #) ☐
Project Manager: RACHEL HENKE
ALPHAQuote #:

Turn-Around Time

Standard ☑ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☑ Other CAT B

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☑ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☑

Other project specific requirements/comments:

ONLY REPORT FOR: PCE, TCE, CIS-1,2-DCE, TRANS-1,2-DCE VINYL CHLORIDE AND 1,1-DICHLOROETHENE

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,2-TCL-VOC (8260)	Sample Specific Comments	Total Bottle
538560-01	MW-D	9-29-22	0810	GW	TJ	X	MS/MSD	9
-02	TRC-MW-F	9-29-22	0910	GW	TJ	X		3
-03	MW-E	9-29-22	1055	GW	TJ	X		3
-04	MW-C (SVE)	9-29-22	1150	GW	TJ	X		3
-05	MW-1	9-29-22	1300	GW	TJ	X		3
-06	DUP-GW-092922	9-29-22	1055	GW	TJ	X		3
-07	FIELD BLANK-GW-092922	9-29-22	1100	GW	TJ	X		3
-08	TRIP BLANK-GW-092922	9-28-22	—	LAB	TR	X		2

Container Type: V
Preservative: B

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
ROUX	9/29/22 1430	(AAL)	9/29/22 1430
(AAL)	9/29/22 1430		9/29 1755
	9/29		
			9/29 2200

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

Organics

GC/MS 8260
Analysis

Volatiles QC Summary

Surrogate Recovery Summary
Form 2
Volatiles

Client: Roux Env. Eng. & Geology, DPC
Project Name: FORMER CLEAN ZONE DRY CLEANERS

Lab Number: L2253856
Project Number: 2546.007Y002
Matrix: Water

CLIENT ID (LAB SAMPLE NO.)	SMC1 DCA	SMC2 TOL	SMC3 BFB	SMC4 DBFM	TOT OUT
MW-D (L2253856-01)	79	92	101	102	0
TRC-MW-F (L2253856-02)	83	97	98	103	0
MW-E (L2253856-03)	83	98	98	106	0
MW-C(SVE) (L2253856-04)	80	96	99	98	0
MW-1 (L2253856-05)	84	93	99	102	0
DUP-GW-092922 (L2253856-06)	83	93	97	109	0
FIELD BLANK-GW-092922 (L2253856-07)	84	94	96	104	0
TRIP BLANK-GW-092922 (L2253856-08)	83	97	97	107	0
WG1695594-3LCS	79	101	100	101	0
WG1695594-4LCSD	80	100	97	99	0
WG1695594-5BLANK	75	96	93	101	0
MW-DMS	89	92	99	103	0
MW-DMSD	88	97	99	100	0

QC LIMITS

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

*** Values outside of QC limits**

FORM II NYTCL-8260

Laboratory Control Sample Summary
Form 3
Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253856
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.007Y002
Matrix	: WATER		
LCS Sample ID	: WG1695594-3 **Analysis Date** : 10/04/22 06:54	**File ID**	: V30221004A01
LCSD Sample ID	: WG1695594-4 **Analysis Date** : 10/04/22 07:13	**File ID**	: V30221004A02

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Tetrachloroethene	10	9.6	96	10	9.2	92	4	70-130	20
Vinyl chloride	10	11	110	10	11	110	0	55-140	20
1,1-Dichloroethene	10	11	110	10	11	110	0	61-145	20
trans-1,2-Dichloroethene	10	10	100	10	10	100	0	70-130	20
Trichloroethene	10	9.9	99	10	9.3	93	6	70-130	20
cis-1,2-Dichloroethene	10	9.9	99	10	9.4	94	5	70-130	20

Matrix Spike Sample Summary
Form 3
Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253856
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.007Y002
Client Sample ID	: MW-D	**Matrix**	: WATER
Lab Sample ID	: L2253856-01	**Analysis Date**	: 10/04/22 11:28
Matrix Spike	: WG1695594-6	**MS Analysis Date**	: 10/04/22 15:04
Matrix Spike Dup	: WG1695594-7	**MSD Analysis Date**	: 10/04/22 15:23

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	**Sample Conc. (ug/l)**	**Spike Added (ug/l)**	**Spike Conc. (ug/l)**	**%R**	**Spike Added (ug/l)**	**Spike Conc. (ug/l)**	**%R**	**RPD**	**Recovery Limits**	**RPD Limit**
Tetrachloroethene	ND	10	9.2	92	10	8.8	88	4	70-130	20
Vinyl chloride	ND	10	12	120	10	12	120	0	55-140	20
1,1-Dichloroethene	ND	10	11	110	10	10	100	10	61-145	20
trans-1,2-Dichloroethene	ND	10	10	100	10	10	100	0	70-130	20
Trichloroethene	ND	10	10	100	10	10	100	0	70-130	20
cis-1,2-Dichloroethene	ND	10	11	110	10	11	110	0	70-130	20

Method Blank Summary
Form 4
Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253856
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.007Y002
Lab Sample ID	: WG1695594-5	**Lab File ID**	: V30221004A05
Instrument ID	: VOA130		
Matrix	: WATER	**Analysis Date**	: 10/04/22 08:12

Client Sample No.	Lab Sample ID	Analysis Date
WG1695594-3LCS	WG1695594-3	10/04/22 06:54
WG1695594-4LCSD	WG1695594-4	10/04/22 07:13
MW-D	L2253856-01	10/04/22 11:28
TRC-MW-F	L2253856-02	10/04/22 11:48
MW-E	L2253856-03	10/04/22 12:07
MW-C(SVE)	L2253856-04	10/04/22 12:27
MW-1	L2253856-05	10/04/22 12:46
DUP-GW-092922	L2253856-06	10/04/22 13:06
FIELD BLANK-GW-092922	L2253856-07	10/04/22 13:26
TRIP BLANK-GW-092922	L2253856-08	10/04/22 13:45
MW-DMS	WG1695594-6	10/04/22 15:04
MW-DMSD	WG1695594-7	10/04/22 15:23

Instrument Performance Check (Tune) Summary
Form 5
Volatiles
Bromofluorobenzene (BFB)

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253856
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.007Y002
Instrument ID	: VOA130	**Analysis Date**	: 08/19/22 13:23
Tune Standard	: WG1678209-1	**Tune File ID**	: V30220819ABF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	23.2
75	30.0 - 80.0% of mass 95	53.1
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.7 (.9)1
174	Greater than 50.0% of mass 95	79.8
175	5.0 - 9.0% of mass 174	5.8 (7.3)1
176	Greater than 95.0% but less than 101% of mass	77.2 (96.7)1
177	5.0 - 9.0% of mass 176	5.1 (6.6)2

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

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

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STD0.19PPB	R1601033-1	V30220819A03	08/19/22 14:16
STD0.5PPB	R1601033-2	V30220819A04	08/19/22 14:35
STD2PPB	R1601033-3	V30220819A06	08/19/22 15:15
STD10PPB	R1601033-4	V30220819A08	08/19/22 15:54
STD30PPB	R1601033-5	V30220819A09	08/19/22 16:14
STD80PPB	R1601033-6	V30220819A10	08/19/22 16:33
STD120PPB	R1601033-7	V30220819A11	08/19/22 16:53
STD200PPB	R1601033-8	V30220819A12	08/19/22 17:12
ICV Quant Report	R1601033-9	V30220819A17	08/19/22 18:51

Instrument Performance Check (Tune) Summary
Form 5
Volatiles
Bromofluorobenzene (BFB)

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253856
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.007Y002
Instrument ID	: VOA130	**Analysis Date**	: 10/04/22 06:40
Tune Standard	: WG1695594-1	**Tune File ID**	: V30221004ABF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	20.9
75	30.0 - 80.0% of mass 95	51.6
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.9 (1.1)1
174	Greater than 50.0% of mass 95	80.9
175	5.0 - 9.0% of mass 174	6.2 (7.6)1
176	Greater than 95.0% but less than 101% of mass	78.1 (96.6)1
177	5.0 - 9.0% of mass 176	5.1 (6.5)2

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

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

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1695594-2CCAL	WG1695594-2	V30221004A01	10/04/22 06:54
WG1695594-3LCS	WG1695594-3	V30221004A01	10/04/22 06:54
WG1695594-4LCSD	WG1695594-4	V30221004A02	10/04/22 07:13
WG1695594-5BLANK	WG1695594-5	V30221004A05	10/04/22 08:12
MW-D	L2253856-01	V30221004A15	10/04/22 11:28
TRC-MW-F	L2253856-02	V30221004A16	10/04/22 11:48
MW-E	L2253856-03	V30221004A17	10/04/22 12:07
MW-C(SVE)	L2253856-04	V30221004A18	10/04/22 12:27
MW-1	L2253856-05	V30221004A19	10/04/22 12:46
DUP-GW-092922	L2253856-06	V30221004A20	10/04/22 13:06
FIELD BLANK-GW-092922	L2253856-07	V30221004A21	10/04/22 13:26
TRIP BLANK-GW-092922	L2253856-08	V30221004A22	10/04/22 13:45
WG1695594-6MS	WG1695594-6	V30221004A26	10/04/22 15:04
WG1695594-7MSD	WG1695594-7	V30221004A27	10/04/22 15:23

Internal Standard Area and RT Summary
Form 8a
Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253856
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.007Y002
Instrument ID	: VOA130	**Analysis Date**	: 10/04/22 06:54:00
Sample No	: WG1695594-2	**Lab File ID**	: V30221004A01

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG1695594-2	257104	5.48	224851	8.49	113313	9.98
Upper Limit	514208	5.98	449702	8.99	226626	10.48
Lower Limit	128552	4.98	112426	7.99	56657	9.48
Sample ID						
WG1695594-3 LCS	257104	5.48	224851	8.49	113313	9.98
WG1695594-4 LCSD	256138	5.48	202911	8.49	104709	9.98
WG1695594-5 BLANK	212639	5.48	180946	8.49	92786	9.98
MW-D	189503	5.48	168745	8.49	83139	9.98
TRC-MW-F	186346	5.48	157465	8.49	80831	9.98
MW-E	185644	5.48	155805	8.49	79977	9.98
MW-C(SVE)	206477	5.48	169876	8.49	86073	9.98
MW-1	195750	5.48	164764	8.49	85245	9.98
DUP-GW-092922	181346	5.48	157560	8.49	81353	9.98
FIELD BLANK-GW-092922	181111	5.48	156892	8.49	83443	9.98
TRIP BLANK-GW-092922	207326	5.48	166516	8.49	85274	9.98
MW-D MS	212524	5.48	184160	8.49	97400	9.98
MW-D MSD	231639	5.48	201643	8.49	104491	9.98

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

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

* Values outside of QC limits

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

Volatile Organics - EPA 8260C (WATER)

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

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Methylene chloride	75-09-2	3	0.678	ug/l	70-130	20	70-130	20	20			
1,1-Dichloroethane	75-34-3	0.75	0.210	ug/l	70-130	20	70-130	20	20			
Chloroform	67-66-3	0.75	0.222	ug/l	70-130	20	70-130	20	20			
Carbon tetrachloride	56-23-5	0.5	0.134	ug/l	63-132	20	63-132	20	20			
1,2-Dichloropropane	78-87-5	1.75	0.137	ug/l	70-130	20	70-130	20	20			
Dibromochloromethane	124-48-1	0.5	0.149	ug/l	63-130	20	63-130	20	20			
1,1,2-Trichloroethane	79-00-5	0.75	0.144	ug/l	70-130	20	70-130	20	20			
Tetrachloroethene	127-18-4	0.5	0.181	ug/l	70-130	20	70-130	20	20			
Chlorobenzene	108-90-7	0.5	0.178	ug/l	75-130	25	75-130	25	25			
Trichlorofluoromethane	75-69-4	2.5	0.161	ug/l	62-150	20	62-150	20	20			
1,2-Dichloroethane	107-06-2	0.5	0.132	ug/l	70-130	20	70-130	20	20			
1,1,1-Trichloroethane	71-55-6	0.5	0.158	ug/l	67-130	20	67-130	20	20			
Bromodichloromethane	75-27-4	0.5	0.192	ug/l	67-130	20	67-130	20	20			
trans-1,3-Dichloropropene	10061-02-6	0.5	0.164	ug/l	70-130	20	70-130	20	20			
cis-1,3-Dichloropropene	10061-01-5	0.5	0.144	ug/l	70-130	20	70-130	20	20			
1,3-Dichloropropene, Total	542-75-6	0.5	0.144	ug/l				20	20			
1,3-Dichloropropene, Total	542-75-6	0.5	0.144	ug/l				20	20			
1,1-Dichloropropene	563-58-6	2.5	0.240	ug/l	70-130	20	70-130	20	20			
Bromoform	75-25-2	2	0.248	ug/l	54-136	20	54-136	20	20			
1,1,2,2-Tetrachloroethane	79-34-5	0.5	0.167	ug/l	67-130	20	67-130	20	20			
Benzene	71-43-2	0.5	0.159	ug/l	70-130	25	70-130	25	25			
Toluene	108-88-3	0.75	0.203	ug/l	70-130	25	70-130	25	25			
Ethylbenzene	100-41-4	0.5	0.167	ug/l	70-130	20	70-130	20	20			
Chloromethane	74-87-3	2.5	0.200	ug/l	64-130	20	64-130	20	20			
Bromomethane	74-83-9	1	0.256	ug/l	39-139	20	39-139	20	20			
Vinyl chloride	75-01-4	1	0.0714	ug/l	55-140	20	55-140	20	20			
Chloroethane	75-00-3	1	0.134	ug/l	55-138	20	55-138	20	20			
1,1-Dichloroethene	75-35-4	0.5	0.169	ug/l	61-145	25	61-145	25	25			
trans-1,2-Dichloroethene	156-60-5	0.75	0.163	ug/l	70-130	20	70-130	20	20			
1,2-Dichloroethene (total)	540-59-0	0.5	0.163	ug/l				20	20			
1,2-Dichloroethene (total)	540-59-0	0.5	0.163	ug/l				20	20			
Trichloroethene	79-01-6	0.5	0.175	ug/l	70-130	25	70-130	25	25			
1,2-Dichlorobenzene	95-50-1	2.5	0.184	ug/l	70-130	20	70-130	20	20			
1,3-Dichlorobenzene	541-73-1	2.5	0.186	ug/l	70-130	20	70-130	20	20			
1,4-Dichlorobenzene	106-46-7	2.5	0.187	ug/l	70-130	20	70-130	20	20			
Methyl tert butyl ether	1634-04-4	1	0.166	ug/l	63-130	20	63-130	20	20			
p/m-Xylene	179601-23-1	1	0.332	ug/l	70-130	20	70-130	20	20			
o-Xylene	95-47-6	1	0.392	ug/l	70-130	20	70-130	20	20			
Xylene (Total)	1330-20-7	1	0.330	ug/l				20	20			
Xylene (Total)	1330-20-7	1	0.330	ug/l				20	20			
cis-1,2-Dichloroethene	156-59-2	0.5	0.187	ug/l	70-130	20	70-130	20	20			
Dibromomethane	74-95-3	5	0.363	ug/l	70-130	20	70-130	20	20			

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Volatile Organics - EPA 8260C (WATER)

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

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
1,4-Dichlorobutane	110-56-5	5	0.464	ug/l	70-130	20	70-130	20	20			
1,2,3-Trichloropropane	96-18-4	5	0.176	ug/l	64-130	20	64-130	20	20			
Styrene	100-42-5	1	0.359	ug/l	70-130	20	70-130	20	20			
Dichlorodifluoromethane	75-71-8	5	0.244	ug/l	36-147	20	36-147	20	20			
Acetone	67-64-1	5	1.46	ug/l	58-148	20	58-148	20	20			
Carbon disulfide	75-15-0	5	0.299	ug/l	51-130	20	51-130	20	20			
2-Butanone	78-93-3	5	1.94	ug/l	63-138	20	63-138	20	20			
Vinyl acetate	108-05-4	5	0.311	ug/l	70-130	20	70-130	20	20			
4-Methyl-2-pentanone	108-10-1	5	0.416	ug/l	59-130	20	59-130	20	20			
2-Hexanone	591-78-6	5	0.515	ug/l	57-130	20	57-130	20	20			
Ethyl methacrylate	97-63-2	5	0.606	ug/l	70-130	20	70-130	20	20			
Acrylonitrile	107-13-1	5	0.430	ug/l	70-130	20	70-130	20	20			
Bromochloromethane	74-97-5	2.5	0.152	ug/l	70-130	20	70-130	20	20			
Tetrahydrofuran	109-99-9	5	0.525	ug/l	58-130	20	58-130	20	20			
2,2-Dichloropropane	594-20-7	2.5	0.204	ug/l	63-133	20	63-133	20	20			
1,2-Dibromoethane	106-93-4	2	0.193	ug/l	70-130	20	70-130	20	20			
1,3-Dichloropropane	142-28-9	2.5	0.212	ug/l	70-130	20	70-130	20	20			
1,1,1,2-Tetrachloroethane	630-20-6	0.5	0.164	ug/l	64-130	20	64-130	20	20			
Bromobenzene	108-86-1	2.5	0.152	ug/l	70-130	20	70-130	20	20			
n-Butylbenzene	104-51-8	0.5	0.192	ug/l	53-136	20	53-136	20	20			
sec-Butylbenzene	135-98-8	0.5	0.181	ug/l	70-130	20	70-130	20	20			
tert-Butylbenzene	98-06-6	2.5	0.196	ug/l	70-130	20	70-130	20	20			
o-Chlorotoluene	95-49-8	2.5	0.215	ug/l	70-130	20	70-130	20	20			
p-Chlorotoluene	106-43-4	2.5	0.185	ug/l	70-130	20	70-130	20	20			
1,2-Dibromo-3-chloropropane	96-12-8	2.5	0.353	ug/l	41-144	20	41-144	20	20			
Hexachlorobutadiene	87-68-3	0.5	0.217	ug/l	63-130	20	63-130	20	20			
Isopropylbenzene	98-82-8	0.5	0.187	ug/l	70-130	20	70-130	20	20			
p-Isopropyltoluene	99-87-6	0.5	0.188	ug/l	70-130	20	70-130	20	20			
Naphthalene	91-20-3	2.5	0.216	ug/l	70-130	20	70-130	20	20			
n-Propylbenzene	103-65-1	0.5	0.173	ug/l	69-130	20	69-130	20	20			
1,2,3-Trichlorobenzene	87-61-6	2.5	0.234	ug/l	70-130	20	70-130	20	20			
1,2,4-Trichlorobenzene	120-82-1	2.5	0.220	ug/l	70-130	20	70-130	20	20			
1,3,5-Trimethylbenzene	108-67-8	2.5	0.217	ug/l	64-130	20	64-130	20	20			
1,3,5-Trichlorobenzene	108-70-3	2	0.141	ug/l	70-130	20	70-130	20	20			
1,2,4-Trimethylbenzene	95-63-6	2.5	0.191	ug/l	70-130	20	70-130	20	20			
trans-1,4-Dichloro-2-butene	110-57-6	2.5	0.213	ug/l	70-130	20	70-130	20	20			
Ethyl ether	60-29-7	2.5	0.163	ug/l	59-134	20	59-134	20	20			
Methyl Acetate	79-20-9	10	0.234	ug/l	70-130	20	70-130	20	20			
Ethyl Acetate	141-78-6	10	0.716	ug/l	70-130	20	70-130	20	20			
Isopropyl Ether	108-20-3	2	0.425	ug/l	70-130	20	70-130	20	20			
Cyclohexane	110-82-7	10	0.271	ug/l	70-130	20	70-130	20	20			
Ethyl-Tert-Butyl-Ether	637-92-3	2	0.179	ug/l	70-130	20	70-130	20	20			

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Volatile Organics - EPA 8260C (WATER)

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

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Tertiary-Amyl Methyl Ether	994-05-8	2	0.278	ug/l	66-130	20	66-130	20	20			
1,4-Dioxane	123-91-1	250	60.8	ug/l	56-162	20	56-162	20	20			
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	10	0.148	ug/l	70-130	20	70-130	20	20			
Methyl cyclohexane	108-87-2	10	0.396	ug/l	70-130	20	70-130	20	20			
1,4-Diethylbenzene	105-05-5	2	0.392	ug/l	70-130	20	70-130	20	20			
4-Ethyltoluene	622-96-8	2	0.340	ug/l	70-130	20	70-130	20	20			
1,2,4,5-Tetramethylbenzene	95-93-2	2	0.542	ug/l	70-130	20	70-130	20	20			
1,2-Dichloroethane-d4	*17060-07-0*									*70-130*		
Toluene-d8	*2037-26-5*									*70-130*		
4-Bromofluorobenzene	*460-00-4*									*70-130*		
Dibromofluoromethane	*1868-53-7*									*70-130*		

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Created By: Jason Hebert
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Volatile Organics - EPA 8260C (SOIL-LOW)

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

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

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Volatile Organics - EPA 8260C (SOIL-LOW)

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

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

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Volatile Organics - EPA 8260C (SOIL-LOW)

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

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Ethyl-Tert-Butyl-Ether	637-92-3	2	0.128	ug/kg	70-130	30	70-130	30	30			
Tertiary-Amyl Methyl Ether	994-05-8	2	0.176	ug/kg	70-130	30	70-130	30	30			
1,4-Dioxane	123-91-1	100	35.1	ug/kg	65-136	30	65-136	30	30			
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	4	0.693	ug/kg	70-130	30	70-130	30	30			
1,2-Dichloroethane-d4	*17060-07-0*									*70-130*		
Toluene-d8	*2037-26-5*									*70-130*		
4-Bromofluorobenzene	*460-00-4*									*70-130*		
Dibromofluoromethane	*1868-53-7*									*70-130*		

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Volatile Organics - EPA 8260C (SOIL-HIGH)

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

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

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

Volatile Organics - EPA 8260C (SOIL-HIGH)

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

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
1,4-Dichlorobutane	110-56-5	500	11.3	ug/kg	70-130	30	70-130	30	30			
1,2,3-Trichloropropane	96-18-4	100	6.35	ug/kg	68-130	30	68-130	30	30			
Styrene	100-42-5	50	9.80	ug/kg	70-130	30	70-130	30	30			
Dichlorodifluoromethane	75-71-8	500	45.8	ug/kg	30-146	30	30-146	30	30			
Acetone	67-64-1	500	241	ug/kg	54-140	30	54-140	30	30			
Carbon disulfide	75-15-0	500	228	ug/kg	59-130	30	59-130	30	30			
2-Butanone	78-93-3	500	111	ug/kg	70-130	30	70-130	30	30			
Vinyl acetate	108-05-4	500	108	ug/kg	70-130	30	70-130	30	30			
4-Methyl-2-pentanone	108-10-1	500	64.0	ug/kg	70-130	30	70-130	30	30			
2-Hexanone	591-78-6	500	59.0	ug/kg	70-130	30	70-130	30	30			
Ethyl methacrylate	97-63-2	500	79.0	ug/kg	70-130	30	70-130	30	30			
Acrylonitrile	107-13-1	200	57.5	ug/kg	70-130	30	70-130	30	30			
Bromochloromethane	74-97-5	100	10.3	ug/kg	70-130	30	70-130	30	30			
Tetrahydrofuran	109-99-9	200	79.5	ug/kg	66-130	30	66-130	30	30			
2,2-Dichloropropane	594-20-7	100	10.1	ug/kg	70-130	30	70-130	30	30			
1,2-Dibromoethane	106-93-4	50	14.0	ug/kg	70-130	30	70-130	30	30			
1,3-Dichloropropane	142-28-9	100	8.35	ug/kg	69-130	30	69-130	30	30			
1,1,1,2-Tetrachloroethane	630-20-6	25	6.60	ug/kg	70-130	30	70-130	30	30			
Bromobenzene	108-86-1	100	7.25	ug/kg	70-130	30	70-130	30	30			
n-Butylbenzene	104-51-8	50	8.35	ug/kg	70-130	30	70-130	30	30			
sec-Butylbenzene	135-98-8	50	7.30	ug/kg	70-130	30	70-130	30	30			
tert-Butylbenzene	98-06-6	100	5.90	ug/kg	70-130	30	70-130	30	30			
1,3,5-Trichlorobenzene	108-70-3	100	8.65	ug/kg	70-139	30	70-130	30	30			
o-Chlorotoluene	95-49-8	100	9.55	ug/kg	70-130	30	70-130	30	30			
p-Chlorotoluene	106-43-4	100	5.40	ug/kg	70-130	30	70-130	30	30			
1,2-Dibromo-3-chloropropane	96-12-8	150	49.9	ug/kg	68-130	30	68-130	30	30			
Hexachlorobutadiene	87-68-3	200	8.45	ug/kg	67-130	30	67-130	30	30			
Isopropylbenzene	98-82-8	50	5.45	ug/kg	70-130	30	70-130	30	30			
p-Isopropyltoluene	99-87-6	50	5.45	ug/kg	70-130	30	70-130	30	30			
Naphthalene	91-20-3	200	32.5	ug/kg	70-130	30	70-130	30	30			
n-Propylbenzene	103-65-1	50	8.55	ug/kg	70-130	30	70-130	30	30			
1,2,3-Trichlorobenzene	87-61-6	100	16.1	ug/kg	70-130	30	70-130	30	30			
1,2,4-Trichlorobenzene	120-82-1	100	13.6	ug/kg	70-130	30	70-130	30	30			
1,3,5-Trimethylbenzene	108-67-8	100	9.65	ug/kg	70-130	30	70-130	30	30			
1,2,4-Trimethylbenzene	95-63-6	100	16.7	ug/kg	70-130	30	70-130	30	30			
trans-1,4-Dichloro-2-butene	110-57-6	250	71.0	ug/kg	70-130	30	70-130	30	30			
iso-Propyl Alcohol	67-63-0	5000	5000	ug/kg	70-130	20	70-130	20	20			
Ethyl ether	60-29-7	100	17.1	ug/kg	67-130	30	67-130	30	30			
Methyl Acetate	79-20-9	200	47.5	ug/kg	65-130	30	65-130	30	30			
Ethyl Acetate	141-78-6	500	60.5	ug/kg	70-130	30	70-130	30	30			
Isopropyl Ether	108-20-3	100	10.7	ug/kg	66-130	30	66-130	30	30			
Cyclohexane	110-82-7	500	27.2	ug/kg	70-130	30	70-130	30	30			

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

Volatile Organics - EPA 8260C (SOIL-HIGH)

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

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Ethyl-Tert-Butyl-Ether	637-92-3	100	6.40	ug/kg	70-130	30	70-130	30	30			
Tertiary-Amyl Methyl Ether	994-05-8	100	8.80	ug/kg	70-130	30	70-130	30	30			
1,4-Dioxane	123-91-1	5000	1755	ug/kg	65-136	30	65-136	30	30			
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	200	34.7	ug/kg	70-130	30	70-130	30	30			
1,2-Dichloroethane-d4	*17060-07-0*									*70-130*		
Toluene-d8	*2037-26-5*									*70-130*		
4-Bromofluorobenzene	*460-00-4*									*70-130*		
Dibromofluoromethane	*1868-53-7*									*70-130*		

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

Volatiles Sample Data

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253856
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.007Y002
Lab ID	: L2253856-01	**Date Collected**	: 09/29/22 08:10
Client ID	: MW-D	**Date Received**	: 09/29/22
Sample Location	: YONKERS, NY	**Date Analyzed**	: 10/04/22 11:28
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: LAC
Lab File ID	: V30221004A15	**Instrument ID**	: VOA130
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253856
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.007Y002
Lab ID	: L2253856-02	**Date Collected**	: 09/29/22 09:10
Client ID	: TRC-MW-F	**Date Received**	: 09/29/22
Sample Location	: YONKERS, NY	**Date Analyzed**	: 10/04/22 11:48
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: LAC
Lab File ID	: V30221004A16	**Instrument ID**	: VOA130
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253856
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.007Y002
Lab ID	: L2253856-03	**Date Collected**	: 09/29/22 10:55
Client ID	: MW-E	**Date Received**	: 09/29/22
Sample Location	: YONKERS, NY	**Date Analyzed**	: 10/04/22 12:07
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: LAC
Lab File ID	: V30221004A17	**Instrument ID**	: VOA130
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253856
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.007Y002
Lab ID	: L2253856-04	**Date Collected**	: 09/29/22 11:50
Client ID	: MW-C(SVE)	**Date Received**	: 09/29/22
Sample Location	: YONKERS, NY	**Date Analyzed**	: 10/04/22 12:27
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: LAC
Lab File ID	: V30221004A18	**Instrument ID**	: VOA130
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
127-18-4	Tetrachloroethene	31	0.50	0.18	
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	3.0	0.50	0.18	
156-59-2	cis-1,2-Dichloroethene	8.0	2.5	0.70	

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253856
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.007Y002
Lab ID	: L2253856-05	**Date Collected**	: 09/29/22 13:00
Client ID	: MW-1	**Date Received**	: 09/29/22
Sample Location	: YONKERS, NY	**Date Analyzed**	: 10/04/22 12:46
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: LAC
Lab File ID	: V30221004A19	**Instrument ID**	: VOA130
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
127-18-4	Tetrachloroethene	22	0.50	0.18	
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	2.3	0.50	0.18	
156-59-2	cis-1,2-Dichloroethene	4.5	2.5	0.70	

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253856
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.007Y002
Lab ID	: L2253856-06	**Date Collected**	: 09/29/22 10:55
Client ID	: DUP-GW-092922	**Date Received**	: 09/29/22
Sample Location	: YONKERS, NY	**Date Analyzed**	: 10/04/22 13:06
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: LAC
Lab File ID	: V30221004A20	**Instrument ID**	: VOA130
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253856
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.007Y002
Lab ID	: L2253856-07	**Date Collected**	: 09/29/22 11:00
Client ID	: FIELD BLANK-GW-092922	**Date Received**	: 09/29/22
Sample Location	: YONKERS, NY	**Date Analyzed**	: 10/04/22 13:26
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: LAC
Lab File ID	: V30221004A21	**Instrument ID**	: VOA130
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253856
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.007Y002
Lab ID	: L2253856-08	**Date Collected**	: 09/29/22 00:00
Client ID	: TRIP BLANK-GW-092922	**Date Received**	: 09/29/22
Sample Location	: YONKERS, NY	**Date Analyzed**	: 10/04/22 13:45
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: LAC
Lab File ID	: V30221004A22	**Instrument ID**	: VOA130
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253856
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.007Y002
Lab ID	: WG1695594-5	**Date Collected**	: NA
Client ID	: WG1695594-5BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 10/04/22 08:12
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: PD
Lab File ID	: V30221004A05	**Instrument ID**	: VOA130
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A15.D
Acq On : 04 Oct 2022 11:28 am
Operator : VOA130:LAC
Sample : l2253856-01,31,10,10,,a,pri
Misc : WG1695594,ICAL19274
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 04 15:02:55 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\221004A\V30221004A01.D
Sub List : 8260-PCEbreak - PCE Break Down

Compound		R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards							
1) Fluorobenzene		5.481	96	189503	10.000	ug/L	0.00
Standard Area 1 = 257104				Recovery =	73.71%		
59) Chlorobenzene-d5		8.493	117	168745	10.000	ug/L	0.00
Standard Area 1 = 224851				Recovery =	75.05%		
79) 1,4-Dichlorobenzene-d4		9.979	152	83139	10.000	ug/L	-0.01
Standard Area 1 = 113313				Recovery =	73.37%		
System Monitoring Compounds							
36) Dibromofluoromethane		4.486	113	50849	10.161	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130		Recovery =	101.61%		
43) 1,2-Dichloroethane-d4		5.130	65	43677	7.949	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130		Recovery =	79.49%		
60) Toluene-d8		7.191	98	201829	9.208	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130		Recovery =	92.08%		
83) 4-Bromofluorobenzene		9.310	95	79935	10.141	ug/L	-0.01
Spiked Amount	10.000	Range 70 - 130		Recovery =	101.41%		
Target Compounds							Qvalue
4) Vinyl chloride		0.000		0	N.D.		
10) 1,1-Dichloroethene		0.000		0	N.D.		
18) trans-1,2-Dichloroethene		0.000		0	N.D.		
28) cis-1,2-Dichloroethene		3.814	96	85	N.D.		
48) Trichloroethene		0.000		0	N.D.		
63) Tetrachloroethene		7.598	166	511	0.098	ug/L #	77

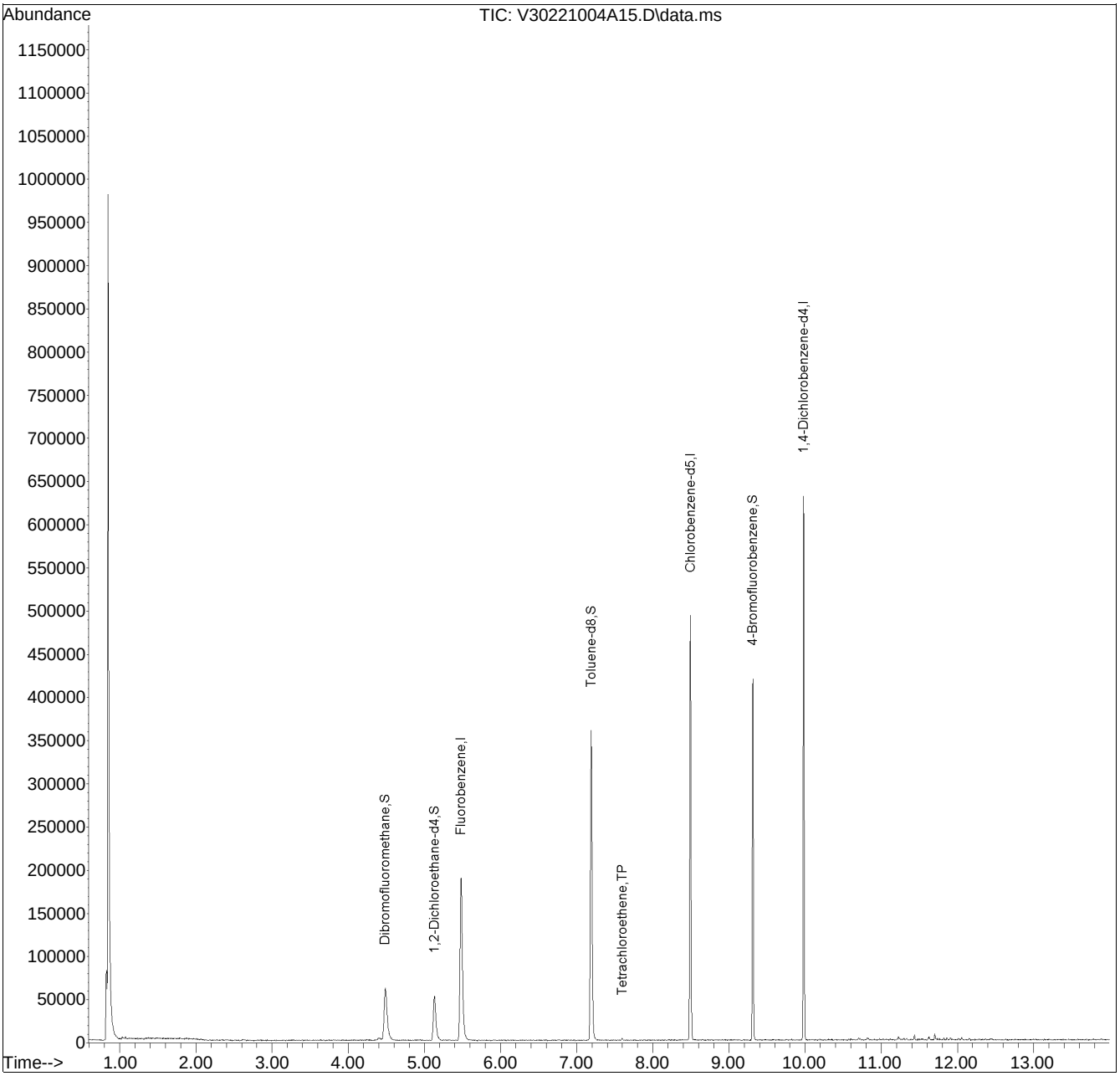
(#) = qualifier out of range (m) = manual integration (+) = signals summed

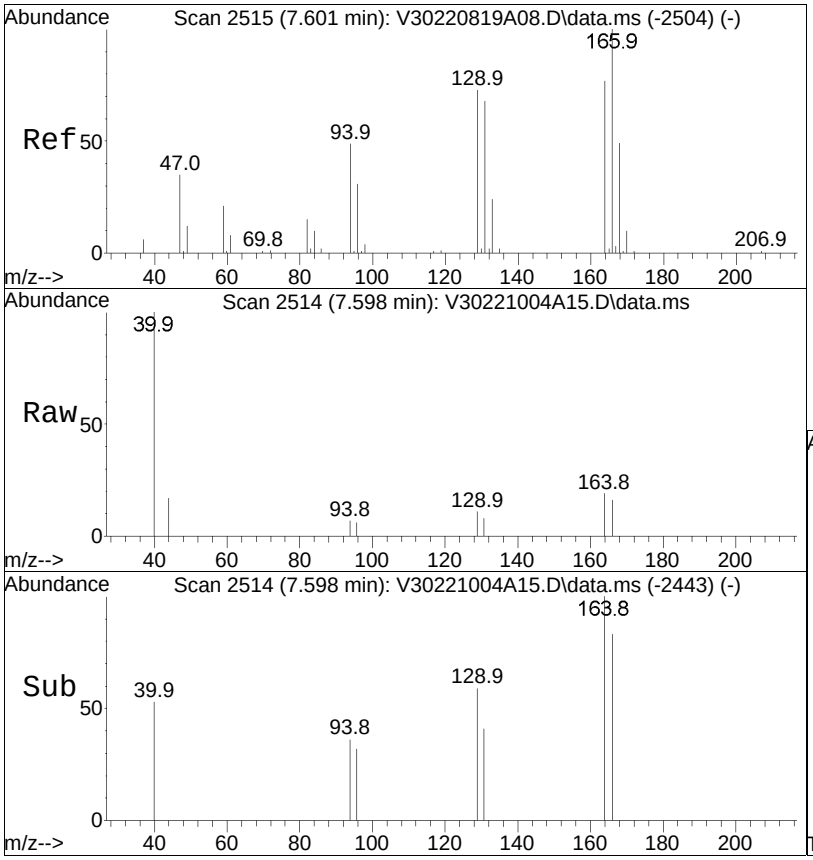
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A15.D
Acq On : 04 Oct 2022 11:28 am
Operator : VOA130:LAC
Sample : l2253856-01,31,10,10,,a,pri
Misc : WG1695594,ICAL19274
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 04 15:02:55 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

Sub List : 8260-PCEbreak - PCE Break Down21004A\V30221004A01.D•

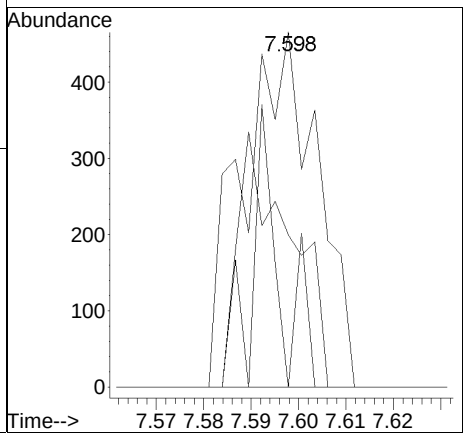




#63
Tetrachloroethene
Concen: 0.10 ug/L
RT: 7.598 min Scan# 2514
Delta R.T. -0.003 min
Lab File: V30221004A15.D
Acq: 04 Oct 2022 11:28 am

Tgt Ion:166 Resp: 511

Ion	Ratio	Lower	Upper
166	100		
168	22.9	28.2	68.2#
94	50.3	38.4	78.4



Manual Integration Report

Data Path	: I:\VOLATILES\VOA130\2022\2Q	Method	: VOA130_220819A_8260.m
Data File	: V30221004A15.D	Operator	: VOA130:LAC
Date Inj'd	: 10/4/2022 11:28 am	Instrument	: VOA130
Sample	: l2253856-01,31,10,10,,a,pr	Quant Date	: 10/4/2022 3:02 pm

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A16.D
Acq On : 04 Oct 2022 11:48 am
Operator : VOA130:LAC
Sample : l2253856-02,31,10,10,,a,pri
Misc : WG1695594,ICAL19274
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 04 15:03:00 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\221004A\V30221004A01.D
Sub List : 8260-PCEbreak - PCE Break Down

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.479	96	186346	10.000	ug/L	0.00
Standard Area 1 = 257104			Recovery = 72.48%			
59) Chlorobenzene-d5	8.490	117	157465	10.000	ug/L	-0.01
Standard Area 1 = 224851			Recovery = 70.03%			
79) 1,4-Dichlorobenzene-d4	9.979	152	80831	10.000	ug/L	-0.01
Standard Area 1 = 113313			Recovery = 71.33%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.489	113	50444	10.251	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.51%			
43) 1,2-Dichloroethane-d4	5.136	65	45049	8.338	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 83.38%			
60) Toluene-d8	7.191	98	197425	9.652	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 96.52%			
83) 4-Bromofluorobenzene	9.310	95	74993	9.785	ug/L	-0.01
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.85%			
Target Compounds						Qvalue
4) Vinyl chloride	0.000		0	N.D.		
10) 1,1-Dichloroethene	0.000		0	N.D.		
18) trans-1,2-Dichloroethene	0.000		0	N.D.		
28) cis-1,2-Dichloroethene	0.000		0	N.D.		
48) Trichloroethene	5.554	95	124	N.D.		
63) Tetrachloroethene	7.595	166	75	N.D.		

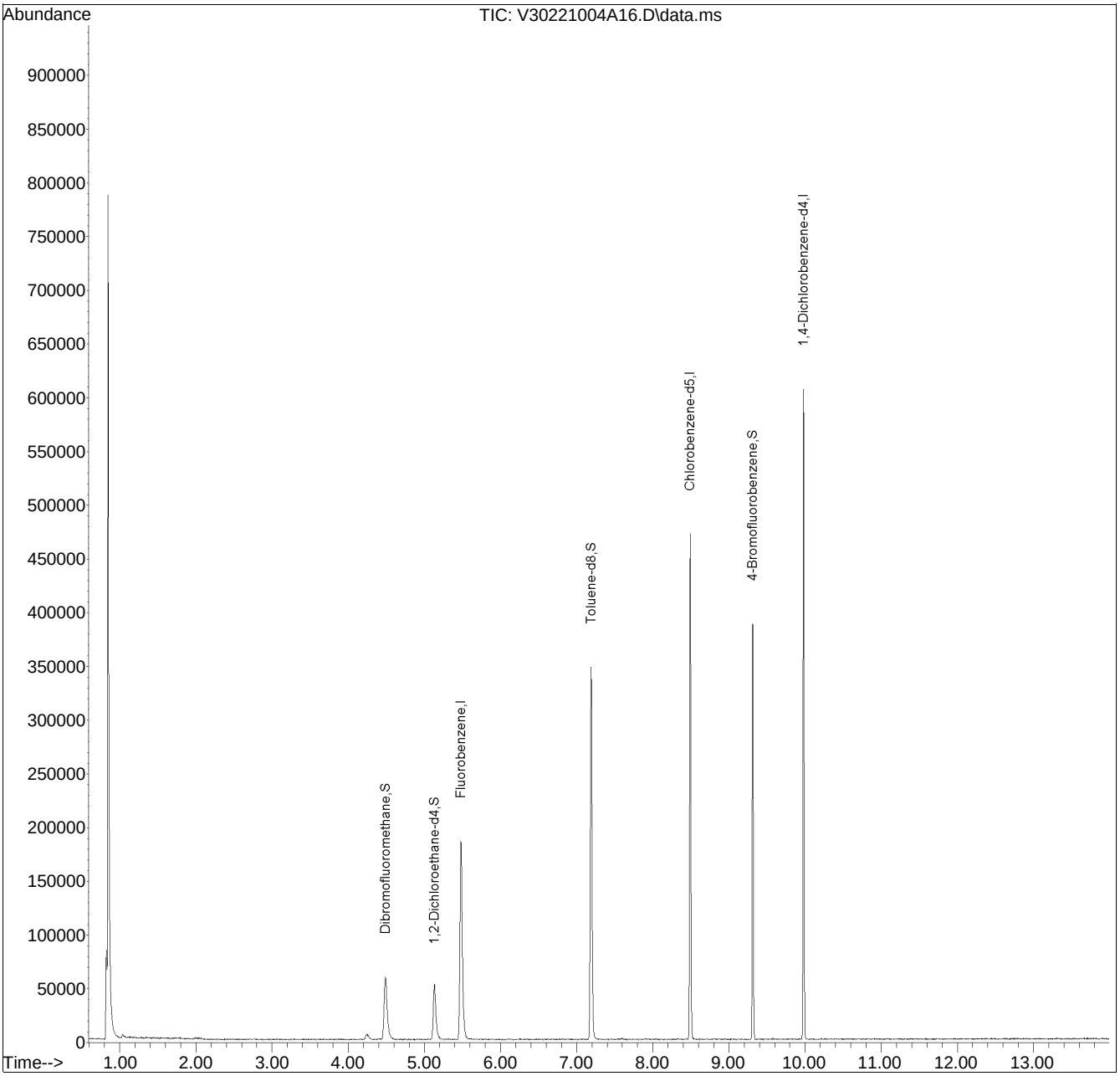
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A16.D
Acq On : 04 Oct 2022 11:48 am
Operator : VOA130:LAC
Sample : l2253856-02,31,10,10,,a,pri
Misc : WG1695594,ICAL19274
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 04 15:03:00 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

Sub List : 8260-PCEbreak - PCE Break Down21004A\V30221004A01.D•



Manual Integration Report

Data Path	: I:\VOLATILES\VOA130\2022\2Q	Method	: VOA130_220819A_8260.m
Data File	: V30221004A16.D	Operator	: VOA130:LAC
Date Inj'd	: 10/4/2022 11:48 am	Instrument	: VOA130
Sample	: l2253856-02,31,10,10,,a,pr	Quant Date	: 10/4/2022 3:03 pm

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A17.D
Acq On : 04 Oct 2022 12:07 pm
Operator : VOA130:LAC
Sample : l2253856-03,31,10,10,,a,pri
Misc : WG1695594,ICAL19274
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 04 15:03:03 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\221004A\V30221004A01.D
Sub List : 8260-PCEbreak - PCE Break Down

Compound		R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards							
1) Fluorobenzene		5.481	96	185644	10.000	ug/L	0.00
Standard Area 1 = 257104				Recovery =	72.21%		
59) Chlorobenzene-d5		8.493	117	155805	10.000	ug/L	0.00
Standard Area 1 = 224851				Recovery =	69.29%		
79) 1,4-Dichlorobenzene-d4		9.979	152	79977	10.000	ug/L	-0.01
Standard Area 1 = 113313				Recovery =	70.58%		
System Monitoring Compounds							
36) Dibromofluoromethane		4.483	113	51962	10.599	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130		Recovery =	105.99%		
43) 1,2-Dichloroethane-d4		5.133	65	44723	8.309	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130		Recovery =	83.09%		
60) Toluene-d8		7.188	98	197834	9.775	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130		Recovery =	97.75%		
83) 4-Bromofluorobenzene		9.313	95	74398	9.811	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130		Recovery =	98.11%		
Target Compounds							Qvalue
4) Vinyl chloride		0.000		0	N.D.		
10) 1,1-Dichloroethene		0.000		0	N.D.		
18) trans-1,2-Dichloroethene		0.000		0	N.D.		
28) cis-1,2-Dichloroethene		0.000		0	N.D.		
48) Trichloroethene		0.000		0	N.D.		
63) Tetrachloroethene		7.592	166	230	N.D.		

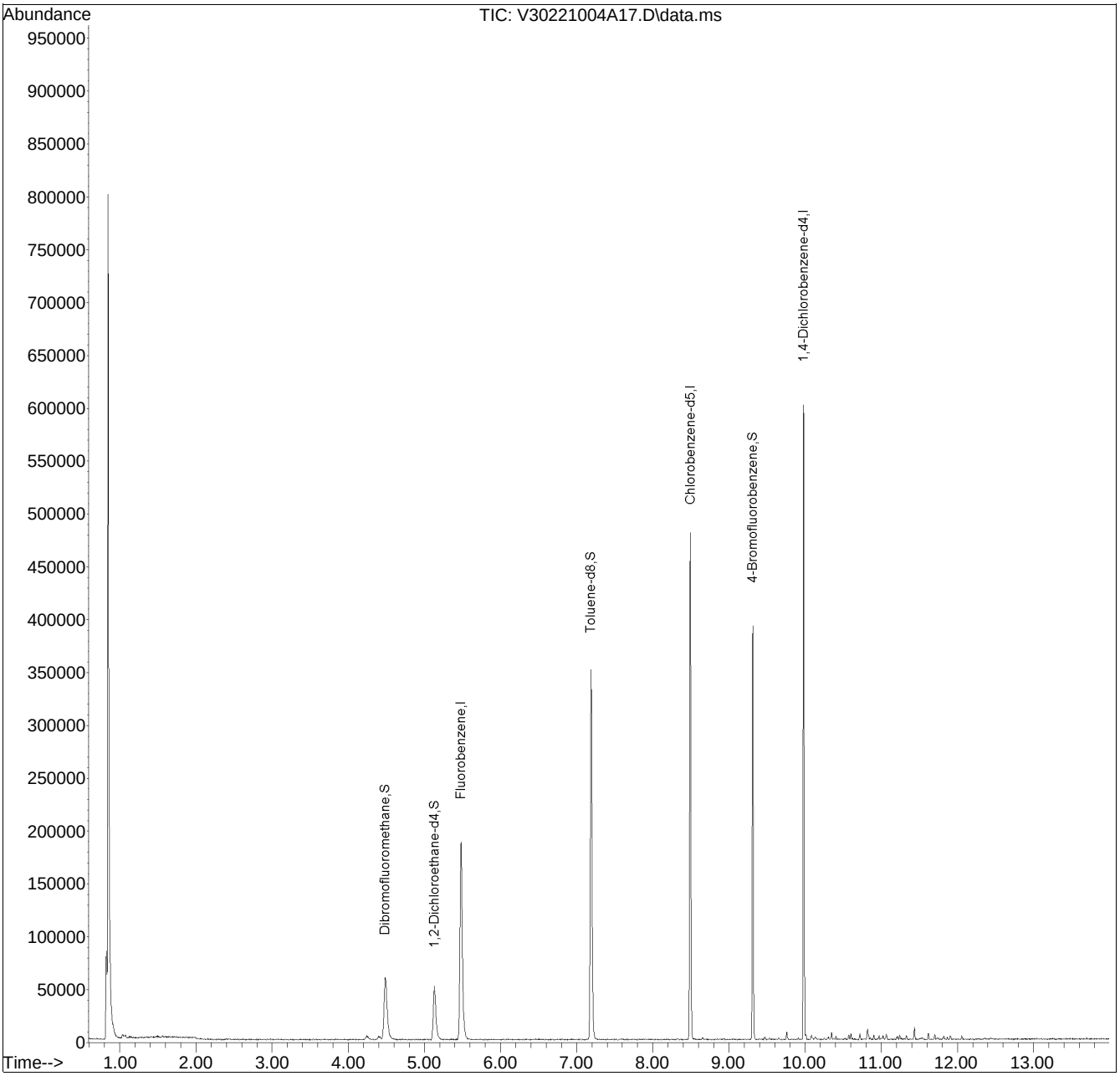
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A17.D
Acq On : 04 Oct 2022 12:07 pm
Operator : VOA130:LAC
Sample : l2253856-03,31,10,10,,a,pri
Misc : WG1695594,ICAL19274
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 04 15:03:03 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

Sub List : 8260-PCEbreak - PCE Break Down21004A\V30221004A01.D•



Manual Integration Report

Data Path	: I:\VOLATILES\VOA130\2022\2Q	Method	: VOA130_220819A_8260.m
Data File	: V30221004A17.D	Operator	: VOA130:LAC
Date Inj'd	: 10/4/2022 12:07 pm	Instrument	: VOA130
Sample	: l2253856-03,31,10,10,,a,pr	Quant Date	: 10/4/2022 3:03 pm

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A18.D
Acq On : 04 Oct 2022 12:27 pm
Operator : VOA130:LAC
Sample : l2253856-04,31,10,10,,a,pri
Misc : WG1695594,ICAL19274
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 04 15:14:23 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\221004A\V30221004A01.D
Sub List : 8260-PCEbreak - PCE Break Down

Compound		R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards							
1) Fluorobenzene		5.481	96	206477	10.000	ug/L	0.00
Standard Area 1 = 257104				Recovery =	80.31%		
59) Chlorobenzene-d5		8.490	117	169876	10.000	ug/L	-0.01
Standard Area 1 = 224851				Recovery =	75.55%		
79) 1,4-Dichlorobenzene-d4		9.980	152	86073	10.000	ug/L	-0.01
Standard Area 1 = 113313				Recovery =	75.96%		
System Monitoring Compounds							
36) Dibromofluoromethane		4.489	113	53682	9.845	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130		Recovery =	98.45%		
43) 1,2-Dichloroethane-d4		5.130	65	48134	8.040	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130		Recovery =	80.40%		
60) Toluene-d8		7.191	98	211686	9.593	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130		Recovery =	95.93%		
83) 4-Bromofluorobenzene		9.313	95	80408	9.853	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130		Recovery =	98.53%		
Target Compounds							Qvalue
4) Vinyl chloride		0.000		0	N.D.		
10) 1,1-Dichloroethene		0.000		0	N.D.		
18) trans-1,2-Dichloroethene		0.000		0	N.D.		
28) cis-1,2-Dichloroethene		3.808	96	39277M1	8.040	ug/L	
48) Trichloroethene		5.679	95	13520	2.968	ug/L	95
63) Tetrachloroethene		7.595	166	162585	31.118	ug/L	95

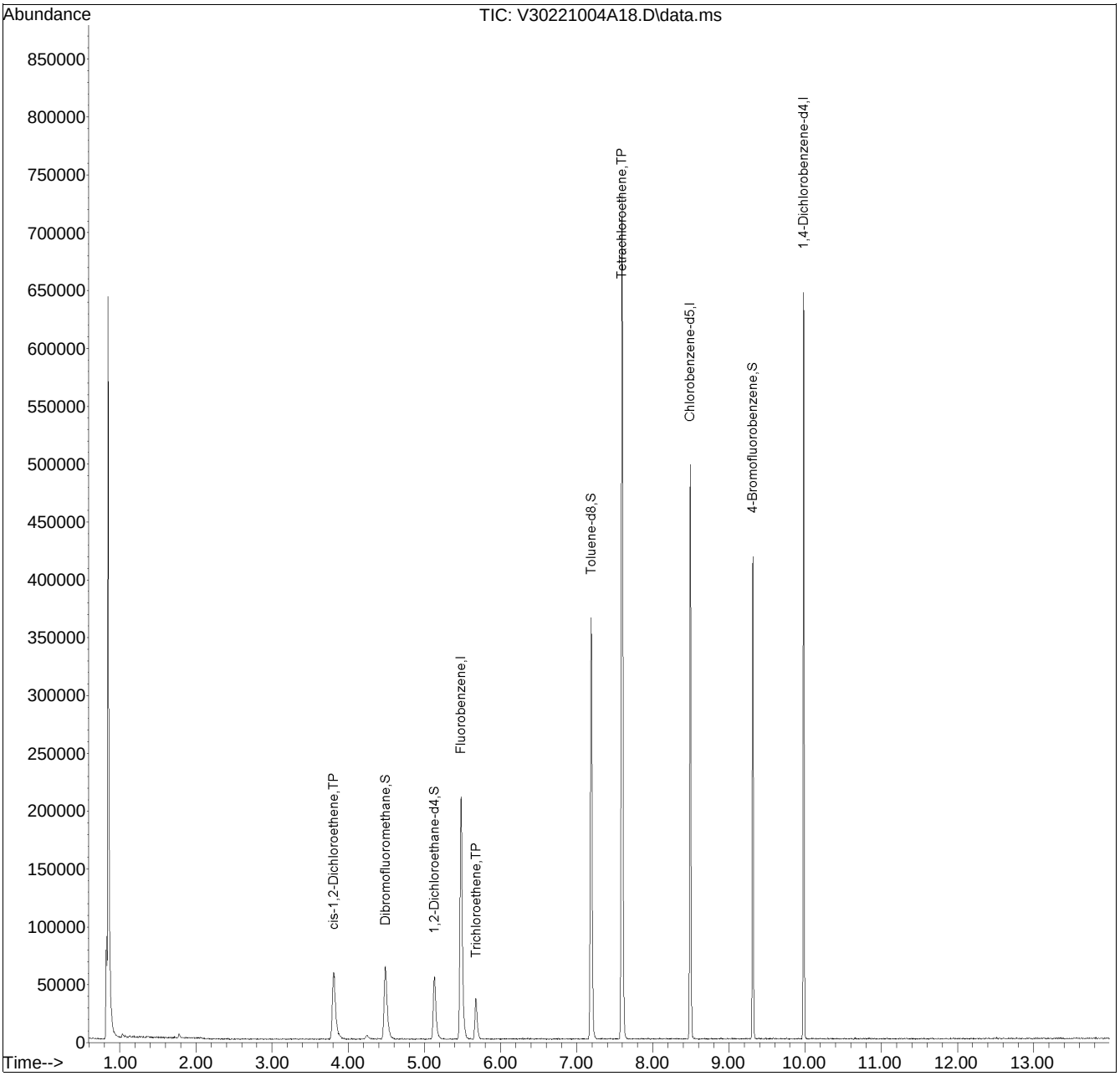
(#) = qualifier out of range (m) = manual integration (+) = signals summed

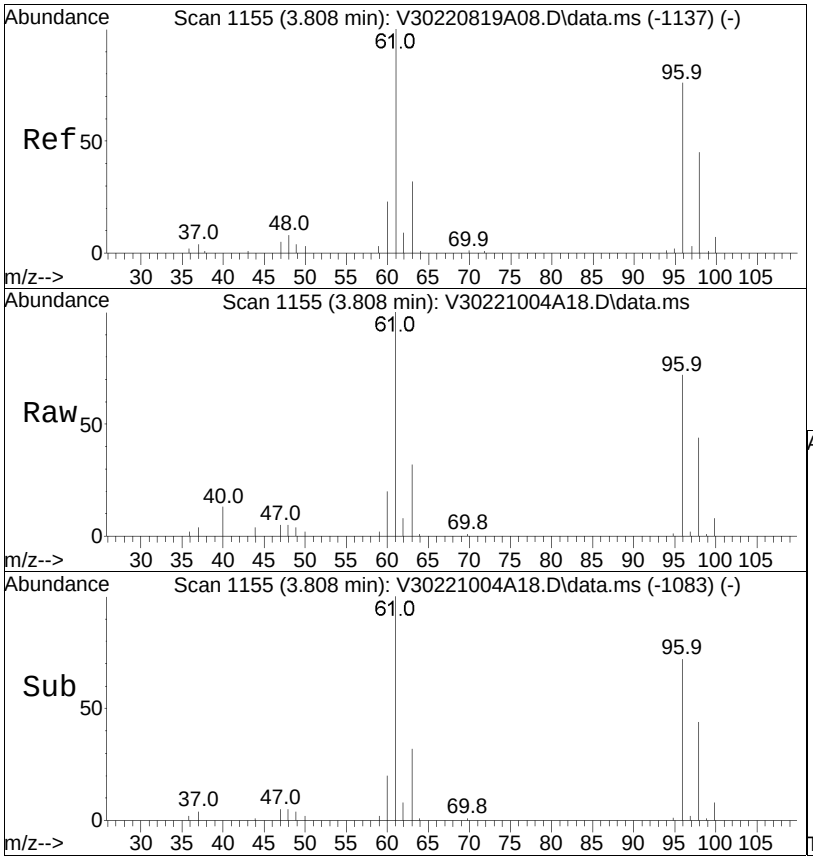
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A18.D
Acq On : 04 Oct 2022 12:27 pm
Operator : VOA130:LAC
Sample : l2253856-04,31,10,10,,a,pri
Misc : WG1695594,ICAL19274
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 04 15:14:23 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

Sub List : 8260-PCEbreak - PCE Break Down21004A\V30221004A01.D•

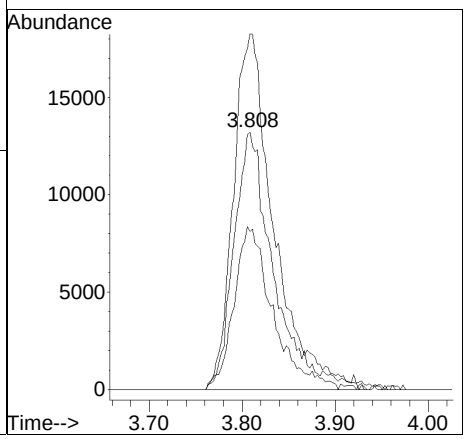


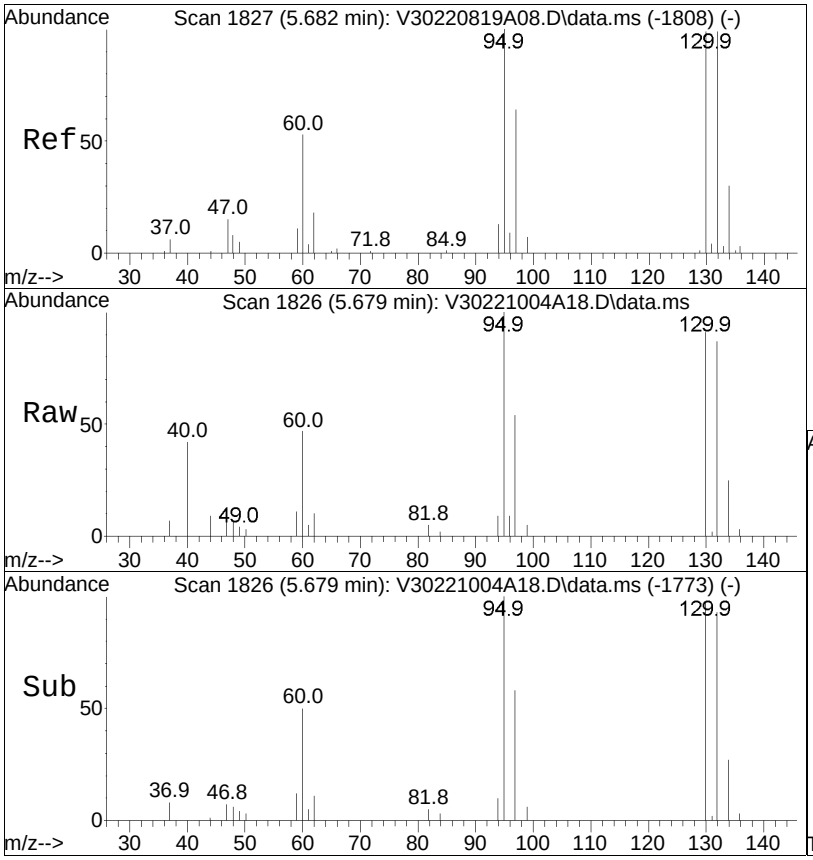


#28
cis-1,2-Dichloroethene
Concen: 8.04 ug/L M1
RT: 3.808 min Scan# 1155
Delta R.T. 0.000 min
Lab File: V30221004A18.D
Acq: 04 Oct 2022 12:27 pm

Tgt Ion: 96 Resp: 39277

Ion	Ratio	Lower	Upper
96	100		
61	140.2	149.4	224.2#
98	59.6	53.4	80.2

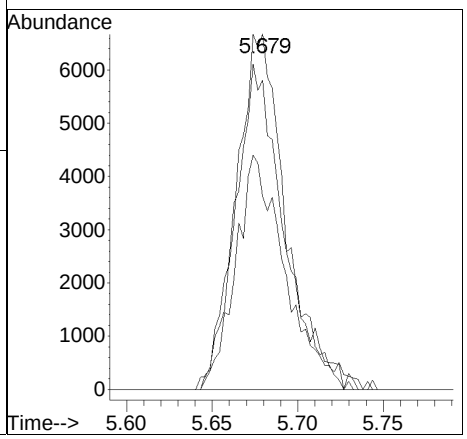


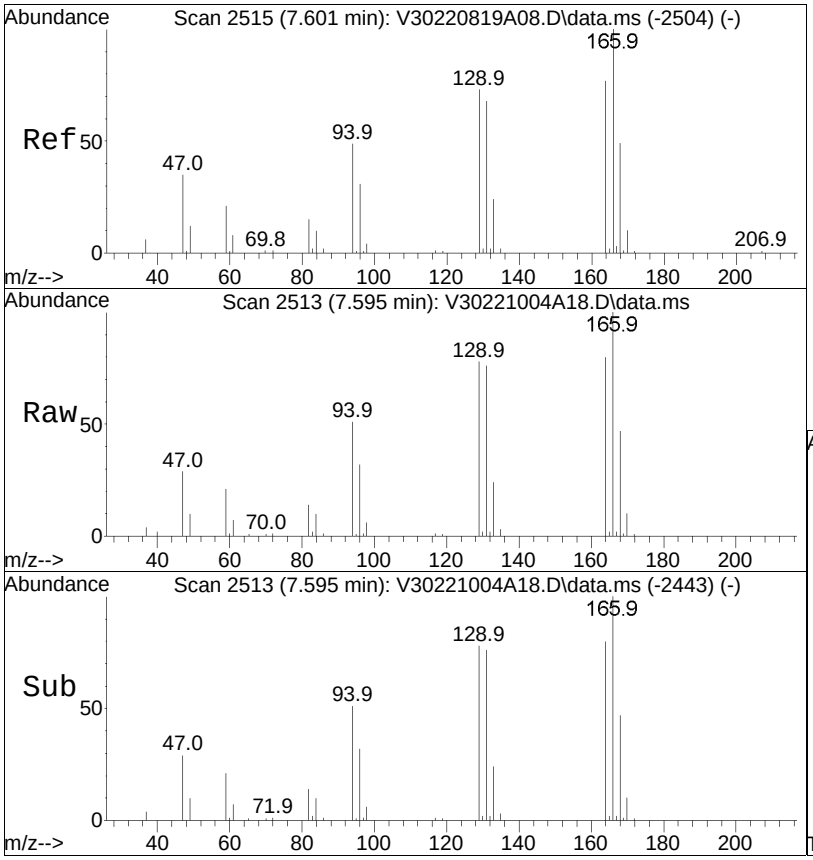


#48
Trichloroethene
Concen: 2.97 ug/L
RT: 5.679 min Scan# 1826
Delta R.T. -0.003 min
Lab File: V30221004A18.D
Acq: 04 Oct 2022 12:27 pm

Tgt Ion: 95 Resp: 13520

Ion	Ratio	Lower	Upper
95	100		
97	65.1	55.5	83.3
132	90.3	76.6	115.0

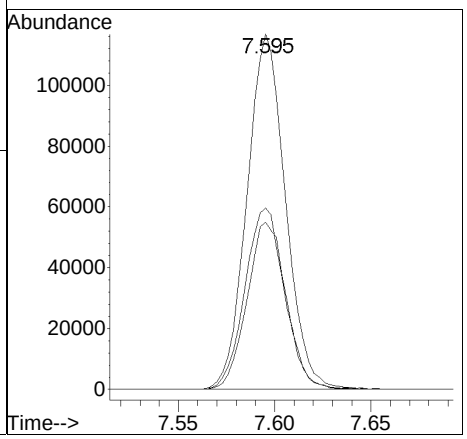




#63
Tetrachloroethene
Concen: 31.12 ug/L
RT: 7.595 min Scan# 2513
Delta R.T. -0.006 min
Lab File: V30221004A18.D
Acq: 04 Oct 2022 12:27 pm

Tgt Ion:166 Resp: 162585

Ion	Ratio	Lower	Upper
166	100		
168	48.0	28.2	68.2
94	52.4	38.4	78.4

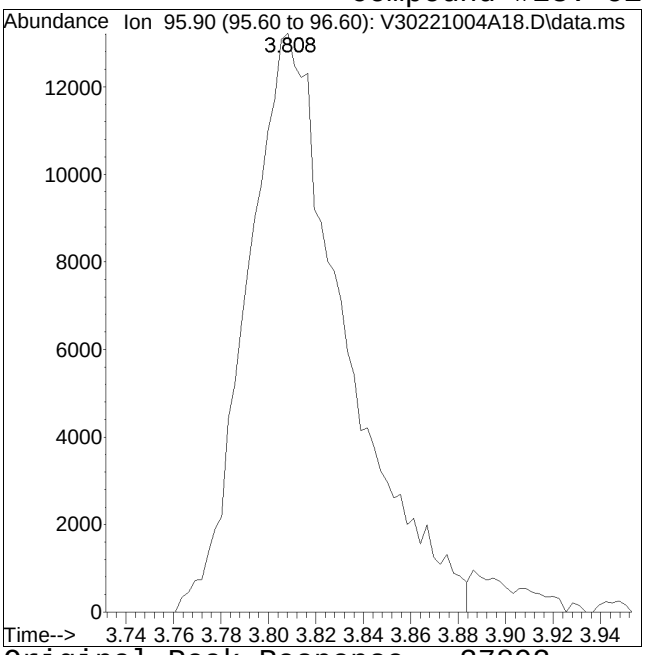


Manual Integration Report

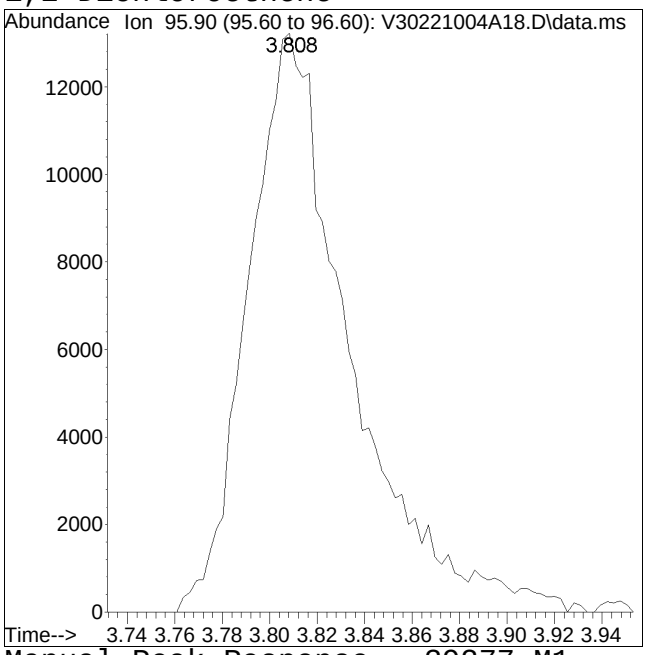
Data Path : I:\VOLATILES\VOA130\2022\2Q
Data File : V30221004A18.D
Date Inj'd : 10/4/2022 12:27 pm
Sample : l2253856-04,31,10,10,,a,pr

Method : VOA130_220819A_8260.m
Operator : VOA130:LAC
Instrument : VOA130
Quant Date : 10/4/2022 3:03 pm

Compound #28: cis-1,2-Dichloroethene



Original Peak Response = 37892



Manual Peak Response = 39277 M1

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A19.D
Acq On : 04 Oct 2022 12:46 pm
Operator : VOA130:LAC
Sample : l2253856-05,31,10,10,,a,pri
Misc : WG1695594,ICAL19274
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 04 15:14:39 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\221004A\V30221004A01.D
Sub List : 8260-PCEbreak - PCE Break Down

Compound		R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards							
1) Fluorobenzene		5.481	96	195750	10.000	ug/L	0.00
Standard Area 1 = 257104				Recovery =	76.14%		
59) Chlorobenzene-d5		8.490	117	164764	10.000	ug/L	-0.01
Standard Area 1 = 224851				Recovery =	73.28%		
79) 1,4-Dichlorobenzene-d4		9.979	152	85245	10.000	ug/L	-0.01
Standard Area 1 = 113313				Recovery =	75.23%		
System Monitoring Compounds							
36) Dibromofluoromethane		4.488	113	52656	10.186	ug/L	0.00
Spiked Amount	10.000	Range	70 - 130	Recovery =	101.86%		
43) 1,2-Dichloroethane-d4		5.130	65	47446	8.360	ug/L	0.00
Spiked Amount	10.000	Range	70 - 130	Recovery =	83.60%		
60) Toluene-d8		7.188	98	199507	9.322	ug/L	0.00
Spiked Amount	10.000	Range	70 - 130	Recovery =	93.22%		
83) 4-Bromofluorobenzene		9.313	95	79970	9.895	ug/L	0.00
Spiked Amount	10.000	Range	70 - 130	Recovery =	98.95%		
Target Compounds							Qvalue
4) Vinyl chloride		0.000		0	N.D.		
10) 1,1-Dichloroethene		0.000		0	N.D.		
18) trans-1,2-Dichloroethene		0.000		0	N.D.		
28) cis-1,2-Dichloroethene		3.808	96	20886M1	4.509	ug/L	
48) Trichloroethene		5.679	95	9804	2.270	ug/L	93
63) Tetrachloroethene		7.595	166	112682	22.236	ug/L	96

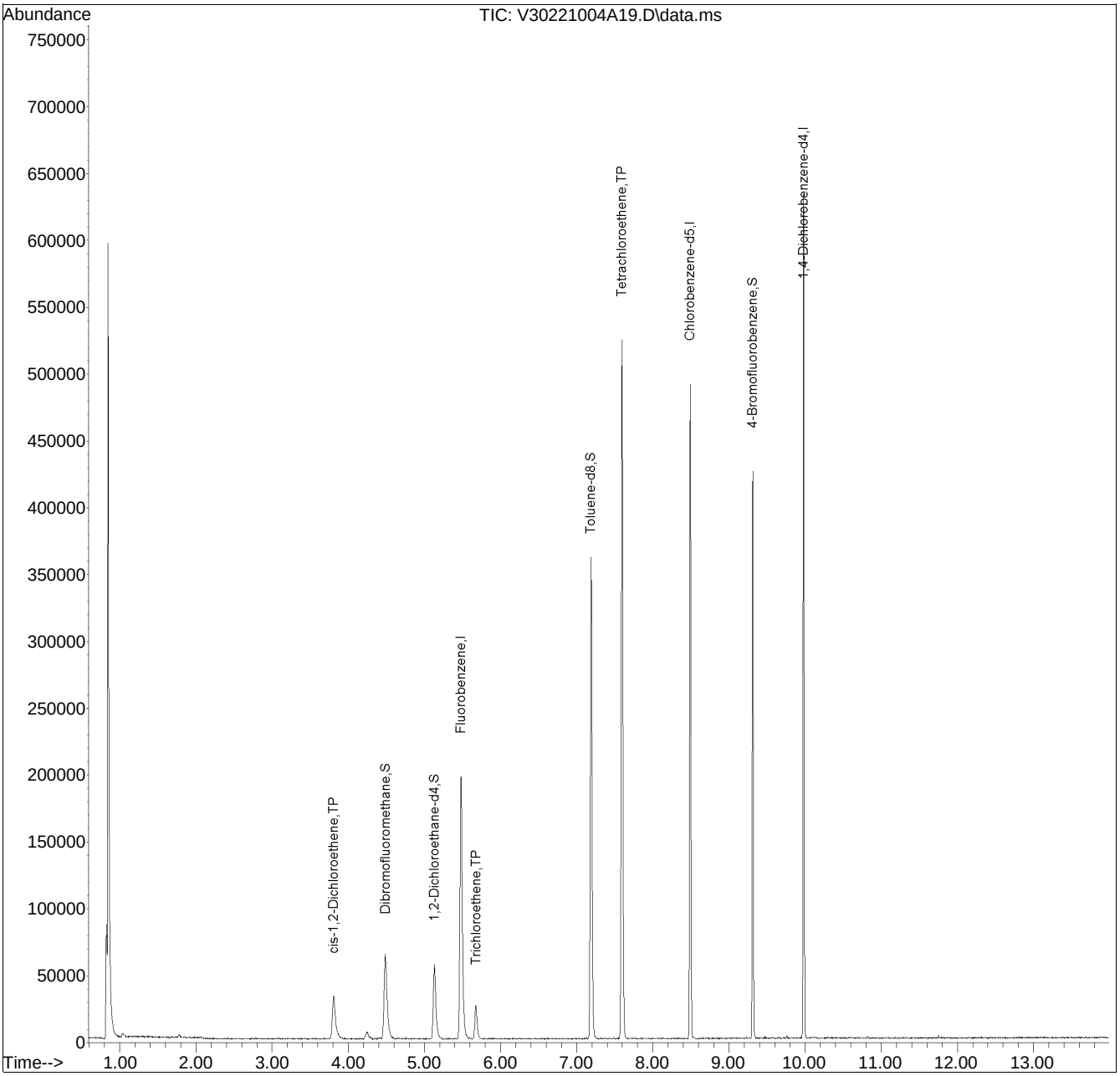
(#) = qualifier out of range (m) = manual integration (+) = signals summed

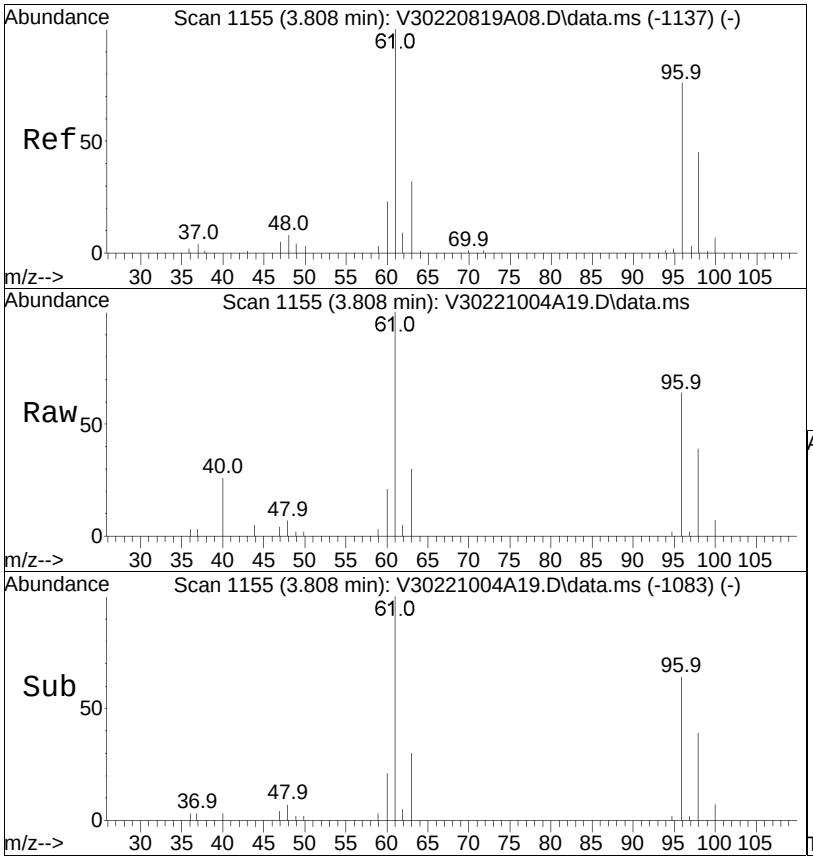
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A19.D
Acq On : 04 Oct 2022 12:46 pm
Operator : VOA130:LAC
Sample : l2253856-05,31,10,10,,a,pri
Misc : WG1695594,ICAL19274
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 04 15:14:39 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

Sub List : 8260-PCEbreak - PCE Break Down21004A\V30221004A01.D•

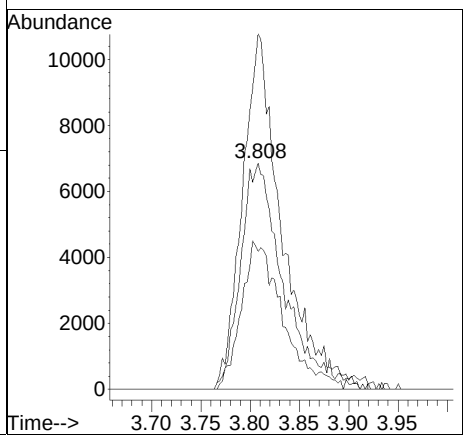


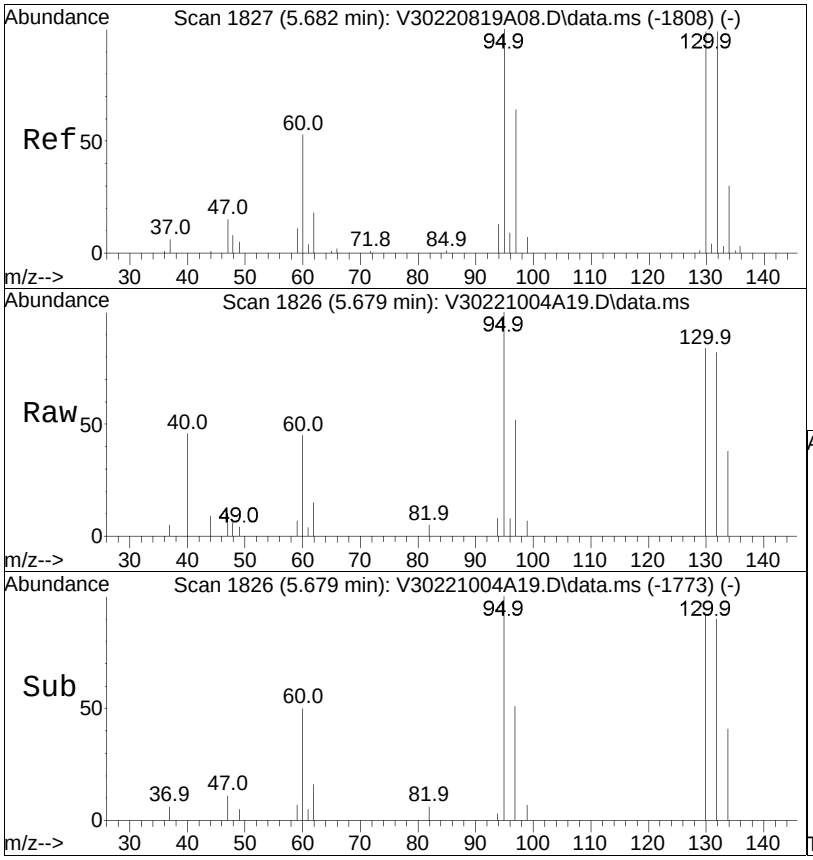


#28
cis-1,2-Dichloroethene
Concen: 4.51 ug/L M1
RT: 3.808 min Scan# 1155
Delta R.T. -0.000 min
Lab File: V30221004A19.D
Acq: 04 Oct 2022 12:46 pm

Tgt Ion: 96 Resp: 20886

Ion	Ratio	Lower	Upper
96	100		
61	143.4	149.4	224.2#
98	60.6	53.4	80.2

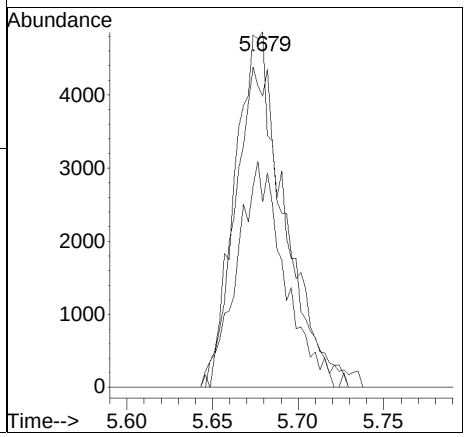


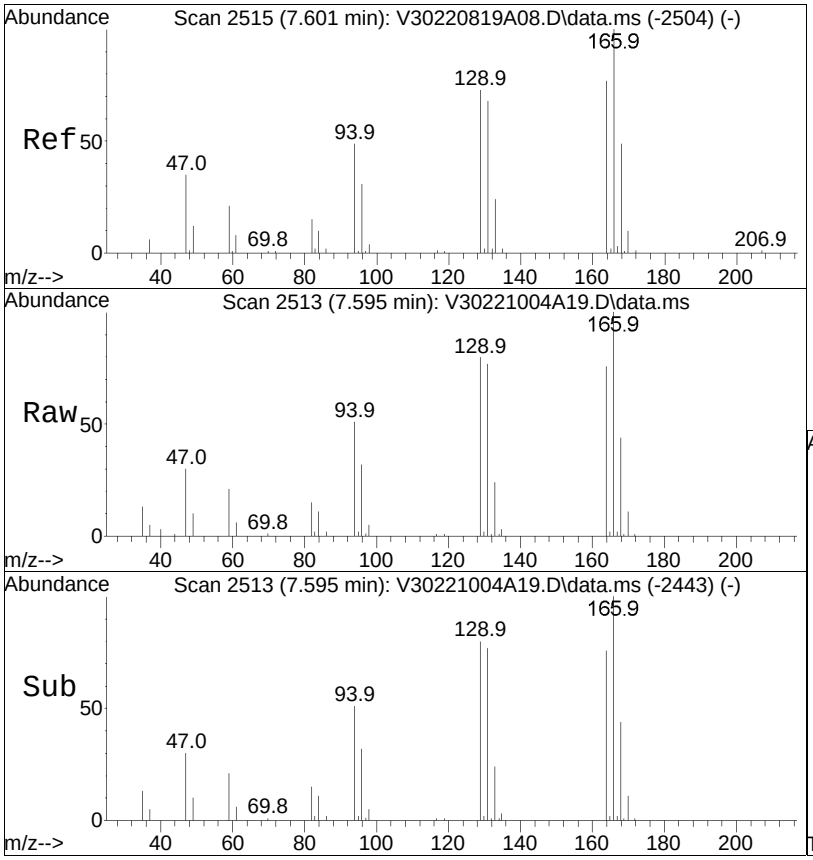


#48
Trichloroethene
Concen: 2.27 ug/L
RT: 5.679 min Scan# 1826
Delta R.T. -0.003 min
Lab File: V30221004A19.D
Acq: 04 Oct 2022 12:46 pm

Tgt Ion: 95 Resp: 9804

Ion	Ratio	Lower	Upper
95	100		
97	60.7	55.5	83.3
132	92.1	76.6	115.0

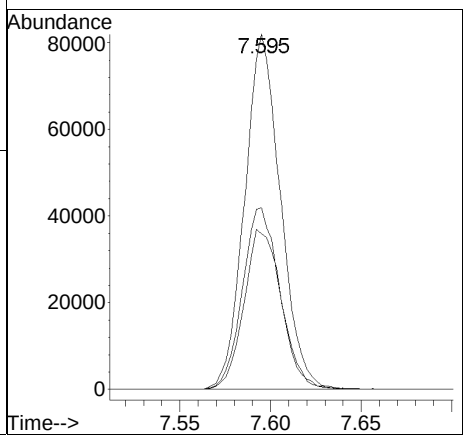




#63
Tetrachloroethene
Concen: 22.24 ug/L
RT: 7.595 min Scan# 2513
Delta R.T. -0.006 min
Lab File: V30221004A19.D
Acq: 04 Oct 2022 12:46 pm

Tgt Ion:166 Resp: 112682

Ion	Ratio	Lower	Upper
166	100		
168	47.4	28.2	68.2
94	53.1	38.4	78.4

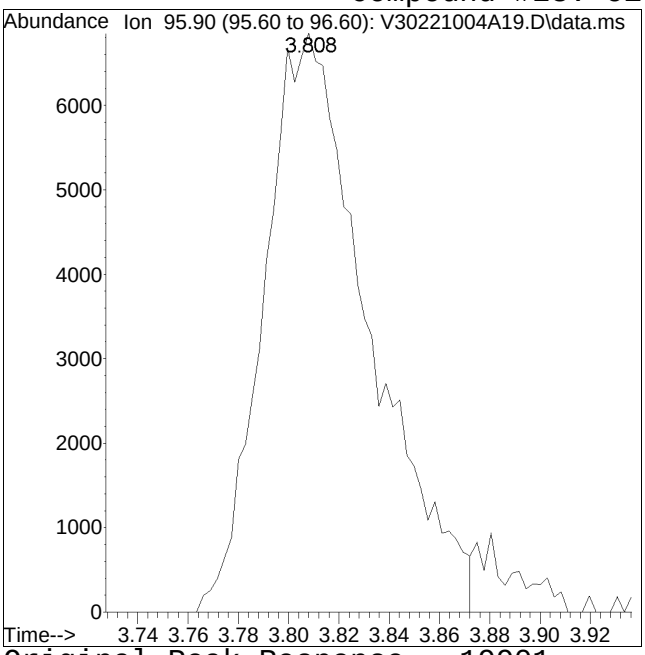


Manual Integration Report

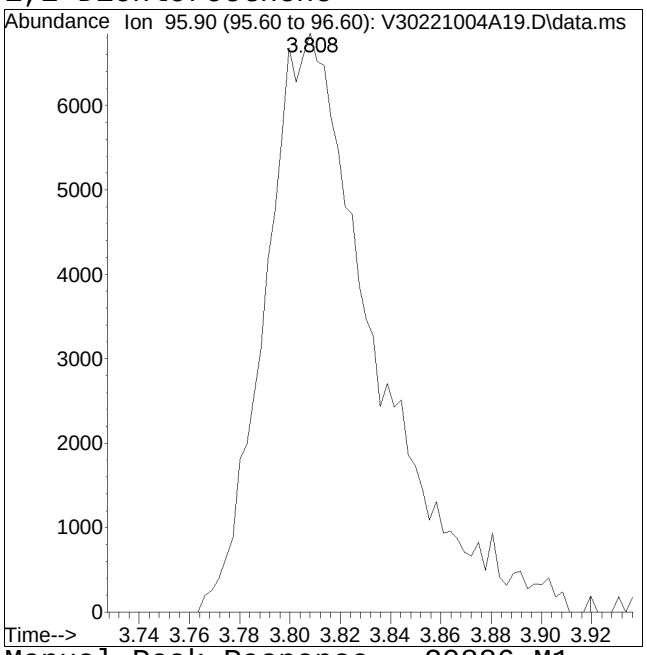
Data Path : I:\VOLATILES\VOA130\2022\2Q
Data File : V30221004A19.D
Date Inj'd : 10/4/2022 12:46 pm
Sample : l2253856-05,31,10,10,,a,pr

Method : VOA130_220819A_8260.m
Operator : VOA130:LAC
Instrument : VOA130
Quant Date : 10/4/2022 3:03 pm

Compound #28: cis-1,2-Dichloroethene



Original Peak Response = 19901



Manual Peak Response = 20886 M1

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A20.D
Acq On : 04 Oct 2022 01:06 pm
Operator : VOA130:LAC
Sample : l2253856-06,31,10,10,,a,pri
Misc : WG1695594,ICAL19274
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Oct 04 15:03:18 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\221004A\V30221004A01.D
Sub List : 8260-PCEbreak - PCE Break Down

Compound		R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards							
1) Fluorobenzene		5.481	96	181346	10.000	ug/L	0.00
Standard Area 1 = 257104				Recovery =	70.53%		
59) Chlorobenzene-d5		8.493	117	157560	10.000	ug/L	0.00
Standard Area 1 = 224851				Recovery =	70.07%		
79) 1,4-Dichlorobenzene-d4		9.982	152	81353	10.000	ug/L	0.00
Standard Area 1 = 113313				Recovery =	71.79%		
System Monitoring Compounds							
36) Dibromofluoromethane		4.483	113	52276	10.916	ug/L	0.00
Spiked Amount	10.000	Range	70 - 130	Recovery =	109.16%		
43) 1,2-Dichloroethane-d4		5.130	65	43450	8.264	ug/L	0.00
Spiked Amount	10.000	Range	70 - 130	Recovery =	82.64%		
60) Toluene-d8		7.191	98	190922	9.329	ug/L	0.00
Spiked Amount	10.000	Range	70 - 130	Recovery =	93.29%		
83) 4-Bromofluorobenzene		9.313	95	74625	9.675	ug/L	0.00
Spiked Amount	10.000	Range	70 - 130	Recovery =	96.75%		
Target Compounds							Qvalue
4) Vinyl chloride		0.000		0	N.D.		
10) 1,1-Dichloroethene		0.000		0	N.D.		
18) trans-1,2-Dichloroethene		0.000		0	N.D.		
28) cis-1,2-Dichloroethene		0.000		0	N.D.		
48) Trichloroethene		5.557	95	55	N.D.		
63) Tetrachloroethene		7.595	166	73	N.D.		

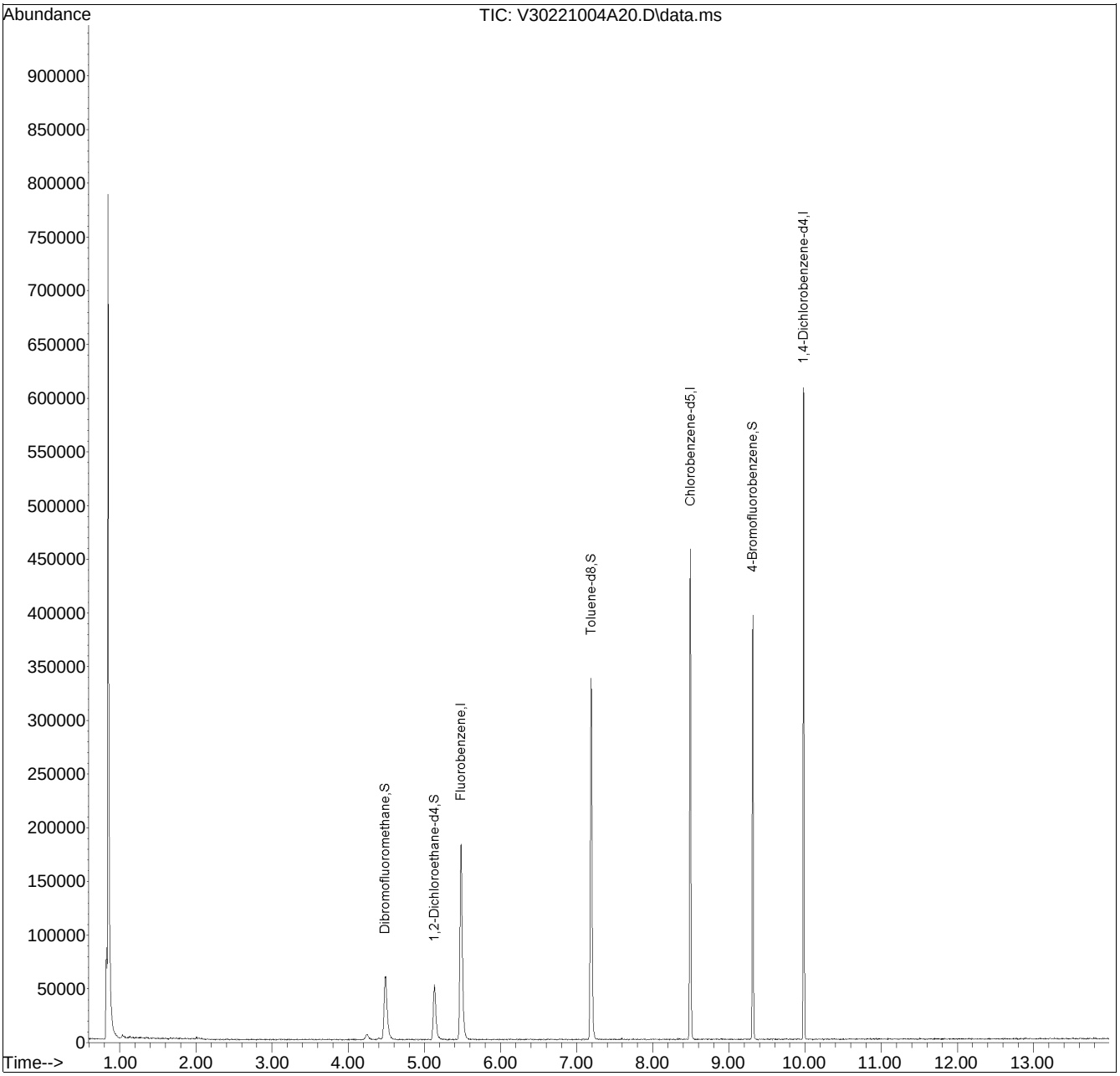
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A20.D
Acq On : 04 Oct 2022 01:06 pm
Operator : VOA130:LAC
Sample : l2253856-06,31,10,10,,a,pri
Misc : WG1695594,ICAL19274
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Oct 04 15:03:18 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

Sub List : 8260-PCEbreak - PCE Break Down21004A\V30221004A01.D•



Manual Integration Report

Data Path	: I:\VOLATILES\VOA130\2022\2Q	Method	: VOA130_220819A_8260.m
Data File	: V30221004A20.D	Operator	: VOA130:LAC
Date Inj'd	: 10/4/2022 1:06 pm	Instrument	: VOA130
Sample	: l2253856-06,31,10,10,,a,pr	Quant Date	: 10/4/2022 3:03 pm

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A21.D
Acq On : 04 Oct 2022 01:26 pm
Operator : VOA130:LAC
Sample : l2253856-07,31,10,10,,a,pri
Misc : WG1695594,ICAL19274
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Oct 04 15:03:22 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\221004A\V30221004A01.D
Sub List : 8260-PCEbreak - PCE Break Down

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.481	96	181111	10.000	ug/L	0.00
Standard Area 1 = 257104			Recovery = 70.44%			
59) Chlorobenzene-d5	8.493	117	156892	10.000	ug/L	0.00
Standard Area 1 = 224851			Recovery = 69.78%			
79) 1,4-Dichlorobenzene-d4	9.979	152	83443	10.000	ug/L	-0.01
Standard Area 1 = 113313			Recovery = 73.64%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.483	113	49794	10.411	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 104.11%			
43) 1,2-Dichloroethane-d4	5.133	65	43919	8.364	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 83.64%			
60) Toluene-d8	7.191	98	190663	9.356	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 93.56%			
83) 4-Bromofluorobenzene	9.310	95	75792	9.580	ug/L	-0.01
Spiked Amount 10.000	Range 70 - 130		Recovery = 95.80%			
Target Compounds						Qvalue
4) Vinyl chloride	0.000		0	N.D.		
10) 1,1-Dichloroethene	0.000		0	N.D.		
18) trans-1,2-Dichloroethene	0.000		0	N.D.		
28) cis-1,2-Dichloroethene	0.000		0	N.D.		
48) Trichloroethene	5.568	95	124	N.D.		
63) Tetrachloroethene	0.000		0	N.D.		

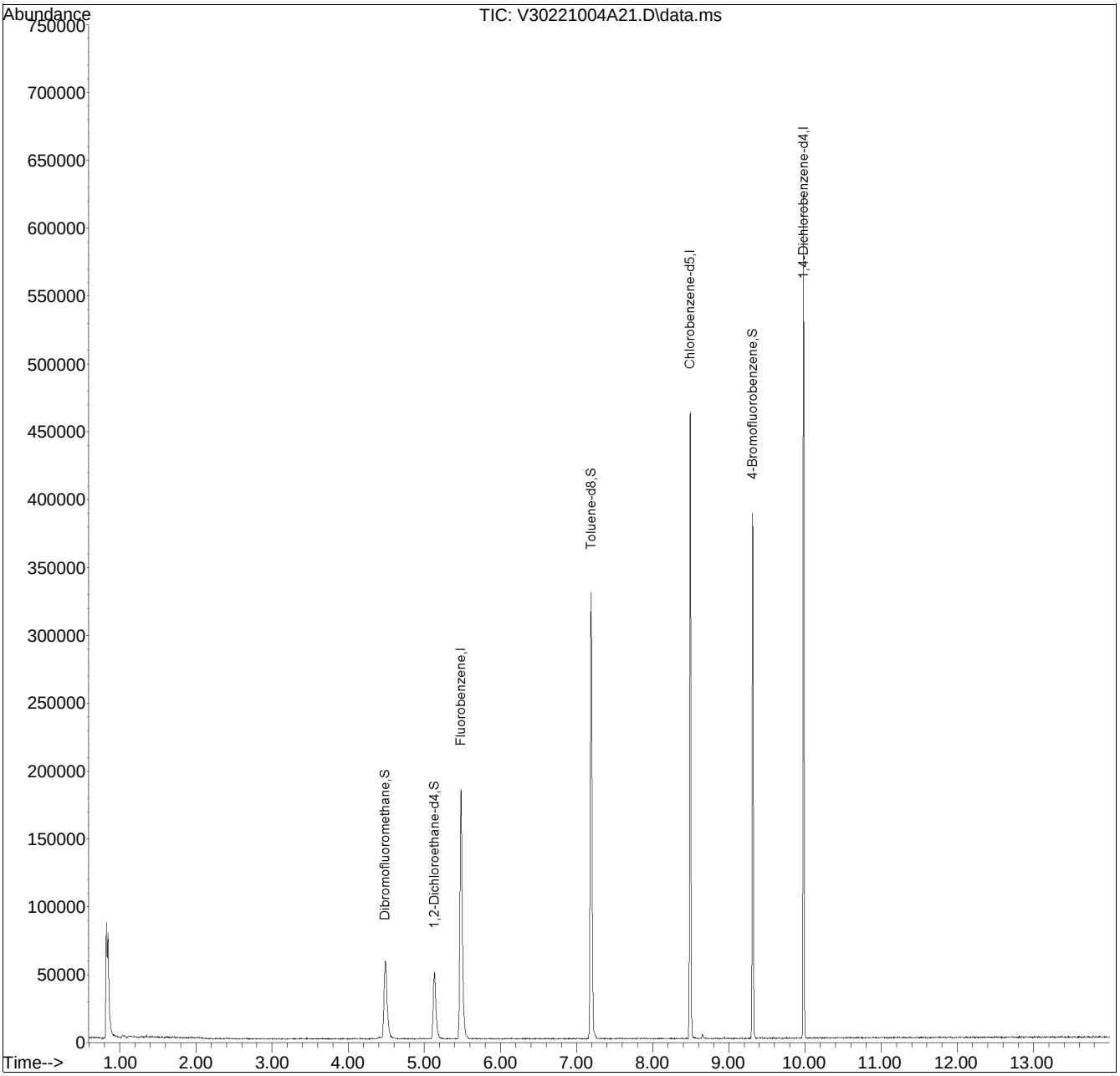
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A21.D
Acq On : 04 Oct 2022 01:26 pm
Operator : VOA130:LAC
Sample : l2253856-07,31,10,10,,a,pri
Misc : WG1695594,ICAL19274
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Oct 04 15:03:22 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

Sub List : 8260-PCEbreak - PCE Break Down21004A\V30221004A01.D•



Manual Integration Report

Data Path	: I:\VOLATILES\VOA130\2022\2Q	Method	: VOA130_220819A_8260.m
Data File	: V30221004A21.D	Operator	: VOA130:LAC
Date Inj'd	: 10/4/2022 1:26 pm	Instrument	: VOA130
Sample	: l2253856-07,31,10,10,,a,pr	Quant Date	: 10/4/2022 3:03 pm

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A22.D
Acq On : 04 Oct 2022 01:45 pm
Operator : VOA130:LAC
Sample : l2253856-08,31,10,10,,a,pri
Misc : WG1695594,ICAL19274
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Oct 04 15:03:26 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\221004A\V30221004A01.D
Sub List : 8260-PCEbreak - PCE Break Down

Compound		R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards							
1) Fluorobenzene		5.479	96	207326	10.000	ug/L	0.00
Standard Area 1 = 257104				Recovery =	80.64%		
59) Chlorobenzene-d5		8.490	117	166516	10.000	ug/L	-0.01
Standard Area 1 = 224851				Recovery =	74.06%		
79) 1,4-Dichlorobenzene-d4		9.980	152	85274	10.000	ug/L	-0.01
Standard Area 1 = 113313				Recovery =	75.26%		
System Monitoring Compounds							
36) Dibromofluoromethane		4.486	113	58639	10.710	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130		Recovery =	107.10%		
43) 1,2-Dichloroethane-d4		5.133	65	49733	8.273	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130		Recovery =	82.73%		
60) Toluene-d8		7.188	98	209095	9.667	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130		Recovery =	96.67%		
83) 4-Bromofluorobenzene		9.313	95	78745	9.740	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130		Recovery =	97.40%		
Target Compounds							Qvalue
4) Vinyl chloride		0.000		0	N.D.		
10) 1,1-Dichloroethene		0.000		0	N.D.		
18) trans-1,2-Dichloroethene		0.000		0	N.D.		
28) cis-1,2-Dichloroethene		0.000		0	N.D.		
48) Trichloroethene		5.557	95	58	N.D.		
63) Tetrachloroethene		0.000		0	N.D.		

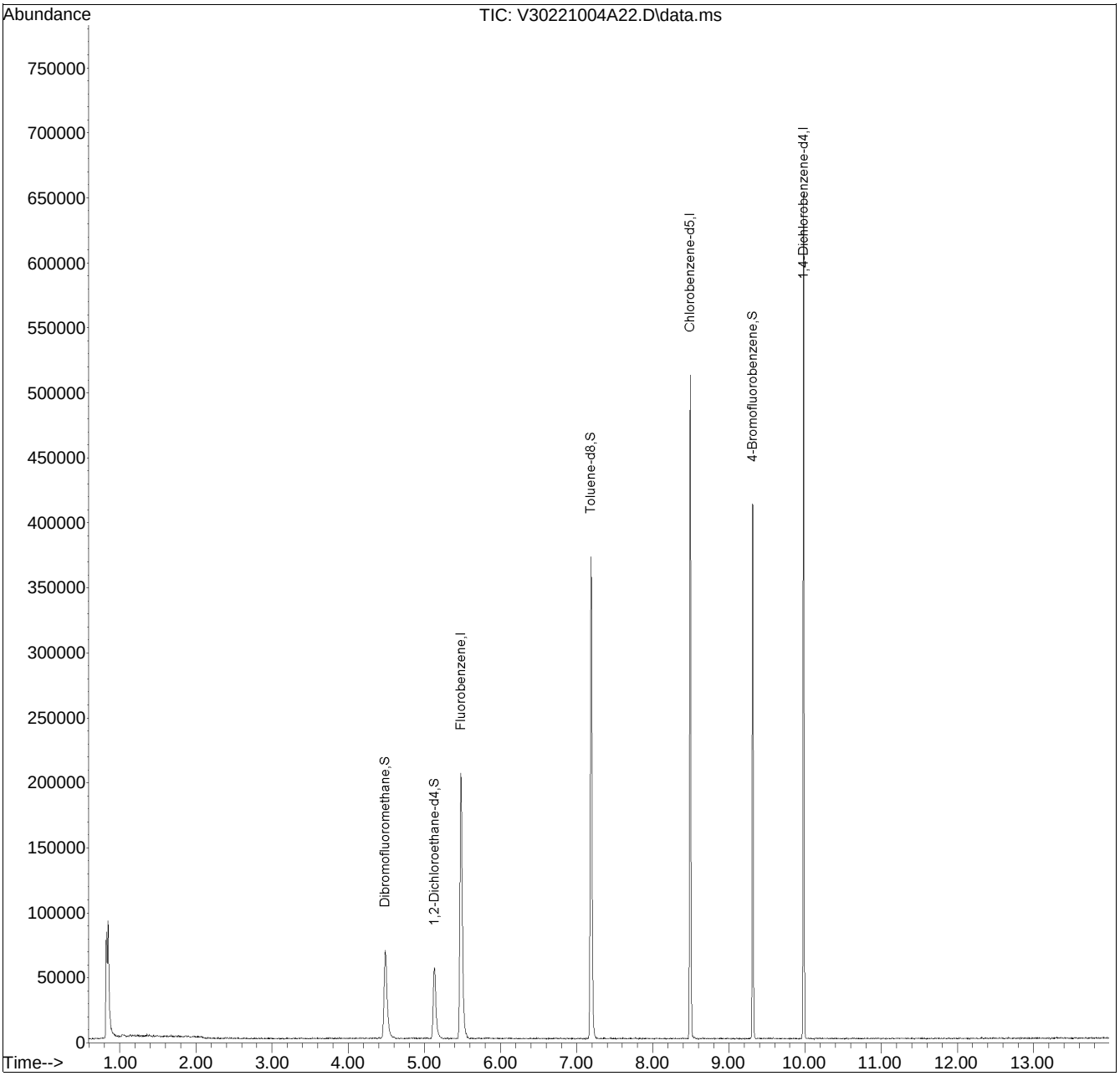
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A22.D
Acq On : 04 Oct 2022 01:45 pm
Operator : VOA130:LAC
Sample : l2253856-08,31,10,10,,a,pri
Misc : WG1695594,ICAL19274
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Oct 04 15:03:26 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

Sub List : 8260-PCEbreak - PCE Break Down21004A\V30221004A01.D•



Manual Integration Report

Data Path	: I:\VOLATILES\VOA130\2022\2Q	Method	: VOA130_220819A_8260.m
Data File	: V30221004A22.D	Operator	: VOA130:LAC
Date Inj'd	: 10/4/2022 1:45 pm	Instrument	: VOA130
Sample	: l2253856-08,31,10,10,,a,pr	Quant Date	: 10/4/2022 3:03 pm

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

Volatiles Standards Data

Initial Calibration

Initial Calibration Summary
Form 6
Volatiles

Client	**: Roux Env. Eng. & Geology, DPC**	**Lab Number**	**: L2253856**
Project Name	**: FORMER CLEAN ZONE DRY CLEANERS**	**Project Number**	**: 2546.007Y002**
Instrument ID	**: VOA130**	**Ical Ref**	**: ICAL19274**
Calibration dates	**: 08/19/22 14:16 08/19/22 17:12**		

Calibration Files

L11 =V30220819A03.D L1 =V30220819A04.D L2 =V30220819A06.D L3 =V30220819A08.D L4 =V30220819A09.D

L6 =V30220819A10.D L8 =V30220819A11.D L10 =V30220819A12.D

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------									
2)	TP	Dichlorodifluo		0.157	0.227	0.227	0.187	0.212	0.205	0.210	0.204	12.20
3)	TP	Chloromethane		0.209	0.248	0.252	0.224	0.237	0.235	0.238	0.235	6.12
4)	TC	Vinyl chloride	0.217	0.210	0.258	0.255	0.218	0.238	0.231	0.236	0.233	7.45
5)	TP	Bromomethane		0.177	0.183	0.167	0.143	0.148	0.149	0.155	0.160	9.61
6)	TP	Chloroethane		0.135	0.147	0.155	0.140	0.149	0.148	0.150	0.146	4.50
7)	TP	Trichlorofluor		0.345	0.369	0.390	0.328	0.365	0.353	0.358	0.358	5.47
8)	TP	Ethyl ether		0.068	0.082	0.088	0.086	0.090	0.089	0.089	0.084	9.28
10)	TC	1,1-Dichloroet		0.171	0.204	0.207	0.176	0.192	0.190	0.192	0.190	6.89
11)	TP	Carbon disulfide		0.434	0.505	0.503	0.447	0.476	0.468	0.474	0.472	5.57
12)	TP	Freon-113		0.177	0.220	0.237	0.195	0.221	0.212	0.218	0.211	9.22
13)	TP	Iodomethane		0.162	0.185	0.212	0.220	0.238	0.235	0.235	0.212	13.64
14)	TP	Acrolein			0.019	0.021	0.020	0.021	0.022	0.022	0.021	5.72
15)	TP	Methylene chlo		0.218	0.237	0.217	0.203	0.207	0.205	0.208	0.213	5.63
17)	TP	Acetone			0.045	0.032	0.030	0.031	0.030	0.030	0.033	17.88
18)	TP	trans-1,2-Dich		0.183	0.224	0.222	0.196	0.205	0.203	0.208	0.206	6.99
19)	TP	Methyl acetate			0.083	0.086	0.081	0.088	0.086	0.089	0.086	3.42
20)	TP	Methyl tert butyl ether		0.322	0.372	0.395	0.404	0.436	0.433	0.446	0.401	10.89
21)	TP	tert-Butyl alc			0.005	0.006	0.006	0.007	0.007	0.007	0.006#	17.17
22)	TP	Diisopropyl ether		0.620	0.656	0.686	0.693	0.743	0.740	0.750	0.698	7.05
23)	TP	1,1-Dichloroet		0.392	0.439	0.436	0.395	0.406	0.403	0.409	0.412	4.51
24)	TP	Halothane		0.133	0.160	0.170	0.154	0.166	0.162	0.166	0.159	7.79
25)	TP	Acrylonitrile			0.042	0.043	0.043	0.045	0.043	0.045	0.043	2.38
26)	TP	Ethyl tert-but		0.426	0.486	0.524	0.552	0.614	0.627	0.649	0.554	14.72
27)	TP	Vinyl acetate			0.285	0.324	0.351	0.404	0.413	0.430	0.368	15.53
28)	TP	cis-1,2-Dichlo		0.243	0.252	0.243	0.223	0.232	0.230	0.234	0.237	4.22
29)	TP	2,2-Dichloropr		0.199	0.246	0.263	0.258	0.303	0.307	0.323	0.271	15.79
30)	TP	Bromochloromet		0.102	0.110	0.105	0.100	0.103	0.101	0.100	0.103	3.25
31)	TP	Cyclohexane		0.339	0.409	0.444	0.383	0.428	0.419	0.435	0.408	8.89
32)	TC	Chloroform		0.386	0.423	0.425	0.390	0.399	0.398	0.403	0.404	3.77
33)	TP	Ethyl acetate			0.105	0.109	0.116	0.126	0.124	0.127	0.118	7.92
34)	TP	Carbon tetrachloride	0.227	0.216	0.281	0.313	0.284	0.324	0.318	0.330	0.287	15.28
35)	TP	Tetrahydrofuran			0.034	0.033	0.031	0.031	0.031	0.032	0.032	4.49
36)	S	Dibromofluoromethane	0.277	0.278	0.271	0.262	0.256	0.256	0.257	0.256	0.264	3.68
37)	TP	1,1,1-Trichlor		0.280	0.310	0.367	0.326	0.355	0.350	0.359	0.335	9.45
39)	TP	2-Butanone			0.051	0.047	0.048	0.052	0.051	0.053	0.050	5.08

Initial Calibration Summary
Form 6
Volatiles

Client	**: Roux Env. Eng. & Geology, DPC**	**Lab Number**	**: L2253856**
Project Name	**: FORMER CLEAN ZONE DRY CLEANERS**	**Project Number**	**: 2546.007Y002**
Instrument ID	**: VOA130**	**Ical Ref**	**: ICAL19274**
Calibration dates	**: 08/19/22 14:16 08/19/22 17:12**		

Calibration Files
L11 =V30220819A03.D L1 =V30220819A04.D L2 =V30220819A06.D L3 =V30220819A08.D L4 =V30220819A09.D
L6 =V30220819A10.D L8 =V30220819A11.D L10 =V30220819A12.D

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
40) TP	1,1-Dichloropr		0.229	0.276	0.311	0.277	0.302	0.297	0.304	0.285	9.95
41) TP	Benzene	0.880	0.749	0.859	0.896	0.823	0.863	0.853	0.859	0.848	5.32
42) TP	Tertiary-Amyl Methyl Ether		0.350	0.376	0.415	0.443	0.500	0.505	0.524	0.445	15.23
43) S	1,2-Dichloroethane-d4	0.290	0.290	0.287	0.289	0.289	0.293	0.292	0.290	0.290	0.68
44) TP	1,2-Dichloroet		0.290	0.302	0.298	0.290	0.300	0.298	0.300	0.297	1.66
47) TP	Methyl cyclohe		0.301	0.372	0.409	0.363	0.416	0.405	0.415	0.383	10.89
48) TP	Trichloroethene	0.206	0.178	0.222	0.243	0.219	0.232	0.230	0.235	0.221	9.27
50) TP	Dibromomethane		0.111	0.120	0.118	0.114	0.121	0.118	0.121	0.118	3.38
51) TC	1,2-Dichloropr		0.191	0.221	0.230	0.223	0.233	0.232	0.236	0.224	6.98
53) TP	2-Chloroethyl		0.087	0.095	0.106	0.108	0.118	0.118	0.120	0.108	11.83
54) TP	Bromodichlorom		0.281	0.299	0.303	0.297	0.312	0.310	0.315	0.303	3.91
57) TP	1,4-Dioxane		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001#	7.21
58) TP	cis-1,3-Dichloropropene	0.206	0.240	0.263	0.306	0.320	0.352	0.356	0.364	0.301	19.55
59) I	Chlorobenzene-d5	----------ISTD----------									
60) S	Toluene-d8	1.290	1.293	1.286	1.312	1.299	1.312	1.302	1.297	1.299	0.73
61) TC	Toluene		0.657	0.735	0.768	0.708	0.745	0.729	0.741	0.726	4.89
62) TP	4-Methyl-2-pen		0.058	0.056	0.062	0.063	0.071	0.069	0.071	0.064	9.34
63) TP	Tetrachloroethene		0.262	0.309	0.333	0.294	0.322	0.314	0.320	0.308	7.63
65) TP	trans-1,3-Dichloropropene	0.193	0.217	0.238	0.311	0.347	0.399			*Q	0.9995
67) TP	Ethyl methacry		0.197	0.198	0.224	0.244	0.276	0.270	0.280	0.241	14.85
68) TP	1,1,2-Trichlor		0.160	0.165	0.178	0.179	0.187	0.182	0.185	0.177#	5.81
69) TP	Chlorodibromom		0.219	0.228	0.255	0.265	0.286	0.280	0.290	0.261	10.77
70) TP	1,3-Dichloropr		0.330	0.349	0.379	0.377	0.395	0.385	0.393	0.373	6.52
71) TP	1,2-Dibromoethane		0.166	0.178	0.202	0.205	0.217	0.212	0.216	0.199#	9.91
72) TP	2-Hexanone		0.130	0.103	0.103	0.105	0.117	0.113	0.116	0.112	8.65
73) TP	Chlorobenzene		0.781	0.827	0.832	0.778	0.808	0.790	0.795	0.802	2.70
74) TC	Ethylbenzene	1.496	1.312	1.431	1.518	1.376	1.439	1.382	1.357	1.414	4.96
75) TP	1,1,1,2-Tetrac		0.218	0.223	0.265	0.274	0.303	0.296	0.297	0.268	13.08
76) TP	p/m Xylene	0.527	0.458	0.538	0.573	0.525	0.544	0.522	0.520	0.526	6.17
77) TP	o Xylene		0.484	0.516	0.551	0.509	0.527	0.506	0.500	0.513	4.14
78) TP	Styrene	0.762	0.773	0.866	0.903	0.859	0.865	0.822	0.780	0.829	6.29
79) I	1,4-Dichlorobenzene-d4	----------ISTD----------									
80) TP	Bromoform		0.258	0.244	0.273	0.298	0.323	0.323	0.329	0.293	11.78
82) TP	Isopropylbenzene		2.393	2.765	2.911	2.657	2.730	2.649	2.625	2.676	5.90
83) S	4-Bromofluorobenzene	0.953	0.951	0.959	0.952	0.946	0.936	0.937	0.951	0.948	0.84
84) TP	Bromobenzene		0.719	0.687	0.662	0.645	0.645	0.638	0.654	0.664	4.35

Initial Calibration Summary
Form 6
Volatiles

Client	**: Roux Env. Eng. & Geology, DPC**	**Lab Number**	**: L2253856**
Project Name	**: FORMER CLEAN ZONE DRY CLEANERS**	**Project Number**	**: 2546.007Y002**
Instrument ID	**: VOA130**	**Ical Ref**	**: ICAL19274**
Calibration dates	**: 08/19/22 14:16 08/19/22 17:12**		

Calibration Files
L11 =V30220819A03.D L1 =V30220819A04.D L2 =V30220819A06.D L3 =V30220819A08.D L4 =V30220819A09.D
L6 =V30220819A10.D L8 =V30220819A11.D L10 =V30220819A12.D

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
85) TP	n-Propylbenzene		2.898	3.338	3.546	3.258	3.314	3.177	3.063	3.228	6.45
86) TP	1,4-Dichlorobu		0.753	0.692	0.721	0.747	0.772	0.757	0.775	0.745	3.98
87) TP	1,1,2,2-Tetrac		0.561	0.450	0.465	0.469	0.483	0.477	0.488	0.485	7.41
88) TP	4-Ethyltoluene		2.381	2.667	2.814	2.668	2.713	2.637	2.599	2.640	5.04
89) TP	2-Chlorotoluene		2.158	2.304	2.399	2.250	2.259	2.209	2.210	2.256	3.47
90) TP	1,3,5-Trimethy		2.087	2.296	2.424	2.306	2.322	2.277	2.267	2.283	4.42
91) TP	1,2,3-Trichlor		0.441	0.361	0.372	0.380	0.392	0.385	0.395	0.390	6.59
92) TP	trans-1,4-Dich		0.109	0.124	0.125	0.137	0.149	0.150	0.157	0.136	12.90
93) TP	4-Chlorotoluene		2.004	2.063	2.097	2.011	2.018	1.982	1.991	2.024	2.05
94) TP	tert-Butylbenzene		1.786	2.033	2.120	1.955	1.987	1.950	1.957	1.970	5.14
97) TP	1,2,4-Trimethy		2.071	2.224	2.361	2.266	2.301	2.249	2.242	2.245	3.97
98) TP	sec-Butylbenzene		2.598	3.064	3.252	2.959	3.023	2.919	2.840	2.951	6.87
99) TP	p-Isopropyltol		2.268	2.508	2.745	2.526	2.608	2.536	2.487	2.525	5.68
100) TP	1,3-Dichlorobe		1.310	1.282	1.326	1.249	1.265	1.234	1.252	1.274	2.67
101) TP	1,4-Dichlorobe		1.337	1.314	1.306	1.257	1.253	1.244	1.257	1.281	2.87
102) TP	p-Diethylbenzene		1.339	1.535	1.600	1.511	1.581	1.554	1.587	1.530	5.86
103) TP	n-Butylbenzene		2.011	2.353	2.558	2.359	2.435	2.364	2.339	2.345	7.09
104) TP	1,2-Dichlorobe		1.349	1.196	1.199	1.154	1.165	1.135	1.162	1.194	6.03
105) TP	1,2,4,5-Tetram		2.173	2.250	2.380	2.339	2.429	2.402	2.390	2.338	3.98
106) TP	1,2-Dibromo-3-		0.045	0.049	0.060	0.065	0.071	0.070	0.075	0.062	18.50
107) TP	1,3,5-Trichlor		1.015	1.036	1.046	0.995	1.007	0.995	1.025	1.017	1.95
108) TP	Hexachlorobuta		0.442	0.456	0.472	0.436	0.467	0.473	0.480	0.461	3.60
109) TP	1,2,4-Trichlor		0.964	0.855	0.881	0.862	0.875	0.860	0.891	0.884	4.22
110) TP	Naphthalene		1.779	1.512	1.564	1.573	1.568	1.552	1.578	1.590	5.44
111) TP	1,2,3-Trichlor		0.837	0.753	0.789	0.766	0.775	0.773	0.795	0.784	3.48

Response Factor Report VOA130

Method Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Method File : VOA130_220819A_8260.m
Title : VOLATILES BY GC/MS
Last Update : Mon Aug 22 13:44:43 2022
Response Via : Initial Calibration

Calibration Files
L11 =V30220819A03.D L1 =V30220819A04.D L2 =V30220819A06.D L3 =V30220819A08.D L4 =V30220819A09.D
L6 =V30220819A10.D L8 =V30220819A11.D L10 =V30220819A12.D

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------									
2)	TP	Dichlorodifluo...		0.157	0.227	0.227	0.187	0.212	0.205	0.210	0.204	12.20
3)	TP	Chloromethane		0.209	0.248	0.252	0.224	0.237	0.235	0.238	0.235	6.12
4)	TC	Vinyl chloride	0.217	0.210	0.258	0.255	0.218	0.238	0.231	0.236	0.233	7.45
5)	TP	Bromomethane		0.177	0.183	0.167	0.143	0.148	0.149	0.155	0.160	9.61
6)	TP	Chloroethane		0.135	0.147	0.155	0.140	0.149	0.148	0.150	0.146	4.50
7)	TP	Trichlorofluor...		0.345	0.369	0.390	0.328	0.365	0.353	0.358	0.358	5.47
8)	TP	Ethyl ether		0.068	0.082	0.088	0.086	0.090	0.089	0.089	0.084	9.28
10)	TC	1,1-Dichloroet...		0.171	0.204	0.207	0.176	0.192	0.190	0.192	0.190	6.89
11)	TP	Carbon disulfide		0.434	0.505	0.503	0.447	0.476	0.468	0.474	0.472	5.57
12)	TP	Freon-113		0.177	0.220	0.237	0.195	0.221	0.212	0.218	0.211	9.22
13)	TP	Iodomethane		0.162	0.185	0.212	0.220	0.238	0.235	0.235	0.212	13.64
14)	TP	Acrolein			0.019	0.021	0.020	0.021	0.022	0.022	0.021	5.72
15)	TP	Methylene chlo...		0.218	0.237	0.217	0.203	0.207	0.205	0.208	0.213	5.63
17)	TP	Acetone			0.045	0.032	0.030	0.031	0.030	0.030	0.033	17.88
18)	TP	trans-1,2-Dich...		0.183	0.224	0.222	0.196	0.205	0.203	0.208	0.206	6.99
19)	TP	Methyl acetate			0.083	0.086	0.081	0.088	0.086	0.089	0.086	3.42
20)	TP	Methyl tert-bu...		0.322	0.372	0.395	0.404	0.436	0.433	0.446	0.401	10.89
21)	TP	tert-Butyl alc...			0.005	0.006	0.006	0.007	0.007	0.007	0.006#	17.17
22)	TP	Diisopropyl ether		0.620	0.656	0.686	0.693	0.743	0.740	0.750	0.698	7.05
23)	TP	1,1-Dichloroet...		0.392	0.439	0.436	0.395	0.406	0.403	0.409	0.412	4.51
24)	TP	Halothane		0.133	0.160	0.170	0.154	0.166	0.162	0.166	0.159	7.79
25)	TP	Acrylonitrile			0.042	0.043	0.043	0.045	0.043	0.045	0.043	2.38
26)	TP	Ethyl tert-but...		0.426	0.486	0.524	0.552	0.614	0.627	0.649	0.554	14.72
27)	TP	Vinyl acetate			0.285	0.324	0.351	0.404	0.413	0.430	0.368	15.53
28)	TP	cis-1,2-Dichlo...		0.243	0.252	0.243	0.223	0.232	0.230	0.234	0.237	4.22
29)	TP	2,2-Dichloropr...		0.199	0.246	0.263	0.258	0.303	0.307	0.323	0.271	15.79
30)	TP	Bromochloromet...		0.102	0.110	0.105	0.100	0.103	0.101	0.100	0.103	3.25
31)	TP	Cyclohexane		0.339	0.409	0.444	0.383	0.428	0.419	0.435	0.408	8.89
32)	TC	Chloroform		0.386	0.423	0.425	0.390	0.399	0.398	0.403	0.404	3.77
33)	TP	Ethyl acetate			0.105	0.109	0.116	0.126	0.124	0.127	0.118	7.92

Response Factor Report VOA130

Method Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Method File : VOA130_220819A_8260.m
Title : VOLATILES BY GC/MS
Last Update : Mon Aug 22 13:44:43 2022
Response Via : Initial Calibration

Calibration Files
L11 =V30220819A03.D L1 =V30220819A04.D L2 =V30220819A06.D L3 =V30220819A08.D L4 =V30220819A09.D
L6 =V30220819A10.D L8 =V30220819A11.D L10 =V30220819A12.D

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
34)	TP	Carbon tetrach...	0.227	0.216	0.281	0.313	0.284	0.324	0.318	0.330	0.287	15.28
35)	TP	Tetrahydrofuran		0.034	0.033	0.031	0.031	0.031	0.032	0.032		4.49
36)	S	Dibromofluorom...	0.277	0.278	0.271	0.262	0.256	0.256	0.257	0.256	0.264	3.68
37)	TP	1,1,1-Trichlor...		0.280	0.310	0.367	0.326	0.355	0.350	0.359	0.335	9.45
39)	TP	2-Butanone			0.051	0.047	0.048	0.052	0.051	0.053	0.050	5.08
40)	TP	1,1-Dichloropr...		0.229	0.276	0.311	0.277	0.302	0.297	0.304	0.285	9.95
41)	TP	Benzene	0.880	0.749	0.859	0.896	0.823	0.863	0.853	0.859	0.848	5.32
42)	TP	tert-Amyl meth...		0.350	0.376	0.415	0.443	0.500	0.505	0.524	0.445	15.23
43)	S	1,2-Dichloroet...	0.290	0.290	0.287	0.289	0.289	0.293	0.292	0.290	0.290	0.68
44)	TP	1,2-Dichloroet...		0.290	0.302	0.298	0.290	0.300	0.298	0.300	0.297	1.66
47)	TP	Methyl cyclohe...		0.301	0.372	0.409	0.363	0.416	0.405	0.415	0.383	10.89
48)	TP	Trichloroethene	0.206	0.178	0.222	0.243	0.219	0.232	0.230	0.235	0.221	9.27
50)	TP	Dibromomethane		0.111	0.120	0.118	0.114	0.121	0.118	0.121	0.118	3.38
51)	TC	1,2-Dichloropr...		0.191	0.221	0.230	0.223	0.233	0.232	0.236	0.224	6.98
53)	TP	2-Chloroethyl ...		0.087	0.095	0.106	0.108	0.118	0.118	0.120	0.108	11.83
54)	TP	Bromodichlorom...		0.281	0.299	0.303	0.297	0.312	0.310	0.315	0.303	3.91
57)	TP	1,4-Dioxane		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001#	7.21
58)	TP	cis-1,3-Dichlo...	0.206	0.240	0.263	0.306	0.320	0.352	0.356	0.364	0.301	19.55
59)	I	Chlorobenzene-d5	----------	ISTD	----------							
60)	S	Toluene-d8	1.290	1.293	1.286	1.312	1.299	1.312	1.302	1.297	1.299	0.73
61)	TC	Toluene		0.657	0.735	0.768	0.708	0.745	0.729	0.741	0.726	4.89
62)	TP	4-Methyl-2-pen...		0.058	0.056	0.062	0.063	0.071	0.069	0.071	0.064	9.34
63)	TP	Tetrachloroethene		0.262	0.309	0.333	0.294	0.322	0.314	0.320	0.308	7.63
65)	TP	trans-1,3-Dich...	0.193	0.217	0.238	0.311	0.347	0.399		*Q		0.9995
67)	TP	Ethyl methacry...		0.197	0.198	0.224	0.244	0.276	0.270	0.280	0.241	14.85
68)	TP	1,1,2-Trichlor...		0.160	0.165	0.178	0.179	0.187	0.182	0.185	0.177#	5.81
69)	TP	Chlorodibromom...		0.219	0.228	0.255	0.265	0.286	0.280	0.290	0.261	10.77
70)	TP	1,3-Dichloropr...		0.330	0.349	0.379	0.377	0.395	0.385	0.393	0.373	6.52
71)	TP	1,2-Dibromoethane		0.166	0.178	0.202	0.205	0.217	0.212	0.216	0.199#	9.91
72)	TP	2-Hexanone		0.130	0.103	0.103	0.105	0.117	0.113	0.116	0.112	8.65
73)	TP	Chlorobenzene		0.781	0.827	0.832	0.778	0.808	0.790	0.795	0.802	2.70

Method Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Method File : VOA130_220819A_8260.m
Title : VOLATILES BY GC/MS
Last Update : Mon Aug 22 13:44:43 2022
Response Via : Initial Calibration

Calibration Files
L11 =V30220819A03.D L1 =V30220819A04.D L2 =V30220819A06.D L3 =V30220819A08.D L4 =V30220819A09.D
L6 =V30220819A10.D L8 =V30220819A11.D L10 =V30220819A12.D

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
74)	TC	Ethylbenzene	1.496	1.312	1.431	1.518	1.376	1.439	1.382	1.357	1.414	4.96
75)	TP	1,1,1,2-Tetrac...		0.218	0.223	0.265	0.274	0.303	0.296	0.297	0.268	13.08
76)	TP	p/m Xylene	0.527	0.458	0.538	0.573	0.525	0.544	0.522	0.520	0.526	6.17
77)	TP	o Xylene		0.484	0.516	0.551	0.509	0.527	0.506	0.500	0.513	4.14
78)	TP	Styrene	0.762	0.773	0.866	0.903	0.859	0.865	0.822	0.780	0.829	6.29
79)	I	1,4-Dichlorobenzene-d4	----------ISTD----------									
80)	TP	Bromoform		0.258	0.244	0.273	0.298	0.323	0.323	0.329	0.293	11.78
82)	TP	Isopropylbenzene		2.393	2.765	2.911	2.657	2.730	2.649	2.625	2.676	5.90
83)	S	4-Bromofluorob...	0.953	0.951	0.959	0.952	0.946	0.936	0.937	0.951	0.948	0.84
84)	TP	Bromobenzene		0.719	0.687	0.662	0.645	0.645	0.638	0.654	0.664	4.35
85)	TP	n-Propylbenzene		2.898	3.338	3.546	3.258	3.314	3.177	3.063	3.228	6.45
86)	TP	1,4-Dichlorobu...		0.753	0.692	0.721	0.747	0.772	0.757	0.775	0.745	3.98
87)	TP	1,1,2,2-Tetrac...		0.561	0.450	0.465	0.469	0.483	0.477	0.488	0.485	7.41
88)	TP	4-Ethyltoluene		2.381	2.667	2.814	2.668	2.713	2.637	2.599	2.640	5.04
89)	TP	2-Chlorotoluene		2.158	2.304	2.399	2.250	2.259	2.209	2.210	2.256	3.47
90)	TP	1,3,5-Trimethy...		2.087	2.296	2.424	2.306	2.322	2.277	2.267	2.283	4.42
91)	TP	1,2,3-Trichlor...		0.441	0.361	0.372	0.380	0.392	0.385	0.395	0.390	6.59
92)	TP	trans-1,4-Dich...		0.109	0.124	0.125	0.137	0.149	0.150	0.157	0.136	12.90
93)	TP	4-Chlorotoluene		2.004	2.063	2.097	2.011	2.018	1.982	1.991	2.024	2.05
94)	TP	tert-Butylbenzene		1.786	2.033	2.120	1.955	1.987	1.950	1.957	1.970	5.14
97)	TP	1,2,4-Trimethy...		2.071	2.224	2.361	2.266	2.301	2.249	2.242	2.245	3.97
98)	TP	sec-Butylbenzene		2.598	3.064	3.252	2.959	3.023	2.919	2.840	2.951	6.87
99)	TP	p-Isopropyltol...		2.268	2.508	2.745	2.526	2.608	2.536	2.487	2.525	5.68
100)	TP	1,3-Dichlorobe...		1.310	1.282	1.326	1.249	1.265	1.234	1.252	1.274	2.67
101)	TP	1,4-Dichlorobe...		1.337	1.314	1.306	1.257	1.253	1.244	1.257	1.281	2.87
102)	TP	p-Diethylbenzene		1.339	1.535	1.600	1.511	1.581	1.554	1.587	1.530	5.86
103)	TP	n-Butylbenzene		2.011	2.353	2.558	2.359	2.435	2.364	2.339	2.345	7.09
104)	TP	1,2-Dichlorobe...		1.349	1.196	1.199	1.154	1.165	1.135	1.162	1.194	6.03
105)	TP	1,2,4,5-Tetram...		2.173	2.250	2.380	2.339	2.429	2.402	2.390	2.338	3.98
106)	TP	1,2-Dibromo-3-...		0.045	0.049	0.060	0.065	0.071	0.070	0.075	0.062	18.50
107)	TP	1,3,5-Trichlor...		1.015	1.036	1.046	0.995	1.007	0.995	1.025	1.017	1.95

Method Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Method File : VOA130_220819A_8260.m
Title : VOLATILES BY GC/MS
Last Update : Mon Aug 22 13:44:43 2022
Response Via : Initial Calibration

Calibration Files
L11 =V30220819A03.D L1 =V30220819A04.D L2 =V30220819A06.D L3 =V30220819A08.D L4 =V30220819A09.D
L6 =V30220819A10.D L8 =V30220819A11.D L10 =V30220819A12.D

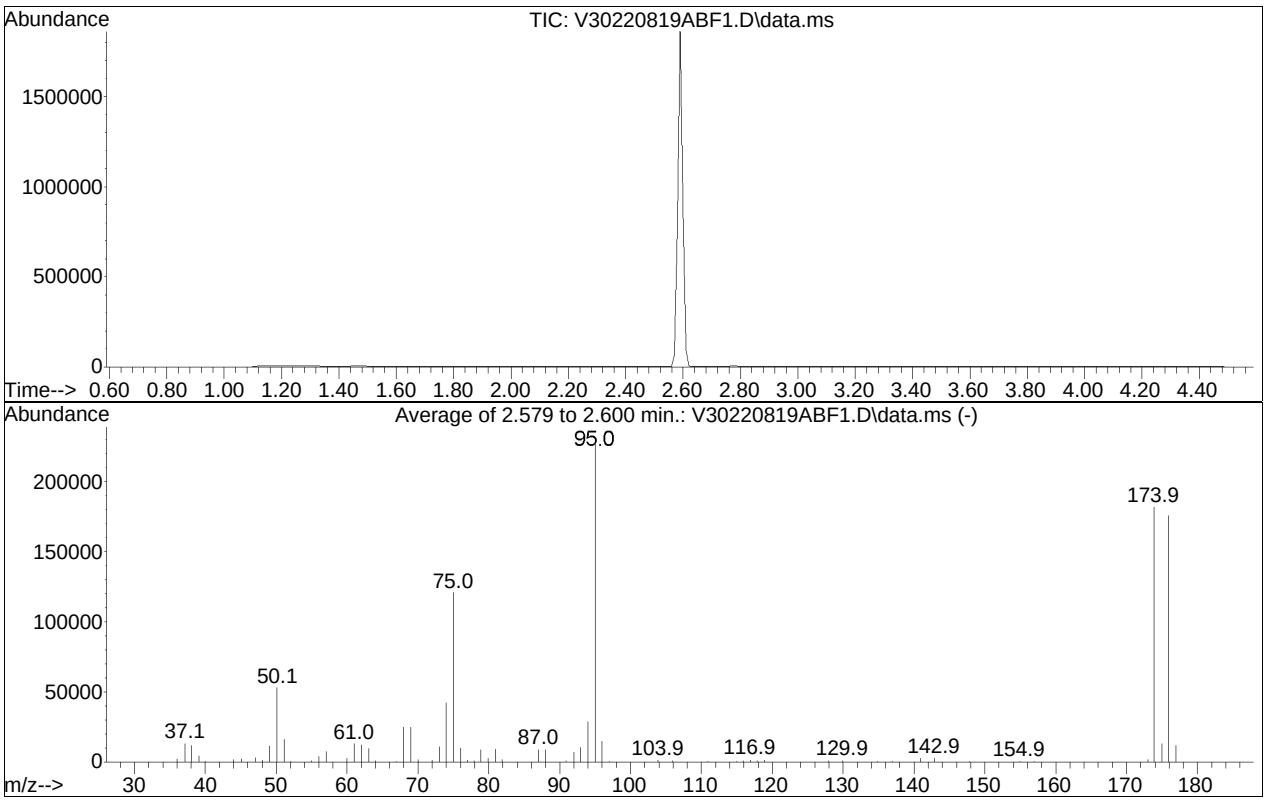
	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
108) TP	Hexachlorobuta...	0.442	0.456	0.472	0.436	0.467	0.473	0.480	0.461		3.60
109) TP	1,2,4-Trichlor...	0.964	0.855	0.881	0.862	0.875	0.860	0.891	0.884		4.22
110) TP	Naphthalene	1.779	1.512	1.564	1.573	1.568	1.552	1.578	1.590		5.44
111) TP	1,2,3-Trichlor...	0.837	0.753	0.789	0.766	0.775	0.773	0.795	0.784		3.48

(#) = Out of Range

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819ABF1.D
Acq On : 19 Aug 2022 01:23 pm
Operator : VOA130:PD
Sample : WG1678209-1
Misc : WG1678209
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Title : VOLATILES BY GC/MS
Last Update : Mon Aug 22 13:44:43 2022



AutoFind: Scans 147, 148, 149; Background Corrected with Scan 143

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.2	52912	PASS
75	95	30	60	53.1	120952	PASS
95	95	100	100	100.0	227947	PASS
96	95	5	9	6.6	15127	PASS
173	174	0.00	2	0.9	1668	PASS
174	95	50	100	79.8	181949	PASS
175	174	5	9	7.3	13265	PASS
176	174	95	101	96.7	175867	PASS
177	176	5	9	6.6	11660	PASS

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A03.D
Acq On : 19 Aug 2022 02:16 pm
Operator : VOA130:MKS
Sample : I8260STD0.19PPB
Misc : WG1678209
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 14:44:11 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 14:44:05 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\220819AICAL\V30220819A08.D
Sub List : 8260-L11 - Level 11 for 8260-LRR product

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	5.487	96	253169	10.000 ug/L	0.00
Standard Area 1 = 267936			Recovery =	94.49%	
59) Chlorobenzene-d5	8.501	117	190278	10.000 ug/L	0.00
Standard Area 1 = 196265			Recovery =	96.95%	
79) 1,4-Dichlorobenzene-d4	9.988	152	98085	10.000 ug/L	0.00
Standard Area 1 = 101565			Recovery =	96.57%	
System Monitoring Compounds					
36) Dibromofluoromethane	4.491	113	70060	10.479 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	104.79%	
43) 1,2-Dichloroethane-d4	5.138	65	73331	9.990 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	99.90%	
60) Toluene-d8	7.199	98	245497	9.933 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	99.33%	
83) 4-Bromofluorobenzene	9.321	95	93477	10.052 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	100.52%	
Target Compounds					Qvalue
4) Vinyl chloride	1.109	62	1044	0.177 ug/L	82
34) Carbon tetrachloride	4.385	117	1093M1	0.151 ug/L	
41) Benzene	4.960	78	4231	0.197 ug/L #	55
48) Trichloroethene	5.682	95	989	0.177 ug/L #	79
58) cis-1,3-Dichloropropene	7.015	75	989	0.130 ug/L #	75
65) trans-1,3-Dichloropropene	7.676	75	697	0.234 ug/L #	74
74) Ethylbenzene	8.554	91	5408	0.201 ug/L	98
76) p/m Xylene	8.660	106	3813	0.381 ug/L	100
78) Styrene	8.984	104	5511	0.349 ug/L	92

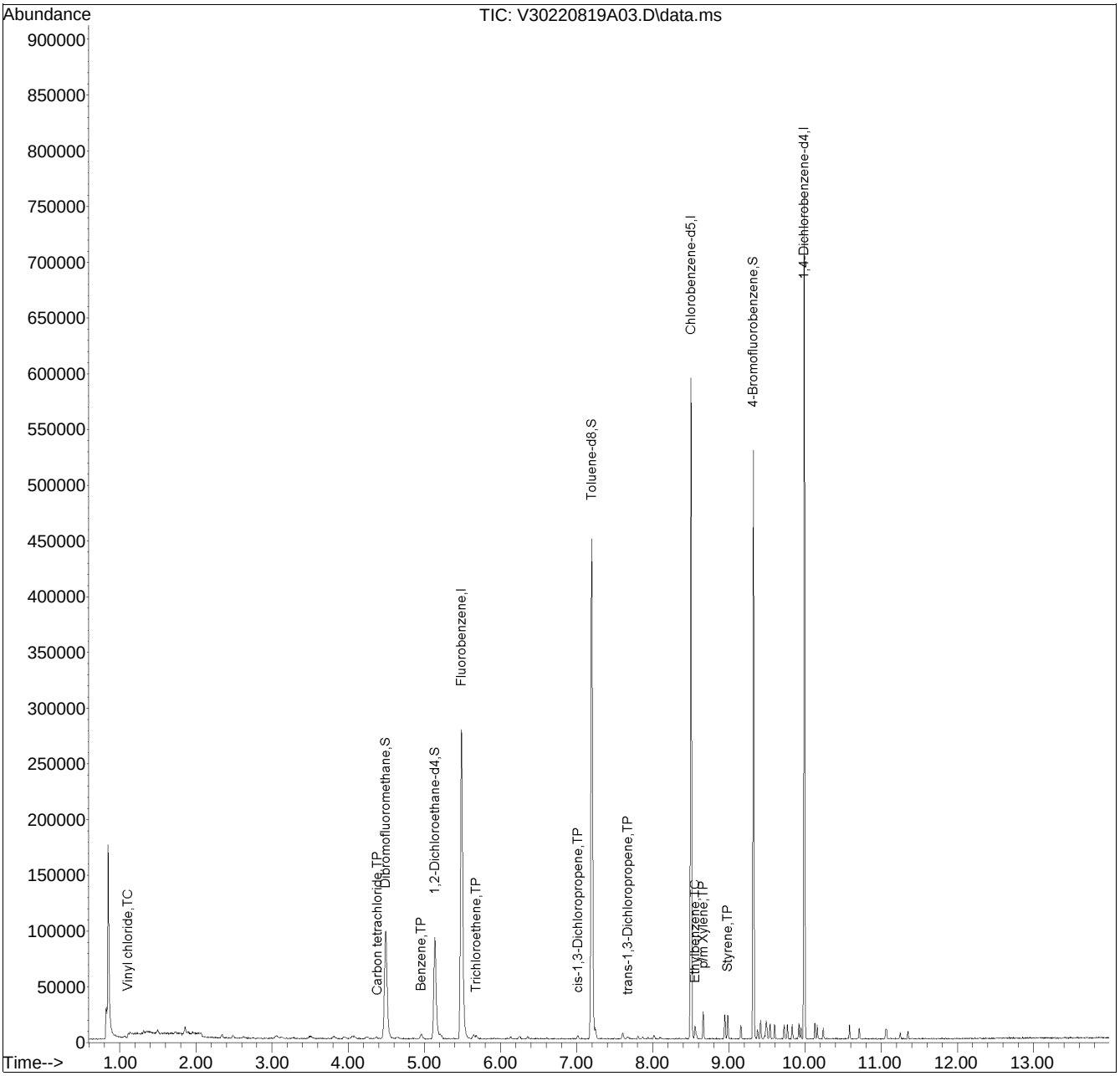
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A03.D
Acq On : 19 Aug 2022 02:16 pm
Operator : VOA130:MKS
Sample : I8260STD0.19PPB
Misc : WG1678209
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 14:44:11 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 14:44:05 2022
Response via : Initial Calibration

Sub List : 8260-L11 - Level 11 for 8260-LRR product\V30220819A08.D•

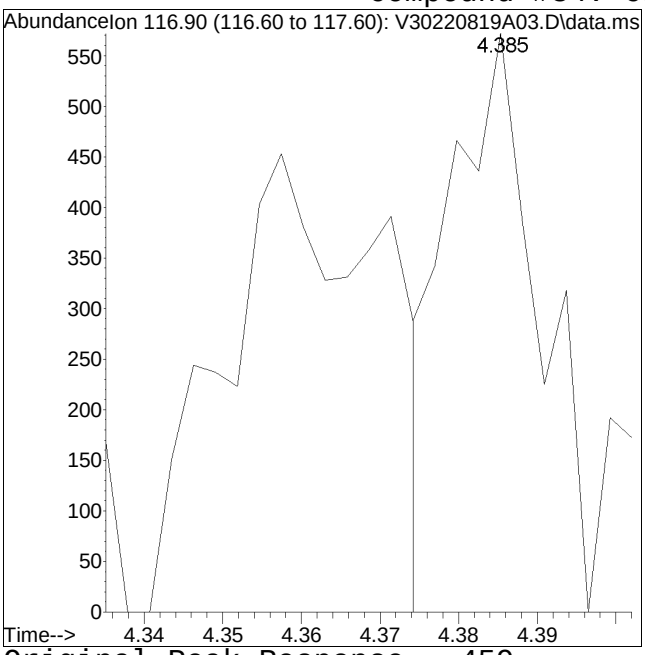


Manual Integration Report

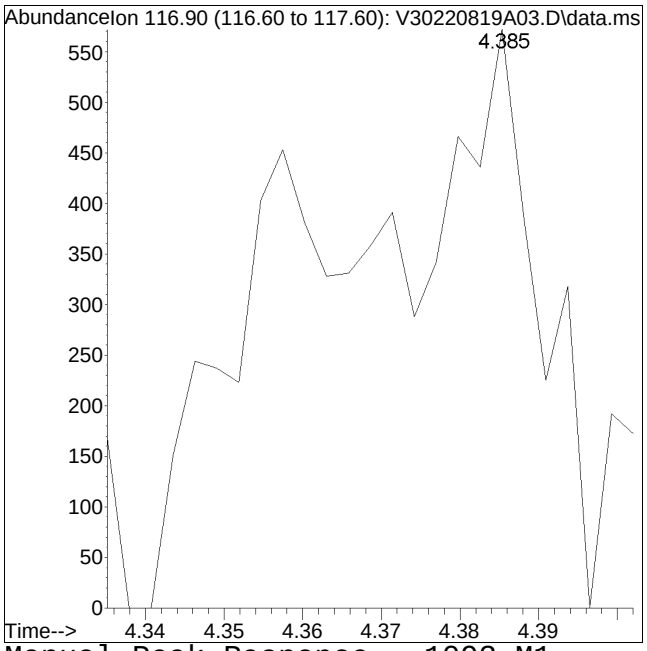
Data Path : I:\VOLATILES\VOA130\2022\2Q
Data File : V30220819A03.D
Date Inj'd : 8/19/2022 2:16 pm
Sample : I8260STD0.19PPB

Method : VOA130_220819A_8260.m
Operator : VOA130:MKS
Instrument : VOA130
Quant Date : 8/22/2022 2:44 pm

Compound #34: Carbon tetrachloride



Original Peak Response = 459



Manual Peak Response = 1093 M1

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A04.D
Acq On : 19 Aug 2022 02:35 pm
Operator : VOA130:MKS
Sample : I8260STD0.5PPB
Misc : WG1678209
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 22 13:27:32 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:22:28 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\220819AICAL\V30220819A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	5.490	96	245935	10.000 ug/L	0.00
Standard Area 1 = 267936			Recovery =	91.79%	
59) Chlorobenzene-d5	8.501	117	188297	10.000 ug/L	0.00
Standard Area 1 = 196265			Recovery =	95.94%	
79) 1,4-Dichlorobenzene-d4	9.991	152	97681	10.000 ug/L	0.00
Standard Area 1 = 101565			Recovery =	96.18%	
System Monitoring Compounds					
36) Dibromofluoromethane	4.491	113	68420	10.627 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	106.27%	
43) 1,2-Dichloroethane-d4	5.138	65	71344	10.051 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	100.51%	
60) Toluene-d8	7.196	98	243409	9.856 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	98.56%	
83) 4-Bromofluorobenzene	9.321	95	92909	9.991 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	99.91%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.939	85	1926	0.345 ug/L	88
3) Chloromethane	1.061	50	2574M1	0.416 ug/L	
4) Vinyl chloride	1.109	62	2588	0.413 ug/L	99
5) Bromomethane	1.312	94	2182M1	0.531 ug/L	
6) Chloroethane	1.399	64	1665	0.437 ug/L	88
7) Trichlorofluoromethane	1.494	101	4240	0.442 ug/L	91
8) Ethyl ether	1.731	74	832	0.386 ug/L #	48
10) 1,1-Dichloroethene	1.859	96	2106	0.414 ug/L	77
11) Carbon disulfide	1.859	76	5341	0.431 ug/L	96
12) Freon-113	1.903	101	2178	0.374 ug/L #	60
13) Iodomethane	1.959	142	1990M1	0.381 ug/L	
14) Acrolein	0.000		0	N.D. d	
15) Methylene chloride	2.344	84	2677	0.502 ug/L	83
17) Acetone	0.000		0	N.D. d	
18) trans-1,2-Dichloroethene	2.486	96	2247	0.412 ug/L	85
19) Methyl acetate	0.000		0	N.D. d	
20) Methyl tert-butyl ether	2.626	73	3957M1	0.407 ug/L	
21) tert-Butyl alcohol	0.000		0	N.D. d	
22) Diisopropyl ether	3.058	45	7621M1	0.452 ug/L	
23) 1,1-Dichloroethane	3.119	63	4820	0.450 ug/L	87
24) Halothane	3.284	117	1635M1	0.392 ug/L	

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A04.D
Acq On : 19 Aug 2022 02:35 pm
Operator : VOA130:MKS
Sample : I8260STD0.5PPB
Misc : WG1678209
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 22 13:27:32 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:22:28 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\220819AICAL\V30220819A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
25) Acrylonitrile	0.000		0	N.D. d	
26) Ethyl tert-butyl ether	3.493	59	5242M1	0.407 ug/L	
27) Vinyl acetate	0.000		0	N.D. d	
28) cis-1,2-Dichloroethene	3.822	96	2990M1	0.500 ug/L	
29) 2,2-Dichloropropane	3.959	77	2451M1	0.379 ug/L	
30) Bromochloromethane	4.081	128	1253M1	0.487 ug/L	
31) Cyclohexane	4.065	56	4172M1	0.382 ug/L	
32) Chloroform	4.243	83	4748	0.454 ug/L #	90
33) Ethyl acetate	0.000		0	N.D. d	
34) Carbon tetrachloride	4.371	117	2661M1	0.346 ug/L	
35) Tetrahydrofuran	0.000		0	N.D. d	
37) 1,1,1-Trichloroethane	4.469	97	3442M1	0.382 ug/L	
39) 2-Butanone	0.000		0	N.D. d	
40) 1,1-Dichloropropene	4.648	75	2813M1	0.367 ug/L	
41) Benzene	4.957	78	9209	0.418 ug/L #	64
42) tert-Amyl methyl ether	5.205	73	4300	0.421 ug/L #	58
44) 1,2-Dichloroethane	5.219	62	3567	0.487 ug/L #	50
47) Methyl cyclohexane	5.649	83	3707M1	0.369 ug/L	
48) Trichloroethene	5.679	95	2193M1	0.368 ug/L	
50) Dibromomethane	6.134	93	1359	0.467 ug/L	98
51) 1,2-Dichloropropane	6.248	63	2343	0.413 ug/L #	84
53) 2-Chloroethyl vinyl ether	7.007	63	1070	0.409 ug/L #	84
54) Bromodichloromethane	6.357	83	3450	0.462 ug/L #	94
57) 1,4-Dioxane	6.588	88	1564M1	78.819 ug/L	
58) cis-1,3-Dichloropropene	7.023	75	2954	0.392 ug/L	98
61) Toluene	7.249	92	6181	0.428 ug/L	96
62) 4-Methyl-2-pentanone	7.659	58	548	0.468 ug/L #	56
63) Tetrachloroethene	7.604	166	2464	0.393 ug/L	99
65) trans-1,3-Dichloropropene	7.676	75	2039	0.348 ug/L	85
67) Ethyl methacrylate	7.866	69	1852	0.438 ug/L	85
68) 1,1,2-Trichloroethane	7.807	83	1505	0.450 ug/L	92
69) Chlorodibromomethane	7.938	129	2066	0.430 ug/L	91
70) 1,3-Dichloropropane	8.016	76	3104	0.435 ug/L	99
71) 1,2-Dibromoethane	8.094	107	1567	0.412 ug/L	92
72) 2-Hexanone	8.343	43	1224	0.629 ug/L #	81
73) Chlorobenzene	8.515	112	7351	0.469 ug/L #	82
74) Ethylbenzene	8.554	91	12350	0.432 ug/L	99
75) 1,1,1,2-Tetrachloroethane	8.574	131	2049	0.410 ug/L #	64
76) p/m Xylene	8.663	106	8627	0.799 ug/L	94
77) o Xylene	8.945	106	9118	0.879 ug/L	93

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A04.D
Acq On : 19 Aug 2022 02:35 pm
Operator : VOA130:MKS
Sample : I8260STD0.5PPB
Misc : WG1678209
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 22 13:27:32 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:22:28 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\220819AICAL\V30220819A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
78) Styrene	8.984	104	14557	0.857	ug/L		92
80) Bromoform	8.984	173	1262	0.473	ug/L		86
82) Isopropylbenzene	9.154	105	11687	0.411	ug/L		99
84) Bromobenzene	9.372	156	3510	0.543	ug/L		94
85) n-Propylbenzene	9.413	91	14152	0.409	ug/L		99
86) 1,4-Dichlorobutane	9.419	55	3678	0.522	ug/L		98
87) 1,1,2,2-Tetrachloroethane	9.466	83	2741	0.604	ug/L		95
88) 4-Ethyltoluene	9.486	105	11627	0.423	ug/L		95
89) 2-Chlorotoluene	9.494	91	10540	0.450	ug/L		96
90) 1,3,5-Trimethylbenzene	9.539	105	10192	0.430	ug/L		96
91) 1,2,3-Trichloropropane	9.536	75	2156	0.594	ug/L		97
92) trans-1,4-Dichloro-2-b...	9.567	53	530	0.435	ug/L		99
93) 4-Chlorotoluene	9.600	91	9790	0.478	ug/L		98
94) tert-Butylbenzene	9.726	119	8721	0.421	ug/L		91
97) 1,2,4-Trimethylbenzene	9.768	105	10117	0.439	ug/L		95
98) sec-Butylbenzene	9.832	105	12688	0.399	ug/L		99
99) p-Isopropyltoluene	9.918	119	11076	0.413	ug/L		97
100) 1,3-Dichlorobenzene	9.946	146	6399	0.494	ug/L		99
101) 1,4-Dichlorobenzene	9.996	146	6528	0.512	ug/L	#	79
102) p-Diethylbenzene	10.127	119	6539	0.418	ug/L		95
103) n-Butylbenzene	10.158	91	9821	0.393	ug/L		100
104) 1,2-Dichlorobenzene	10.236	146	6591	0.563	ug/L		98
105) 1,2,4,5-Tetramethylben...	10.582	119	10615	0.457	ug/L		98
106) 1,2-Dibromo-3-chloropr...	10.693	155	220	0.377	ug/L	#	28
107) 1,3,5-Trichlorobenzene	10.707	180	4957	0.485	ug/L		97
108) Hexachlorobutadiene	11.056	225	2161	0.468	ug/L		98
109) 1,2,4-Trichlorobenzene	11.070	180	4706	0.547	ug/L		94
110) Naphthalene	11.248	128	8689	0.569	ug/L		100
111) 1,2,3-Trichlorobenzene	11.352	180	4090	0.531	ug/L		92

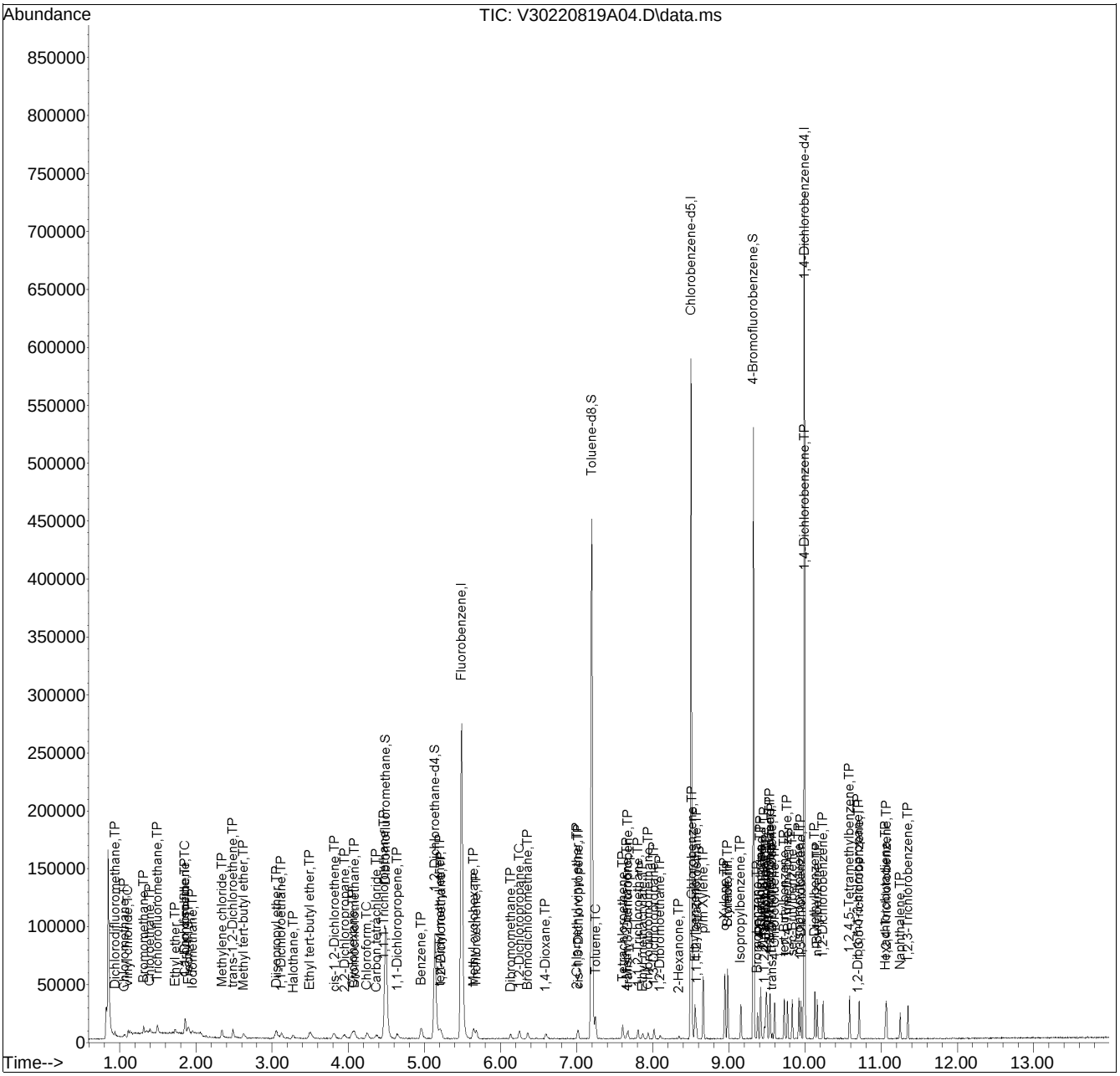
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A04.D
Acq On : 19 Aug 2022 02:35 pm
Operator : VOA130:MKS
Sample : I8260STD0.5PPB
Misc : WG1678209
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 22 13:27:32 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:22:28 2022
Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus Diox20819AICAL\V30220819A08.D•

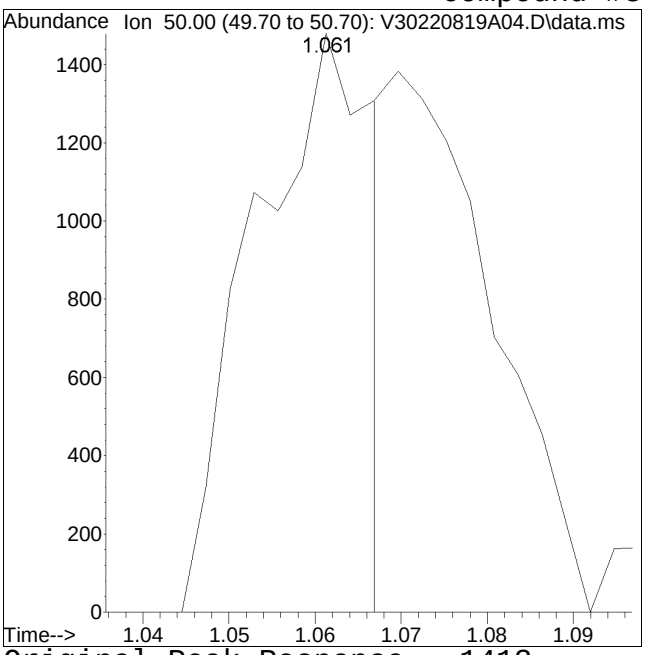


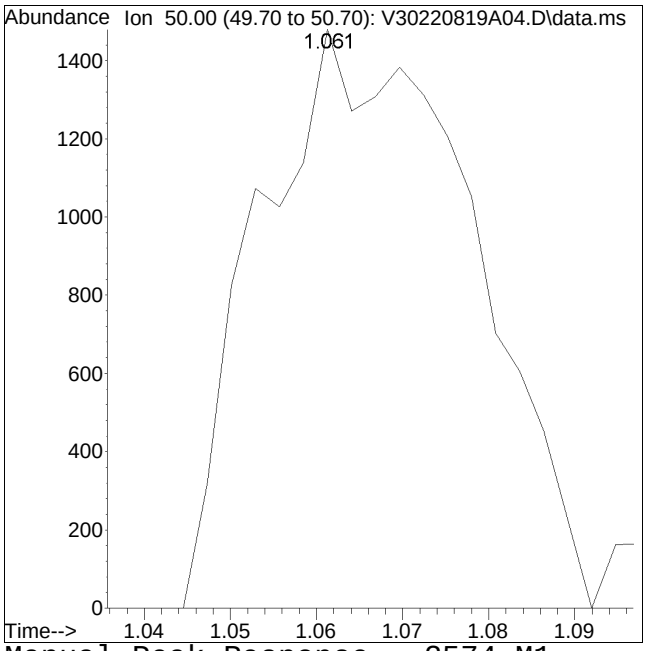
Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2Q
Data File : V30220819A04.D
Date Inj'd : 8/19/2022 2:35 pm
Sample : I8260STD0.5PPB

Method : VOA130_220819A_8260.m
Operator : VOA130:MKS
Instrument : VOA130
Quant Date : 8/22/2022 1:22 pm

Compound #3: Chloromethane





Original Peak Response = 1413 Manual Peak Response = 2574 M1

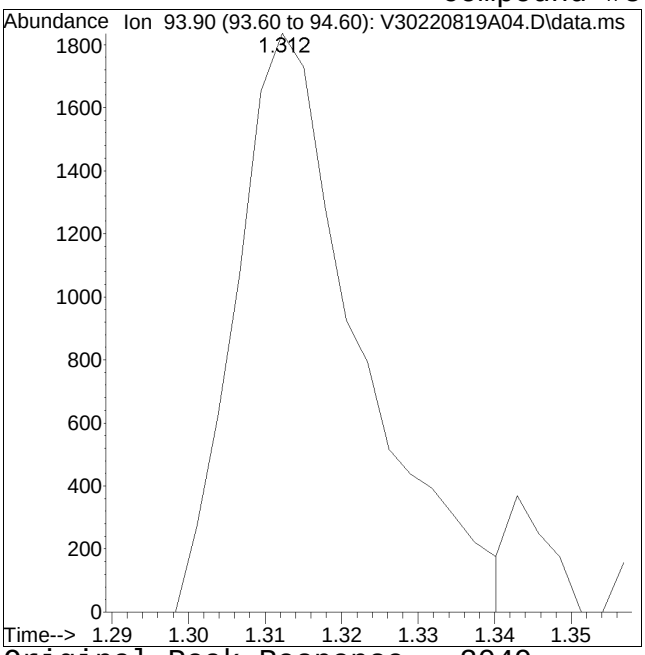
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

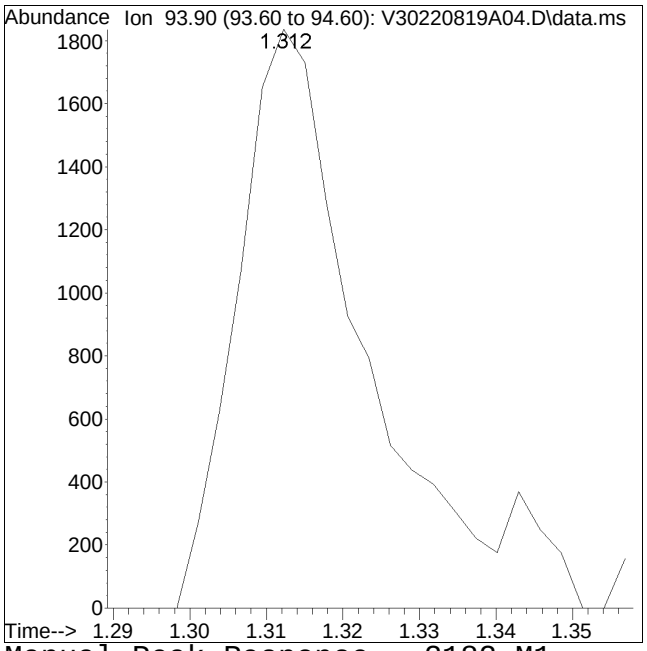
Data Path : I:\VOLATILES\VOA130\2022\2Q
Data File : V30220819A04.D
Date Inj'd : 8/19/2022 2:35 pm
Sample : I8260STD0.5PPB

Method : VOA130_220819A_8260.m
Operator : VOA130:MKS
Instrument : VOA130
Quant Date : 8/22/2022 1:22 pm

Compound #5: Bromomethane



Original Peak Response = 2049



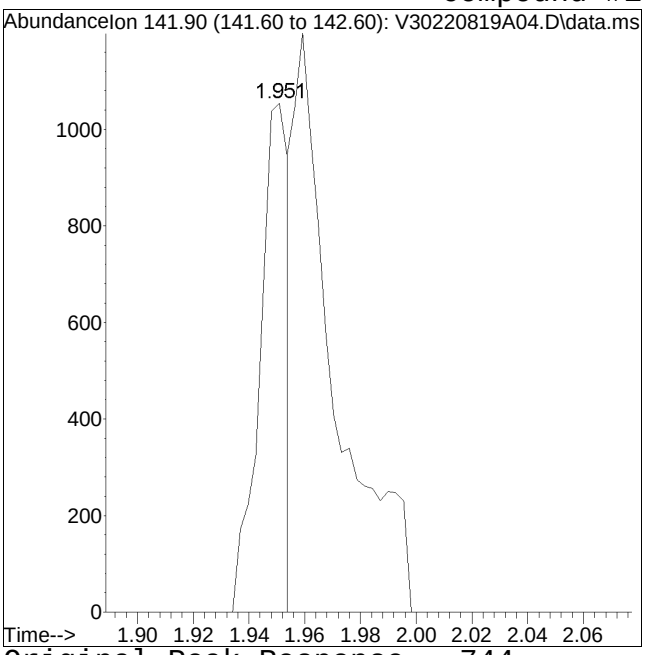
Manual Peak Response = 2182 M1

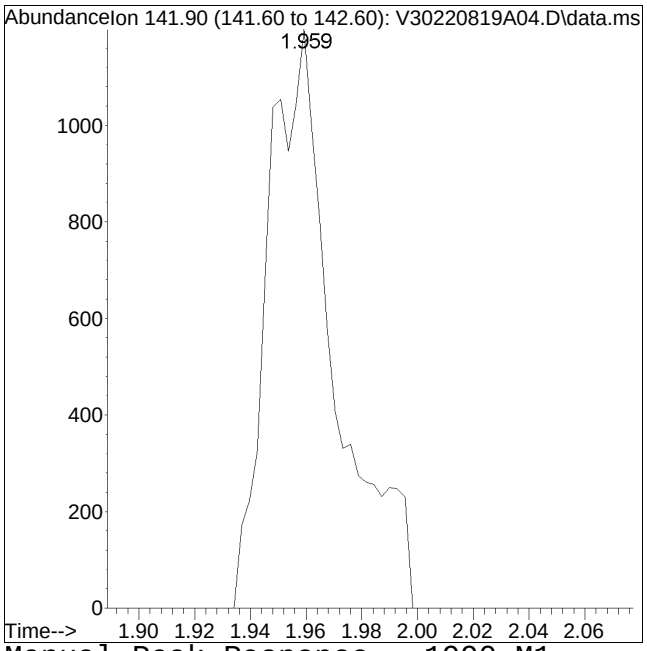
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A04.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 2:35 pm Instrument : VOA130
Sample : I8260STD0.5PPB Quant Date : 8/22/2022 1:22 pm

Compound #13: Iodomethane



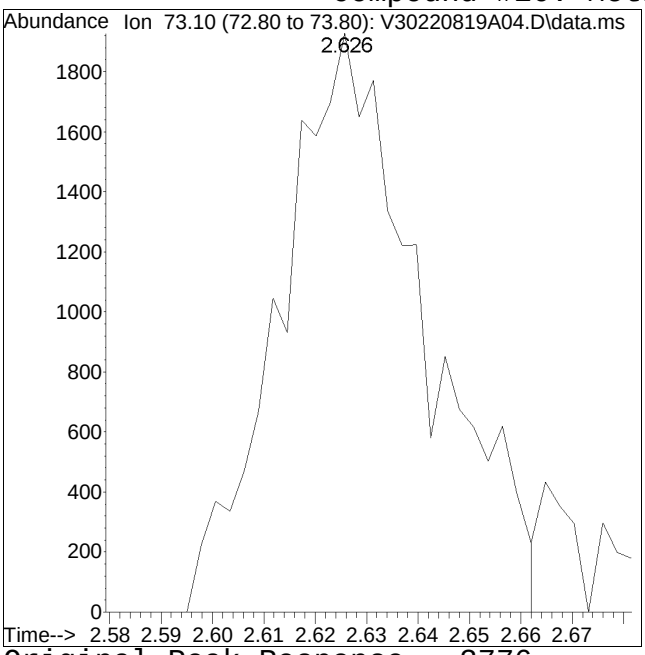


Original Peak Response = 744 Manual Peak Response = 1990 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

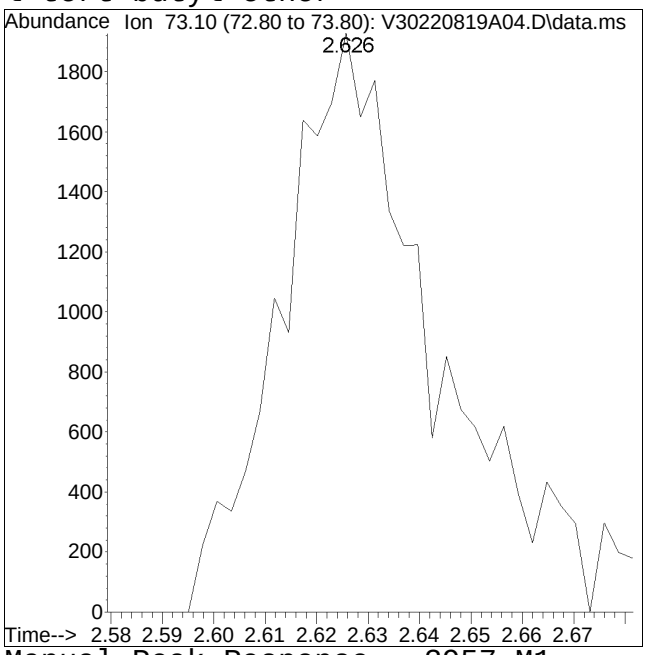
Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A04.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 2:35 pm Instrument : VOA130
Sample : I8260STD0.5PPB Quant Date : 8/22/2022 1:22 pm

Compound #20: Methyl tert-butyl ether



Original Peak Response = 3776



Manual Peak Response = 3957 M1

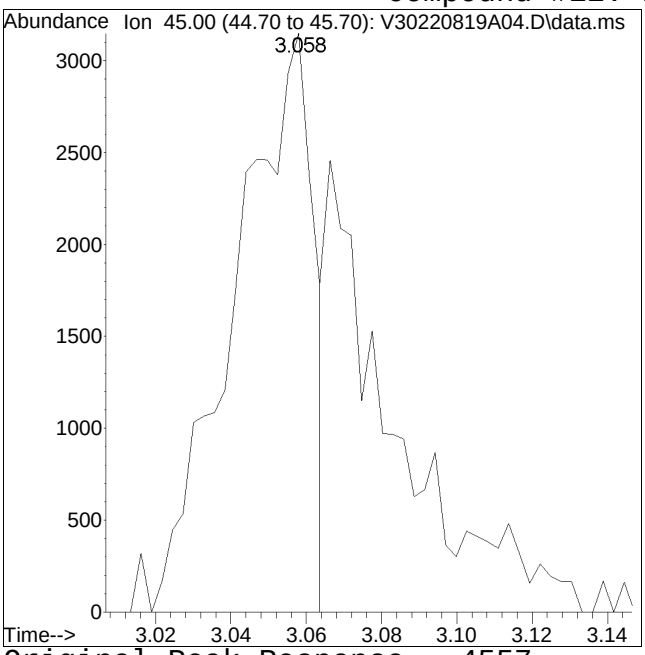
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

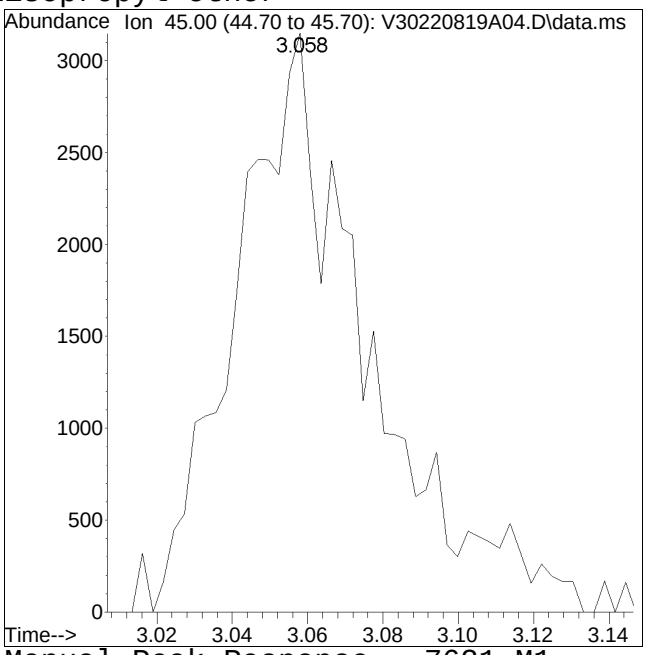
Data Path : I:\VOLATILES\VOA130\2022\2Q
Data File : V30220819A04.D
Date Inj'd : 8/19/2022 2:35 pm
Sample : I8260STD0.5PPB

Method : VOA130_220819A_8260.m
Operator : VOA130:MKS
Instrument : VOA130
Quant Date : 8/22/2022 1:22 pm

Compound #22: Diisopropyl ether



Original Peak Response = 4557



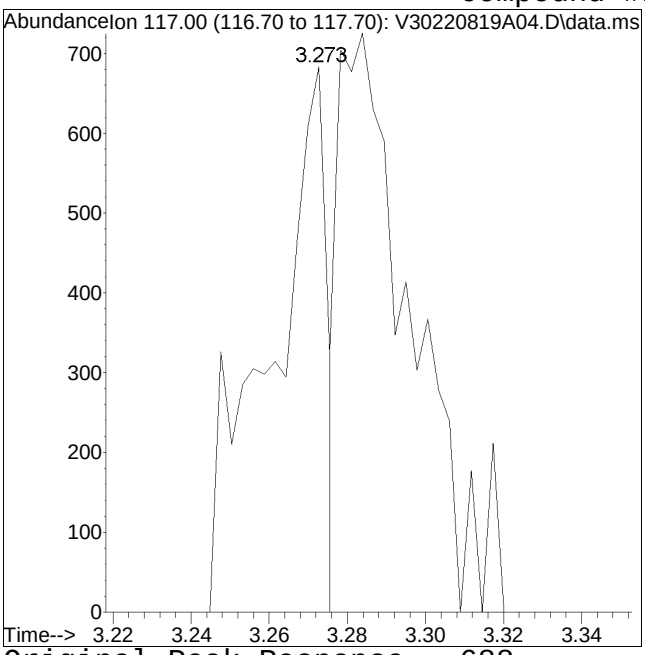
Manual Peak Response = 7621 M1

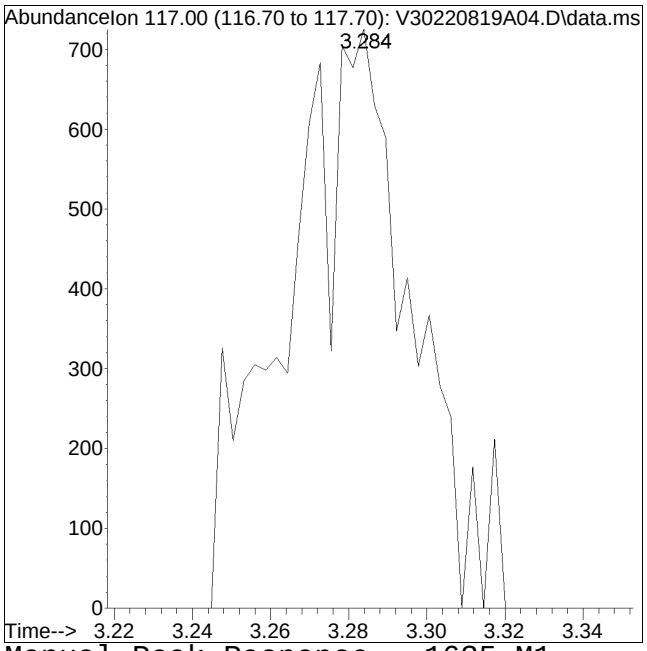
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A04.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 2:35 pm Instrument : VOA130
Sample : I8260STD0.5PPB Quant Date : 8/22/2022 1:22 pm

Compound #24: Halothane





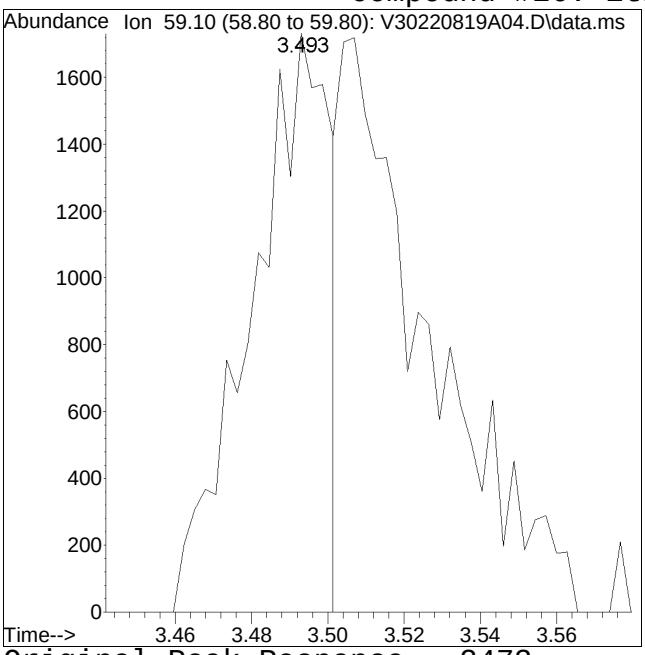
Original Peak Response = 688 Manual Peak Response = 1635 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

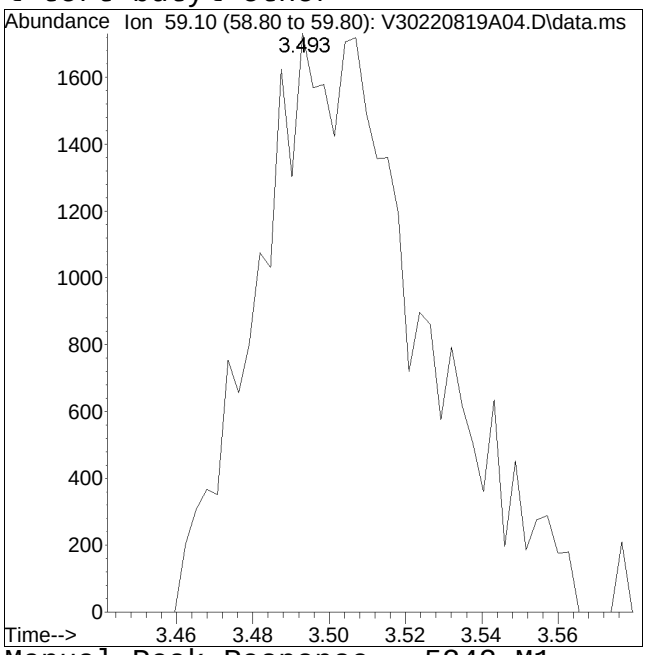
Data Path : I:\VOLATILES\VOA130\2022\2Q
Data File : V30220819A04.D
Date Inj'd : 8/19/2022 2:35 pm
Sample : I8260STD0.5PPB

Method : VOA130_220819A_8260.m
Operator : VOA130:MKS
Instrument : VOA130
Quant Date : 8/22/2022 1:22 pm

Compound #26: Ethyl tert-butyl ether



Original Peak Response = 2473



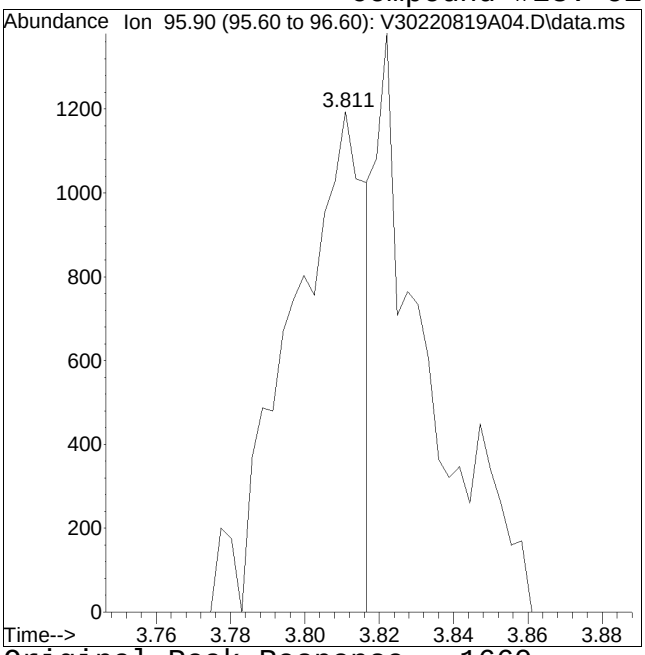
Manual Peak Response = 5242 M1

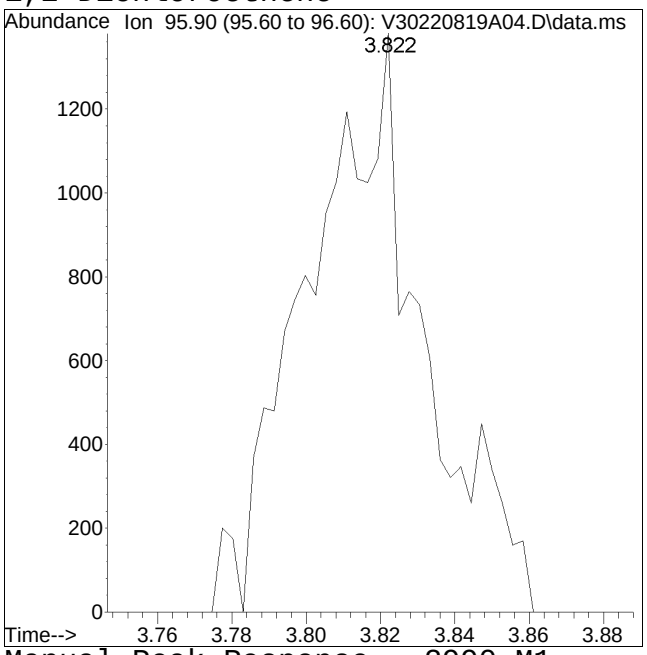
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A04.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 2:35 pm Instrument : VOA130
Sample : I8260STD0.5PPB Quant Date : 8/22/2022 1:22 pm

Compound #28: cis-1,2-Dichloroethene



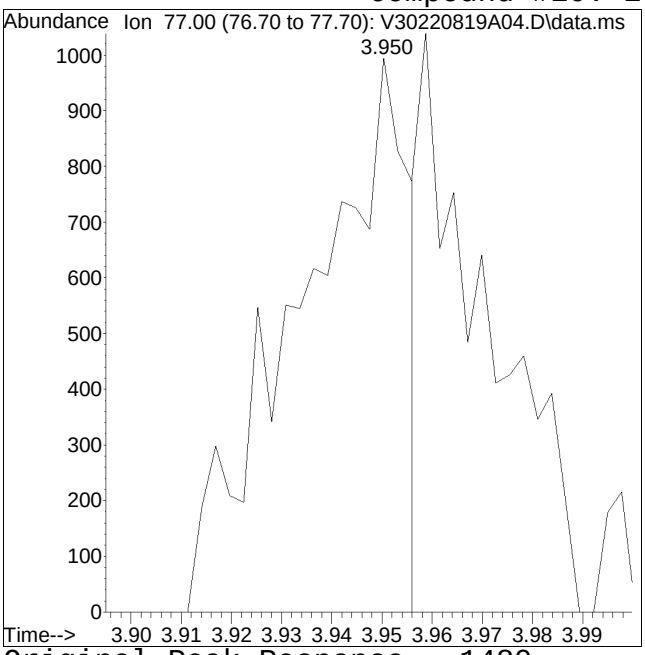


Original Peak Response = 1660 Manual Peak Response = 2990 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

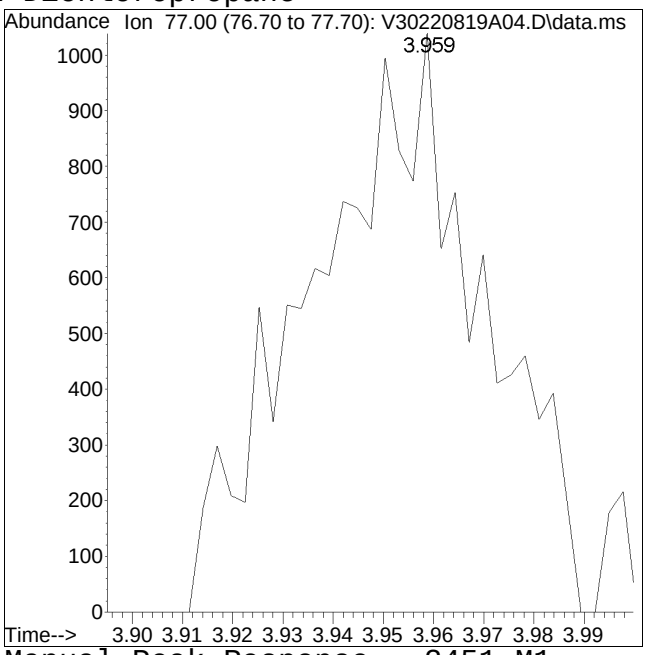
Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A04.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 2:35 pm Instrument : VOA130
Sample : I8260STD0.5PPB Quant Date : 8/22/2022 1:22 pm

Compound #29: 2,2-Dichloropropane



Original Peak Response = 1480



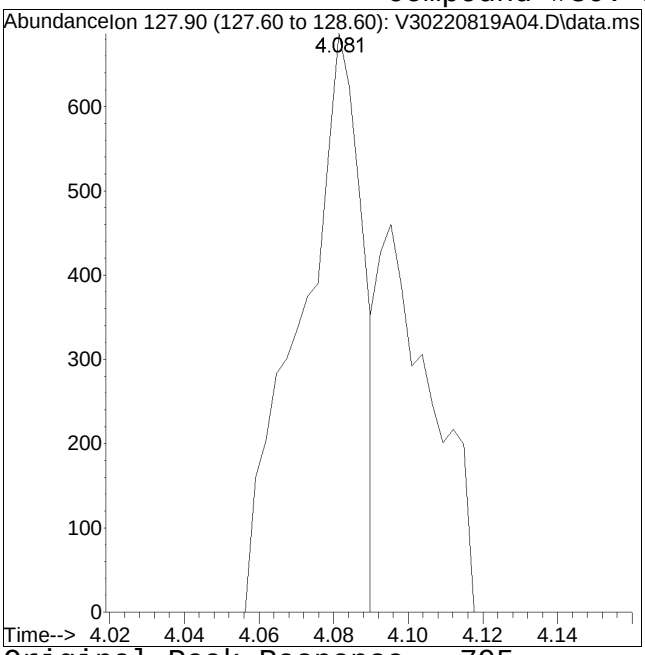
Manual Peak Response = 2451 M1

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

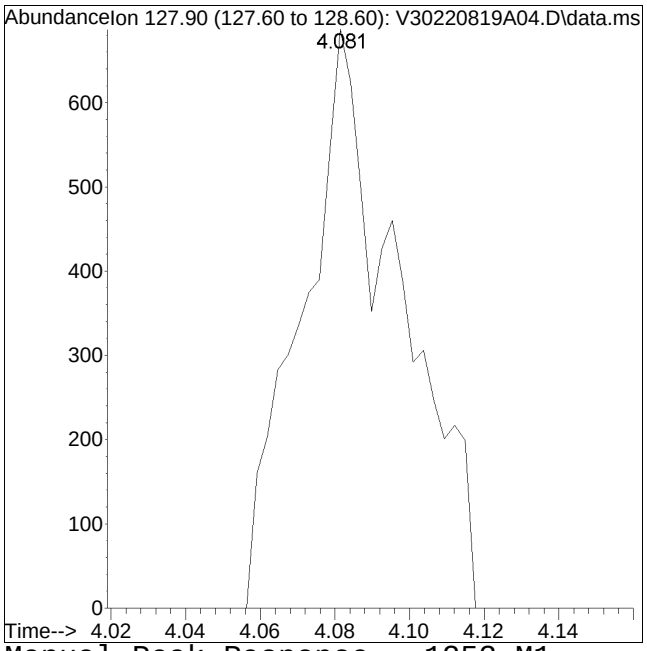
Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A04.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 2:35 pm Instrument : VOA130
Sample : I8260STD0.5PPB Quant Date : 8/22/2022 1:22 pm

Compound #30: Bromochloromethane



Original Peak Response = 795



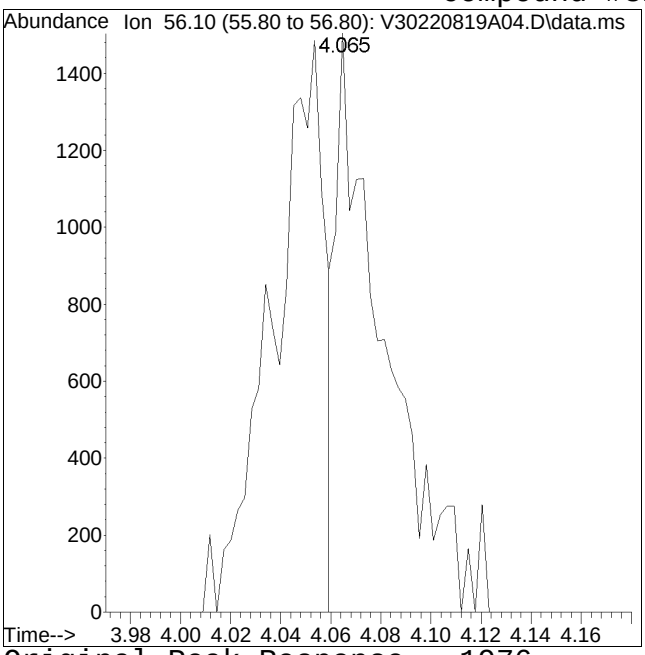
Manual Peak Response = 1253 M1

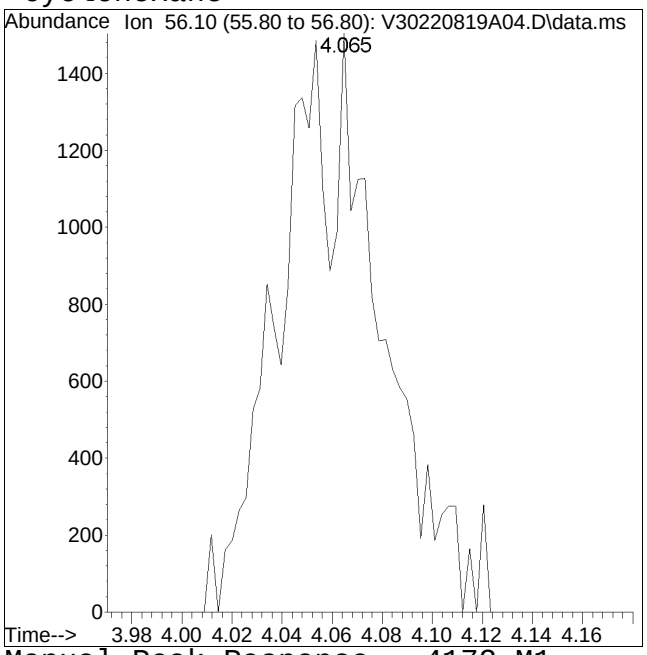
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A04.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 2:35 pm Instrument : VOA130
Sample : I8260STD0.5PPB Quant Date : 8/22/2022 1:22 pm

Compound #31: Cyclohexane



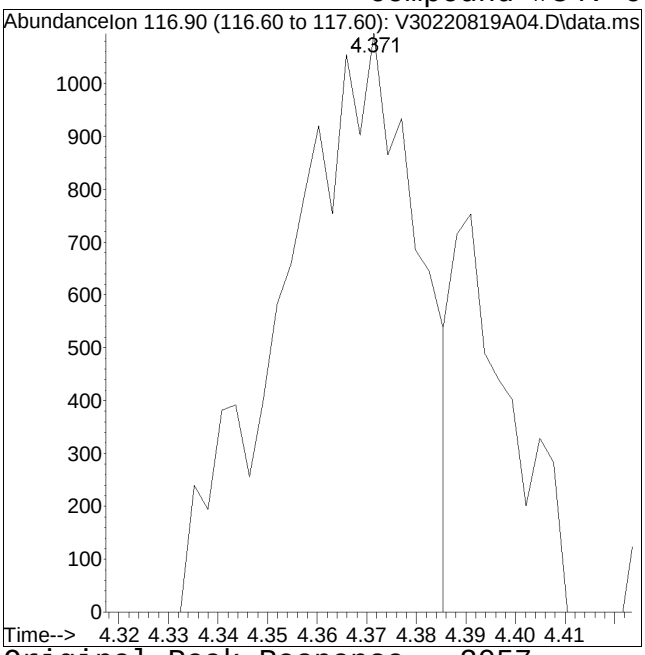


Original Peak Response = 1976 Manual Peak Response = 4172 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

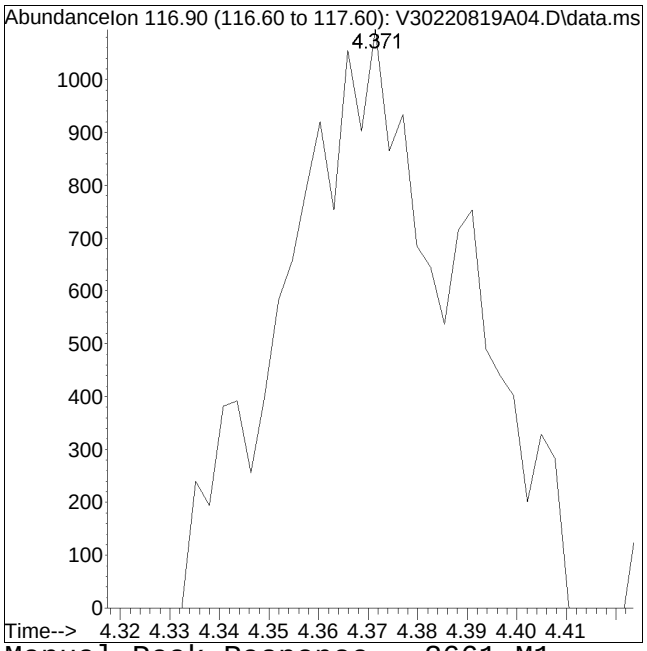
Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A04.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 2:35 pm Instrument : VOA130
Sample : I8260STD0.5PPB Quant Date : 8/22/2022 1:22 pm

Compound #34: Carbon tetrachloride



Original Peak Response = 2057



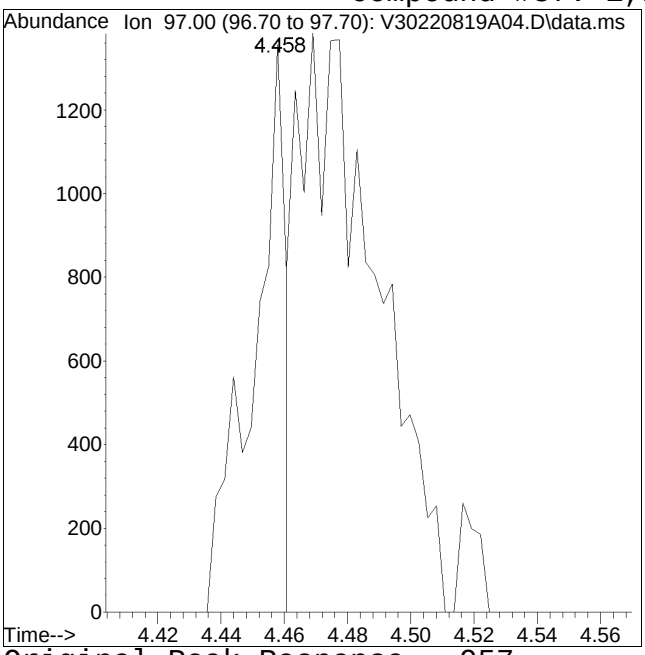
Manual Peak Response = 2661 M1

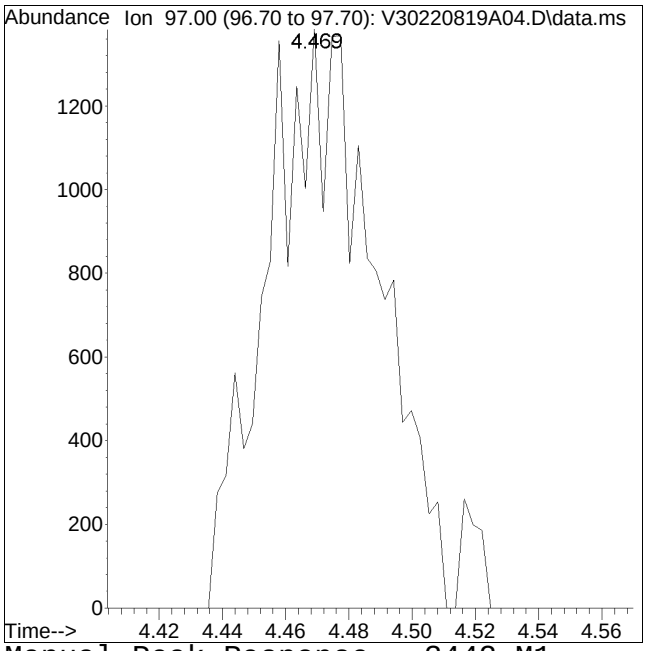
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A04.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 2:35 pm Instrument : VOA130
Sample : I8260STD0.5PPB Quant Date : 8/22/2022 1:22 pm

Compound #37: 1,1,1-Trichloroethane



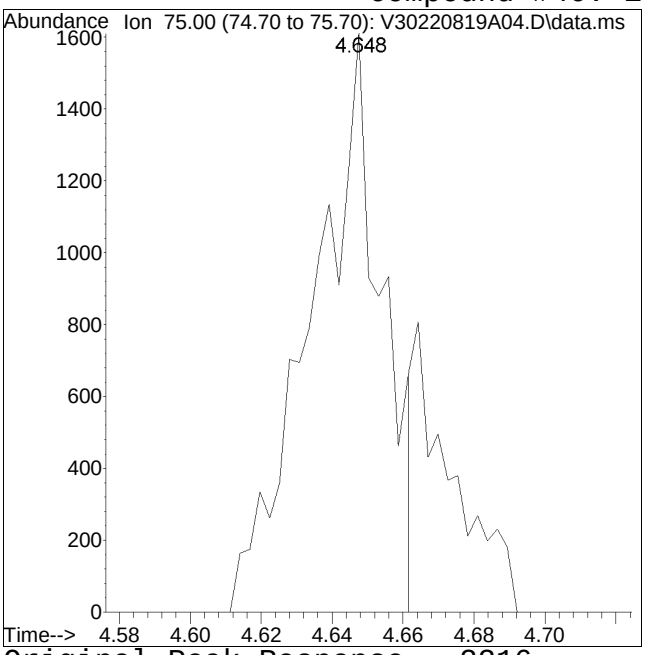


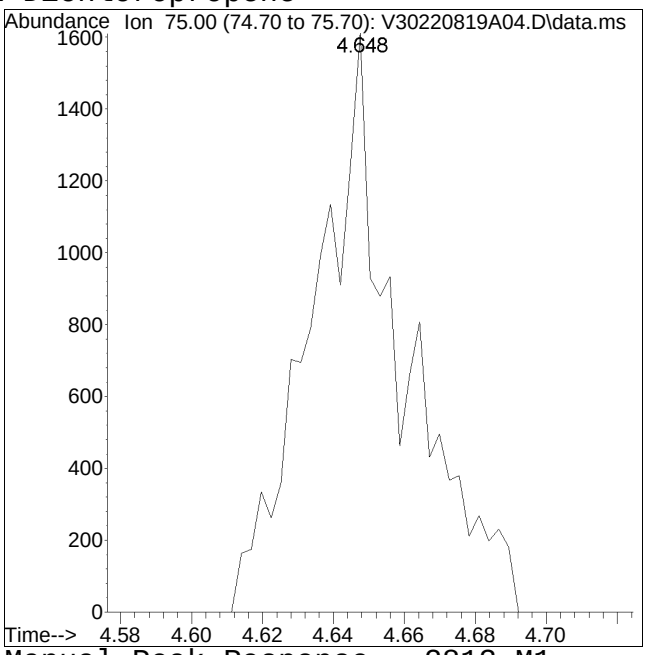
Original Peak Response = 957 Manual Peak Response = 3442 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A04.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 2:35 pm Instrument : VOA130
Sample : I8260STD0.5PPB Quant Date : 8/22/2022 1:22 pm

Compound #40: 1,1-Dichloropropene



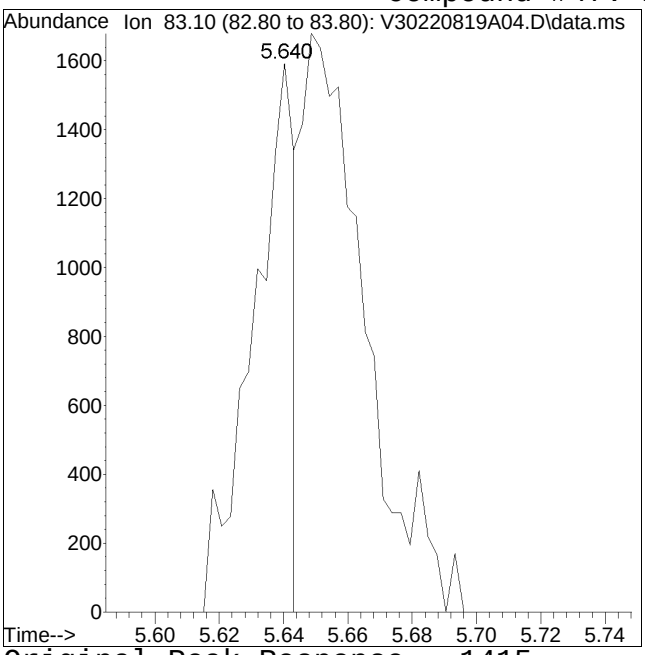


Original Peak Response = 2216 Manual Peak Response = 2813 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

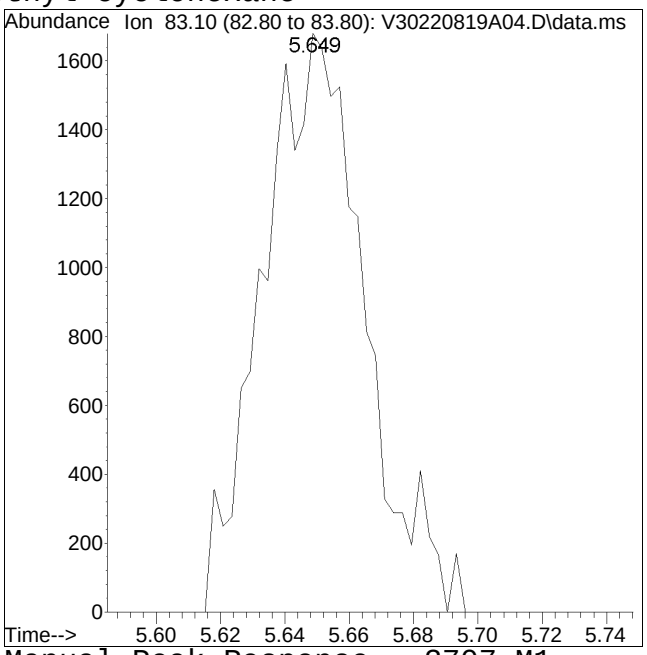
Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A04.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 2:35 pm Instrument : VOA130
Sample : I8260STD0.5PPB Quant Date : 8/22/2022 1:22 pm

Compound #47: Methyl cyclohexane



Original Peak Response = 1415



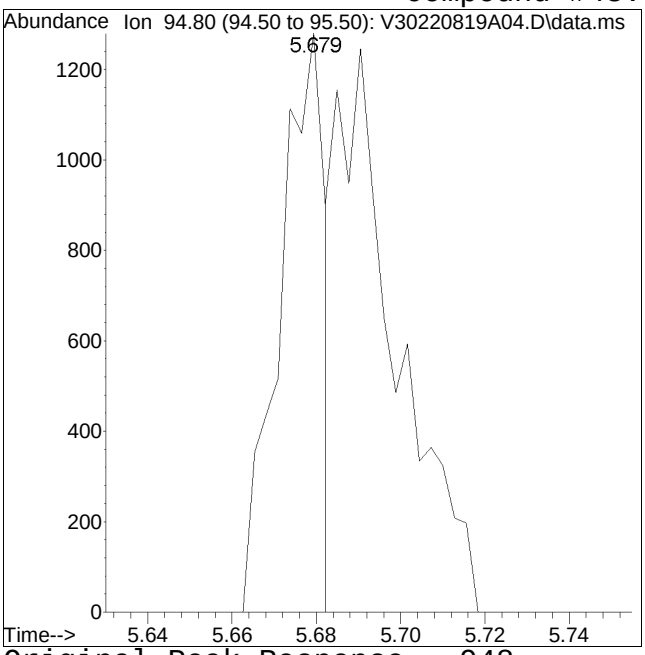
Manual Peak Response = 3707 M1

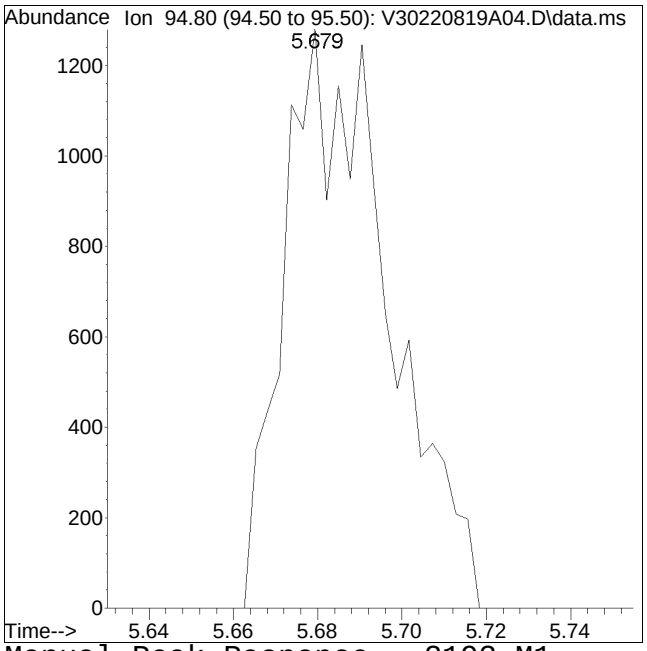
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A04.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 2:35 pm Instrument : VOA130
Sample : I8260STD0.5PPB Quant Date : 8/22/2022 1:22 pm

Compound #48: Trichloroethene



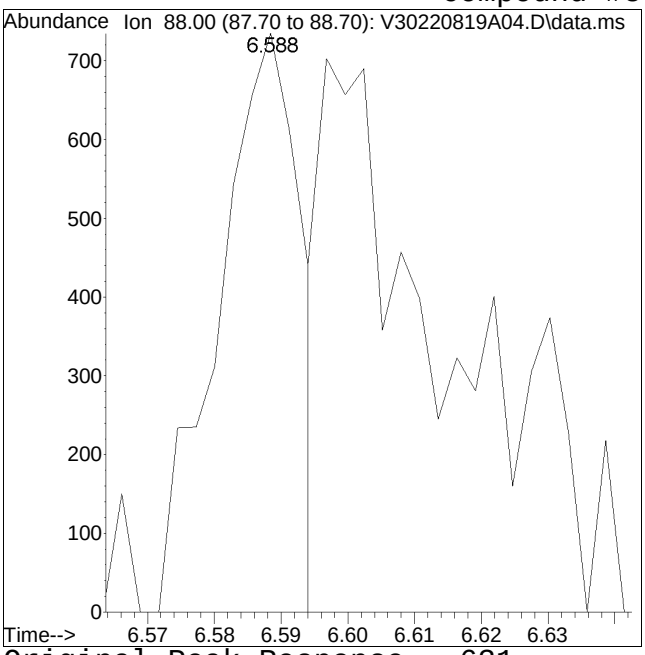


Original Peak Response = 948 Manual Peak Response = 2193 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

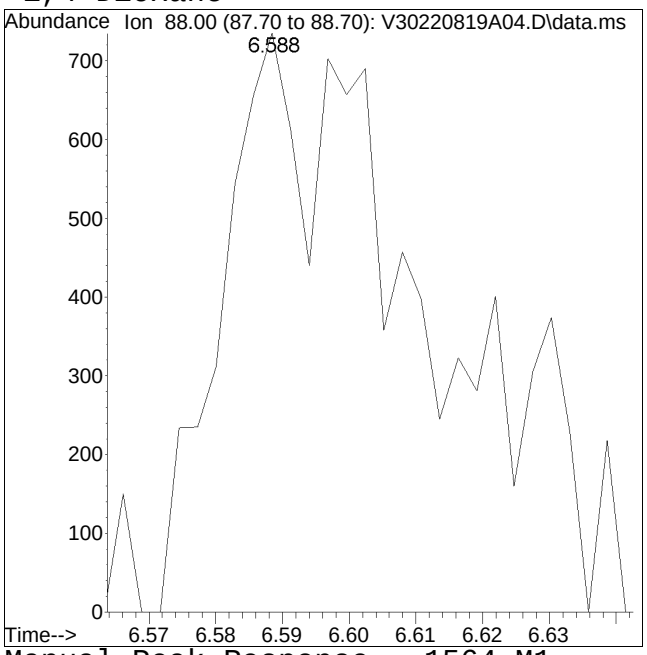
Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A04.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 2:35 pm Instrument : VOA130
Sample : I8260STD0.5PPB Quant Date : 8/22/2022 1:22 pm

Compound #57: 1,4-Dioxane



Original Peak Response = 631



Manual Peak Response = 1564 M1

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A06.D
Acq On : 19 Aug 2022 03:15 pm
Operator : VOA130:MKS
Sample : I8260STD2PPB
Misc : WG1678209
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 22 13:31:23 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:22:28 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\220819AICAL\V30220819A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	5.489	96	257743	10.000 ug/L	0.00
Standard Area 1 = 267936			Recovery = 96.20%		
59) Chlorobenzene-d5	8.501	117	194557	10.000 ug/L	0.00
Standard Area 1 = 196265			Recovery = 99.13%		
79) 1,4-Dichlorobenzene-d4	9.990	152	99085	10.000 ug/L	0.00
Standard Area 1 = 101565			Recovery = 97.56%		
System Monitoring Compounds					
36) Dibromofluoromethane	4.488	113	69850	10.352 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.52%		
43) 1,2-Dichloroethane-d4	5.138	65	73897	9.933 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.33%		
60) Toluene-d8	7.199	98	250244	9.807 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.07%		
83) 4-Bromofluorobenzene	9.321	95	95007	10.072 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.72%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.935	85	11718M1	2.006 ug/L	
3) Chloromethane	1.072	50	12799	1.972 ug/L	99
4) Vinyl chloride	1.108	62	13277	2.022 ug/L	93
5) Bromomethane	1.315	94	9412	2.185 ug/L	97
6) Chloroethane	1.401	64	7593	1.903 ug/L	98
7) Trichlorofluoromethane	1.493	101	19026	1.893 ug/L	97
8) Ethyl ether	1.730	74	4230M1	1.872 ug/L	
10) 1,1-Dichloroethene	1.858	96	10508M1	1.969 ug/L	
11) Carbon disulfide	1.861	76	26025	2.006 ug/L	97
12) Freon-113	1.897	101	11324	1.857 ug/L	100
13) Iodomethane	1.956	142	9515	1.739 ug/L	91
14) Acrolein	2.135	56	969	1.816 ug/L #	51
15) Methylene chloride	2.344	84	12237M1	2.188 ug/L	
17) Acetone	2.405	43	2317	2.819 ug/L #	69
18) trans-1,2-Dichloroethene	2.486	96	11569	2.022 ug/L	81
19) Methyl acetate	2.531	43	4294	1.939 ug/L #	95
20) Methyl tert-butyl ether	2.625	73	19159M1	1.881 ug/L	
21) tert-Butyl alcohol	2.781	59	1171M1	8.202 ug/L	
22) Diisopropyl ether	3.055	45	33817M1	1.913 ug/L	
23) 1,1-Dichloroethane	3.124	63	22621	2.015 ug/L	96
24) Halothane	3.278	117	8259	1.890 ug/L #	51

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A06.D
Acq On : 19 Aug 2022 03:15 pm
Operator : VOA130:MKS
Sample : I8260STD2PPB
Misc : WG1678209
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 22 13:31:23 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:22:28 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\220819AICAL\V30220819A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) Acrylonitrile	3.186	53	2183M1	1.975	ug/L		
26) Ethyl tert-butyl ether	3.498	59	25045M1	1.855	ug/L		
27) Vinyl acetate	3.501	43	14698	1.761	ug/L	#	87
28) cis-1,2-Dichloroethene	3.816	96	12990M1	2.074	ug/L		
29) 2,2-Dichloropropane	3.953	77	12696M1	1.872	ug/L		
30) Bromochloromethane	4.081	128	5657	2.100	ug/L	#	69
31) Cyclohexane	4.050	56	21065M1	1.840	ug/L		
32) Chloroform	4.251	83	21795	1.987	ug/L	#	96
33) Ethyl acetate	4.505	43	5413	1.929	ug/L	#	88
34) Carbon tetrachloride	4.365	117	14495	1.798	ug/L		98
35) Tetrahydrofuran	4.449	42	1777M1	2.109	ug/L		
37) 1,1,1-Trichloroethane	4.466	97	15968	1.689	ug/L	#	78
39) 2-Butanone	4.697	43	2650M1	2.200	ug/L		
40) 1,1-Dichloropropene	4.650	75	14209	1.771	ug/L		98
41) Benzene	4.962	78	44303	1.919	ug/L	#	90
42) tert-Amyl methyl ether	5.199	73	19386	1.813	ug/L		90
44) 1,2-Dichloroethane	5.222	62	15573	2.027	ug/L		99
47) Methyl cyclohexane	5.651	83	19189	1.821	ug/L	#	76
48) Trichloroethene	5.679	95	11435	1.829	ug/L		98
50) Dibromomethane	6.131	93	6205	2.035	ug/L		97
51) 1,2-Dichloropropane	6.245	63	11406	1.920	ug/L		98
53) 2-Chloroethyl vinyl ether	7.006	63	4892	1.784	ug/L	#	93
54) Bromodichloromethane	6.357	83	15425	1.972	ug/L		98
57) 1,4-Dioxane	6.591	88	7819M1	375.993	ug/L		
58) cis-1,3-Dichloropropene	7.017	75	13557	1.716	ug/L		98
61) Toluene	7.246	92	28597	1.915	ug/L		96
62) 4-Methyl-2-pentanone	7.662	58	2168	1.794	ug/L	#	87
63) Tetrachloroethene	7.600	166	12017	1.857	ug/L		91
65) trans-1,3-Dichloropropene	7.676	75	9278	1.531	ug/L		94
67) Ethyl methacrylate	7.868	69	7702	1.765	ug/L		98
68) 1,1,2-Trichloroethane	7.801	83	6423	1.859	ug/L		96
69) Chlorodibromomethane	7.941	129	8866	1.784	ug/L		98
70) 1,3-Dichloropropane	8.019	76	13583	1.844	ug/L		99
71) 1,2-Dibromoethane	8.097	107	6913	1.759	ug/L		95
72) 2-Hexanone	8.342	43	3995	1.987	ug/L		89
73) Chlorobenzene	8.512	112	32186	1.987	ug/L		97
74) Ethylbenzene	8.554	91	55673	1.886	ug/L		99
75) 1,1,1,2-Tetrachloroethane	8.574	131	8695	1.684	ug/L		97
76) p/m Xylene	8.663	106	41856	3.753	ug/L		98
77) o Xylene	8.944	106	40172	3.747	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A06.D
Acq On : 19 Aug 2022 03:15 pm
Operator : VOA130:MKS
Sample : I8260STD2PPB
Misc : WG1678209
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 22 13:31:23 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:22:28 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\220819AICAL\V30220819A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
78) Styrene	8.983	104	67433	3.840	ug/L		92
80) Bromoform	8.983	173	4827	1.782	ug/L		96
82) Isopropylbenzene	9.156	105	54799	1.900	ug/L		98
84) Bromobenzene	9.374	156	13605	2.076	ug/L		99
85) n-Propylbenzene	9.416	91	66141	1.883	ug/L		98
86) 1,4-Dichlorobutane	9.419	55	13706	1.918	ug/L		98
87) 1,1,2,2-Tetrachloroethane	9.466	83	8921	1.937	ug/L		100
88) 4-Ethyltoluene	9.485	105	52852	1.896	ug/L		98
89) 2-Chlorotoluene	9.497	91	45668	1.921	ug/L		97
90) 1,3,5-Trimethylbenzene	9.538	105	45496	1.894	ug/L		94
91) 1,2,3-Trichloropropane	9.533	75	7158	1.944	ug/L		97
92) trans-1,4-Dichloro-2-b...	9.569	53	2448	1.982	ug/L	#	78
93) 4-Chlorotoluene	9.600	91	40873	1.967	ug/L		98
94) tert-Butylbenzene	9.725	119	40287	1.918	ug/L		96
97) 1,2,4-Trimethylbenzene	9.767	105	44064	1.883	ug/L		92
98) sec-Butylbenzene	9.828	105	60728	1.885	ug/L		100
99) p-Isopropyltoluene	9.918	119	49694	1.827	ug/L		98
100) 1,3-Dichlorobenzene	9.943	146	25414	1.934	ug/L		98
101) 1,4-Dichlorobenzene	9.999	146	26040	2.012	ug/L		97
102) p-Diethylbenzene	10.127	119	30429	1.919	ug/L		92
103) n-Butylbenzene	10.160	91	46624	1.839	ug/L		99
104) 1,2-Dichlorobenzene	10.238	146	23708	1.995	ug/L		99
105) 1,2,4,5-Tetramethylben...	10.584	119	44580	1.890	ug/L		96
106) 1,2-Dibromo-3-chloropr...	10.693	155	973	1.644	ug/L	#	67
107) 1,3,5-Trichlorobenzene	10.710	180	20537	1.981	ug/L		92
108) Hexachlorobutadiene	11.056	225	9030	1.929	ug/L		95
109) 1,2,4-Trichlorobenzene	11.069	180	16943	1.941	ug/L		97
110) Naphthalene	11.251	128	29972	1.934	ug/L		100
111) 1,2,3-Trichlorobenzene	11.351	180	14922	1.910	ug/L		98

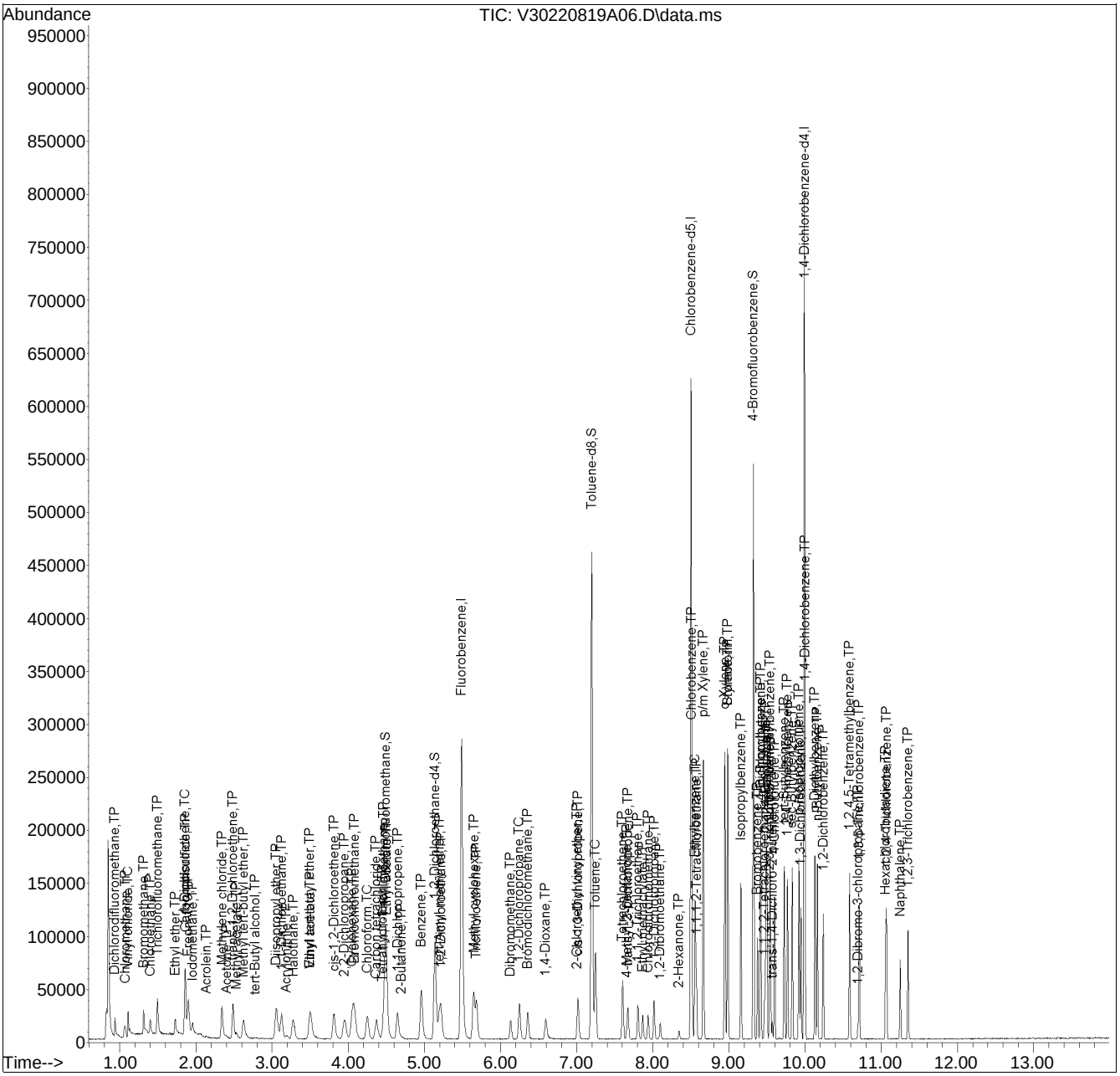
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A06.D
Acq On : 19 Aug 2022 03:15 pm
Operator : VOA130:MKS
Sample : I8260STD2PPB
Misc : WG1678209
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 22 13:31:23 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:22:28 2022
Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus Diox20819AICAL\V30220819A08.D•

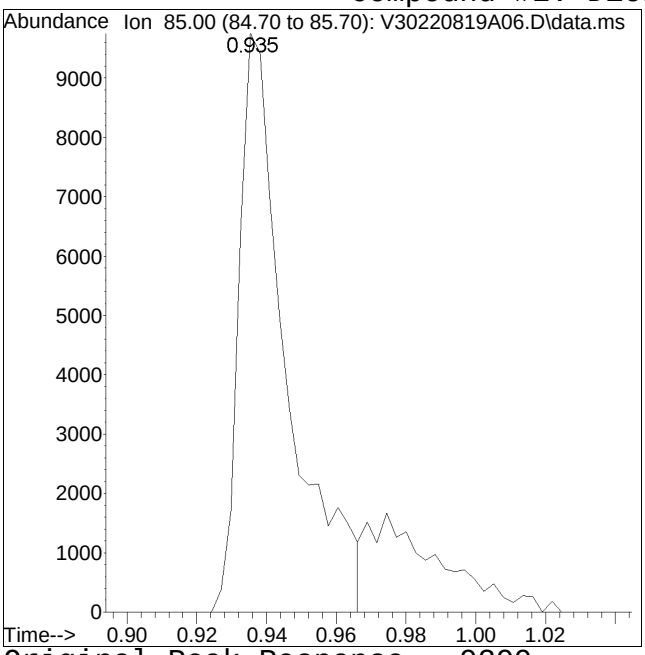


Manual Integration Report

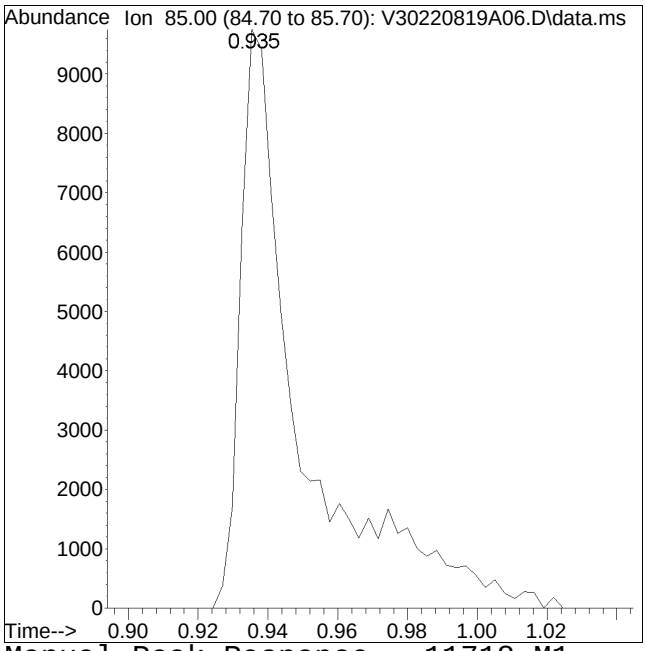
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Data File : V30220819A06.D
Date Inj'd : 8/19/2022 3:15 pm
Sample : I8260STD2PPB

Method : VOA130_220819A_8260.m
Operator : VOA130:MKS
Instrument : VOA130
Quant Date : 8/22/2022 1:23 pm

Compound #2: Dichlorodifluoromethane



Original Peak Response = 9299



Manual Peak Response = 11718 M1

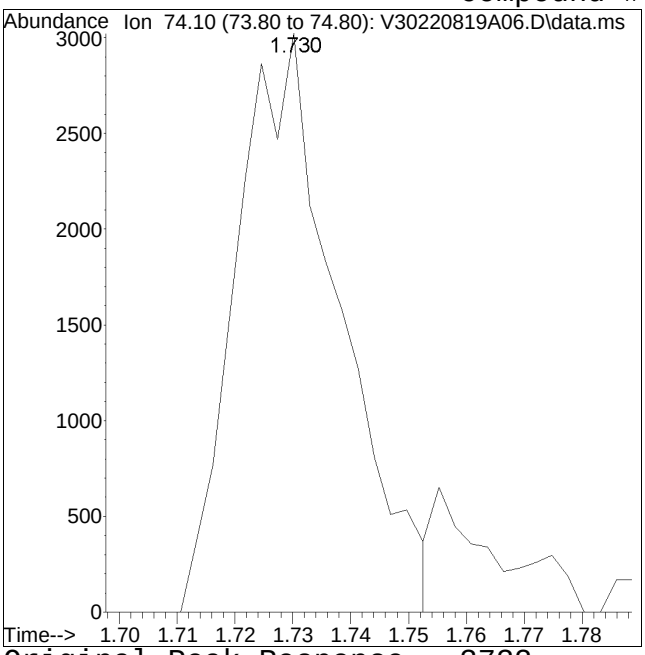
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

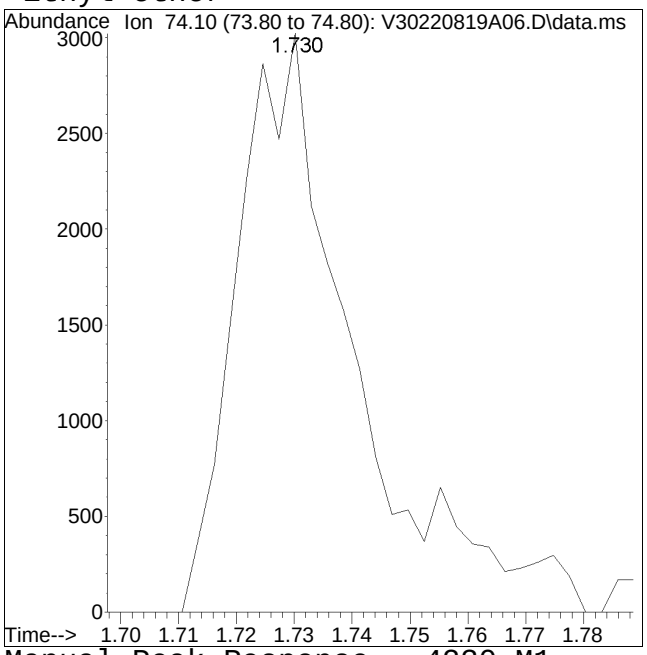
Data Path : I:\VOLATILES\VOA130\2022\2Q
Data File : V30220819A06.D
Date Inj'd : 8/19/2022 3:15 pm
Sample : I8260STD2PPB

Method : VOA130_220819A_8260.m
Operator : VOA130:MKS
Instrument : VOA130
Quant Date : 8/22/2022 1:23 pm

Compound #8: Ethyl ether



Original Peak Response = 3732



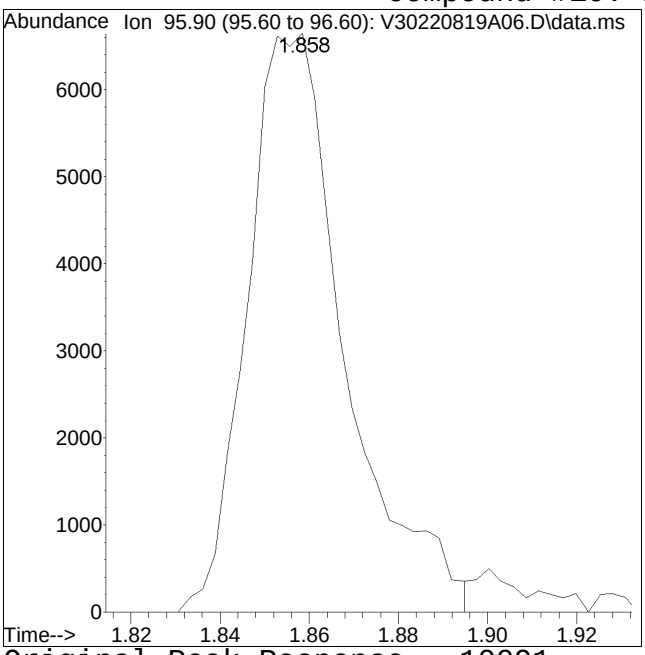
Manual Peak Response = 4230 M1

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

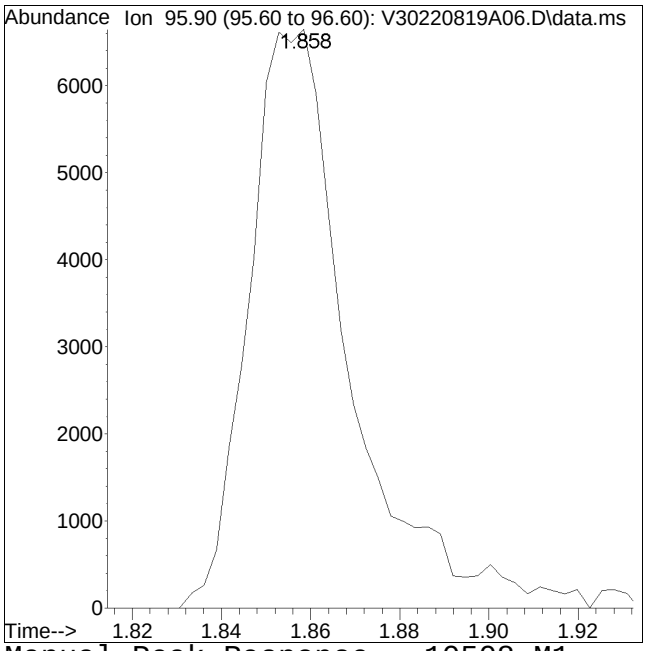
Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A06.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 3:15 pm Instrument : VOA130
Sample : I8260STD2PPB Quant Date : 8/22/2022 1:23 pm

Compound #10: 1,1-Dichloroethene



Original Peak Response = 10091



Manual Peak Response = 10508 M1

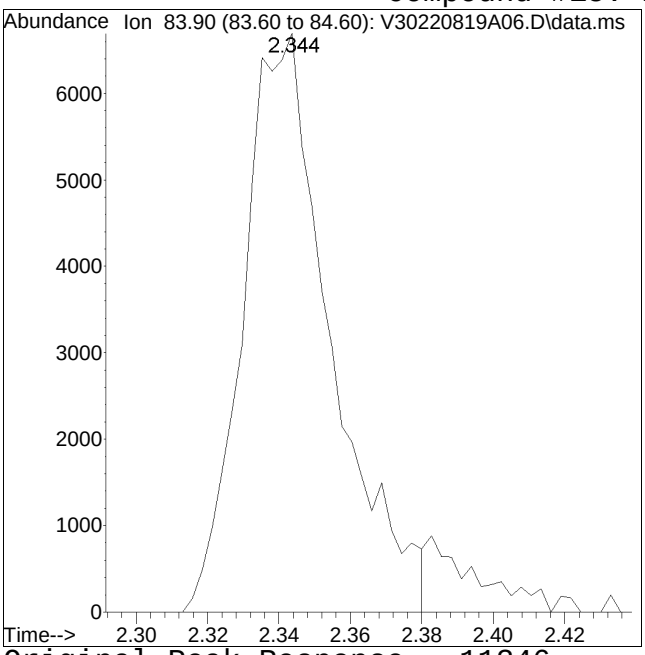
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

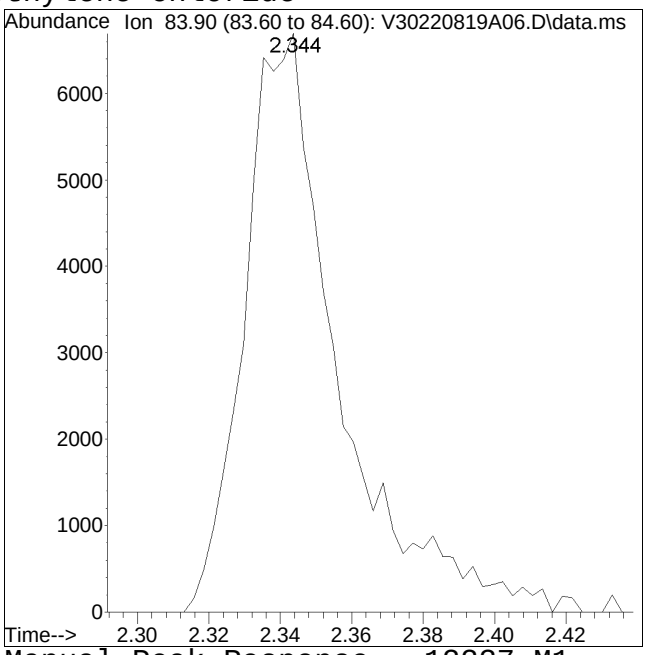
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Data File : V30220819A06.D
Date Inj'd : 8/19/2022 3:15 pm
Sample : I8260STD2PPB

Method : VOA130_220819A_8260.m
Operator : VOA130:MKS
Instrument : VOA130
Quant Date : 8/22/2022 1:23 pm

Compound #15: Methylene chloride



Original Peak Response = 11346



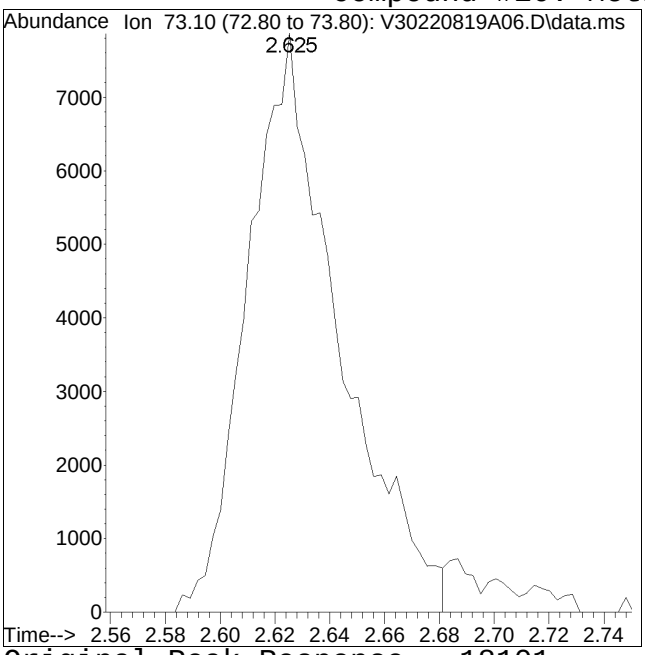
Manual Peak Response = 12237 M1

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

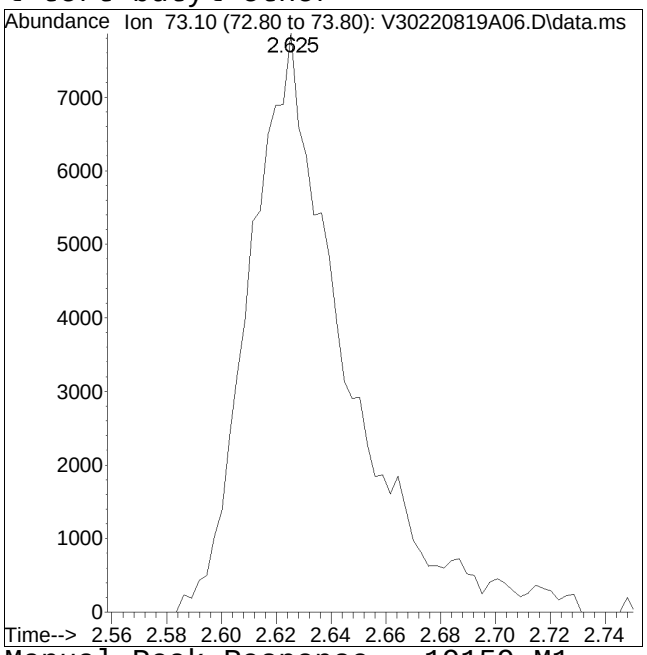
Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A06.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 3:15 pm Instrument : VOA130
Sample : I8260STD2PPB Quant Date : 8/22/2022 1:23 pm

Compound #20: Methyl tert-butyl ether



Original Peak Response = 18101



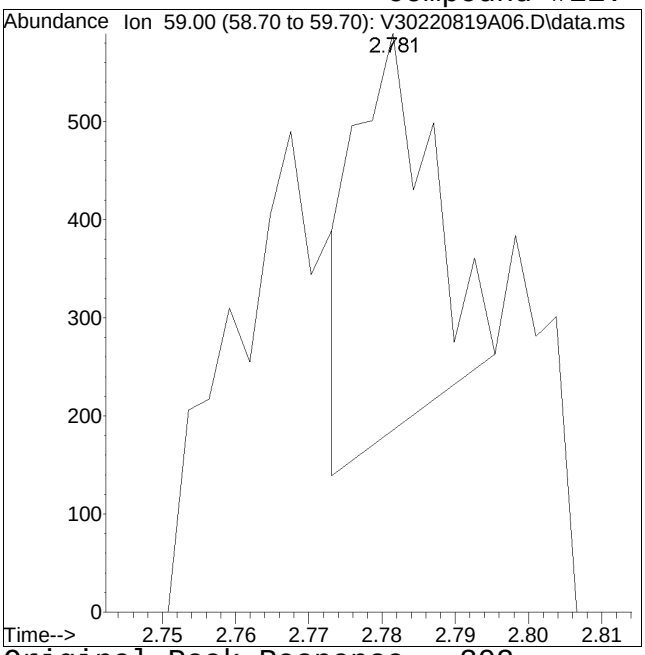
Manual Peak Response = 19159 M1

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

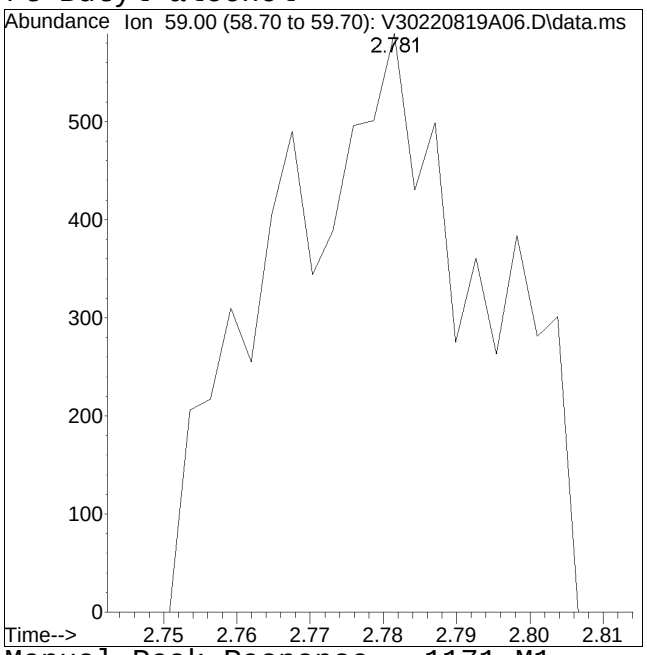
Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A06.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 3:15 pm Instrument : VOA130
Sample : I8260STD2PPB Quant Date : 8/22/2022 1:23 pm

Compound #21: tert-Butyl alcohol



Original Peak Response = 302



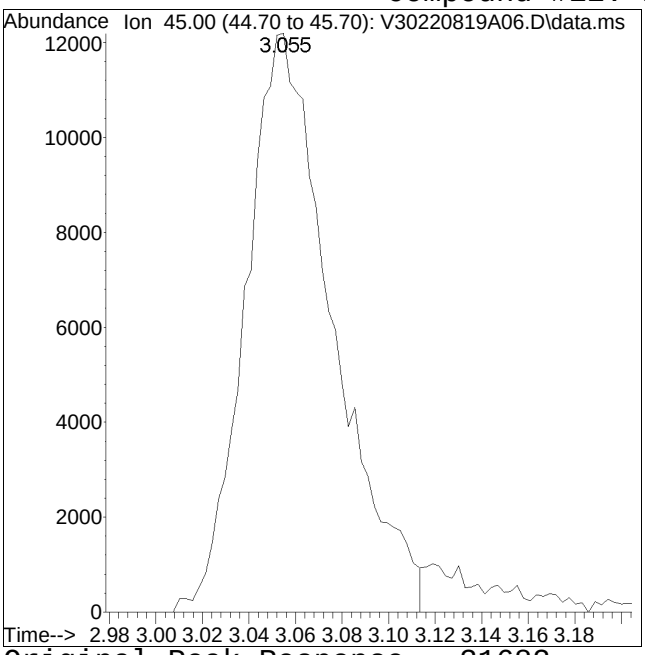
Manual Peak Response = 1171 M1

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

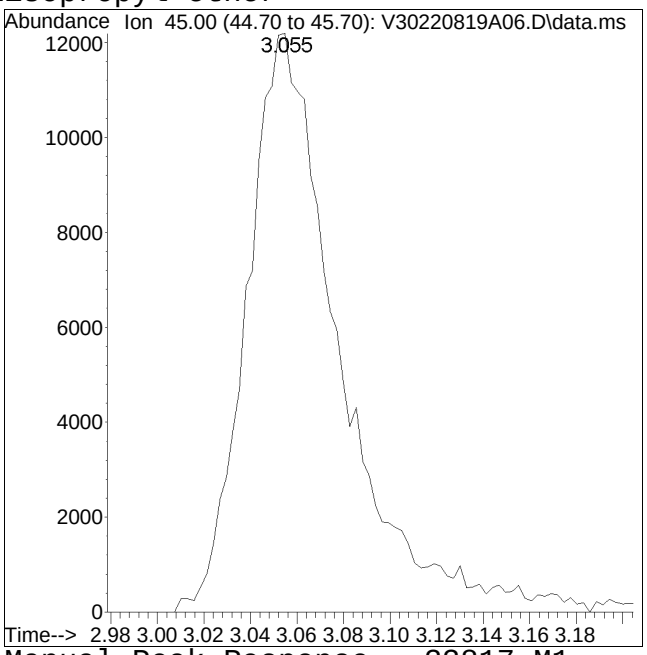
Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A06.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 3:15 pm Instrument : VOA130
Sample : I8260STD2PPB Quant Date : 8/22/2022 1:23 pm

Compound #22: Diisopropyl ether



Original Peak Response = 31682



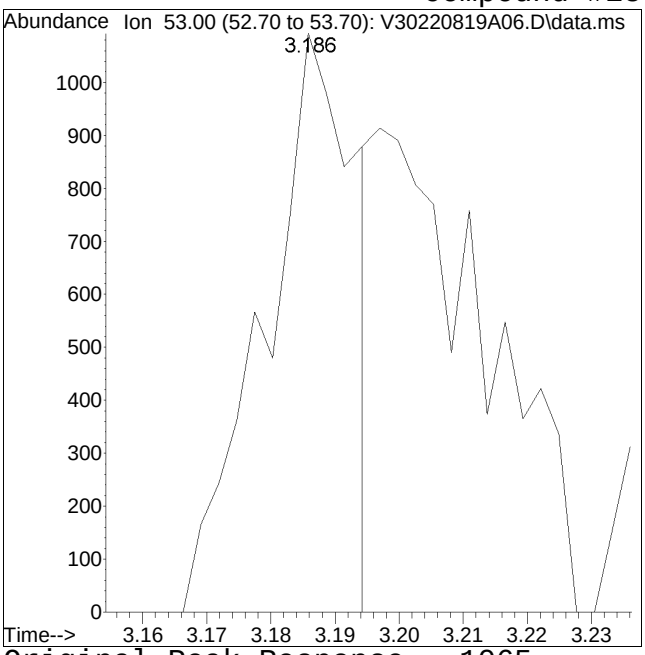
Manual Peak Response = 33817 M1

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

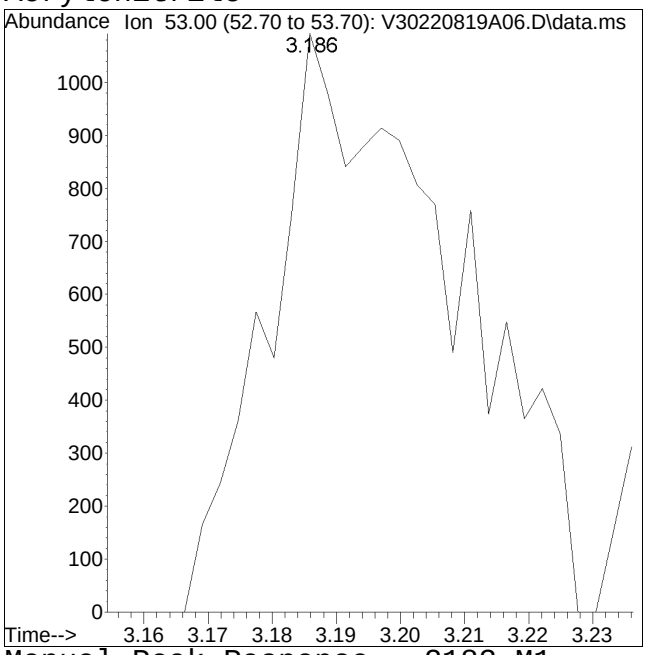
Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A06.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 3:15 pm Instrument : VOA130
Sample : I8260STD2PPB Quant Date : 8/22/2022 1:23 pm

Compound #25: Acrylonitrile



Original Peak Response = 1065



Manual Peak Response = 2183 M1

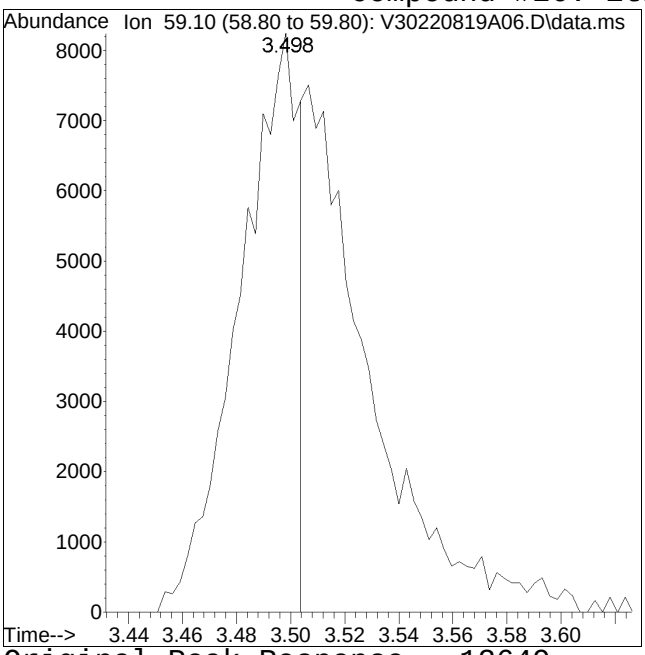
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

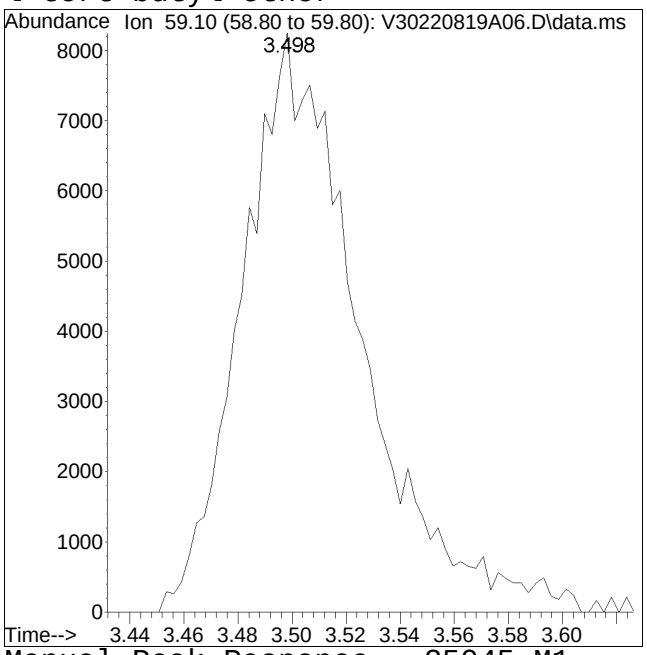
Data Path : I:\VOLATILES\VOA130\2022\2Q
Data File : V30220819A06.D
Date Inj'd : 8/19/2022 3:15 pm
Sample : I8260STD2PPB

Method : VOA130_220819A_8260.m
Operator : VOA130:MKS
Instrument : VOA130
Quant Date : 8/22/2022 1:23 pm

Compound #26: Ethyl tert-butyl ether



Original Peak Response = 12649



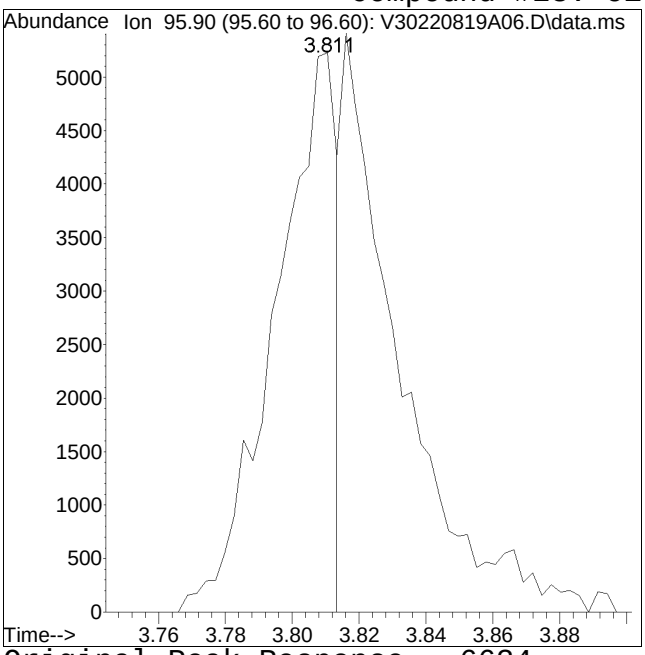
Manual Peak Response = 25045 M1

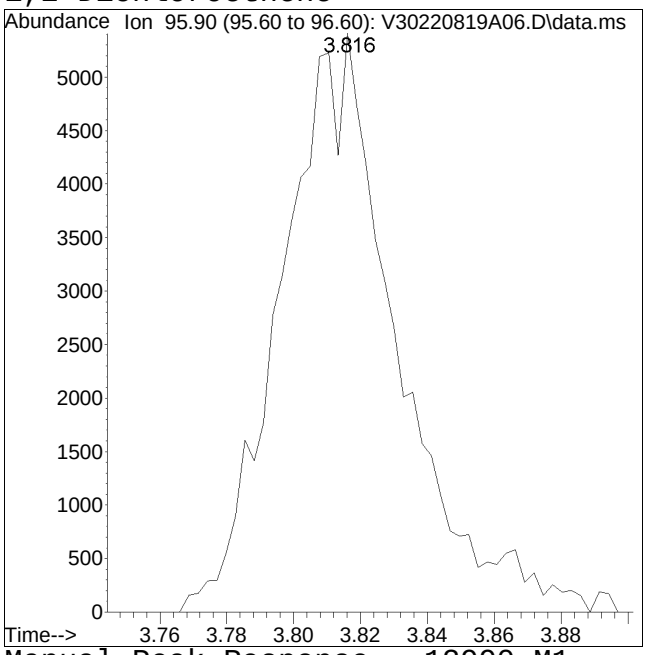
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A06.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 3:15 pm Instrument : VOA130
Sample : I8260STD2PPB Quant Date : 8/22/2022 1:23 pm

Compound #28: cis-1,2-Dichloroethene



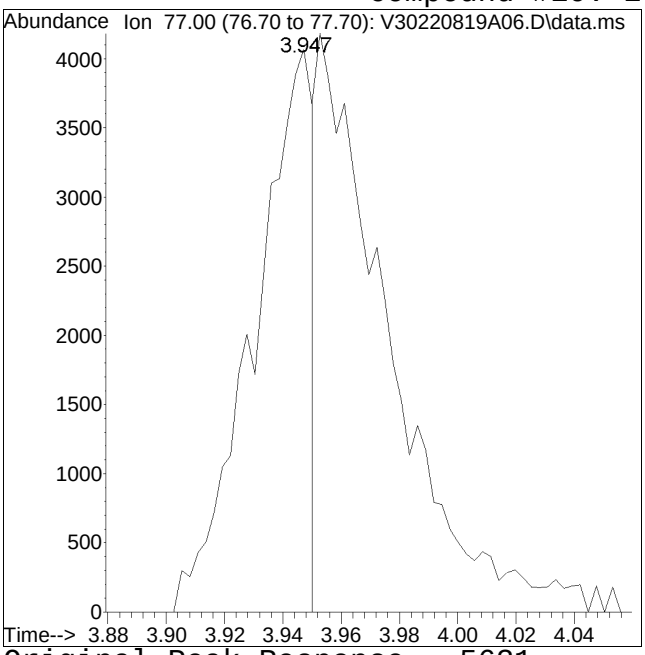


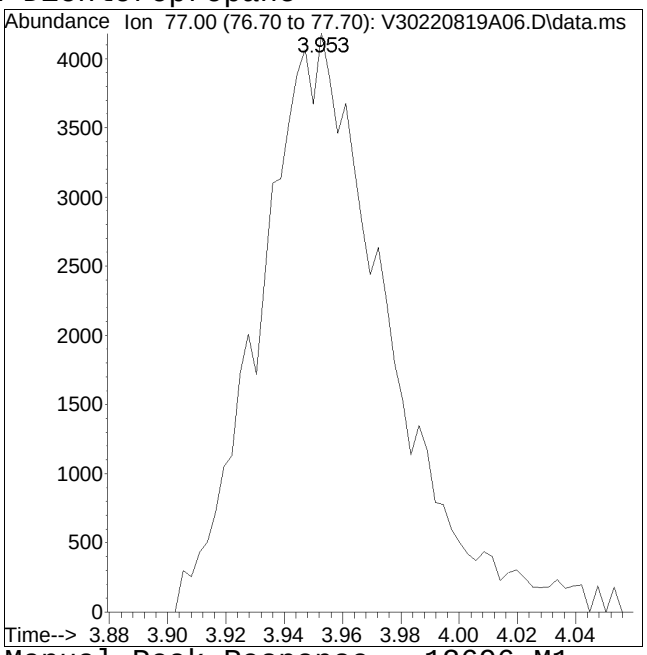
Original Peak Response = 6634 Manual Peak Response = 12990 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A06.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 3:15 pm Instrument : VOA130
Sample : I8260STD2PPB Quant Date : 8/22/2022 1:23 pm

Compound #29: 2,2-Dichloropropane



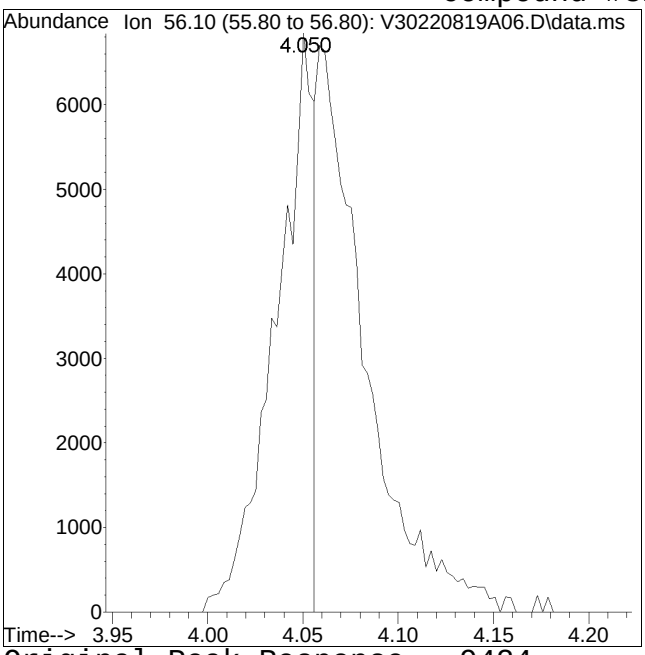


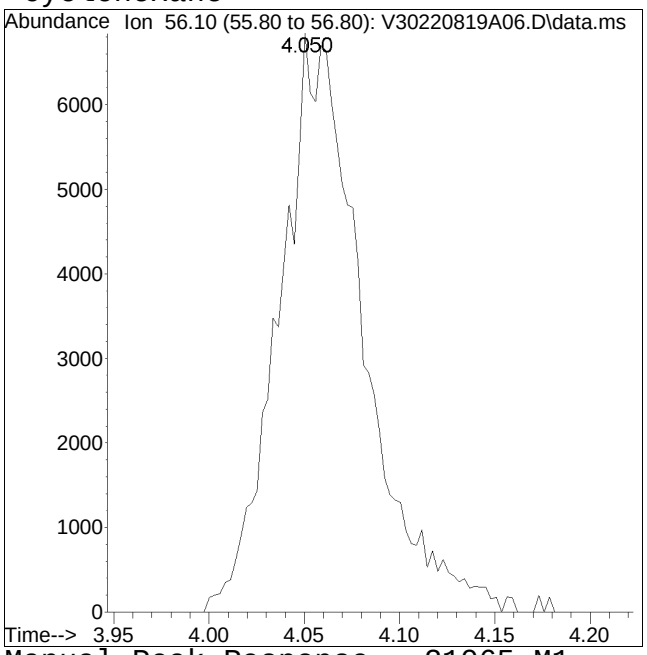
Original Peak Response = 5631 Manual Peak Response = 12696 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A06.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 3:15 pm Instrument : VOA130
Sample : I8260STD2PPB Quant Date : 8/22/2022 1:23 pm

Compound #31: Cyclohexane



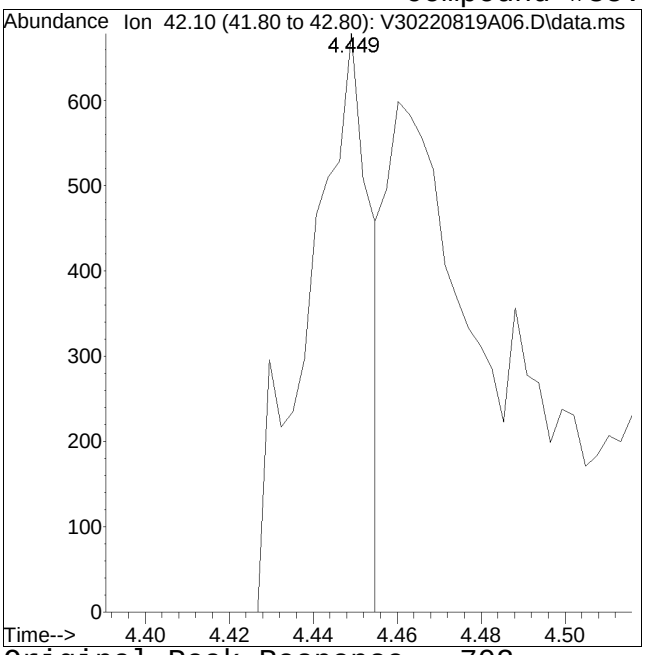


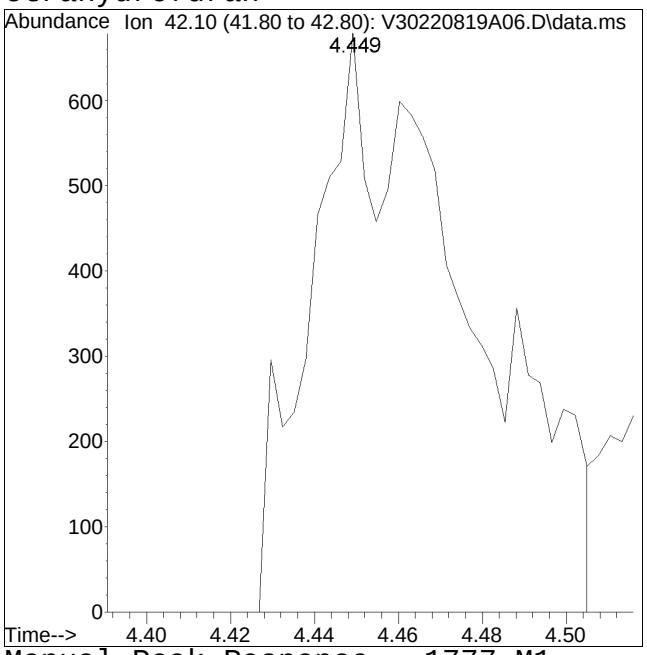
Original Peak Response = 9424 Manual Peak Response = 21065 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A06.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 3:15 pm Instrument : VOA130
Sample : I8260STD2PPB Quant Date : 8/22/2022 1:23 pm

Compound #35: Tetrahydrofuran





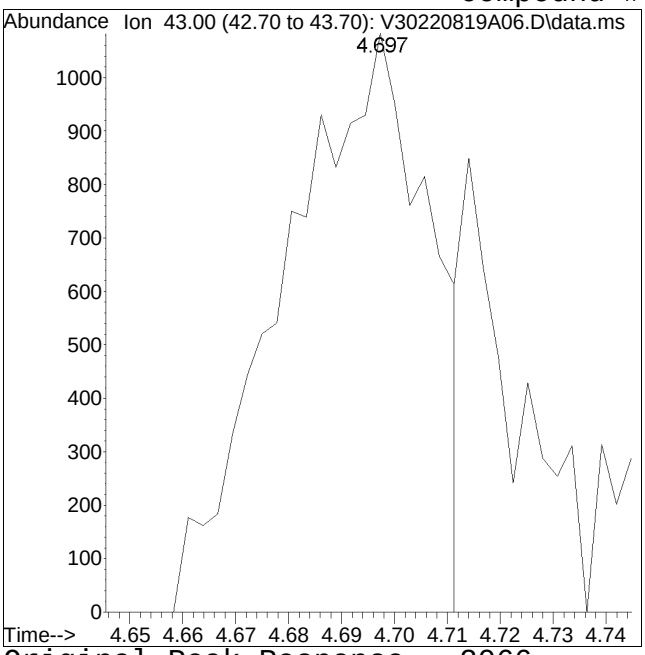
Original Peak Response = 702 Manual Peak Response = 1777 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

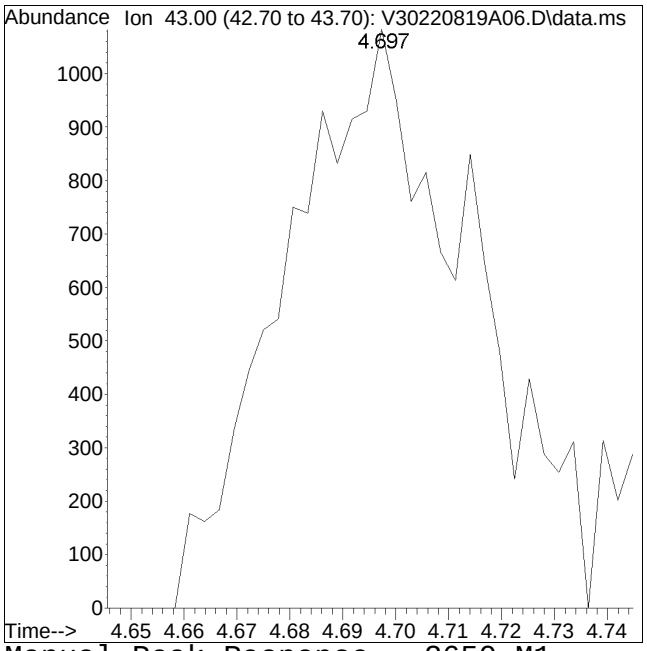
Data Path : I:\VOLATILES\VOA130\2022\2Q
Data File : V30220819A06.D
Date Inj'd : 8/19/2022 3:15 pm
Sample : I8260STD2PPB

Method : VOA130_220819A_8260.m
Operator : VOA130:MKS
Instrument : VOA130
Quant Date : 8/22/2022 1:23 pm

Compound #39: 2-Butanone



Original Peak Response = 2066



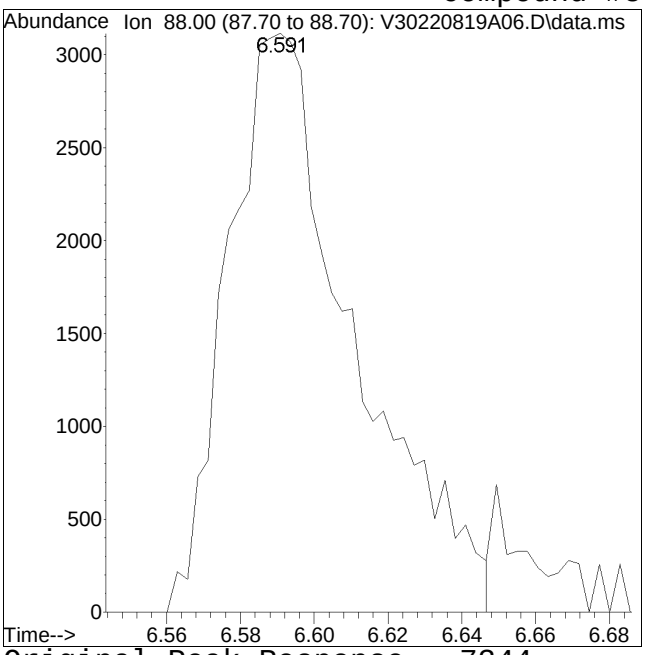
Manual Peak Response = 2650 M1

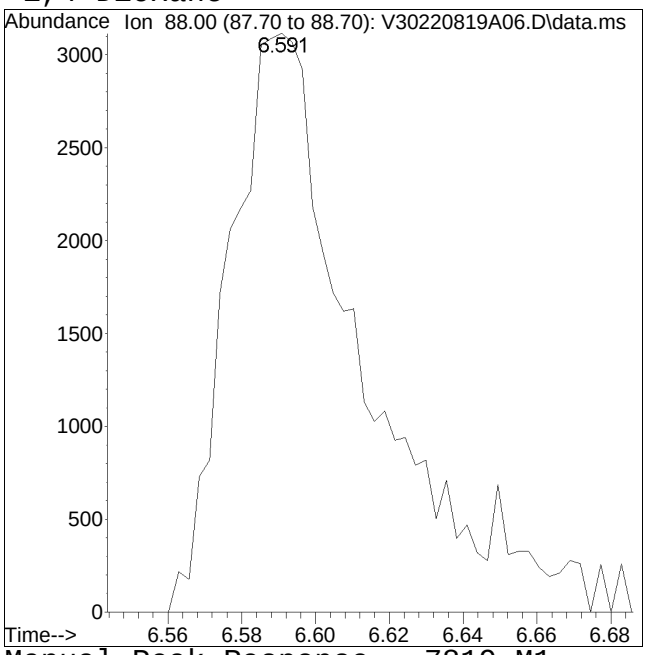
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A06.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 3:15 pm Instrument : VOA130
Sample : I8260STD2PPB Quant Date : 8/22/2022 1:23 pm

Compound #57: 1,4-Dioxane





Original Peak Response = 7344 Manual Peak Response = 7819 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A08.D
Acq On : 19 Aug 2022 03:54 pm
Operator : VOA130:MKS
Sample : I8260STD10PPB
Misc : WG1678209
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 22 13:33:22 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:22:32 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\220819AICAL\V30220819A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.487	96	267936	10.000	ug/L	0.00
Standard Area 1 = 267936			Recovery = 100.00%			
59) Chlorobenzene-d5	8.501	117	196265	10.000	ug/L	0.00
Standard Area 1 = 196265			Recovery = 100.00%			
79) 1,4-Dichlorobenzene-d4	9.991	152	101565	10.000	ug/L	0.00
Standard Area 1 = 101565			Recovery = 100.00%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.491	113	70146	10.000	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.00%			
43) 1,2-Dichloroethane-d4	5.138	65	77334	10.000	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.00%			
60) Toluene-d8	7.196	98	257415	10.000	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.00%			
83) 4-Bromofluorobenzene	9.321	95	96691	10.000	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.00%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.936	85	60734	10.000	ug/L	86
3) Chloromethane	1.064	50	67468	10.000	ug/L	98
4) Vinyl chloride	1.109	62	68271	10.000	ug/L	96
5) Bromomethane	1.312	94	44776	10.000	ug/L	99
6) Chloroethane	1.399	64	41486	10.000	ug/L	97
7) Trichlorofluoromethane	1.494	101	104496M1	10.000	ug/L	
8) Ethyl ether	1.731	74	23492M1	10.000	ug/L	
10) 1,1-Dichloroethene	1.856	96	55478	10.000	ug/L	78
11) Carbon disulfide	1.859	76	134863	10.000	ug/L	100
12) Freon-113	1.901	101	63390M1	10.000	ug/L	
13) Iodomethane	1.954	142	56895	10.000	ug/L	93
14) Acrolein	2.135	56	5548	10.000	ug/L	96
15) Methylene chloride	2.341	84	58127	10.000	ug/L	81
17) Acetone	2.405	43	8545	10.000	ug/L	94
18) trans-1,2-Dichloroethene	2.486	96	59484	10.000	ug/L	83
19) Methyl acetate	2.534	43	23018	10.000	ug/L	96
20) Methyl tert-butyl ether	2.623	73	105877	10.000	ug/L	94
21) tert-Butyl alcohol	2.782	59	7421M3	50.000	ug/L	
22) Diisopropyl ether	3.052	45	183795	10.000	ug/L	92
23) 1,1-Dichloroethane	3.122	63	116712	10.000	ug/L	98
24) Halothane	3.273	117	45424	10.000	ug/L #	67

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A08.D
Acq On : 19 Aug 2022 03:54 pm
Operator : VOA130:MKS
Sample : I8260STD10PPB
Misc : WG1678209
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 22 13:33:22 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:22:32 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\220819AICAL\V30220819A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) Acrylonitrile	3.197	53	11491M1	10.000	ug/L		
26) Ethyl tert-butyl ether	3.496	59	140372	10.000	ug/L		95
27) Vinyl acetate	3.499	43	86748	10.000	ug/L	#	91
28) cis-1,2-Dichloroethene	3.808	96	65115	10.000	ug/L	#	76
29) 2,2-Dichloropropane	3.956	77	70518	10.000	ug/L	#	60
30) Bromochloromethane	4.087	128	28009	10.000	ug/L	#	67
31) Cyclohexane	4.056	56	119016	10.000	ug/L		74
32) Chloroform	4.249	83	113998	10.000	ug/L	#	91
33) Ethyl acetate	4.505	43	29178M1	10.000	ug/L		
34) Carbon tetrachloride	4.369	117	83792	10.000	ug/L	#	94
35) Tetrahydrofuran	4.447	42	8758	10.000	ug/L	#	75
37) 1,1,1-Trichloroethane	4.469	97	98288	10.000	ug/L	#	98
39) 2-Butanone	4.692	43	12520	10.000	ug/L	#	81
40) 1,1-Dichloropropene	4.648	75	83423	10.000	ug/L		97
41) Benzene	4.960	78	240035	10.000	ug/L		93
42) tert-Amyl methyl ether	5.194	73	111169	10.000	ug/L		94
44) 1,2-Dichloroethane	5.216	62	79877	10.000	ug/L		98
47) Methyl cyclohexane	5.649	83	109562	10.000	ug/L		79
48) Trichloroethene	5.682	95	65001	10.000	ug/L		98
50) Dibromomethane	6.134	93	31703	10.000	ug/L		95
51) 1,2-Dichloropropane	6.245	63	61746	10.000	ug/L		97
53) 2-Chloroethyl vinyl ether	7.010	63	28513	10.000	ug/L		95
54) Bromodichloromethane	6.360	83	81294	10.000	ug/L		99
57) 1,4-Dioxane	6.586	88	10809M1	500.000	ug/L		
58) cis-1,3-Dichloropropene	7.018	75	82112	10.000	ug/L		98
61) Toluene	7.247	92	150634	10.000	ug/L		97
62) 4-Methyl-2-pentanone	7.659	58	12193	10.000	ug/L	#	91
63) Tetrachloroethene	7.601	166	65268	10.000	ug/L		93
65) trans-1,3-Dichloropropene	7.676	75	61127	10.000	ug/L		98
67) Ethyl methacrylate	7.866	69	44031	10.000	ug/L		99
68) 1,1,2-Trichloroethane	7.804	83	34861	10.000	ug/L		95
69) Chlorodibromomethane	7.938	129	50124	10.000	ug/L		99
70) 1,3-Dichloropropane	8.013	76	74326	10.000	ug/L		99
71) 1,2-Dibromoethane	8.097	107	39644	10.000	ug/L		98
72) 2-Hexanone	8.343	43	20285	10.000	ug/L		97
73) Chlorobenzene	8.513	112	163377	10.000	ug/L		94
74) Ethylbenzene	8.554	91	297835	10.000	ug/L		100
75) 1,1,1,2-Tetrachloroethane	8.571	131	52077	10.000	ug/L		97
76) p/m Xylene	8.660	106	224989	20.000	ug/L		100
77) o Xylene	8.945	106	216314	20.000	ug/L		94

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A08.D
Acq On : 19 Aug 2022 03:54 pm
Operator : VOA130:MKS
Sample : I8260STD10PPB
Misc : WG1678209
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 22 13:33:22 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:22:32 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\220819AICAL\V30220819A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
78) Styrene	8.984	104	354267	20.000	ug/L		93
80) Bromoform	8.984	173	27770	10.000	ug/L		95
82) Isopropylbenzene	9.157	105	295605	10.000	ug/L		98
84) Bromobenzene	9.377	156	67191	10.000	ug/L		98
85) n-Propylbenzene	9.416	91	360121	10.000	ug/L		98
86) 1,4-Dichlorobutane	9.419	55	73232	10.000	ug/L		98
87) 1,1,2,2-Tetrachloroethane	9.466	83	47203	10.000	ug/L		99
88) 4-Ethyltoluene	9.486	105	285795	10.000	ug/L		97
89) 2-Chlorotoluene	9.497	91	243657	10.000	ug/L		97
90) 1,3,5-Trimethylbenzene	9.539	105	246243	10.000	ug/L		94
91) 1,2,3-Trichloropropane	9.533	75	37742	10.000	ug/L		98
92) trans-1,4-Dichloro-2-b...	9.570	53	12658	10.000	ug/L	#	86
93) 4-Chlorotoluene	9.600	91	213000	10.000	ug/L		96
94) tert-Butylbenzene	9.726	119	215326	10.000	ug/L		93
97) 1,2,4-Trimethylbenzene	9.768	105	239845	10.000	ug/L		97
98) sec-Butylbenzene	9.829	105	330257	10.000	ug/L		99
99) p-Isopropyltoluene	9.918	119	278841	10.000	ug/L		97
100) 1,3-Dichlorobenzene	9.946	146	134720	10.000	ug/L		98
101) 1,4-Dichlorobenzene	9.999	146	132687	10.000	ug/L		98
102) p-Diethylbenzene	10.127	119	162514	10.000	ug/L		96
103) n-Butylbenzene	10.161	91	259819	10.000	ug/L		99
104) 1,2-Dichlorobenzene	10.239	146	121793	10.000	ug/L		99
105) 1,2,4,5-Tetramethylben...	10.582	119	241742	10.000	ug/L		98
106) 1,2-Dibromo-3-chloropr...	10.693	155	6065	10.000	ug/L		89
107) 1,3,5-Trichlorobenzene	10.710	180	106285	10.000	ug/L		94
108) Hexachlorobutadiene	11.056	225	47988	10.000	ug/L		97
109) 1,2,4-Trichlorobenzene	11.070	180	89485	10.000	ug/L		98
110) Naphthalene	11.248	128	158859	10.000	ug/L		100
111) 1,2,3-Trichlorobenzene	11.352	180	80096	10.000	ug/L		99

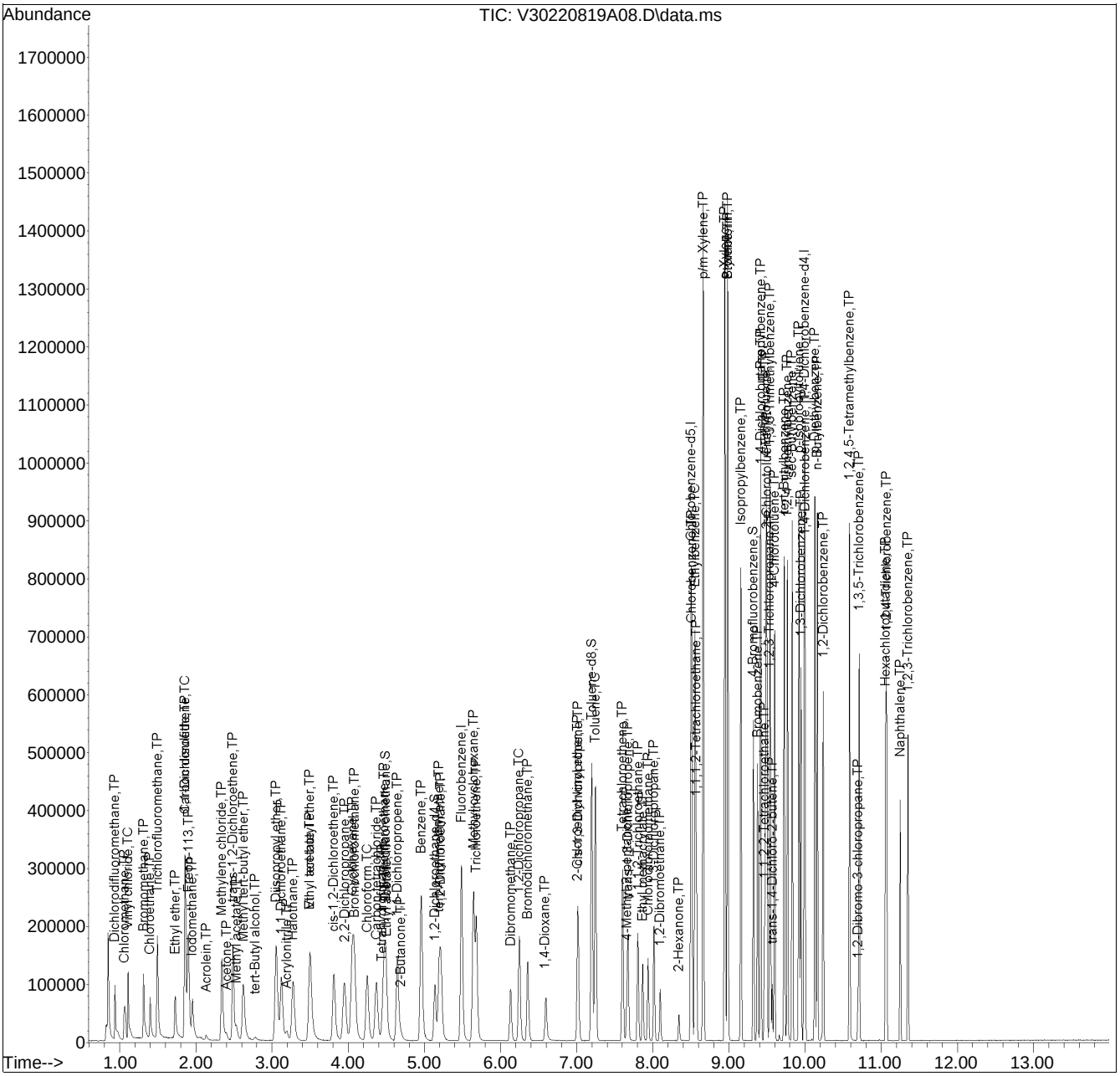
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A08.D
Acq On : 19 Aug 2022 03:54 pm
Operator : VOA130:MKS
Sample : I8260STD10PPB
Misc : WG1678209
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 22 13:33:22 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:22:32 2022
Response via : Initial Calibration

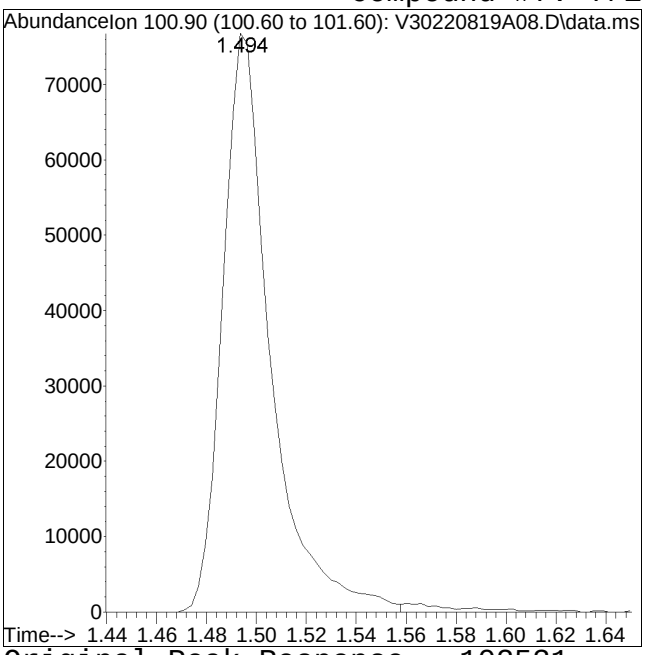
Sub List : 8260-Curve - Megamix plus Diox20819AICAL\V30220819A08.D•



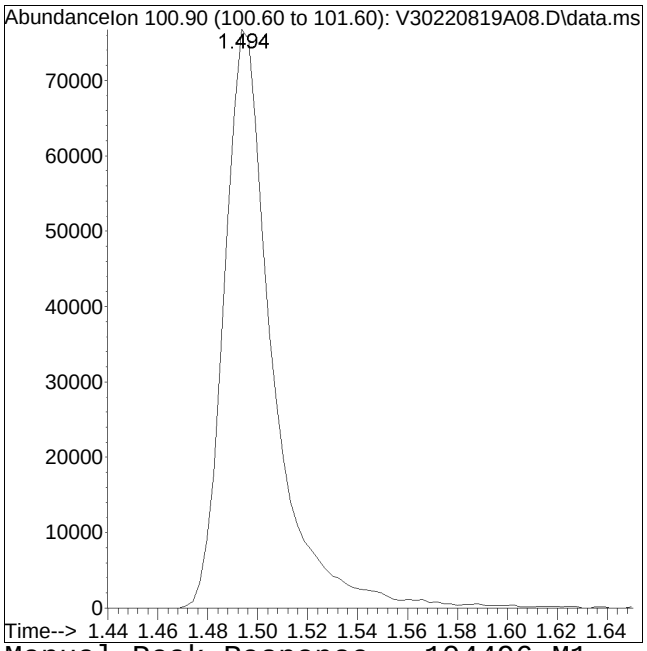
Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A08.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 3:54 pm Instrument : VOA130
Sample : I8260STD10PPB Quant Date : 8/22/2022 1:33 pm

Compound #7: Trichlorofluoromethane



Original Peak Response = 102531



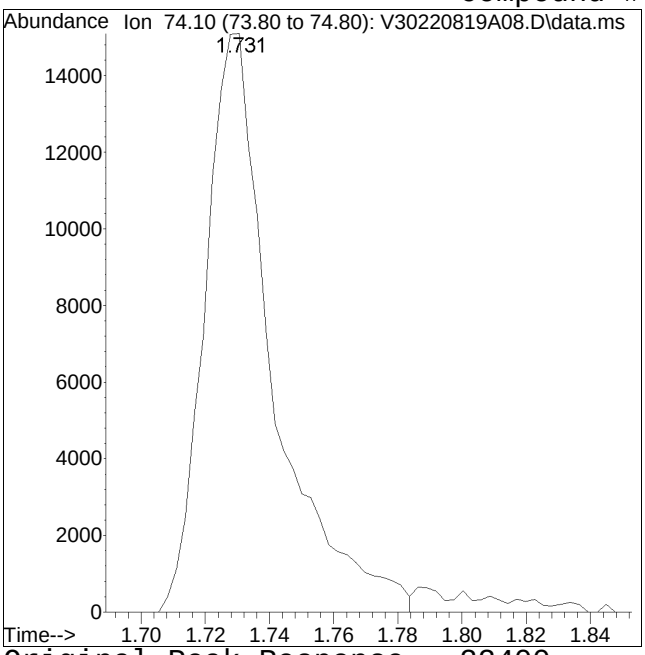
Manual Peak Response = 104496 M1

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

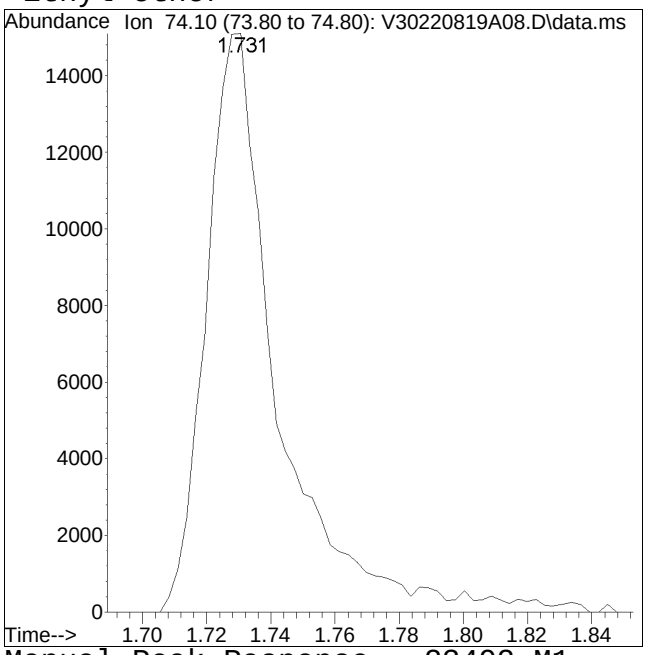
Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A08.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 3:54 pm Instrument : VOA130
Sample : I8260STD10PPB Quant Date : 8/22/2022 1:33 pm

Compound #8: Ethyl ether



Original Peak Response = 22400



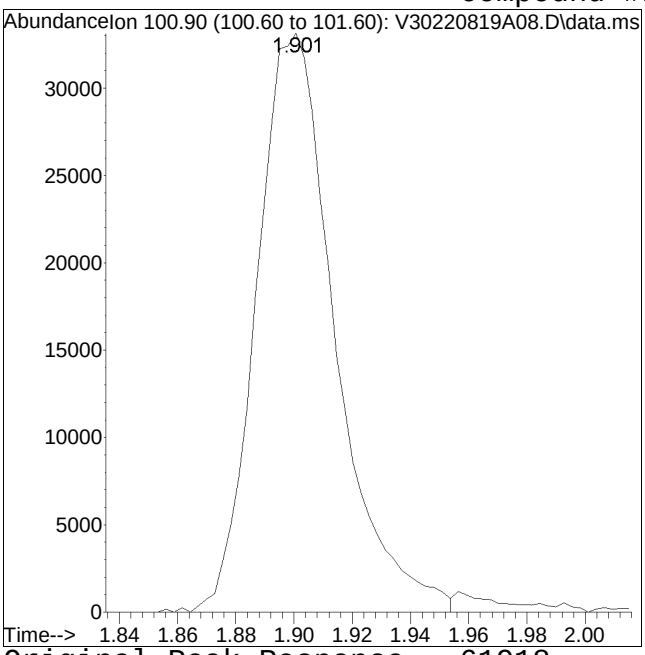
Manual Peak Response = 23492 M1

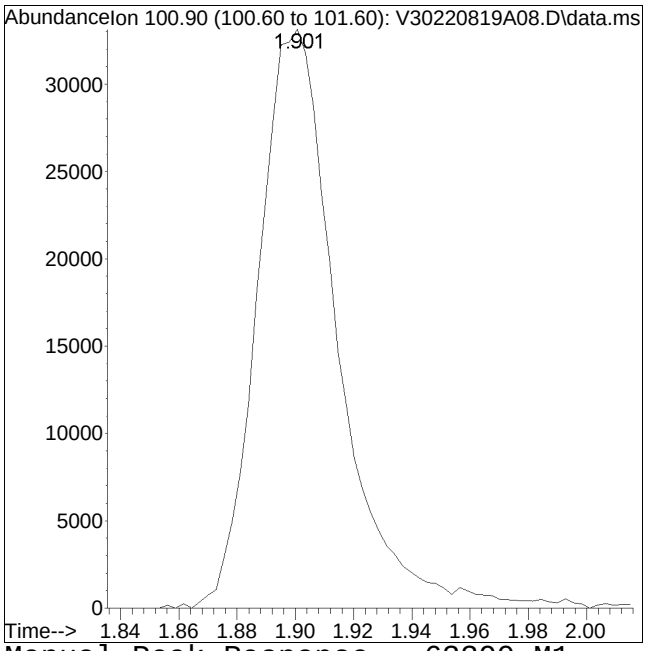
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A08.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 3:54 pm Instrument : VOA130
Sample : I8260STD10PPB Quant Date : 8/22/2022 1:33 pm

Compound #12: Freon-113



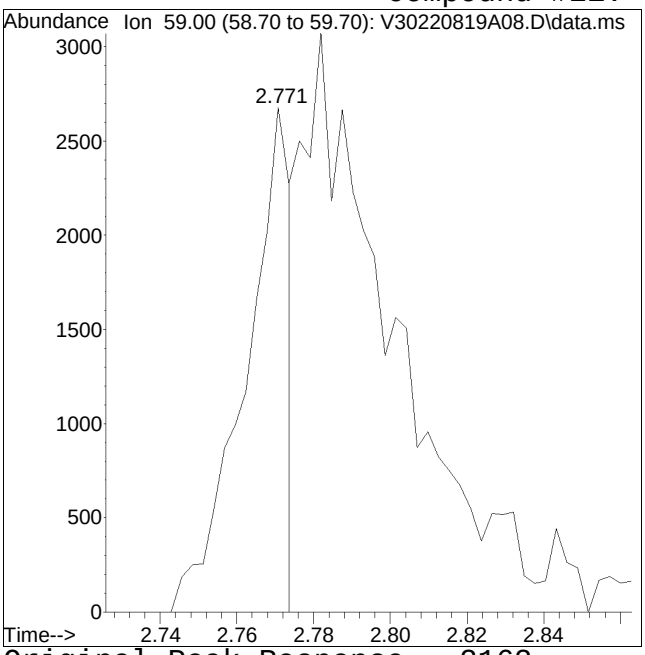


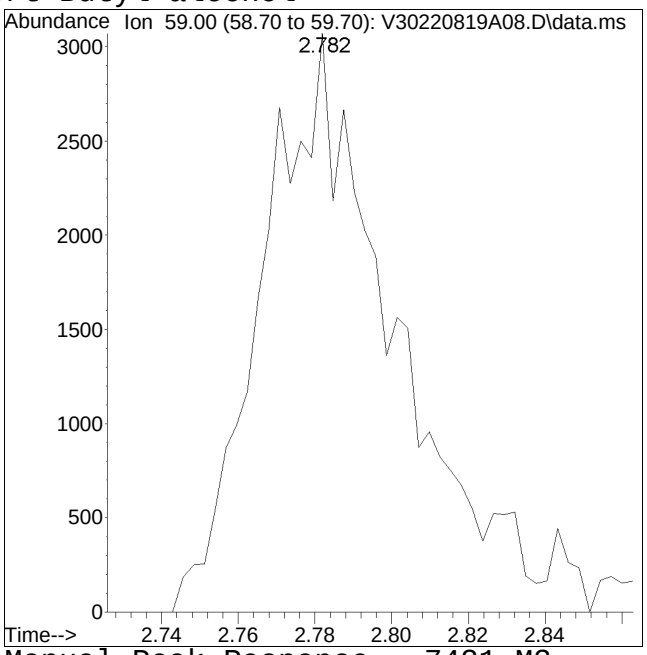
Original Peak Response = 61918 Manual Peak Response = 63390 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A08.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 3:54 pm Instrument : VOA130
Sample : I8260STD10PPB Quant Date : 8/22/2022 1:33 pm

Compound #21: tert-Butyl alcohol





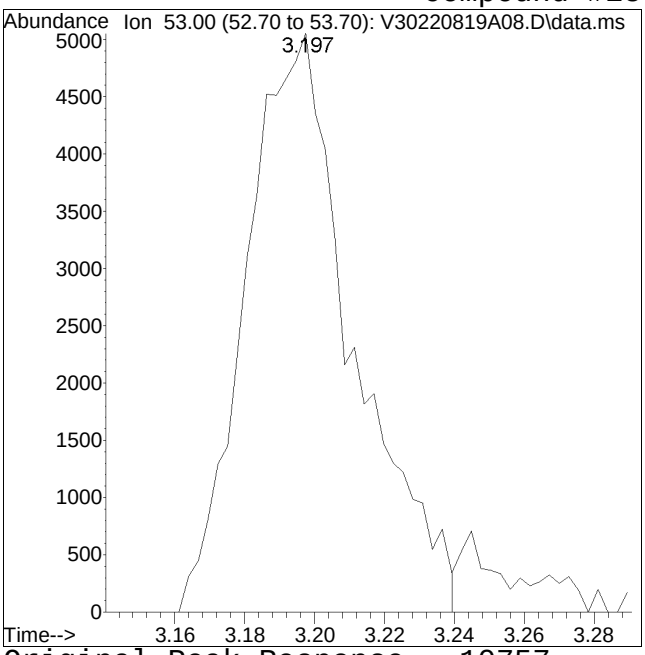
Original Peak Response = 2162 Manual Peak Response = 7421 M3

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

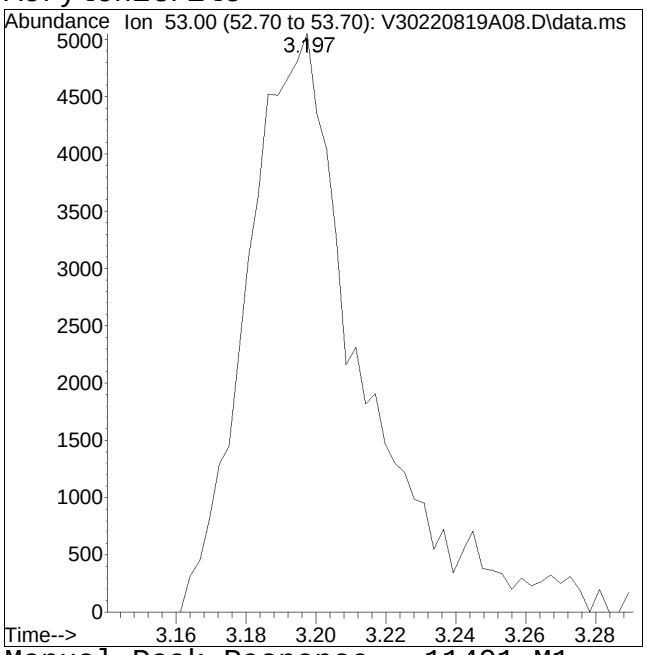
Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A08.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 3:54 pm Instrument : VOA130
Sample : I8260STD10PPB Quant Date : 8/22/2022 1:33 pm

Compound #25: Acrylonitrile



Original Peak Response = 10757



Manual Peak Response = 11491 M1

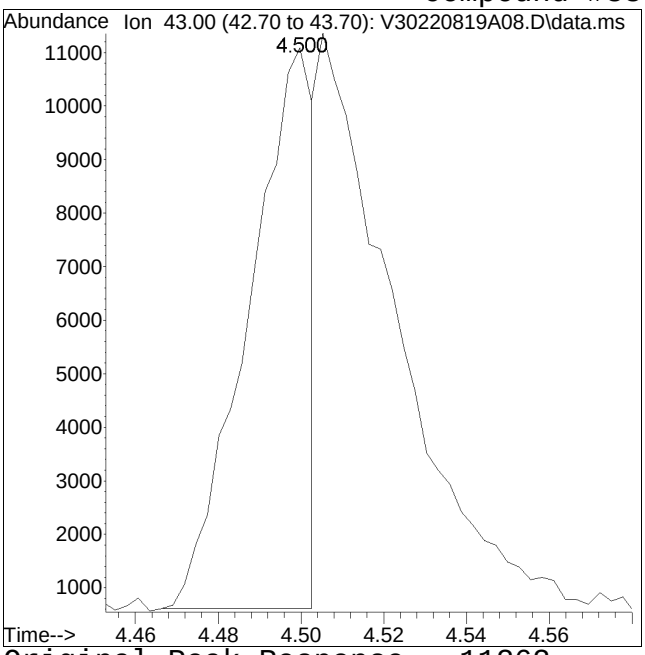
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

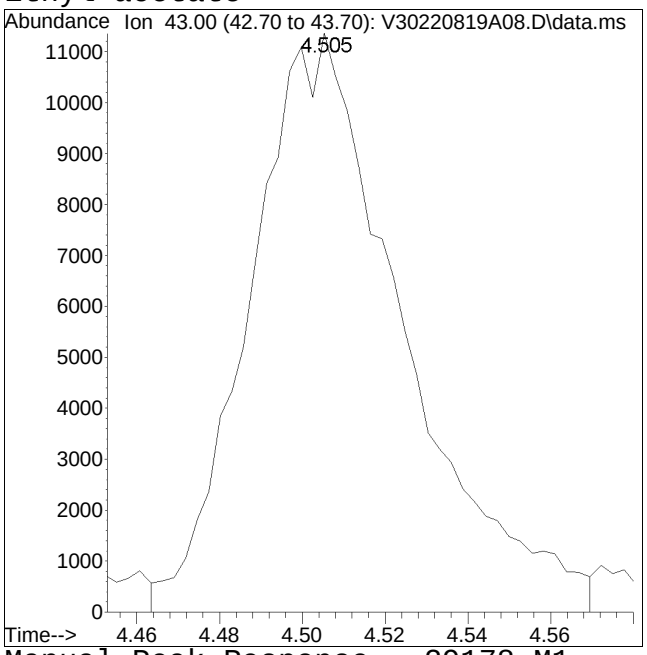
Data Path : I:\VOLATILES\VOA130\2022\2Q
Data File : V30220819A08.D
Date Inj'd : 8/19/2022 3:54 pm
Sample : I8260STD10PPB

Method : VOA130_220819A_8260.m
Operator : VOA130:MKS
Instrument : VOA130
Quant Date : 8/22/2022 1:33 pm

Compound #33: Ethyl acetate



Original Peak Response = 11262



Manual Peak Response = 29178 M1

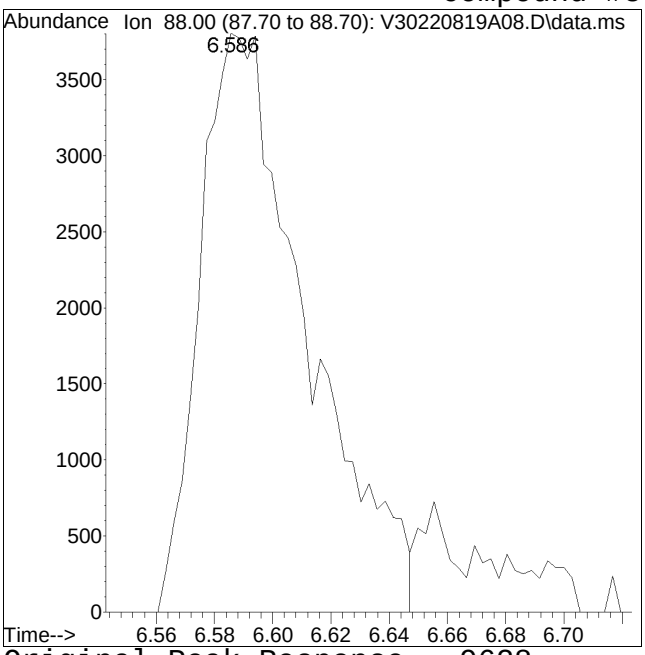
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

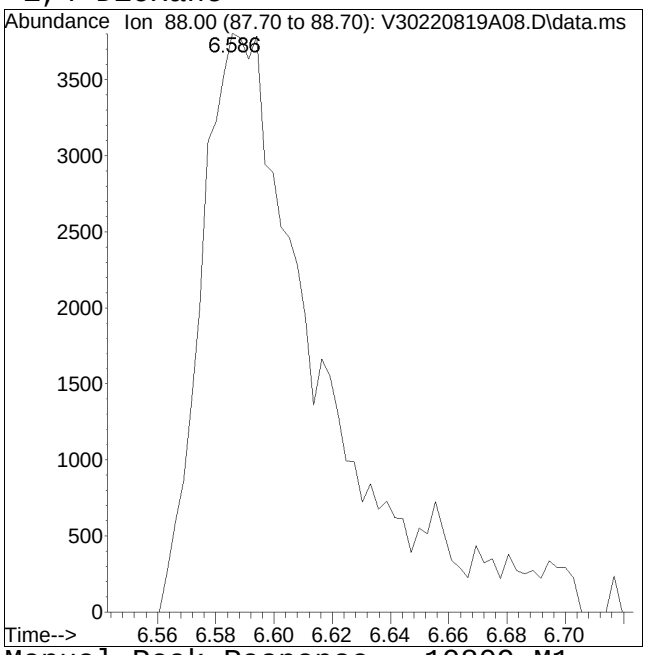
Data Path : I:\VOLATILES\VOA130\2022\2Q
Data File : V30220819A08.D
Date Inj'd : 8/19/2022 3:54 pm
Sample : I8260STD10PPB

Method : VOA130_220819A_8260.m
Operator : VOA130:MKS
Instrument : VOA130
Quant Date : 8/22/2022 1:33 pm

Compound #57: 1,4-Dioxane



Original Peak Response = 9628



Manual Peak Response = 10809 M1

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A09.D
Acq On : 19 Aug 2022 04:14 pm
Operator : VOA130:MKS
Sample : I8260STD30PPB
Misc : WG1678209
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 22 13:34:34 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:22:28 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\220819AICAL\V30220819A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.487	96	273855	10.000	ug/L	0.00
Standard Area 1 = 267936			Recovery = 102.21%			
59) Chlorobenzene-d5	8.501	117	201013	10.000	ug/L	0.00
Standard Area 1 = 196265			Recovery = 102.42%			
79) 1,4-Dichlorobenzene-d4	9.990	152	102035	10.000	ug/L	0.00
Standard Area 1 = 101565			Recovery = 100.46%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.488	113	69981	9.761	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.61%			
43) 1,2-Dichloroethane-d4	5.135	65	79152	10.014	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.14%			
60) Toluene-d8	7.199	98	261145	9.905	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.05%			
83) 4-Bromofluorobenzene	9.321	95	96504	9.935	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.35%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.936	85	153509	24.729	ug/L	99
3) Chloromethane	1.069	50	184407	26.742	ug/L	100
4) Vinyl chloride	1.109	62	179132	25.671	ug/L	96
5) Bromomethane	1.312	94	117780	25.736	ug/L	99
6) Chloroethane	1.399	64	114933	27.105	ug/L	97
7) Trichlorofluoromethane	1.493	101	269238	25.209	ug/L	96
8) Ethyl ether	1.728	74	71047M1	29.589	ug/L	
10) 1,1-Dichloroethene	1.856	96	144856	25.546	ug/L	79
11) Carbon disulfide	1.859	76	366899	26.617	ug/L	100
12) Freon-113	1.898	101	160359	24.750	ug/L	100
13) Iodomethane	1.954	142	180681	31.071	ug/L	92
14) Acrolein	2.132	56	16761M1	29.558	ug/L	
15) Methylene chloride	2.341	84	166686	28.056	ug/L	80
17) Acetone	2.402	43	24724	28.309	ug/L	98
18) trans-1,2-Dichloroethene	2.486	96	161269	26.525	ug/L	83
19) Methyl acetate	2.534	43	66705	28.353	ug/L #	93
20) Methyl tert-butyl ether	2.620	73	332161	30.694	ug/L	96
21) tert-Butyl alcohol	2.773	59	24409M1	160.904	ug/L	
22) Diisopropyl ether	3.052	45	569086	30.294	ug/L	92
23) 1,1-Dichloroethane	3.122	63	324897	27.236	ug/L	99
24) Halothane	3.273	117	126906	27.334	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A09.D
Acq On : 19 Aug 2022 04:14 pm
Operator : VOA130:MKS
Sample : I8260STD30PPB
Misc : WG1678209
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 22 13:34:34 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:22:28 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\220819AICAL\V30220819A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) Acrylonitrile	3.192	53	35239M1	30.004	ug/L		
26) Ethyl tert-butyl ether	3.498	59	453541	31.612	ug/L		94
27) Vinyl acetate	3.498	43	288368	32.524	ug/L		97
28) cis-1,2-Dichloroethene	3.811	96	182813	27.469	ug/L	#	78
29) 2,2-Dichloropropane	3.947	77	211705	29.373	ug/L	#	80
30) Bromochloromethane	4.084	128	82256	28.733	ug/L	#	67
31) Cyclohexane	4.056	56	314752	25.875	ug/L		74
32) Chloroform	4.249	83	320419	27.500	ug/L		98
33) Ethyl acetate	4.505	43	95712M1	32.094	ug/L		
34) Carbon tetrachloride	4.369	117	233247	27.235	ug/L		99
35) Tetrahydrofuran	4.441	42	25777	28.796	ug/L	#	87
37) 1,1,1-Trichloroethane	4.469	97	267451	26.623	ug/L	#	98
39) 2-Butanone	4.684	43	39403	30.792	ug/L	#	73
40) 1,1-Dichloropropene	4.645	75	227716	26.707	ug/L		97
41) Benzene	4.957	78	675753	27.544	ug/L		93
42) tert-Amyl methyl ether	5.197	73	364315	32.063	ug/L		96
44) 1,2-Dichloroethane	5.222	62	238314	29.190	ug/L		98
47) Methyl cyclohexane	5.646	83	298219	26.631	ug/L		79
48) Trichloroethene	5.685	95	180062	27.103	ug/L		99
50) Dibromomethane	6.134	93	93298	28.793	ug/L		96
51) 1,2-Dichloropropane	6.245	63	183003	28.997	ug/L		97
53) 2-Chloroethyl vinyl ether	7.009	63	88876	30.497	ug/L		95
54) Bromodichloromethane	6.354	83	244195	29.389	ug/L		98
57) 1,4-Dioxane	6.583	88	12750M1	577.039	ug/L		
58) cis-1,3-Dichloropropene	7.018	75	262640	31.294	ug/L		97
61) Toluene	7.246	92	427032	27.679	ug/L		97
62) 4-Methyl-2-pentanone	7.659	58	38278	30.652	ug/L	#	89
63) Tetrachloroethene	7.603	166	177449	26.546	ug/L		94
65) trans-1,3-Dichloropropene	7.673	75	209384	33.445	ug/L		99
67) Ethyl methacrylate	7.865	69	147189	32.639	ug/L		98
68) 1,1,2-Trichloroethane	7.804	83	107815	30.197	ug/L		97
69) Chlorodibromomethane	7.938	129	160090	31.184	ug/L		98
70) 1,3-Dichloropropane	8.016	76	227470	29.881	ug/L		99
71) 1,2-Dibromoethane	8.097	107	123504	30.417	ug/L		99
72) 2-Hexanone	8.342	43	63607	30.616	ug/L		96
73) Chlorobenzene	8.512	112	469354	28.050	ug/L		92
74) Ethylbenzene	8.554	91	829484	27.193	ug/L		99
75) 1,1,1,2-Tetrachloroethane	8.571	131	165044	30.944	ug/L		95
76) p/m Xylene	8.663	106	632880	54.930	ug/L		99
77) o Xylene	8.945	106	614466	55.470	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A09.D
Acq On : 19 Aug 2022 04:14 pm
Operator : VOA130:MKS
Sample : I8260STD30PPB
Misc : WG1678209
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 22 13:34:34 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:22:28 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\220819AICAL\V30220819A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78) Styrene	8.984	104	1036343	57.124	ug/L	93
80) Bromoform	8.984	173	91283	32.720	ug/L	98
82) Isopropylbenzene	9.157	105	813238	27.384	ug/L	97
84) Bromobenzene	9.377	156	197399	29.243	ug/L	99
85) n-Propylbenzene	9.416	91	997436	27.570	ug/L	98
86) 1,4-Dichlorobutane	9.419	55	228551	31.065	ug/L	98
87) 1,1,2,2-Tetrachloroethane	9.466	83	143708	30.304	ug/L	100
88) 4-Ethyltoluene	9.486	105	816789	28.448	ug/L	98
89) 2-Chlorotoluene	9.497	91	688606	28.131	ug/L	98
90) 1,3,5-Trimethylbenzene	9.541	105	705927	28.536	ug/L	94
91) 1,2,3-Trichloropropane	9.536	75	116419	30.704	ug/L	98
92) trans-1,4-Dichloro-2-b...	9.567	53	41853	32.912	ug/L	96
93) 4-Chlorotoluene	9.600	91	615705	28.773	ug/L	96
94) tert-Butylbenzene	9.726	119	598565	27.670	ug/L	94
97) 1,2,4-Trimethylbenzene	9.767	105	693544	28.783	ug/L	96
98) sec-Butylbenzene	9.832	105	905698	27.298	ug/L	99
99) p-Isopropyltoluene	9.918	119	773279	27.604	ug/L	97
100) 1,3-Dichlorobenzene	9.946	146	382387	28.253	ug/L	99
101) 1,4-Dichlorobenzene	9.999	146	384810	28.868	ug/L	99
102) p-Diethylbenzene	10.127	119	462562	28.332	ug/L	96
103) n-Butylbenzene	10.161	91	722211	27.669	ug/L	99
104) 1,2-Dichlorobenzene	10.239	146	353288	28.874	ug/L	99
105) 1,2,4,5-Tetramethylben...	10.582	119	715893	29.478	ug/L	98
106) 1,2-Dibromo-3-chloropr...	10.693	155	19771	32.448	ug/L	91
107) 1,3,5-Trichlorobenzene	10.710	180	304634	28.530	ug/L	94
108) Hexachlorobutadiene	11.059	225	133485	27.688	ug/L	97
109) 1,2,4-Trichlorobenzene	11.070	180	263860	29.351	ug/L	99
110) Naphthalene	11.248	128	481564	30.174	ug/L	100
111) 1,2,3-Trichlorobenzene	11.351	180	234353	29.124	ug/L	99

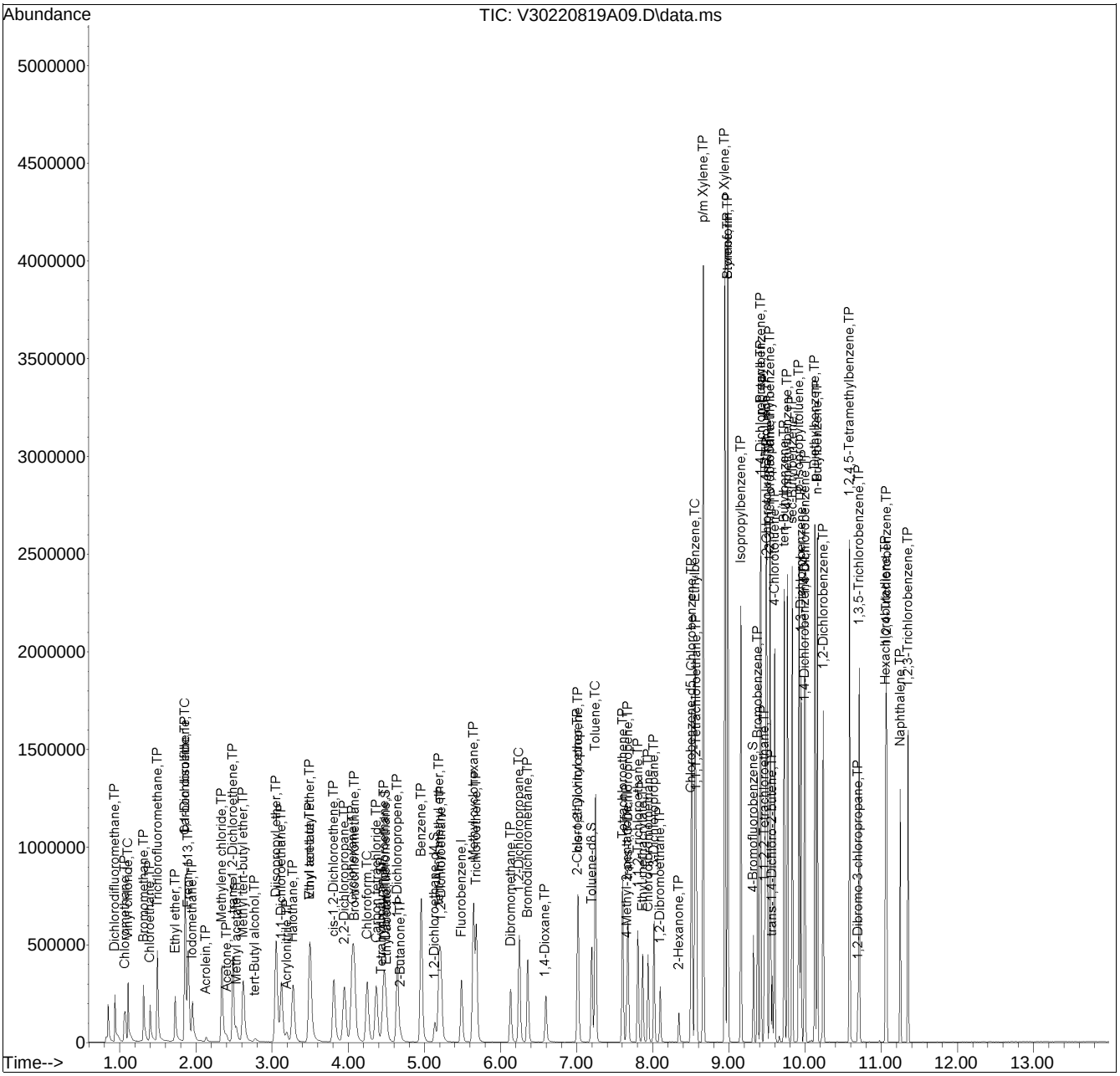
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A09.D
Acq On : 19 Aug 2022 04:14 pm
Operator : VOA130:MKS
Sample : I8260STD30PPB
Misc : WG1678209
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 22 13:34:34 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:22:28 2022
Response via : Initial Calibration

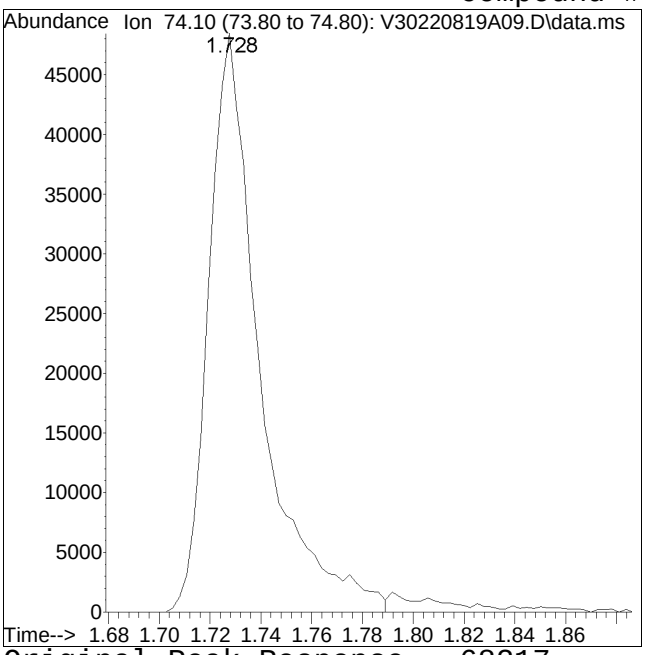
Sub List : 8260-Curve - Megamix plus Diox20819AICAL\V30220819A08.D•



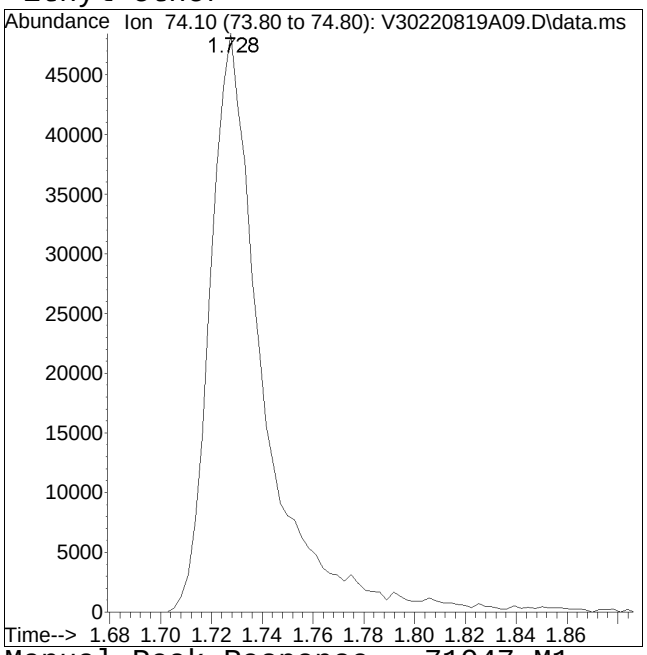
Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A09.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 4:14 pm Instrument : VOA130
Sample : I8260STD30PPB Quant Date : 8/22/2022 1:23 pm

Compound #8: Ethyl ether



Original Peak Response = 68217



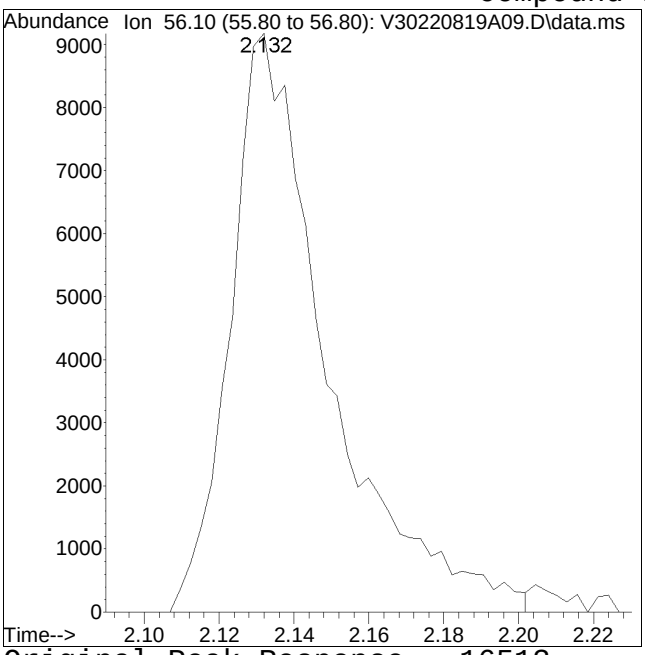
Manual Peak Response = 71047 M1

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

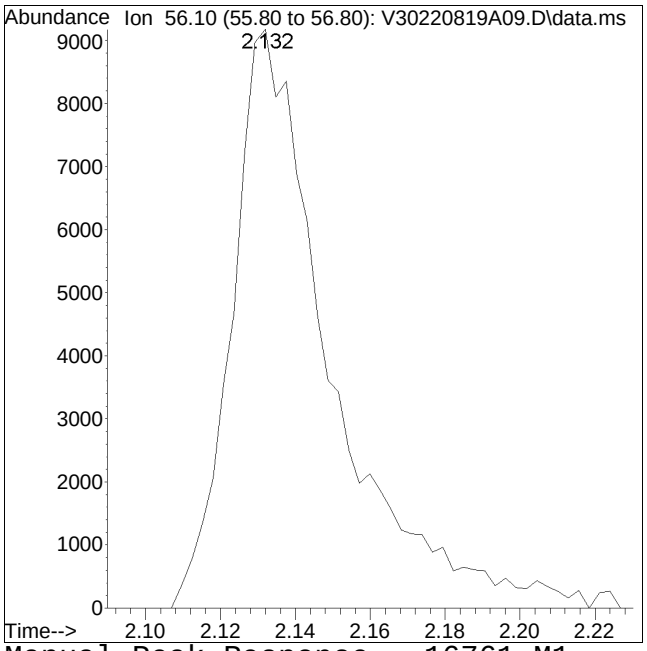
Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A09.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 4:14 pm Instrument : VOA130
Sample : I8260STD30PPB Quant Date : 8/22/2022 1:23 pm

Compound #14: Acrolein



Original Peak Response = 16513



Manual Peak Response = 16761 M1

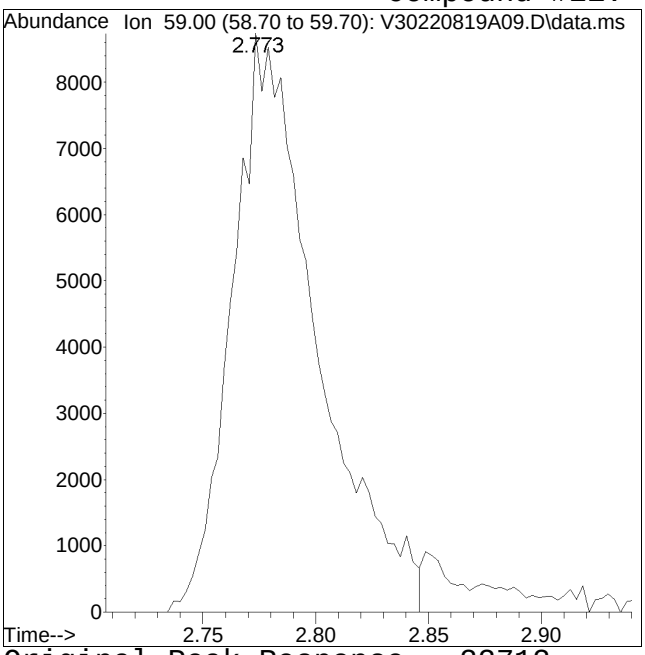
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

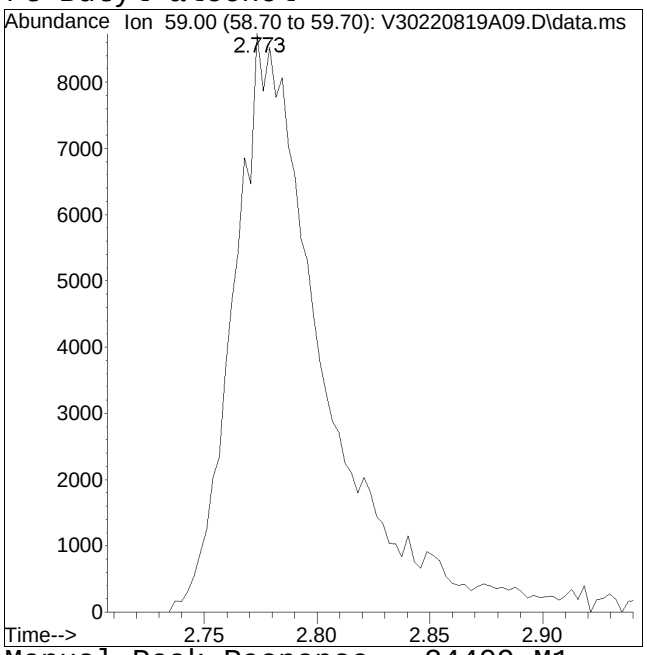
Data Path : I:\VOLATILES\VOA130\2022\2Q
Data File : V30220819A09.D
Date Inj'd : 8/19/2022 4:14 pm
Sample : I8260STD30PPB

Method : VOA130_220819A_8260.m
Operator : VOA130:MKS
Instrument : VOA130
Quant Date : 8/22/2022 1:23 pm

Compound #21: tert-Butyl alcohol



Original Peak Response = 22712



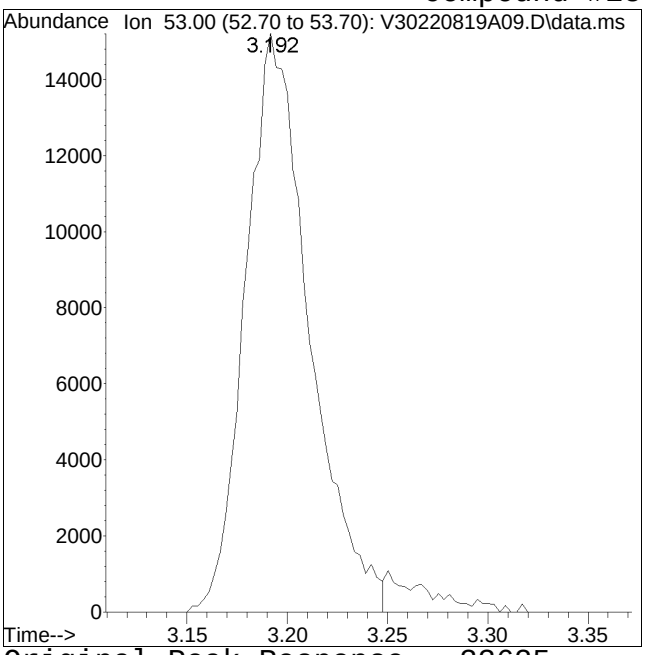
Manual Peak Response = 24409 M1

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

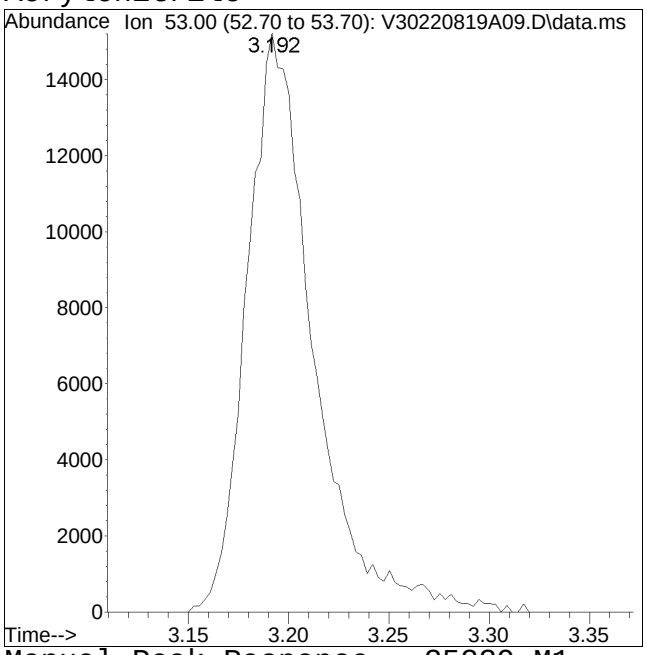
Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A09.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 4:14 pm Instrument : VOA130
Sample : I8260STD30PPB Quant Date : 8/22/2022 1:23 pm

Compound #25: Acrylonitrile



Original Peak Response = 33625



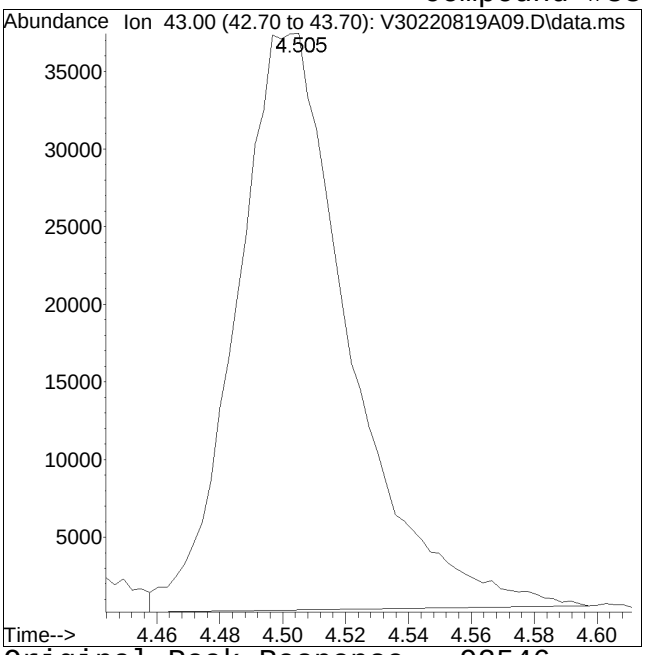
Manual Peak Response = 35239 M1

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

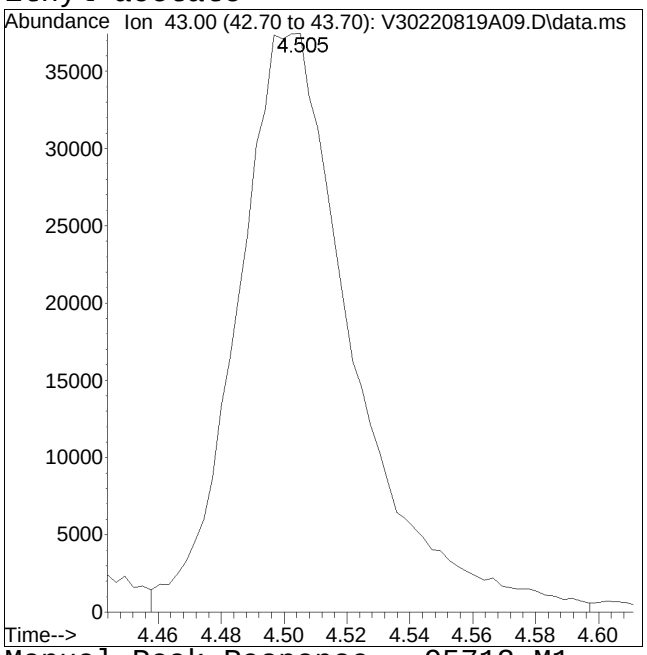
Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A09.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 4:14 pm Instrument : VOA130
Sample : I8260STD30PPB Quant Date : 8/22/2022 1:23 pm

Compound #33: Ethyl acetate



Original Peak Response = 92546



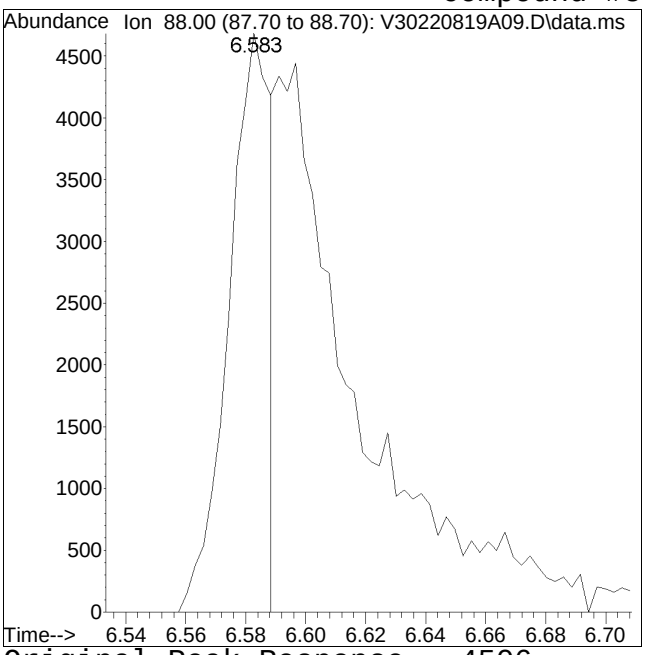
Manual Peak Response = 95712 M1

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

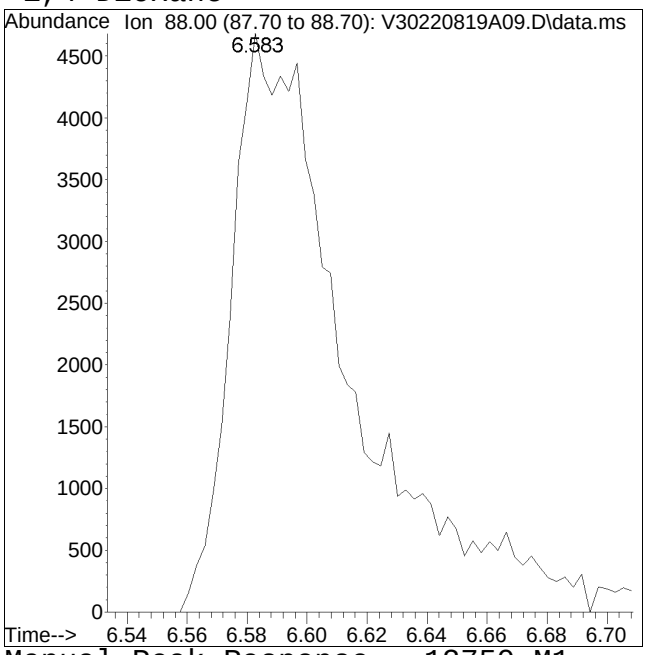
Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A09.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 4:14 pm Instrument : VOA130
Sample : I8260STD30PPB Quant Date : 8/22/2022 1:23 pm

Compound #57: 1,4-Dioxane



Original Peak Response = 4506



Manual Peak Response = 12750 M1

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A10.D
Acq On : 19 Aug 2022 04:33 pm
Operator : VOA130:MKS
Sample : I8260STD80PPB
Misc : WG1678209
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 22 13:35:17 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:22:28 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\220819AICAL\V30220819A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	5.487	96	274941	10.000 ug/L	0.00
Standard Area 1 = 267936			Recovery = 102.61%		
59) Chlorobenzene-d5	8.501	117	201862	10.000 ug/L	0.00
Standard Area 1 = 196265			Recovery = 102.85%		
79) 1,4-Dichlorobenzene-d4	9.991	152	104752	10.000 ug/L	0.00
Standard Area 1 = 101565			Recovery = 103.14%		
System Monitoring Compounds					
36) Dibromofluoromethane	4.494	113	70389	9.779 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.79%		
43) 1,2-Dichloroethane-d4	5.135	65	80573	10.153 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.53%		
60) Toluene-d8	7.199	98	264890	10.005 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.05%		
83) 4-Bromofluorobenzene	9.321	95	98065	9.834 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.34%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.936	85	467104	74.950 ug/L	100
3) Chloromethane	1.070	50	520774	75.222 ug/L	100
4) Vinyl chloride	1.109	62	524292	74.839 ug/L	96
5) Bromomethane	1.312	94	325857	70.921 ug/L	98
6) Chloroethane	1.399	64	328406	77.144 ug/L	97
7) Trichlorofluoromethane	1.493	101	801790	74.774 ug/L	97
8) Ethyl ether	1.728	74	197207	81.808 ug/L	78
10) 1,1-Dichloroethene	1.856	96	423336	74.363 ug/L	78
11) Carbon disulfide	1.859	76	1047349	75.682 ug/L	99
12) Freon-113	1.898	101	486665	74.817 ug/L	99
13) Iodomethane	1.954	142	522483	89.493 ug/L	92
14) Acrolein	2.132	56	46753	82.123 ug/L	90
15) Methylene chloride	2.341	84	455430	76.355 ug/L	79
17) Acetone	2.403	43	68470	78.087 ug/L	99
18) trans-1,2-Dichloroethene	2.486	96	451759	74.011 ug/L	83
19) Methyl acetate	2.534	43	193956	82.116 ug/L #	93
20) Methyl tert-butyl ether	2.620	73	959220	88.289 ug/L	96
21) tert-Butyl alcohol	2.776	59	73652M1	483.597 ug/L	
22) Diisopropyl ether	3.052	45	1633377	86.605 ug/L	92
23) 1,1-Dichloroethane	3.125	63	893919	74.640 ug/L	98
24) Halothane	3.273	117	364253	78.146 ug/L	99

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A10.D
Acq On : 19 Aug 2022 04:33 pm
Operator : VOA130:MKS
Sample : I8260STD80PPB
Misc : WG1678209
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 22 13:35:17 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:22:28 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\220819AICAL\V30220819A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) Acrylonitrile	3.192	53	98285	83.353	ug/L		97
26) Ethyl tert-butyl ether	3.496	59	1350474	93.756	ug/L		93
27) Vinyl acetate	3.498	43	889306	99.904	ug/L		97
28) cis-1,2-Dichloroethene	3.811	96	509888	76.311	ug/L	#	77
29) 2,2-Dichloropropane	3.953	77	667063	92.185	ug/L		88
30) Bromochloromethane	4.084	128	225621	78.501	ug/L	#	66
31) Cyclohexane	4.059	56	942201	77.149	ug/L		75
32) Chloroform	4.249	83	878178	75.072	ug/L		98
33) Ethyl acetate	4.497	43	277964M1	92.838	ug/L		
34) Carbon tetrachloride	4.369	117	712030	82.811	ug/L		99
35) Tetrahydrofuran	4.433	42	67706	75.338	ug/L	#	62
37) 1,1,1-Trichloroethane	4.472	97	781870	77.522	ug/L	#	97
39) 2-Butanone	4.684	43	114849	89.395	ug/L	#	80
40) 1,1-Dichloropropene	4.645	75	664818	77.662	ug/L		97
41) Benzene	4.960	78	1897356	77.031	ug/L		94
42) tert-Amyl methyl ether	5.194	73	1099571	96.390	ug/L		97
44) 1,2-Dichloroethane	5.219	62	660213	80.548	ug/L		98
47) Methyl cyclohexane	5.649	83	915158	81.401	ug/L	#	79
48) Trichloroethene	5.682	95	511140	76.632	ug/L		99
50) Dibromomethane	6.134	93	265210	81.523	ug/L		96
51) 1,2-Dichloropropane	6.248	63	512980	80.962	ug/L		97
53) 2-Chloroethyl vinyl ether	7.009	63	260517	89.040	ug/L		94
54) Bromodichloromethane	6.357	83	687067	82.363	ug/L		98
57) 1,4-Dioxane	6.586	88	16013M1	721.853	ug/L		
58) cis-1,3-Dichloropropene	7.018	75	773509	91.802	ug/L		97
61) Toluene	7.246	92	1202878	77.640	ug/L		96
62) 4-Methyl-2-pentanone	7.659	58	114134	91.011	ug/L	#	92
63) Tetrachloroethene	7.603	166	520107	77.478	ug/L		93
65) trans-1,3-Dichloropropene	7.676	75	644794	102.560	ug/L		98
67) Ethyl methacrylate	7.868	69	444927	98.247	ug/L		98
68) 1,1,2-Trichloroethane	7.804	83	301993	84.226	ug/L		96
69) Chlorodibromomethane	7.938	129	462435	89.700	ug/L		98
70) 1,3-Dichloropropane	8.016	76	638635	83.541	ug/L		100
71) 1,2-Dibromoethane	8.097	107	350780	86.029	ug/L		99
72) 2-Hexanone	8.342	43	188702	90.446	ug/L		96
73) Chlorobenzene	8.513	112	1305352	77.683	ug/L		92
74) Ethylbenzene	8.554	91	2323930	75.864	ug/L		99
75) 1,1,1,2-Tetrachloroethane	8.571	131	488640	91.229	ug/L		96
76) p/m Xylene	8.663	106	1757883	151.931	ug/L		97
77) o Xylene	8.948	106	1702579	153.053	ug/L		92

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A10.D
Acq On : 19 Aug 2022 04:33 pm
Operator : VOA130:MKS
Sample : I8260STD80PPB
Misc : WG1678209
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 22 13:35:17 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:22:28 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\220819AICAL\V30220819A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78) Styrene	8.984	104	2795360	153.435	ug/L	95
80) Bromoform	8.984	173	270535	94.456	ug/L	96
82) Isopropylbenzene	9.157	105	2287791	75.039	ug/L	97
84) Bromobenzene	9.377	156	540325	77.970	ug/L	98
85) n-Propylbenzene	9.416	91	2777227	74.773	ug/L	97
86) 1,4-Dichlorobutane	9.419	55	647165	85.683	ug/L	97
87) 1,1,2,2-Tetrachloroethane	9.466	83	404981	83.185	ug/L	100
88) 4-Ethyltoluene	9.486	105	2273937	77.145	ug/L	98
89) 2-Chlorotoluene	9.497	91	1893242	75.337	ug/L	98
90) 1,3,5-Trimethylbenzene	9.542	105	1945765	76.614	ug/L	93
91) 1,2,3-Trichloropropane	9.536	75	328274	84.332	ug/L	98
92) trans-1,4-Dichloro-2-b...	9.569	53	124508	95.370	ug/L	90
93) 4-Chlorotoluene	9.600	91	1691271	76.987	ug/L	96
94) tert-Butylbenzene	9.726	119	1665383	74.989	ug/L	93
97) 1,2,4-Trimethylbenzene	9.767	105	1927945	77.937	ug/L	95
98) sec-Butylbenzene	9.832	105	2533253	74.372	ug/L	98
99) p-Isopropyltoluene	9.918	119	2185290	75.986	ug/L	98
100) 1,3-Dichlorobenzene	9.946	146	1059673	76.264	ug/L	100
101) 1,4-Dichlorobenzene	9.999	146	1049937	76.721	ug/L	99
102) p-Diethylbenzene	10.127	119	1324567	79.025	ug/L	96
103) n-Butylbenzene	10.161	91	2040265	76.137	ug/L	98
104) 1,2-Dichlorobenzene	10.239	146	975897	77.690	ug/L	99
105) 1,2,4,5-Tetramethylben...	10.585	119	2035935	81.657	ug/L	98
106) 1,2-Dibromo-3-chloropr...	10.693	155	59775	95.559	ug/L	93
107) 1,3,5-Trichlorobenzene	10.713	180	844180	77.010	ug/L	95
108) Hexachlorobutadiene	11.059	225	391047	79.009	ug/L	96
109) 1,2,4-Trichlorobenzene	11.070	180	733200	79.443	ug/L	98
110) Naphthalene	11.248	128	1314039	80.201	ug/L	100
111) 1,2,3-Trichlorobenzene	11.351	180	649601	78.635	ug/L	100

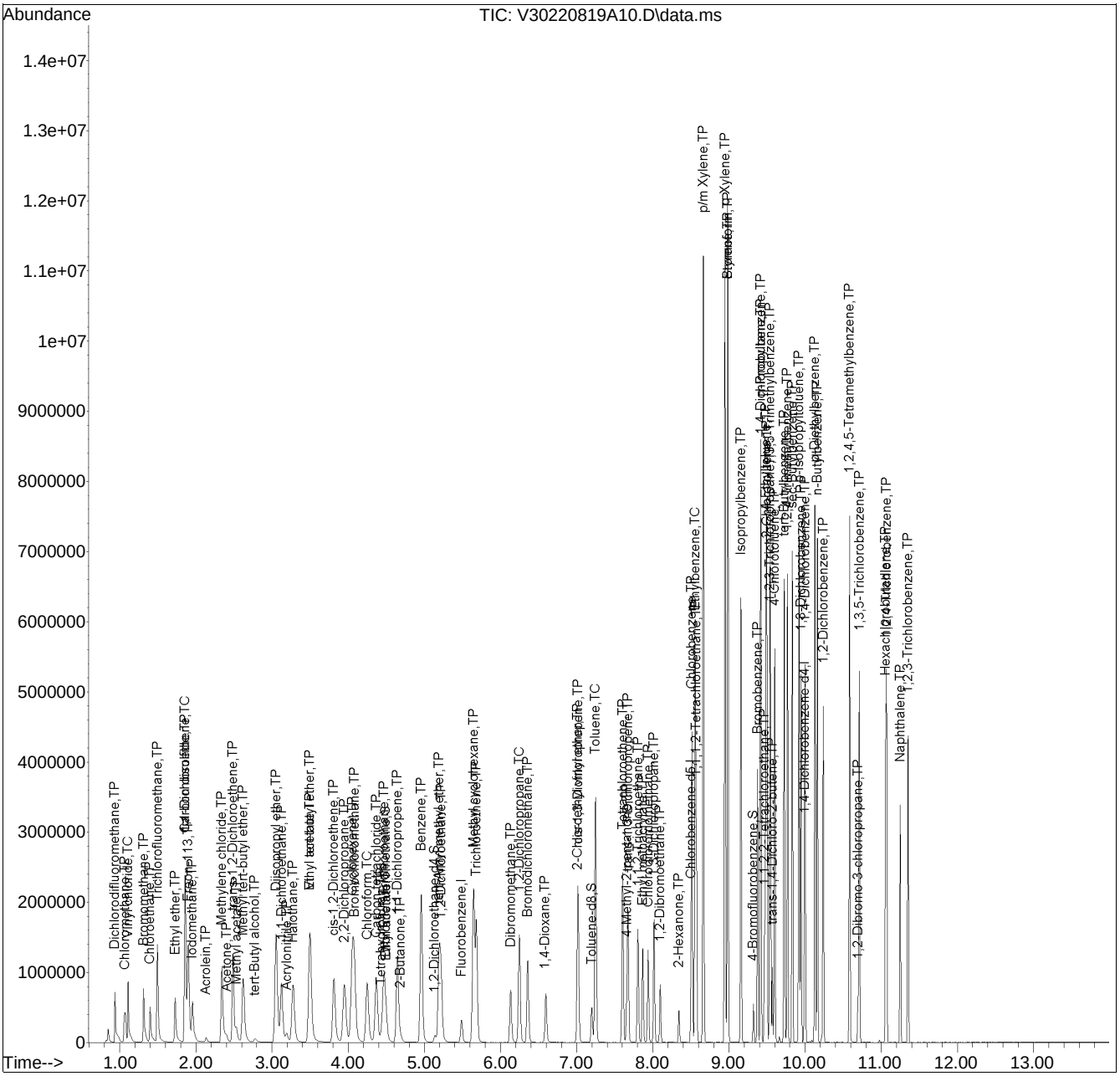
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A10.D
Acq On : 19 Aug 2022 04:33 pm
Operator : VOA130:MKS
Sample : I8260STD80PPB
Misc : WG1678209
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 22 13:35:17 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:22:28 2022
Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus Diox20819AICAL\V30220819A08.D•

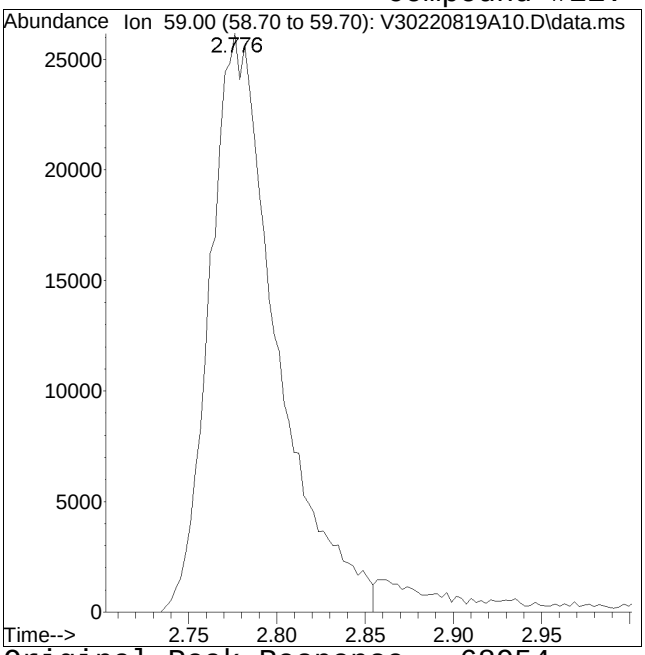


Manual Integration Report

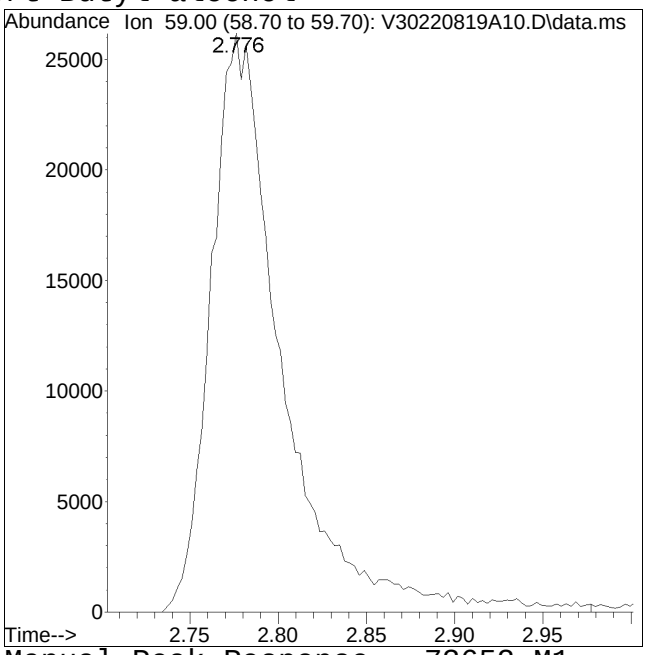
Data Path : I:\VOLATILES\VOA130\2022\2Q
Data File : V30220819A10.D
Date Inj'd : 8/19/2022 4:33 pm
Sample : I8260STD80PPB

Method : VOA130_220819A_8260.m
Operator : VOA130:MKS
Instrument : VOA130
Quant Date : 8/22/2022 1:23 pm

Compound #21: tert-Butyl alcohol



Original Peak Response = 68954



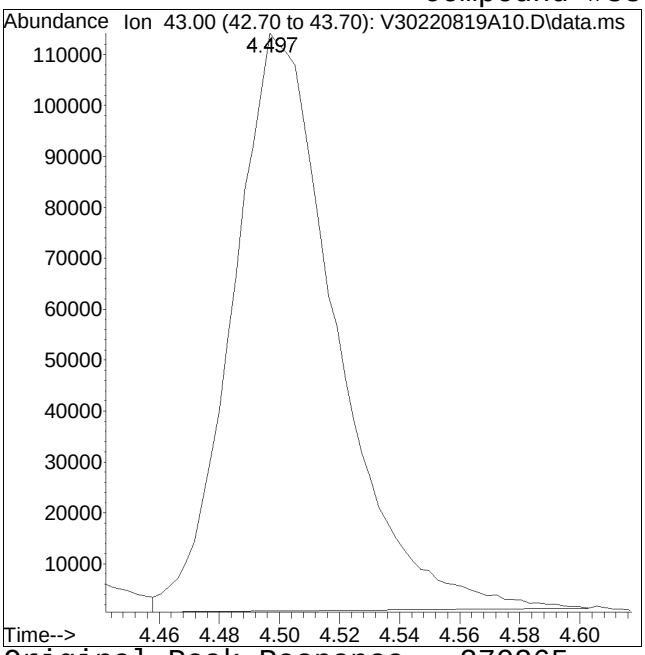
Manual Peak Response = 73652 M1

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

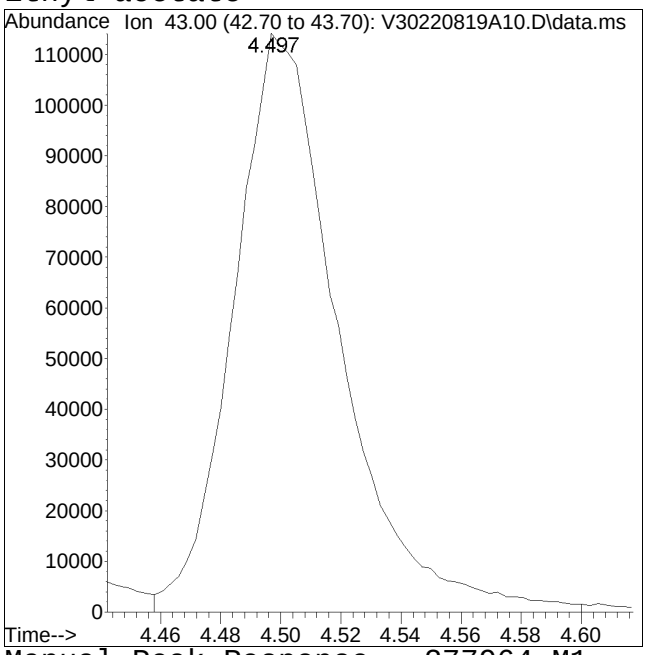
Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A10.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 4:33 pm Instrument : VOA130
Sample : I8260STD80PPB Quant Date : 8/22/2022 1:23 pm

Compound #33: Ethyl acetate



Original Peak Response = 270265



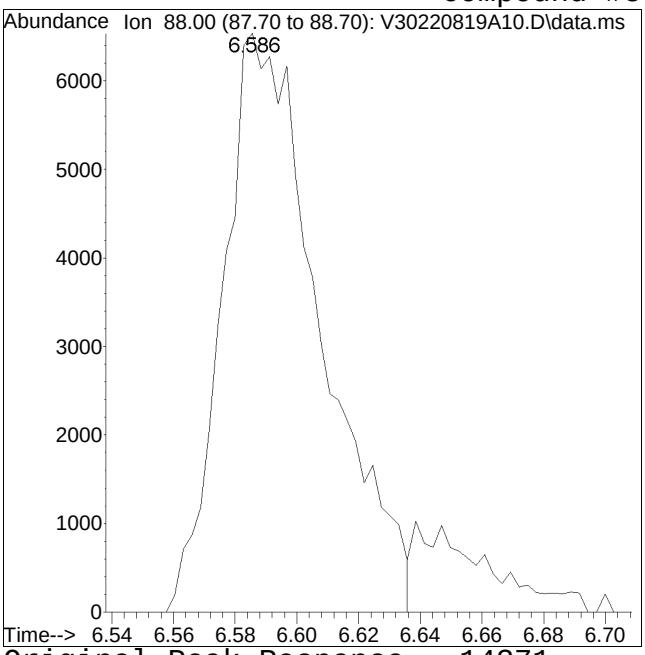
Manual Peak Response = 277964 M1

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

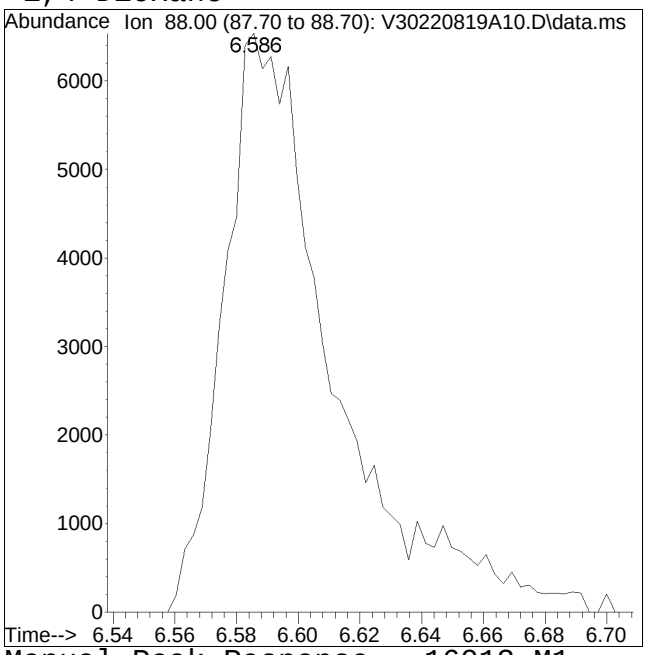
Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A10.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 4:33 pm Instrument : VOA130
Sample : I8260STD80PPB Quant Date : 8/22/2022 1:23 pm

Compound #57: 1,4-Dioxane



Original Peak Response = 14371



Manual Peak Response = 16013 M1

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A11.D
Acq On : 19 Aug 2022 04:53 pm
Operator : VOA130:MKS
Sample : I8260STD120PPB
Misc : WG1678209
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 22 13:35:59 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:22:28 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\220819AICAL\V30220819A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.487	96	278821	10.000	ug/L	0.00
Standard Area 1 = 267936			Recovery = 104.06%			
59) Chlorobenzene-d5	8.501	117	207129	10.000	ug/L	0.00
Standard Area 1 = 196265			Recovery = 105.54%			
79) 1,4-Dichlorobenzene-d4	9.991	152	105486	10.000	ug/L	0.00
Standard Area 1 = 101565			Recovery = 103.86%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.489	113	71646	9.815	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.15%			
43) 1,2-Dichloroethane-d4	5.138	65	81409	10.116	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.16%			
60) Toluene-d8	7.196	98	269766	9.930	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.30%			
83) 4-Bromofluorobenzene	9.321	95	98853	9.844	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.44%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.936	85	685091	108.398	ug/L	99
3) Chloromethane	1.067	50	787764	112.203	ug/L	99
4) Vinyl chloride	1.109	62	774004	108.946	ug/L	96
5) Bromomethane	1.312	94	499347	107.167	ug/L	98
6) Chloroethane	1.399	64	493544	114.322	ug/L	98
7) Trichlorofluoromethane	1.493	101	1181331	108.637	ug/L	97
8) Ethyl ether	1.728	74	296602	121.328	ug/L	78
10) 1,1-Dichloroethene	1.856	96	634166	109.847	ug/L	77
11) Carbon disulfide	1.862	76	1566114	111.593	ug/L	98
12) Freon-113	1.898	101	710232	107.668	ug/L	100
13) Iodomethane	1.954	142	786188	132.788	ug/L	92
14) Acrolein	2.135	56	72025	124.753	ug/L	95
15) Methylene chloride	2.341	84	684930	113.233	ug/L	79
17) Acetone	2.400	43	100131	112.606	ug/L	99
18) trans-1,2-Dichloroethene	2.486	96	678989	109.690	ug/L	83
19) Methyl acetate	2.531	43	288561	120.469	ug/L #	92
20) Methyl tert-butyl ether	2.620	73	1448544	131.473	ug/L	97
21) tert-Butyl alcohol	2.773	59	117499M1	760.759	ug/L	
22) Diisopropyl ether	3.052	45	2474440	129.375	ug/L	93
23) 1,1-Dichloroethane	3.122	63	1348731	111.049	ug/L	99
24) Halothane	3.275	117	541628	114.583	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A11.D
Acq On : 19 Aug 2022 04:53 pm
Operator : VOA130:MKS
Sample : I8260STD120PPB
Misc : WG1678209
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 22 13:35:59 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:22:28 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\220819AICAL\V30220819A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) Acrylonitrile	3.192	53	143918	120.355	ug/L		96
26) Ethyl tert-butyl ether	3.496	59	2098992	143.693	ug/L		93
27) Vinyl acetate	3.499	43	1382728	153.173	ug/L	#	96
28) cis-1,2-Dichloroethene	3.808	96	768454	113.408	ug/L	#	77
29) 2,2-Dichloropropane	3.950	77	1026827	139.927	ug/L		90
30) Bromochloromethane	4.087	128	339264	116.398	ug/L	#	65
31) Cyclohexane	4.059	56	1400744	113.099	ug/L		74
32) Chloroform	4.251	83	1331773	112.263	ug/L		98
33) Ethyl acetate	4.500	43	414253	136.432	ug/L	#	94
34) Carbon tetrachloride	4.369	117	1064649	122.098	ug/L		99
35) Tetrahydrofuran	4.436	42	102516	112.484	ug/L	#	60
37) 1,1,1-Trichloroethane	4.469	97	1172461	114.631	ug/L	#	96
39) 2-Butanone	4.684	43	171225	131.422	ug/L	#	78
40) 1,1-Dichloropropene	4.647	75	995382	114.659	ug/L		97
41) Benzene	4.960	78	2854561	114.280	ug/L		94
42) tert-Amyl methyl ether	5.194	73	1688514	145.958	ug/L		96
44) 1,2-Dichloroethane	5.222	62	997068	119.952	ug/L		98
47) Methyl cyclohexane	5.646	83	1353729	118.735	ug/L	#	79
48) Trichloroethene	5.685	95	769614	113.778	ug/L		99
50) Dibromomethane	6.131	93	395830	119.981	ug/L		96
51) 1,2-Dichloropropane	6.245	63	776664	120.873	ug/L		97
53) 2-Chloroethyl vinyl ether	7.009	63	394659	133.010	ug/L		94
54) Bromodichloromethane	6.357	83	1038386	122.746	ug/L		98
57) 1,4-Dioxane	6.588	88	24600M1	1093.516	ug/L		
58) cis-1,3-Dichloropropene	7.021	75	1191420	139.432	ug/L		96
61) Toluene	7.249	92	1811334	113.940	ug/L		96
62) 4-Methyl-2-pentanone	7.659	58	170461	132.470	ug/L	#	93
63) Tetrachloroethene	7.603	166	779677	113.192	ug/L		93
65) trans-1,3-Dichloropropene	7.676	75	999742	154.973	ug/L		98
67) Ethyl methacrylate	7.868	69	671869	144.587	ug/L		99
68) 1,1,2-Trichloroethane	7.804	83	452446	122.978	ug/L		96
69) Chlorodibromomethane	7.938	129	697097	131.780	ug/L		98
70) 1,3-Dichloropropane	8.016	76	957468	122.063	ug/L		99
71) 1,2-Dibromoethane	8.097	107	528106	126.225	ug/L		99
72) 2-Hexanone	8.342	43	281045	131.281	ug/L		96
73) Chlorobenzene	8.513	112	1963067	113.853	ug/L		92
74) Ethylbenzene	8.557	91	3436202	109.321	ug/L		99
75) 1,1,1,2-Tetrachloroethane	8.574	131	735283	133.786	ug/L		95
76) p/m Xylene	8.666	106	2593765	218.475	ug/L		94
77) o Xylene	8.948	106	2513047	220.165	ug/L		90

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A11.D
Acq On : 19 Aug 2022 04:53 pm
Operator : VOA130:MKS
Sample : I8260STD120PPB
Misc : WG1678209
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 22 13:35:59 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:22:28 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\220819AICAL\V30220819A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78) Styrene	8.987	104	4087814	218.672	ug/L	96
80) Bromoform	8.987	173	408404	141.600	ug/L	97
82) Isopropylbenzene	9.157	105	3352574	109.198	ug/L	96
84) Bromobenzene	9.377	156	808000	115.784	ug/L	98
85) n-Propylbenzene	9.416	91	4022138	107.537	ug/L	96
86) 1,4-Dichlorobutane	9.419	55	957673	125.912	ug/L	97
87) 1,1,2,2-Tetrachloroethane	9.469	83	603610	123.122	ug/L	99
88) 4-Ethyltoluene	9.489	105	3337508	112.439	ug/L	97
89) 2-Chlorotoluene	9.497	91	2796646	110.512	ug/L	97
90) 1,3,5-Trimethylbenzene	9.542	105	2881861	112.683	ug/L	93
91) 1,2,3-Trichloropropane	9.536	75	487950	124.480	ug/L	98
92) trans-1,4-Dichloro-2-b...	9.569	53	189951	144.486	ug/L	89
93) 4-Chlorotoluene	9.600	91	2508638	113.399	ug/L	96
94) tert-Butylbenzene	9.726	119	2468176	110.364	ug/L	93
97) 1,2,4-Trimethylbenzene	9.770	105	2846819	114.282	ug/L	94
98) sec-Butylbenzene	9.832	105	3694629	107.713	ug/L	97
99) p-Isopropyltoluene	9.921	119	3210743	110.866	ug/L	98
100) 1,3-Dichlorobenzene	9.946	146	1562170	111.647	ug/L	100
101) 1,4-Dichlorobenzene	9.999	146	1574853	114.278	ug/L	99
102) p-Diethylbenzene	10.130	119	1967506	116.567	ug/L	97
103) n-Butylbenzene	10.161	91	2992267	110.887	ug/L	97
104) 1,2-Dichlorobenzene	10.239	146	1436913	113.595	ug/L	99
105) 1,2,4,5-Tetramethylben...	10.585	119	3040622	121.104	ug/L	99
106) 1,2-Dibromo-3-chloropr...	10.693	155	88834	141.026	ug/L	90
107) 1,3,5-Trichlorobenzene	10.713	180	1259403	114.089	ug/L	96
108) Hexachlorobutadiene	11.059	225	598336	120.050	ug/L	95
109) 1,2,4-Trichlorobenzene	11.070	180	1089147	117.189	ug/L	99
110) Naphthalene	11.251	128	1964207	119.049	ug/L	100
111) 1,2,3-Trichlorobenzene	11.351	180	978957	117.680	ug/L	100

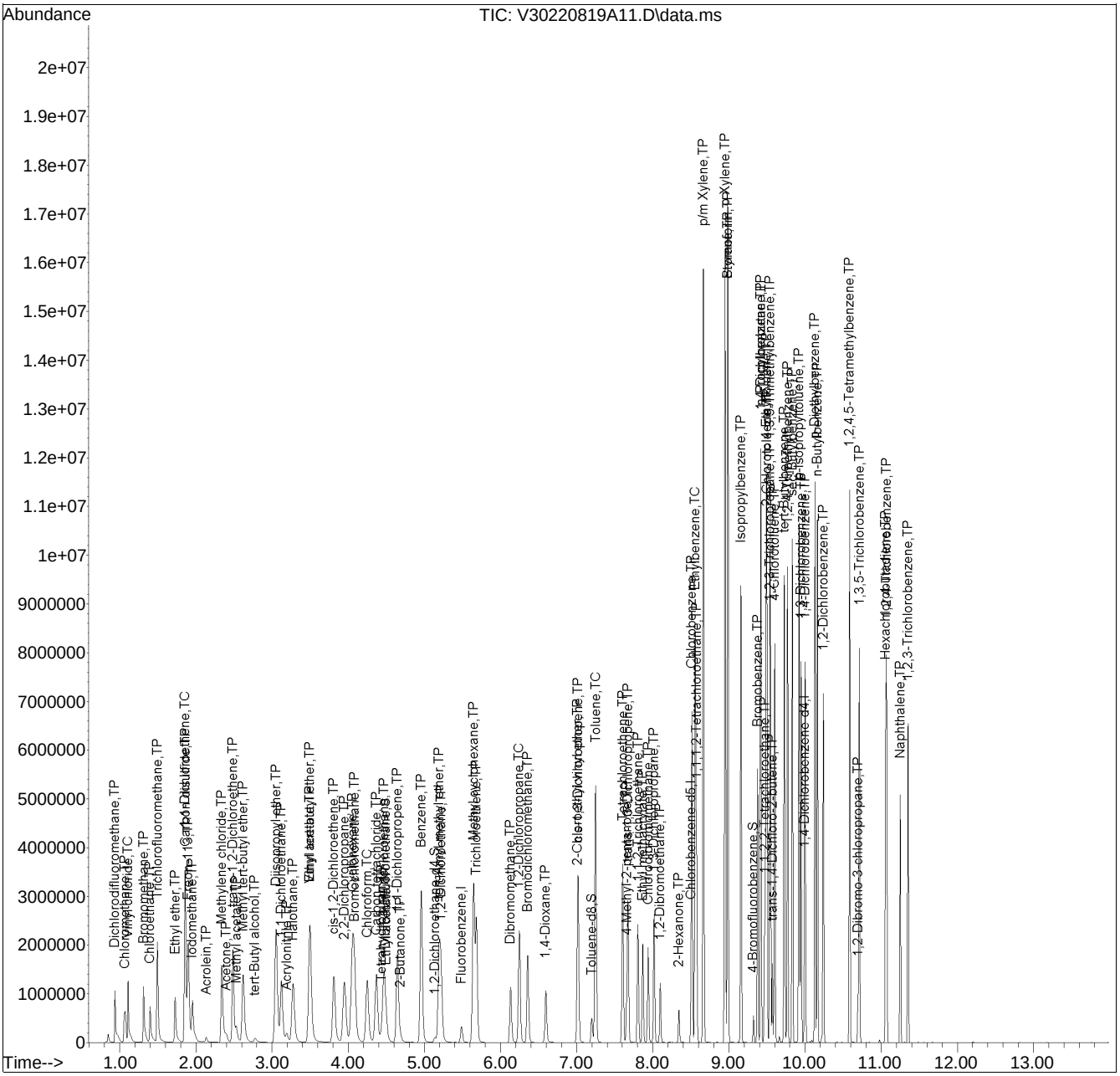
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A11.D
Acq On : 19 Aug 2022 04:53 pm
Operator : VOA130:MKS
Sample : I8260STD120PPB
Misc : WG1678209
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 22 13:35:59 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:22:28 2022
Response via : Initial Calibration

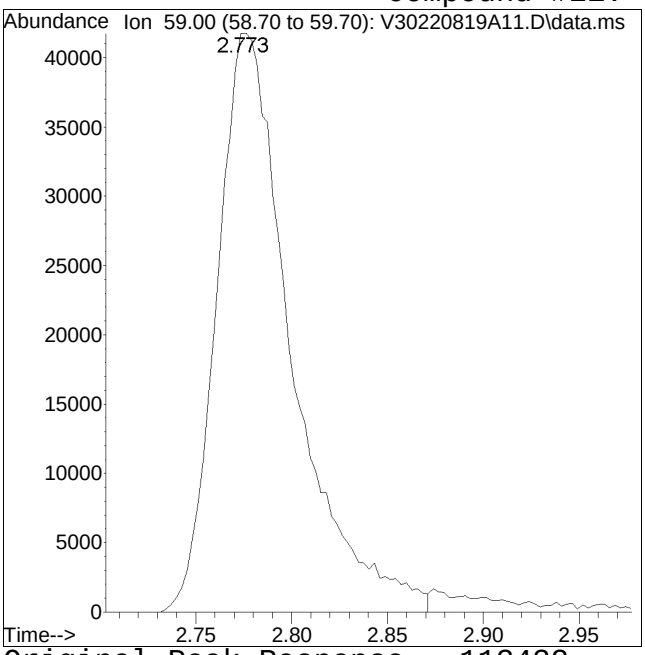
Sub List : 8260-Curve - Megamix plus Diox20819AICAL\V30220819A08.D•



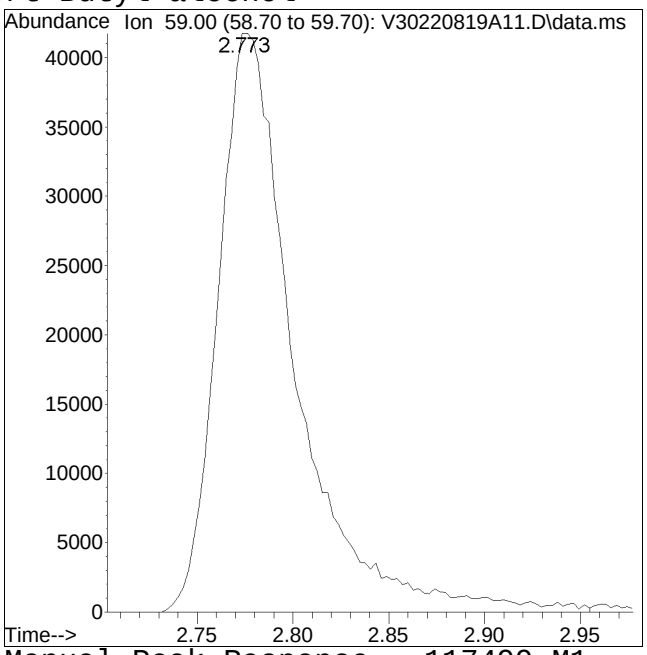
Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A11.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 4:53 pm Instrument : VOA130
Sample : I8260STD120PPB Quant Date : 8/22/2022 1:23 pm

Compound #21: tert-Butyl alcohol



Original Peak Response = 113432



Manual Peak Response = 117499 M1

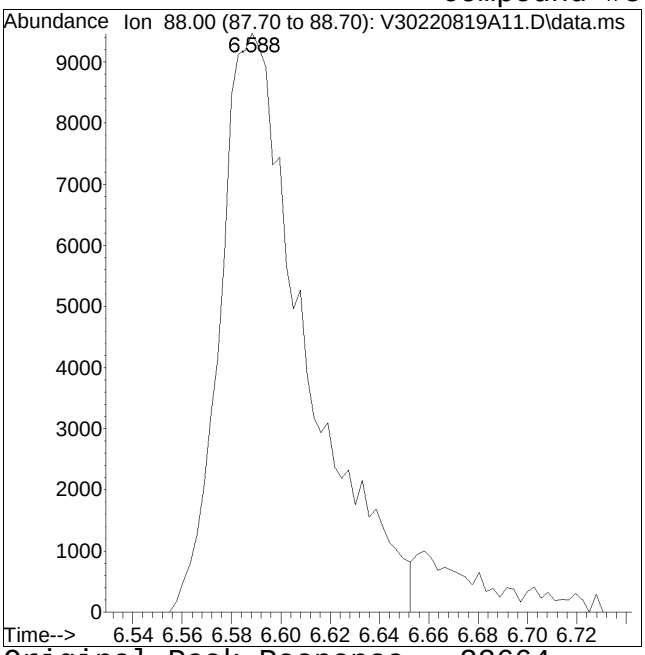
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

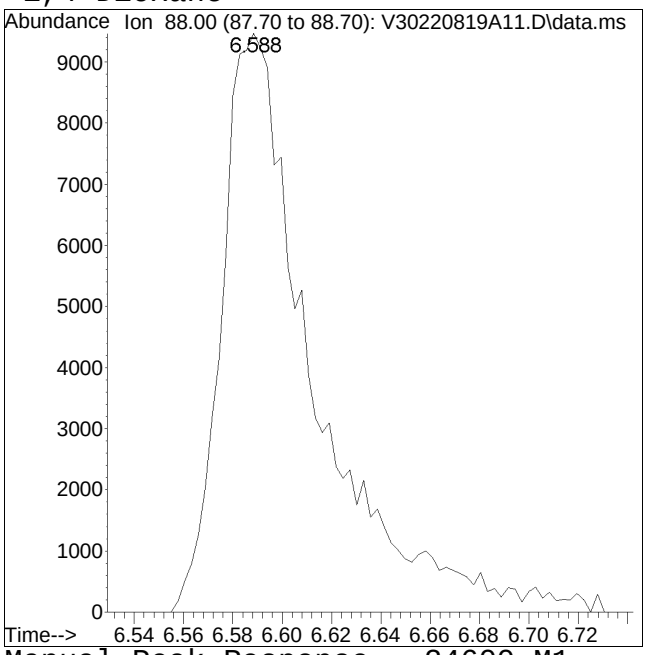
Data Path : I:\VOLATILES\VOA130\2022\2Q
Data File : V30220819A11.D
Date Inj'd : 8/19/2022 4:53 pm
Sample : I8260STD120PPB

Method : VOA130_220819A_8260.m
Operator : VOA130:MKS
Instrument : VOA130
Quant Date : 8/22/2022 1:23 pm

Compound #57: 1,4-Dioxane



Original Peak Response = 22664



Manual Peak Response = 24600 M1

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A12.D
Acq On : 19 Aug 2022 05:12 pm
Operator : VOA130:MKS
Sample : I8260STD200PPB
Misc : WG1678209
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 22 13:36:36 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:22:28 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\220819AICAL\V30220819A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.490	96	275490	10.000	ug/L	0.00
Standard Area 1 = 267936			Recovery = 102.82%			
59) Chlorobenzene-d5	8.502	117	202885	10.000	ug/L	0.00
Standard Area 1 = 196265			Recovery = 103.37%			
79) 1,4-Dichlorobenzene-d4	9.991	152	102162	10.000	ug/L	0.00
Standard Area 1 = 101565			Recovery = 100.59%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.491	113	70638	9.794	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.94%			
43) 1,2-Dichloroethane-d4	5.138	65	80005	10.062	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.62%			
60) Toluene-d8	7.199	98	263137	9.889	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.89%			
83) 4-Bromofluorobenzene	9.321	95	97139	9.988	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.88%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.936	85	1157127	185.300	ug/L	99
3) Chloromethane	1.064	50	1310249	188.878	ug/L	100
4) Vinyl chloride	1.109	62	1302662	185.576	ug/L	96
5) Bromomethane	1.312	94	852658	185.206	ug/L	98
6) Chloroethane	1.399	64	828162	194.151	ug/L	98
7) Trichlorofluoromethane	1.494	101	1973333	183.665	ug/L	97
8) Ethyl ether	1.728	74	491027	203.287	ug/L	78
10) 1,1-Dichloroethene	1.856	96	1059903	185.811	ug/L	77
11) Carbon disulfide	1.862	76	2610705	188.274	ug/L	99
12) Freon-113	1.898	101	1201402	184.329	ug/L	99
13) Iodomethane	1.954	142	1293616	221.135	ug/L	92
14) Acrolein	2.135	56	122771	215.221	ug/L	95
15) Methylene chloride	2.341	84	1143526	191.335	ug/L	79
17) Acetone	2.400	43	165470	188.336	ug/L	99
18) trans-1,2-Dichloroethene	2.486	96	1145849	187.349	ug/L	83
19) Methyl acetate	2.531	43	489919	207.006	ug/L #	93
20) Methyl tert-butyl ether	2.620	73	2457525	225.747	ug/L	97
21) tert-Butyl alcohol	2.776	59	204337M1	1338.998	ug/L	
22) Diisopropyl ether	3.052	45	4134680	218.793	ug/L	93
23) 1,1-Dichloroethane	3.125	63	2255087	187.920	ug/L	98
24) Halothane	3.278	117	917102	196.362	ug/L	99

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A12.D
Acq On : 19 Aug 2022 05:12 pm
Operator : VOA130:MKS
Sample : I8260STD200PPB
Misc : WG1678209
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 22 13:36:36 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:22:28 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\220819AICAL\V30220819A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) Acrylonitrile	3.192	53	246765	208.858	ug/L		97
26) Ethyl tert-butyl ether	3.496	59	3577439	247.866	ug/L		93
27) Vinyl acetate	3.499	43	2368802	265.579	ug/L	#	96
28) cis-1,2-Dichloroethene	3.811	96	1289660	192.628	ug/L	#	76
29) 2,2-Dichloropropane	3.950	77	1779323	245.403	ug/L		94
30) Bromochloromethane	4.087	128	552685	191.913	ug/L	#	65
31) Cyclohexane	4.056	56	2395114	195.725	ug/L		75
32) Chloroform	4.249	83	2220549	189.447	ug/L		98
33) Ethyl acetate	4.500	43	698911	232.965	ug/L	#	93
34) Carbon tetrachloride	4.369	117	1817789	210.992	ug/L		99
35) Tetrahydrofuran	4.430	42	176567	196.078	ug/L	#	68
37) 1,1,1-Trichloroethane	4.466	97	1980727	195.997	ug/L	#	96
39) 2-Butanone	4.684	43	293818	228.244	ug/L	#	73
40) 1,1-Dichloropropene	4.648	75	1676287	195.428	ug/L		97
41) Benzene	4.960	78	4734644	191.839	ug/L		94
42) tert-Amyl methyl ether	5.197	73	2884983	252.397	ug/L		95
44) 1,2-Dichloroethane	5.222	62	1655440	201.566	ug/L		98
47) Methyl cyclohexane	5.649	83	2287690	203.078	ug/L	#	79
48) Trichloroethene	5.685	95	1293948	193.607	ug/L		99
50) Dibromomethane	6.134	93	666024	204.322	ug/L		96
51) 1,2-Dichloropropane	6.248	63	1300441	204.836	ug/L		97
53) 2-Chloroethyl vinyl ether	7.012	63	662805	226.083	ug/L		93
54) Bromodichloromethane	6.357	83	1736886	207.796	ug/L		99
57) 1,4-Dioxane	6.586	88	41006M1	1844.833	ug/L		
58) cis-1,3-Dichloropropene	7.021	75	2006731	237.688	ug/L		95
61) Toluene	7.249	92	3008351	193.196	ug/L		94
62) 4-Methyl-2-pentanone	7.659	58	286778	227.525	ug/L	#	93
63) Tetrachloroethene	7.606	166	1297977	192.380	ug/L		94
65) trans-1,3-Dichloropropene	7.676	75	1701908	269.337	ug/L		97
67) Ethyl methacrylate	7.868	69	1137791	249.975	ug/L		99
68) 1,1,2-Trichloroethane	7.804	83	751396	208.508	ug/L		96
69) Chlorodibromomethane	7.938	129	1175914	226.946	ug/L		98
70) 1,3-Dichloropropane	8.019	76	1593907	207.451	ug/L		99
71) 1,2-Dibromoethane	8.097	107	874879	213.483	ug/L		99
72) 2-Hexanone	8.343	43	470794	224.517	ug/L		96
73) Chlorobenzene	8.515	112	3226512	191.045	ug/L		93
74) Ethylbenzene	8.557	91	5508270	178.909	ug/L		96
75) 1,1,1,2-Tetrachloroethane	8.574	131	1205270	223.888	ug/L		95
76) p/m Xylene	8.666	106	4216584	362.595	ug/L		87
77) o Xylene	8.950	106	4061472	363.263	ug/L		82

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A12.D
Acq On : 19 Aug 2022 05:12 pm
Operator : VOA130:MKS
Sample : I8260STD200PPB
Misc : WG1678209
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 22 13:36:36 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:22:28 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\220819AICAL\V30220819A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
78) Styrene	8.987	104	6333836	345.907	ug/L		100
80) Bromoform	8.987	173	672759	240.845	ug/L		96
82) Isopropylbenzene	9.160	105	5363792	180.391	ug/L		94
84) Bromobenzene	9.377	156	1336263	197.713	ug/L		98
85) n-Propylbenzene	9.419	91	6257666	172.750	ug/L		93
86) 1,4-Dichlorobutane	9.419	55	1584184	215.060	ug/L		96
87) 1,1,2,2-Tetrachloroethane	9.469	83	997310	210.046	ug/L		99
88) 4-Ethyltoluene	9.489	105	5310890	184.743	ug/L		95
89) 2-Chlorotoluene	9.500	91	4515053	184.221	ug/L		96
90) 1,3,5-Trimethylbenzene	9.544	105	4631456	186.986	ug/L		91
91) 1,2,3-Trichloropropane	9.536	75	807020	212.576	ug/L		98
92) trans-1,4-Dichloro-2-b...	9.570	53	320688	251.868	ug/L	#	85
93) 4-Chlorotoluene	9.603	91	4067504	189.847	ug/L		96
94) tert-Butylbenzene	9.729	119	3997899	184.582	ug/L		91
97) 1,2,4-Trimethylbenzene	9.770	105	4580466	189.860	ug/L		92
98) sec-Butylbenzene	9.834	105	5802654	174.674	ug/L		95
99) p-Isopropyltoluene	9.921	119	5081834	181.183	ug/L		96
100) 1,3-Dichlorobenzene	9.946	146	2557572	188.734	ug/L		99
101) 1,4-Dichlorobenzene	9.999	146	2567882	192.398	ug/L		98
102) p-Diethylbenzene	10.130	119	3242448	198.352	ug/L		97
103) n-Butylbenzene	10.161	91	4778832	182.854	ug/L		95
104) 1,2-Dichlorobenzene	10.239	146	2373717	193.759	ug/L		99
105) 1,2,4,5-Tetramethylben...	10.585	119	4883363	200.827	ug/L		98
106) 1,2-Dibromo-3-chloropr...	10.693	155	153645	251.850	ug/L		92
107) 1,3,5-Trichlorobenzene	10.713	180	2094778	195.939	ug/L		95
108) Hexachlorobutadiene	11.059	225	980505	203.129	ug/L		97
109) 1,2,4-Trichlorobenzene	11.070	180	1819850	202.181	ug/L		97
110) Naphthalene	11.248	128	3224968	201.822	ug/L		100
111) 1,2,3-Trichlorobenzene	11.352	180	1623554	201.516	ug/L		99

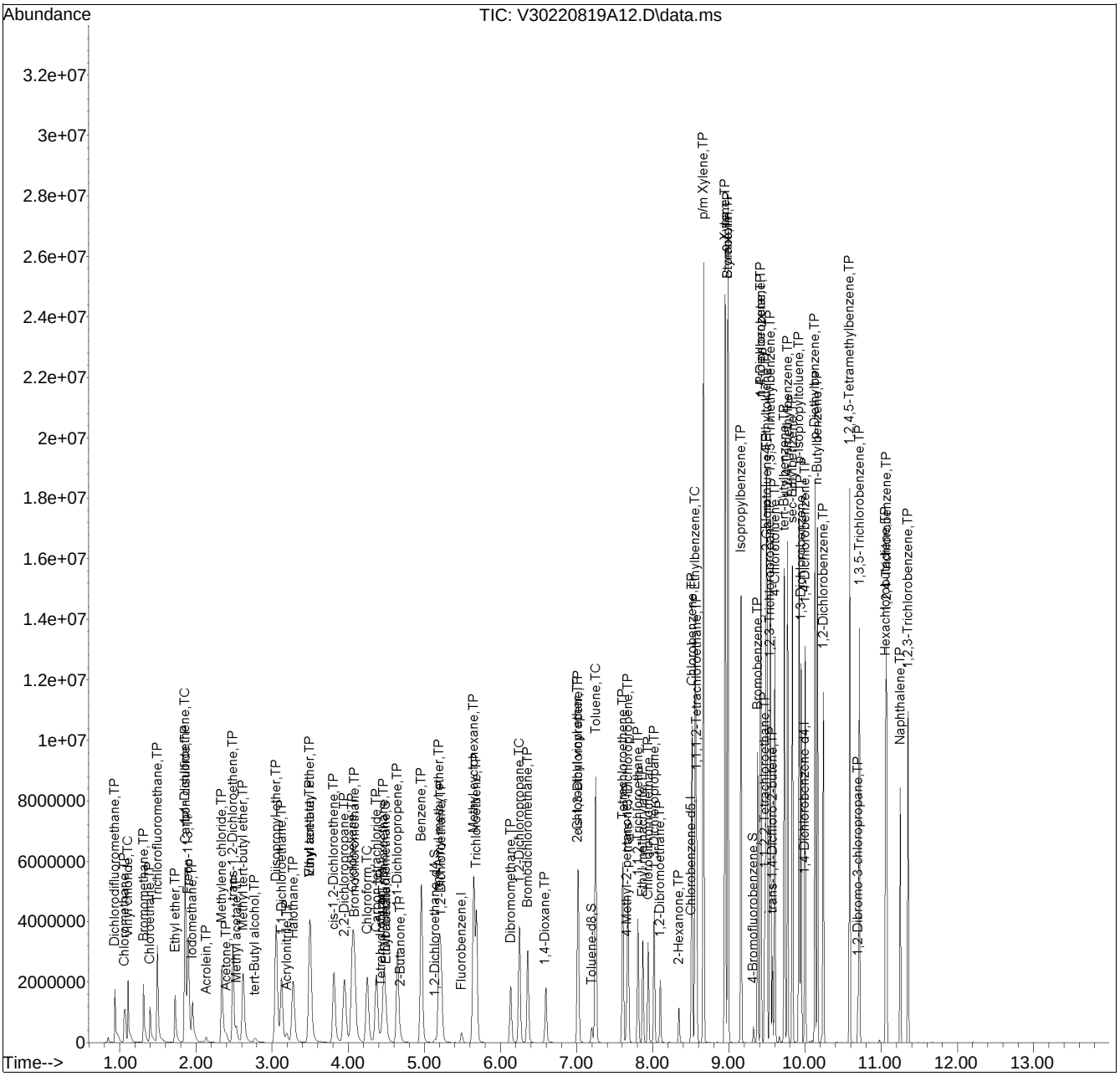
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A12.D
Acq On : 19 Aug 2022 05:12 pm
Operator : VOA130:MKS
Sample : I8260STD200PPB
Misc : WG1678209
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 22 13:36:36 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:22:28 2022
Response via : Initial Calibration

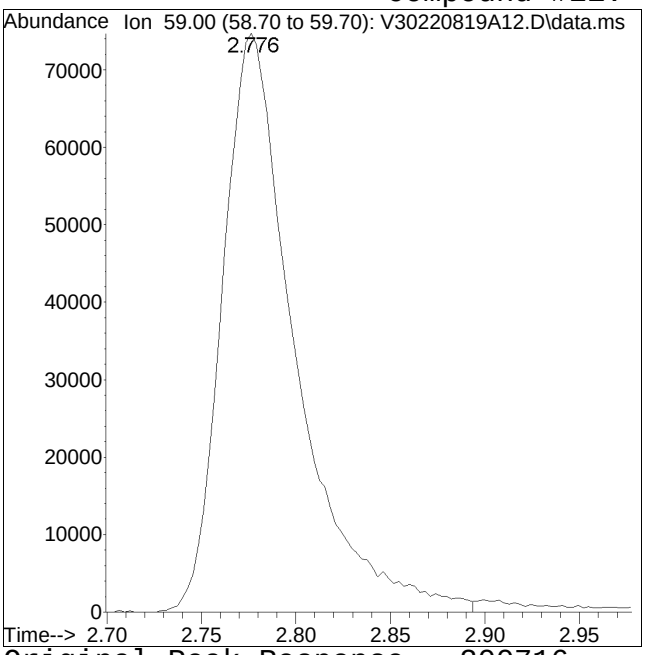
Sub List : 8260-Curve - Megamix plus Diox20819AICAL\V30220819A08.D•



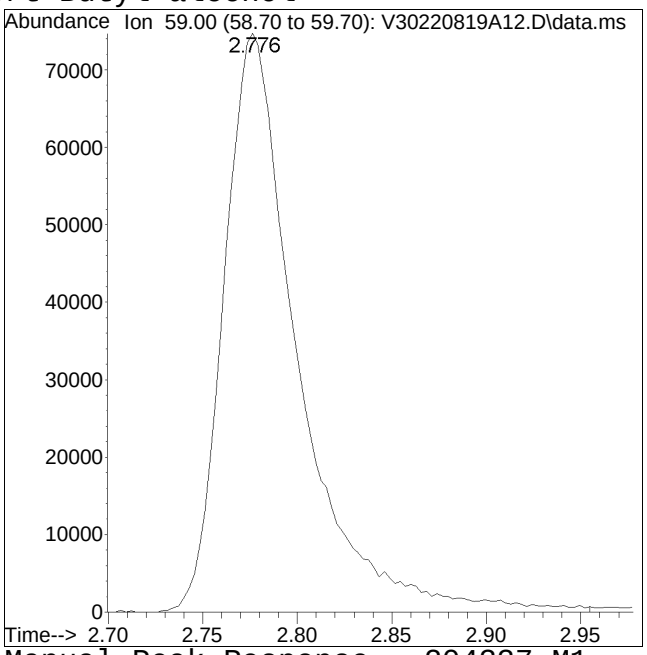
Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A12.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 5:12 pm Instrument : VOA130
Sample : I8260STD200PPB Quant Date : 8/22/2022 1:23 pm

Compound #21: tert-Butyl alcohol



Original Peak Response = 200716



Manual Peak Response = 204337 M1

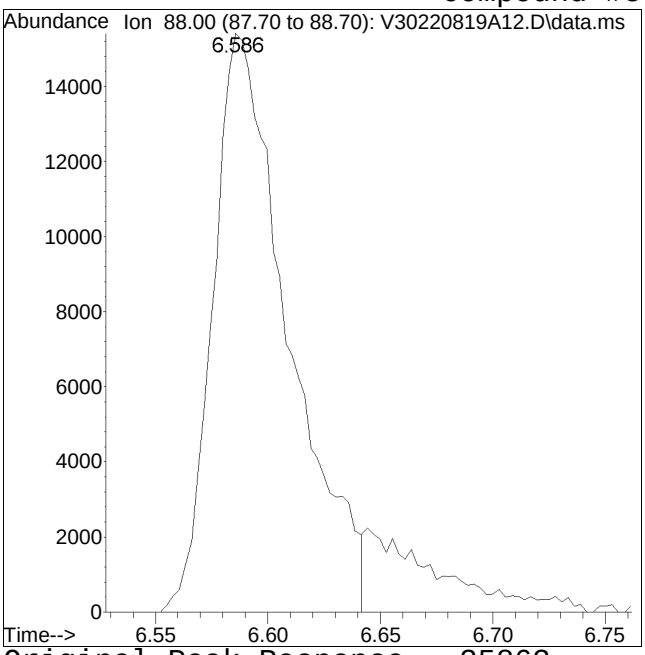
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

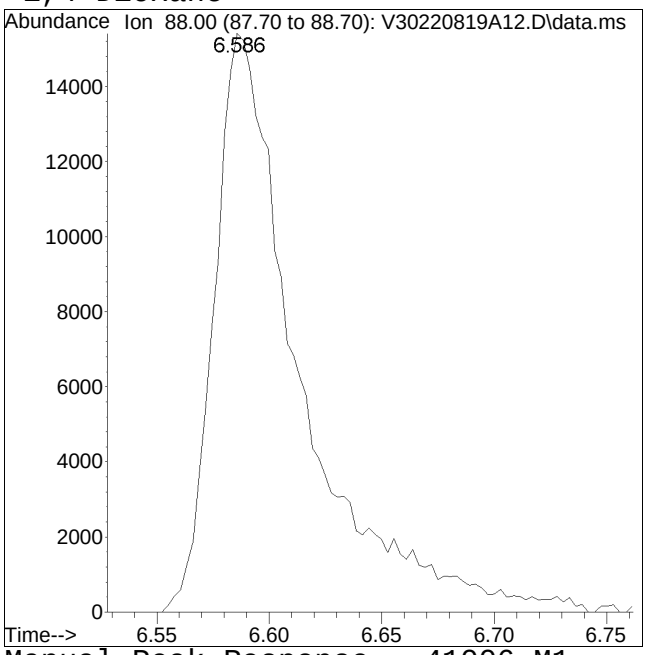
Data Path : I:\VOLATILES\VOA130\2022\2Q
Data File : V30220819A12.D
Date Inj'd : 8/19/2022 5:12 pm
Sample : I8260STD200PPB

Method : VOA130_220819A_8260.m
Operator : VOA130:MKS
Instrument : VOA130
Quant Date : 8/22/2022 1:23 pm

Compound #57: 1,4-Dioxane



Original Peak Response = 35863



Manual Peak Response = 41006 M1

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

Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A17.D
Acq On : 19 Aug 2022 06:51 pm
Operator : VOA130:MKS
Sample : C8260STD10PPB
Misc : WG1678209
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 22 13:46:40 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	1.000	1.000	0.0	95	0.00
2	TP	Dichlorodifluoromethane	0.204	0.252	-23.5#	105	0.00
3	TP	Chloromethane	0.235	0.282	-20.0	106	0.00
4	TC	Vinyl chloride	0.233	0.280	-20.2#	104	0.00
5	TP	Bromomethane	0.160	0.185	-15.6	105	0.00
6	TP	Chloroethane	0.146	0.159	-8.9	98	0.00
7	TP	Trichlorofluoromethane	0.358	0.411	-14.8	100	0.00
8	TP	Ethyl ether	0.084	0.106	-26.2#	114	0.00
10	TC	1,1-Dichloroethene	0.190	0.201	-5.8	92	0.00
11	TP	Carbon disulfide	0.472	0.529	-12.1	100	0.00
12	TP	Freon-113	0.211	0.217	-2.8	87	0.00
13	TP	Iodomethane	0.212	0.196	7.5	87	0.00
14	TP	Acrolein	0.021	0.016	23.8#	73	0.00
15	TP	Methylene chloride	0.213	0.218	-2.3	95	0.00
17	TP	Acetone	0.033	0.031	6.1	92	0.00
18	TP	trans-1,2-Dichloroethene	0.206	0.213	-3.4	91	0.00
19	TP	Methyl acetate	0.086	0.082	4.7	90	0.00
20	TP	Methyl tert-butyl ether	0.401	0.441	-10.0	106	0.00
21	TP	tert-Butyl alcohol	0.00619	0.00576#	6.9	99	0.00
22	TP	Diisopropyl ether	0.698	0.696	0.3	96	0.00
23	TP	1,1-Dichloroethane	0.412	0.430	-4.4	94	0.00
24	TP	Halothane	0.159	0.165	-3.8	93	0.00
25	TP	Acrylonitrile	0.043	0.046	-7.0	101	0.00
26	TP	Ethyl tert-butyl ether	0.554	0.532	4.0	96	0.00
27	TP	Vinyl acetate	0.368	0.328	10.9	96	0.00
28	TP	cis-1,2-Dichloroethene	0.237	0.229	3.4	89	0.00
29	TP	2,2-Dichloropropane	0.271	0.246	9.2	89	0.00
30	TP	Bromochloromethane	0.103	0.105	-1.9	96	0.00
31	TP	Cyclohexane	0.408	0.375	8.1	80	0.00
32	TC	Chloroform	0.404	0.417	-3.2	93	0.00
33	TP	Ethyl acetate	0.118	0.115	2.5	101	0.00
34	TP	Carbon tetrachloride	0.287	0.302	-5.2	92	0.00
35	TP	Tetrahydrofuran	0.032	0.031	3.1	91	0.00
36	S	Dibromofluoromethane	0.264	0.265	-0.4	96	0.00
37	TP	1,1,1-Trichloroethane	0.335	0.363	-8.4	94	0.00
39	TP	2-Butanone	0.050	0.050	0.0	101	0.00
40	TP	1,1-Dichloropropene	0.285	0.303	-6.3	92	0.00
41	TP	Benzene	0.848	0.854	-0.7	90	0.00
42	TP	tert-Amyl methyl ether	0.445	0.427	4.0	98	0.00

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A17.D
Acq On : 19 Aug 2022 06:51 pm
Operator : VOA130:MKS
Sample : C8260STD10PPB
Misc : WG1678209
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 22 13:46:40 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
43	S	1,2-Dichloroethane-d4	0.290	0.293	-1.0	96	0.00
44	TP	1,2-Dichloroethane	0.297	0.290	2.4	92	0.00
47	TP	Methyl cyclohexane	0.383	0.362	5.5	84	0.00
48	TP	Trichloroethene	0.221	0.226	-2.3	88	0.00
50	TP	Dibromomethane	0.118	0.115	2.5	92	0.00
51	TC	1,2-Dichloropropane	0.224	0.224	0.0	92	0.00
53	TP	2-Chloroethyl vinyl ether	0.108	0.102	5.6	91	0.00
54	TP	Bromodichloromethane	0.303	0.302	0.3	95	0.00
57	TP	1,4-Dioxane	0.00074	0.00062#	16.2	73	0.00
58	TP	cis-1,3-Dichloropropene	0.301	0.297#	1.3	92	0.00
59	I	Chlorobenzene-d5	1.000	1.000	0.0	96	0.00
60	S	Toluene-d8	1.299	1.322	-1.8	97	0.00
61	TC	Toluene	0.726	0.726	0.0	91	0.00
62	TP	4-Methyl-2-pentanone	0.064	0.060	6.3	92	0.00
63	TP	Tetrachloroethene	0.308	0.316	-2.6	91	0.00
65	TP	trans-1,3-Dichloropropene	* 10.000	9.834	1.7	95	0.00
67	TP	Ethyl methacrylate	0.241	0.249	-3.3	106	0.00
68	TP	1,1,2-Trichloroethane	0.177	0.170#	4.0	91	0.00
69	TP	Chlorodibromomethane	0.261	0.255	2.3	96	0.00
70	TP	1,3-Dichloropropane	0.373	0.364	2.4	92	0.00
71	TP	1,2-Dibromoethane	0.199	0.195#	2.0	92	0.00
72	TP	2-Hexanone	0.112	0.098	12.5	91	0.00
73	TP	Chlorobenzene	0.802	0.809	-0.9	93	0.00
74	TC	Ethylbenzene	1.414	1.453	-2.8	92	0.00
75	TP	1,1,1,2-Tetrachloroethane	0.268	0.262	2.2	95	0.00
76	TP	p/m Xylene	0.526	0.540	-2.7	90	0.00
77	TP	o Xylene	0.513	0.548	-6.8	95	0.00
78	TP	Styrene	0.829	0.916	-10.5	97	0.00
79	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	97	0.00
80	TP	Bromoform	0.293	0.273	6.8	97	0.00
82	TP	Isopropylbenzene	2.676	2.692	-0.6	90	0.00
83	S	4-Bromofluorobenzene	0.948	0.941	0.7	96	0.00
84	TP	Bromobenzene	0.664	0.632	4.8	93	0.00
85	TP	n-Propylbenzene	3.228	3.305	-2.4	91	0.00
86	TP	1,4-Dichlorobutane	0.745	0.782	-5.0	105	0.00
87	TP	1,1,2,2-Tetrachloroethane	0.485	0.433	10.7	91	0.00
88	TP	4-Ethyltoluene	2.640	2.877	-9.0	99	0.00

Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A17.D
Acq On : 19 Aug 2022 06:51 pm
Operator : VOA130:MKS
Sample : C8260STD10PPB
Misc : WG1678209
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 22 13:46:40 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
89 TP	2-Chlorotoluene	2.256	2.245	0.5	91	0.00
90 TP	1,3,5-Trimethylbenzene	2.283	2.247	1.6	90	0.00
91 TP	1,2,3-Trichloropropane	0.390	0.363	6.9	95	0.00
92 TP	trans-1,4-Dichloro-2-butene	0.136	0.134	1.5	105	0.00
93 TP	4-Chlorotoluene	2.024	1.982	2.1	92	0.00
94 TP	tert-Butylbenzene	1.970	1.970	0.0	90	0.00
97 TP	1,2,4-Trimethylbenzene	2.245	2.285	-1.8	94	0.00
98 TP	sec-Butylbenzene	2.951	3.015	-2.2	90	0.00
99 TP	p-Isopropyltoluene	2.525	2.525	0.0	89	0.00
100 TP	1,3-Dichlorobenzene	1.274	1.254	1.6	92	0.00
101 TP	1,4-Dichlorobenzene	1.281	1.190	7.1	89	0.00
102 TP	p-Diethylbenzene	1.530	1.528	0.1	93	0.00
103 TP	n-Butylbenzene	2.345	2.425	-3.4	92	0.00
104 TP	1,2-Dichlorobenzene	1.194	1.161	2.8	94	0.00
105 TP	1,2,4,5-Tetramethylbenzene	2.338	2.426	-3.8	99	0.00
106 TP	1,2-Dibromo-3-chloropropane	0.062	0.062	0.0	100	0.00
107 TP	1,3,5-Trichlorobenzene	1.017	1.003	1.4	93	0.00
108 TP	Hexachlorobutadiene	0.461	0.426	7.6	88	0.00
109 TP	1,2,4-Trichlorobenzene	0.884	0.852	3.6	94	0.00
110 TP	Naphthalene	1.590	1.524	4.2	95	0.00
111 TP	1,2,3-Trichlorobenzene	0.784	0.759	3.2	94	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 5 CCC's out = 1

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A17.D
Acq On : 19 Aug 2022 06:51 pm
Operator : VOA130:MKS
Sample : C8260STD10PPB
Misc : WG1678209
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 22 13:46:40 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\220819AICAL\V30220819A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.490	96	254142	10.000	ug/L	0.00
Standard Area 1 = 267936			Recovery =	94.85%		
59) Chlorobenzene-d5	8.499	117	188032	10.000	ug/L	0.00
Standard Area 1 = 196265			Recovery =	95.81%		
79) 1,4-Dichlorobenzene-d4	9.991	152	98769	10.000	ug/L	0.00
Standard Area 1 = 101565			Recovery =	97.25%		
System Monitoring Compounds						
36) Dibromofluoromethane	4.491	113	67464	10.052	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	100.52%		
43) 1,2-Dichloroethane-d4	5.141	65	74541	10.116	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	101.16%		
60) Toluene-d8	7.199	98	248658	10.181	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	101.81%		
83) 4-Bromofluorobenzene	9.321	95	92913	9.922	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	99.22%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.936	85	63917	12.358	ug/L	91
3) Chloromethane	1.064	50	71752	12.022	ug/L	100
4) Vinyl chloride	1.109	62	71038	11.996	ug/L	97
5) Bromomethane	1.312	94	47003	11.532	ug/L	96
6) Chloroethane	1.399	64	40483	10.883	ug/L	97
7) Trichlorofluoromethane	1.496	101	104354	11.463	ug/L	97
8) Ethyl ether	1.728	74	26867	12.515	ug/L	76
10) 1,1-Dichloroethene	1.856	96	51031	10.546	ug/L	78
11) Carbon disulfide	1.859	76	134374	11.191	ug/L	99
12) Freon-113	1.901	101	55158	10.264	ug/L	98
13) Iodomethane	1.957	142	49783	9.228	ug/L	91
14) Acrolein	2.132	56	4050M1	7.651	ug/L	
15) Methylene chloride	2.339	84	55476	10.226	ug/L	79
17) Acetone	2.403	43	7900	9.419	ug/L	91
18) trans-1,2-Dichloroethene	2.486	96	54062	10.328	ug/L	83
19) Methyl acetate	2.534	43	20760	9.540	ug/L #	95
20) Methyl tert-butyl ether	2.620	73	112012M1	10.987	ug/L	
21) tert-Butyl alcohol	2.776	59	7313M1	46.458	ug/L	
22) Diisopropyl ether	3.058	45	176940	9.973	ug/L	91
23) 1,1-Dichloroethane	3.122	63	109408	10.461	ug/L	99
24) Halothane	3.273	117	42019	10.416	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A17.D
Acq On : 19 Aug 2022 06:51 pm
Operator : VOA130:MKS
Sample : C8260STD10PPB
Misc : WG1678209
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 22 13:46:40 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\220819AICAL\V30220819A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) Acrylonitrile	3.195	53	11608M1	10.516	ug/L		
26) Ethyl tert-butyl ether	3.501	59	135325	9.610	ug/L		95
27) Vinyl acetate	3.499	43	83427	8.923	ug/L	#	91
28) cis-1,2-Dichloroethene	3.817	96	58149	9.670	ug/L	#	78
29) 2,2-Dichloropropane	3.953	77	62474	9.059	ug/L	#	77
30) Bromochloromethane	4.081	128	26809M1	10.248	ug/L		
31) Cyclohexane	4.054	56	95287	9.187	ug/L		75
32) Chloroform	4.246	83	105920	10.328	ug/L		99
33) Ethyl acetate	4.505	43	29336M1	9.790	ug/L		
34) Carbon tetrachloride	4.366	117	76780	10.539	ug/L		99
35) Tetrahydrofuran	4.441	42	7994M1	9.830	ug/L		
37) 1,1,1-Trichloroethane	4.472	97	92128	10.810	ug/L	#	98
39) 2-Butanone	4.687	43	12663M1	9.873	ug/L		
40) 1,1-Dichloropropene	4.642	75	77093	10.633	ug/L		97
41) Benzene	4.957	78	216996	10.073	ug/L		93
42) tert-Amyl methyl ether	5.197	73	108554	9.607	ug/L		93
44) 1,2-Dichloroethane	5.219	62	73714	9.766	ug/L		96
47) Methyl cyclohexane	5.646	83	91989	9.449	ug/L	#	79
48) Trichloroethene	5.685	95	57355	10.230	ug/L		98
50) Dibromomethane	6.131	93	29308	9.814	ug/L		95
51) 1,2-Dichloropropane	6.245	63	56973	10.018	ug/L		97
53) 2-Chloroethyl vinyl ether	7.010	63	25943	9.487	ug/L		94
54) Bromodichloromethane	6.357	83	76850	9.992	ug/L		98
57) 1,4-Dioxane	6.591	88	7897M1	419.532	ug/L		
58) cis-1,3-Dichloropropene	7.018	75	75574	9.884	ug/L		98
61) Toluene	7.247	92	136460	9.996	ug/L		99
62) 4-Methyl-2-pentanone	7.659	58	11229	9.301	ug/L	#	94
63) Tetrachloroethene	7.604	166	59467	10.283	ug/L		94
65) trans-1,3-Dichloropropene	7.676	75	58119	9.834	ug/L		98
67) Ethyl methacrylate	7.869	69	46887	10.333	ug/L		97
68) 1,1,2-Trichloroethane	7.804	83	31897	9.611	ug/L		94
69) Chlorodibromomethane	7.938	129	47936	9.780	ug/L		98
70) 1,3-Dichloropropane	8.016	76	68391	9.762	ug/L		99
71) 1,2-Dibromoethane	8.097	107	36596	9.758	ug/L		98
72) 2-Hexanone	8.343	43	18477	8.735	ug/L		98
73) Chlorobenzene	8.513	112	152191	10.096	ug/L		93
74) Ethylbenzene	8.555	91	273155	10.275	ug/L		99
75) 1,1,1,2-Tetrachloroethane	8.574	131	49277	9.781	ug/L		95
76) p/m Xylene	8.661	106	202887	20.519	ug/L		100
77) o Xylene	8.945	106	206190	21.357	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A17.D
Acq On : 19 Aug 2022 06:51 pm
Operator : VOA130:MKS
Sample : C8260STD10PPB
Misc : WG1678209
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 22 13:46:40 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\220819AICAL\V30220819A08.D
Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
78)	Styrene	8.981	104	344313	22.089	ug/L		93
80)	Bromoform	8.984	173	26948	9.324	ug/L		95
82)	Isopropylbenzene	9.157	105	265899	10.062	ug/L		98
84)	Bromobenzene	9.374	156	62387	9.511	ug/L		97
85)	n-Propylbenzene	9.413	91	326459	10.241	ug/L		99
86)	1,4-Dichlorobutane	9.419	55	77244	10.494	ug/L		98
87)	1,1,2,2-Tetrachloroethane	9.466	83	42740	8.925	ug/L		99
88)	4-Ethyltoluene	9.486	105	284140	10.897	ug/L		98
89)	2-Chlorotoluene	9.497	91	221703	9.951	ug/L		97
90)	1,3,5-Trimethylbenzene	9.539	105	221902	9.842	ug/L		94
91)	1,2,3-Trichloropropane	9.536	75	35882	9.326	ug/L		98
92)	trans-1,4-Dichloro-2-b...	9.567	53	13245	9.892	ug/L	#	86
93)	4-Chlorotoluene	9.598	91	195732	9.792	ug/L		97
94)	tert-Butylbenzene	9.726	119	194598	10.003	ug/L		93
97)	1,2,4-Trimethylbenzene	9.768	105	225682	10.179	ug/L		95
98)	sec-Butylbenzene	9.829	105	297814	10.219	ug/L		99
99)	p-Isopropyltoluene	9.918	119	249387	9.998	ug/L		98
100)	1,3-Dichlorobenzene	9.943	146	123834	9.841	ug/L		99
101)	1,4-Dichlorobenzene	9.999	146	117510	9.287	ug/L		99
102)	p-Diethylbenzene	10.127	119	150899	9.988	ug/L		94
103)	n-Butylbenzene	10.158	91	239532	10.340	ug/L		99
104)	1,2-Dichlorobenzene	10.236	146	114712	9.724	ug/L		98
105)	1,2,4,5-Tetramethylben...	10.582	119	239599	10.377	ug/L		98
106)	1,2-Dibromo-3-chloropr...	10.693	155	6092	9.922	ug/L		87
107)	1,3,5-Trichlorobenzene	10.710	180	99028	9.857	ug/L		95
108)	Hexachlorobutadiene	11.056	225	42060	9.241	ug/L		97
109)	1,2,4-Trichlorobenzene	11.067	180	84147	9.638	ug/L		98
110)	Naphthalene	11.248	128	150554	9.589	ug/L		100
111)	1,2,3-Trichlorobenzene	11.349	180	74921	9.676	ug/L		98

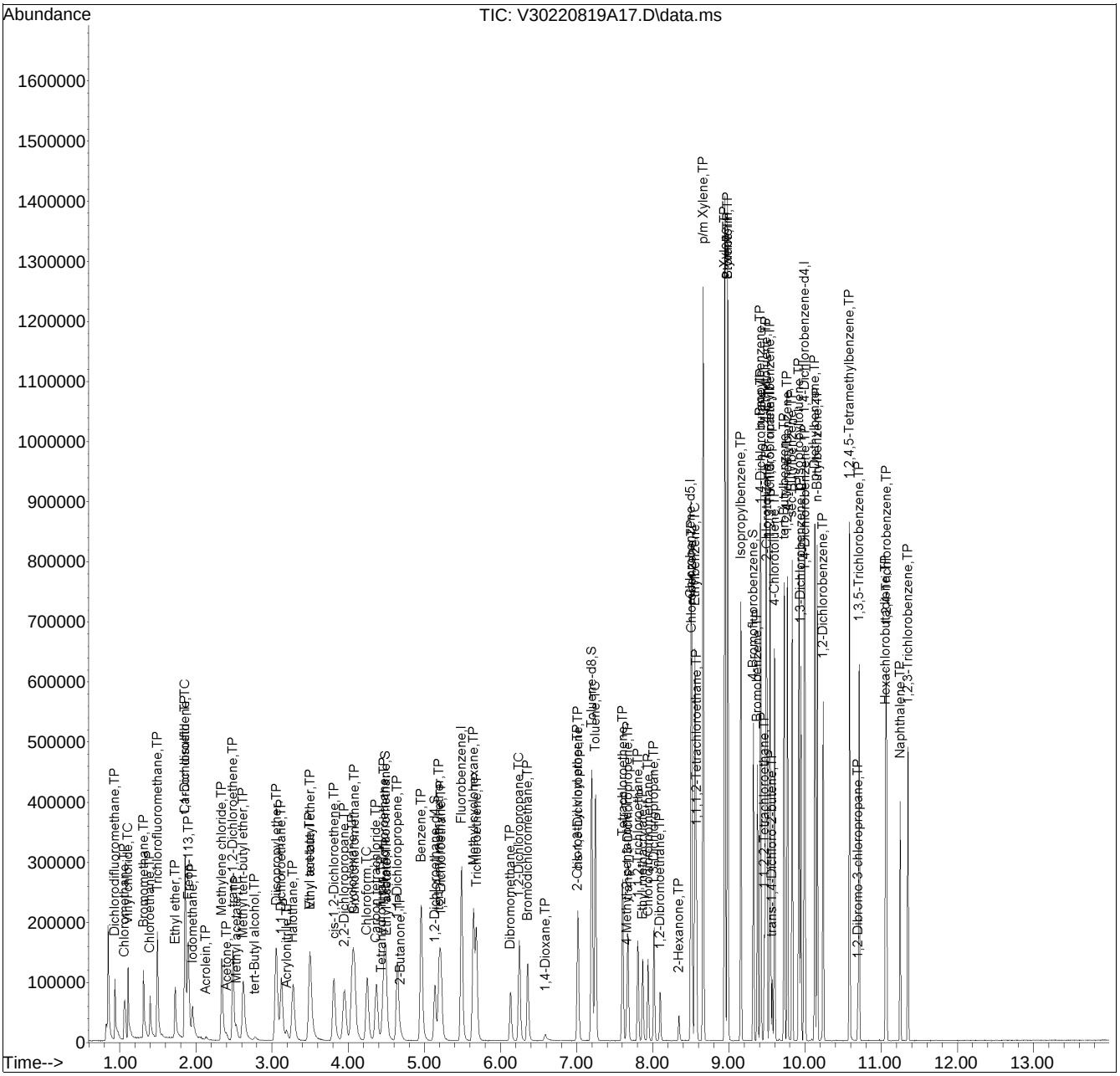
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\220819AICAL\
Data File : V30220819A17.D
Acq On : 19 Aug 2022 06:51 pm
Operator : VOA130:MKS
Sample : C8260STD10PPB
Misc : WG1678209
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 22 13:46:40 2022
Quant Method : I:\VOLATILES\VOA130\2022\220819AICAL\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

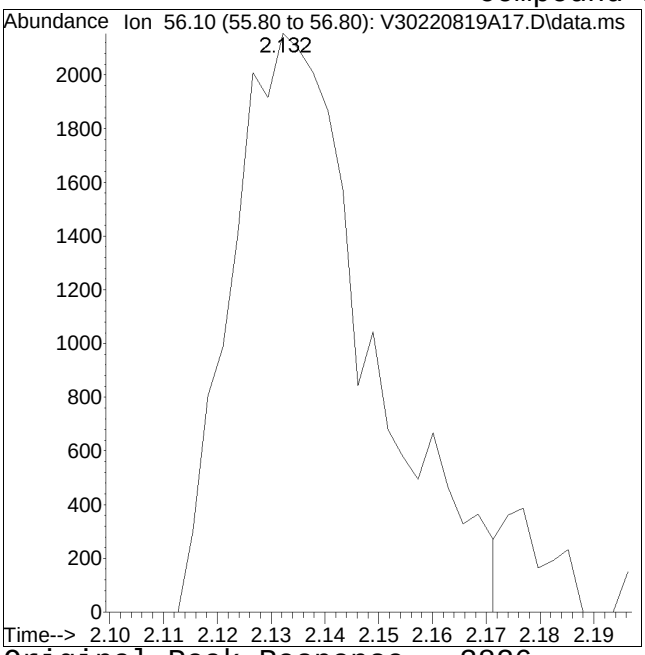
Sub List : 8260-Curve - Megamix plus Diox20819AICAL\V30220819A08.D•



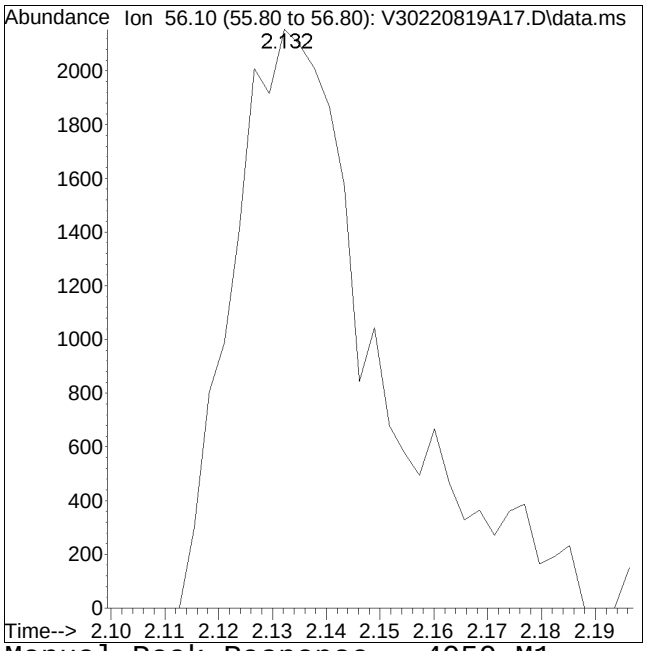
Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A17.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 6:51 pm Instrument : VOA130
Sample : C8260STD10PPB Quant Date : 8/22/2022 1:44 pm

Compound #14: Acrolein



Original Peak Response = 3826



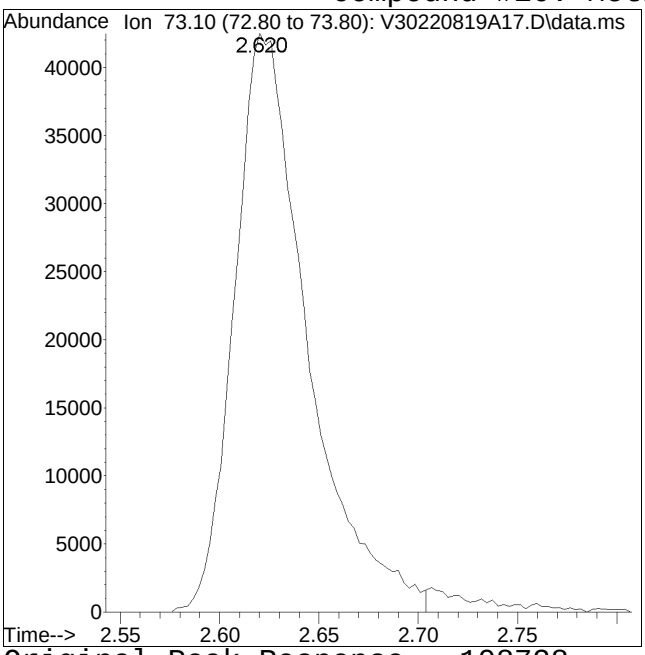
Manual Peak Response = 4050 M1

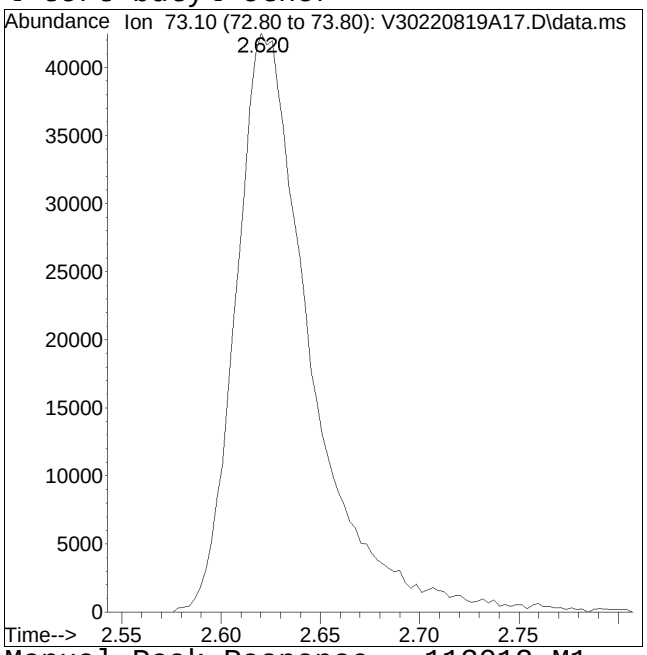
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A17.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 6:51 pm Instrument : VOA130
Sample : C8260STD10PPB Quant Date : 8/22/2022 1:44 pm

Compound #20: Methyl tert-butyl ether





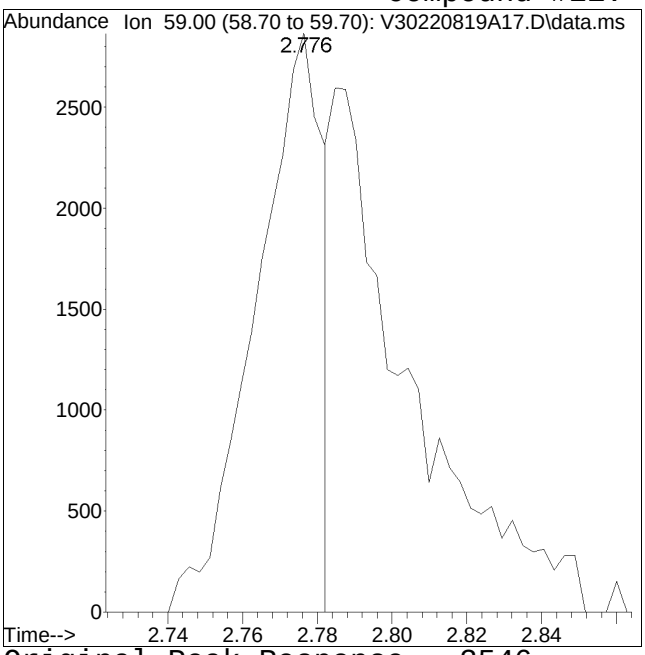
Original Peak Response = 108728 Manual Peak Response = 112012 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

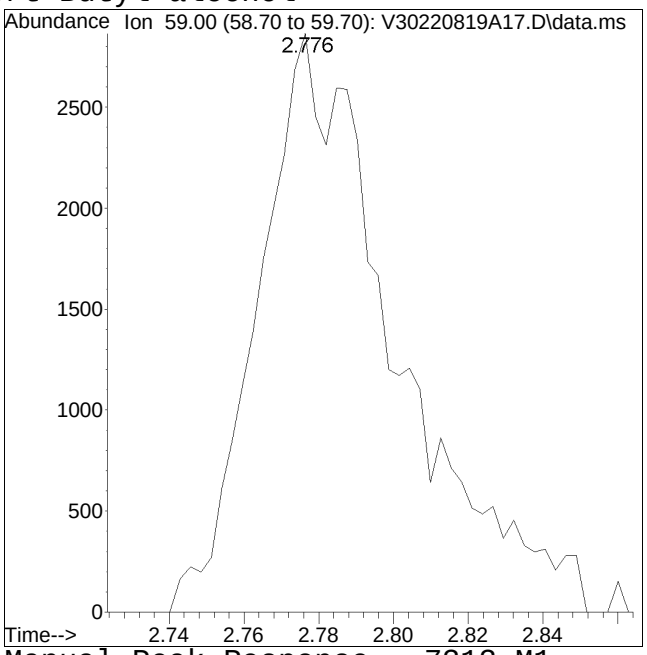
Data Path : I:\VOLATILES\VOA130\2022\2Q
Data File : V30220819A17.D
Date Inj'd : 8/19/2022 6:51 pm
Sample : C8260STD10PPB

Method : VOA130_220819A_8260.m
Operator : VOA130:MKS
Instrument : VOA130
Quant Date : 8/22/2022 1:44 pm

Compound #21: tert-Butyl alcohol



Original Peak Response = 3546



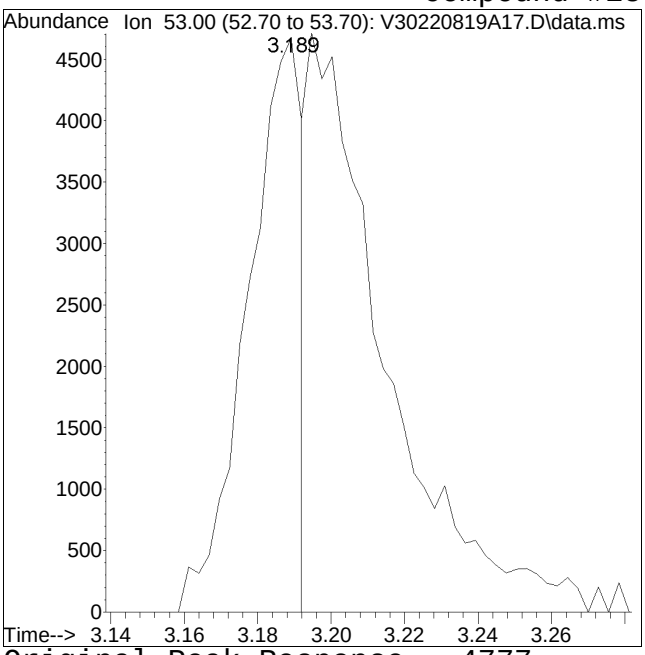
Manual Peak Response = 7313 M1

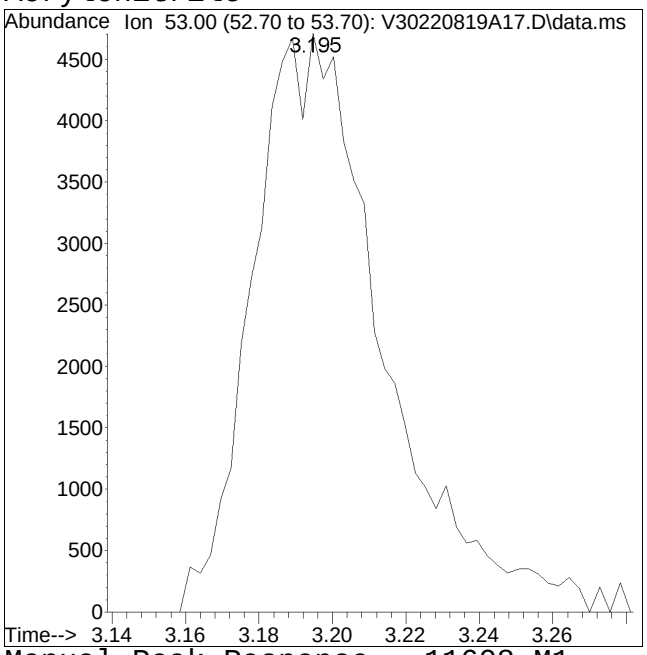
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A17.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 6:51 pm Instrument : VOA130
Sample : C8260STD10PPB Quant Date : 8/22/2022 1:44 pm

Compound #25: Acrylonitrile



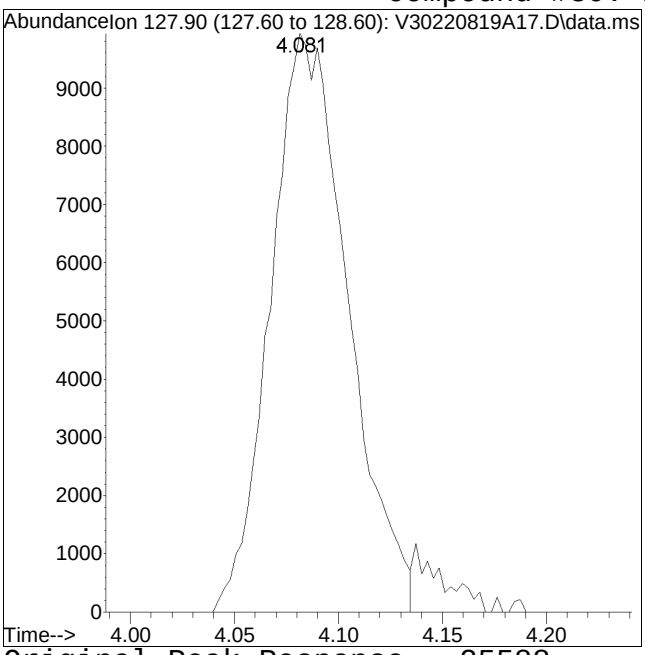


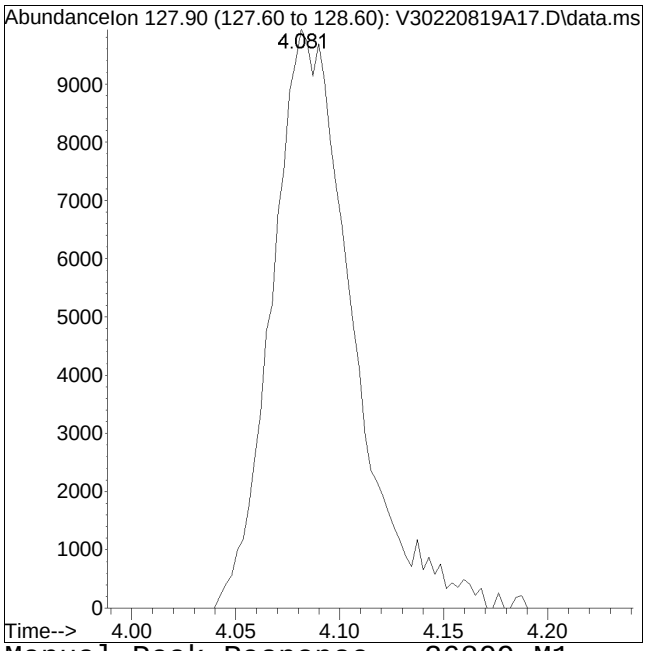
Original Peak Response = 4777 Manual Peak Response = 11608 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A17.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 6:51 pm Instrument : VOA130
Sample : C8260STD10PPB Quant Date : 8/22/2022 1:44 pm

Compound #30: Bromochloromethane



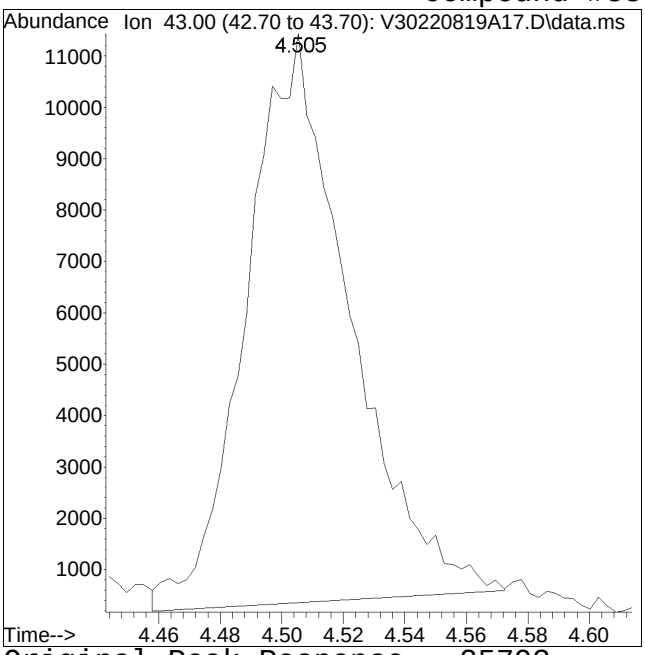


Original Peak Response = 25588 Manual Peak Response = 26809 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

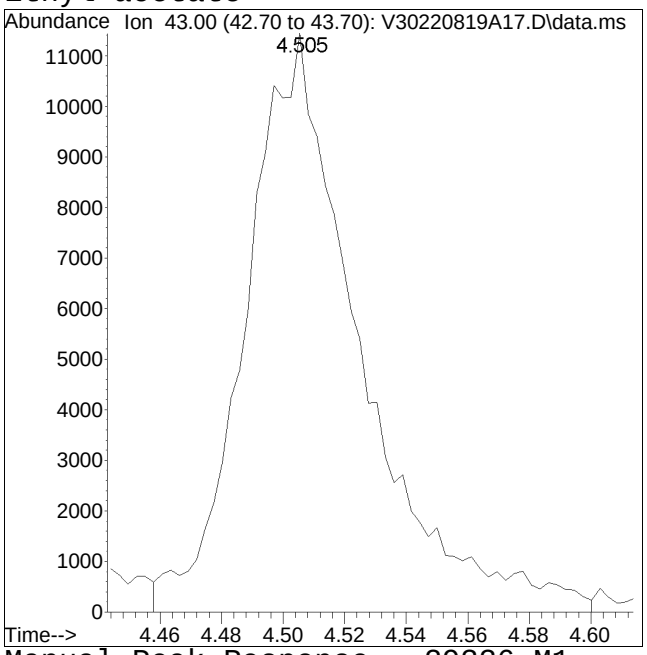
Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A17.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 6:51 pm Instrument : VOA130
Sample : C8260STD10PPB Quant Date : 8/22/2022 1:44 pm

Compound #33: Ethyl acetate



Original Peak Response = 25793



Manual Peak Response = 29336 M1

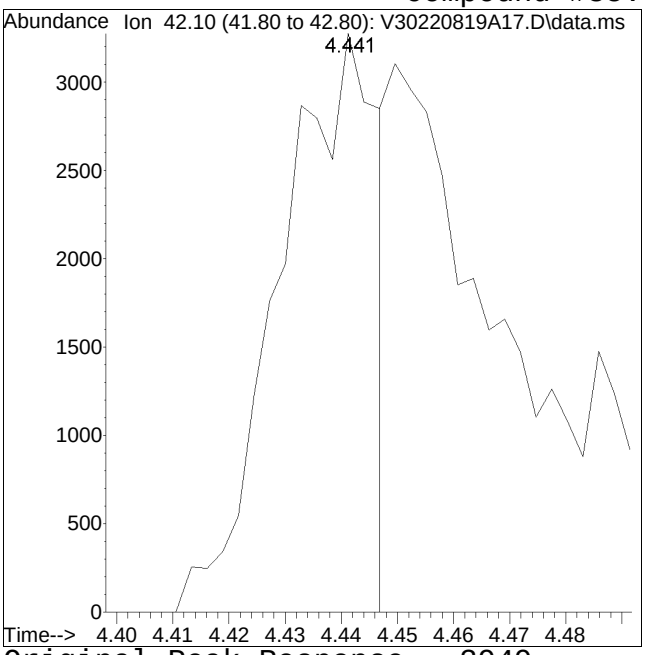
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

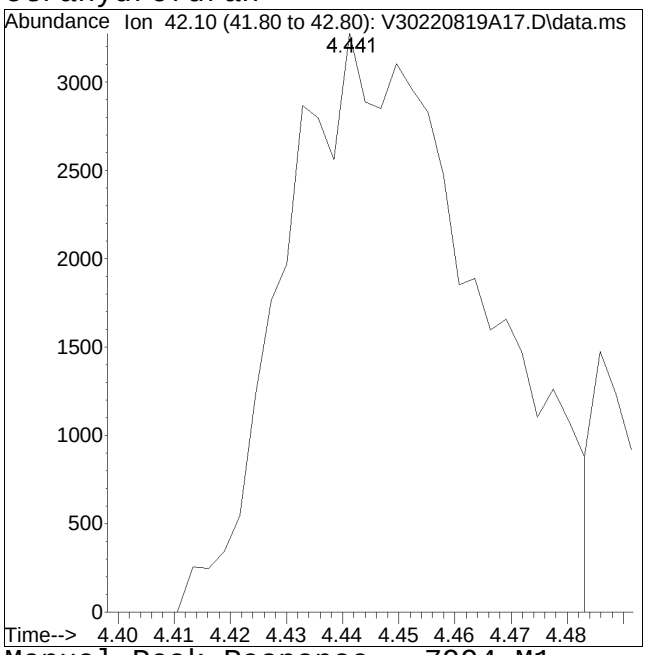
Data Path : I:\VOLATILES\VOA130\2022\2Q
Data File : V30220819A17.D
Date Inj'd : 8/19/2022 6:51 pm
Sample : C8260STD10PPB

Method : VOA130_220819A_8260.m
Operator : VOA130:MKS
Instrument : VOA130
Quant Date : 8/22/2022 1:44 pm

Compound #35: Tetrahydrofuran



Original Peak Response = 3949



Manual Peak Response = 7994 M1

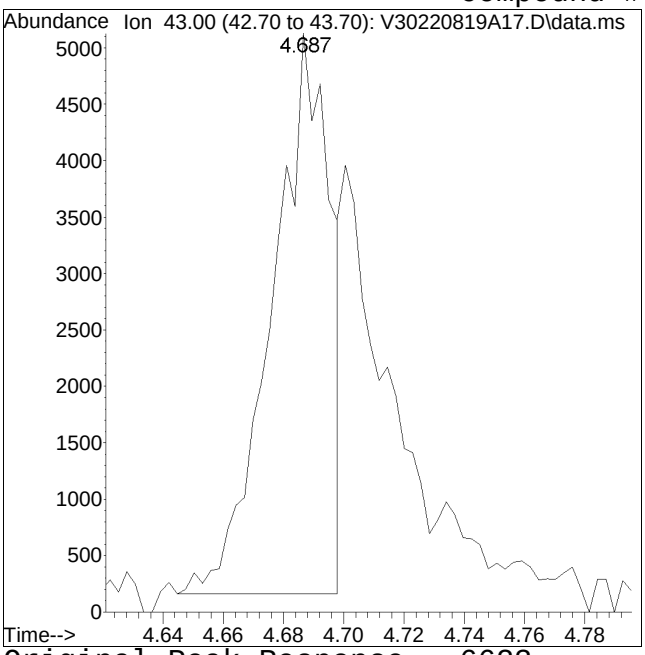
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

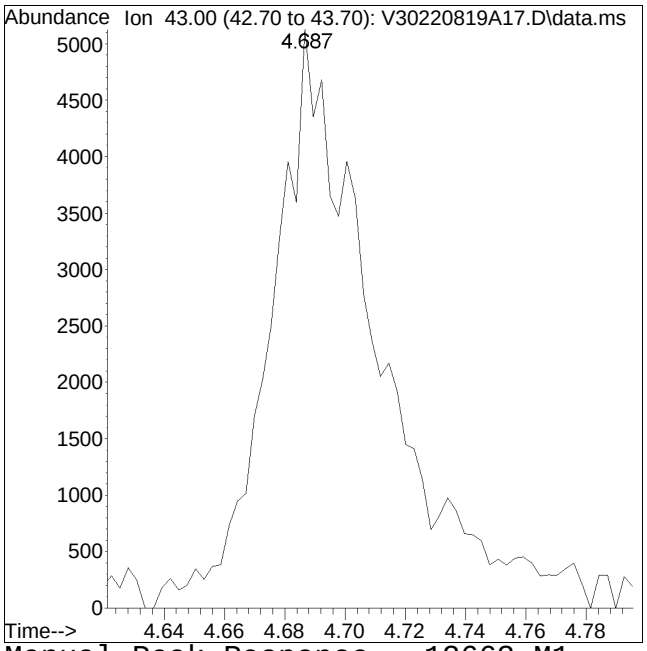
Data Path : I:\VOLATILES\VOA130\2022\2Q
Data File : V30220819A17.D
Date Inj'd : 8/19/2022 6:51 pm
Sample : C8260STD10PPB

Method : VOA130_220819A_8260.m
Operator : VOA130:MKS
Instrument : VOA130
Quant Date : 8/22/2022 1:44 pm

Compound #39: 2-Butanone



Original Peak Response = 6623



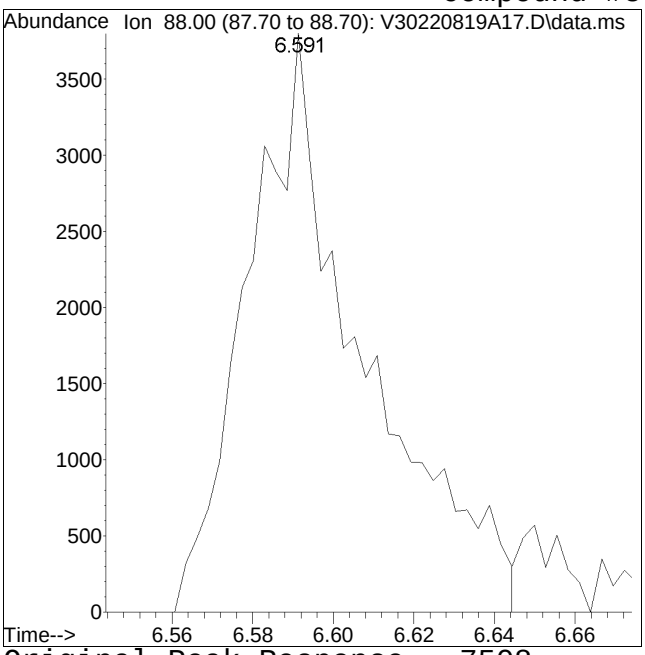
Manual Peak Response = 12663 M1

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

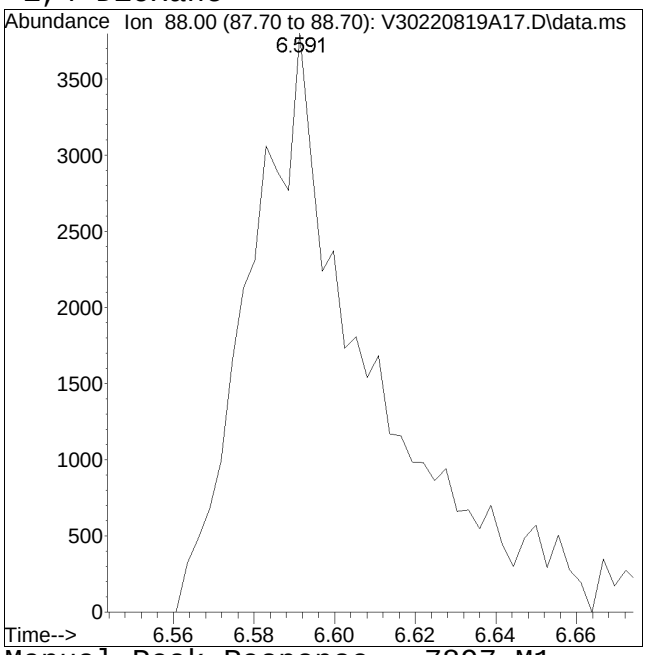
Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30220819A17.D Operator : VOA130:MKS
Date Inj'd : 8/19/2022 6:51 pm Instrument : VOA130
Sample : C8260STD10PPB Quant Date : 8/22/2022 1:44 pm

Compound #57: 1,4-Dioxane



Original Peak Response = 7508



Manual Peak Response = 7897 M1

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

Correlation Data Summary

Method Path:	I:\VOLATILES\VOA130\2022\220819AICAL\
Method File:	VOA130_220819A_8260.m
Method Title:	VOLATILES BY GC/MS
Last Update:	Mon Aug 22 13:44:43 2022
CSV generated:	Mon Aug 22 13:49:19 2022

Analyte	Curve fit Ty	Coefficient Determinat	Quadratic Term	Linear Term	Constant Term
trans-1,3-Dichloropropene	Quadratic	0.99952	0.011792	0.30625	-0.0035

Continuing Calibration

Calibration Verification Summary
Form 7
Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253856	
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.007Y002	
Instrument ID	: VOA130	**Calibration Date**	: 10/04/22 06:54	
Lab File ID	: V30221004A01	**Init. Calib. Date(s)**	: 08/19/22	08/19/22
Sample No	: WG1695594-2	**Init. Calib. Times**	: 14:16	17:12
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	96	0
Dichlorodifluoromethane	0.204	0.206	-	-1	20	87	0
Chloromethane	0.235	0.256	-	-8.9	20	98	0
Vinyl chloride	0.233	0.247	-	-6	20	93	0
Bromomethane	0.16	0.086	-	46.3*	20	49	0
Chloroethane	0.146	0.184	-	-26*	20	114	0
Trichlorofluoromethane	0.358	0.396	-	-10.6	20	97	0
Ethyl ether	0.084	0.059	-	29.8*	20	64	0
1,1-Dichloroethene	0.19	0.208	-	-9.5	20	97	0
Carbon disulfide	0.472	0.579	-	-22.7*	20	110	0
Methylene chloride	0.213	0.236	-	-10.8	20	105	0
Acetone	0.033	0.032	-	3	20	96	-.01
trans-1,2-Dichloroethene	0.206	0.212	-	-2.9	20	91	0
Methyl tert-butyl ether	0.401	0.236	-	41.1*	20	57	0
1,1-Dichloroethane	0.412	0.445	-	-8	20	98	0
Acrylonitrile	0.043	0.038	-	11.6	20	85	0
Vinyl acetate	0.368	0.24	-	34.8*	20	71	0
cis-1,2-Dichloroethene	0.237	0.234	-	1.3	20	92	0
2,2-Dichloropropane	0.271	0.246	-	9.2	20	90	0
Bromochloromethane	0.103	0.107	-	-3.9	20	98	-.01
Chloroform	0.404	0.403	-	0.2	20	91	0
Carbon tetrachloride	0.287	0.279	-	2.8	20	86	0
Dibromofluoromethane	0.264	0.267	-	-1.1	20	98	0
1,1,1-Trichloroethane	0.335	0.304	-	9.3	20	79	0
2-Butanone	0.05	0.039	-	22*	20	81	0
1,1-Dichloropropene	0.285	0.272	-	4.6	20	84	0
Benzene	0.848	0.884	-	-4.2	20	95	0
1,2-Dichloroethane-d4	0.29	0.228	-	21.4*	20	76	-.01
1,2-Dichloroethane	0.297	0.229	-	22.9*	20	74	0
Trichloroethene	0.221	0.218	-	1.4	20	86	0
Dibromomethane	0.118	0.102	-	13.6	20	83	-.01
1,2-Dichloropropane	0.224	0.204	-	8.9	20	85	0
Bromodichloromethane	0.303	0.248*	-	18.2	20	78	-.01
1,4-Dioxane	0.00074	0.00071*	-	4.1	20	85	0
cis-1,3-Dichloropropene	0.301	0.304	-	-1	20	95	0
Chlorobenzene-d5	1	1	-	0	20	115	-.01
Toluene-d8	1.299	1.312	-	-1	20	115	0
Toluene	0.726	0.763	-	-5.1	20	114	-.01
4-Methyl-2-pentanone	0.064	0.046	-	28.1*	20	84	0
Tetrachloroethene	0.308	0.297	-	3.6	20	102	0
trans-1,3-Dichloropropene	10	8.596	-	14	20	99	-.01
Ethyl methacrylate	0.241	0.185	-	23.2*	20	95	0
1,1,2-Trichloroethane	0.177	0.151*	-	14.7	20	98	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Volatiles

Client	: Roux Env. Eng. & Geology, DPC	**Lab Number**	: L2253856	
Project Name	: FORMER CLEAN ZONE DRY CLEANERS	**Project Number**	: 2546.007Y002	
Instrument ID	: VOA130	**Calibration Date**	: 10/04/22 06:54	
Lab File ID	: V30221004A01	**Init. Calib. Date(s)**	: 08/19/22	08/19/22
Sample No	: WG1695594-2	**Init. Calib. Times**	: 14:16	17:12
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Chlorodibromomethane	0.261	0.215	-	17.6	20	97	0
1,3-Dichloropropane	0.373	0.326	-	12.6	20	99	0
1,2-Dibromoethane	0.199	0.167*	-	16.1	20	95	0
2-Hexanone	0.112	0.08	-	28.6*	20	89	0
Chlorobenzene	0.802	0.832	-	-3.7	20	115	0
Ethylbenzene	1.414	1.489	-	-5.3	20	112	-.01
1,1,1,2-Tetrachloroethane	0.268	0.247	-	7.8	20	107	-.01
p/m Xylene	0.526	0.567	-	-7.8	20	113	0
o Xylene	0.513	0.539	-	-5.1	20	112	0
Styrene	0.829	0.901	-	-8.7	20	114	-.01
1,4-Dichlorobenzene-d4	1	1	-	0	20	112	-.01
Bromoform	0.293	0.246	-	16	20	100	-.01
Isopropylbenzene	2.676	2.923	-	-9.2	20	112	-.01
4-Bromofluorobenzene	0.948	0.946	-	0.2	20	111	-.01
Bromobenzene	0.664	0.627	-	5.6	20	106	-.01
n-Propylbenzene	3.228	3.605	-	-11.7	20	113	-.01
1,4-Dichlorobutane	0.745	0.647	-	13.2	20	100	-.01
1,1,2,2-Tetrachloroethane	0.485	0.431	-	11.1	20	103	0
4-Ethyltoluene	2.64	2.83	-	-7.2	20	112	0
2-Chlorotoluene	2.256	2.462	-	-9.1	20	115	-.01
1,3,5-Trimethylbenzene	2.283	2.154	-	5.7	20	99	0
1,2,3-Trichloropropane	0.39	0.348	-	10.8	20	104	0
trans-1,4-Dichloro-2-buten	0.136	0.1	-	26.5*	20	90	-.01
4-Chlorotoluene	2.024	2.172	-	-7.3	20	116	-.01
tert-Butylbenzene	1.97	2.11	-	-7.1	20	111	0
1,2,4-Trimethylbenzene	2.245	2.067	-	7.9	20	98	0
sec-Butylbenzene	2.951	3.286	-	-11.4	20	113	0
p-Isopropyltoluene	2.525	2.617	-	-3.6	20	106	0
1,3-Dichlorobenzene	1.274	1.329	-	-4.3	20	112	-.01
1,4-Dichlorobenzene	1.281	1.284	-	-0.2	20	110	-.01
p-Diethylbenzene	1.53	1.487	-	2.8	20	104	0
n-Butylbenzene	2.345	2.496	-	-6.4	20	109	-.01
1,2-Dichlorobenzene	1.194	1.158	-	3	20	108	-.01
1,2,4,5-Tetramethylbenzene	2.338	2.12	-	9.3	20	99	0
1,2-Dibromo-3-chloropropan	0.062	0.057	-	8.1	20	106	-.01
Hexachlorobutadiene	0.461	0.349	-	24.3*	20	83	0
1,2,4-Trichlorobenzene	0.884	0.765	-	13.5	20	97	-.01
Naphthalene	1.59	1.34	-	15.7	20	96	0
1,2,3-Trichlorobenzene	0.784	0.671	-	14.4	20	95	0

* Value outside of QC limits.

Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A01.D
Acq On : 04 Oct 2022 06:54 am
Operator : VOA130:PD
Sample : WG1695594-2
Misc : WG1695594,ICAL19274
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 04 07:16:16 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	1.000	1.000	0.0	96	0.00
2	TP	Dichlorodifluoromethane	0.204	0.206	-1.0	87	0.00
3	TP	Chloromethane	0.235	0.256	-8.9	98	0.00
4	TC	Vinyl chloride	0.233	0.247	-6.0	93	0.00
5	TP	Bromomethane	0.160	0.086	46.3#	49#	0.00
6	TP	Chloroethane	0.146	0.184	-26.0#	114	0.00
7	TP	Trichlorofluoromethane	0.358	0.396	-10.6	97	0.00
8	TP	Ethyl ether	0.084	0.059	29.8#	64	0.00
10	TC	1,1-Dichloroethene	0.190	0.208	-9.5	97	0.00
11	TP	Carbon disulfide	0.472	0.579	-22.7#	110	0.00
15	TP	Methylene chloride	0.213	0.236	-10.8	105	0.00
17	TP	Acetone	0.033	0.032	3.0	96	-0.01
18	TP	trans-1,2-Dichloroethene	0.206	0.212	-2.9	91	0.00
20	TP	Methyl tert-butyl ether	0.401	0.236	41.1#	57	0.00
23	TP	1,1-Dichloroethane	0.412	0.445	-8.0	98	0.00
25	TP	Acrylonitrile	0.043	0.038	11.6	85	0.00
27	TP	Vinyl acetate	0.368	0.240	34.8#	71	0.00
28	TP	cis-1,2-Dichloroethene	0.237	0.234	1.3	92	0.00
29	TP	2,2-Dichloropropane	0.271	0.246	9.2	90	0.00
30	TP	Bromochloromethane	0.103	0.107	-3.9	98	-0.01
32	TC	Chloroform	0.404	0.403	0.2	91	0.00
34	TP	Carbon tetrachloride	0.287	0.279	2.8	86	0.00
36	S	Dibromofluoromethane	0.264	0.267	-1.1	98	0.00
37	TP	1,1,1-Trichloroethane	0.335	0.304	9.3	79	0.00
39	TP	2-Butanone	0.050	0.039	22.0#	81	0.00
40	TP	1,1-Dichloropropene	0.285	0.272	4.6	84	0.00
41	TP	Benzene	0.848	0.884	-4.2	95	0.00
43	S	1,2-Dichloroethane-d4	0.290	0.228	21.4#	76	-0.01
44	TP	1,2-Dichloroethane	0.297	0.229	22.9#	74	0.00
48	TP	Trichloroethene	0.221	0.218	1.4	86	0.00
50	TP	Dibromomethane	0.118	0.102	13.6	83	-0.01
51	TC	1,2-Dichloropropane	0.224	0.204	8.9	85	0.00
54	TP	Bromodichloromethane	0.303	0.248#	18.2	78	-0.01
57	TP	1,4-Dioxane	0.00074	0.00071#	4.1	85	0.00
58	TP	cis-1,3-Dichloropropene	0.301	0.304	-1.0	95	0.00
59	I	Chlorobenzene-d5	1.000	1.000	0.0	115	-0.01
60	S	Toluene-d8	1.299	1.312	-1.0	115	0.00
61	TC	Toluene	0.726	0.763	-5.1	114	-0.01

Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A01.D
Acq On : 04 Oct 2022 06:54 am
Operator : VOA130:PD
Sample : WG1695594-2
Misc : WG1695594,ICAL19274
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 04 07:16:16 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

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

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
62	TP	4-Methyl-2-pentanone		0.064	0.046	28.1#	84	0.00
63	TP	Tetrachloroethene		0.308	0.297	3.6	102	0.00
65	TP	trans-1,3-Dichloropropene	*	10.000	8.596	14.0	99	-0.01
67	TP	Ethyl methacrylate		0.241	0.185	23.2#	95	0.00
68	TP	1,1,2-Trichloroethane		0.177	0.151#	14.7	98	0.00
69	TP	Chlorodibromomethane		0.261	0.215	17.6	97	0.00
70	TP	1,3-Dichloropropane		0.373	0.326	12.6	99	0.00
71	TP	1,2-Dibromoethane		0.199	0.167#	16.1	95	0.00
72	TP	2-Hexanone		0.112	0.080	28.6#	89	0.00
73	TP	Chlorobenzene		0.802	0.832	-3.7	115	0.00
74	TC	Ethylbenzene		1.414	1.489	-5.3	112	-0.01
75	TP	1,1,1,2-Tetrachloroethane		0.268	0.247	7.8	107	-0.01
76	TP	p/m Xylene		0.526	0.567	-7.8	113	0.00
77	TP	o Xylene		0.513	0.539	-5.1	112	0.00
78	TP	Styrene		0.829	0.901	-8.7	114	-0.01
79	I	1,4-Dichlorobenzene-d4		1.000	1.000	0.0	112	-0.01
80	TP	Bromoform		0.293	0.246	16.0	100	-0.01
82	TP	Isopropylbenzene		2.676	2.923	-9.2	112	-0.01
83	S	4-Bromofluorobenzene		0.948	0.946	0.2	111	-0.01
84	TP	Bromobenzene		0.664	0.627	5.6	106	-0.01
85	TP	n-Propylbenzene		3.228	3.605	-11.7	113	-0.01
86	TP	1,4-Dichlorobutane		0.745	0.647	13.2	100	-0.01
87	TP	1,1,2,2-Tetrachloroethane		0.485	0.431	11.1	103	0.00
88	TP	4-Ethyltoluene		2.640	2.830	-7.2	112	0.00
89	TP	2-Chlorotoluene		2.256	2.462	-9.1	115	-0.01
90	TP	1,3,5-Trimethylbenzene		2.283	2.154	5.7	99	0.00
91	TP	1,2,3-Trichloropropane		0.390	0.348	10.8	104	0.00
92	TP	trans-1,4-Dichloro-2-butene		0.136	0.100	26.5#	90	-0.01
93	TP	4-Chlorotoluene		2.024	2.172	-7.3	116	-0.01
94	TP	tert-Butylbenzene		1.970	2.110	-7.1	111	0.00
97	TP	1,2,4-Trimethylbenzene		2.245	2.067	7.9	98	0.00
98	TP	sec-Butylbenzene		2.951	3.286	-11.4	113	0.00
99	TP	p-Isopropyltoluene		2.525	2.617	-3.6	106	0.00
100	TP	1,3-Dichlorobenzene		1.274	1.329	-4.3	112	-0.01
101	TP	1,4-Dichlorobenzene		1.281	1.284	-0.2	110	-0.01
102	TP	p-Diethylbenzene		1.530	1.487	2.8	104	0.00
103	TP	n-Butylbenzene		2.345	2.496	-6.4	109	-0.01
104	TP	1,2-Dichlorobenzene		1.194	1.158	3.0	108	-0.01

Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A01.D
Acq On : 04 Oct 2022 06:54 am
Operator : VOA130:PD
Sample : WG1695594-2
Misc : WG1695594,ICAL19274
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 04 07:16:16 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
105 TP	1,2,4,5-Tetramethylbenzene	2.338	2.120	9.3	99	0.00
106 TP	1,2-Dibromo-3-chloropropane	0.062	0.057	8.1	106	-0.01
108 TP	Hexachlorobutadiene	0.461	0.349	24.3#	83	0.00
109 TP	1,2,4-Trichlorobenzene	0.884	0.765	13.5	97	-0.01
110 TP	Naphthalene	1.590	1.340	15.7	96	0.00
111 TP	1,2,3-Trichlorobenzene	0.784	0.671	14.4	95	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 4 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A01.D
Acq On : 04 Oct 2022 06:54 am
Operator : VOA130:PD
Sample : WG1695594-2
Misc : WG1695594,ICAL19274
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 04 07:16:16 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\221004A\V30221004A01.D
Sub List : 8260-NYTCL - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.478	96	257104	10.000	ug/L	0.00
Standard Area 1 = 257104			Recovery = 100.00%			
59) Chlorobenzene-d5	8.490	117	224851	10.000	ug/L	-0.01
Standard Area 1 = 224851			Recovery = 100.00%			
79) 1,4-Dichlorobenzene-d4	9.979	152	113313	10.000	ug/L	-0.01
Standard Area 1 = 113313			Recovery = 100.00%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.488	113	68663	10.113	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.13%			
43) 1,2-Dichloroethane-d4	5.124	65	58700	7.874	ug/L	-0.01
Spiked Amount 10.000	Range 70 - 130		Recovery = 78.74%			
60) Toluene-d8	7.188	98	295086	10.103	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.03%			
83) 4-Bromofluorobenzene	9.310	95	107207	9.979	ug/L	-0.01
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.79%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.938	85	53063	10.141	ug/L	99
3) Chloromethane	1.055	50	65827	10.902	ug/L	98
4) Vinyl chloride	1.108	62	63504	10.601	ug/L	95
5) Bromomethane	1.309	94	22148	5.371	ug/L	99
6) Chloroethane	1.398	64	47183	12.538	ug/L	99
7) Trichlorofluoromethane	1.493	101	101728	11.046	ug/L	93
8) Ethyl ether	1.728	74	15112M1	6.958	ug/L	
10) 1,1-Dichloroethene	1.853	96	53590	10.947	ug/L #	76
11) Carbon disulfide	1.859	76	148822	12.252	ug/L	96
15) Methylene chloride	2.338	84	60793	11.077	ug/L	77
17) Acetone	2.394	43	8172	9.631	ug/L	94
18) trans-1,2-Dichloroethene	2.480	96	54383	10.270	ug/L	79
20) Methyl tert-butyl ether	2.617	73	60629	5.879	ug/L	89
23) 1,1-Dichloroethane	3.119	63	114514	10.823	ug/L	99
25) Acrylonitrile	3.192	53	9800	8.776	ug/L #	88
27) Vinyl acetate	3.493	43	61818	6.535	ug/L	100
28) cis-1,2-Dichloroethene	3.805	96	60163	9.890	ug/L #	74
29) 2,2-Dichloropropane	3.947	77	63250	9.065	ug/L #	73
30) Bromochloromethane	4.076	128	27401	10.353	ug/L #	60
32) Chloroform	4.240	83	103672	9.993	ug/L	96
34) Carbon tetrachloride	4.363	117	71859	9.750	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A01.D
Acq On : 04 Oct 2022 06:54 am
Operator : VOA130:PD
Sample : WG1695594-2
Misc : WG1695594,ICAL19274
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 04 07:16:16 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\221004A\V30221004A01.D
Sub List : 8260-NYTCL - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) 1,1,1-Trichloroethane	4.466	97	78115	9.060	ug/L	#	96
39) 2-Butanone	4.684	43	10106	7.788	ug/L	#	83
40) 1,1-Dichloropropene	4.639	75	69998	9.544	ug/L		98
41) Benzene	4.951	78	227291	10.429	ug/L		91
44) 1,2-Dichloroethane	5.211	62	58751	7.694	ug/L		96
48) Trichloroethene	5.673	95	56160	9.902	ug/L		99
50) Dibromomethane	6.122	93	26207	8.675	ug/L		99
51) 1,2-Dichloropropane	6.237	63	52552	9.134	ug/L		96
54) Bromodichloromethane	6.346	83	63708	8.188	ug/L		98
57) 1,4-Dioxane	6.580	88	9190M1	482.599	ug/L		
58) cis-1,3-Dichloropropene	7.012	75	78036	10.088	ug/L		90
61) Toluene	7.235	92	171638	10.514	ug/L		99
62) 4-Methyl-2-pentanone	7.651	58	10242	7.094	ug/L	#	86
63) Tetrachloroethene	7.595	166	66775	9.656	ug/L		93
65) trans-1,3-Dichloropropene	7.665	75	60367	8.596	ug/L		92
67) Ethyl methacrylate	7.857	69	41678	7.681	ug/L		96
68) 1,1,2-Trichloroethane	7.796	83	34024	8.573	ug/L		98
69) Chlorodibromomethane	7.930	129	48388	8.255	ug/L		96
70) 1,3-Dichloropropane	8.008	76	73258	8.744	ug/L		100
71) 1,2-Dibromoethane	8.088	107	37620	8.388	ug/L		98
72) 2-Hexanone	8.334	43	17962	7.101	ug/L		95
73) Chlorobenzene	8.504	112	187068	10.377	ug/L		93
74) Ethylbenzene	8.543	91	334896	10.535	ug/L		100
75) 1,1,1,2-Tetrachloroethane	8.560	131	55490	9.211	ug/L		96
76) p/m Xylene	8.652	106	254921	21.560	ug/L		100
77) o Xylene	8.936	106	242188	20.978	ug/L		94
78) Styrene	8.973	104	405287	21.743	ug/L		90
80) Bromoform	8.973	173	27897	8.414	ug/L		94
82) Isopropylbenzene	9.145	105	331242	10.926	ug/L		98
84) Bromobenzene	9.366	156	71073	9.445	ug/L		96
85) n-Propylbenzene	9.405	91	408447	11.168	ug/L		98
86) 1,4-Dichlorobutane	9.408	55	73309	8.682	ug/L		94
87) 1,1,2,2-Tetrachloroethane	9.458	83	48810	8.885	ug/L		99
88) 4-Ethyltoluene	9.477	105	320701	10.721	ug/L		99
89) 2-Chlorotoluene	9.486	91	279000	10.916	ug/L		98
90) 1,3,5-Trimethylbenzene	9.530	105	244061	9.436	ug/L		92
91) 1,2,3-Trichloropropane	9.525	75	39399	8.926	ug/L		96
92) trans-1,4-Dichloro-2-b...	9.558	53	11363	7.397	ug/L		94
93) 4-Chlorotoluene	9.589	91	246140	10.734	ug/L		97
94) tert-Butylbenzene	9.717	119	239113	10.713	ug/L		96

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A01.D
Acq On : 04 Oct 2022 06:54 am
Operator : VOA130:PD
Sample : WG1695594-2
Misc : WG1695594,ICAL19274
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 04 07:16:16 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\221004A\V30221004A01.D
Sub List : 8260-NYTCL - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	1,2,4-Trimethylbenzene	9.759	105	234191	9.207	ug/L	94
98)	sec-Butylbenzene	9.820	105	372306	11.135	ug/L	100
99)	p-Isopropyltoluene	9.909	119	296526	10.362	ug/L	96
100)	1,3-Dichlorobenzene	9.935	146	150542	10.427	ug/L	99
101)	1,4-Dichlorobenzene	9.988	146	145467	10.021	ug/L	98
102)	p-Diethylbenzene	10.119	119	168463	9.719	ug/L	95
103)	n-Butylbenzene	10.149	91	282800	10.641	ug/L	99
104)	1,2-Dichlorobenzene	10.227	146	131227	9.696	ug/L	98
105)	1,2,4,5-Tetramethylben...	10.573	119	240239	9.070	ug/L	97
106)	1,2-Dibromo-3-chloropr...	10.682	155	6417	9.110	ug/L	96
108)	Hexachlorobutadiene	11.047	225	39593	7.582	ug/L	96
109)	1,2,4-Trichlorobenzene	11.058	180	86677	8.654	ug/L	99
110)	Naphthalene	11.240	128	151861	8.431	ug/L	100
111)	1,2,3-Trichlorobenzene	11.343	180	75977	8.553	ug/L	99

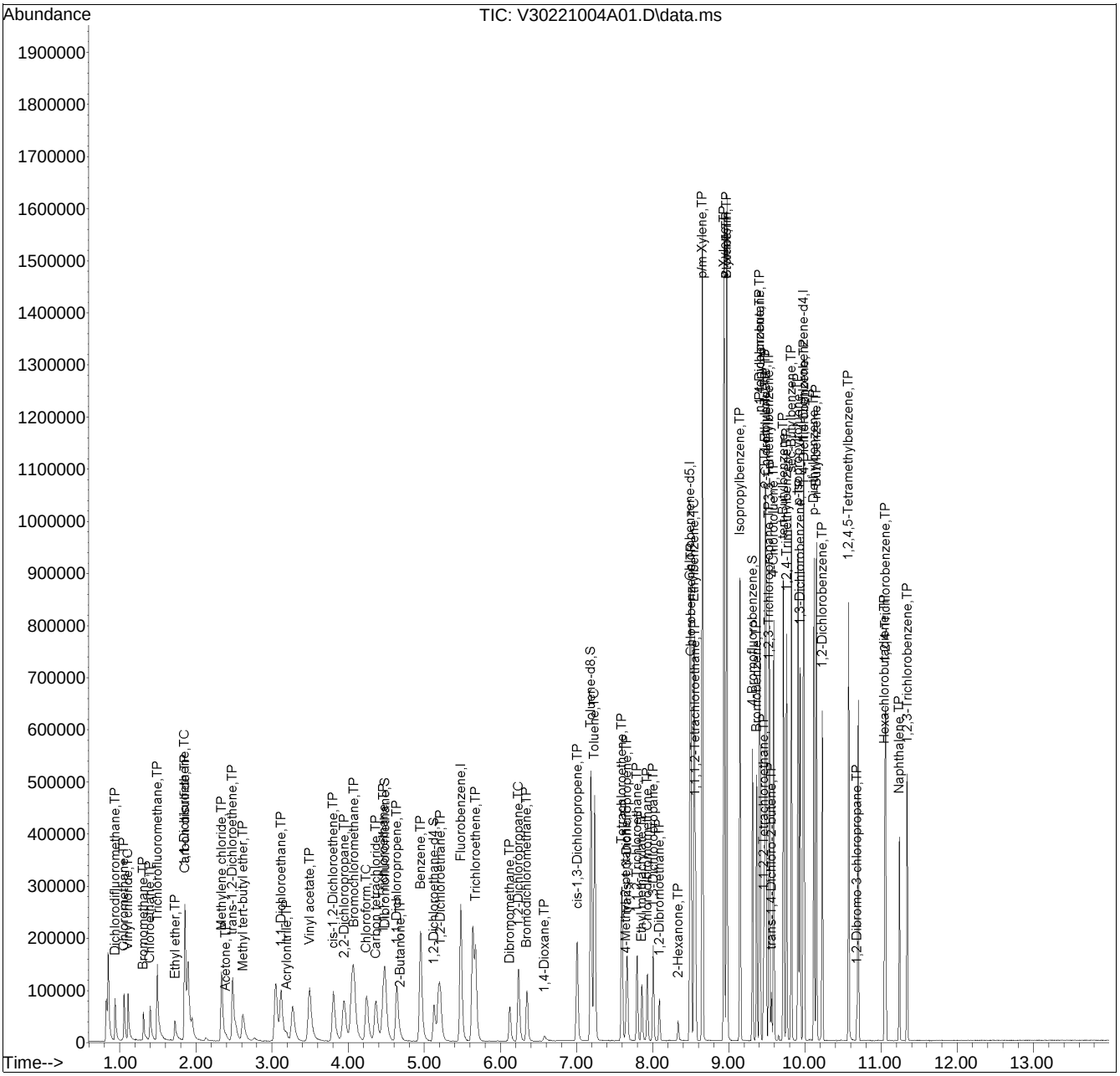
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A01.D
Acq On : 04 Oct 2022 06:54 am
Operator : VOA130:PD
Sample : WG1695594-2
Misc : WG1695594,ICAL19274
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 04 07:16:16 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

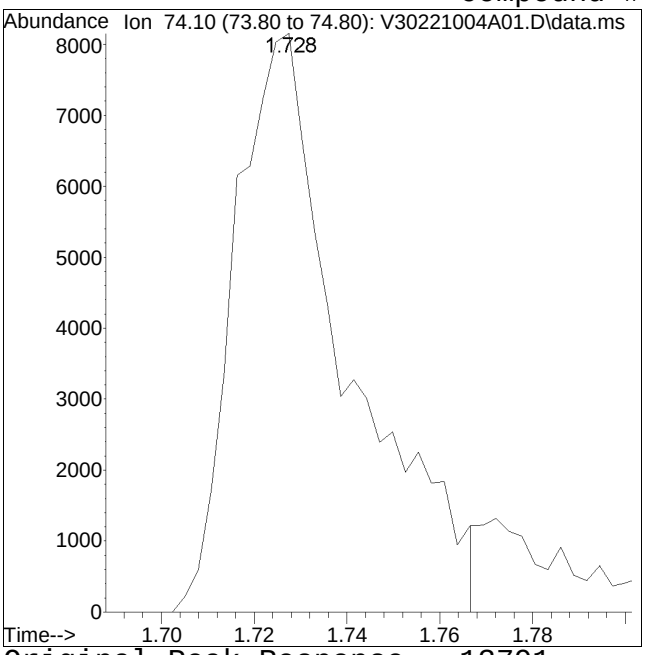
Sub List : 8260-NYTCL - Megamix plus Diox21004A\V30221004A01.D•



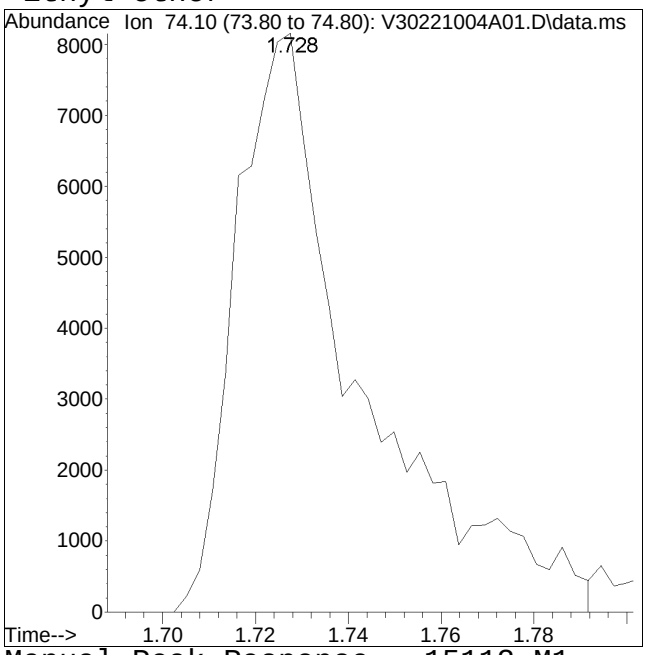
Manual Integration Report

Data Path : I:\VOLATILES\VOA130\2022\2QMethod : VOA130_220819A_8260.m
Data File : V30221004A01.D Operator : VOA130:PD
Date Inj'd : 10/4/2022 6:54 am Instrument : VOA130
Sample : WG1695594-2 Quant Date : 10/4/2022 7:14 am

Compound #8: Ethyl ether



Original Peak Response = 13791



Manual Peak Response = 15112 M1

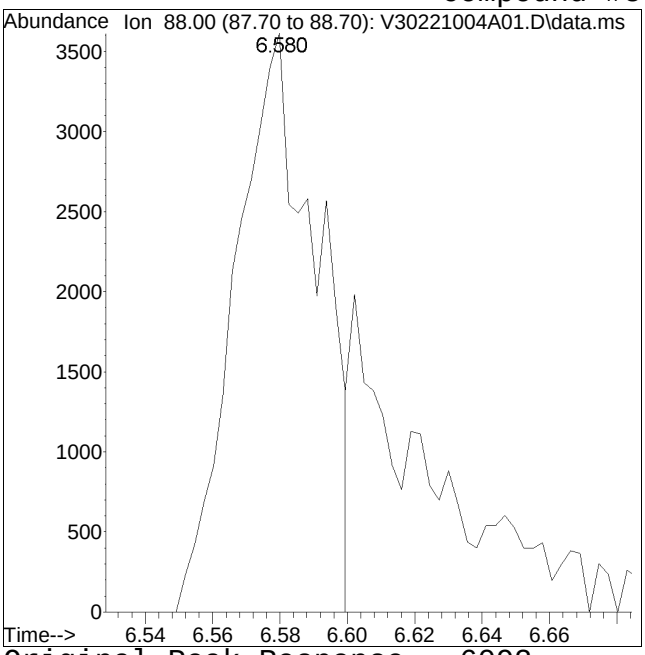
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

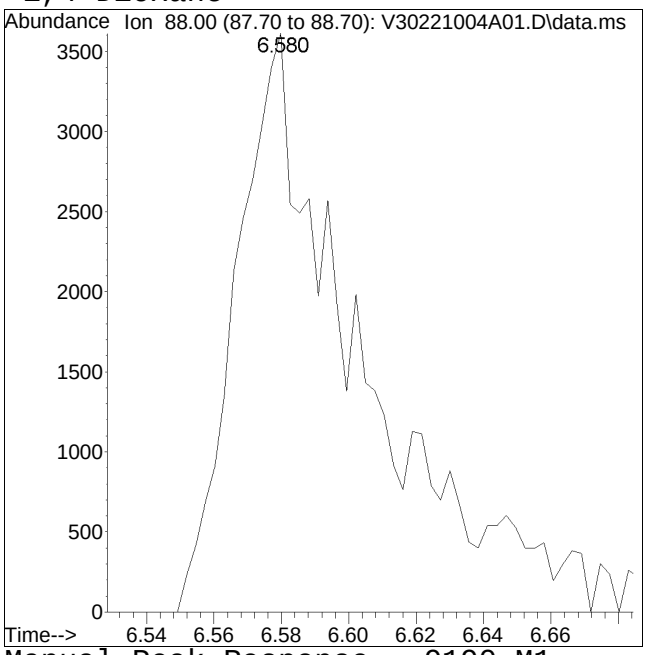
Data Path : I:\VOLATILES\VOA130\2022\2Q
Data File : V30221004A01.D
Date Inj'd : 10/4/2022 6:54 am
Sample : WG1695594-2

Method : VOA130_220819A_8260.m
Operator : VOA130:PD
Instrument : VOA130
Quant Date : 10/4/2022 7:14 am

Compound #57: 1,4-Dioxane



Original Peak Response = 6092



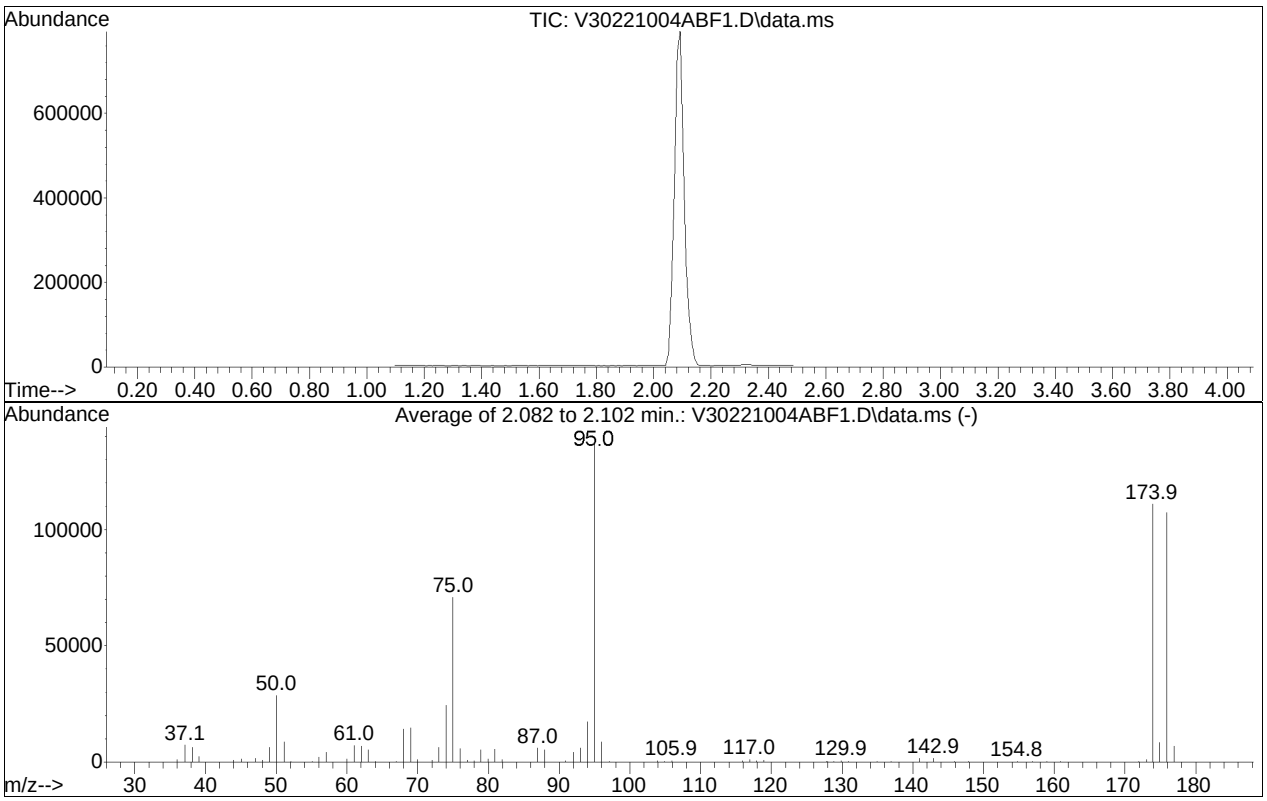
Manual Peak Response = 9190 M1

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

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004ABF1.D
Acq On : 04 Oct 2022 06:40 am
Operator : VOA130:PD
Sample : WG1695594-1
Misc : WG1695594
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Title : VOLATILES BY GC/MS
Last Update : Mon Aug 22 13:44:43 2022



AutoFind: Scans 98, 99, 100; Background Corrected with Scan 91

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.9	28656	PASS
75	95	30	60	51.6	70875	PASS
95	95	100	100	100.0	137384	PASS
96	95	5	9	6.5	8868	PASS
173	174	0.00	2	1.1	1174	PASS
174	95	50	100	80.9	111112	PASS
175	174	5	9	7.6	8472	PASS
176	174	95	101	96.6	107347	PASS
177	176	5	9	6.5	6977	PASS

Volatiles Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A05.D
Acq On : 04 Oct 2022 08:12 am
Operator : VOA130:PD
Sample : WG1695594-5,31,10,10
Misc : WG1695594,ICAL19274
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 04 08:35:39 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\221004A\V30221004A01.D
Sub List : 8260-NYTCL - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.484	96	212639	10.000	ug/L	0.00
Standard Area 1 = 257104			Recovery = 82.71%			
59) Chlorobenzene-d5	8.490	117	180946	10.000	ug/L	-0.01
Standard Area 1 = 224851			Recovery = 80.47%			
79) 1,4-Dichlorobenzene-d4	9.979	152	92786	10.000	ug/L	-0.01
Standard Area 1 = 113313			Recovery = 81.88%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.486	113	56625	10.084	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.84%			
43) 1,2-Dichloroethane-d4	5.130	65	46333	7.515	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 75.15%			
60) Toluene-d8	7.191	98	225159	9.580	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 95.80%			
83) 4-Bromofluorobenzene	9.310	95	82227	9.347	ug/L	-0.01
Spiked Amount 10.000	Range 70 - 130		Recovery = 93.47%			
Target Compounds						Qvalue
4) Vinyl chloride	0.000		0	N.D.		
10) 1,1-Dichloroethene	0.000		0	N.D.		
18) trans-1,2-Dichloroethene	0.000		0	N.D.		
28) cis-1,2-Dichloroethene	0.000		0	N.D.		
48) Trichloroethene	5.568	95	55	N.D.		
63) Tetrachloroethene	0.000		0	N.D.		

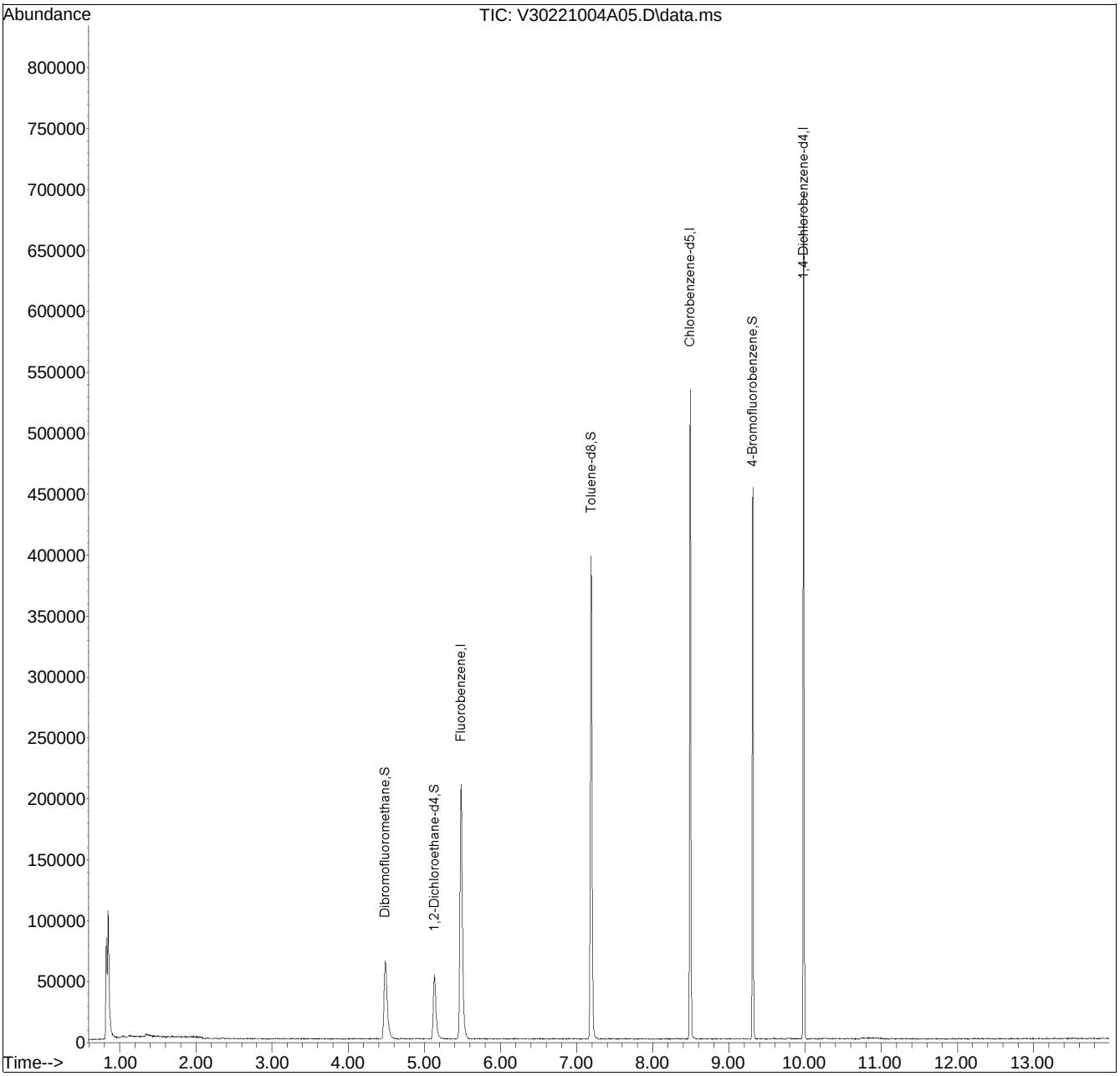
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A05.D
Acq On : 04 Oct 2022 08:12 am
Operator : VOA130:PD
Sample : WG1695594-5,31,10,10
Misc : WG1695594,ICAL19274
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 04 08:35:39 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

Sub List : 8260-NYTCL - Megamix plus Diox21004A\V30221004A01.D•



Manual Integration Report

Data Path	: I:\VOLATILES\VOA130\2022\2Q	Method	: VOA130_220819A_8260.m
Data File	: V30221004A05.D	Operator	: VOA130:PD
Date Inj'd	: 10/4/2022 8:12 am	Instrument	: VOA130
Sample	: WG1695594-5,31,10,10	Quant Date	: 10/4/2022 8:35 am

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A01.D
Acq On : 04 Oct 2022 06:54 am
Operator : VOA130:PD
Sample : WG1695594-3,31,10,10
Misc : WG1695594,ICAL19274
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 04 07:16:16 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\221004A\V30221004A01.D
Sub List : 8260-NYTCL - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.478	96	257104	10.000	ug/L	0.00
Standard Area 1 = 257104			Recovery = 100.00%			
59) Chlorobenzene-d5	8.490	117	224851	10.000	ug/L	-0.01
Standard Area 1 = 224851			Recovery = 100.00%			
79) 1,4-Dichlorobenzene-d4	9.979	152	113313	10.000	ug/L	-0.01
Standard Area 1 = 113313			Recovery = 100.00%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.488	113	68663	10.113	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.13%			
43) 1,2-Dichloroethane-d4	5.124	65	58700	7.874	ug/L	-0.01
Spiked Amount 10.000	Range 70 - 130		Recovery = 78.74%			
60) Toluene-d8	7.188	98	295086	10.103	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.03%			
83) 4-Bromofluorobenzene	9.310	95	107207	9.979	ug/L	-0.01
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.79%			
Target Compounds						Qvalue
4) Vinyl chloride	1.108	62	63504	10.601	ug/L	95
10) 1,1-Dichloroethene	1.853	96	53590	10.947	ug/L #	76
18) trans-1,2-Dichloroethene	2.480	96	54383	10.270	ug/L	79
28) cis-1,2-Dichloroethene	3.805	96	60163	9.890	ug/L #	74
48) Trichloroethene	5.673	95	56160	9.902	ug/L	99
63) Tetrachloroethene	7.595	166	66775	9.656	ug/L	93

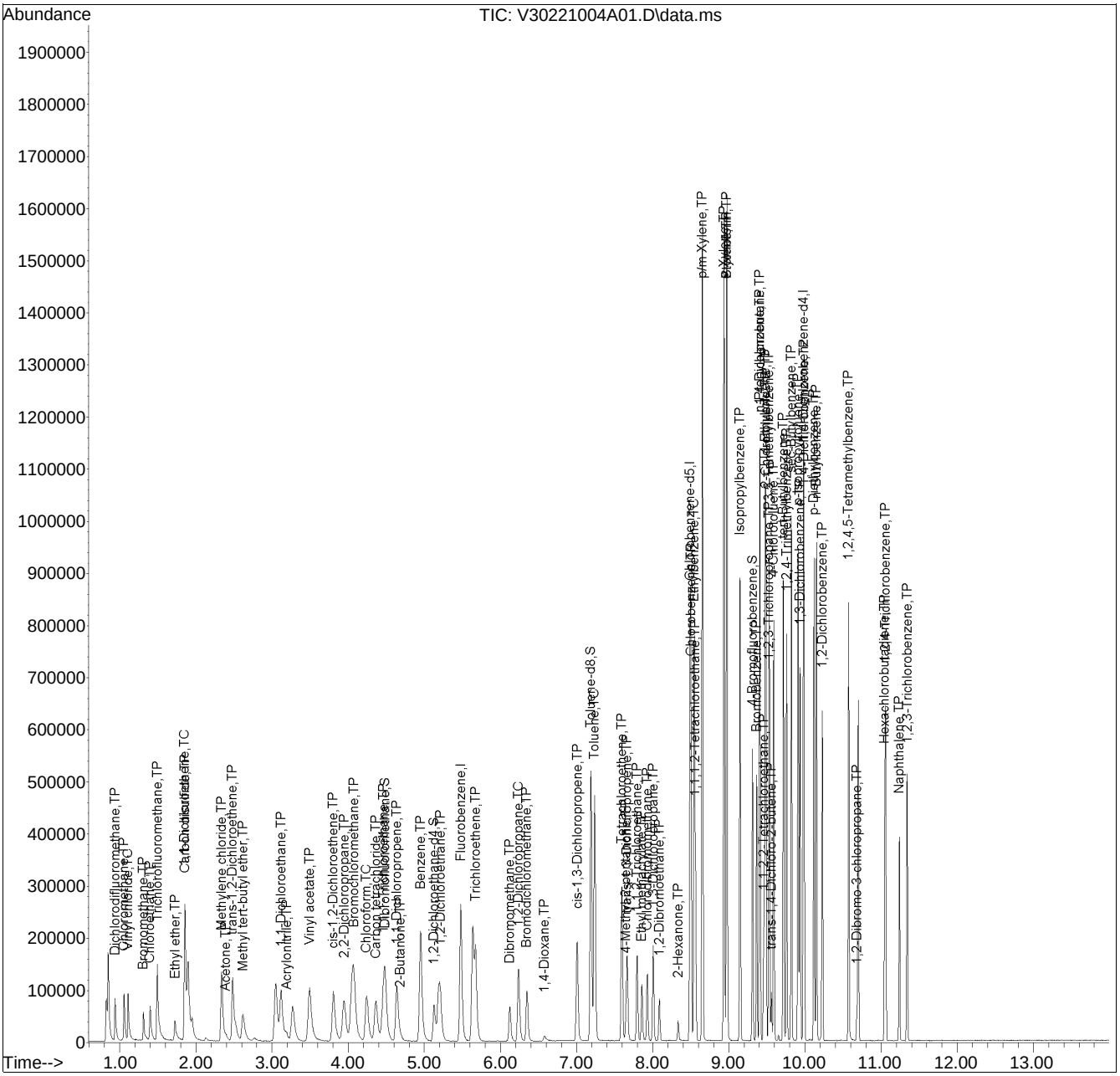
(#) = qualifier out of range (m) = manual integration (+) = signals summed

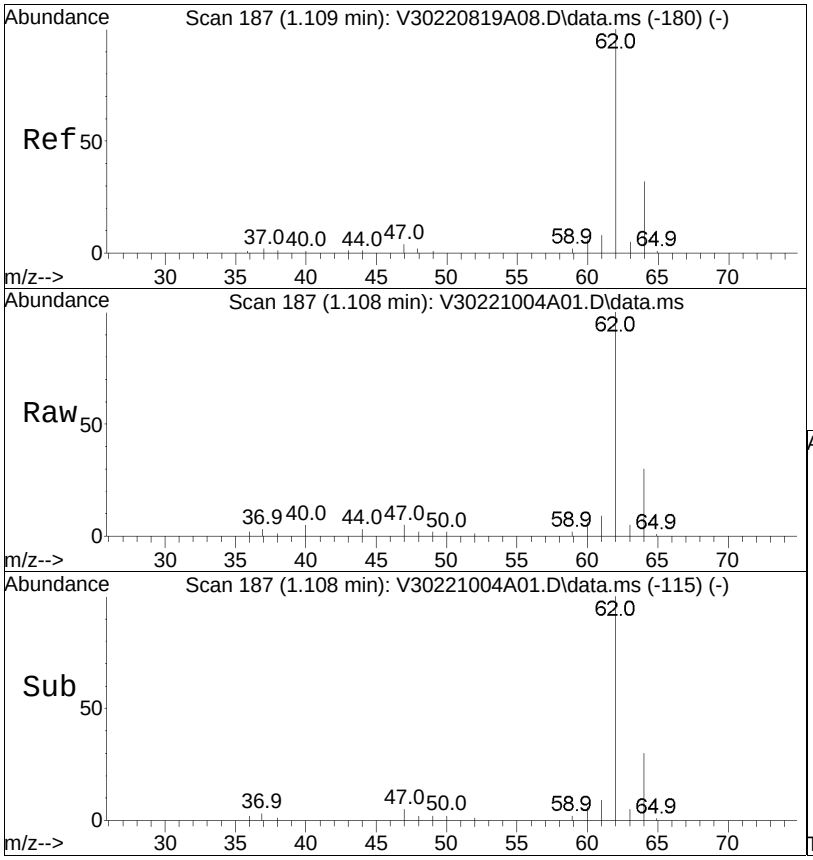
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A01.D
Acq On : 04 Oct 2022 06:54 am
Operator : VOA130:PD
Sample : WG1695594-3,31,10,10
Misc : WG1695594,ICAL19274
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 04 07:16:16 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

Sub List : 8260-NYTCL - Megamix plus Diox21004A\V30221004A01.D•

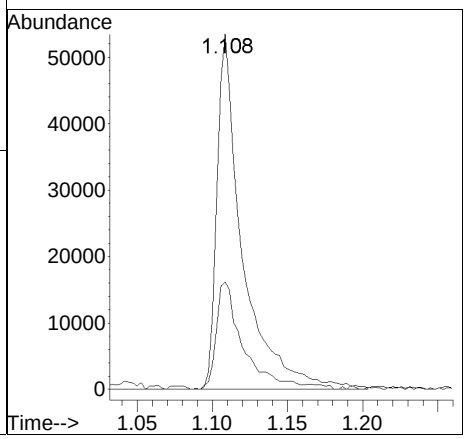


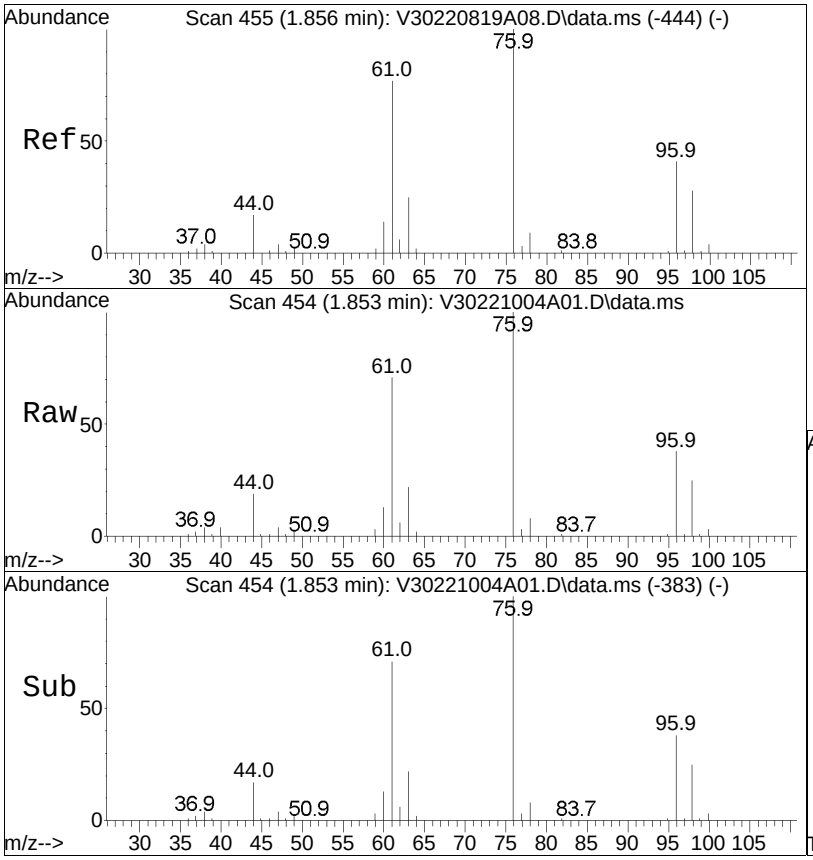


#4
Vinyl chloride
Concen: 10.60 ug/L
RT: 1.108 min Scan# 187
Delta R.T. -0.001 min
Lab File: V30221004A01.D
Acq: 04 Oct 2022 06:54 am

Tgt Ion: 62 Resp: 63504

Ion	Ratio	Lower	Upper
62	100		
64	31.6	9.1	49.1

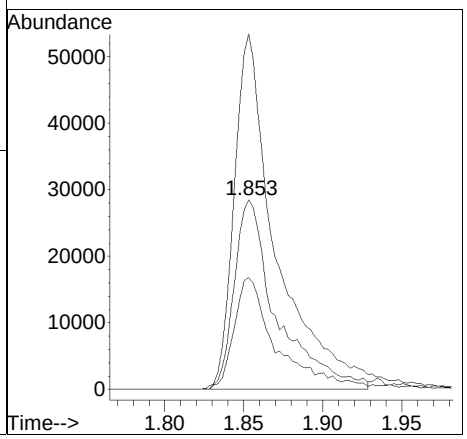


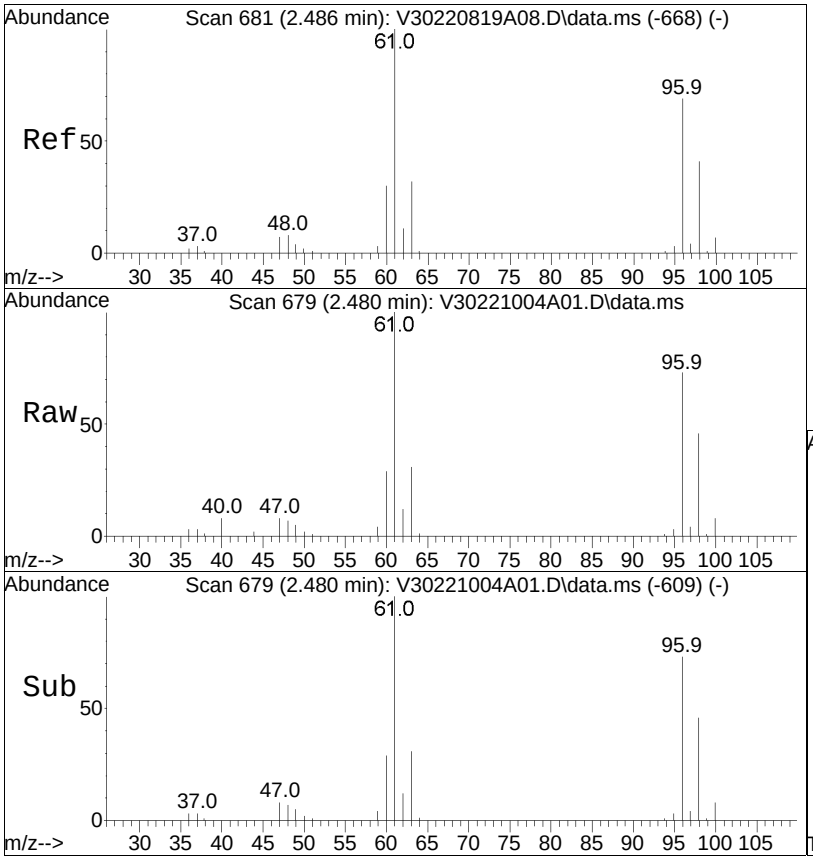


#10
1,1-Dichloroethene
Concen: 10.95 ug/L
RT: 1.853 min Scan# 454
Delta R.T. -0.003 min
Lab File: V30221004A01.D
Acq: 04 Oct 2022 06:54 am

Tgt Ion: 96 Resp: 53590

Ion	Ratio	Lower	Upper
96	100		
61	189.8	186.1	279.1
63	56.9	57.6	86.4#

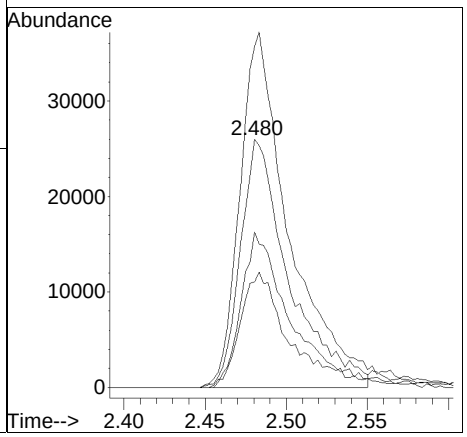


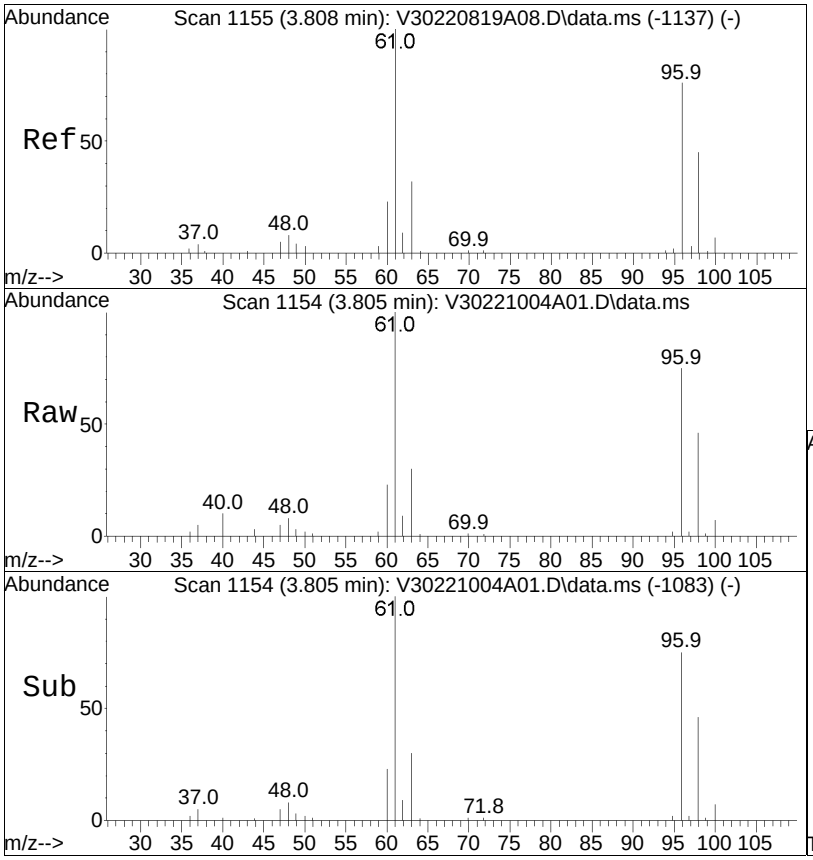


#18
trans-1,2-Dichloroethene
Concen: 10.27 ug/L
RT: 2.480 min Scan# 679
Delta R.T. -0.006 min
Lab File: V30221004A01.D
Acq: 04 Oct 2022 06:54 am

Tgt Ion: 96 Resp: 54383

Ion	Ratio	Lower	Upper
96	100		
61	147.0	124.0	257.6
98	62.7	41.2	85.6
63	48.4	38.4	79.7

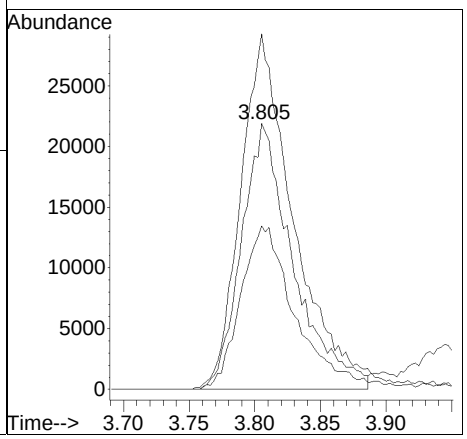


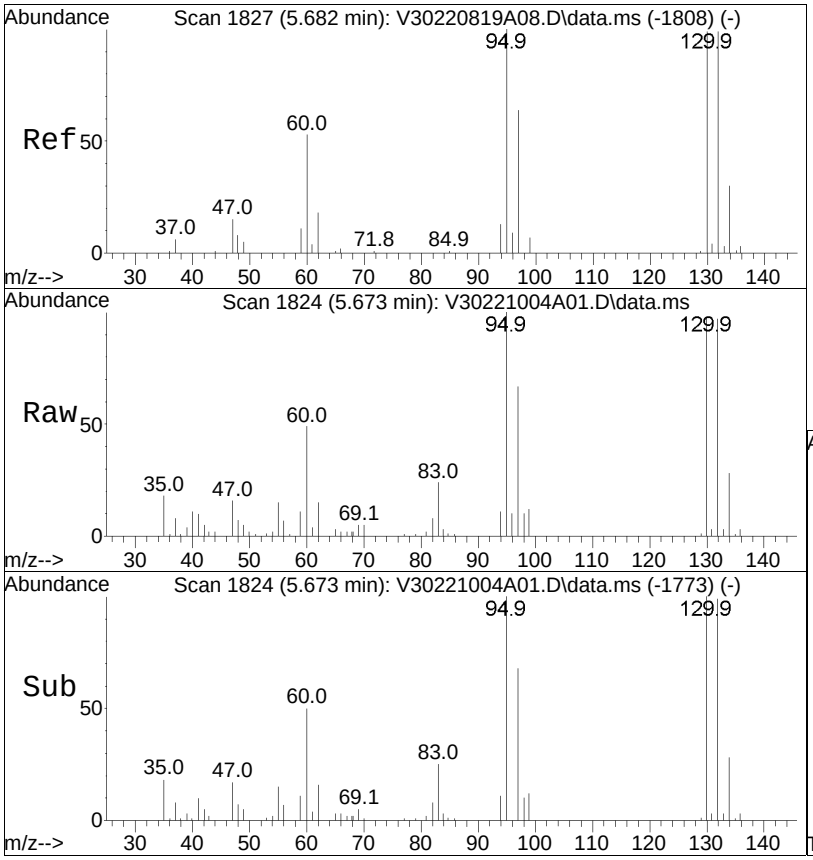


#28
cis-1,2-Dichloroethene
Concen: 9.89 ug/L
RT: 3.805 min Scan# 1154
Delta R.T. -0.003 min
Lab File: V30221004A01.D
Acq: 04 Oct 2022 06:54 am

Tgt Ion: 96 Resp: 60163

Ion	Ratio	Lower	Upper
96	100		
61	137.4	149.4	224.2#
98	64.5	53.4	80.2

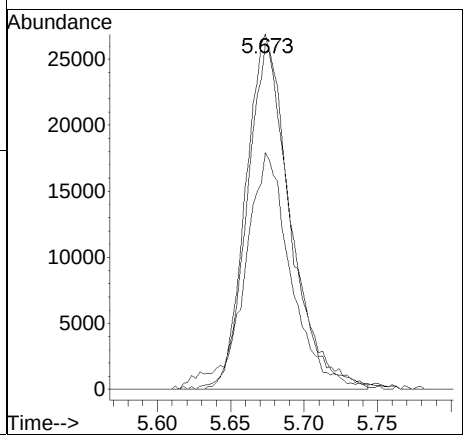


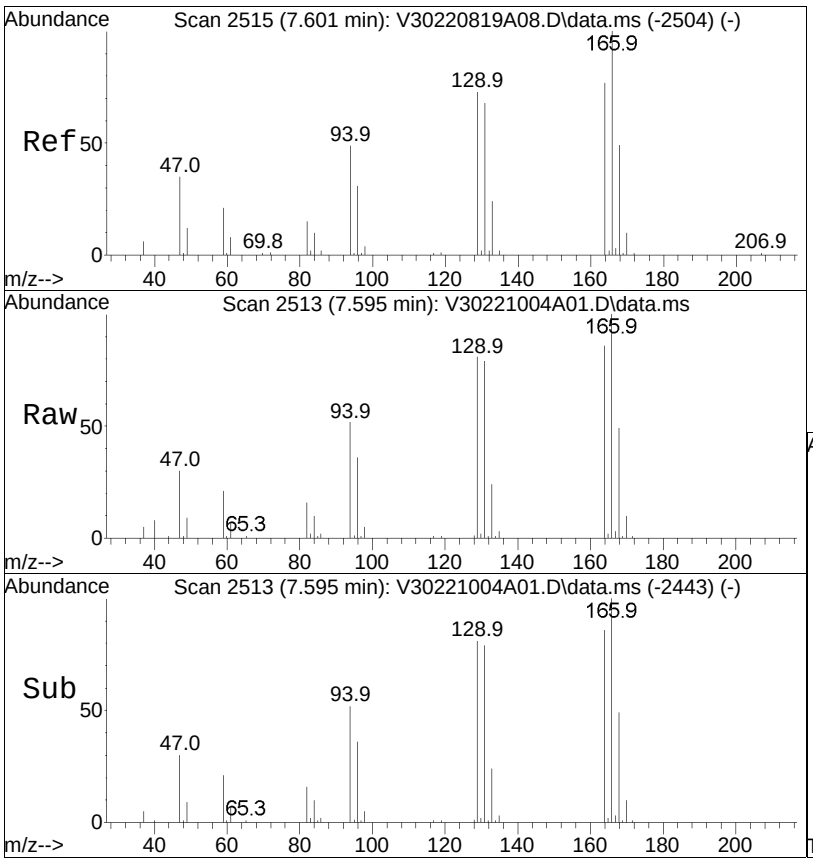


#48
Trichloroethene
Concen: 9.90 ug/L
RT: 5.673 min Scan# 1824
Delta R.T. -0.009 min
Lab File: V30221004A01.D
Acq: 04 Oct 2022 06:54 am

Tgt Ion: 95 Resp: 56160

Ion	Ratio	Lower	Upper
95	100		
97	70.3	55.5	83.3
132	97.4	76.6	115.0

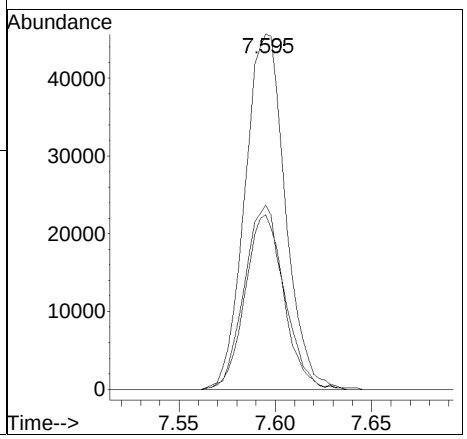




#63
Tetrachloroethene
Concen: 9.66 ug/L
RT: 7.595 min Scan# 2513
Delta R.T. -0.006 min
Lab File: V30221004A01.D
Acq: 04 Oct 2022 06:54 am

Tgt Ion:166 Resp: 66775

Ion	Ratio	Lower	Upper
166	100		
168	48.6	28.2	68.2
94	49.9	38.4	78.4



Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A02.D
Acq On : 04 Oct 2022 07:13 am
Operator : VOA130:PD
Sample : WG1695594-4,31,10,10
Misc : WG1695594,ICAL19274
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 04 07:31:42 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\221004A\V30221004A01.D
Sub List : 8260-NYTCL - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.481	96	256138	10.000	ug/L	0.00
Standard Area 1 = 257104			Recovery = 99.62%			
59) Chlorobenzene-d5	8.490	117	202911	10.000	ug/L	-0.01
Standard Area 1 = 224851			Recovery = 90.24%			
79) 1,4-Dichlorobenzene-d4	9.980	152	104709	10.000	ug/L	-0.01
Standard Area 1 = 113313			Recovery = 92.41%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.489	113	67200	9.935	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.35%			
43) 1,2-Dichloroethane-d4	5.130	65	59405	7.999	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 79.99%			
60) Toluene-d8	7.191	98	263943	10.014	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.14%			
83) 4-Bromofluorobenzene	9.313	95	95961	9.666	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 96.66%			
Target Compounds						Qvalue
4) Vinyl chloride	1.109	62	65310	10.943	ug/L	94
10) 1,1-Dichloroethene	1.853	96	53555	10.981	ug/L #	73
18) trans-1,2-Dichloroethene	2.481	96	55416	10.504	ug/L	78
28) cis-1,2-Dichloroethene	3.803	96	56718	9.359	ug/L #	75
48) Trichloroethene	5.677	95	52577	9.305	ug/L	99
63) Tetrachloroethene	7.598	166	57623	9.233	ug/L	95

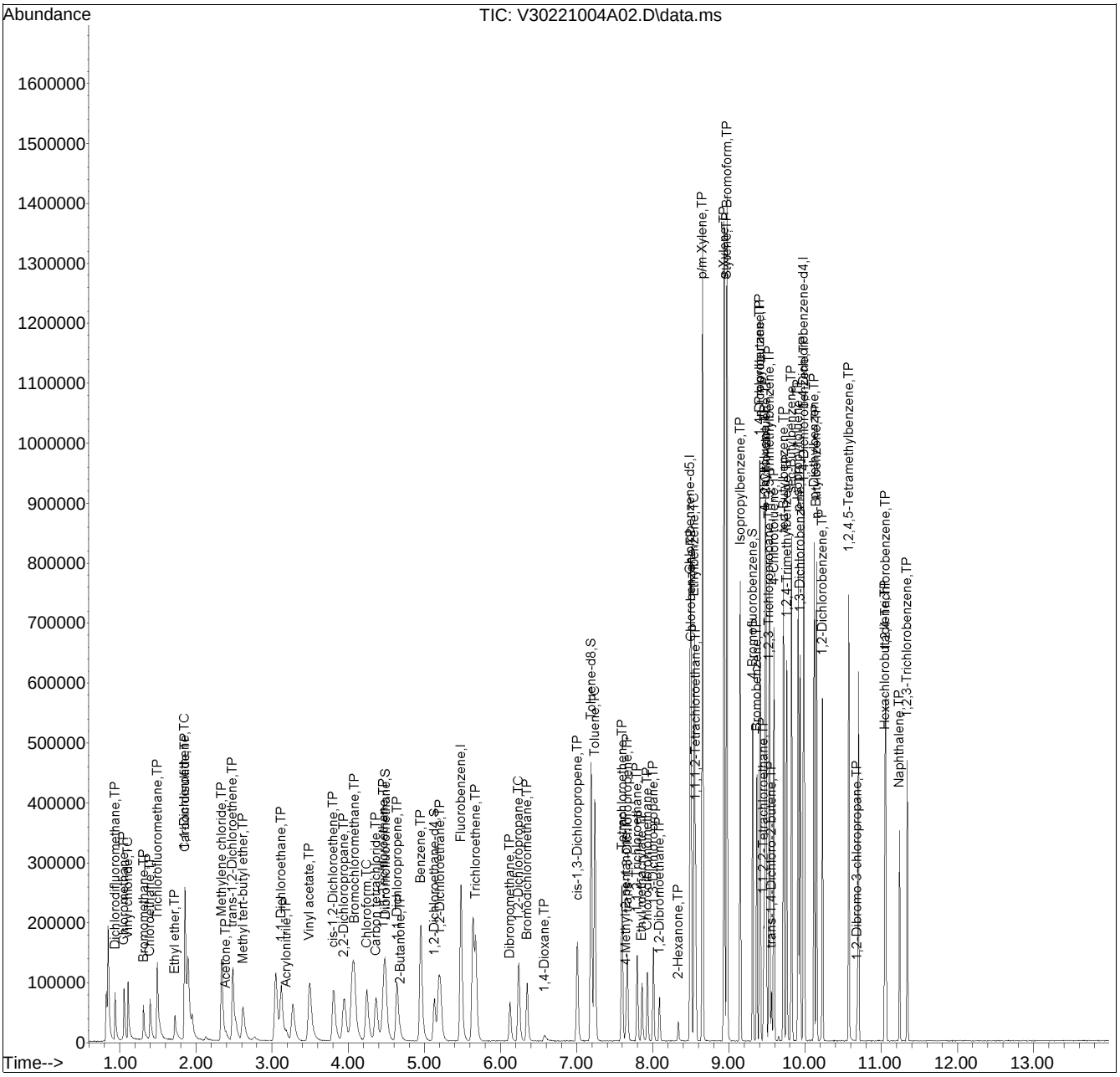
(#) = qualifier out of range (m) = manual integration (+) = signals summed

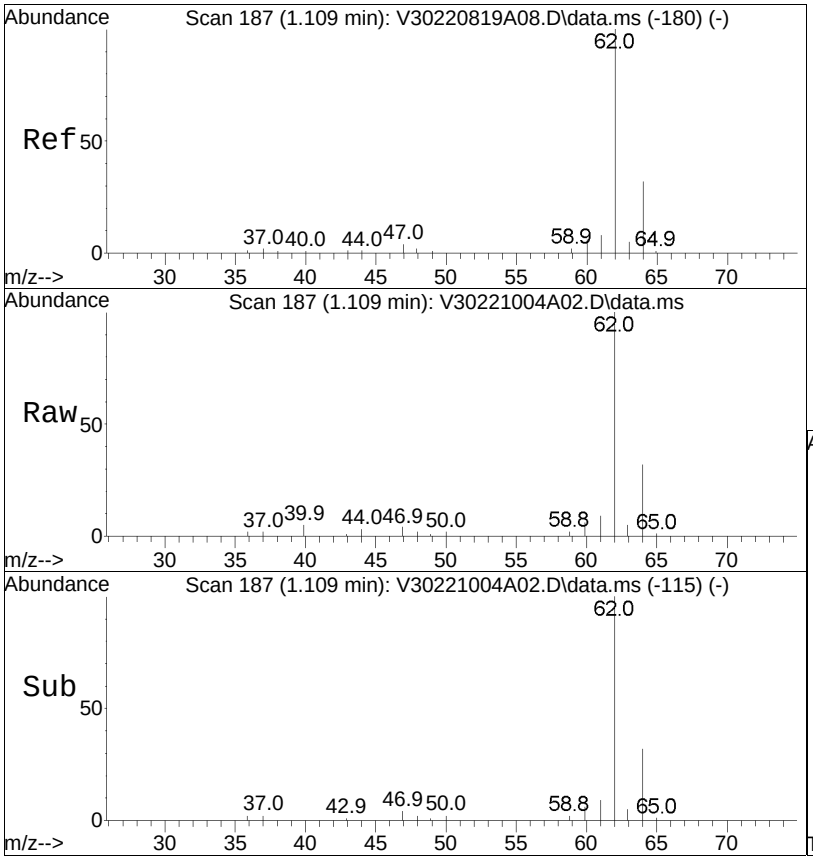
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A02.D
Acq On : 04 Oct 2022 07:13 am
Operator : VOA130:PD
Sample : WG1695594-4,31,10,10
Misc : WG1695594,ICAL19274
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 04 07:31:42 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

Sub List : 8260-NYTCL - Megamix plus Diox21004A\V30221004A01.D•

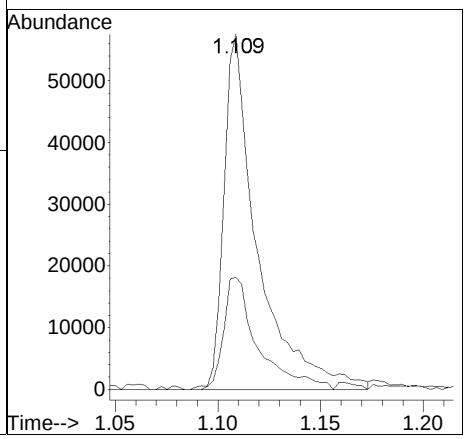


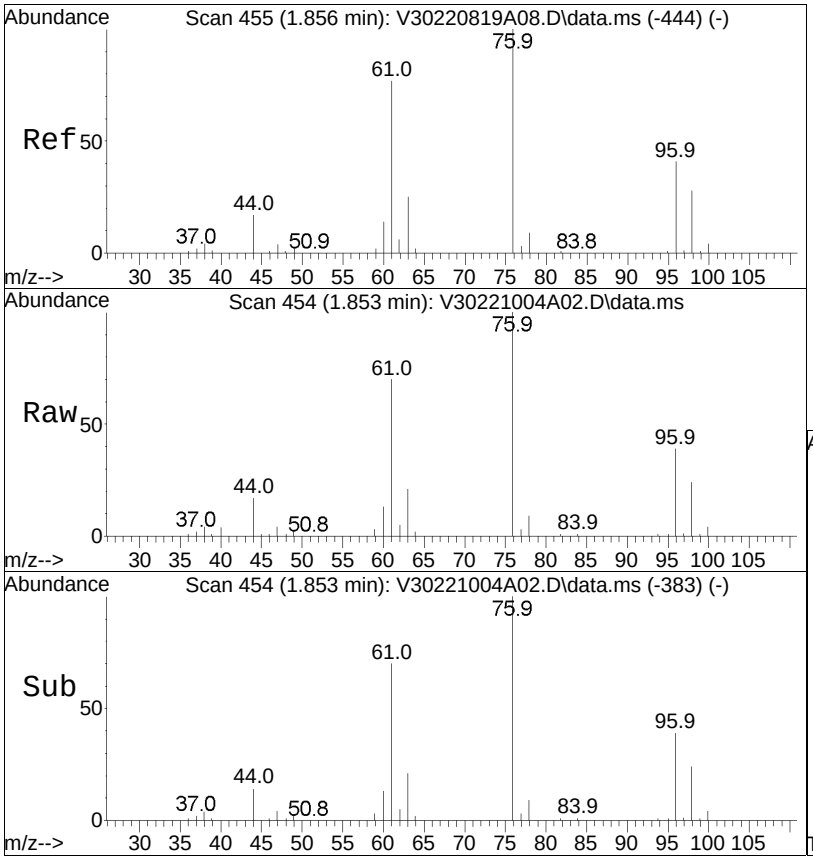


#4
Vinyl chloride
Concen: 10.94 ug/L
RT: 1.109 min Scan# 187
Delta R.T. -0.000 min
Lab File: V30221004A02.D
Acq: 04 Oct 2022 07:13 am

Tgt Ion: 62 Resp: 65310

Ion	Ratio	Lower	Upper
62	100		
64	32.5	9.1	49.1

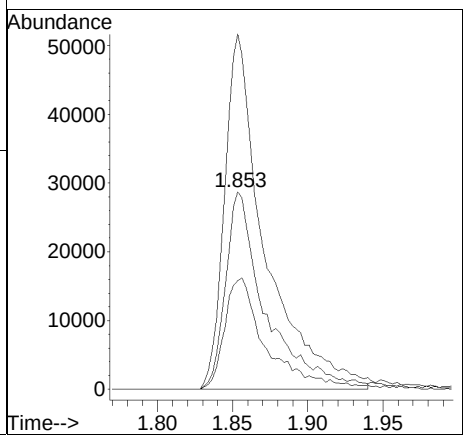


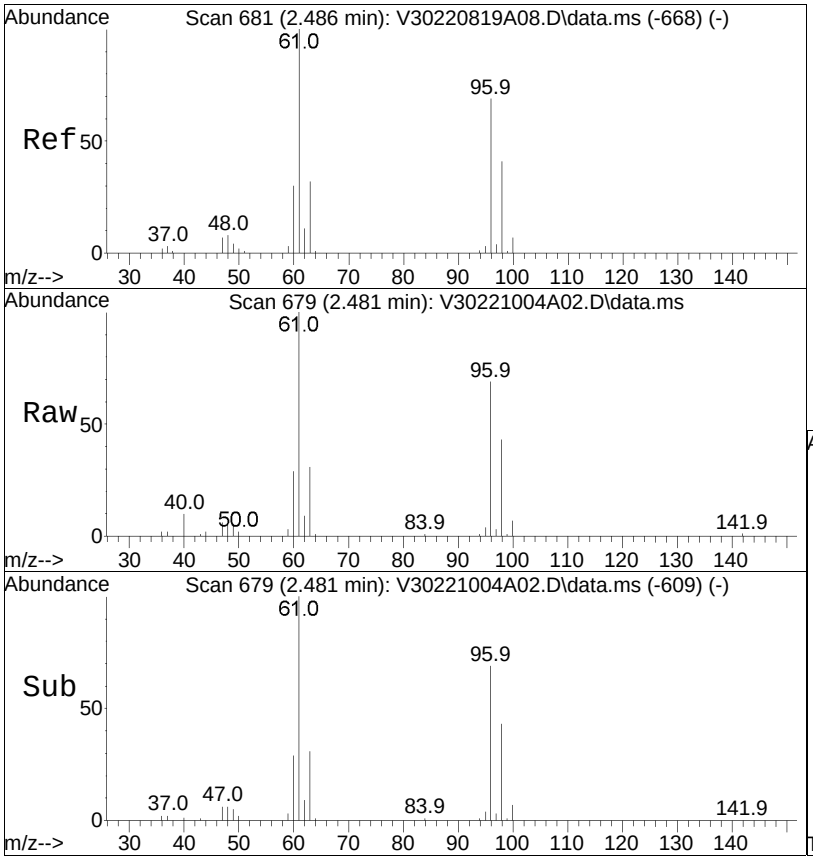


#10
1,1-Dichloroethene
Concen: 10.98 ug/L
RT: 1.853 min Scan# 454
Delta R.T. -0.003 min
Lab File: V30221004A02.D
Acq: 04 Oct 2022 07:13 am

Tgt Ion: 96 Resp: 53555

Ion	Ratio	Lower	Upper
96	100		
61	181.8	186.1	279.1#
63	58.9	57.6	86.4

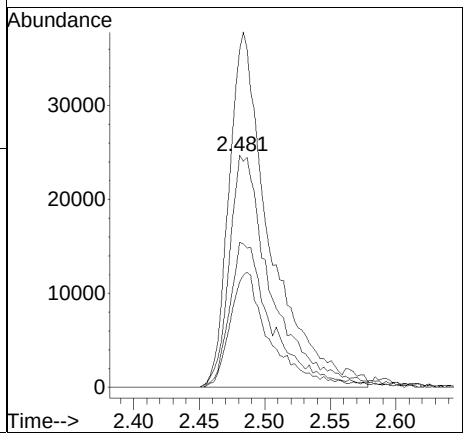


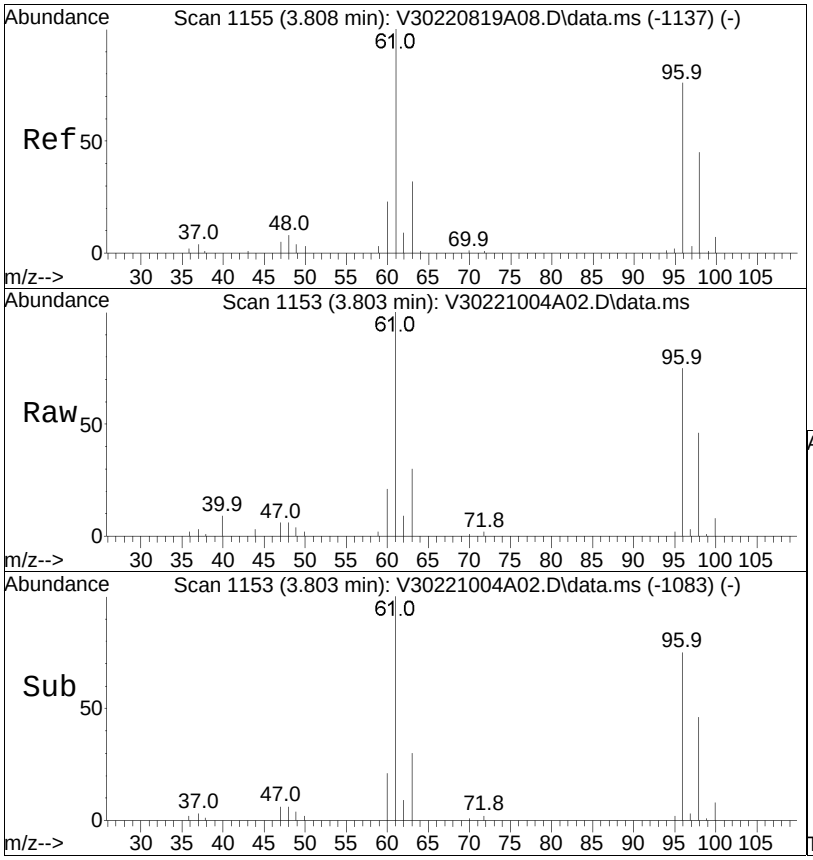


#18
trans-1,2-Dichloroethene
Concen: 10.50 ug/L
RT: 2.481 min Scan# 679
Delta R.T. -0.005 min
Lab File: V30221004A02.D
Acq: 04 Oct 2022 07:13 am

Tgt Ion: 96 Resp: 55416

Ion	Ratio	Lower	Upper
96	100		
61	146.2	124.0	257.6
98	62.3	41.2	85.6
63	47.2	38.4	79.7

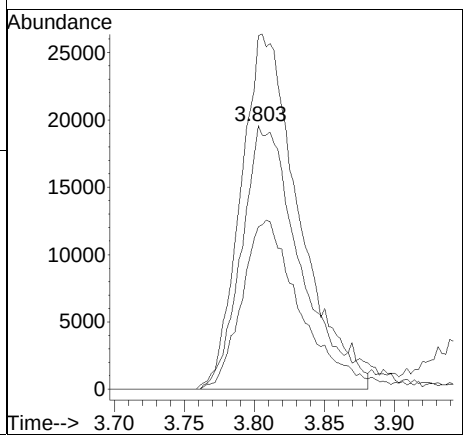


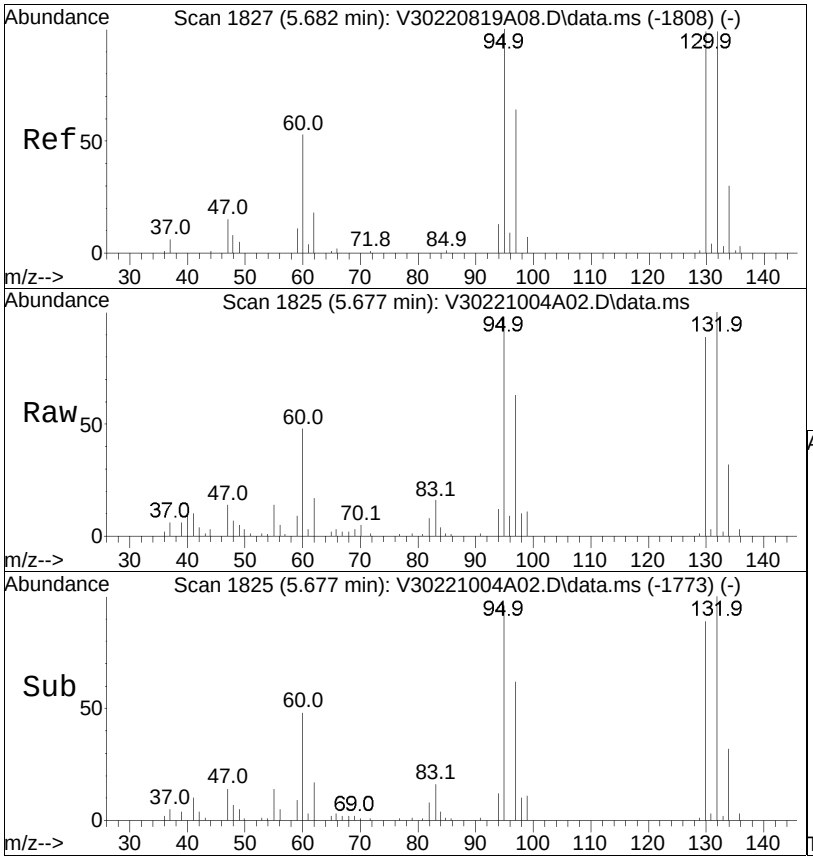


#28
cis-1,2-Dichloroethene
Concen: 9.36 ug/L
RT: 3.803 min Scan# 1153
Delta R.T. -0.005 min
Lab File: V30221004A02.D
Acq: 04 Oct 2022 07:13 am

Tgt Ion: 96 Resp: 56718

Ion	Ratio	Lower	Upper
96	100		
61	139.1	149.4	224.2#
98	65.0	53.4	80.2

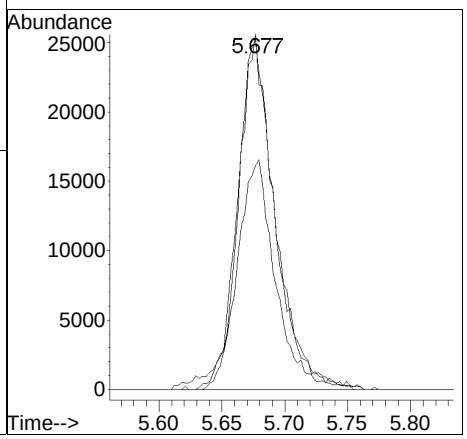


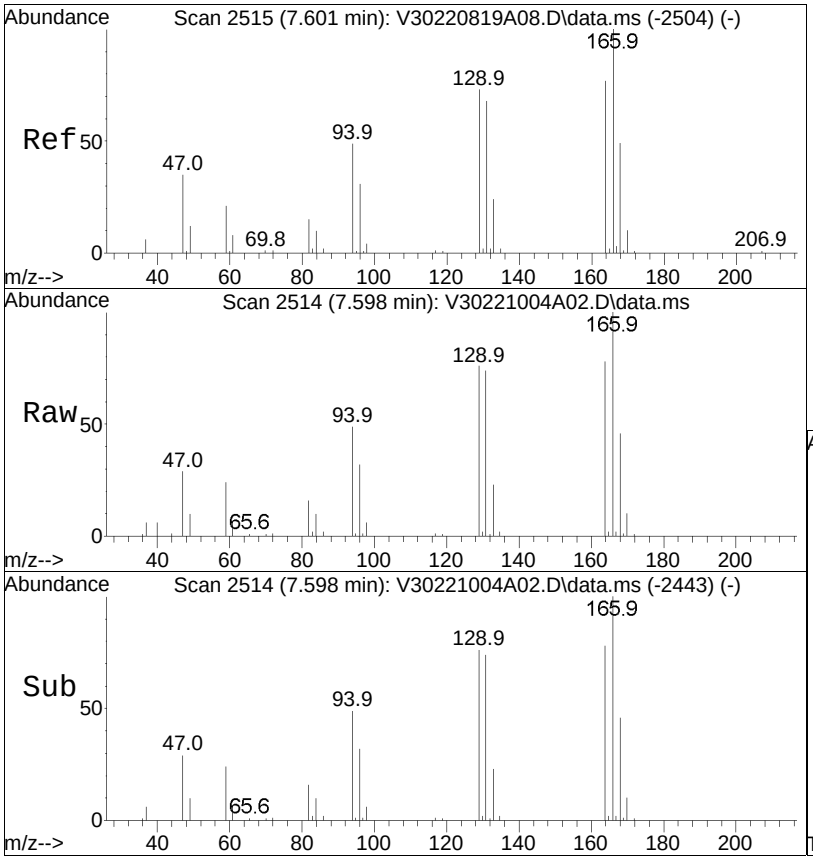


#48
Trichloroethene
Concen: 9.31 ug/L
RT: 5.677 min Scan# 1825
Delta R.T. -0.005 min
Lab File: V30221004A02.D
Acq: 04 Oct 2022 07:13 am

Tgt Ion: 95 Resp: 52577

Ion	Ratio	Lower	Upper
95	100		
97	68.8	55.5	83.3
132	97.2	76.6	115.0

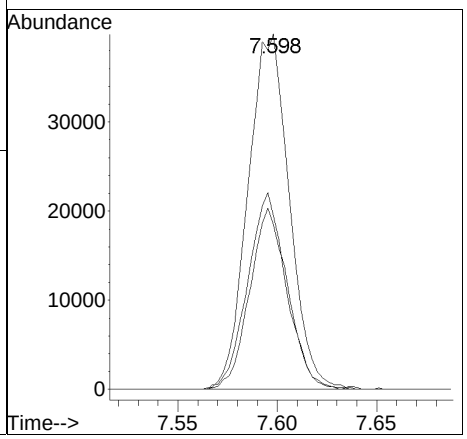




#63
Tetrachloroethene
Concen: 9.23 ug/L
RT: 7.598 min Scan# 2514
Delta R.T. -0.003 min
Lab File: V30221004A02.D
Acq: 04 Oct 2022 07:13 am

Tgt Ion:166 Resp: 57623

Ion	Ratio	Lower	Upper
166	100		
168	47.4	28.2	68.2
94	51.9	38.4	78.4



Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A26.D
Acq On : 04 Oct 2022 03:04 pm
Operator : VOA130:PD
Sample : WG1695594-6,31,10,10,,a1
Misc : WG1695594,ICAL19274
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Oct 05 07:02:57 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\221004A\V30221004A01.D
Sub List : 8260-PCEbreak - PCE Break Down

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.479	96	212524	10.000	ug/L	0.00
Standard Area 1 = 257104			Recovery = 82.66%			
59) Chlorobenzene-d5	8.490	117	184160	10.000	ug/L	-0.01
Standard Area 1 = 224851			Recovery = 81.90%			
79) 1,4-Dichlorobenzene-d4	9.979	152	97400	10.000	ug/L	-0.01
Standard Area 1 = 113313			Recovery = 85.96%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.489	113	57533	10.251	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.51%			
43) 1,2-Dichloroethane-d4	5.130	65	54737	8.883	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 88.83%			
60) Toluene-d8	7.191	98	220329	9.211	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 92.11%			
83) 4-Bromofluorobenzene	9.310	95	91752	9.936	ug/L	-0.01
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.36%			
Target Compounds						Qvalue
4) Vinyl chloride	1.109	62	60437	12.205	ug/L	99
10) 1,1-Dichloroethene	1.853	96	43354	10.714	ug/L	79
18) trans-1,2-Dichloroethene	2.486	96	45081	10.299	ug/L	84
28) cis-1,2-Dichloroethene	3.808	96	53573	10.654	ug/L #	74
48) Trichloroethene	5.674	95	48484	10.342	ug/L	98
63) Tetrachloroethene	7.592	166	52138	9.205	ug/L	95

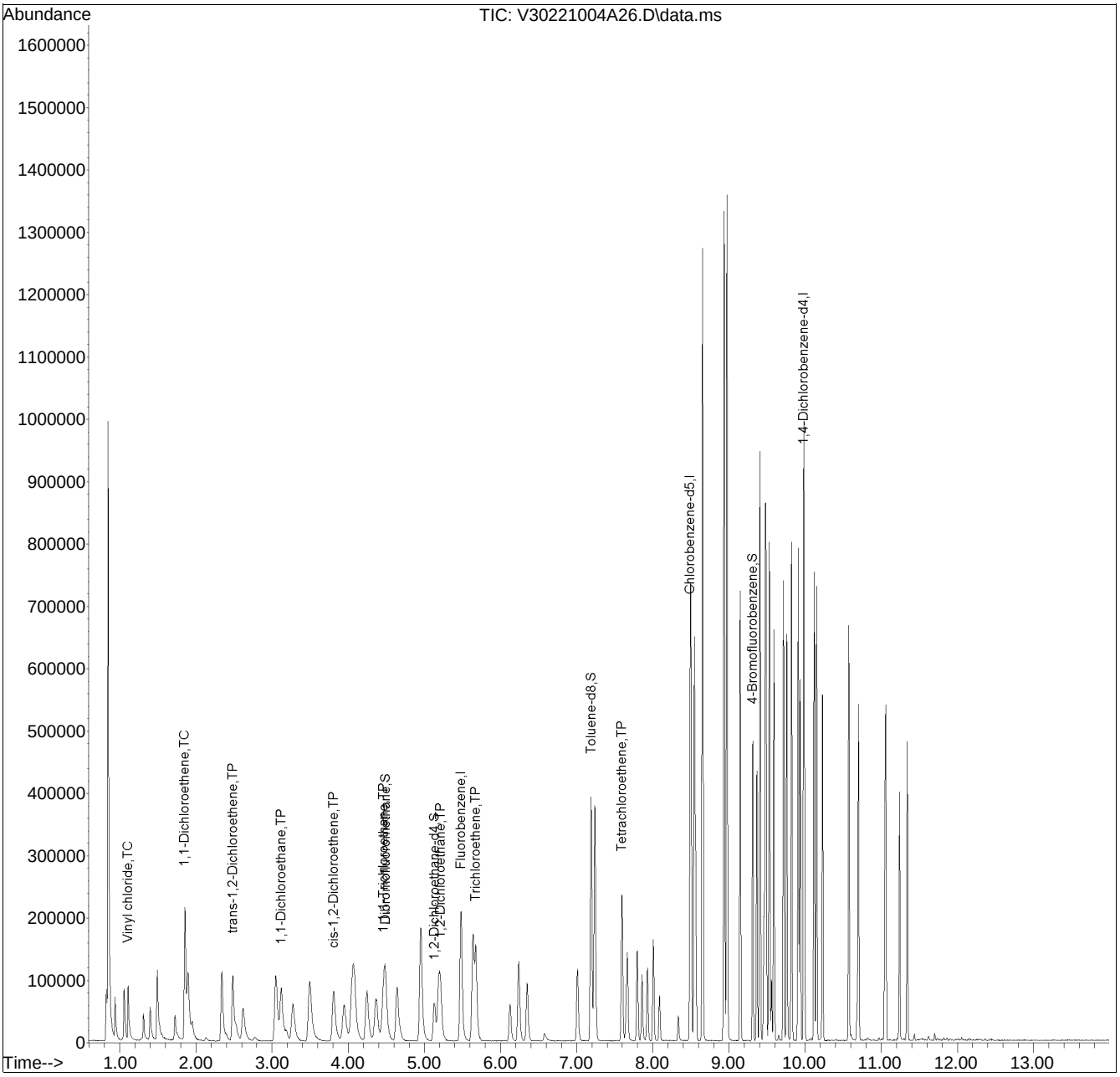
(#) = qualifier out of range (m) = manual integration (+) = signals summed

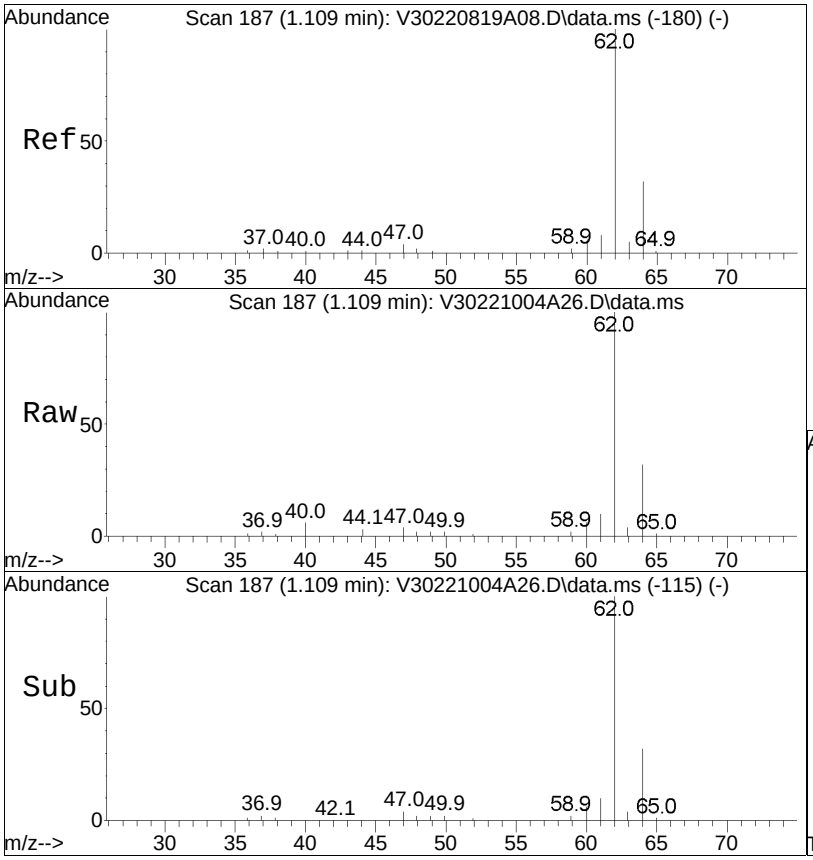
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A26.D
Acq On : 04 Oct 2022 03:04 pm
Operator : VOA130:PD
Sample : WG1695594-6,31,10,10,,a1
Misc : WG1695594,ICAL19274
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Oct 05 07:02:57 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

Sub List : 8260-PCEbreak - PCE Break Down21004A\V30221004A01.D•

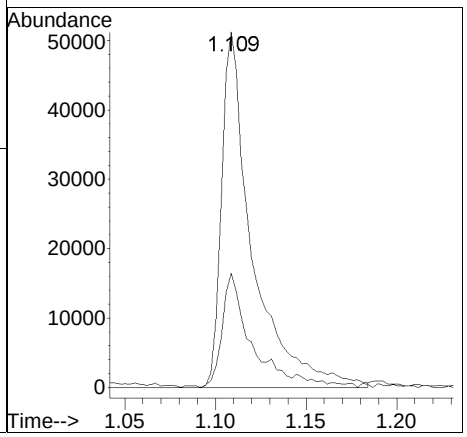


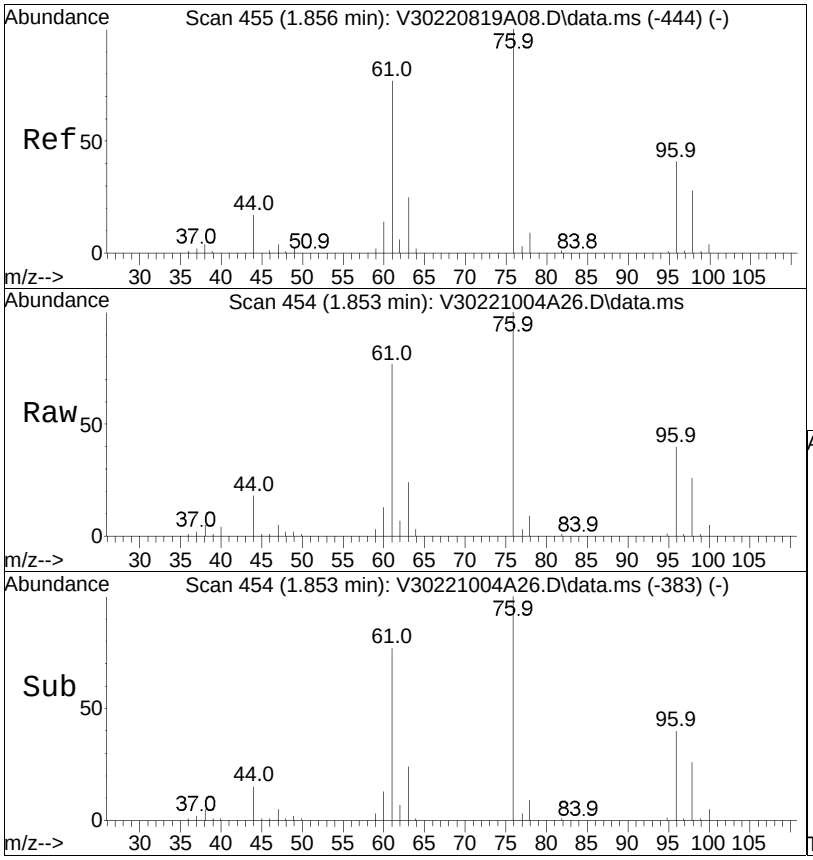


#4
Vinyl chloride
Concen: 12.20 ug/L
RT: 1.109 min Scan# 187
Delta R.T. -0.000 min
Lab File: V30221004A26.D
Acq: 04 Oct 2022 03:04 pm

Tgt Ion: 62 Resp: 60437

Ion	Ratio	Lower	Upper
62	100		
64	28.6	9.1	49.1

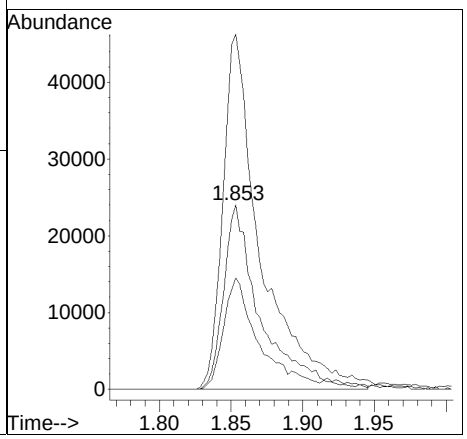


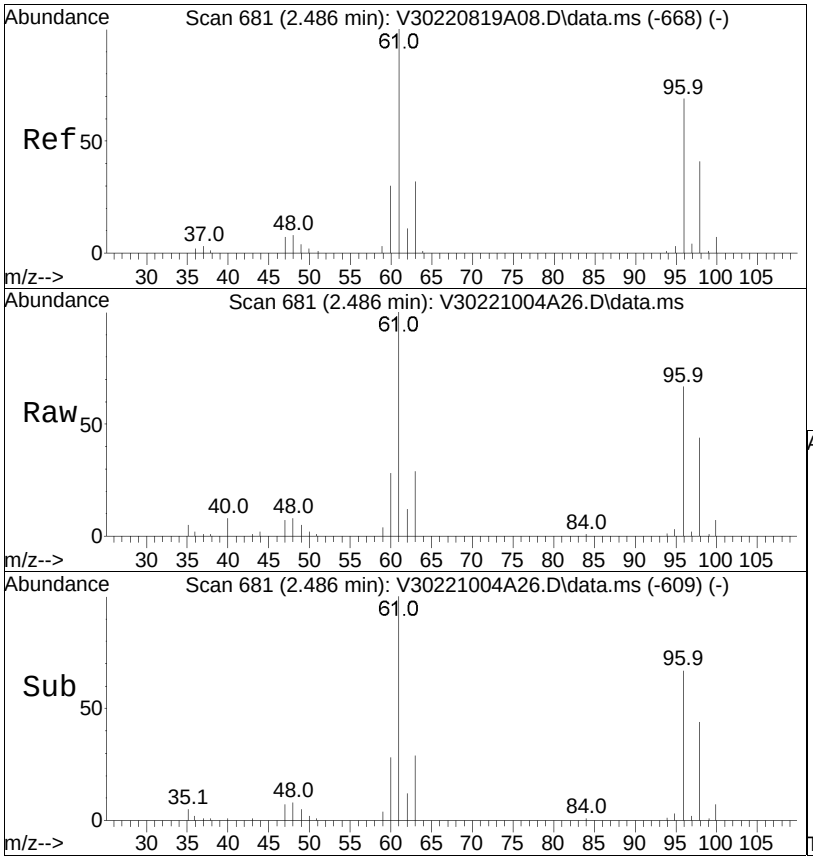


#10
1,1-Dichloroethene
Concen: 10.71 ug/L
RT: 1.853 min Scan# 454
Delta R.T. -0.003 min
Lab File: V30221004A26.D
Acq: 04 Oct 2022 03:04 pm

Tgt Ion: 96 Resp: 43354

Ion	Ratio	Lower	Upper
96	100		
61	195.8	186.1	279.1
63	58.0	57.6	86.4

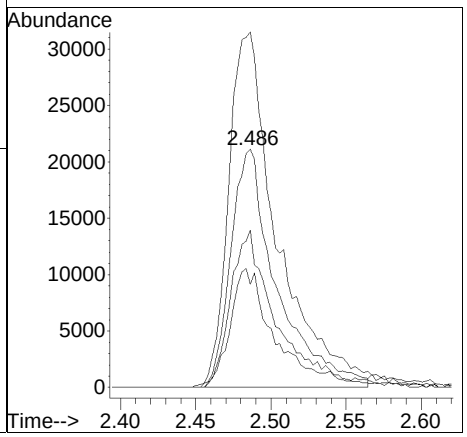


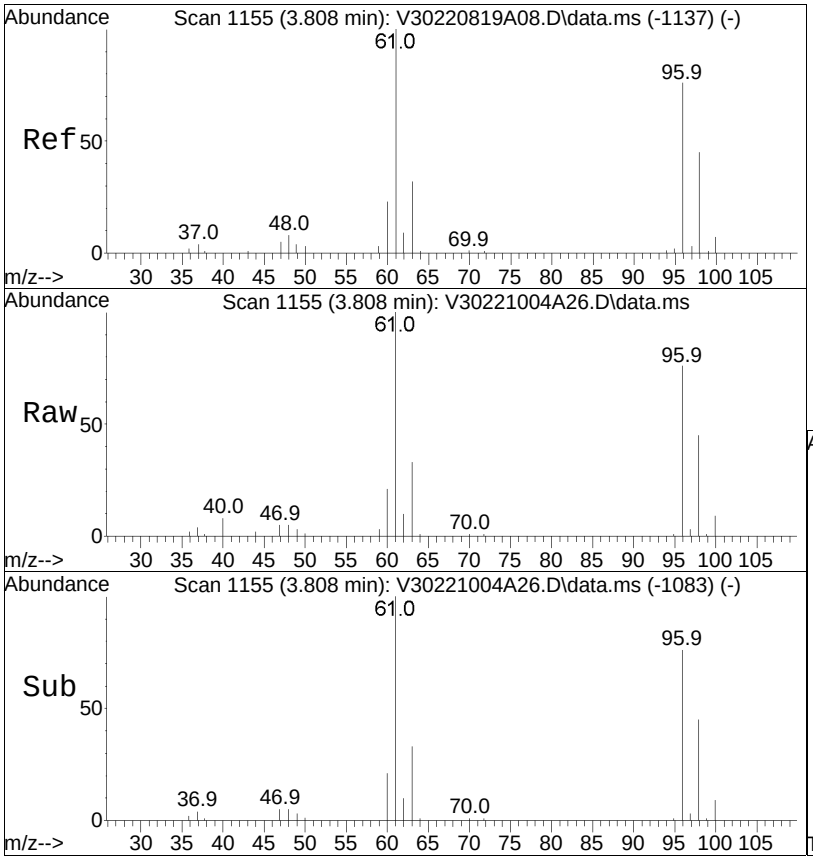


#18
trans-1,2-Dichloroethene
Concen: 10.30 ug/L
RT: 2.486 min Scan# 681
Delta R.T. 0.000 min
Lab File: V30221004A26.D
Acq: 04 Oct 2022 03:04 pm

Tgt Ion: 96 Resp: 45081

Ion	Ratio	Lower	Upper
96	100		
61	158.4	124.0	257.6
98	64.2	41.2	85.6
63	49.4	38.4	79.7

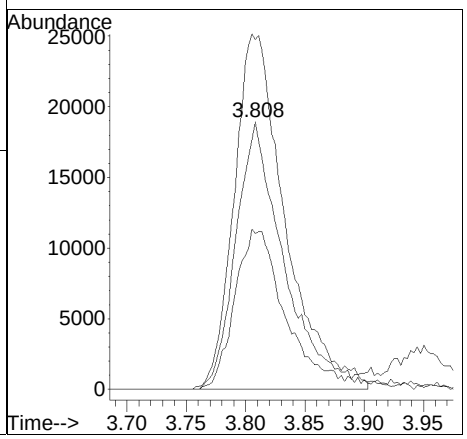


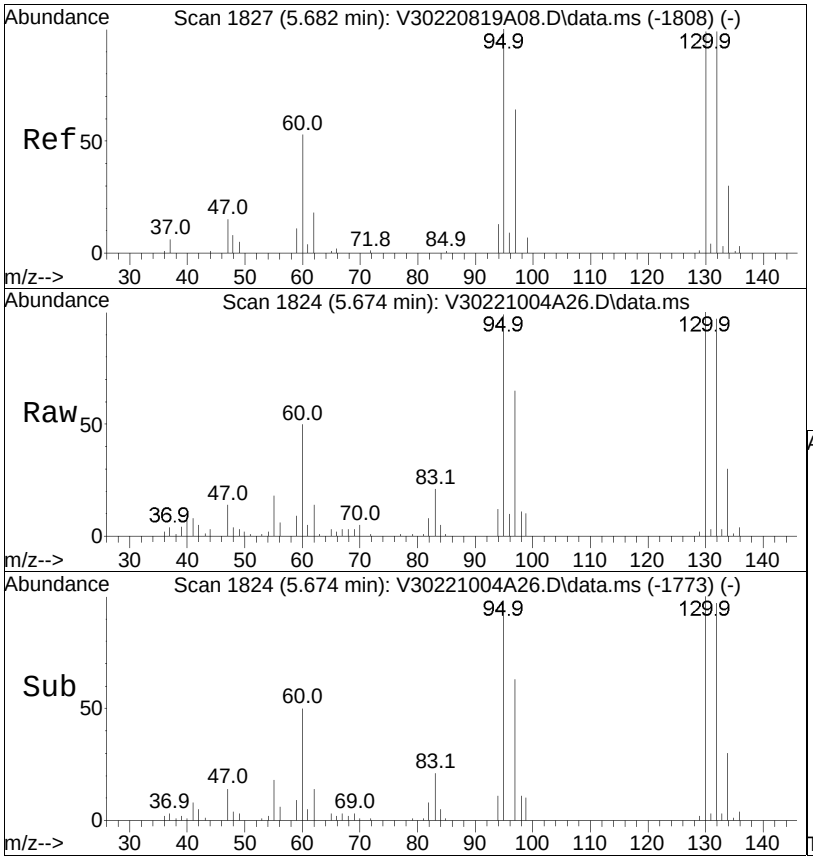


#28
cis-1,2-Dichloroethene
Concen: 10.65 ug/L
RT: 3.808 min Scan# 1155
Delta R.T. 0.000 min
Lab File: V30221004A26.D
Acq: 04 Oct 2022 03:04 pm

Tgt Ion: 96 Resp: 53573

Ion	Ratio	Lower	Upper
96	100		
61	138.3	149.4	224.2#
98	62.4	53.4	80.2

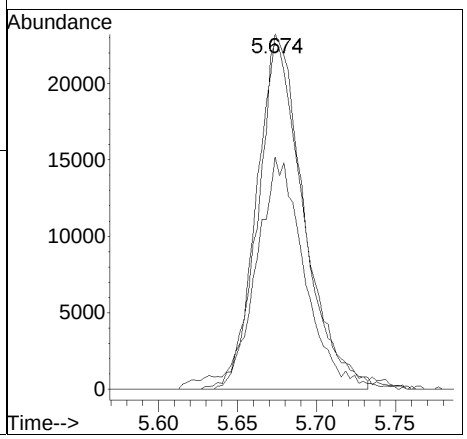


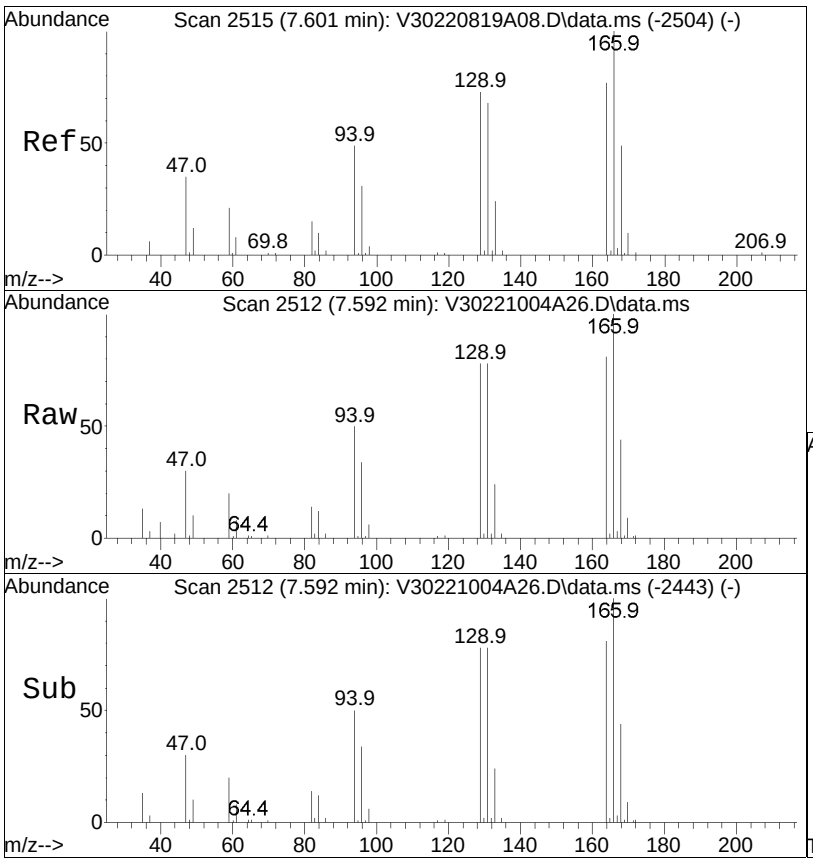


#48
Trichloroethene
Concen: 10.34 ug/L
RT: 5.674 min Scan# 1824
Delta R.T. -0.008 min
Lab File: V30221004A26.D
Acq: 04 Oct 2022 03:04 pm

Tgt Ion: 95 Resp: 48484

Ion	Ratio	Lower	Upper
95	100		
97	66.1	55.5	83.3
132	94.7	76.6	115.0

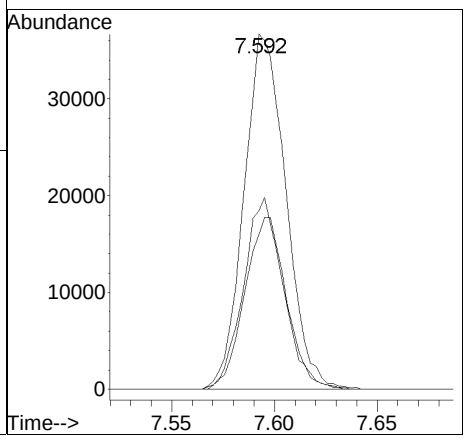




#63
Tetrachloroethene
Concen: 9.20 ug/L
RT: 7.592 min Scan# 2512
Delta R.T. -0.009 min
Lab File: V30221004A26.D
Acq: 04 Oct 2022 03:04 pm

Tgt Ion:166 Resp: 52138

Ion	Ratio	Lower	Upper
166	100		
168	48.1	28.2	68.2
94	51.2	38.4	78.4



Manual Integration Report

Data Path	: I:\VOLATILES\VOA130\2022\2Q	Method	: VOA130_220819A_8260.m
Data File	: V30221004A26.D	Operator	: VOA130:PD
Date Inj'd	: 10/4/2022 3:04 pm	Instrument	: VOA130
Sample	: WG1695594-6,31,10,10,,a1	Quant Date	: 10/5/2022 7:02 am

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A27.D
Acq On : 04 Oct 2022 03:23 pm
Operator : VOA130:PD
Sample : WG1695594-7,31,10,10,,a2
Misc : WG1695594,ICAL19274
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Oct 05 07:03:01 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA130\2022\221004A\V30221004A01.D
Sub List : 8260-PCEbreak - PCE Break Down

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.481	96	231639	10.000	ug/L	0.00
Standard Area 1 = 257104			Recovery = 90.10%			
59) Chlorobenzene-d5	8.490	117	201643	10.000	ug/L	-0.01
Standard Area 1 = 224851			Recovery = 89.68%			
79) 1,4-Dichlorobenzene-d4	9.979	152	104491	10.000	ug/L	-0.01
Standard Area 1 = 113313			Recovery = 92.21%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.486	113	61262	10.015	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.15%			
43) 1,2-Dichloroethane-d4	5.136	65	59077	8.796	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 87.96%			
60) Toluene-d8	7.191	98	254871	9.731	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.31%			
83) 4-Bromofluorobenzene	9.313	95	97739	9.866	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.66%			
Target Compounds						Qvalue
4) Vinyl chloride	1.109	62	67548	12.515	ug/L	96
10) 1,1-Dichloroethene	1.853	96	45835	10.392	ug/L	81
18) trans-1,2-Dichloroethene	2.481	96	49494	10.374	ug/L	81
28) cis-1,2-Dichloroethene	3.805	96	59522	10.860	ug/L #	74
48) Trichloroethene	5.674	95	51491	10.077	ug/L	96
63) Tetrachloroethene	7.598	166	54582	8.801	ug/L	94

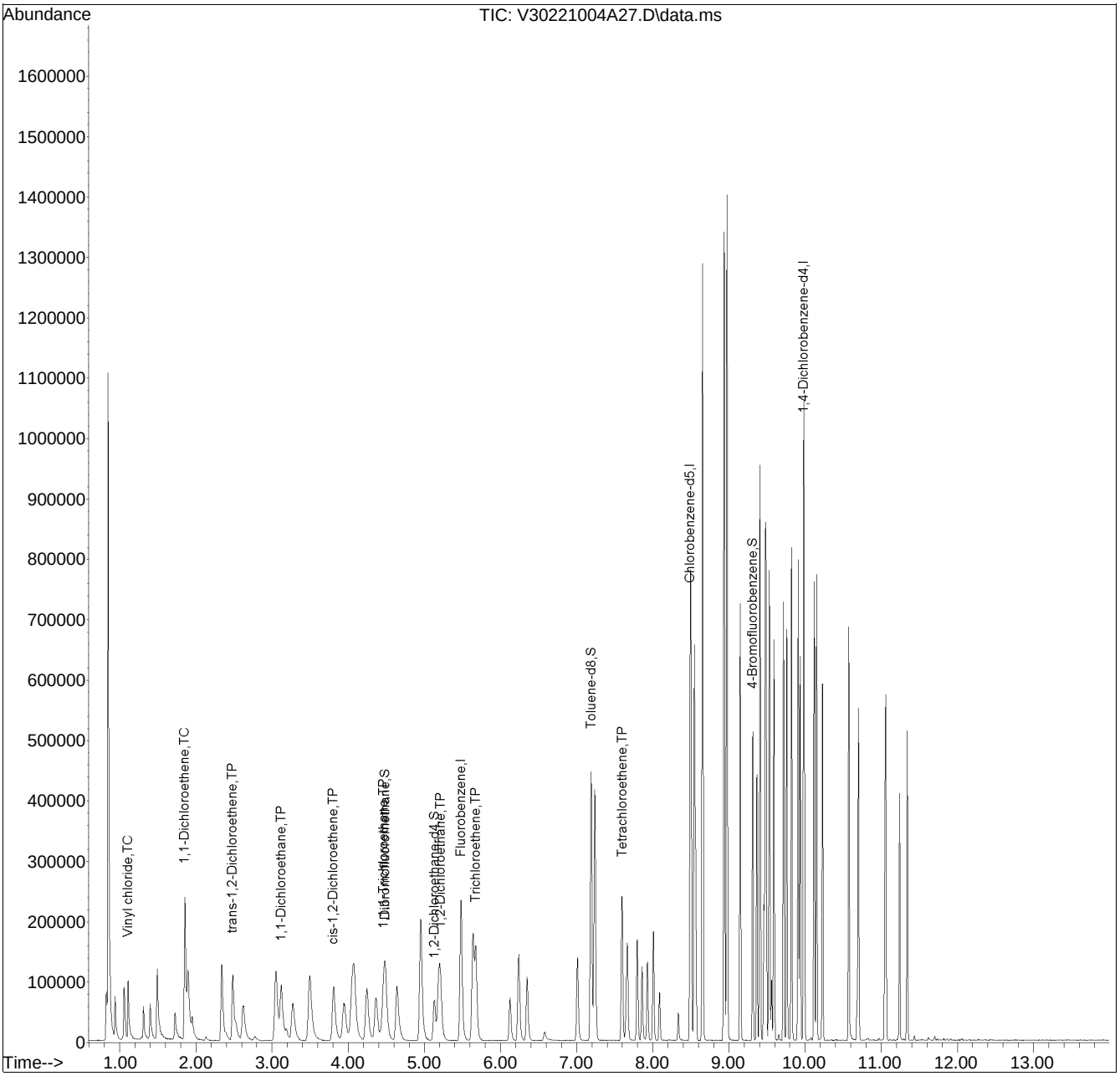
(#) = qualifier out of range (m) = manual integration (+) = signals summed

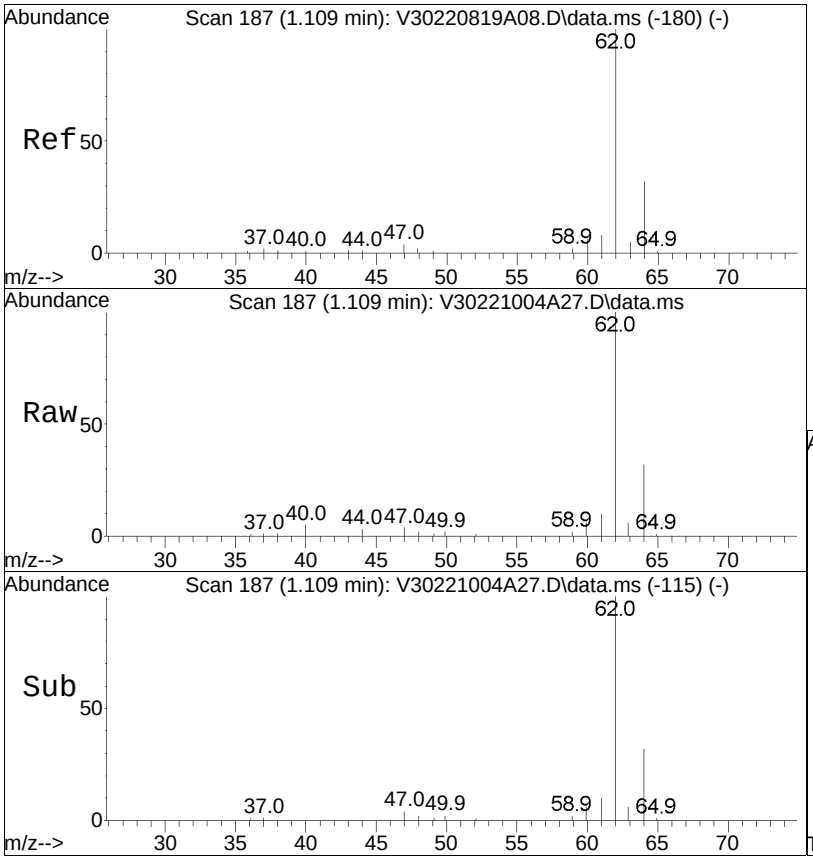
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA130\2022\221004A\
Data File : V30221004A27.D
Acq On : 04 Oct 2022 03:23 pm
Operator : VOA130:PD
Sample : WG1695594-7,31,10,10,,a2
Misc : WG1695594,ICAL19274
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Oct 05 07:03:01 2022
Quant Method : I:\VOLATILES\VOA130\2022\221004A\VOA130_220819A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Aug 22 13:44:43 2022
Response via : Initial Calibration

Sub List : 8260-PCEbreak - PCE Break Down21004A\V30221004A01.D•

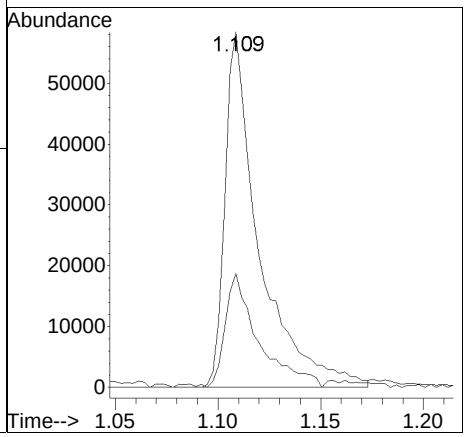


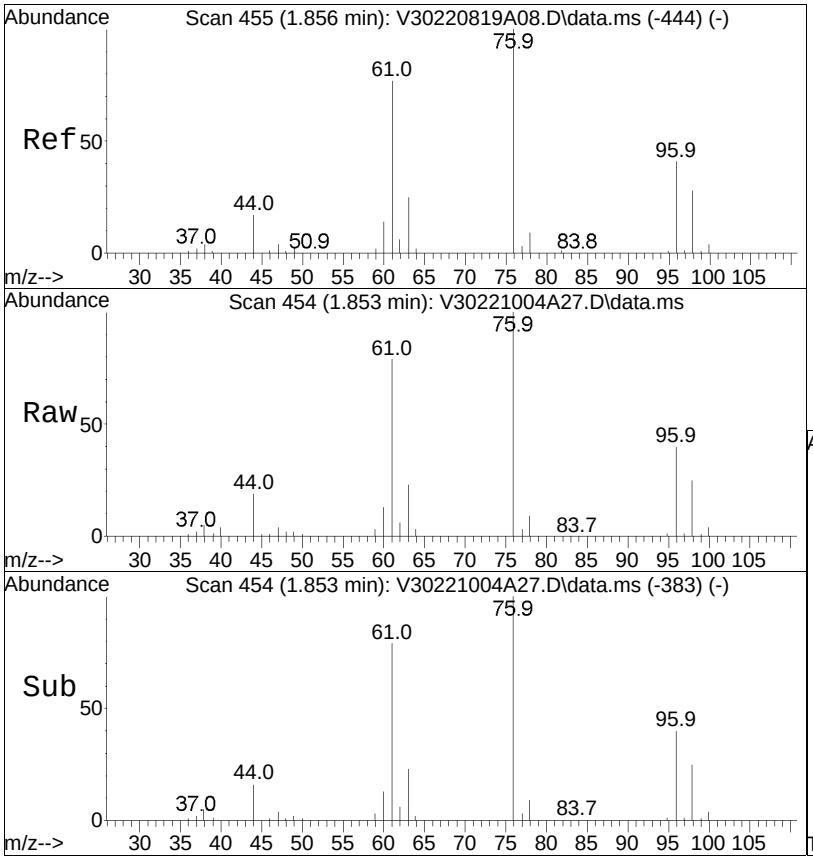


#4
Vinyl chloride
Concen: 12.52 ug/L
RT: 1.109 min Scan# 187
Delta R.T. -0.000 min
Lab File: V30221004A27.D
Acq: 04 Oct 2022 03:23 pm

Tgt Ion: 62 Resp: 67548

Ion	Ratio	Lower	Upper
62	100		
64	31.3	9.1	49.1

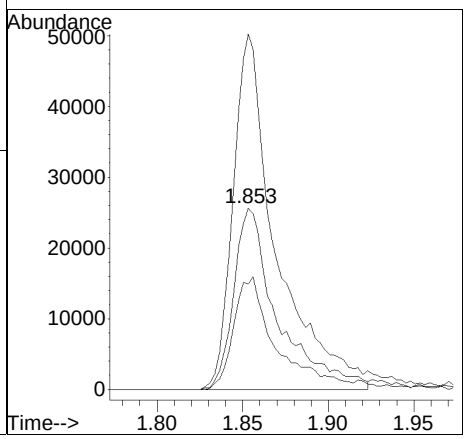


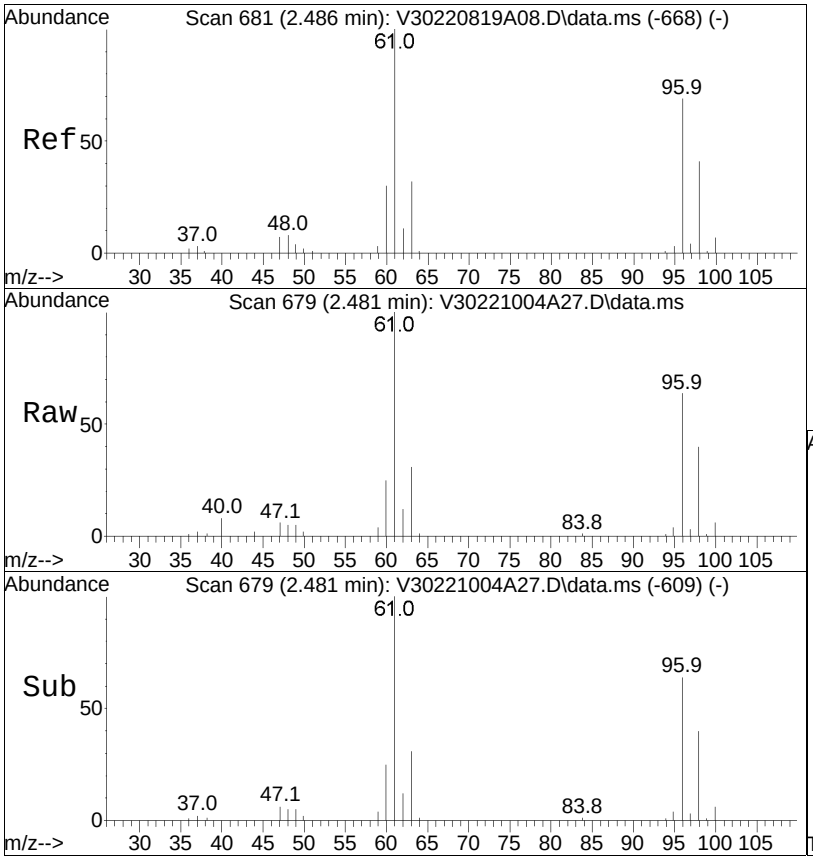


#10
1,1-Dichloroethene
Concen: 10.39 ug/L
RT: 1.853 min Scan# 454
Delta R.T. -0.003 min
Lab File: V30221004A27.D
Acq: 04 Oct 2022 03:23 pm

Tgt Ion: 96 Resp: 45835

Ion	Ratio	Lower	Upper
96	100		
61	198.7	186.1	279.1
63	59.7	57.6	86.4

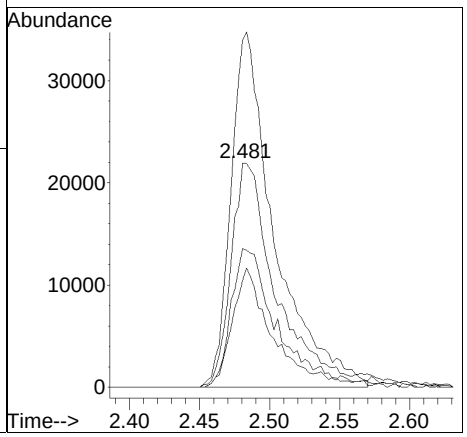


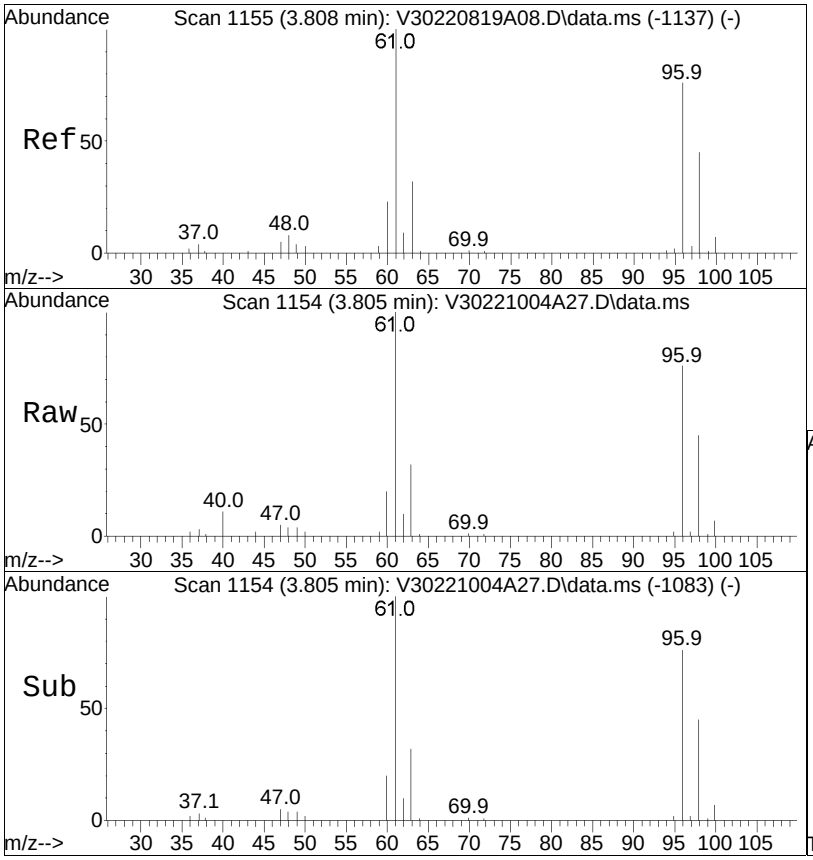


#18
trans-1,2-Dichloroethene
Concen: 10.37 ug/L
RT: 2.481 min Scan# 679
Delta R.T. -0.005 min
Lab File: V30221004A27.D
Acq: 04 Oct 2022 03:23 pm

Tgt Ion: 96 Resp: 49494

Ion	Ratio	Lower	Upper
96	100		
61	156.2	124.0	257.6
98	60.8	41.2	85.6
63	44.6	38.4	79.7

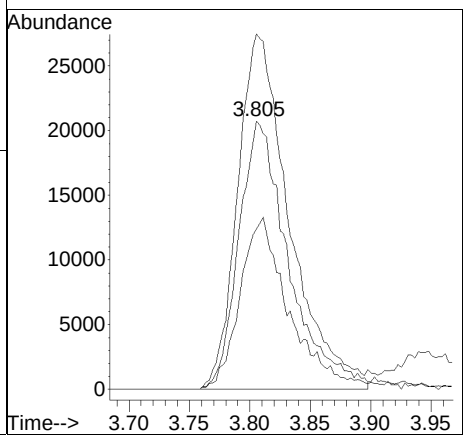


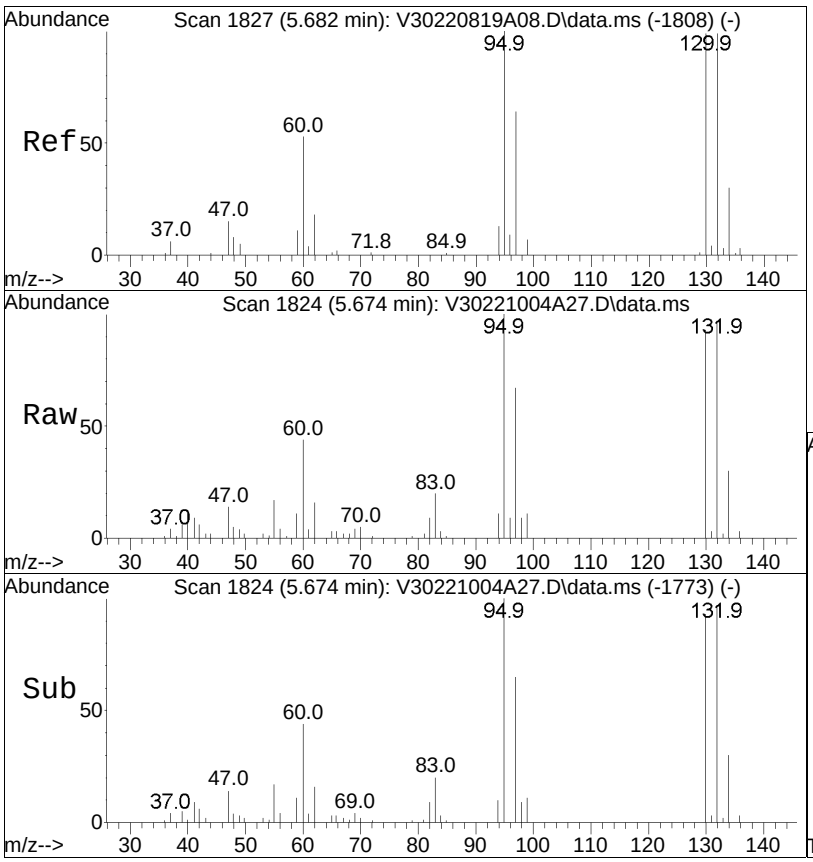


#28
cis-1,2-Dichloroethene
Concen: 10.86 ug/L
RT: 3.805 min Scan# 1154
Delta R.T. -0.003 min
Lab File: V30221004A27.D
Acq: 04 Oct 2022 03:23 pm

Tgt Ion: 96 Resp: 59522

Ion	Ratio	Lower	Upper
96	100		
61	137.7	149.4	224.2#
98	63.0	53.4	80.2

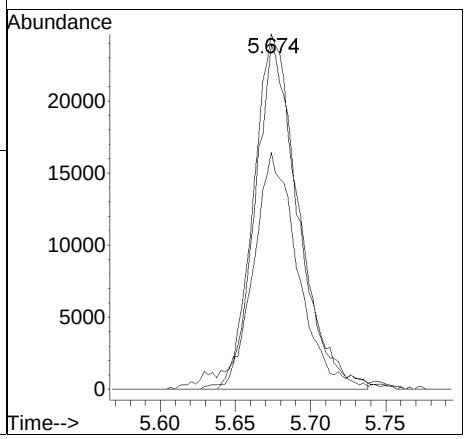


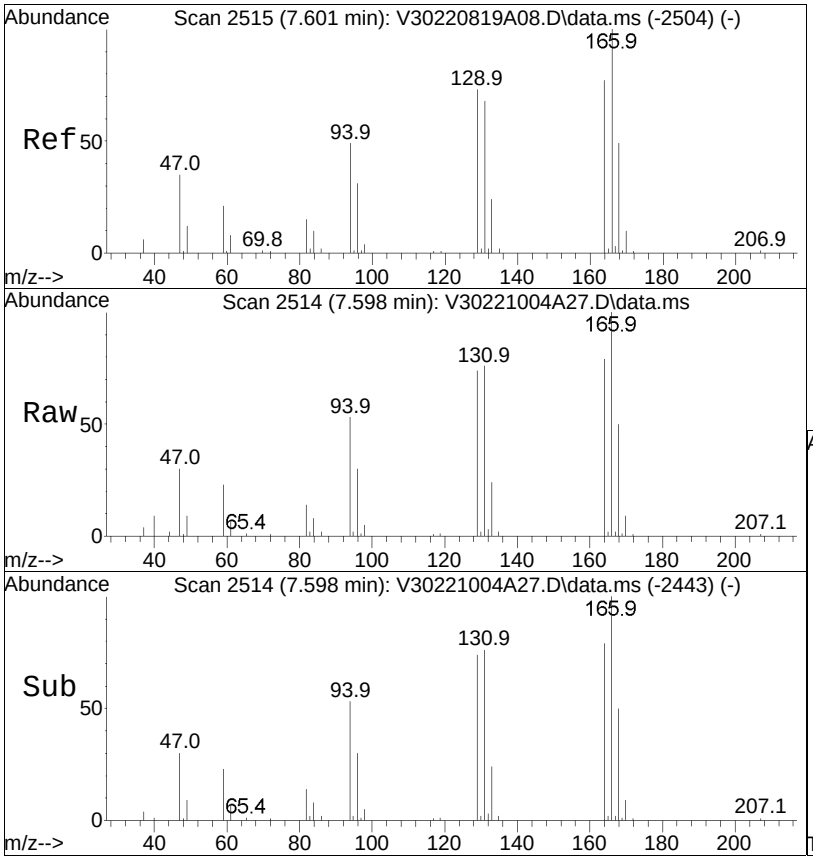


#48
Trichloroethene
Concen: 10.08 ug/L
RT: 5.674 min Scan# 1824
Delta R.T. -0.008 min
Lab File: V30221004A27.D
Acq: 04 Oct 2022 03:23 pm

Tgt Ion: 95 Resp: 51491

Ion	Ratio	Lower	Upper
95	100		
97	64.9	55.5	83.3
132	93.8	76.6	115.0

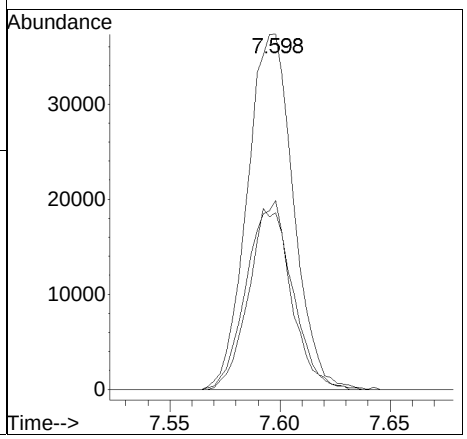




#63
Tetrachloroethene
Concen: 8.80 ug/L
RT: 7.598 min Scan# 2514
Delta R.T. -0.003 min
Lab File: V30221004A27.D
Acq: 04 Oct 2022 03:23 pm

Tgt Ion:166 Resp: 54582

Ion	Ratio	Lower	Upper
166	100		
168	49.0	28.2	68.2
94	50.7	38.4	78.4



Manual Integration Report

Data Path	: I:\VOLATILES\VOA130\2022\2	QMethod	: VOA130_220819A_8260.m
Data File	: V30221004A27.D	Operator	: VOA130:PD
Date Inj'd	: 10/4/2022 3:23 pm	Instrument	: VOA130
Sample	: WG1695594-7,31,10,10,,a2	Quant Date	: 10/5/2022 7:03 am

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

Calculation of Volatile Organic Compounds

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

Where:
DF = Dilution Factor
Vo = Sample Volume Purged (mL)
Uf = ng Unit Correction Factor (mL)

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

Where:
DF = Dilution Factor
Wt = Weight of Sample (g)

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Oct 05 2022, 09:12 am

Work Group: WG1695594 for Department: 31 GC/MS - Volatiles

Created: 05-OCT-22 Due: Operator: PD

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2252336-01	SW-1	S	NYTCL-8260-BTEX	WATER	SEC	U	1006	1006	S0	Vial-B
L2252336-02	SW-2	S	NYTCL-8260-BTEX	WATER	DONE	U	1006	1006	S0	Vial-B
L2252336-03	SW-3	S	NYTCL-8260-BTEX	WATER	DONE	U	1006	1006	S0	Vial-B
L2253856-01	MW-D	S	NYTCL-8260	WATER	DONE	U	1013	1005	S0	Vial-B
L2253856-02	TRC-MW-F	S	NYTCL-8260	WATER	DONE	U	1013	1005	S0	Vial-B
L2253856-03	MW-E	S	NYTCL-8260	WATER	DONE	U	1013	1005	S0	Vial-B
L2253856-04	MW-C(SVE)	S	NYTCL-8260	WATER	DONE	U	1013	1005	S0	Vial-B
L2253856-05	MW-1	S	NYTCL-8260	WATER	DONE	U	1013	1005	S0	Vial-B
L2253856-06	DUP-GW-092922	S	NYTCL-8260	WATER	DONE	U	1013	1005	S0	Vial-B
L2253856-07	FIELD BLANK-GW-092922	S	NYTCL-8260	WATER	DONE	U	1013	1005	S0	Vial-B
L2253856-08	TRIP BLANK-GW-092922	S	NYTCL-8260	WATER	DONE	U	1013	1005	S0	Vial-B
L2254324-01	GW-10 (10'-15')	S	NYTCL-8260	WATER	DONE	U	1015	1005	3B	Vial-B
L2254324-02	GW-10 (15'-20')	S	NYTCL-8260	WATER	DONE	U	1015	1005	3B	Vial-B
L2254324-03	GW-10 (20'-25')	S	NYTCL-8260	WATER	DONE	U	1015	1005	3B	Vial-B
L2254324-04	GW-10 (25'-30')	S	NYTCL-8260	WATER	DONE	U	1015	1005	3B	Vial-B
L2254324-05	GW-11 (10'-15')	S	NYTCL-8260	WATER	DONE	U	1015	1005	3B	Vial-B
L2254324-06	GW-11 (15'-20')	S	NYTCL-8260	WATER	DONE	U	1015	1005	3B	Vial-B
L2254332-03	GW-12 (15'-20')	S	NYTCL-8260	WATER	DONE	U	1016	1005	3B	Vial-B
L2254332-04	GW-12 (20'-25')	S	NYTCL-8260	WATER	DONE	U	1016	1005	3B	Vial-B
L2254332-05	GW-12 (25'-30')	S	NYTCL-8260	WATER	DONE	U	1016	1005	3B	Vial-B
WG1695594-1	MS BFB Tune Standard	S	NYTCL-8260-BTEX	WATER	DONE	U				
WG1695594-1	MS BFB Tune Standard	S	NYTCL-8260	WATER	DONE	U				
WG1695594-2	Continuing Calibrati	S	NYTCL-8260-BTEX	WATER	DONE	U				
WG1695594-2	Continuing Calibrati	S	NYTCL-8260	WATER	DONE	U				
WG1695594-3	Laboratory Control S	S	NYTCL-8260-BTEX	WATER	DONE	U				
WG1695594-3	Laboratory Control S	S	NYTCL-8260	WATER	DACQ	U				
WG1695594-4	LCS Duplicate	S	NYTCL-8260-BTEX	WATER	DONE	U				
WG1695594-4	LCS Duplicate	S	NYTCL-8260	WATER	DACQ	U				
WG1695594-5	Laboratory Method Bl	S	NYTCL-8260-BTEX	WATER	DONE	U				
WG1695594-5	Laboratory Method Bl	S	NYTCL-8260	WATER	DACQ	U				
WG1695594-6	Matrix Spike	S	NYTCL-8260-BTEX	WATER	DONE	U				
WG1695594-6	Matrix Spike	S	NYTCL-8260	WATER	DACQ	U				
WG1695594-7	Matrix Spike Duplica	S	NYTCL-8260-BTEX	WATER	DONE	U				
WG1695594-7	Matrix Spike Duplica	S	NYTCL-8260	WATER	DACQ	U				

Comments:

WG1695594-4	WG1695594-3
WG1695594-6	L2253856-01
WG1695594-7	L2253856-01

Inst: VOA130
Initials: PD
Date: **08/19/22**
Run: **A**

BFB: V9160
IS/SS: V9202
ICAL: V9206A,V9198
ICV: V9152,V9203,V9172,V9151,V9178,V9173

Method
GC: 8260
Autosampler: 8260
Concentrator: 8260

QC:_____ Seq:_____

Vial	Data File	Sample	pH<2
1	V30220819ABF1	BFB TUNE	
1	V30220819A01	BLK	
2	V30220819A02	BLK	
3	V30220819A03	I8260STD0.19PPB	
4	V30220819A04	I8260STD0.5PPB	
5	V30220819A05	I8260STD0.5PPB	
6	V30220819A06	I8260STD2PPB	
7	V30220819A07	I8260STD2PPB	
8	V30220819A08	I8260STD10PPB	
9	V30220819A09	I8260STD30PPB	
10	V30220819A10	I8260STD80PPB	
11	V30220819A11	I8260STD120PPB	
12	V30220819A12	I8260STD200PPB	
13	V30220819A13	BLK	
14	V30220819A14	BLK	
15	V30220819A15	BLK	
16	V30220819A16	BLK	
17	V30220819A17	C8260STD10PPB	
18	V30220819A18	C8260STD10PPB	
19	V30220819A19	BLK	
20	V30220819A20	BLK	
21	V30220819A21	MDL METHOD BLK	
22	V30220819A22	MDL L11	
23	V30220819A23	MDL L1	
24	V30220819A24	MDL L2	
25	V30220819A25	BLK	

Inst: VOA130 BFB: V9268 Method GC: 8260
Initials: MB IS/SS: V9261 Autosampler: 8260
Date: **10/04/22** ICAL: V9251C,V9274 Concentrator: 8260
Run: **A** QC:_____ Seq:_____

Vial	Data File	Sample		pH<2
1	V30221004ABF1	BFB TUNE 06:40		
1	V30221004A01	8260 CCAL LCS		
2	V30221004A02	8260 CCAL LCSD		
3	V30221004A03	8260 CCAL		
4	V30221004A04	BLK		
5	V30221004A05	METHOD BLK		
6	V30221004A06	I2254324-01,31,10,10,,a,r3b	NYTCL/10	pH<2
7	V30221004A07	I2254324-02,31,10,10,,a,r3b	NYTCL/10	pH<2
8	V30221004A08	I2254324-03,31,10,10,,a,r3b	NYTCL/10	pH<2
9	V30221004A09	I2254324-04d,31,1.0,10,,a,r3b	NYTCL/10	pH<2
10	V30221004A10	I2254324-05,31,10,10,,a,r3b	NYTCL/10	pH<2
11	V30221004A11	I2254324-06,31,10,10,,a,r3b	NYTCL/10	pH<2
12	V30221004A12	I2254332-05,31,10,10,,a,r3b	NYTCL	pH<2
13	V30221004A13	I2254332-04,31,10,10,,a,r3b	NYTCL	pH<2
14	V30221004A14	I2254332-03,31,10,10,,a,r3b	NYTCL	pH<2
15	V30221004A15	I2253856-01,31,10,10,,a,pri	NY/PCEBREAK	pH<2
16	V30221004A16	I2253856-02,31,10,10,,a,pri	NY/PCEBREAK	pH<2
17	V30221004A17	I2253856-03,31,10,10,,a,pri	NY/PCEBREAK	pH<2
18	V30221004A18	I2253856-04,31,10,10,,a,pri	NY/PCEBREAK	pH<2
19	V30221004A19	I2253856-05,31,10,10,,a,pri	NY/PCEBREAK	pH<2
20	V30221004A20	I2253856-06,31,10,10,,a,pri	NY/PCEBREAK	pH<2
21	V30221004A21	I2253856-07,31,10,10,,a,pri	NY/PCEBREAK FB	pH<2
22	V30221004A22	I2253856-08,31,10,10,,a,pri	NY/PCEBREAK TB	pH<2
23	V30221004A23	I2252336-01,31,10,10,,a	NY/BTEX	pH<2
24	V30221004A24	I2252336-02,31,10,10,,a	NY/BTEX	pH<2
25	V30221004A25	I2252336-03,31,10,10,,a	NY/BTEX	pH<2
26	V30221004A26	I2253856-01MS,31,10,10,,a1	NY/PCEBREAK	pH<2
27	V30221004A27	I2253856-01MSD,31,10,10,,a2	NY/PCEBREAK	pH<2
28	V30221004A28	HSTD		
29	V30221004A29	BLK		
30	V30221004A30	BLK		

ANALYTICAL REPORT

Lab Number:	L2315188
Client:	Roux Env. Eng. & Geology, DPC 209 Shafter Street Islandia, NY 11749
ATTN:	Rachel Henke
Phone:	(631) 630-2334
Project Name:	FORMER CLEAN ZONE DRY CLEANERS
Project Number:	2546.0007Y000
Report Date:	03/29/23

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Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Number: 2546.0007Y000

Lab Number: L2315188
Report Date: 03/29/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2315188-01	VE-1	SOIL_VAPOR	YONKERS, NY	03/22/23 12:03	03/22/23
L2315188-02	VE-2-IA	AIR	YONKERS, NY	03/22/23 12:07	03/22/23
L2315188-03	DUP-032223	AIR	YONKERS, NY	03/22/23 12:08	03/22/23
L2315188-04	VE-2	SOIL_VAPOR	YONKERS, NY	03/22/23 12:25	03/22/23
L2315188-05	VE-1-IA	AIR	YONKERS, NY	03/22/23 13:00	03/22/23

Project Name:	FORMER CLEAN ZONE DRY CLEANERS	**Lab Number:**	L2315188
Project Number:	2546.0007Y000	**Report Date:**	03/29/23

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	FORMER CLEAN ZONE DRY CLEANERS	**Lab Number:**	L2315188
Project Number:	2546.0007Y000	**Report Date:**	03/29/23

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on March 20, 2023. The canister certification results are provided as an addendum.

L2315188-04D: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

L2315188-05D: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

WG1758865-5D: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

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

Authorized Signature: Christopher J. Anderson

Title: Technical Director/Representative Date: 03/29/23

AIR

Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Number: 2546.0007Y000
Lab Number: L2315188
Report Date: 03/29/23

SAMPLE RESULTS

Lab ID: L2315188-01
Client ID: VE-1
Sample Location: YONKERS, NY

Date Collected: 03/22/23 12:03
Date Received: 03/22/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 03/26/23 03:37
Analyst: NFL

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.534	0.200	--	2.64	0.989	--		1
Chloromethane	0.522	0.200	--	1.08	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	0.282	0.200	--	0.721	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	55.5	5.00	--	105	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	87.3	1.00	--	207	2.38	--		1
Trichlorofluoromethane	0.407	0.200	--	2.29	1.12	--		1
Isopropanol	3.23	0.500	--	7.94	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	1.65	0.500	--	5.00	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	0.427	0.200	--	1.69	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	53.0	0.500	--	156	1.47	--		1
cis-1,2-Dichloroethene	12.0	0.200	--	47.6	0.793	--		1

Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Number: 2546.0007Y000
Lab Number: L2315188
Report Date: 03/29/23

SAMPLE RESULTS

Lab ID: L2315188-01
Client ID: VE-1
Sample Location: YONKERS, NY

Date Collected: 03/22/23 12:03
Date Received: 03/22/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	0.201	0.200	--	0.814	0.809	--		1
n-Hexane	0.498	0.200	--	1.76	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	1.01	0.200	--	3.23	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	4.26	0.200	--	22.9	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	2.89	0.200	--	10.9	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	33.0	0.200	--	224	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1

Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Number: 2546.0007Y000
Lab Number: L2315188
Report Date: 03/29/23

SAMPLE RESULTS

Lab ID: L2315188-01
Client ID: VE-1
Sample Location: YONKERS, NY

Date Collected: 03/22/23 12:03
Date Received: 03/22/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	94		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	97		60-140

Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Number: 2546.0007Y000
Lab Number: L2315188
Report Date: 03/29/23

SAMPLE RESULTS

Lab ID: L2315188-02
Client ID: VE-2-IA
Sample Location: YONKERS, NY

Date Collected: 03/22/23 12:07
Date Received: 03/22/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/26/23 01:01
Analyst: NFL

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.474	0.200	--	2.34	0.989	--		1
Chloromethane	0.610	0.200	--	1.26	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	118	5.00	--	222	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	4.24	1.00	--	10.1	2.38	--		1
Trichlorofluoromethane	0.265	0.200	--	1.49	1.12	--		1
Isopropanol	2.95	0.500	--	7.25	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	0.577	0.500	--	2.00	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.700	0.500	--	2.06	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Number: 2546.0007Y000
Lab Number: L2315188
Report Date: 03/29/23

SAMPLE RESULTS

Lab ID: L2315188-02
Client ID: VE-2-IA
Sample Location: YONKERS, NY

Date Collected: 03/22/23 12:07
Date Received: 03/22/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	0.218	0.200	--	0.882	0.809	--		1
n-Hexane	0.256	0.200	--	0.902	0.705	--		1
Benzene	0.327	0.200	--	1.04	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.38	0.200	--	5.20	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.362	0.200	--	1.57	0.869	--		1
p/m-Xylene	0.862	0.400	--	3.74	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.536	0.200	--	2.28	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.460	0.200	--	2.00	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Number: 2546.0007Y000
Lab Number: L2315188
Report Date: 03/29/23

SAMPLE RESULTS

Lab ID: L2315188-02
Client ID: VE-2-IA
Sample Location: YONKERS, NY

Date Collected: 03/22/23 12:07
Date Received: 03/22/23
Field Prep: Not Specified

Sample Depth:

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	91		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	95		60-140

Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Number: 2546.0007Y000
Lab Number: L2315188
Report Date: 03/29/23

SAMPLE RESULTS

Lab ID: L2315188-02
Client ID: VE-2-IA
Sample Location: YONKERS, NY

Date Collected: 03/22/23 12:07
Date Received: 03/22/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/26/23 01:01
Analyst: NFL

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.060	0.020	--	0.377	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.092	0.020	--	0.624	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	94		60-140
bromochloromethane	98		60-140
chlorobenzene-d5	99		60-140

Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Number: 2546.0007Y000
Lab Number: L2315188
Report Date: 03/29/23

SAMPLE RESULTS

Lab ID: L2315188-03
Client ID: DUP-032223
Sample Location: YONKERS, NY

Date Collected: 03/22/23 12:08
Date Received: 03/22/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/26/23 01:40
Analyst: NFL

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.465	0.200	--	2.30	0.989	--		1
Chloromethane	0.576	0.200	--	1.19	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	120	5.00	--	226	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	4.50	1.00	--	10.7	2.38	--		1
Trichlorofluoromethane	0.263	0.200	--	1.48	1.12	--		1
Isopropanol	3.06	0.500	--	7.52	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	0.561	0.500	--	1.95	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.660	0.500	--	1.95	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Number: 2546.0007Y000
Lab Number: L2315188
Report Date: 03/29/23

SAMPLE RESULTS

Lab ID: L2315188-03
Client ID: DUP-032223
Sample Location: YONKERS, NY

Date Collected: 03/22/23 12:08
Date Received: 03/22/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.264	0.200	--	0.930	0.705	--		1
Benzene	0.324	0.200	--	1.04	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.39	0.200	--	5.24	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.366	0.200	--	1.59	0.869	--		1
p/m-Xylene	0.904	0.400	--	3.93	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.590	0.200	--	2.51	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.472	0.200	--	2.05	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Number: 2546.0007Y000
Lab Number: L2315188
Report Date: 03/29/23

SAMPLE RESULTS

Lab ID: L2315188-03
Client ID: DUP-032223
Sample Location: YONKERS, NY

Date Collected: 03/22/23 12:08
Date Received: 03/22/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	95		60-140

Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Number: 2546.0007Y000
Lab Number: L2315188
Report Date: 03/29/23

SAMPLE RESULTS

Lab ID: L2315188-03
Client ID: DUP-032223
Sample Location: YONKERS, NY

Date Collected: 03/22/23 12:08
Date Received: 03/22/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/26/23 01:40
Analyst: NFL

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.074	0.020	--	0.465	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.088	0.020	--	0.597	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	96		60-140
bromochloromethane	99		60-140
chlorobenzene-d5	100		60-140

Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Number: 2546.0007Y000
Lab Number: L2315188
Report Date: 03/29/23

SAMPLE RESULTS

Lab ID: L2315188-04
Client ID: VE-2
Sample Location: YONKERS, NY

Date Collected: 03/22/23 12:25
Date Received: 03/22/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 03/26/23 04:16
Analyst: NFL

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.435	0.200	--	2.15	0.989	--		1
Chloromethane	0.880	0.200	--	1.82	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	40.6	5.00	--	76.5	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	158	1.00	--	375	2.38	--		1
Trichlorofluoromethane	0.203	0.200	--	1.14	1.12	--		1
Isopropanol	3.97	0.500	--	9.76	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	2.20	0.500	--	6.67	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	0.393	0.200	--	1.22	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	138	0.500	--	407	1.47	--	E	1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Number: 2546.0007Y000
Lab Number: L2315188
Report Date: 03/29/23

SAMPLE RESULTS

Lab ID: L2315188-04
Client ID: VE-2
Sample Location: YONKERS, NY

Date Collected: 03/22/23 12:25
Date Received: 03/22/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.455	0.200	--	1.60	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.707	0.200	--	2.26	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	0.273	0.200	--	0.940	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.229	0.200	--	0.938	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	4.26	0.200	--	16.1	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1

Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Number: 2546.0007Y000
Lab Number: L2315188
Report Date: 03/29/23

SAMPLE RESULTS

Lab ID: L2315188-04
Client ID: VE-2
Sample Location: YONKERS, NY

Date Collected: 03/22/23 12:25
Date Received: 03/22/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	0.408	0.400	--	1.77	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	97		60-140

Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Number: 2546.0007Y000
Lab Number: L2315188
Report Date: 03/29/23

SAMPLE RESULTS

Lab ID: L2315188-04 D
Client ID: VE-2
Sample Location: YONKERS, NY

Date Collected: 03/22/23 12:25
Date Received: 03/22/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 03/26/23 09:30
Analyst: NFL

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
2-Butanone	133	1.25	--	392	3.69	--		2.5

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	92		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	95		60-140

Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Number: 2546.0007Y000
Lab Number: L2315188
Report Date: 03/29/23

SAMPLE RESULTS

Lab ID: L2315188-05
Client ID: VE-1-IA
Sample Location: YONKERS, NY

Date Collected: 03/22/23 13:00
Date Received: 03/22/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/26/23 02:19
Analyst: NFL

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.471	0.200	--	2.33	0.989	--		1
Chloromethane	0.652	0.200	--	1.35	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	2310	5.00	--	4350	9.42	--	E	1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	7.85	1.00	--	18.6	2.38	--		1
Trichlorofluoromethane	0.522	0.200	--	2.93	1.12	--		1
Isopropanol	16.2	0.500	--	39.8	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.686	0.500	--	2.02	1.47	--		1
Ethyl Acetate	1.83	0.500	--	6.59	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Number: 2546.0007Y000
Lab Number: L2315188
Report Date: 03/29/23

SAMPLE RESULTS

Lab ID: L2315188-05
Client ID: VE-1-IA
Sample Location: YONKERS, NY

Date Collected: 03/22/23 13:00
Date Received: 03/22/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.266	0.200	--	0.937	0.705	--		1
Benzene	0.331	0.200	--	1.06	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	0.387	0.200	--	1.81	0.934	--		1
Heptane	0.334	0.200	--	1.37	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.05	0.200	--	3.96	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.213	0.200	--	0.925	0.869	--		1
p/m-Xylene	0.694	0.400	--	3.01	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.282	0.200	--	1.22	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Number: 2546.0007Y000
Lab Number: L2315188
Report Date: 03/29/23

SAMPLE RESULTS

Lab ID: L2315188-05
Client ID: VE-1-IA
Sample Location: YONKERS, NY

Date Collected: 03/22/23 13:00
Date Received: 03/22/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	95		60-140

Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Number: 2546.0007Y000
Lab Number: L2315188
Report Date: 03/29/23

SAMPLE RESULTS

Lab ID: L2315188-05
Client ID: VE-1-IA
Sample Location: YONKERS, NY

Date Collected: 03/22/23 13:00
Date Received: 03/22/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/26/23 02:19
Analyst: NFL

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.066	0.020	--	0.415	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.475	0.020	--	3.22	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	94		60-140
bromochloromethane	98		60-140
chlorobenzene-d5	98		60-140

Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Number: 2546.0007Y000
Lab Number: L2315188
Report Date: 03/29/23

SAMPLE RESULTS

Lab ID: L2315188-05 D
Client ID: VE-1-IA
Sample Location: YONKERS, NY

Date Collected: 03/22/23 13:00
Date Received: 03/22/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/26/23 08:16
Analyst: NFL

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Ethanol	2490	35.7	--	4690	67.3	--		7.143

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	83		60-140
Bromochloromethane	91		60-140
chlorobenzene-d5	84		60-140

Project Name: FORMER CLEAN ZONE DRY CLEANERS **Lab Number:** L2315188

Project Number: 2546.0007Y000 **Report Date:** 03/29/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 03/25/23 17:14

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-05 Batch: WG1758865-4								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1

Project Name: FORMER CLEAN ZONE DRY CLEANERS **Lab Number:** L2315188

Project Number: 2546.0007Y000 **Report Date:** 03/29/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 03/25/23 17:14

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-05 Batch: WG1758865-4								
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1

Project Name: FORMER CLEAN ZONE DRY CLEANERS **Lab Number:** L2315188

Project Number: 2546.0007Y000 **Report Date:** 03/29/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 03/25/23 17:14

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-05 Batch: WG1758865-4								
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: FORMER CLEAN ZONE DRY CLEANERS **Lab Number:** L2315188

Project Number: 2546.0007Y000 **Report Date:** 03/29/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 03/25/23 17:53

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 02-03,05 Batch: WG1758866-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER CLEAN ZONE DRY CLEANERS

Project Number: 2546.0007Y000

Lab Number: L2315188

Report Date: 03/29/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-05 Batch: WG1758865-3								
Dichlorodifluoromethane	90		-		70-130	-		
Chloromethane	98		-		70-130	-		
Freon-114	91		-		70-130	-		
Vinyl chloride	91		-		70-130	-		
1,3-Butadiene	90		-		70-130	-		
Bromomethane	96		-		70-130	-		
Chloroethane	109		-		70-130	-		
Ethanol	81		-		40-160	-		
Vinyl bromide	90		-		70-130	-		
Acetone	83		-		40-160	-		
Trichlorofluoromethane	94		-		70-130	-		
Isopropanol	80		-		40-160	-		
1,1-Dichloroethene	92		-		70-130	-		
Tertiary butyl Alcohol	72		-		70-130	-		
Methylene chloride	94		-		70-130	-		
3-Chloropropene	91		-		70-130	-		
Carbon disulfide	77		-		70-130	-		
Freon-113	92		-		70-130	-		
trans-1,2-Dichloroethene	101		-		70-130	-		
1,1-Dichloroethane	103		-		70-130	-		
Methyl tert butyl ether	84		-		70-130	-		
2-Butanone	97		-		70-130	-		
cis-1,2-Dichloroethene	108		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER CLEAN ZONE DRY CLEANERS

Project Number: 2546.0007Y000

Lab Number: L2315188

Report Date: 03/29/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-05 Batch: WG1758865-3								
Ethyl Acetate	101		-		70-130	-		
Chloroform	103		-		70-130	-		
Tetrahydrofuran	96		-		70-130	-		
1,2-Dichloroethane	99		-		70-130	-		
n-Hexane	99		-		70-130	-		
1,1,1-Trichloroethane	100		-		70-130	-		
Benzene	95		-		70-130	-		
Carbon tetrachloride	102		-		70-130	-		
Cyclohexane	99		-		70-130	-		
1,2-Dichloropropane	104		-		70-130	-		
Bromodichloromethane	98		-		70-130	-		
1,4-Dioxane	96		-		70-130	-		
Trichloroethene	100		-		70-130	-		
2,2,4-Trimethylpentane	102		-		70-130	-		
Heptane	106		-		70-130	-		
cis-1,3-Dichloropropene	102		-		70-130	-		
4-Methyl-2-pentanone	102		-		70-130	-		
trans-1,3-Dichloropropene	86		-		70-130	-		
1,1,2-Trichloroethane	103		-		70-130	-		
Toluene	98		-		70-130	-		
2-Hexanone	97		-		70-130	-		
Dibromochloromethane	103		-		70-130	-		
1,2-Dibromoethane	103		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER CLEAN ZONE DRY CLEANERS

Project Number: 2546.0007Y000

Lab Number: L2315188

Report Date: 03/29/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-05 Batch: WG1758865-3								
Tetrachloroethene	98		-		70-130	-		
Chlorobenzene	102		-		70-130	-		
Ethylbenzene	111		-		70-130	-		
p/m-Xylene	112		-		70-130	-		
Bromoform	106		-		70-130	-		
Styrene	108		-		70-130	-		
1,1,2,2-Tetrachloroethane	106		-		70-130	-		
o-Xylene	114		-		70-130	-		
4-Ethyltoluene	103		-		70-130	-		
1,3,5-Trimethylbenzene	102		-		70-130	-		
1,2,4-Trimethylbenzene	102		-		70-130	-		
Benzyl chloride	96		-		70-130	-		
1,3-Dichlorobenzene	113		-		70-130	-		
1,4-Dichlorobenzene	116		-		70-130	-		
1,2-Dichlorobenzene	108		-		70-130	-		
1,2,4-Trichlorobenzene	104		-		70-130	-		
Hexachlorobutadiene	104		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER CLEAN ZONE DRY CLEANERS

Project Number: 2546.0007Y000

Lab Number: L2315188

Report Date: 03/29/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 02-03,05 Batch: WG1758866-3								
Vinyl chloride	93		-		70-130	-		25
1,1-Dichloroethene	93		-		70-130	-		25
cis-1,2-Dichloroethene	107		-		70-130	-		25
1,1,1-Trichloroethane	95		-		70-130	-		25
Carbon tetrachloride	92		-		70-130	-		25
Trichloroethene	98		-		70-130	-		25
Tetrachloroethene	100		-		70-130	-		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Number: 2546.0007Y000

Lab Number: L2315188
Report Date: 03/29/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1758865-5 QC Sample: L2315188-05 Client ID: VE-1-IA						
Dichlorodifluoromethane	0.471	0.472	ppbV	0		25
Chloromethane	0.652	0.651	ppbV	0		25
Freon-114	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethanol	2310E	2360E	ppbV	5		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	7.85	7.72	ppbV	2		25
Trichlorofluoromethane	0.522	0.532	ppbV	2		25
Isopropanol	16.2	16.6	ppbV	2		25
Tertiary butyl Alcohol	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
Freon-113	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25
2-Butanone	0.686	0.699	ppbV	2		25
Ethyl Acetate	1.83	1.96	ppbV	7		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Number: 2546.0007Y000

Lab Number: L2315188
Report Date: 03/29/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1758865-5 QC Sample: L2315188-05 Client ID: VE-1-IA						
Chloroform	ND	ND	ppbV	NC		25
Tetrahydrofuran	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	0.266	0.276	ppbV	4		25
Benzene	0.331	0.345	ppbV	4		25
Cyclohexane	ND	ND	ppbV	NC		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	0.387	0.391	ppbV	1		25
Heptane	0.334	0.348	ppbV	4		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Toluene	1.05	1.06	ppbV	1		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	0.213	0.210	ppbV	1		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Number: 2546.0007Y000

Lab Number: L2315188
Report Date: 03/29/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1758865-5 QC Sample: L2315188-05 Client ID: VE-1-IA						
p/m-Xylene	0.694	0.690	ppbV	1		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	ND	ND	ppbV	NC		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	0.282	0.290	ppbV	3		25
4-Ethyltoluene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC		25
1,2,4-Trimethylbenzene	ND	ND	ppbV	NC		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1758865-5 QC Sample: L2315188-05 Client ID: VE-1-IA						
Ethanol	2490	2360	ppbV	5		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Number: 2546.0007Y000

Lab Number: L2315188
Report Date: 03/29/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 02-03,05 QC Batch ID: WG1758866-5 QC Sample: L2315188-05 Client ID: VE-1-IA						
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Carbon tetrachloride	0.066	0.063	ppbV	5		25
Trichloroethene	ND	ND	ppbV	NC		25
Tetrachloroethene	0.475	0.498	ppbV	5		25

Project Name: FORMER CLEAN ZONE DRY CLEANERS **Lab Number:** L2315188

Project Number: 2546.0007Y000 **Report Date:** 03/29/23

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2315188-01	VE-1	01806	Flow 3	03/20/23	416672		-	-	-	Pass	18.0	17.6	2
L2315188-01	VE-1	2554	2.7L Can	03/20/23	416672	L2313291-01	Pass	-29.0	-3.9	-	-	-	-
L2315188-02	VE-2-IA	02092	Flow 3	03/20/23	416672		-	-	-	Pass	18.0	18.9	5
L2315188-02	VE-2-IA	3228	2.7L Can	03/20/23	416672	L2313291-01	Pass	-29.8	-4.5	-	-	-	-
L2315188-03	DUP-032223	0069	Flow 3	03/20/23	416672		-	-	-	Pass	18.0	18.4	2
L2315188-03	DUP-032223	2591	2.7L Can	03/20/23	416672	L2313291-01	Pass	-29.8	-1.1	-	-	-	-
L2315188-04	VE-2	02100	Flow 3	03/20/23	416672		-	-	-	Pass	18.0	19.2	6
L2315188-04	VE-2	484	2.7L Can	03/20/23	416672	L2313291-01	Pass	-29.9	-5.3	-	-	-	-
L2315188-05	VE-1-IA	01789	Flow 3	03/20/23	416672		-	-	-	Pass	18.0	17.6	2
L2315188-05	VE-1-IA	158	2.7L Can	03/20/23	416672	L2313291-01	Pass	-29.8	-5.4	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2313291
Report Date: 03/29/23

Air Canister Certification Results

Lab ID: L2313291-01
Client ID: CAN 3185 SHELF 13
Sample Location:

Date Collected: 03/14/23 18:00
Date Received: 03/15/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/15/23 18:18
Analyst: NFL

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2313291
Report Date: 03/29/23

Air Canister Certification Results

Lab ID: L2313291-01
Client ID: CAN 3185 SHELF 13
Sample Location:

Date Collected: 03/14/23 18:00
Date Received: 03/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2313291
Report Date: 03/29/23

Air Canister Certification Results

Lab ID: L2313291-01
Client ID: CAN 3185 SHELF 13
Sample Location:

Date Collected: 03/14/23 18:00
Date Received: 03/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2313291
Report Date: 03/29/23

Air Canister Certification Results

Lab ID: L2313291-01
Client ID: CAN 3185 SHELF 13
Sample Location:

Date Collected: 03/14/23 18:00
Date Received: 03/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,3-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2313291
Report Date: 03/29/23

Air Canister Certification Results

Lab ID: L2313291-01
Client ID: CAN 3185 SHELF 13
Sample Location:

Date Collected: 03/14/23 18:00
Date Received: 03/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	96		60-140
Bromochloromethane	98		60-140
chlorobenzene-d5	93		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2313291
Report Date: 03/29/23

Air Canister Certification Results

Lab ID: L2313291-01
Client ID: CAN 3185 SHELF 13
Sample Location:

Date Collected: 03/14/23 18:00
Date Received: 03/15/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/15/23 18:18
Analyst: NFL

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2313291
Report Date: 03/29/23

Air Canister Certification Results

Lab ID: L2313291-01
Client ID: CAN 3185 SHELF 13
Sample Location:

Date Collected: 03/14/23 18:00
Date Received: 03/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2313291
Report Date: 03/29/23

Air Canister Certification Results

Lab ID: L2313291-01
Client ID: CAN 3185 SHELF 13
Sample Location:

Date Collected: 03/14/23 18:00
Date Received: 03/15/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	96		60-140
bromochloromethane	97		60-140
chlorobenzene-d5	98		60-140

Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Number: 2546.0007Y000

Lab Number: L2315188
Report Date: 03/29/23

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
NA	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2315188-01A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2315188-02A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2315188-03A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2315188-04A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2315188-05A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)

*Values in parentheses indicate holding time in days

Project Name:	FORMER CLEAN ZONE DRY CLEANERS	**Lab Number:**	L2315188
Project Number:	2546.0007Y000	**Report Date:**	03/29/23

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report

Project Name:	FORMER CLEAN ZONE DRY CLEANERS	**Lab Number:**	L2315188
Project Number:	2546.0007Y000	**Report Date:**	03/29/23

Footnotes

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

Terms

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

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

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

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

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

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

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report

Project Name:	FORMER CLEAN ZONE DRY CLEANERS	**Lab Number:**	L2315188
Project Number:	2546.0007Y000	**Report Date:**	03/29/23

Data Qualifiers

ND - Not detected at the reporting limit (RL) for the sample.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: Data Usability Report

REFERENCES

48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

AIR ANALYSIS

PAGE 1 OF 1

CHAIN OF CUSTODY

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 3/23/23

ALPHA Job #: L2315188

Client Information

Client: ROUX
Address: 209 SHAFTER ST.
ISLANDIA, NY 11749
Phone: 631-2322600
Fax: 631-2329898
Email: RHENKE@ROUXINC.COM

☑ These samples have been previously analyzed by Alpha

Project Information

Project Name: FORMER CLEAN ZONE DRY CLEANERS
Project Location: YONKERS, NY
Project #: 2546.0007Y000
Project Manager: RACHEL HENKE
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved)

Date Due: Time:

Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☑ EMAIL (standard pdf report)
☑ Additional Deliverables: CAT B DELIVERABLES
Report to: (if different than Project Manager)

Billing Information

☑ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	TO-15	TO-15 SIM	APH (subtract Non-petroleum HCs ☐)	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
15188-01	VE-1	3-22-23	1003	1203	28.71	4.33	SV	AF	2.7L	2554	1806	X					
-02	VE-2-IA	3-22-23	1007	1207	30.21	4.99	AA	AF	2.7L	3228	2092	X					
-03	DUP-032223	3-22-23	1008	1208	29.68	4.27	AA	AF	2.7L	2591	69	X					
-04	VE-2	3-22-23	1025	1225	30.13	5.16	SV	AF	2.7L	484	2100	X					
-05	VE-1-IA	3-22-23	1100	1300	30.23	5.29	AA	AF	2.7L	158	1789	X					

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type: CS

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By:	Date/Time	Received By:	Date/Time:
ROUX	3/22/23 1350	CHURN	3/22/23 1350
CHURN	3-22-23 1350		3-22-23 2100
	3-22-23		3/23/23 0045
	3/23/23 0515		3/23/23 0515