284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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# DATA PACKAGE

## VOLATILE ORGANICS

**PROJECT NAME : FORMER SCHLUMBERGER STC PTC SITE # D3868221**

**JACOBS ENGINEERING GROUP, INC.**

**412 Mt. Kemble Ave**

**Downtown Building**

**Morristown, NJ - 07960**

**Phone No: 9732670555**

**ORDER ID : Q1478**

**ATTENTION : John Ynfante**

**Laboratory Certification ID # 20012**

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# Cover Page

**Order ID :** Q1478

**Project ID :** Former Schlumberger STC PTC Site # D3868221

**Client :** JACOBS Engineering Group, Inc.

| Lab Sample Number | Client Sample Number |
|---|---|
| Q1478-01 | IDW-AQ-MW-19B-COMP-022825 |
| Q1478-02 | IDW-AQ-DRUM-610-022825 |
| Q1478-03 | IDW-AQ-IW-01-COMP-022825 |
| Q1478-04 | IDW-AQ-DRUM-616-022825 |
| Q1478-05 | IDW-AQ-IW-02-COMP-022825 |
| Q1478-06 | IDW-AQ-DRUM-614-022825 |
| Q1478-07 | IDW-AQ-IW-03-COMP-022825 |
| Q1478-08 | IDW-AQ-DRUM-612-022825 |
| Q1478-13 | IDW-SO-COMP-022825 |
| Q1478-14 | IDW-SO-COMP-022825 |
| Q1478-15 | IDW-SO-DRUM-582-022825 |
| Q1478-16 | IDW-SO-DRUM-582-022825 |

I certify that the data package is in compliance with the terms and conditions of the contract,both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature : APPROVED
*By Nimisha Pandya, QA/QC Supervisor at 3:17 pm, Mar 14, 2025*

Date: 3/11/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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# CASE NARRATIVE

**JACOBS Engineering Group, Inc.**
**Project Name: Former Schlumberger STC PTC Site # D3868221**
**Project # N/A**
**Chemtech Project # Q1478**
**Test Name: TCLP VOA**

**A. Number of Samples and Date of Receipt:**
4 Solid samples were received on 02/28/2025.
8 Water samples were received on 02/28/2025.

**B. Parameters**
According to the Chain of Custody document, the following analyses were requested: Corrosivity, Diesel Range Organics, Flash Point, Gasoline Range Organics, Ignitability, Mercury, Metals ICP-RCRA, METALS RCRA, PCB, pH, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP ICP Metals, TCLP Mercury, TCLP METALS, TCLP VOA, TCLP ZHE Extraction and VOC-TCLVOA-10. This data package contains results for TCLP VOA.

**C. Analytical Techniques:**
The analysis performed on instrument MSVOA_X were done using GC column DB-624UI 20m 0.18mm 1.0 um. Cat#121-1324UIThe analysis of TCLP VOA was based on method 8260D and TCLP extraction method was 1311.

**D. QA/ QC Samples:**
The Holding Times were met for all analysis.
The Surrogate recoveries met the acceptable criteria except for
BR-05-465-030525MS [Dibromofluoromethane - 0%],
BR-05-465-030525MSD [Dibromofluoromethane - 0%]these compounds did not meet the NJDKQP criteria and in-house criteria, MS and MSD surrogate failure confirm with parent sample.

The Internal Standards Areas met the acceptable requirements.
The Retention Times were acceptable for all samples.

The MS {Q1501-05MS} with File ID: VX045163.D recoveries met the requirements for all compounds except for 1,1-Dichloroethene[140%] this compound did not meet the NJDKQP criteria but met the in-house criteria, while Tetrachloroethene[178%] and Trichloroethene[190%] these compounds did not meet the NJDKQP criteria and in-house criteria due to matrix interference.

The MSD {Q1501-06MSD} with File ID: VX045164.D recoveries met the acceptable requirements except for 1,1-Dichloroethene[146%], this compounds did not meet the

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NJDKQP criteria but met the in-house criteria, while Tetrachloroethene[171%] and Trichloroethene[183%] these compounds did not meet the NJDKQP criteria and in-house criteria due to matrix interference.

The RPD met criteria.
The Blank Spike met requirements for all samples.
The Blank Spike Duplicate met requirements for all samples.
The Blank analysis did not indicate the presence of lab contamination.
The Initial Calibration met the requirements.
The Continuous Calibration met the requirements.
The Tuning criteria met requirements.

**E. Additional Comments:**
Samples for MS/MSD for VOC analysis were not provided with this set of samples therefore lab used from another project.
Trip Blank was not provided with this set of samples.
Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <20% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 20% for the Initial Calibration curve for SW-846 analysis.

**F. Manual Integration Comments:**
Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

---

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature

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# DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following " Results Qualifiers" are used:

| | |
|---|---|
| Value | If the result is a value greater than or equal to the detection limit, report the value |
| **U** | Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. "10 U". This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required. |
| **ND** | Indicates the analyte was analyzed for, but not detected |
| **J** | Indicates an estimated value. This flag is used:<br>(1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.)<br>(2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This is flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others. |
| **B** | Indicates the analyte was found in the blank as well as the sample report as "12 B". |
| **E** | Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis. |
| **D** | This flag identifies all compounds identified in an analysis at a secondary dilution factor. |
| **P** | This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a "P". |
| **N** | This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used. |
| **A** | This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product. |
| **Q** | Indicates the LCS did not meet the control limits requirements |

## GC/MS VOA CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: Q1478 MATRIX: TCLP

METHOD: 8260D/1311

| | | NA | NO | YES |
|---|---|---|---|---|
| 1. | Chromatograms Labeled/Compounds Identified. (Field samples and Method Blanks) | | | ✓ |
| 2. | GC/MS Tuning Specifications<br>BFB Meet Criteria (NOTE THAT THERE ARE DIFFERENT CRITERIA FOR NY ASP CLP, CLP AND NJ) | | | ✓ |
| 3. | GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 Series. | | | ✓ |
| 4. | GC/MS Calibration - Initial Calibration performed before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series. | | | ✓ |
| 5. | GC/MS Calibration Requirements.<br>The Initial Calibration met the requirements . The Continuous Calibration met the requirements. | | | ✓ |
| 6. | Blank Contamination - If yes, list compounds and concentrations in each blank: | | ✓ | |
| 7. | Surrogate Recoveries Meet Criteria<br>If not met, list those compounds and their recoveries which fall outside the acceptable ranges.<br>The Surrogate recoveries met the acceptable criteria except for BR-05-465-030525MS [Dibromofluoromethane - 0%], BR-05-465-030525MSD [Dibromofluoromethane - 0%]these compounds did not meet the NJDKQP criteria and in-house criteria, MS and MSD surrogate failure confirm with parent sample. | | ✓ | |
| 8. | Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria<br>If not met, list those compounds and their recoveries which fall outside the acceptable range.<br>The MS {Q1501-05MS} with File ID: VX045163.D recoveries met the requirements for all compounds except for 1,1-Dichloroethene[140%] this compound did not meet the NJDKQP criteria but met the in-house criteria, while Tetrachloroethene[178%] and Trichloroethene[190%] these compounds did not meet the NJDKQP criteria and in-house criteria due to matrix interference.<br>The MSD {Q1501-06MSD} with File ID: VX045164.D recoveries met the acceptable requirements except for 1,1-Dichloroethene[146%], this compounds did not meet the NJDKQP criteria but met the in-house criteria, while Tetrachloroethene[171%] and Trichloroethene[183%] these compounds did not meet the NJDKQP criteria and in-house criteria due to matrix interference. | | ✓ | |

## GC/MS VOA CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)

| | | NA | NO | YES |
|---|---|---|---|---|
| 9. | Internal Standard Area/Retention Time Shift Meet Criteria | | | ✓ |
| | Comments: | | | |
| 10. | Analysis Holding Time Met | | | ✓ |
| | If not met, list number of days exceeded for each sample: | | | |

ADDITIONAL COMMENTS:

Samples for MS/MSD for VOC analysis were not provided with this set of samples therefore lab used from another project.

Trip Blank was not provided with this set of samples.

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <20% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 20% for the Initial Calibration curve for SW-846 analysis.

APPROVED
*By Nimisha Pandya, QA/QC Supervisor at 3:17 pm, Mar 14, 2025*

QA REVIEW _____ Date _____

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## APPENDIX A

## QA REVIEW GENERAL DOCUMENTATION

**Project #:** Q1478

| | Completed |
|---|---|
| **For thorough review, the report must have the following:** | |
| **GENERAL:** | |
| **Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)** | ✓ |
| **Check chain-of-custody for proper relinquish/return of samples** | ✓ |
| **Is the chain of custody signed and complete** | ✓ |
| **Check internal chain-of-custody for proper relinquish/return of samples /sample extracts** | ✓ |
| **Collect information for each project id from server. Were all requirements followed** | ✓ |
| **COVER PAGE:** | |
| **Do numbers of samples correspond to the number of samples in the Chain of Custody on login page** | ✓ |
| **Do lab numbers and client Ids on cover page agree with the Chain of Custody** | ✓ |
| **CHAIN OF CUSTODY:** | |
| **Do requested analyses on Chain of Custody agree with form I results** | ✓ |
| **Do requested analyses on Chain of Custody agree with the log-in page** | ✓ |
| **Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody** | ✓ |
| **Were the samples received within hold time** | ✓ |
| **Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle** | ✓ |
| **ANALYTICAL:** | |
| **Was method requirement followed?** | ✓ |
| **Was client requirement followed?** | ✓ |
| **Does the case narrative summarize all QC failure?** | ✓ |
| **All runlogs and manual integration are reviewed for requirements** | ✓ |
| **All manual calculations and /or hand notations verified** | ✓ |

**QA Review Signature:** SOHIL JODHANI **Date:** 03/11/2025

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# LAB CHRONICLE

| | | | |
|---|---|---|---|
| **OrderID:** | Q1478 | **OrderDate:** | 3/3/2025 10:28:22 AM |
| **Client:** | JACOBS Engineering Group, Inc. | **Project:** | Former Schlumberger STC PTC Site # D3868221 |
| **Contact:** | John Ynfante | **Location:** | H31,H41,VOA Ref. #3 Water |

| LabID | ClientID | Matrix | Test | Method | Sample Date | Prep Date | Anal Date | Received |
|---|---|---|---|---|---|---|---|---|
| **Q1478-02** | **IDW-AQ-DRUM-610-022825** | **Water** | | | **02/28/25** | | | **02/28/25** |
| | | | VOC-TCLVOA-10 | 8260-Low | | | 03/03/25 | |
| **Q1478-02DL** | **IDW-AQ-DRUM-610-022825DL** | **Water** | | | **02/28/25** | | | **02/28/25** |
| | | | VOC-TCLVOA-10 | 8260-Low | | | 03/05/25 | |
| **Q1478-04** | **IDW-AQ-DRUM-616-022825** | **Water** | | | **02/28/25** | | | **02/28/25** |
| | | | VOC-TCLVOA-10 | 8260-Low | | | 03/03/25 | |
| **Q1478-04DL** | **IDW-AQ-DRUM-616-022825DL** | **Water** | | | **02/28/25** | | | **02/28/25** |
| | | | VOC-TCLVOA-10 | 8260-Low | | | 03/05/25 | |
| **Q1478-06** | **IDW-AQ-DRUM-614-022825** | **Water** | | | **02/28/25** | | | **02/28/25** |
| | | | VOC-TCLVOA-10 | 8260-Low | | | 03/03/25 | |
| **Q1478-06DL** | **IDW-AQ-DRUM-614-022825DL** | **Water** | | | **02/28/25** | | | **02/28/25** |
| | | | VOC-TCLVOA-10 | 8260-Low | | | 03/05/25 | |
| **Q1478-08** | **IDW-AQ-DRUM-612-022825** | **Water** | | | **02/28/25** | | | **02/28/25** |
| | | | VOC-TCLVOA-10 | 8260-Low | | | 03/05/25 | |
| **Q1478-15** | **IDW-SO-DRUM-582-022825** | **TCLP** | | | **02/28/25** | | | **02/28/25** |
| | | | TCLP VOA | 8260D | | | 03/06/25 | |

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# Hit Summary Sheet
**SW-846**

**SDG No.:** Q1478

**Client:** JACOBS Engineering Group, Inc.

| Sample ID | Client ID | Matrix | Parameter | Concentration | C | MDL | RDL | Units |
|---|---|---|---|---|---|---|---|---|
| **Client ID:** | **IDW-SO-DRUM-582-022825** | | | | | | | |
| Q1478-15 | IDW-SO-DRUM-58 | TCLP | 2-Butanone | 5.20 | J | 1.30 | 25.0 | ug/L |
| | | | **Total Voc :** | 5.20 | | | | |
| | | | **Total Concentration:** | 5.20 | | | | |

# QC SUMMARY

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## Surrogate Summary

**SDG No.:** Q1478

**Client:** JACOBS Engineering Group, Inc.

**Analytical Method:** SW8260D

| Lab Sample ID | Client ID | Parameter | Spike | Result | RecoveryQual | Limits Low | Limits High |
|---|---|---|---|---|---|---|---|
| Q1478-15 | IDW-SO-DRUM-582-022825 | 1,2-Dichloroethane-d4 | 50 | 53.3 | 107 | 70 (74) | 130 (125) |
| | | Dibromofluoromethane | 50 | 50.5 | 101 | 70 (75) | 130 (124) |
| | | Toluene-d8 | 50 | 51.9 | 104 | 70 (86) | 130 (113) |
| | | 4-Bromofluorobenzene | 50 | 52.6 | 105 | 70 (77) | 130 (121) |

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## Surrogate Summary

**SDG No.:** Q1478

**Client:** JACOBS Engineering Group, Inc.

**Analytical Method:** SW8260-Low

| Lab Sample ID | Client ID | Parameter | Spike | Result | Recovery | Qual | Limits Low | Limits High |
|---|---|---|---|---|---|---|---|---|
| Q1501-05MS | BR-05-465-030525MS | 1,2-Dichloroethane-d4 | 50 | 51.4 | 103 | | 70 (74) | 130 (125) |
| | | Dibromofluoromethane | 50 | 0 | 0 | * | 70 (75) | 130 (124) |
| | | Toluene-d8 | 50 | 53.2 | 106 | | 70 (86) | 130 (113) |
| | | 4-Bromofluorobenzene | 50 | 54.7 | 109 | | 70 (77) | 130 (121) |
| Q1501-06MSD | BR-05-465-030525MSD | 1,2-Dichloroethane-d4 | 50 | 49.2 | 98 | | 70 (74) | 130 (125) |
| | | Dibromofluoromethane | 50 | 0 | 0 | * | 70 (75) | 130 (124) |
| | | Toluene-d8 | 50 | 48.1 | 96 | | 70 (86) | 130 (113) |
| | | 4-Bromofluorobenzene | 50 | 48.8 | 98 | | 70 (77) | 130 (121) |
| VX0306WBL01 | VX0306WBL01 | 1,2-Dichloroethane-d4 | 50 | 53.9 | 108 | | 70 (74) | 130 (125) |
| | | Dibromofluoromethane | 50 | 52.4 | 105 | | 70 (75) | 130 (124) |
| | | Toluene-d8 | 50 | 52.3 | 105 | | 70 (86) | 130 (113) |
| | | 4-Bromofluorobenzene | 50 | 51.8 | 104 | | 70 (77) | 130 (121) |
| VX0306WBS01 | VX0306WBS01 | 1,2-Dichloroethane-d4 | 50 | 50.2 | 100 | | 70 (74) | 130 (125) |
| | | Dibromofluoromethane | 50 | 50.9 | 102 | | 70 (75) | 130 (124) |
| | | Toluene-d8 | 50 | 50.3 | 101 | | 70 (86) | 130 (113) |
| | | 4-Bromofluorobenzene | 50 | 49.2 | 98 | | 70 (77) | 130 (121) |

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## Matrix Spike/Matrix Spike Duplicate Summary

### SW-846

**SDG No.:** Q1478

**Client:** JACOBS Engineering Group, Inc.

**Analytical Method:** SW8260-Low

| Parameter | Spike | Sample Result | Result | Units | Rec | Rec Qual | RPD | RPD Qual | Limits Low | Limits High | Limits RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Lab Sample ID :** Q1501-05MS | | **Client Sample ID :** BR-05-465-030525MS | | | | | | | **Datafile :** VX045163.D | | |
| Vinyl chloride | 50 | 0 | 47.4 | ug/L | 95 | | | | 70 (69) | 130 (125) | |
| 1,1-Dichloroethene | 50 | 0 | 70.0 | ug/L | 140 | * | | | 70 (53) | 130 (162) | |
| 2-Butanone | 250 | 5.70 | 290 | ug/L | 114 | | | | 40 (67) | 160 (137) | |
| Carbon Tetrachloride | 50 | 0 | 50.1 | ug/L | 100 | | | | 70 (66) | 130 (133) | |
| Chloroform | 50 | 0 | 50.2 | ug/L | 100 | | | | 70 (83) | 130 (119) | |
| Benzene | 50 | 0 | 51.7 | ug/L | 103 | | | | 70 (81) | 130 (128) | |
| 1,2-Dichloroethane | 50 | 0 | 51.6 | ug/L | 103 | | | | 70 (76) | 130 (120) | |
| Trichloroethene | 50 | 0 | 94.9 | ug/L | 190 | * | | | 70 (28) | 130 (175) | |
| Tetrachloroethene | 50 | 0 | 88.9 | ug/L | 178 | * | | | 70 (48) | 130 (153) | |
| Chlorobenzene | 50 | 0 | 51.6 | ug/L | 103 | | | | 70 (85) | 130 (114) | |

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## Matrix Spike/Matrix Spike Duplicate Summary

### SW-846

**SDG No.:** Q1478

**Client:** JACOBS Engineering Group, Inc.

**Analytical Method:** SW8260-Low

| Parameter | Spike | Sample Result | Result | Units | Rec | Rec Qual | RPD | RPD Qual | Limits Low | Limits High | Limits RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Lab Sample ID :** Q1501-06MSD | **Client Sample ID :** BR-05-465-030525MSD | | | | | | | **Datafile :** VX045164.D | | | |
| Vinyl chloride | 50 | 0 | 43.3 | ug/L | 87 | | 9 | | 70 (69) | 130 (125) | 20 (20) |
| 1,1-Dichloroethene | 50 | 0 | 73.0 | ug/L | 146 | * | 4 | | 70 (53) | 130 (162) | 20 (20) |
| 2-Butanone | 250 | 5.70 | 280 | ug/L | 110 | | 4 | | 40 (67) | 160 (137) | 20 (20) |
| Carbon Tetrachloride | 50 | 0 | 47.3 | ug/L | 95 | | 6 | | 70 (66) | 130 (133) | 20 (20) |
| Chloroform | 50 | 0 | 48.6 | ug/L | 97 | | 3 | | 70 (83) | 130 (119) | 20 (20) |
| Benzene | 50 | 0 | 49.0 | ug/L | 98 | | 5 | | 70 (81) | 130 (128) | 20 (20) |
| 1,2-Dichloroethane | 50 | 0 | 49.8 | ug/L | 100 | | 4 | | 70 (76) | 130 (120) | 20 (20) |
| Trichloroethene | 50 | 0 | 91.5 | ug/L | 183 | * | 4 | | 70 (28) | 130 (175) | 20 (20) |
| Tetrachloroethene | 50 | 0 | 85.3 | ug/L | 171 | * | 4 | | 70 (48) | 130 (153) | 20 (20) |
| Chlorobenzene | 50 | 0 | 49.8 | ug/L | 100 | | 4 | | 70 (85) | 130 (114) | 20 (20) |

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## Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

**SW-846**

**SDG No.:** Q1478

**Client:** JACOBS Engineering Group, Inc.

**Analytical Method:** SW8260-Low **Datafile :** VX045158.D

| Lab Sample ID | Parameter | Spike | Result | Unit | Rec | RPD | Qual | Limits Low | Limits High | RPD |
|---|---|---|---|---|---|---|---|---|---|---|
| VX0306WBS01 | Vinyl chloride | 20 | 19.4 | ug/L | 97 | | | 70 (65) | 130 (117) | |
| | 1,1-Dichloroethene | 20 | 21.3 | ug/L | 106 | | | 70 (74) | 130 (110) | |
| | 2-Butanone | 100 | 100 | ug/L | 100 | | | 40 (65) | 160 (122) | |
| | Carbon Tetrachloride | 20 | 20.5 | ug/L | 103 | | | 70 (77) | 130 (113) | |
| | Chloroform | 20 | 21.2 | ug/L | 106 | | | 70 (79) | 130 (113) | |
| | Benzene | 20 | 21.5 | ug/L | 108 | | | 70 (82) | 130 (109) | |
| | 1,2-Dichloroethane | 20 | 21.4 | ug/L | 107 | | | 70 (80) | 130 (115) | |
| | Trichloroethene | 20 | 20.8 | ug/L | 104 | | | 70 (77) | 130 (113) | |
| | Tetrachloroethene | 20 | 22.2 | ug/L | 111 | | | 70 (67) | 130 (123) | |
| | Chlorobenzene | 20 | 21.6 | ug/L | 108 | | | 70 (82) | 130 (109) | |

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# VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VX0306WBL01

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q1478 SAS No.: Q1478 SDG NO.: Q1478

Lab File ID: VX045157.D Lab Sample ID: VX0306WBL01

Date Analyzed: 03/06/2025 Time Analyzed: 10:46

GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

Instrument ID: MSVOA_X

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

| EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED |
|---|---|---|---|
| VX0306WBS01 | VX0306WBS01 | VX045158.D | 03/06/2025 |
| BR-05-465-030525MS | Q1501-05MS | VX045163.D | 03/06/2025 |
| BR-05-465-030525MSD | Q1501-06MSD | VX045164.D | 03/06/2025 |
| IDW-SO-DRUM-582-022825 | Q1478-15 | VX045180.D | 03/06/2025 |

COMMENTS:

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
## BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q1478 SAS No.: Q1478 SDG NO.: Q1478

Lab File ID: VX045067.D BFB Injection Date: 02/28/2025

Instrument ID: MSVOA_X BFB Injection Time: 01:03

GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: Y/N N

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 50 | 15.0 - 40.0% of mass 95 | 20.7 |
| 75 | 30.0 - 60.0% of mass 95 | 53.6 |
| 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 ( 1 ) 1 |
| 174 | 50.0 - 100.0% of mass 95 | 73.8 |
| 175 | 5.0 - 9.0% of mass 174 | 5.8 ( 7.9 ) 1 |
| 176 | 95.0 - 101.0% of mass 174 | 70.6 ( 95.6 ) 1 |
| 177 | 5.0 - 9.0% of mass 176 | 4.3 ( 6.2 ) 2 |

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

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

| EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| VSTDICC001 | VSTDICC001 | VX045068.D | 02/28/2025 | 01:27 |
| VSTDICC005 | VSTDICC005 | VX045069.D | 02/28/2025 | 02:13 |
| VSTDICC020 | VSTDICC020 | VX045070.D | 02/28/2025 | 02:37 |
| VSTDICCC050 | VSTDICCC050 | VX045071.D | 02/28/2025 | 03:00 |
| VSTDICC100 | VSTDICC100 | VX045072.D | 02/28/2025 | 03:23 |
| VSTDICC150 | VSTDICC150 | VX045073.D | 02/28/2025 | 03:47 |

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# VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
## BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q1478 SAS No.: Q1478 SDG NO.: Q1478

Lab File ID: VX045154.D BFB Injection Date: 03/06/2025

Instrument ID: MSVOA_X BFB Injection Time: 09:09

GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: Y/N N

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 50 | 15.0 - 40.0% of mass 95 | 21.5 |
| 75 | 30.0 - 60.0% of mass 95 | 54 |
| 95 | Base Peak, 100% relative abundance | 100 |
| 96 | 5.0 - 9.0% of mass 95 | 6.4 |
| 173 | Less than 2.0% of mass 174 | 0.8 ( 1.1 ) 1 |
| 174 | 50.0 - 100.0% of mass 95 | 70.6 |
| 175 | 5.0 - 9.0% of mass 174 | 5.3 ( 7.5 ) 1 |
| 176 | 95.0 - 101.0% of mass 174 | 67.9 ( 96.1 ) 1 |
| 177 | 5.0 - 9.0% of mass 176 | 4.5 ( 6.6 ) 2 |

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

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

| EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| VSTDCCC050 | VSTDCCC050 | VX045155.D | 03/06/2025 | 09:56 |
| VX0306WBL01 | VX0306WBL01 | VX045157.D | 03/06/2025 | 10:46 |
| VX0306WBS01 | VX0306WBS01 | VX045158.D | 03/06/2025 | 11:10 |
| BR-05-465-030525MS | Q1501-05MS | VX045163.D | 03/06/2025 | 13:09 |
| BR-05-465-030525MSD | Q1501-06MSD | VX045164.D | 03/06/2025 | 13:33 |
| IDW-SO-DRUM-582-022825 | Q1478-15 | VX045180.D | 03/06/2025 | 19:45 |

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## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q1478 SAS No.: Q1478 SDG NO.: Q1478

Lab File ID: VX045155.D Date Analyzed: 03/06/2025

Instrument ID: MSVOA_X Time Analyzed: 09:56

GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

| | IS1 AREA # | RT # | IS2 AREA # | RT # | IS3 AREA # | RT # |
|---|---|---|---|---|---|---|
| 12 HOUR STD | 99532 | 5.54 | 175834 | 6.76 | 153746 | 10.05 |
| UPPER LIMIT | 199064 | 6.044 | 351668 | 7.257 | 307492 | 10.549 |
| LOWER LIMIT | 49766 | 5.044 | 87917 | 6.257 | 76873 | 9.549 |
| EPA SAMPLE NO. | | | | | | |
| IDW-SO-DRUM-582-022825 | 74182 | 5.55 | 149089 | 6.76 | 138397 | 10.05 |
| BR-05-465-030525MS | 101112 | 5.54 | 179083 | 6.76 | 156313 | 10.06 |
| BR-05-465-030525MSD | 100565 | 5.55 | 182698 | 6.76 | 154927 | 10.05 |
| VX0306WBL01 | 71177 | 5.54 | 139793 | 6.76 | 129041 | 10.05 |
| VX0306WBS01 | 97102 | 5.54 | 175752 | 6.76 | 147757 | 10.05 |

IS1 = Pentafluorobenzene
IS2 = 1,4-Difluorobenzene
IS3 = Chlorobenzene-d5

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

# Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q1478 SAS No.: Q1478 SDG NO.: Q1478

Lab File ID: VX045155.D Date Analyzed: 03/06/2025

Instrument ID: MSVOA_X Time Analyzed: 09:56

GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

| | IS4 AREA # | RT # | | | | |
|---|---|---|---|---|---|---|
| 12 HOUR STD | 69403 | 12.018 | | | | |
| UPPER LIMIT | 138806 | 12.518 | | | | |
| LOWER LIMIT | 34701.5 | 11.518 | | | | |
| EPA SAMPLE NO. | | | | | | |
| IDW-SO-DRUM-582-022825 | 57244 | 12.02 | | | | |
| BR-05-465-030525MS | 67219 | 12.02 | | | | |
| BR-05-465-030525MSD | 68360 | 12.02 | | | | |
| VX0306WBL01 | 53719 | 12.02 | | | | |
| VX0306WBS01 | 67123 | 12.02 | | | | |

IS4 = 1,4-Dichlorobenzene-d4

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

# Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

# SAMPLE DATA

Alliance TECHNICAL GROUP
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Fax : 908 789 8922

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | 02/28/25 |
| Project: | Former Schlumberger STC PTC Site # D3868221 | Date Received: | 02/28/25 |
| Client Sample ID: | IDW-SO-DRUM-582-022825 | SDG No.: | Q1478 |
| Lab Sample ID: | Q1478-15 | Matrix: | TCLP |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | TCLP VOA |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |
| Prep Method : | SW5035 | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX045180.D | 1 | | 03/06/25 19:45 | VX030625 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-01-4 | Vinyl Chloride | 0.34 | U | 0.34 | 5.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 0.26 | U | 0.26 | 5.00 | ug/L |
| 78-93-3 | 2-Butanone | 5.20 | J | 1.30 | 25.0 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 0.25 | U | 0.25 | 5.00 | ug/L |
| 67-66-3 | Chloroform | 0.26 | U | 0.26 | 5.00 | ug/L |
| 71-43-2 | Benzene | 0.16 | U | 0.16 | 5.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 0.24 | U | 0.24 | 5.00 | ug/L |
| 79-01-6 | Trichloroethene | 0.32 | U | 0.32 | 5.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 0.25 | U | 0.25 | 5.00 | ug/L |
| 108-90-7 | Chlorobenzene | 0.13 | U | 0.13 | 5.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 53.3 | | 70 (74) - 130 (125) | 107% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 50.5 | | 70 (75) - 130 (124) | 101% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 51.9 | | 70 (86) - 130 (113) | 104% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 52.6 | | 70 (77) - 130 (121) | 105% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 74200 | 5.55 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 149000 | 6.757 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 138000 | 10.049 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 57200 | 12.018 | | | |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX030625\
Data File : VX045180.D
Acq On : 06 Mar 2025 19:45
Operator : JC/MD
Sample : Q1478-15
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 28 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
IDW-SO-DRUM-582-022825

Quant Time: Mar 07 00:51:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

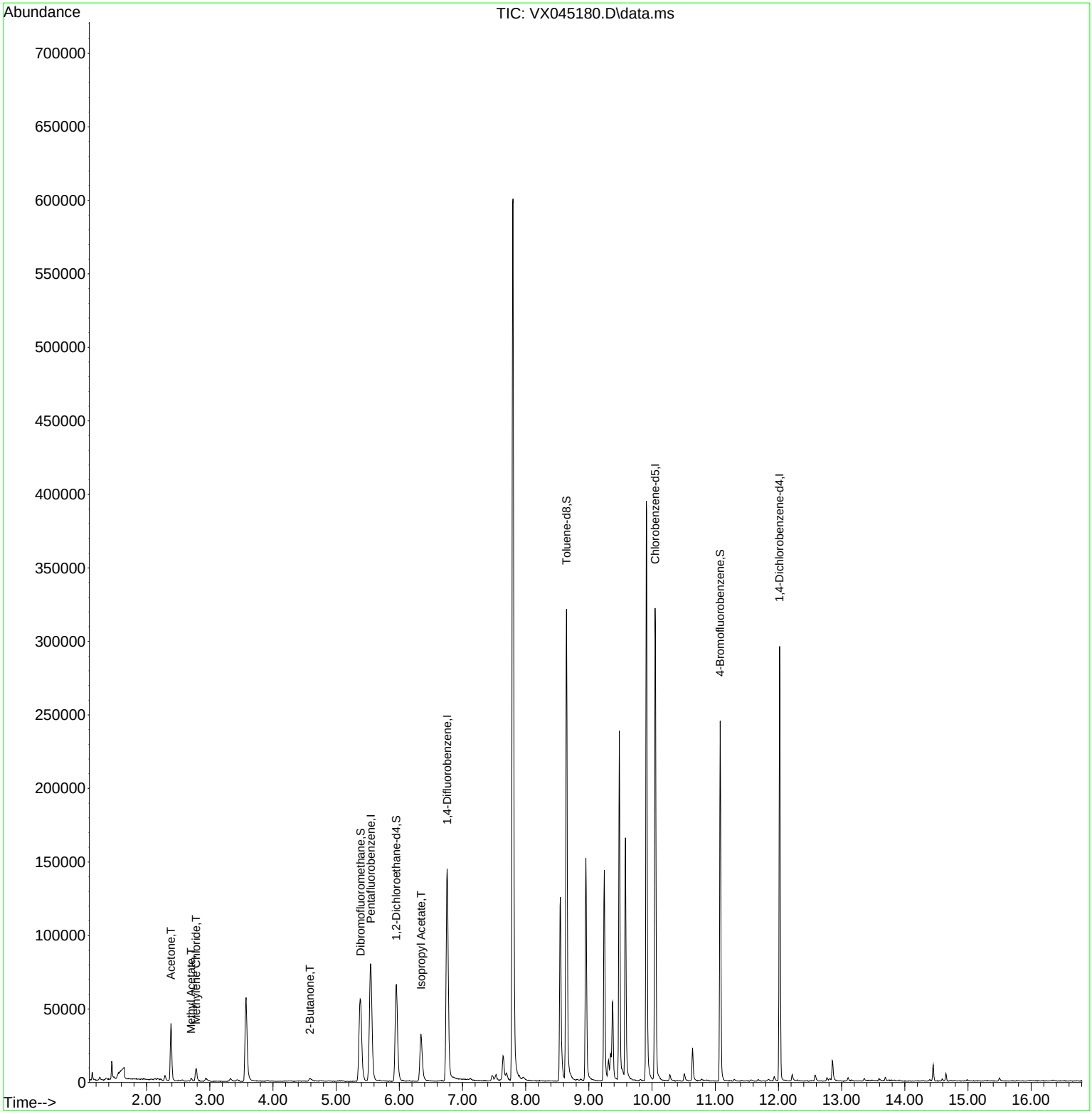
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 5.550 | 168 | 74182 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 6.757 | 114 | 149089 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 10.049 | 117 | 138397 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.018 | 152 | 57244 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 5.952 | 65 | 62937 | 53.338 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 106.680% | | | |
| 35) Dibromofluoromethane | 5.385 | 113 | 50362 | 50.518 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 101.040% | | | |
| 50) Toluene-d8 | 8.647 | 98 | 187727 | 51.942 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 103.880% | | | |
| 62) 4-Bromofluorobenzene | 11.079 | 95 | 62997 | 52.601 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 105.200% | | | |
| Target Compounds | | | | | | Qvalue |
| 16) Acetone | 2.386 | 43 | 41661 | 76.097 | ug/l | 97 |
| 18) Methyl Acetate | 2.703 | 43 | 2526 | 1.918 | ug/l | 93 |
| 20) Methylene Chloride | 2.782 | 84 | 4062 | 3.746 | ug/l | 93 |
| 25) 2-Butanone | 4.586 | 43 | 4292 | 5.208 | ug/l | 98 |
| 43) Isopropyl Acetate | 6.342 | 43 | 46947 | 18.022 | ug/l | 99 |

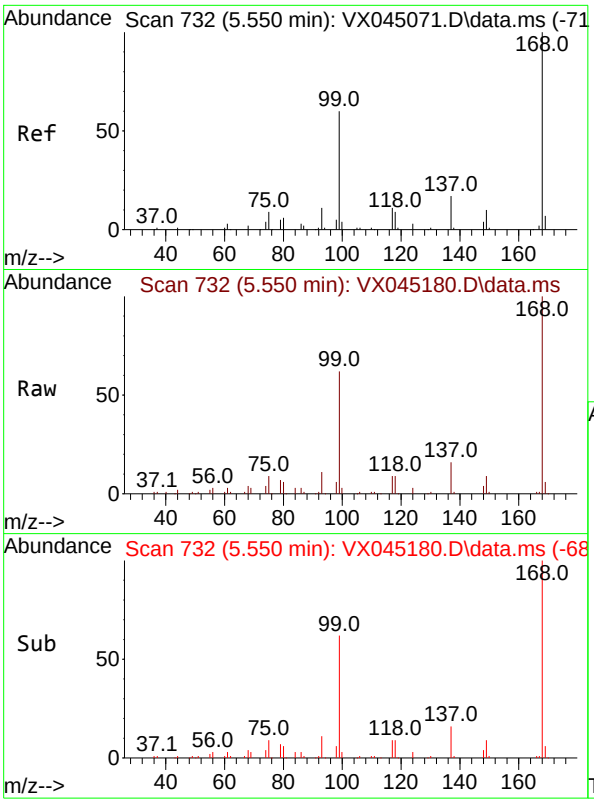
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX030625\
Data File : VX045180.D
Acq On : 06 Mar 2025 19:45
Operator : JC/MD
Sample : Q1478-15
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 28 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
IDW-SO-DRUM-582-022825

Quant Time: Mar 07 00:51:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration



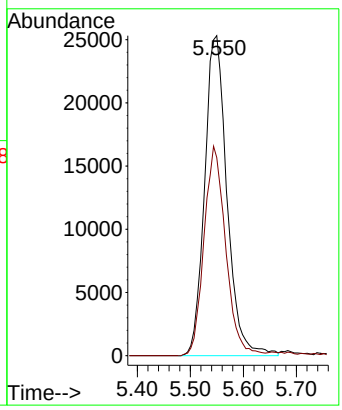


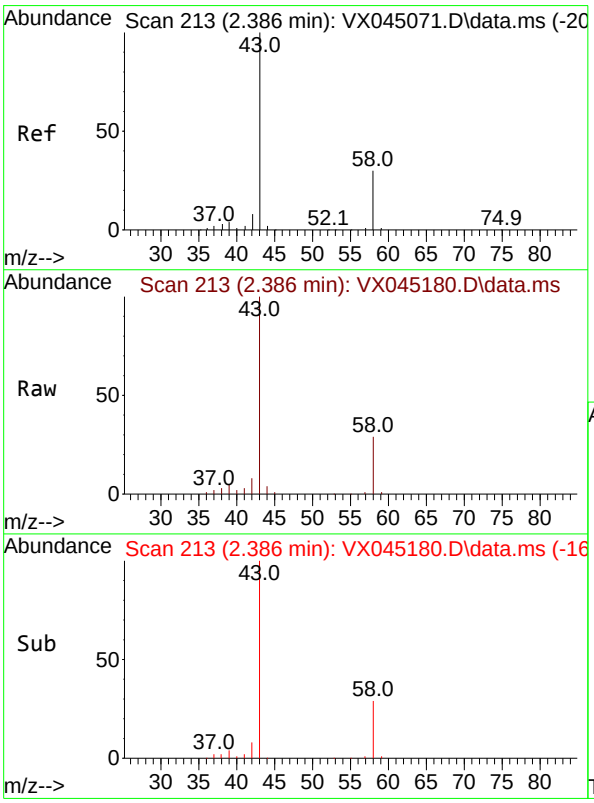

#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.550 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX045180.D
Acq: 06 Mar 2025 19:45

**Instrument :**
MSVOA_X
**ClientSampleId :**
IDW-SO-DRUM-582-022825

Tgt Ion:168 Resp: 74182

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 61.9 | 48.2 | 72.4 |

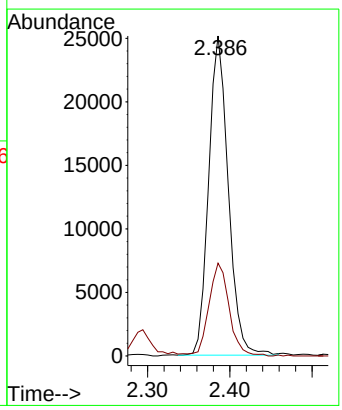


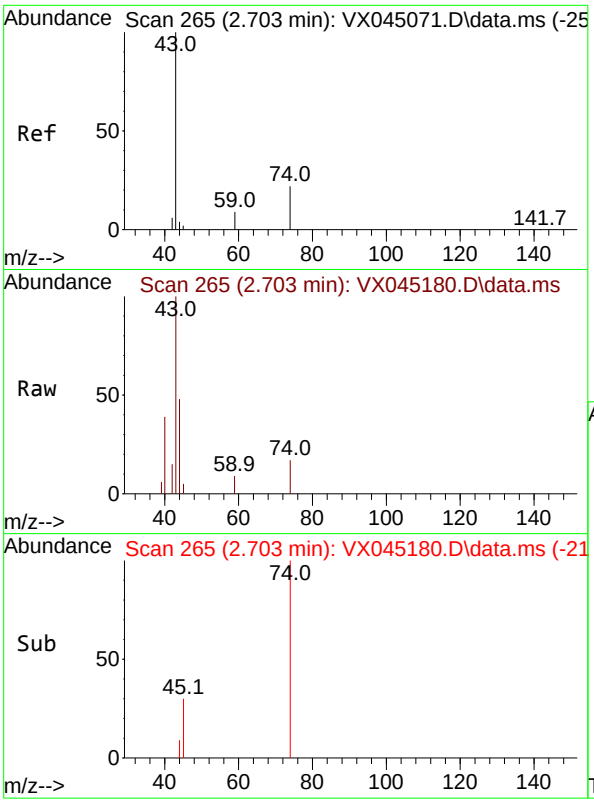




#16
Acetone
Concen: 76.097 ug/l
RT: 2.386 min Scan# 213
Delta R.T. -0.000 min
Lab File: VX045180.D
Acq: 06 Mar 2025 19:45

Tgt Ion: 43 Resp: 41661

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 28.8 | 24.2 | 36.4 |



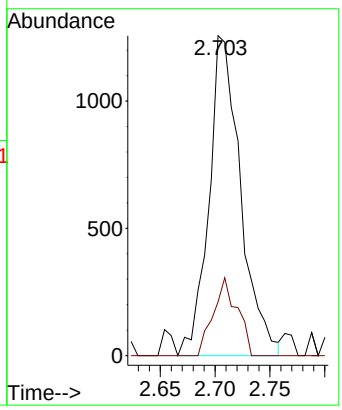


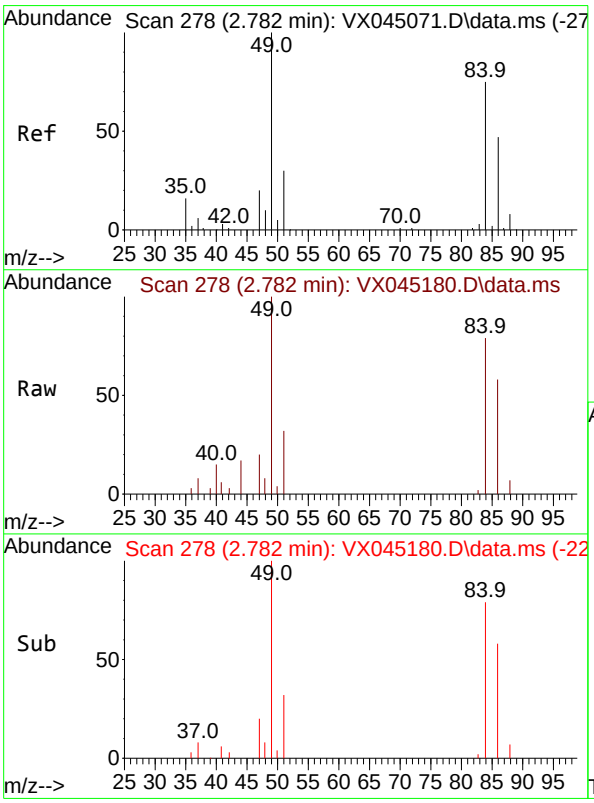

#18
Methyl Acetate
Concen: 1.918 ug/l
RT: 2.703 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX045180.D
Acq: 06 Mar 2025 19:45

**Instrument :**
MSVOA_X
**ClientSampleId :**
IDW-SO-DRUM-582-022825

Tgt Ion: 43 Resp: 2526

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 18.4 | 17.4 | 26.2 |

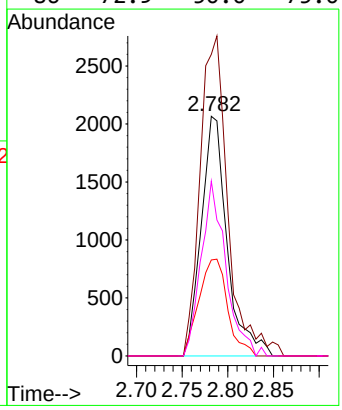


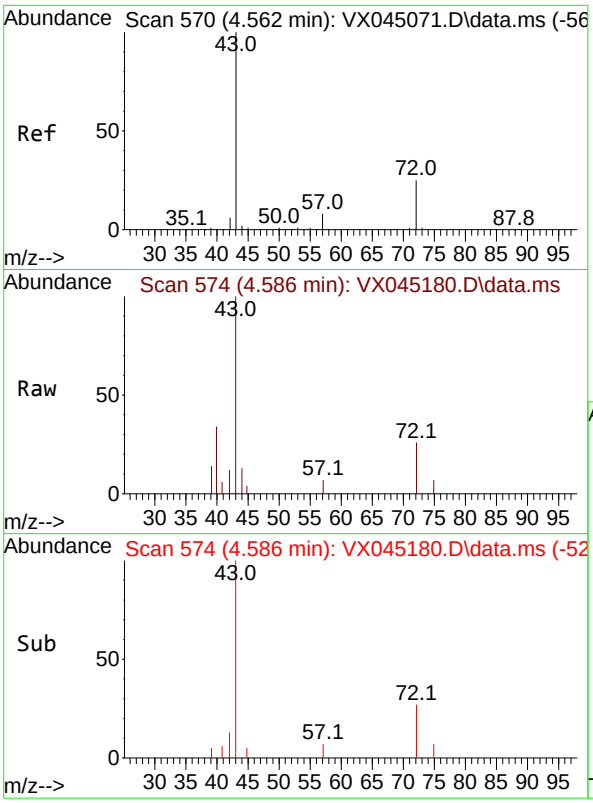




#20
Methylene Chloride
Concen: 3.746 ug/l
RT: 2.782 min Scan# 278
Delta R.T. -0.000 min
Lab File: VX045180.D
Acq: 06 Mar 2025 19:45

Tgt Ion: 84 Resp: 4062

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 125.8 | 106.5 | 159.7 |
| 51 | 40.0 | 32.1 | 48.1 |
| 86 | 72.9 | 50.0 | 75.0 |



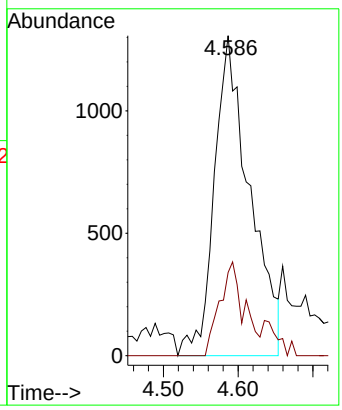


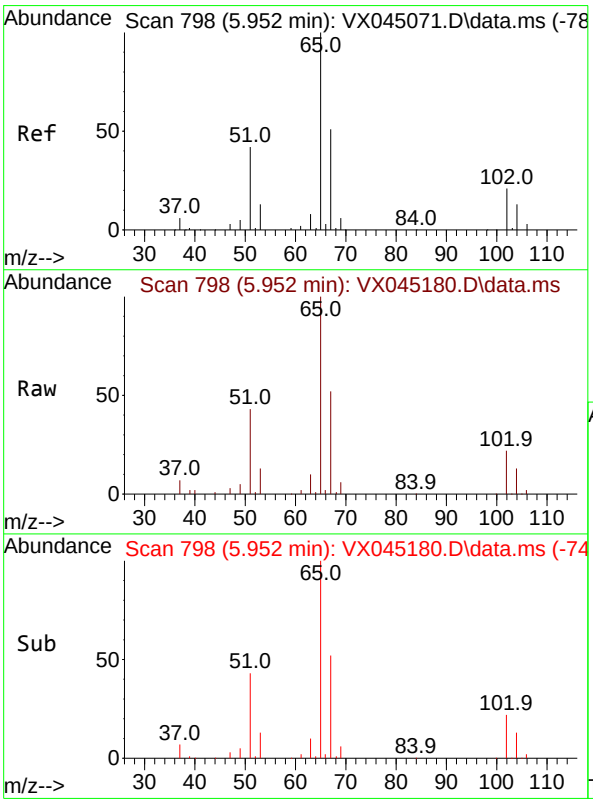

#25
2-Butanone
Concen: 5.208 ug/l
RT: 4.586 min Scan# 5
Delta R.T. 0.024 min
Lab File: VX045180.D
Acq: 06 Mar 2025 19:45

**Instrument :**
MSVOA_X
**ClientSampleId :**
IDW-SO-DRUM-582-022825

Tgt Ion: 43 Resp: 4292

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 26.0 | 20.0 | 30.0 |

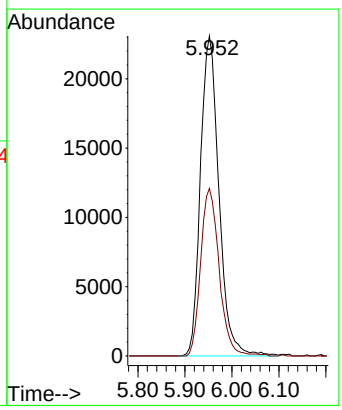


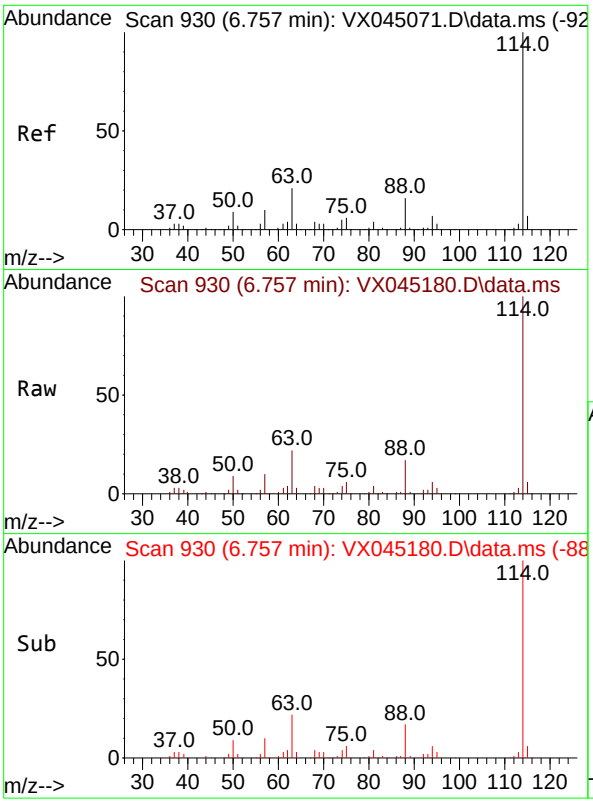




#33
1,2-Dichloroethane-d4
Concen: 53.338 ug/l
RT: 5.952 min Scan# 798
Delta R.T. -0.000 min
Lab File: VX045180.D
Acq: 06 Mar 2025 19:45

Tgt Ion: 65 Resp: 62937

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 52.5 | 0.0 | 106.2 |



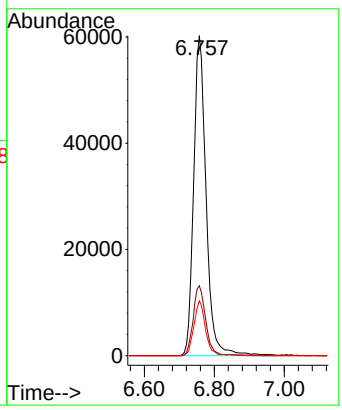


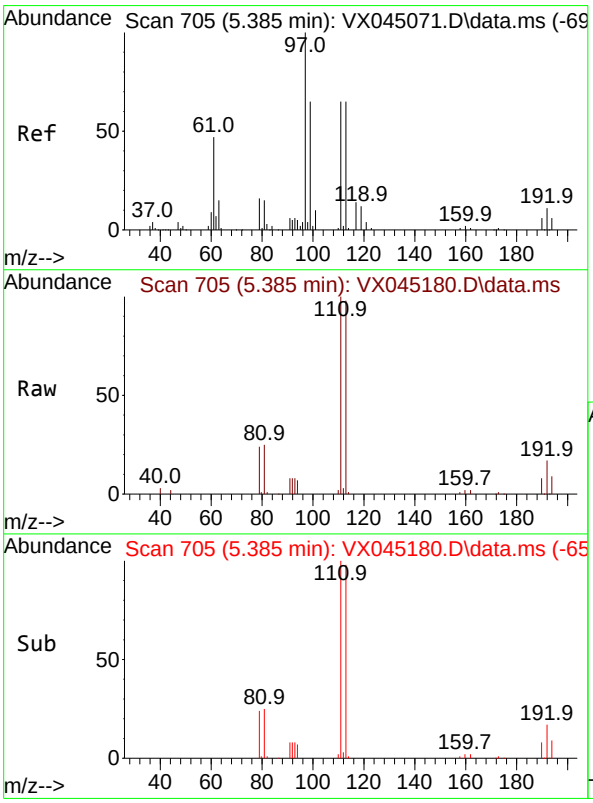

#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.757 min Scan# 9
Delta R.T. -0.000 min
Lab File: VX045180.D
Acq: 06 Mar 2025 19:45

**Instrument :**
MSVOA_X
**ClientSampleId :**
IDW-SO-DRUM-582-022825

Tgt Ion:114 Resp: 149089

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 21.9 | 0.0 | 41.8 |
| 88 | 17.2 | 0.0 | 32.8 |

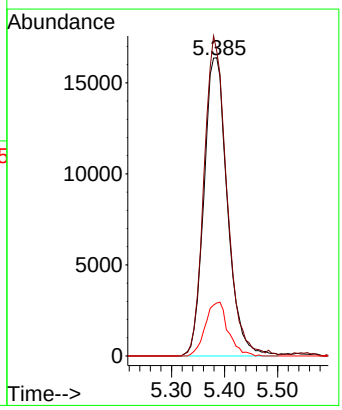


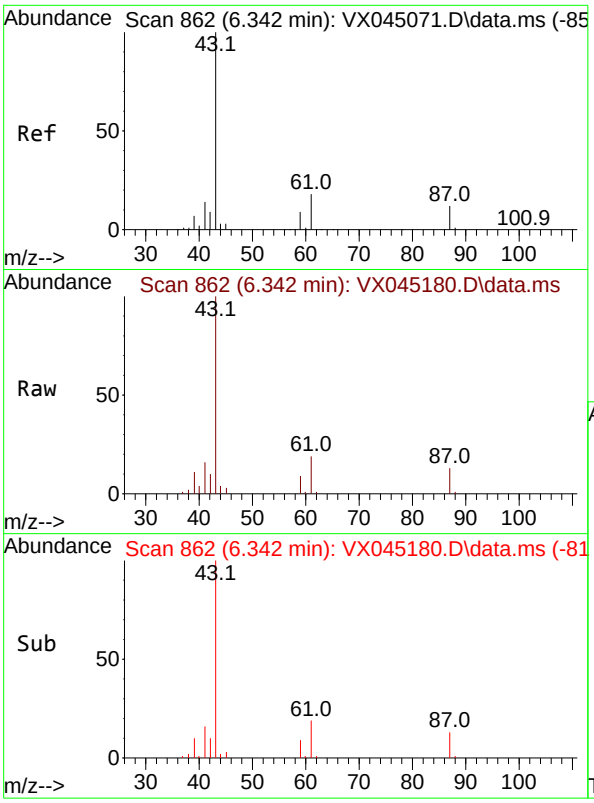




#35
Dibromofluoromethane
Concen: 50.518 ug/l
RT: 5.385 min Scan# 705
Delta R.T. -0.000 min
Lab File: VX045180.D
Acq: 06 Mar 2025 19:45

Tgt Ion:113 Resp: 50362

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 103.9 | 81.8 | 122.6 |
| 192 | 17.5 | 14.3 | 21.5 |



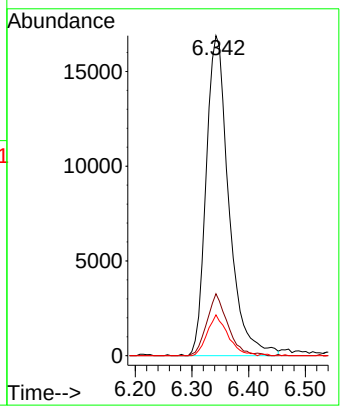


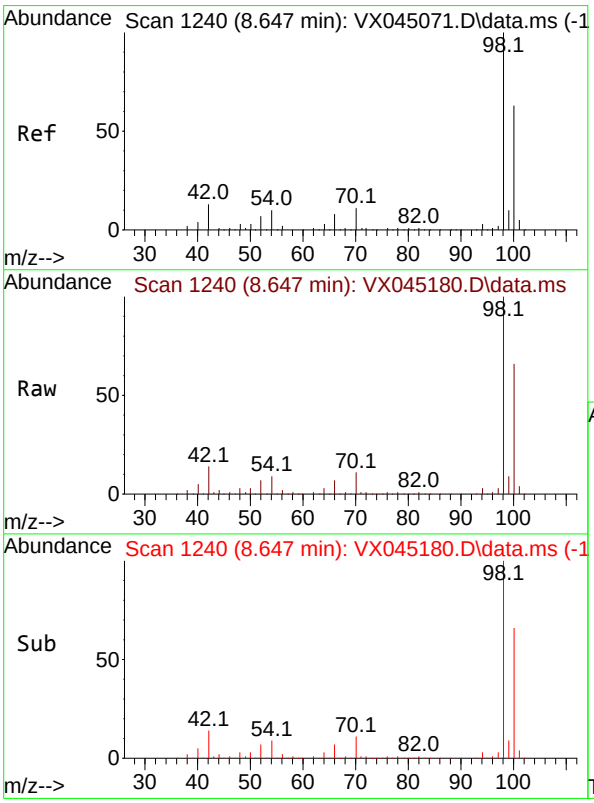

#43
Isopropyl Acetate
Concen: 18.022 ug/l
RT: 6.342 min Scan# 8
Delta R.T. -0.000 min
Lab File: VX045180.D
Acq: 06 Mar 2025 19:45

**Instrument :**
MSVOA_X
**ClientSampleId :**
IDW-SO-DRUM-582-022825

Tgt Ion: 43 Resp: 46947

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 17.9 | 14.9 | 22.3 |
| 87 | 11.6 | 9.4 | 14.2 |

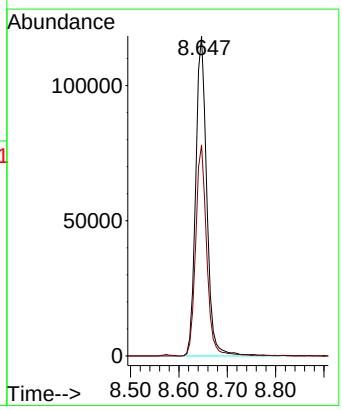


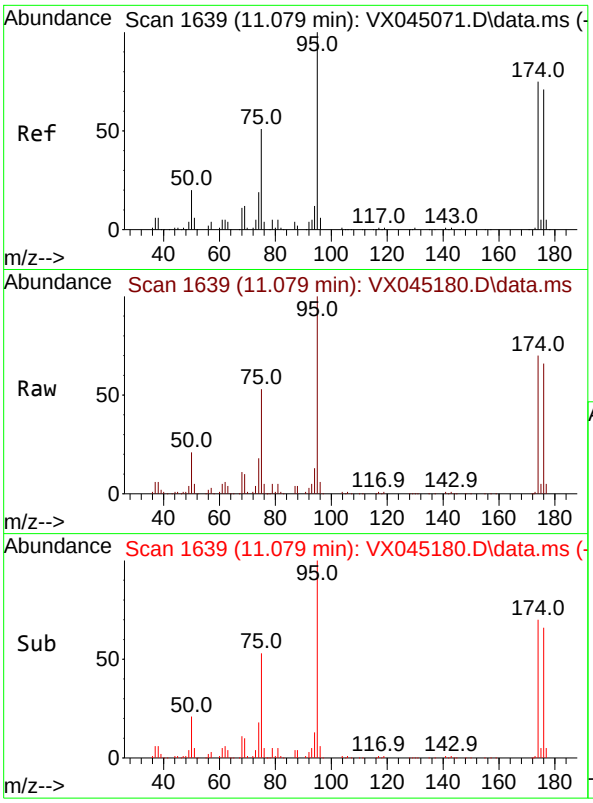




#50
Toluene-d8
Concen: 51.942 ug/l
RT: 8.647 min Scan# 1240
Delta R.T. -0.000 min
Lab File: VX045180.D
Acq: 06 Mar 2025 19:45

Tgt Ion: 98 Resp: 187727

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.6 | 52.0 | 78.0 |



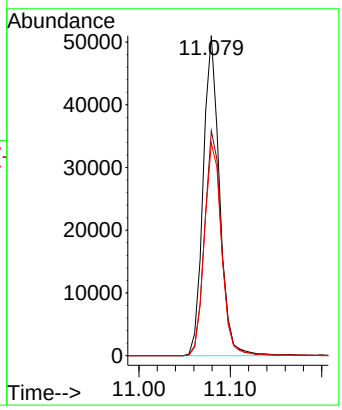


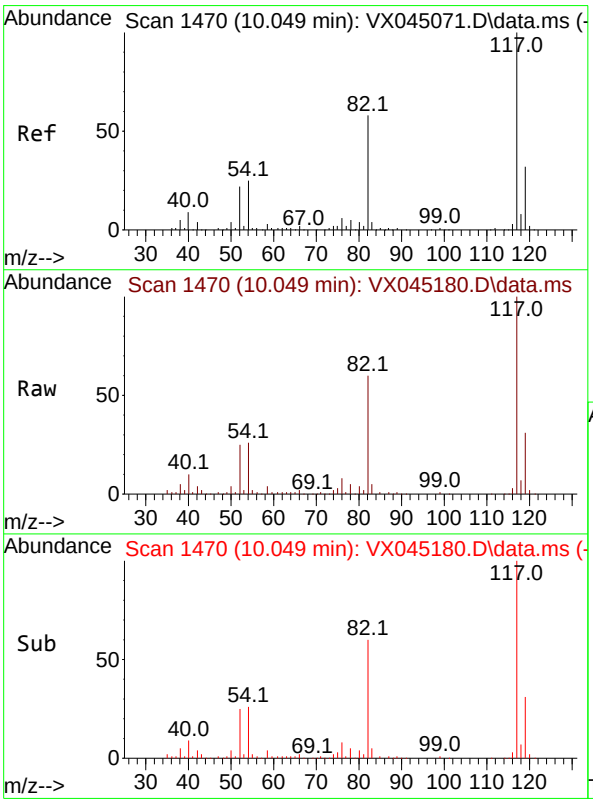

#62
4-Bromofluorobenzene
Concen: 52.601 ug/l
RT: 11.079 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045180.D
Acq: 06 Mar 2025 19:45

**Instrument :**
MSVOA_X
**ClientSampleId :**
IDW-SO-DRUM-582-022825

Tgt Ion: 95 Resp: 62997

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 73.5 | 0.0 | 148.2 |
| 176 | 70.0 | 0.0 | 141.4 |

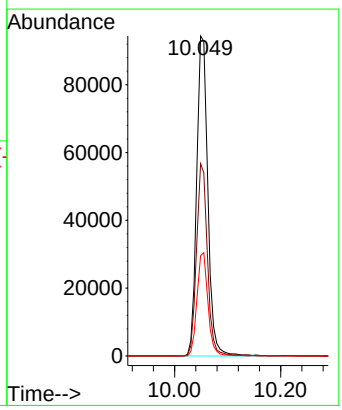


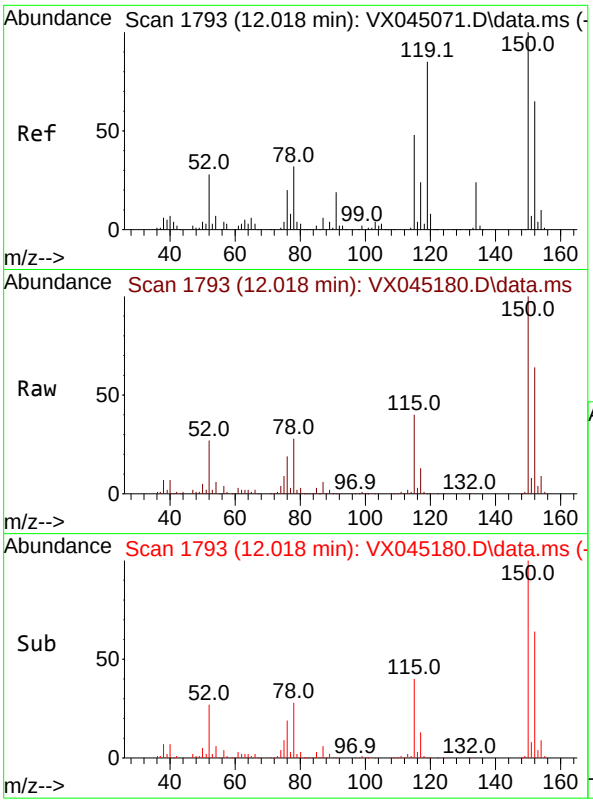




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.049 min Scan# 1470
Delta R.T. -0.000 min
Lab File: VX045180.D
Acq: 06 Mar 2025 19:45

Tgt Ion:117 Resp: 138397

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 60.1 | 46.3 | 69.5 |
| 119 | 31.4 | 25.7 | 38.5 |



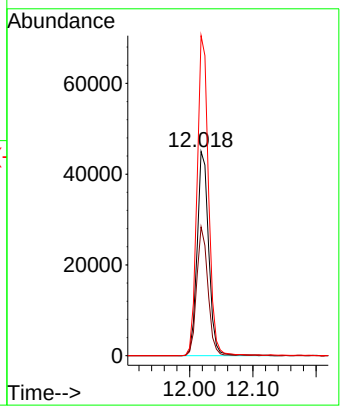



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.018 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045180.D
Acq: 06 Mar 2025 19:45

**Instrument :**
MSVOA_X
**ClientSampleId :**
IDW-SO-DRUM-582-022825

Tgt Ion:152 Resp: 57244

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 61.3 | 44.2 | 132.6 |
| 150 | 155.6 | 0.0 | 349.0 |



# CALIBRATION SUMMARY

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q1478 SAS No.: Q1478 SDG No.: Q1478

Instrument ID: MSVOA_X Calibration Date(s): 02/28/2025 02/28/2025

Heated Purge: (Y/N) N Calibration Time(s): 01:27 03:47

GC Column: DB-624UI ID: 0.18 (mm)

LAB FILE ID: RRF001 = VX045068.D RRF005 = VX045069.D RRF020 = VX045070.D
RRF050 = VX045071.D RRF100 = VX045072.D RRF150 = VX045073.D

| COMPOUND | RRF001 | RRF005 | RRF020 | RRF050 | RRF100 | RRF150 | $\overline{RRF}$ | % RSD |
|---|---|---|---|---|---|---|---|---|
| Vinyl Chloride | 0.773 | 0.755 | 0.774 | 0.761 | 0.765 | 0.758 | 0.764 | 1 |
| 1,1-Dichloroethene | 0.609 | 0.620 | 0.612 | 0.623 | 0.620 | 0.603 | 0.614 | 1.3 |
| 2-Butanone | 0.476 | 0.545 | 0.610 | 0.579 | 0.553 | 0.570 | 0.555 | 8.1 |
| Carbon Tetrachloride | 0.463 | 0.463 | 0.447 | 0.468 | 0.489 | 0.463 | 0.465 | 3 |
| Chloroform | 1.206 | 1.247 | 1.278 | 1.246 | 1.230 | 1.225 | 1.239 | 2 |
| Benzene | 1.321 | 1.459 | 1.491 | 1.496 | 1.497 | 1.424 | 1.448 | 4.7 |
| 1,2-Dichloroethane | 0.487 | 0.525 | 0.545 | 0.528 | 0.524 | 0.520 | 0.521 | 3.6 |
| Trichloroethene | 0.319 | 0.351 | 0.339 | 0.341 | 0.354 | 0.336 | 0.340 | 3.7 |
| Tetrachloroethene | 0.315 | 0.326 | 0.319 | 0.324 | 0.329 | 0.309 | 0.320 | 2.3 |
| Chlorobenzene | 0.968 | 1.054 | 1.090 | 1.092 | 1.100 | 1.045 | 1.058 | 4.7 |
| 1,2-Dichloroethane-d4 | | 0.836 | 0.784 | 0.757 | 0.783 | 0.817 | 0.795 | 3.9 |
| Dibromofluoromethane | | 0.329 | 0.335 | 0.329 | 0.340 | 0.338 | 0.334 | 1.5 |
| Toluene-d8 | | 1.237 | 1.191 | 1.210 | 1.219 | 1.203 | 1.212 | 1.4 |
| 4-Bromofluorobenzene | | 0.383 | 0.393 | 0.402 | 0.410 | 0.421 | 0.402 | 3.7 |

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

# Response Factor Report MSVOA_X2

Method Path : Z:\voasrv\HPCHEM1\MSVOA_X\Method\
Method File : 82X022825W.M
Title : SW846 8260
Last Update : Fri Feb 28 06:45:16 2025
Response Via : Initial Calibration

Calibration Files
1 =VX045068.D 5 =VX045069.D 20 =VX045070.D 50 =VX045071.D 100 =VX045072.D 150 =VX045073.D

| | | Compound | 1 | 5 | 20 | 50 | 100 | 150 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|
| 1) | I | Pentafluorobenzene | ----------ISTD---------- | | | | | | | |
| 2) | T | Dichlorodifluo... | 0.624 | 0.646 | 0.646 | 0.627 | 0.626 | 0.607 | 0.629 | 2.38 |
| 3) | P | Chloromethane | 0.755 | 0.821 | 0.828 | 0.753 | 0.721 | 0.744 | 0.770 | 5.68 |
| 4) | C | Vinyl Chloride | 0.773 | 0.755 | 0.774 | 0.761 | 0.765 | 0.758 | 0.764 | 1.03# |
| 5) | T | Bromomethane | | 0.337 | 0.298 | 0.292 | 0.284 | 0.291 | 0.300 | 7.01 |
| 6) | T | Chloroethane | 0.373 | 0.421 | 0.366 | 0.373 | 0.297 | 0.286 | 0.352 | 14.54 |
| 7) | T | Trichlorofluor... | 0.978 | 1.061 | 1.050 | 1.050 | 0.982 | 0.948 | 1.011 | 4.73 |
| 8) | T | Diethyl Ether | 0.406 | 0.402 | 0.409 | 0.387 | 0.387 | 0.383 | 0.396 | 2.83 |
| 9) | T | 1,1,2-Trichlor... | 0.526 | 0.613 | 0.595 | 0.594 | 0.596 | 0.563 | 0.581 | 5.41 |
| 10) | T | Methyl Iodide | | 0.607 | 0.758 | 0.769 | 0.758 | 0.739 | 0.726 | 9.28 |
| 11) | T | Tert butyl alc... | | 0.189 | 0.161 | 0.134 | 0.133 | 0.136 | 0.151 | 16.19 |
| 12) | CM | 1,1-Dichloroet... | 0.609 | 0.620 | 0.612 | 0.623 | 0.620 | 0.603 | 0.614 | 1.27# |
| 13) | T | Acrolein | | 0.162 | 0.173 | 0.174 | 0.178 | 0.184 | 0.174 | 4.53 |
| 14) | T | Allyl chloride | 1.140 | 1.047 | 1.104 | 1.107 | 1.091 | 1.072 | 1.094 | 2.92 |
| 15) | T | Acrylonitrile | 0.396 | 0.398 | 0.432 | 0.410 | 0.387 | 0.399 | 0.404 | 3.90 |
| 16) | T | Acetone | 0.414 | 0.363 | 0.384 | 0.351 | 0.345 | 0.356 | 0.369 | 7.04 |
| 17) | T | Carbon Disulfide | 1.584 | 1.582 | 1.587 | 1.660 | 1.708 | 1.698 | 1.636 | 3.62 |
| 18) | T | Methyl Acetate | 0.954 | 0.835 | 0.903 | 0.867 | 0.869 | 0.899 | 0.888 | 4.59 |
| 19) | T | Methyl tert-bu... | 1.955 | 1.913 | 2.127 | 2.083 | 2.132 | 2.158 | 2.061 | 4.97 |
| 20) | T | Methylene Chlo... | 0.806 | 0.730 | 0.752 | 0.698 | 0.694 | 0.706 | 0.731 | 5.84 |
| 21) | T | trans-1,2-Dich... | 0.540 | 0.619 | 0.603 | 0.631 | 0.634 | 0.616 | 0.607 | 5.73 |
| 22) | T | Diisopropyl ether | 1.959 | 2.156 | 2.321 | 2.291 | 2.310 | 2.307 | 2.224 | 6.46 |
| 23) | T | Vinyl Acetate | 1.486 | 1.655 | 1.961 | 1.973 | 2.012 | 2.049 | 1.856 | 12.38 |
| 24) | P | 1,1-Dichloroet... | 1.200 | 1.223 | 1.280 | 1.242 | 1.270 | 1.264 | 1.247 | 2.45 |
| 25) | T | 2-Butanone | 0.476 | 0.545 | 0.610 | 0.579 | 0.553 | 0.570 | 0.555 | 8.09 |
| 26) | T | 2,2-Dichloropr... | 0.519 | 0.562 | 0.588 | 0.597 | 0.617 | 0.626 | 0.585 | 6.74 |
| 27) | T | cis-1,2-Dichlo... | 0.687 | 0.746 | 0.765 | 0.762 | 0.767 | 0.769 | 0.749 | 4.21 |
| 28) | T | Bromochloromet... | 0.557 | 0.633 | 0.613 | 0.603 | 0.563 | 0.596 | 0.594 | 4.97 |
| 29) | T | Tetrahydrofuran | 0.362 | 0.376 | 0.398 | 0.373 | 0.361 | 0.368 | 0.373 | 3.61 |
| 30) | C | Chloroform | 1.206 | 1.247 | 1.278 | 1.246 | 1.230 | 1.225 | 1.239 | 1.97# |
| 31) | T | Cyclohexane | | 1.021 | 1.087 | 1.108 | 1.142 | 1.052 | 1.082 | 4.35 |
| 32) | T | 1,1,1-Trichlor... | 0.908 | 0.992 | 1.009 | 1.024 | 1.044 | 1.025 | 1.000 | 4.83 |
| 33) | S | 1,2-Dichloroet... | | 0.836 | 0.784 | 0.757 | 0.783 | 0.817 | 0.795 | 3.91 |
| 34) | I | 1,4-Difluorobenzene | ----------ISTD---------- | | | | | | | |
| 35) | S | Dibromofluorom... | | 0.329 | 0.335 | 0.329 | 0.340 | 0.338 | 0.334 | 1.53 |
| 36) | T | 1,1-Dichloropr... | 0.446 | 0.462 | 0.444 | 0.469 | 0.476 | 0.455 | 0.459 | 2.77 |
| 37) | T | Ethyl Acetate | 0.589 | 0.538 | 0.607 | 0.606 | 0.609 | 0.596 | 0.591 | 4.53 |
| 38) | T | Carbon Tetrach... | 0.463 | 0.463 | 0.447 | 0.468 | 0.489 | 0.463 | 0.465 | 2.96 |
| 39) | T | Methylcyclohexane | 0.464 | 0.530 | 0.560 | 0.585 | 0.607 | 0.550 | 0.549 | 9.07 |
| 40) | TM | Benzene | 1.321 | 1.459 | 1.491 | 1.496 | 1.497 | 1.424 | 1.448 | 4.72 |
| 41) | T | Methacrylonitrile | 0.284 | 0.293 | 0.337 | 0.340 | 0.332 | 0.330 | 0.319 | 7.59 |
| 42) | TM | 1,2-Dichloroet... | 0.487 | 0.525 | 0.545 | 0.528 | 0.524 | 0.520 | 0.521 | 3.63 |
| 43) | T | Isopropyl Acetate | 0.675 | 0.800 | 0.940 | 0.929 | 0.935 | 0.964 | 0.874 | 12.98 |
| 44) | TM | Trichloroethene | 0.319 | 0.351 | 0.339 | 0.341 | 0.354 | 0.336 | 0.340 | 3.72 |
| 45) | C | 1,2-Dichloropr... | 0.354 | 0.378 | 0.382 | 0.371 | 0.376 | 0.373 | 0.372 | 2.68# |
| 46) | T | Dibromomethane | 0.236 | 0.265 | 0.272 | 0.269 | 0.269 | 0.268 | 0.263 | 5.10 |
| 47) | T | Bromodichlorom... | 0.478 | 0.503 | 0.536 | 0.524 | 0.528 | 0.528 | 0.516 | 4.23 |
| 48) | T | Methyl methacr... | 0.352 | 0.422 | 0.460 | 0.463 | 0.458 | 0.475 | 0.438 | 10.46 |
| 49) | T | 1,4-Dioxane | 0.008 | 0.009 | 0.010 | 0.009 | 0.009 | 0.009 | 0.009 | 6.46 |
| 50) | S | Toluene-d8 | | 1.237 | 1.191 | 1.210 | 1.219 | 1.203 | 1.212 | 1.43 |
| 51) | T | 4-Methyl-2-Pen... | 0.535 | 0.570 | 0.647 | 0.610 | 0.579 | 0.579 | 0.587 | 6.52 |
| 52) | CM | Toluene | 0.716 | 0.872 | 0.892 | 0.898 | 0.874 | 0.845 | 0.849 | 8.03# |
| 53) | T | t-1,3-Dichloro... | 0.304 | 0.389 | 0.436 | 0.469 | 0.490 | 0.502 | 0.431 | 17.30 |
| 54) | T | cis-1,3-Dichlo... | 0.404 | 0.463 | 0.509 | 0.535 | 0.555 | 0.553 | 0.503 | 11.80 |
| 55) | T | 1,1,2-Trichlor... | 0.346 | 0.348 | 0.371 | 0.356 | 0.341 | 0.336 | 0.350 | 3.63 |
| 56) | T | Ethyl methacry... | 0.396 | 0.500 | 0.562 | 0.570 | 0.577 | 0.586 | 0.532 | 13.74 |

Method Path : Z:\voasrv\HPCHEM1\MSVOA_X\Method\
Method File : 82X022825W.M

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 57) | T | 1,3-Dichloropr... | 0.560 | 0.623 | 0.643 | 0.620 | 0.597 | 0.588 | 0.605 | 4.90 |
| 58) | T | 2-Chloroethyl ... | 0.218 | 0.239 | 0.271 | 0.284 | 0.273 | 0.270 | 0.259 | 9.71 |
| 59) | T | 2-Hexanone | 0.349 | 0.412 | 0.476 | 0.448 | 0.431 | 0.436 | 0.425 | 10.08 |
| 60) | T | Dibromochlorom... | 0.305 | 0.349 | 0.390 | 0.384 | 0.385 | 0.380 | 0.366 | 9.01 |
| 61) | T | 1,2-Dibromoethane | 0.311 | 0.352 | 0.371 | 0.356 | 0.355 | 0.350 | 0.349 | 5.73 |
| 62) | S | 4-Bromofluorob... | | 0.383 | 0.393 | 0.402 | 0.410 | 0.421 | 0.402 | 3.67 |
| 63) | I | Chlorobenzene-d5 | ----------ISTD---------- | | | | | | | |
| 64) | T | Tetrachloroethene | 0.315 | 0.326 | 0.319 | 0.324 | 0.329 | 0.309 | 0.320 | 2.33 |
| 65) | PM | Chlorobenzene | 0.968 | 1.054 | 1.090 | 1.092 | 1.100 | 1.045 | 1.058 | 4.68 |
| 66) | T | 1,1,1,2-Tetrac... | 0.337 | 0.331 | 0.357 | 0.356 | 0.372 | 0.362 | 0.352 | 4.39 |
| 67) | C | Ethyl Benzene | 1.566 | 1.794 | 1.889 | 1.952 | 1.972 | 1.888 | 1.843 | 8.11# |
| 68) | T | m/p-Xylenes | 0.555 | 0.672 | 0.711 | 0.724 | 0.715 | 0.673 | 0.675 | 9.27 |
| 69) | T | o-Xylene | 0.609 | 0.689 | 0.702 | 0.706 | 0.707 | 0.670 | 0.681 | 5.52 |
| 70) | T | Styrene | 0.879 | 1.060 | 1.170 | 1.181 | 1.183 | 1.134 | 1.101 | 10.75 |
| 71) | P | Bromoform | 0.209 | 0.234 | 0.276 | 0.276 | 0.300 | 0.300 | 0.266 | 13.94 |
| 72) | I | 1,4-Dichlorobenzen... | ----------ISTD---------- | | | | | | | |
| 73) | T | Isopropylbenzene | 3.397 | 4.034 | 3.999 | 4.135 | 4.006 | 3.845 | 3.903 | 6.79 |
| 74) | T | N-amyl acetate | 1.349 | 1.578 | 1.890 | 1.977 | 2.078 | 2.116 | 1.831 | 16.62 |
| 75) | P | 1,1,2,2-Tetrac... | 1.395 | 1.479 | 1.513 | 1.419 | 1.391 | 1.396 | 1.432 | 3.60 |
| 76) | T | 1,2,3-Trichlor... | 1.181 | 1.201 | 1.193 | 1.147 | 1.131 | 1.130 | 1.164 | 2.73 |
| 77) | T | Bromobenzene | 0.899 | 0.947 | 0.939 | 0.939 | 0.910 | 0.891 | 0.921 | 2.57 |
| 78) | T | n-propylbenzene | 3.451 | 4.375 | 4.577 | 4.805 | 4.696 | 4.548 | 4.409 | 11.14 |
| 79) | T | 2-Chlorotoluene | 2.788 | 2.888 | 2.828 | 2.869 | 2.770 | 2.702 | 2.808 | 2.45 |
| 80) | T | 1,3,5-Trimethy... | 2.611 | 3.211 | 3.373 | 3.384 | 3.224 | 3.131 | 3.156 | 9.01 |
| 81) | T | trans-1,4-Dich... | | 0.268 | 0.313 | 0.339 | 0.376 | 0.405 | 0.340 | 15.78 |
| 82) | T | 4-Chlorotoluene | 2.800 | 3.015 | 3.078 | 3.234 | 3.140 | 3.092 | 3.060 | 4.80 |
| 83) | T | tert-Butylbenzene | 3.029 | 3.256 | 3.342 | 3.375 | 3.292 | 3.160 | 3.242 | 3.96 |
| 84) | T | 1,2,4-Trimethy... | 2.646 | 3.202 | 3.380 | 3.378 | 3.258 | 3.188 | 3.175 | 8.57 |
| 85) | T | sec-Butylbenzene | 3.000 | 3.847 | 4.137 | 4.215 | 4.125 | 3.978 | 3.884 | 11.65 |
| 86) | T | p-Isopropyltol... | 2.511 | 2.986 | 3.266 | 3.424 | 3.369 | 3.275 | 3.139 | 10.91 |
| 87) | T | 1,3-Dichlorobe... | 1.502 | 1.652 | 1.710 | 1.668 | 1.675 | 1.649 | 1.643 | 4.40 |
| 88) | T | 1,4-Dichlorobe... | 1.605 | 1.702 | 1.665 | 1.687 | 1.669 | 1.643 | 1.662 | 2.06 |
| 89) | T | n-Butylbenzene | 1.905 | 2.359 | 2.788 | 3.013 | 3.099 | 3.057 | 2.703 | 17.67 |
| 90) | T | Hexachloroethane | 0.470 | 0.498 | 0.568 | 0.605 | 0.633 | 0.633 | 0.568 | 12.30 |
| 91) | T | 1,2-Dichlorobe... | 1.479 | 1.695 | 1.735 | 1.668 | 1.687 | 1.622 | 1.648 | 5.50 |
| 92) | T | 1,2-Dibromo-3-... | 0.237 | 0.243 | 0.285 | 0.289 | 0.300 | 0.320 | 0.279 | 11.64 |
| 93) | T | 1,2,4-Trichlor... | 0.668 | 0.821 | 0.978 | 1.009 | 1.074 | 1.080 | 0.938 | 17.32 |
| 94) | T | Hexachlorobuta... | 0.356 | 0.369 | 0.390 | 0.392 | 0.406 | 0.395 | 0.385 | 4.77 |
| 95) | T | Naphthalene | 2.573 | 3.115 | 3.866 | 3.902 | 4.091 | 4.082 | 3.605 | 17.21 |
| 96) | T | 1,2,3-Trichlor... | 0.747 | 0.897 | 1.032 | 1.059 | 1.107 | 1.096 | 0.990 | 14.23 |

(#) = Out of Range

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045068.D
Acq On : 28 Feb 2025 01:27
Operator : JC/MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 16 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

Quant Time: Feb 28 06:28:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:18:23 2025
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | | |
| 1) Pentafluorobenzene | 5.550 | 168 | 102761 | 50.000 | ug/l | | 0.00 |
| 34) 1,4-Difluorobenzene | 6.757 | 114 | 188642 | 50.000 | ug/l | | 0.00 |
| 63) Chlorobenzene-d5 | 10.049 | 117 | 159886 | 50.000 | ug/l | | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.018 | 152 | 64845 | 50.000 | ug/l | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 0.000 | 65 | 0d | 0.000 | ug/l | | |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = | 0.000%# | | | |
| 35) Dibromofluoromethane | 0.000 | 113 | 0d | 0.000 | ug/l | | |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = | 0.000%# | | | |
| 50) Toluene-d8 | 0.000 | 98 | 0d | 0.000 | ug/l | | |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = | 0.000%# | | | |
| 62) 4-Bromofluorobenzene | 0.000 | 95 | 0d | 0.000 | ug/l | | |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = | 0.000%# | | | |
| **Target Compounds** | | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.166 | 85 | 1282 | 1.007 | ug/l | | 90 |
| 3) Chloromethane | 1.301 | 50 | 1552 | 0.975 | ug/l | | 91 |
| 4) Vinyl Chloride | 1.368 | 62 | 1588 | 1.008 | ug/l | # | 85 |
| 6) Chloroethane | 1.673 | 64 | 766m | 0.992 | ug/l | | |
| 7) Trichlorofluoromethane | 1.880 | 101 | 2011 | 0.957 | ug/l | | 97 |
| 8) Diethyl Ether | 2.130 | 74 | 835 | 1.045 | ug/l | | 80 |
| 9) 1,1,2-Trichlorotrifluo... | 2.319 | 101 | 1081 | 0.884 | ug/l | | 87 |
| 12) 1,1-Dichloroethene | 2.313 | 96 | 1251 | 0.991 | ug/l | | 92 |
| 14) Allyl chloride | 2.660 | 41 | 2343 | 1.055 | ug/l | | 93 |
| 15) Acrylonitrile | 3.075 | 53 | 4067 | 4.931 | ug/l | | 99 |
| 16) Acetone | 2.380 | 43 | 4259 | 5.635 | ug/l | | 100 |
| 17) Carbon Disulfide | 2.502 | 76 | 3256 | 0.956 | ug/l | # | 92 |
| 18) Methyl Acetate | 2.703 | 43 | 1960 | 1.066 | ug/l | | 93 |
| 19) Methyl tert-butyl Ether | 3.111 | 73 | 4017 | 0.943 | ug/l | | 91 |
| 20) Methylene Chloride | 2.782 | 84 | 1656 | 1.095 | ug/l | | 98 |
| 21) trans-1,2-Dichloroethene | 3.093 | 96 | 1109 | 0.869 | ug/l | | 91 |
| 22) Diisopropyl ether | 3.764 | 45 | 4026 | 0.871 | ug/l | # | 80 |
| 23) Vinyl Acetate | 3.727 | 43 | 15271 | 3.971 | ug/l | | 97 |
| 24) 1,1-Dichloroethane | 3.605 | 63 | 2467 | 0.958 | ug/l | # | 83 |
| 25) 2-Butanone | 4.587 | 43 | 4894 | 4.252 | ug/l | | 96 |
| 26) 2,2-Dichloropropane | 4.471 | 77 | 1066 | 0.872 | ug/l | # | 56 |
| 27) cis-1,2-Dichloroethene | 4.501 | 96 | 1412 | 0.902 | ug/l | # | 19 |
| 28) Bromochloromethane | 4.885 | 49 | 1144 | 0.958 | ug/l | # | 54 |
| 29) Tetrahydrofuran | 5.032 | 42 | 3719 | 4.809 | ug/l | # | 34 |
| 30) Chloroform | 5.093 | 83 | 2478 | 0.978 | ug/l | | 92 |
| 32) 1,1,1-Trichloroethane | 5.373 | 97 | 1867 | 0.893 | ug/l | # | 52 |
| 36) 1,1-Dichloropropene | 5.690 | 75 | 1681 | 0.967 | ug/l | # | 84 |
| 37) Ethyl Acetate | 4.739 | 43 | 2223m | 0.988 | ug/l | | |
| 38) Carbon Tetrachloride | 5.672 | 117 | 1747m | 0.987 | ug/l | | |
| 39) Methylcyclohexane | 7.385 | 83 | 1750 | 0.831 | ug/l | | 88 |
| 40) Benzene | 6.031 | 78 | 4984 | 0.907 | ug/l | | 99 |
| 41) Methacrylonitrile | 4.958 | 41 | 1072m | 0.879 | ug/l | | |
| 42) 1,2-Dichloroethane | 6.099 | 62 | 1837 | 0.924 | ug/l | | 78 |
| 43) Isopropyl Acetate | 6.355 | 43 | 2545 | 0.767 | ug/l | # | 95 |
| 44) Trichloroethene | 7.129 | 130 | 1202 | 0.933 | ug/l | | 65 |
| 45) 1,2-Dichloropropane | 7.434 | 63 | 1334 | 0.971 | ug/l | # | 82 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045068.D
Acq On : 28 Feb 2025 01:27
Operator : JC/MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 16 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

Quant Time: Feb 28 06:28:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:18:23 2025
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 46) Dibromomethane | 7.586 | 93 | 891 | 0.897 | ug/l | | 92 |
| 47) Bromodichloromethane | 7.818 | 83 | 1802 | 0.927 | ug/l | # | 85 |
| 48) Methyl methacrylate | 7.714 | 41 | 1328m | 0.825 | ug/l | | |
| 49) 1,4-Dioxane | 7.684 | 88 | 639 | 18.144 | ug/l | # | 81 |
| 51) 4-Methyl-2-Pentanone | 8.574 | 43 | 10091 | 4.567 | ug/l | | 95 |
| 52) Toluene | 8.720 | 92 | 2700 | 0.841 | ug/l | | 97 |
| 53) t-1,3-Dichloropropene | 8.994 | 75 | 1147 | 0.700 | ug/l | # | 85 |
| 54) cis-1,3-Dichloropropene | 8.373 | 75 | 1525 | 0.804 | ug/l | # | 90 |
| 55) 1,1,2-Trichloroethane | 9.153 | 97 | 1306 | 1.004 | ug/l | # | 90 |
| 56) Ethyl methacrylate | 9.135 | 69 | 1494 | 0.748 | ug/l | # | 93 |
| 57) 1,3-Dichloropropane | 9.311 | 76 | 2112 | 0.920 | ug/l | | 97 |
| 58) 2-Chloroethyl Vinyl ether | 8.251 | 63 | 4115 | 4.320 | ug/l | | 95 |
| 59) 2-Hexanone | 9.439 | 43 | 6582 | 4.153 | ug/l | | 96 |
| 60) Dibromochloromethane | 9.519 | 129 | 1152 | 0.835 | ug/l | | 98 |
| 61) 1,2-Dibromoethane | 9.610 | 107 | 1174 | 0.890 | ug/l | | 97 |
| 64) Tetrachloroethene | 9.275 | 164 | 1006 | 0.986 | ug/l | # | 88 |
| 65) Chlorobenzene | 10.080 | 112 | 3094 | 0.908 | ug/l | | 90 |
| 66) 1,1,1,2-Tetrachloroethane | 10.159 | 131 | 1078 | 0.978 | ug/l | # | 65 |
| 67) Ethyl Benzene | 10.195 | 91 | 5008 | 0.846 | ug/l | # | 85 |
| 68) m/p-Xylenes | 10.305 | 106 | 3552 | 1.630 | ug/l | | 97 |
| 69) o-Xylene | 10.640 | 106 | 1949 | 0.891 | ug/l | | 95 |
| 70) Styrene | 10.665 | 104 | 2810 | 0.802 | ug/l | | 97 |
| 71) Bromoform | 10.799 | 173 | 667 | 0.768 | ug/l | # | 92 |
| 73) Isopropylbenzene | 10.964 | 105 | 4405 | 0.858 | ug/l | | 96 |
| 74) N-amyl acetate | 10.854 | 43 | 1750 | 0.732 | ug/l | # | 87 |
| 75) 1,1,2,2-Tetrachloroethane | 11.213 | 83 | 1809 | 0.954 | ug/l | | 88 |
| 76) 1,2,3-Trichloropropane | 11.244 | 75 | 1531m | 1.015 | ug/l | | |
| 77) Bromobenzene | 11.201 | 156 | 1166 | 0.972 | ug/l | | 91 |
| 78) n-propylbenzene | 11.305 | 91 | 4475 | 0.773 | ug/l | | 97 |
| 79) 2-Chlorotoluene | 11.366 | 91 | 3616 | 0.986 | ug/l | | 98 |
| 80) 1,3,5-Trimethylbenzene | 11.451 | 105 | 3386 | 0.815 | ug/l | | 94 |
| 82) 4-Chlorotoluene | 11.457 | 91 | 3631 | 0.904 | ug/l | | 99 |
| 83) tert-Butylbenzene | 11.713 | 119 | 3928 | 0.929 | ug/l | | 96 |
| 84) 1,2,4-Trimethylbenzene | 11.756 | 105 | 3432 | 0.827 | ug/l | | 95 |
| 85) sec-Butylbenzene | 11.890 | 105 | 3891 | 0.752 | ug/l | | 100 |
| 86) p-Isopropyltoluene | 12.012 | 119 | 3257 | 0.797 | ug/l | | 94 |
| 87) 1,3-Dichlorobenzene | 11.976 | 146 | 1948 | 0.913 | ug/l | | 96 |
| 88) 1,4-Dichlorobenzene | 12.043 | 146 | 2082m | 0.962 | ug/l | | |
| 89) n-Butylbenzene | 12.335 | 91 | 2470 | 0.691 | ug/l | | 93 |
| 90) Hexachloroethane | 12.536 | 117 | 609 | 0.805 | ug/l | | 94 |
| 91) 1,2-Dichlorobenzene | 12.335 | 146 | 1918 | 0.890 | ug/l | | 98 |
| 92) 1,2-Dibromo-3-Chloropr... | 12.945 | 75 | 308 | 0.859 | ug/l | | 82 |
| 93) 1,2,4-Trichlorobenzene | 13.591 | 180 | 866 | 0.706 | ug/l | | 93 |
| 94) Hexachlorobutadiene | 13.725 | 225 | 462 | 0.917 | ug/l | | 94 |
| 95) Naphthalene | 13.780 | 128 | 3337 | 0.707 | ug/l | # | 94 |
| 96) 1,2,3-Trichlorobenzene | 13.963 | 180 | 969 | 0.759 | ug/l | | 93 |

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

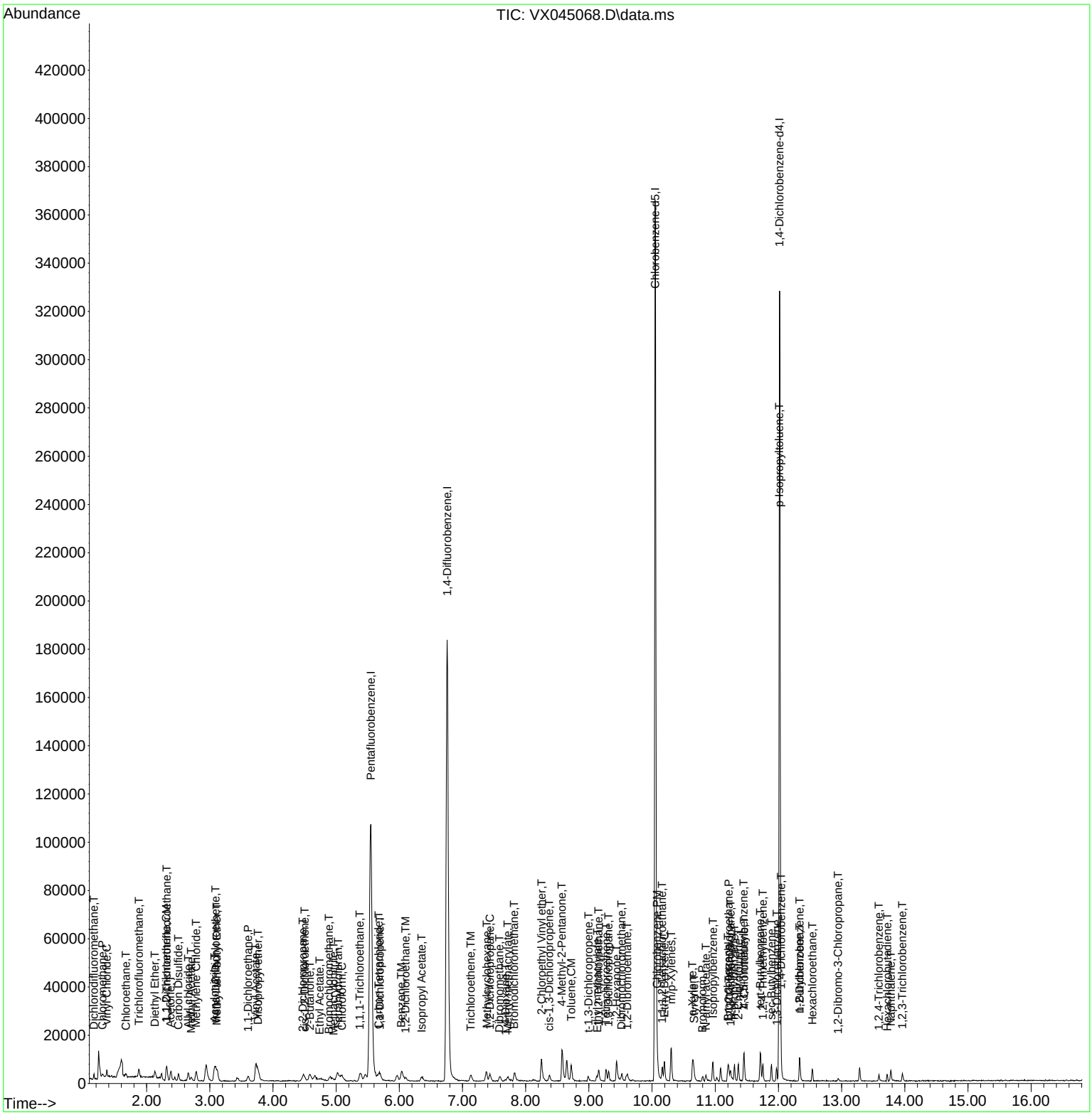
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045068.D
Acq On : 28 Feb 2025 01:27
Operator : JC/MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 16 Sample Multiplier: 1

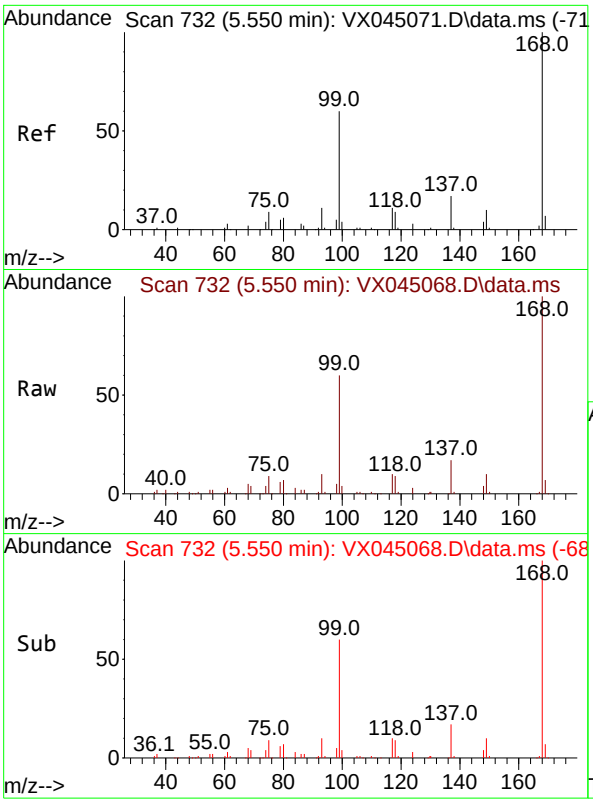
Quant Time: Feb 28 06:28:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:18:23 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

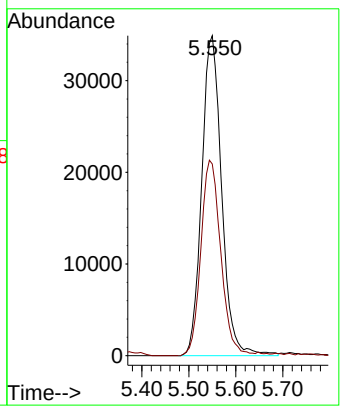





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.550 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion:168 Resp: 10276

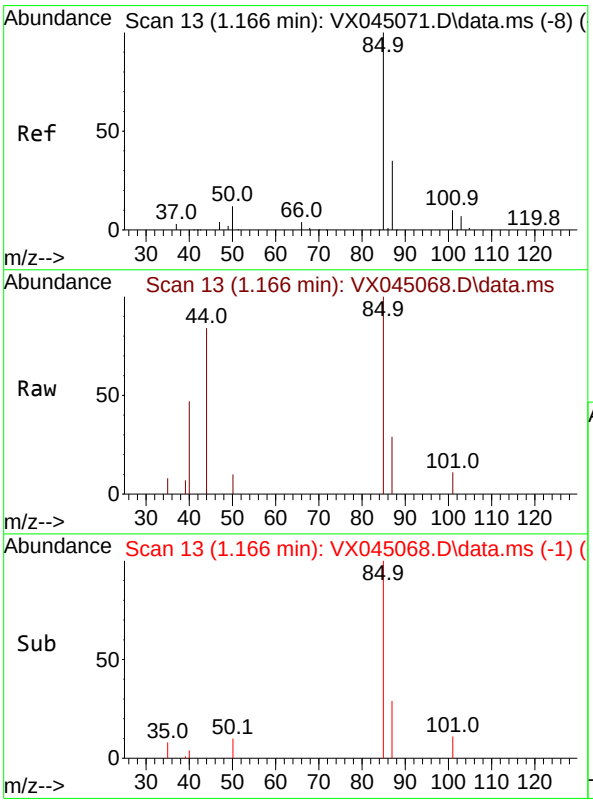
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 59.9 | 48.2 | 72.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

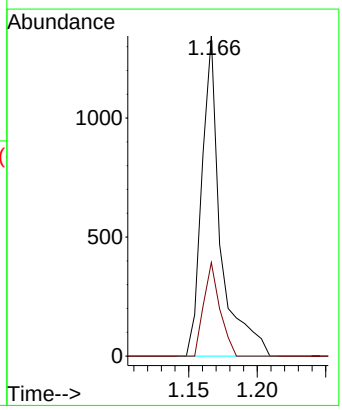
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

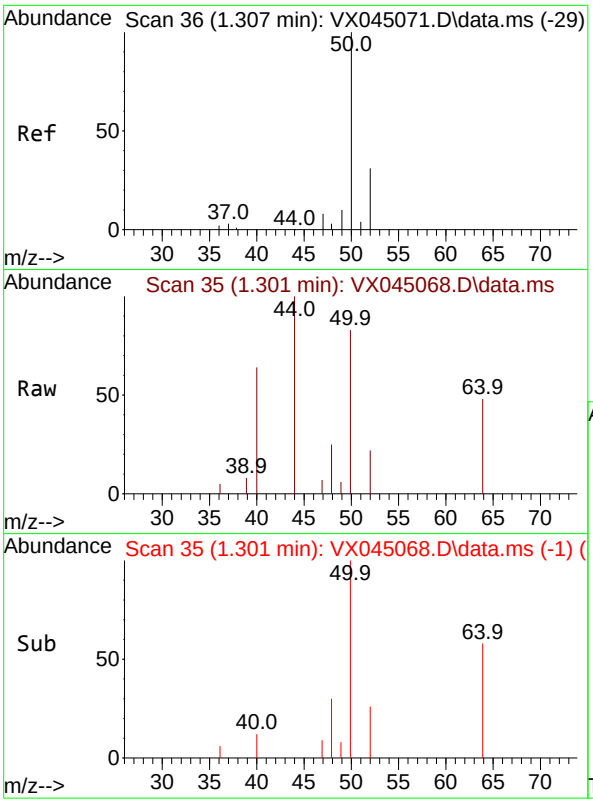



#2
Dichlorodifluoromethane
Concen: 1.007 ug/l
RT: 1.166 min Scan# 13
Delta R.T. 0.000 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 85 Resp: 1282

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 29.2 | 17.4 | 52.3 |

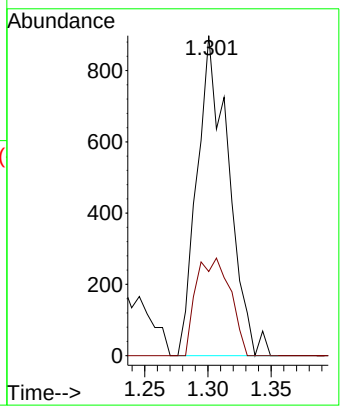





#3
Chloromethane
Concen: 0.975 ug/l
RT: 1.301 min Scan# 3
Delta R.T. -0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 50 Resp: 155

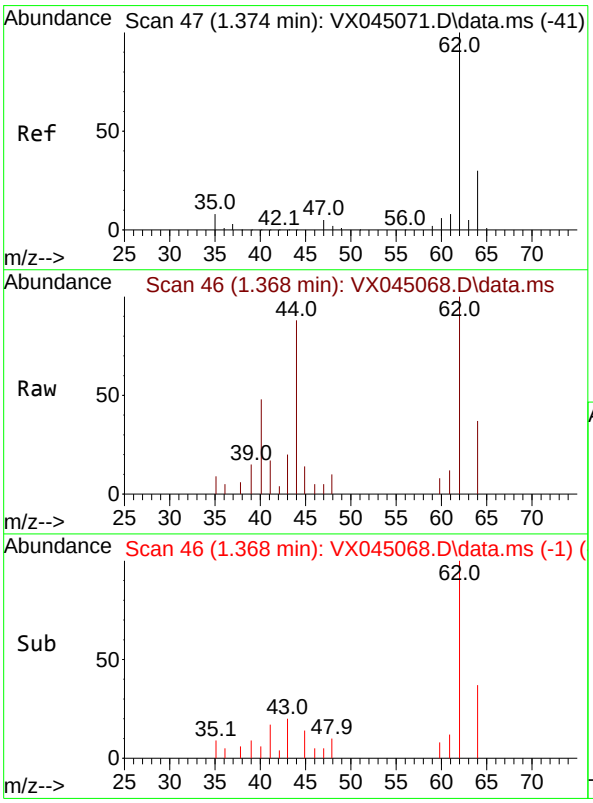
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 26.3 | 25.0 | 37.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

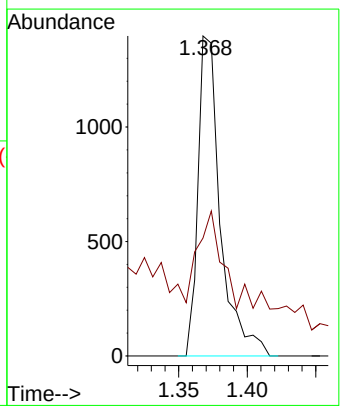
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

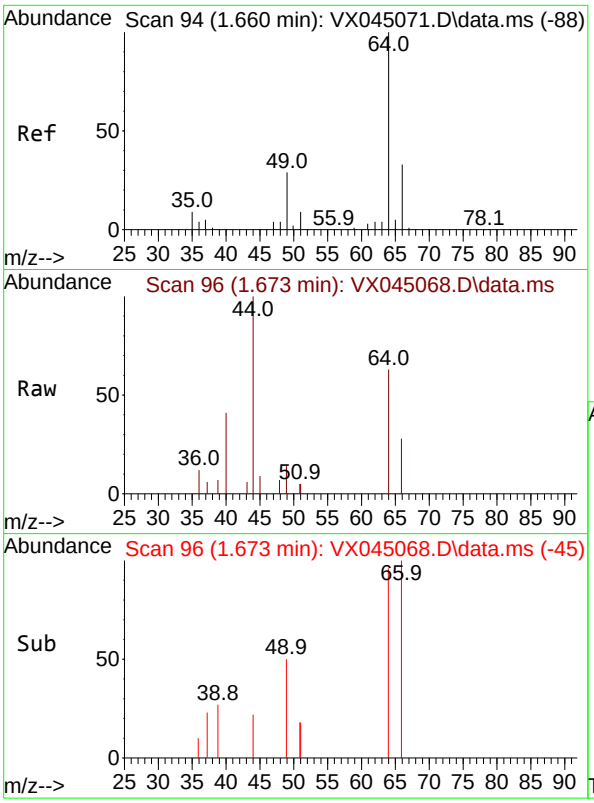



#4
Vinyl Chloride
Concen: 1.008 ug/l
RT: 1.368 min Scan# 46
Delta R.T. -0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 62 Resp: 1588

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 22.0 | 24.3 | 36.5# |

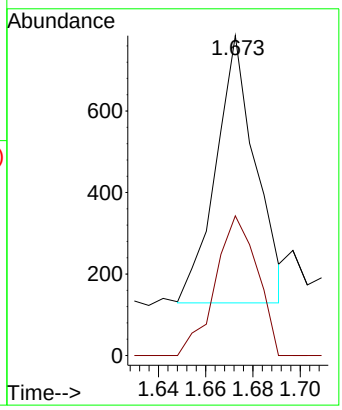





#6
Chloroethane
Concen: 0.992 ug/l m
RT: 1.673 min Scan# 9
Delta R.T. 0.012 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 64 Resp: 76

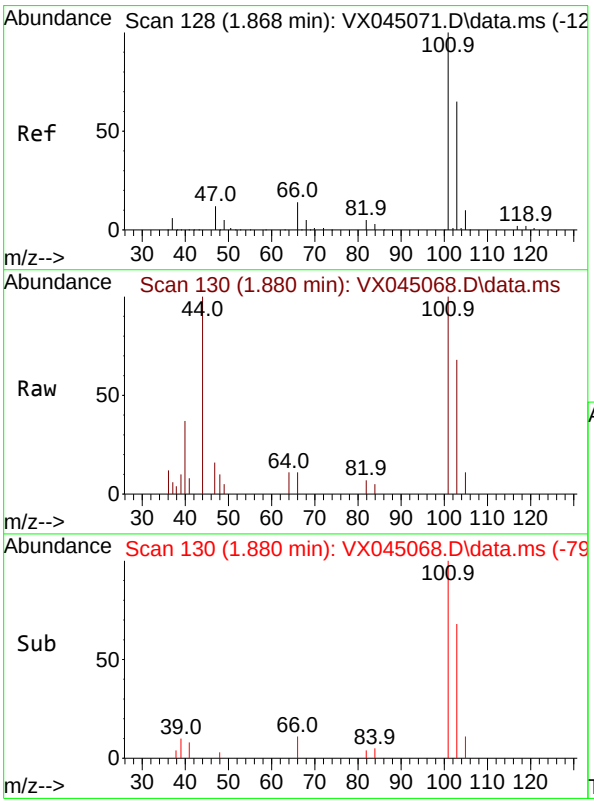
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 43.7 | 26.7 | 40.1# |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

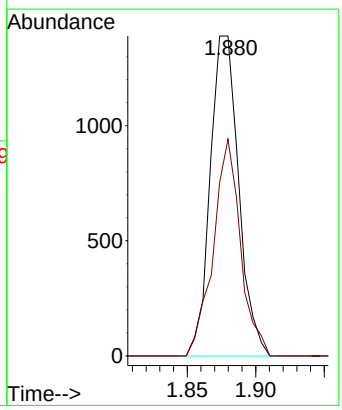
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

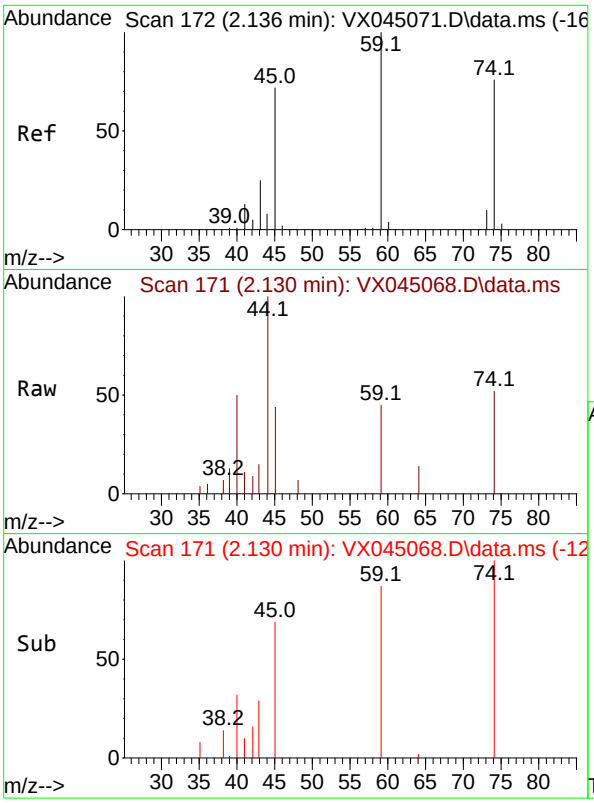



#7
Trichlorofluoromethane
Concen: 0.957 ug/l
RT: 1.880 min Scan# 130
Delta R.T. 0.012 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion:101 Resp: 2011

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 67.8 | 52.1 | 78.1 |






#8
Diethyl Ether
Concen: 1.045 ug/l
RT: 2.130 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

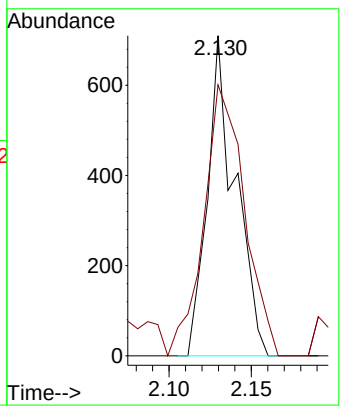
Tgt Ion: 74 Resp: 83

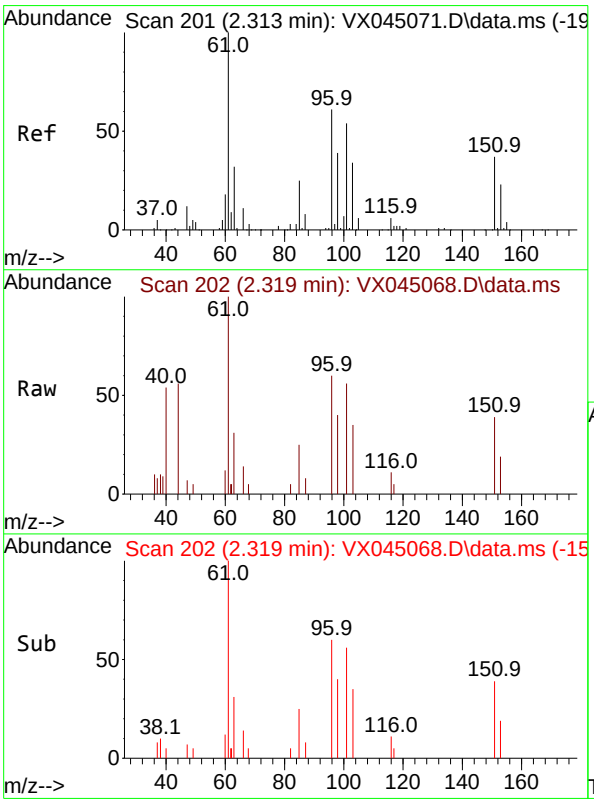
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 123.5 | 51.5 | 154.5 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

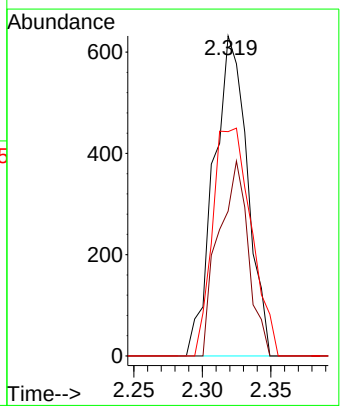


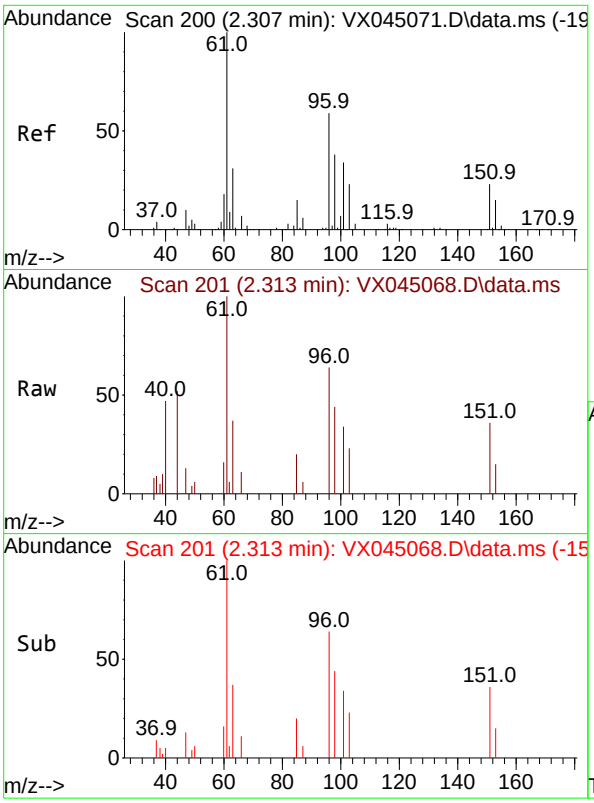




#9
1,1,2-Trichlorotrifluoroethane
Concen: 0.884 ug/l
RT: 2.319 min Scan# 202
Delta R.T. 0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion:101 Resp: 1081

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 53.7 | 36.2 | 54.4 |
| 151 | 81.9 | 56.4 | 84.6 |

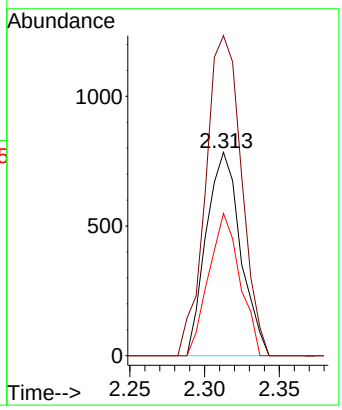





#12
1,1-Dichloroethene
Concen: 0.991 ug/l
RT: 2.313 min Scan# 2
Delta R.T. 0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 96 Resp: 125

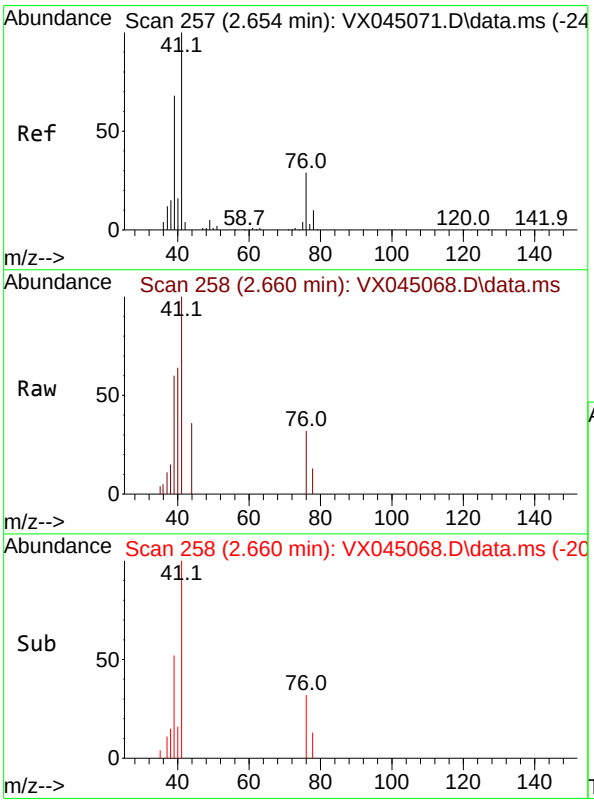
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 157.4 | 134.6 | 202.0 |
| 98 | 70.0 | 51.0 | 76.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

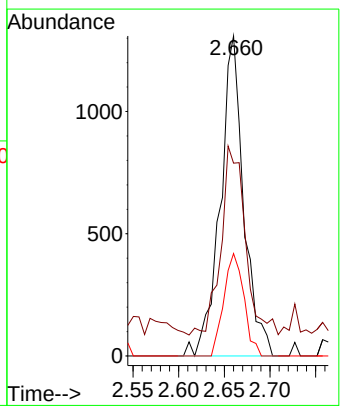
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

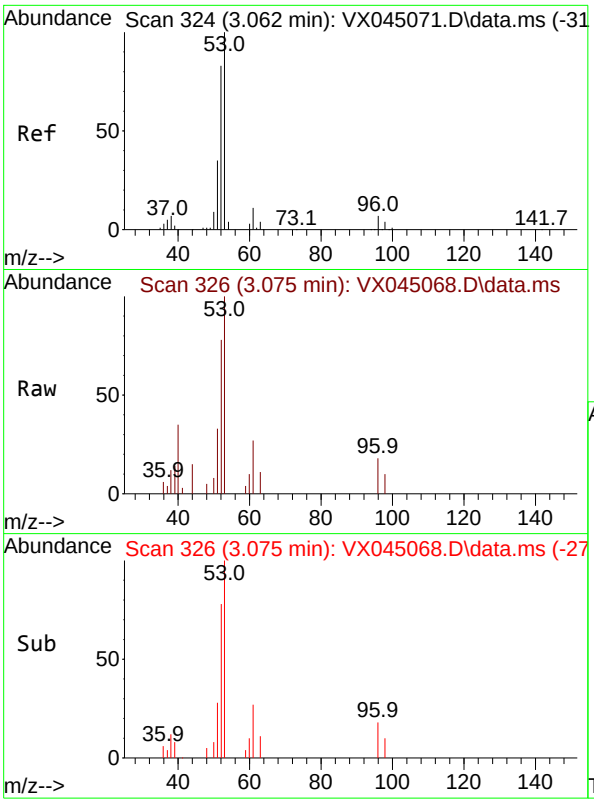



#14
Allyl chloride
Concen: 1.055 ug/l
RT: 2.660 min Scan# 258
Delta R.T. 0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 41 Resp: 2343

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 62.3 | 53.8 | 80.8 |
| 76 | 27.4 | 25.2 | 37.8 |

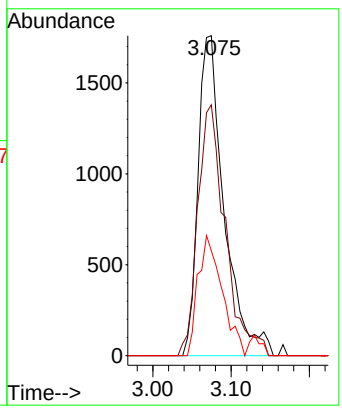





#15
Acrylonitrile
Concen: 4.931 ug/l
RT: 3.075 min Scan# 3
Delta R.T. 0.012 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 53 Resp: 406

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 82.6 | 66.2 | 99.2 |
| 51 | 34.6 | 29.0 | 43.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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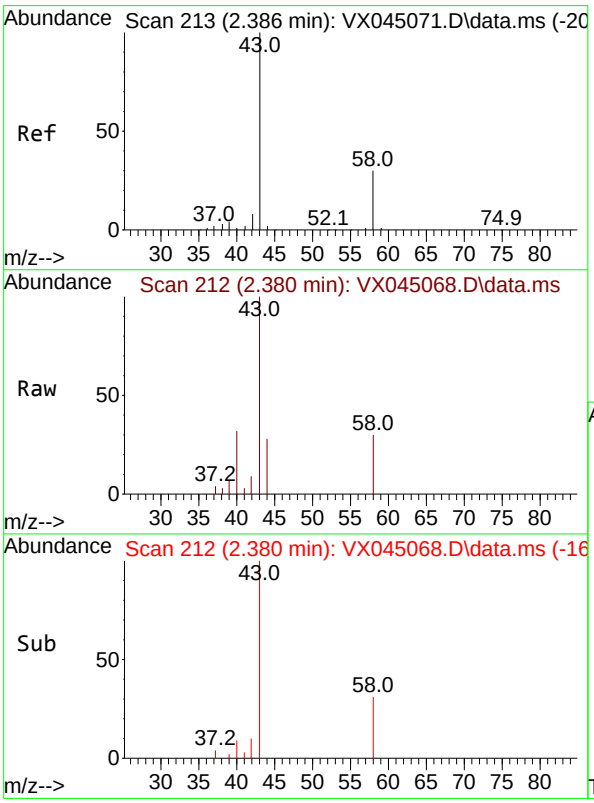
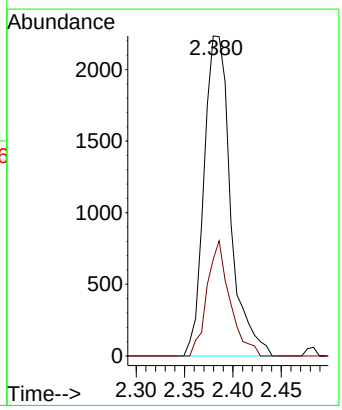
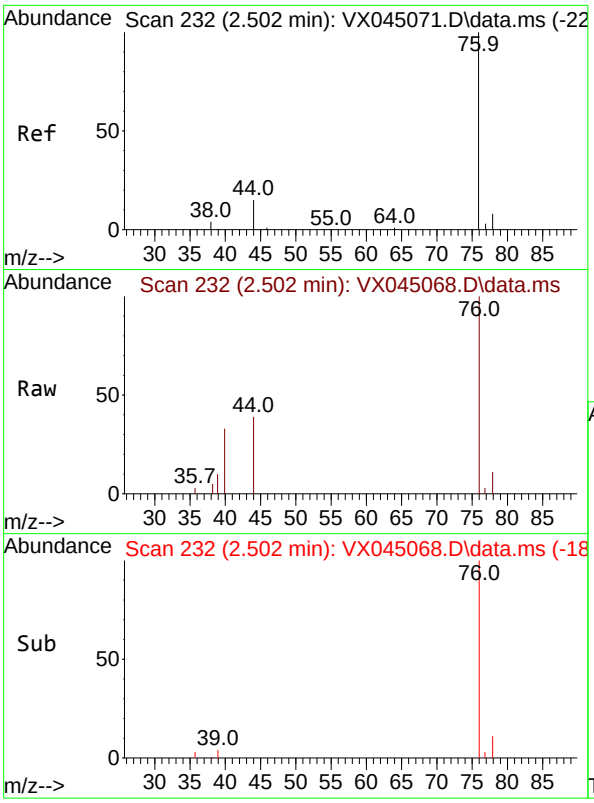



#16
Acetone
Concen: 5.635 ug/l
RT: 2.380 min Scan# 212
Delta R.T. -0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 43 Resp: 4259

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 30.2 | 24.2 | 36.4 |

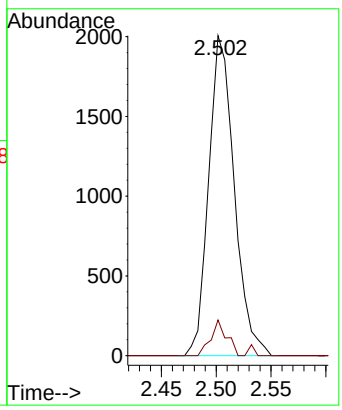





#17
Carbon Disulfide
Concen: 0.956 ug/l
RT: 2.502 min Scan# 2
Delta R.T. 0.000 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 76 Resp: 325

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 11.2 | 6.6 | 9.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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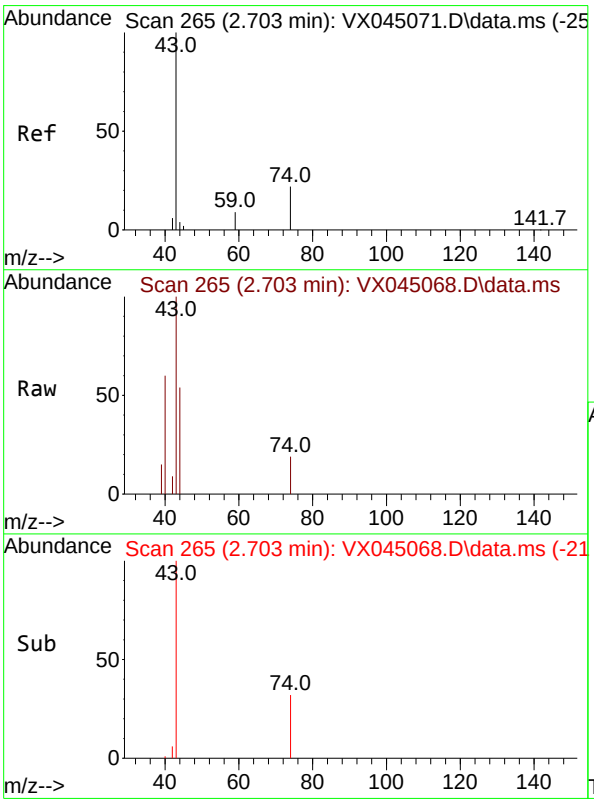
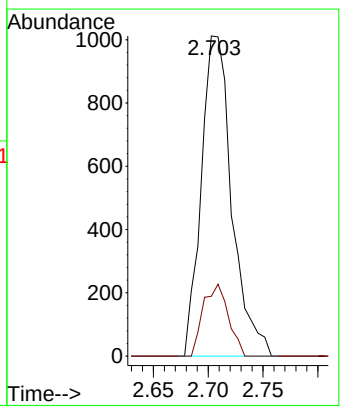
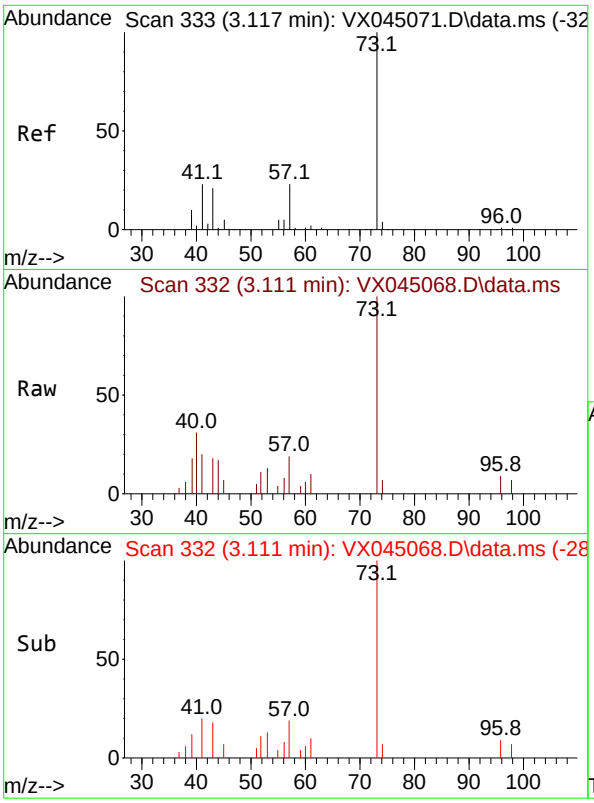



#18
Methyl Acetate
Concen: 1.066 ug/l
RT: 2.703 min Scan# 265
Delta R.T. 0.000 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 43 Resp: 1960

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 18.5 | 17.4 | 26.2 |






#19
Methyl tert-butyl Ether
Concen: 0.943 ug/l
RT: 3.111 min Scan# 3
Delta R.T. -0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 73 Resp: 401

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 19.0 | 18.5 | 27.7 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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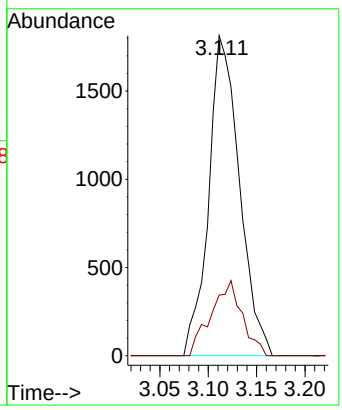
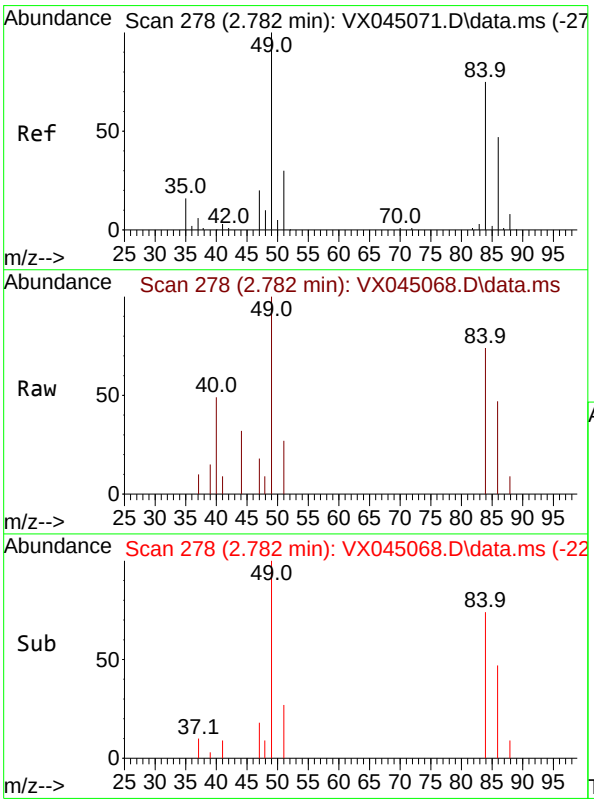
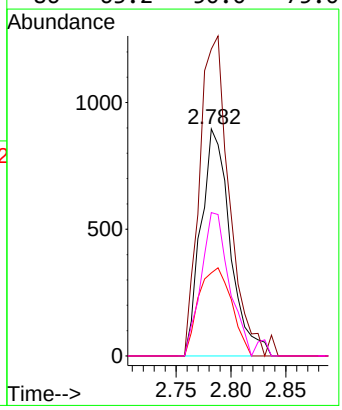


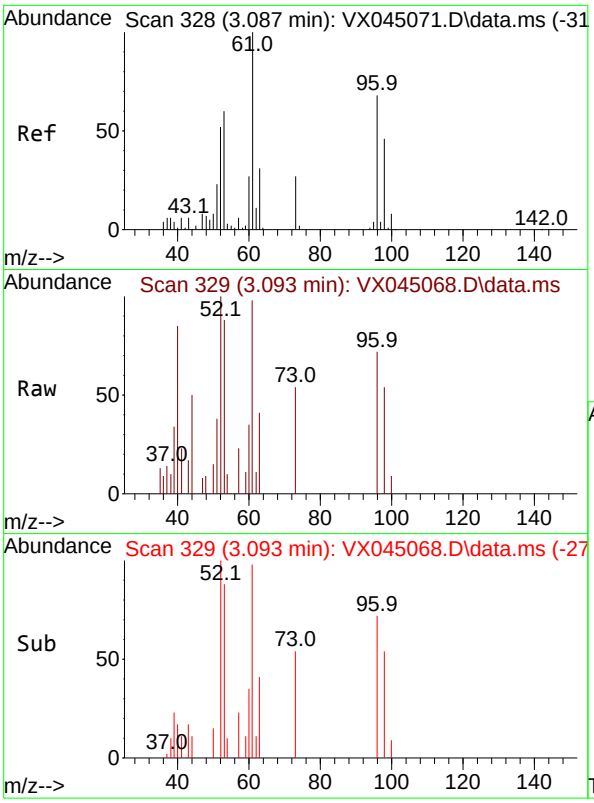




#20
Methylene Chloride
Concen: 1.095 ug/l
RT: 2.782 min Scan# 278
Delta R.T. 0.000 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 84 Resp: 1656

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 135.2 | 106.5 | 159.7 |
| 51 | 36.6 | 32.1 | 48.1 |
| 86 | 63.2 | 50.0 | 75.0 |

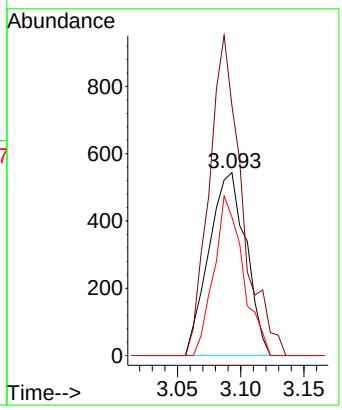





#21
trans-1,2-Dichloroethene
Concen: 0.869 ug/l
RT: 3.093 min Scan# 3
Delta R.T. 0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 96 Resp: 110

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 136.4 | 117.0 | 175.4 |
| 98 | 75.6 | 53.4 | 80.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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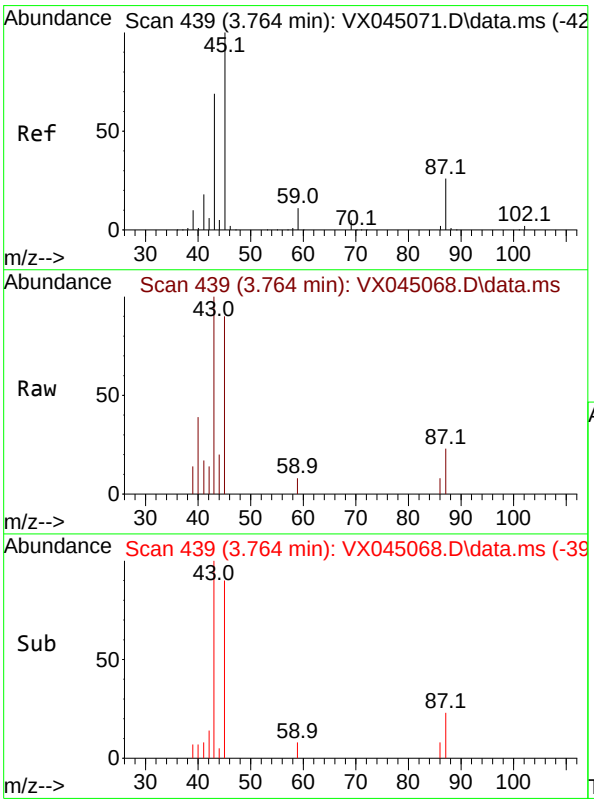
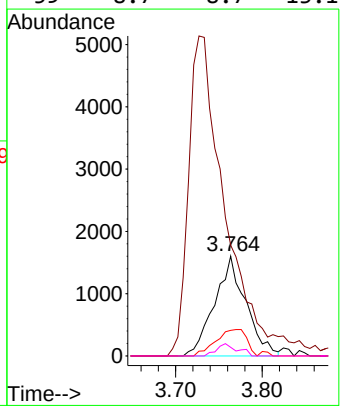
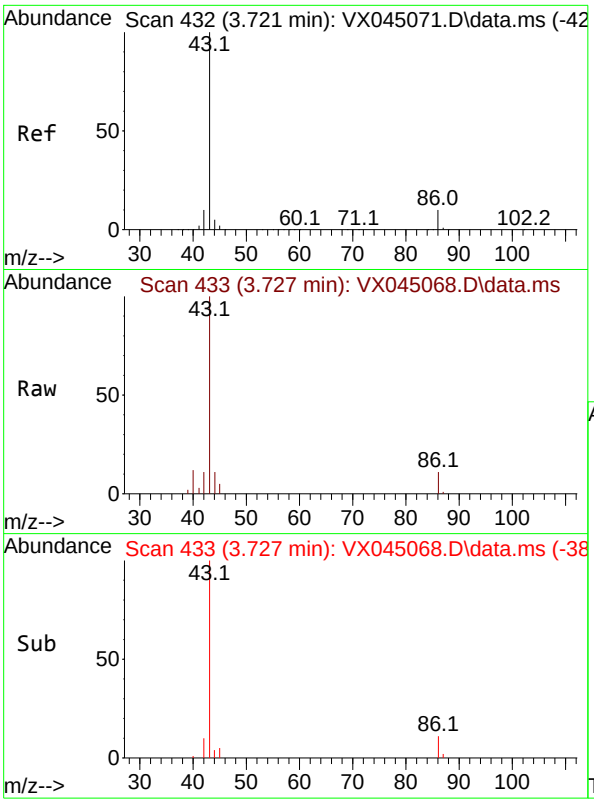



#22
Diisopropyl ether
Concen: 0.871 ug/l
RT: 3.764 min Scan# 439
Delta R.T. 0.000 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 45 Resp: 4026

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 91.9 | 54.9 | 82.3# |
| 87 | 25.6 | 21.0 | 31.4 |
| 59 | 8.7 | 8.7 | 13.1 |






#23
Vinyl Acetate
Concen: 3.971 ug/l
RT: 3.727 min Scan# 4
Delta R.T. 0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 43 Resp: 1527

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 11.1 | 8.1 | 12.1 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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Reviewed By :John Carlone 02/28/2025
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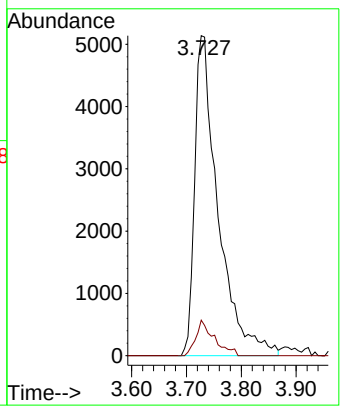
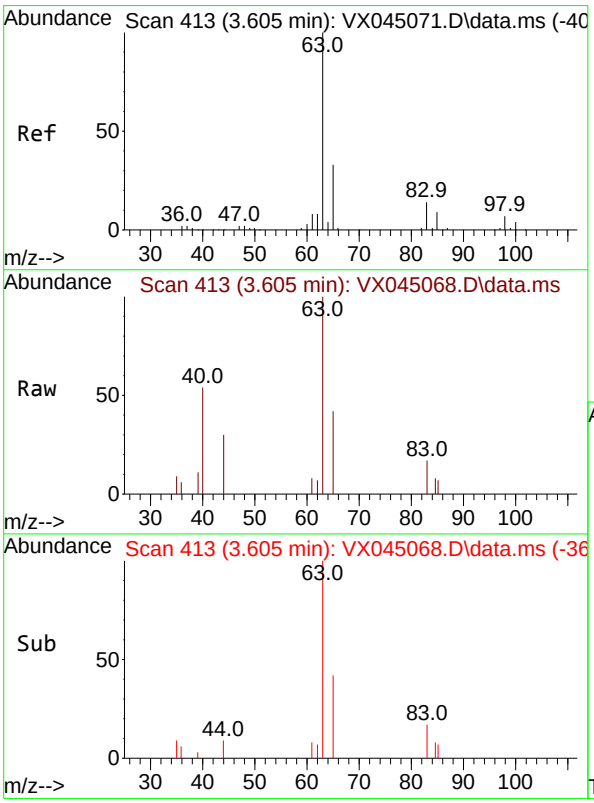
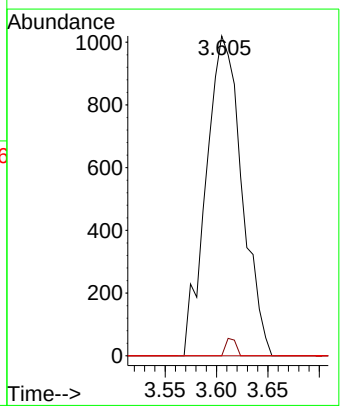


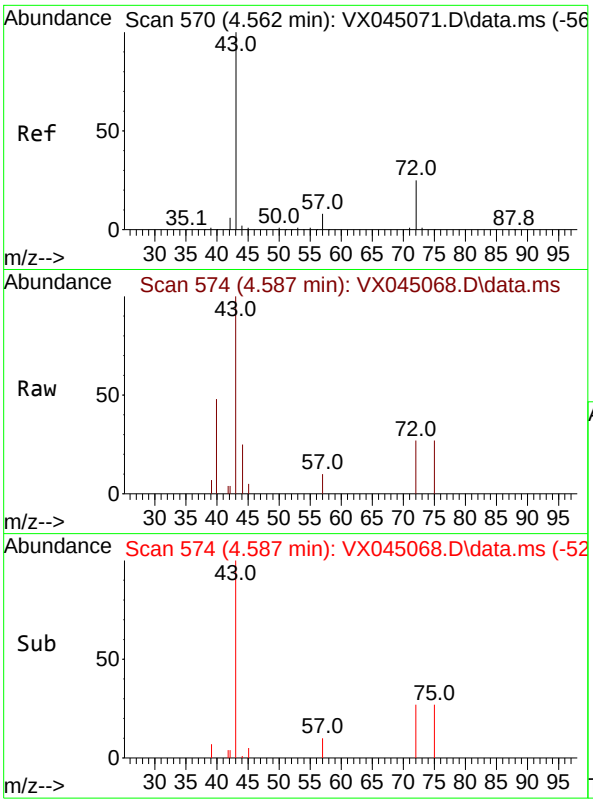




#24
1,1-Dichloroethane
Concen: 0.958 ug/l
RT: 3.605 min Scan# 413
Delta R.T. 0.000 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 63 Resp: 2467

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 0.0 | 3.4 | 10.2# |
| 100 | 0.0 | 2.1 | 6.5# |

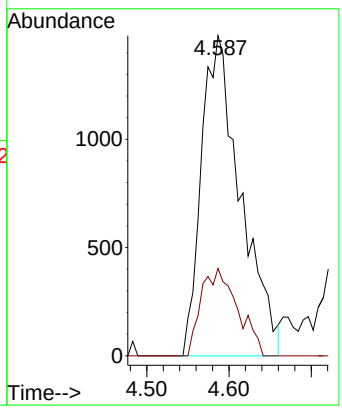





#25
2-Butanone
Concen: 4.252 ug/l
RT: 4.587 min Scan# 5
Delta R.T. 0.024 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 43 Resp: 489

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 27.2 | 20.0 | 30.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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Reviewed By :John Carlone 02/28/2025
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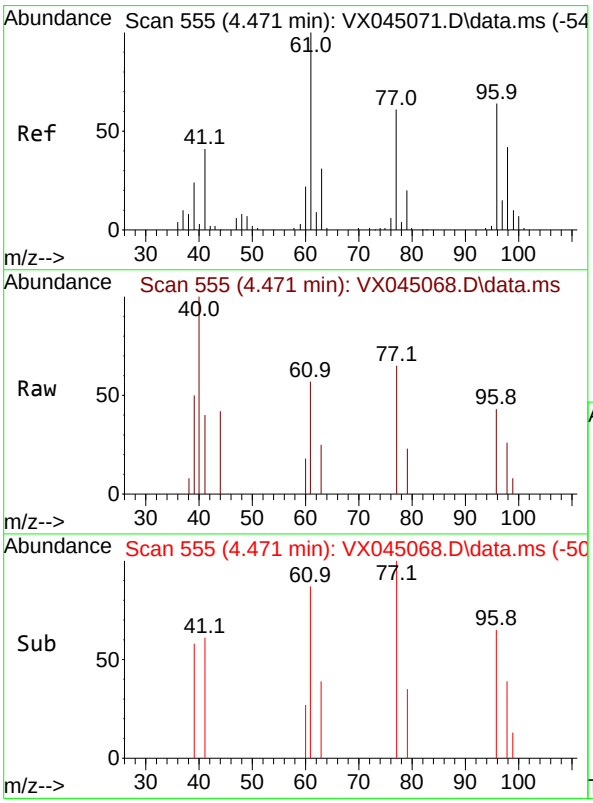
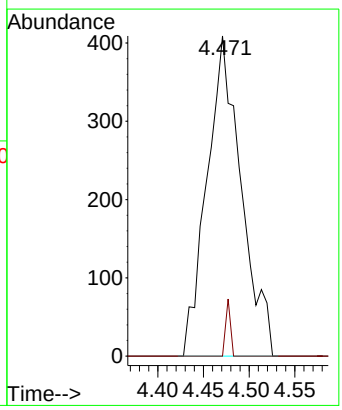
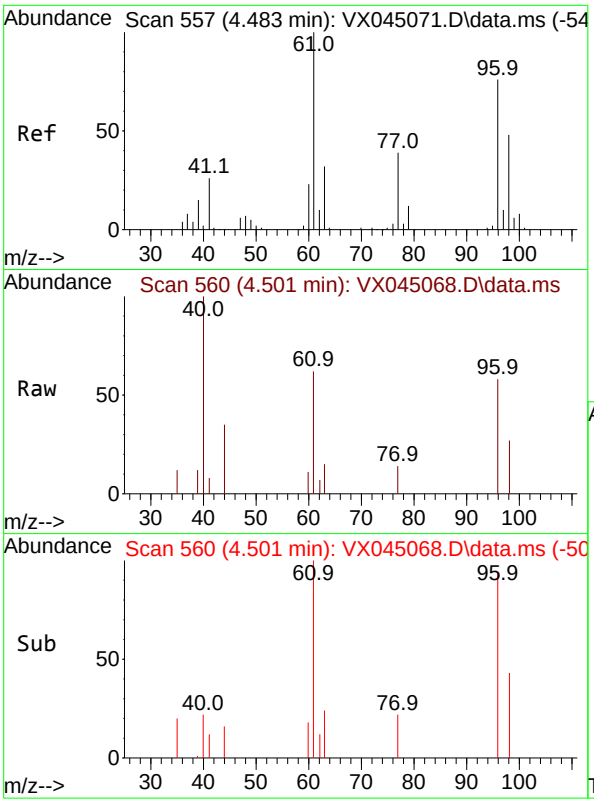



#26
2,2-Dichloropropane
Concen: 0.872 ug/l
RT: 4.471 min Scan# 555
Delta R.T. 0.000 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 77 Resp: 1066

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 2.5 | 12.4 | 37.0# |

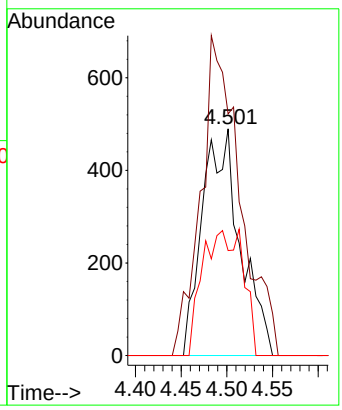





#27
cis-1,2-Dichloroethene
Concen: 0.902 ug/l
RT: 4.501 min Scan# 5
Delta R.T. 0.018 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 96 Resp: 141

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 0.0 | 0.0 | 283.2 |
| 98 | 59.1 | 0.0 | 128.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

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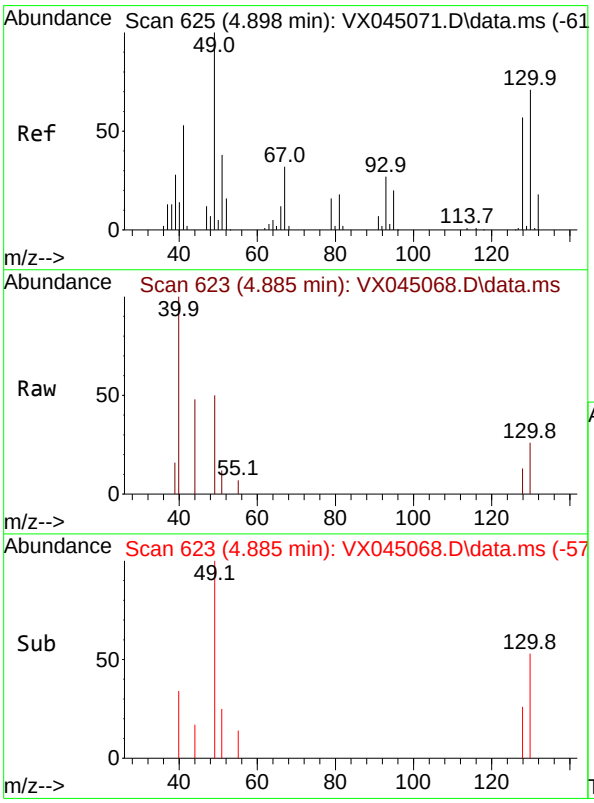
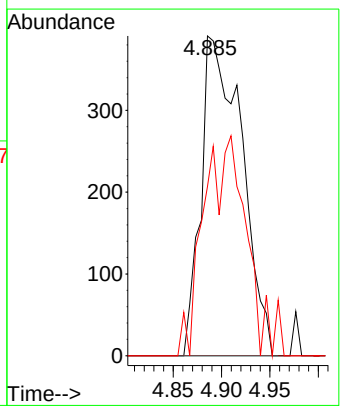
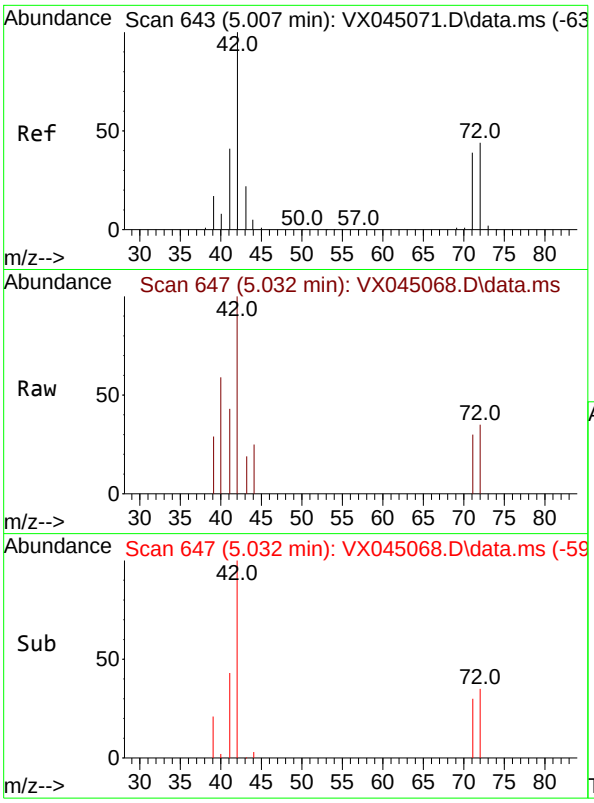



#28
Bromochloromethane
Concen: 0.958 ug/l
RT: 4.885 min Scan# 623
Delta R.T. -0.012 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 49 Resp: 1144

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 0.0 | 0.0 | 3.4 |
| 130 | 31.5 | 56.1 | 84.1# |

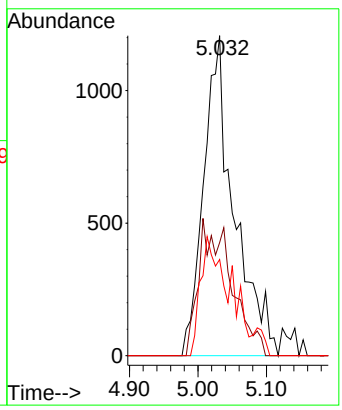





#29
Tetrahydrofuran
Concen: 4.809 ug/l
RT: 5.032 min Scan# 64
Delta R.T. 0.024 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 42 Resp: 3719

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 0.0 | 34.1 | 51.1# |
| 71 | 0.0 | 31.4 | 47.0# |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

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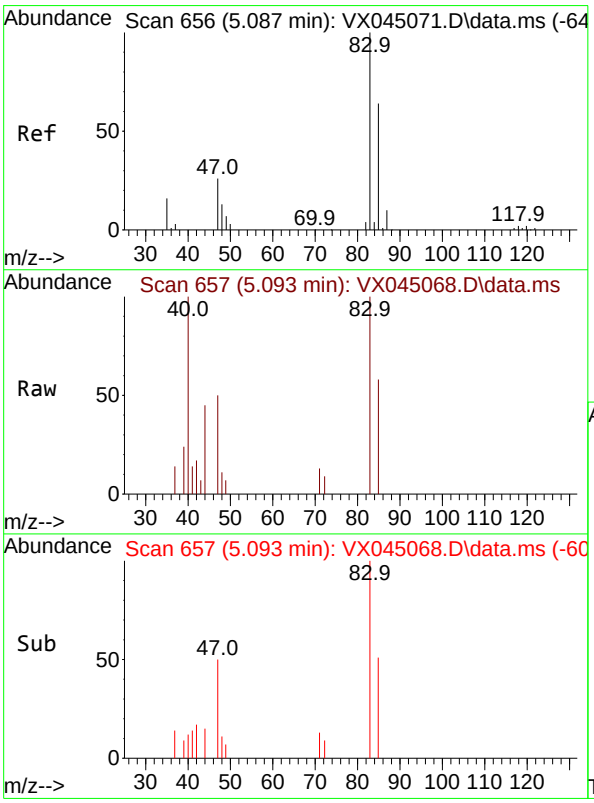
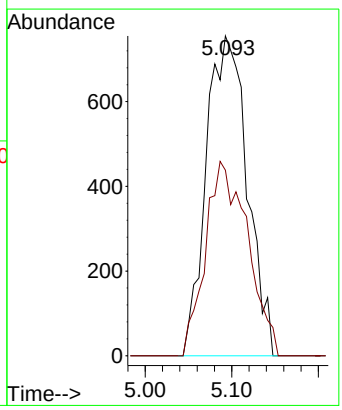
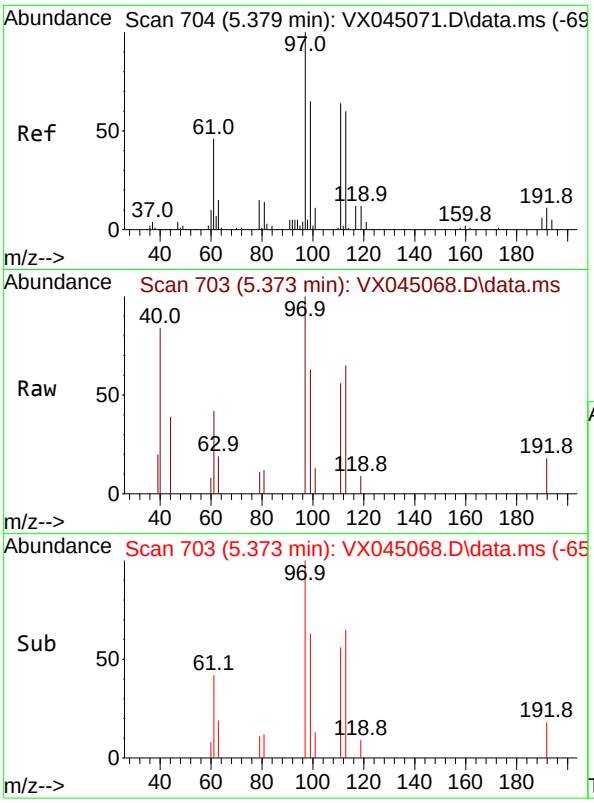



#30
Chloroform
Concen: 0.978 ug/l
RT: 5.093 min Scan# 657
Delta R.T. 0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 83 Resp: 2478

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 58.0 | 51.4 | 77.2 |

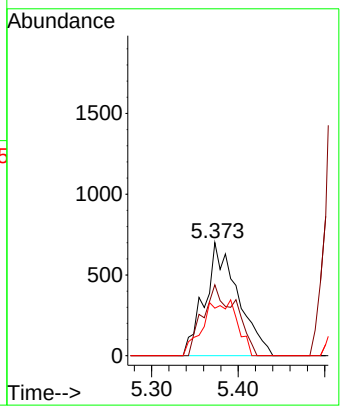





#32
1,1,1-Trichloroethane
Concen: 0.893 ug/l
RT: 5.373 min Scan# 7
Delta R.T. -0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 97 Resp: 186

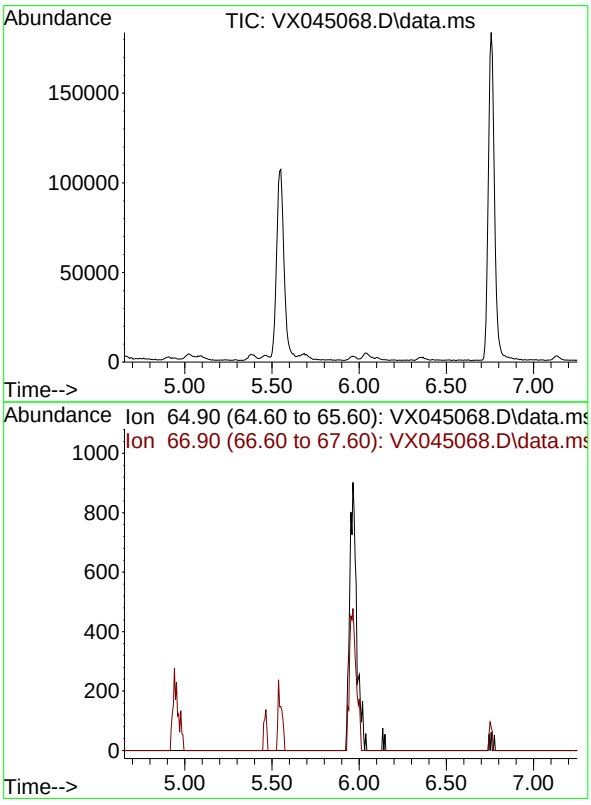
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 0.0 | 51.6 | 77.4 |
| 61 | 50.0 | 38.4 | 57.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

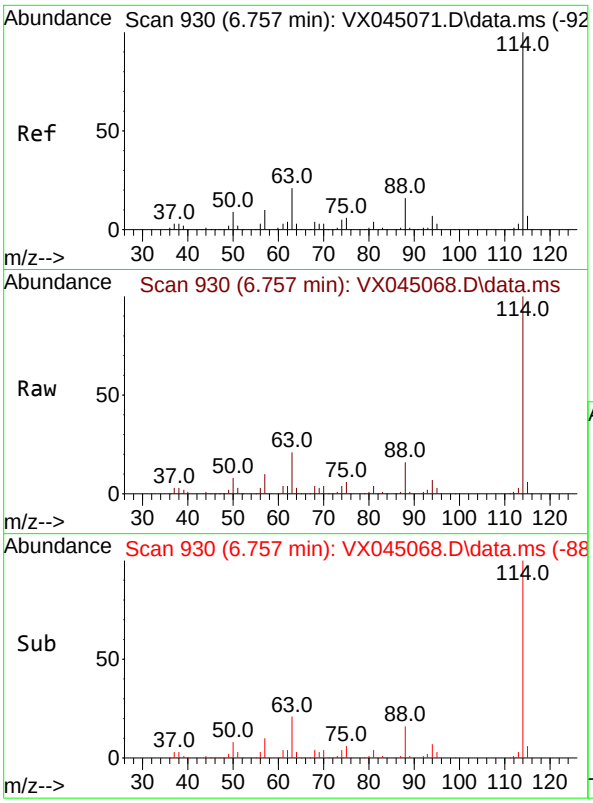



#33
1,2-Dichloroethane-d4
Concen: 0.000 ug/l
Expected RT: 5.95 min

Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 65

| Sig | Exp Ratio |
|---|---|
| 65 | 100 |
| 67 | 53.1 |




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.757 min Scan# 9
Delta R.T. 0.000 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

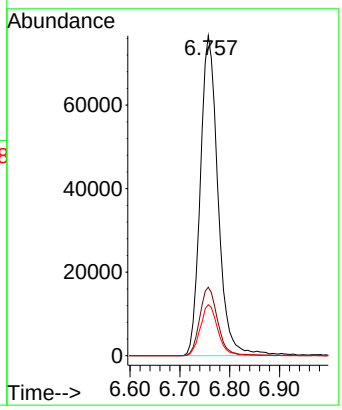
Tgt Ion:114 Resp: 18864

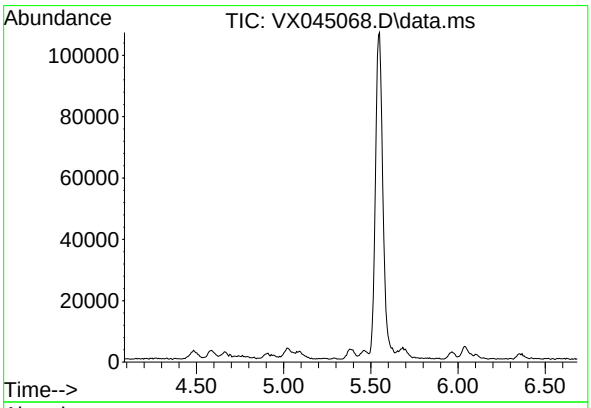
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 21.4 | 0.0 | 41.8 |
| 88 | 16.0 | 0.0 | 32.8 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025



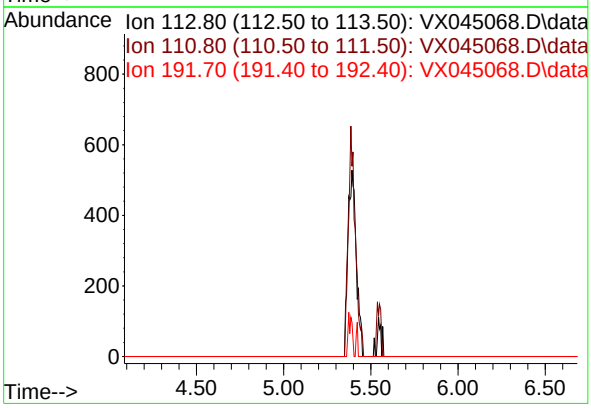



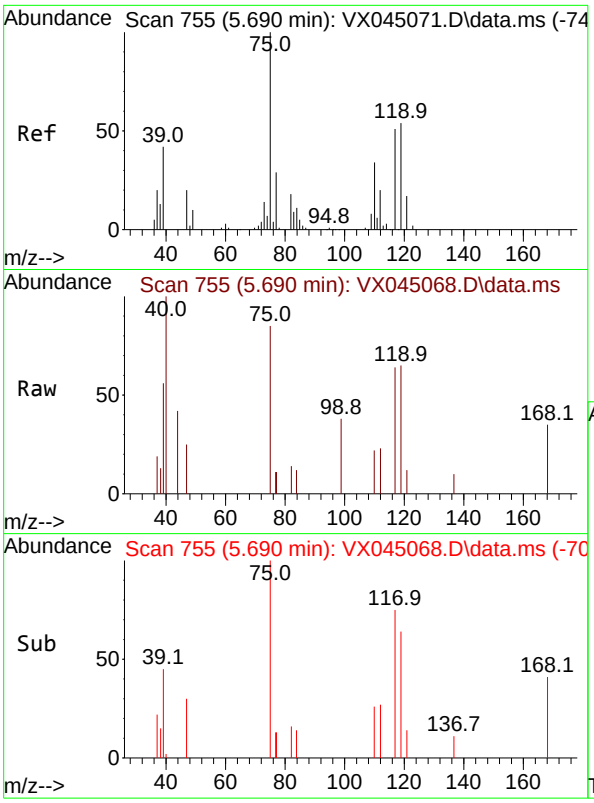

#35
Dibromofluoromethane
Concen: 0.000 ug/l
Expected RT: 5.39 min

Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 113

| Sig | Exp Ratio |
|---|---|
| 113 | 100 |
| 111 | 102.2 |
| 192 | 17.9 |

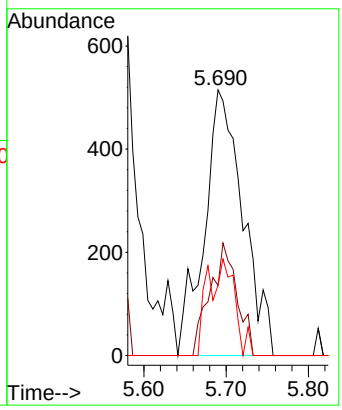





#36
1,1-Dichloropropene
Concen: 0.967 ug/l
RT: 5.690 min Scan# 7
Delta R.T. 0.000 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 75 Resp: 168

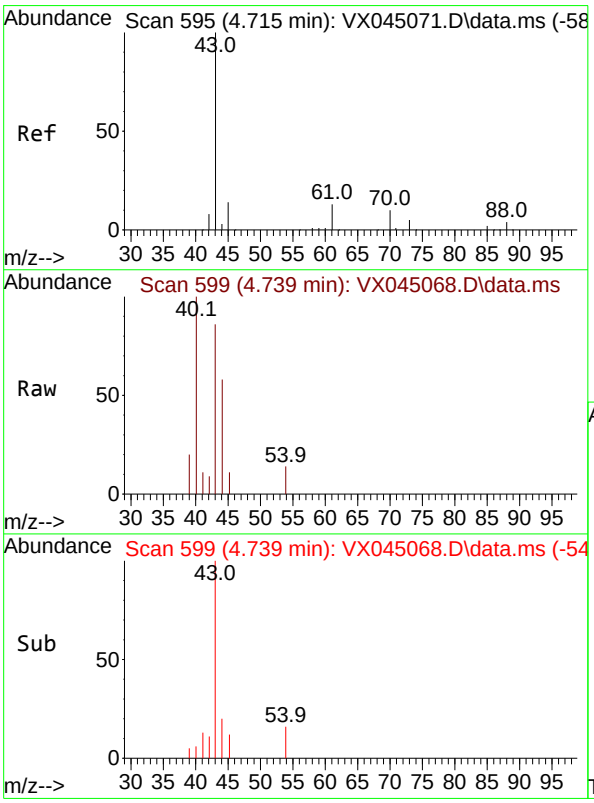
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 29.6 | 16.9 | 50.6 |
| 77 | 16.4 | 24.5 | 36.7# |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

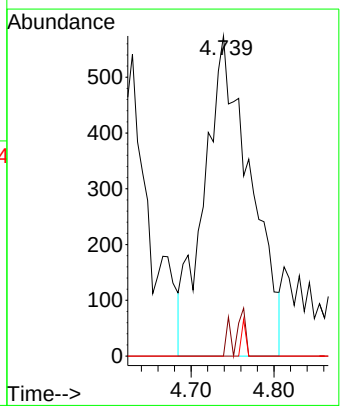
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

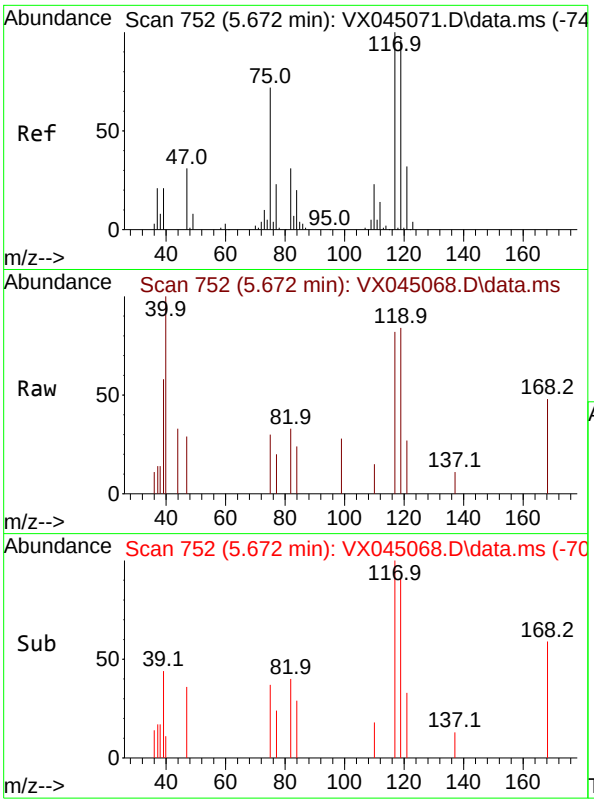



#37
Ethyl Acetate
Concen: 0.988 ug/l m
RT: 4.739 min Scan# 599
Delta R.T. 0.024 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 43 Resp: 2223

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 0.0 | 10.8 | 16.2# |
| 70 | 0.0 | 7.7 | 11.5# |

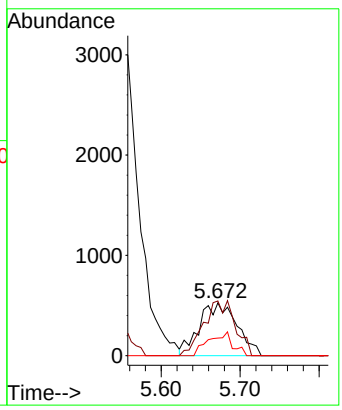





#38
Carbon Tetrachloride
Concen: 0.987 ug/l m
RT: 5.672 min Scan# 7
Delta R.T. 0.000 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion:117 Resp: 174

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 103.4 | 76.7 | 115.1 |
| 121 | 33.2 | 25.5 | 38.3 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

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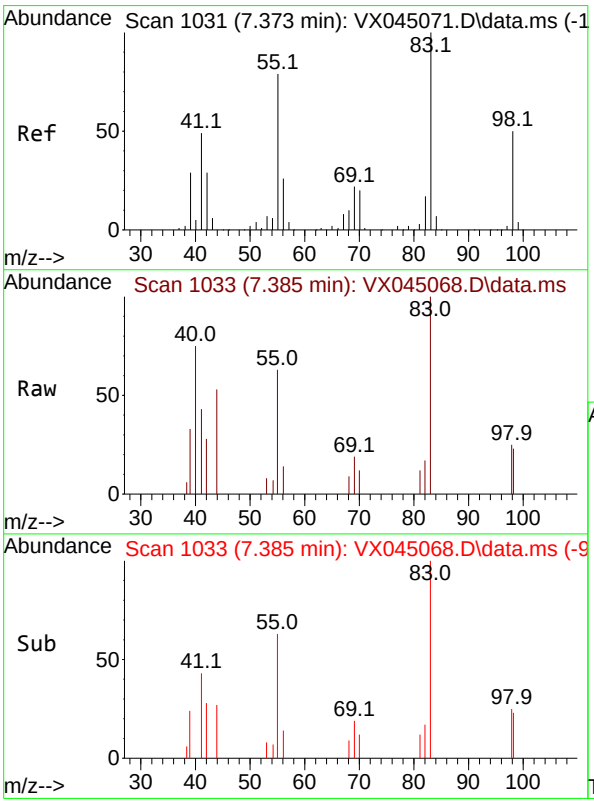
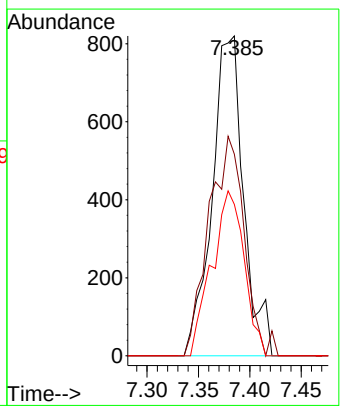
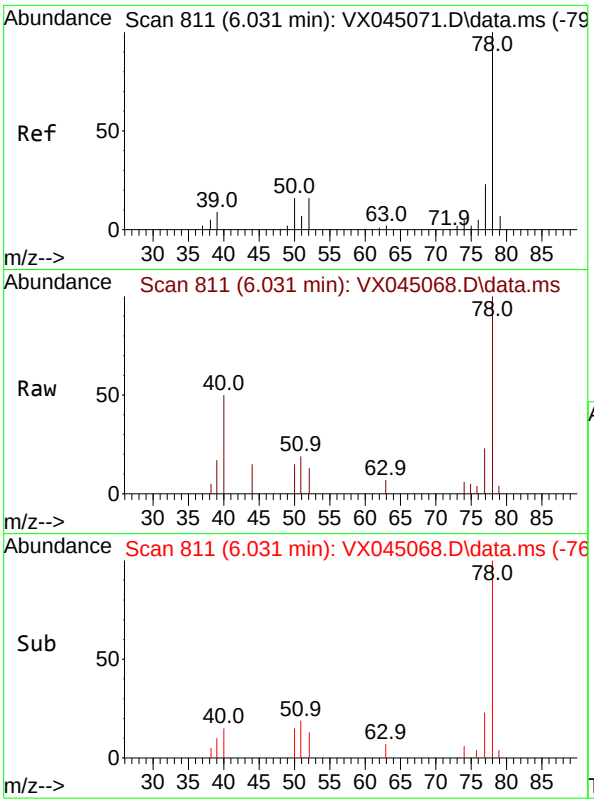



#39
Methylcyclohexane
Concen: 0.831 ug/l
RT: 7.385 min Scan# 1033
Delta R.T. 0.012 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 83 Resp: 1750

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 63.0 | 63.0 | 94.4 |
| 98 | 47.3 | 39.7 | 59.5 |

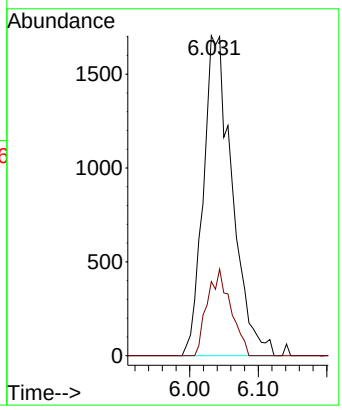





#40
Benzene
Concen: 0.907 ug/l
RT: 6.031 min Scan# 8
Delta R.T. 0.000 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 78 Resp: 498

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.2 | 18.8 | 28.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

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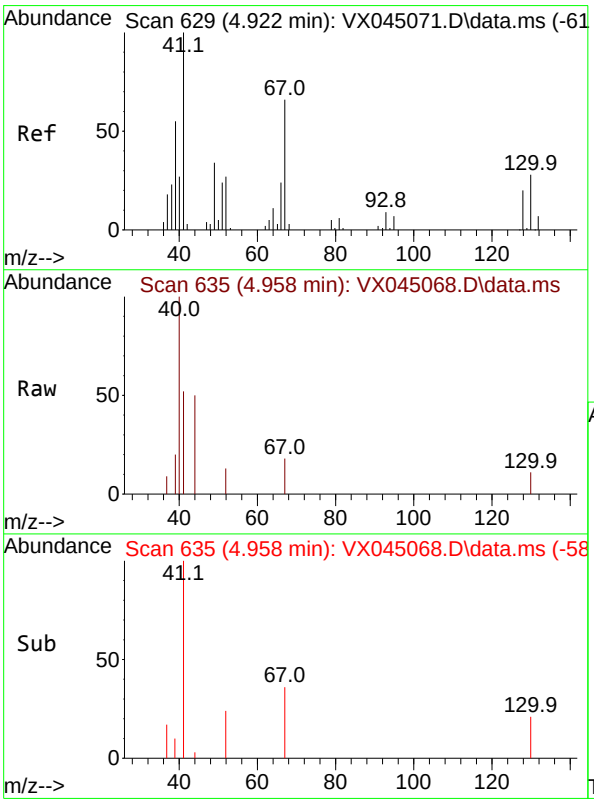
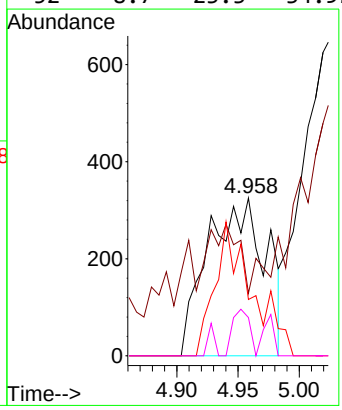
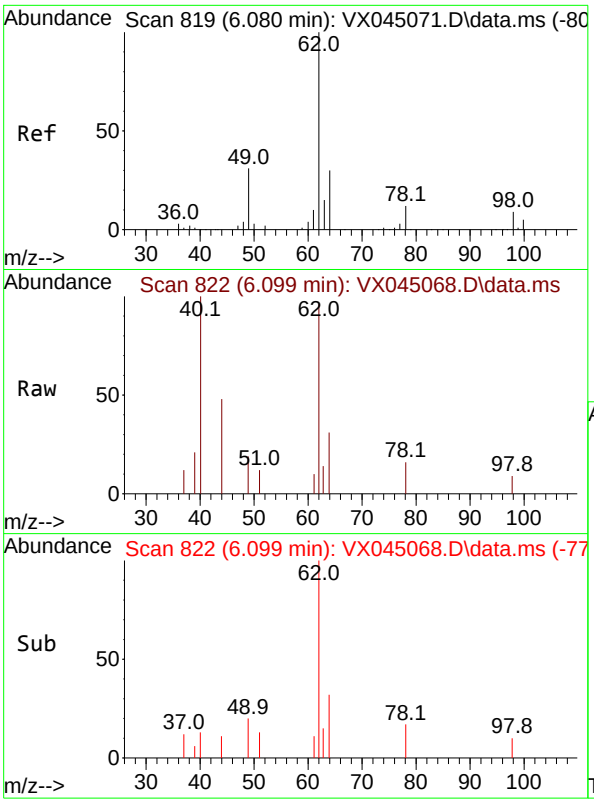



#41
Methacrylonitrile
Concen: 0.879 ug/l m
RT: 4.958 min Scan# 635
Delta R.T. 0.037 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 41 Resp: 1072

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 29.2 | 44.6 | 67.0# |
| 67 | 53.9 | 53.9 | 80.9# |
| 52 | 8.7 | 23.3 | 34.9# |

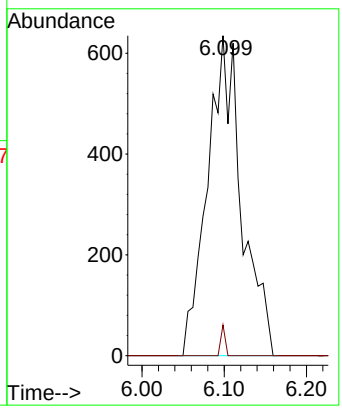





#42
1,2-Dichloroethane
Concen: 0.924 ug/l
RT: 6.099 min Scan# 8
Delta R.T. 0.018 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 62 Resp: 183

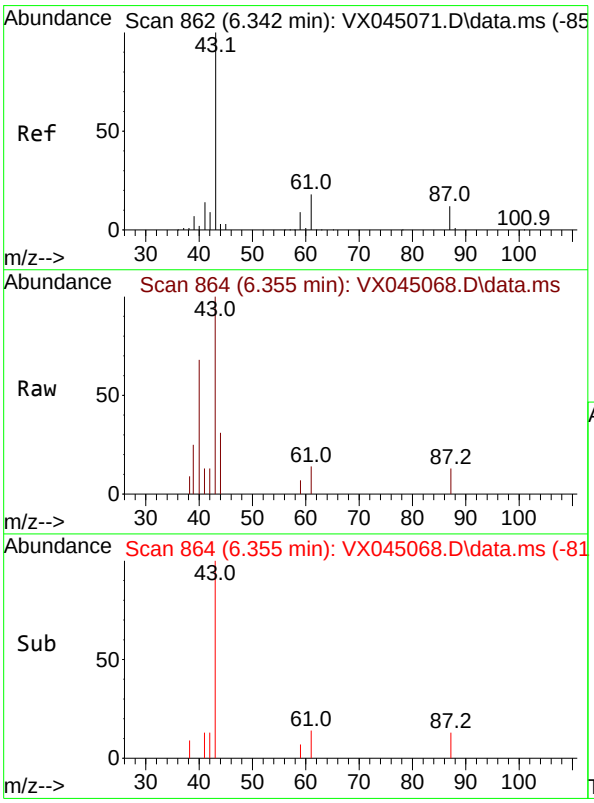
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 1.2 | 0.0 | 18.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

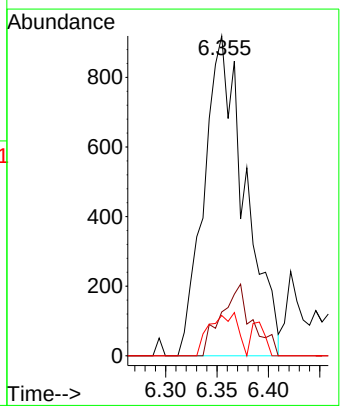
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

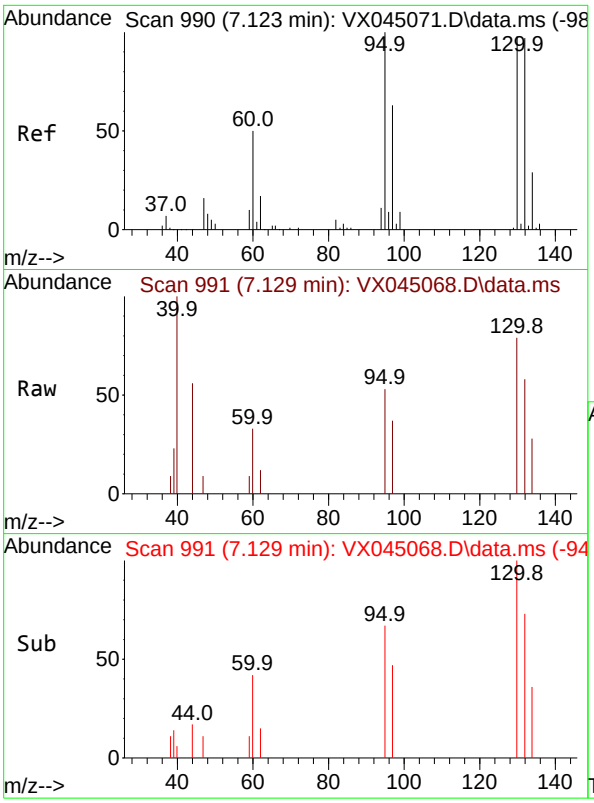



#43
Isopropyl Acetate
Concen: 0.767 ug/l
RT: 6.355 min Scan# 864
Delta R.T. 0.012 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 43 Resp: 2545

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 17.0 | 14.9 | 22.3 |
| 87 | 9.2 | 9.4 | 14.2# |

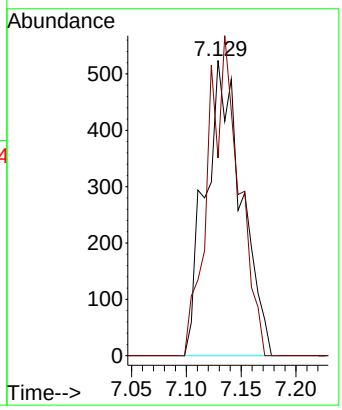





#44
Trichloroethene
Concen: 0.933 ug/l
RT: 7.129 min Scan# 9
Delta R.T. 0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion:130 Resp: 120

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 67.0 | 0.0 | 205.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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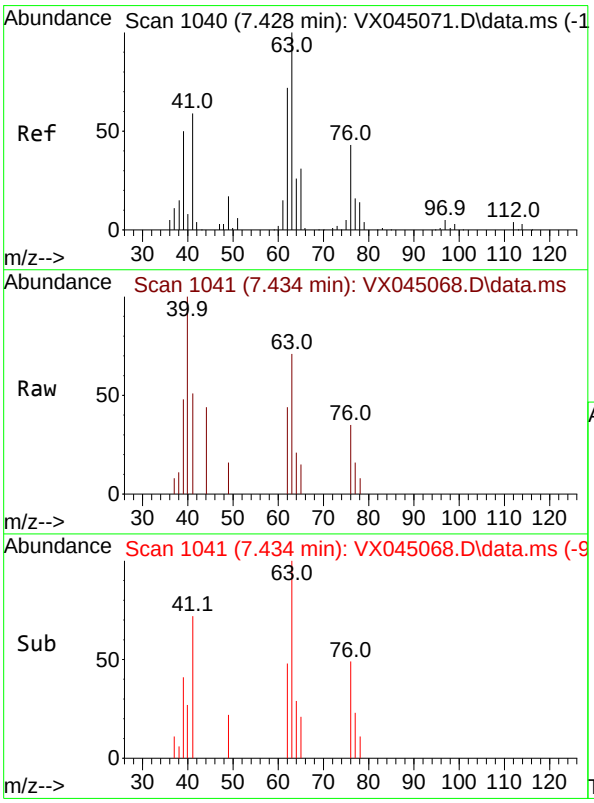
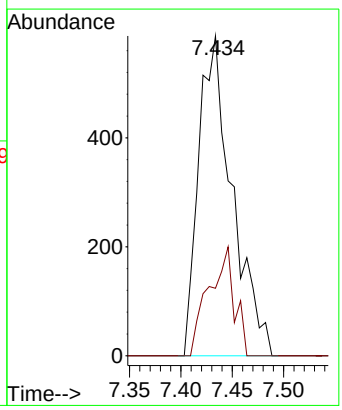
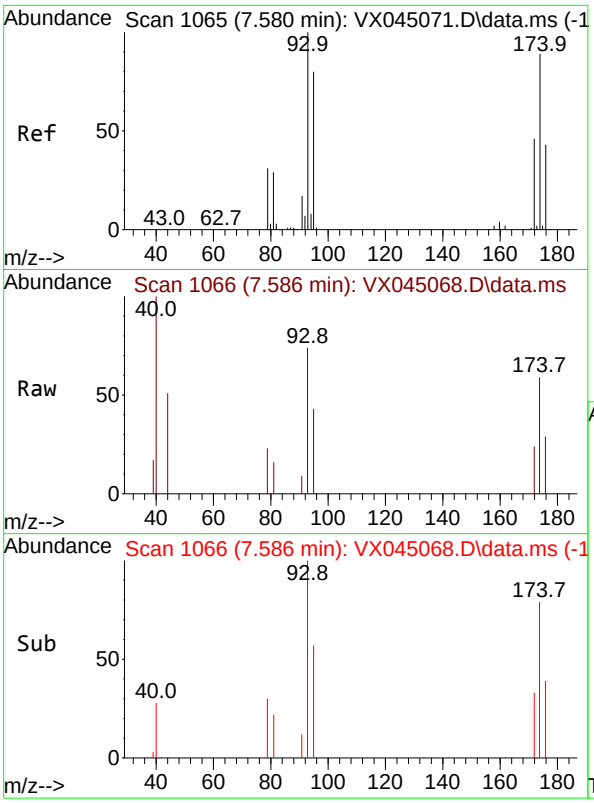



#45
1,2-Dichloropropane
Concen: 0.971 ug/l
RT: 7.434 min Scan# 1041
Delta R.T. 0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 63 Resp: 1334

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 21.1 | 24.7 | 37.1# |

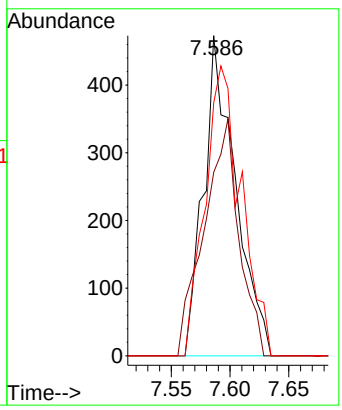





#46
Dibromomethane
Concen: 0.897 ug/l
RT: 7.586 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 93 Resp: 89

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 80.9 | 65.8 | 98.8 |
| 174 | 102.8 | 72.2 | 108.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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Reviewed By :John Carlone 02/28/2025
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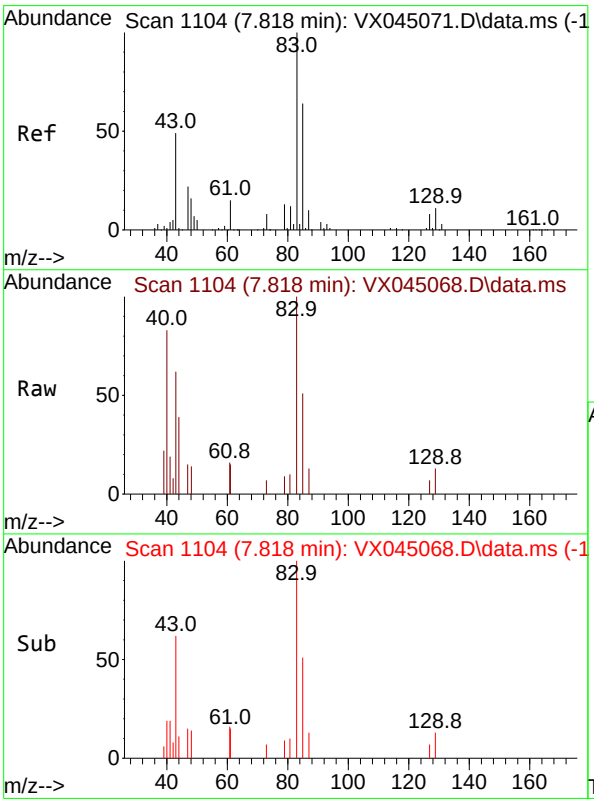
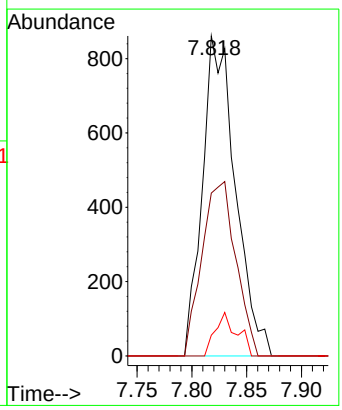
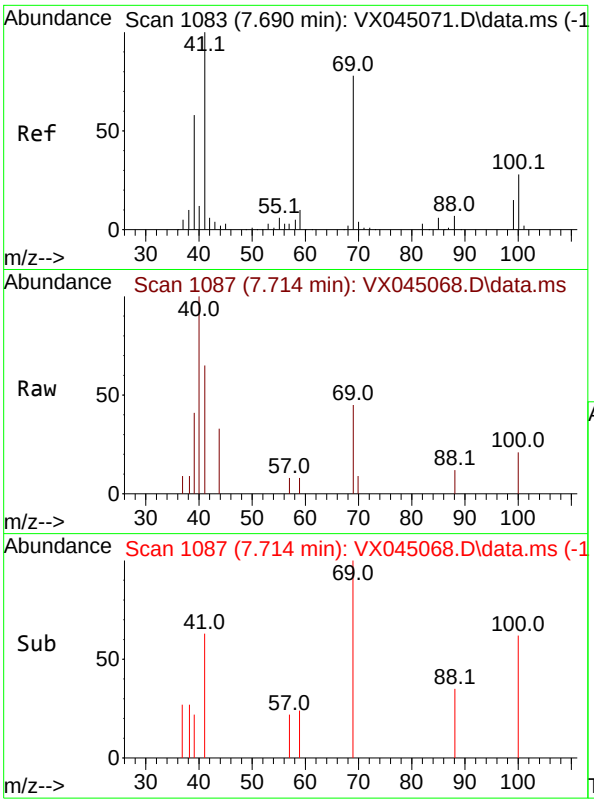



#47
Bromodichloromethane
Concen: 0.927 ug/l
RT: 7.818 min Scan# 1104
Delta R.T. 0.000 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 83 Resp: 1802

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 50.9 | 51.1 | 76.7# |
| 127 | 6.5 | 6.4 | 9.6 |

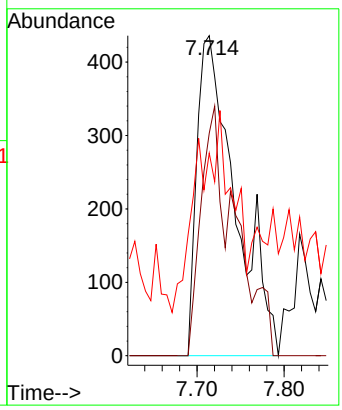





#48
Methyl methacrylate
Concen: 0.825 ug/l m
RT: 7.714 min Scan# 1
Delta R.T. 0.024 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 41 Resp: 132

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 41.4 | 63.0 | 94.6# |
| 39 | 20.7 | 47.5 | 71.3# |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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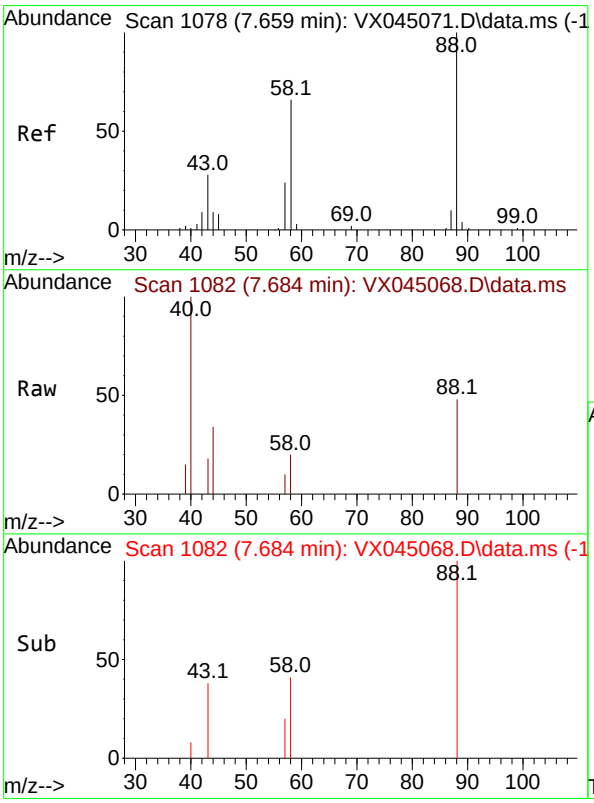
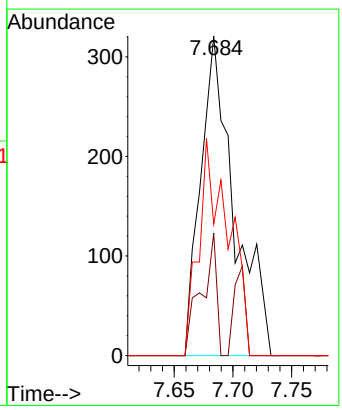
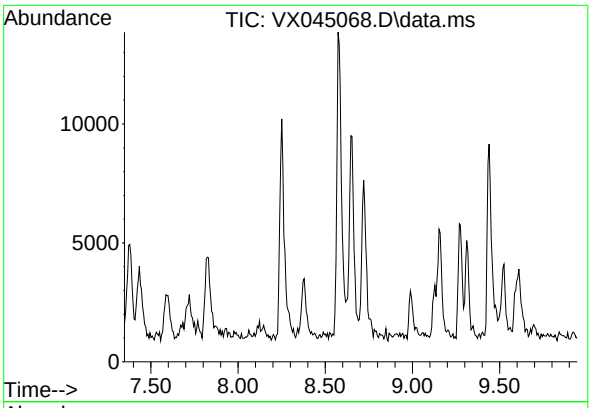



#49
1,4-Dioxane
Concen: 18.144 ug/l
RT: 7.684 min Scan# 1082
Delta R.T. 0.024 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 88 Resp: 639

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 17.2 | 28.7 | 43.1# |
| 58 | 59.9 | 55.8 | 83.8 |






#50
Toluene-d8
Concen: 0.000 ug/l
Expected RT: 8.65 min

Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

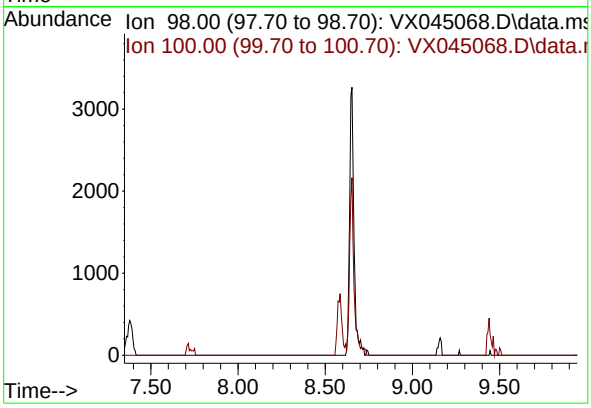
Tgt Ion: 98

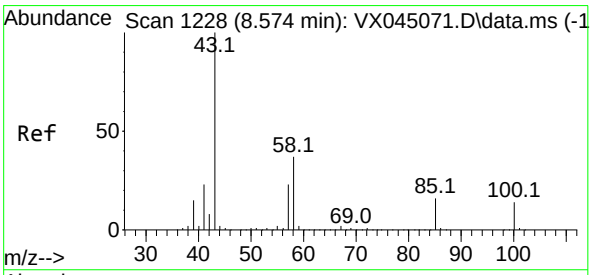
| Sig | Exp Ratio |
|---|---|
| 98 | 100 |
| 100 | 65.0 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

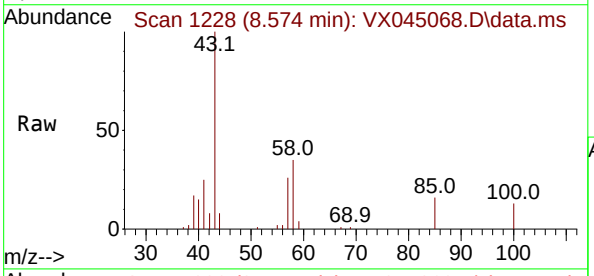


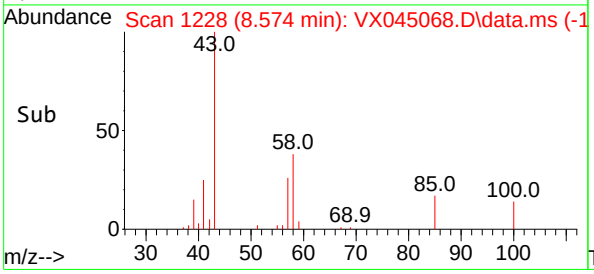



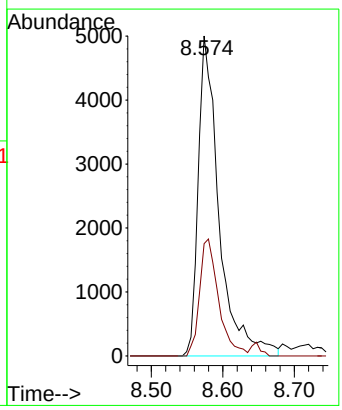

#51
4-Methyl-2-Pentanone
Concen: 4.567 ug/l
RT: 8.574 min Scan# 1228
Delta R.T. 0.000 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

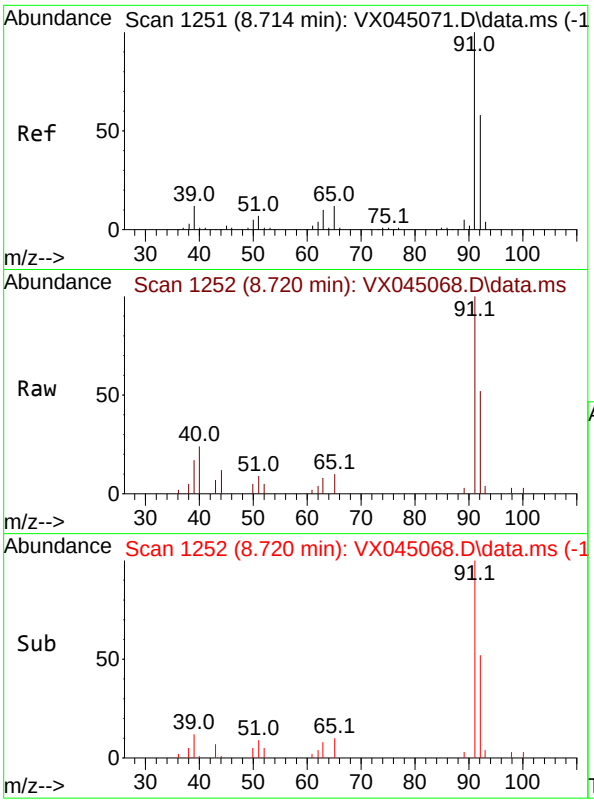
Tgt Ion: 43 Resp: 10091

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 33.5 | 29.2 | 43.8 |



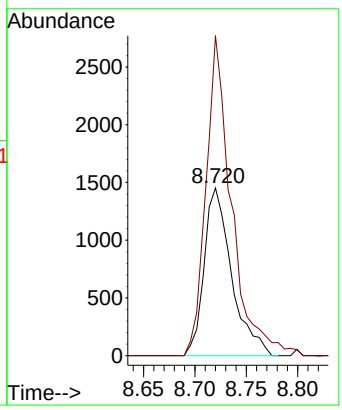






#52
Toluene
Concen: 0.841 ug/l
RT: 8.720 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 92 Resp: 270

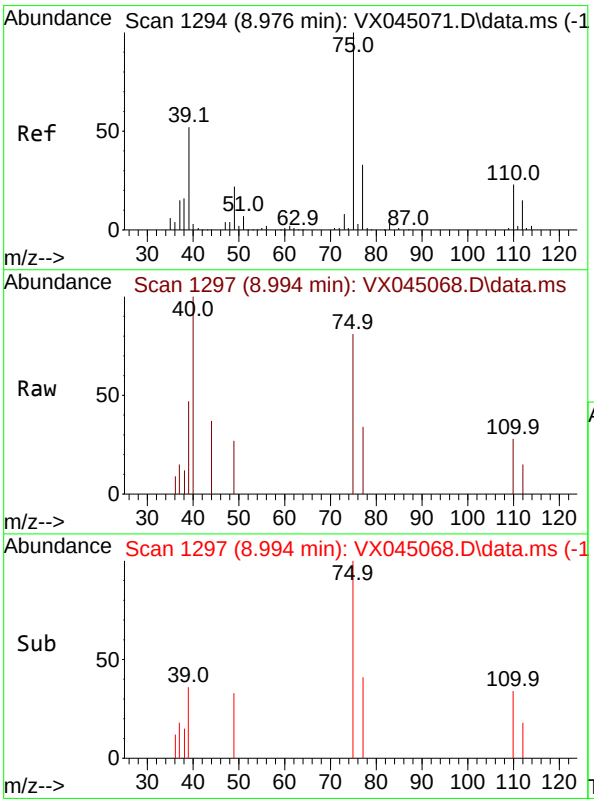
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 177.7 | 138.9 | 208.3 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

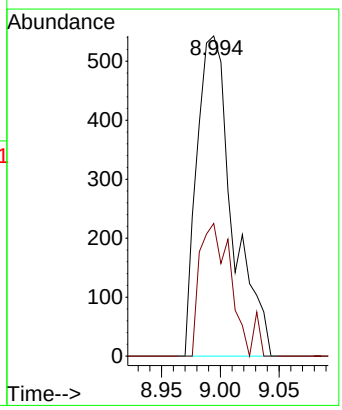
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

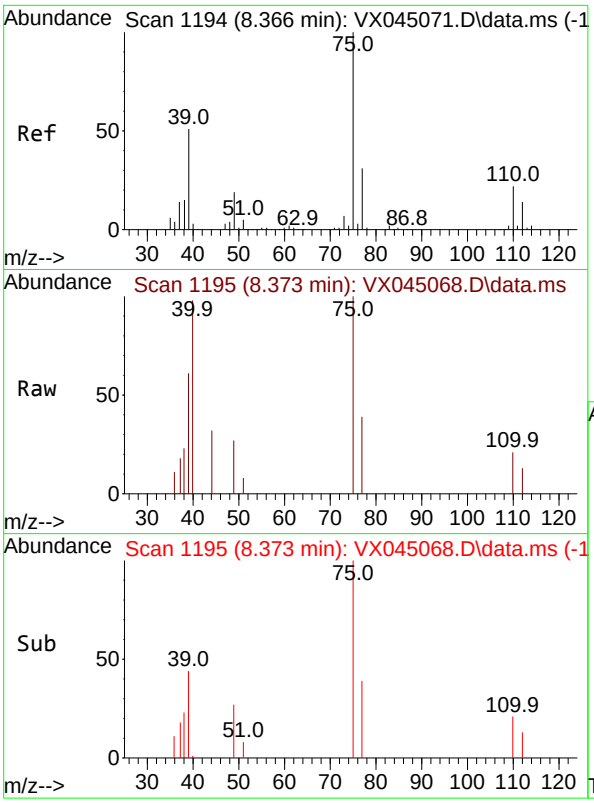



#53
t-1,3-Dichloropropene
Concen: 0.700 ug/l
RT: 8.994 min Scan# 1297
Delta R.T. 0.018 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 75 Resp: 1147

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 41.4 | 26.5 | 39.7# |

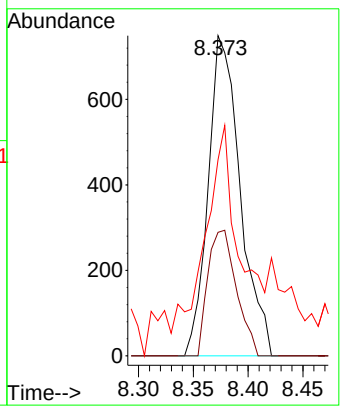





#54
cis-1,3-Dichloropropene
Concen: 0.804 ug/l
RT: 8.373 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 75 Resp: 152

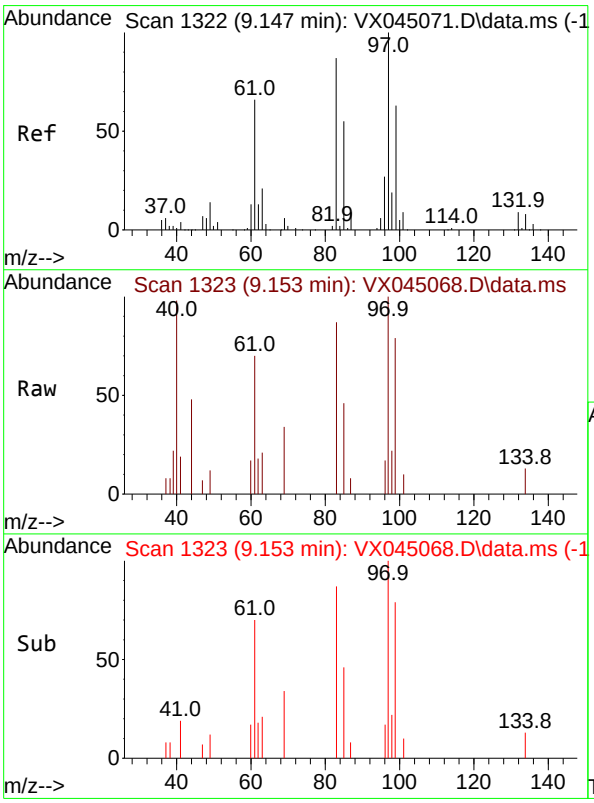
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 38.6 | 24.7 | 37.1# |
| 39 | 45.1 | 40.7 | 61.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

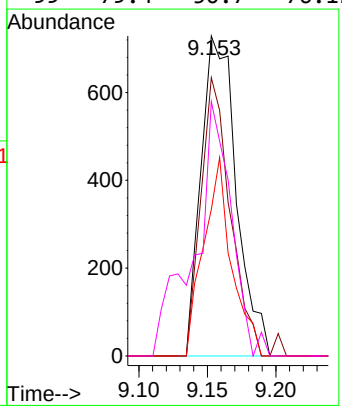
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

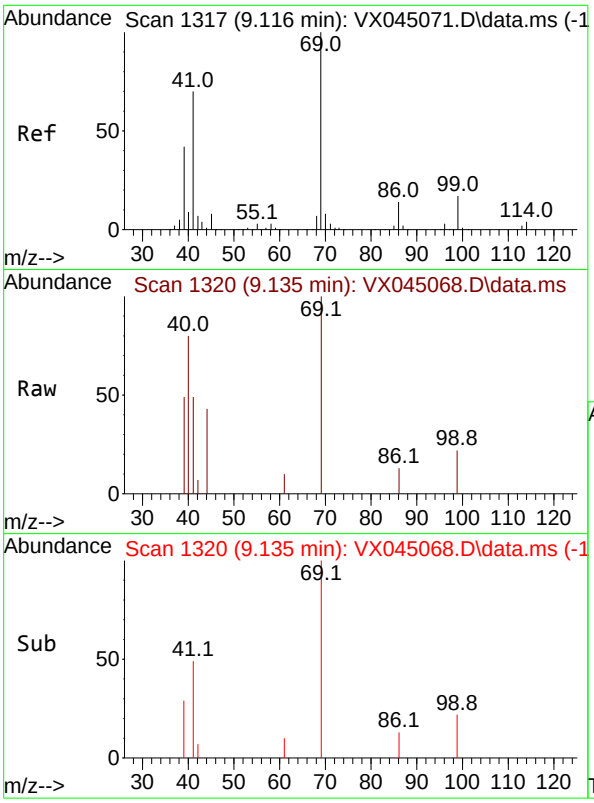



#55
1,1,2-Trichloroethane
Concen: 1.004 ug/l
RT: 9.153 min Scan# 1323
Delta R.T. 0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 97 Resp: 1306

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 87.0 | 69.4 | 104.2 |
| 85 | 45.8 | 44.1 | 66.1 |
| 99 | 79.4 | 50.7 | 76.1# |

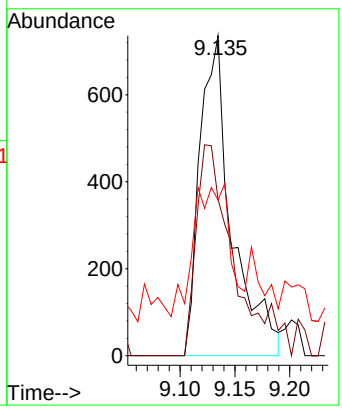





#56
Ethyl methacrylate
Concen: 0.748 ug/l
RT: 9.135 min Scan# 1
Delta R.T. 0.018 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 69 Resp: 149

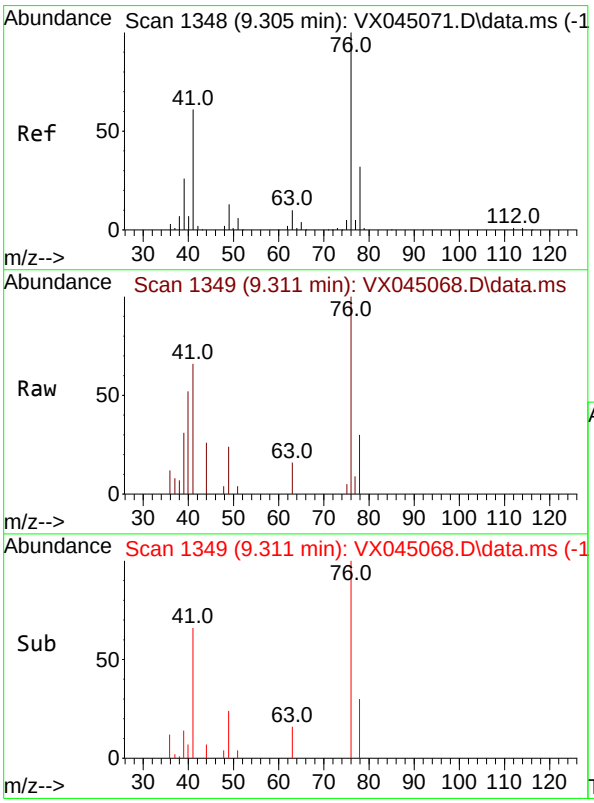
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 71.5 | 57.0 | 85.4 |
| 39 | 54.6 | 34.2 | 51.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

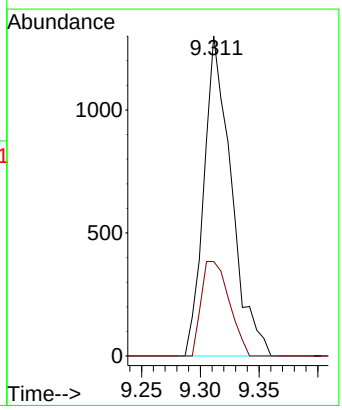
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

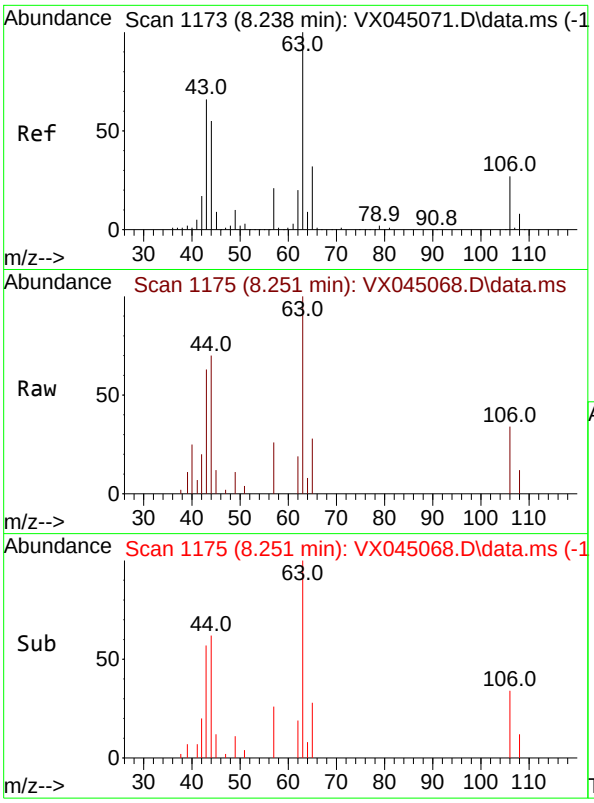



#57
1,3-Dichloropropane
Concen: 0.920 ug/l
RT: 9.311 min Scan# 1349
Delta R.T. 0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 76 Resp: 2112

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 30.1 | 25.5 | 38.3 |

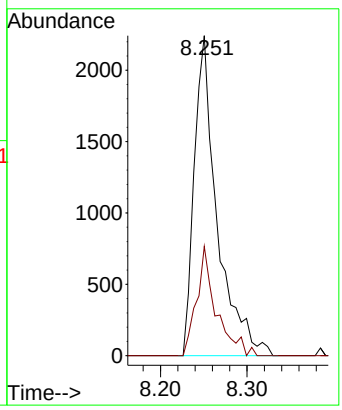





#58
2-Chloroethyl Vinyl ether
Concen: 4.320 ug/l
RT: 8.251 min Scan# 1
Delta R.T. 0.012 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 63 Resp: 411

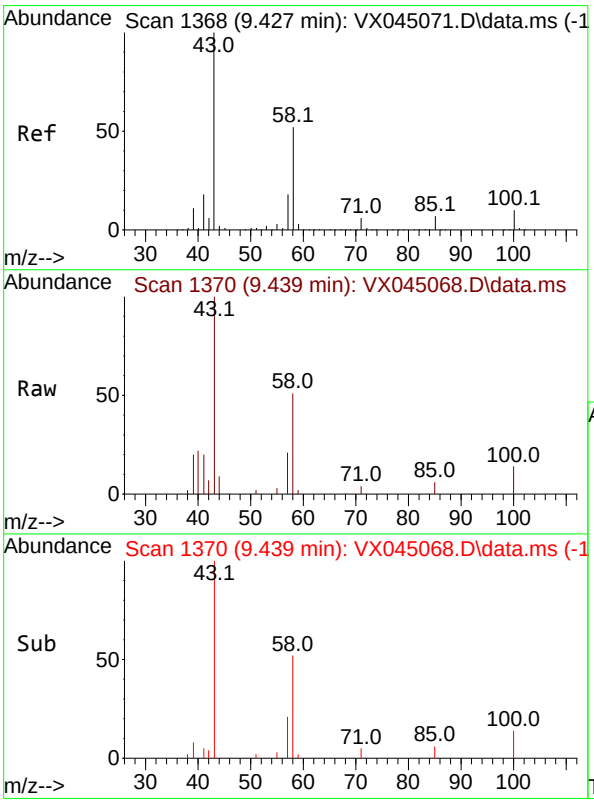
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 29.2 | 21.5 | 32.3 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

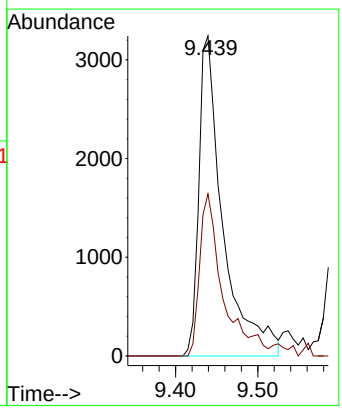
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

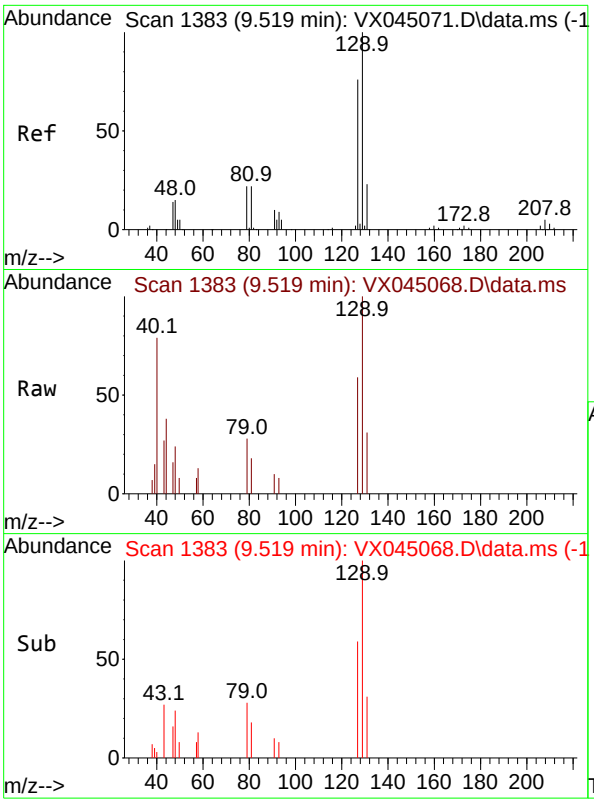



#59
2-Hexanone
Concen: 4.153 ug/l
RT: 9.439 min Scan# 1370
Delta R.T. 0.012 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 43 Resp: 6582

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 48.7 | 25.9 | 77.6 |

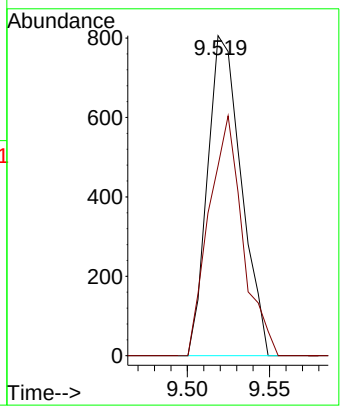





#60
Dibromochloromethane
Concen: 0.835 ug/l
RT: 9.519 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion:129 Resp: 115

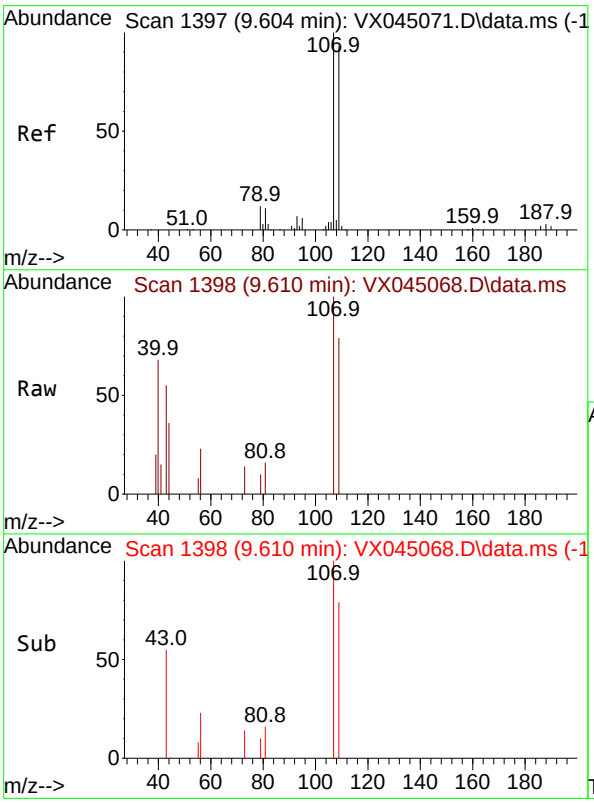
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 75.2 | 38.5 | 115.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

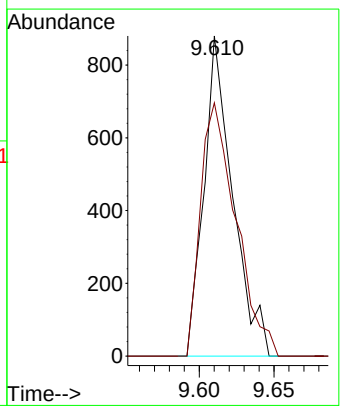
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

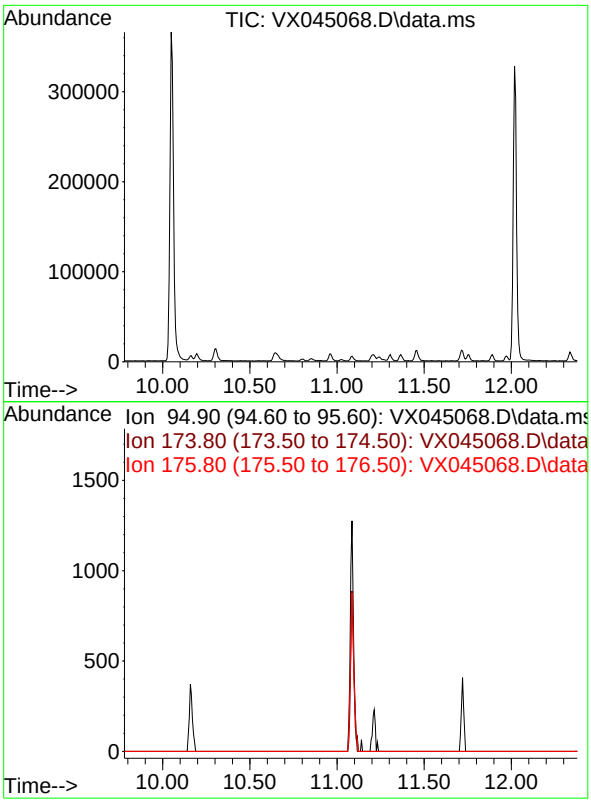



#61
1,2-Dibromoethane
Concen: 0.890 ug/l
RT: 9.610 min Scan# 1398
Delta R.T. 0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion:107 Resp: 1174

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 97.6 | 76.1 | 114.1 |






#62
4-Bromofluorobenzene
Concen: 0.000 ug/l
Expected RT: 11.08 min

Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

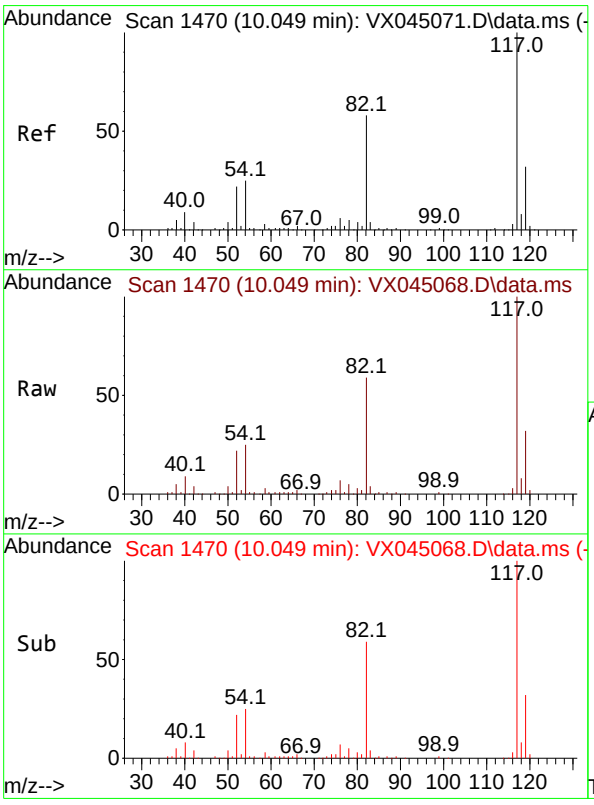
Tgt Ion: 95

| Sig | Exp Ratio |
|---|---|
| 95 | 100 |
| 174 | 74.1 |
| 176 | 70.7 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

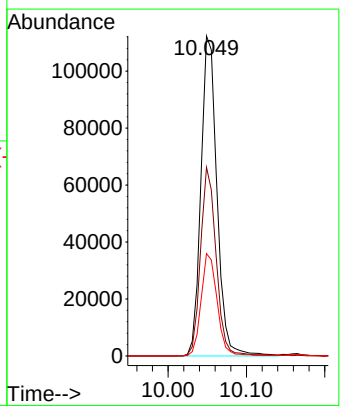
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

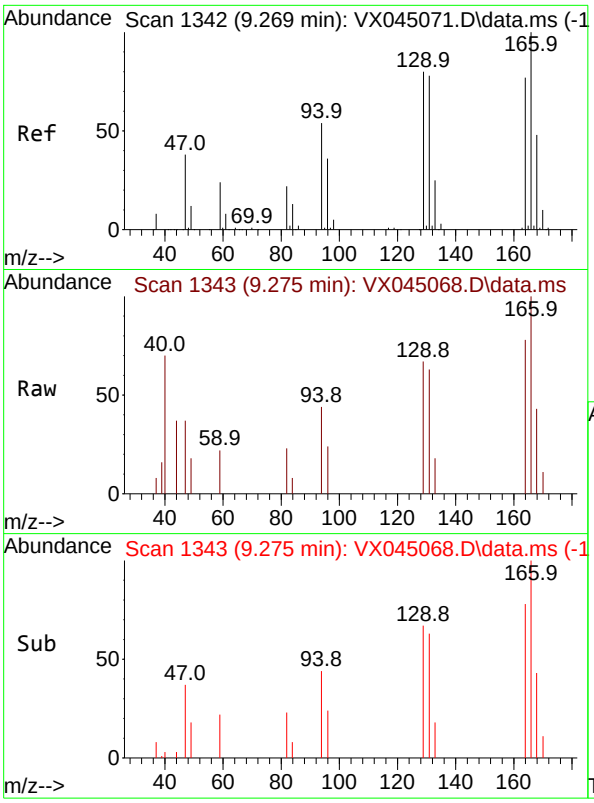



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.049 min Scan# 1470
Delta R.T. 0.000 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion:117 Resp: 159886

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 59.0 | 46.3 | 69.5 |
| 119 | 32.0 | 25.7 | 38.5 |

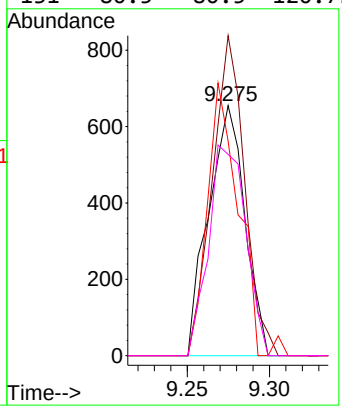





#64
Tetrachloroethene
Concen: 0.986 ug/l
RT: 9.275 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion:164 Resp: 100

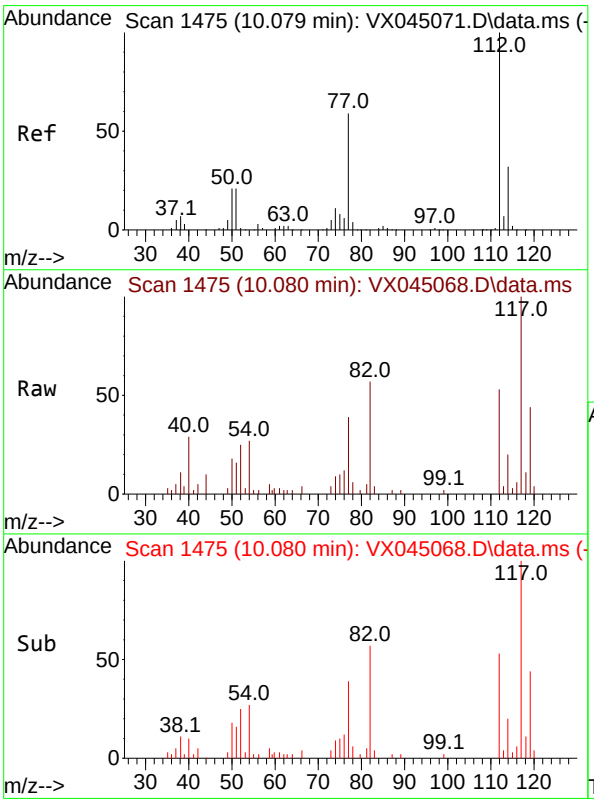
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 127.9 | 103.6 | 155.4 |
| 129 | 85.8 | 82.7 | 124.1 |
| 131 | 80.5 | 80.5 | 120.7# |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

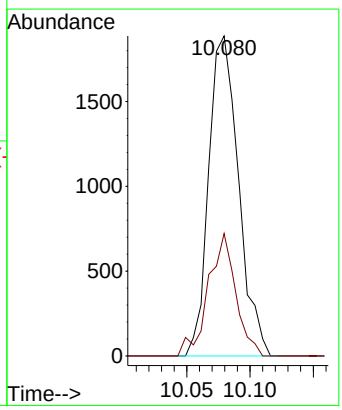
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

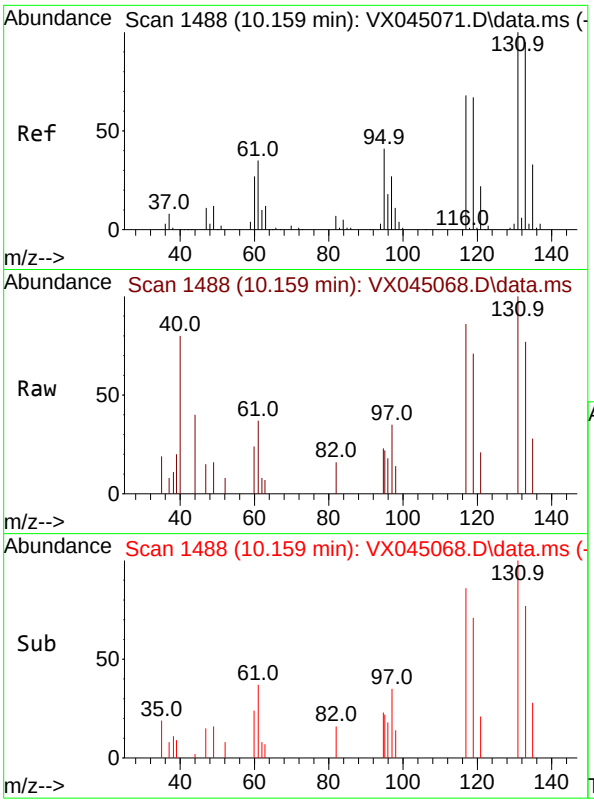



#65
Chlorobenzene
Concen: 0.908 ug/l
RT: 10.080 min Scan# 1475
Delta R.T. 0.000 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion:112 Resp: 3094

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 38.3 | 26.0 | 39.0 |






#66
1,1,1,2-Tetrachloroethane
Concen: 0.978 ug/l
RT: 10.159 min Scan# 14
Delta R.T. 0.000 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

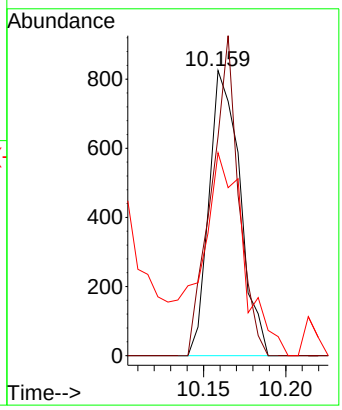
Tgt Ion:131 Resp: 107

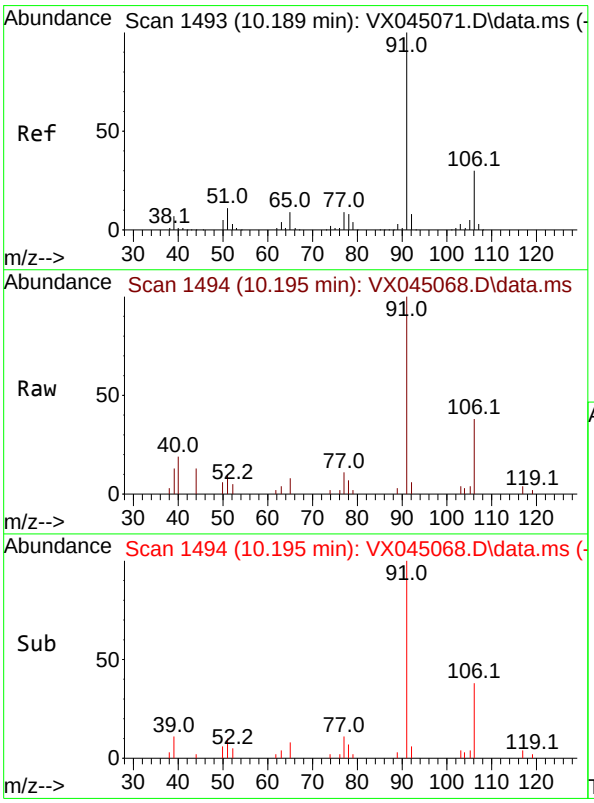
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 98.6 | 48.6 | 145.9 |
| 119 | 0.0 | 33.9 | 101.7# |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

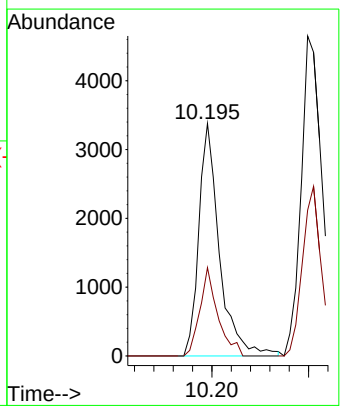


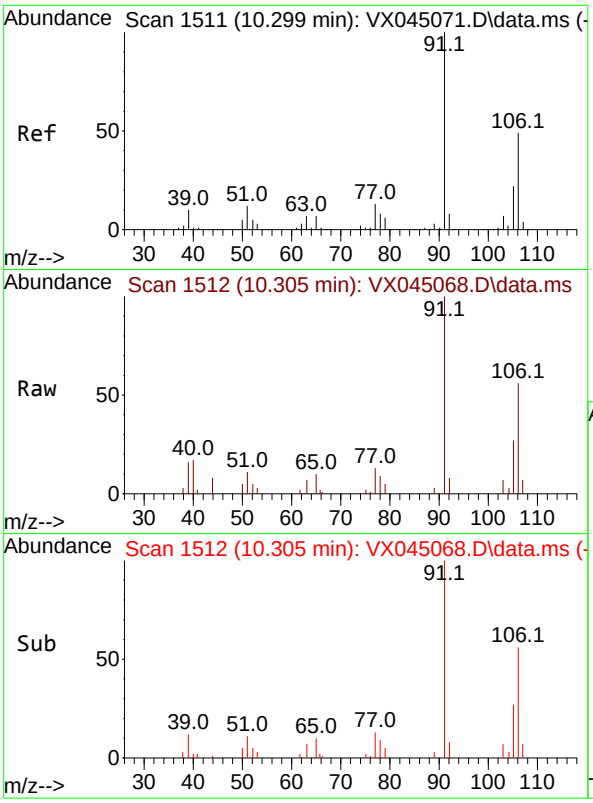




#67
Ethyl Benzene
Concen: 0.846 ug/l
RT: 10.195 min Scan# 1494
Delta R.T. 0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 91 Resp: 5008

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 38.0 | 23.9 | 35.9# |

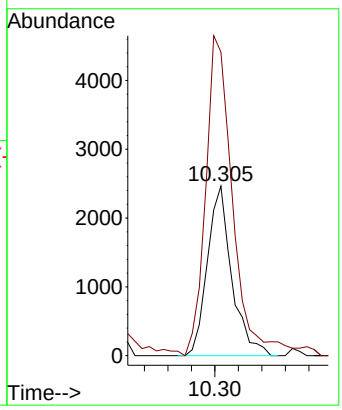





#68
m/p-Xylenes
Concen: 1.630 ug/l
RT: 10.305 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion:106 Resp: 355

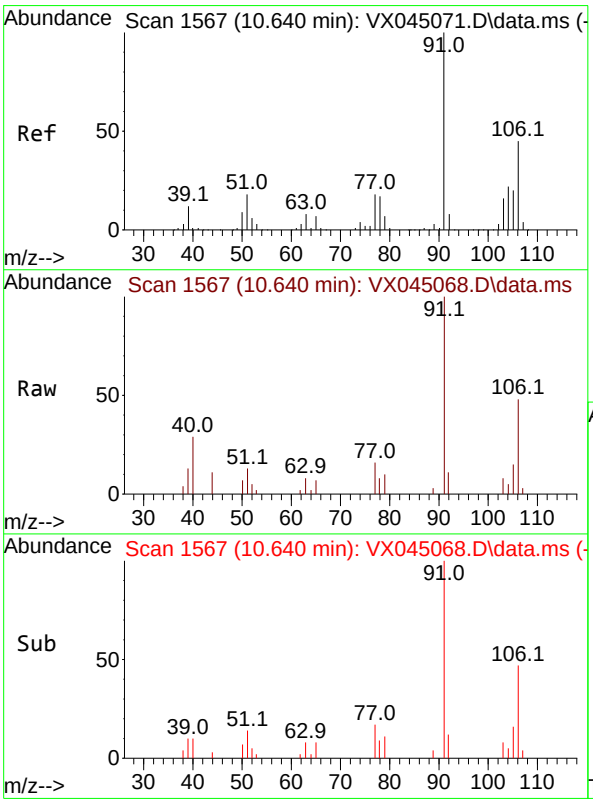
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 211.2 | 165.4 | 248.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

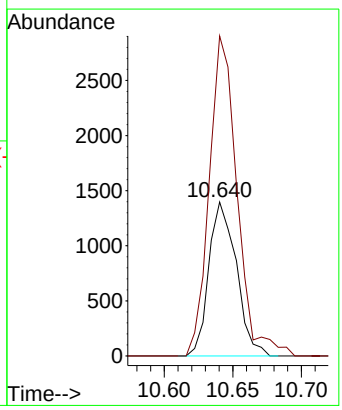
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

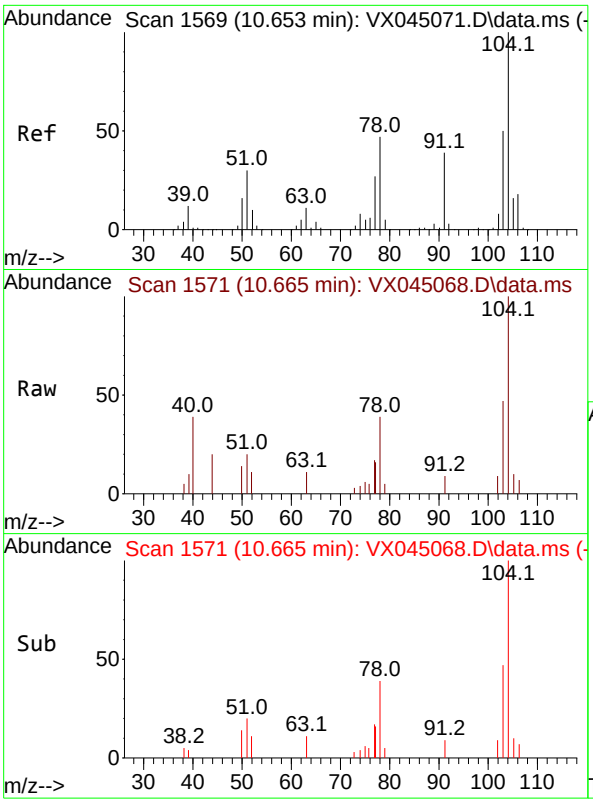



#69
o-Xylene
Concen: 0.891 ug/l
RT: 10.640 min Scan# 1567
Delta R.T. 0.000 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion:106 Resp: 1949

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 211.0 | 109.9 | 329.6 |

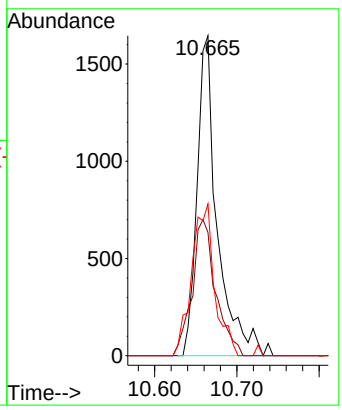





#70
Styrene
Concen: 0.802 ug/l
RT: 10.665 min Scan# 1
Delta R.T. 0.012 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion:104 Resp: 281

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 49.7 | 42.2 | 63.4 |
| 103 | 53.6 | 43.8 | 65.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

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Reviewed By :John Carlone 02/28/2025
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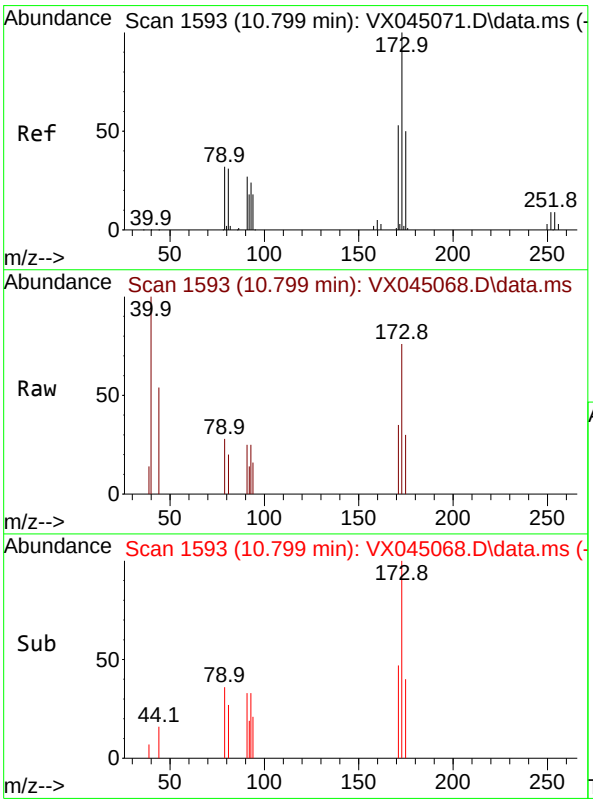
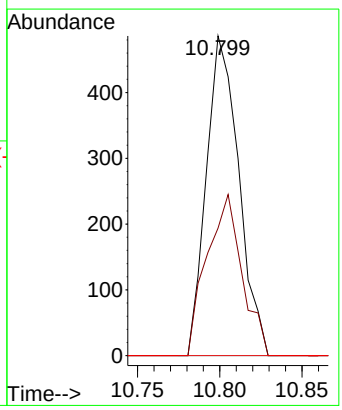
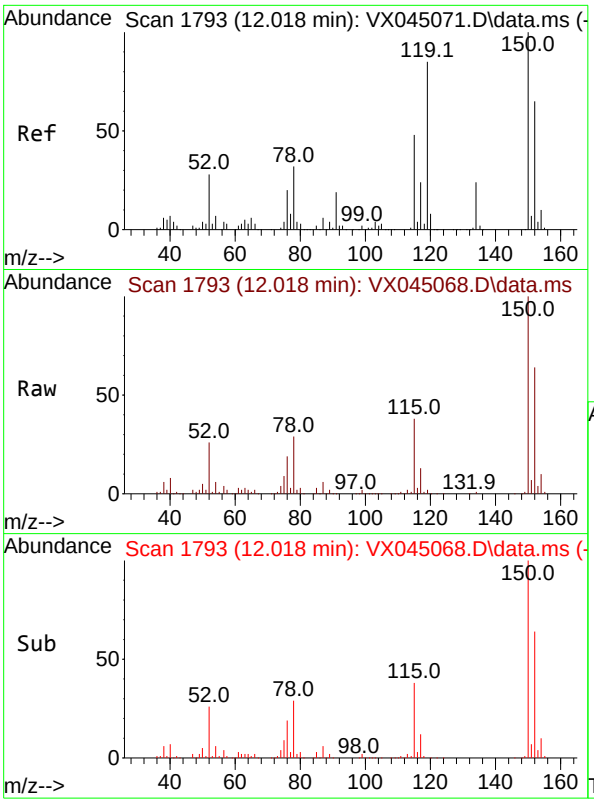



#71
Bromoform
Concen: 0.768 ug/l
RT: 10.799 min Scan# 1593
Delta R.T. 0.000 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion:173 Resp: 667

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 54.7 | 24.6 | 73.6 |
| 254 | 0.0 | 0.0 | 0.0 |

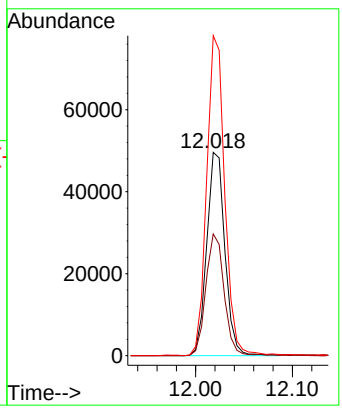





#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.018 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion:152 Resp: 6484

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 60.3 | 44.2 | 132.6 |
| 150 | 157.1 | 0.0 | 349.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

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Reviewed By :John Carlone 02/28/2025
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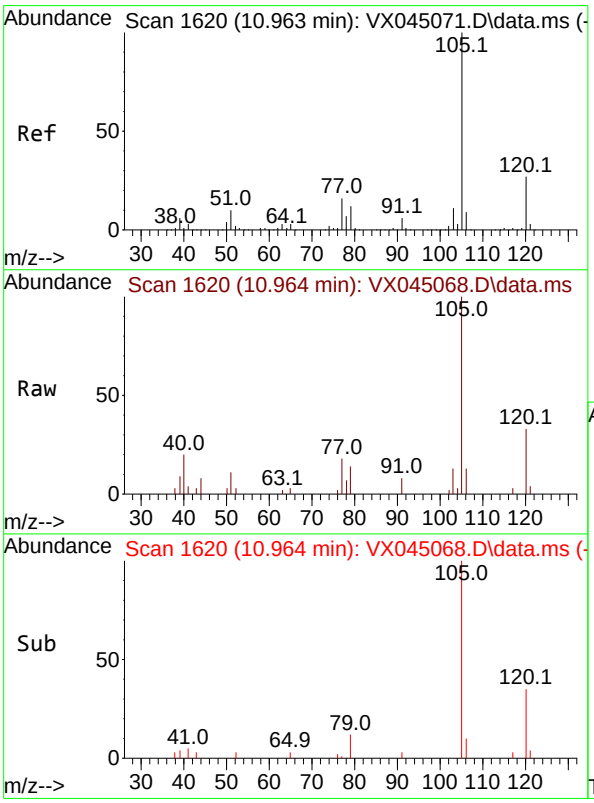
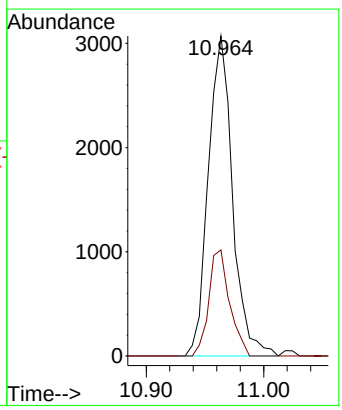
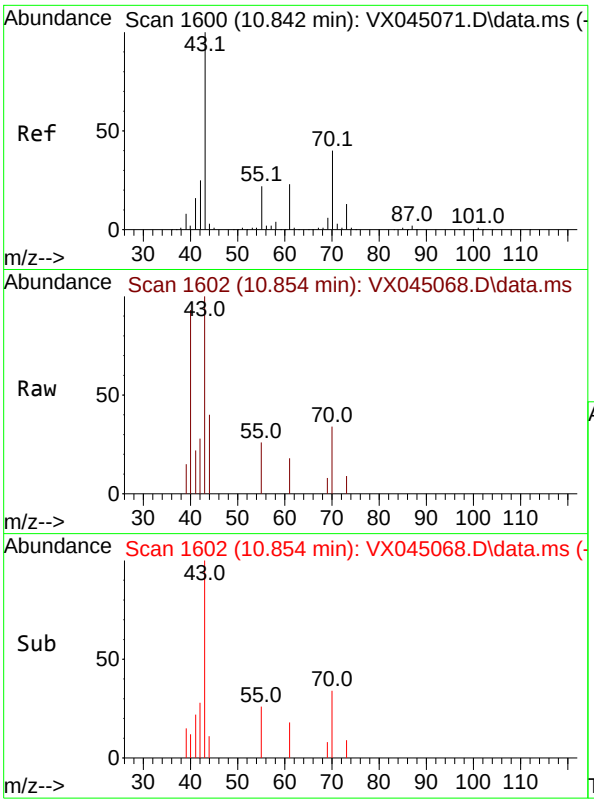



#73
Isopropylbenzene
Concen: 0.858 ug/l
RT: 10.964 min Scan# 1620
Delta R.T. 0.000 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion:105 Resp: 4405

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 28.5 | 13.2 | 39.5 |

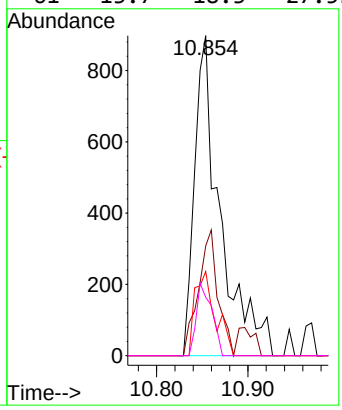





#74
N-amyl acetate
Concen: 0.732 ug/l
RT: 10.854 min Scan# 1
Delta R.T. 0.012 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 43 Resp: 175

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 30.1 | 31.8 | 47.6# |
| 55 | 20.9 | 18.3 | 27.5 |
| 61 | 13.7 | 18.3 | 27.5# |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

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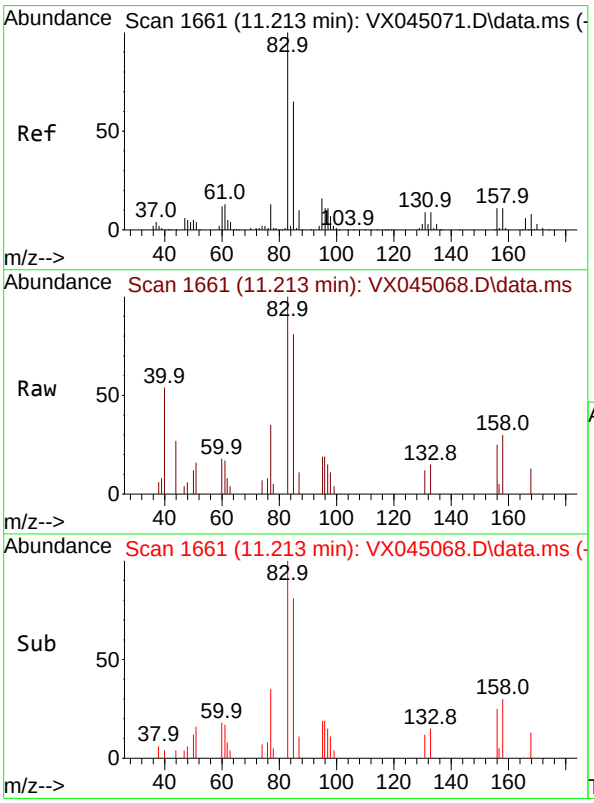
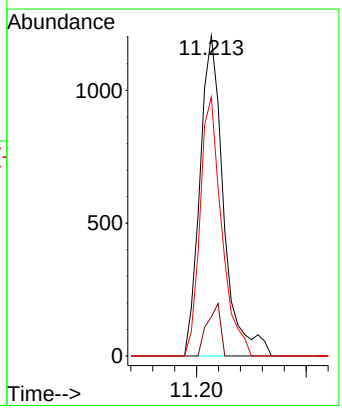
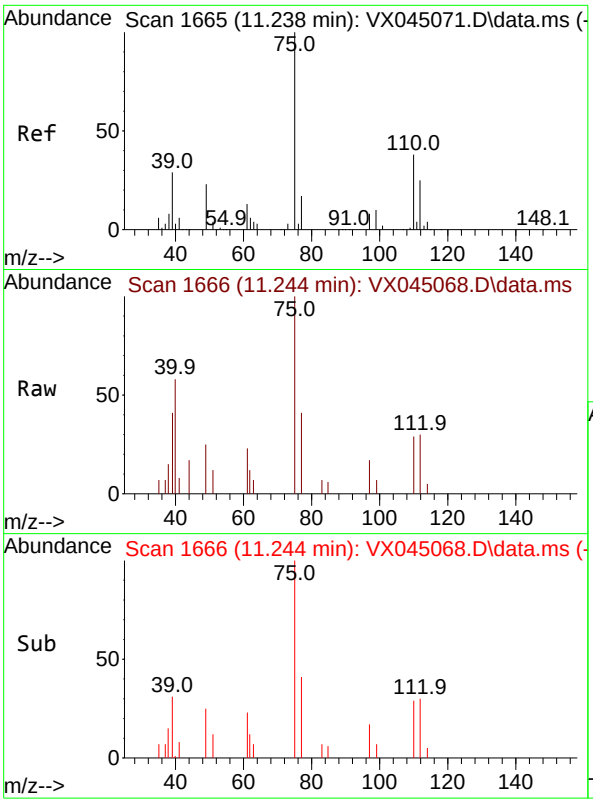



#75
1,1,2,2-Tetrachloroethane
Concen: 0.954 ug/l
RT: 11.213 min Scan# 1661
Delta R.T. 0.000 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 83 Resp: 1809

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 9.2 | 4.5 | 13.4 |
| 85 | 73.7 | 31.7 | 95.1 |

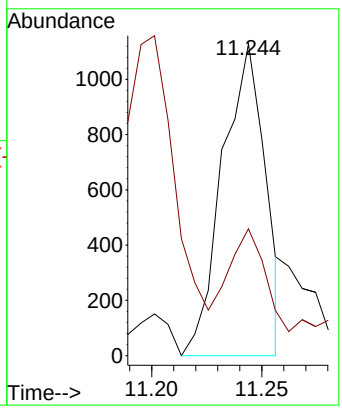





#76
1,2,3-Trichloropropane
Concen: 1.015 ug/l m
RT: 11.244 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 75 Resp: 153

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 40.0 | 20.7 | 62.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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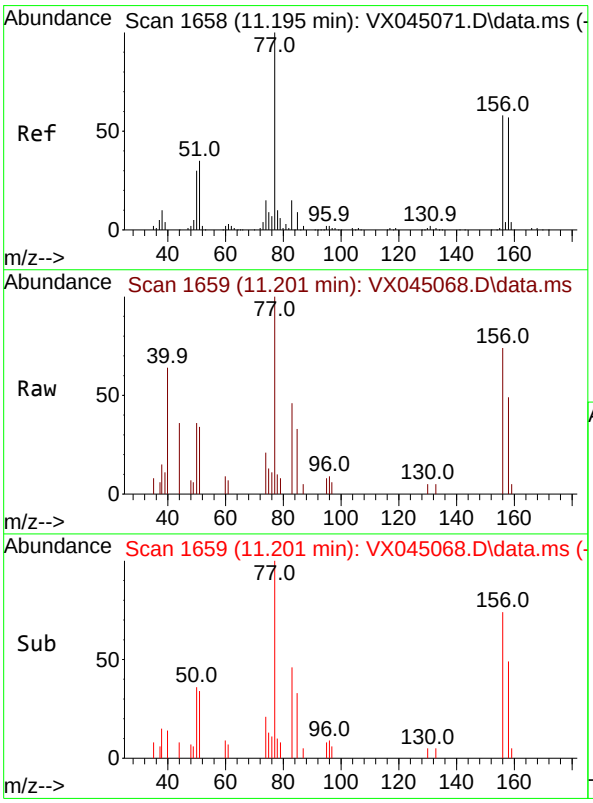
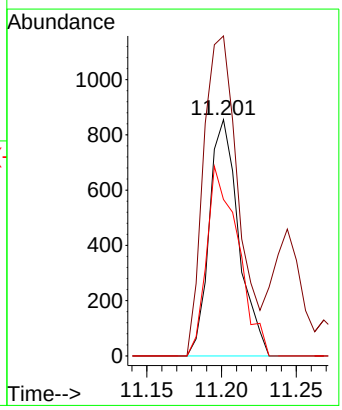
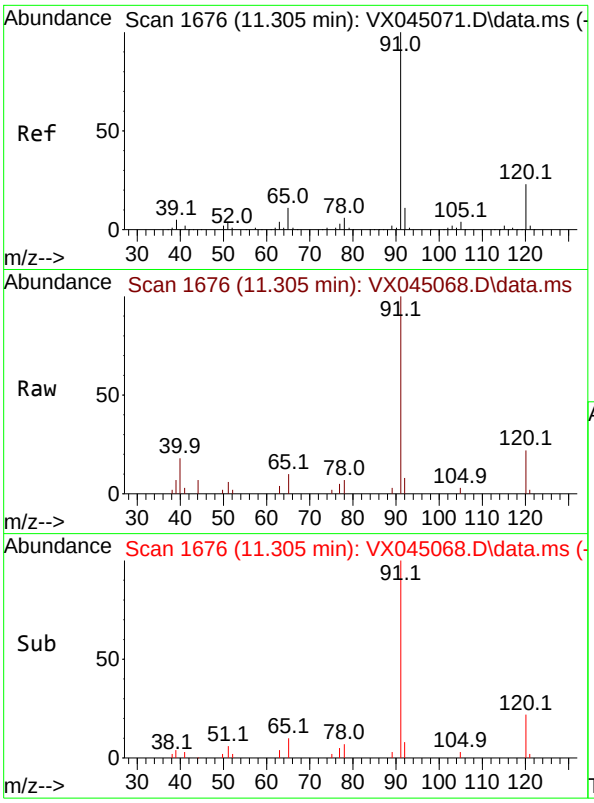



#77
Bromobenzene
Concen: 0.972 ug/l
RT: 11.201 min Scan# 1659
Delta R.T. 0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion:156 Resp: 1166

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 159.8 | 85.8 | 257.4 |
| 158 | 86.2 | 48.4 | 145.2 |

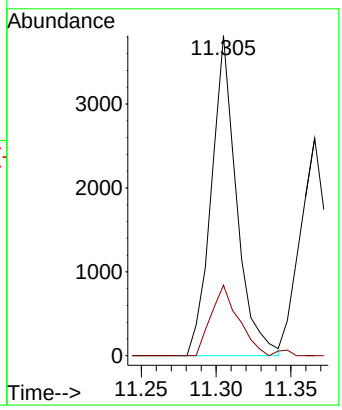





#78
n-propylbenzene
Concen: 0.773 ug/l
RT: 11.305 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 91 Resp: 447

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 23.9 | 11.2 | 33.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

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Reviewed By :John Carlone 02/28/2025
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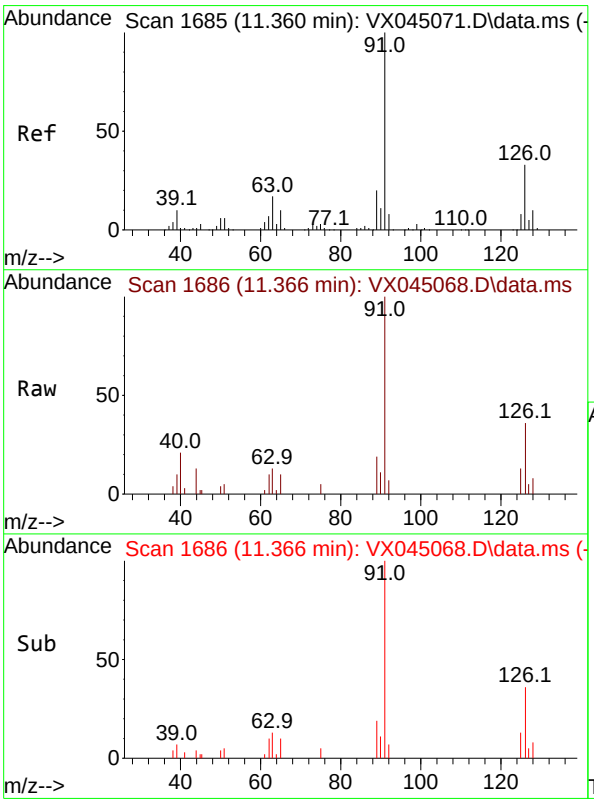
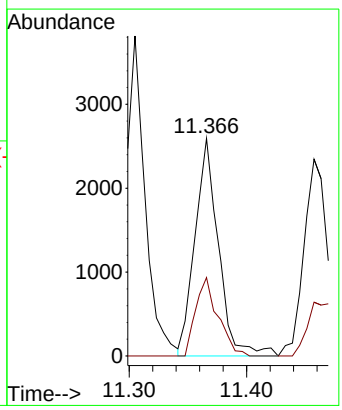
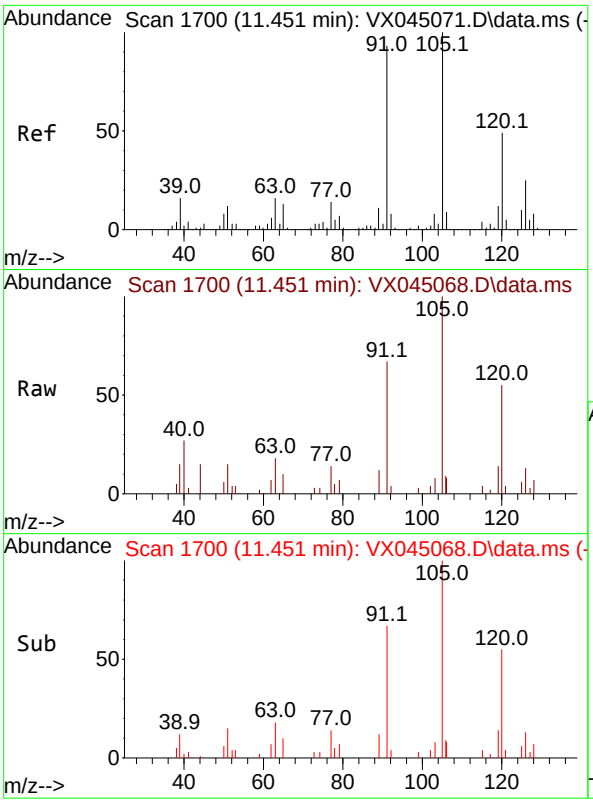



#79
2-Chlorotoluene
Concen: 0.986 ug/l
RT: 11.366 min Scan# 1686
Delta R.T. 0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 91 Resp: 3616

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 34.2 | 16.4 | 49.4 |

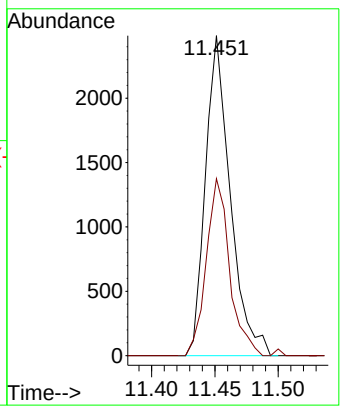





#80
1,3,5-Trimethylbenzene
Concen: 0.815 ug/l
RT: 11.451 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion:105 Resp: 338

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 52.2 | 24.1 | 72.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

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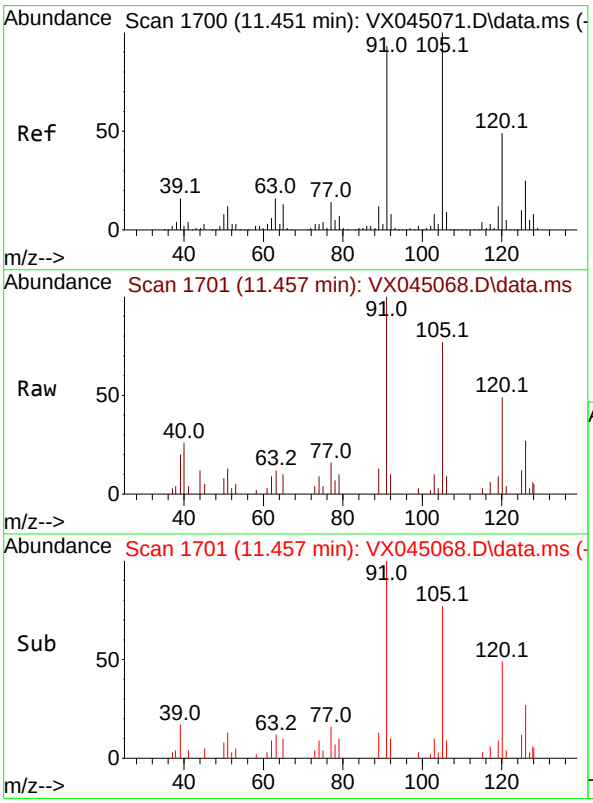
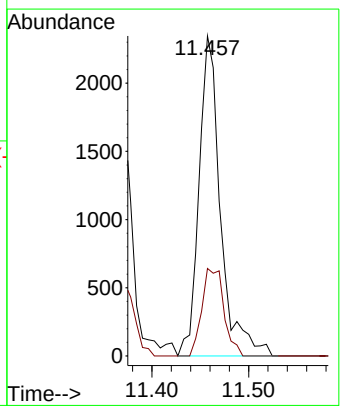
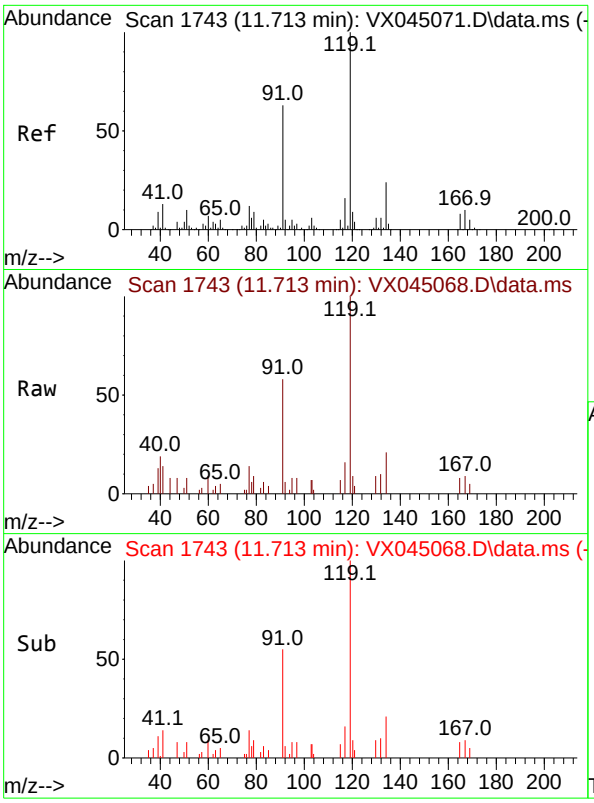



#82
4-Chlorotoluene
Concen: 0.904 ug/l
RT: 11.457 min Scan# 1701
Delta R.T. 0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 91 Resp: 3631

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 28.0 | 14.1 | 42.4 |

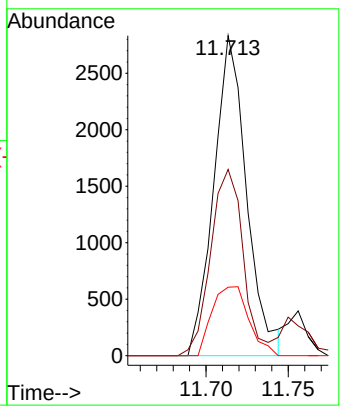





#83
tert-Butylbenzene
Concen: 0.929 ug/l
RT: 11.713 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion:119 Resp: 392

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 57.7 | 30.7 | 92.1 |
| 134 | 24.2 | 11.7 | 35.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

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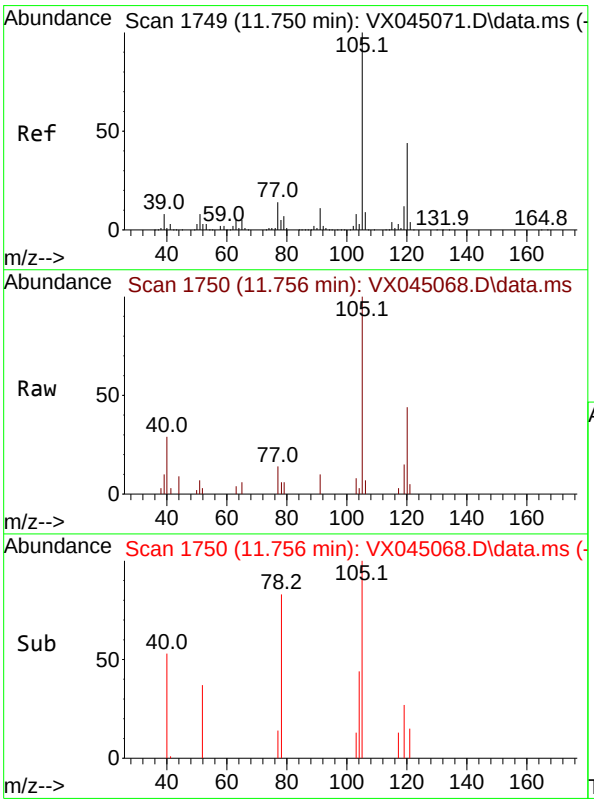
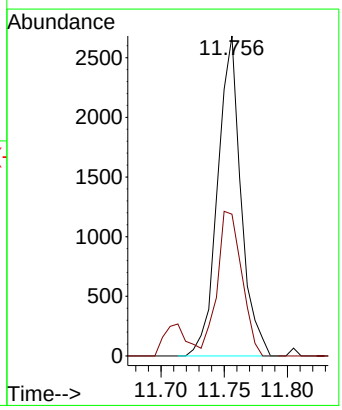
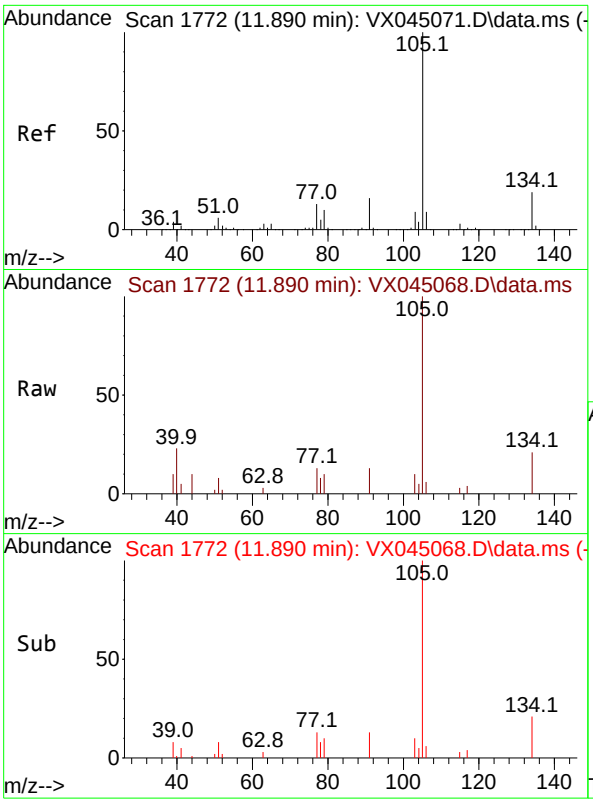



#84
1,2,4-Trimethylbenzene
Concen: 0.827 ug/l
RT: 11.756 min Scan# 1750
Delta R.T. 0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion:105 Resp: 3432

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 47.5 | 22.1 | 66.1 |

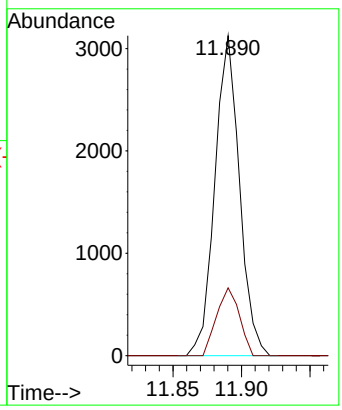





#85
sec-Butylbenzene
Concen: 0.752 ug/l
RT: 11.890 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion:105 Resp: 389

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.5 | 9.8 | 29.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

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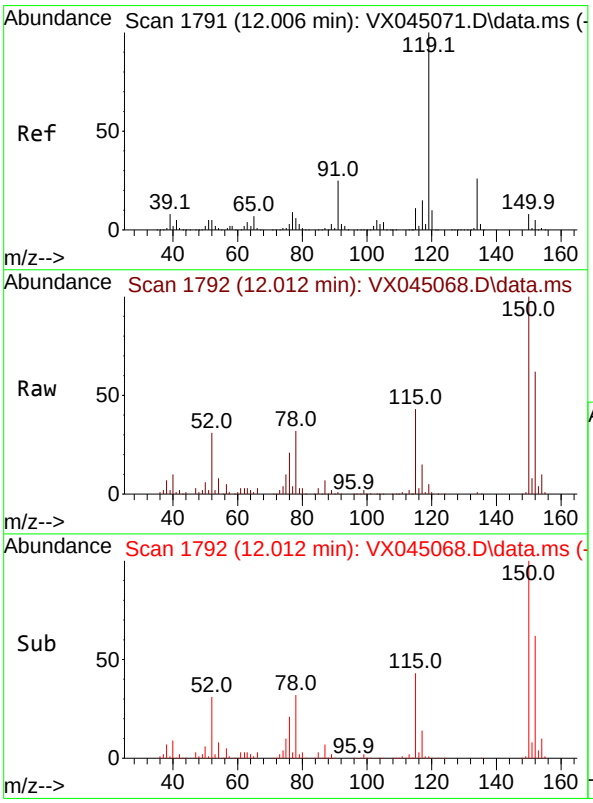
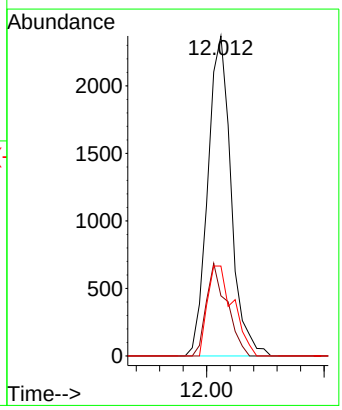
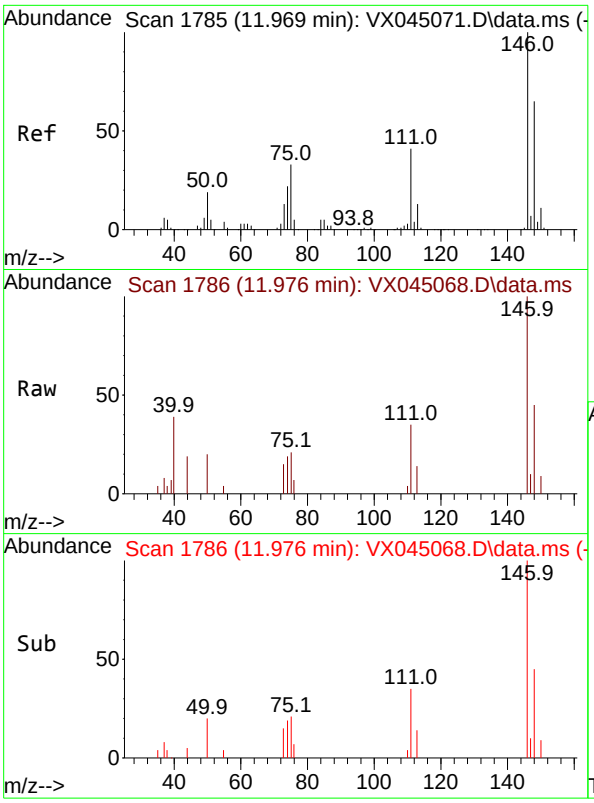



#86
p-Isopropyltoluene
Concen: 0.797 ug/l
RT: 12.012 min Scan# 1792
Delta R.T. 0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion:119 Resp: 3257

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.6 | 12.9 | 38.6 |
| 91 | 30.9 | 12.7 | 38.0 |

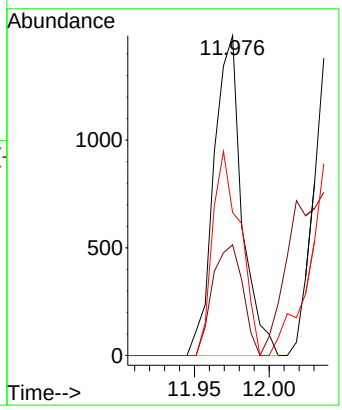





#87
1,3-Dichlorobenzene
Concen: 0.913 ug/l
RT: 11.976 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion:146 Resp: 194

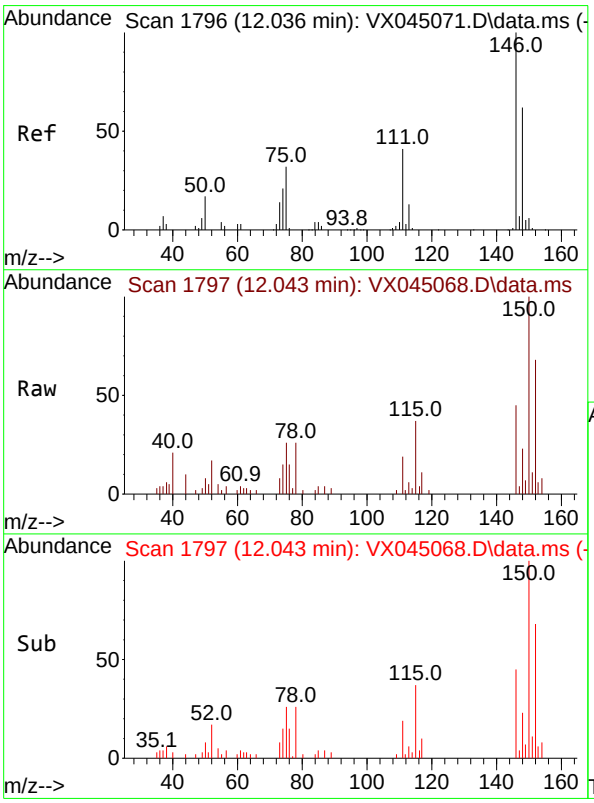
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 37.1 | 21.1 | 63.4 |
| 148 | 62.4 | 31.9 | 95.7 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

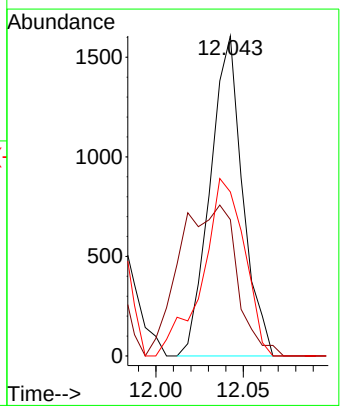
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

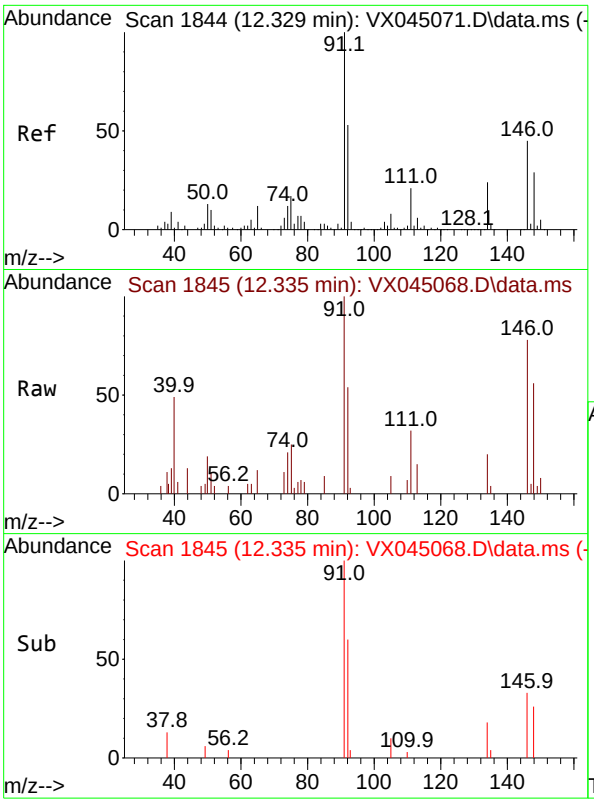



#88
1,4-Dichlorobenzene
Concen: 0.962 ug/l m
RT: 12.043 min Scan# 1797
Delta R.T. 0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion:146 Resp: 2082

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 34.7 | 20.2 | 60.5 |
| 148 | 58.4 | 31.9 | 95.9 |

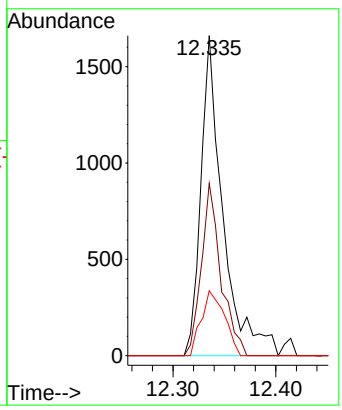





#89
n-Butylbenzene
Concen: 0.691 ug/l
RT: 12.335 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 91 Resp: 247

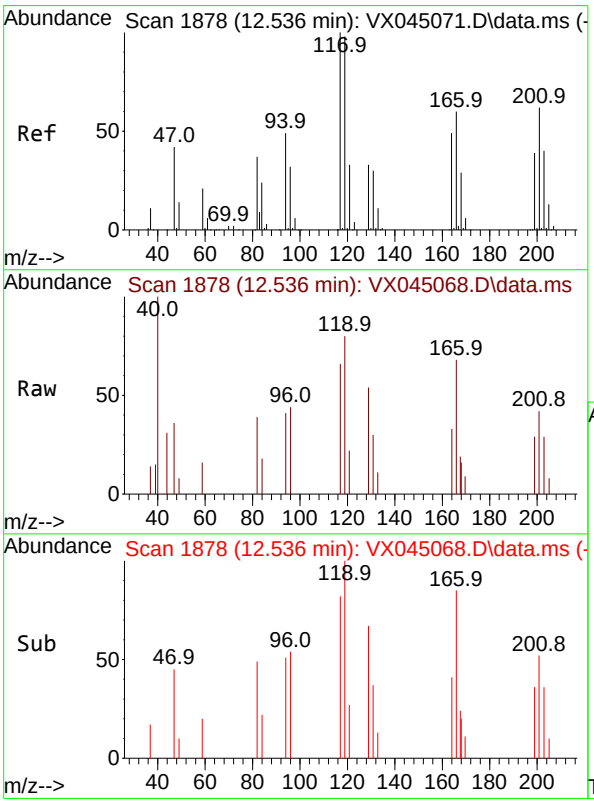
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 48.0 | 26.7 | 80.0 |
| 134 | 21.4 | 12.2 | 36.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

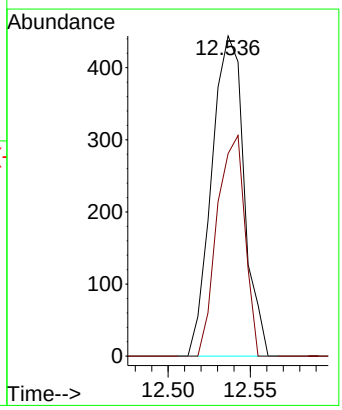
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

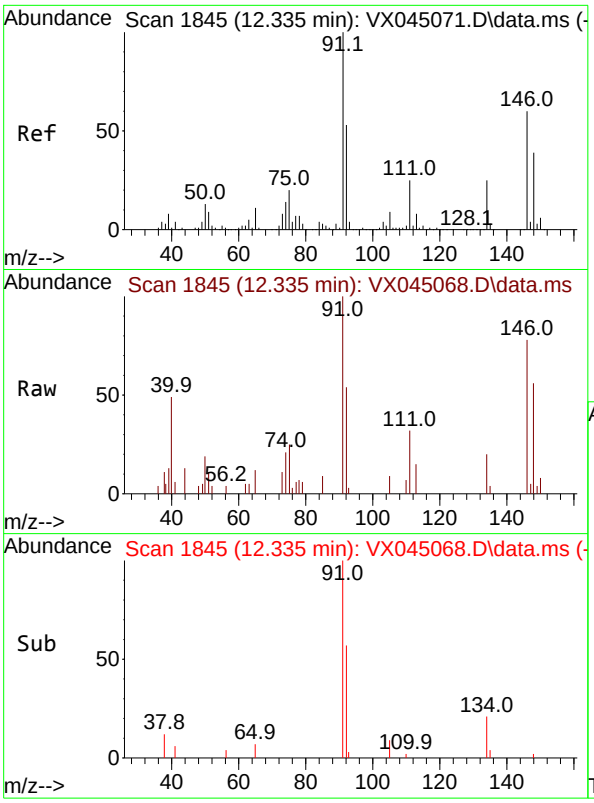



#90
Hexachloroethane
Concen: 0.805 ug/l
RT: 12.536 min Scan# 1878
Delta R.T. 0.000 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion:117 Resp: 609

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 58.9 | 31.9 | 95.9 |

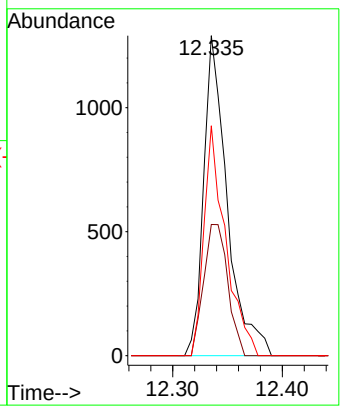





#91
1,2-Dichlorobenzene
Concen: 0.890 ug/l
RT: 12.335 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion:146 Resp: 191

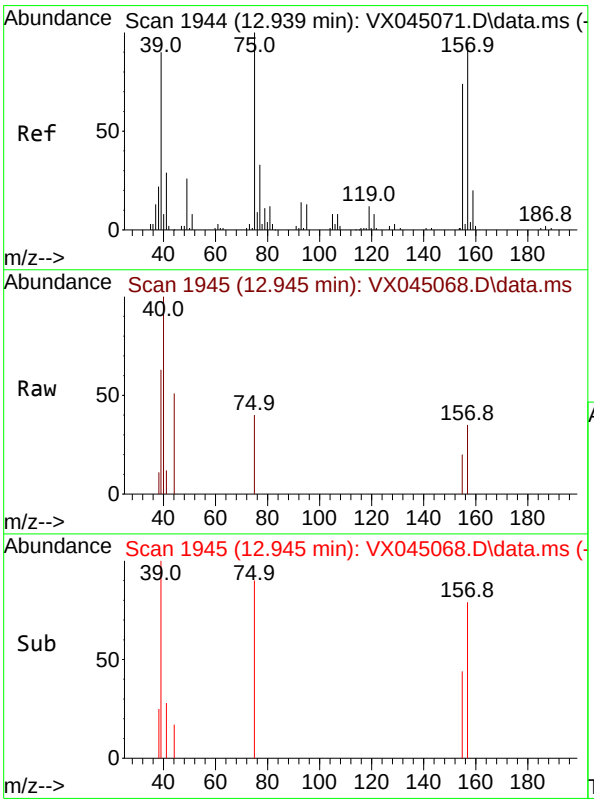
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.0 | 21.6 | 65.0 |
| 148 | 66.1 | 31.9 | 95.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

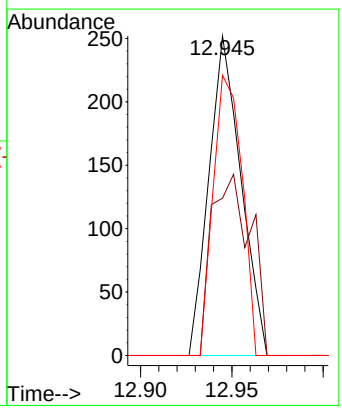
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

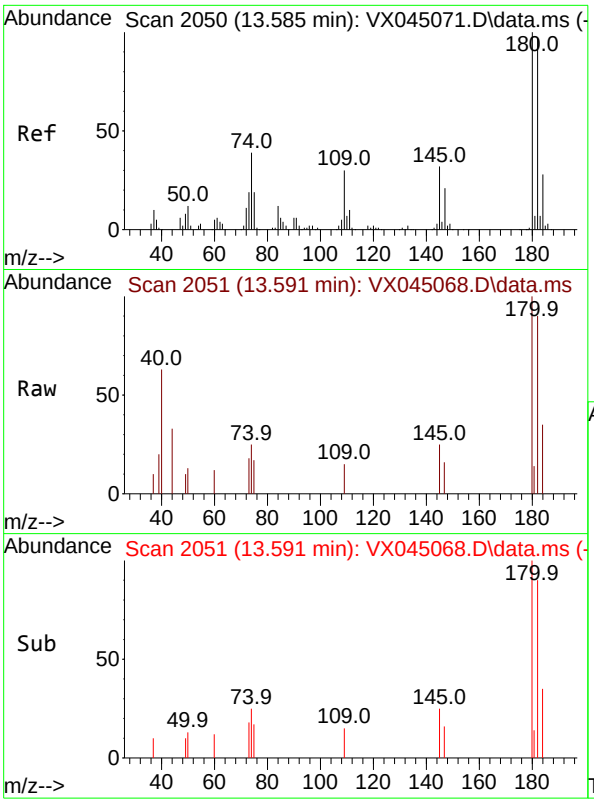



#92
1,2-Dibromo-3-Chloropropane
Concen: 0.859 ug/l
RT: 12.945 min Scan# 1945
Delta R.T. 0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion: 75 Resp: 308

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 69.2 | 39.6 | 118.7 |
| 157 | 78.6 | 51.1 | 153.4 |

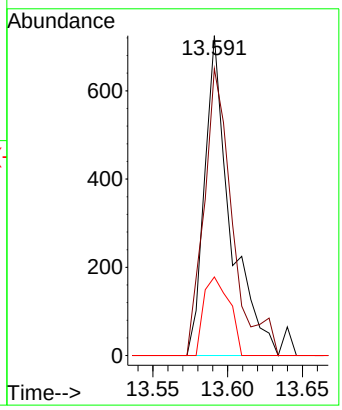





#93
1,2,4-Trichlorobenzene
Concen: 0.706 ug/l
RT: 13.591 min Scan# 2
Delta R.T. 0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion:180 Resp: 86

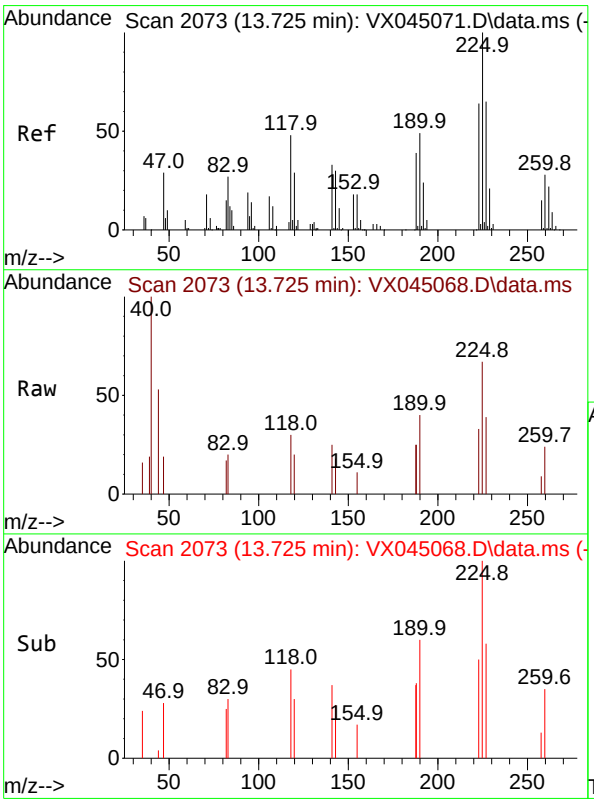
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 98.7 | 47.3 | 141.9 |
| 145 | 24.5 | 16.3 | 48.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

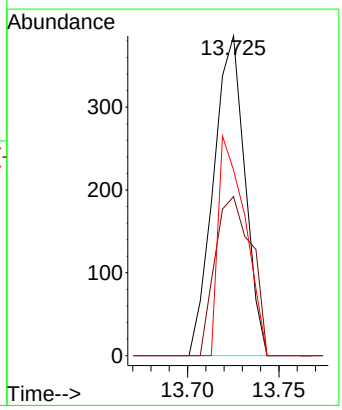
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

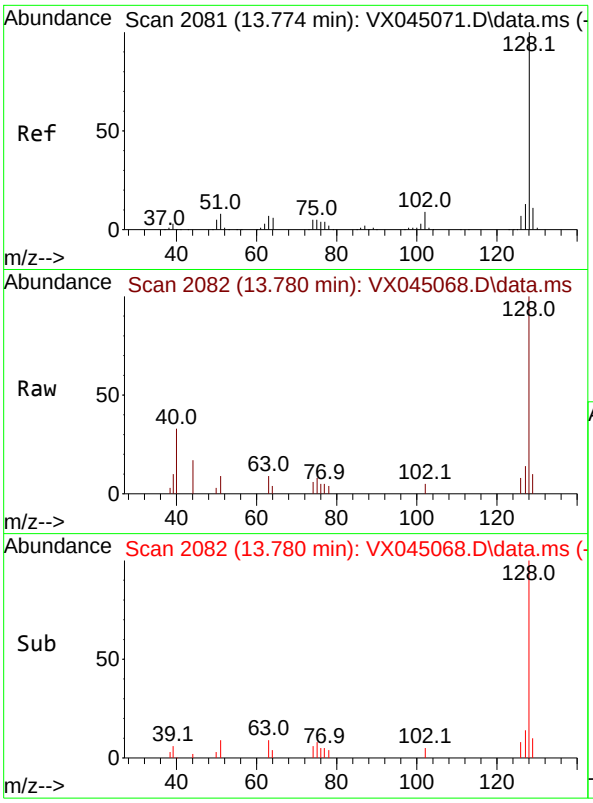



#94
Hexachlorobutadiene
Concen: 0.917 ug/l
RT: 13.725 min Scan# 2073
Delta R.T. 0.000 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion:225 Resp: 462

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 57.8 | 31.9 | 95.7 |
| 227 | 58.7 | 31.4 | 94.0 |

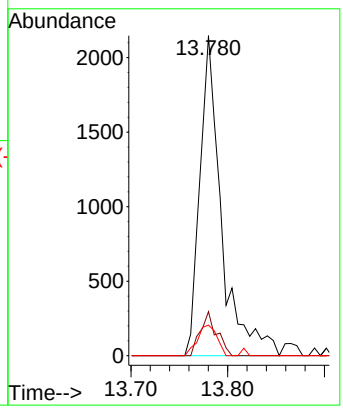





#95
Naphthalene
Concen: 0.707 ug/l
RT: 13.780 min Scan# 2
Delta R.T. 0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion:128 Resp: 333

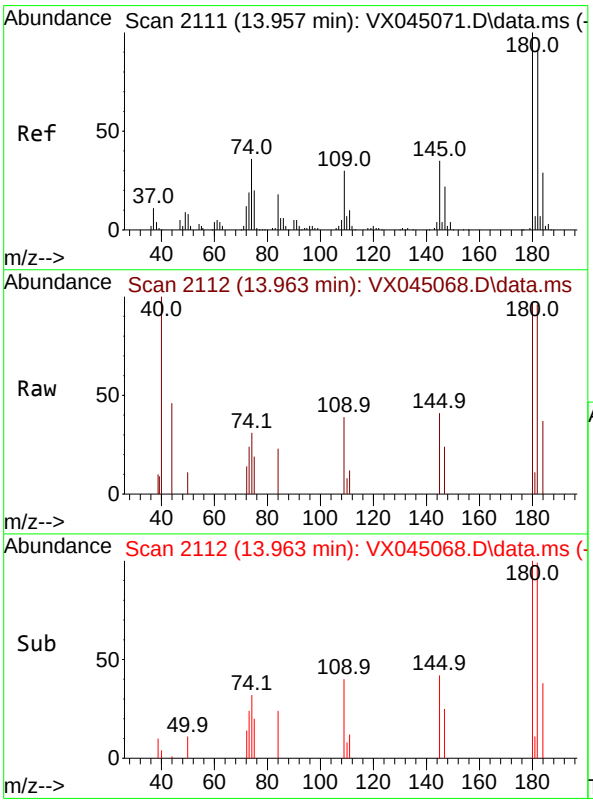
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 10.5 | 10.3 | 15.5 |
| 129 | 8.6 | 8.7 | 13.1# |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

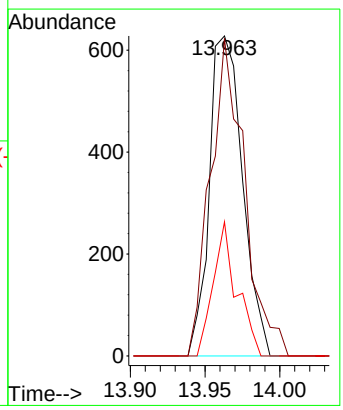
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025




#96
1,2,3-Trichlorobenzene
Concen: 0.759 ug/l
RT: 13.963 min Scan# 2112
Delta R.T. 0.006 min
Lab File: VX045068.D
Acq: 28 Feb 2025 01:27

Tgt Ion:180 Resp: 969

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 102.3 | 47.5 | 142.6 |
| 145 | 29.8 | 17.0 | 50.9 |



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045069.D
Acq On : 28 Feb 2025 02:13
Operator : JC/MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 18 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

Quant Time: Feb 28 05:32:40 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | | |
| 1) Pentafluorobenzene | 5.544 | 168 | 107391 | 50.000 | ug/l | | 0.00 |
| 34) 1,4-Difluorobenzene | 6.757 | 114 | 194243 | 50.000 | ug/l | | 0.00 |
| 63) Chlorobenzene-d5 | 10.055 | 117 | 172367 | 50.000 | ug/l | | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.018 | 152 | 73591 | 50.000 | ug/l | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 5.964 | 65 | 8978 | 5.659 | ug/l | | 0.01 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 11.320%# | | | | |
| 35) Dibromofluoromethane | 5.391 | 113 | 6398 | 5.039 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 10.080%# | | | | |
| 50) Toluene-d8 | 8.647 | 98 | 24037 | 5.057 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 10.120%# | | | | |
| 62) 4-Bromofluorobenzene | 11.079 | 95 | 7436 | 4.685 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 9.360%# | | | | |
| **Target Compounds** | | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.166 | 85 | 6941 | 4.689 | ug/l | | 96 |
| 3) Chloromethane | 1.307 | 50 | 8819 | 4.896 | ug/l | | 99 |
| 4) Vinyl Chloride | 1.374 | 62 | 8106 | 4.608 | ug/l | | 94 |
| 5) Bromomethane | 1.593 | 94 | 3620 | 6.582 | ug/l | | 96 |
| 6) Chloroethane | 1.660 | 64 | 4517 | 6.746 | ug/l | | 91 |
| 7) Trichlorofluoromethane | 1.867 | 101 | 11392 | 5.056 | ug/l | | 95 |
| 8) Diethyl Ether | 2.136 | 74 | 4314 | 5.268 | ug/l | | 99 |
| 9) 1,1,2-Trichlorotrifluo... | 2.319 | 101 | 6586 | 4.894 | ug/l | | 98 |
| 10) Methyl Iodide | 2.441 | 142 | 6520 | 3.780 | ug/l | | 95 |
| 11) Tert butyl alcohol | 2.983 | 59 | 10164m | 34.976 | ug/l | | |
| 12) 1,1-Dichloroethene | 2.313 | 96 | 6658 | 4.819 | ug/l | | 94 |
| 13) Acrolein | 2.233 | 56 | 8725 | 27.725 | ug/l | | 97 |
| 14) Allyl chloride | 2.654 | 41 | 11244 | 4.527 | ug/l | | 96 |
| 15) Acrylonitrile | 3.068 | 53 | 21381 | 27.072 | ug/l | | 99 |
| 16) Acetone | 2.386 | 43 | 19512 | 29.891 | ug/l | | 97 |
| 17) Carbon Disulfide | 2.502 | 76 | 16984 | 4.518 | ug/l | | 99 |
| 18) Methyl Acetate | 2.703 | 43 | 8964 | 4.559 | ug/l | | 97 |
| 19) Methyl tert-butyl Ether | 3.117 | 73 | 20546 | 4.651 | ug/l | | 95 |
| 20) Methylene Chloride | 2.782 | 84 | 7835 | 5.068 | ug/l | | 97 |
| 21) trans-1,2-Dichloroethene | 3.087 | 96 | 6651 | 4.895 | ug/l | | 94 |
| 22) Diisopropyl ether | 3.763 | 45 | 23151 | 4.875 | ug/l | # | 82 |
| 23) Vinyl Acetate | 3.721 | 43 | 88852 | 22.788 | ug/l | | 98 |
| 24) 1,1-Dichloroethane | 3.605 | 63 | 13132 | 4.949 | ug/l | | 99 |
| 25) 2-Butanone | 4.574 | 43 | 29277 | 27.819 | ug/l | | 99 |
| 26) 2,2-Dichloropropane | 4.471 | 77 | 6034 | 3.059 | ug/l | | 97 |
| 27) cis-1,2-Dichloroethene | 4.483 | 96 | 8012 | 4.892 | ug/l | | 97 |
| 28) Bromochloromethane | 4.904 | 49 | 6797 | 5.311 | ug/l | # | 96 |
| 29) Tetrahydrofuran | 5.013 | 42 | 20186 | 28.950 | ug/l | | 99 |
| 30) Chloroform | 5.093 | 83 | 13390 | 5.159 | ug/l | | 96 |
| 31) Cyclohexane | 5.464 | 56 | 10968 | 4.504 | ug/l | | 95 |
| 32) 1,1,1-Trichloroethane | 5.385 | 97 | 10654 | 4.876 | ug/l | | 100 |
| 36) 1,1-Dichloropropene | 5.690 | 75 | 8977 | 4.917 | ug/l | # | 83 |
| 37) Ethyl Acetate | 4.727 | 43 | 10459 | 5.035 | ug/l | | 98 |
| 38) Carbon Tetrachloride | 5.666 | 117 | 8997 | 5.013 | ug/l | | 95 |
| 39) Methylcyclohexane | 7.379 | 83 | 10291 | 4.414 | ug/l | | 97 |
| 40) Benzene | 6.037 | 78 | 28339 | 4.966 | ug/l | | 97 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045069.D
Acq On : 28 Feb 2025 02:13
Operator : JC/MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 28 05:32:40 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 4.922 | 41 | 5700 | 5.136 | ug/l | | 95 |
| 42) 1,2-Dichloroethane | 6.092 | 62 | 10189 | 5.510 | ug/l | | 98 |
| 43) Isopropyl Acetate | 6.348 | 43 | 15543 | 4.700 | ug/l | | 99 |
| 44) Trichloroethene | 7.129 | 130 | 6827 | 5.234 | ug/l | | 99 |
| 45) 1,2-Dichloropropane | 7.427 | 63 | 7342 | 5.177 | ug/l | | 95 |
| 46) Dibromomethane | 7.586 | 93 | 5146 | 5.195 | ug/l | | 97 |
| 47) Bromodichloromethane | 7.824 | 83 | 9773 | 5.100 | ug/l | | 99 |
| 48) Methyl methacrylate | 7.696 | 41 | 8201 | 5.224 | ug/l | | 95 |
| 49) 1,4-Dioxane | 7.665 | 88 | 3531 | 105.826 | ug/l | | 95 |
| 51) 4-Methyl-2-Pentanone | 8.574 | 43 | 55320 | 27.303 | ug/l | | 99 |
| 52) Toluene | 8.720 | 92 | 16933 | 4.997 | ug/l | | 99 |
| 53) t-1,3-Dichloropropene | 8.982 | 75 | 7548 | 3.985 | ug/l | | 94 |
| 54) cis-1,3-Dichloropropene | 8.366 | 75 | 8988 | 4.244 | ug/l | | 92 |
| 55) 1,1,2-Trichloroethane | 9.153 | 97 | 6759 | 5.151 | ug/l | | 97 |
| 56) Ethyl methacrylate | 9.116 | 69 | 9712 | 4.628 | ug/l | | 98 |
| 57) 1,3-Dichloropropane | 9.305 | 76 | 12106 | 5.289 | ug/l | | 100 |
| 58) 2-Chloroethyl Vinyl ether | 8.238 | 63 | 23212 | 22.527 | ug/l | | 99 |
| 59) 2-Hexanone | 9.433 | 43 | 39994 | 27.363 | ug/l | | 99 |
| 60) Dibromochloromethane | 9.519 | 129 | 6785 | 4.846 | ug/l | | 98 |
| 61) 1,2-Dibromoethane | 9.610 | 107 | 6832 | 5.161 | ug/l | | 95 |
| 64) Tetrachloroethene | 9.269 | 164 | 5615 | 5.128 | ug/l | | 93 |
| 65) Chlorobenzene | 10.079 | 112 | 18161 | 4.908 | ug/l | | 97 |
| 66) 1,1,1,2-Tetrachloroethane | 10.159 | 131 | 5702 | 4.781 | ug/l | | 96 |
| 67) Ethyl Benzene | 10.195 | 91 | 30918 | 4.725 | ug/l | | 98 |
| 68) m/p-Xylenes | 10.299 | 106 | 23152 | 9.608 | ug/l | | 97 |
| 69) o-Xylene | 10.640 | 106 | 11881 | 4.914 | ug/l | | 95 |
| 70) Styrene | 10.659 | 104 | 18278 | 4.704 | ug/l | | 99 |
| 71) Bromoform | 10.799 | 173 | 4027 | 4.541 | ug/l | # | 98 |
| 73) Isopropylbenzene | 10.963 | 105 | 29685 | 4.991 | ug/l | | 98 |
| 74) N-amyl acetate | 10.848 | 43 | 11609 | 4.300 | ug/l | | 97 |
| 75) 1,1,2,2-Tetrachloroethane | 11.213 | 83 | 10881 | 5.310 | ug/l | | 100 |
| 76) 1,2,3-Trichloropropane | 11.238 | 75 | 8839m | 5.384 | ug/l | | |
| 77) Bromobenzene | 11.195 | 156 | 6970 | 5.163 | ug/l | | 96 |
| 78) n-propylbenzene | 11.305 | 91 | 32196 | 4.694 | ug/l | | 99 |
| 79) 2-Chlorotoluene | 11.366 | 91 | 21253 | 5.048 | ug/l | | 98 |
| 80) 1,3,5-Trimethylbenzene | 11.451 | 105 | 23627 | 4.897 | ug/l | | 99 |
| 81) trans-1,4-Dichloro-2-b... | 11.018 | 75 | 1971 | 3.256 | ug/l | # | 83 |
| 82) 4-Chlorotoluene | 11.457 | 91 | 22190 | 4.761 | ug/l | | 98 |
| 83) tert-Butylbenzene | 11.713 | 119 | 23960 | 4.910 | ug/l | | 97 |
| 84) 1,2,4-Trimethylbenzene | 11.750 | 105 | 23561 | 4.960 | ug/l | | 99 |
| 85) sec-Butylbenzene | 11.890 | 105 | 28314 | 4.687 | ug/l | | 99 |
| 86) p-Isopropyltoluene | 12.006 | 119 | 21977 | 4.532 | ug/l | | 97 |
| 87) 1,3-Dichlorobenzene | 11.969 | 146 | 12157 | 4.926 | ug/l | | 98 |
| 88) 1,4-Dichlorobenzene | 12.042 | 146 | 12526 | 5.014 | ug/l | | 96 |
| 89) n-Butylbenzene | 12.335 | 91 | 17358 | 4.072 | ug/l | | 99 |
| 90) Hexachloroethane | 12.536 | 117 | 3665 | 4.052 | ug/l | | 96 |
| 91) 1,2-Dichlorobenzene | 12.335 | 146 | 12477 | 5.138 | ug/l | | 95 |
| 92) 1,2-Dibromo-3-Chloropr... | 12.945 | 75 | 1787 | 4.712 | ug/l | | 90 |
| 93) 1,2,4-Trichlorobenzene | 13.591 | 180 | 6040 | 4.114 | ug/l | | 97 |
| 94) Hexachlorobutadiene | 13.725 | 225 | 2716 | 4.640 | ug/l | | 97 |
| 95) Naphthalene | 13.780 | 128 | 22927 | 4.287 | ug/l | | 99 |
| 96) 1,2,3-Trichlorobenzene | 13.963 | 180 | 6600 | 4.437 | ug/l | | 98 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045069.D
Acq On : 28 Feb 2025 02:13
Operator : JC/MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 18 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

Quant Time: Feb 28 05:32:40 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

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

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

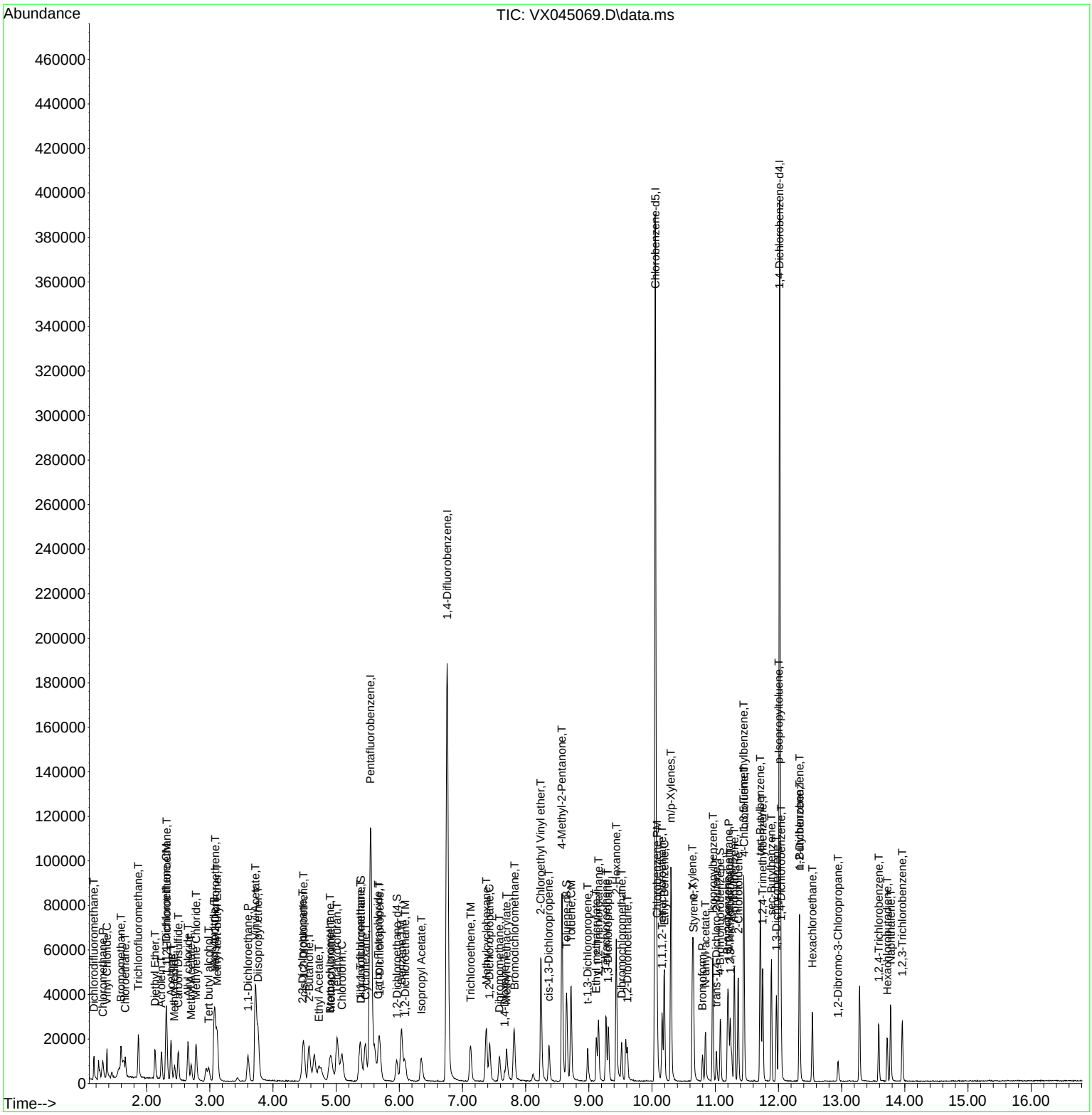
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045069.D
Acq On : 28 Feb 2025 02:13
Operator : JC/MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 18 Sample Multiplier: 1

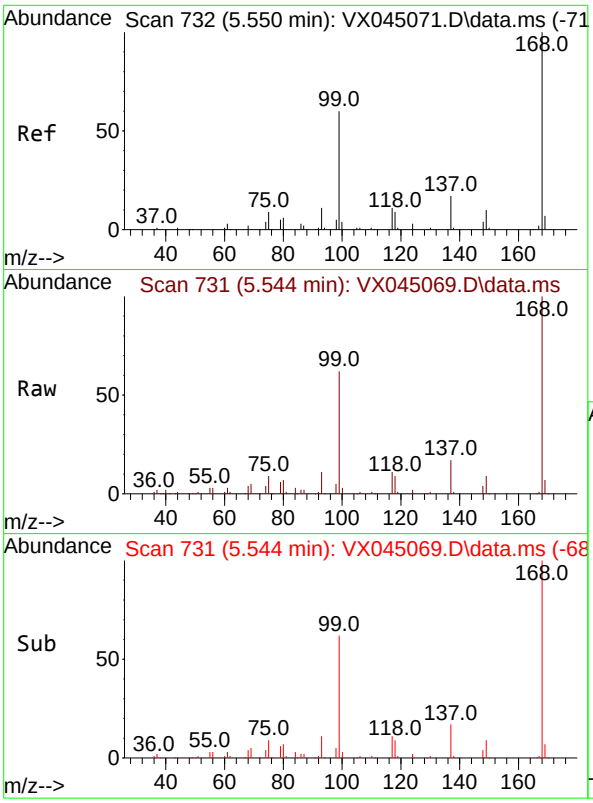
Quant Time: Feb 28 05:32:40 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

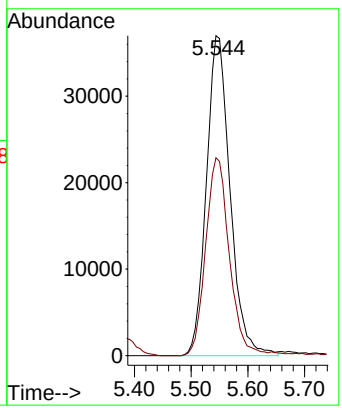





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.544 min Scan# 7
Delta R.T. -0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:168 Resp: 10739

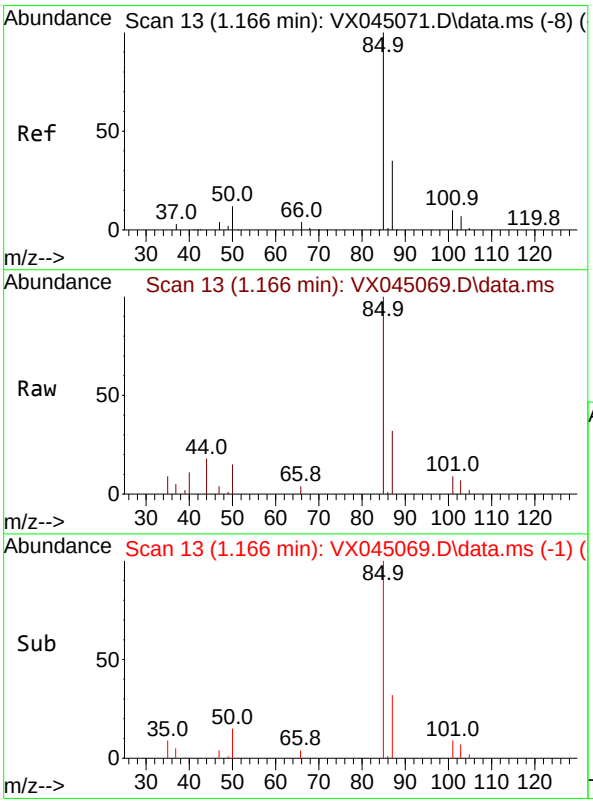
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 61.8 | 48.2 | 72.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

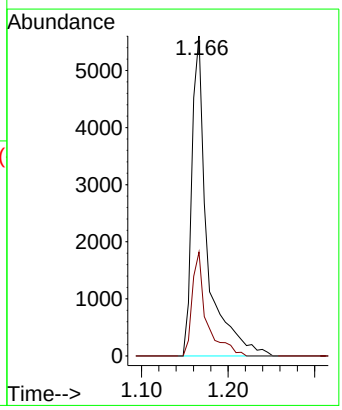
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

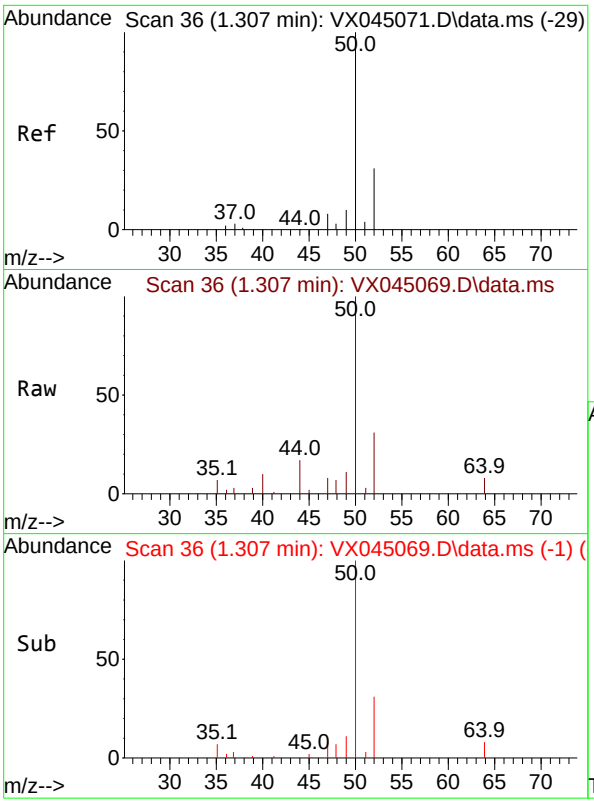



#2
Dichlorodifluoromethane
Concen: 4.689 ug/l
RT: 1.166 min Scan# 13
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 85 Resp: 6941

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.4 | 17.4 | 52.3 |

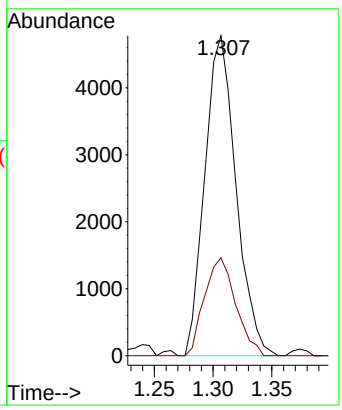





#3
Chloromethane
Concen: 4.896 ug/l
RT: 1.307 min Scan# 3
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 50 Resp: 881

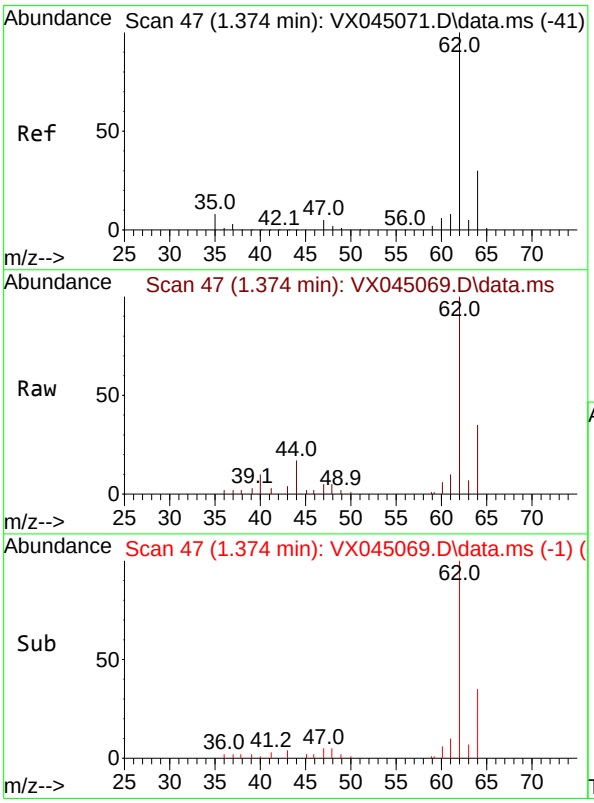
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 30.6 | 25.0 | 37.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

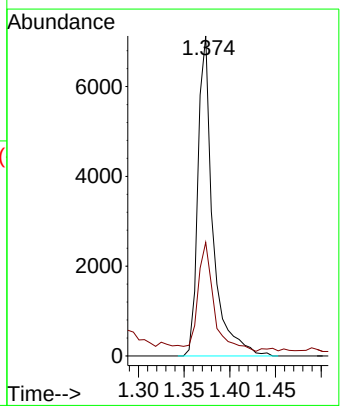
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

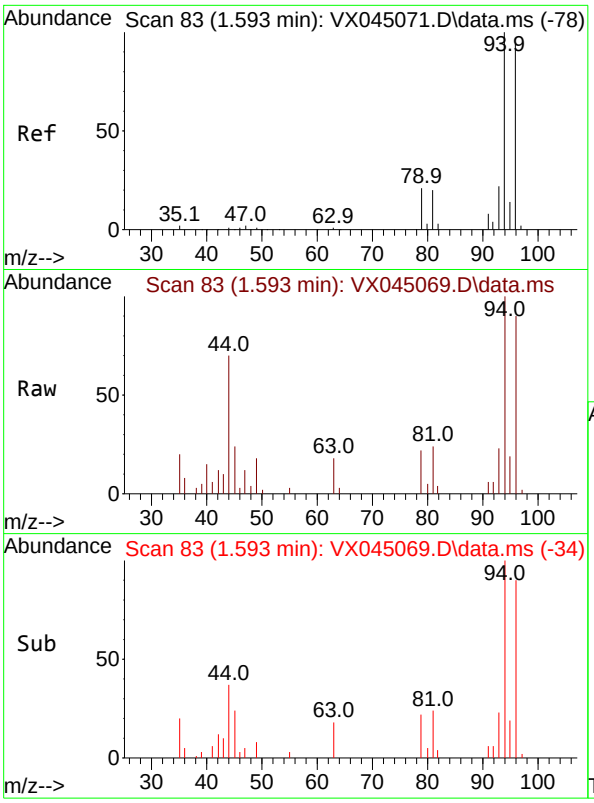



#4
Vinyl Chloride
Concen: 4.608 ug/l
RT: 1.374 min Scan# 47
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 62 Resp: 8106

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 33.9 | 24.3 | 36.5 |

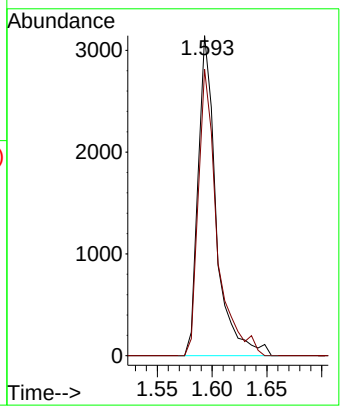





#5
Bromomethane
Concen: 6.582 ug/l
RT: 1.593 min Scan# 8
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 94 Resp: 362

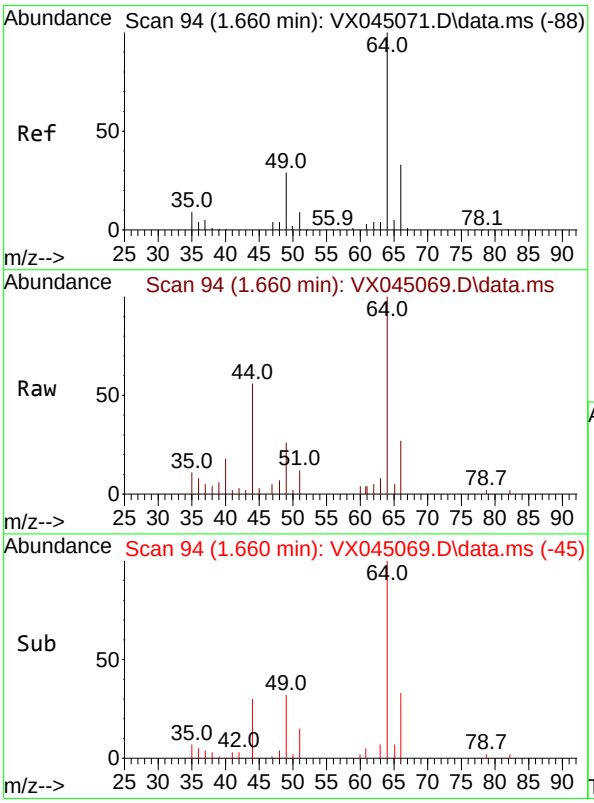
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 89.5 | 75.0 | 112.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

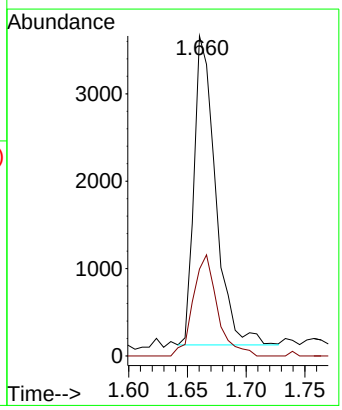
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

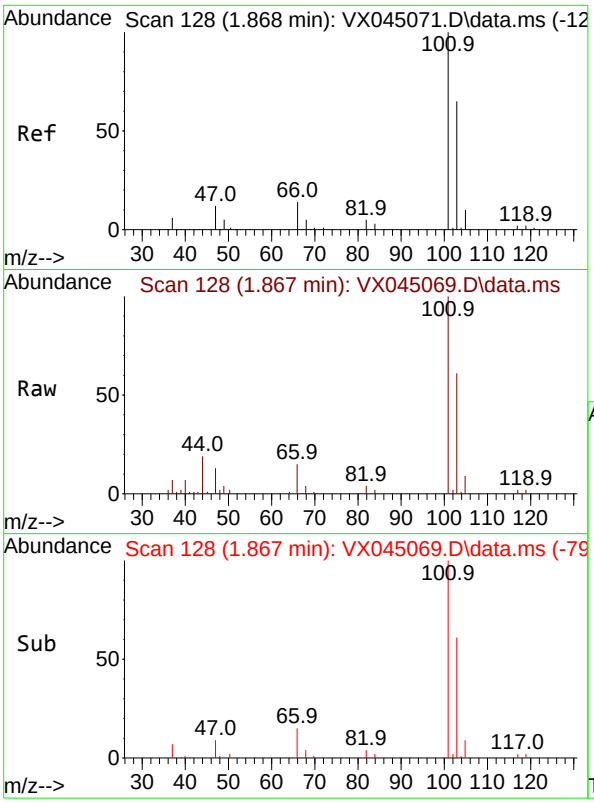



#6
Chloroethane
Concen: 6.746 ug/l
RT: 1.660 min Scan# 94
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 64 Resp: 4517

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 28.1 | 26.7 | 40.1 |

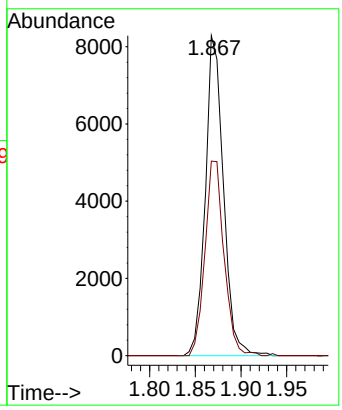





#7
Trichlorofluoromethane
Concen: 5.056 ug/l
RT: 1.867 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:101 Resp: 1139

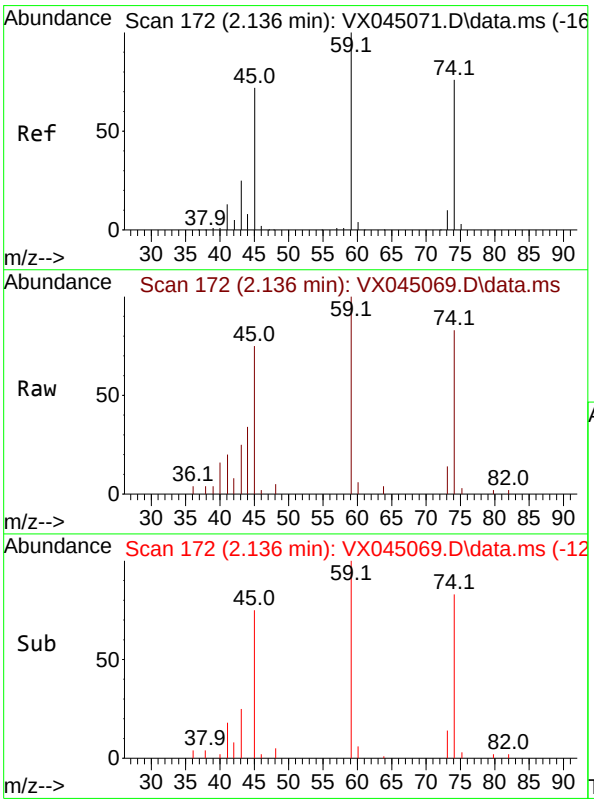
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 60.8 | 52.1 | 78.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

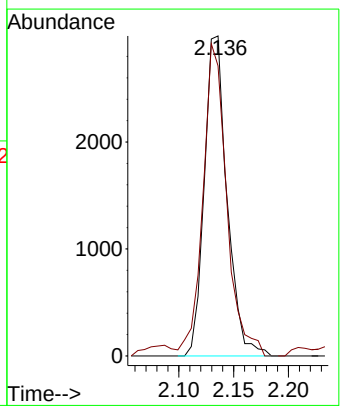
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

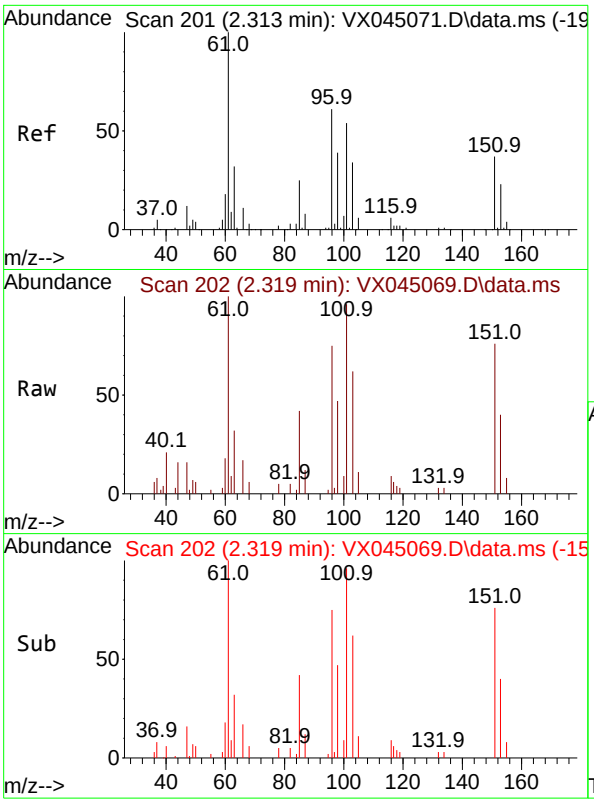



#8
Diethyl Ether
Concen: 5.268 ug/l
RT: 2.136 min Scan# 172
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 74 Resp: 4314

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 101.9 | 51.5 | 154.5 |

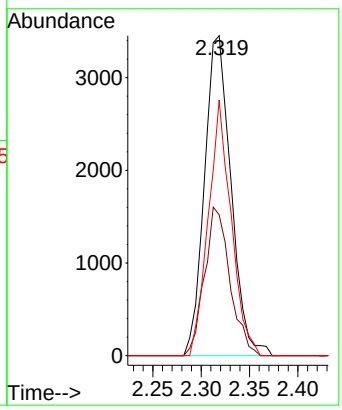





#9
1,1,2-Trichlorotrifluoroethane
Concen: 4.894 ug/l
RT: 2.319 min Scan# 2(
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:101 Resp: 658(

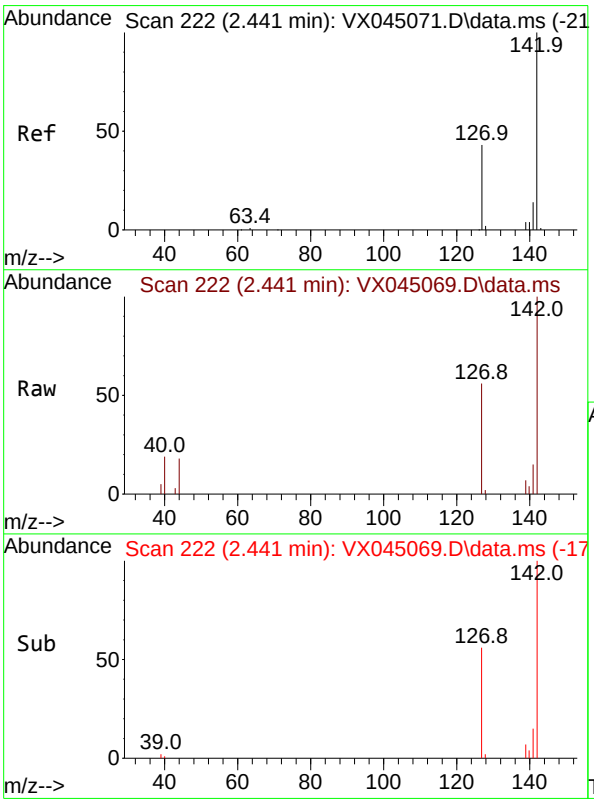
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 44.4 | 36.2 | 54.4 |
| 151 | 69.0 | 56.4 | 84.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

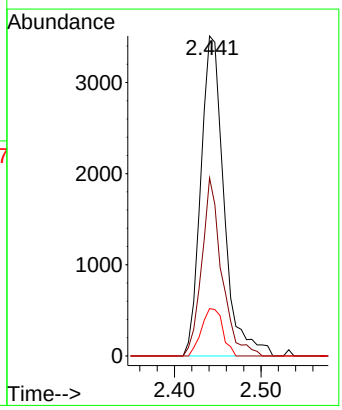
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

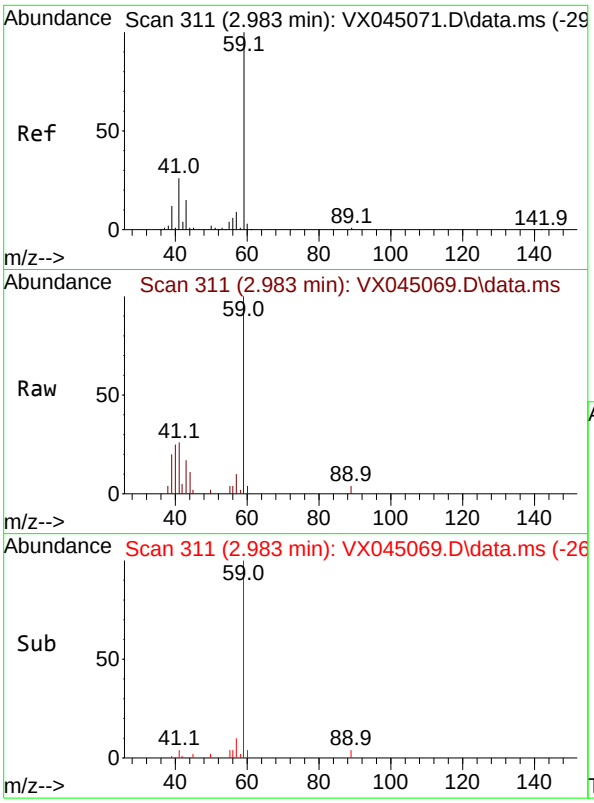



#10
Methyl Iodide
Concen: 3.780 ug/l
RT: 2.441 min Scan# 222
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:142 Resp: 6520

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 48.1 | 35.4 | 53.2 |
| 141 | 13.5 | 11.6 | 17.4 |

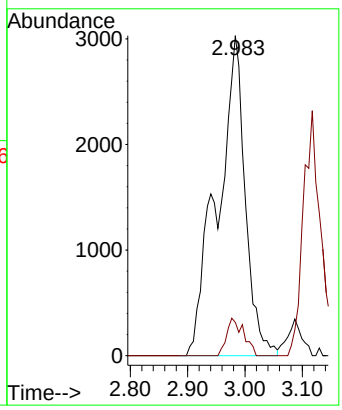





#11
Tert butyl alcohol
Concen: 34.976 ug/l m
RT: 2.983 min Scan# 3
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 59 Resp: 1016

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 7.2 | 7.8 | 11.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/28/2025
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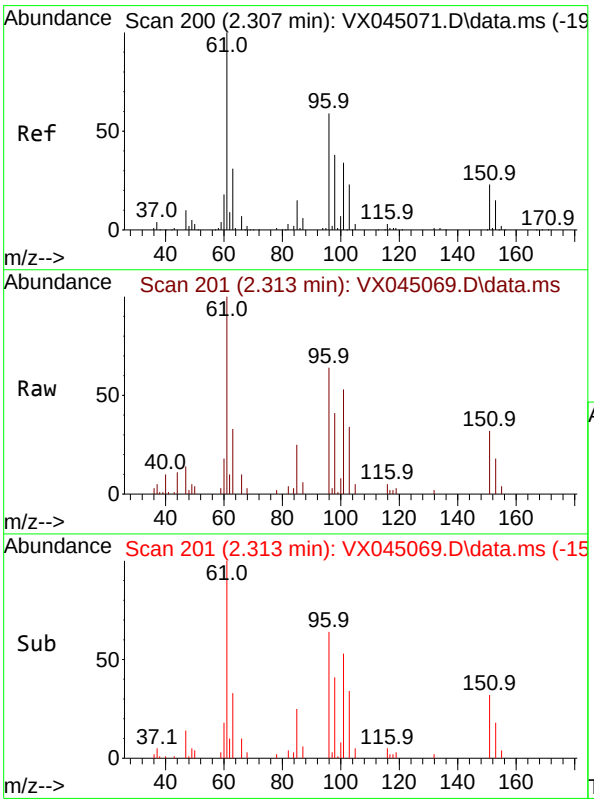
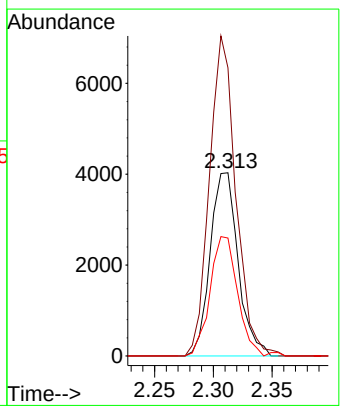
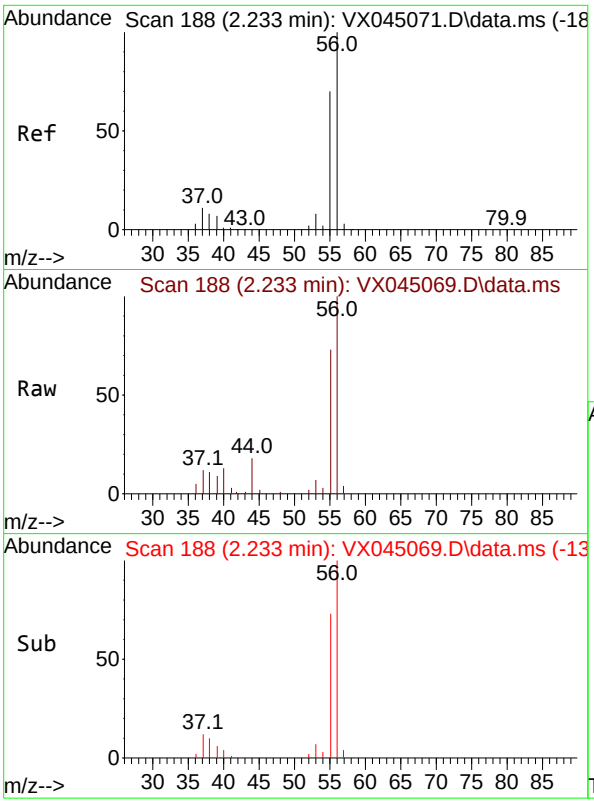



#12
1,1-Dichloroethene
Concen: 4.819 ug/l
RT: 2.313 min Scan# 201
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 96 Resp: 6658

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 157.3 | 134.6 | 202.0 |
| 98 | 64.3 | 51.0 | 76.6 |

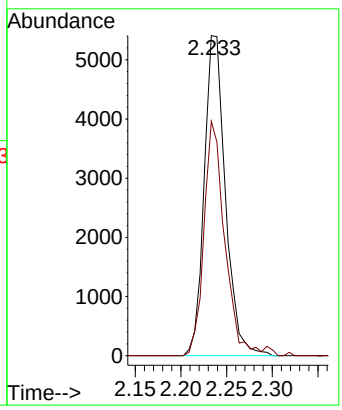





#13
Acrolein
Concen: 27.725 ug/l
RT: 2.233 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 56 Resp: 872

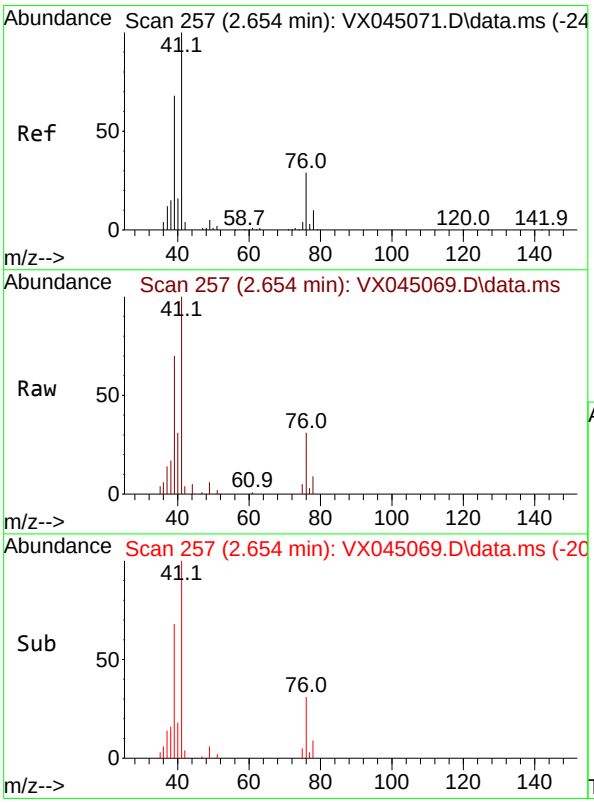
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 72.4 | 56.2 | 84.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

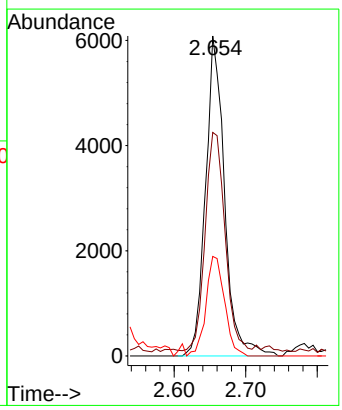
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

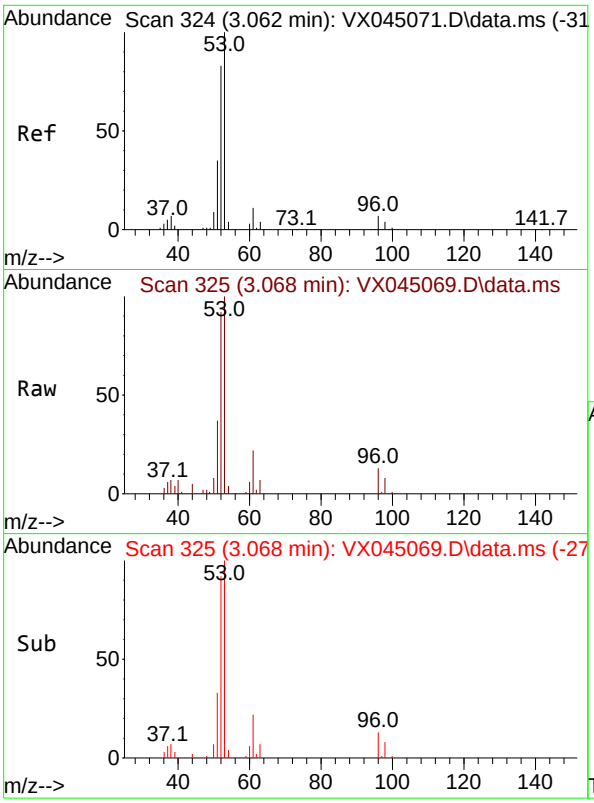



#14
Allyl chloride
Concen: 4.527 ug/l
RT: 2.654 min Scan# 257
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 41 Resp: 11244

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 70.8 | 53.8 | 80.8 |
| 76 | 30.4 | 25.2 | 37.8 |

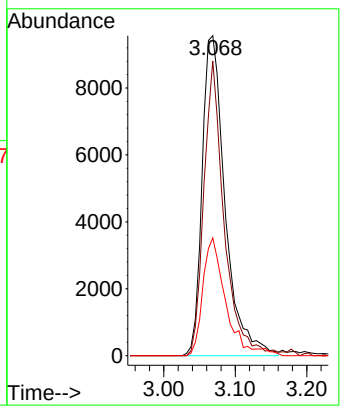





#15
Acrylonitrile
Concen: 27.072 ug/l
RT: 3.068 min Scan# 3
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 53 Resp: 2138

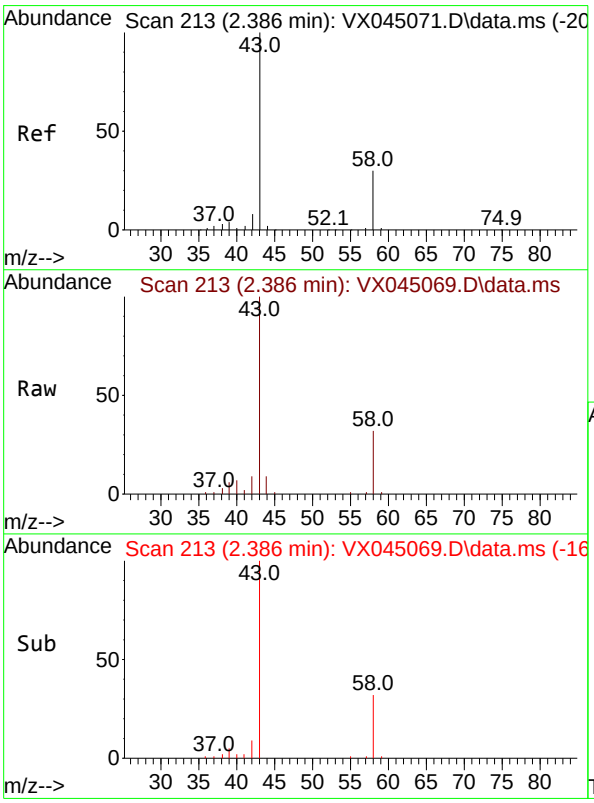
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 81.1 | 66.2 | 99.2 |
| 51 | 36.7 | 29.0 | 43.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

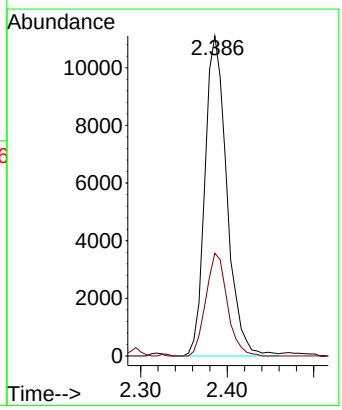
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

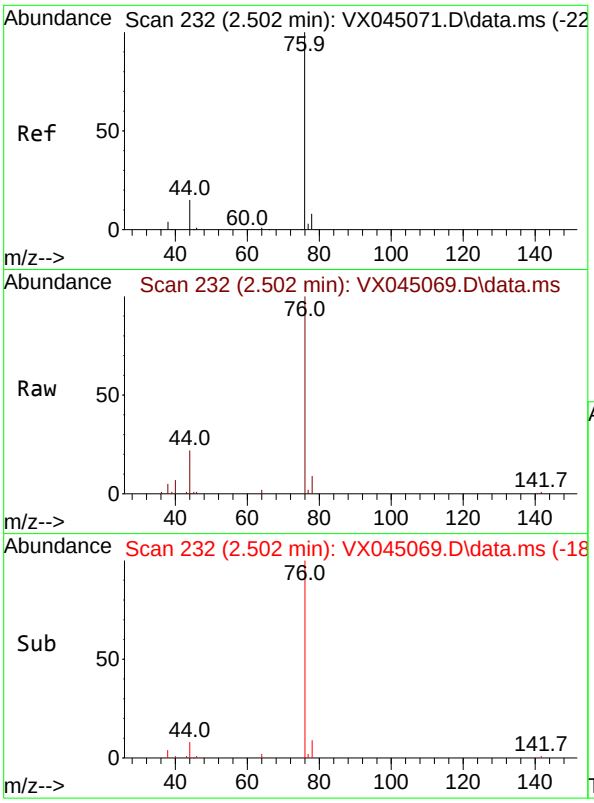



#16
Acetone
Concen: 29.891 ug/l
RT: 2.386 min Scan# 213
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 43 Resp: 19512

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 32.1 | 24.2 | 36.4 |






#17
Carbon Disulfide
Concen: 4.518 ug/l
RT: 2.502 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

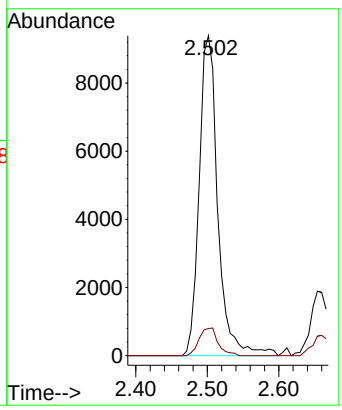
Tgt Ion: 76 Resp: 1698

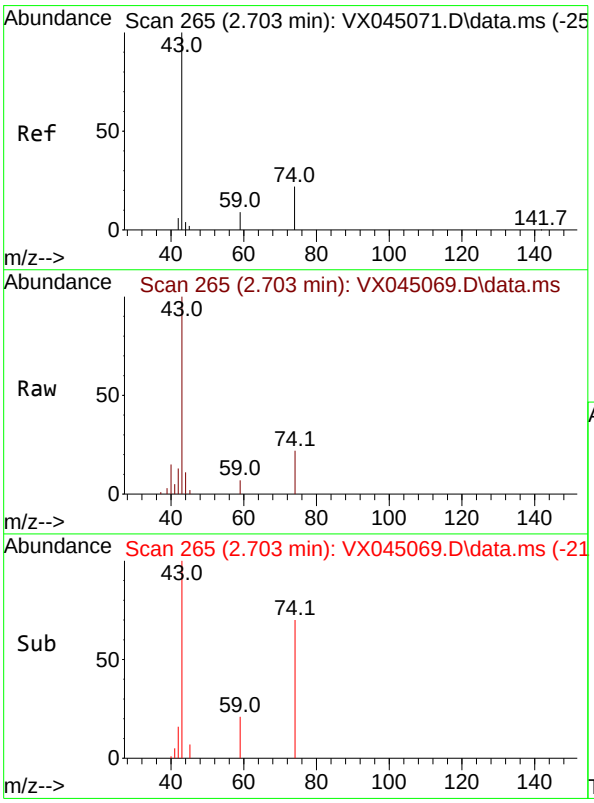
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 8.5 | 6.6 | 9.8 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

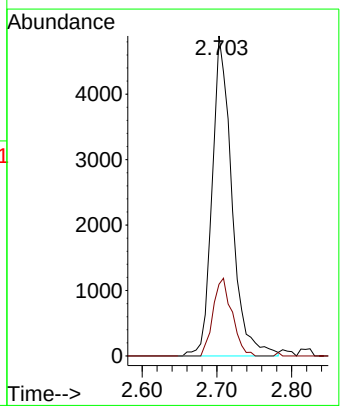


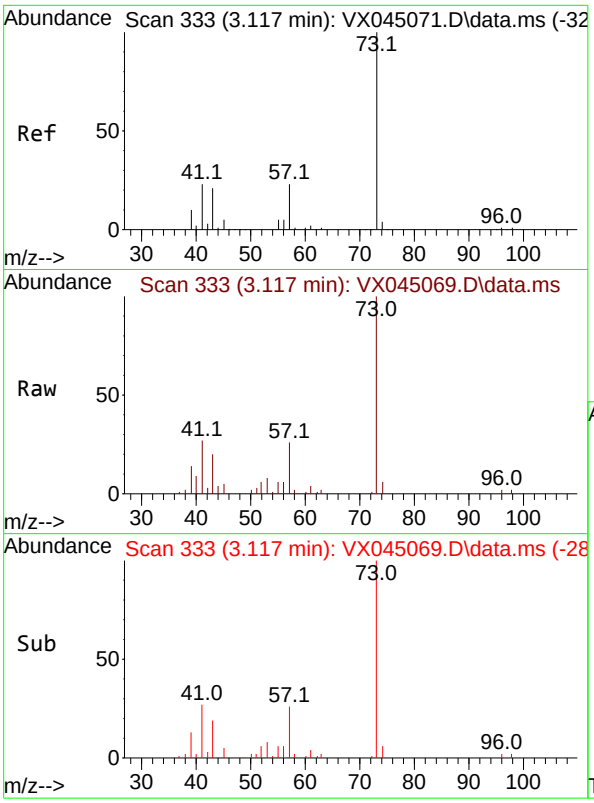




#18
Methyl Acetate
Concen: 4.559 ug/l
RT: 2.703 min Scan# 265
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 43 Resp: 8964

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 23.3 | 17.4 | 26.2 |






#19
Methyl tert-butyl Ether
Concen: 4.651 ug/l
RT: 3.117 min Scan# 3
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

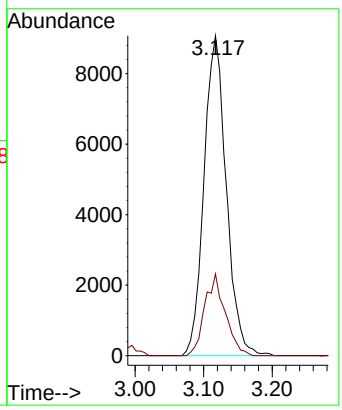
Tgt Ion: 73 Resp: 2054

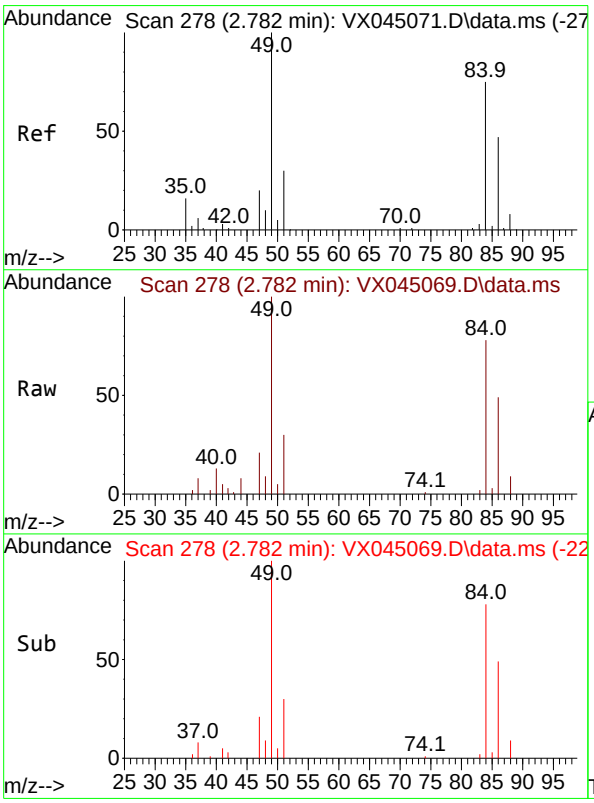
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 25.6 | 18.5 | 27.7 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

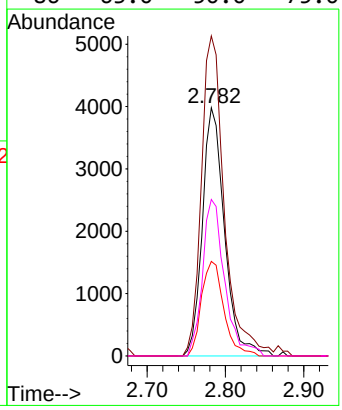


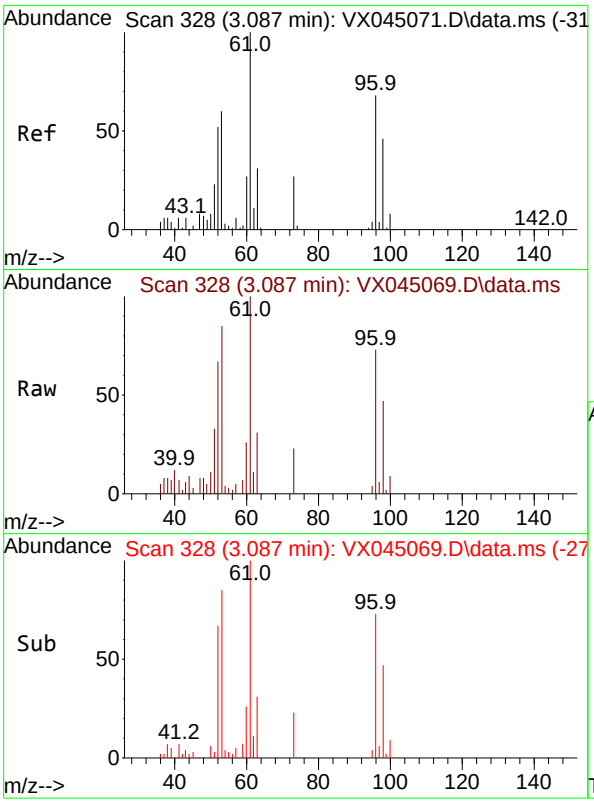




#20
Methylene Chloride
Concen: 5.068 ug/l
RT: 2.782 min Scan# 278
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 84 Resp: 7835

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 128.9 | 106.5 | 159.7 |
| 51 | 38.1 | 32.1 | 48.1 |
| 86 | 63.0 | 50.0 | 75.0 |

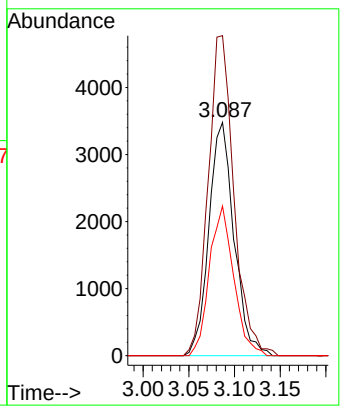





#21
trans-1,2-Dichloroethene
Concen: 4.895 ug/l
RT: 3.087 min Scan# 3
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 96 Resp: 665

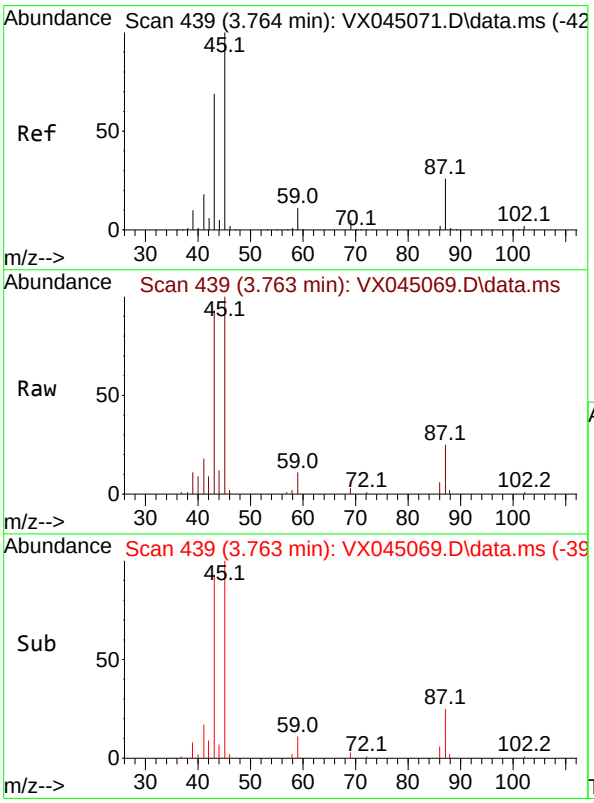
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 137.2 | 117.0 | 175.4 |
| 98 | 64.1 | 53.4 | 80.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

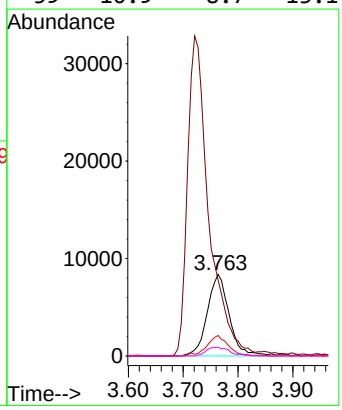
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

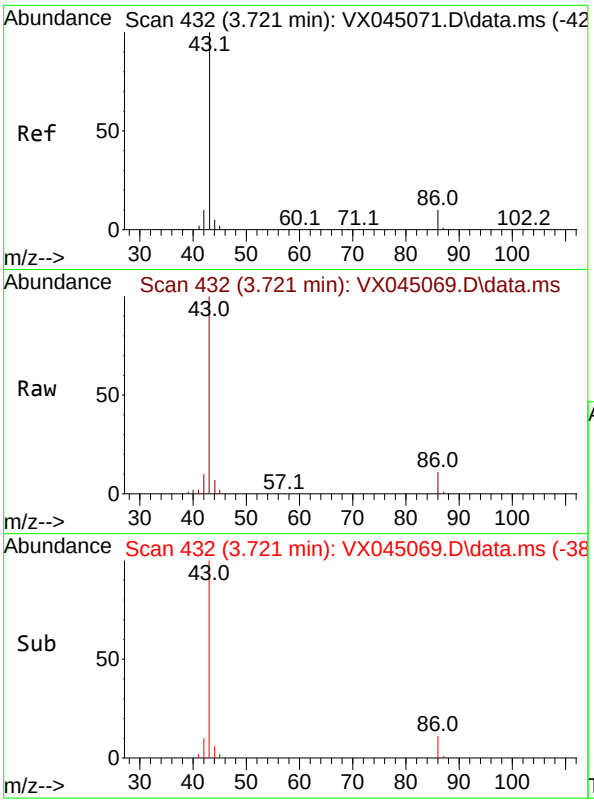



#22
Diisopropyl ether
Concen: 4.875 ug/l
RT: 3.763 min Scan# 439
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 45 Resp: 23151

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 90.2 | 54.9 | 82.3# |
| 87 | 25.1 | 21.0 | 31.4 |
| 59 | 10.9 | 8.7 | 13.1 |






#23
Vinyl Acetate
Concen: 22.788 ug/l
RT: 3.721 min Scan# 4
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

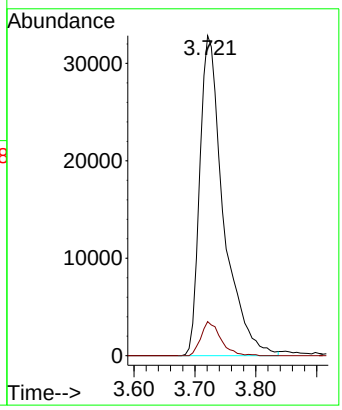
Tgt Ion: 43 Resp: 8885

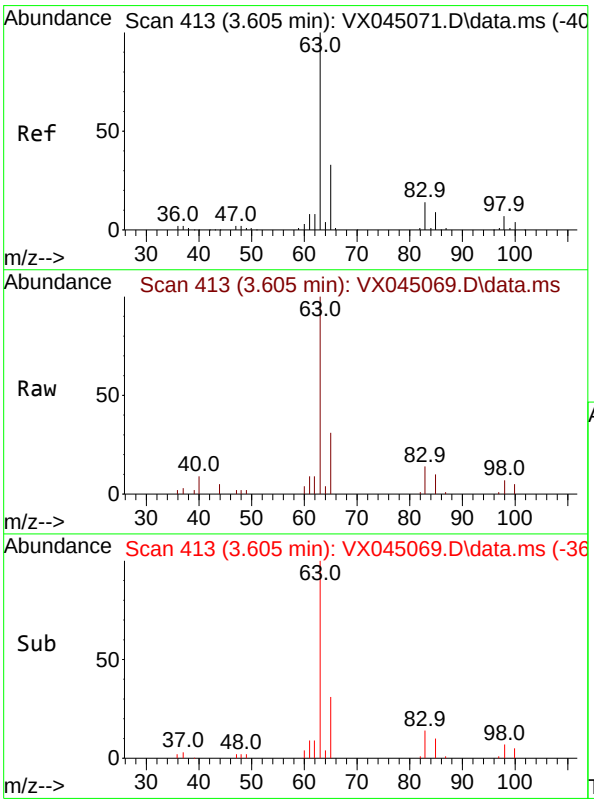
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 10.7 | 8.1 | 12.1 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

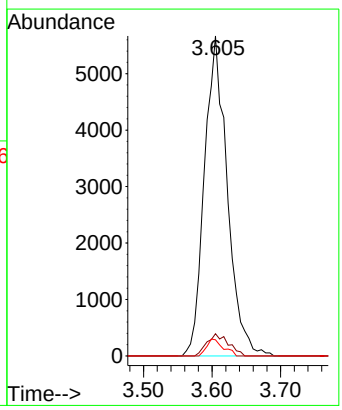


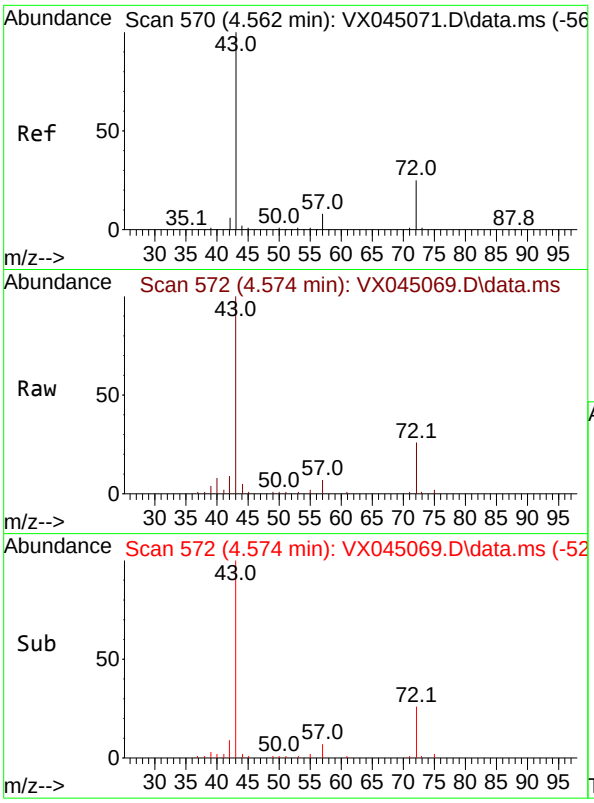




#24
1,1-Dichloroethane
Concen: 4.949 ug/l
RT: 3.605 min Scan# 413
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 63 Resp: 13132

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 7.0 | 3.4 | 10.2 |
| 100 | 5.1 | 2.1 | 6.5 |

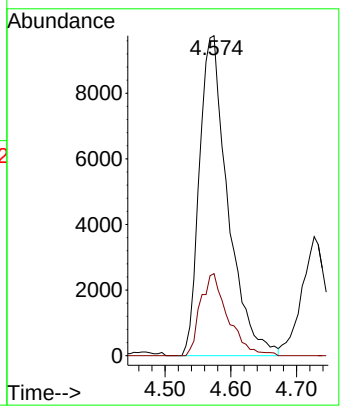





#25
2-Butanone
Concen: 27.819 ug/l
RT: 4.574 min Scan# 5
Delta R.T. 0.012 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 43 Resp: 2927

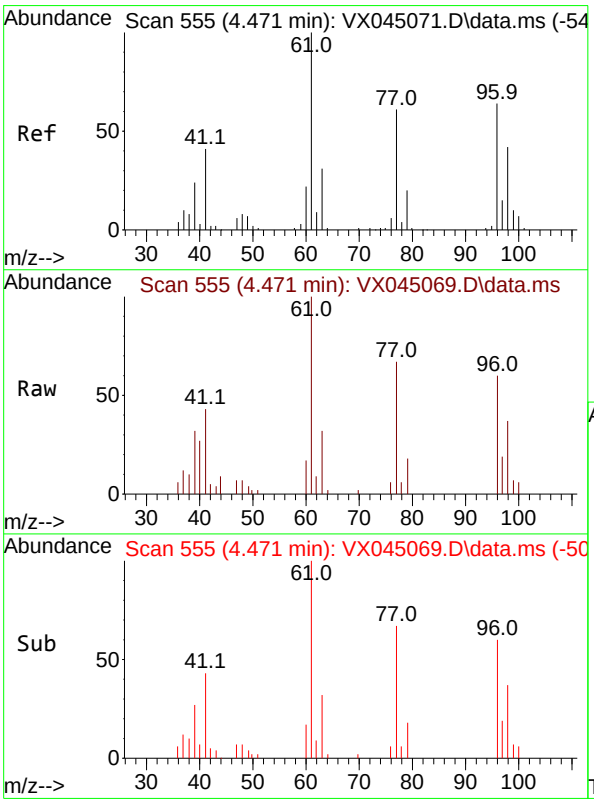
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 25.7 | 20.0 | 30.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

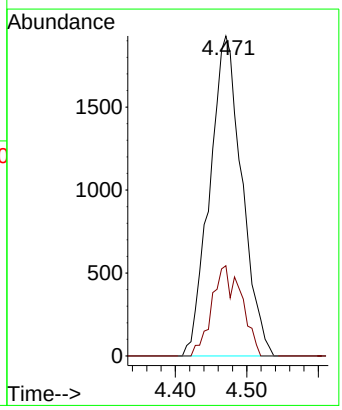
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

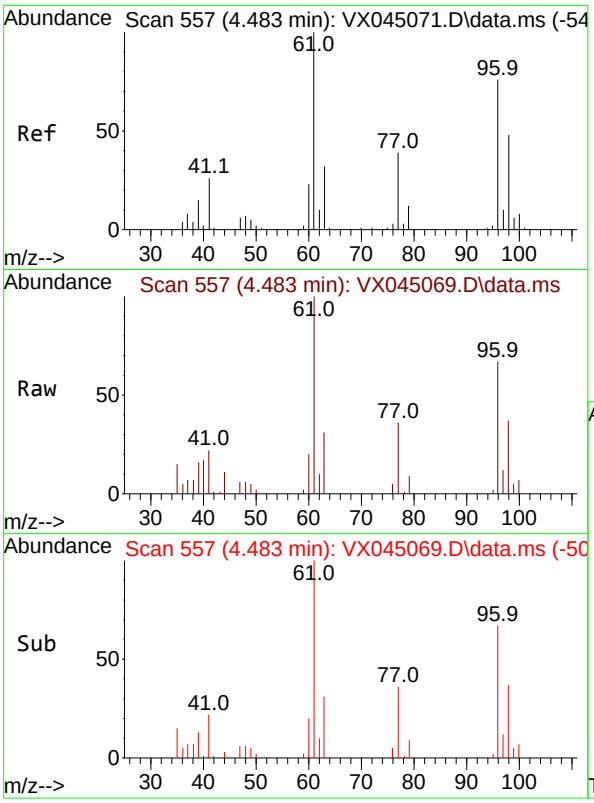



#26
2,2-Dichloropropane
Concen: 3.059 ug/l
RT: 4.471 min Scan# 555
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 77 Resp: 6034

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 26.0 | 12.4 | 37.0 |

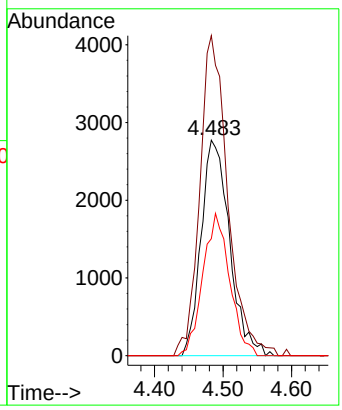





#27
cis-1,2-Dichloroethene
Concen: 4.892 ug/l
RT: 4.483 min Scan# 5
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 96 Resp: 801

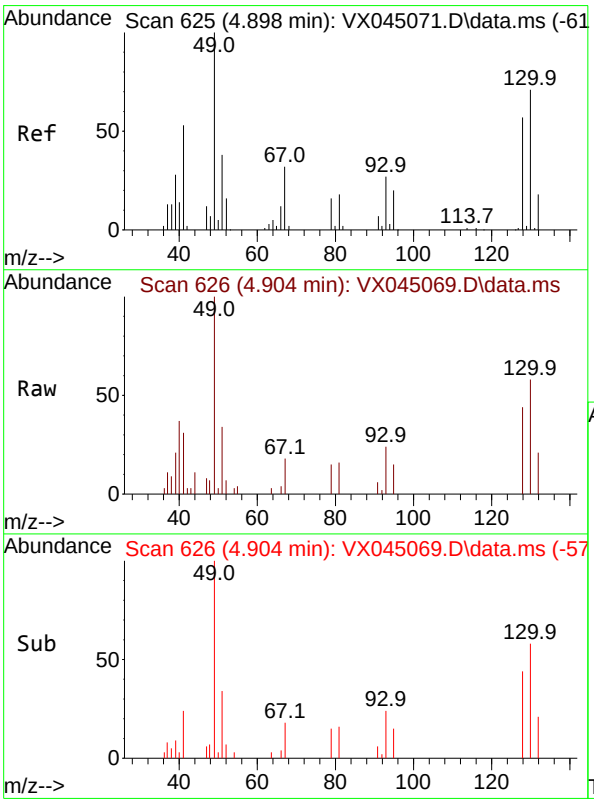
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 146.1 | 0.0 | 283.2 |
| 98 | 62.0 | 0.0 | 128.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

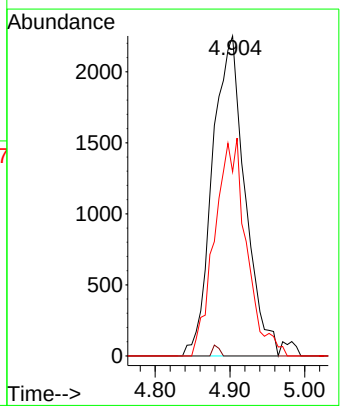
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

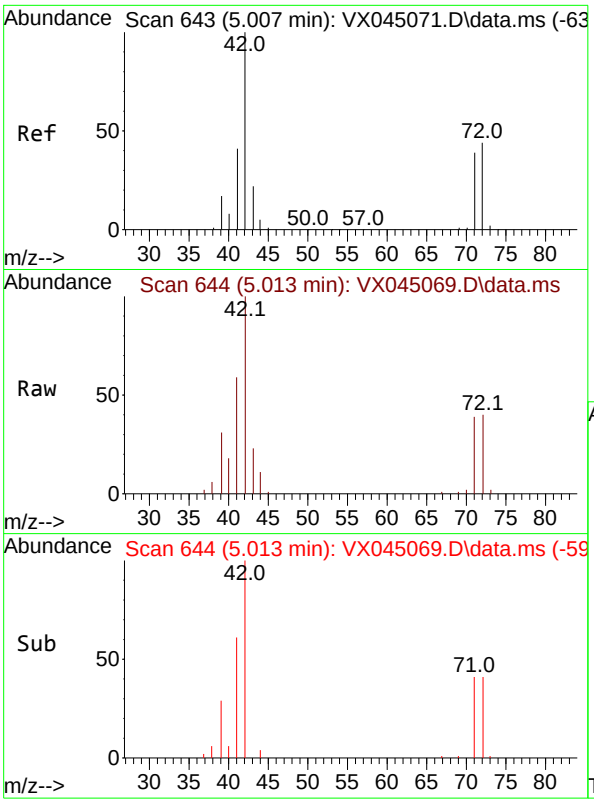



#28
Bromochloromethane
Concen: 5.311 ug/l
RT: 4.904 min Scan# 626
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 49 Resp: 6797

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 0.0 | 0.0 | 3.4 |
| 130 | 66.5 | 56.1 | 84.1 |

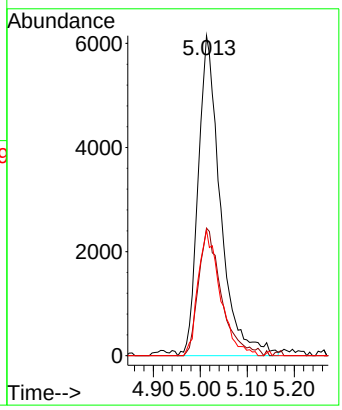





#29
Tetrahydrofuran
Concen: 28.950 ug/l
RT: 5.013 min Scan# 64
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 42 Resp: 2018

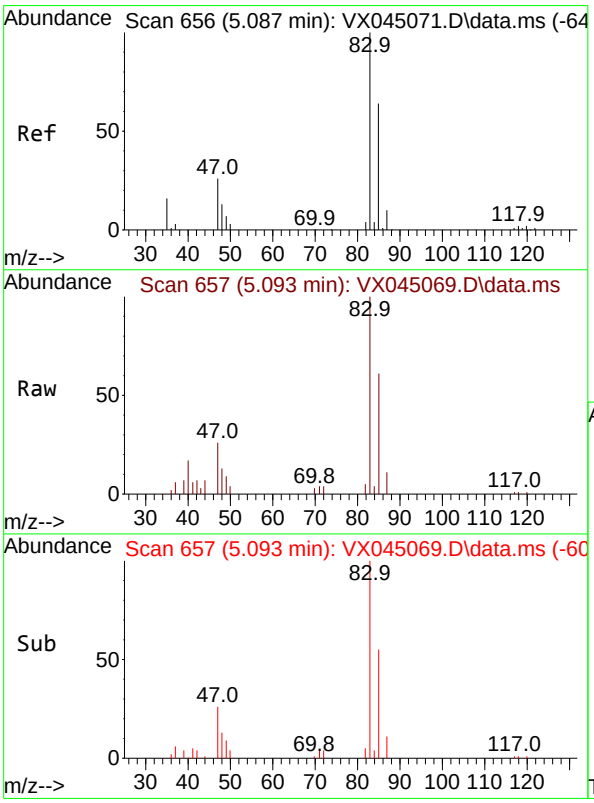
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 41.2 | 34.1 | 51.1 |
| 71 | 39.3 | 31.4 | 47.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

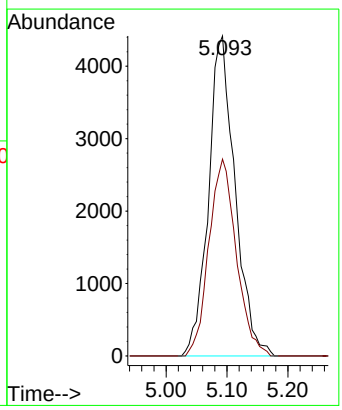
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

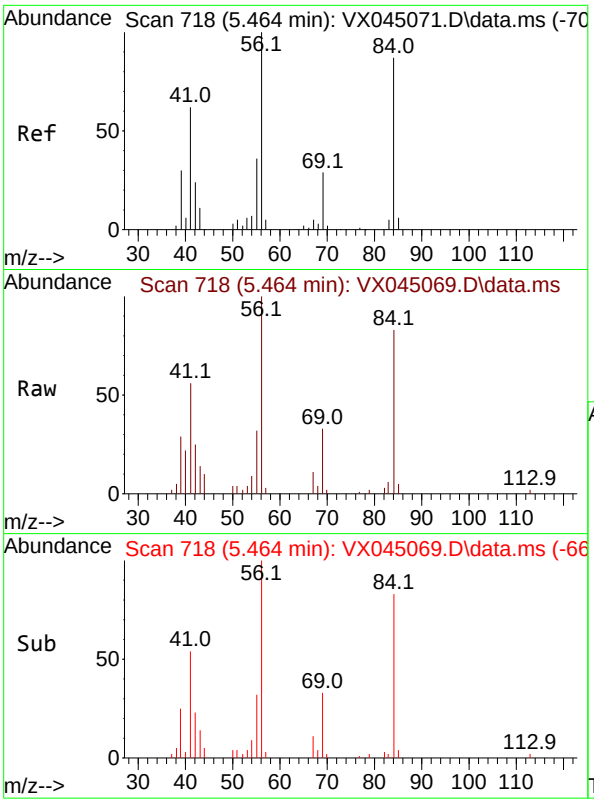



#30
Chloroform
Concen: 5.159 ug/l
RT: 5.093 min Scan# 657
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 83 Resp: 13390

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 61.5 | 51.4 | 77.2 |

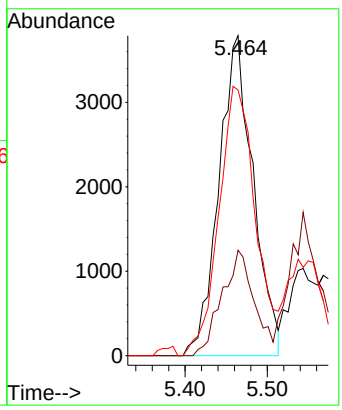





#31
Cyclohexane
Concen: 4.504 ug/l
RT: 5.464 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 56 Resp: 1096

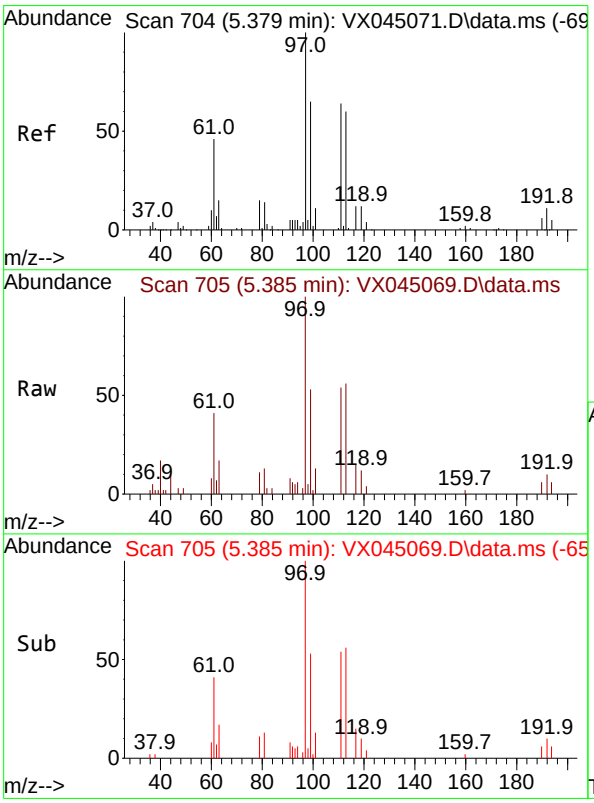
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 33.0 | 23.4 | 35.2 |
| 84 | 83.1 | 69.4 | 104.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

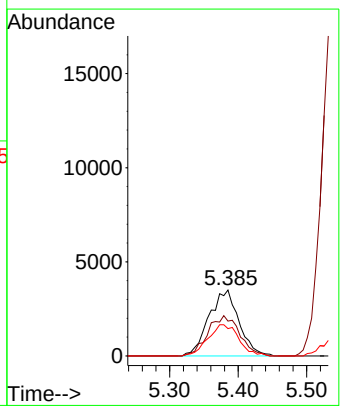
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

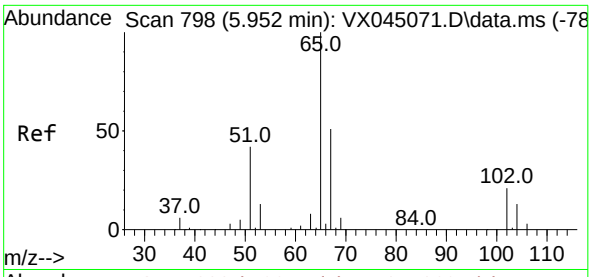


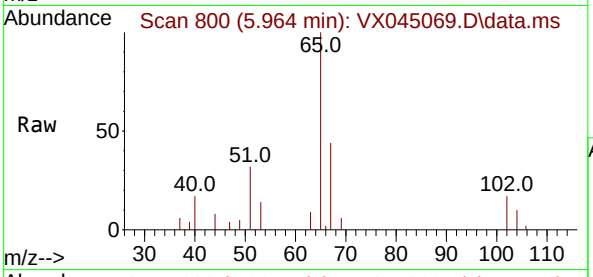

#32
1,1,1-Trichloroethane
Concen: 4.876 ug/l
RT: 5.385 min Scan# 705
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

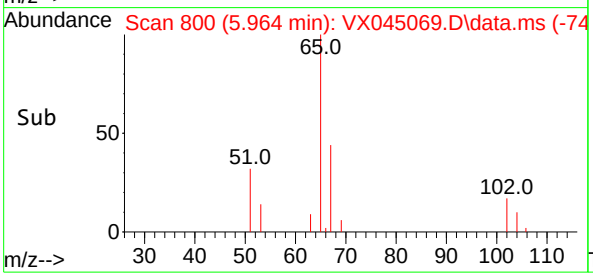
Tgt Ion: 97 Resp: 10654

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 64.5 | 51.6 | 77.4 |
| 61 | 48.7 | 38.4 | 57.6 |





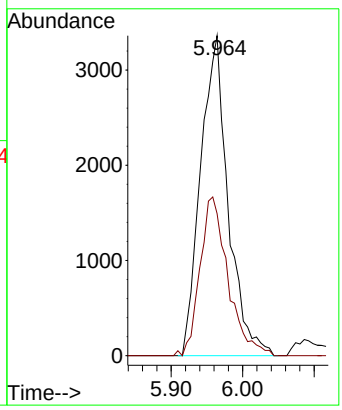




#33
1,2-Dichloroethane-d4
Concen: 5.659 ug/l
RT: 5.964 min Scan# 8
Delta R.T. 0.012 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 65 Resp: 897

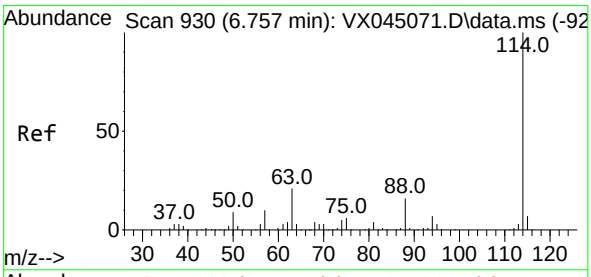
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.5 | 0.0 | 106.2 |

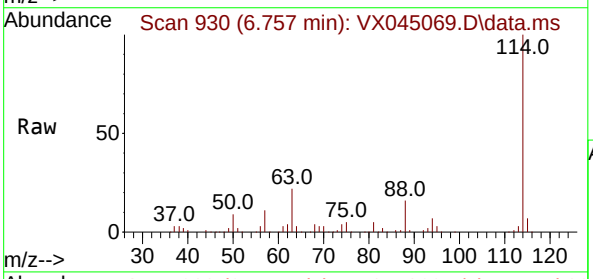


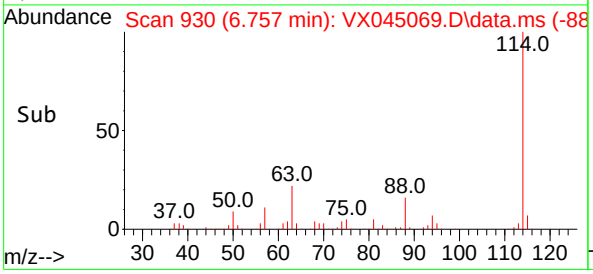

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025



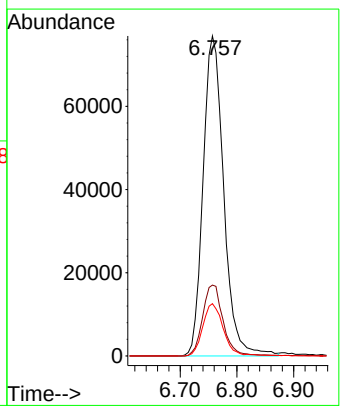



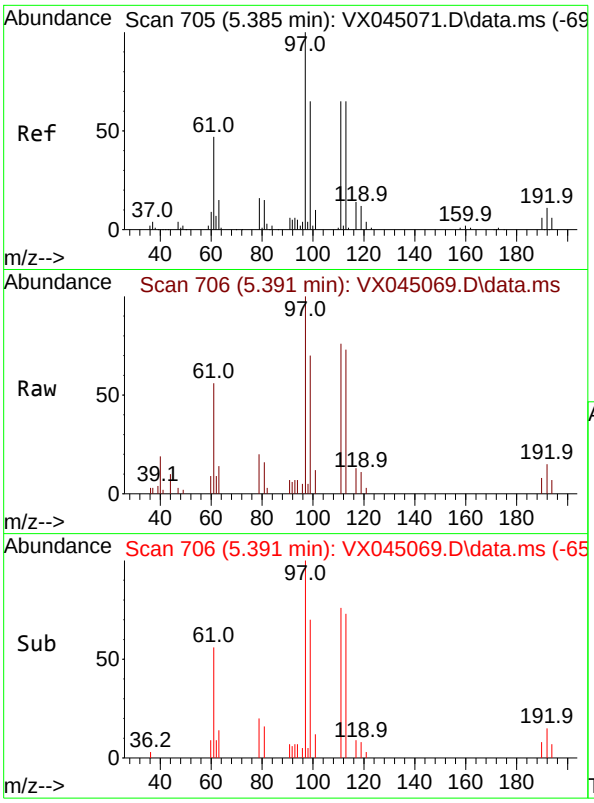




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.757 min Scan# 930
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:114 Resp: 194243

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.1 | 0.0 | 41.8 |
| 88 | 16.4 | 0.0 | 32.8 |

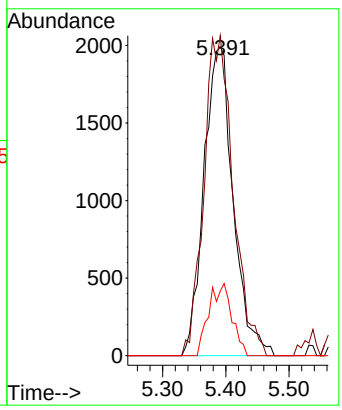





#35
Dibromofluoromethane
Concen: 5.039 ug/l
RT: 5.391 min Scan# 7
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:113 Resp: 639

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 103.9 | 81.8 | 122.6 |
| 192 | 18.3 | 14.3 | 21.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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Reviewed By :John Carlone 02/28/2025
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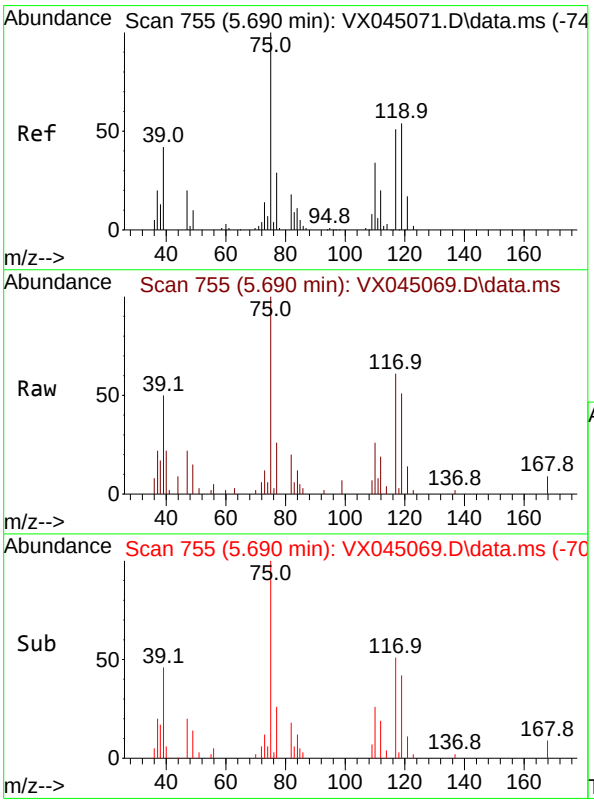
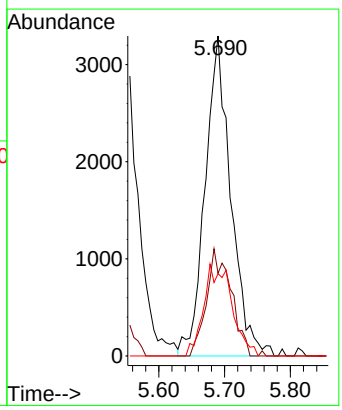
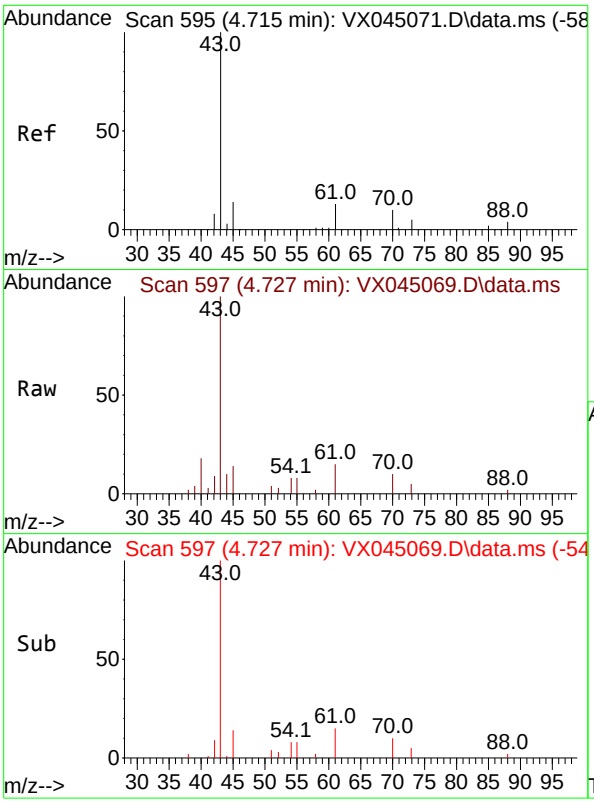



#36
1,1-Dichloropropene
Concen: 4.917 ug/l
RT: 5.690 min Scan# 755
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 75 Resp: 8977

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 31.8 | 16.9 | 50.6 |
| 77 | 13.2 | 24.5 | 36.7# |

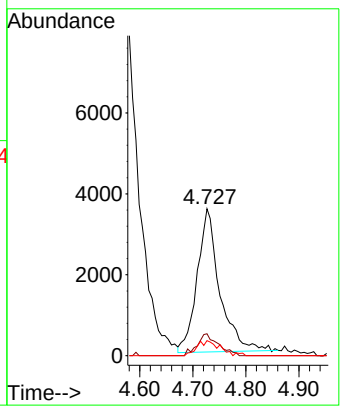





#37
Ethyl Acetate
Concen: 5.035 ug/l
RT: 4.727 min Scan# 5
Delta R.T. 0.012 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 43 Resp: 1045

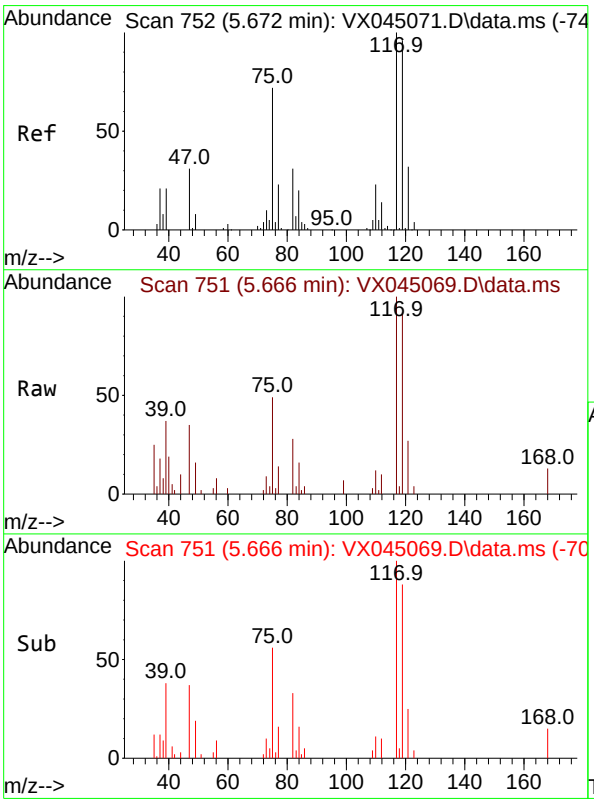
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 14.4 | 10.8 | 16.2 |
| 70 | 10.2 | 7.7 | 11.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

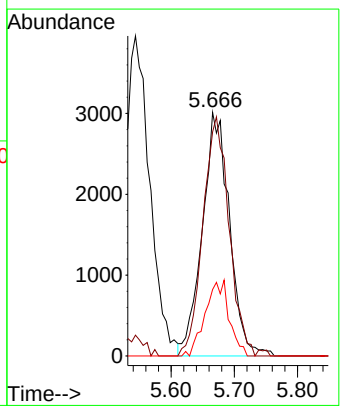
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

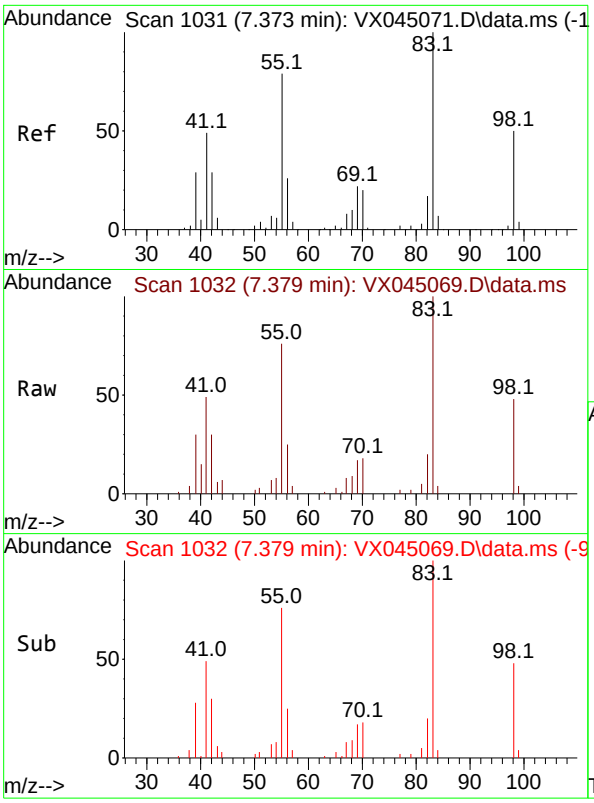



#38
Carbon Tetrachloride
Concen: 5.013 ug/l
RT: 5.666 min Scan# 751
Delta R.T. -0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:117 Resp: 8997

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 92.0 | 76.7 | 115.1 |
| 121 | 27.2 | 25.5 | 38.3 |

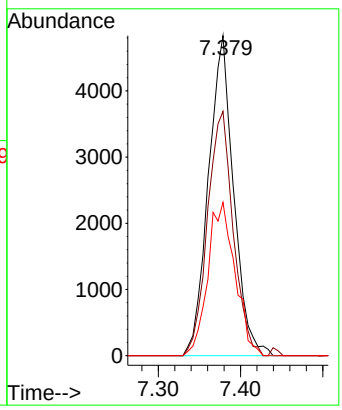





#39
Methylcyclohexane
Concen: 4.414 ug/l
RT: 7.379 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 83 Resp: 1029

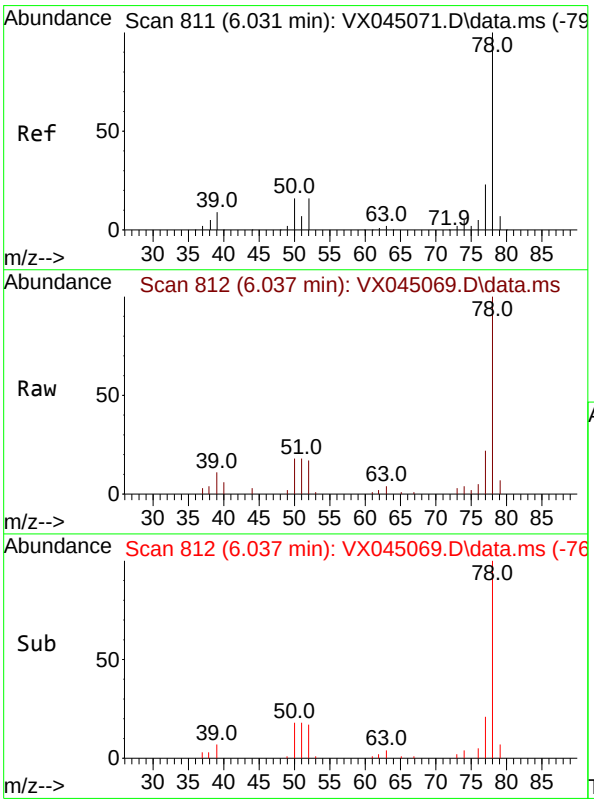
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 76.4 | 63.0 | 94.4 |
| 98 | 47.9 | 39.7 | 59.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

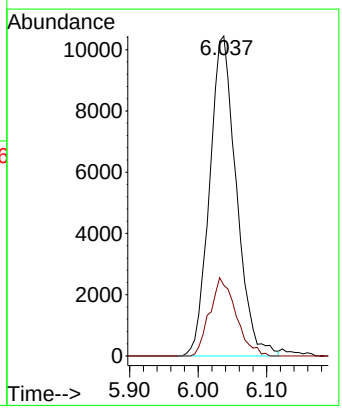
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

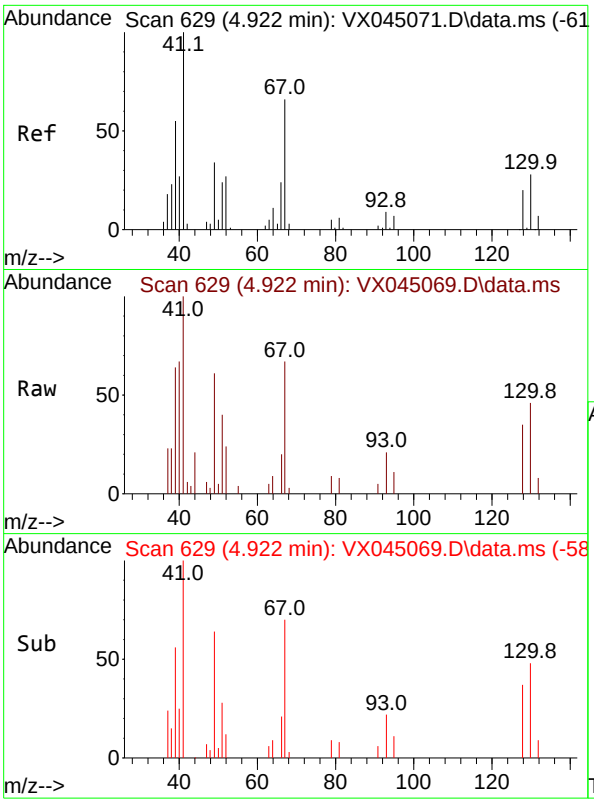



#40
Benzene
Concen: 4.966 ug/l
RT: 6.037 min Scan# 812
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 78 Resp: 28339

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 22.1 | 18.8 | 28.2 |

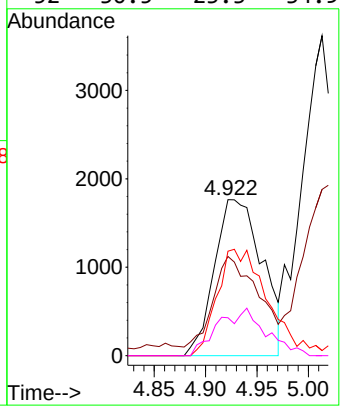





#41
Methacrylonitrile
Concen: 5.136 ug/l
RT: 4.922 min Scan# 6
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 41 Resp: 570

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 53.3 | 44.6 | 67.0 |
| 67 | 73.4 | 53.9 | 80.9 |
| 52 | 30.5 | 23.3 | 34.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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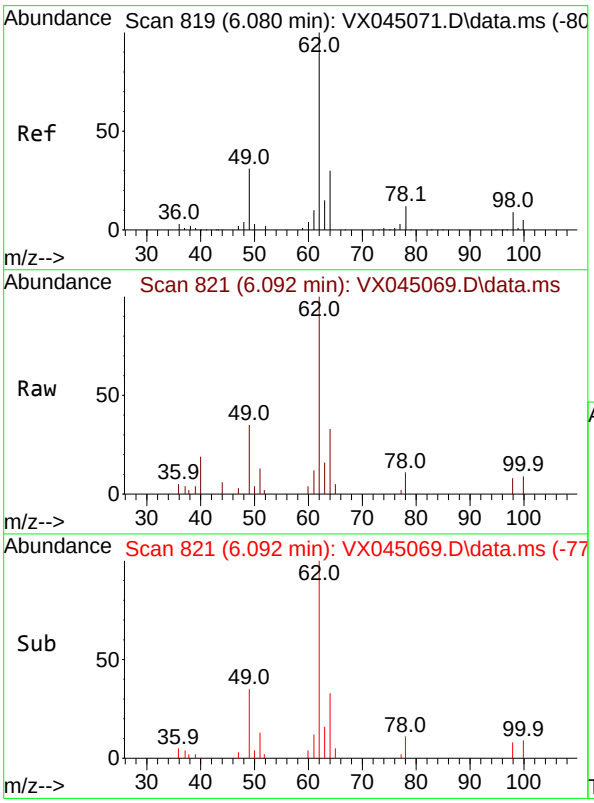
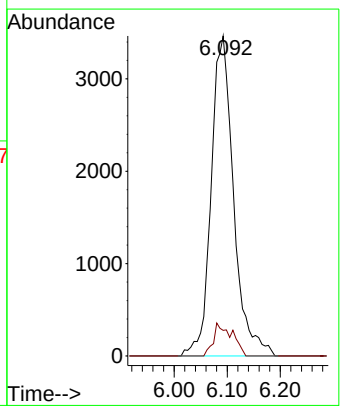
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

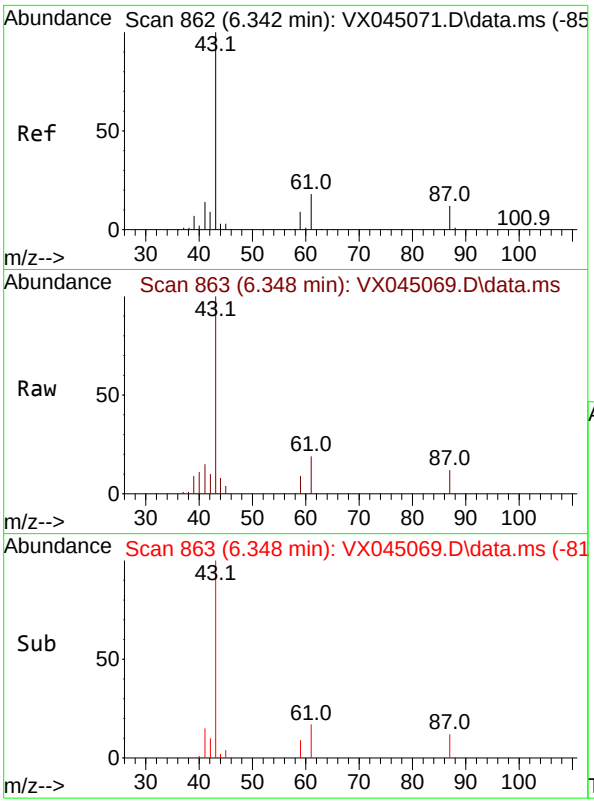



#42
1,2-Dichloroethane
Concen: 5.510 ug/l
RT: 6.092 min Scan# 821
Delta R.T. 0.012 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 62 Resp: 10189

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 8.5 | 0.0 | 18.2 |

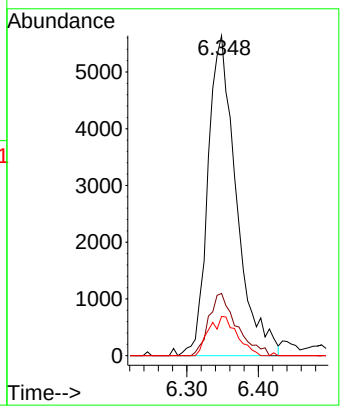





#43
Isopropyl Acetate
Concen: 4.700 ug/l
RT: 6.348 min Scan# 8
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 43 Resp: 1554

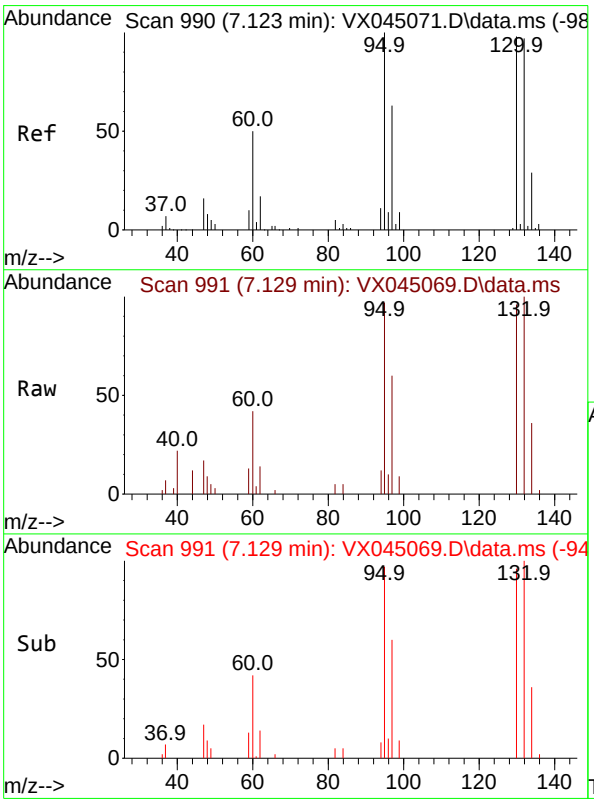
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 19.0 | 14.9 | 22.3 |
| 87 | 12.1 | 9.4 | 14.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

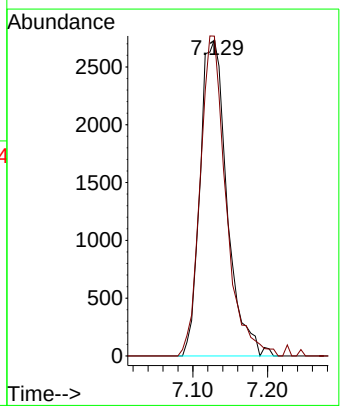
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

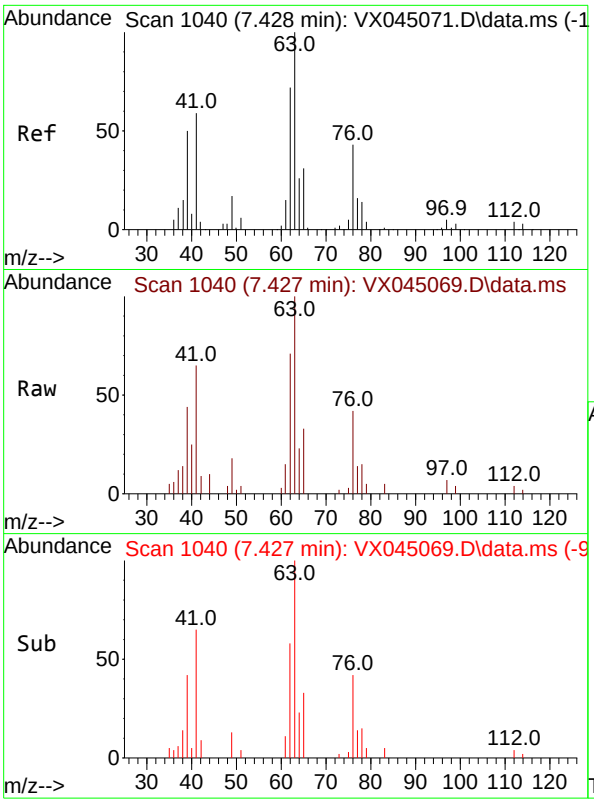



#44
Trichloroethene
Concen: 5.234 ug/l
RT: 7.129 min Scan# 991
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:130 Resp: 6827

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 101.2 | 0.0 | 205.0 |

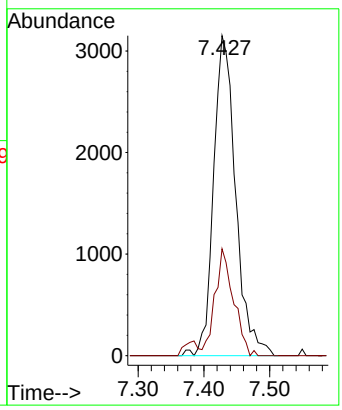





#45
1,2-Dichloropropane
Concen: 5.177 ug/l
RT: 7.427 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 63 Resp: 734

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 33.4 | 24.7 | 37.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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Reviewed By :John Carlone 02/28/2025
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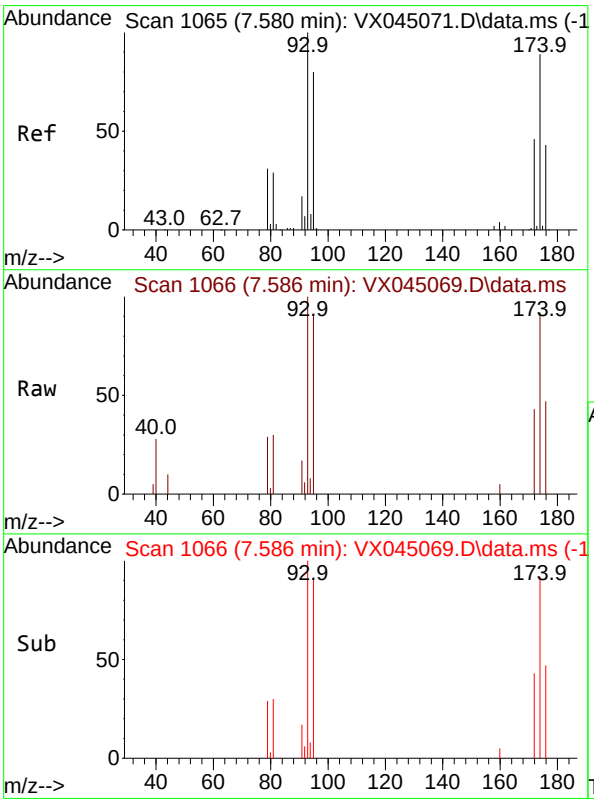
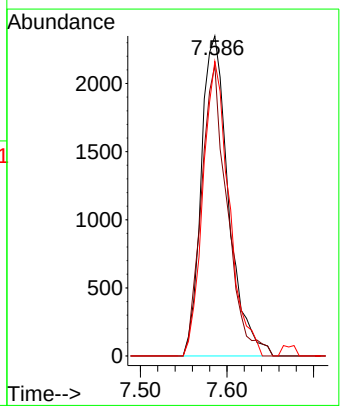
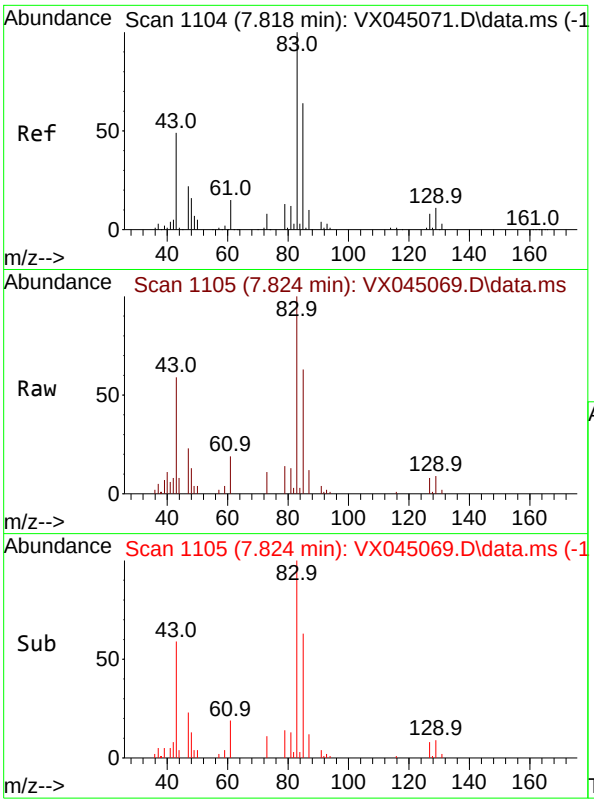



#46
Dibromomethane
Concen: 5.195 ug/l
RT: 7.586 min Scan# 1066
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 93 Resp: 5146

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 86.2 | 65.8 | 98.8 |
| 174 | 88.2 | 72.2 | 108.2 |

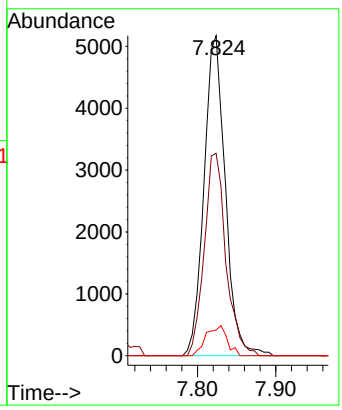





#47
Bromodichloromethane
Concen: 5.100 ug/l
RT: 7.824 min Scan# 11
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 83 Resp: 977

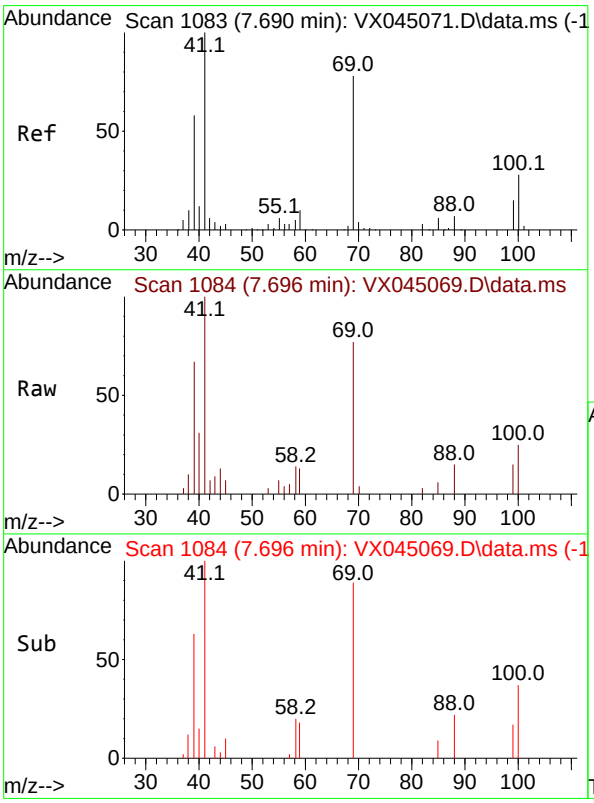
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 63.3 | 51.1 | 76.7 |
| 127 | 8.0 | 6.4 | 9.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

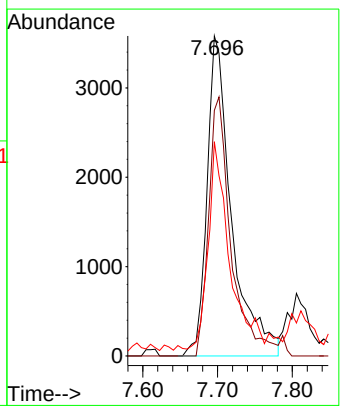
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

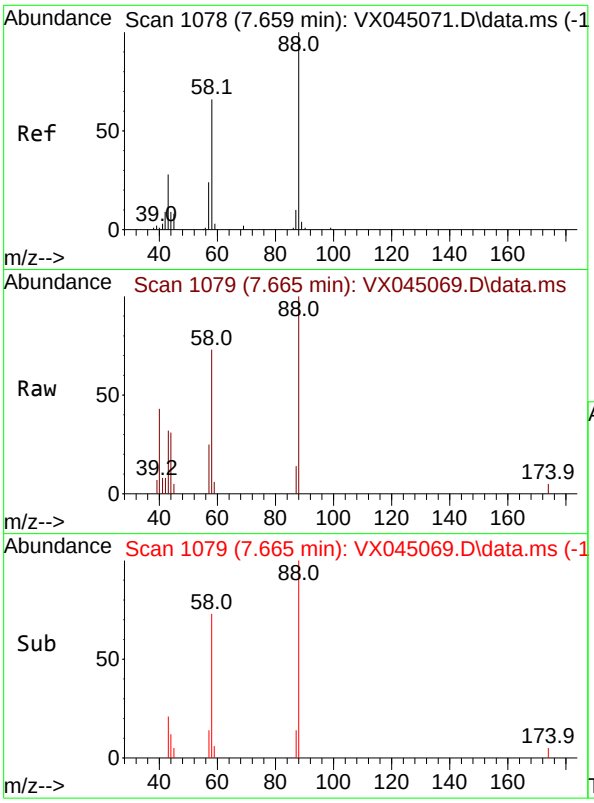



#48
Methyl methacrylate
Concen: 5.224 ug/l
RT: 7.696 min Scan# 1084
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 41 Resp: 8201

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 74.0 | 63.0 | 94.6 |
| 39 | 55.4 | 47.5 | 71.3 |

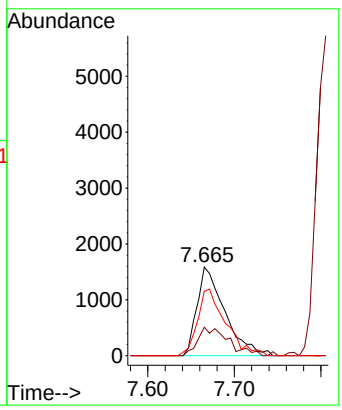





#49
1,4-Dioxane
Concen: 105.826 ug/l
RT: 7.665 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 88 Resp: 353

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 35.2 | 28.7 | 43.1 |
| 58 | 75.9 | 55.8 | 83.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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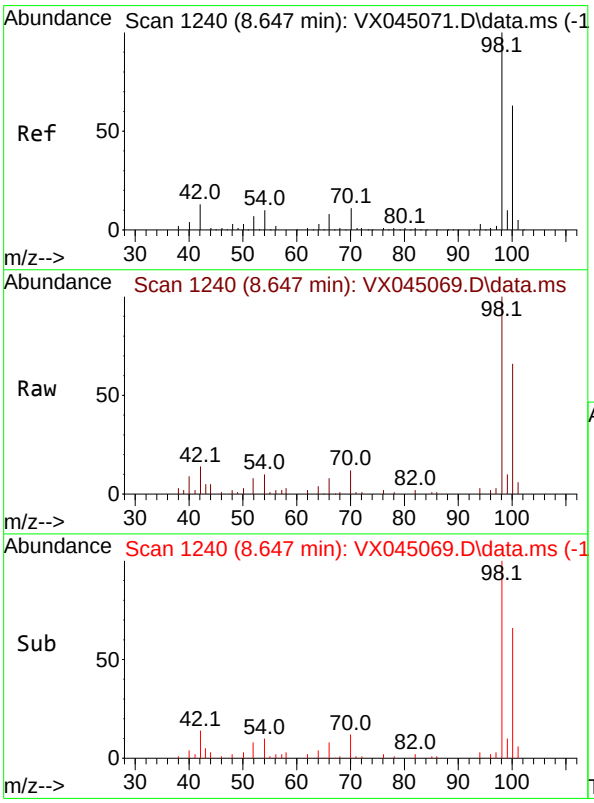
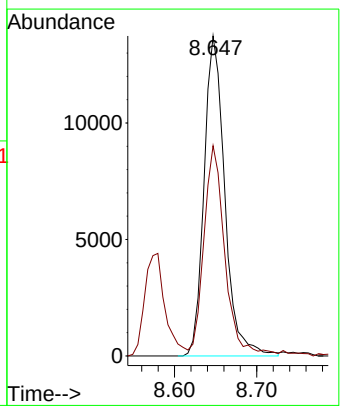
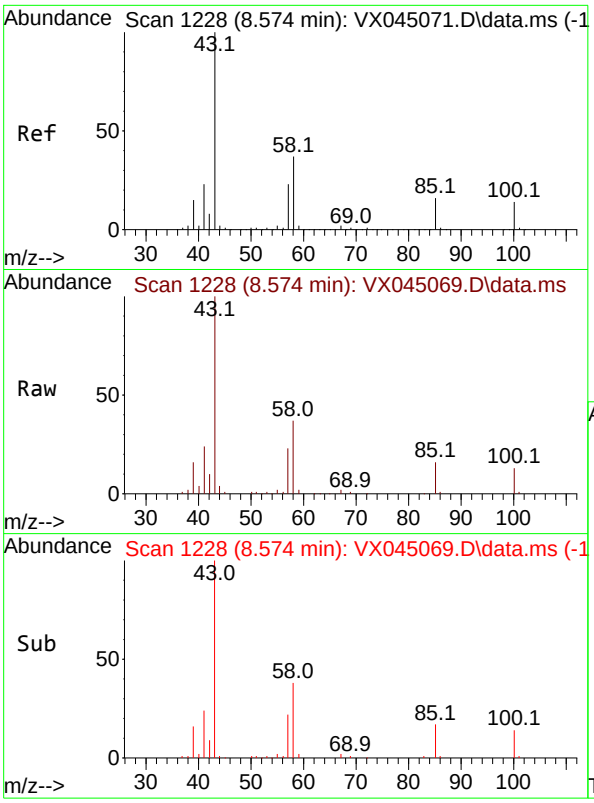



#50
Toluene-d8
Concen: 5.057 ug/l
RT: 8.647 min Scan# 1240
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 98 Resp: 24037

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.6 | 52.0 | 78.0 |

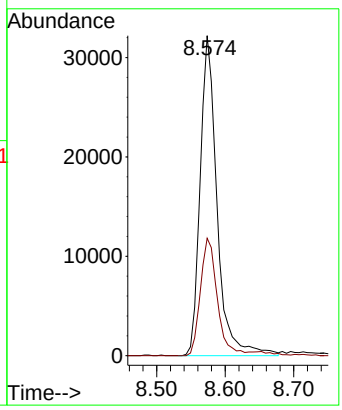





#51
4-Methyl-2-Pentanone
Concen: 27.303 ug/l
RT: 8.574 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 43 Resp: 5532

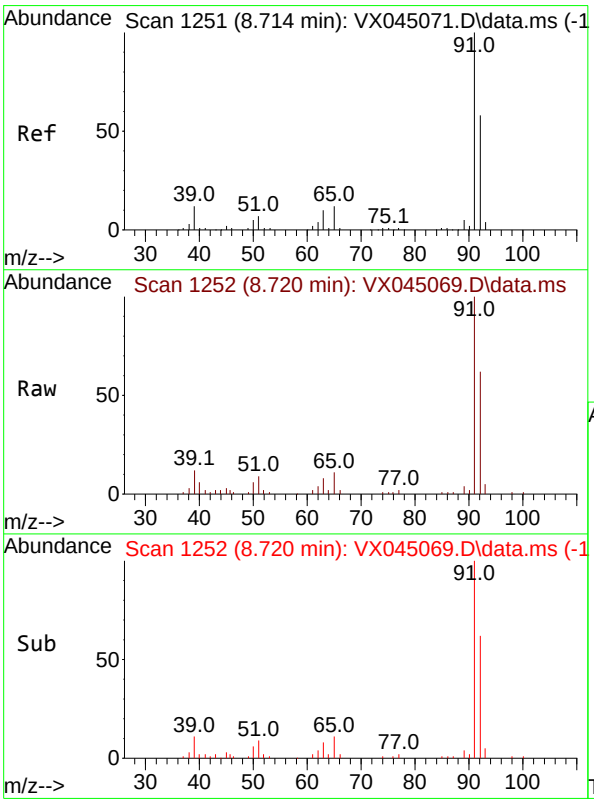
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 36.8 | 29.2 | 43.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

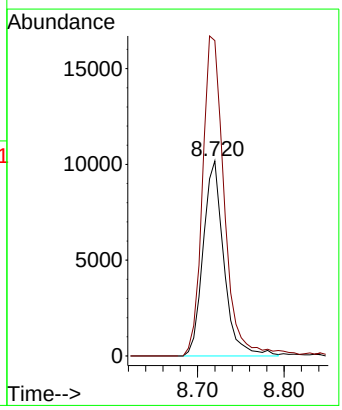
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

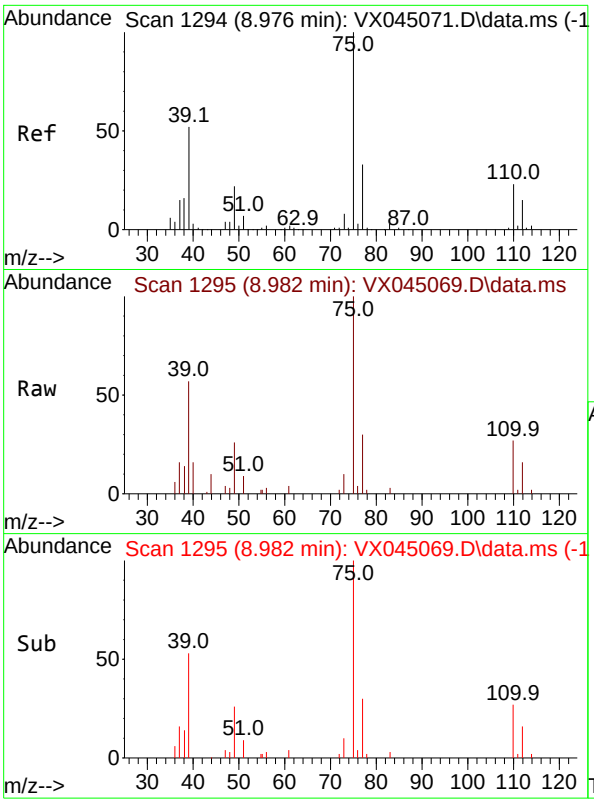



#52
Toluene
Concen: 4.997 ug/l
RT: 8.720 min Scan# 1252
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 92 Resp: 16933

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 172.6 | 138.9 | 208.3 |

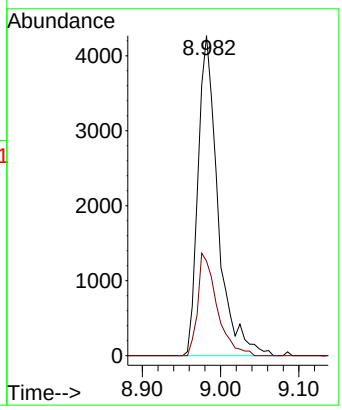





#53
t-1,3-Dichloropropene
Concen: 3.985 ug/l
RT: 8.982 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 75 Resp: 754

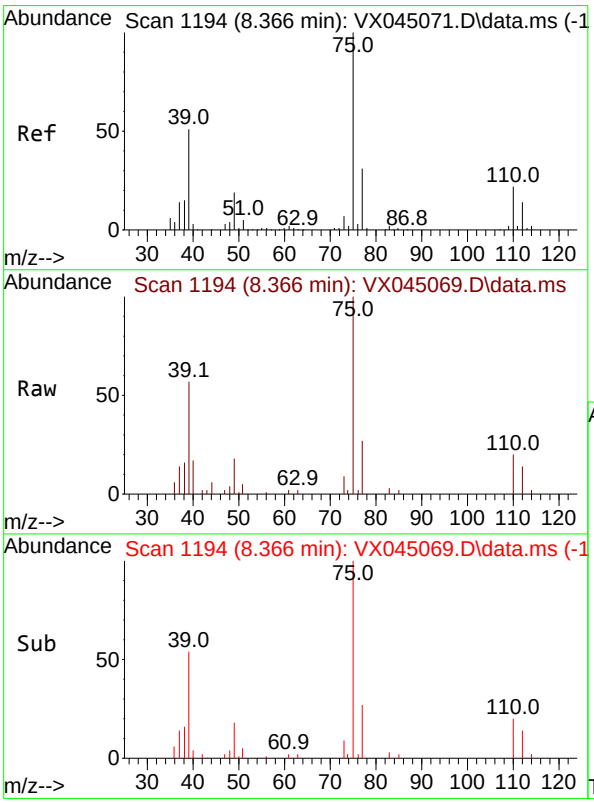
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 29.6 | 26.5 | 39.7 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

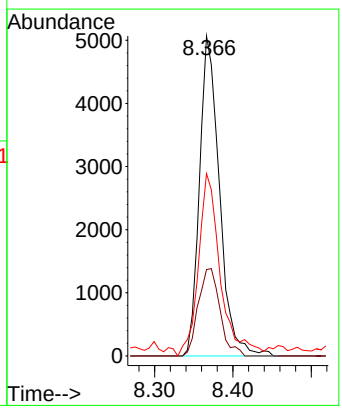
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

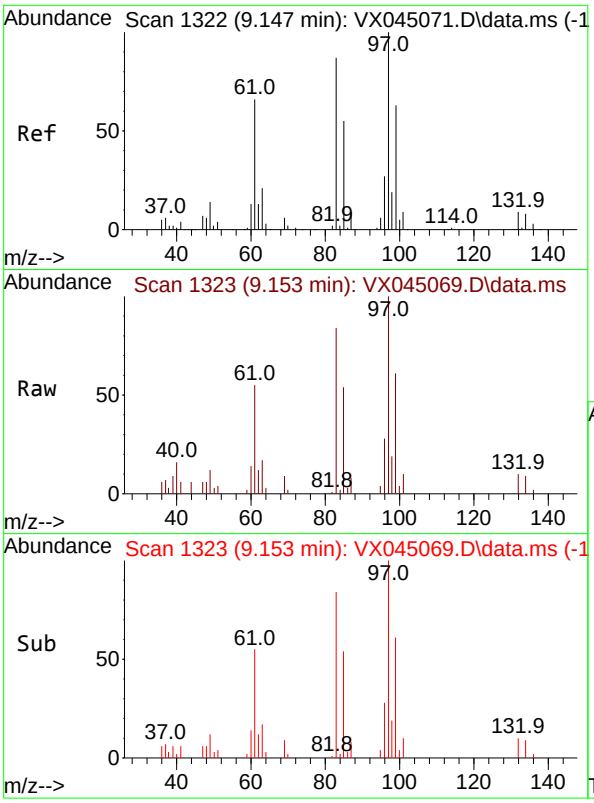



#54
cis-1,3-Dichloropropene
Concen: 4.244 ug/l
RT: 8.366 min Scan# 1194
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 75 Resp: 8988

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 27.0 | 24.7 | 37.1 |
| 39 | 57.0 | 40.7 | 61.1 |

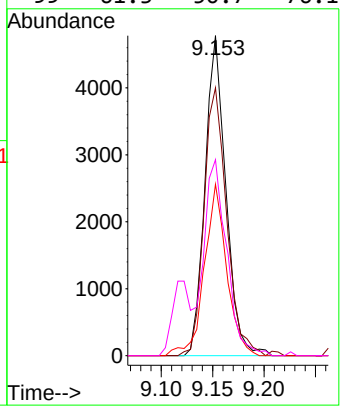





#55
1,1,2-Trichloroethane
Concen: 5.151 ug/l
RT: 9.153 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 97 Resp: 675

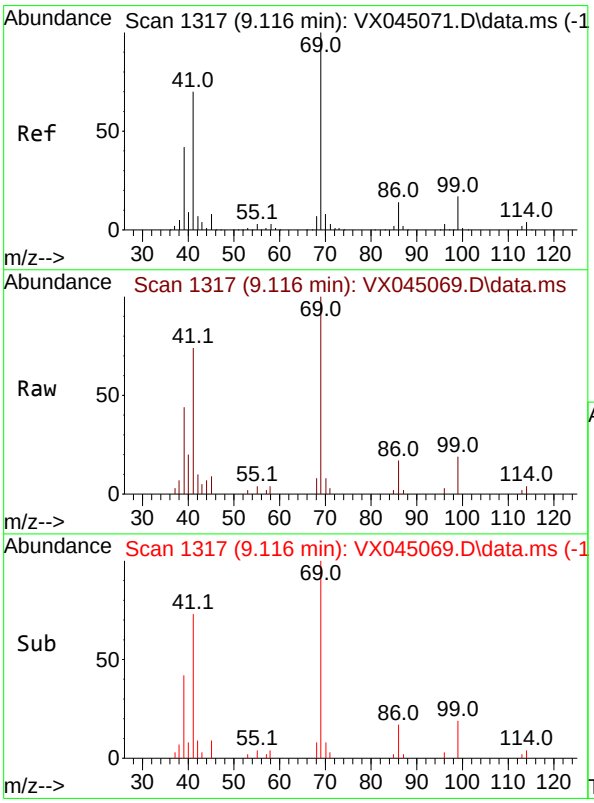
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 83.7 | 69.4 | 104.2 |
| 85 | 53.6 | 44.1 | 66.1 |
| 99 | 61.3 | 50.7 | 76.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

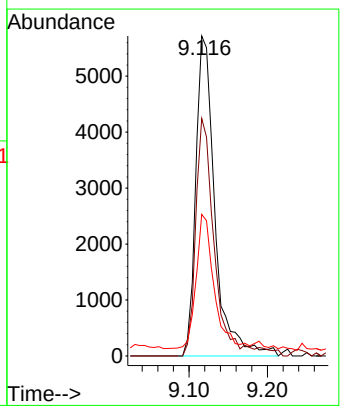
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

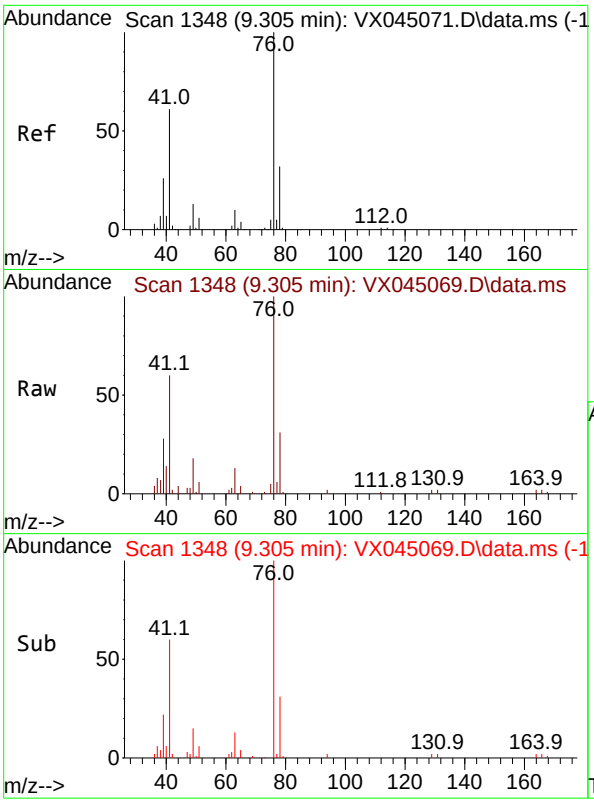



#56
Ethyl methacrylate
Concen: 4.628 ug/l
RT: 9.116 min Scan# 1317
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 69 Resp: 9712

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 71.0 | 57.0 | 85.4 |
| 39 | 39.2 | 34.2 | 51.4 |

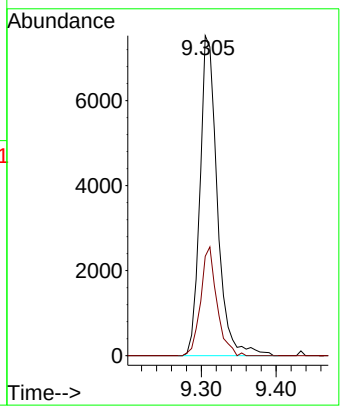





#57
1,3-Dichloropropane
Concen: 5.289 ug/l
RT: 9.305 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 76 Resp: 1210

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 31.9 | 25.5 | 38.3 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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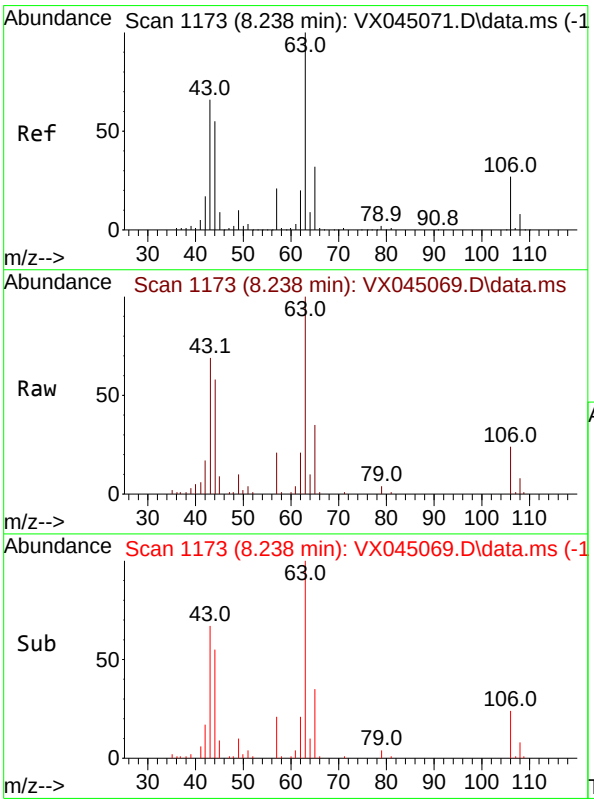
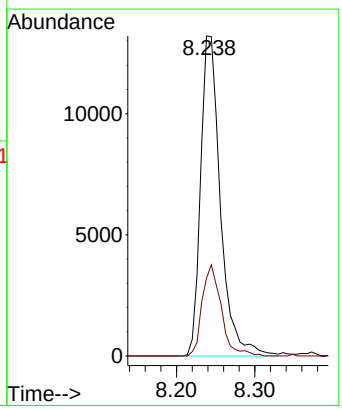
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

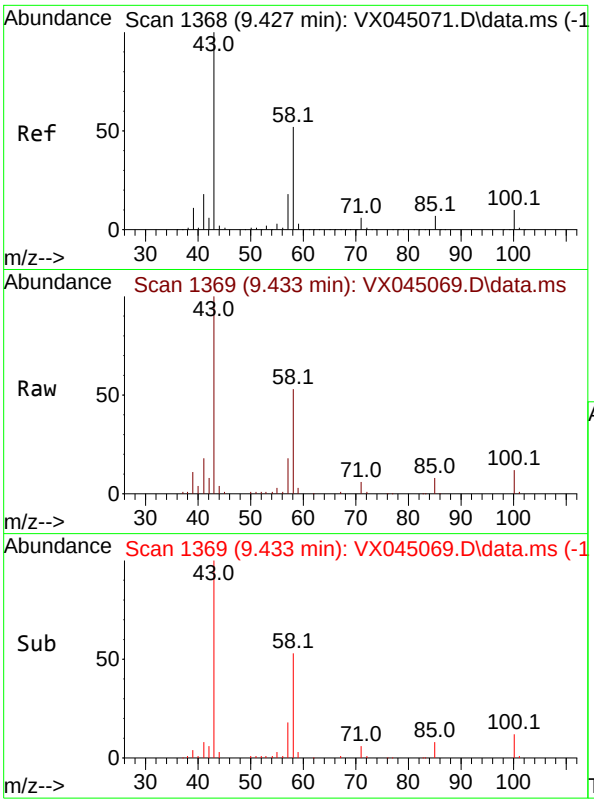



#58
2-Chloroethyl Vinyl ether
Concen: 22.527 ug/l
RT: 8.238 min Scan# 1173
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 63 Resp: 23212

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 27.4 | 21.5 | 32.3 |






#59
2-Hexanone
Concen: 27.363 ug/l
RT: 9.433 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

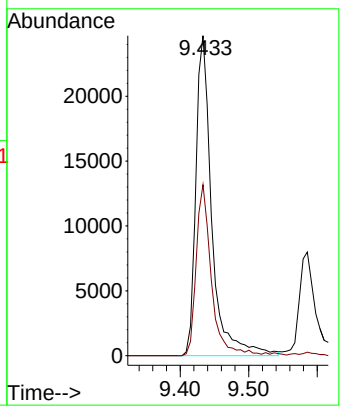
Tgt Ion: 43 Resp: 3999

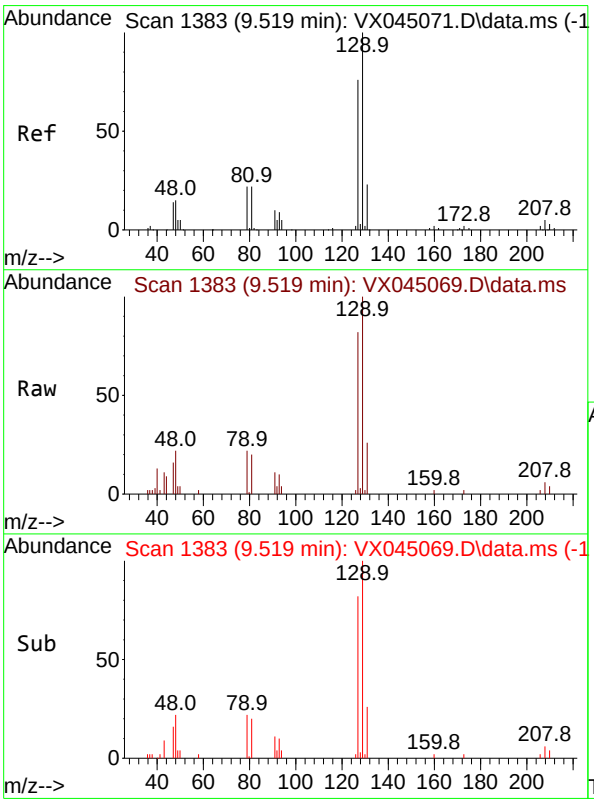
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 50.7 | 25.9 | 77.6 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

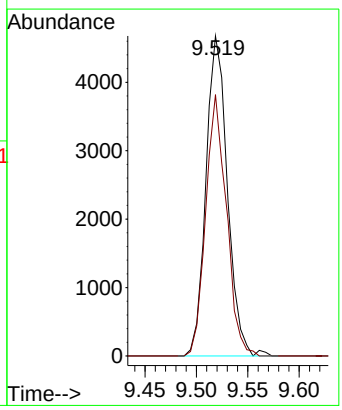


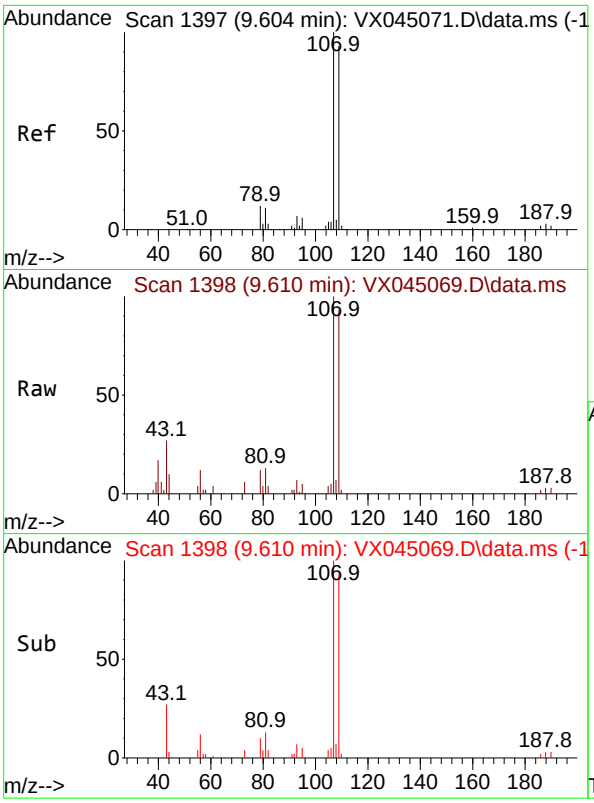




#60
Dibromochloromethane
Concen: 4.846 ug/l
RT: 9.519 min Scan# 1383
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:129 Resp: 6785

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 79.0 | 38.5 | 115.5 |

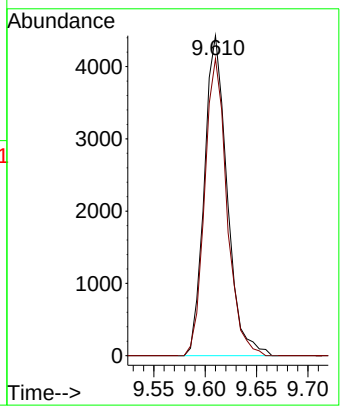





#61
1,2-Dibromoethane
Concen: 5.161 ug/l
RT: 9.610 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:107 Resp: 683

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 90.7 | 76.1 | 114.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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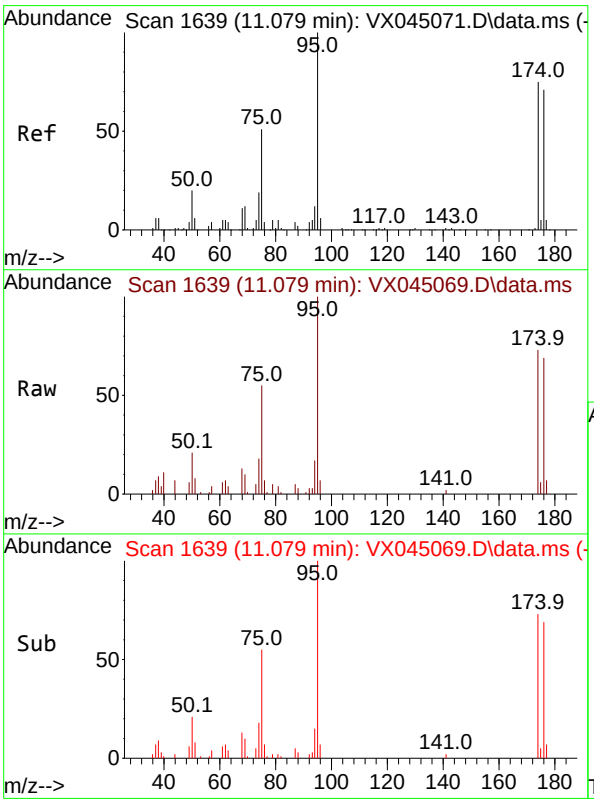
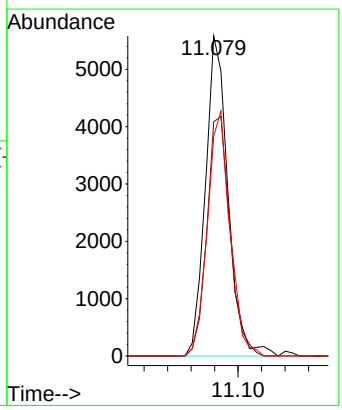
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

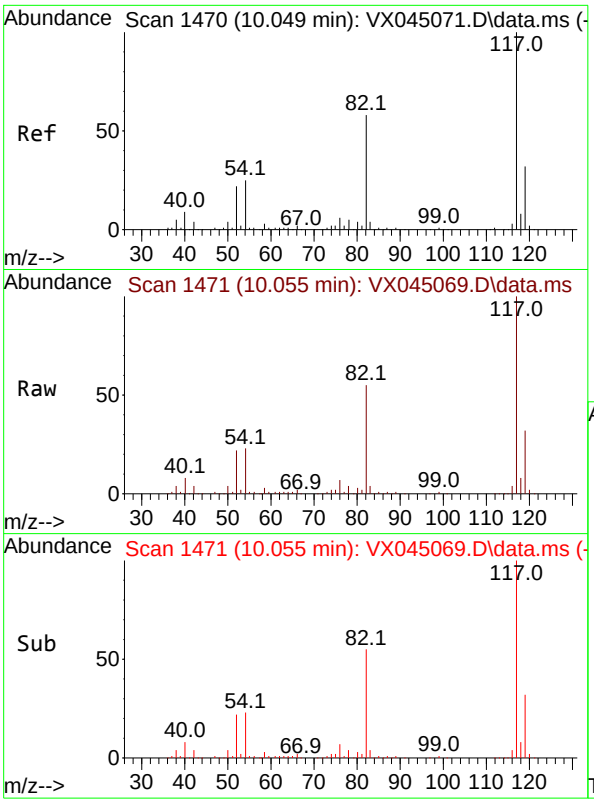



#62
4-Bromofluorobenzene
Concen: 4.685 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 95 Resp: 7436

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 76.5 | 0.0 | 148.2 |
| 176 | 76.3 | 0.0 | 141.4 |

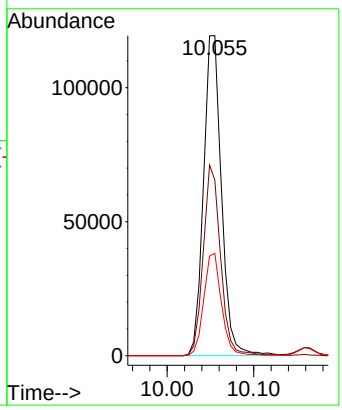





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.055 min Scan# 14
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:117 Resp: 17236

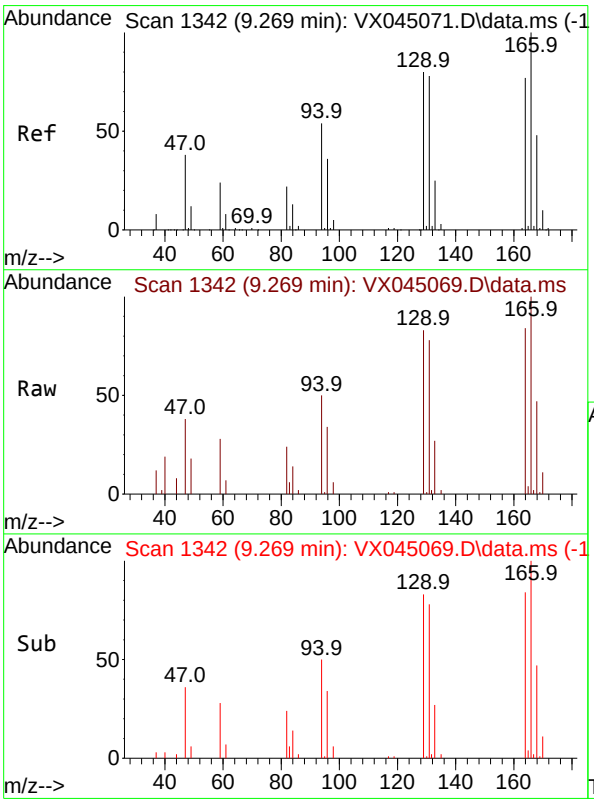
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 54.8 | 46.3 | 69.5 |
| 119 | 32.0 | 25.7 | 38.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

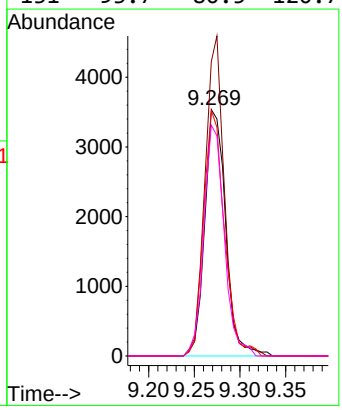
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

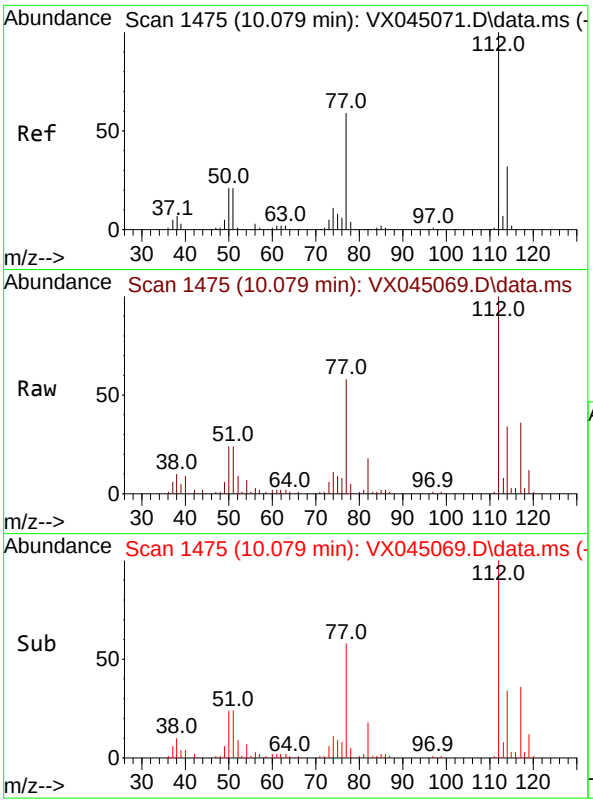



#64
Tetrachloroethene
Concen: 5.128 ug/l
RT: 9.269 min Scan# 1342
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:164 Resp: 5615

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 119.5 | 103.6 | 155.4 |
| 129 | 99.7 | 82.7 | 124.1 |
| 131 | 93.7 | 80.5 | 120.7 |

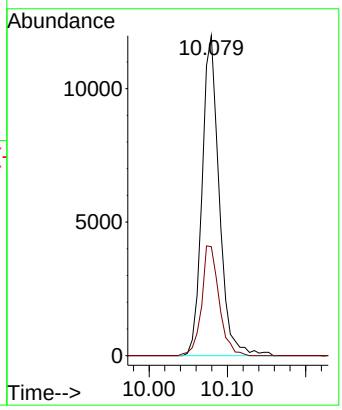





#65
Chlorobenzene
Concen: 4.908 ug/l
RT: 10.079 min Scan# 14
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:112 Resp: 1816

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 34.0 | 26.0 | 39.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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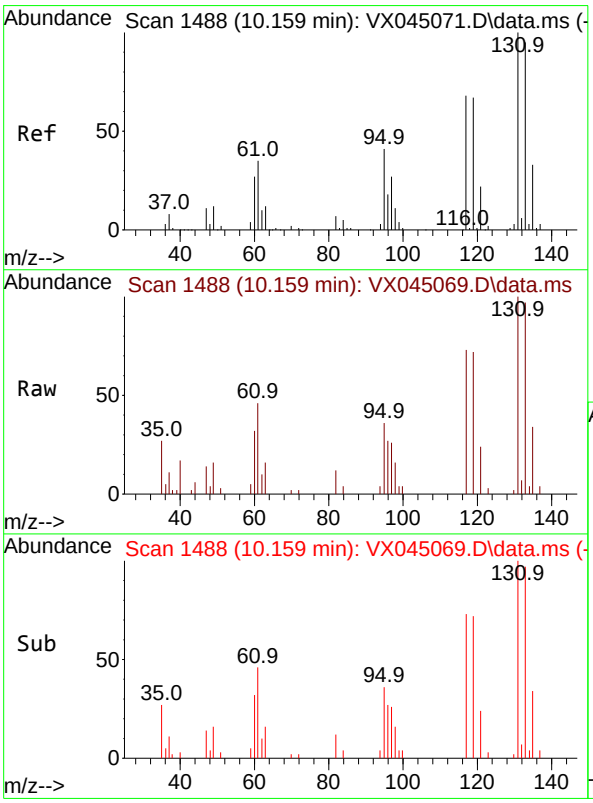
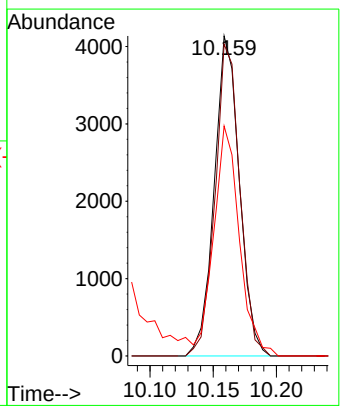
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

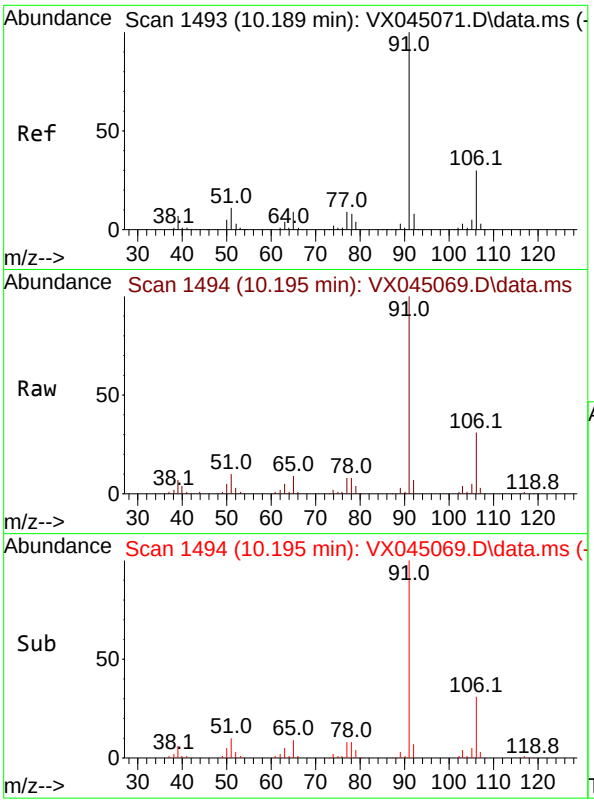



#66
1,1,1,2-Tetrachloroethane
Concen: 4.781 ug/l
RT: 10.159 min Scan# 1488
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:131 Resp: 5702

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 96.1 | 48.6 | 145.9 |
| 119 | 73.4 | 33.9 | 101.7 |

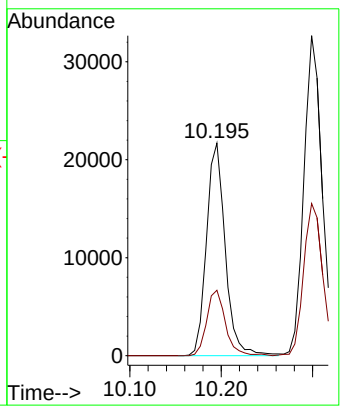





#67
Ethyl Benzene
Concen: 4.725 ug/l
RT: 10.195 min Scan# 14
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 91 Resp: 3091

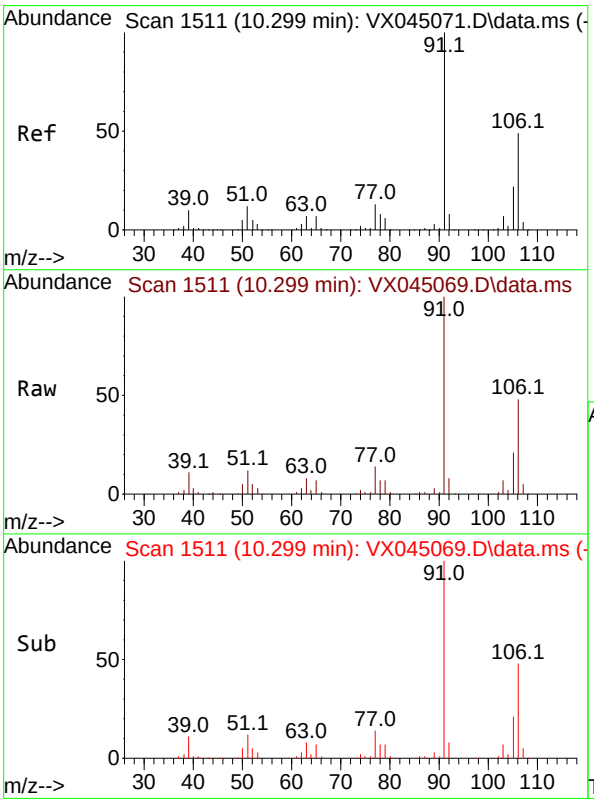
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 30.8 | 23.9 | 35.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

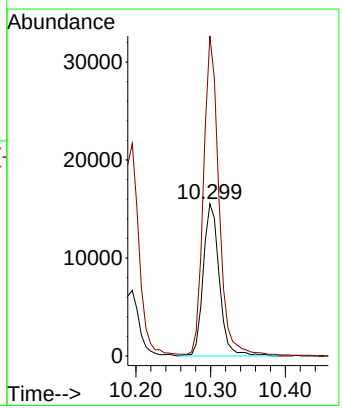
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

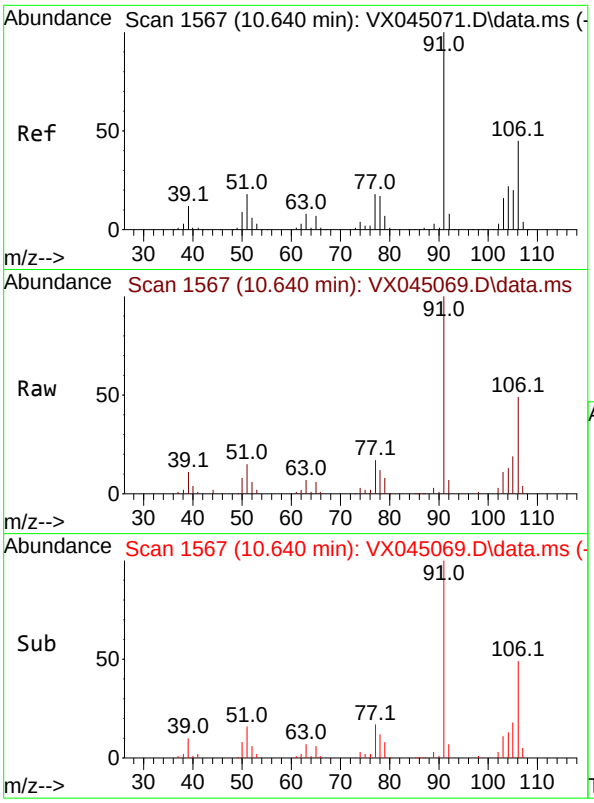



#68
m/p-Xylenes
Concen: 9.608 ug/l
RT: 10.299 min Scan# 1511
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:106 Resp: 23152

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 202.7 | 165.4 | 248.0 |

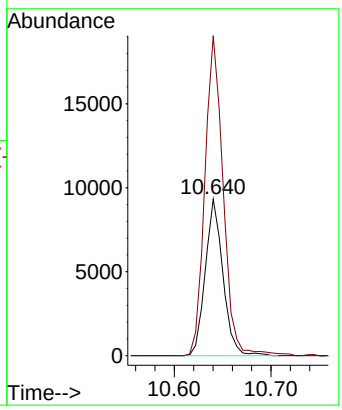





#69
o-Xylene
Concen: 4.914 ug/l
RT: 10.640 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:106 Resp: 1188

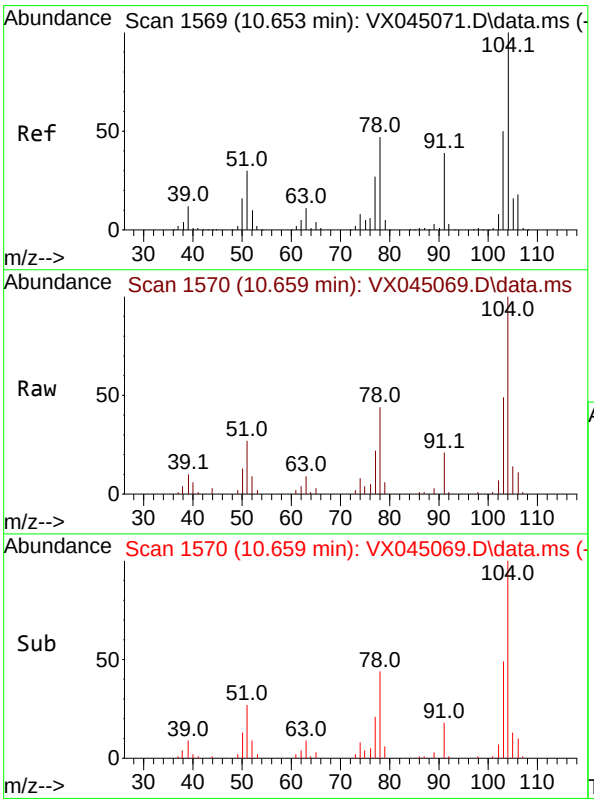
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 211.7 | 109.9 | 329.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

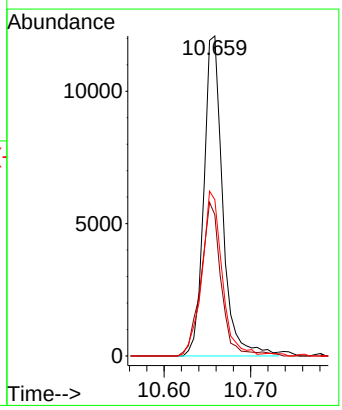
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

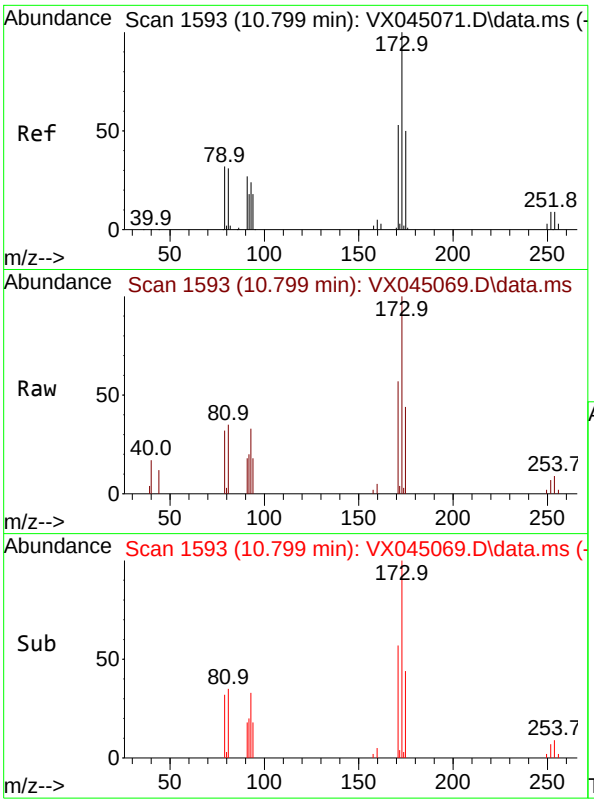



#70
Styrene
Concen: 4.704 ug/l
RT: 10.659 min Scan# 1570
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:104 Resp: 18278

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 51.7 | 42.2 | 63.4 |
| 103 | 55.3 | 43.8 | 65.8 |

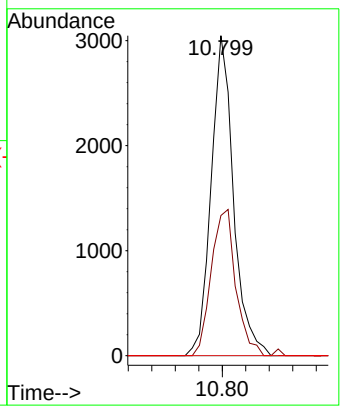





#71
Bromoform
Concen: 4.541 ug/l
RT: 10.799 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:173 Resp: 402

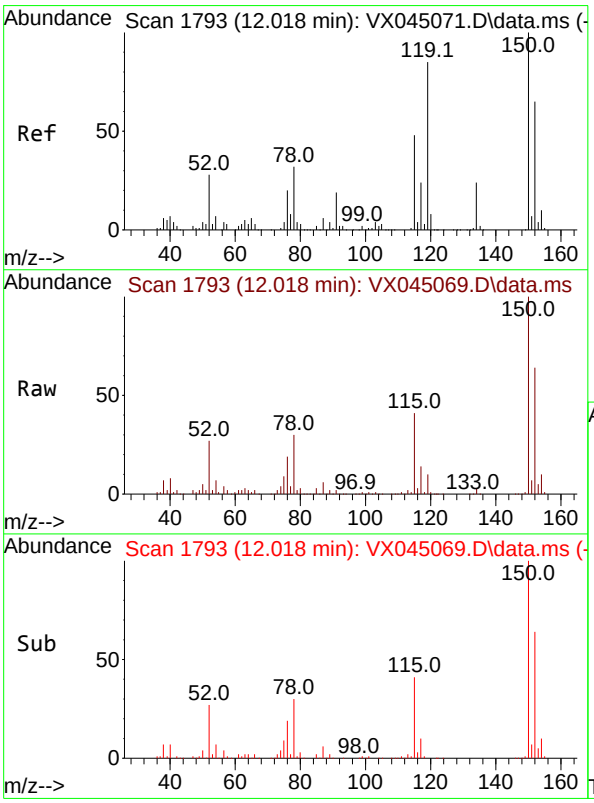
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 50.1 | 24.6 | 73.6 |
| 254 | 0.0 | 0.0 | 0.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

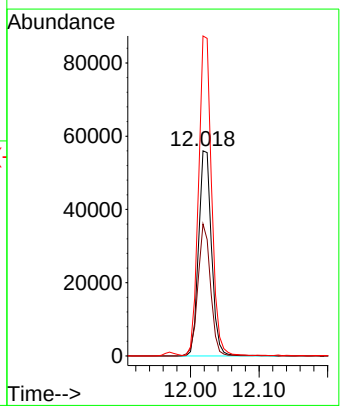
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

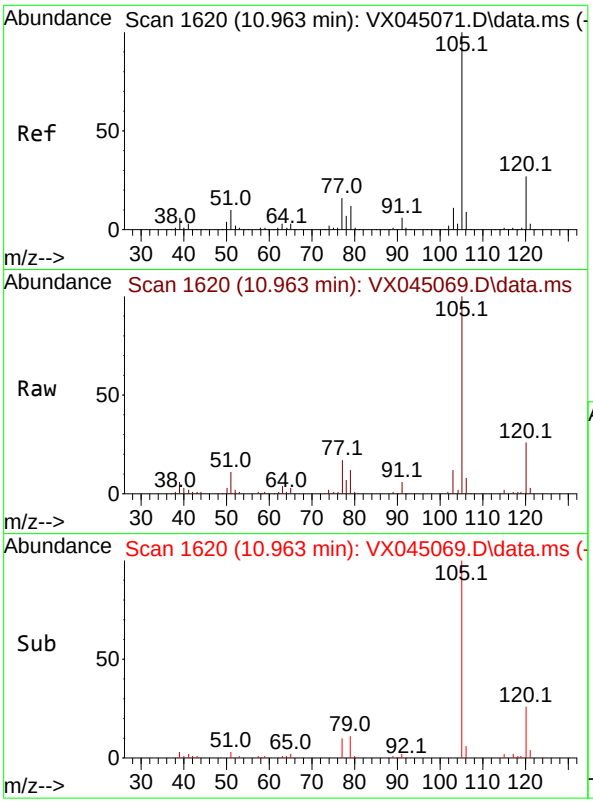



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.018 min Scan# 1793
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:152 Resp: 73591

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 62.6 | 44.2 | 132.6 |
| 150 | 156.2 | 0.0 | 349.0 |

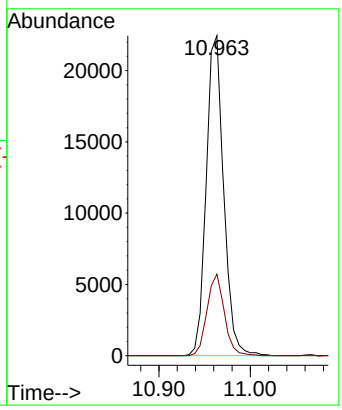





#73
Isopropylbenzene
Concen: 4.991 ug/l
RT: 10.963 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:105 Resp: 2968

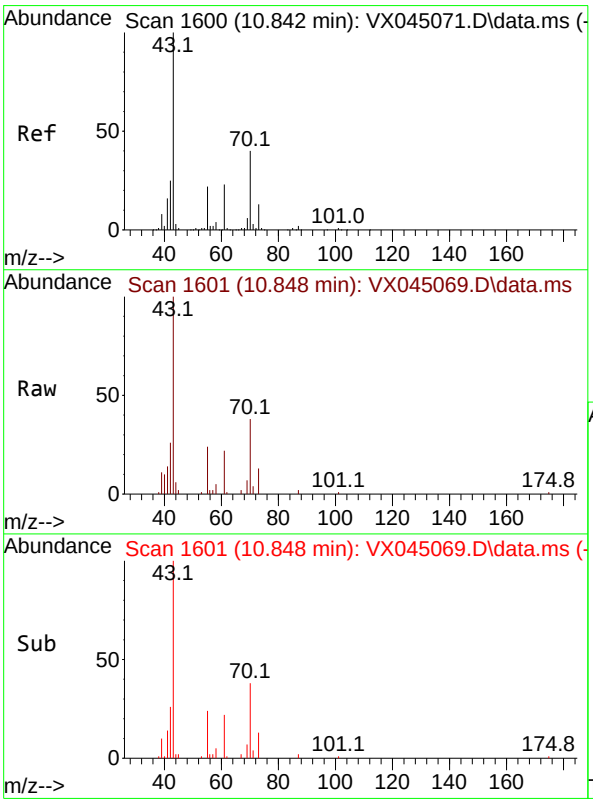
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.3 | 13.2 | 39.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

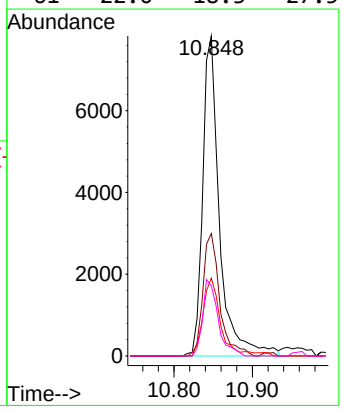
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

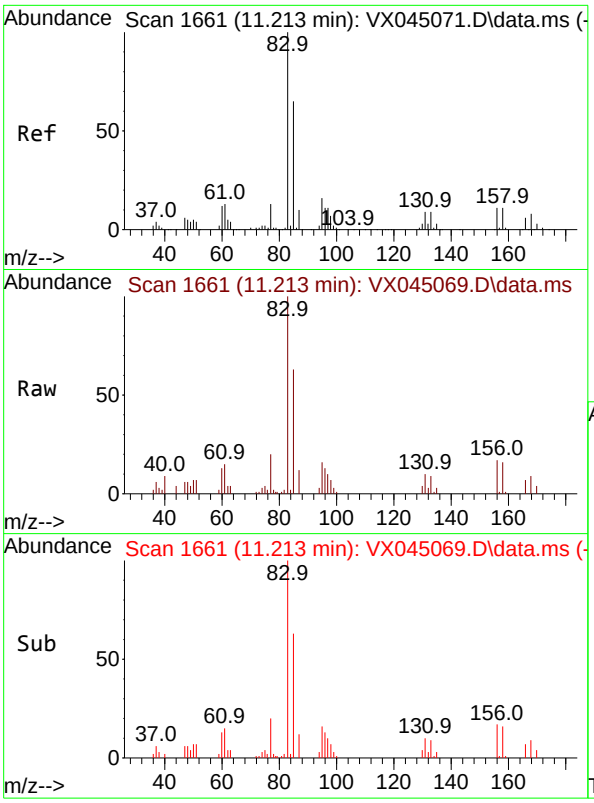



#74
N-amyl acetate
Concen: 4.300 ug/l
RT: 10.848 min Scan# 1601
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 43 Resp: 11609

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 38.1 | 31.8 | 47.6 |
| 55 | 25.9 | 18.3 | 27.5 |
| 61 | 22.0 | 18.3 | 27.5 |

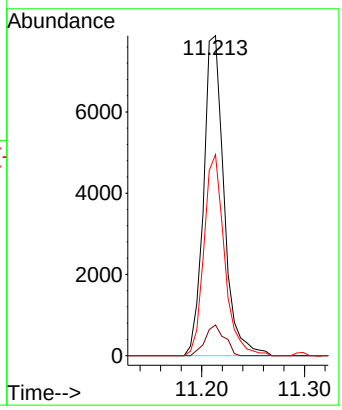





#75
1,1,2,2-Tetrachloroethane
Concen: 5.310 ug/l
RT: 11.213 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 83 Resp: 1088

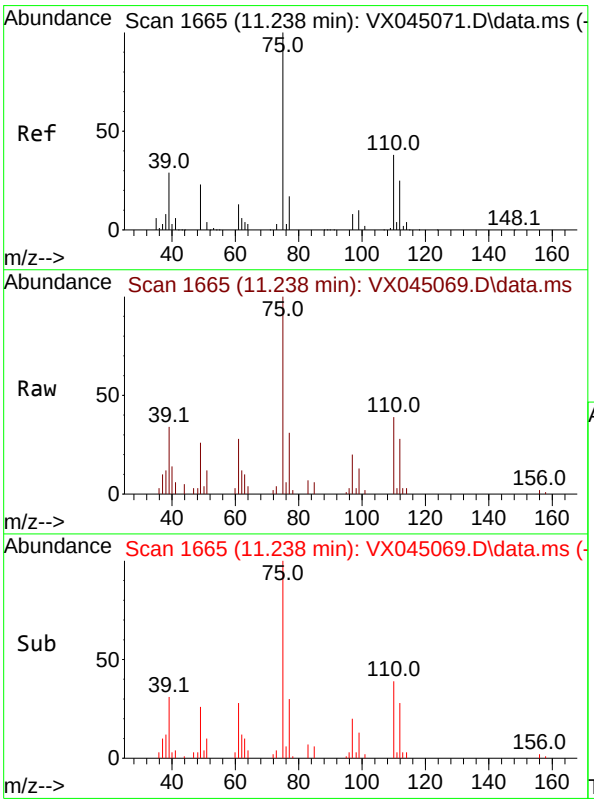
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 9.2 | 4.5 | 13.4 |
| 85 | 63.1 | 31.7 | 95.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

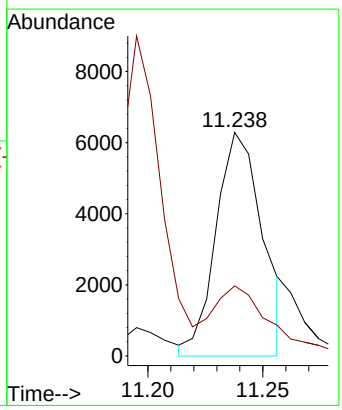
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

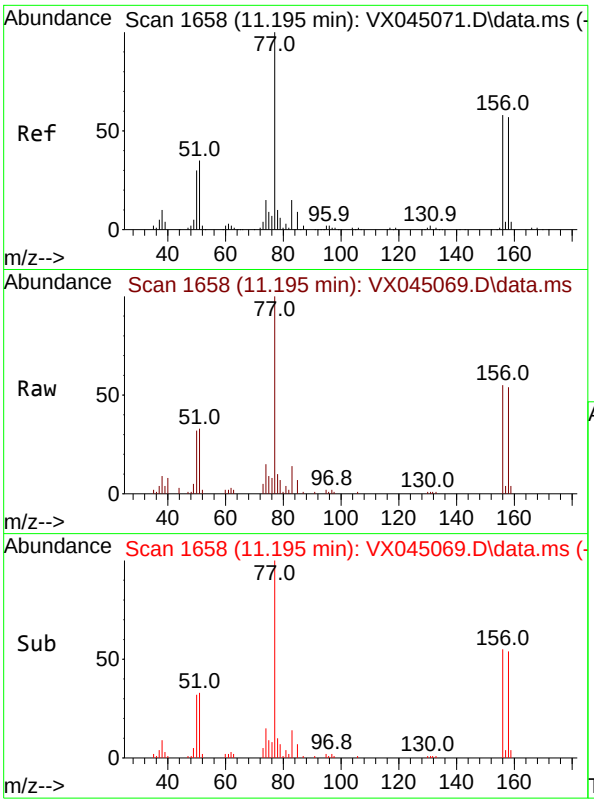



#76
1,2,3-Trichloropropane
Concen: 5.384 ug/l m
RT: 11.238 min Scan# 1665
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 75 Resp: 8839

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 39.8 | 20.7 | 62.1 |

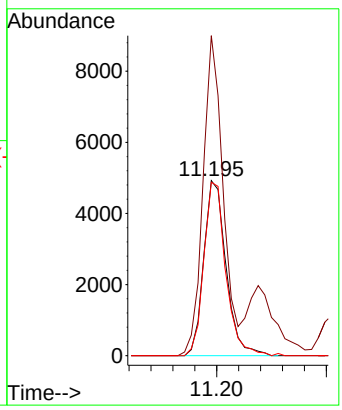





#77
Bromobenzene
Concen: 5.163 ug/l
RT: 11.195 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:156 Resp: 697

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 163.3 | 85.8 | 257.4 |
| 158 | 97.8 | 48.4 | 145.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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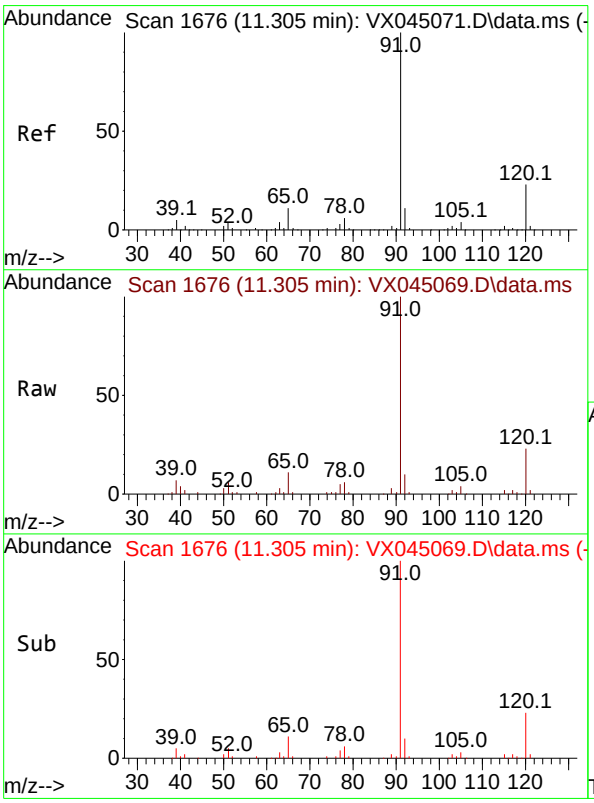
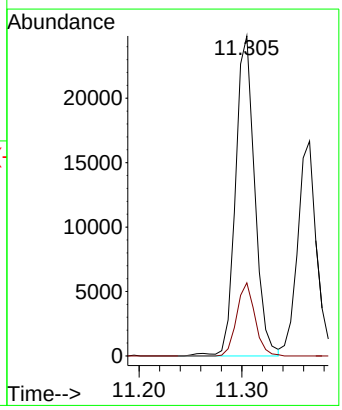
Supervised By :Mahesh Dadoda 02/28/2025

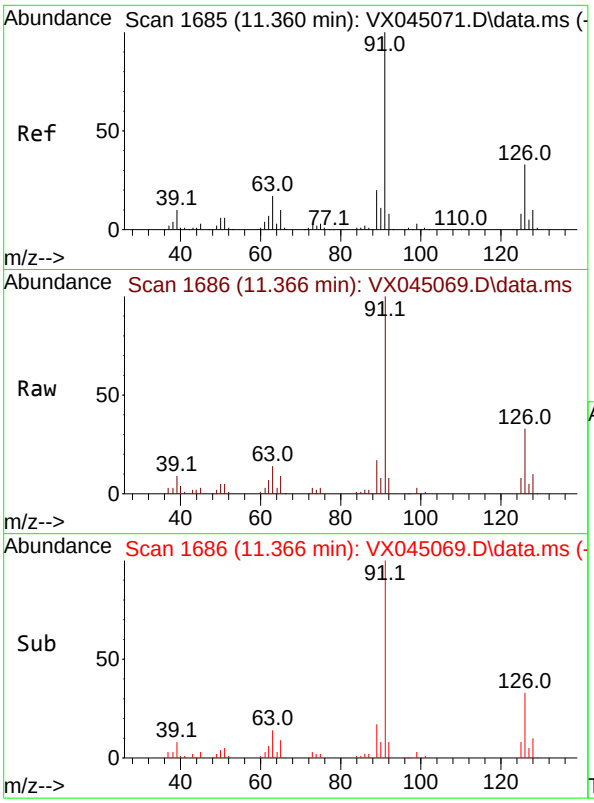



#78
n-propylbenzene
Concen: 4.694 ug/l
RT: 11.305 min Scan# 1676
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 91 Resp: 32196

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 21.7 | 11.2 | 33.6 |

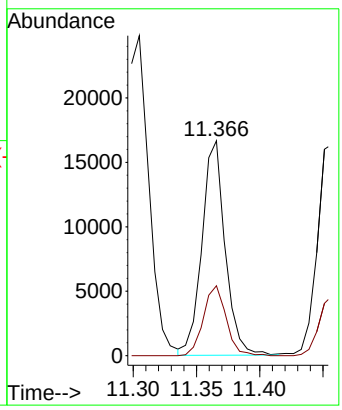





#79
2-Chlorotoluene
Concen: 5.048 ug/l
RT: 11.366 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 91 Resp: 2125

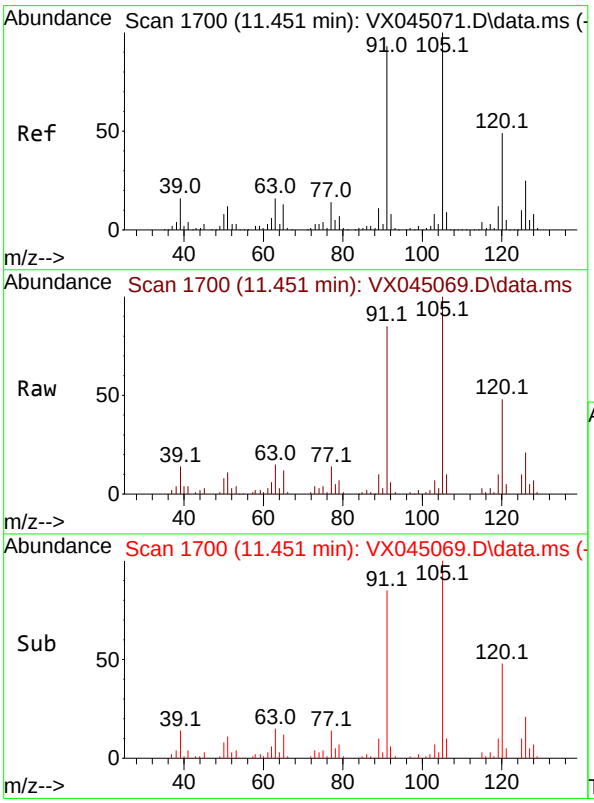
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 32.0 | 16.4 | 49.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

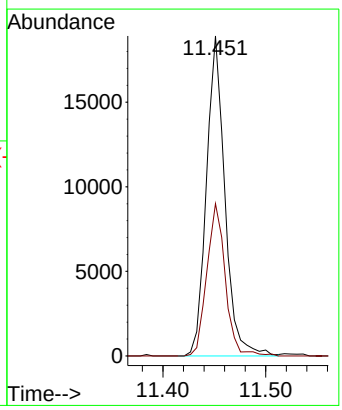
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

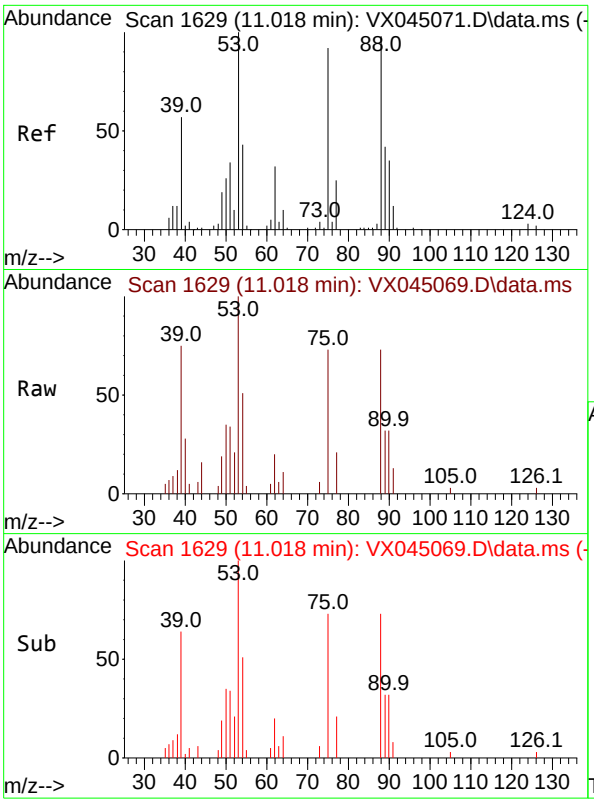



#80
1,3,5-Trimethylbenzene
Concen: 4.897 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:105 Resp: 23627

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 47.6 | 24.1 | 72.2 |






#81
trans-1,4-Dichloro-2-butene
Concen: 3.256 ug/l
RT: 11.018 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 75 Resp: 197

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 134.1 | 88.5 | 132.7# |
| 89 | 43.4 | 36.2 | 54.4 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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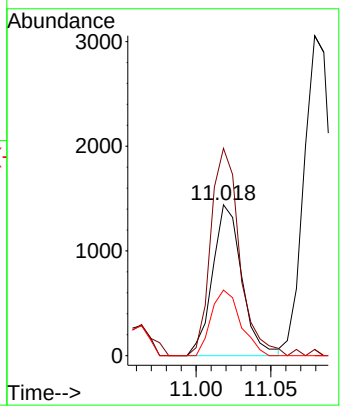
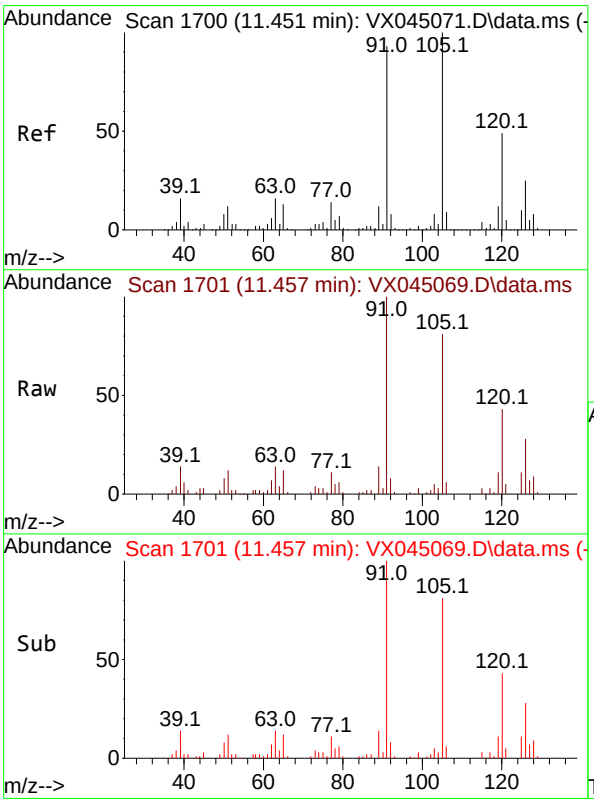
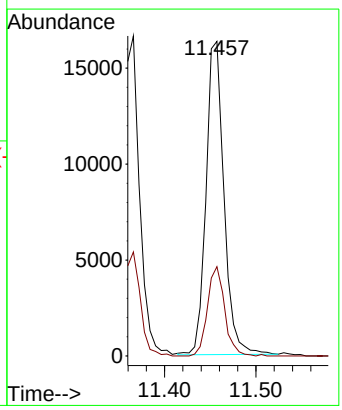


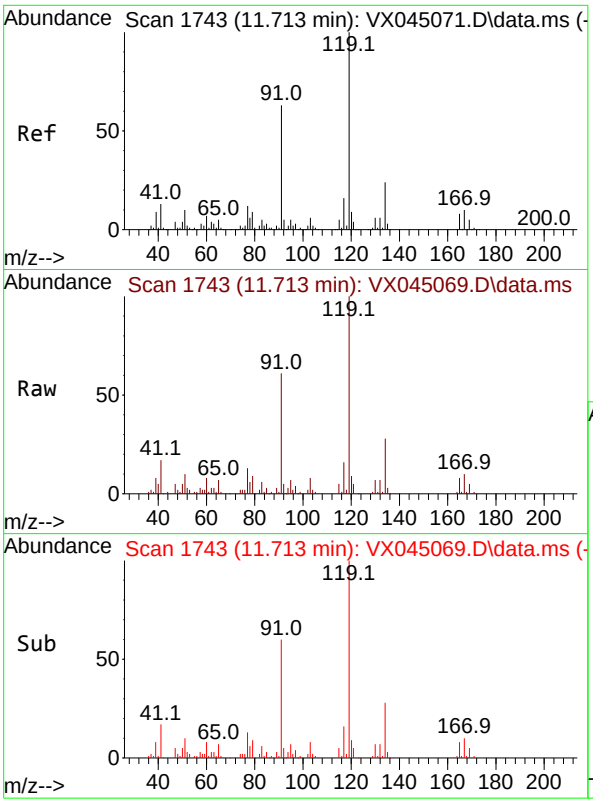




#82
4-Chlorotoluene
Concen: 4.761 ug/l
RT: 11.457 min Scan# 1701
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 91 Resp: 22190

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 27.3 | 14.1 | 42.4 |

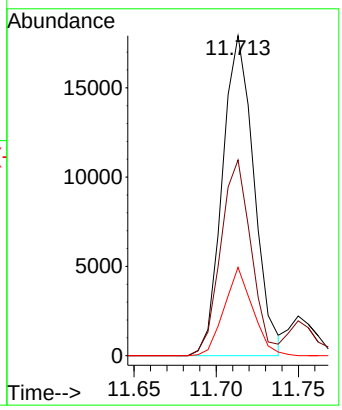





#83
tert-Butylbenzene
Concen: 4.910 ug/l
RT: 11.713 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:119 Resp: 2396

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 59.5 | 30.7 | 92.1 |
| 134 | 24.9 | 11.7 | 35.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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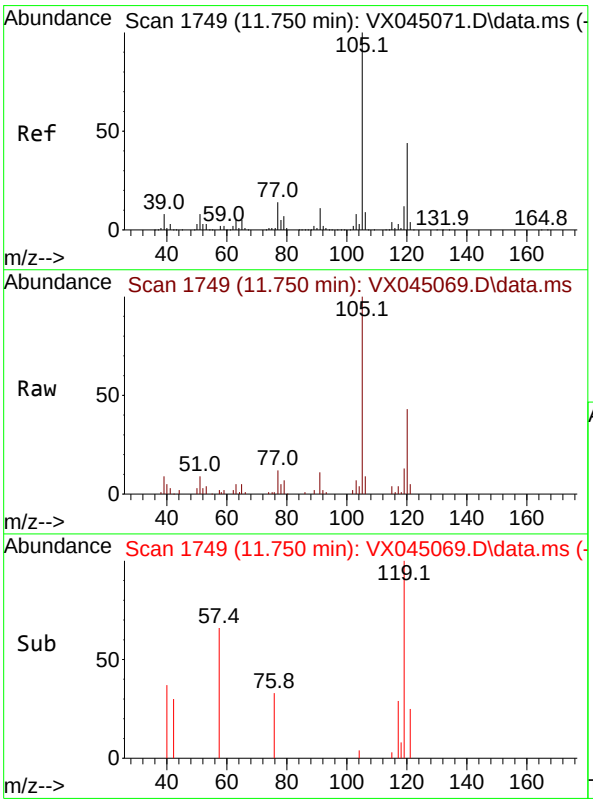
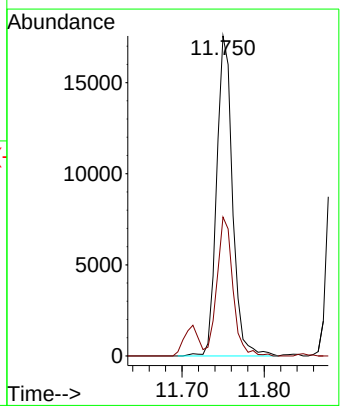
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

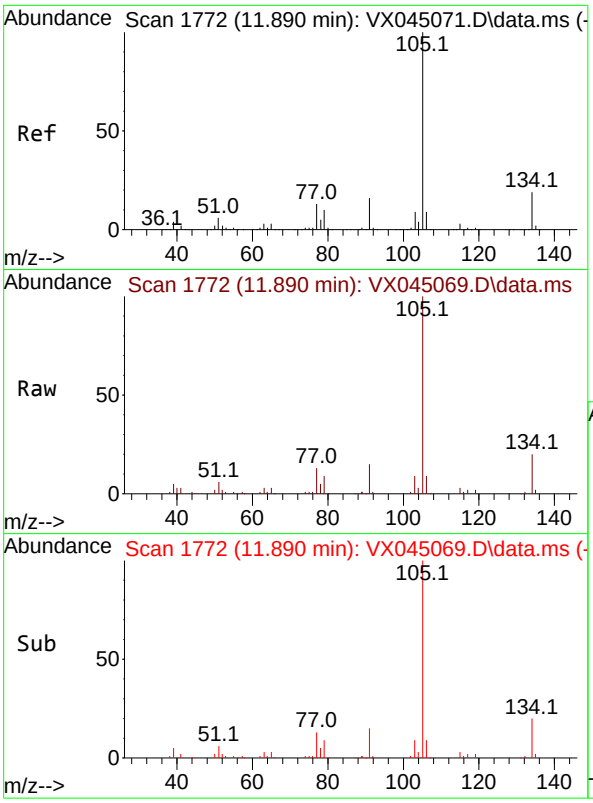



#84
1,2,4-Trimethylbenzene
Concen: 4.960 ug/l
RT: 11.750 min Scan# 1749
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:105 Resp: 23561

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 43.4 | 22.1 | 66.1 |

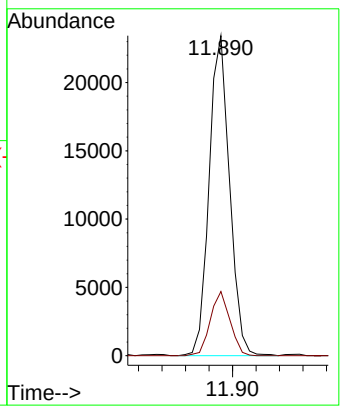





#85
sec-Butylbenzene
Concen: 4.687 ug/l
RT: 11.890 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:105 Resp: 2831

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.3 | 9.8 | 29.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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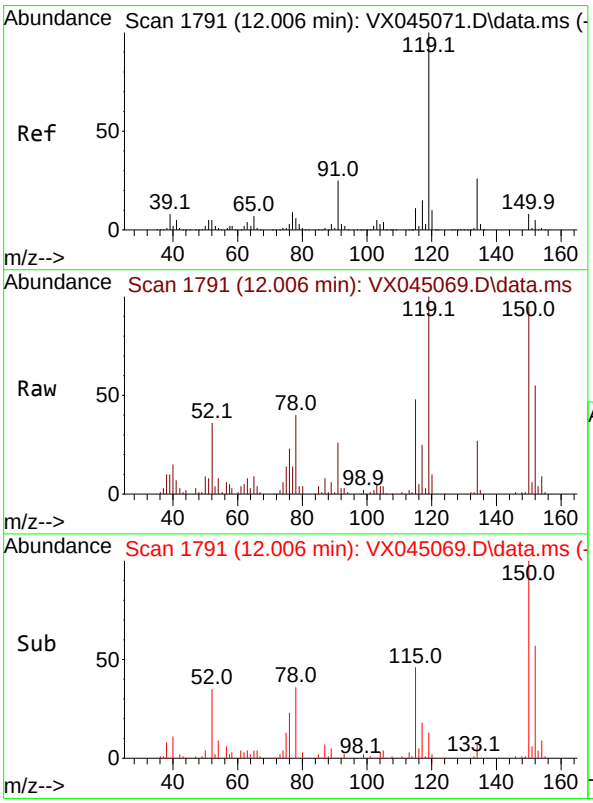
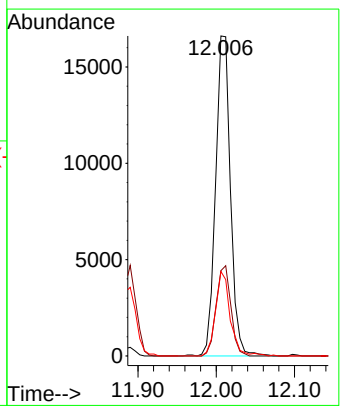
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

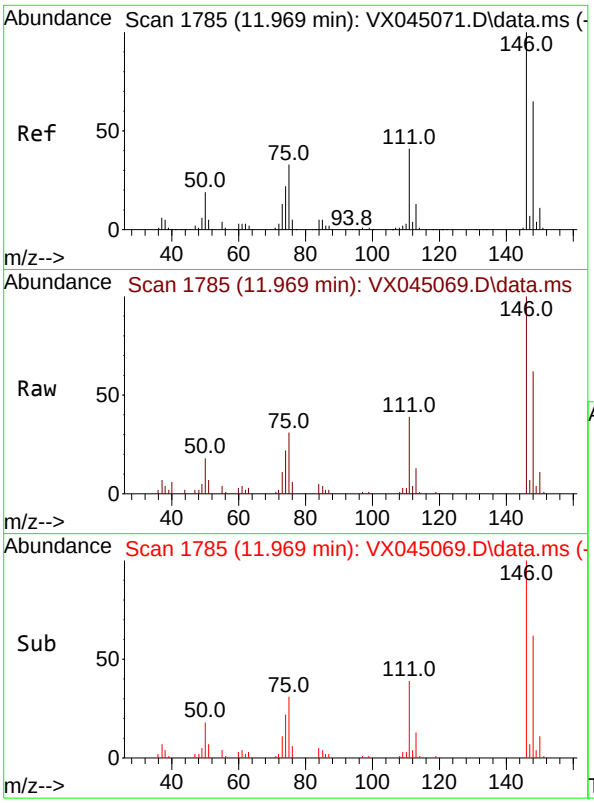



#86
p-Isopropyltoluene
Concen: 4.532 ug/l
RT: 12.006 min Scan# 1791
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:119 Resp: 21977

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 27.9 | 12.9 | 38.6 |
| 91 | 26.1 | 12.7 | 38.0 |

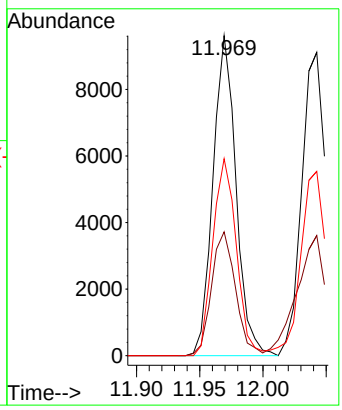





#87
1,3-Dichlorobenzene
Concen: 4.926 ug/l
RT: 11.969 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:146 Resp: 1215

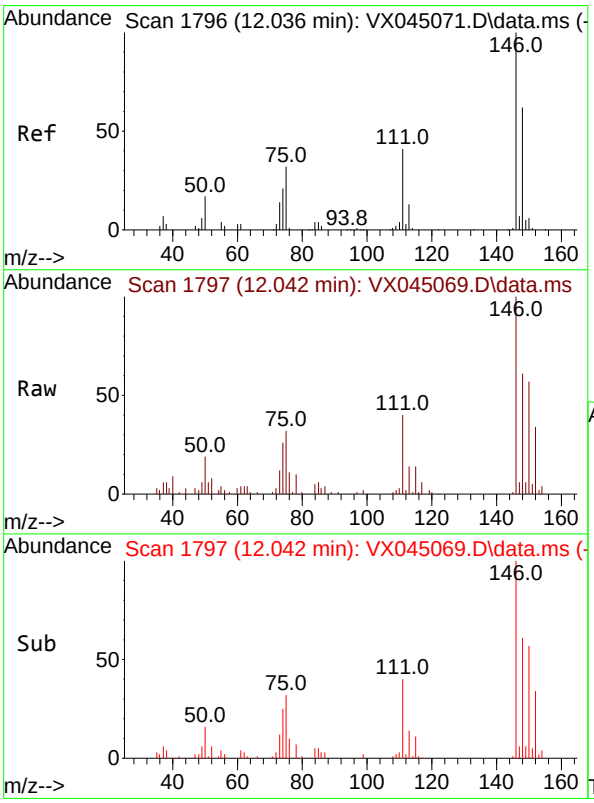
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 40.5 | 21.1 | 63.4 |
| 148 | 62.9 | 31.9 | 95.7 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

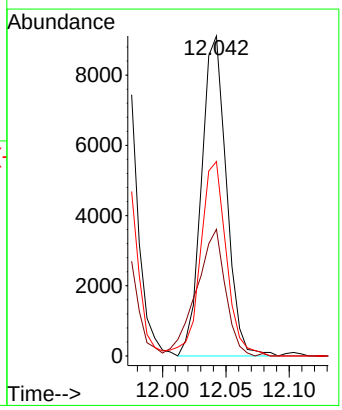
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

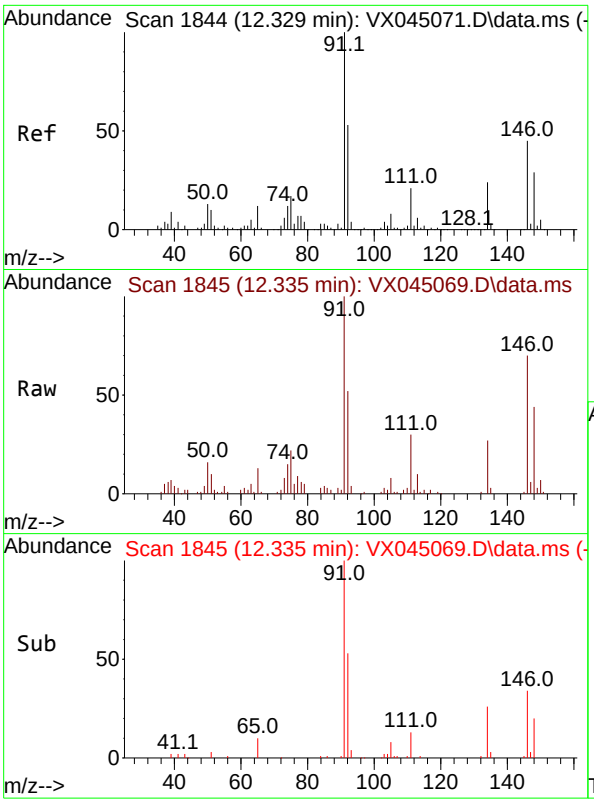



#88
1,4-Dichlorobenzene
Concen: 5.014 ug/l
RT: 12.042 min Scan# 1797
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:146 Resp: 12526

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 46.2 | 20.2 | 60.5 |
| 148 | 63.5 | 31.9 | 95.9 |

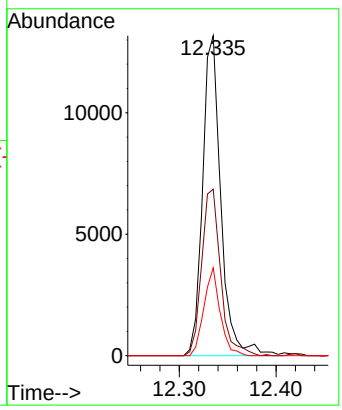





#89
n-Butylbenzene
Concen: 4.072 ug/l
RT: 12.335 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 91 Resp: 1735

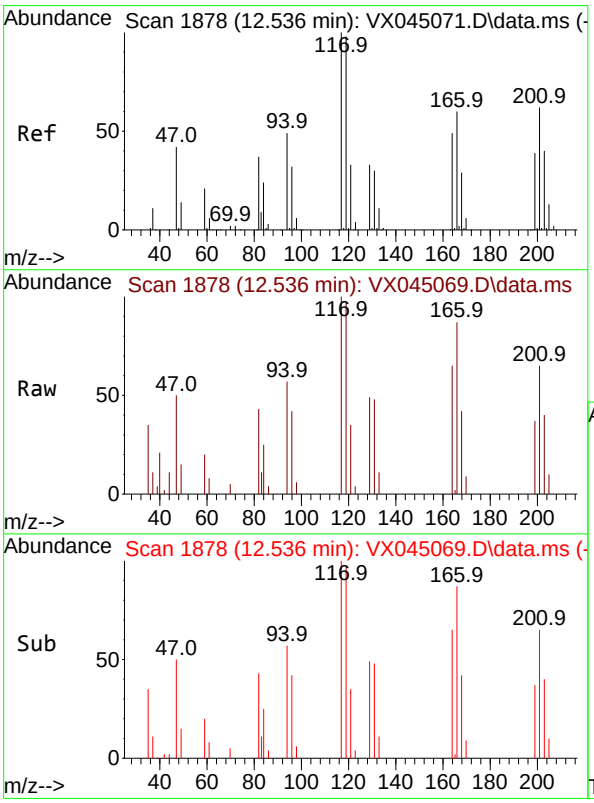
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 53.9 | 26.7 | 80.0 |
| 134 | 24.4 | 12.2 | 36.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

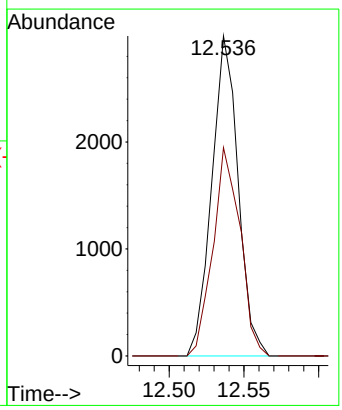
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

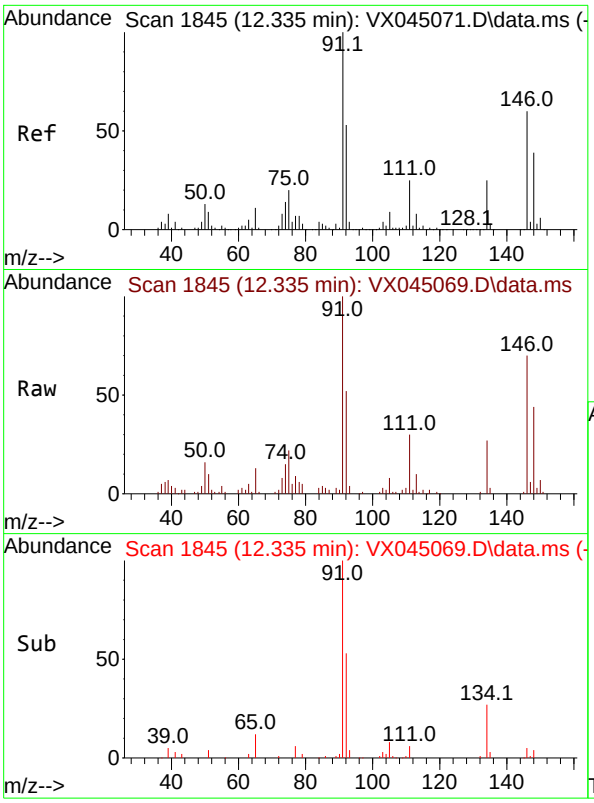



#90
Hexachloroethane
Concen: 4.052 ug/l
RT: 12.536 min Scan# 1878
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:117 Resp: 3665

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 67.1 | 31.9 | 95.9 |

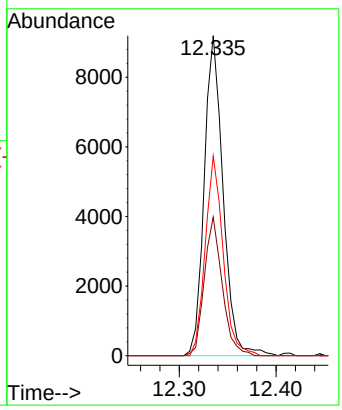





#91
1,2-Dichlorobenzene
Concen: 5.138 ug/l
RT: 12.335 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:146 Resp: 1247

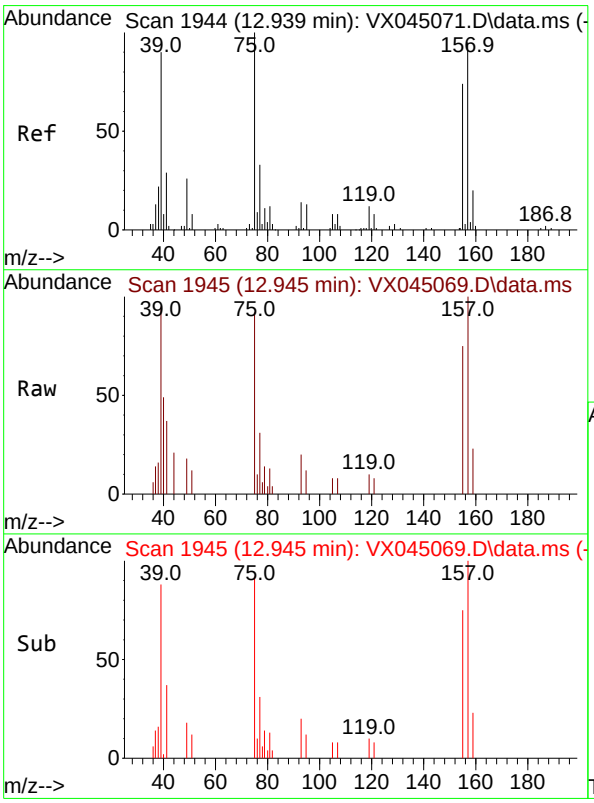
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 41.2 | 21.6 | 65.0 |
| 148 | 59.4 | 31.9 | 95.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

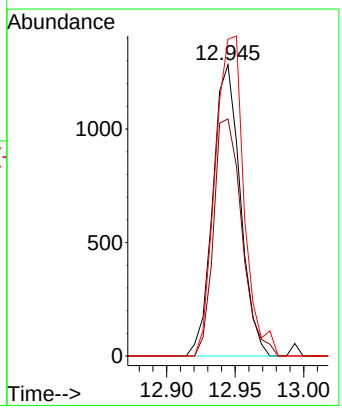
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

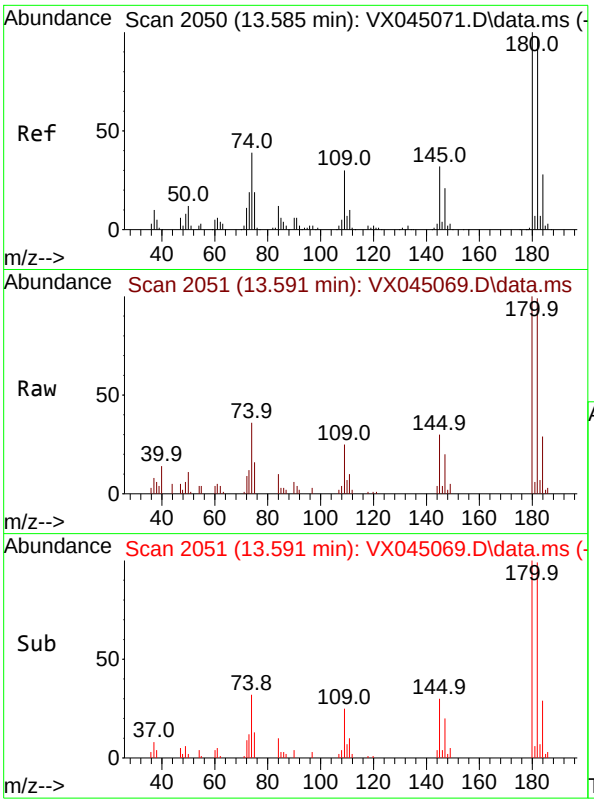



#92
1,2-Dibromo-3-Chloropropane
Concen: 4.712 ug/l
RT: 12.945 min Scan# 1945
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion: 75 Resp: 1787

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 83.8 | 39.6 | 118.7 |
| 157 | 115.4 | 51.1 | 153.4 |

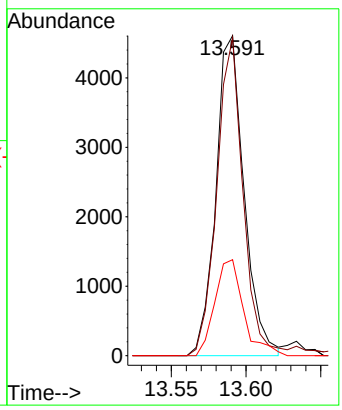





#93
1,2,4-Trichlorobenzene
Concen: 4.114 ug/l
RT: 13.591 min Scan# 2
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:180 Resp: 604

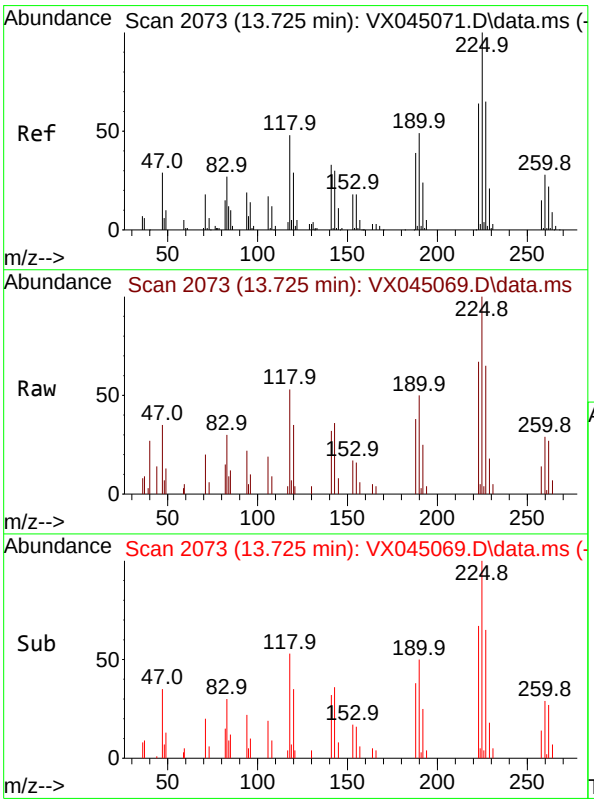
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 92.4 | 47.3 | 141.9 |
| 145 | 30.6 | 16.3 | 48.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

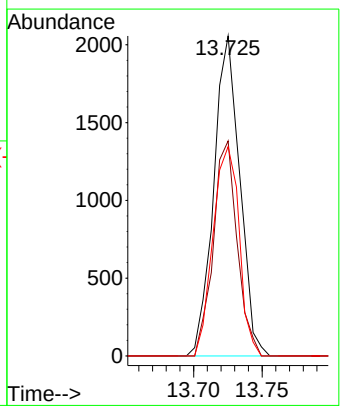
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

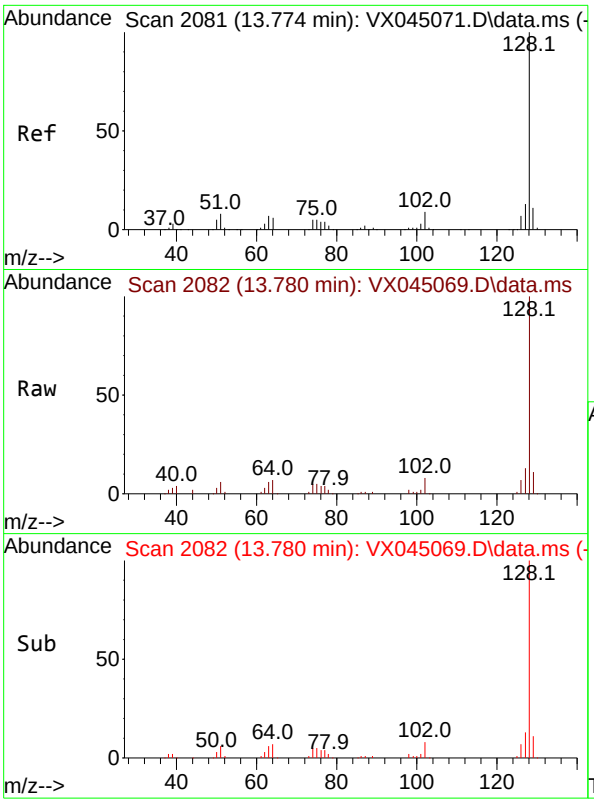



#94
Hexachlorobutadiene
Concen: 4.640 ug/l
RT: 13.725 min Scan# 2073
Delta R.T. -0.000 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:225 Resp: 2716

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 61.8 | 31.9 | 95.7 |
| 227 | 65.5 | 31.4 | 94.0 |

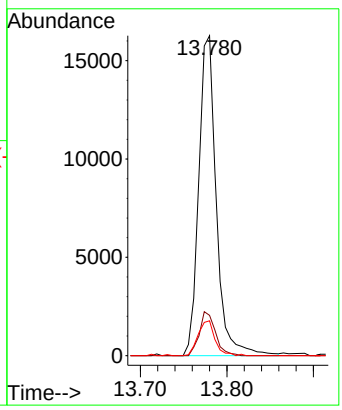





#95
Naphthalene
Concen: 4.287 ug/l
RT: 13.780 min Scan# 2
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:128 Resp: 2292

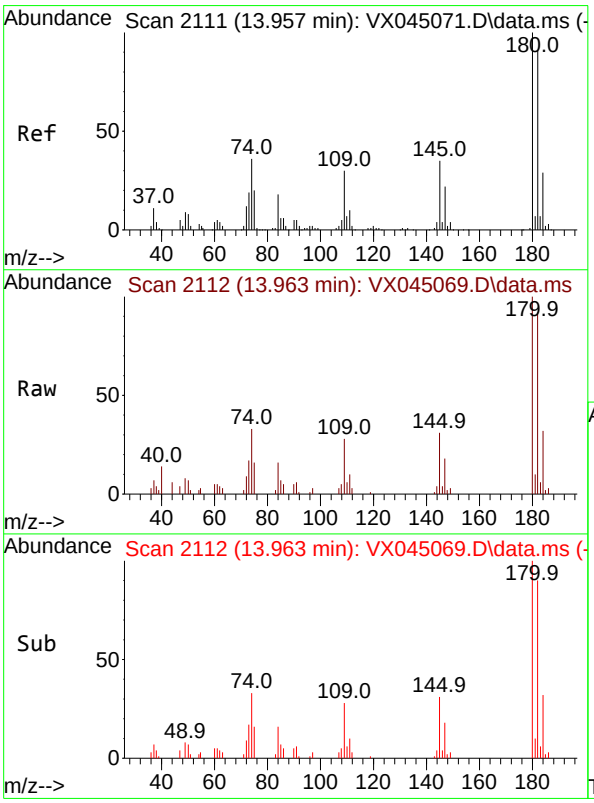
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.6 | 10.3 | 15.5 |
| 129 | 10.6 | 8.7 | 13.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

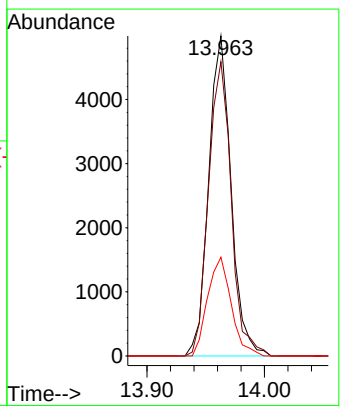
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025




#96
1,2,3-Trichlorobenzene
Concen: 4.437 ug/l
RT: 13.963 min Scan# 2112
Delta R.T. 0.006 min
Lab File: VX045069.D
Acq: 28 Feb 2025 02:13

Tgt Ion:180 Resp: 6600

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 93.3 | 47.5 | 142.6 |
| 145 | 32.6 | 17.0 | 50.9 |



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045070.D
Acq On : 28 Feb 2025 02:37
Operator : JC/MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 28 05:33:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 5.543 | 168 | 97338 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 6.757 | 114 | 177403 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 10.055 | 117 | 157714 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.018 | 152 | 70072 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 5.958 | 65 | 30514 | 21.221 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = | 42.440%# | | |
| 35) Dibromofluoromethane | 5.385 | 113 | 23739 | 20.473 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = | 40.940%# | | |
| 50) Toluene-d8 | 8.646 | 98 | 84516 | 19.469 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = | 38.940%# | | |
| 62) 4-Bromofluorobenzene | 11.079 | 95 | 27856 | 19.215 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = | 38.420%# | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.166 | 85 | 25155 | 18.750 | ug/l | 95 |
| 3) Chloromethane | 1.306 | 50 | 32219 | 19.736 | ug/l | 99 |
| 4) Vinyl Chloride | 1.373 | 62 | 30134 | 18.899 | ug/l | 97 |
| 5) Bromomethane | 1.593 | 94 | 11584 | 23.239 | ug/l | 99 |
| 6) Chloroethane | 1.660 | 64 | 14237 | 23.457 | ug/l | 99 |
| 7) Trichlorofluoromethane | 1.867 | 101 | 40880 | 20.015 | ug/l | 99 |
| 8) Diethyl Ether | 2.135 | 74 | 15911 | 21.437 | ug/l | 98 |
| 9) 1,1,2-Trichlorotrifluo... | 2.312 | 101 | 23154 | 18.984 | ug/l | 98 |
| 10) Methyl Iodide | 2.440 | 142 | 29500 | 18.867 | ug/l | 100 |
| 11) Tert butyl alcohol | 2.983 | 59 | 31246 | 118.627 | ug/l | 98 |
| 12) 1,1-Dichloroethene | 2.306 | 96 | 23810 | 19.014 | ug/l | 97 |
| 13) Acrolein | 2.239 | 56 | 33586 | 117.747 | ug/l | 99 |
| 14) Allyl chloride | 2.654 | 41 | 42993 | 19.096 | ug/l | 100 |
| 15) Acrylonitrile | 3.068 | 53 | 84182 | 117.598 | ug/l | 100 |
| 16) Acetone | 2.385 | 43 | 74701 | 126.257 | ug/l | 99 |
| 17) Carbon Disulfide | 2.501 | 76 | 61802 | 18.139 | ug/l | 99 |
| 18) Methyl Acetate | 2.709 | 43 | 35157 | 19.729 | ug/l | 99 |
| 19) Methyl tert-butyl Ether | 3.117 | 73 | 82833 | 20.689 | ug/l | 96 |
| 20) Methylene Chloride | 2.782 | 84 | 29281 | 20.895 | ug/l | 94 |
| 21) trans-1,2-Dichloroethene | 3.080 | 96 | 23471 | 19.057 | ug/l | 97 |
| 22) Diisopropyl ether | 3.763 | 45 | 90378 | 20.995 | ug/l | 93 |
| 23) Vinyl Acetate | 3.721 | 43 | 381808 | 108.038 | ug/l | 99 |
| 24) 1,1-Dichloroethane | 3.605 | 63 | 49826 | 20.716 | ug/l | 99 |
| 25) 2-Butanone | 4.562 | 43 | 118713 | 124.449 | ug/l | 97 |
| 26) 2,2-Dichloropropane | 4.470 | 77 | 22886 | 12.799 | ug/l | 99 |
| 27) cis-1,2-Dichloroethene | 4.483 | 96 | 29788 | 20.065 | ug/l | 99 |
| 28) Bromochloromethane | 4.891 | 49 | 23869 | 20.579 | ug/l | 99 |
| 29) Tetrahydrofuran | 5.007 | 42 | 77433 | 122.519 | ug/l | 99 |
| 30) Chloroform | 5.086 | 83 | 49751 | 21.147 | ug/l | 97 |
| 31) Cyclohexane | 5.464 | 56 | 42340 | 19.181 | ug/l | 98 |
| 32) 1,1,1-Trichloroethane | 5.373 | 97 | 39276 | 19.831 | ug/l | 99 |
| 36) 1,1-Dichloropropene | 5.684 | 75 | 31519 | 18.903 | ug/l | 99 |
| 37) Ethyl Acetate | 4.714 | 43 | 43097 | 22.714 | ug/l | 99 |
| 38) Carbon Tetrachloride | 5.671 | 117 | 31694 | 19.334 | ug/l | 97 |
| 39) Methylcyclohexane | 7.372 | 83 | 39769 | 18.676 | ug/l | 97 |
| 40) Benzene | 6.031 | 78 | 105787 | 20.298 | ug/l | 98 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045070.D
Acq On : 28 Feb 2025 02:37
Operator : JC/MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 28 05:33:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 4.928 | 41 | 23924 | 23.605 | ug/l | | 97 |
| 42) 1,2-Dichloroethane | 6.086 | 62 | 38653 | 22.886 | ug/l | | 99 |
| 43) Isopropyl Acetate | 6.348 | 43 | 66727 | 22.094 | ug/l | | 99 |
| 44) Trichloroethene | 7.122 | 130 | 24052 | 20.191 | ug/l | | 98 |
| 45) 1,2-Dichloropropane | 7.427 | 63 | 27128 | 20.945 | ug/l | | 99 |
| 46) Dibromomethane | 7.580 | 93 | 19323 | 21.357 | ug/l | | 97 |
| 47) Bromodichloromethane | 7.817 | 83 | 38038 | 21.732 | ug/l | | 97 |
| 48) Methyl methacrylate | 7.695 | 41 | 32627 | 22.757 | ug/l | | 98 |
| 49) 1,4-Dioxane | 7.665 | 88 | 14602 | 479.170 | ug/l | | 97 |
| 51) 4-Methyl-2-Pentanone | 8.573 | 43 | 229615 | 124.081 | ug/l | | 98 |
| 52) Toluene | 8.714 | 92 | 63326 | 20.463 | ug/l | | 100 |
| 53) t-1,3-Dichloropropene | 8.976 | 75 | 30917 | 17.871 | ug/l | | 97 |
| 54) cis-1,3-Dichloropropene | 8.366 | 75 | 36118 | 18.675 | ug/l | | 97 |
| 55) 1,1,2-Trichloroethane | 9.152 | 97 | 26358 | 21.992 | ug/l | | 99 |
| 56) Ethyl methacrylate | 9.116 | 69 | 39850 | 20.791 | ug/l | | 97 |
| 57) 1,3-Dichloropropane | 9.305 | 76 | 45644 | 21.836 | ug/l | | 100 |
| 58) 2-Chloroethyl Vinyl ether | 8.238 | 63 | 96311 | 102.342 | ug/l | | 99 |
| 59) 2-Hexanone | 9.433 | 43 | 168768 | 126.428 | ug/l | | 100 |
| 60) Dibromochloromethane | 9.518 | 129 | 27705 | 21.668 | ug/l | | 99 |
| 61) 1,2-Dibromoethane | 9.610 | 107 | 26311 | 21.764 | ug/l | | 98 |
| 64) Tetrachloroethene | 9.268 | 164 | 20140 | 20.102 | ug/l | | 97 |
| 65) Chlorobenzene | 10.079 | 112 | 68777 | 20.316 | ug/l | | 98 |
| 66) 1,1,1,2-Tetrachloroethane | 10.158 | 131 | 22508 | 20.627 | ug/l | | 97 |
| 67) Ethyl Benzene | 10.189 | 91 | 119165 | 19.905 | ug/l | | 100 |
| 68) m/p-Xylenes | 10.299 | 106 | 89735 | 40.699 | ug/l | | 98 |
| 69) o-Xylene | 10.640 | 106 | 44281 | 20.018 | ug/l | | 98 |
| 70) Styrene | 10.652 | 104 | 73832 | 20.767 | ug/l | | 98 |
| 71) Bromoform | 10.799 | 173 | 17403 | 21.449 | ug/l | # | 99 |
| 73) Isopropylbenzene | 10.963 | 105 | 112099 | 19.794 | ug/l | | 99 |
| 74) N-amyl acetate | 10.841 | 43 | 52972 | 20.606 | ug/l | | 99 |
| 75) 1,1,2,2-Tetrachloroethane | 11.213 | 83 | 42413 | 21.738 | ug/l | | 100 |
| 76) 1,2,3-Trichloropropane | 11.237 | 75 | 33440m | 21.394 | ug/l | | |
| 77) Bromobenzene | 11.195 | 156 | 26310 | 20.466 | ug/l | | 99 |
| 78) n-propylbenzene | 11.305 | 91 | 128284 | 19.641 | ug/l | | 100 |
| 79) 2-Chlorotoluene | 11.359 | 91 | 79275 | 19.775 | ug/l | | 100 |
| 80) 1,3,5-Trimethylbenzene | 11.451 | 105 | 94545 | 20.581 | ug/l | | 98 |
| 81) trans-1,4-Dichloro-2-b... | 11.018 | 75 | 8759 | 15.196 | ug/l | | 96 |
| 82) 4-Chlorotoluene | 11.451 | 91 | 86281 | 19.443 | ug/l | | 98 |
| 83) tert-Butylbenzene | 11.713 | 119 | 93670 | 20.159 | ug/l | | 99 |
| 84) 1,2,4-Trimethylbenzene | 11.750 | 105 | 94734 | 20.943 | ug/l | | 100 |
| 85) sec-Butylbenzene | 11.890 | 105 | 115953 | 20.160 | ug/l | | 100 |
| 86) p-Isopropyltoluene | 12.006 | 119 | 91554 | 19.827 | ug/l | | 99 |
| 87) 1,3-Dichlorobenzene | 11.969 | 146 | 47934 | 20.400 | ug/l | | 97 |
| 88) 1,4-Dichlorobenzene | 12.042 | 146 | 46657 | 19.615 | ug/l | | 99 |
| 89) n-Butylbenzene | 12.329 | 91 | 78135 | 19.249 | ug/l | | 100 |
| 90) Hexachloroethane | 12.536 | 117 | 15919 | 18.483 | ug/l | | 98 |
| 91) 1,2-Dichlorobenzene | 12.335 | 146 | 48632 | 21.031 | ug/l | | 98 |
| 92) 1,2-Dibromo-3-Chloropr... | 12.944 | 75 | 7987 | 22.119 | ug/l | | 99 |
| 93) 1,2,4-Trichlorobenzene | 13.585 | 180 | 27424 | 19.617 | ug/l | | 99 |
| 94) Hexachlorobutadiene | 13.725 | 225 | 10934 | 19.616 | ug/l | | 99 |
| 95) Naphthalene | 13.774 | 128 | 108350 | 21.279 | ug/l | | 100 |
| 96) 1,2,3-Trichlorobenzene | 13.963 | 180 | 28937 | 20.432 | ug/l | | 98 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045070.D
Acq On : 28 Feb 2025 02:37
Operator : JC/MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 19 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

Quant Time: Feb 28 05:33:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045070.D
Acq On : 28 Feb 2025 02:37
Operator : JC/MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 28 05:33:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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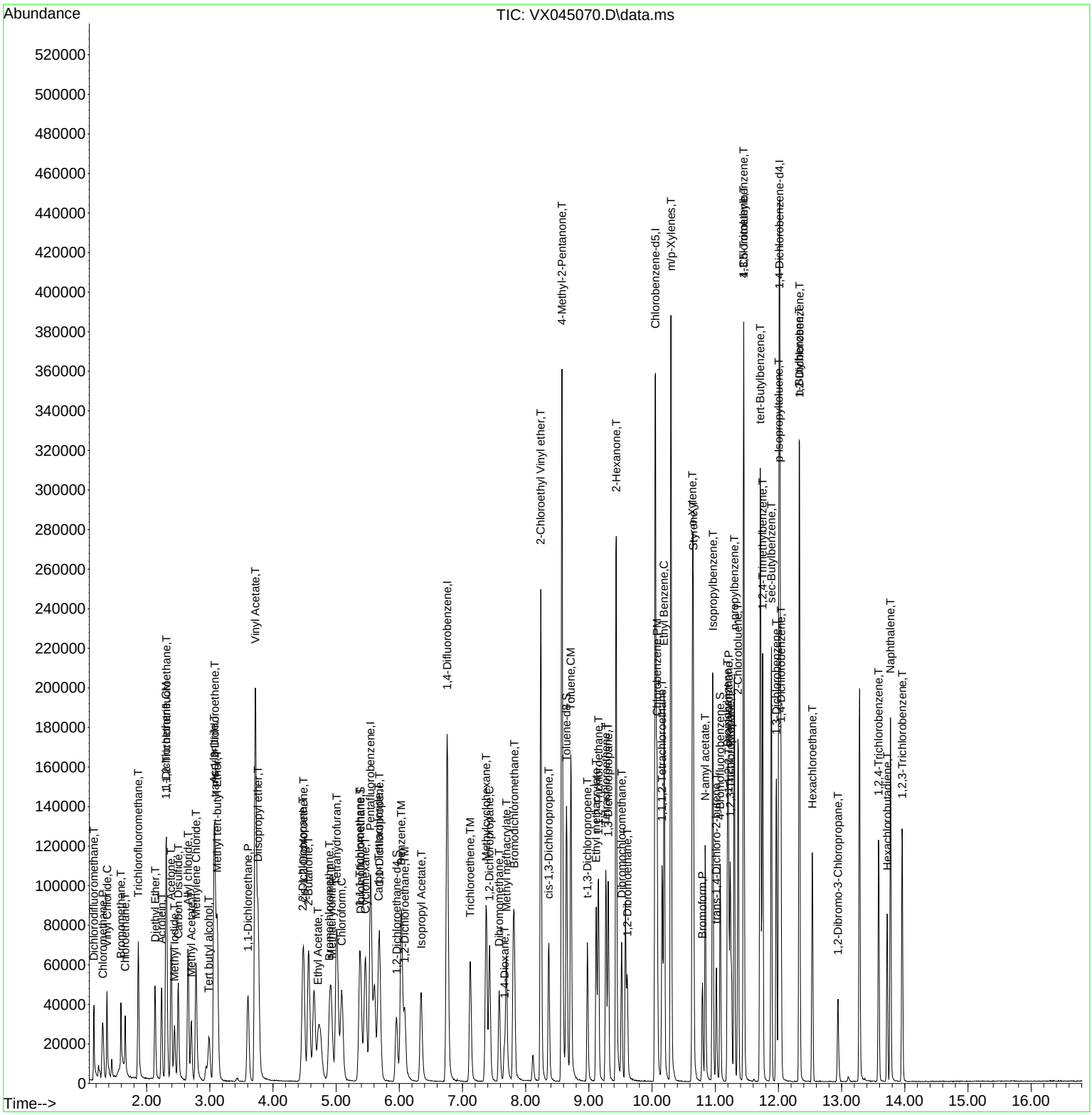
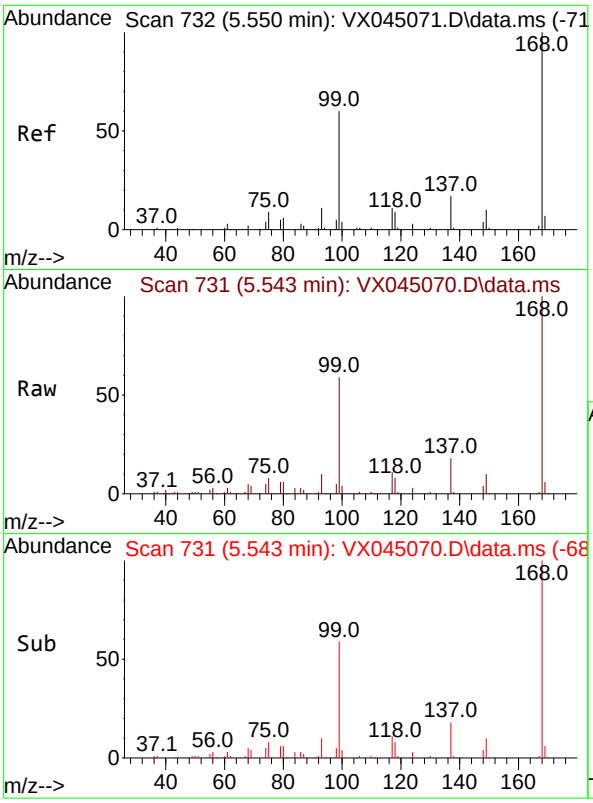
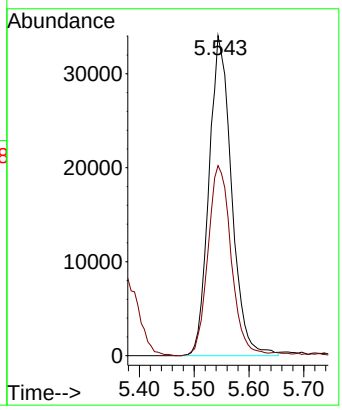





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.543 min Scan# 7
Delta R.T. -0.007 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:168 Resp: 9733

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 59.4 | 48.2 | 72.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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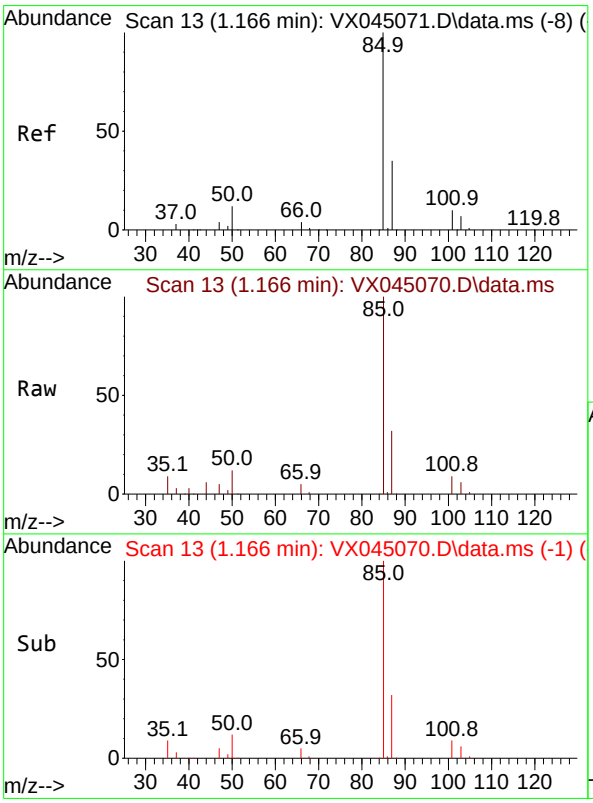
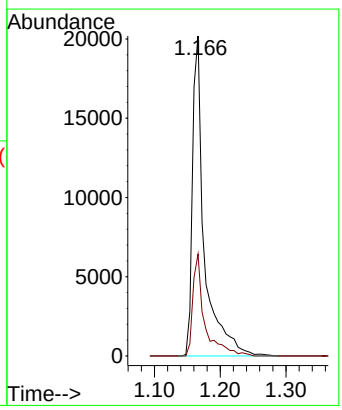
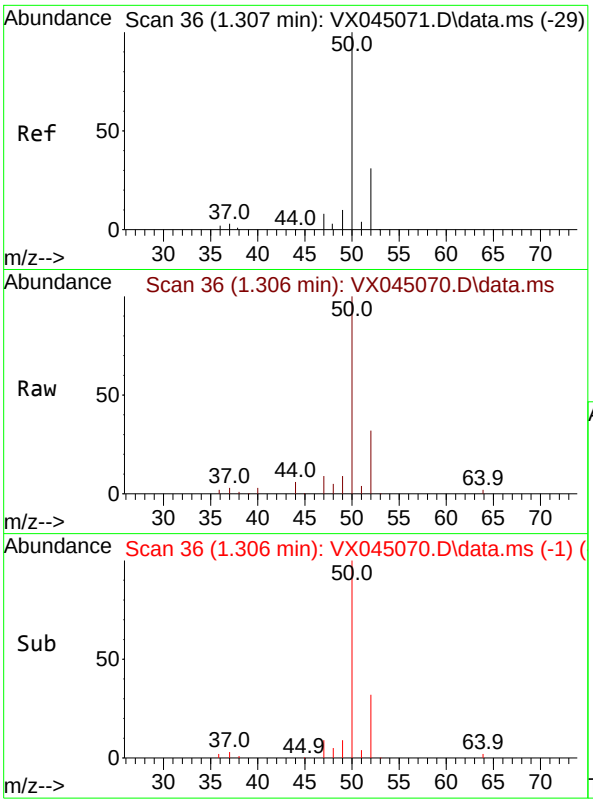



#2
Dichlorodifluoromethane
Concen: 18.750 ug/l
RT: 1.166 min Scan# 13
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 85 Resp: 25155

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 31.9 | 17.4 | 52.3 |

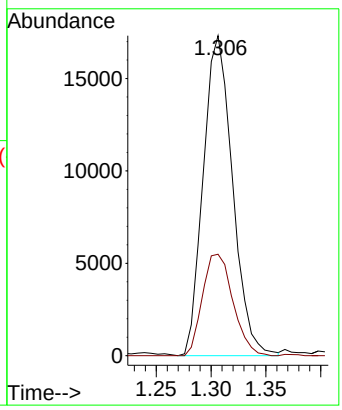





#3
Chloromethane
Concen: 19.736 ug/l
RT: 1.306 min Scan# 3
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 50 Resp: 3221

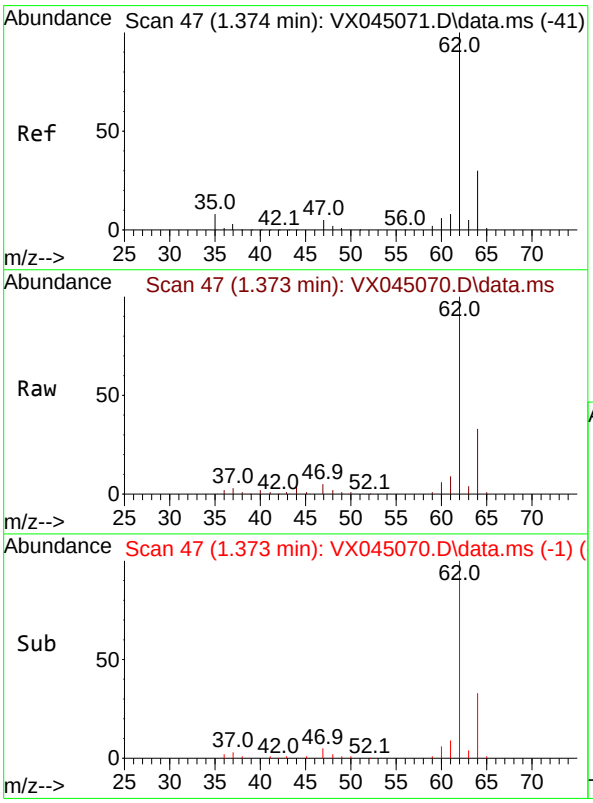
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 31.7 | 25.0 | 37.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

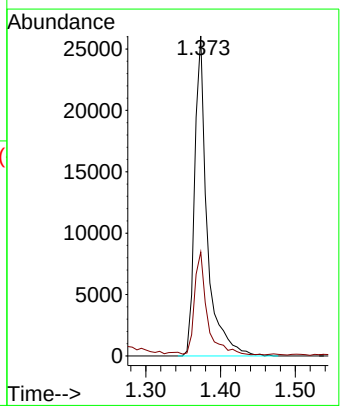
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

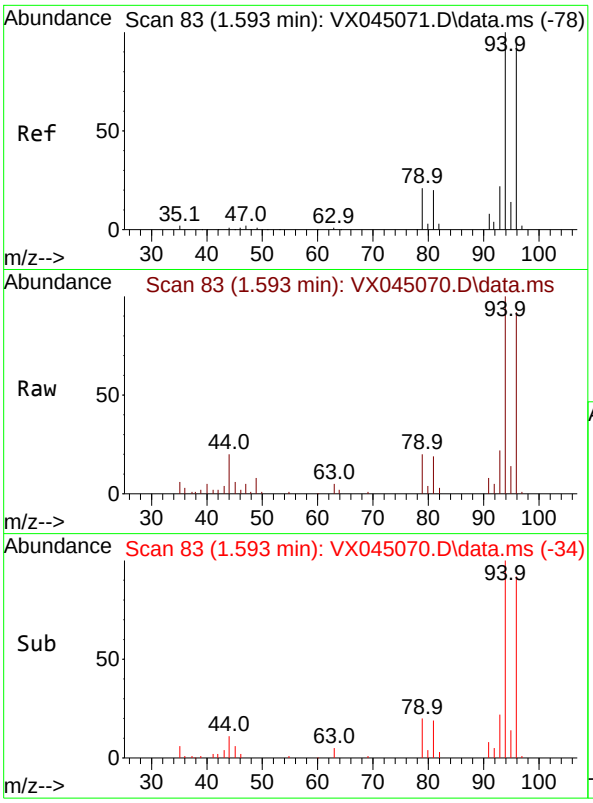



#4
Vinyl Chloride
Concen: 18.899 ug/l
RT: 1.373 min Scan# 47
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 62 Resp: 30134

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 32.0 | 24.3 | 36.5 |

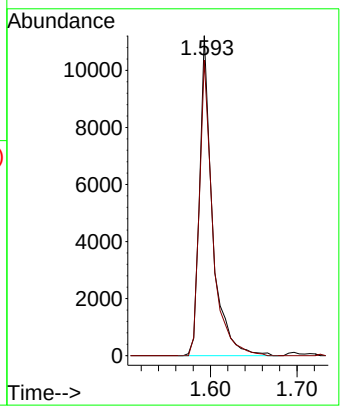





#5
Bromomethane
Concen: 23.239 ug/l
RT: 1.593 min Scan# 8
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 94 Resp: 1158

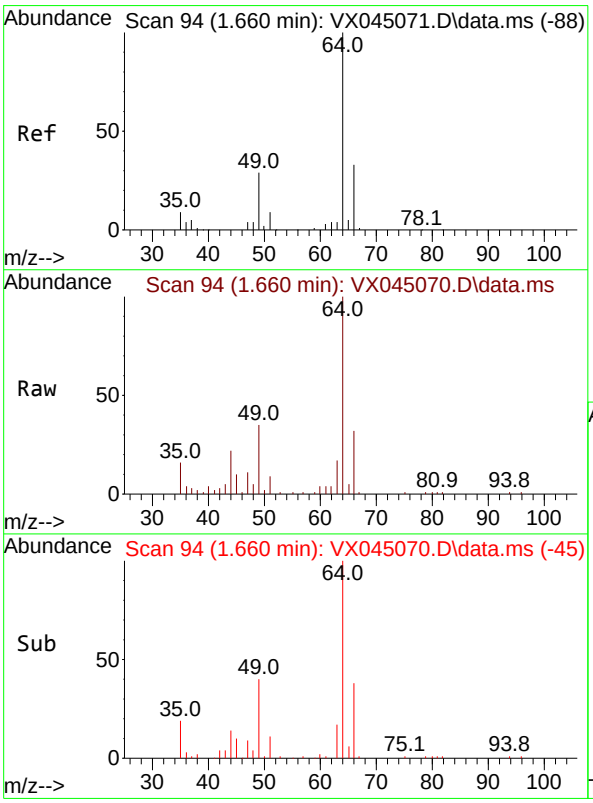
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 92.4 | 75.0 | 112.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
**APPROVED**

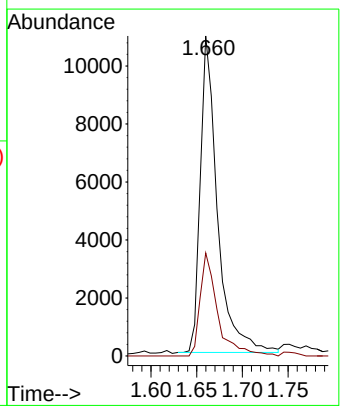
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

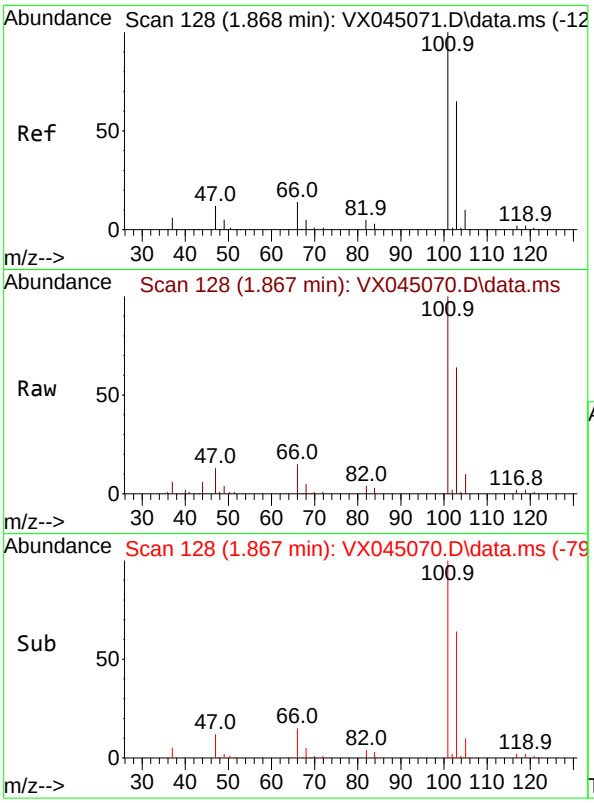



#6
Chloroethane
Concen: 23.457 ug/l
RT: 1.660 min Scan# 94
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 64 Resp: 14237

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 32.6 | 26.7 | 40.1 |

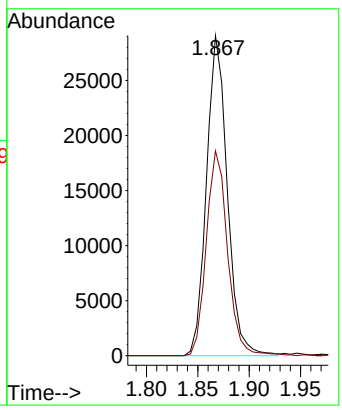





#7
Trichlorofluoromethane
Concen: 20.015 ug/l
RT: 1.867 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:101 Resp: 4088

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 64.0 | 52.1 | 78.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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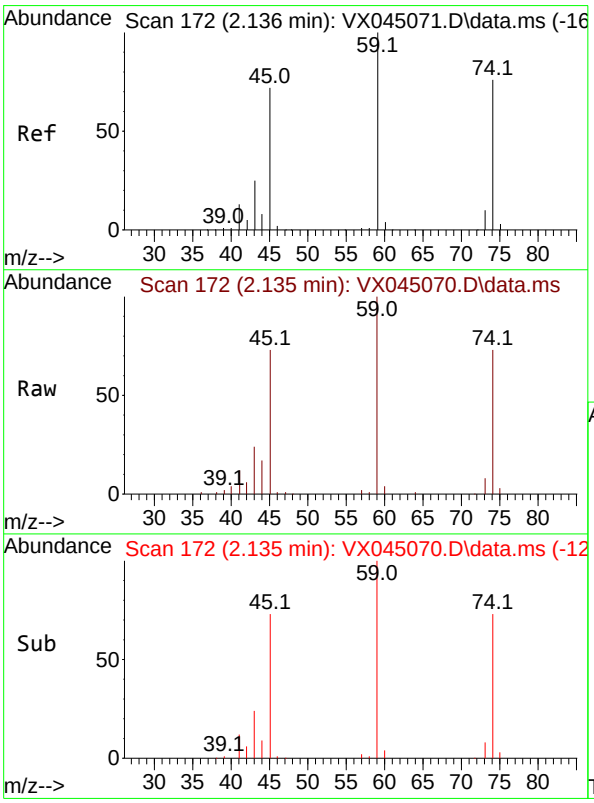
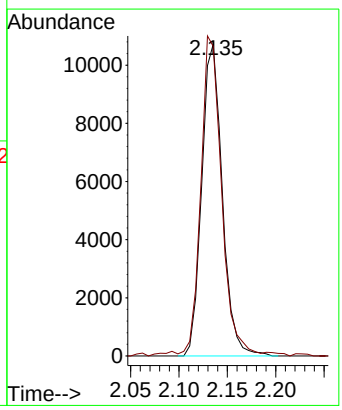
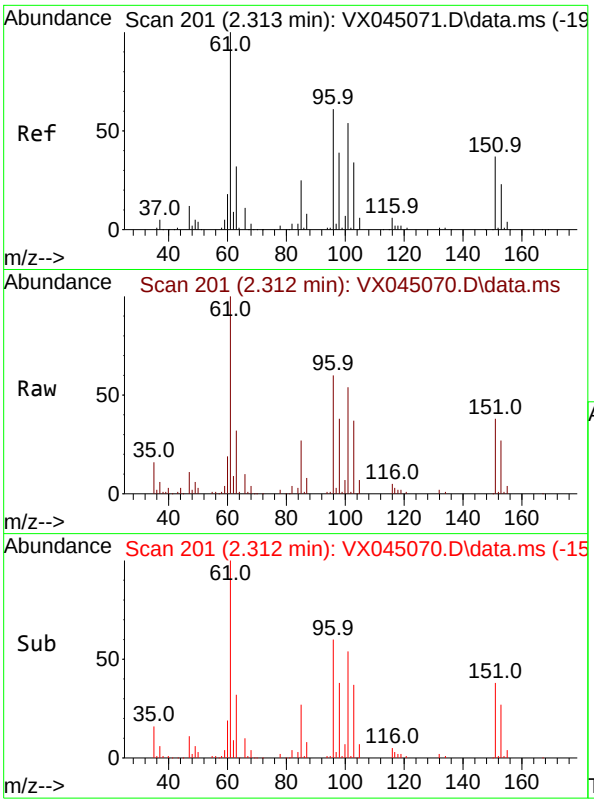



#8
Diethyl Ether
Concen: 21.437 ug/l
RT: 2.135 min Scan# 172
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 74 Resp: 15911

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 105.3 | 51.5 | 154.5 |

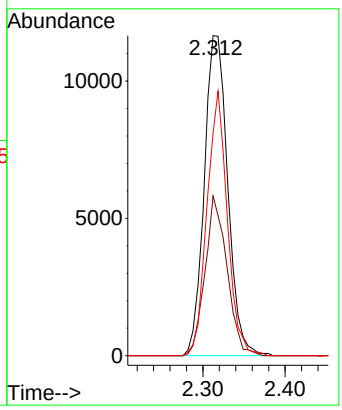





#9
1,1,2-Trichlorotrifluoroethane
Concen: 18.984 ug/l
RT: 2.312 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:101 Resp: 2315

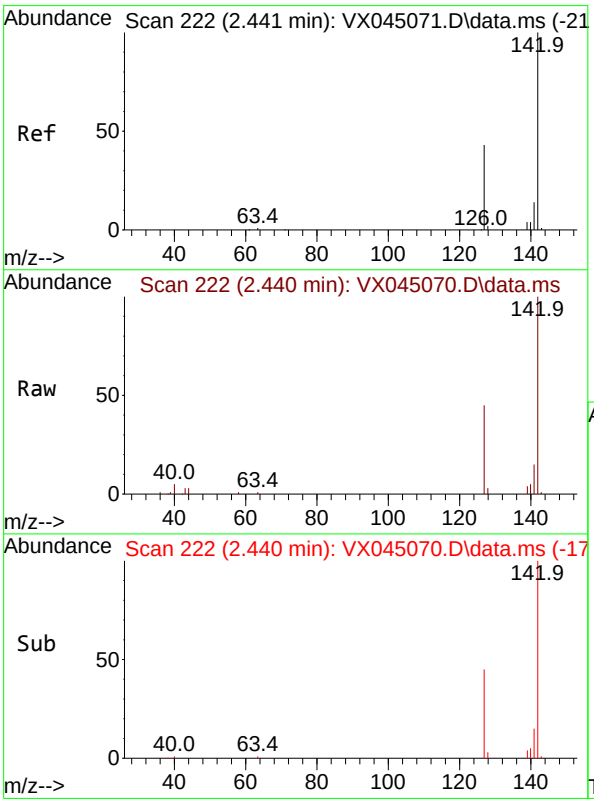
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 46.5 | 36.2 | 54.4 |
| 151 | 71.8 | 56.4 | 84.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
**APPROVED**

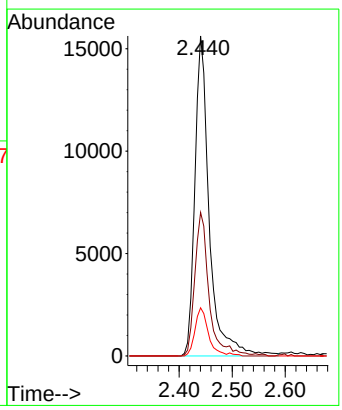
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

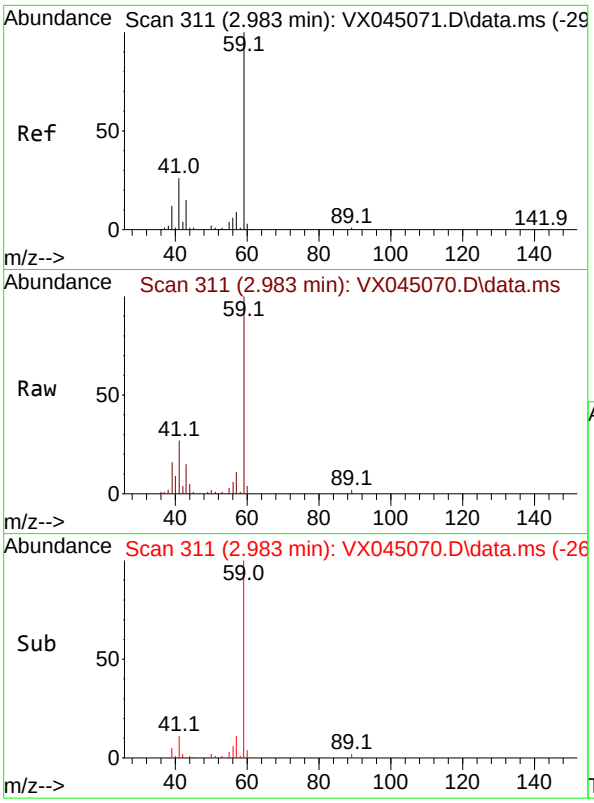



#10
Methyl Iodide
Concen: 18.867 ug/l
RT: 2.440 min Scan# 222
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:142 Resp: 29500

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 44.2 | 35.4 | 53.2 |
| 141 | 14.3 | 11.6 | 17.4 |

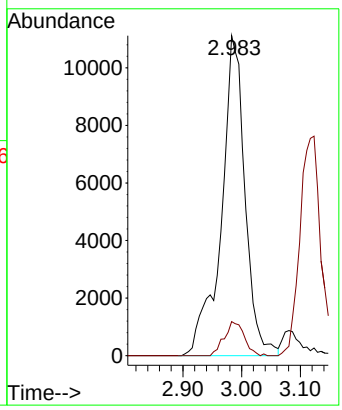





#11
Tert butyl alcohol
Concen: 118.627 ug/l
RT: 2.983 min Scan# 3
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 59 Resp: 3124

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 8.9 | 7.8 | 11.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/28/2025
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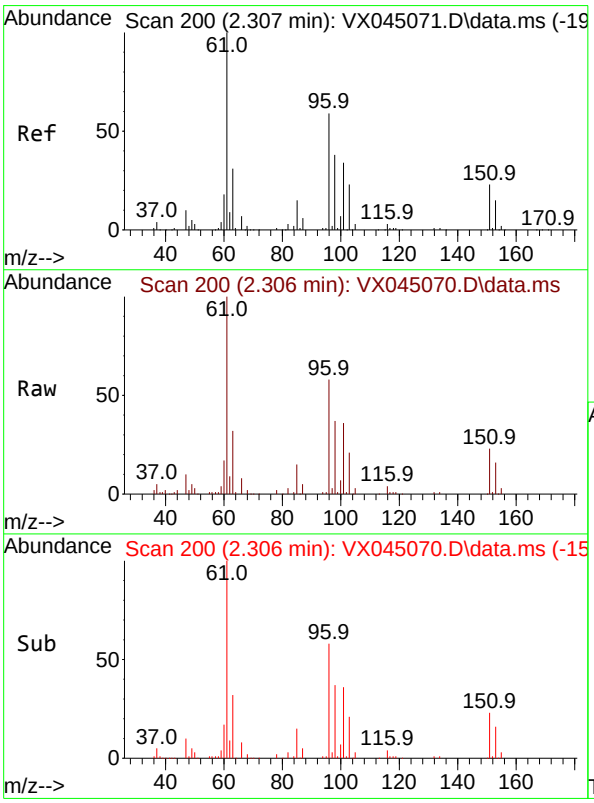
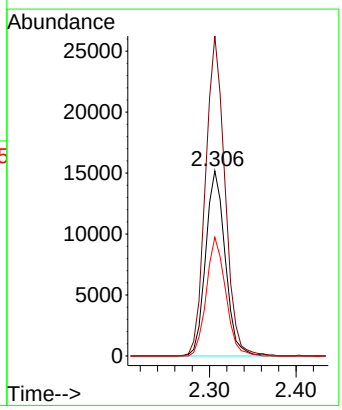
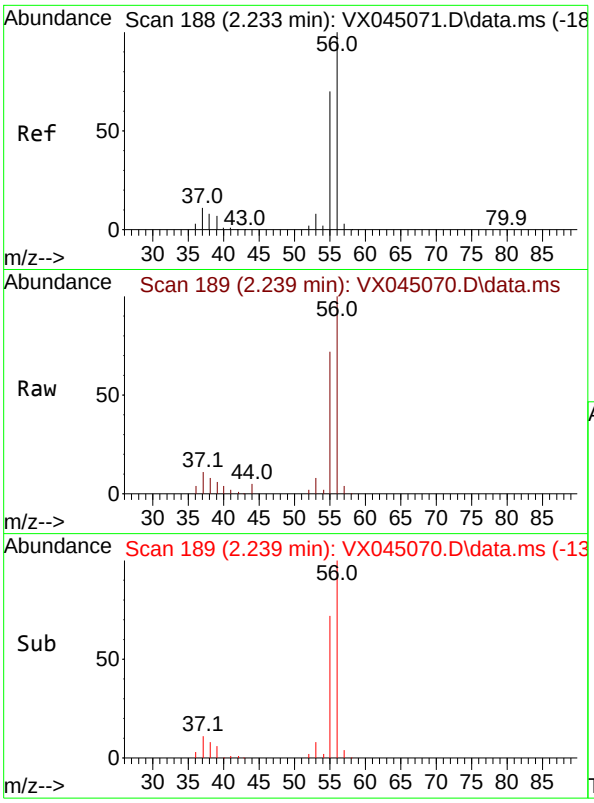



#12
1,1-Dichloroethene
Concen: 19.014 ug/l
RT: 2.306 min Scan# 200
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 96 Resp: 23810

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 172.8 | 134.6 | 202.0 |
| 98 | 64.1 | 51.0 | 76.6 |

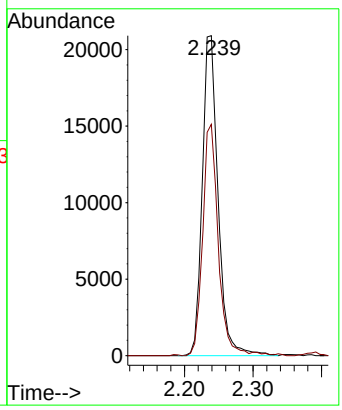





#13
Acrolein
Concen: 117.747 ug/l
RT: 2.239 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 56 Resp: 3358

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 71.4 | 56.2 | 84.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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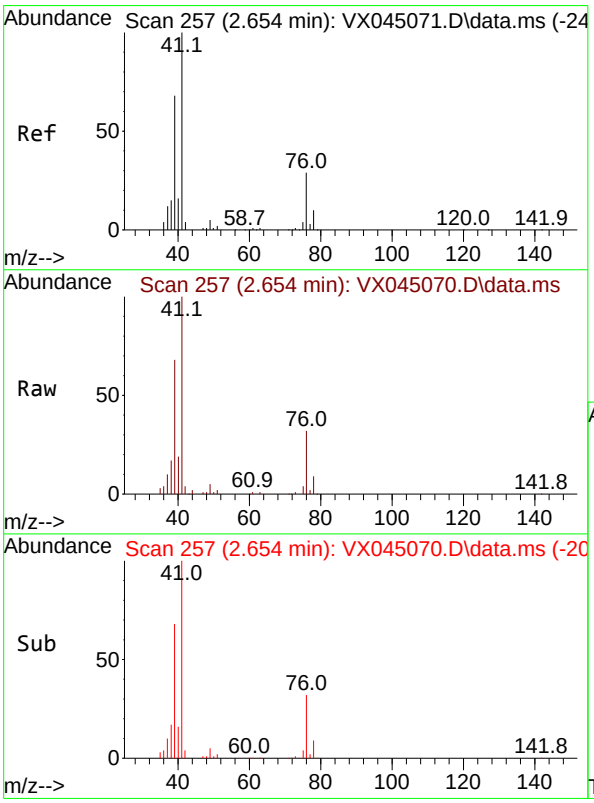
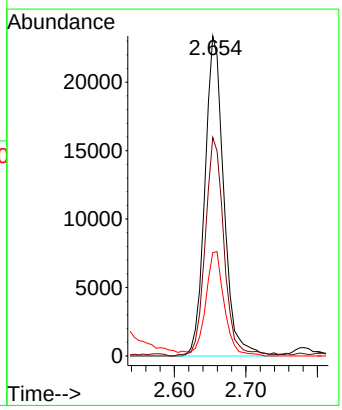
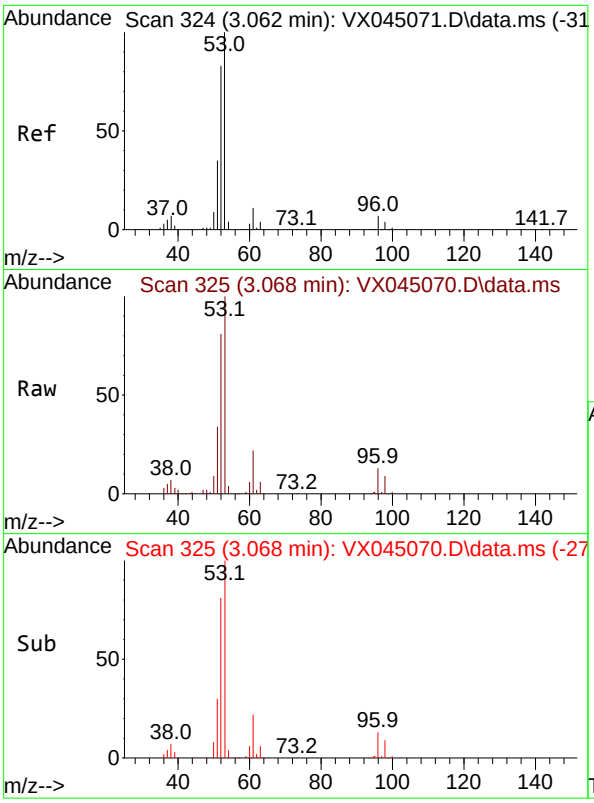



#14
Allyl chloride
Concen: 19.096 ug/l
RT: 2.654 min Scan# 257
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 41 Resp: 42993

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 67.4 | 53.8 | 80.8 |
| 76 | 32.1 | 25.2 | 37.8 |

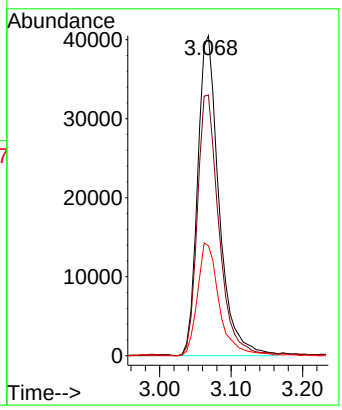





#15
Acrylonitrile
Concen: 117.598 ug/l
RT: 3.068 min Scan# 3
Delta R.T. 0.006 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 53 Resp: 8418

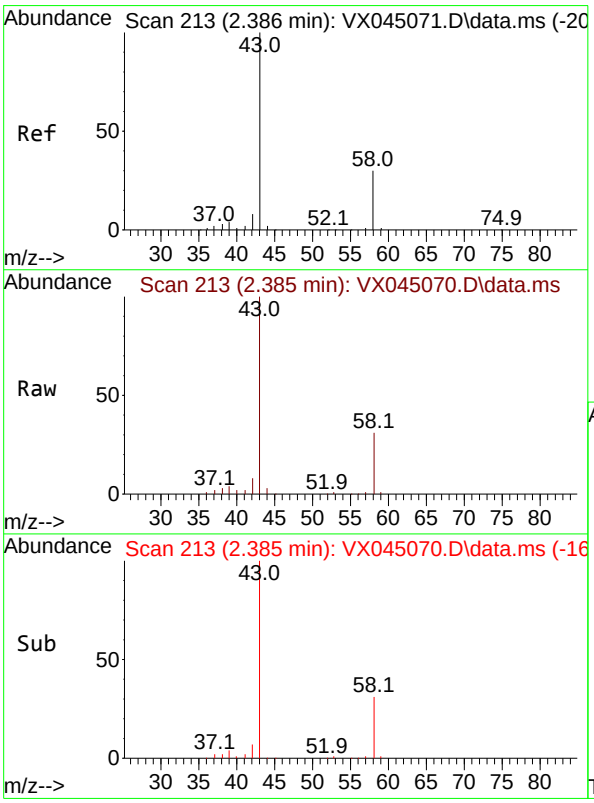
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 82.8 | 66.2 | 99.2 |
| 51 | 36.0 | 29.0 | 43.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

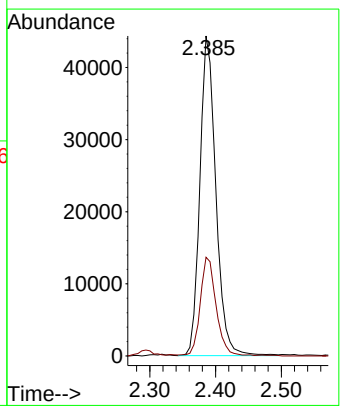
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

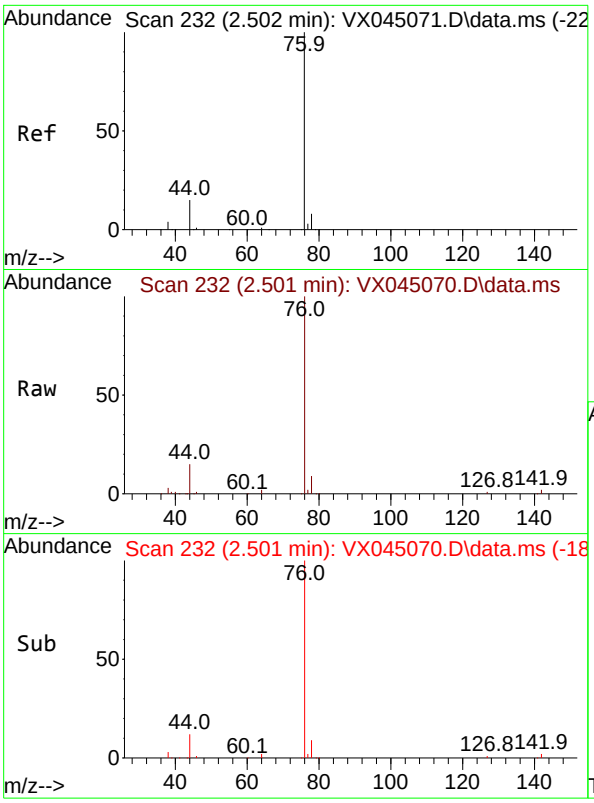



#16
Acetone
Concen: 126.257 ug/l
RT: 2.385 min Scan# 213
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 43 Resp: 74701

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 30.7 | 24.2 | 36.4 |

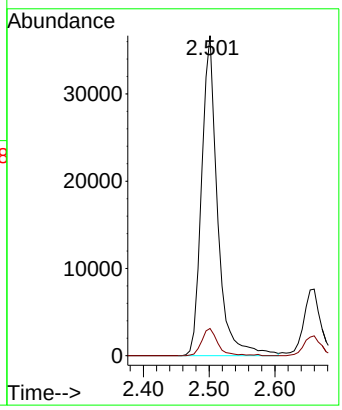





#17
Carbon Disulfide
Concen: 18.139 ug/l
RT: 2.501 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 76 Resp: 6180

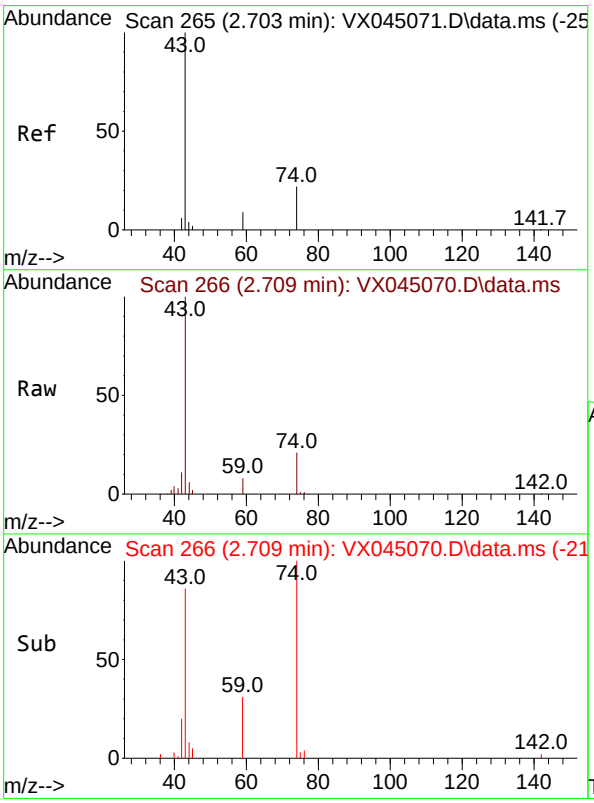
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 8.5 | 6.6 | 9.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
**APPROVED**

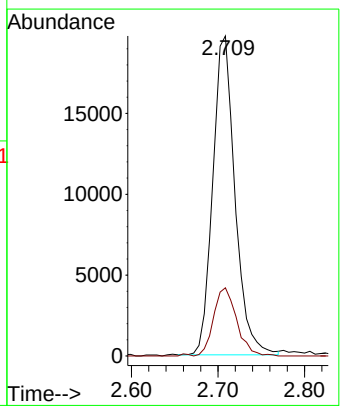
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

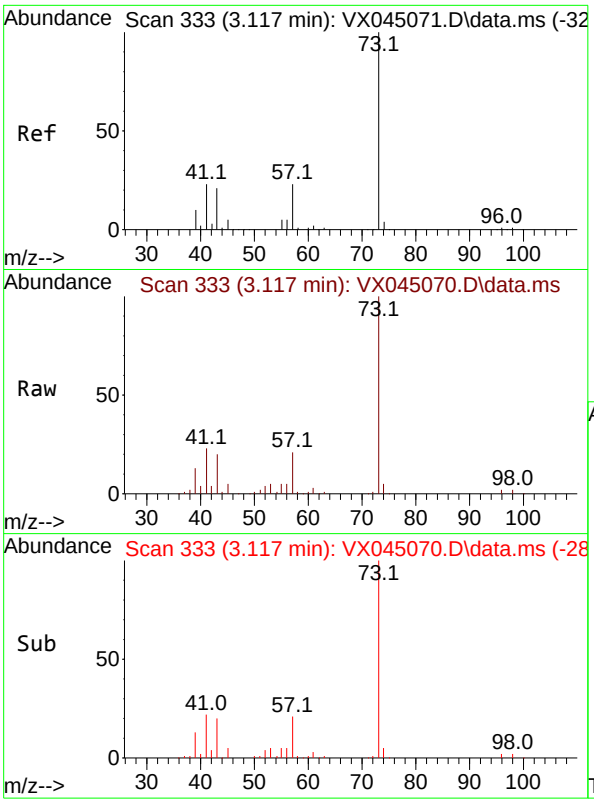



#18
Methyl Acetate
Concen: 19.729 ug/l
RT: 2.709 min Scan# 266
Delta R.T. 0.006 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 43 Resp: 35157

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 22.2 | 17.4 | 26.2 |

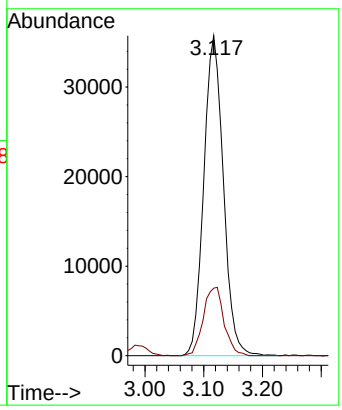





#19
Methyl tert-butyl Ether
Concen: 20.689 ug/l
RT: 3.117 min Scan# 3
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 73 Resp: 8283

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 21.1 | 18.5 | 27.7 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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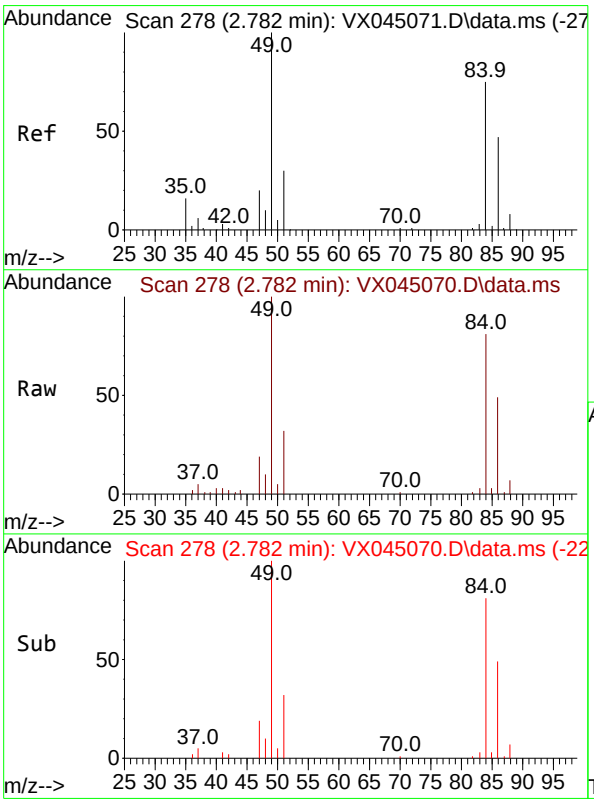
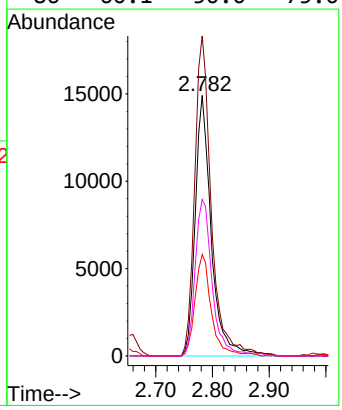
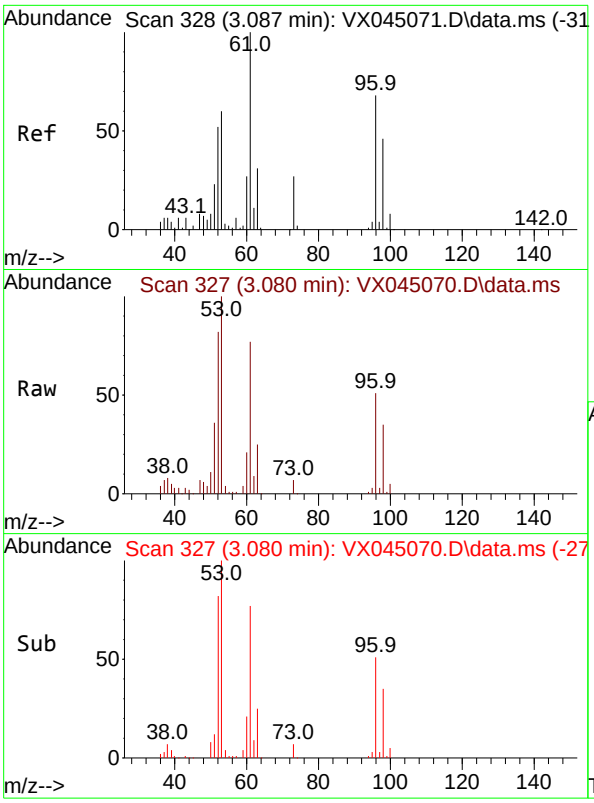



#20
Methylene Chloride
Concen: 20.895 ug/l
RT: 2.782 min Scan# 278
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 84 Resp: 29281

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 122.9 | 106.5 | 159.7 |
| 51 | 38.9 | 32.1 | 48.1 |
| 86 | 60.1 | 50.0 | 75.0 |

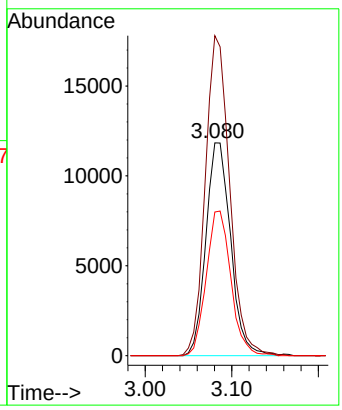





#21
trans-1,2-Dichloroethene
Concen: 19.057 ug/l
RT: 3.080 min Scan# 3
Delta R.T. -0.006 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 96 Resp: 2347

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 150.3 | 117.0 | 175.4 |
| 98 | 67.5 | 53.4 | 80.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

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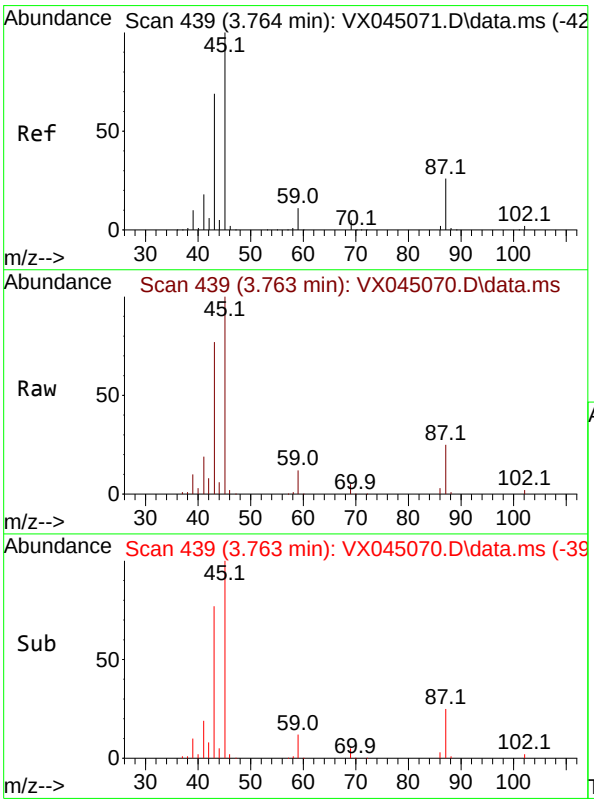
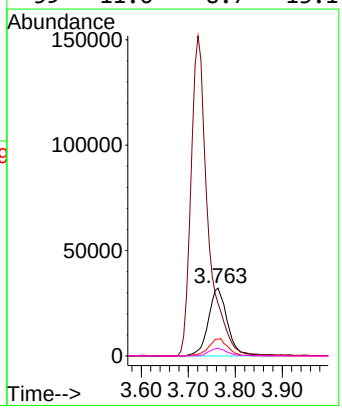
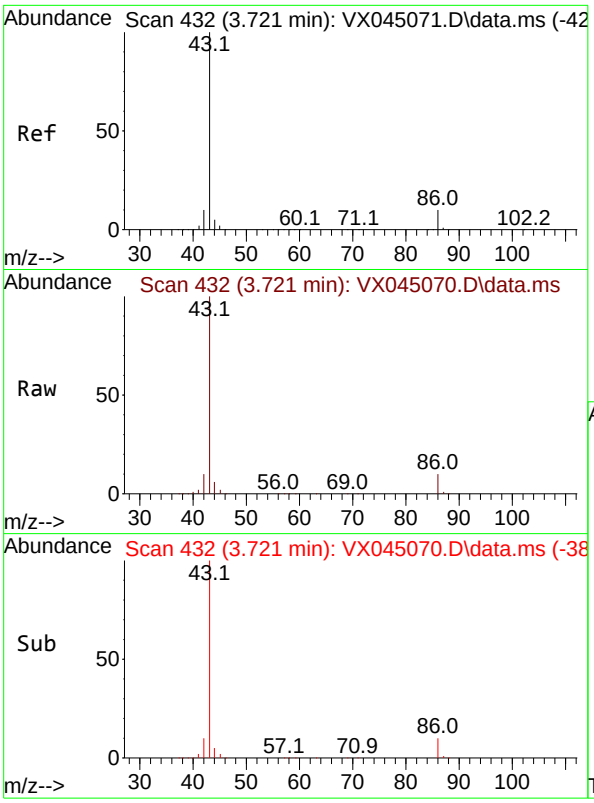



#22
Diisopropyl ether
Concen: 20.995 ug/l
RT: 3.763 min Scan# 439
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 45 Resp: 90378

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 76.4 | 54.9 | 82.3 |
| 87 | 24.7 | 21.0 | 31.4 |
| 59 | 11.6 | 8.7 | 13.1 |






#23
Vinyl Acetate
Concen: 108.038 ug/l
RT: 3.721 min Scan# 4
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 43 Resp: 38180

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 9.9 | 8.1 | 12.1 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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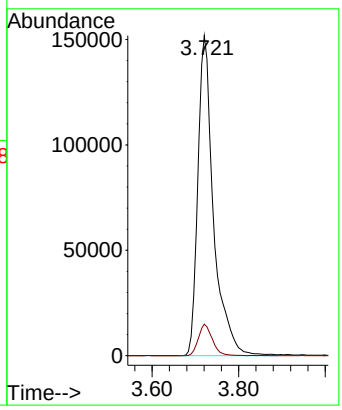
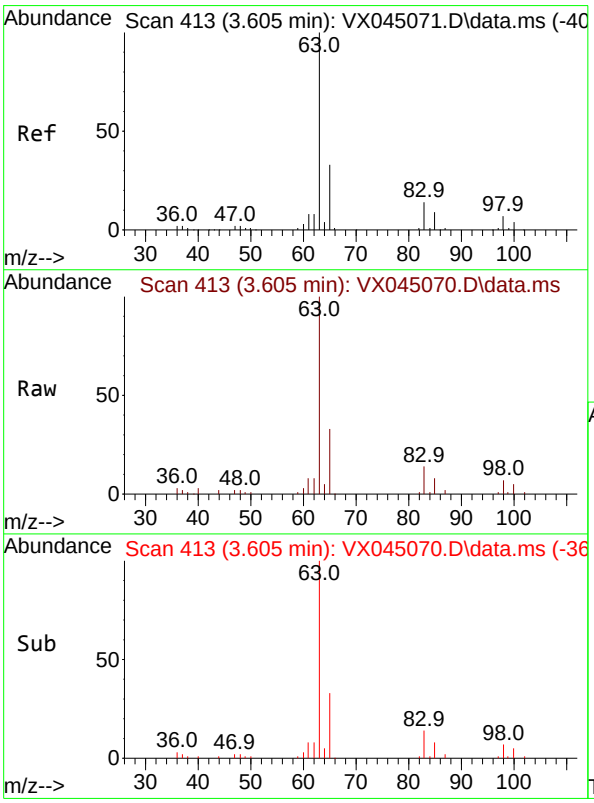
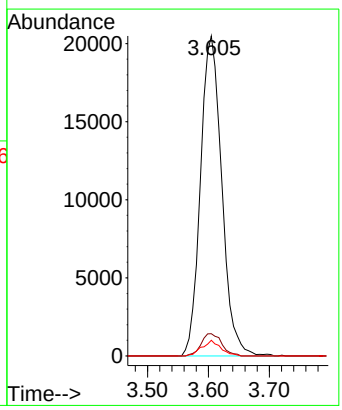


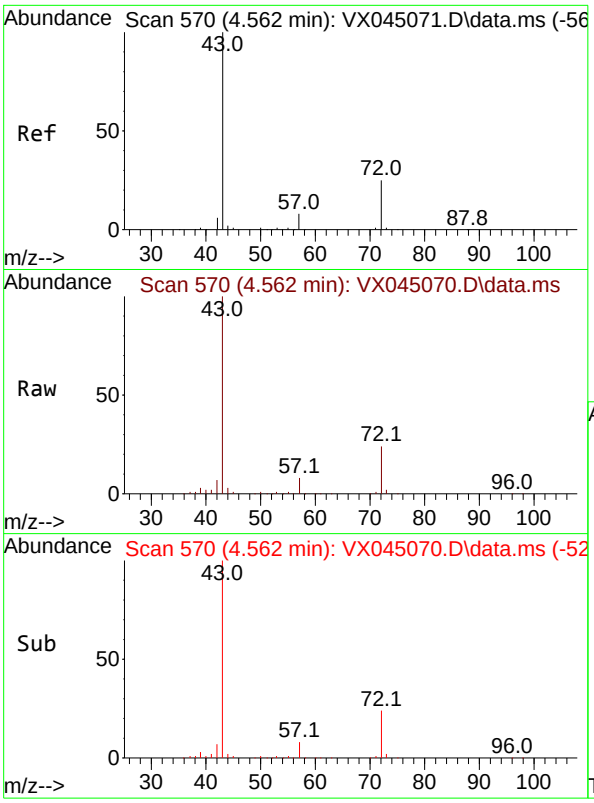




#24
1,1-Dichloroethane
Concen: 20.716 ug/l
RT: 3.605 min Scan# 413
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 63 Resp: 49826

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 7.0 | 3.4 | 10.2 |
| 100 | 4.9 | 2.1 | 6.5 |






#25
2-Butanone
Concen: 124.449 ug/l
RT: 4.562 min Scan# 5
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 43 Resp: 11871

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 23.5 | 20.0 | 30.0 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

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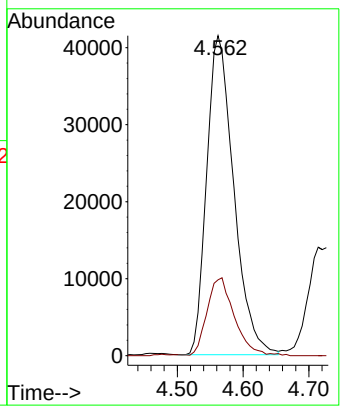
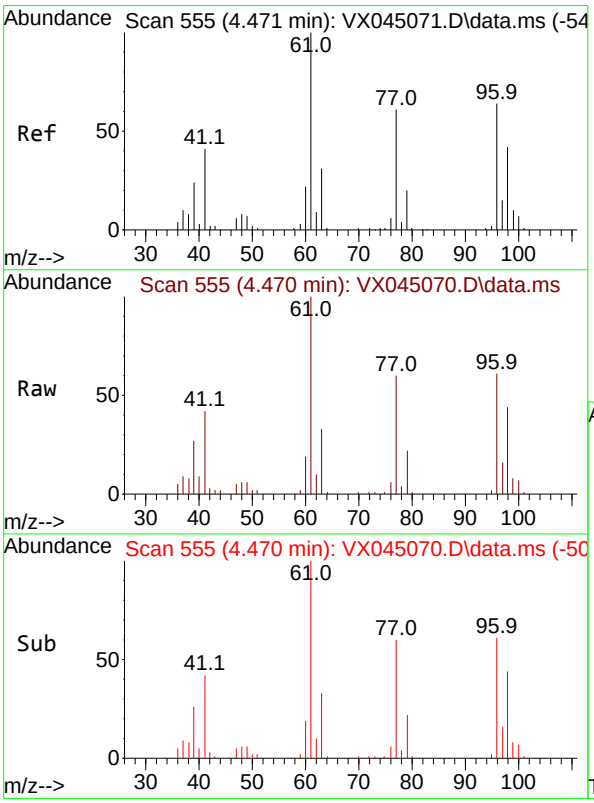
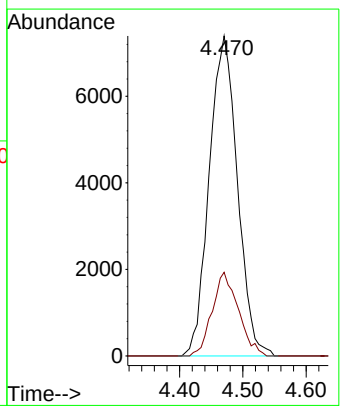


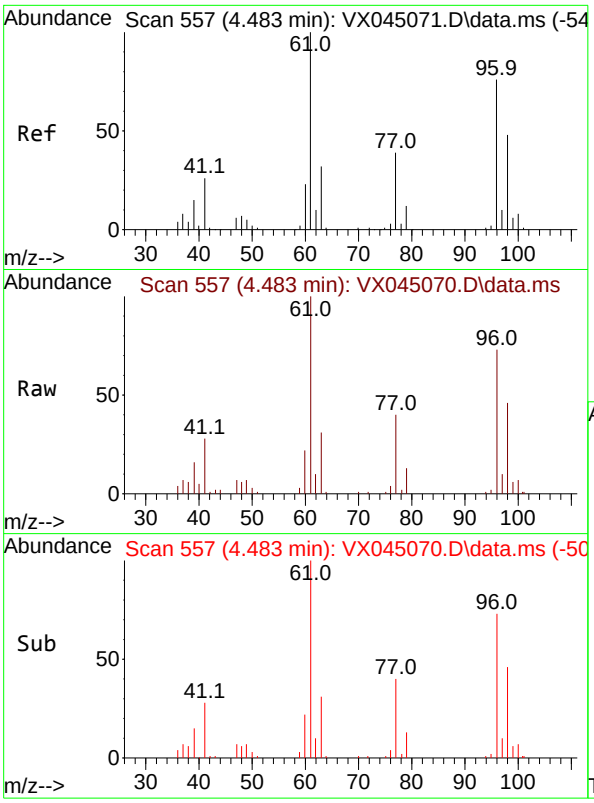




#26
2,2-Dichloropropane
Concen: 12.799 ug/l
RT: 4.470 min Scan# 555
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 77 Resp: 22886

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 24.2 | 12.4 | 37.0 |

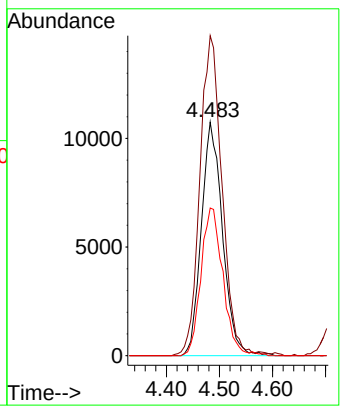





#27
cis-1,2-Dichloroethene
Concen: 20.065 ug/l
RT: 4.483 min Scan# 5
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 96 Resp: 2978

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 142.7 | 0.0 | 283.2 |
| 98 | 65.6 | 0.0 | 128.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

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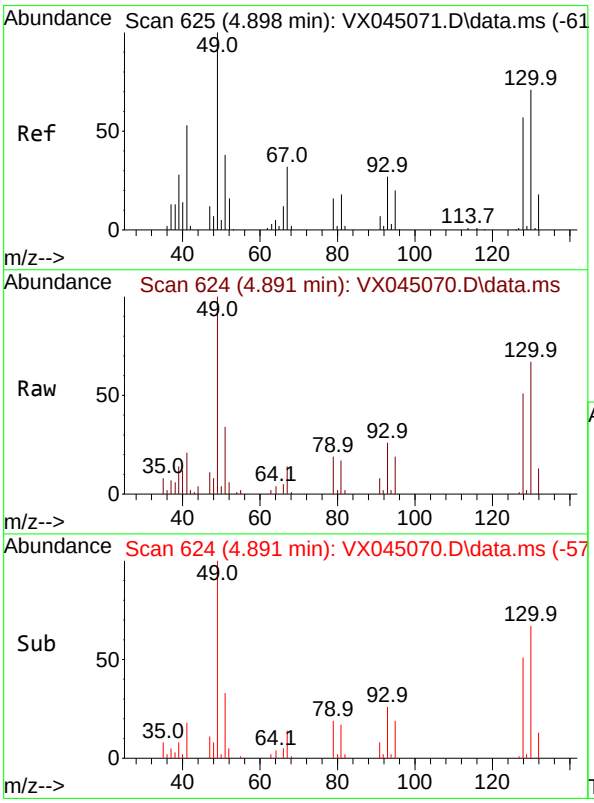
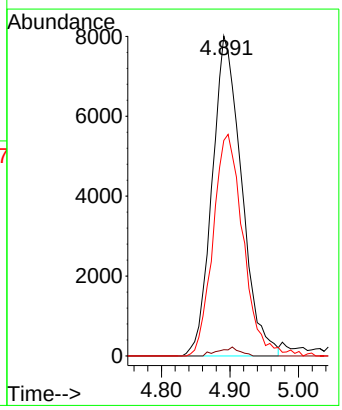
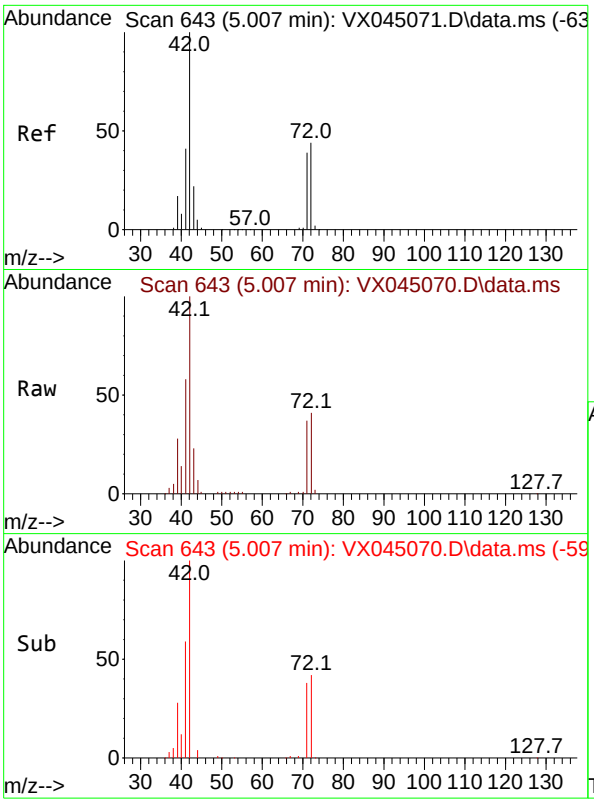



#28
Bromochloromethane
Concen: 20.579 ug/l
RT: 4.891 min Scan# 624
Delta R.T. -0.006 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 49 Resp: 23869

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 2.0 | 0.0 | 3.4 |
| 130 | 70.6 | 56.1 | 84.1 |






#29
Tetrahydrofuran
Concen: 122.519 ug/l
RT: 5.007 min Scan# 64
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 42 Resp: 7743

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 41.0 | 34.1 | 51.1 |
| 71 | 39.0 | 31.4 | 47.0 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

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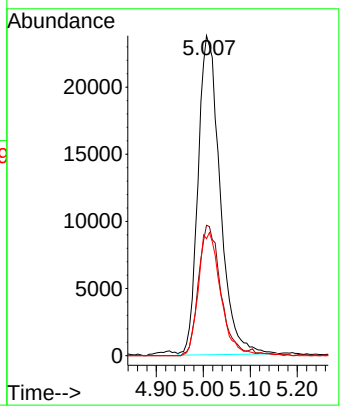
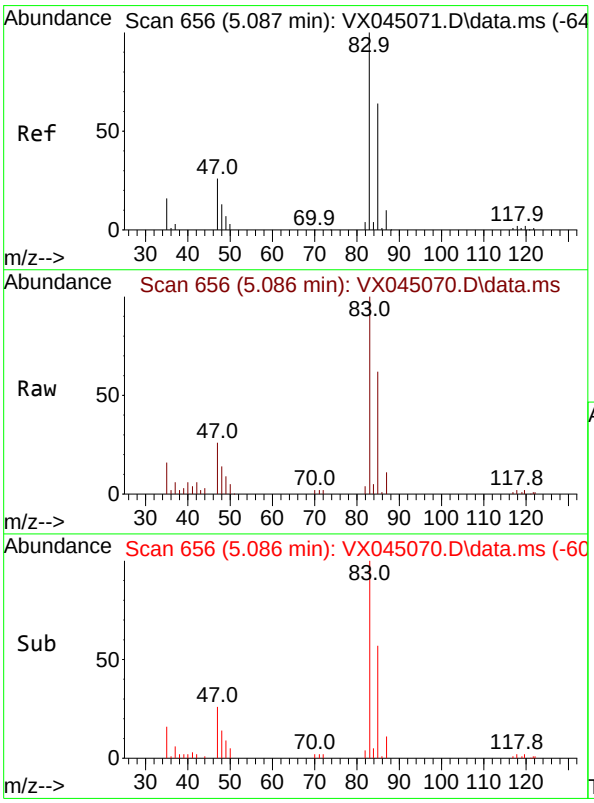
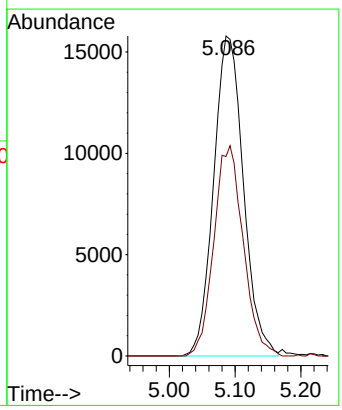


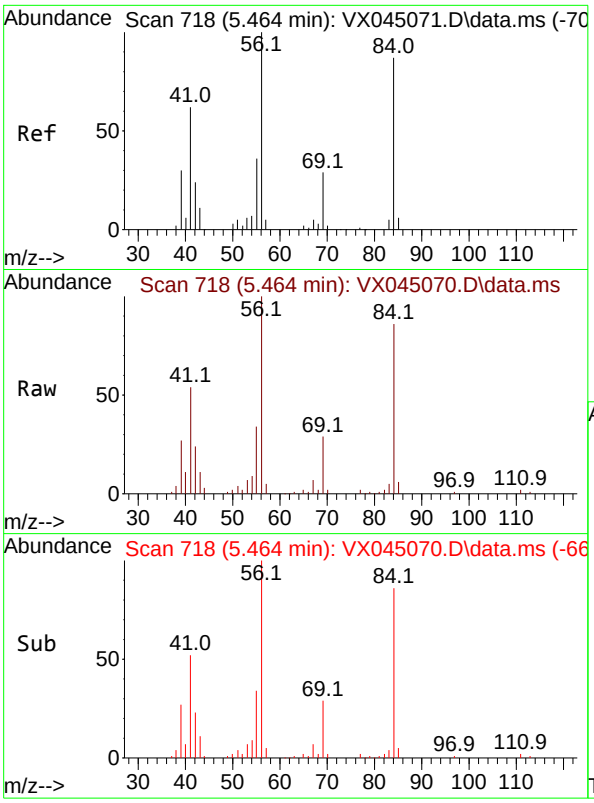




#30
Chloroform
Concen: 21.147 ug/l
RT: 5.086 min Scan# 656
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 83 Resp: 49751

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 62.3 | 51.4 | 77.2 |

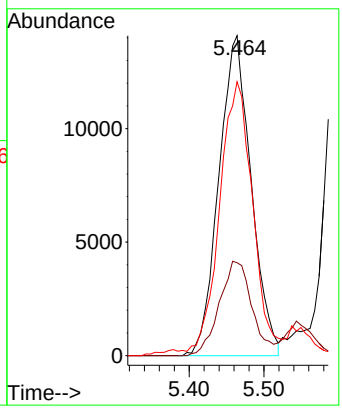





#31
Cyclohexane
Concen: 19.181 ug/l
RT: 5.464 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 56 Resp: 4234

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 29.0 | 23.4 | 35.2 |
| 84 | 84.2 | 69.4 | 104.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

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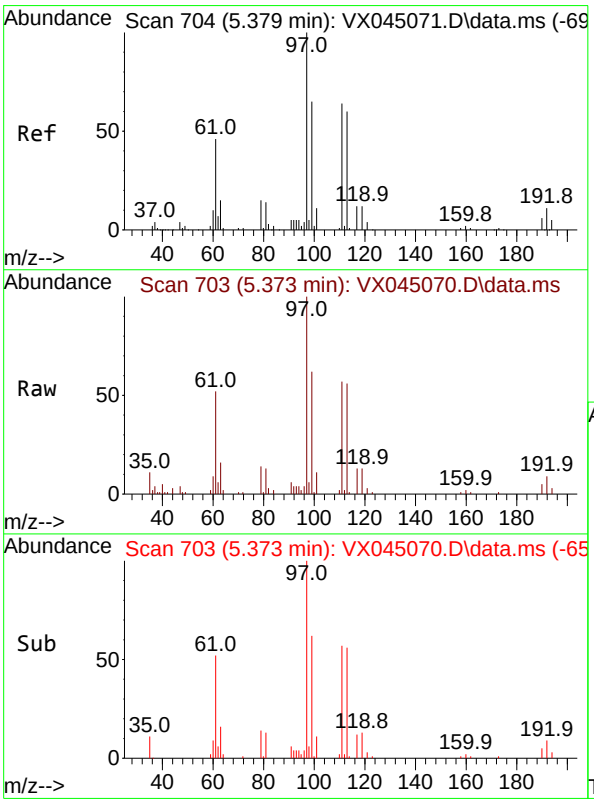
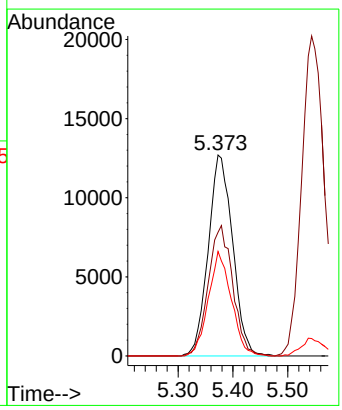
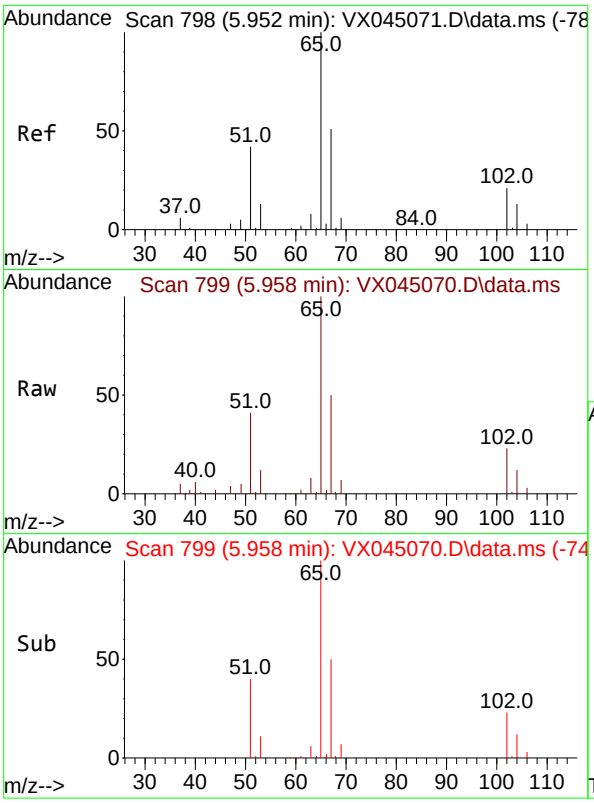



#32
1,1,1-Trichloroethane
Concen: 19.831 ug/l
RT: 5.373 min Scan# 703
Delta R.T. -0.006 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 97 Resp: 39276

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 65.2 | 51.6 | 77.4 |
| 61 | 48.9 | 38.4 | 57.6 |

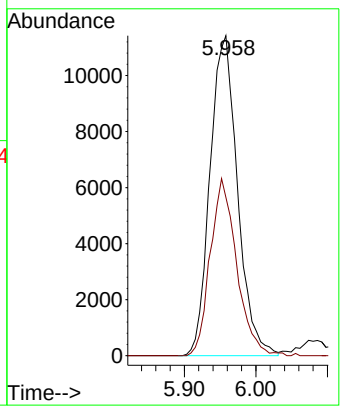





#33
1,2-Dichloroethane-d4
Concen: 21.221 ug/l
RT: 5.958 min Scan# 7
Delta R.T. 0.006 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 65 Resp: 3051

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 53.2 | 0.0 | 106.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

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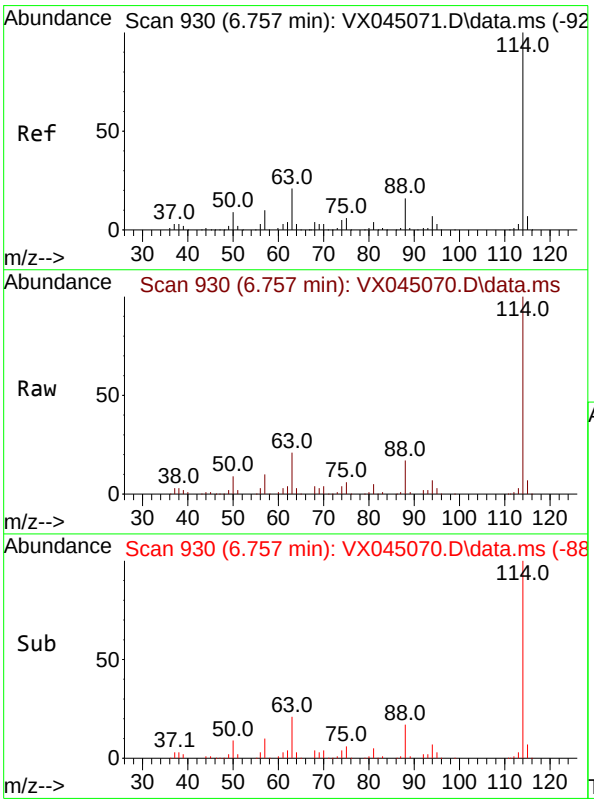
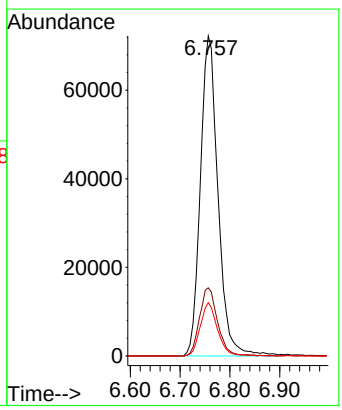
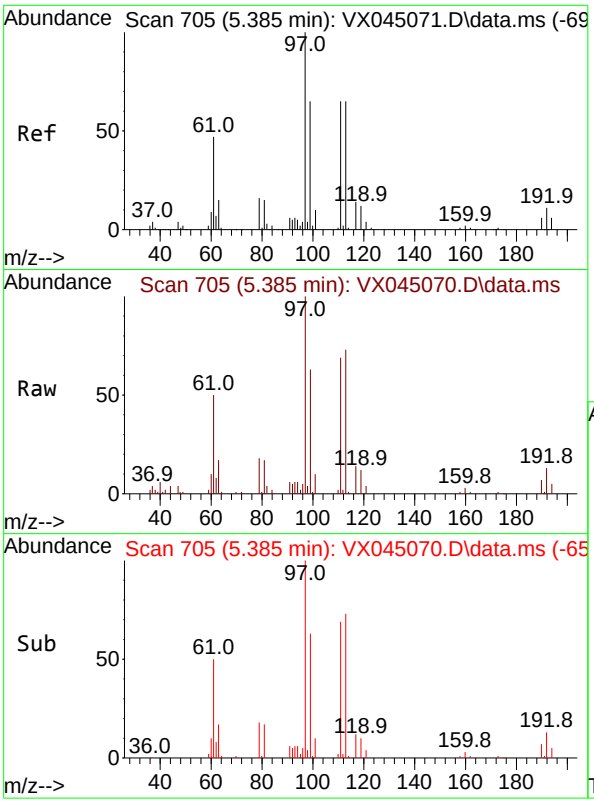



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.757 min Scan# 930
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:114 Resp: 177403

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 21.3 | 0.0 | 41.8 |
| 88 | 16.6 | 0.0 | 32.8 |

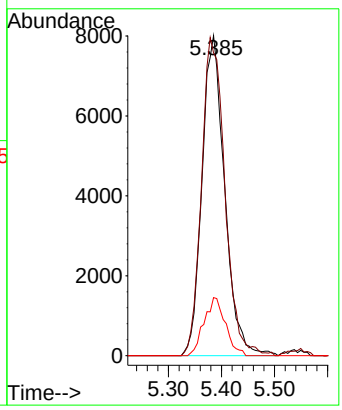





#35
Dibromofluoromethane
Concen: 20.473 ug/l
RT: 5.385 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:113 Resp: 2373

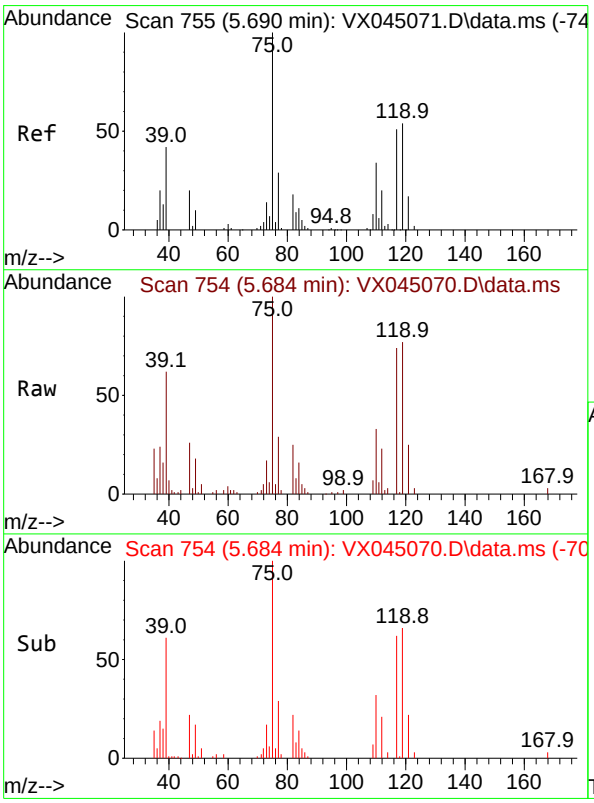
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 102.7 | 81.8 | 122.6 |
| 192 | 17.2 | 14.3 | 21.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

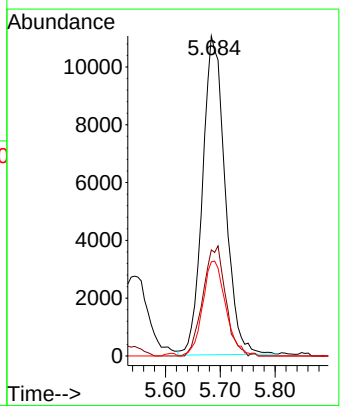
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

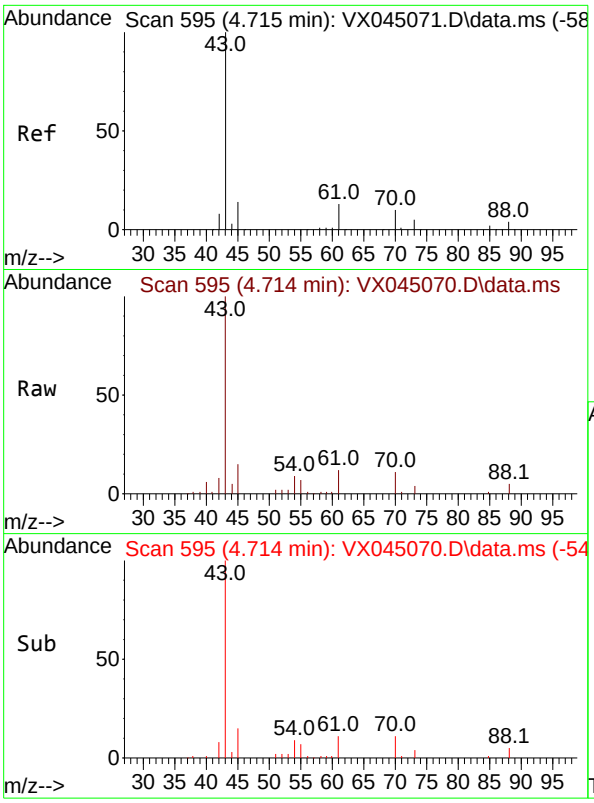



#36
1,1-Dichloropropene
Concen: 18.903 ug/l
RT: 5.684 min Scan# 754
Delta R.T. -0.006 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 75 Resp: 31519

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 34.4 | 16.9 | 50.6 |
| 77 | 30.3 | 24.5 | 36.7 |

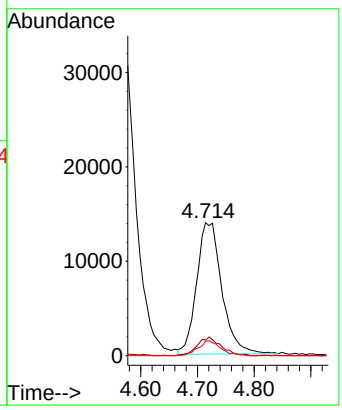





#37
Ethyl Acetate
Concen: 22.714 ug/l
RT: 4.714 min Scan# 5
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 43 Resp: 4309

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 13.4 | 10.8 | 16.2 |
| 70 | 10.1 | 7.7 | 11.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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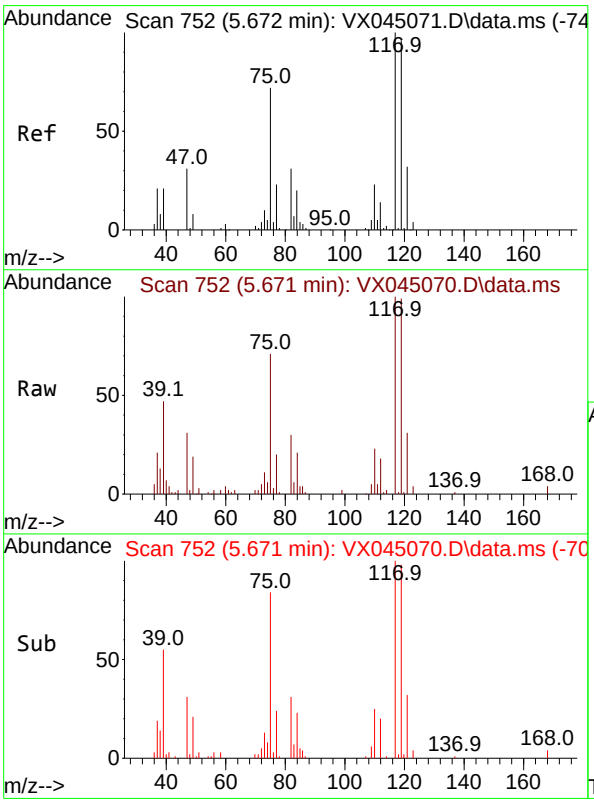
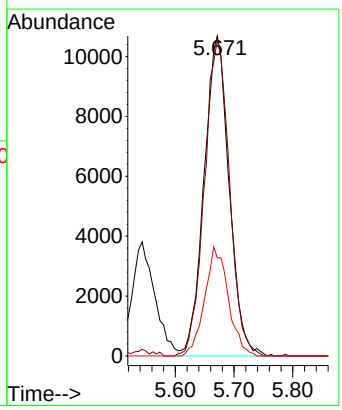
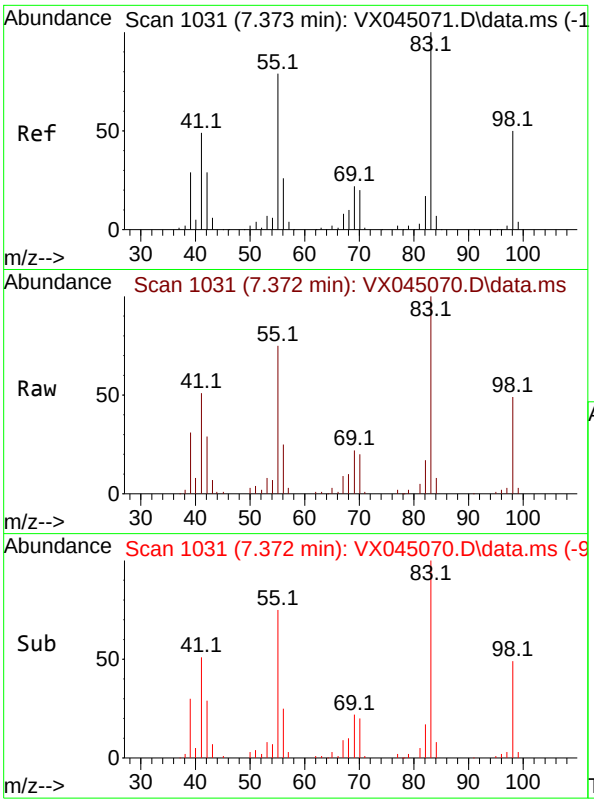



#38
Carbon Tetrachloride
Concen: 19.334 ug/l
RT: 5.671 min Scan# 752
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:117 Resp: 31694

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 98.7 | 76.7 | 115.1 |
| 121 | 30.7 | 25.5 | 38.3 |

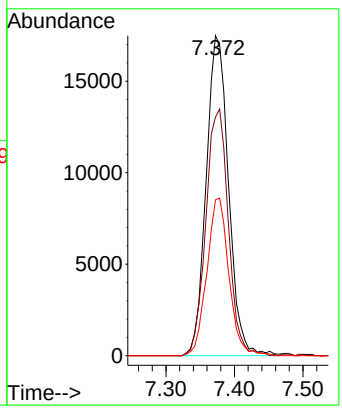





#39
Methylcyclohexane
Concen: 18.676 ug/l
RT: 7.372 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 83 Resp: 3976

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 74.6 | 63.0 | 94.4 |
| 98 | 48.7 | 39.7 | 59.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

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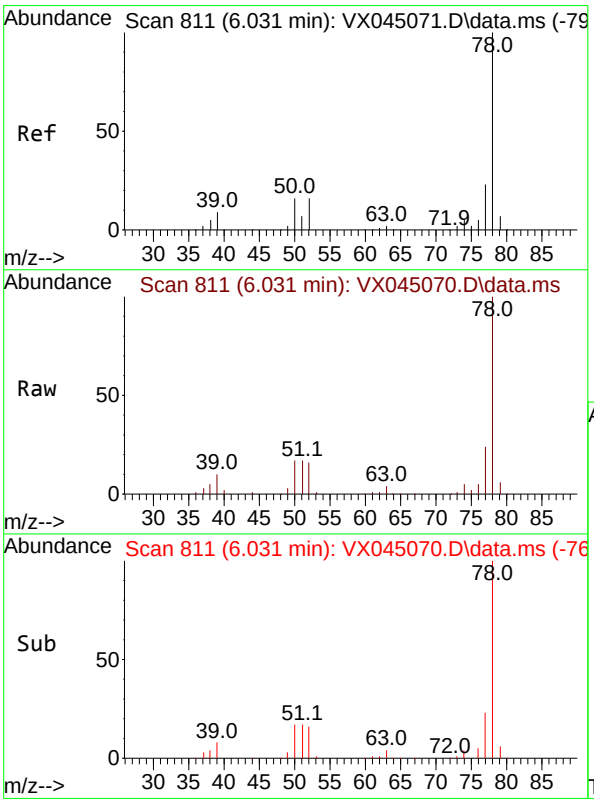
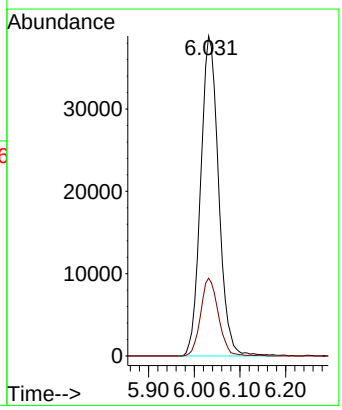
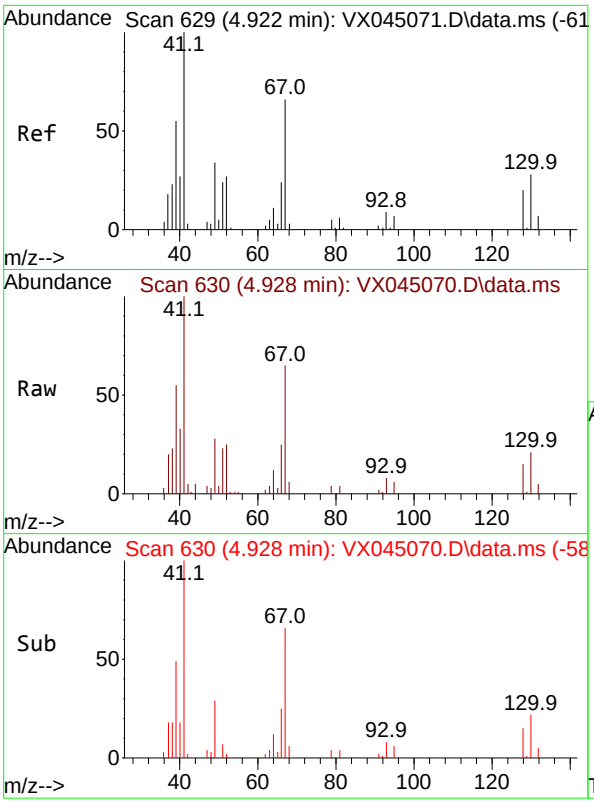



#40
Benzene
Concen: 20.298 ug/l
RT: 6.031 min Scan# 811
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 78 Resp: 105787

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 24.3 | 18.8 | 28.2 |

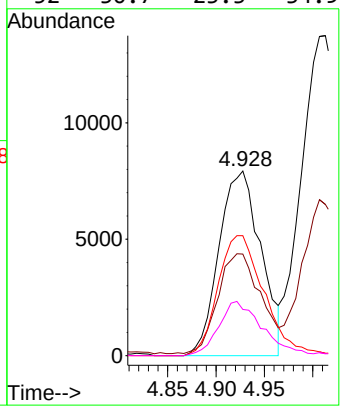





#41
Methacrylonitrile
Concen: 23.605 ug/l
RT: 4.928 min Scan# 6
Delta R.T. 0.006 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 41 Resp: 2392

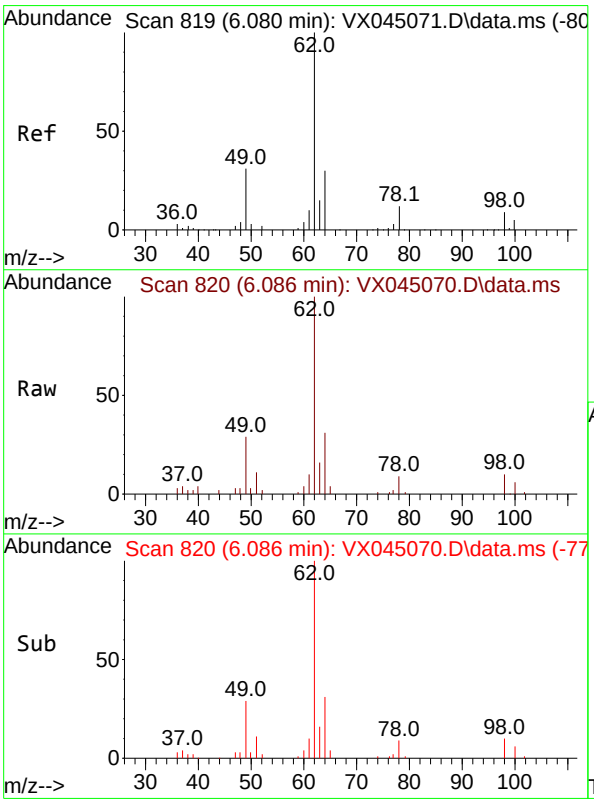
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 55.3 | 44.6 | 67.0 |
| 67 | 71.6 | 53.9 | 80.9 |
| 52 | 30.7 | 23.3 | 34.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

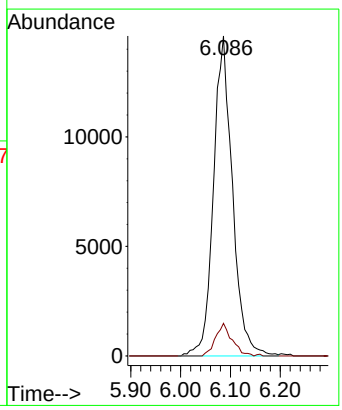
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

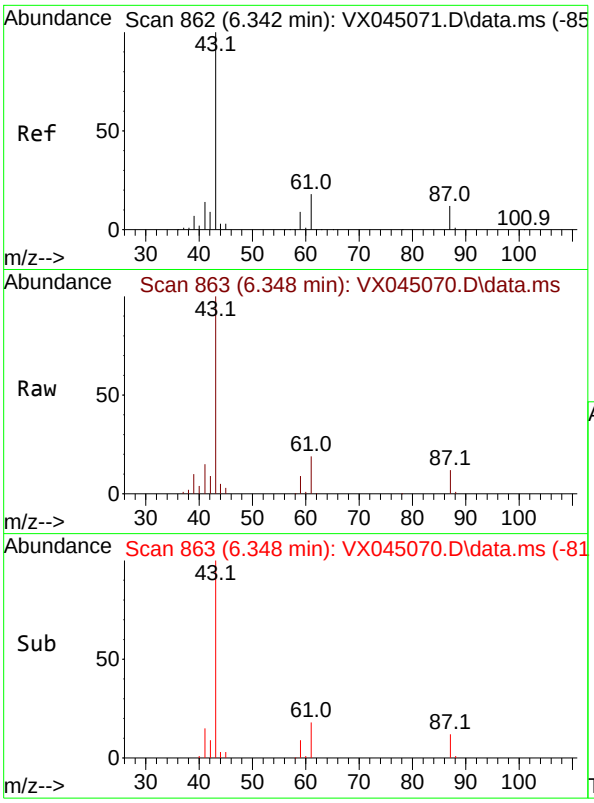



#42
1,2-Dichloroethane
Concen: 22.886 ug/l
RT: 6.086 min Scan# 820
Delta R.T. 0.006 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 62 Resp: 38653

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 8.8 | 0.0 | 18.2 |






#43
Isopropyl Acetate
Concen: 22.094 ug/l
RT: 6.348 min Scan# 8
Delta R.T. 0.006 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 43 Resp: 6672

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 17.8 | 14.9 | 22.3 |
| 87 | 11.5 | 9.4 | 14.2 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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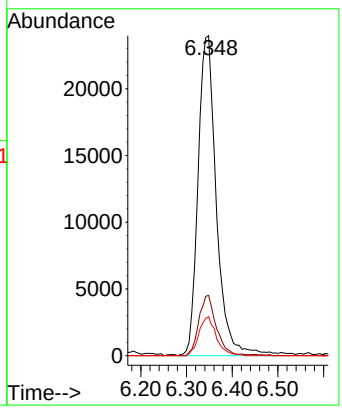
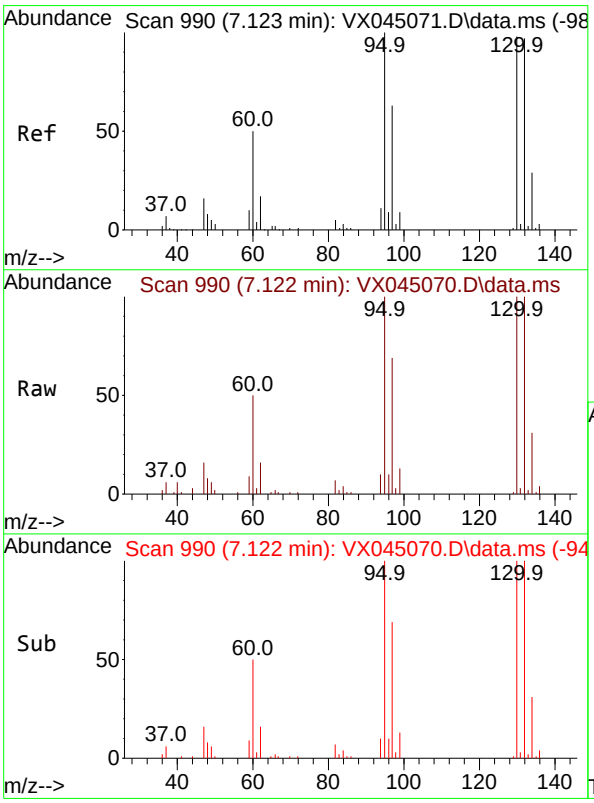
Supervised By :Mahesh Dadoda 02/28/2025

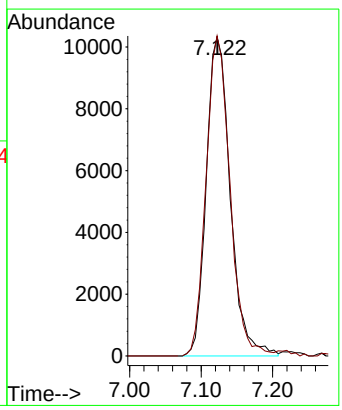


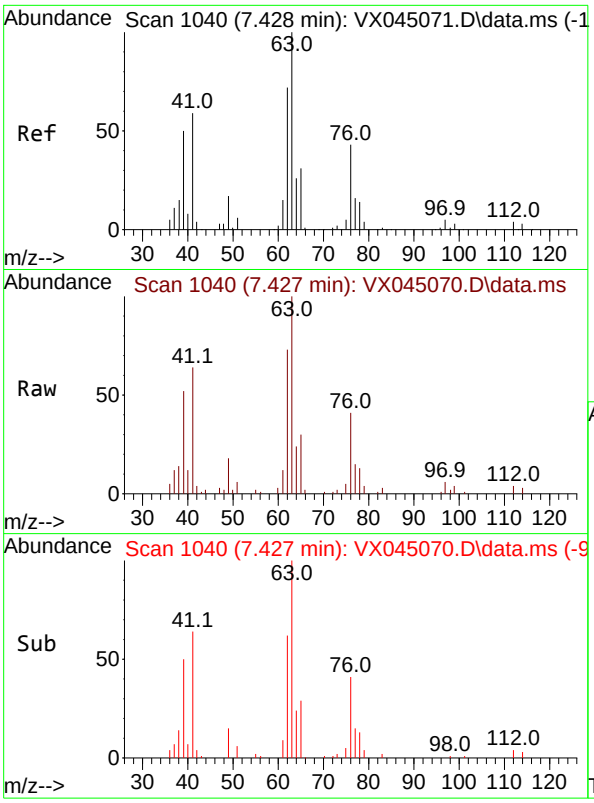




#44
Trichloroethene
Concen: 20.191 ug/l
RT: 7.122 min Scan# 990
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:130 Resp: 24052

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 100.3 | 0.0 | 205.0 |

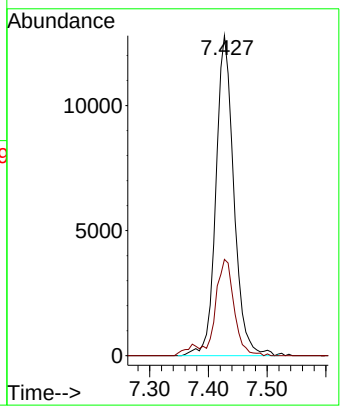





#45
1,2-Dichloropropane
Concen: 20.945 ug/l
RT: 7.427 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 63 Resp: 2712

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 30.1 | 24.7 | 37.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

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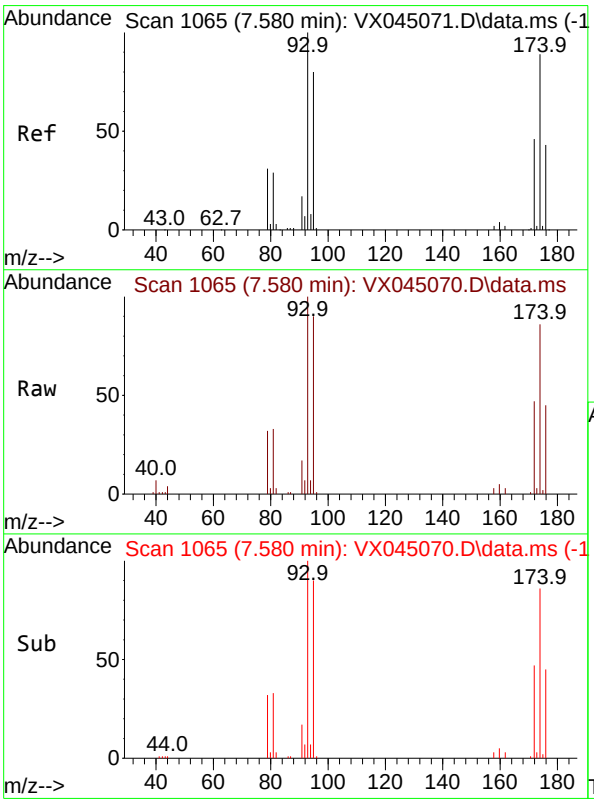
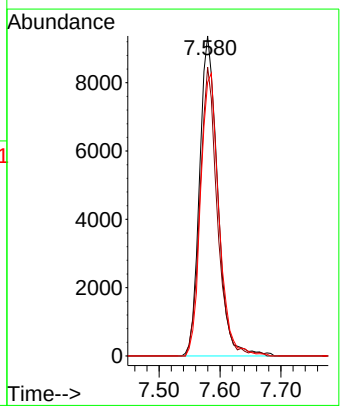
Supervised By :Mahesh Dadoda 02/28/2025

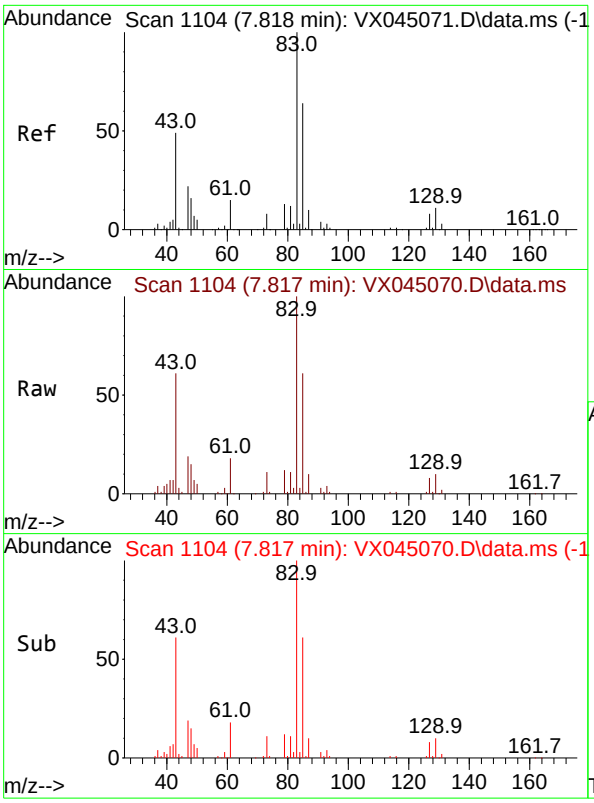



#46
Dibromomethane
Concen: 21.357 ug/l
RT: 7.580 min Scan# 1065
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 93 Resp: 19323

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 86.4 | 65.8 | 98.8 |
| 174 | 89.6 | 72.2 | 108.2 |

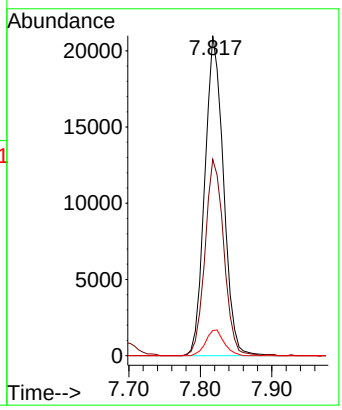





#47
Bromodichloromethane
Concen: 21.732 ug/l
RT: 7.817 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 83 Resp: 3803

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 61.3 | 51.1 | 76.7 |
| 127 | 7.8 | 6.4 | 9.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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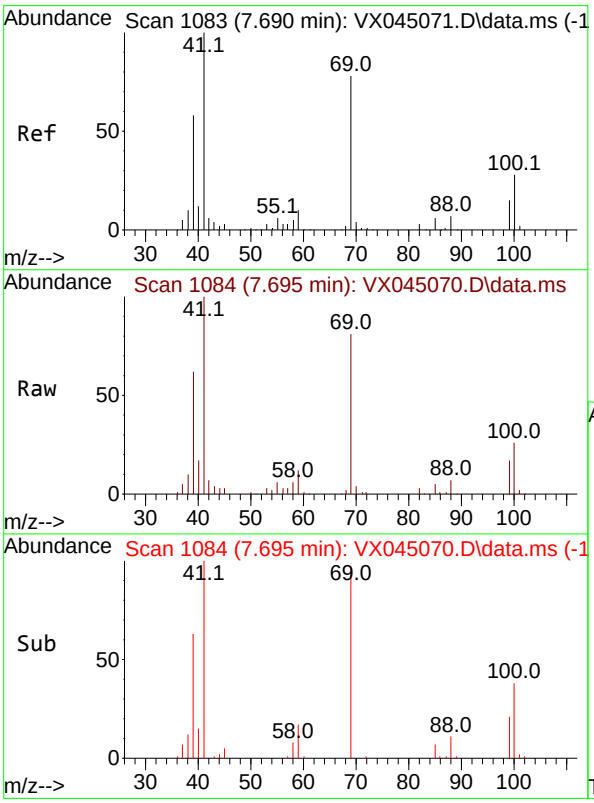
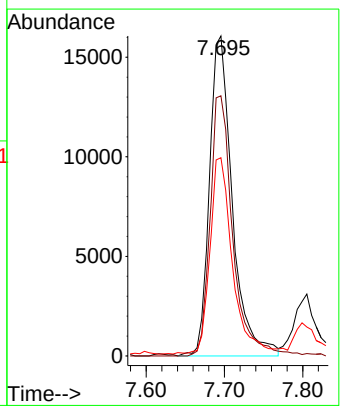
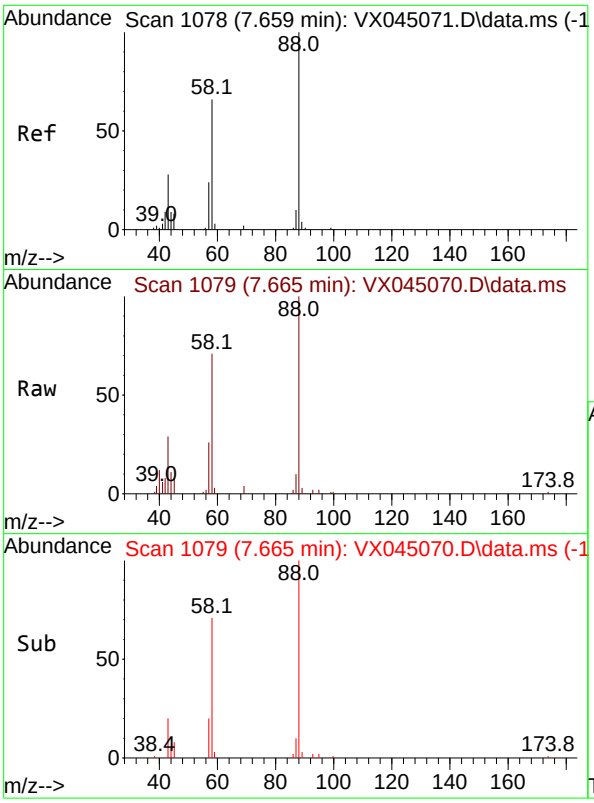



#48
Methyl methacrylate
Concen: 22.757 ug/l
RT: 7.695 min Scan# 1084
Delta R.T. 0.006 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 41 Resp: 32627

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 81.2 | 63.0 | 94.6 |
| 39 | 59.8 | 47.5 | 71.3 |

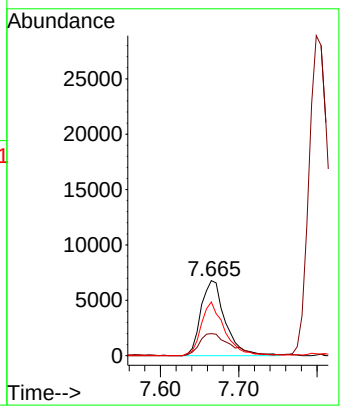





#49
1,4-Dioxane
Concen: 479.170 ug/l
RT: 7.665 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 88 Resp: 1460

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 38.7 | 28.7 | 43.1 |
| 58 | 68.3 | 55.8 | 83.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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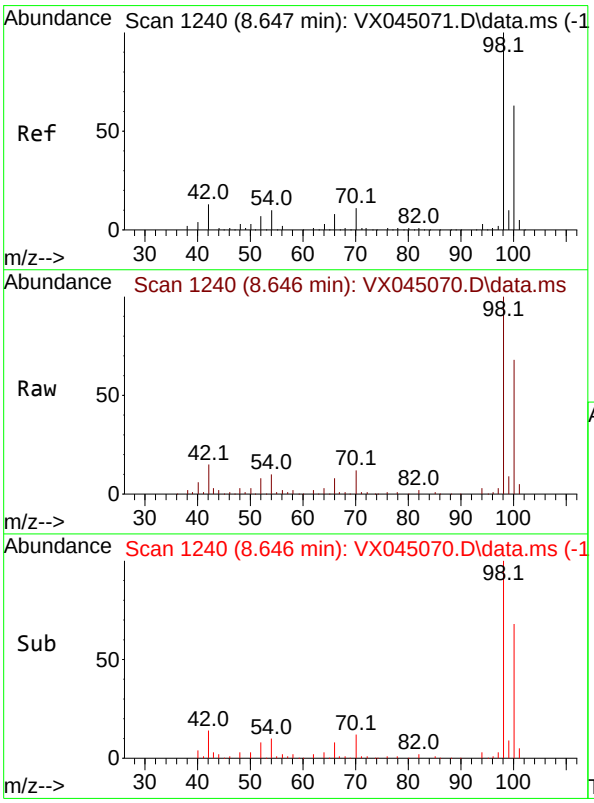
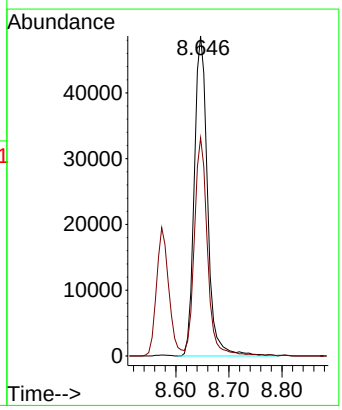
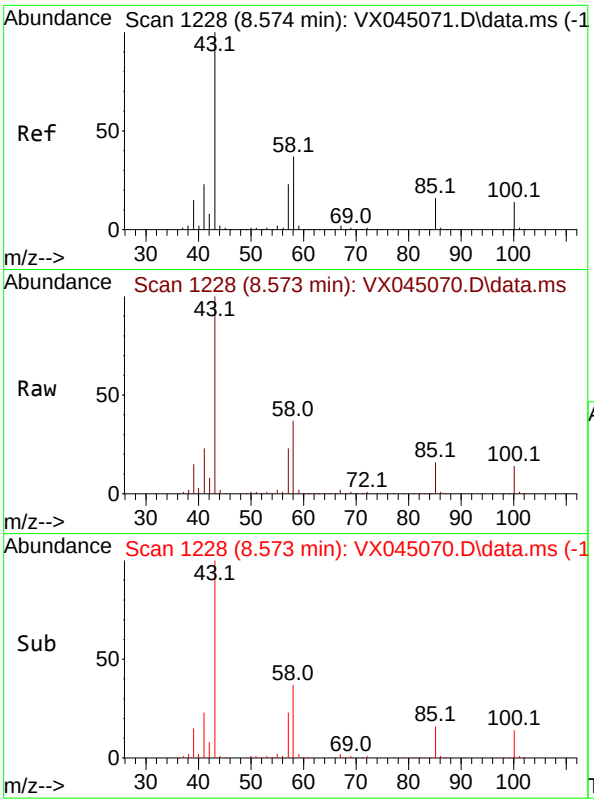



#50
Toluene-d8
Concen: 19.469 ug/l
RT: 8.646 min Scan# 1240
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 98 Resp: 84516

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 67.2 | 52.0 | 78.0 |

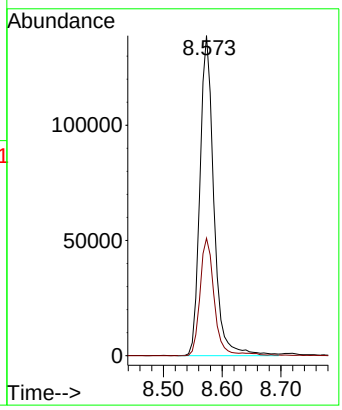





#51
4-Methyl-2-Pentanone
Concen: 124.081 ug/l
RT: 8.573 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 43 Resp: 22961

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 37.5 | 29.2 | 43.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

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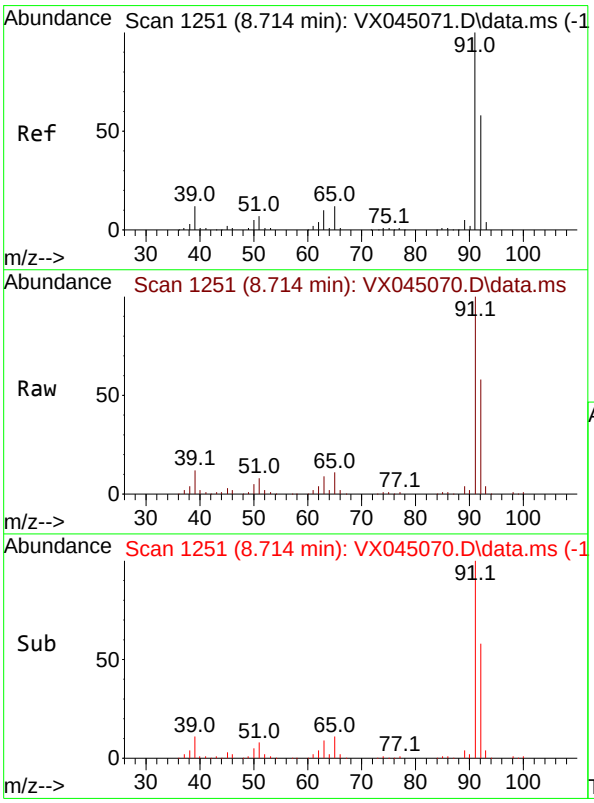
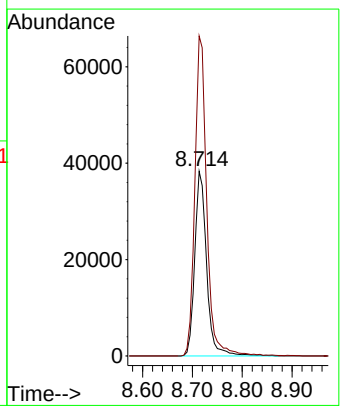
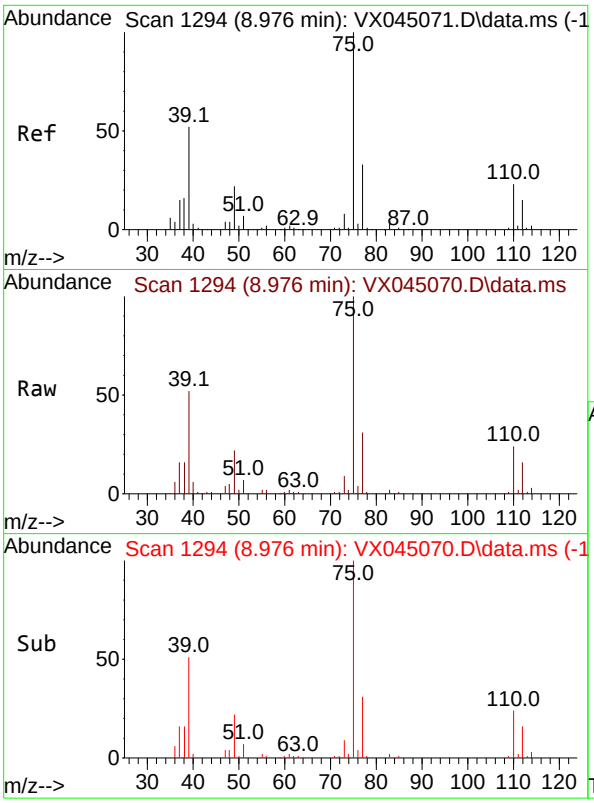



#52
Toluene
Concen: 20.463 ug/l
RT: 8.714 min Scan# 1251
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 92 Resp: 63326

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 173.7 | 138.9 | 208.3 |

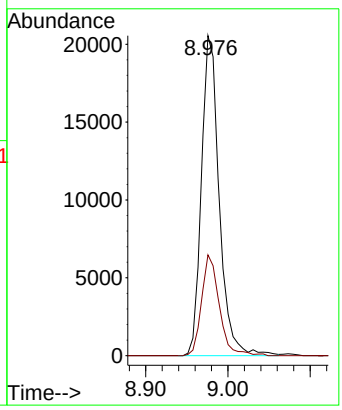





#53
t-1,3-Dichloropropene
Concen: 17.871 ug/l
RT: 8.976 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 75 Resp: 3091

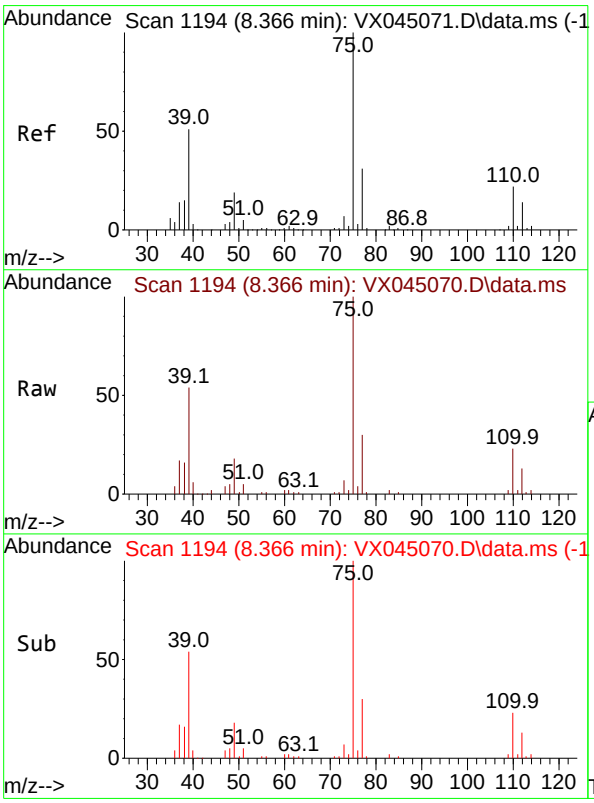
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.5 | 26.5 | 39.7 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

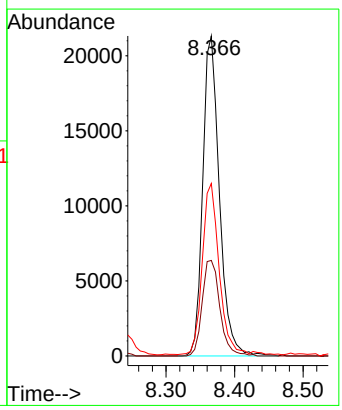
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

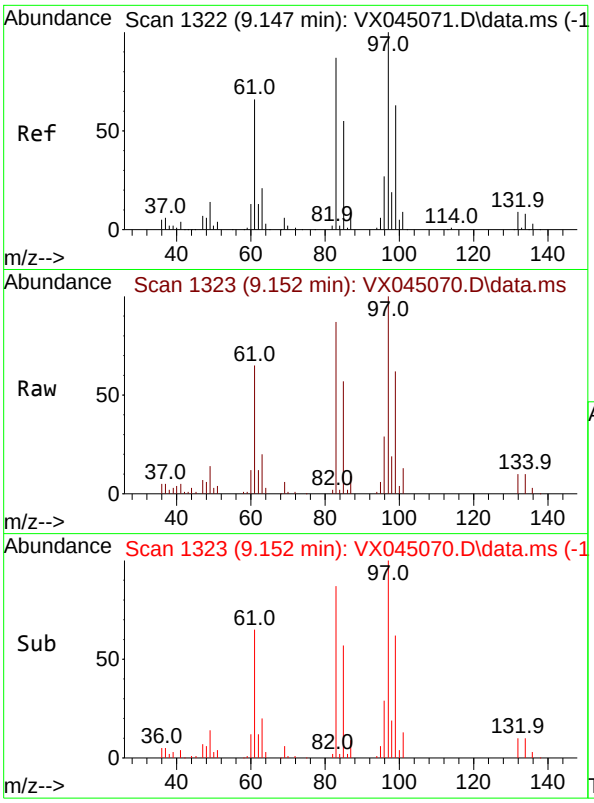



#54
cis-1,3-Dichloropropene
Concen: 18.675 ug/l
RT: 8.366 min Scan# 1194
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 75 Resp: 36118

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 29.9 | 24.7 | 37.1 |
| 39 | 53.5 | 40.7 | 61.1 |

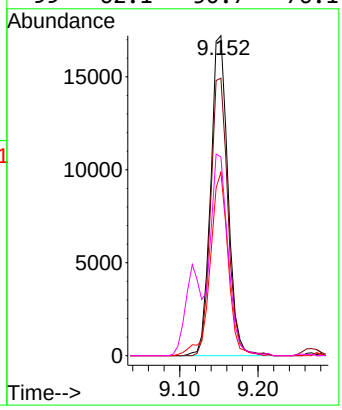





#55
1,1,2-Trichloroethane
Concen: 21.992 ug/l
RT: 9.152 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 97 Resp: 2635

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 86.7 | 69.4 | 104.2 |
| 85 | 57.3 | 44.1 | 66.1 |
| 99 | 62.1 | 50.7 | 76.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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Reviewed By :John Carlone 02/28/2025
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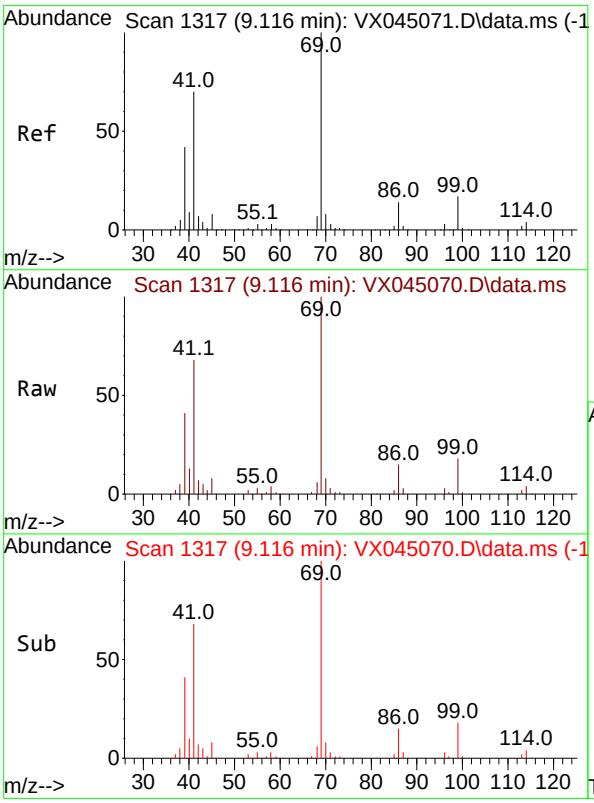
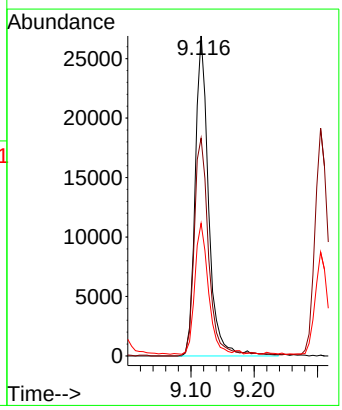
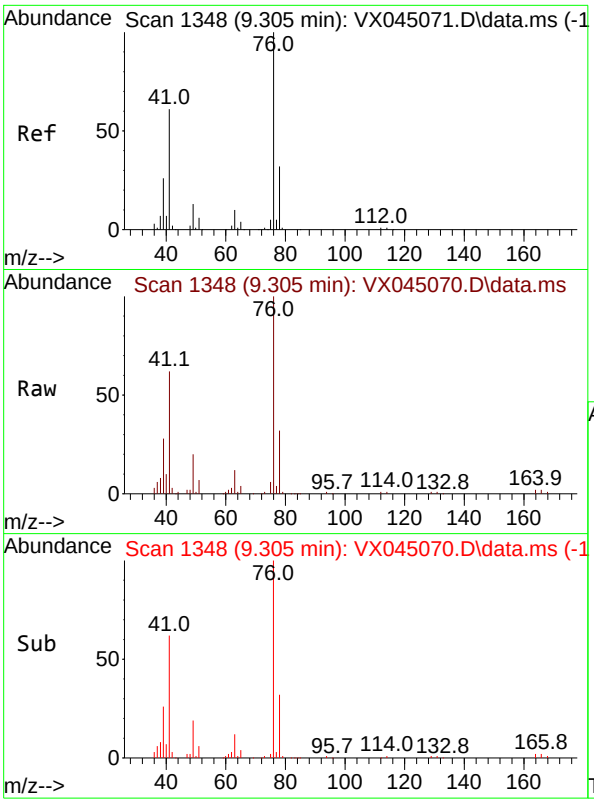



#56
Ethyl methacrylate
Concen: 20.791 ug/l
RT: 9.116 min Scan# 1317
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 69 Resp: 39850

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 73.6 | 57.0 | 85.4 |
| 39 | 40.6 | 34.2 | 51.4 |

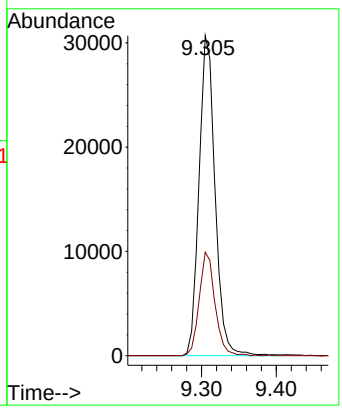





#57
1,3-Dichloropropane
Concen: 21.836 ug/l
RT: 9.305 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 76 Resp: 4564

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 31.9 | 25.5 | 38.3 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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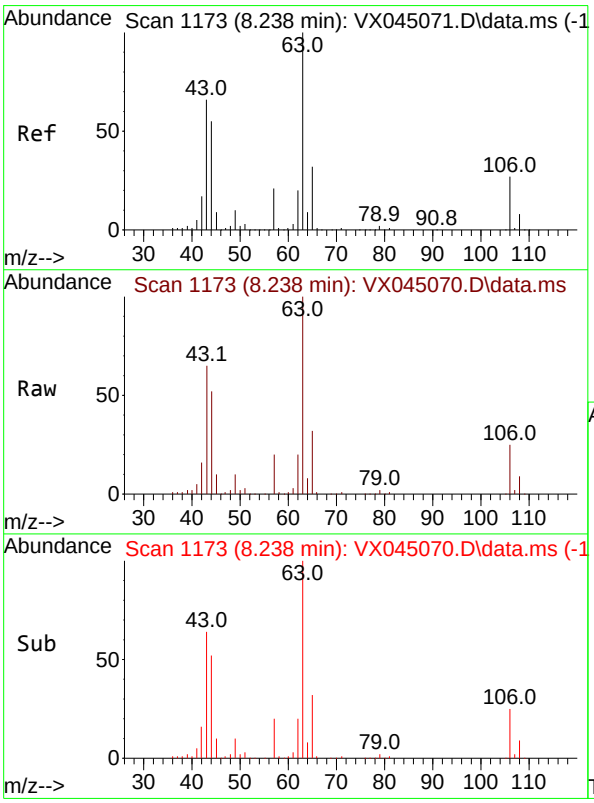
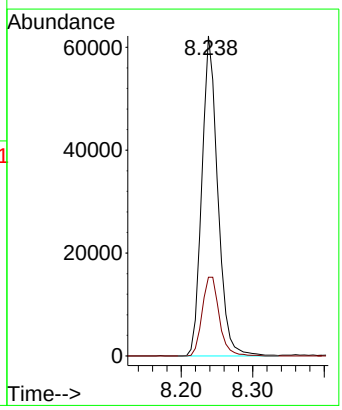
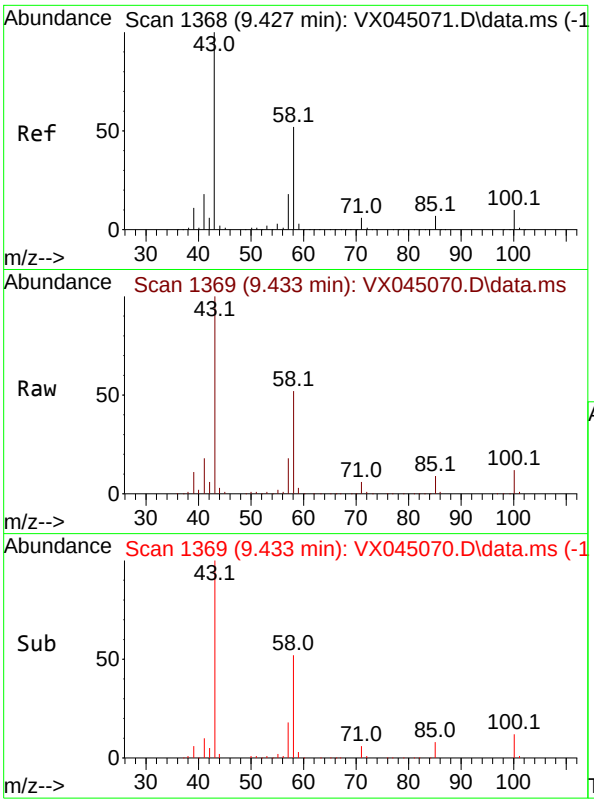



#58
2-Chloroethyl Vinyl ether
Concen: 102.342 ug/l
RT: 8.238 min Scan# 1173
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 63 Resp: 96311

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 26.4 | 21.5 | 32.3 |

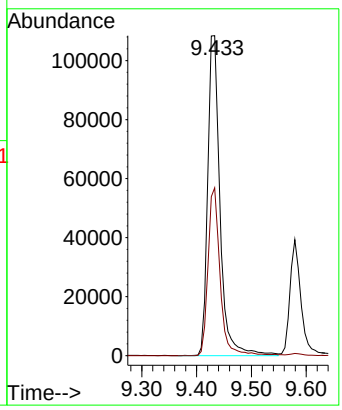





#59
2-Hexanone
Concen: 126.428 ug/l
RT: 9.433 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 43 Resp: 16876

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 51.6 | 25.9 | 77.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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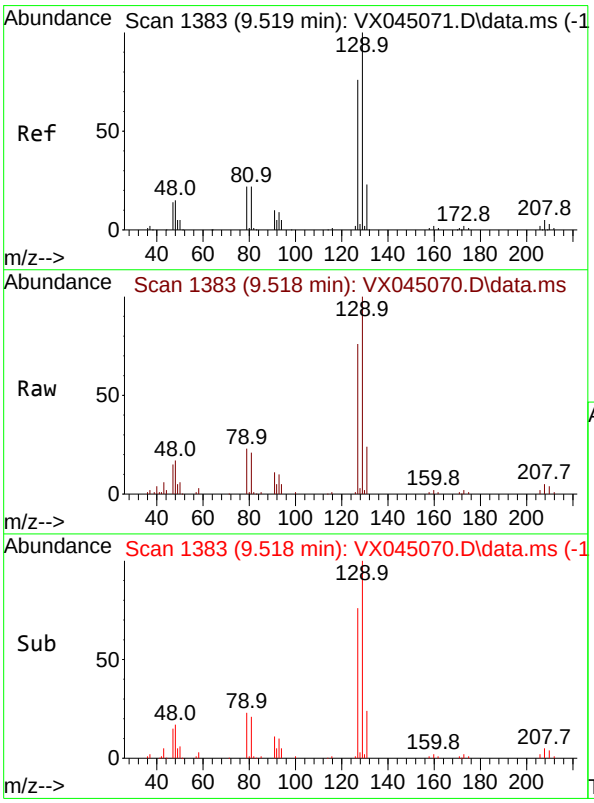
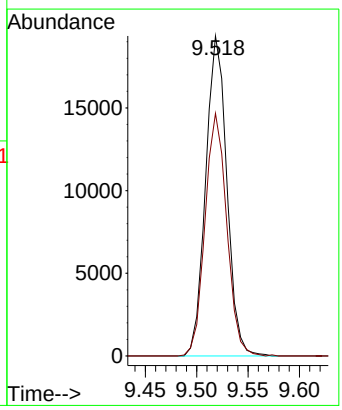
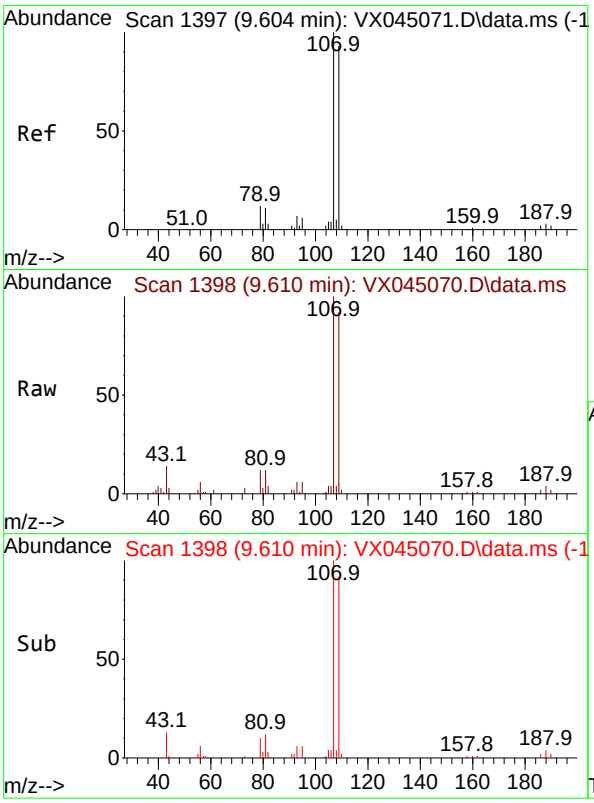



#60
Dibromochloromethane
Concen: 21.668 ug/l
RT: 9.518 min Scan# 1383
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:129 Resp: 27705

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 77.8 | 38.5 | 115.5 |

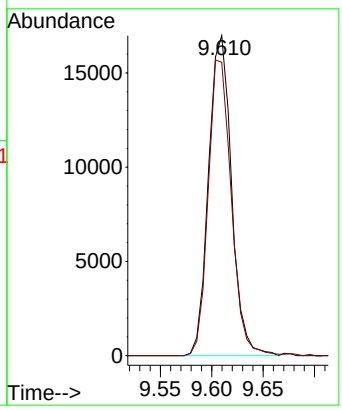





#61
1,2-Dibromoethane
Concen: 21.764 ug/l
RT: 9.610 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:107 Resp: 2631

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 93.3 | 76.1 | 114.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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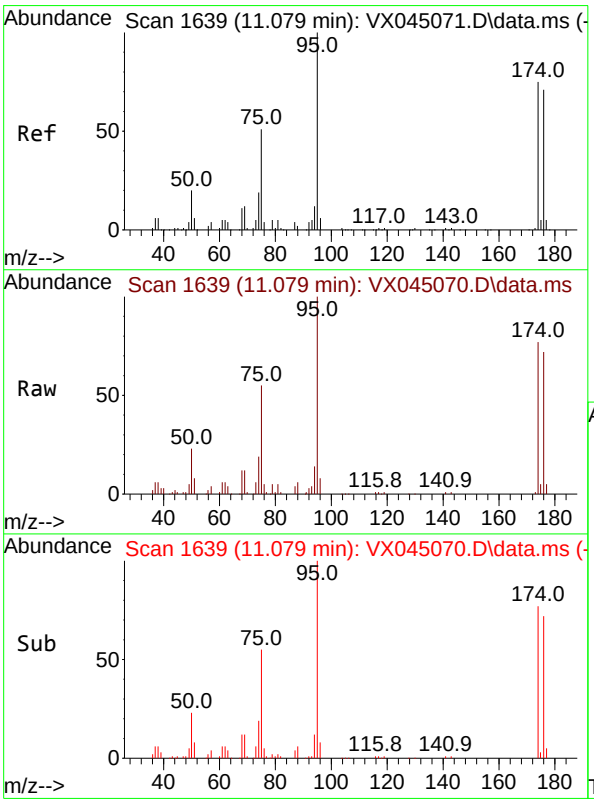
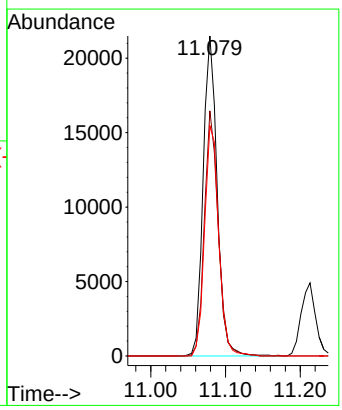
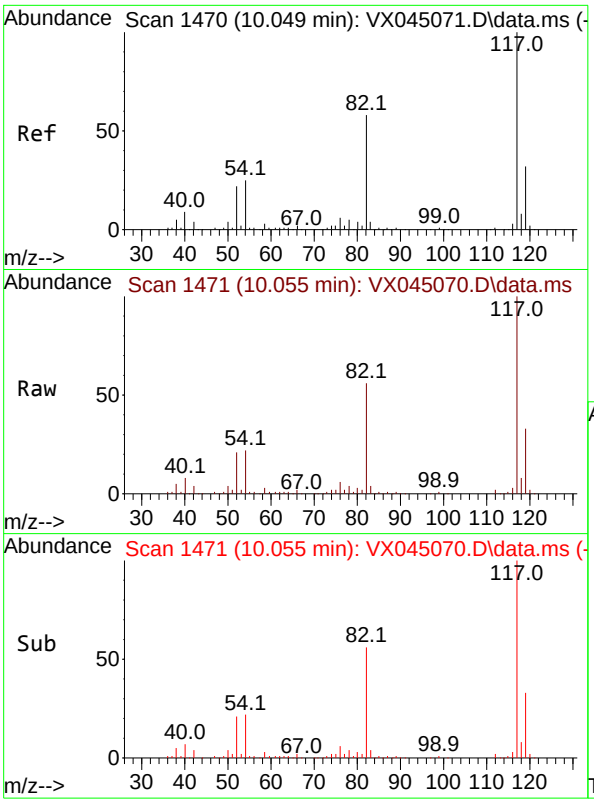



#62
4-Bromofluorobenzene
Concen: 19.215 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 95 Resp: 27856

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 76.1 | 0.0 | 148.2 |
| 176 | 72.8 | 0.0 | 141.4 |

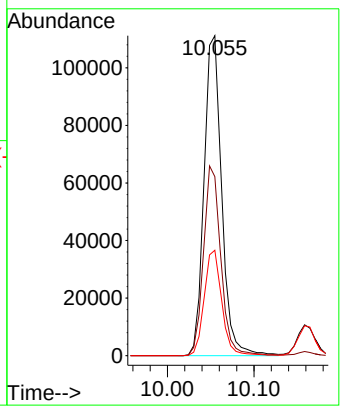





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.055 min Scan# 14
Delta R.T. 0.006 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:117 Resp: 15771

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 55.9 | 46.3 | 69.5 |
| 119 | 33.0 | 25.7 | 38.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

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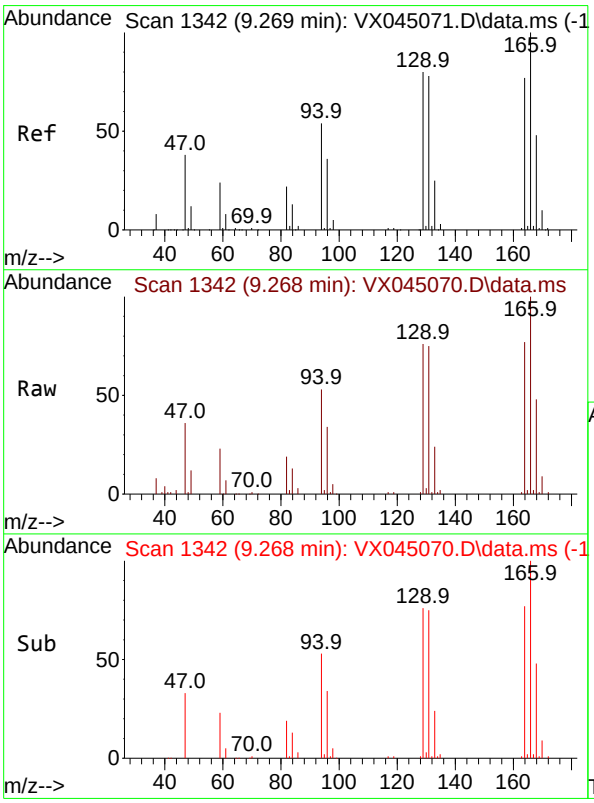
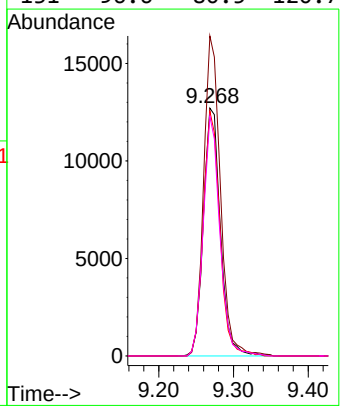
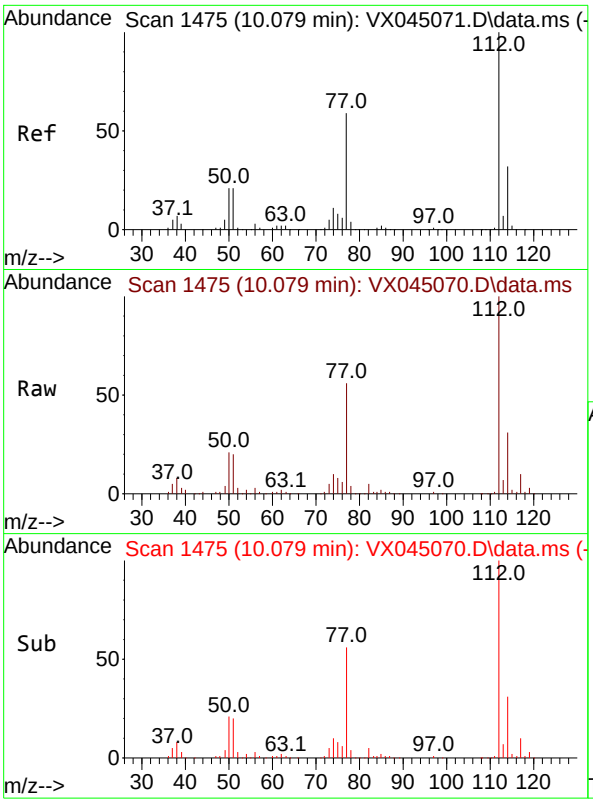



#64
Tetrachloroethene
Concen: 20.102 ug/l
RT: 9.268 min Scan# 1342
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:164 Resp: 20140

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 129.1 | 103.6 | 155.4 |
| 129 | 98.7 | 82.7 | 124.1 |
| 131 | 96.6 | 80.5 | 120.7 |

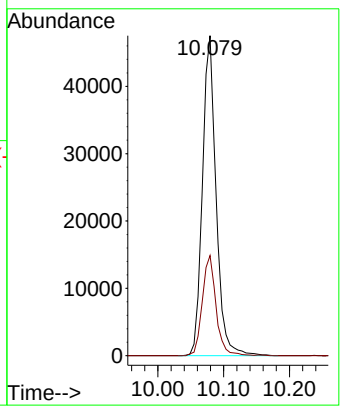





#65
Chlorobenzene
Concen: 20.316 ug/l
RT: 10.079 min Scan# 14
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:112 Resp: 6877

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 31.3 | 26.0 | 39.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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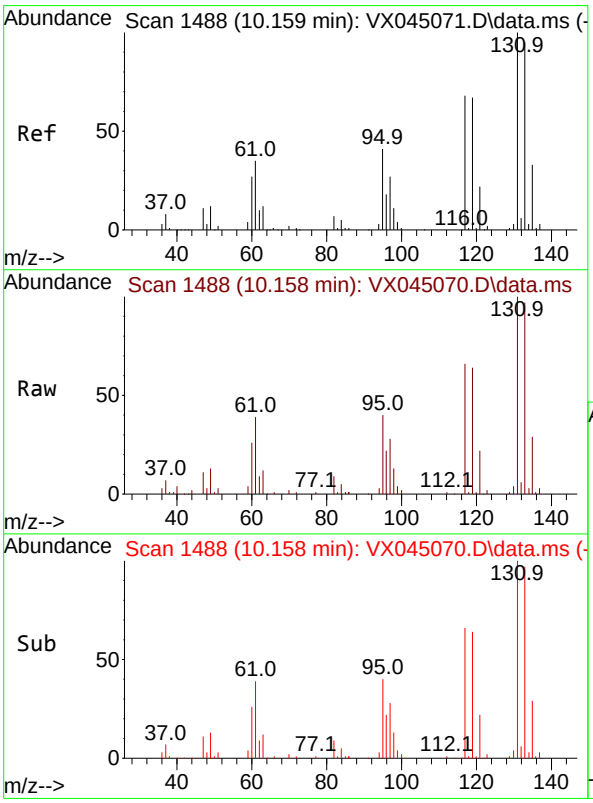
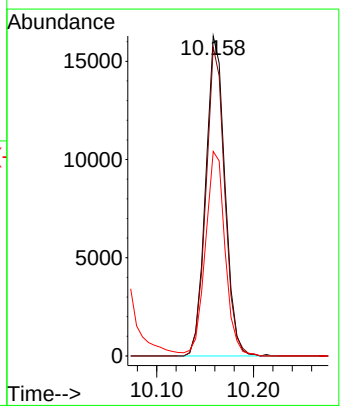
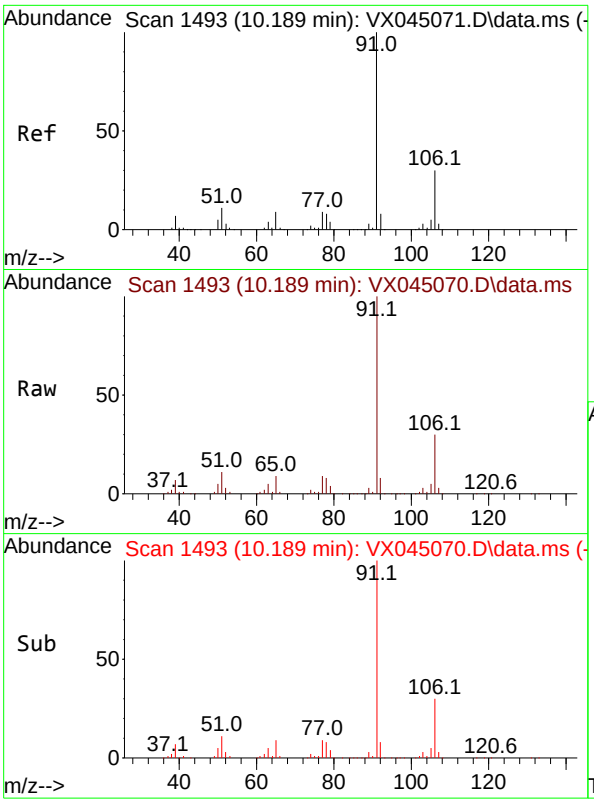



#66
1,1,1,2-Tetrachloroethane
Concen: 20.627 ug/l
RT: 10.158 min Scan# 1488
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:131 Resp: 22508

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 94.6 | 48.6 | 145.9 |
| 119 | 65.4 | 33.9 | 101.7 |

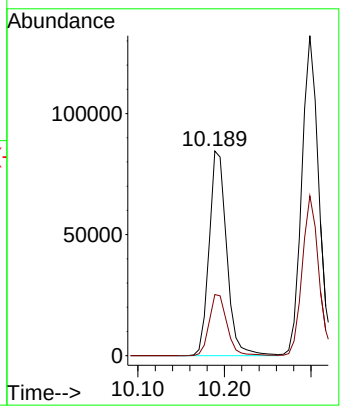





#67
Ethyl Benzene
Concen: 19.905 ug/l
RT: 10.189 min Scan# 14
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 91 Resp: 11916

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 29.9 | 23.9 | 35.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

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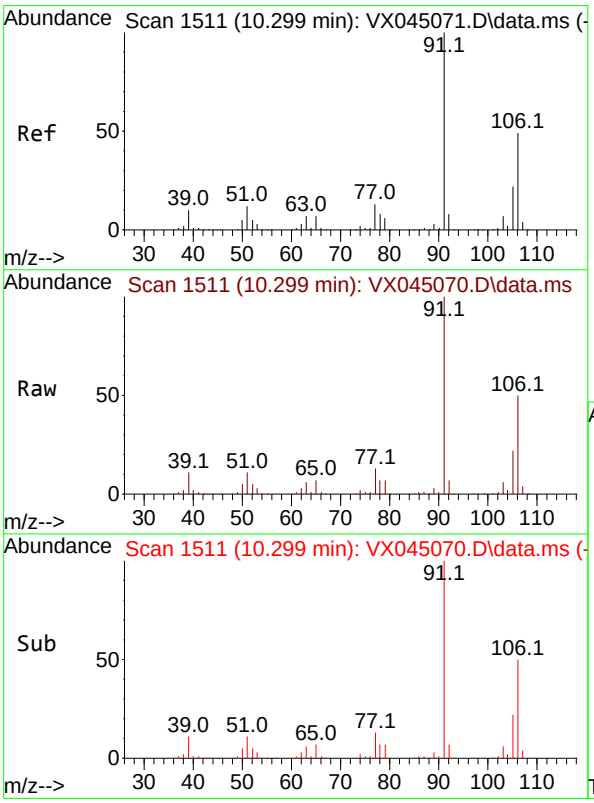
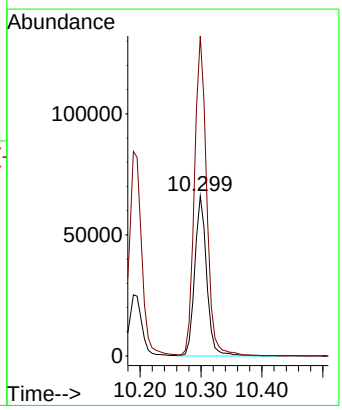
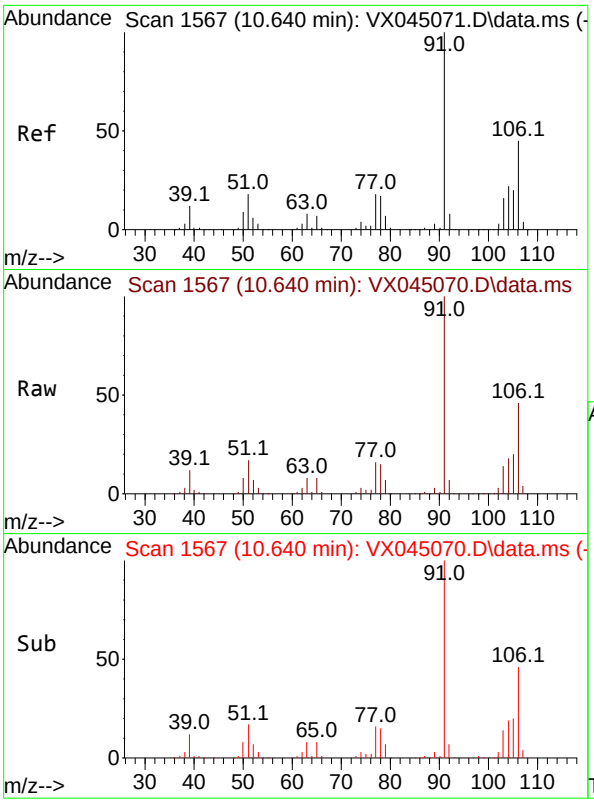



#68
m/p-Xylenes
Concen: 40.699 ug/l
RT: 10.299 min Scan# 1511
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:106 Resp: 89735

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 204.2 | 165.4 | 248.0 |

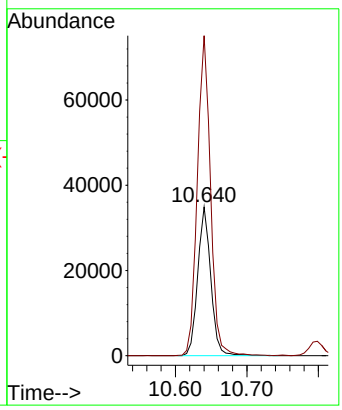





#69
o-Xylene
Concen: 20.018 ug/l
RT: 10.640 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:106 Resp: 4428

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 216.8 | 109.9 | 329.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

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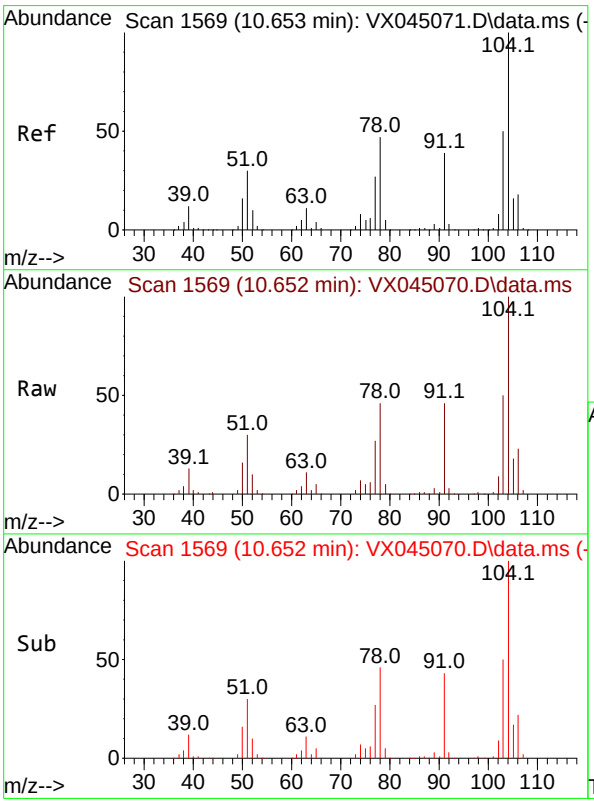
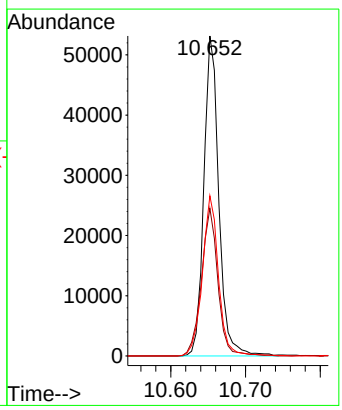
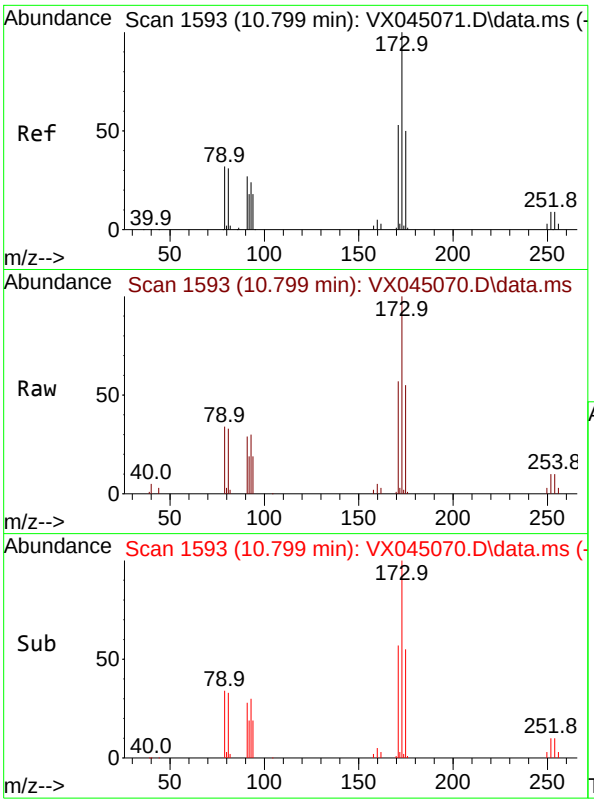



#70
Styrene
Concen: 20.767 ug/l
RT: 10.652 min Scan# 1569
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:104 Resp: 73832

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 50.9 | 42.2 | 63.4 |
| 103 | 54.1 | 43.8 | 65.8 |

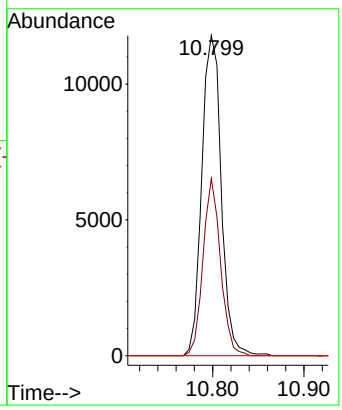





#71
Bromoform
Concen: 21.449 ug/l
RT: 10.799 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:173 Resp: 1740

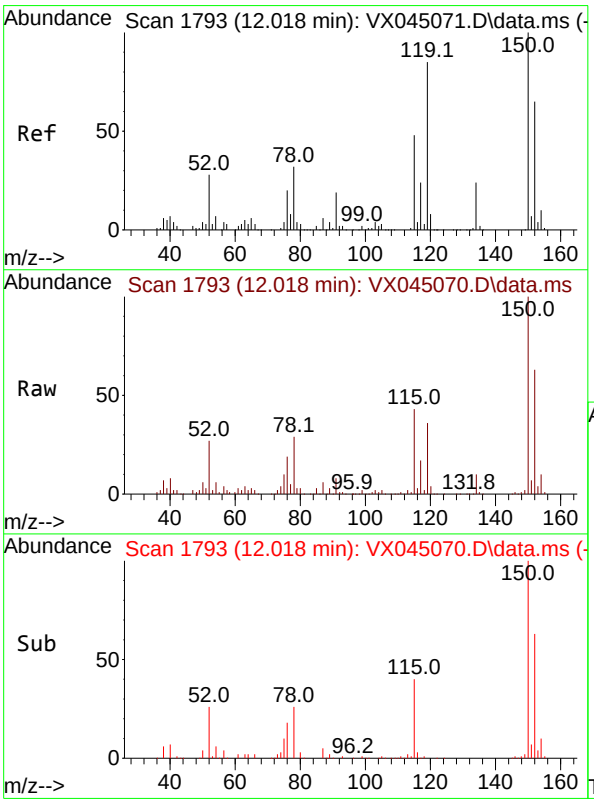
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 49.7 | 24.6 | 73.6 |
| 254 | 0.0 | 0.0 | 0.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

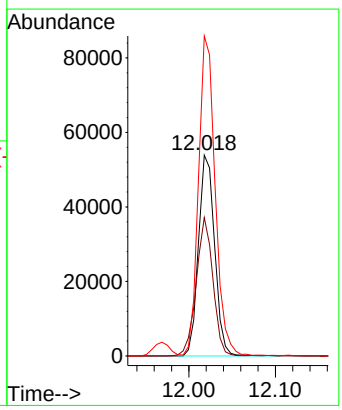
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

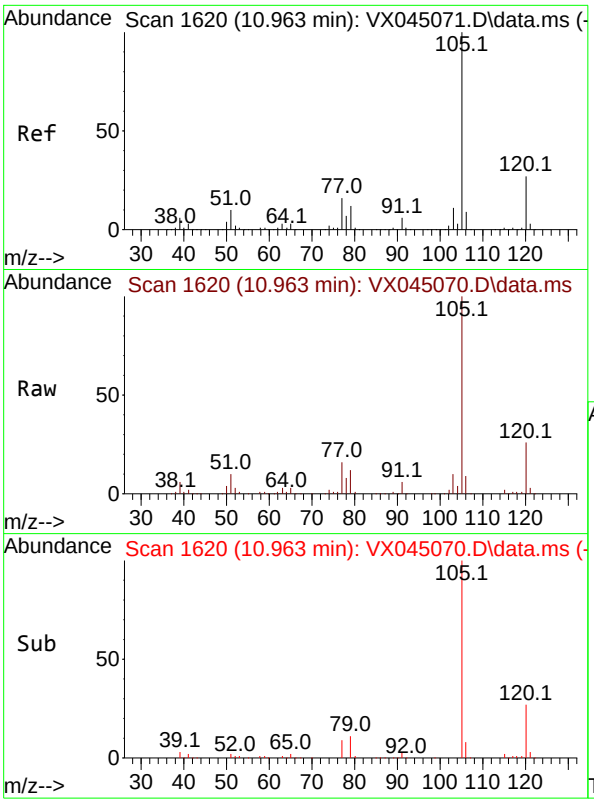



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.018 min Scan# 1793
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:152 Resp: 70072

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 70.9 | 44.2 | 132.6 |
| 150 | 163.4 | 0.0 | 349.0 |

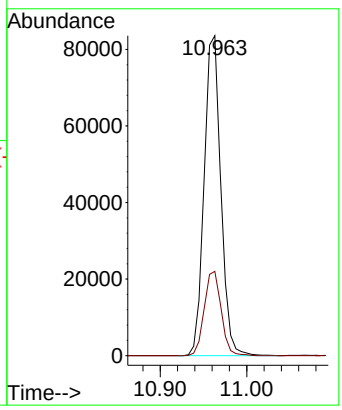





#73
Isopropylbenzene
Concen: 19.794 ug/l
RT: 10.963 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:105 Resp: 11209

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.7 | 13.2 | 39.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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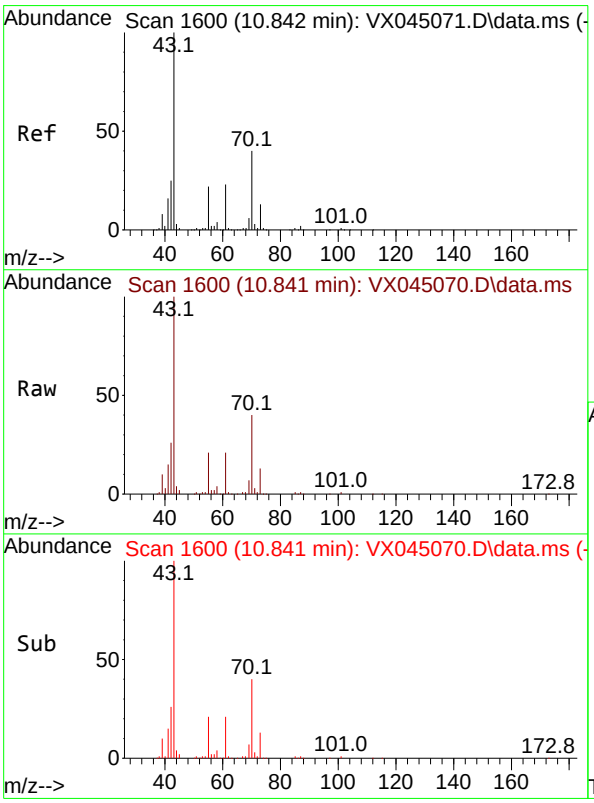
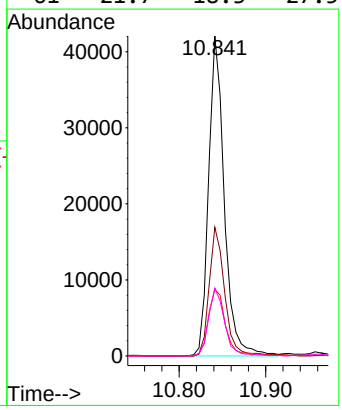
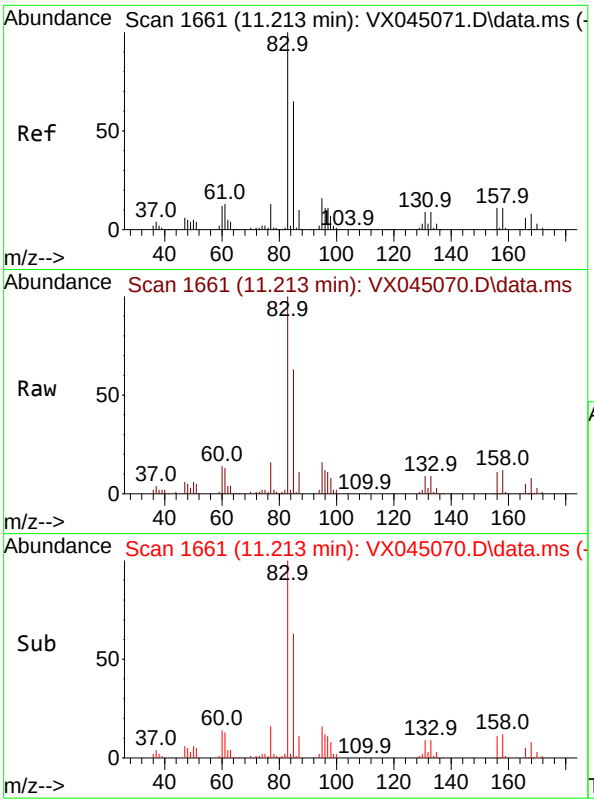



#74
N-amyl acetate
Concen: 20.606 ug/l
RT: 10.841 min Scan# 1600
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 43 Resp: 52972

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 40.0 | 31.8 | 47.6 |
| 55 | 23.0 | 18.3 | 27.5 |
| 61 | 21.7 | 18.3 | 27.5 |






#75
1,1,2,2-Tetrachloroethane
Concen: 21.738 ug/l
RT: 11.213 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 83 Resp: 4241

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 9.0 | 4.5 | 13.4 |
| 85 | 63.4 | 31.7 | 95.1 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/28/2025
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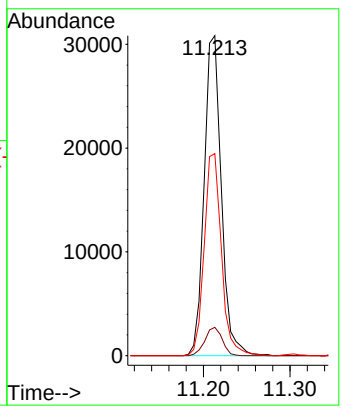
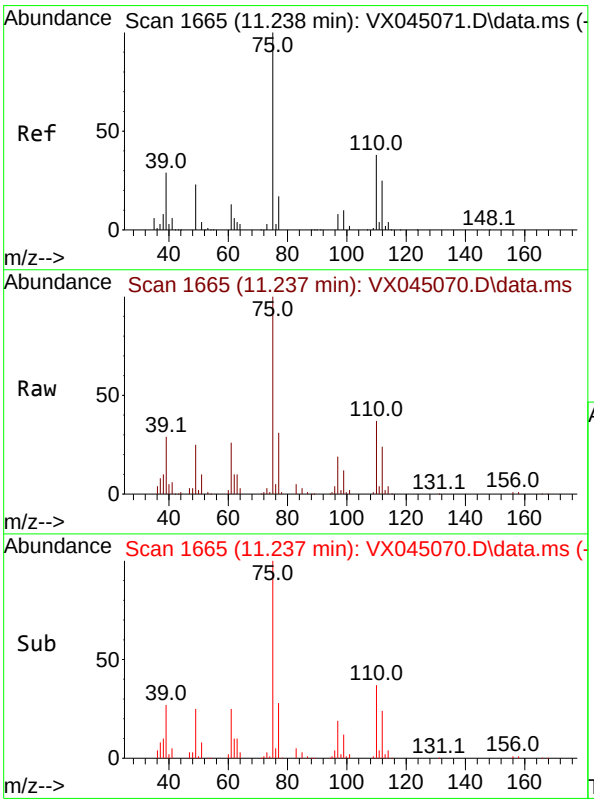
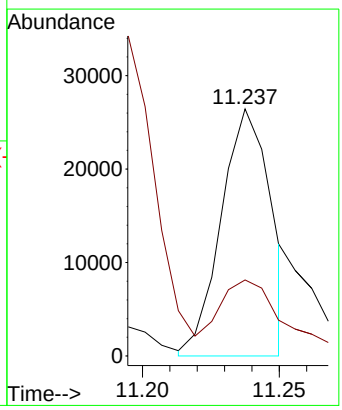


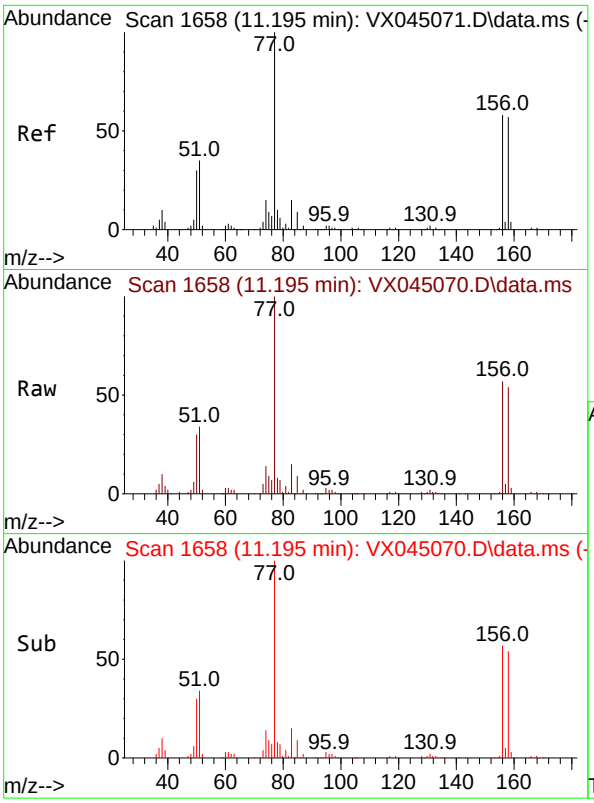




#76
1,2,3-Trichloropropane
Concen: 21.394 ug/l m
RT: 11.237 min Scan# 1665
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 75 Resp: 33440

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 40.6 | 20.7 | 62.1 |

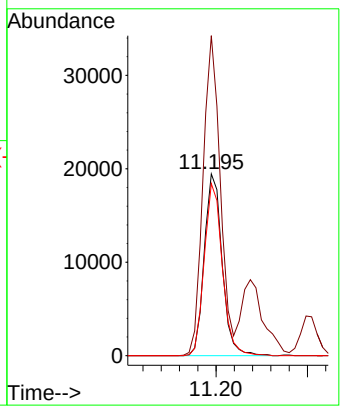





#77
Bromobenzene
Concen: 20.466 ug/l
RT: 11.195 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:156 Resp: 2631

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 170.2 | 85.8 | 257.4 |
| 158 | 95.9 | 48.4 | 145.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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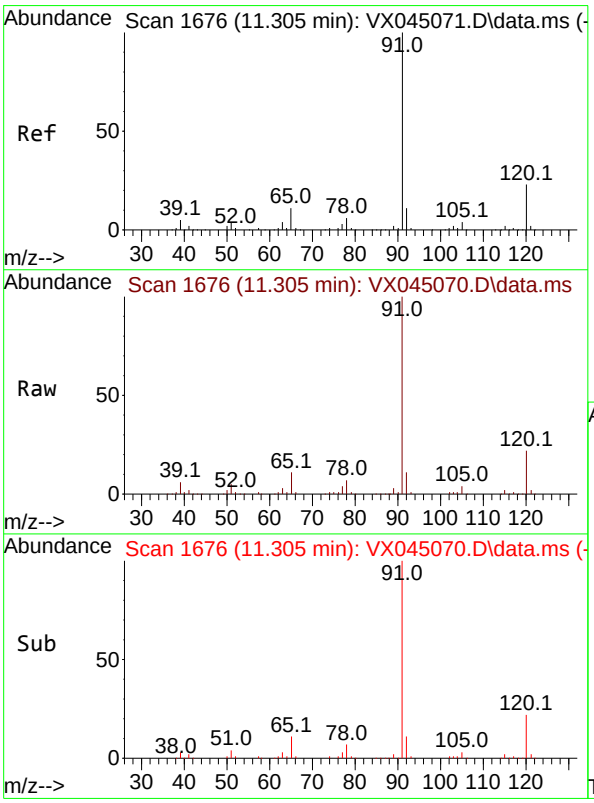
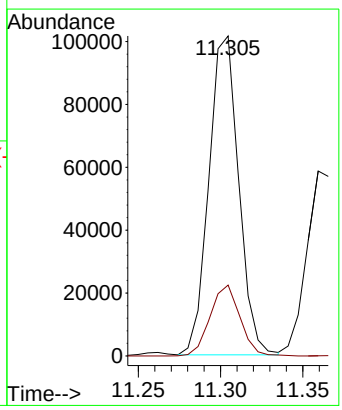
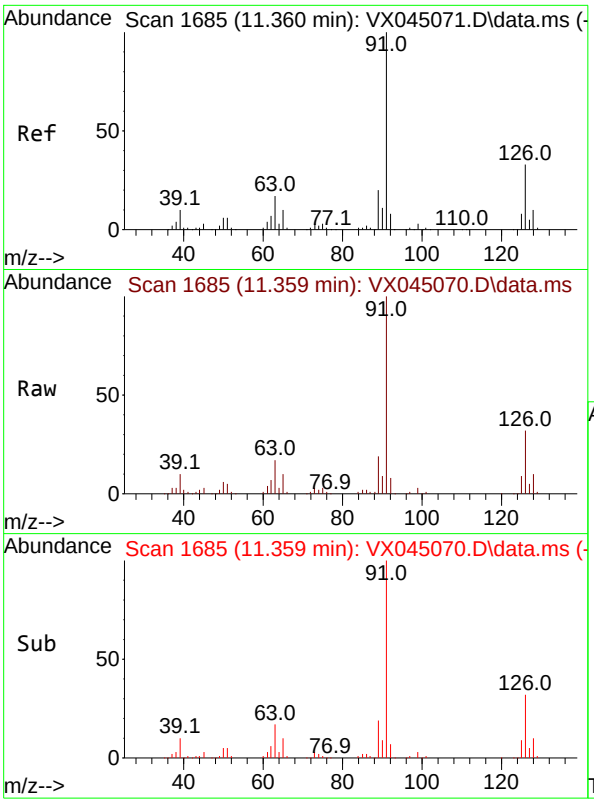



#78
n-propylbenzene
Concen: 19.641 ug/l
RT: 11.305 min Scan# 1676
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 91 Resp: 128284

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.3 | 11.2 | 33.6 |






#79
2-Chlorotoluene
Concen: 19.775 ug/l
RT: 11.359 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 91 Resp: 7927

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 33.1 | 16.4 | 49.4 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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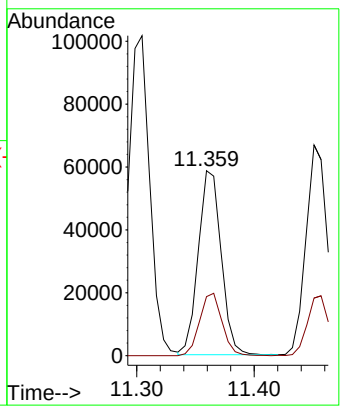
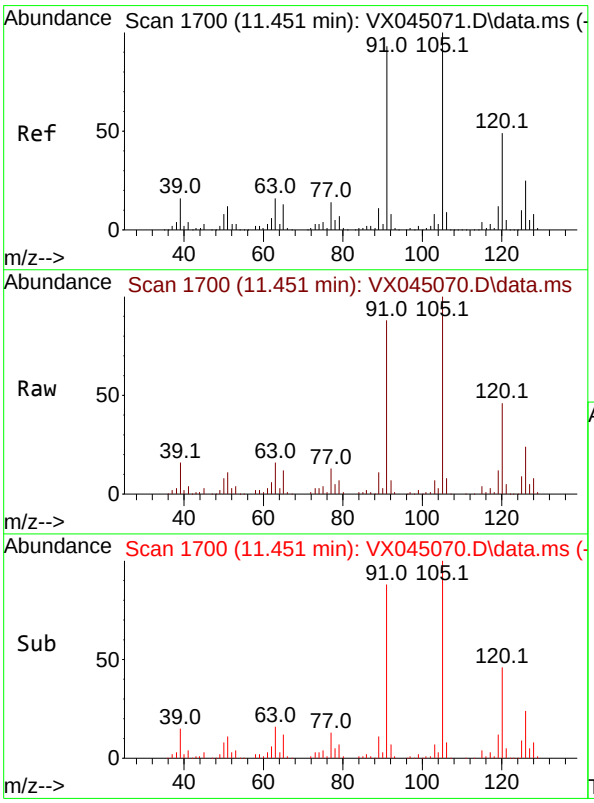
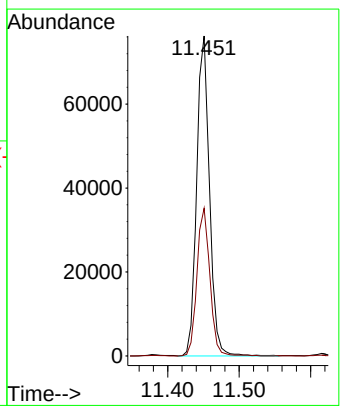


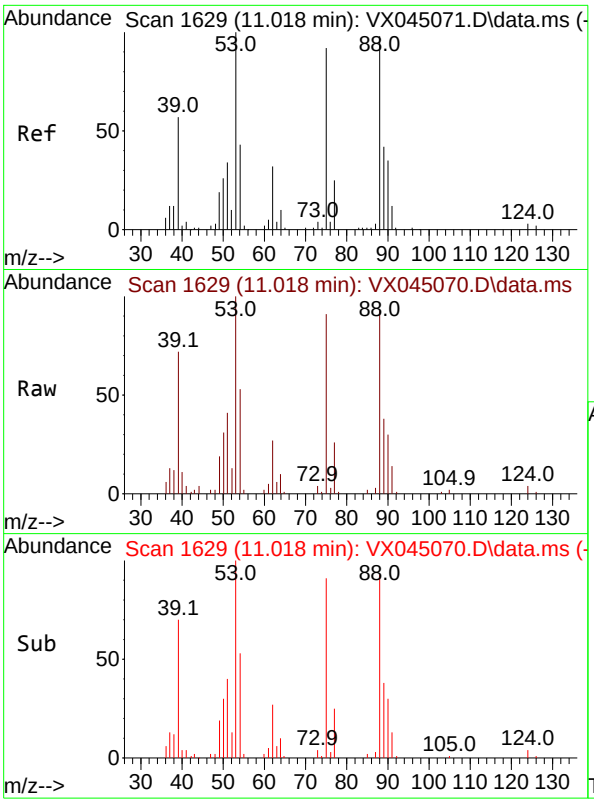




#80
1,3,5-Trimethylbenzene
Concen: 20.581 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:105 Resp: 94545

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 46.8 | 24.1 | 72.2 |






#81
trans-1,4-Dichloro-2-butene
Concen: 15.196 ug/l
RT: 11.018 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

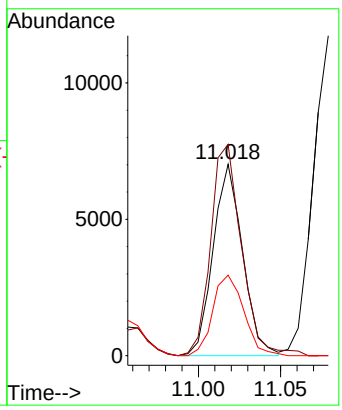
Tgt Ion: 75 Resp: 875

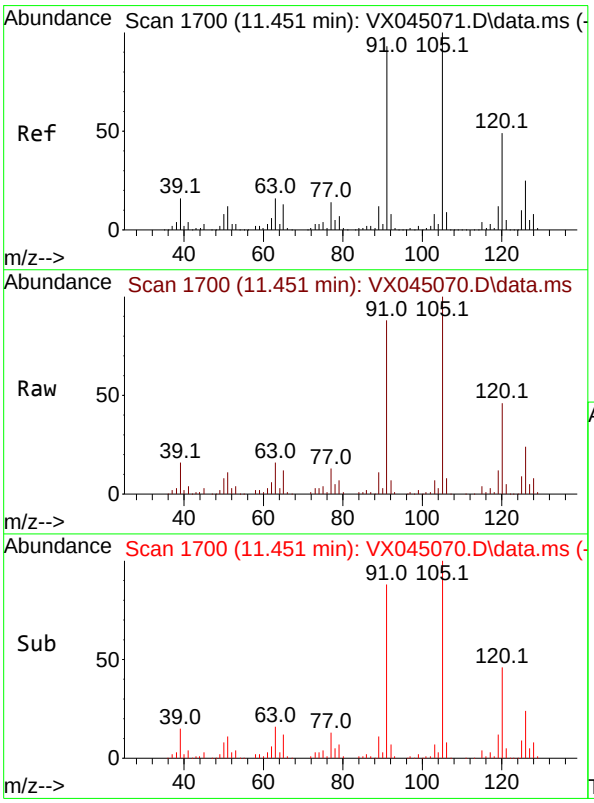
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 115.4 | 88.5 | 132.7 |
| 89 | 44.3 | 36.2 | 54.4 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

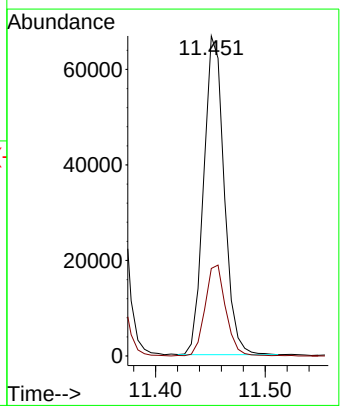


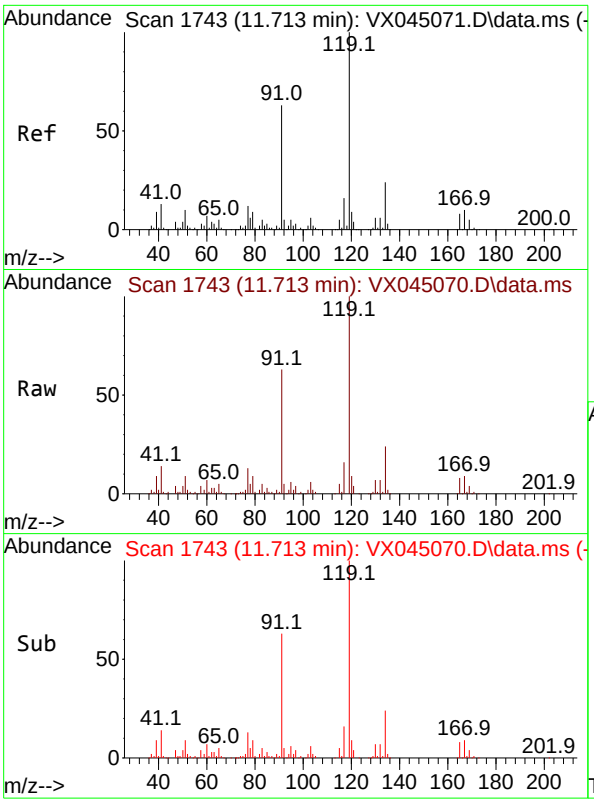




#82
4-Chlorotoluene
Concen: 19.443 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 91 Resp: 86281

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 29.1 | 14.1 | 42.4 |

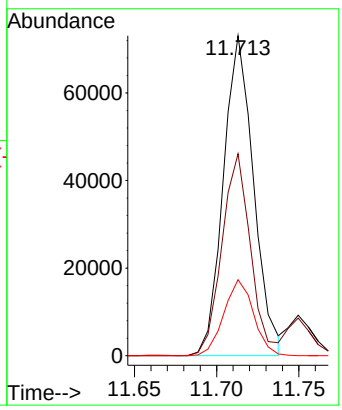





#83
tert-Butylbenzene
Concen: 20.159 ug/l
RT: 11.713 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:119 Resp: 9367

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 60.0 | 30.7 | 92.1 |
| 134 | 23.4 | 11.7 | 35.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

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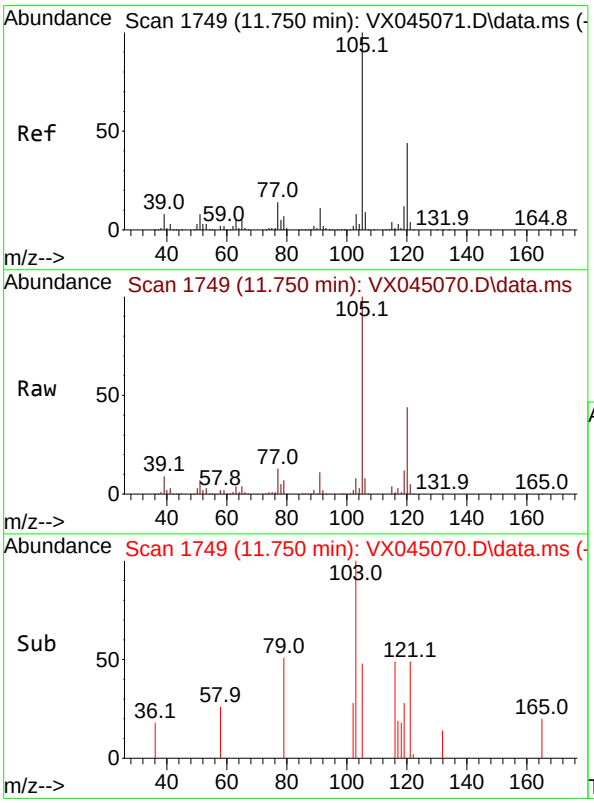
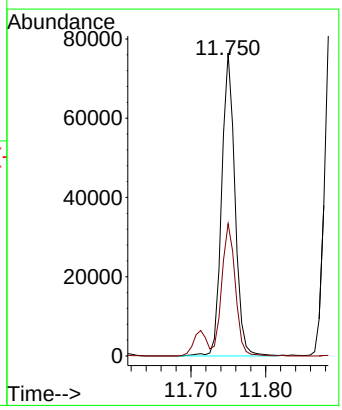
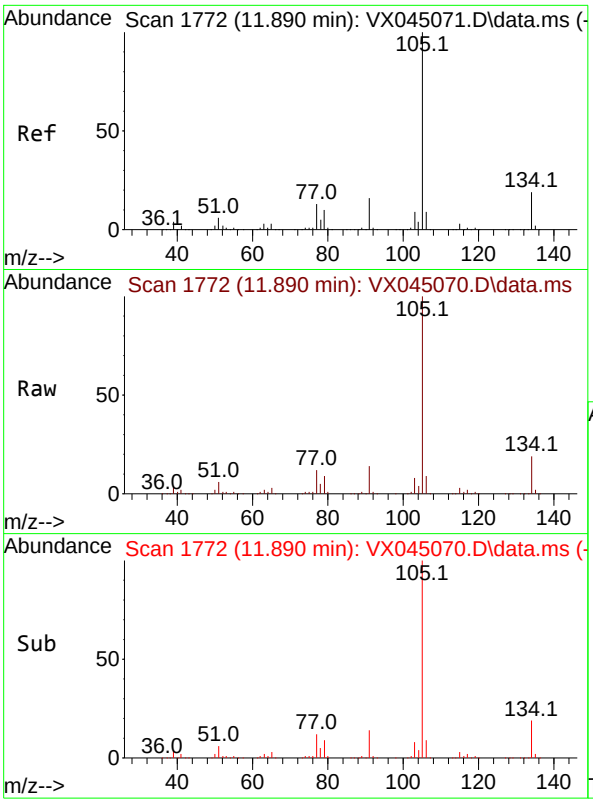



#84
1,2,4-Trimethylbenzene
Concen: 20.943 ug/l
RT: 11.750 min Scan# 1749
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:105 Resp: 94734

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 44.3 | 22.1 | 66.1 |






#85
sec-Butylbenzene
Concen: 20.160 ug/l
RT: 11.890 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:105 Resp: 11595

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.6 | 9.8 | 29.4 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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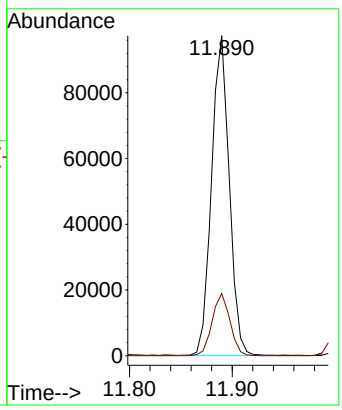
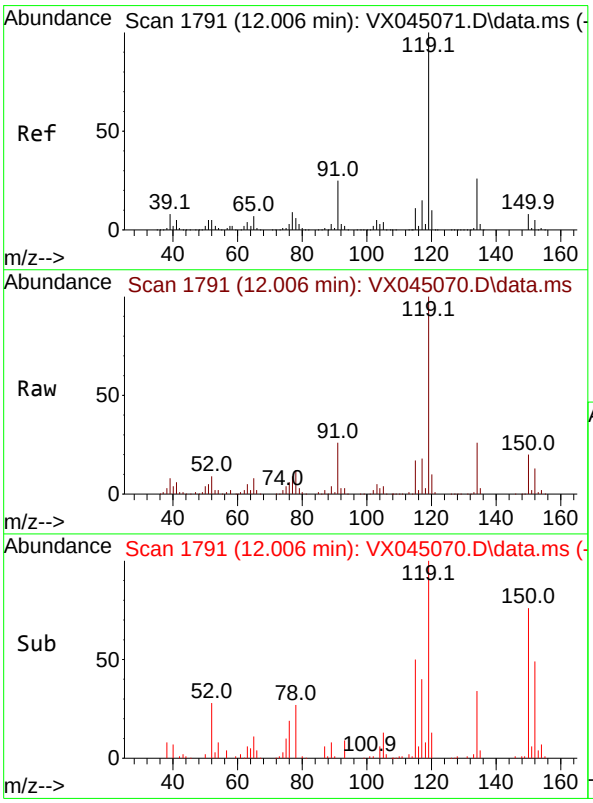
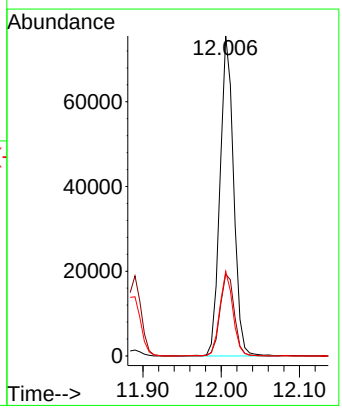


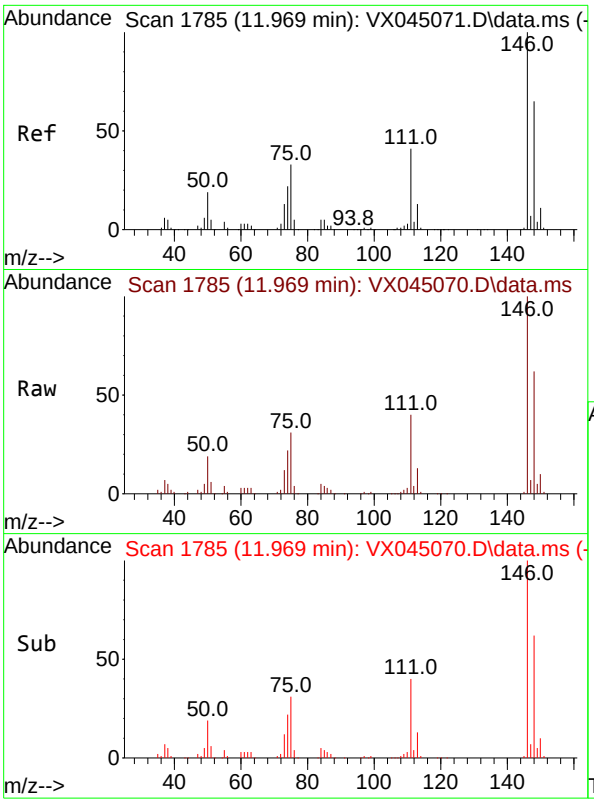




#86
p-Isopropyltoluene
Concen: 19.827 ug/l
RT: 12.006 min Scan# 1791
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:119 Resp: 91554

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 26.8 | 12.9 | 38.6 |
| 91 | 25.6 | 12.7 | 38.0 |

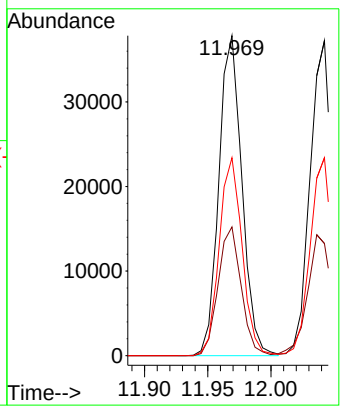





#87
1,3-Dichlorobenzene
Concen: 20.400 ug/l
RT: 11.969 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:146 Resp: 4793

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 40.2 | 21.1 | 63.4 |
| 148 | 61.6 | 31.9 | 95.7 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

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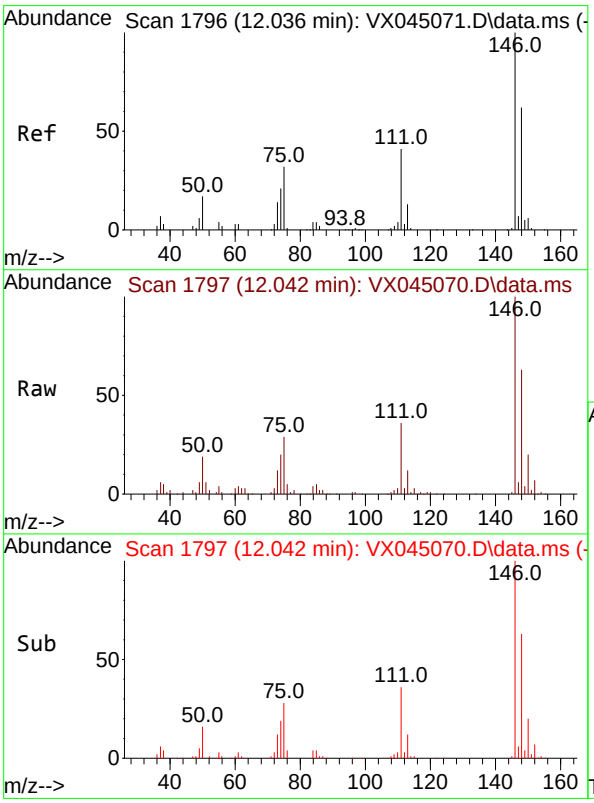
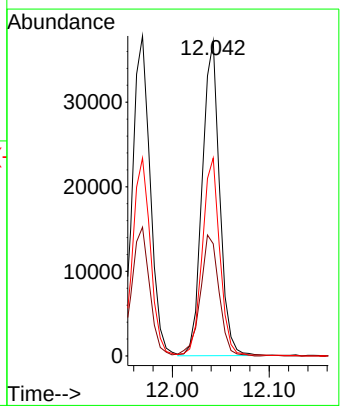
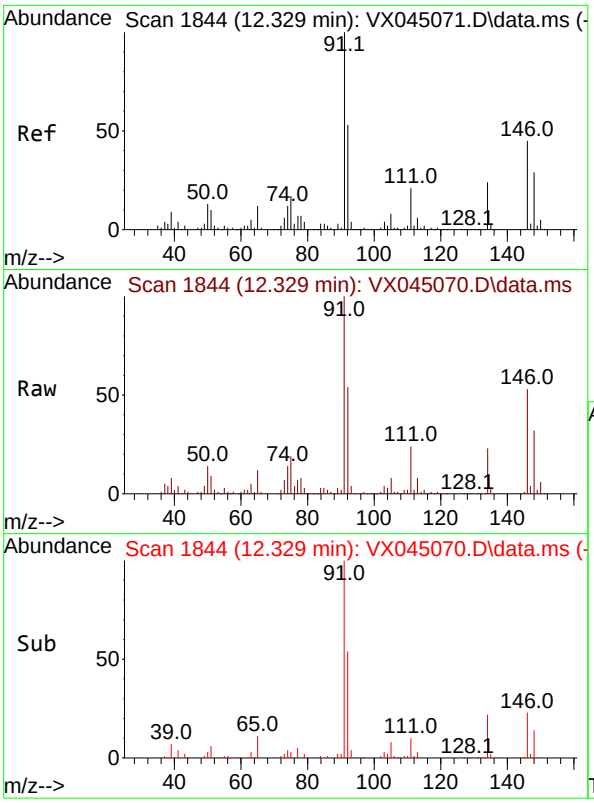



#88
1,4-Dichlorobenzene
Concen: 19.615 ug/l
RT: 12.042 min Scan# 1797
Delta R.T. 0.006 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:146 Resp: 46657

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 41.4 | 20.2 | 60.5 |
| 148 | 63.8 | 31.9 | 95.9 |

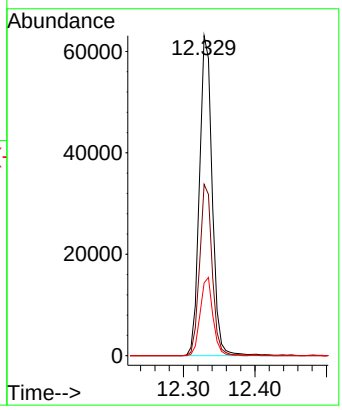





#89
n-Butylbenzene
Concen: 19.249 ug/l
RT: 12.329 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 91 Resp: 7813

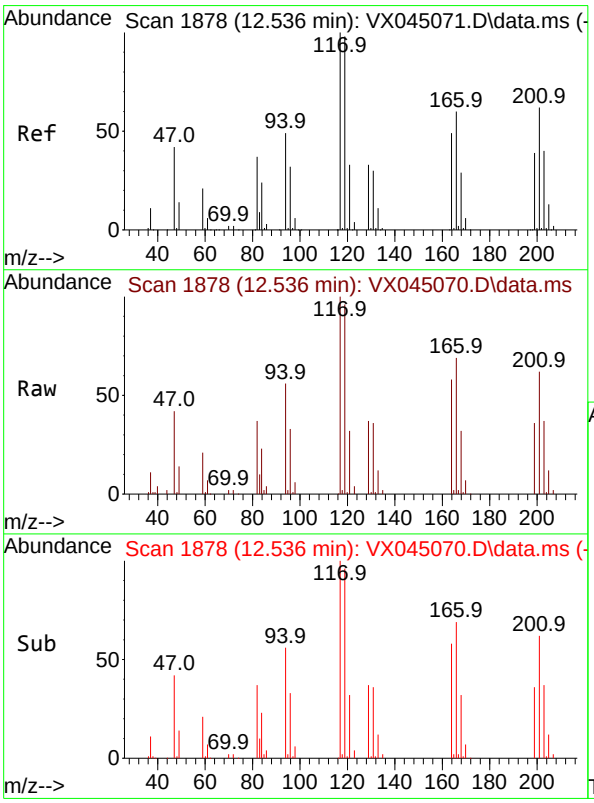
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 52.9 | 26.7 | 80.0 |
| 134 | 24.3 | 12.2 | 36.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
**APPROVED**

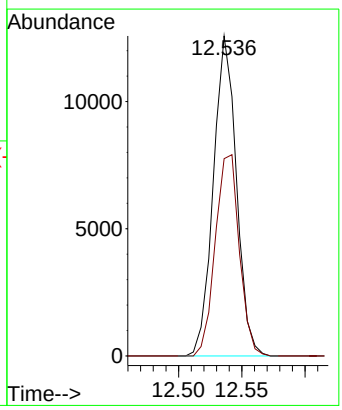
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

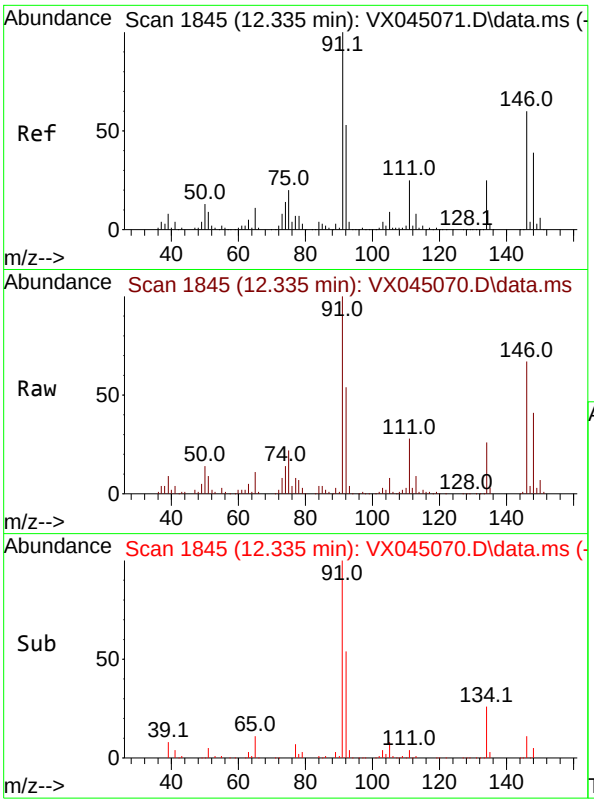



#90
Hexachloroethane
Concen: 18.483 ug/l
RT: 12.536 min Scan# 1878
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:117 Resp: 15919

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 65.6 | 31.9 | 95.9 |

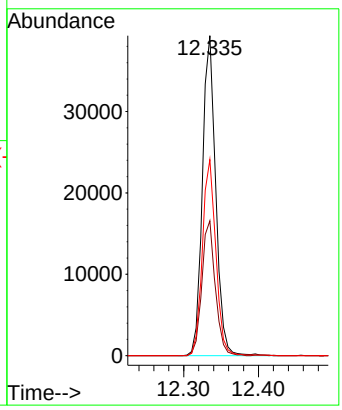





#91
1,2-Dichlorobenzene
Concen: 21.031 ug/l
RT: 12.335 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:146 Resp: 4863

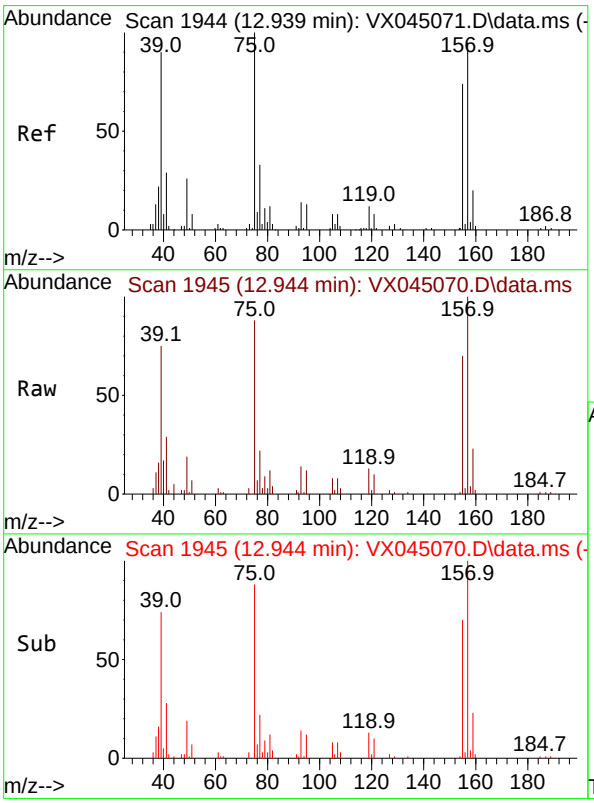
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.6 | 21.6 | 65.0 |
| 148 | 62.1 | 31.9 | 95.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

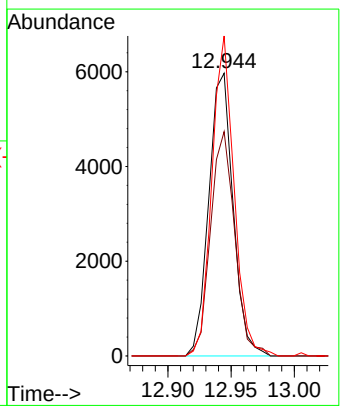
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

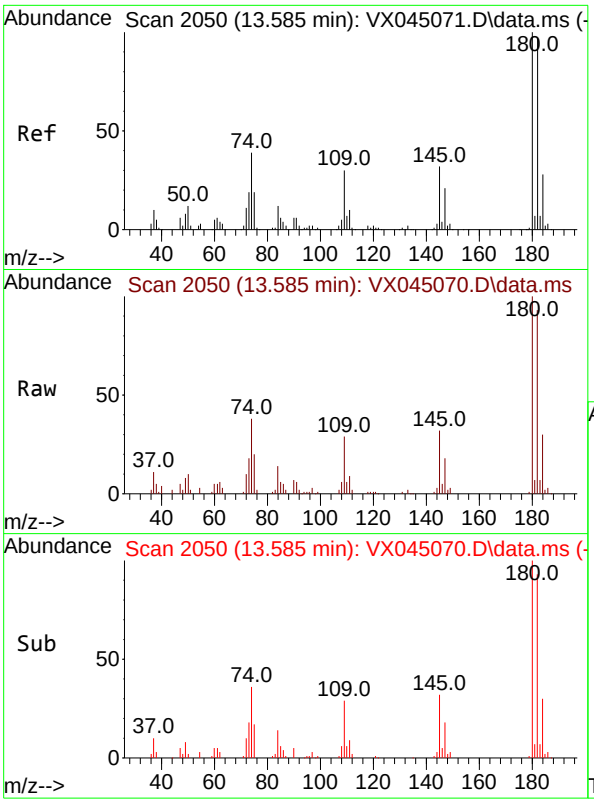



#92
1,2-Dibromo-3-Chloropropane
Concen: 22.119 ug/l
RT: 12.944 min Scan# 1945
Delta R.T. 0.006 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion: 75 Resp: 7987

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 78.7 | 39.6 | 118.7 |
| 157 | 103.3 | 51.1 | 153.4 |

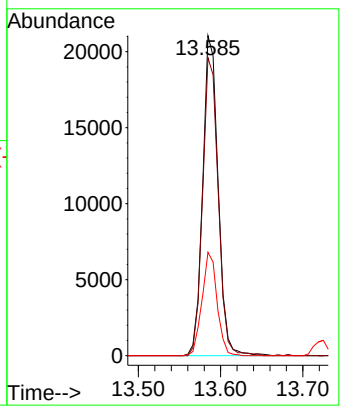





#93
1,2,4-Trichlorobenzene
Concen: 19.617 ug/l
RT: 13.585 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:180 Resp: 2742

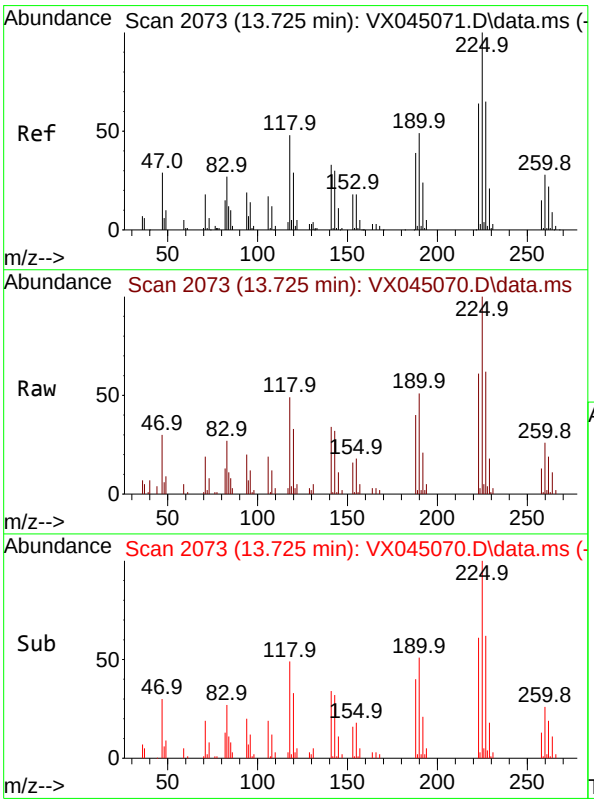
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 93.9 | 47.3 | 141.9 |
| 145 | 31.5 | 16.3 | 48.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

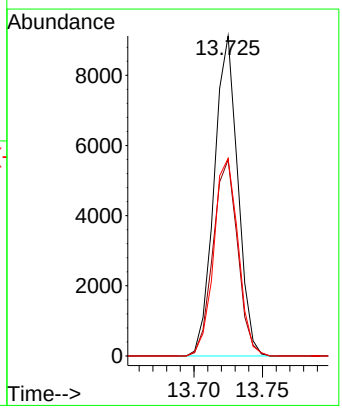
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

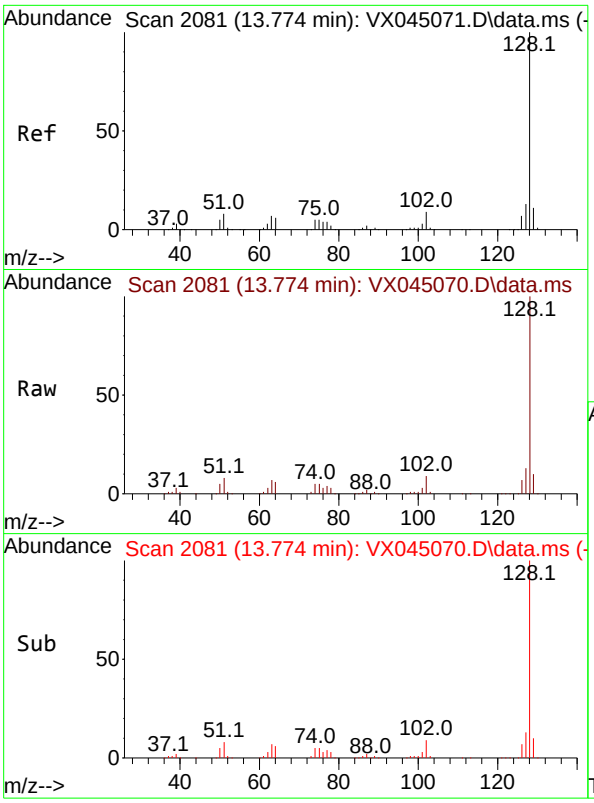



#94
Hexachlorobutadiene
Concen: 19.616 ug/l
RT: 13.725 min Scan# 2073
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:225 Resp: 10934

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 63.7 | 31.9 | 95.7 |
| 227 | 63.7 | 31.4 | 94.0 |

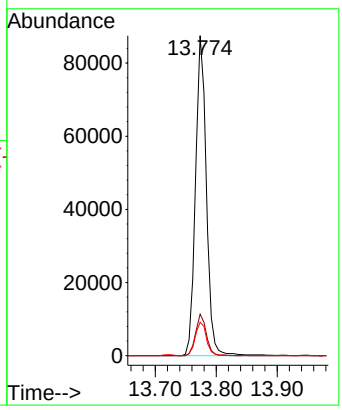





#95
Naphthalene
Concen: 21.279 ug/l
RT: 13.774 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:128 Resp: 10835

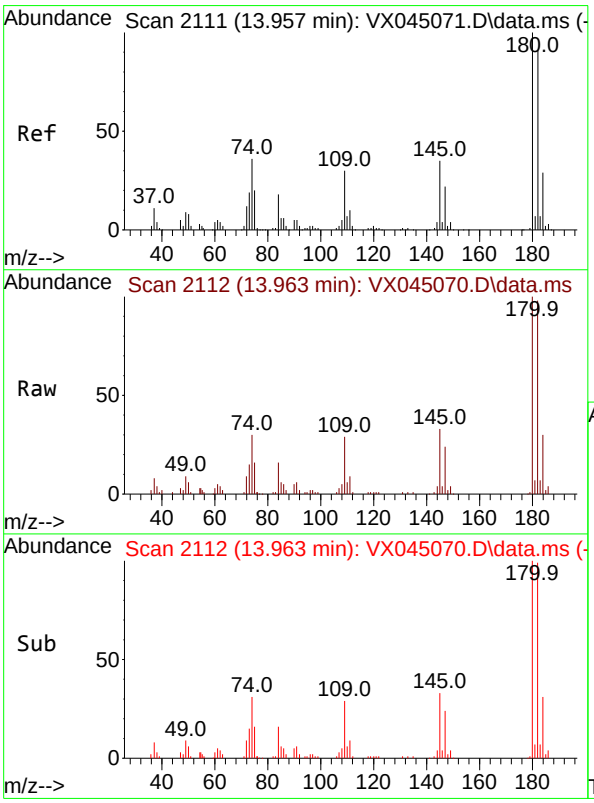
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.7 | 10.3 | 15.5 |
| 129 | 10.8 | 8.7 | 13.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
**APPROVED**

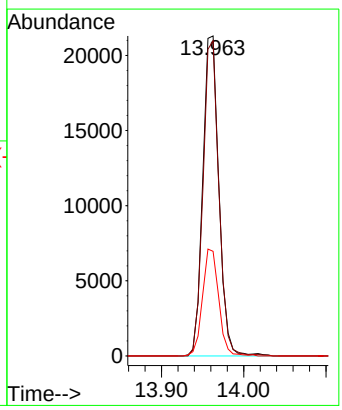
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025




#96
1,2,3-Trichlorobenzene
Concen: 20.432 ug/l
RT: 13.963 min Scan# 2112
Delta R.T. 0.006 min
Lab File: VX045070.D
Acq: 28 Feb 2025 02:37

Tgt Ion:180 Resp: 28937

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 97.0 | 47.5 | 142.6 |
| 145 | 33.7 | 17.0 | 50.9 |



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045071.D
Acq On : 28 Feb 2025 03:00
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 28 05:34:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) Pentafluorobenzene | 5.550 | 168 | 103235 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 6.757 | 114 | 186358 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 10.049 | 117 | 162079 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.018 | 152 | 71264 | 50.000 | ug/l | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 5.952 | 65 | 78159 | 51.250 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 102.500% | | | |
| 35) Dibromofluoromethane | 5.385 | 113 | 61323 | 50.346 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 100.700% | | | |
| 50) Toluene-d8 | 8.647 | 98 | 225493 | 49.449 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 98.900% | | | |
| 62) 4-Bromofluorobenzene | 11.079 | 95 | 74945 | 49.212 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 98.420% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.166 | 85 | 64743 | 45.502 | ug/l | 100 |
| 3) Chloromethane | 1.307 | 50 | 77729 | 44.894 | ug/l | 100 |
| 4) Vinyl Chloride | 1.374 | 62 | 78524 | 46.434 | ug/l | 100 |
| 5) Bromomethane | 1.593 | 94 | 30169 | 57.066 | ug/l | 100 |
| 6) Chloroethane | 1.660 | 64 | 38461 | 59.750 | ug/l | 100 |
| 7) Trichlorofluoromethane | 1.868 | 101 | 108411 | 50.047 | ug/l | 100 |
| 8) Diethyl Ether | 2.136 | 74 | 40001 | 50.814 | ug/l | 100 |
| 9) 1,1,2-Trichlorotrifluo... | 2.313 | 101 | 61312 | 47.399 | ug/l | 100 |
| 10) Methyl Iodide | 2.441 | 142 | 79357 | 47.854 | ug/l | 100 |
| 11) Tert butyl alcohol | 2.983 | 59 | 69139 | 247.496 | ug/l | 100 |
| 12) 1,1-Dichloroethene | 2.307 | 96 | 64327 | 48.434 | ug/l | 100 |
| 13) Acrolein | 2.233 | 56 | 89603 | 296.189 | ug/l | 100 |
| 14) Allyl chloride | 2.654 | 41 | 114313 | 47.875 | ug/l | 100 |
| 15) Acrylonitrile | 3.062 | 53 | 211455 | 278.519 | ug/l | 100 |
| 16) Acetone | 2.386 | 43 | 181429 | 289.130 | ug/l | 100 |
| 17) Carbon Disulfide | 2.502 | 76 | 171353 | 47.419 | ug/l | 100 |
| 18) Methyl Acetate | 2.703 | 43 | 89508 | 47.359 | ug/l | 100 |
| 19) Methyl tert-butyl Ether | 3.117 | 73 | 215043 | 50.642 | ug/l | 100 |
| 20) Methylene Chloride | 2.782 | 84 | 72081 | 48.500 | ug/l | 100 |
| 21) trans-1,2-Dichloroethene | 3.087 | 96 | 65093 | 49.832 | ug/l | 100 |
| 22) Diisopropyl ether | 3.764 | 45 | 236563 | 51.816 | ug/l | 100 |
| 23) Vinyl Acetate | 3.721 | 43 | 1018631 | 271.773 | ug/l | 100 |
| 24) 1,1-Dichloroethane | 3.605 | 63 | 128235 | 50.270 | ug/l | 100 |
| 25) 2-Butanone | 4.562 | 43 | 298785 | 295.330 | ug/l | 100 |
| 26) 2,2-Dichloropropane | 4.471 | 77 | 61631 | 32.498 | ug/l | 100 |
| 27) cis-1,2-Dichloroethene | 4.483 | 96 | 78657 | 49.955 | ug/l | 100 |
| 28) Bromochloromethane | 4.898 | 49 | 62299 | 50.643 | ug/l | 100 |
| 29) Tetrahydrofuran | 5.007 | 42 | 192607 | 287.345 | ug/l | 100 |
| 30) Chloroform | 5.087 | 83 | 128581 | 51.532 | ug/l | 100 |
| 31) Cyclohexane | 5.464 | 56 | 114333 | 48.836 | ug/l | 100 |
| 32) 1,1,1-Trichloroethane | 5.379 | 97 | 105671 | 50.306 | ug/l | 100 |
| 36) 1,1-Dichloropropene | 5.690 | 75 | 87338 | 49.861 | ug/l | 100 |
| 37) Ethyl Acetate | 4.715 | 43 | 112892 | 56.641 | ug/l | 100 |
| 38) Carbon Tetrachloride | 5.672 | 117 | 87123 | 50.593 | ug/l | 100 |
| 39) Methylcyclohexane | 7.373 | 83 | 108974 | 48.715 | ug/l | 100 |
| 40) Benzene | 6.031 | 78 | 278802 | 50.925 | ug/l | 100 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045071.D
Acq On : 28 Feb 2025 03:00
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 28 05:34:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

| Compound | R.T. | QIon | Response | Conc Units | | Dev(Min) |
|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 4.922 | 41 | 63454 | 59.598 ug/l | | 100 |
| 42) 1,2-Dichloroethane | 6.080 | 62 | 98340 | 55.428 ug/l | | 100 |
| 43) Isopropyl Acetate | 6.342 | 43 | 173045 | 54.544 ug/l | | 100 |
| 44) Trichloroethene | 7.123 | 130 | 63513 | 50.756 ug/l | | 100 |
| 45) 1,2-Dichloropropane | 7.428 | 63 | 69128 | 50.808 ug/l | | 100 |
| 46) Dibromomethane | 7.580 | 93 | 50143 | 52.757 ug/l | | 100 |
| 47) Bromodichloromethane | 7.818 | 83 | 97729 | 53.153 ug/l | | 100 |
| 48) Methyl methacrylate | 7.690 | 41 | 86231 | 57.256 ug/l | | 100 |
| 49) 1,4-Dioxane | 7.659 | 88 | 35053 | 1095.003 ug/l | | 100 |
| 51) 4-Methyl-2-Pentanone | 8.574 | 43 | 568737 | 292.570 ug/l | | 100 |
| 52) Toluene | 8.714 | 92 | 167431 | 51.505 ug/l | | 100 |
| 53) t-1,3-Dichloropropene | 8.976 | 75 | 87373 | 48.078 ug/l | | 100 |
| 54) cis-1,3-Dichloropropene | 8.366 | 75 | 99713 | 49.079 ug/l | | 100 |
| 55) 1,1,2-Trichloroethane | 9.147 | 97 | 66379 | 52.724 ug/l | | 100 |
| 56) Ethyl methacrylate | 9.116 | 69 | 106157 | 52.724 ug/l | | 100 |
| 57) 1,3-Dichloropropane | 9.305 | 76 | 115488 | 52.594 ug/l | | 100 |
| 58) 2-Chloroethyl Vinyl ether | 8.238 | 63 | 264555 | 267.612 ug/l | | 100 |
| 59) 2-Hexanone | 9.427 | 43 | 416984 | 297.362 ug/l | | 100 |
| 60) Dibromochloromethane | 9.519 | 129 | 71569 | 53.284 ug/l | | 100 |
| 61) 1,2-Dibromoethane | 9.604 | 107 | 66312 | 52.217 ug/l | | 100 |
| 64) Tetrachloroethene | 9.269 | 164 | 52531 | 51.021 ug/l | | 100 |
| 65) Chlorobenzene | 10.079 | 112 | 176922 | 50.853 ug/l | | 100 |
| 66) 1,1,1,2-Tetrachloroethane | 10.159 | 131 | 57642 | 51.402 ug/l | | 100 |
| 67) Ethyl Benzene | 10.189 | 91 | 316427 | 51.431 ug/l | | 100 |
| 68) m/p-Xylenes | 10.299 | 106 | 234554 | 103.515 ug/l | | 100 |
| 69) o-Xylene | 10.640 | 106 | 114440 | 50.341 ug/l | | 100 |
| 70) Styrene | 10.653 | 104 | 191406 | 52.387 ug/l | | 100 |
| 71) Bromoform | 10.799 | 173 | 44730 | 53.645 ug/l | # | 100 |
| 73) Isopropylbenzene | 10.963 | 105 | 294694 | 51.167 ug/l | | 100 |
| 74) N-amyl acetate | 10.842 | 43 | 140869 | 53.881 ug/l | | 100 |
| 75) 1,1,2,2-Tetrachloroethane | 11.213 | 83 | 101089 | 50.945 ug/l | | 100 |
| 76) 1,2,3-Trichloropropane | 11.238 | 75 | 81743m | 51.421 ug/l | | |
| 77) Bromobenzene | 11.195 | 156 | 66904 | 51.173 ug/l | | 100 |
| 78) n-propylbenzene | 11.305 | 91 | 342399 | 51.546 ug/l | | 100 |
| 79) 2-Chlorotoluene | 11.360 | 91 | 204484 | 50.154 ug/l | | 100 |
| 80) 1,3,5-Trimethylbenzene | 11.451 | 105 | 241129 | 51.613 ug/l | | 100 |
| 81) trans-1,4-Dichloro-2-b... | 11.018 | 75 | 24135 | 41.172 ug/l | | 100 |
| 82) 4-Chlorotoluene | 11.451 | 91 | 230493 | 51.072 ug/l | | 100 |
| 83) tert-Butylbenzene | 11.713 | 119 | 240510 | 50.895 ug/l | | 100 |
| 84) 1,2,4-Trimethylbenzene | 11.750 | 105 | 240719 | 52.326 ug/l | | 100 |
| 85) sec-Butylbenzene | 11.890 | 105 | 300393 | 51.353 ug/l | | 100 |
| 86) p-Isopropyltoluene | 12.006 | 119 | 244031 | 51.964 ug/l | | 100 |
| 87) 1,3-Dichlorobenzene | 11.969 | 146 | 118879 | 49.747 ug/l | | 100 |
| 88) 1,4-Dichlorobenzene | 12.036 | 146 | 120217 | 49.694 ug/l | | 100 |
| 89) n-Butylbenzene | 12.329 | 91 | 214685 | 52.006 ug/l | | 100 |
| 90) Hexachloroethane | 12.536 | 117 | 43086 | 49.188 ug/l | | 100 |
| 91) 1,2-Dichlorobenzene | 12.335 | 146 | 118896 | 50.557 ug/l | | 100 |
| 92) 1,2-Dibromo-3-Chloropr... | 12.939 | 75 | 20610 | 56.123 ug/l | | 100 |
| 93) 1,2,4-Trichlorobenzene | 13.585 | 180 | 71897 | 50.571 ug/l | | 100 |
| 94) Hexachlorobutadiene | 13.725 | 225 | 27916 | 49.245 ug/l | | 100 |
| 95) Naphthalene | 13.774 | 128 | 278086 | 53.700 ug/l | | 100 |
| 96) 1,2,3-Trichlorobenzene | 13.957 | 180 | 75482 | 52.406 ug/l | | 100 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045071.D
Acq On : 28 Feb 2025 03:00
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 20 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

Quant Time: Feb 28 05:34:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

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

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

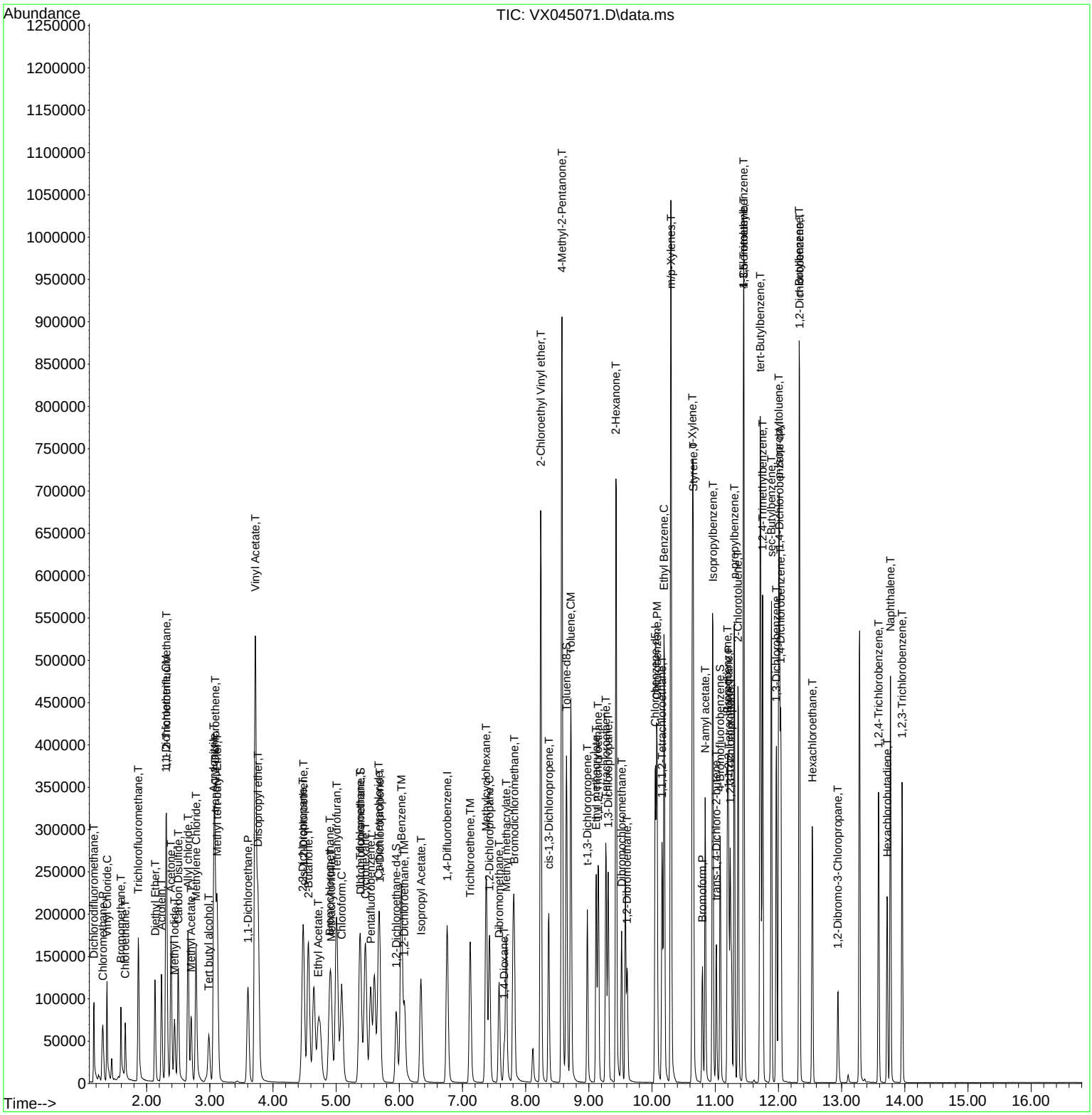
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045071.D
Acq On : 28 Feb 2025 03:00
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 20 Sample Multiplier: 1

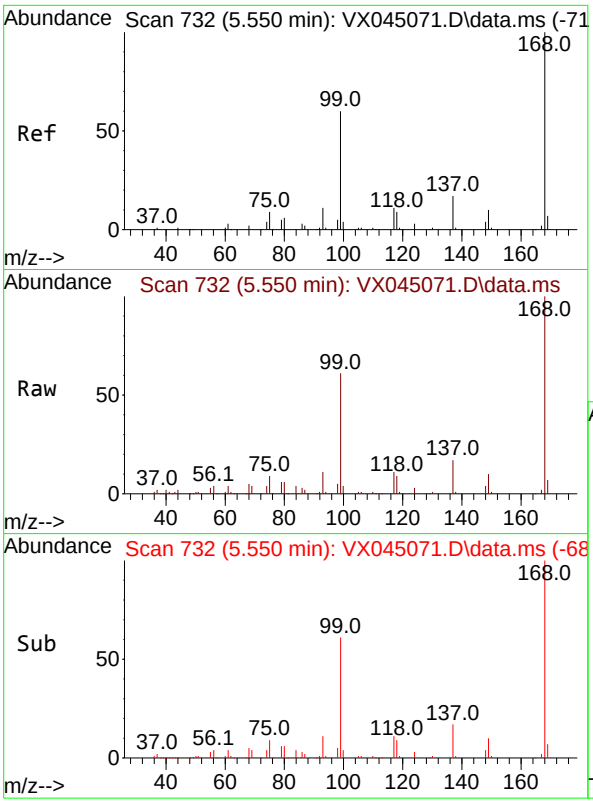
Quant Time: Feb 28 05:34:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

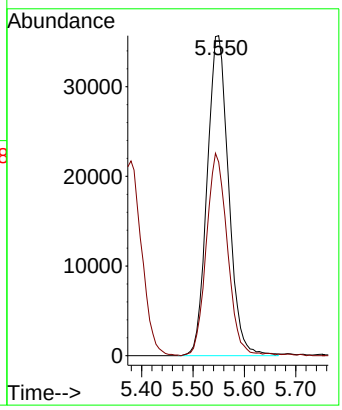





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.550 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:168 Resp: 10323

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 60.3 | 48.2 | 72.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

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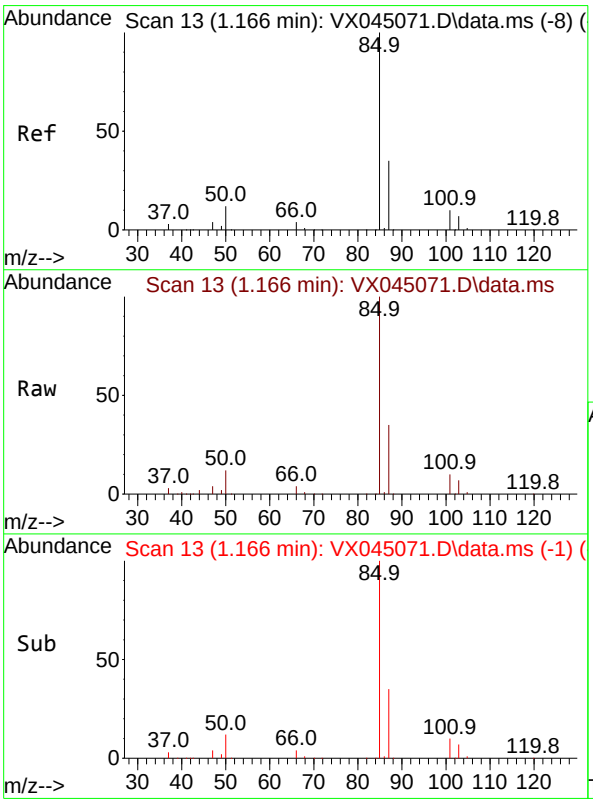
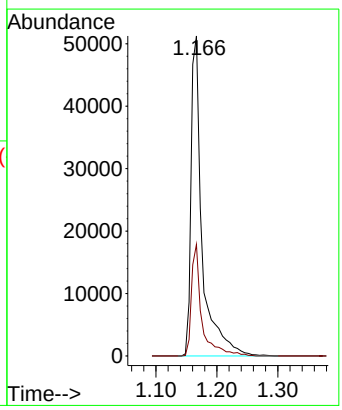
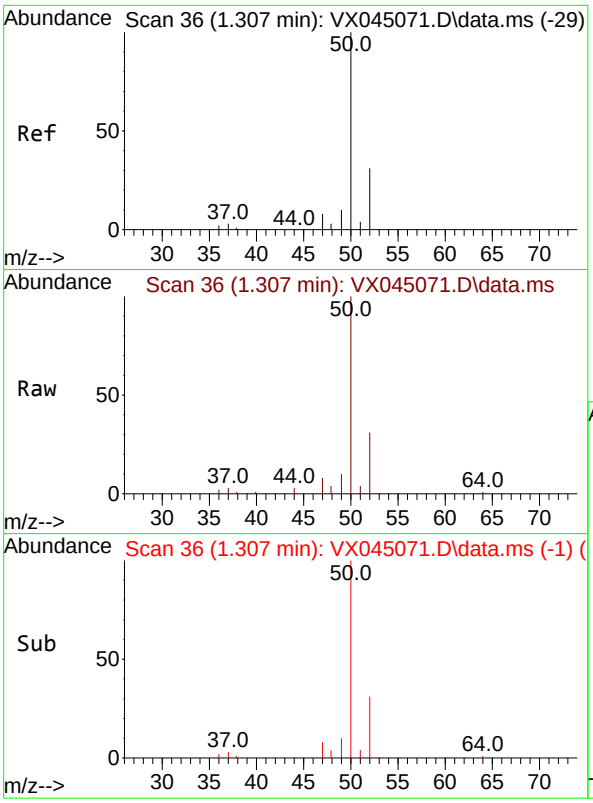



#2
Dichlorodifluoromethane
Concen: 45.502 ug/l
RT: 1.166 min Scan# 13
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 85 Resp: 64743

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 34.9 | 17.4 | 52.3 |

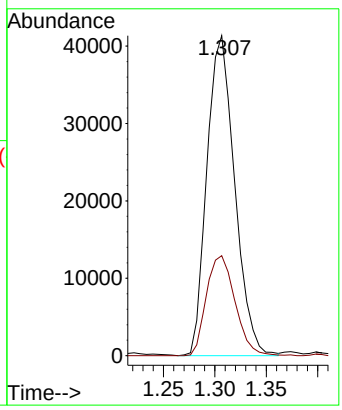





#3
Chloromethane
Concen: 44.894 ug/l
RT: 1.307 min Scan# 3
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 50 Resp: 7772

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 31.2 | 25.0 | 37.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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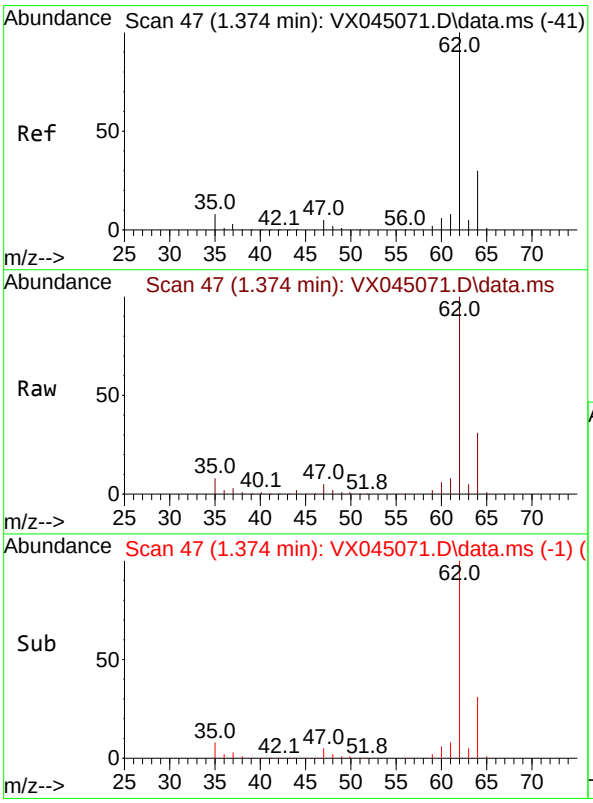
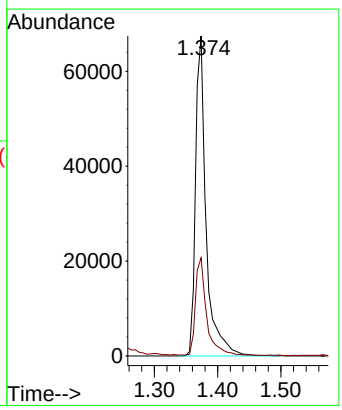
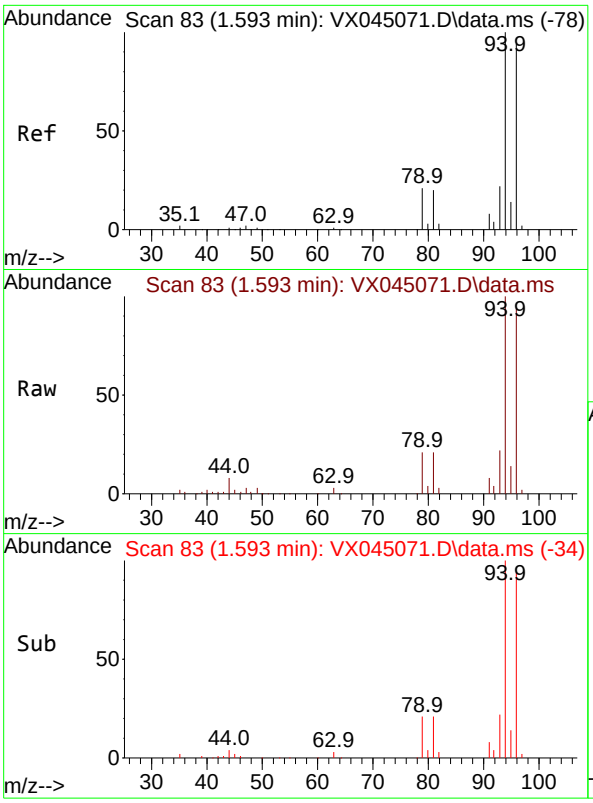



#4
Vinyl Chloride
Concen: 46.434 ug/l
RT: 1.374 min Scan# 47
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 62 Resp: 78524

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 30.4 | 24.3 | 36.5 |

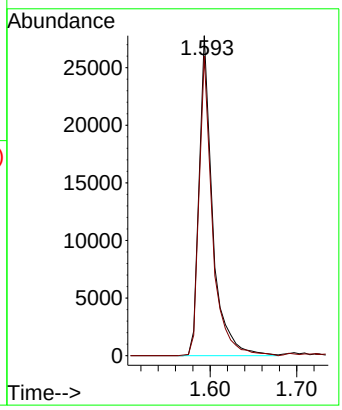





#5
Bromomethane
Concen: 57.066 ug/l
RT: 1.593 min Scan# 8
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 94 Resp: 3016

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 93.7 | 75.0 | 112.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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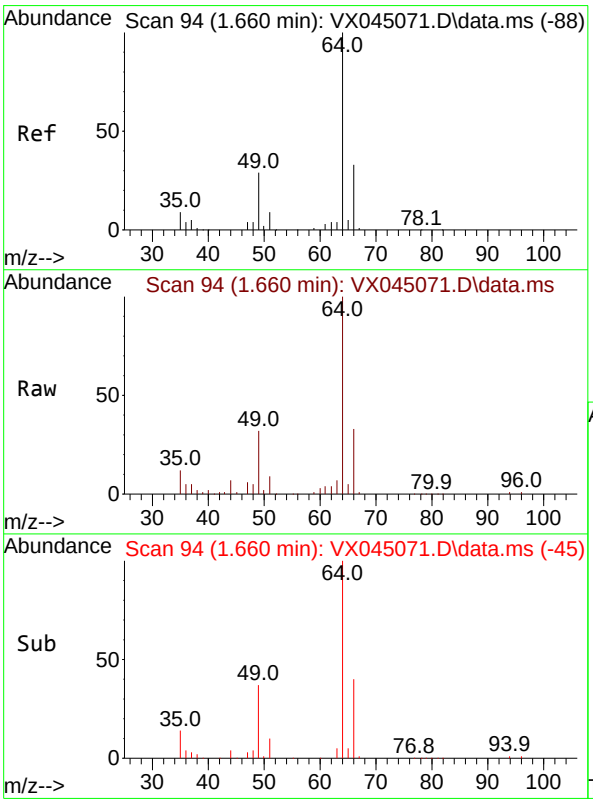
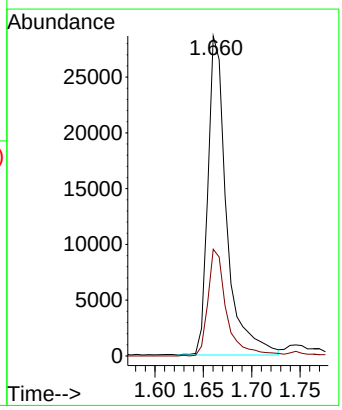
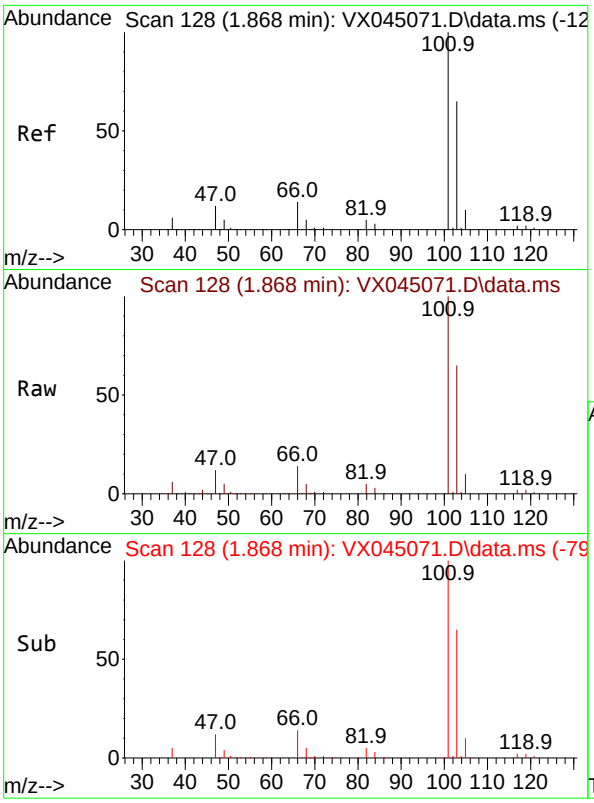



#6
Chloroethane
Concen: 59.750 ug/l
RT: 1.660 min Scan# 94
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 64 Resp: 38461

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 33.4 | 26.7 | 40.1 |

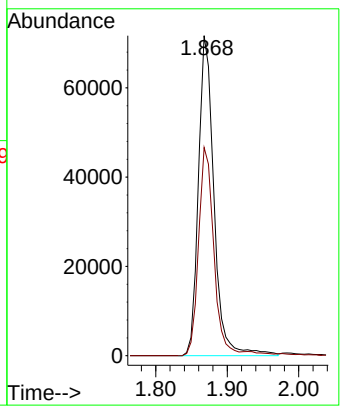





#7
Trichlorofluoromethane
Concen: 50.047 ug/l
RT: 1.868 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:101 Resp: 10841

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 65.1 | 52.1 | 78.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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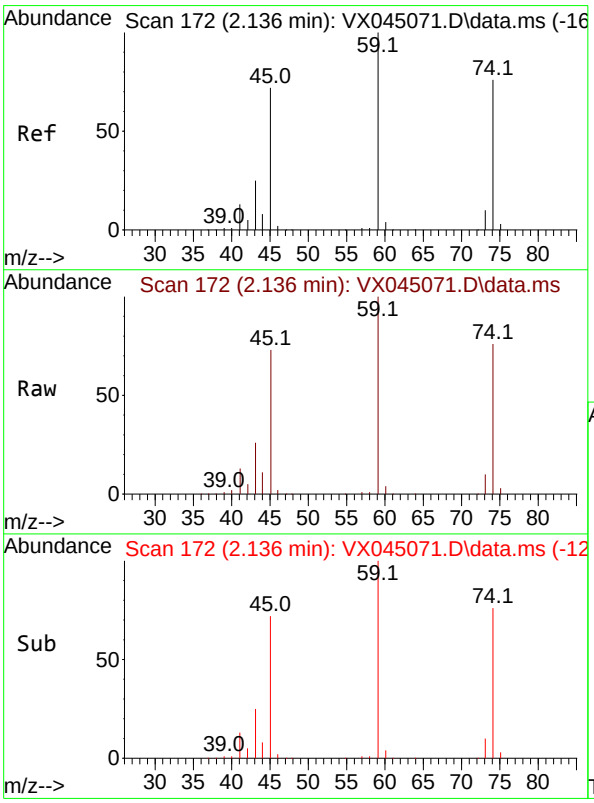
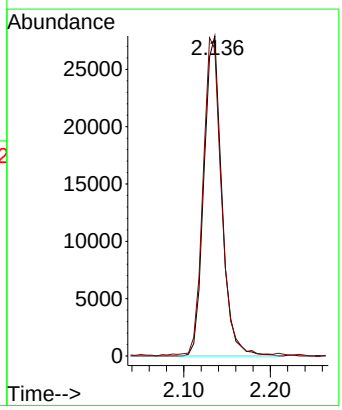
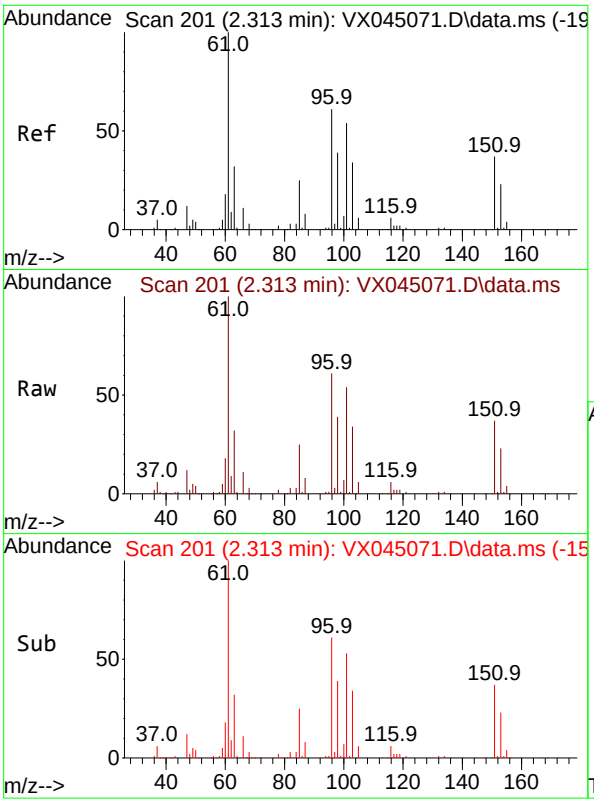



#8
Diethyl Ether
Concen: 50.814 ug/l
RT: 2.136 min Scan# 172
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 74 Resp: 40001

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 103.0 | 51.5 | 154.5 |






#9
1,1,2-Trichlorotrifluoroethane
Concen: 47.399 ug/l
RT: 2.313 min Scan# 2
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

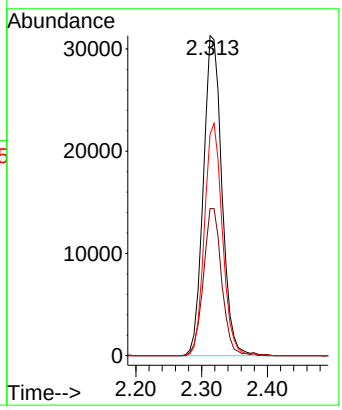
Tgt Ion:101 Resp: 6131

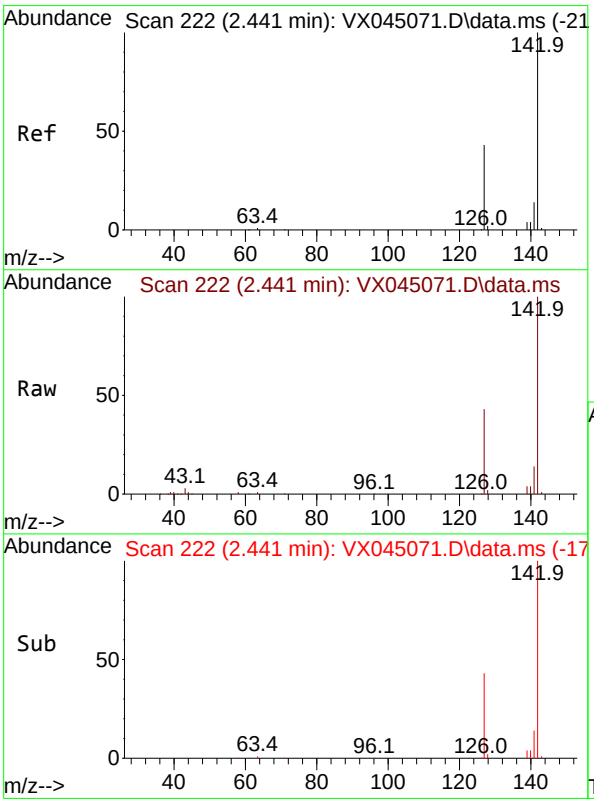
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 45.3 | 36.2 | 54.4 |
| 151 | 70.5 | 56.4 | 84.6 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

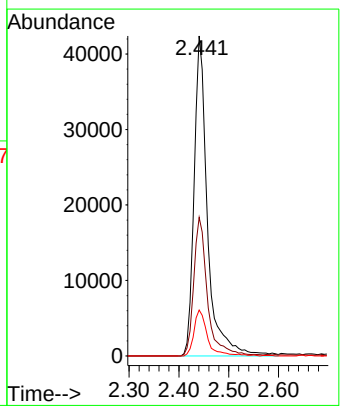


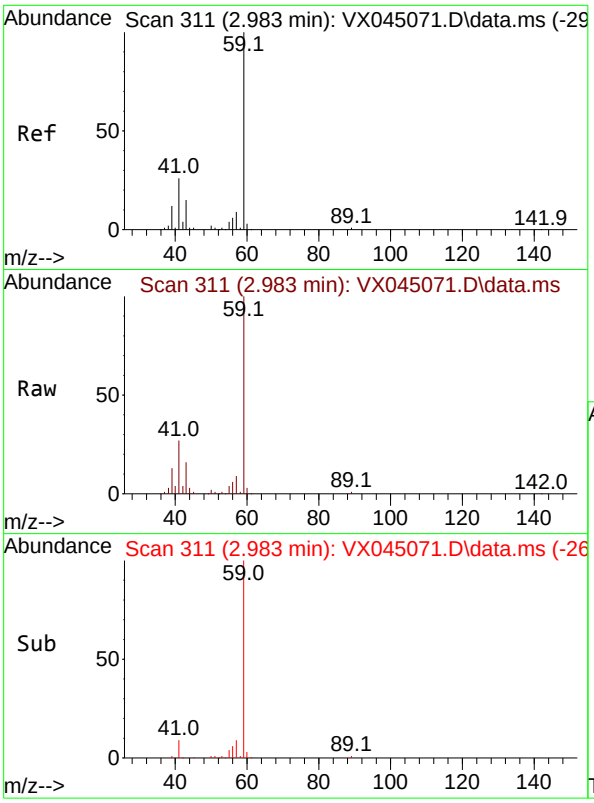




#10
Methyl Iodide
Concen: 47.854 ug/l
RT: 2.441 min Scan# 222
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:142 Resp: 79357

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 44.3 | 35.4 | 53.2 |
| 141 | 14.5 | 11.6 | 17.4 |

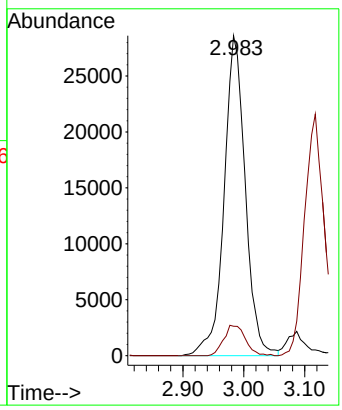





#11
Tert butyl alcohol
Concen: 247.496 ug/l
RT: 2.983 min Scan# 3
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 59 Resp: 6913

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 9.8 | 7.8 | 11.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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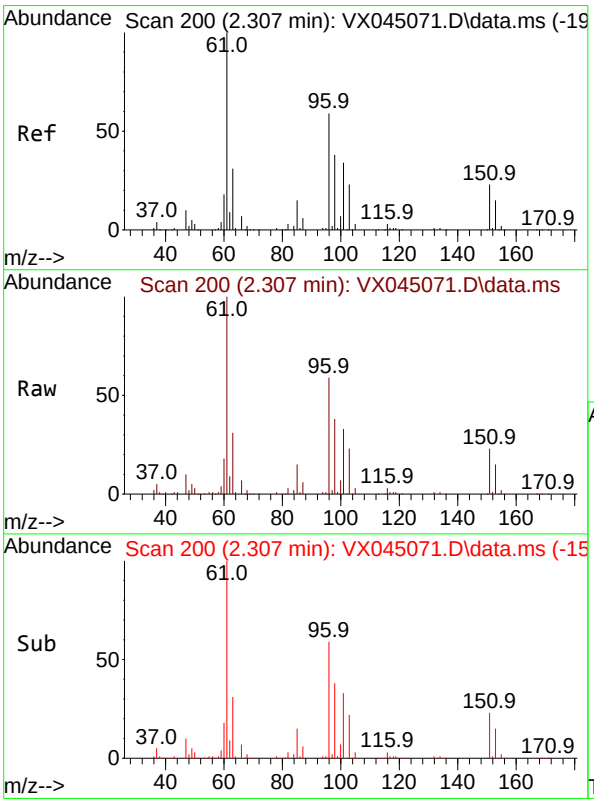
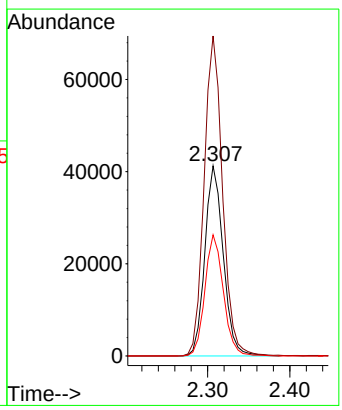
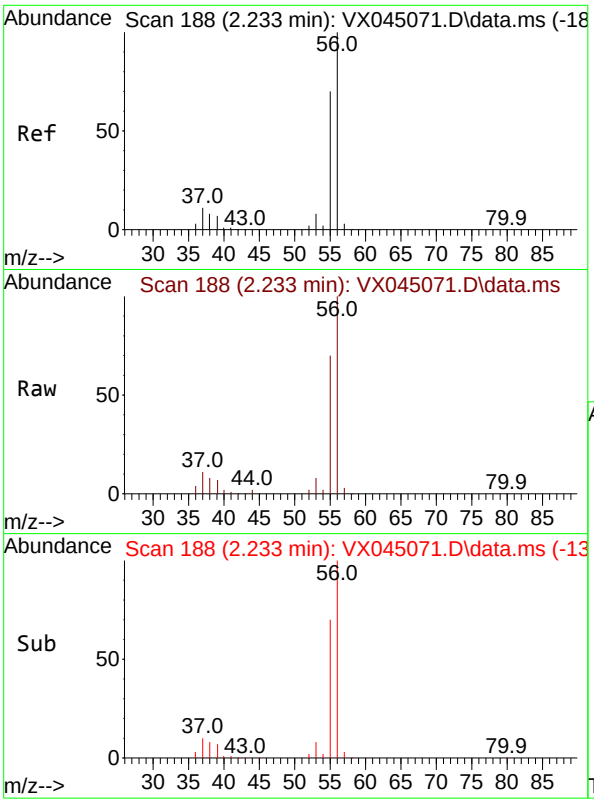



#12
1,1-Dichloroethene
Concen: 48.434 ug/l
RT: 2.307 min Scan# 200
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 96 Resp: 64327

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 168.3 | 134.6 | 202.0 |
| 98 | 63.8 | 51.0 | 76.6 |

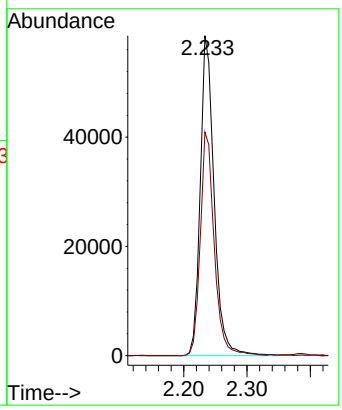





#13
Acrolein
Concen: 296.189 ug/l
RT: 2.233 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 56 Resp: 8960

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 70.3 | 56.2 | 84.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

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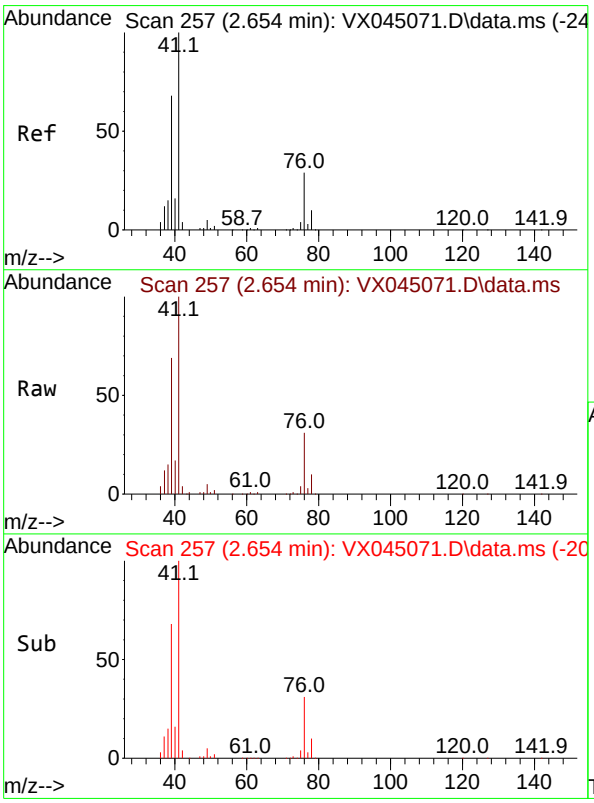
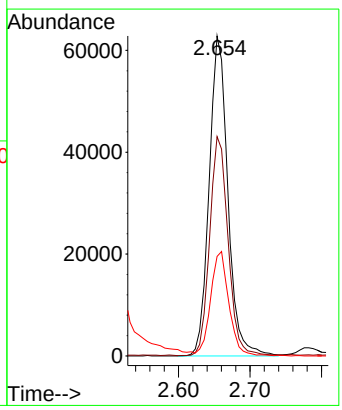
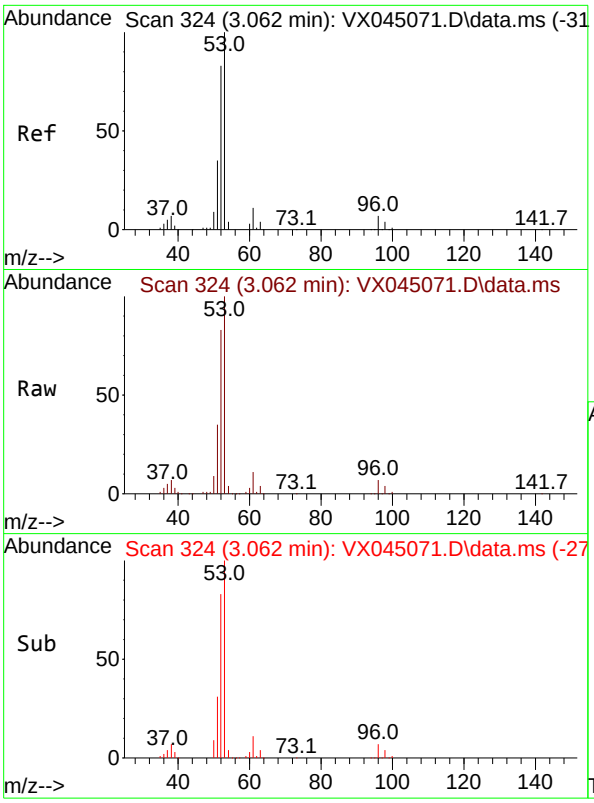



#14
Allyl chloride
Concen: 47.875 ug/l
RT: 2.654 min Scan# 257
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 41 Resp: 114313

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 67.3 | 53.8 | 80.8 |
| 76 | 31.5 | 25.2 | 37.8 |

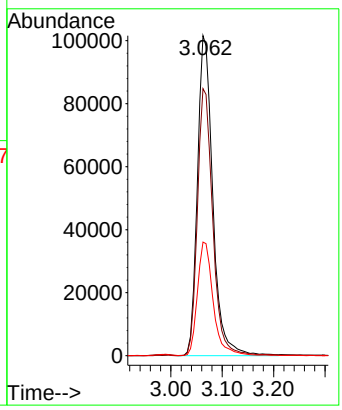





#15
Acrylonitrile
Concen: 278.519 ug/l
RT: 3.062 min Scan# 3
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 53 Resp: 21145

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 82.7 | 66.2 | 99.2 |
| 51 | 36.2 | 29.0 | 43.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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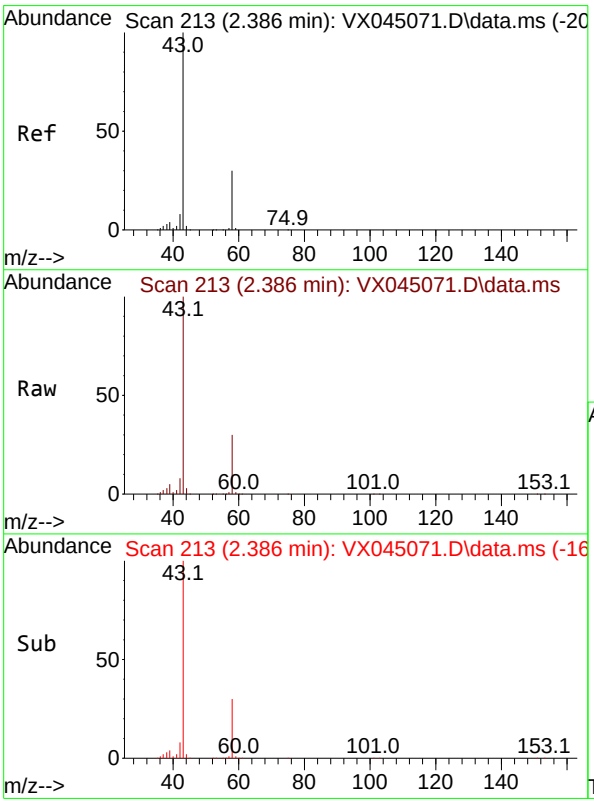
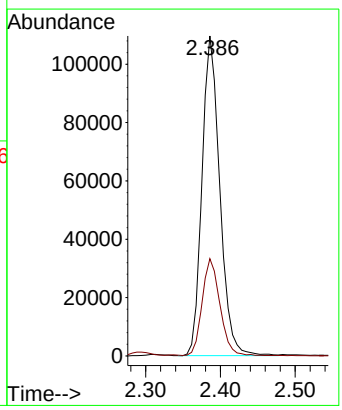
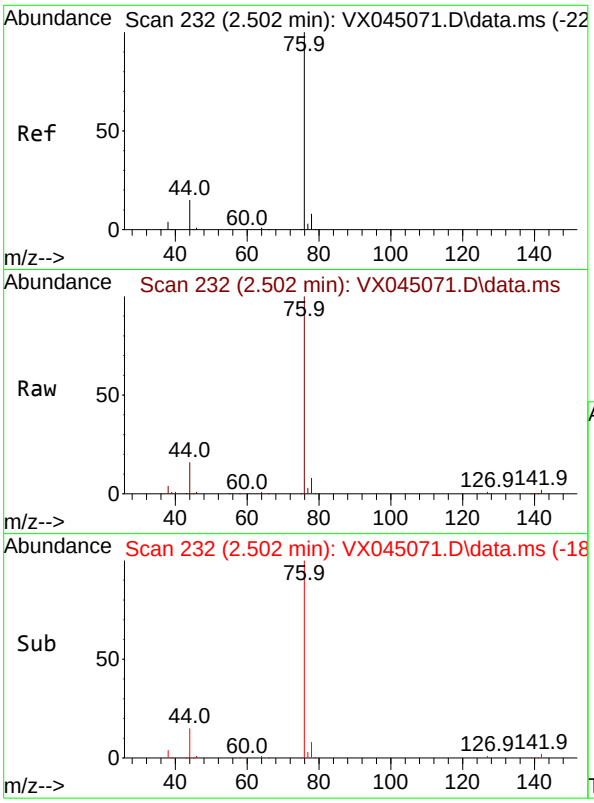



#16
Acetone
Concen: 289.130 ug/l
RT: 2.386 min Scan# 213
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 43 Resp: 181429

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 30.3 | 24.2 | 36.4 |






#17
Carbon Disulfide
Concen: 47.419 ug/l
RT: 2.502 min Scan# 2
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 76 Resp: 17135

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 8.2 | 6.6 | 9.8 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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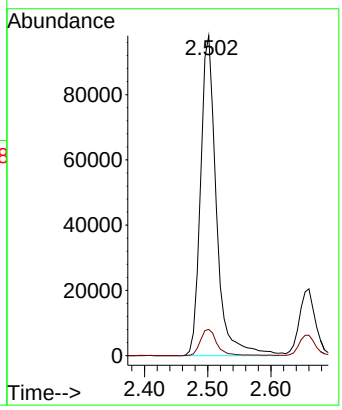
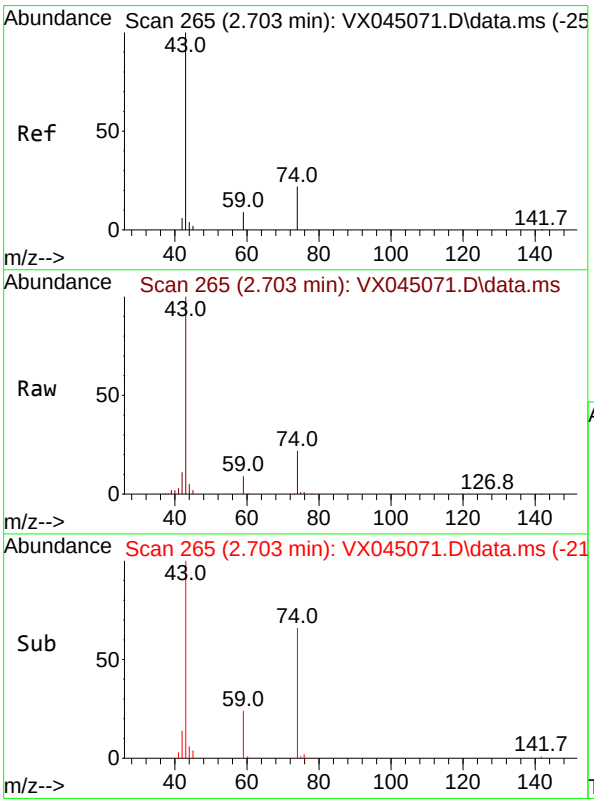
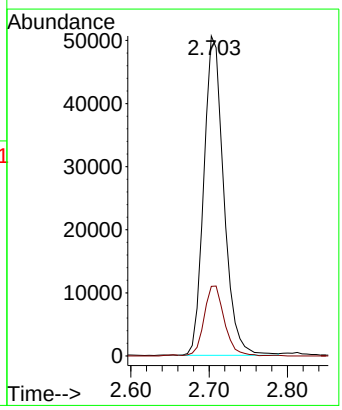


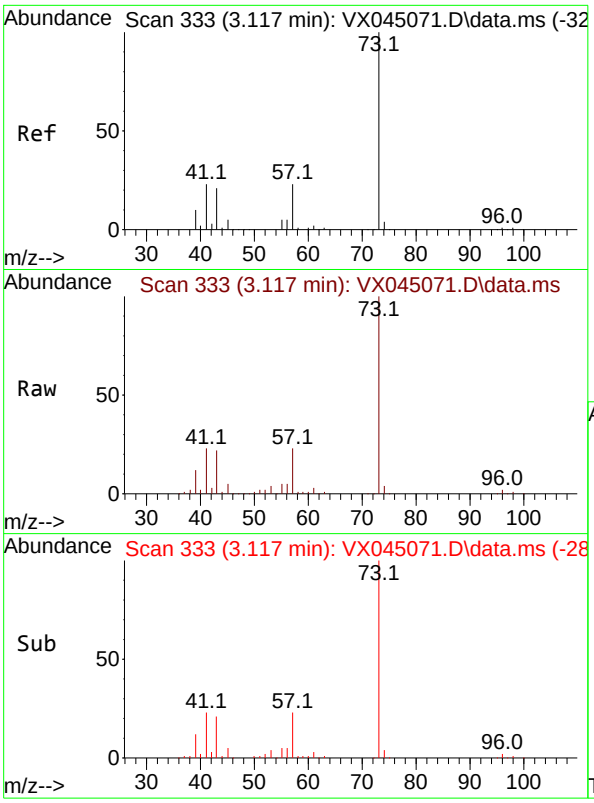




#18
Methyl Acetate
Concen: 47.359 ug/l
RT: 2.703 min Scan# 265
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 43 Resp: 89508

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 21.8 | 17.4 | 26.2 |

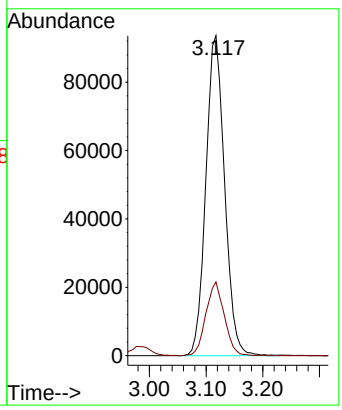





#19
Methyl tert-butyl Ether
Concen: 50.642 ug/l
RT: 3.117 min Scan# 3
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 73 Resp: 21504

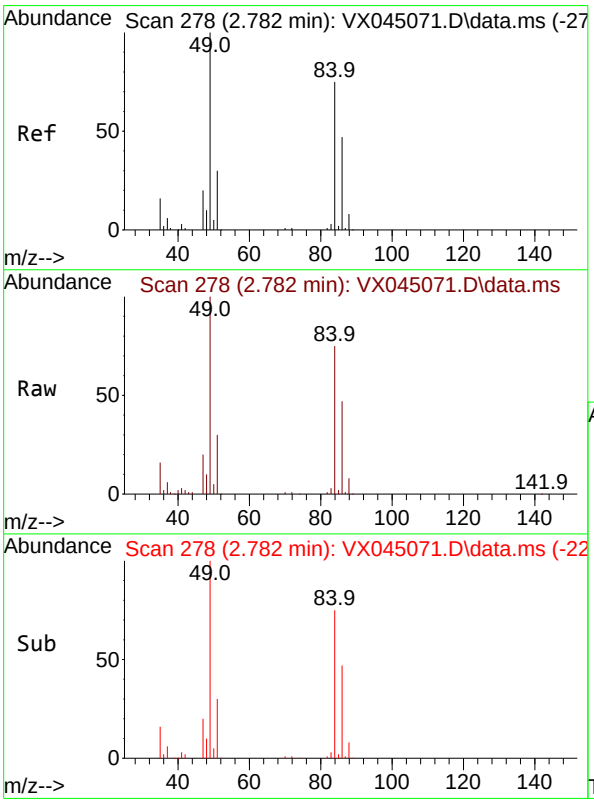
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 23.1 | 18.5 | 27.7 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

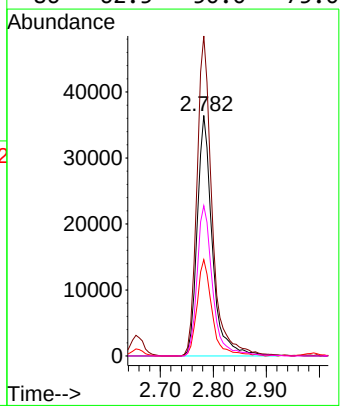
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

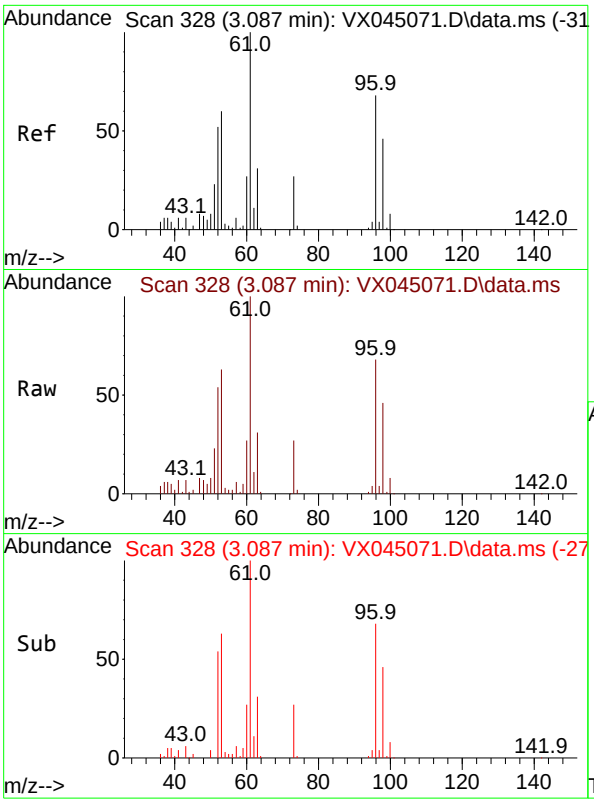



#20
Methylene Chloride
Concen: 48.500 ug/l
RT: 2.782 min Scan# 278
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 84 Resp: 72081

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 133.1 | 106.5 | 159.7 |
| 51 | 40.1 | 32.1 | 48.1 |
| 86 | 62.5 | 50.0 | 75.0 |

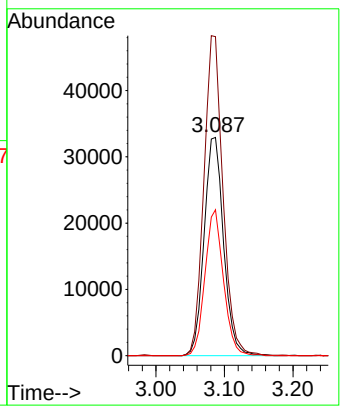





#21
trans-1,2-Dichloroethene
Concen: 49.832 ug/l
RT: 3.087 min Scan# 3
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 96 Resp: 6509

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 146.2 | 117.0 | 175.4 |
| 98 | 66.8 | 53.4 | 80.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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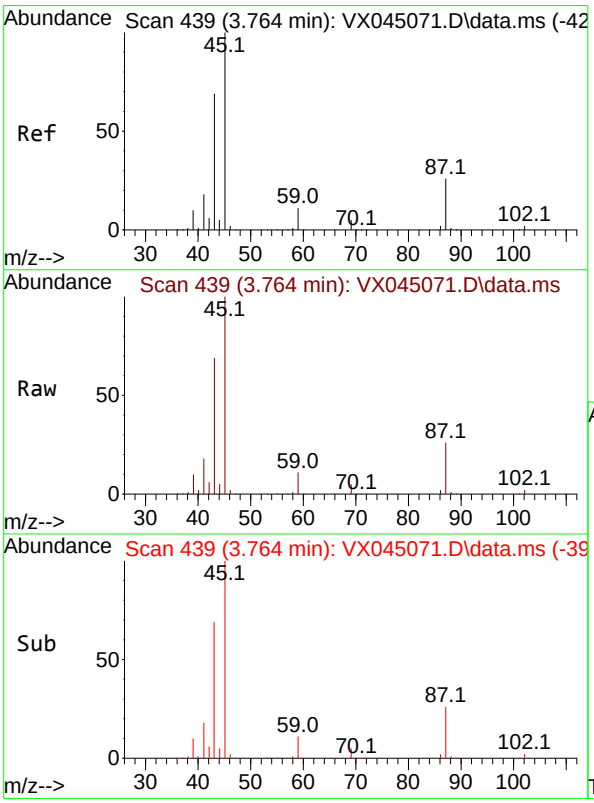
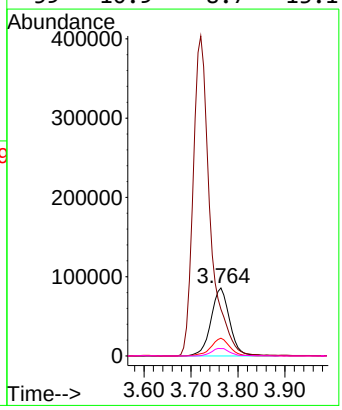
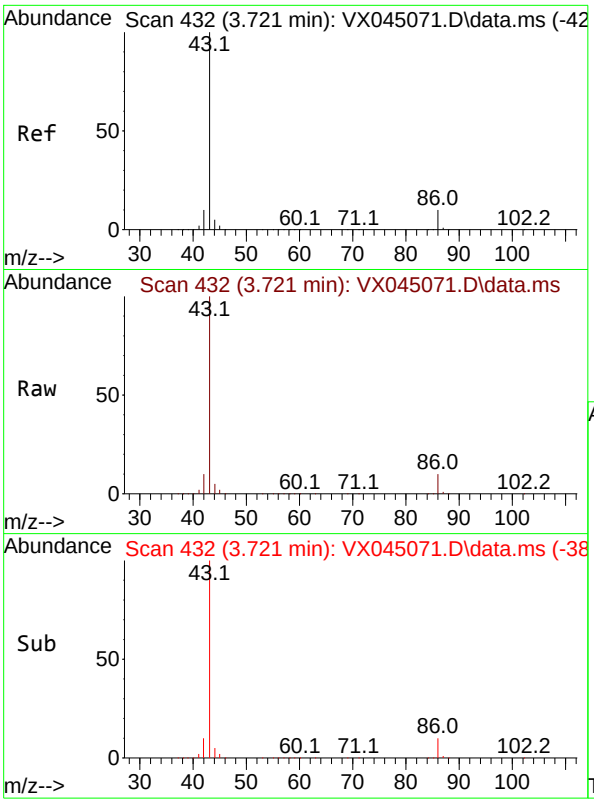



#22
Diisopropyl ether
Concen: 51.816 ug/l
RT: 3.764 min Scan# 439
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 45 Resp: 236563

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 68.6 | 54.9 | 82.3 |
| 87 | 26.2 | 21.0 | 31.4 |
| 59 | 10.9 | 8.7 | 13.1 |

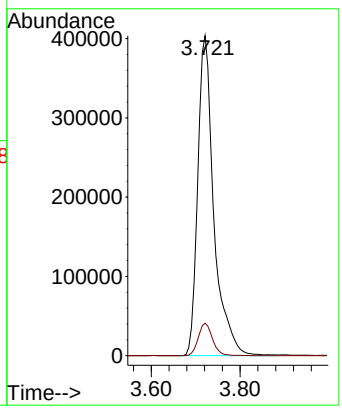





#23
Vinyl Acetate
Concen: 271.773 ug/l
RT: 3.721 min Scan# 4
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 43 Resp: 101863

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 10.1 | 8.1 | 12.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

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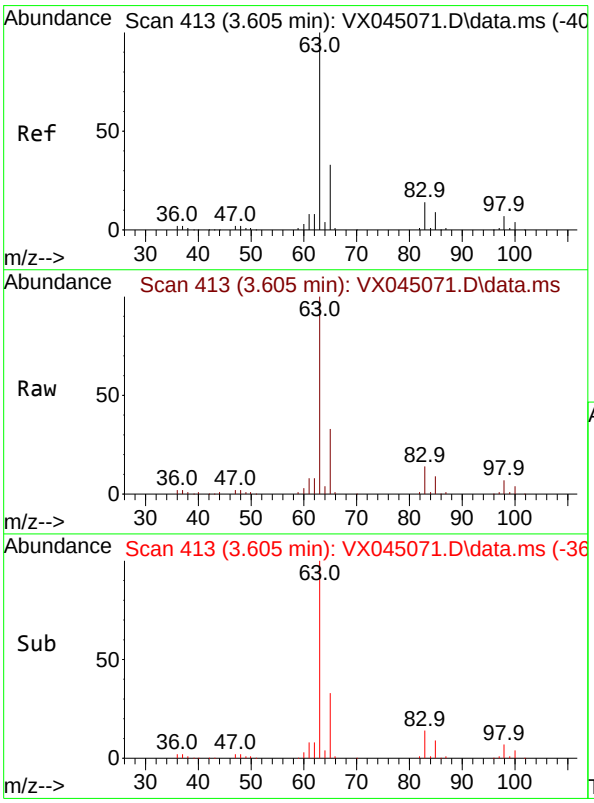
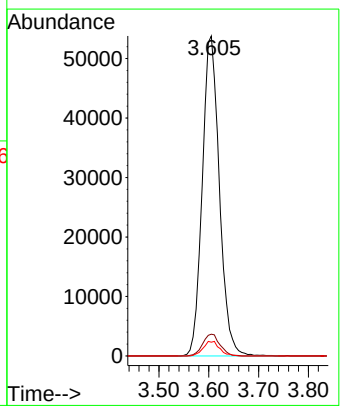
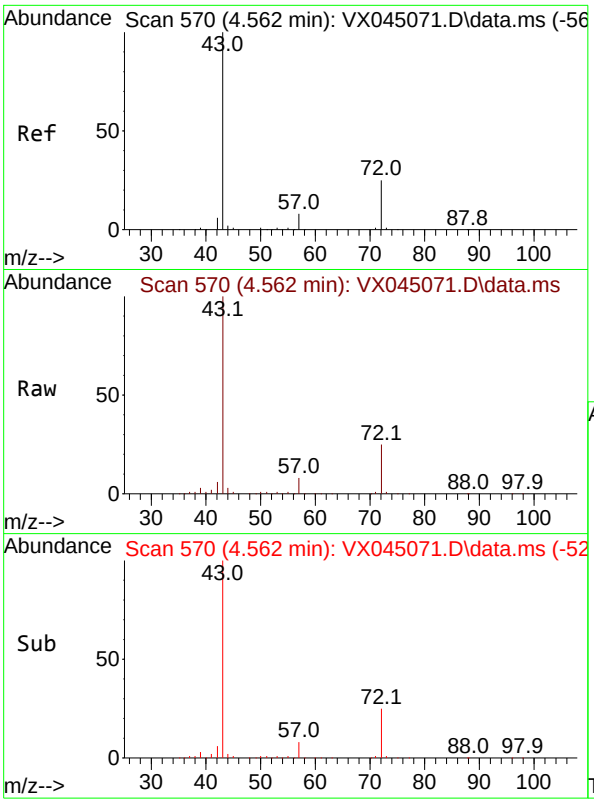



#24
1,1-Dichloroethane
Concen: 50.270 ug/l
RT: 3.605 min Scan# 413
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 63 Resp: 128235

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 6.8 | 3.4 | 10.2 |
| 100 | 4.3 | 2.1 | 6.5 |

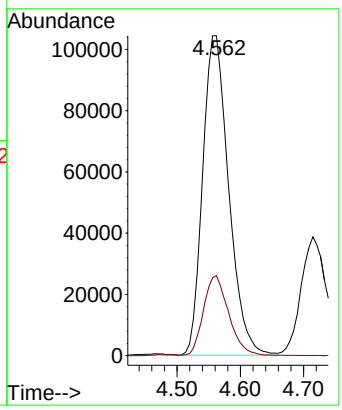





#25
2-Butanone
Concen: 295.330 ug/l
RT: 4.562 min Scan# 5
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 43 Resp: 29878

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 25.0 | 20.0 | 30.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
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Reviewed By :John Carlone 02/28/2025
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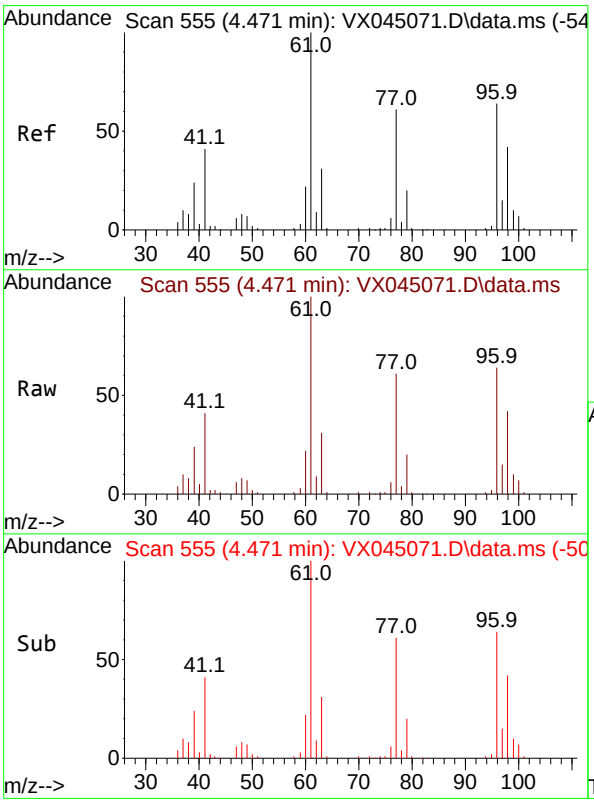
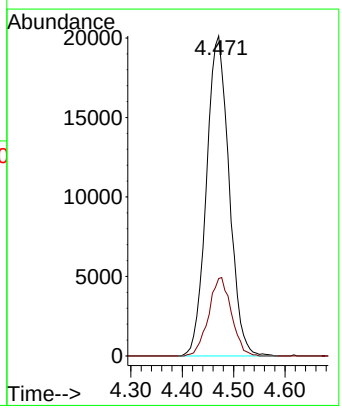
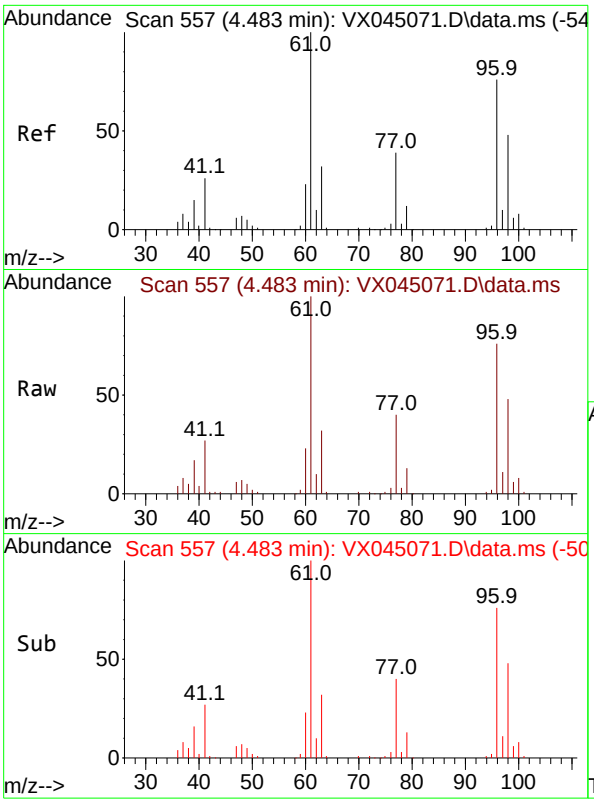



#26
2,2-Dichloropropane
Concen: 32.498 ug/l
RT: 4.471 min Scan# 555
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 77 Resp: 61631

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 24.7 | 12.4 | 37.0 |

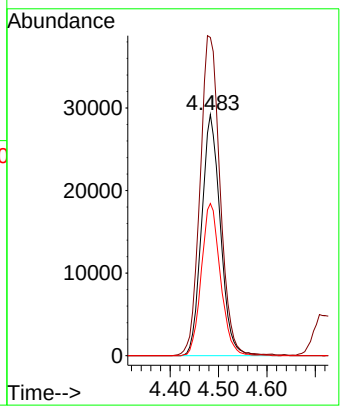





#27
cis-1,2-Dichloroethene
Concen: 49.955 ug/l
RT: 4.483 min Scan# 5
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 96 Resp: 7865

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 141.6 | 0.0 | 283.2 |
| 98 | 64.0 | 0.0 | 128.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

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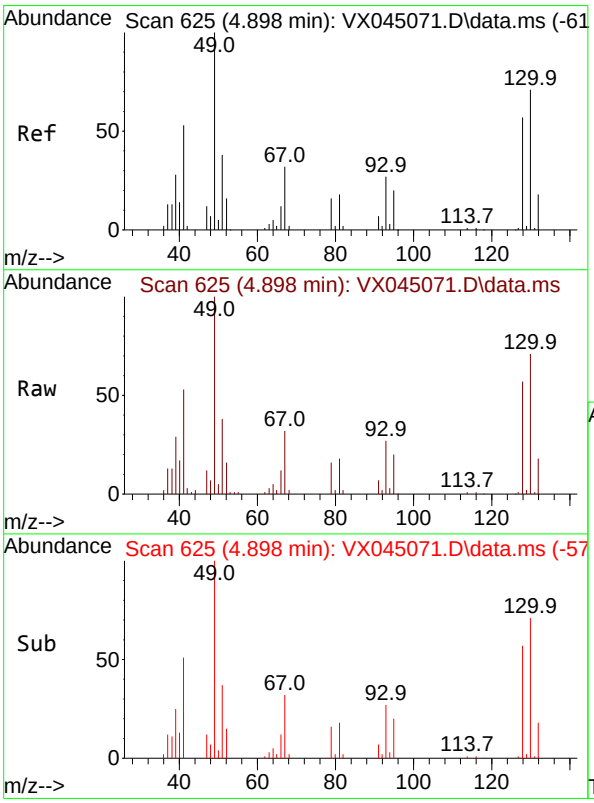
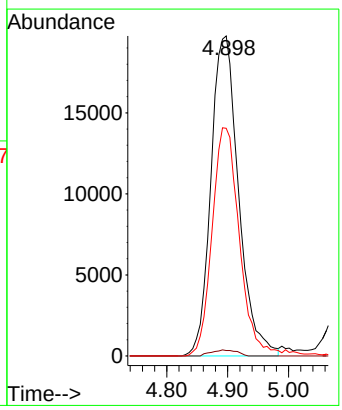
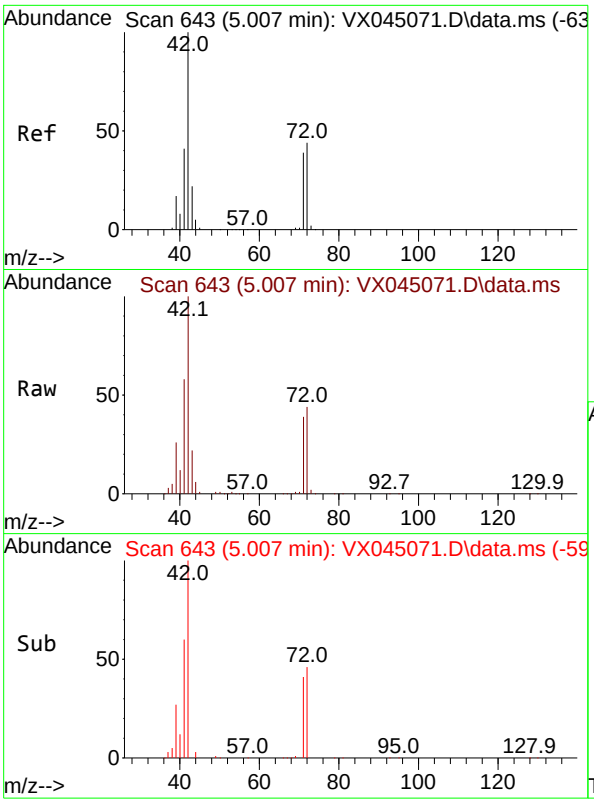



#28
Bromochloromethane
Concen: 50.643 ug/l
RT: 4.898 min Scan# 625
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 49 Resp: 62299

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.7 | 0.0 | 3.4 |
| 130 | 70.1 | 56.1 | 84.1 |

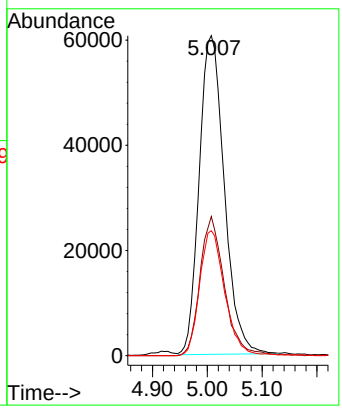





#29
Tetrahydrofuran
Concen: 287.345 ug/l
RT: 5.007 min Scan# 64
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 42 Resp: 19260

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 42.6 | 34.1 | 51.1 |
| 71 | 39.2 | 31.4 | 47.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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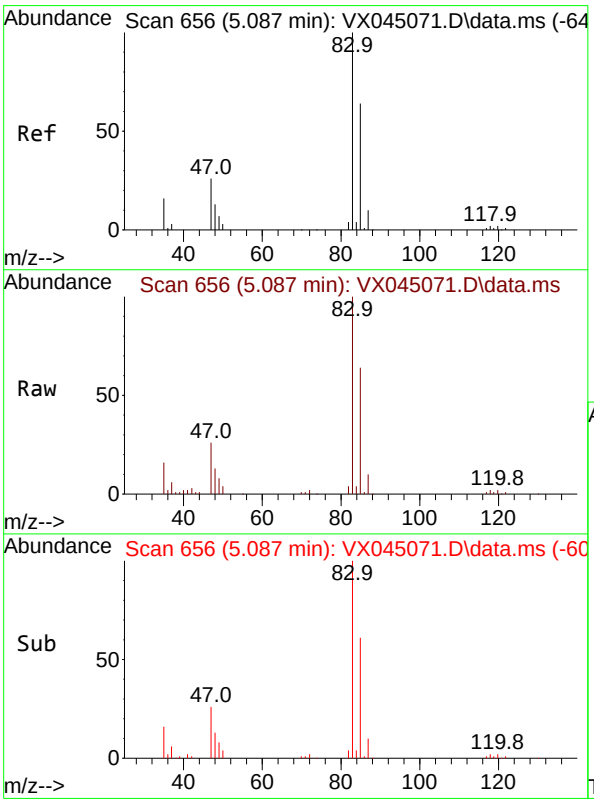
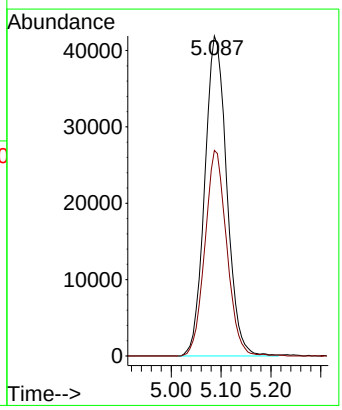
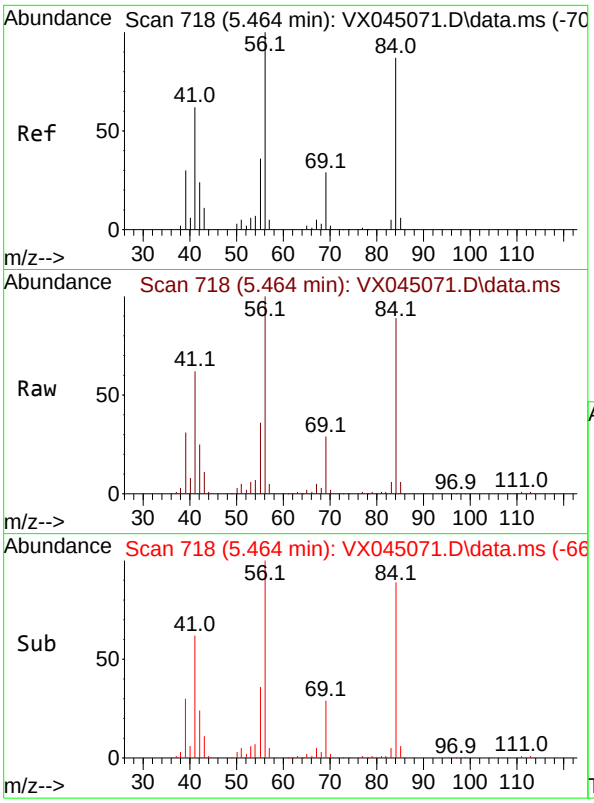



#30
Chloroform
Concen: 51.532 ug/l
RT: 5.087 min Scan# 656
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 83 Resp: 128581

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.3 | 51.4 | 77.2 |






#31
Cyclohexane
Concen: 48.836 ug/l
RT: 5.464 min Scan# 7
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 56 Resp: 11433

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 29.3 | 23.4 | 35.2 |
| 84 | 86.8 | 69.4 | 104.2 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

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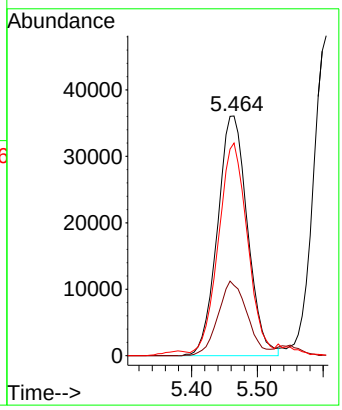
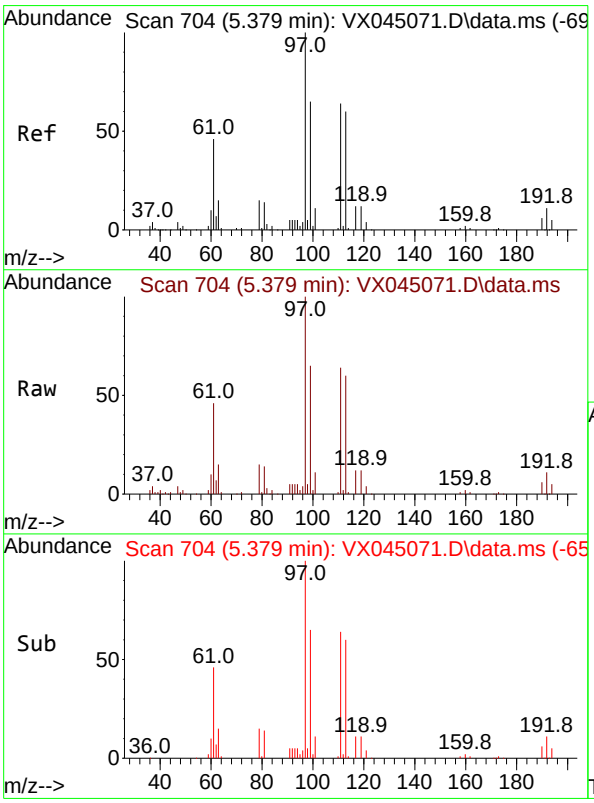
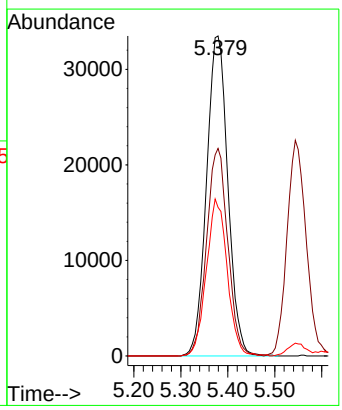


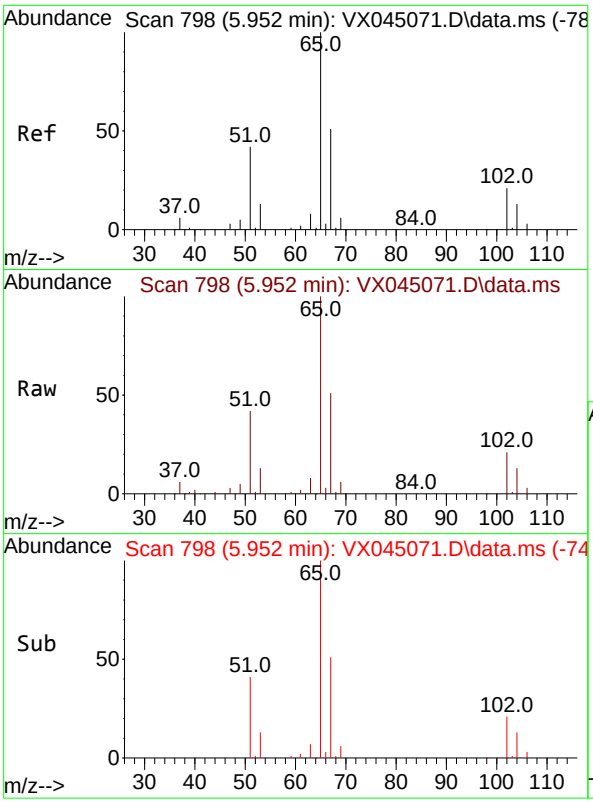




#32
1,1,1-Trichloroethane
Concen: 50.306 ug/l
RT: 5.379 min Scan# 704
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 97 Resp: 105671

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 64.5 | 51.6 | 77.4 |
| 61 | 48.0 | 38.4 | 57.6 |

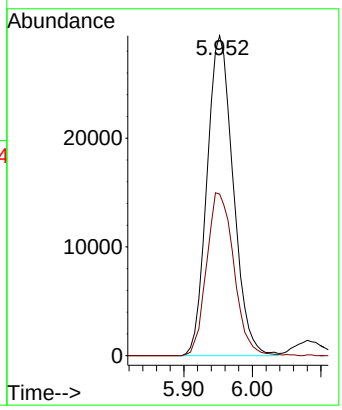





#33
1,2-Dichloroethane-d4
Concen: 51.250 ug/l
RT: 5.952 min Scan# 7
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 65 Resp: 7815

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 53.1 | 0.0 | 106.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

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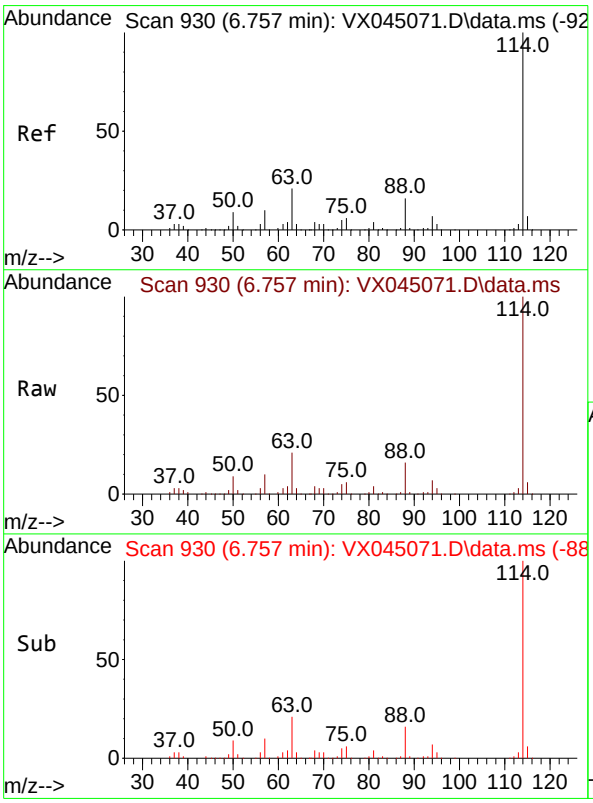
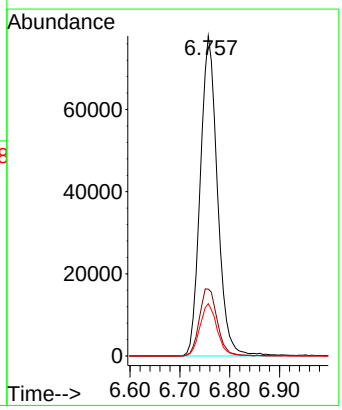
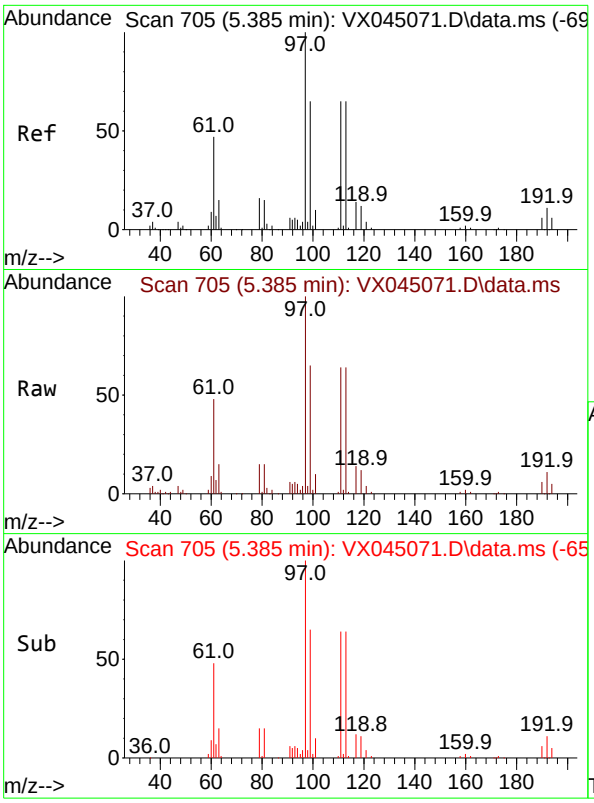



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.757 min Scan# 930
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:114 Resp: 186358

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 20.9 | 0.0 | 41.8 |
| 88 | 16.4 | 0.0 | 32.8 |

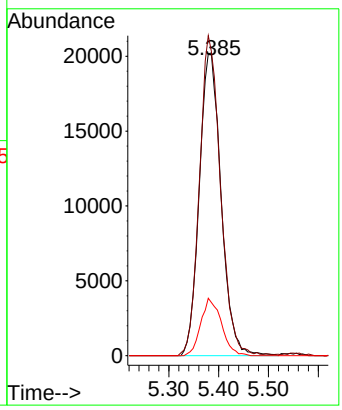





#35
Dibromofluoromethane
Concen: 50.346 ug/l
RT: 5.385 min Scan# 7
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:113 Resp: 6132

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 102.2 | 81.8 | 122.6 |
| 192 | 17.9 | 14.3 | 21.5 |

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MSVOA_X
**ClientSampleId :**
VSTDICCC050

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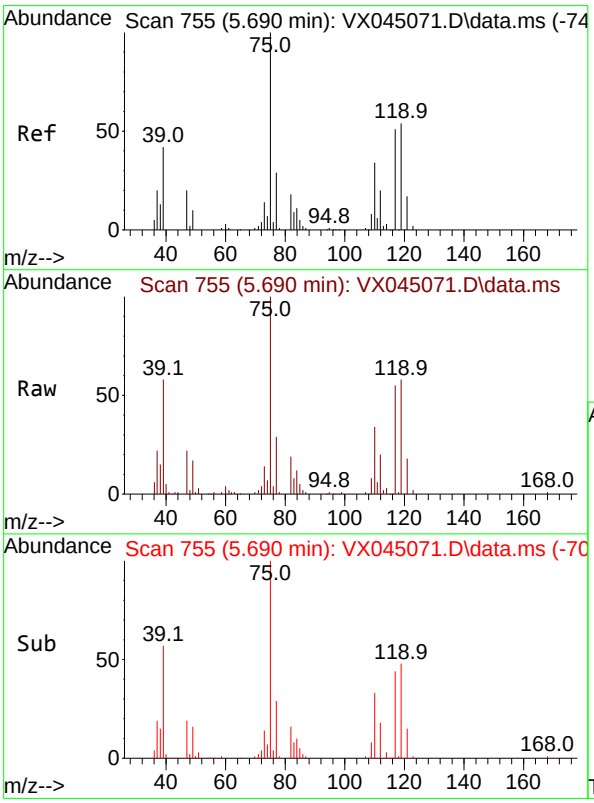
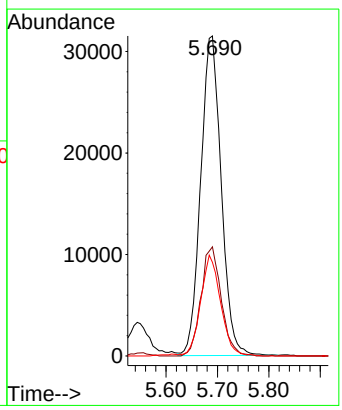
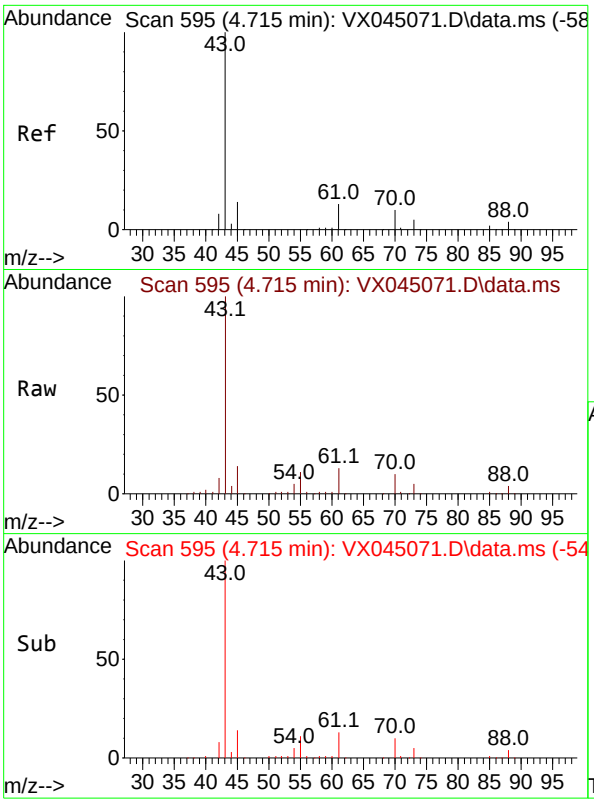



#36
1,1-Dichloropropene
Concen: 49.861 ug/l
RT: 5.690 min Scan# 755
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 75 Resp: 87338

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 33.7 | 16.9 | 50.6 |
| 77 | 30.6 | 24.5 | 36.7 |

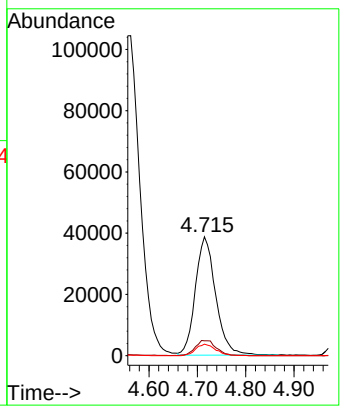





#37
Ethyl Acetate
Concen: 56.641 ug/l
RT: 4.715 min Scan# 5
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 43 Resp: 11289

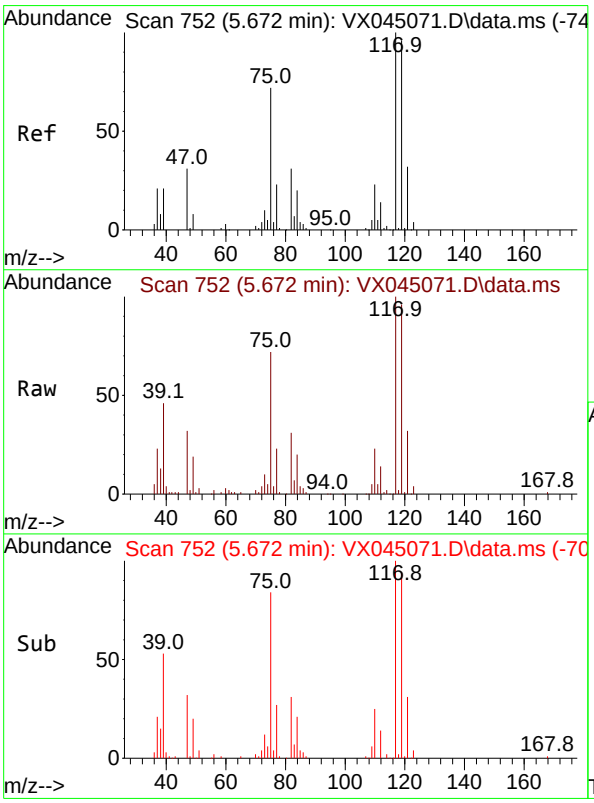
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 13.5 | 10.8 | 16.2 |
| 70 | 9.6 | 7.7 | 11.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

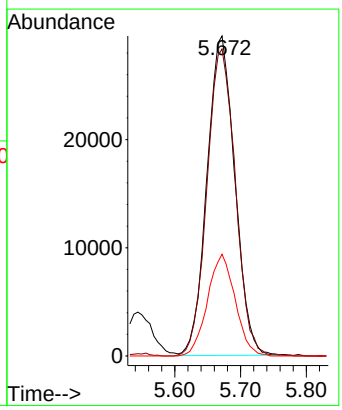
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

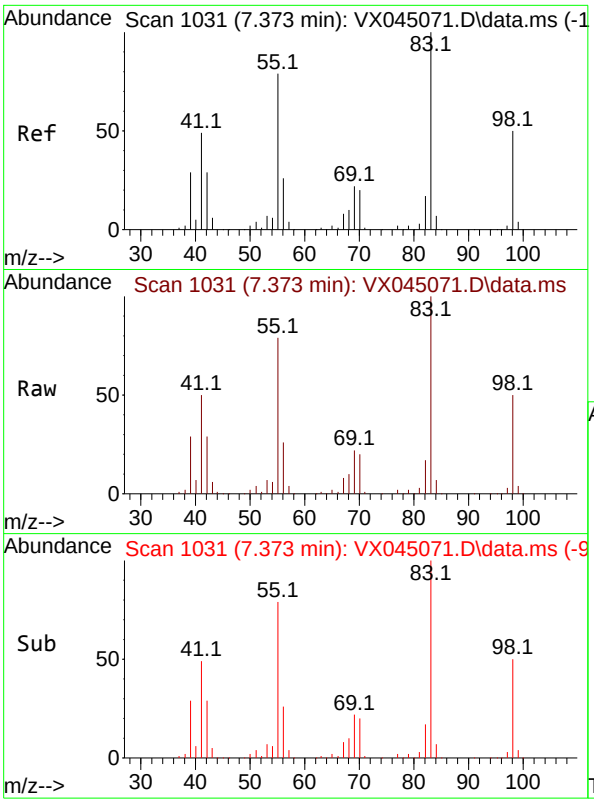



#38
Carbon Tetrachloride
Concen: 50.593 ug/l
RT: 5.672 min Scan# 752
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:117 Resp: 87123

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 95.9 | 76.7 | 115.1 |
| 121 | 31.9 | 25.5 | 38.3 |






#39
Methylcyclohexane
Concen: 48.715 ug/l
RT: 7.373 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

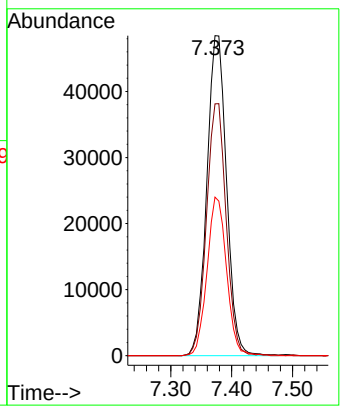
Tgt Ion: 83 Resp: 10897

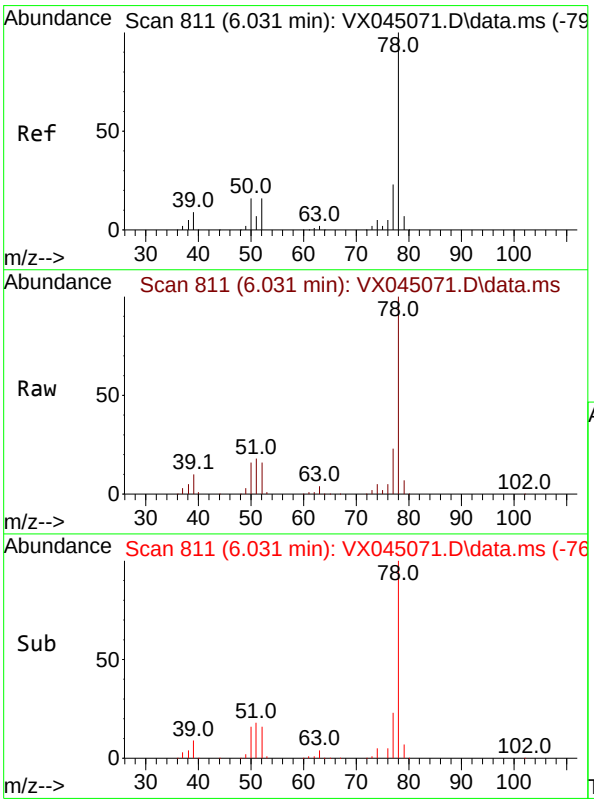
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 78.7 | 63.0 | 94.4 |
| 98 | 49.6 | 39.7 | 59.5 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

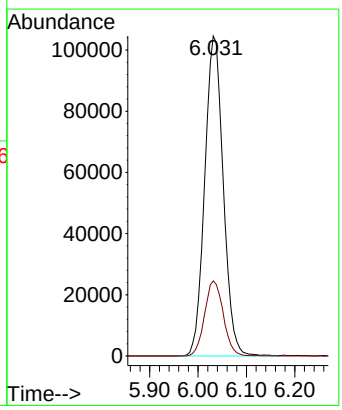


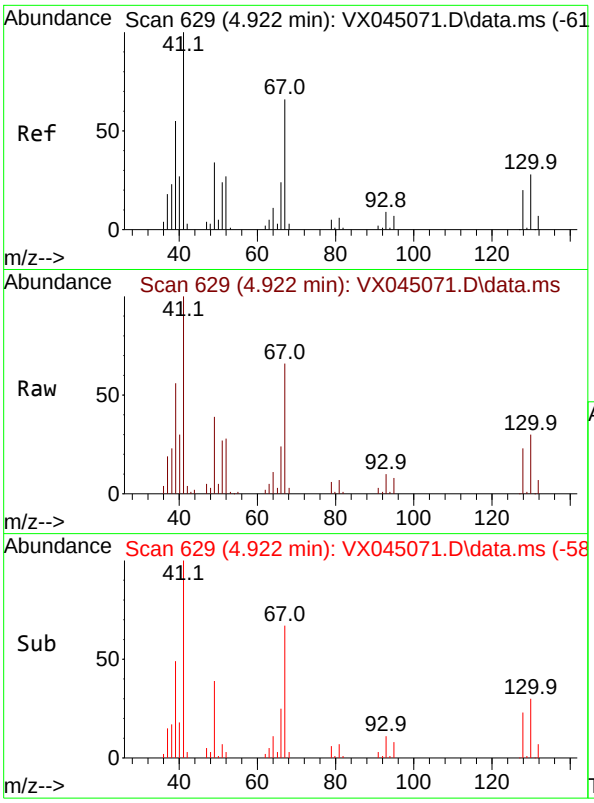




#40
Benzene
Concen: 50.925 ug/l
RT: 6.031 min Scan# 811
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 78 Resp: 278802

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.5 | 18.8 | 28.2 |

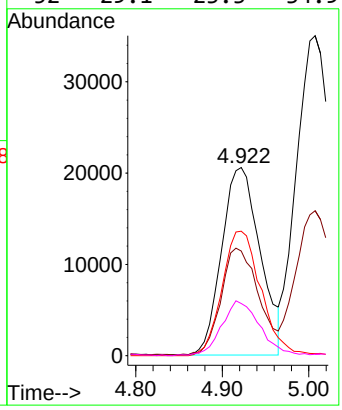





#41
Methacrylonitrile
Concen: 59.598 ug/l
RT: 4.922 min Scan# 6
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 41 Resp: 6345

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 55.8 | 44.6 | 67.0 |
| 67 | 67.4 | 53.9 | 80.9 |
| 52 | 29.1 | 23.3 | 34.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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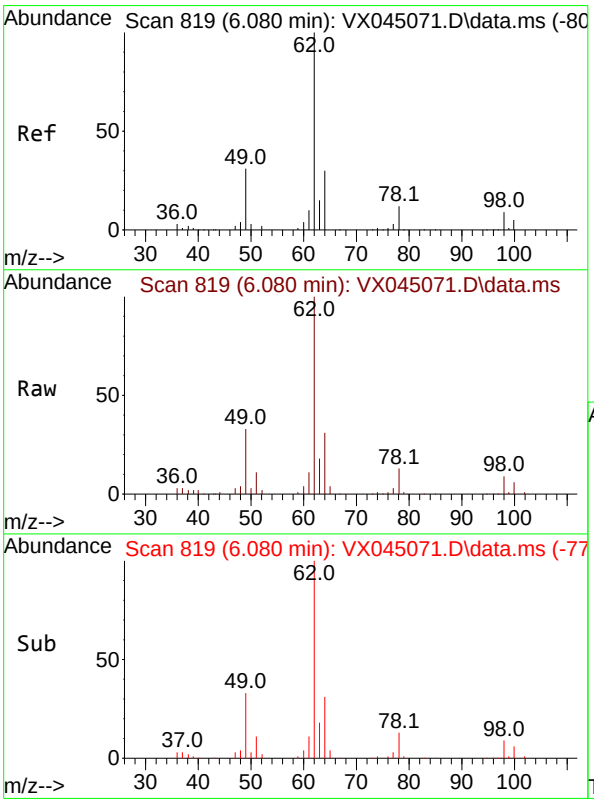
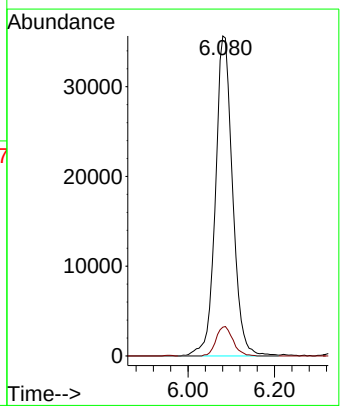
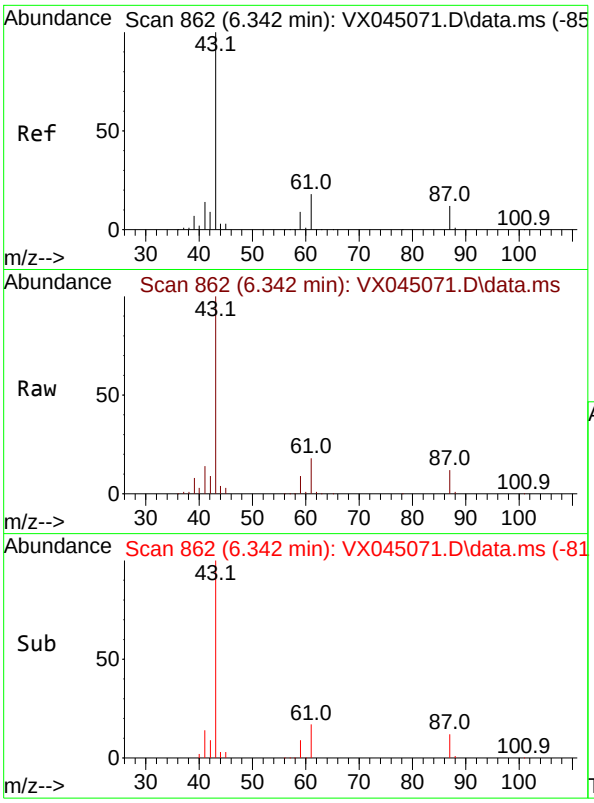



#42
1,2-Dichloroethane
Concen: 55.428 ug/l
RT: 6.080 min Scan# 819
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 62 Resp: 98340

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 9.1 | 0.0 | 18.2 |






#43
Isopropyl Acetate
Concen: 54.544 ug/l
RT: 6.342 min Scan# 8
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 43 Resp: 17304

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 18.6 | 14.9 | 22.3 |
| 87 | 11.8 | 9.4 | 14.2 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/28/2025
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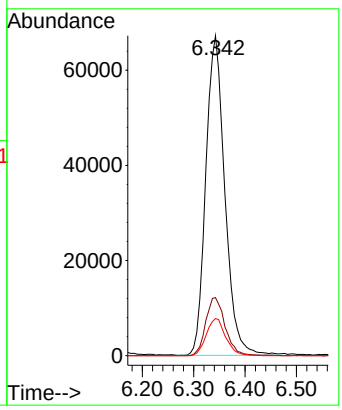
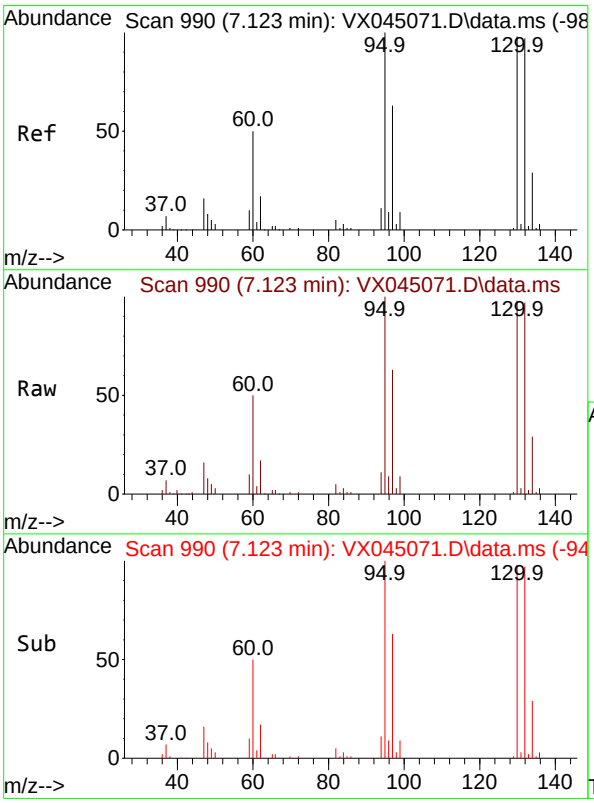
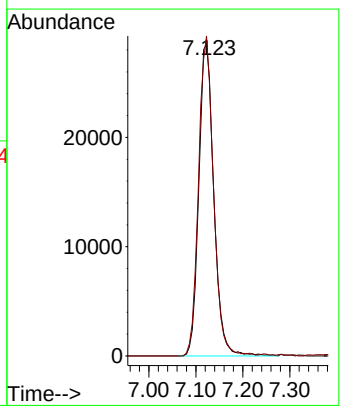


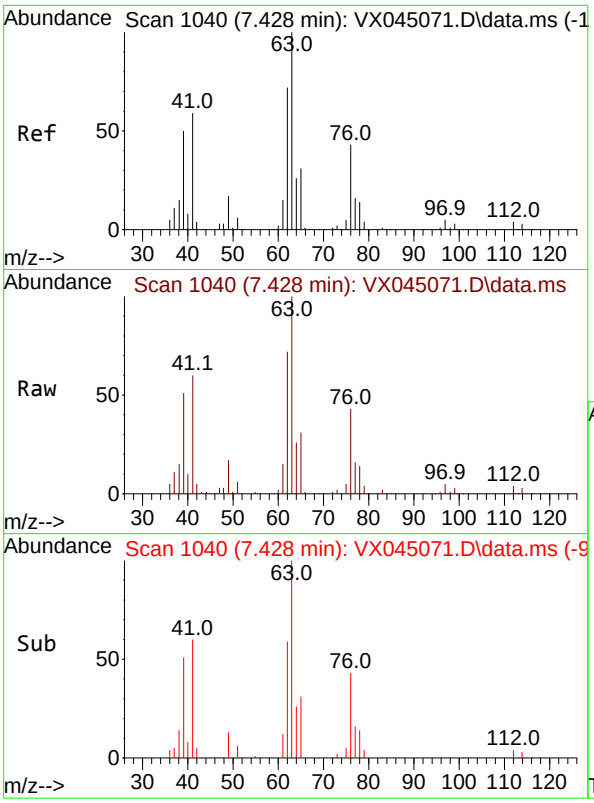




#44
Trichloroethene
Concen: 50.756 ug/l
RT: 7.123 min Scan# 990
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:130 Resp: 63513

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 102.5 | 0.0 | 205.0 |

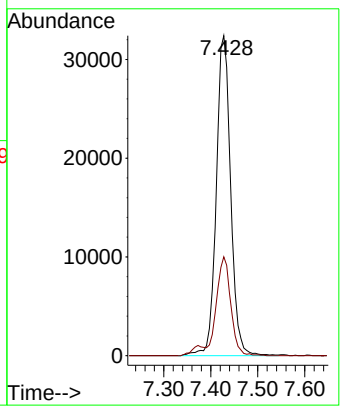





#45
1,2-Dichloropropane
Concen: 50.808 ug/l
RT: 7.428 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 63 Resp: 6912

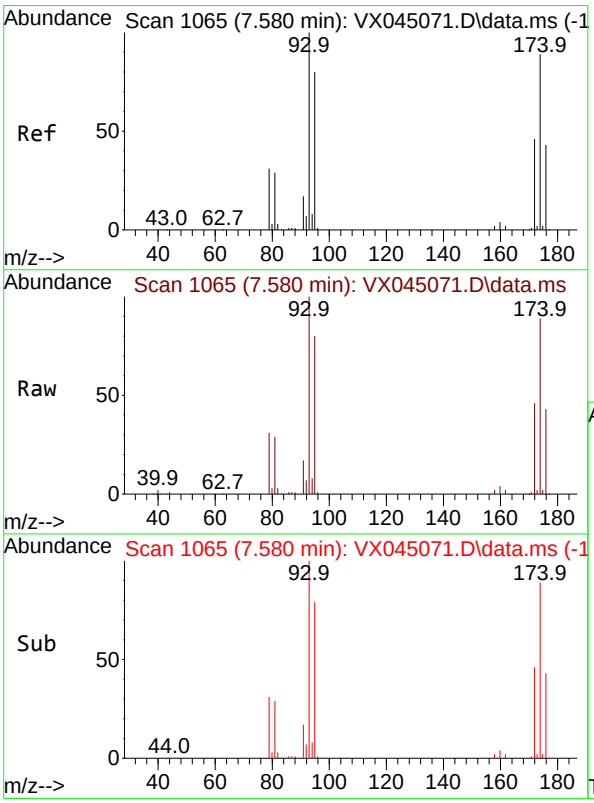
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 30.9 | 24.7 | 37.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

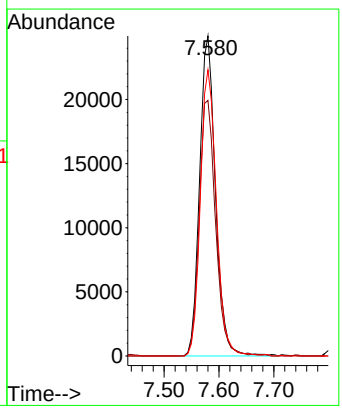
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

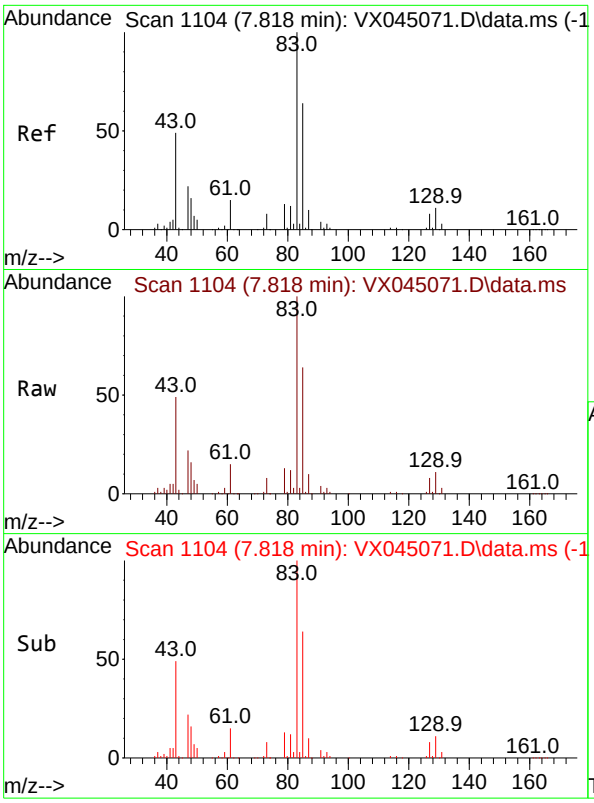



#46
Dibromomethane
Concen: 52.757 ug/l
RT: 7.580 min Scan# 1065
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 93 Resp: 50143

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 82.3 | 65.8 | 98.8 |
| 174 | 90.2 | 72.2 | 108.2 |

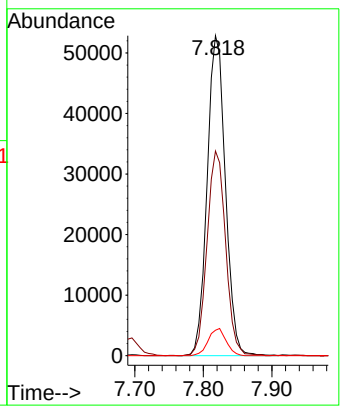





#47
Bromodichloromethane
Concen: 53.153 ug/l
RT: 7.818 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 83 Resp: 9772

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 63.9 | 51.1 | 76.7 |
| 127 | 8.0 | 6.4 | 9.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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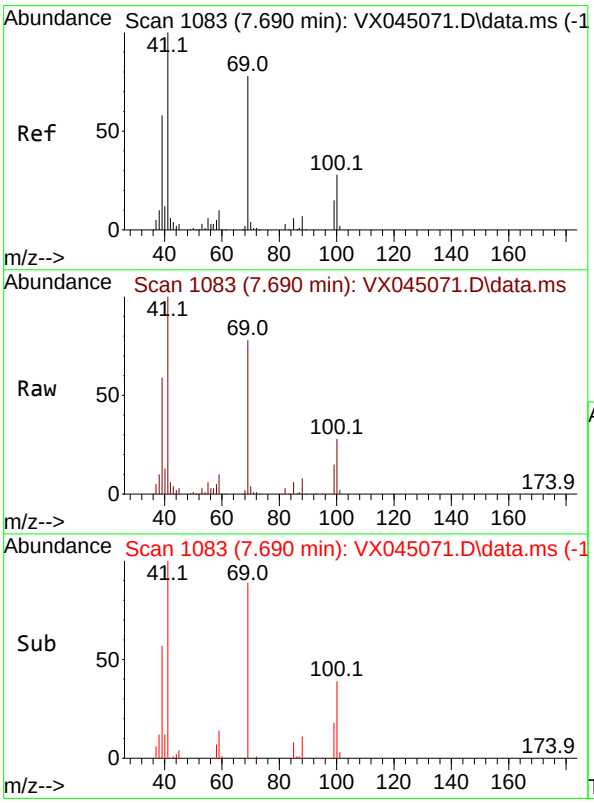
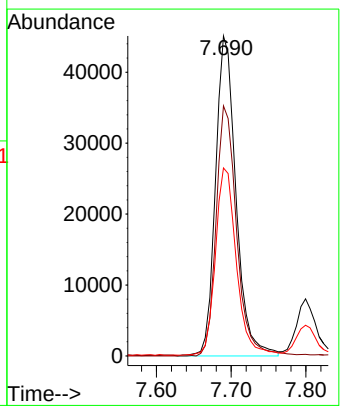
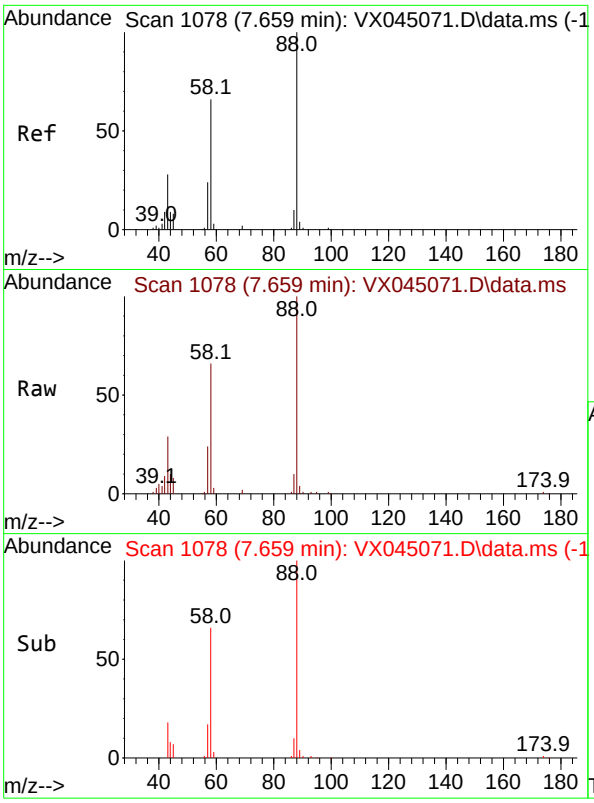



#48
Methyl methacrylate
Concen: 57.256 ug/l
RT: 7.690 min Scan# 1083
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 41 Resp: 86231

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 78.8 | 63.0 | 94.6 |
| 39 | 59.4 | 47.5 | 71.3 |

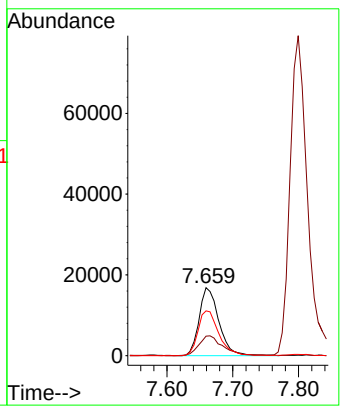





#49
1,4-Dioxane
Concen: 1095.003 ug/l
RT: 7.659 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 88 Resp: 3505

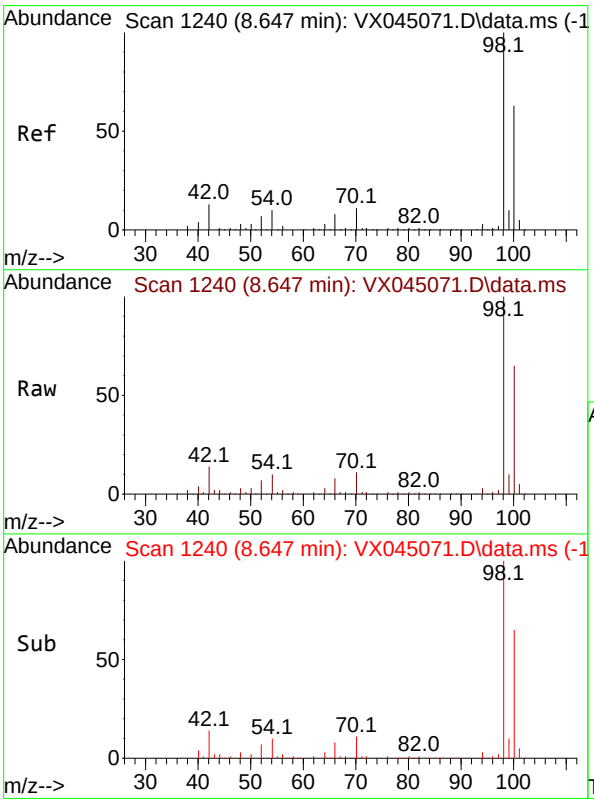
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 35.9 | 28.7 | 43.1 |
| 58 | 69.8 | 55.8 | 83.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

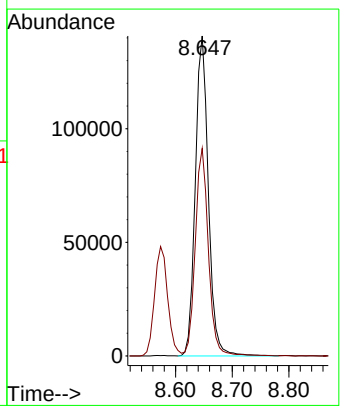
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

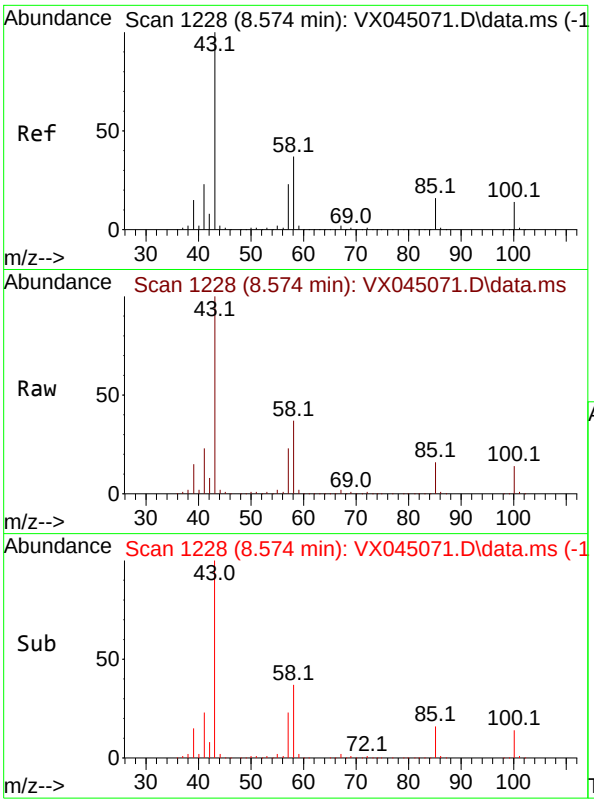



#50
Toluene-d8
Concen: 49.449 ug/l
RT: 8.647 min Scan# 1240
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 98 Resp: 225493

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.0 | 52.0 | 78.0 |

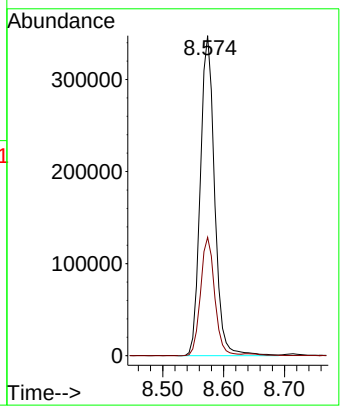





#51
4-Methyl-2-Pentanone
Concen: 292.570 ug/l
RT: 8.574 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 43 Resp: 56873

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 36.5 | 29.2 | 43.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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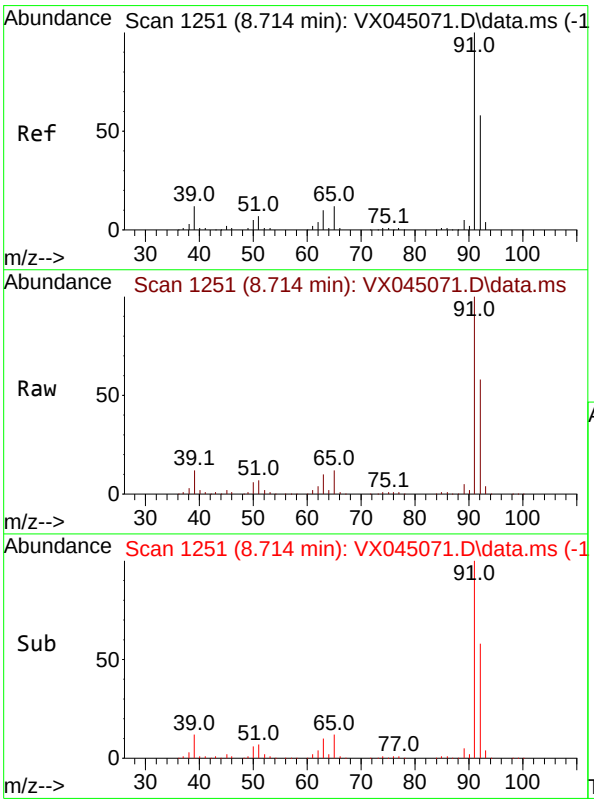
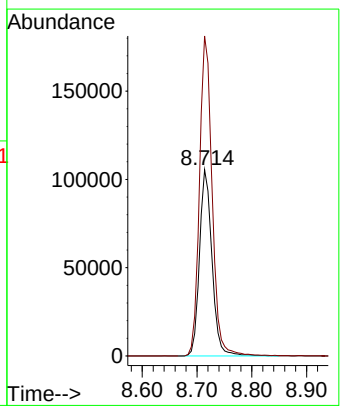
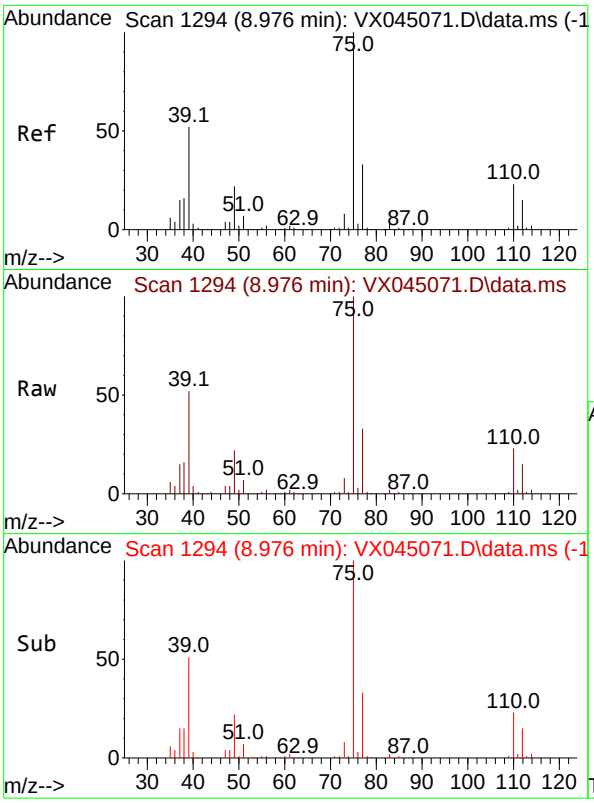



#52
Toluene
Concen: 51.505 ug/l
RT: 8.714 min Scan# 1251
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 92 Resp: 167431

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 173.6 | 138.9 | 208.3 |

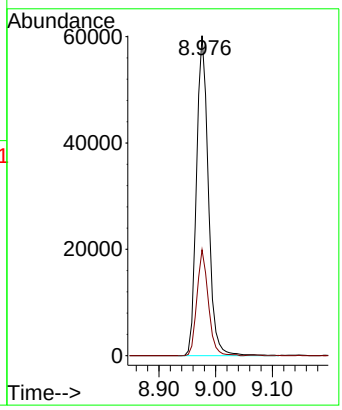





#53
t-1,3-Dichloropropene
Concen: 48.078 ug/l
RT: 8.976 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 75 Resp: 8737

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 33.1 | 26.5 | 39.7 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

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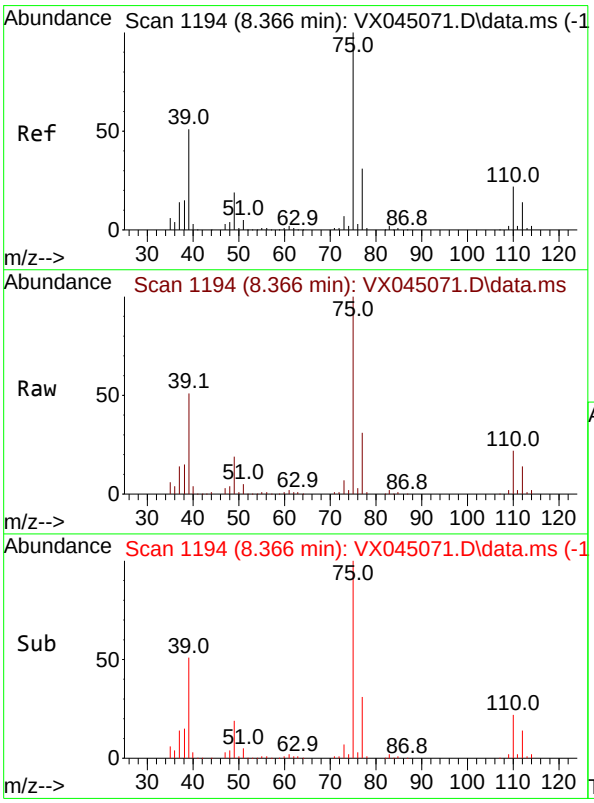
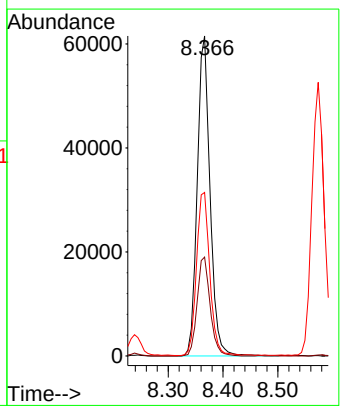
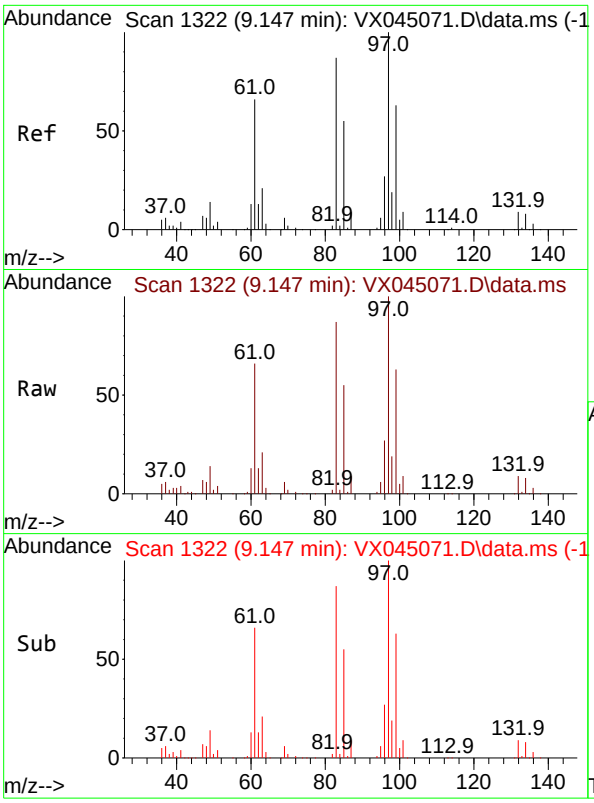



#54
cis-1,3-Dichloropropene
Concen: 49.079 ug/l
RT: 8.366 min Scan# 1194
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 75 Resp: 99713

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 30.9 | 24.7 | 37.1 |
| 39 | 50.9 | 40.7 | 61.1 |

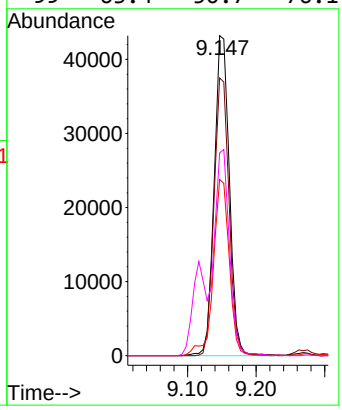





#55
1,1,2-Trichloroethane
Concen: 52.724 ug/l
RT: 9.147 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 97 Resp: 6637

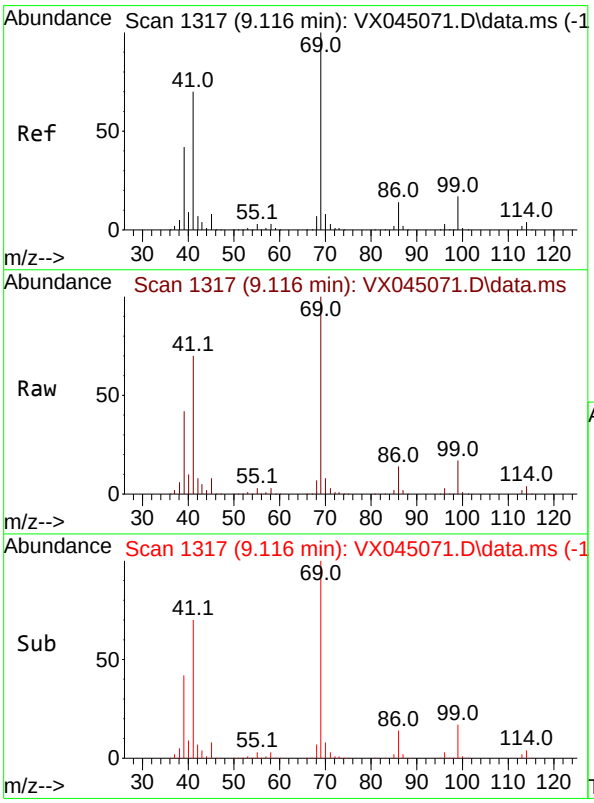
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 86.8 | 69.4 | 104.2 |
| 85 | 55.1 | 44.1 | 66.1 |
| 99 | 63.4 | 50.7 | 76.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

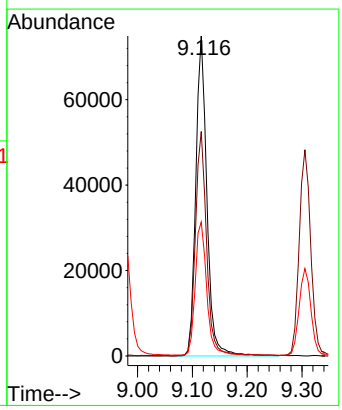
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

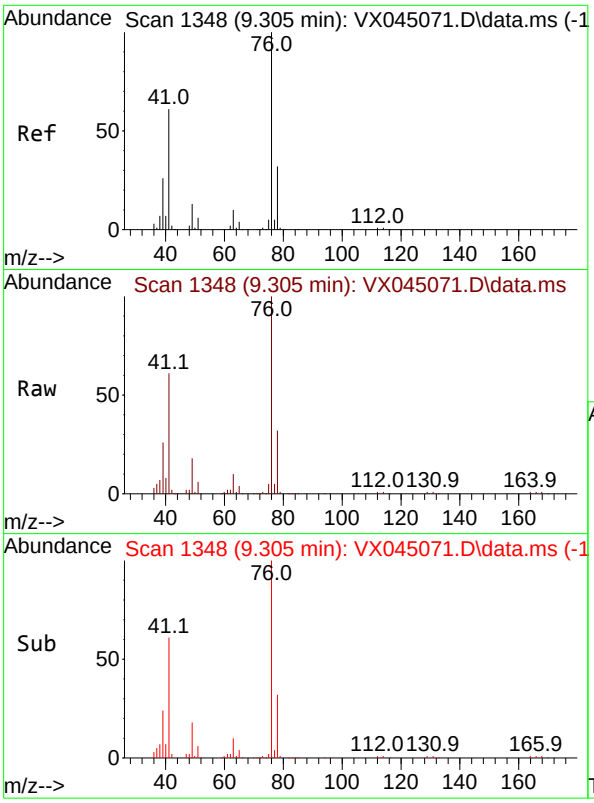



#56
Ethyl methacrylate
Concen: 52.724 ug/l
RT: 9.116 min Scan# 1317
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 69 Resp: 106157

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 71.2 | 57.0 | 85.4 |
| 39 | 42.8 | 34.2 | 51.4 |

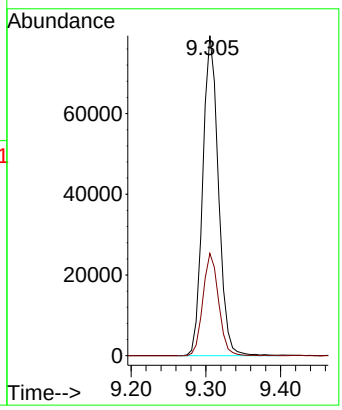





#57
1,3-Dichloropropane
Concen: 52.594 ug/l
RT: 9.305 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 76 Resp: 11548

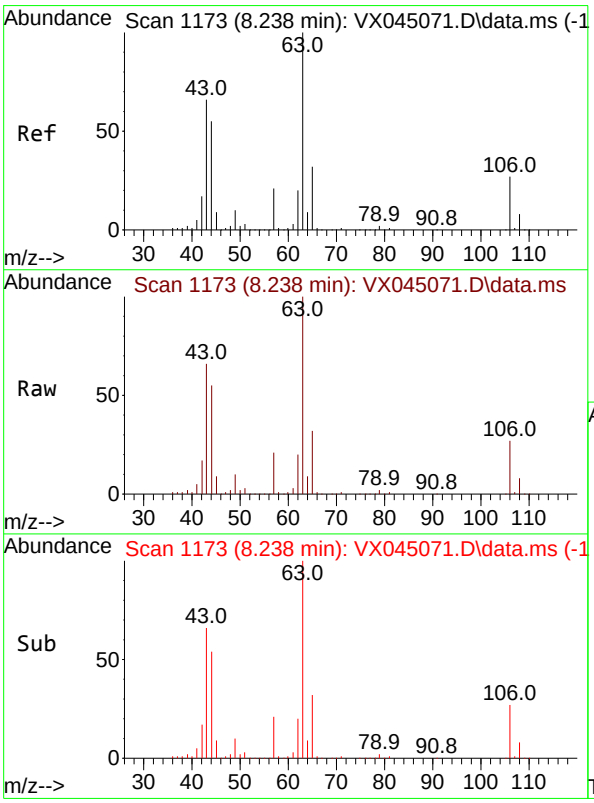
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 31.9 | 25.5 | 38.3 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

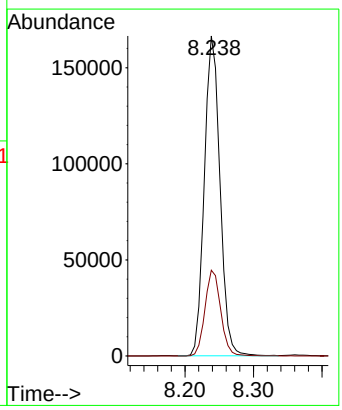
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

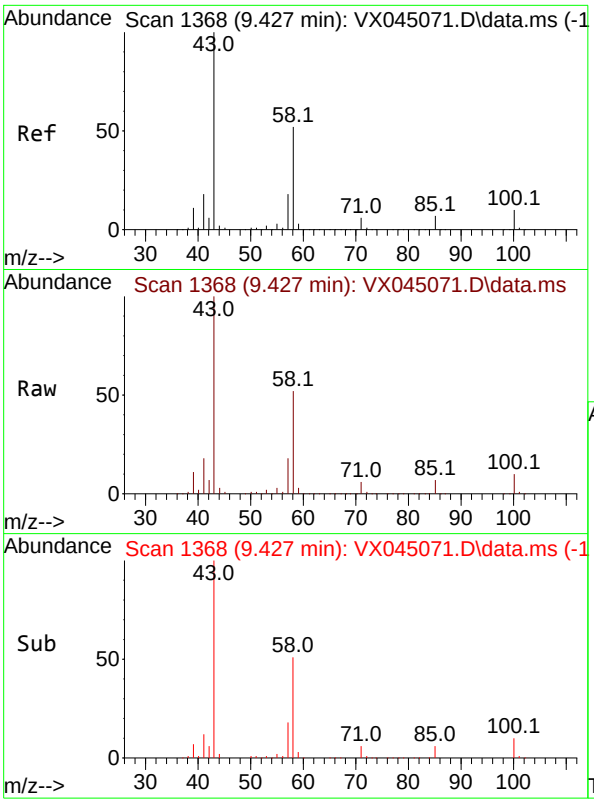



#58
2-Chloroethyl Vinyl ether
Concen: 267.612 ug/l
RT: 8.238 min Scan# 1173
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 63 Resp: 264555

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 26.9 | 21.5 | 32.3 |

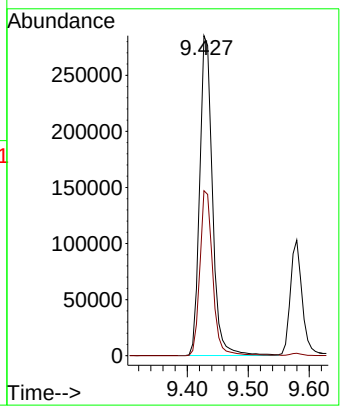





#59
2-Hexanone
Concen: 297.362 ug/l
RT: 9.427 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 43 Resp: 41698

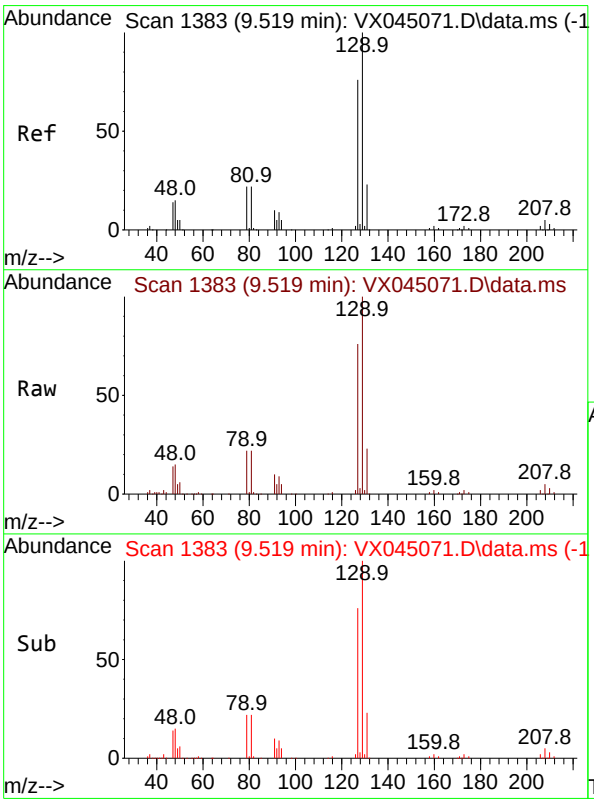
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 51.7 | 25.9 | 77.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
**APPROVED**

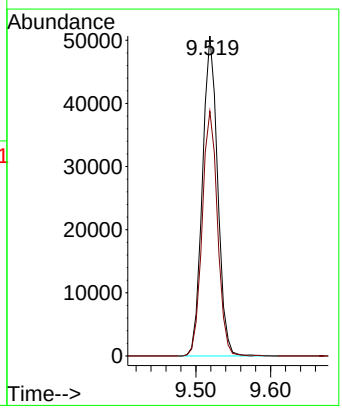
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

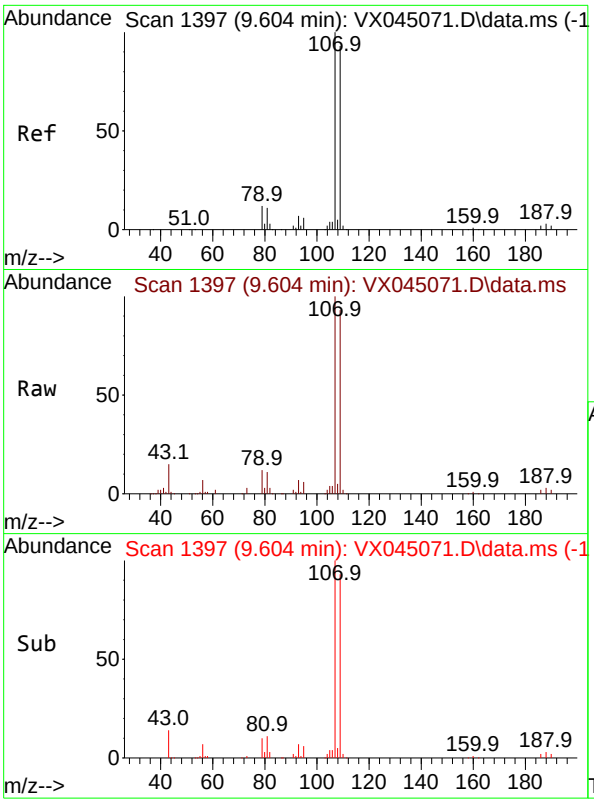



#60
Dibromochloromethane
Concen: 53.284 ug/l
RT: 9.519 min Scan# 1383
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:129 Resp: 71569

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 77.0 | 38.5 | 115.5 |

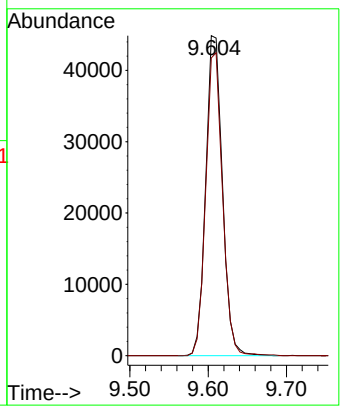





#61
1,2-Dibromoethane
Concen: 52.217 ug/l
RT: 9.604 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:107 Resp: 6631

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 95.1 | 76.1 | 114.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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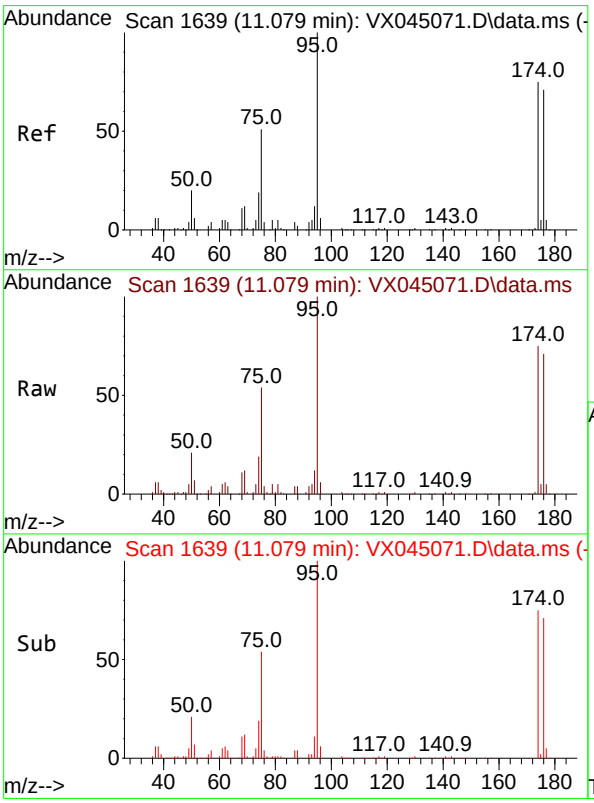
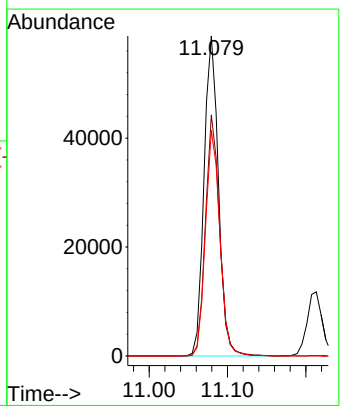
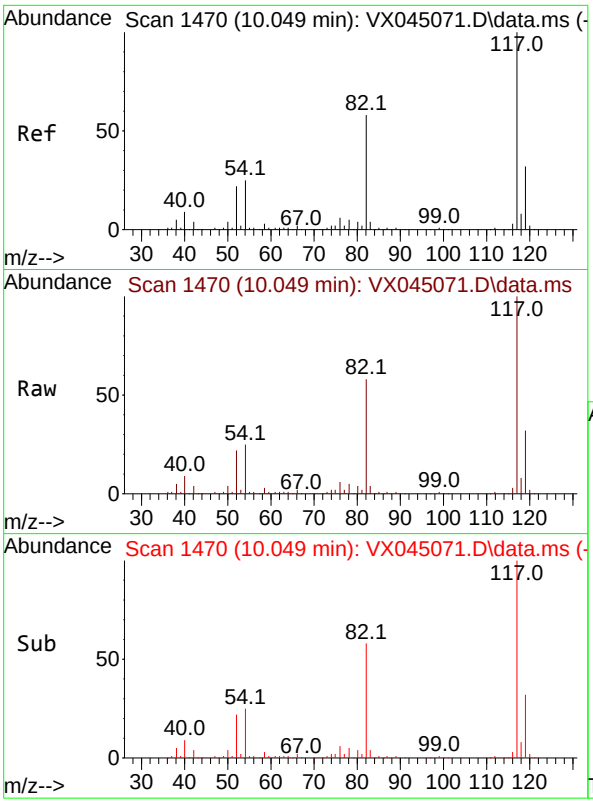



#62
4-Bromofluorobenzene
Concen: 49.212 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 95 Resp: 74945

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 74.1 | 0.0 | 148.2 |
| 176 | 70.7 | 0.0 | 141.4 |






#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.049 min Scan# 14
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:117 Resp: 16207

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 57.9 | 46.3 | 69.5 |
| 119 | 32.1 | 25.7 | 38.5 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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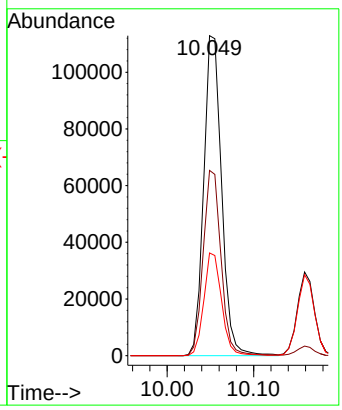
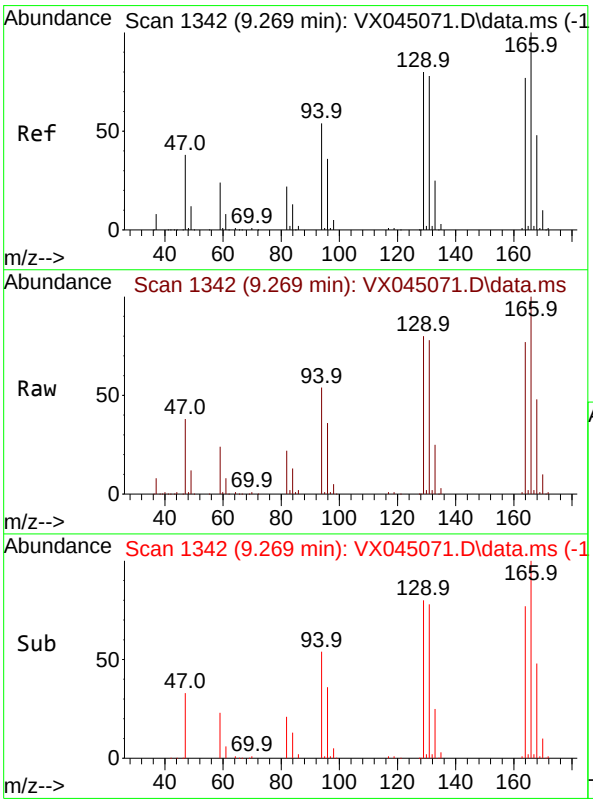
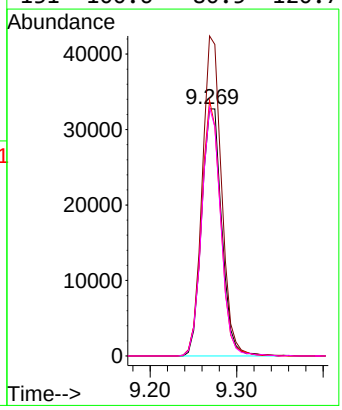


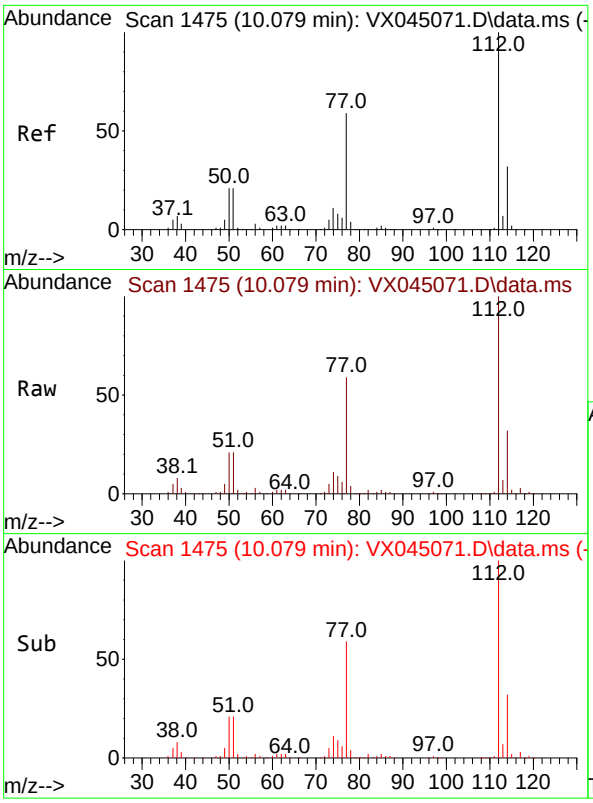




#64
Tetrachloroethene
Concen: 51.021 ug/l
RT: 9.269 min Scan# 1342
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:164 Resp: 52531

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 129.5 | 103.6 | 155.4 |
| 129 | 103.4 | 82.7 | 124.1 |
| 131 | 100.6 | 80.5 | 120.7 |

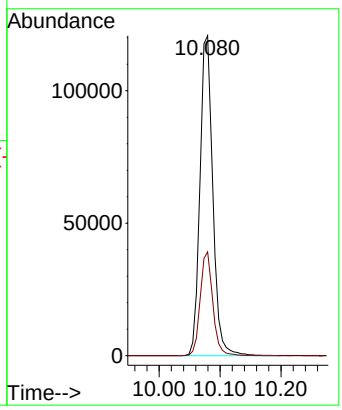





#65
Chlorobenzene
Concen: 50.853 ug/l
RT: 10.079 min Scan# 14
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:112 Resp: 17692

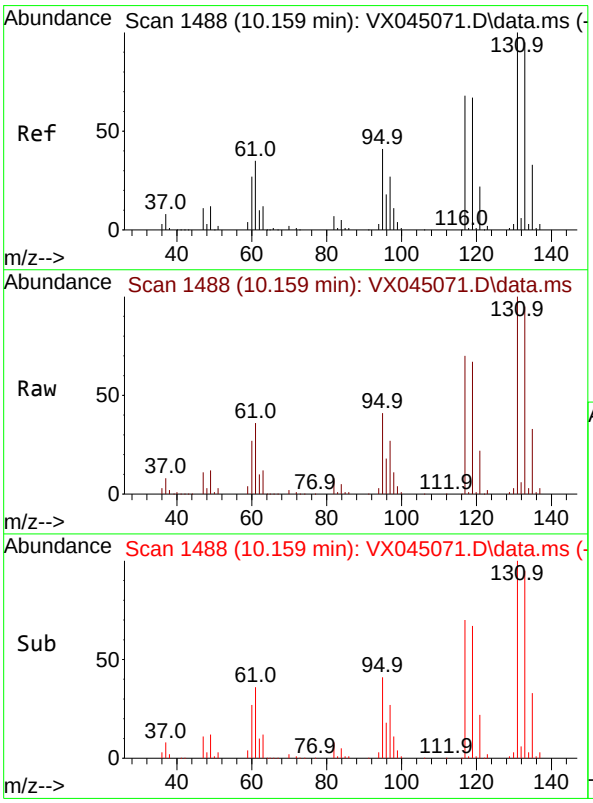
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 32.5 | 26.0 | 39.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

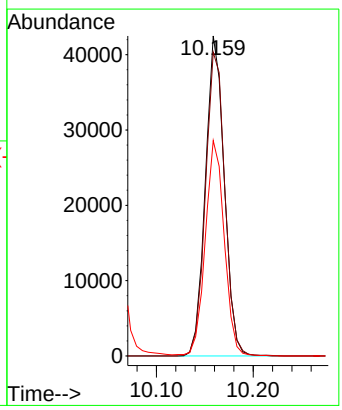
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

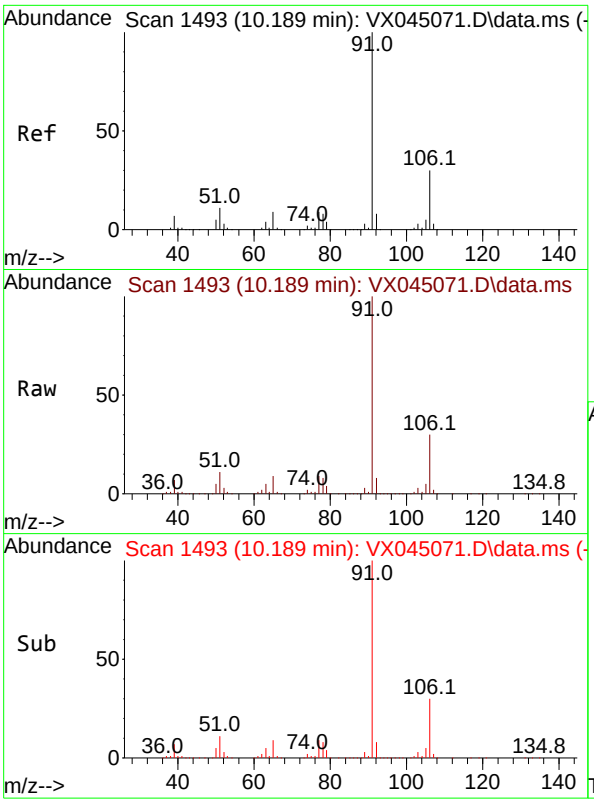



#66
1,1,1,2-Tetrachloroethane
Concen: 51.402 ug/l
RT: 10.159 min Scan# 1488
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:131 Resp: 57642

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 97.3 | 48.6 | 145.9 |
| 119 | 67.8 | 33.9 | 101.7 |

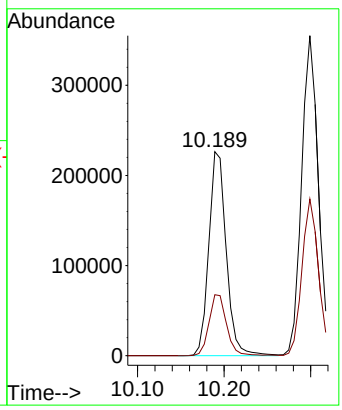





#67
Ethyl Benzene
Concen: 51.431 ug/l
RT: 10.189 min Scan# 14
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 91 Resp: 31642

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 29.9 | 23.9 | 35.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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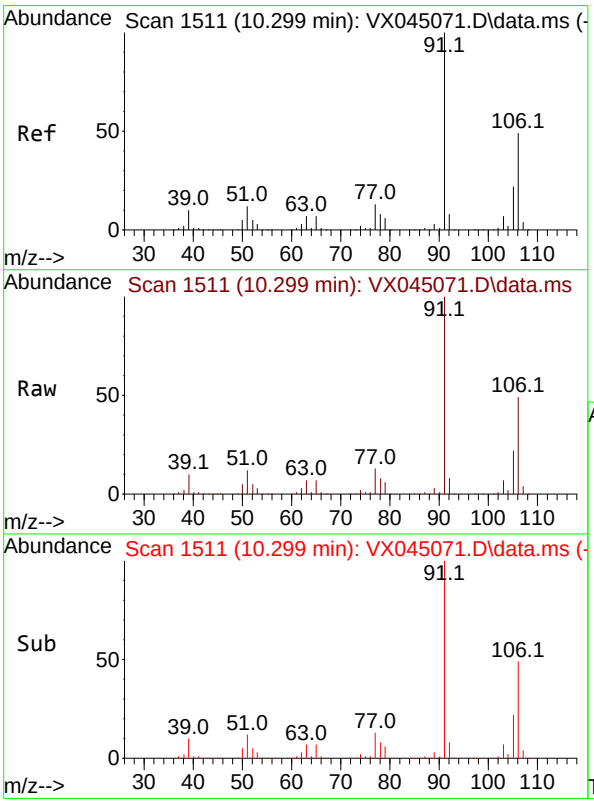
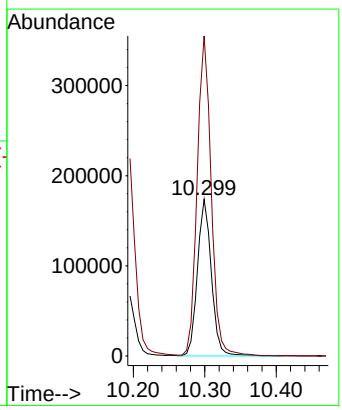
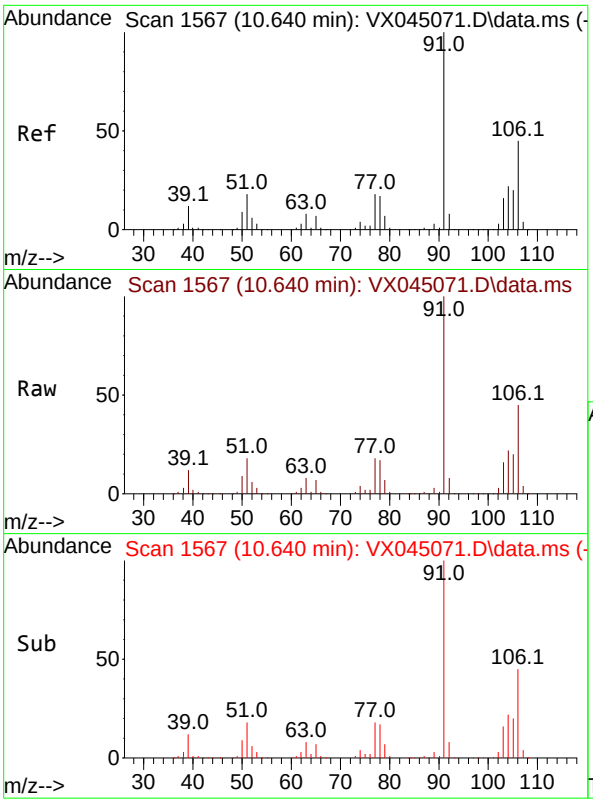



#68
m/p-Xylenes
Concen: 103.515 ug/l
RT: 10.299 min Scan# 1511
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:106 Resp: 234554

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 206.7 | 165.4 | 248.0 |

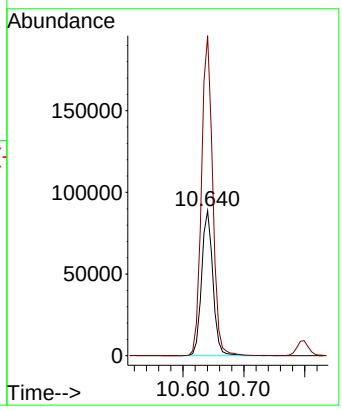





#69
o-Xylene
Concen: 50.341 ug/l
RT: 10.640 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:106 Resp: 11444

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 219.7 | 109.9 | 329.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

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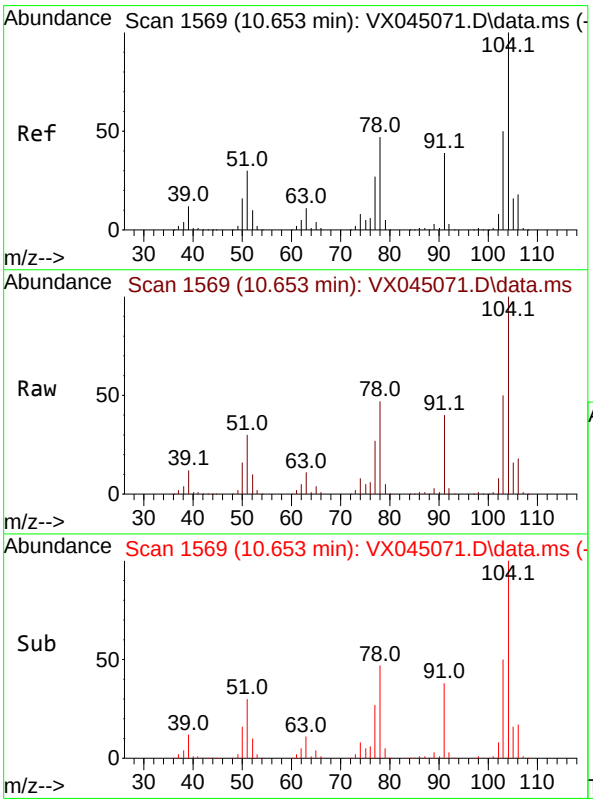
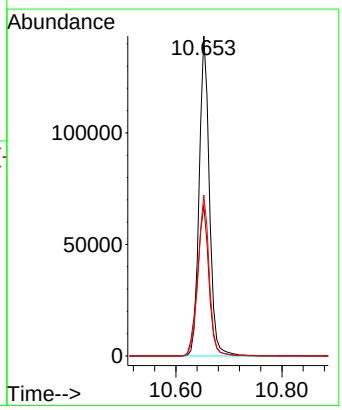
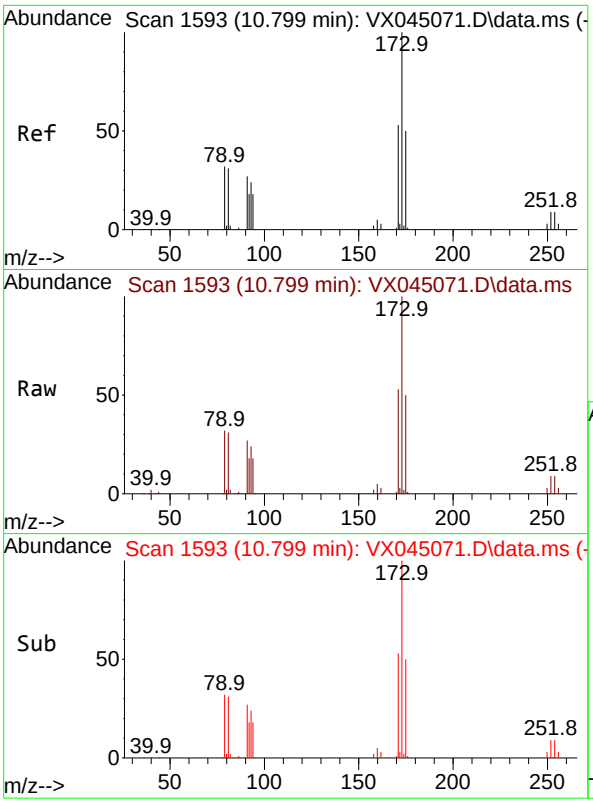



#70
Styrene
Concen: 52.387 ug/l
RT: 10.653 min Scan# 1569
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:104 Resp: 191406

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 52.8 | 42.2 | 63.4 |
| 103 | 54.8 | 43.8 | 65.8 |

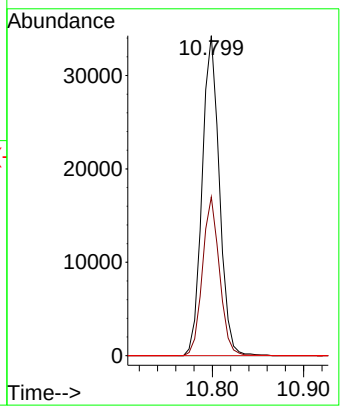





#71
Bromoform
Concen: 53.645 ug/l
RT: 10.799 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:173 Resp: 4473

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 49.1 | 24.6 | 73.6 |
| 254 | 0.0 | 0.0 | 0.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

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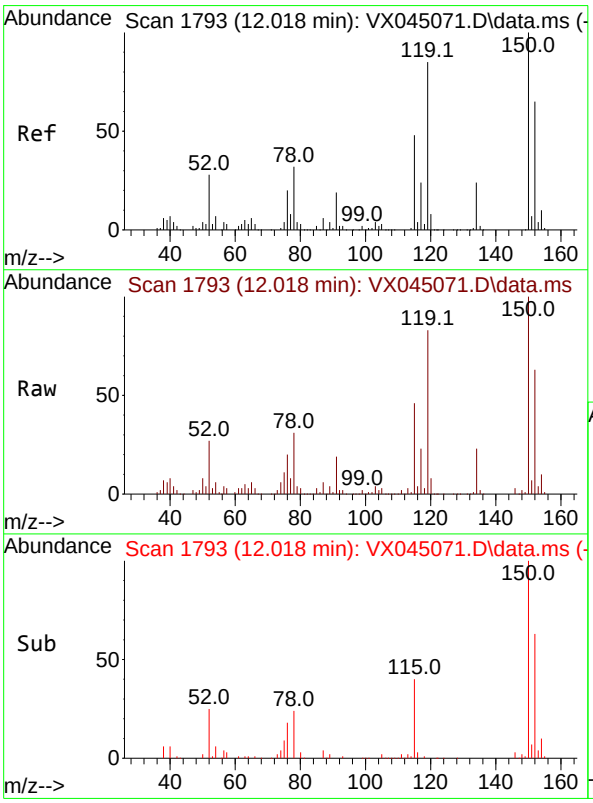
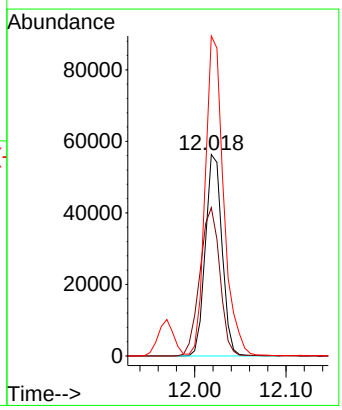
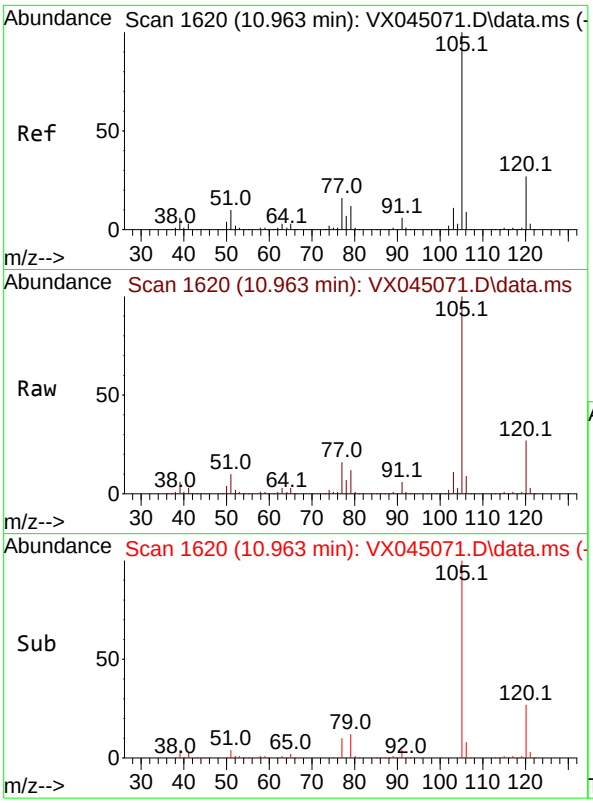



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.018 min Scan# 1793
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:152 Resp: 71264

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 88.4 | 44.2 | 132.6 |
| 150 | 174.5 | 0.0 | 349.0 |

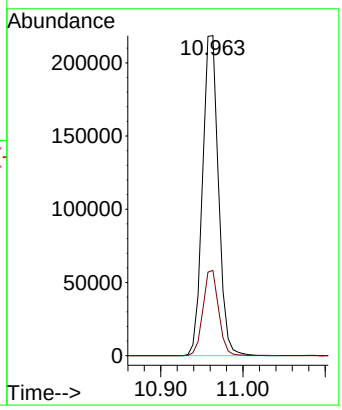





#73
Isopropylbenzene
Concen: 51.167 ug/l
RT: 10.963 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:105 Resp: 29469

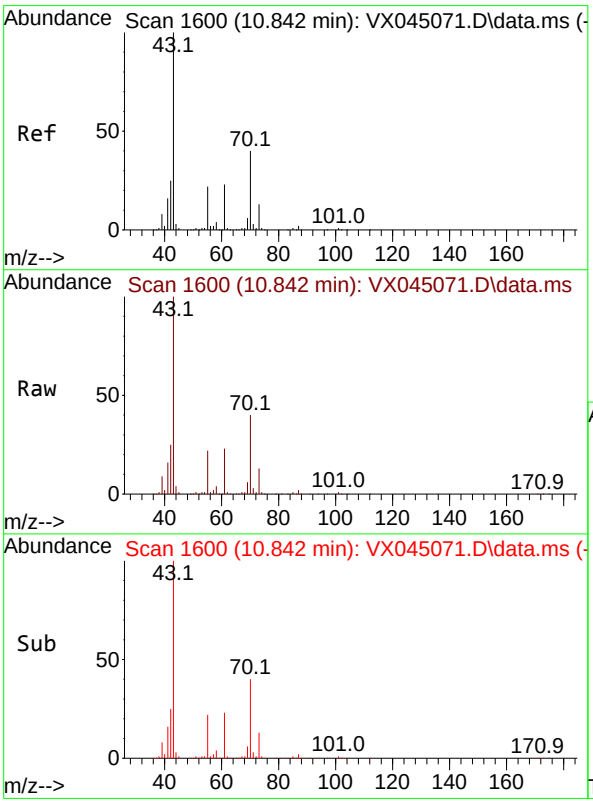
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.3 | 13.2 | 39.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

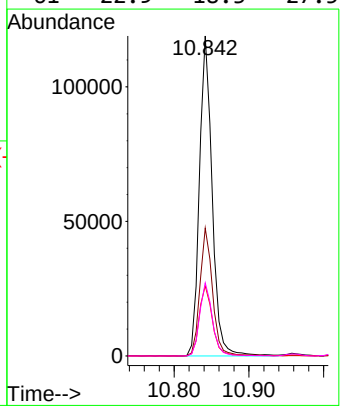
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

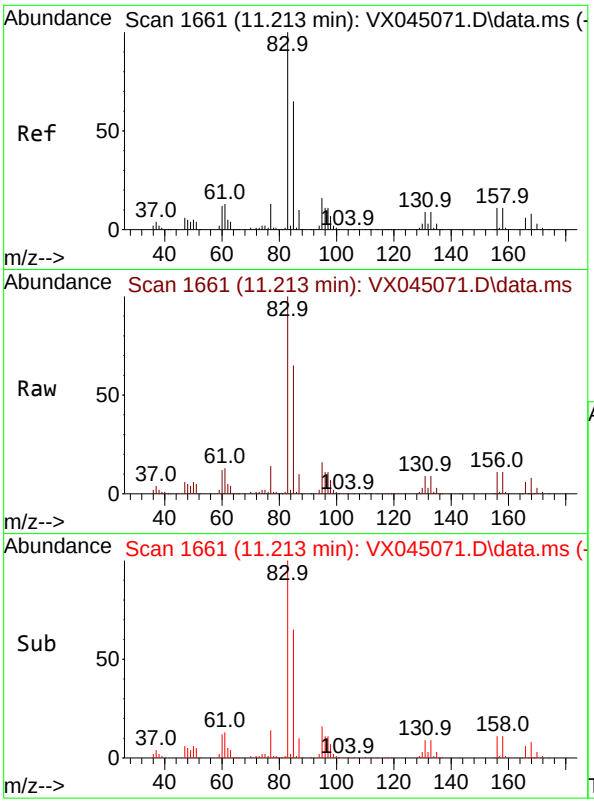



#74
N-amyl acetate
Concen: 53.881 ug/l
RT: 10.842 min Scan# 1600
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 43 Resp: 140869

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 39.7 | 31.8 | 47.6 |
| 55 | 22.9 | 18.3 | 27.5 |
| 61 | 22.9 | 18.3 | 27.5 |

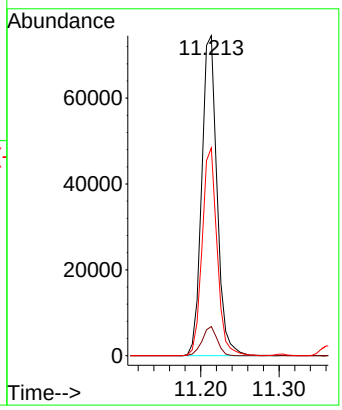





#75
1,1,2,2-Tetrachloroethane
Concen: 50.945 ug/l
RT: 11.213 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 83 Resp: 10108

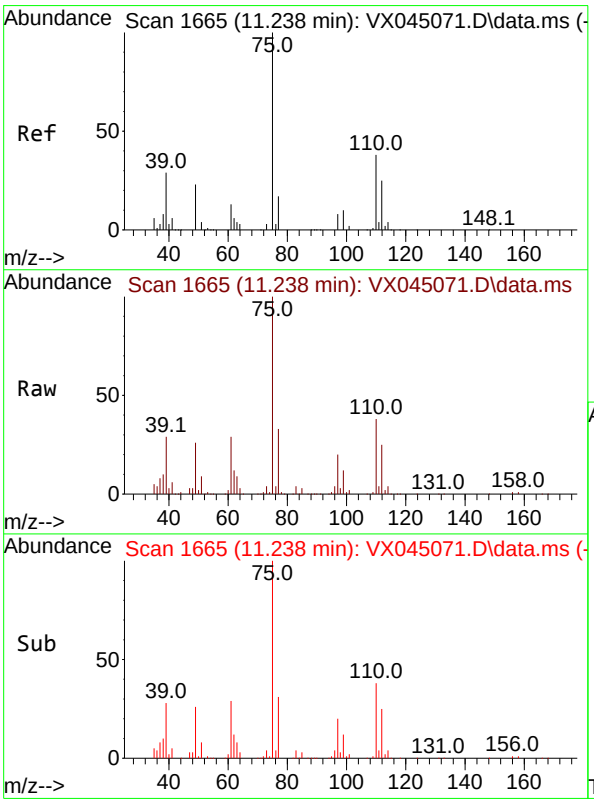
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 8.9 | 4.5 | 13.4 |
| 85 | 63.4 | 31.7 | 95.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

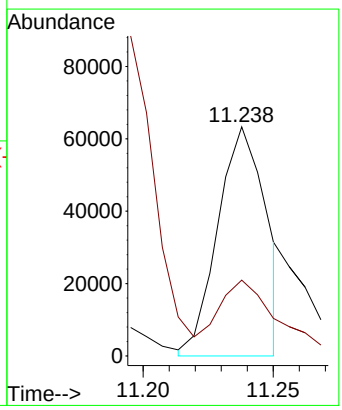
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

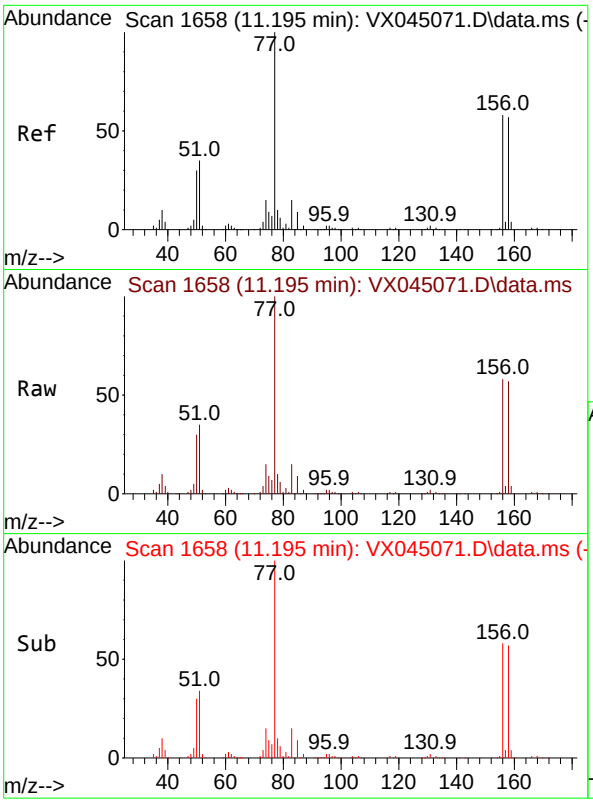



#76
1,2,3-Trichloropropane
Concen: 51.421 ug/l m
RT: 11.238 min Scan# 1665
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 75 Resp: 81743

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 41.4 | 20.7 | 62.1 |

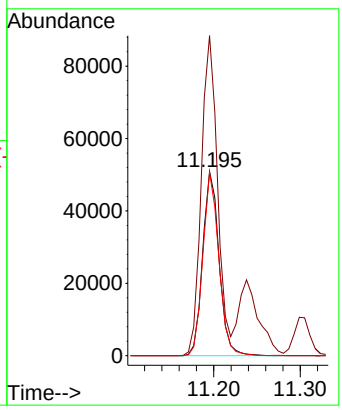





#77
Bromobenzene
Concen: 51.173 ug/l
RT: 11.195 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:156 Resp: 6690

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 171.6 | 85.8 | 257.4 |
| 158 | 96.8 | 48.4 | 145.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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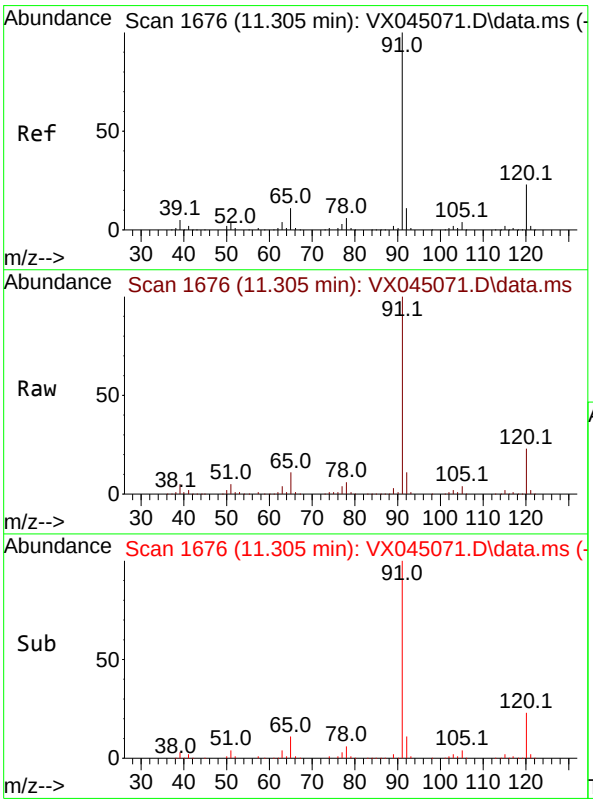
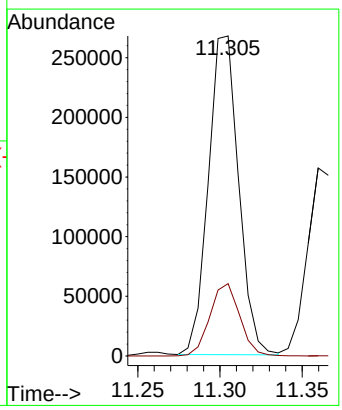
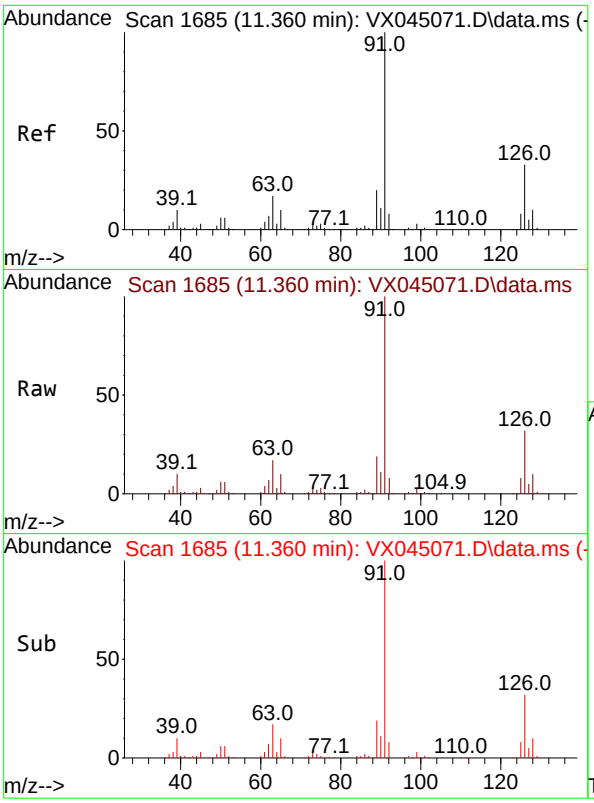



#78
n-propylbenzene
Concen: 51.546 ug/l
RT: 11.305 min Scan# 1676
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 91 Resp: 342399

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.4 | 11.2 | 33.6 |

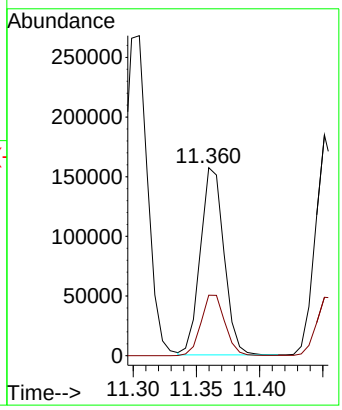





#79
2-Chlorotoluene
Concen: 50.154 ug/l
RT: 11.360 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 91 Resp: 20448

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 32.9 | 16.4 | 49.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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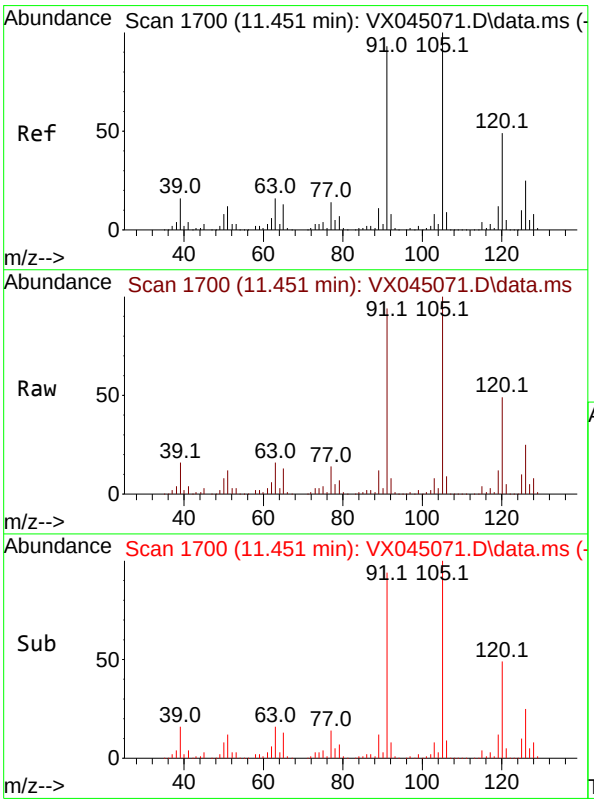
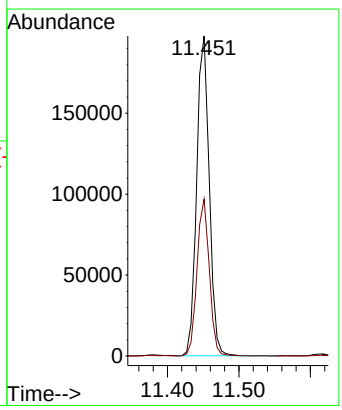
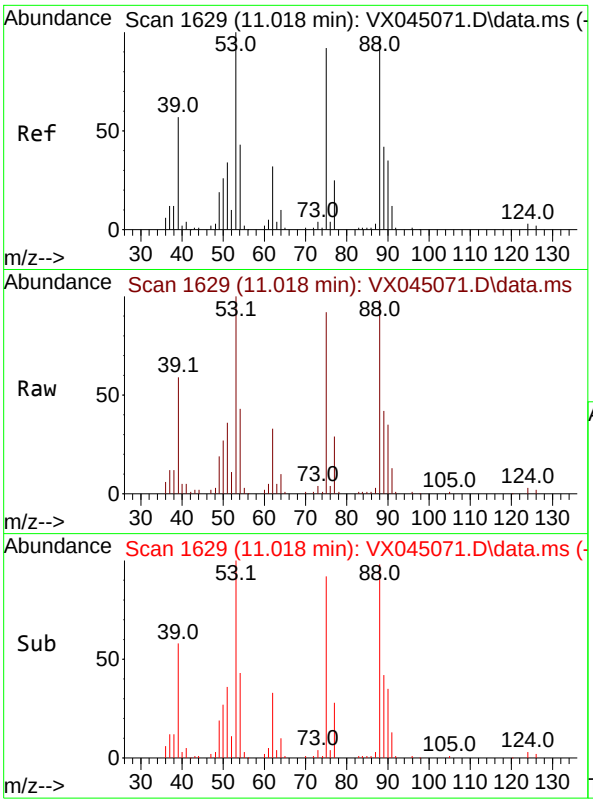



#80
1,3,5-Trimethylbenzene
Concen: 51.613 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:105 Resp: 241129

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 48.1 | 24.1 | 72.2 |






#81
trans-1,4-Dichloro-2-butene
Concen: 41.172 ug/l
RT: 11.018 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 75 Resp: 2413

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 110.6 | 88.5 | 132.7 |
| 89 | 45.3 | 36.2 | 54.4 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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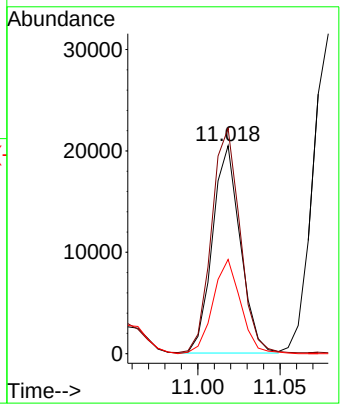
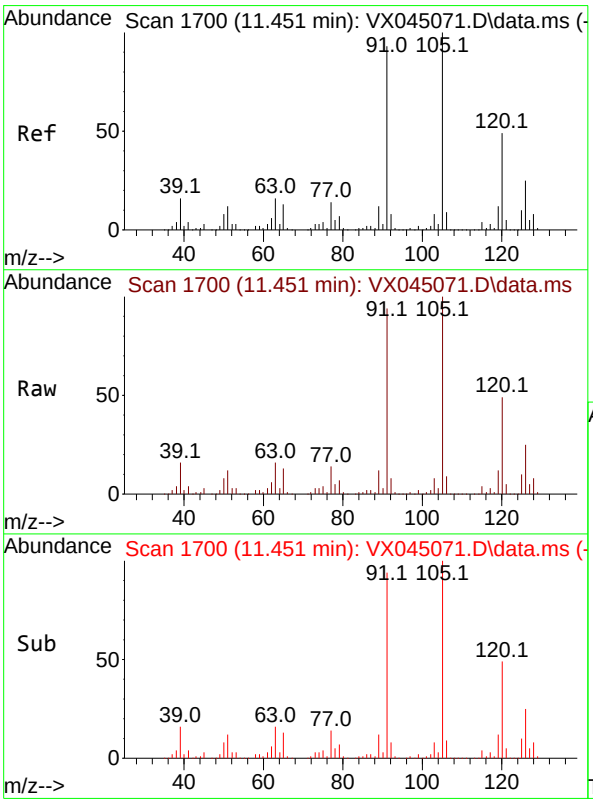
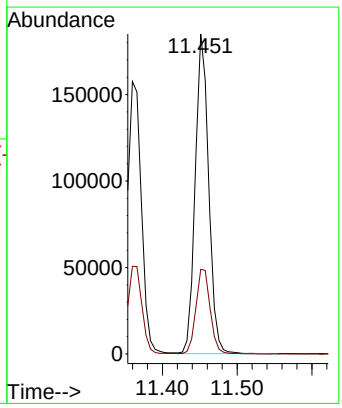


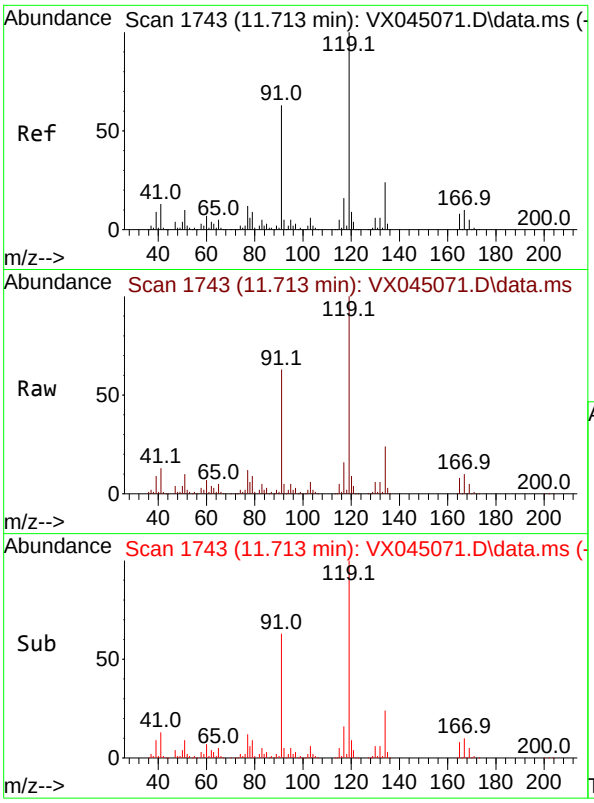




#82
4-Chlorotoluene
Concen: 51.072 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 91 Resp: 230493

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 28.3 | 14.1 | 42.4 |

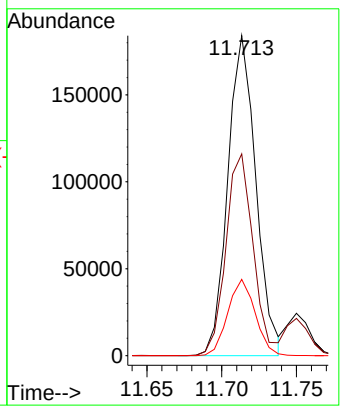





#83
tert-Butylbenzene
Concen: 50.895 ug/l
RT: 11.713 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:119 Resp: 24051

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 61.4 | 30.7 | 92.1 |
| 134 | 23.3 | 11.7 | 35.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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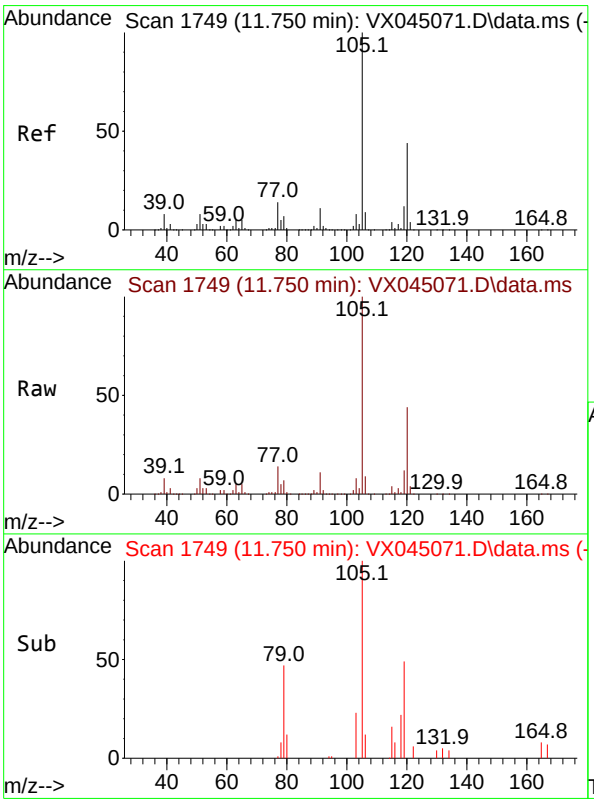
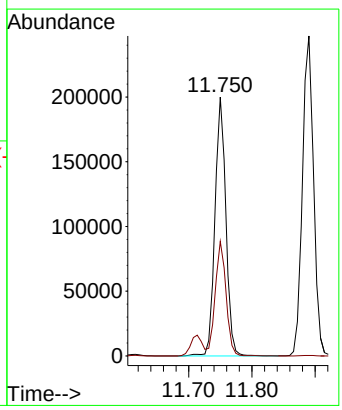
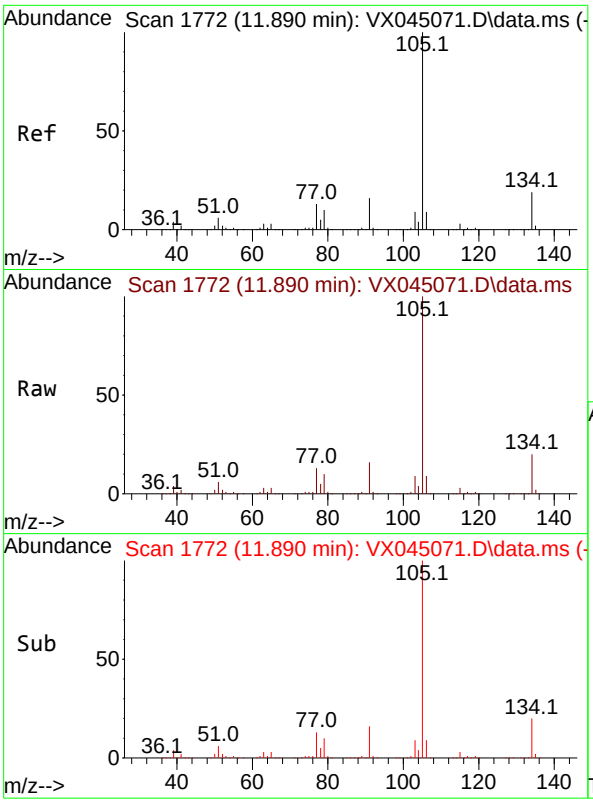



#84
1,2,4-Trimethylbenzene
Concen: 52.326 ug/l
RT: 11.750 min Scan# 1749
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:105 Resp: 240719

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 44.1 | 22.1 | 66.1 |

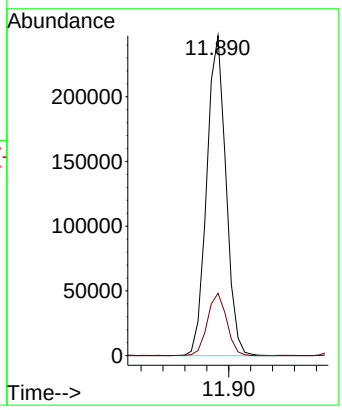





#85
sec-Butylbenzene
Concen: 51.353 ug/l
RT: 11.890 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:105 Resp: 30039

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.6 | 9.8 | 29.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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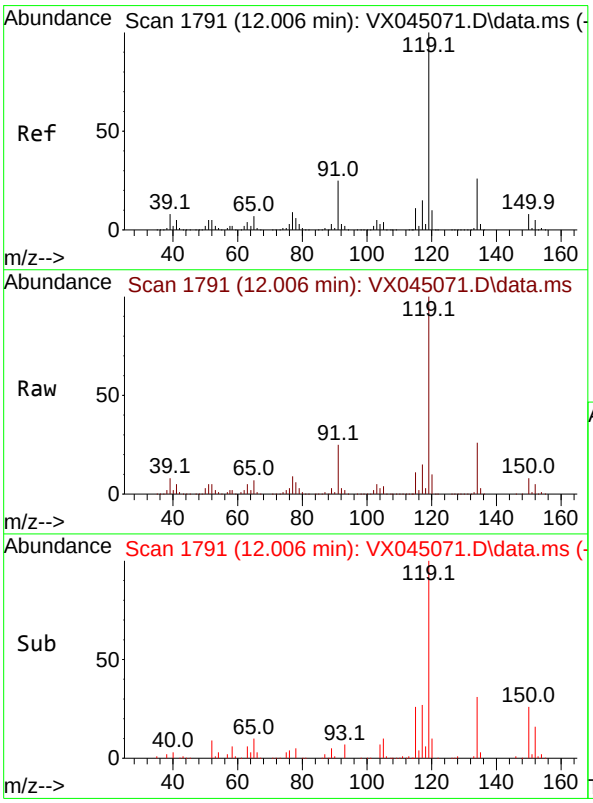
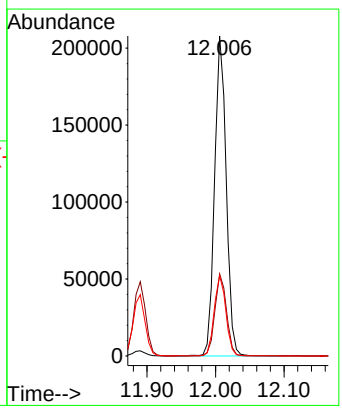
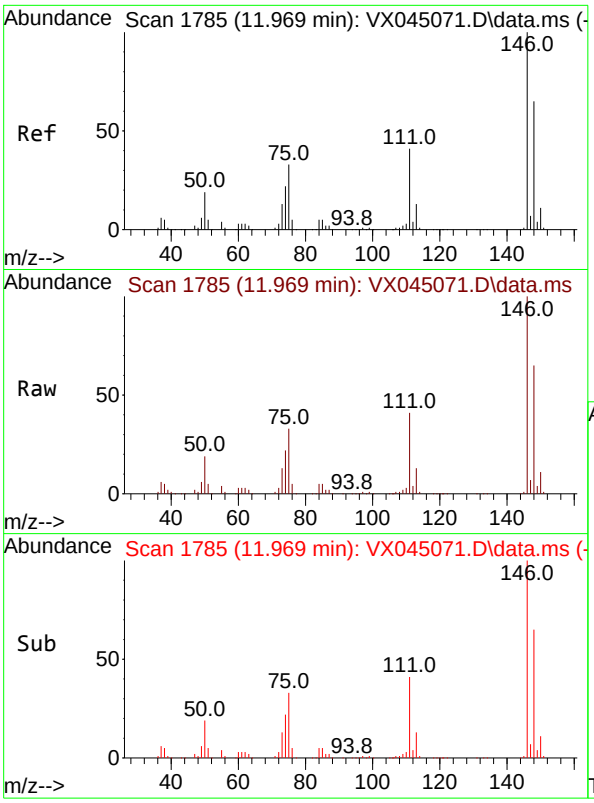



#86
p-Isopropyltoluene
Concen: 51.964 ug/l
RT: 12.006 min Scan# 1791
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:119 Resp: 244031

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.7 | 12.9 | 38.6 |
| 91 | 25.3 | 12.7 | 38.0 |

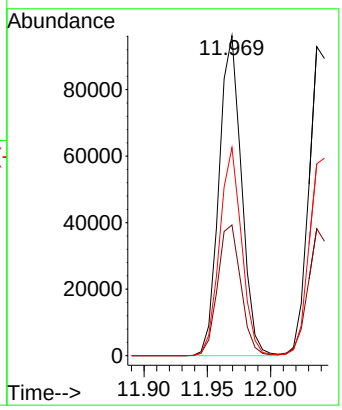





#87
1,3-Dichlorobenzene
Concen: 49.747 ug/l
RT: 11.969 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:146 Resp: 11887

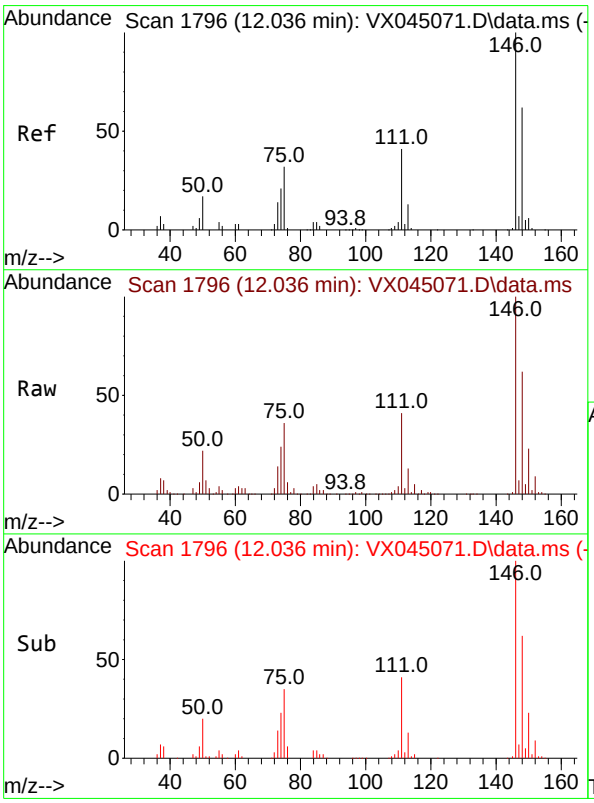
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.3 | 21.1 | 63.4 |
| 148 | 63.8 | 31.9 | 95.7 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

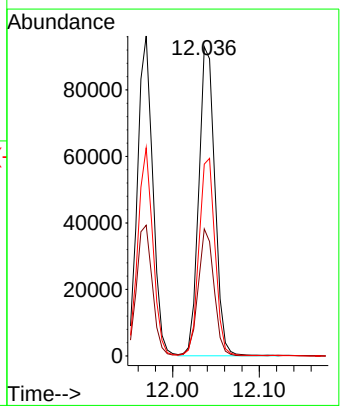
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

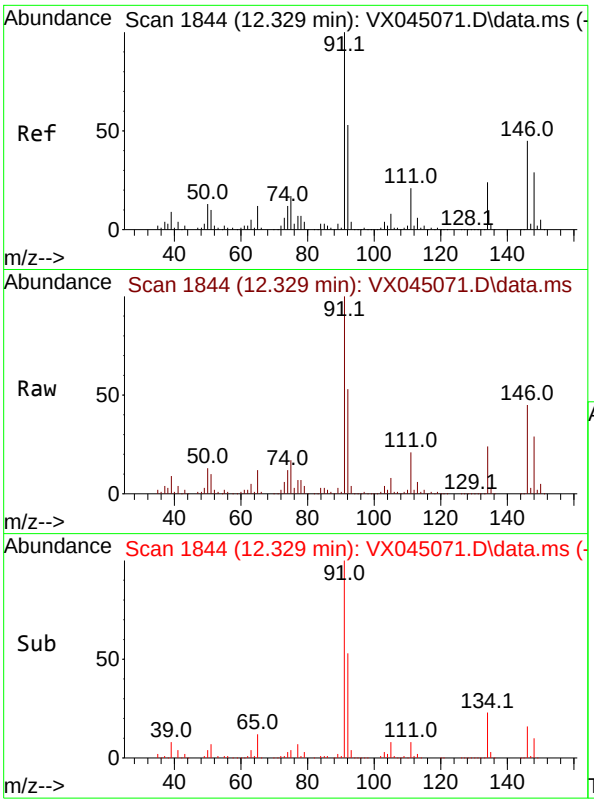



#88
1,4-Dichlorobenzene
Concen: 49.694 ug/l
RT: 12.036 min Scan# 1796
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:146 Resp: 120217

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 40.3 | 20.2 | 60.5 |
| 148 | 63.9 | 31.9 | 95.9 |

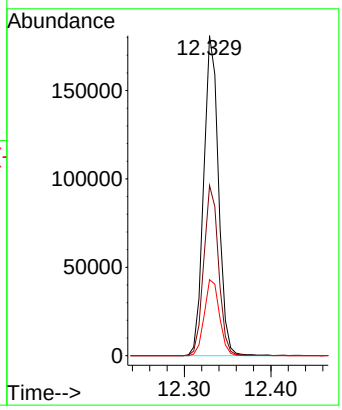





#89
n-Butylbenzene
Concen: 52.006 ug/l
RT: 12.329 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 91 Resp: 21468

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 53.3 | 26.7 | 80.0 |
| 134 | 24.4 | 12.2 | 36.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

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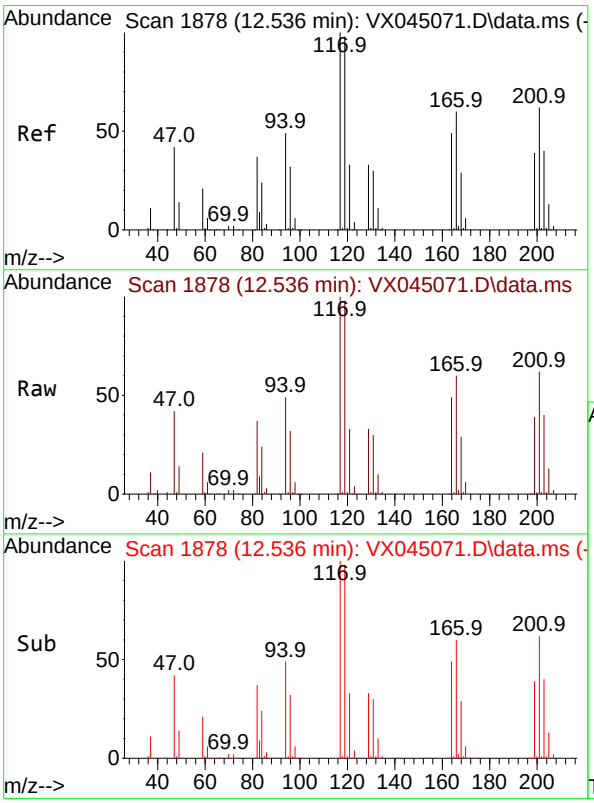
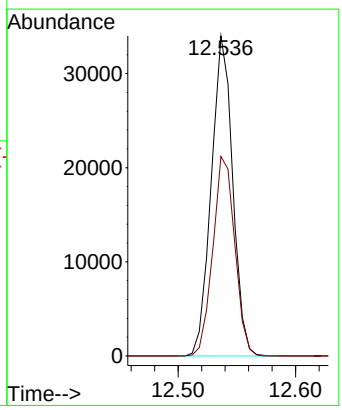
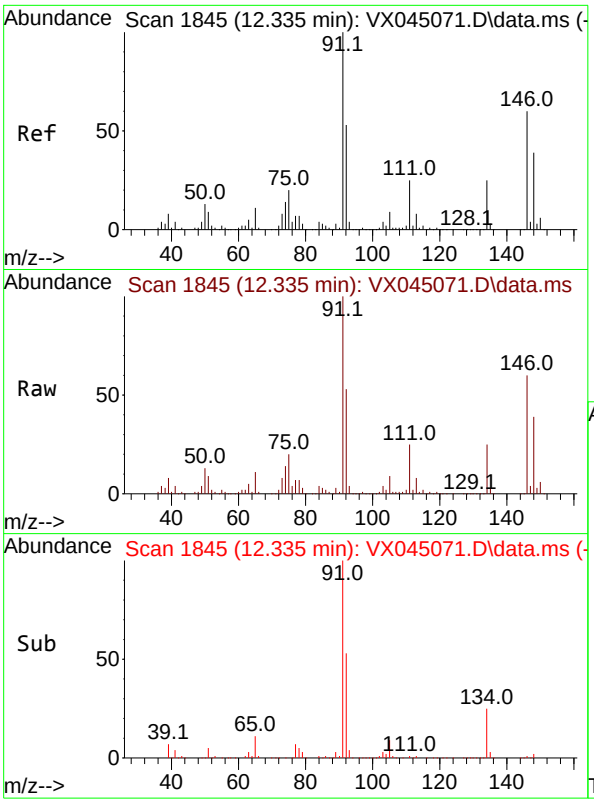



#90
Hexachloroethane
Concen: 49.188 ug/l
RT: 12.536 min Scan# 1878
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:117 Resp: 43086

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 63.9 | 31.9 | 95.9 |

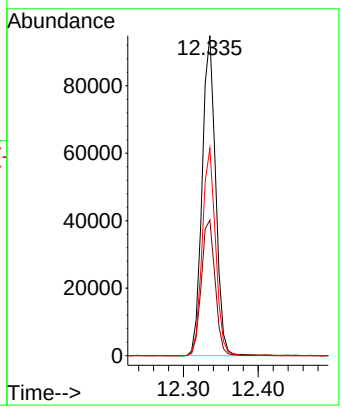





#91
1,2-Dichlorobenzene
Concen: 50.557 ug/l
RT: 12.335 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:146 Resp: 11889

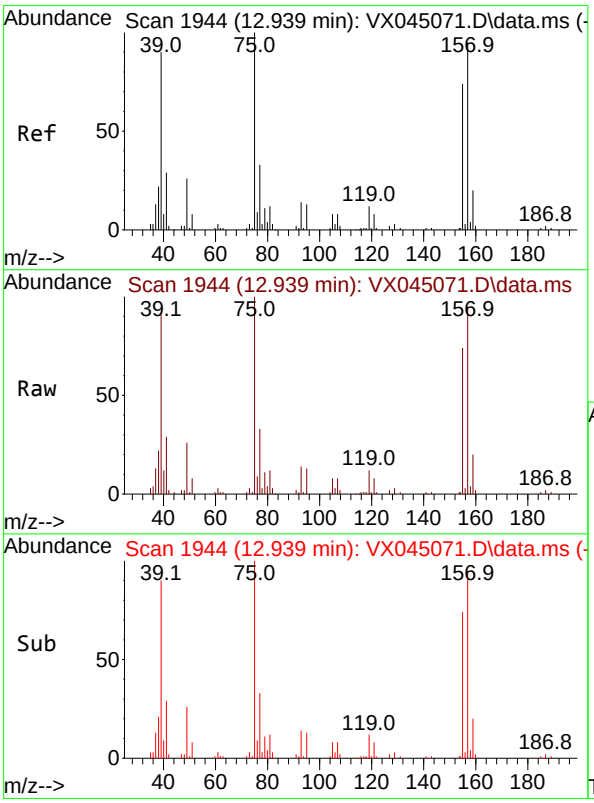
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.3 | 21.6 | 65.0 |
| 148 | 63.9 | 31.9 | 95.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

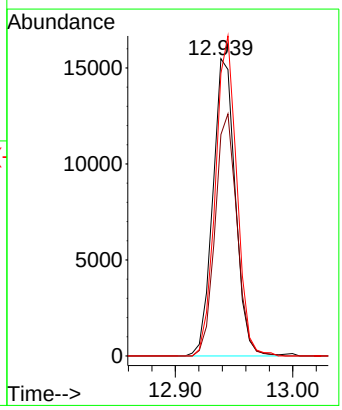
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

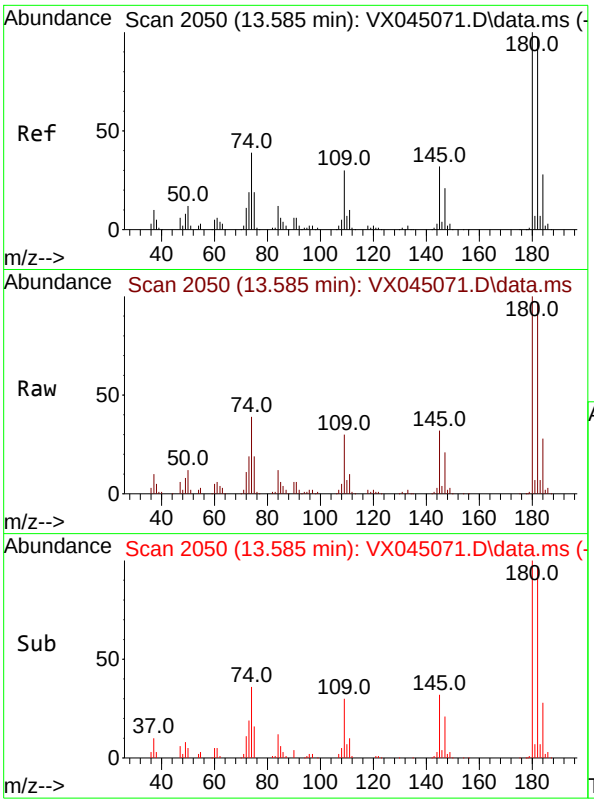



#92
1,2-Dibromo-3-Chloropropane
Concen: 56.123 ug/l
RT: 12.939 min Scan# 1944
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion: 75 Resp: 20610

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 79.1 | 39.6 | 118.7 |
| 157 | 102.3 | 51.1 | 153.4 |

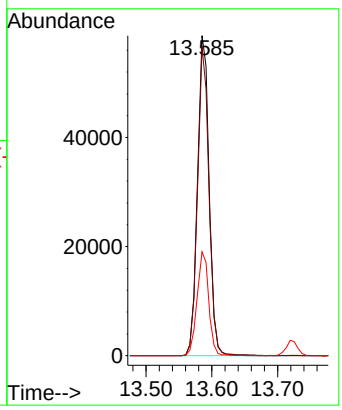





#93
1,2,4-Trichlorobenzene
Concen: 50.571 ug/l
RT: 13.585 min Scan# 2
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:180 Resp: 7189

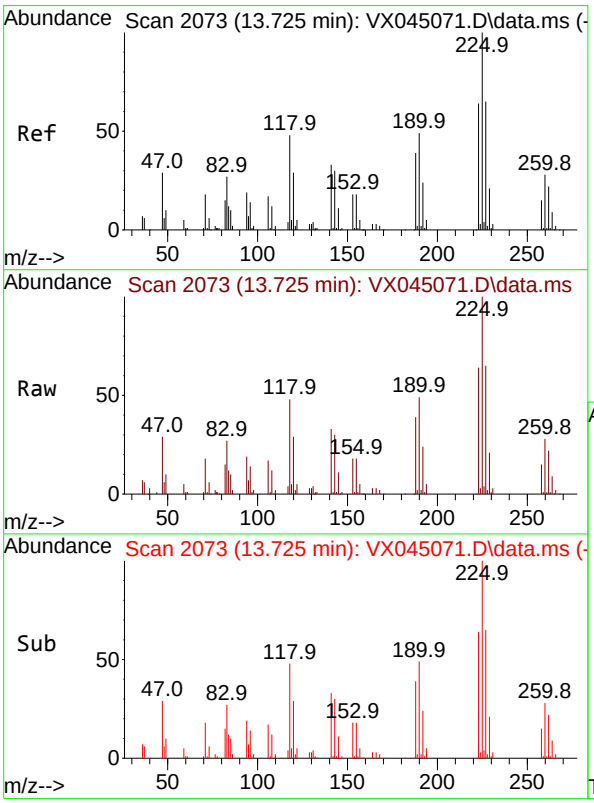
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 94.6 | 47.3 | 141.9 |
| 145 | 32.6 | 16.3 | 48.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

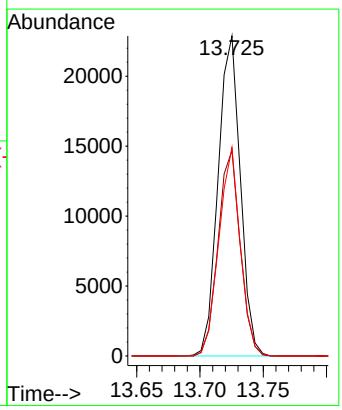
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

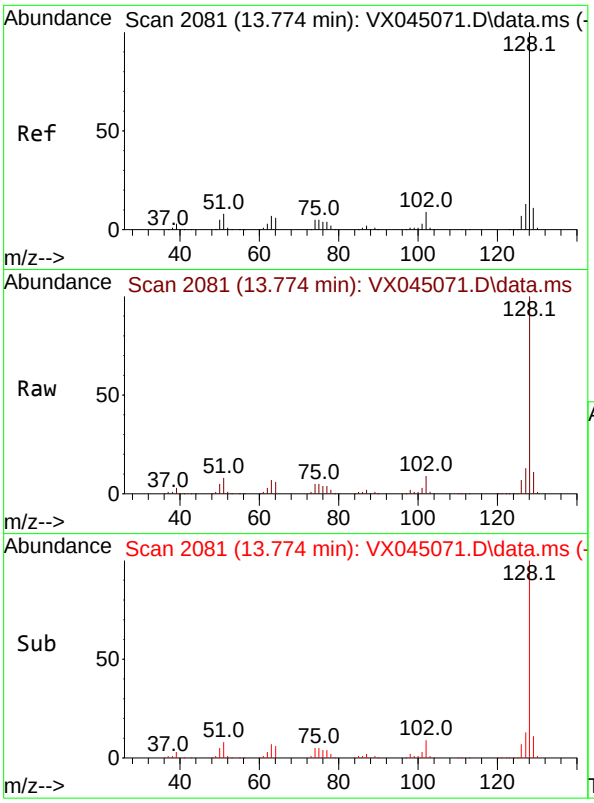



#94
Hexachlorobutadiene
Concen: 49.245 ug/l
RT: 13.725 min Scan# 2073
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:225 Resp: 27916

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 63.8 | 31.9 | 95.7 |
| 227 | 62.7 | 31.4 | 94.0 |

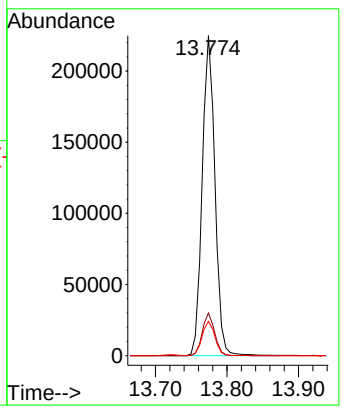





#95
Naphthalene
Concen: 53.700 ug/l
RT: 13.774 min Scan# 2
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:128 Resp: 27808

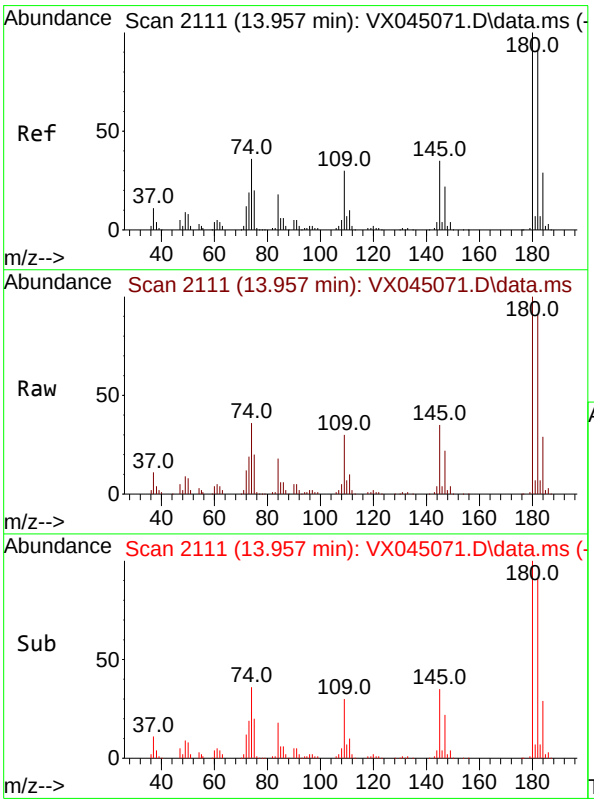
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.9 | 10.3 | 15.5 |
| 129 | 10.9 | 8.7 | 13.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

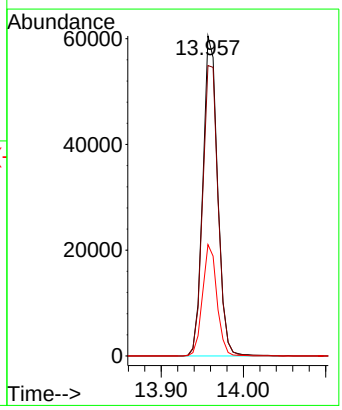
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025




#96
1,2,3-Trichlorobenzene
Concen: 52.406 ug/l
RT: 13.957 min Scan# 2111
Delta R.T. 0.000 min
Lab File: VX045071.D
Acq: 28 Feb 2025 03:00

Tgt Ion:180 Resp: 75482

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.1 | 47.5 | 142.6 |
| 145 | 33.9 | 17.0 | 50.9 |



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045072.D
Acq On : 28 Feb 2025 03:23
Operator : JC/MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 28 05:35:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) Pentafluorobenzene | 5.550 | 168 | 101178 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 6.757 | 114 | 181031 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 10.055 | 117 | 151175 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.018 | 152 | 69086 | 50.000 | ug/l | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 5.952 | 65 | 158452 | 106.011 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 212.020%# | | | |
| 35) Dibromofluoromethane | 5.385 | 113 | 123185 | 104.110 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 208.220%# | | | |
| 50) Toluene-d8 | 8.647 | 98 | 441188 | 99.595 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 199.200%# | | | |
| 62) 4-Bromofluorobenzene | 11.079 | 95 | 148476 | 100.365 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 200.720%# | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.166 | 85 | 126718 | 90.869 | ug/l | 95 |
| 3) Chloromethane | 1.306 | 50 | 145825 | 85.936 | ug/l | 98 |
| 4) Vinyl Chloride | 1.373 | 62 | 154734 | 93.360 | ug/l | 96 |
| 5) Bromomethane | 1.593 | 94 | 57503 | 110.980 | ug/l | 97 |
| 6) Chloroethane | 1.660 | 64 | 60155 | 95.351 | ug/l | 97 |
| 7) Trichlorofluoromethane | 1.861 | 101 | 198701 | 93.594 | ug/l | 99 |
| 8) Diethyl Ether | 2.135 | 74 | 78263 | 101.441 | ug/l | 100 |
| 9) 1,1,2-Trichlorotrifluo... | 2.312 | 101 | 120518 | 95.064 | ug/l | 98 |
| 10) Methyl Iodide | 2.440 | 142 | 153466 | 94.425 | ug/l | 99 |
| 11) Tert butyl alcohol | 3.001 | 59 | 135016 | 493.141 | ug/l | 98 |
| 12) 1,1-Dichloroethene | 2.306 | 96 | 125436 | 96.366 | ug/l | 98 |
| 13) Acrolein | 2.239 | 56 | 180411 | 608.485 | ug/l | 99 |
| 14) Allyl chloride | 2.654 | 41 | 220783 | 94.344 | ug/l | 98 |
| 15) Acrylonitrile | 3.068 | 53 | 391946 | 526.749 | ug/l | 100 |
| 16) Acetone | 2.392 | 43 | 348698 | 566.991 | ug/l | 99 |
| 17) Carbon Disulfide | 2.495 | 76 | 345572 | 97.574 | ug/l | 98 |
| 18) Methyl Acetate | 2.709 | 43 | 175784 | 94.899 | ug/l | 98 |
| 19) Methyl tert-butyl Ether | 3.117 | 73 | 431413 | 103.661 | ug/l | 100 |
| 20) Methylene Chloride | 2.782 | 84 | 140388 | 96.381 | ug/l | 98 |
| 21) trans-1,2-Dichloroethene | 3.080 | 96 | 128232 | 100.164 | ug/l | 98 |
| 22) Diisopropyl ether | 3.763 | 45 | 467534 | 104.489 | ug/l | 98 |
| 23) Vinyl Acetate | 3.721 | 43 | 2035880 | 554.219 | ug/l | 99 |
| 24) 1,1-Dichloroethane | 3.605 | 63 | 257023 | 102.805 | ug/l | 100 |
| 25) 2-Butanone | 4.562 | 43 | 559182 | 563.952 | ug/l | 99 |
| 26) 2,2-Dichloropropane | 4.470 | 77 | 124805 | 67.148 | ug/l | 100 |
| 27) cis-1,2-Dichloroethene | 4.483 | 96 | 155193 | 100.568 | ug/l | 99 |
| 28) Bromochloromethane | 4.897 | 49 | 113848 | 94.428 | ug/l | 98 |
| 29) Tetrahydrofuran | 5.007 | 42 | 365565 | 556.465 | ug/l | 100 |
| 30) Chloroform | 5.092 | 83 | 248978 | 101.814 | ug/l | 97 |
| 31) Cyclohexane | 5.464 | 56 | 231082 | 100.711 | ug/l | 97 |
| 32) 1,1,1-Trichloroethane | 5.379 | 97 | 211302 | 102.638 | ug/l | 99 |
| 36) 1,1-Dichloropropene | 5.690 | 75 | 172295 | 101.258 | ug/l | 99 |
| 37) Ethyl Acetate | 4.720 | 43 | 220327 | 113.796 | ug/l | 99 |
| 38) Carbon Tetrachloride | 5.671 | 117 | 177219 | 105.940 | ug/l | 97 |
| 39) Methylcyclohexane | 7.372 | 83 | 219856 | 101.175 | ug/l | 99 |
| 40) Benzene | 6.031 | 78 | 541974 | 101.908 | ug/l | 100 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045072.D
Acq On : 28 Feb 2025 03:23
Operator : JC/MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 28 05:35:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

| Compound | R.T. | QIon | Response | Conc Units | | Dev(Min) |
|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 4.922 | 41 | 120186 | 116.205 ug/l | | 98 |
| 42) 1,2-Dichloroethane | 6.086 | 62 | 189857 | 110.158 ug/l | | 99 |
| 43) Isopropyl Acetate | 6.342 | 43 | 338414 | 109.806 ug/l | | 99 |
| 44) Trichloroethene | 7.122 | 130 | 128124 | 105.402 ug/l | | 96 |
| 45) 1,2-Dichloropropane | 7.427 | 63 | 135997 | 102.898 ug/l | | 100 |
| 46) Dibromomethane | 7.580 | 93 | 97248 | 105.329 ug/l | | 99 |
| 47) Bromodichloromethane | 7.817 | 83 | 191016 | 106.947 ug/l | | 97 |
| 48) Methyl methacrylate | 7.695 | 41 | 165825 | 113.344 ug/l | | 99 |
| 49) 1,4-Dioxane | 7.665 | 88 | 66308 | 2132.314 ug/l | | 99 |
| 51) 4-Methyl-2-Pentanone | 8.573 | 43 | 1048140 | 555.050 ug/l | | 99 |
| 52) Toluene | 8.714 | 92 | 316349 | 100.178 ug/l | | 100 |
| 53) t-1,3-Dichloropropene | 8.976 | 75 | 177352 | 100.462 ug/l | | 97 |
| 54) cis-1,3-Dichloropropene | 8.366 | 75 | 200943 | 101.815 ug/l | | 98 |
| 55) 1,1,2-Trichloroethane | 9.146 | 97 | 123426 | 100.920 ug/l | | 99 |
| 56) Ethyl methacrylate | 9.116 | 69 | 208782 | 106.744 ug/l | | 100 |
| 57) 1,3-Dichloropropane | 9.305 | 76 | 216267 | 101.387 ug/l | | 100 |
| 58) 2-Chloroethyl Vinyl ether | 8.238 | 63 | 494551 | 514.987 ug/l | | 99 |
| 59) 2-Hexanone | 9.433 | 43 | 779492 | 572.233 ug/l | | 99 |
| 60) Dibromochloromethane | 9.518 | 129 | 139245 | 106.719 ug/l | | 99 |
| 61) 1,2-Dibromoethane | 9.610 | 107 | 128617 | 104.259 ug/l | | 99 |
| 64) Tetrachloroethene | 9.268 | 164 | 99386 | 103.491 ug/l | | 98 |
| 65) Chlorobenzene | 10.079 | 112 | 332473 | 102.456 ug/l | | 100 |
| 66) 1,1,1,2-Tetrachloroethane | 10.158 | 131 | 112451 | 107.511 ug/l | | 96 |
| 67) Ethyl Benzene | 10.189 | 91 | 596257 | 103.905 ug/l | | 100 |
| 68) m/p-Xylenes | 10.299 | 106 | 432214 | 204.507 ug/l | | 99 |
| 69) o-Xylene | 10.640 | 106 | 213835 | 100.849 ug/l | | 99 |
| 70) Styrene | 10.652 | 104 | 357649 | 104.948 ug/l | | 99 |
| 71) Bromoform | 10.799 | 173 | 90800 | 116.751 ug/l | # | 99 |
| 73) Isopropylbenzene | 10.963 | 105 | 553533 | 99.138 ug/l | | 99 |
| 74) N-amyl acetate | 10.841 | 43 | 287104 | 113.277 ug/l | | 100 |
| 75) 1,1,2,2-Tetrachloroethane | 11.213 | 83 | 192217 | 99.923 ug/l | | 98 |
| 76) 1,2,3-Trichloropropane | 11.238 | 75 | 156259m | 101.395 ug/l | | |
| 77) Bromobenzene | 11.195 | 156 | 125700 | 99.175 ug/l | | 97 |
| 78) n-propylbenzene | 11.305 | 91 | 648835 | 100.758 ug/l | | 99 |
| 79) 2-Chlorotoluene | 11.359 | 91 | 382703 | 96.825 ug/l | | 100 |
| 80) 1,3,5-Trimethylbenzene | 11.451 | 105 | 445466 | 98.356 ug/l | | 99 |
| 81) trans-1,4-Dichloro-2-b... | 11.018 | 75 | 51975 | 91.460 ug/l | | 99 |
| 82) 4-Chlorotoluene | 11.451 | 91 | 433881 | 99.168 ug/l | | 100 |
| 83) tert-Butylbenzene | 11.713 | 119 | 454859 | 99.288 ug/l | | 99 |
| 84) 1,2,4-Trimethylbenzene | 11.750 | 105 | 450108 | 100.926 ug/l | | 99 |
| 85) sec-Butylbenzene | 11.890 | 105 | 570006 | 100.517 ug/l | | 100 |
| 86) p-Isopropyltoluene | 12.006 | 119 | 465512 | 102.252 ug/l | | 100 |
| 87) 1,3-Dichlorobenzene | 11.969 | 146 | 231440 | 99.903 ug/l | | 100 |
| 88) 1,4-Dichlorobenzene | 12.042 | 146 | 230663 | 98.355 ug/l | | 99 |
| 89) n-Butylbenzene | 12.329 | 91 | 428209 | 107.000 ug/l | | 99 |
| 90) Hexachloroethane | 12.536 | 117 | 87448 | 102.980 ug/l | | 99 |
| 91) 1,2-Dichlorobenzene | 12.335 | 146 | 233125 | 102.254 ug/l | | 99 |
| 92) 1,2-Dibromo-3-Chloropr... | 12.938 | 75 | 41402 | 116.296 ug/l | | 99 |
| 93) 1,2,4-Trichlorobenzene | 13.585 | 180 | 148368 | 107.648 ug/l | | 99 |
| 94) Hexachlorobutadiene | 13.725 | 225 | 56065 | 102.019 ug/l | | 99 |
| 95) Naphthalene | 13.774 | 128 | 565250 | 112.593 ug/l | | 100 |
| 96) 1,2,3-Trichlorobenzene | 13.963 | 180 | 152970 | 109.554 ug/l | | 100 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045072.D
Acq On : 28 Feb 2025 03:23
Operator : JC/MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 21 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

Quant Time: Feb 28 05:35:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

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

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

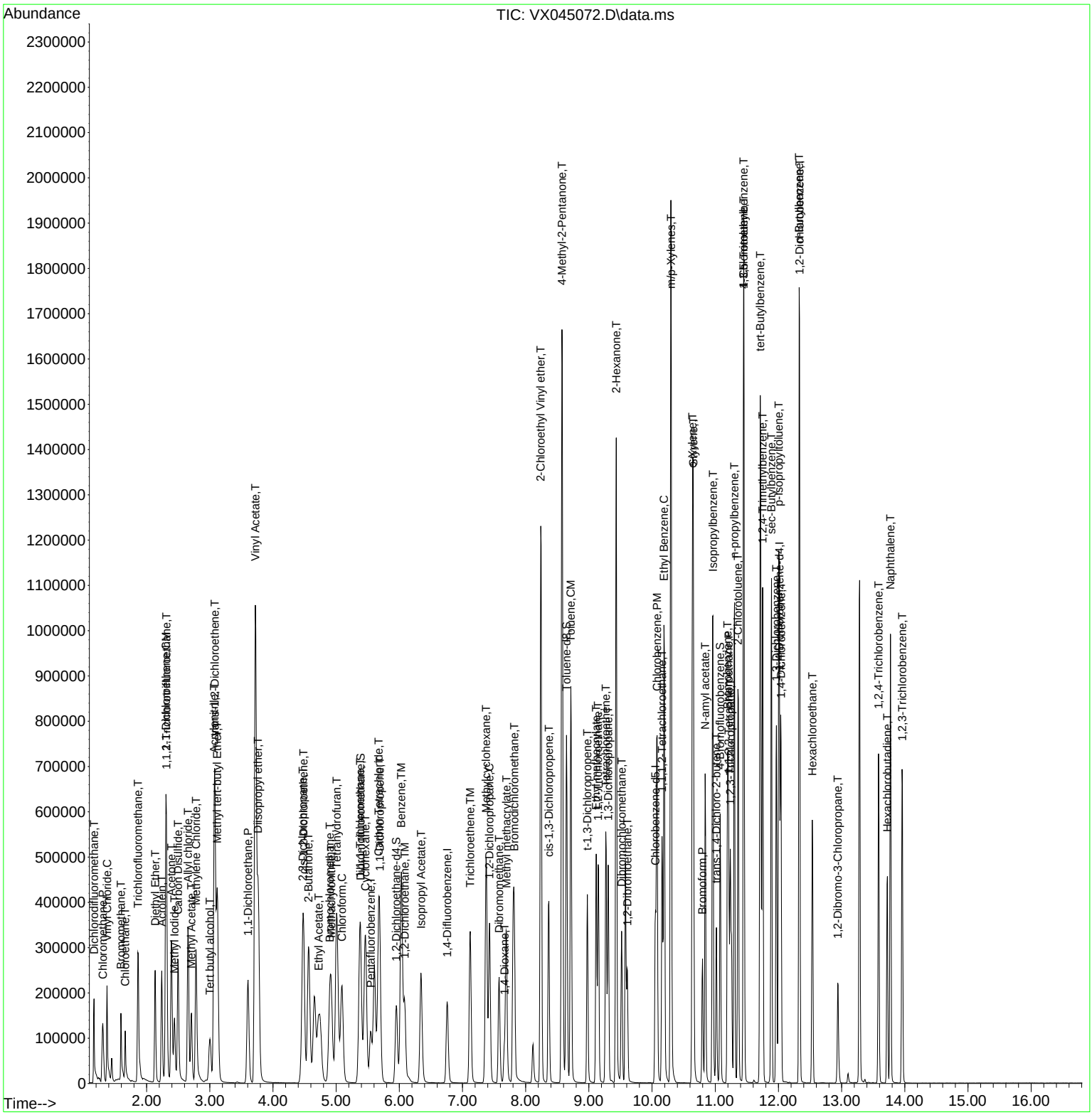
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045072.D
Acq On : 28 Feb 2025 03:23
Operator : JC/MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 21 Sample Multiplier: 1

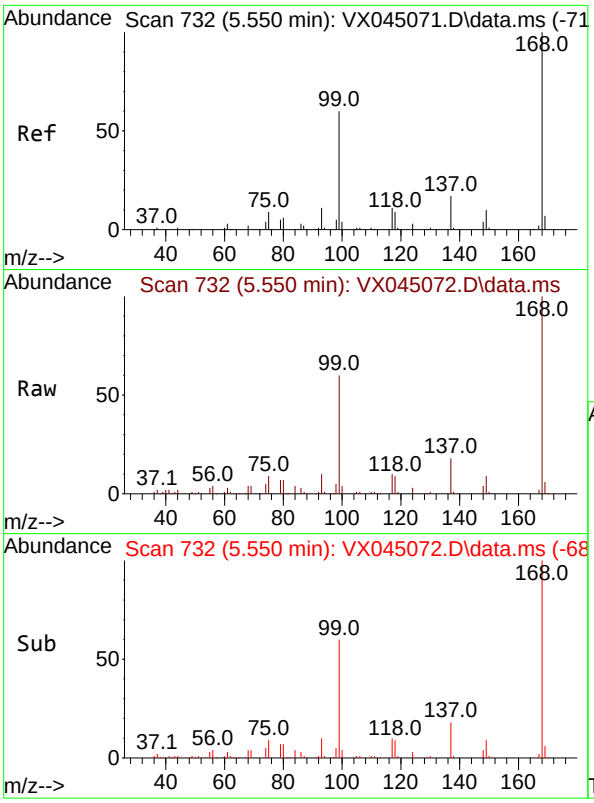
Quant Time: Feb 28 05:35:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

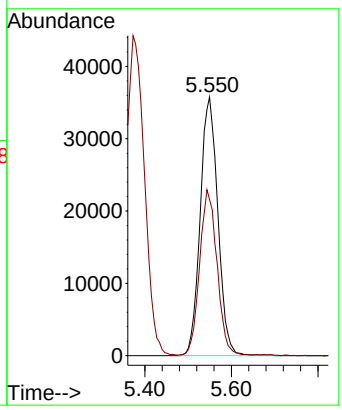





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.550 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion:168 Resp: 10117

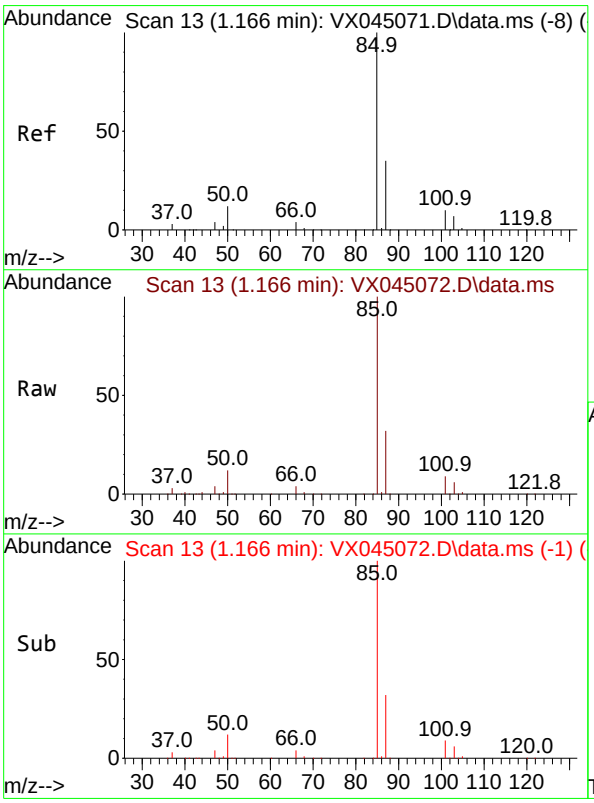
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 60.2 | 48.2 | 72.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

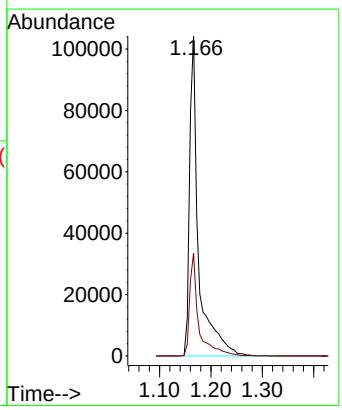
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

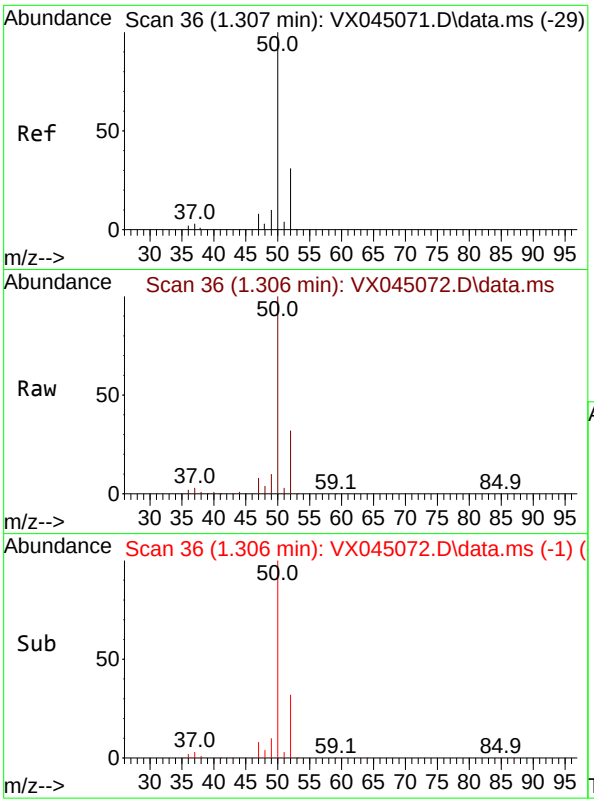



#2
Dichlorodifluoromethane
Concen: 90.869 ug/l
RT: 1.166 min Scan# 13
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 85 Resp: 126718

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.1 | 17.4 | 52.3 |






#3
Chloromethane
Concen: 85.936 ug/l
RT: 1.306 min Scan# 3
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

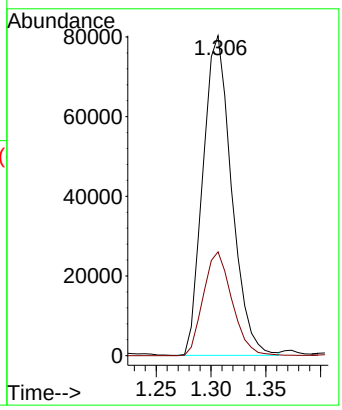
Tgt Ion: 50 Resp: 14582

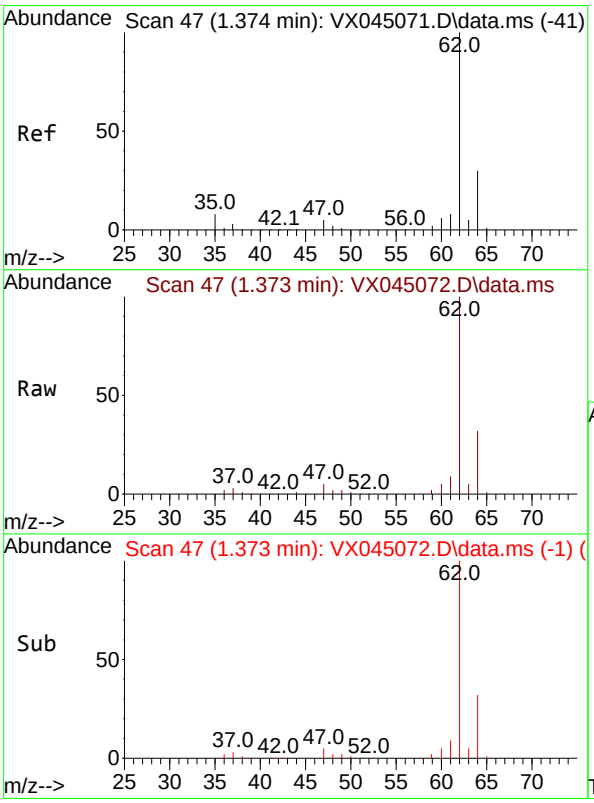
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 32.5 | 25.0 | 37.4 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

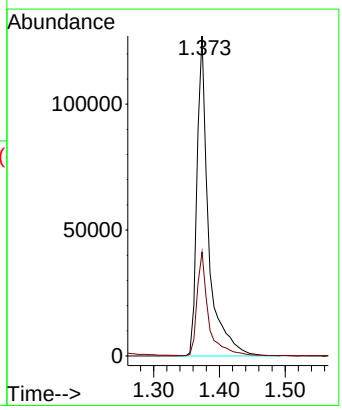


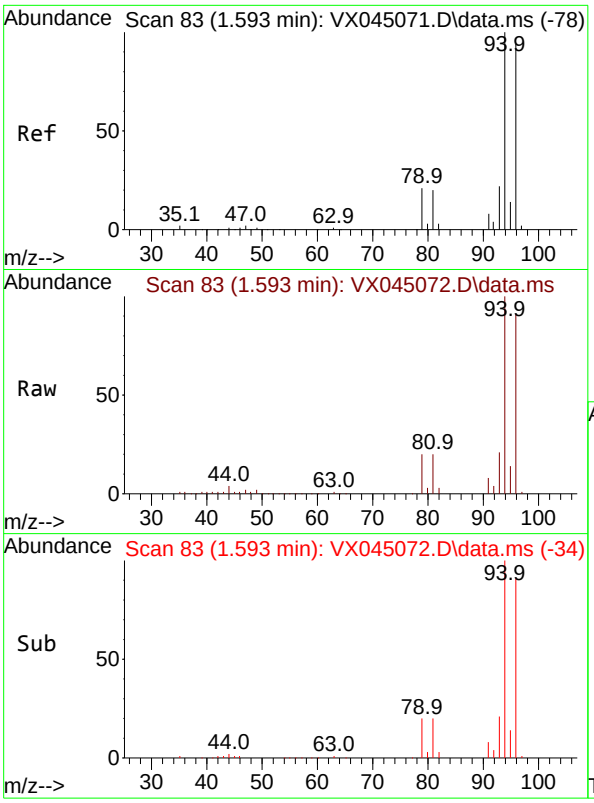




#4
Vinyl Chloride
Concen: 93.360 ug/l
RT: 1.373 min Scan# 47
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 62 Resp: 154734

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 32.4 | 24.3 | 36.5 |

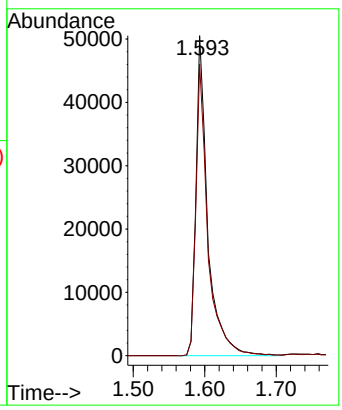





#5
Bromomethane
Concen: 110.980 ug/l
RT: 1.593 min Scan# 8
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 94 Resp: 5750

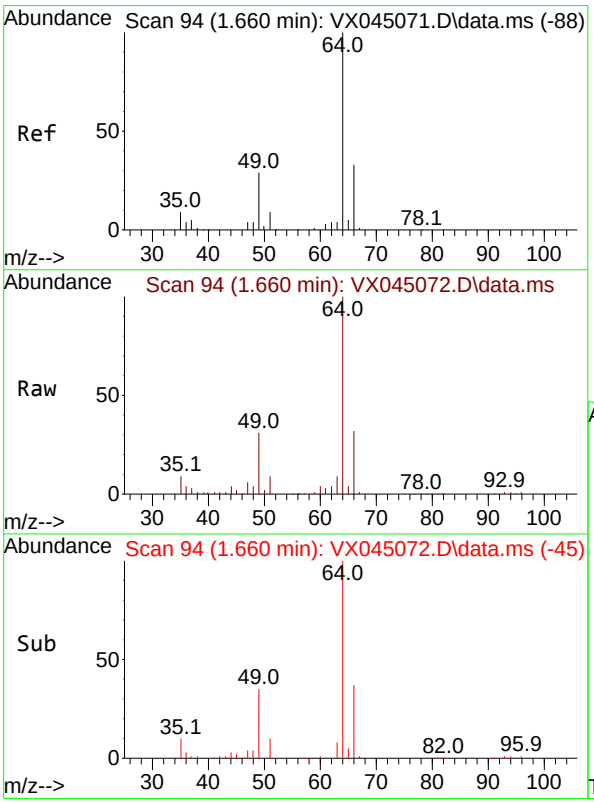
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 91.2 | 75.0 | 112.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

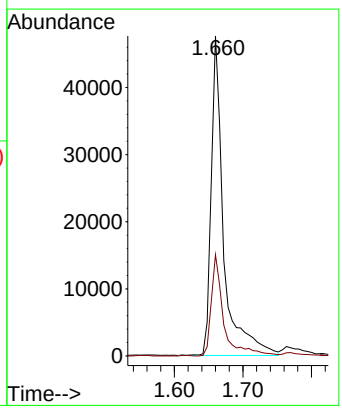
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

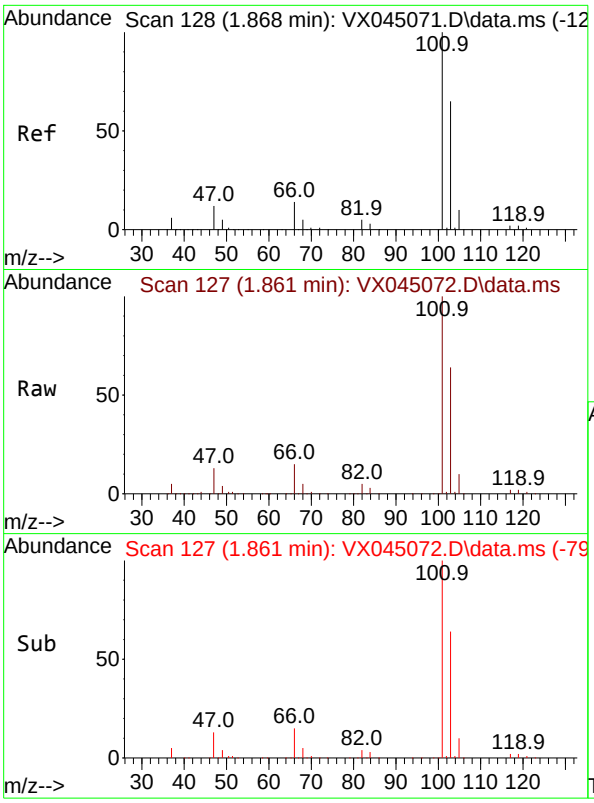



#6
Chloroethane
Concen: 95.351 ug/l
RT: 1.660 min Scan# 94
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 64 Resp: 60155

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 31.7 | 26.7 | 40.1 |






#7
Trichlorofluoromethane
Concen: 93.594 ug/l
RT: 1.861 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

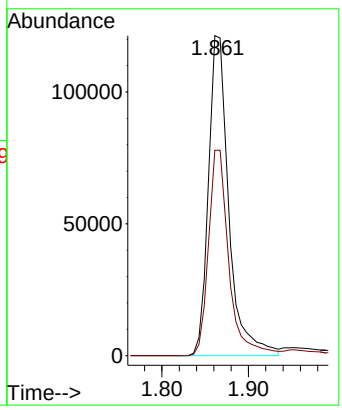
Tgt Ion:101 Resp: 19870

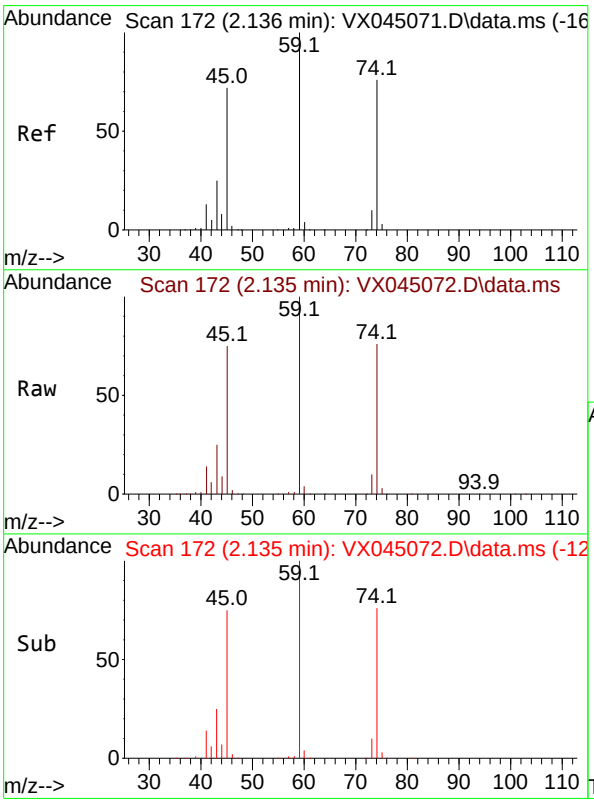
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 64.2 | 52.1 | 78.1 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

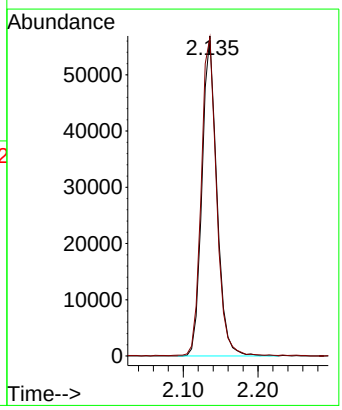


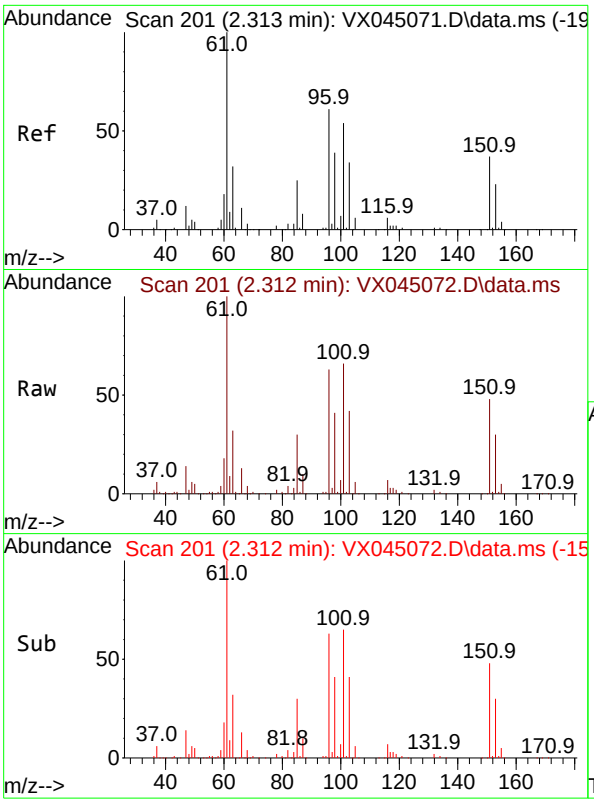




#8
Diethyl Ether
Concen: 101.441 ug/l
RT: 2.135 min Scan# 172
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 74 Resp: 78263

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 102.7 | 51.5 | 154.5 |






#9
1,1,2-Trichlorotrifluoroethane
Concen: 95.064 ug/l
RT: 2.312 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion:101 Resp: 12051

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 46.5 | 36.2 | 54.4 |
| 151 | 72.4 | 56.4 | 84.6 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/28/2025
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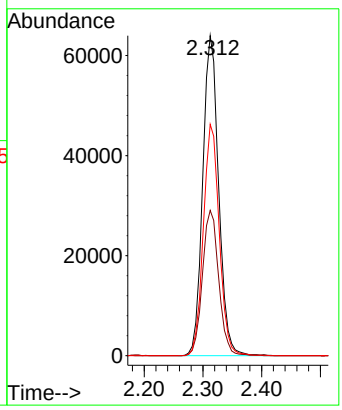
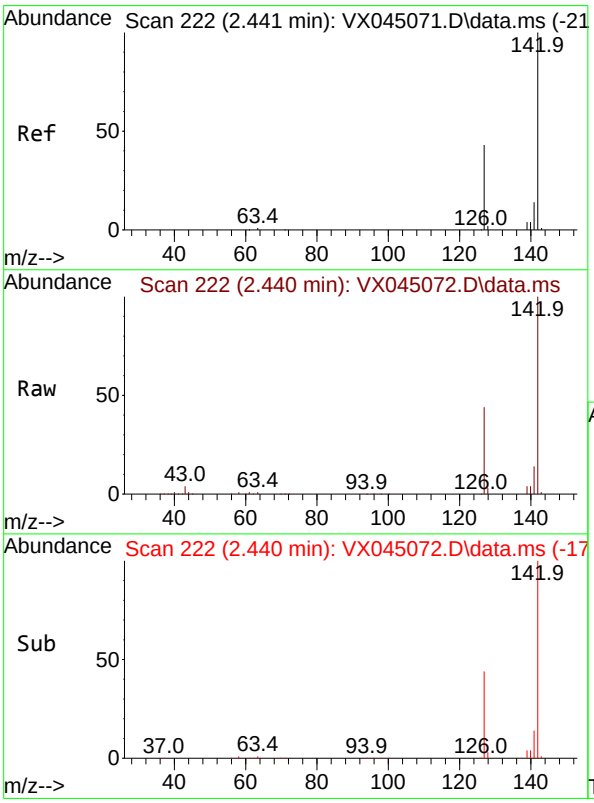
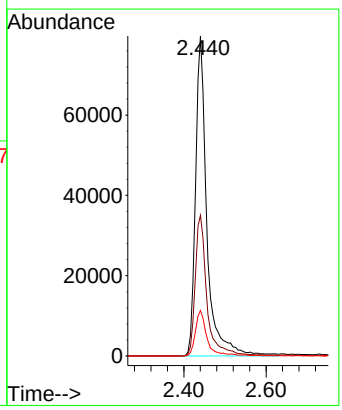


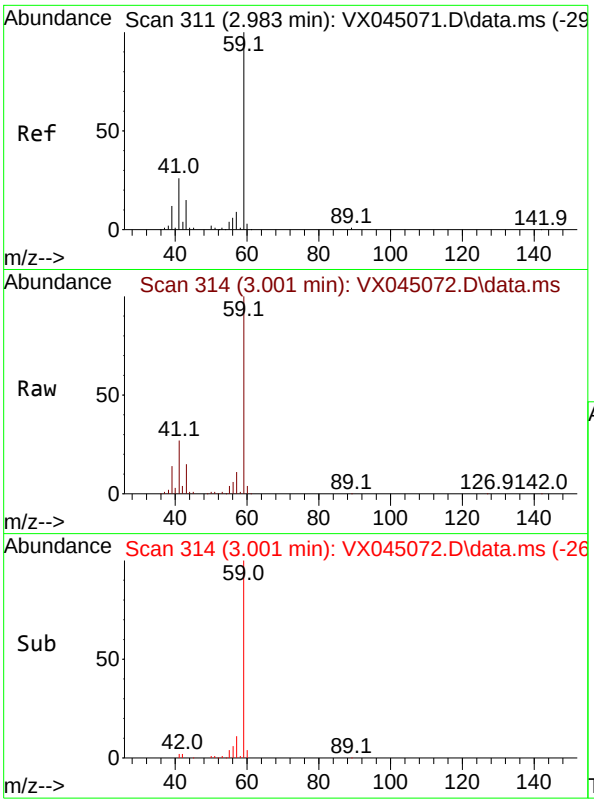




#10
Methyl Iodide
Concen: 94.425 ug/l
RT: 2.440 min Scan# 222
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion:142 Resp: 153466

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 45.0 | 35.4 | 53.2 |
| 141 | 14.4 | 11.6 | 17.4 |

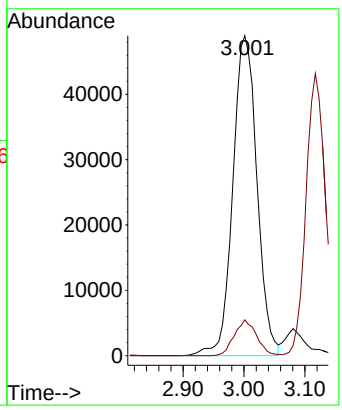





#11
Tert butyl alcohol
Concen: 493.141 ug/l
RT: 3.001 min Scan# 3
Delta R.T. 0.018 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 59 Resp: 13501

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 10.4 | 7.8 | 11.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/28/2025
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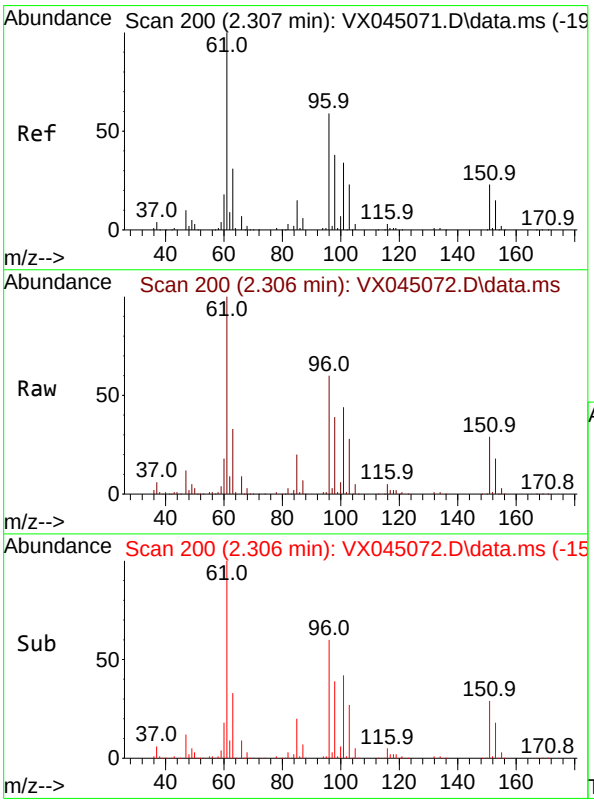
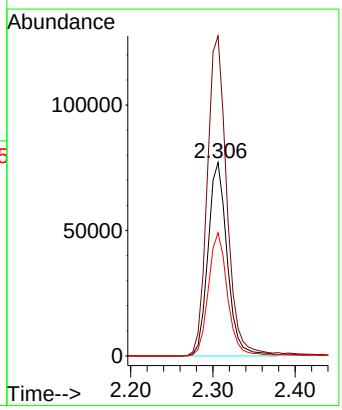
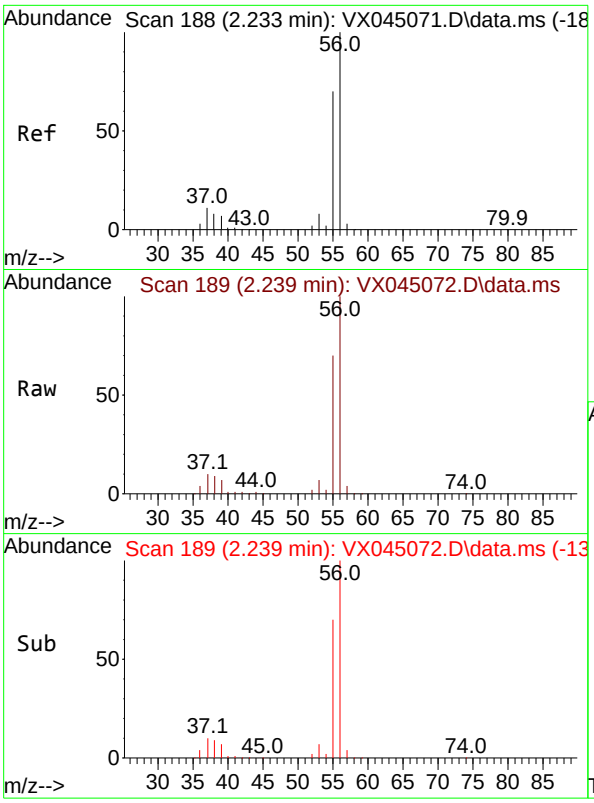



#12
1,1-Dichloroethene
Concen: 96.366 ug/l
RT: 2.306 min Scan# 200
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 96 Resp: 125436

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 165.4 | 134.6 | 202.0 |
| 98 | 63.7 | 51.0 | 76.6 |

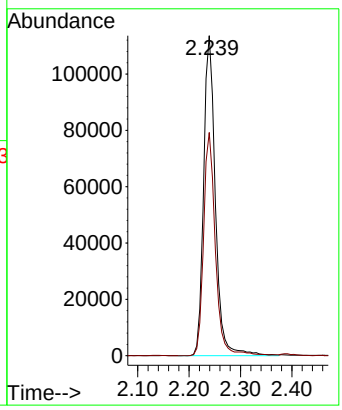





#13
Acrolein
Concen: 608.485 ug/l
RT: 2.239 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 56 Resp: 18041

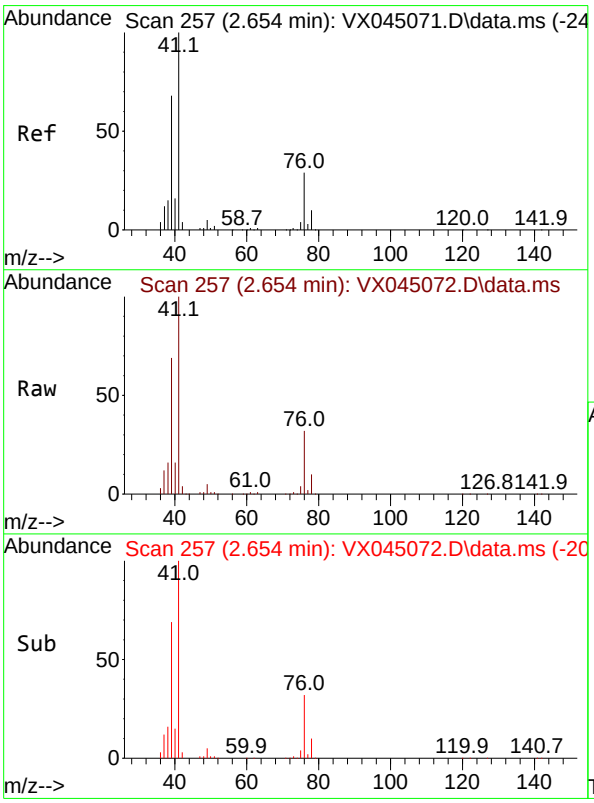
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 69.8 | 56.2 | 84.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

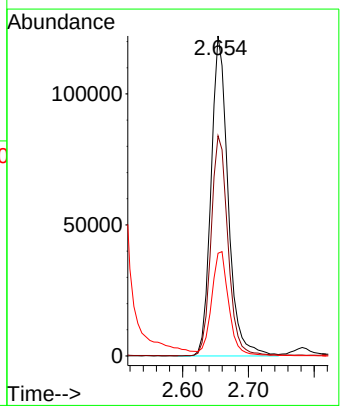
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

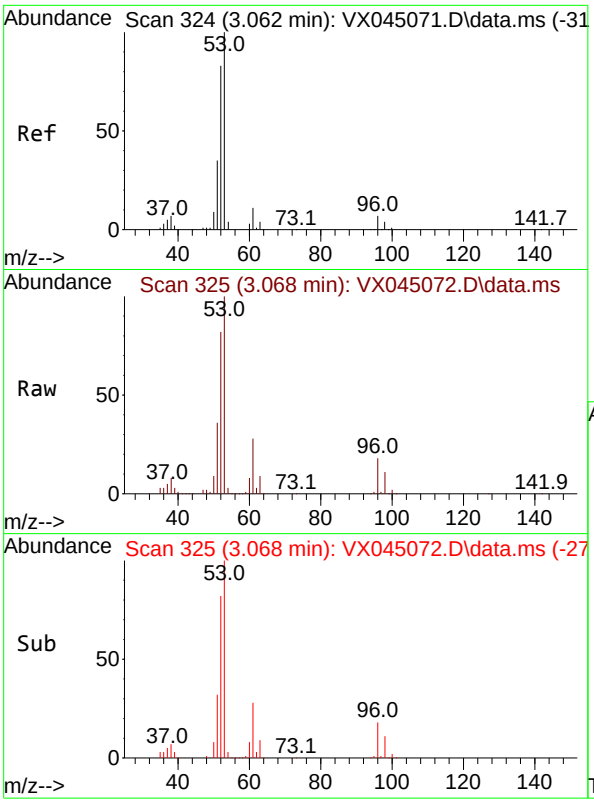



#14
Allyl chloride
Concen: 94.344 ug/l
RT: 2.654 min Scan# 257
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 41 Resp: 220783

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 68.4 | 53.8 | 80.8 |
| 76 | 32.6 | 25.2 | 37.8 |

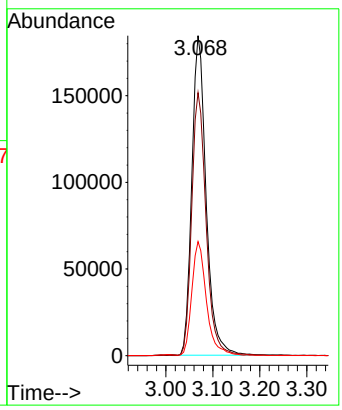





#15
Acrylonitrile
Concen: 526.749 ug/l
RT: 3.068 min Scan# 3
Delta R.T. 0.006 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 53 Resp: 39194

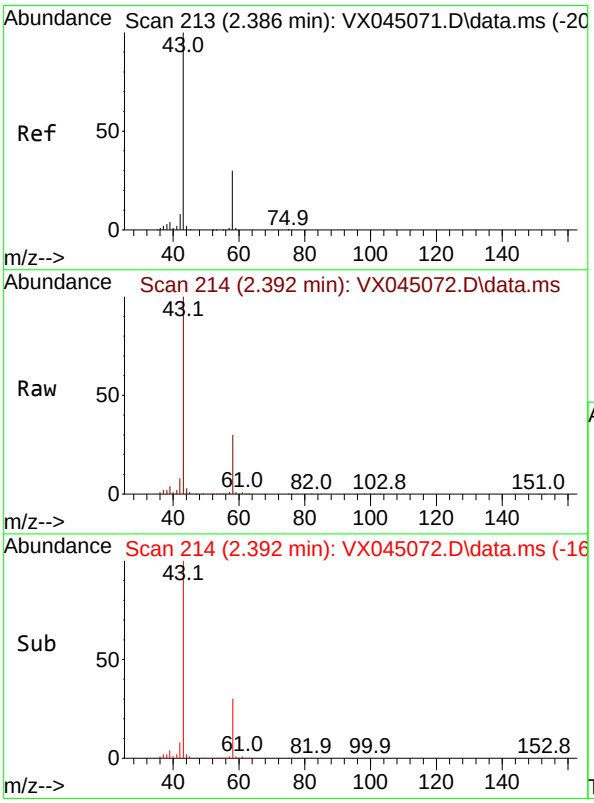
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 82.9 | 66.2 | 99.2 |
| 51 | 36.6 | 29.0 | 43.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

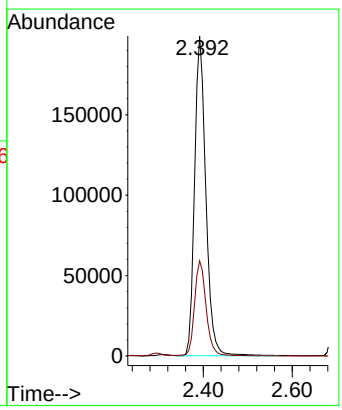
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

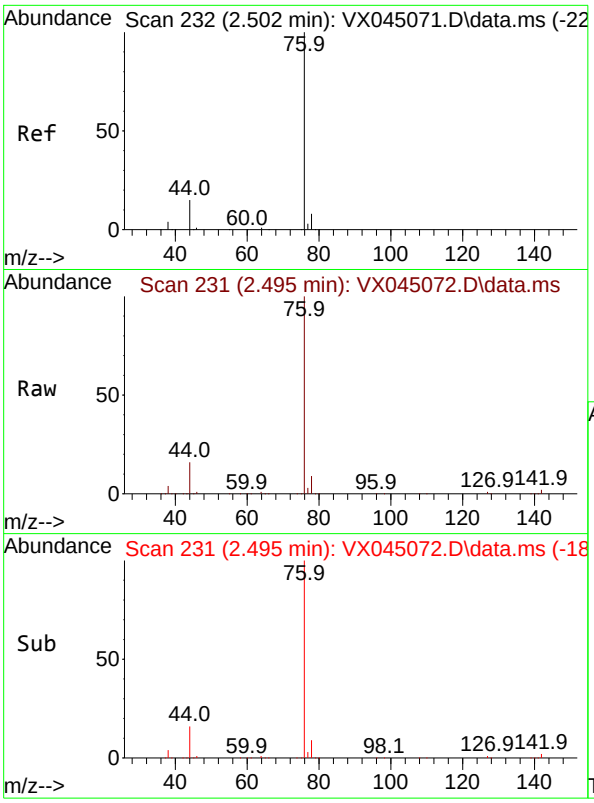



#16
Acetone
Concen: 566.991 ug/l
RT: 2.392 min Scan# 214
Delta R.T. 0.006 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 43 Resp: 348698

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 29.7 | 24.2 | 36.4 |

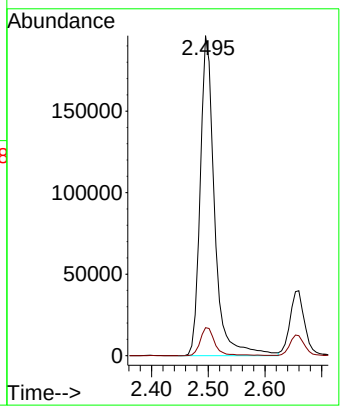





#17
Carbon Disulfide
Concen: 97.574 ug/l
RT: 2.495 min Scan# 2
Delta R.T. -0.006 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 76 Resp: 34557

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 8.7 | 6.6 | 9.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/28/2025
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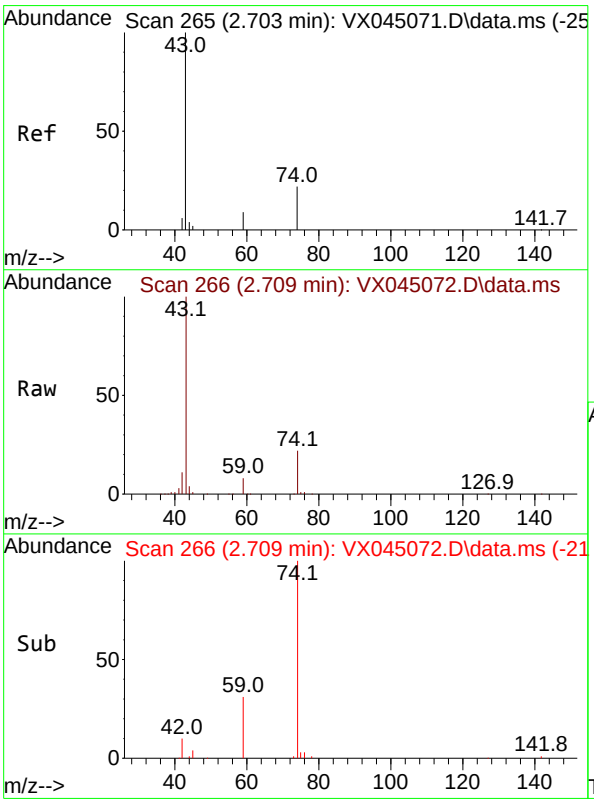
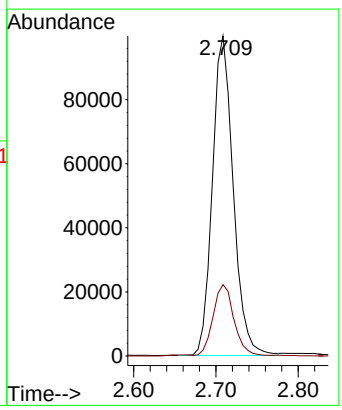
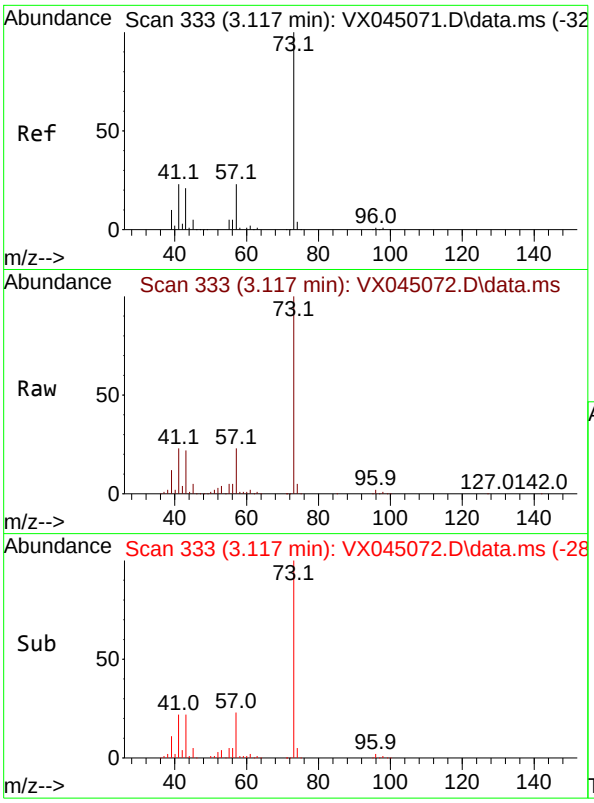



#18
Methyl Acetate
Concen: 94.899 ug/l
RT: 2.709 min Scan# 266
Delta R.T. 0.006 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 43 Resp: 175784

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 22.7 | 17.4 | 26.2 |

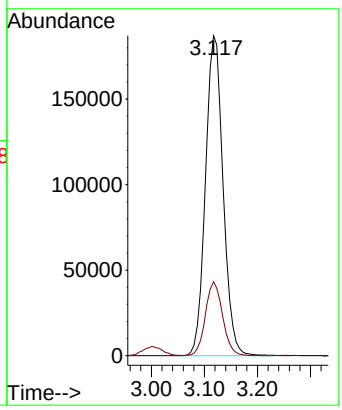





#19
Methyl tert-butyl Ether
Concen: 103.661 ug/l
RT: 3.117 min Scan# 3
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 73 Resp: 43141

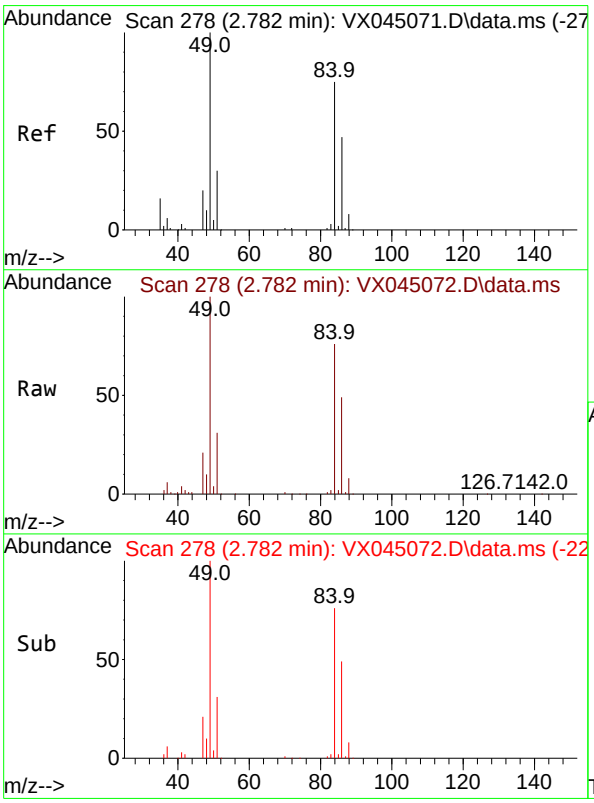
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 23.0 | 18.5 | 27.7 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
**APPROVED**

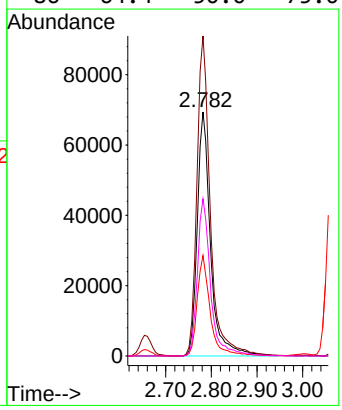
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

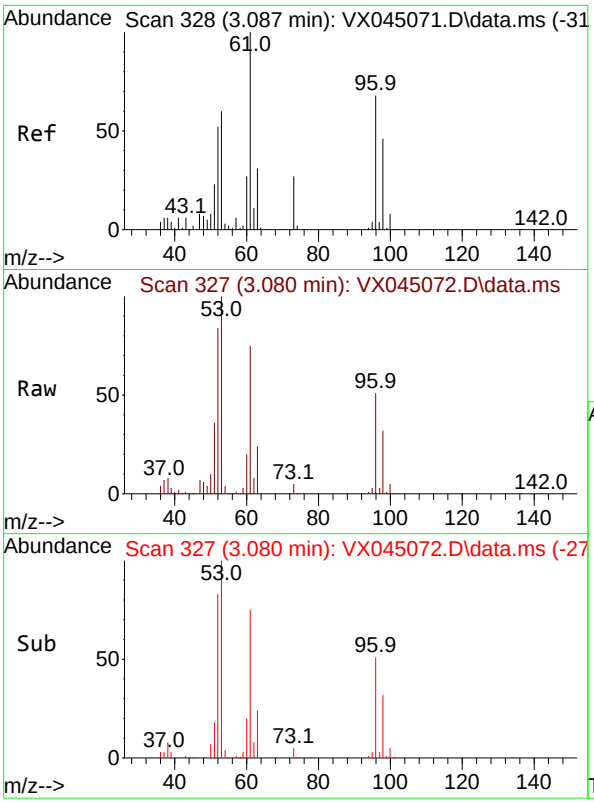



#20
Methylene Chloride
Concen: 96.381 ug/l
RT: 2.782 min Scan# 278
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 84 Resp: 140388

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 131.2 | 106.5 | 159.7 |
| 51 | 41.2 | 32.1 | 48.1 |
| 86 | 64.4 | 50.0 | 75.0 |

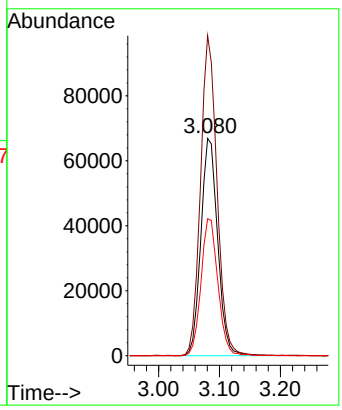





#21
trans-1,2-Dichloroethene
Concen: 100.164 ug/l
RT: 3.080 min Scan# 3
Delta R.T. -0.006 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 96 Resp: 12823

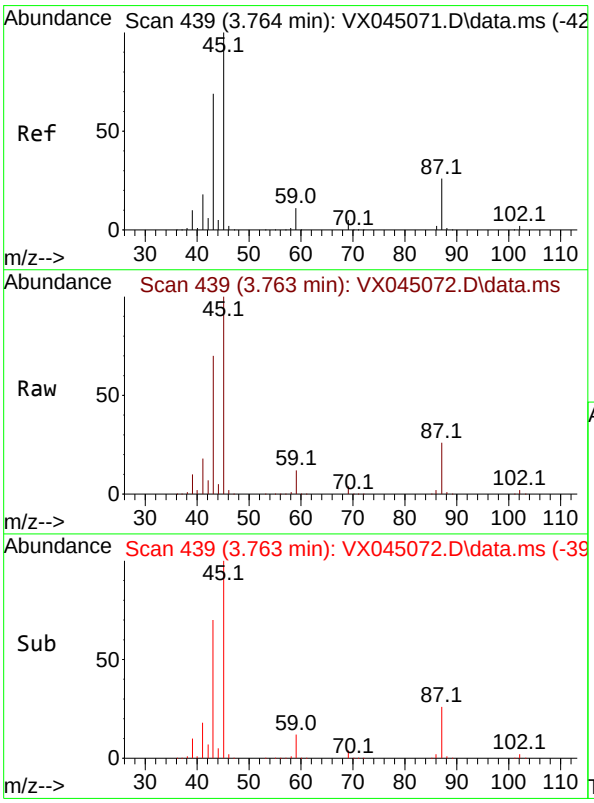
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 147.3 | 117.0 | 175.4 |
| 98 | 63.0 | 53.4 | 80.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

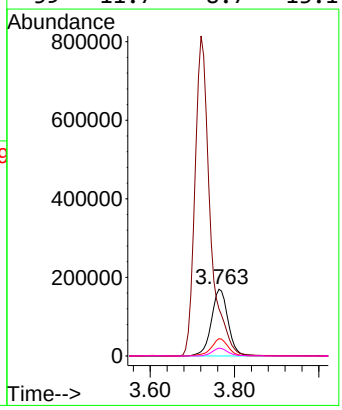
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

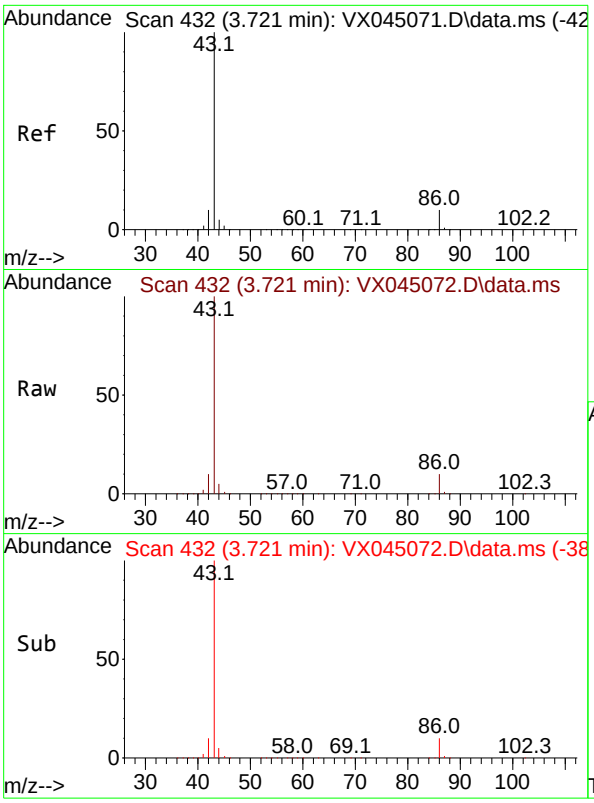



#22
Diisopropyl ether
Concen: 104.489 ug/l
RT: 3.763 min Scan# 439
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 45 Resp: 467534

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 70.4 | 54.9 | 82.3 |
| 87 | 26.0 | 21.0 | 31.4 |
| 59 | 11.7 | 8.7 | 13.1 |

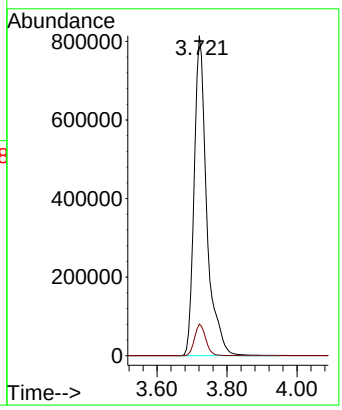





#23
Vinyl Acetate
Concen: 554.219 ug/l
RT: 3.721 min Scan# 4
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 43 Resp: 203588

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 9.9 | 8.1 | 12.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
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Reviewed By :John Carlone 02/28/2025
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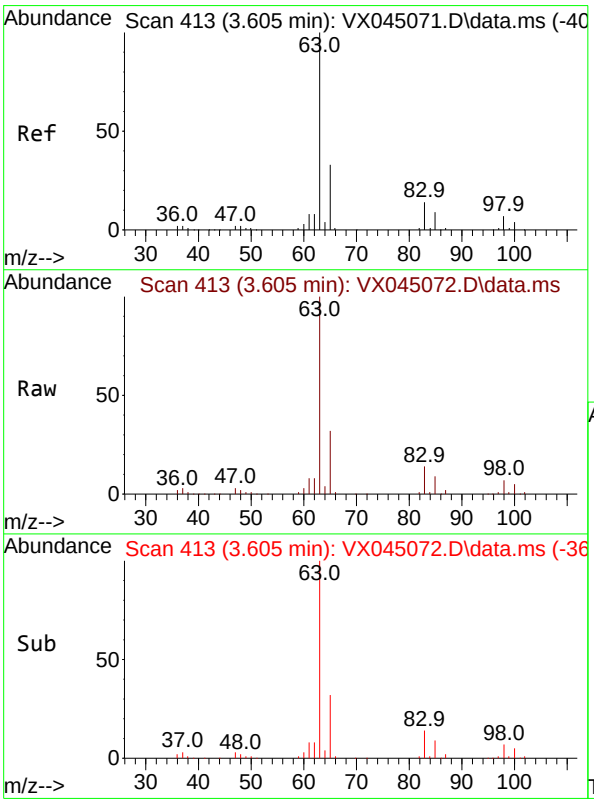
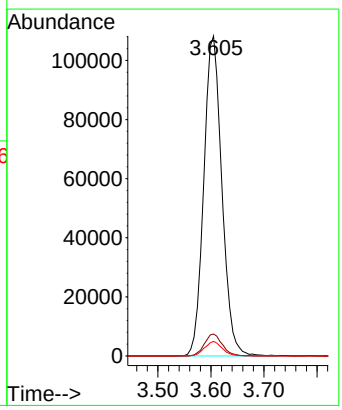
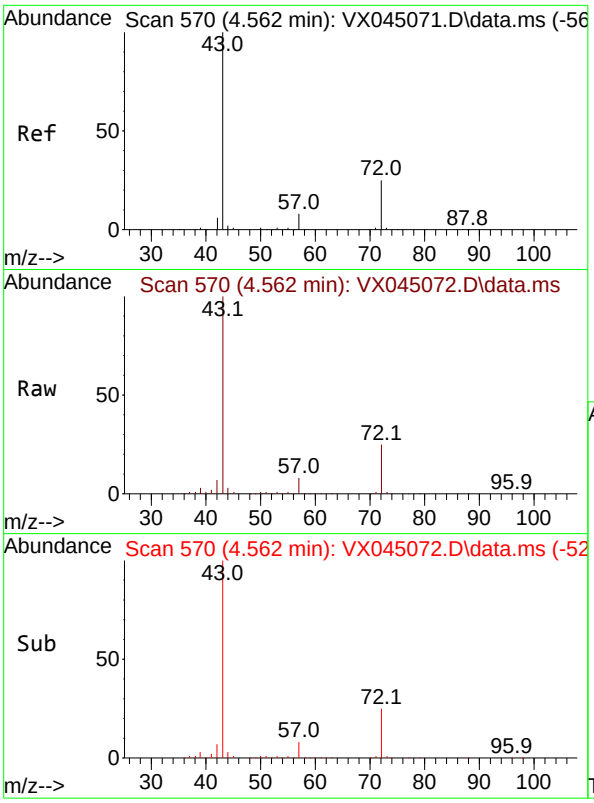



#24
1,1-Dichloroethane
Concen: 102.805 ug/l
RT: 3.605 min Scan# 413
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 63 Resp: 257023

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 6.8 | 3.4 | 10.2 |
| 100 | 4.6 | 2.1 | 6.5 |

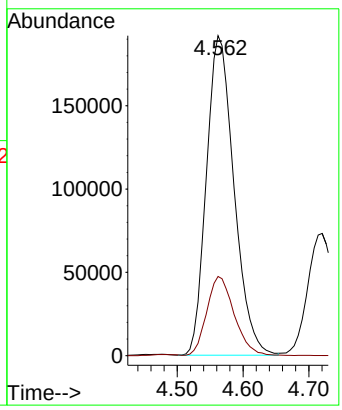





#25
2-Butanone
Concen: 563.952 ug/l
RT: 4.562 min Scan# 5
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 43 Resp: 55918

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 24.6 | 20.0 | 30.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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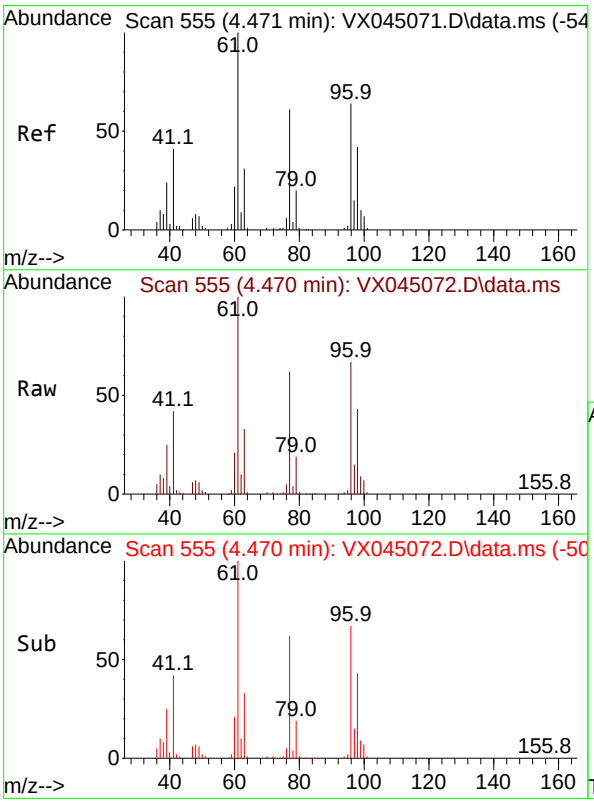
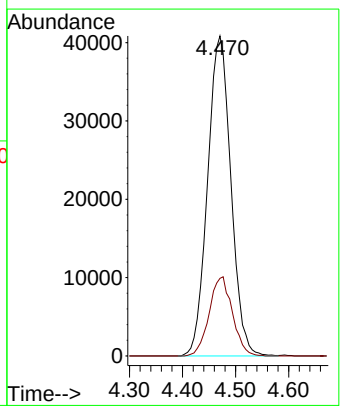
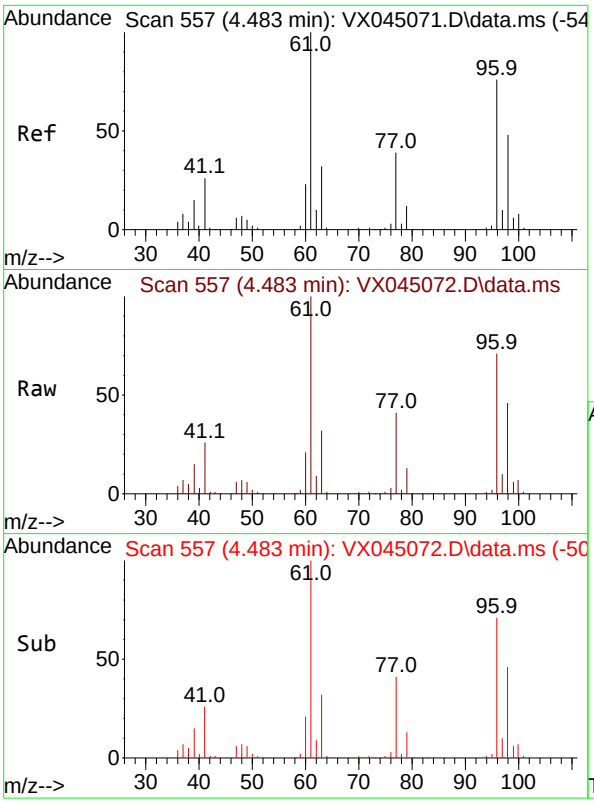



#26
2,2-Dichloropropane
Concen: 67.148 ug/l
RT: 4.470 min Scan# 555
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 77 Resp: 124805

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 24.6 | 12.4 | 37.0 |

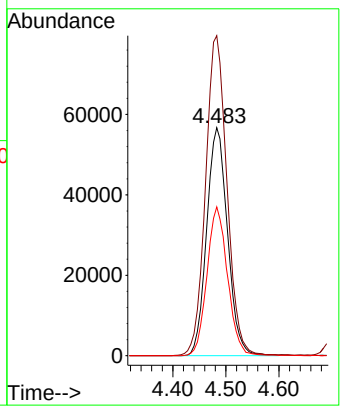





#27
cis-1,2-Dichloroethene
Concen: 100.568 ug/l
RT: 4.483 min Scan# 5
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 96 Resp: 15519

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 143.8 | 0.0 | 283.2 |
| 98 | 64.3 | 0.0 | 128.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

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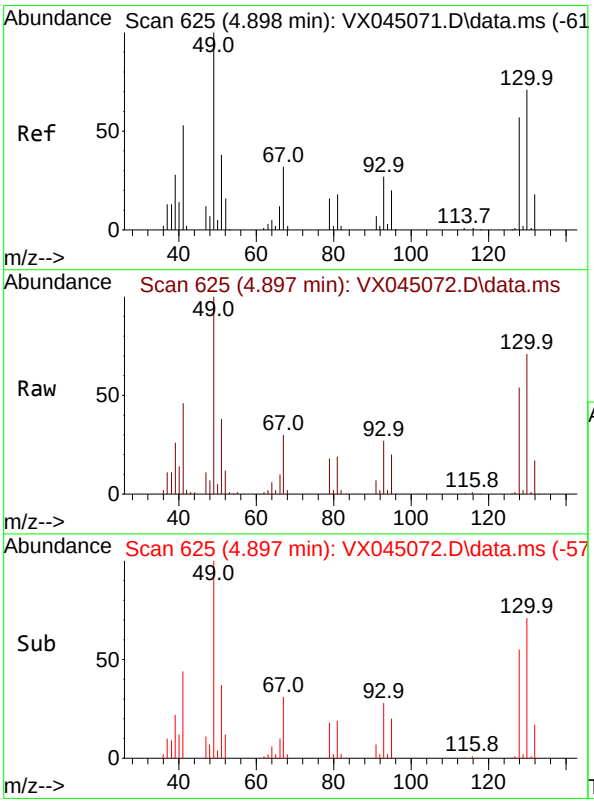
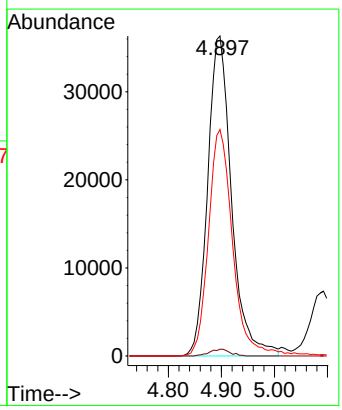
Supervised By :Mahesh Dadoda 02/28/2025

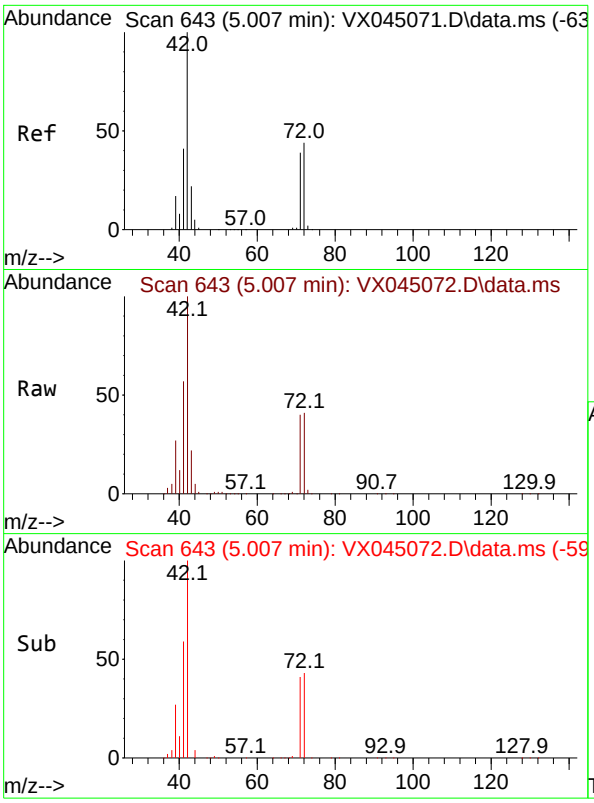



#28
Bromochloromethane
Concen: 94.428 ug/l
RT: 4.897 min Scan# 625
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 49 Resp: 113848

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.8 | 0.0 | 3.4 |
| 130 | 72.2 | 56.1 | 84.1 |

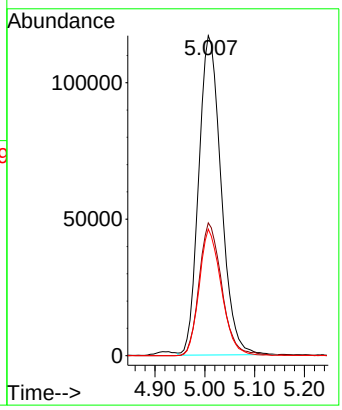





#29
Tetrahydrofuran
Concen: 556.465 ug/l
RT: 5.007 min Scan# 64
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 42 Resp: 36556

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 42.1 | 34.1 | 51.1 |
| 71 | 39.2 | 31.4 | 47.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

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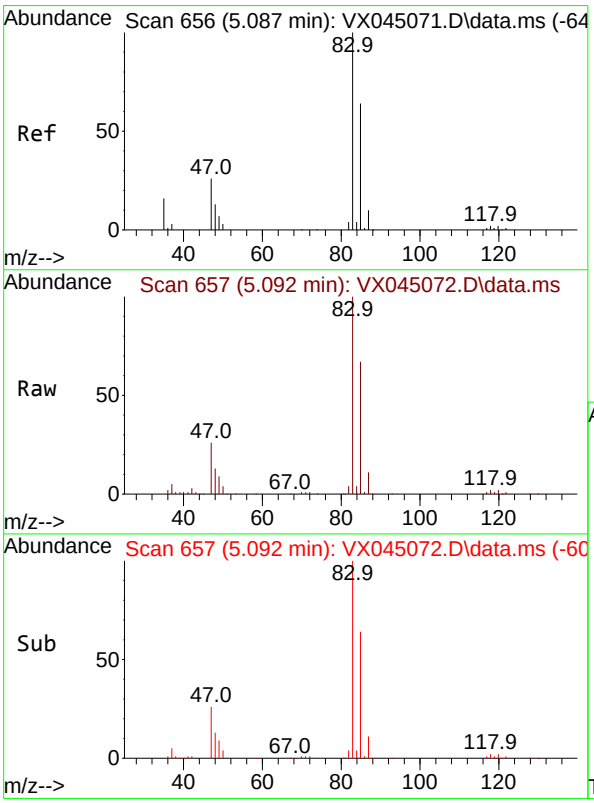
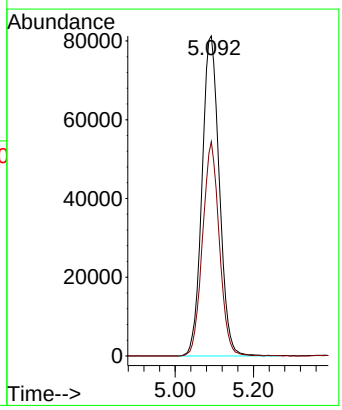
Supervised By :Mahesh Dadoda 02/28/2025

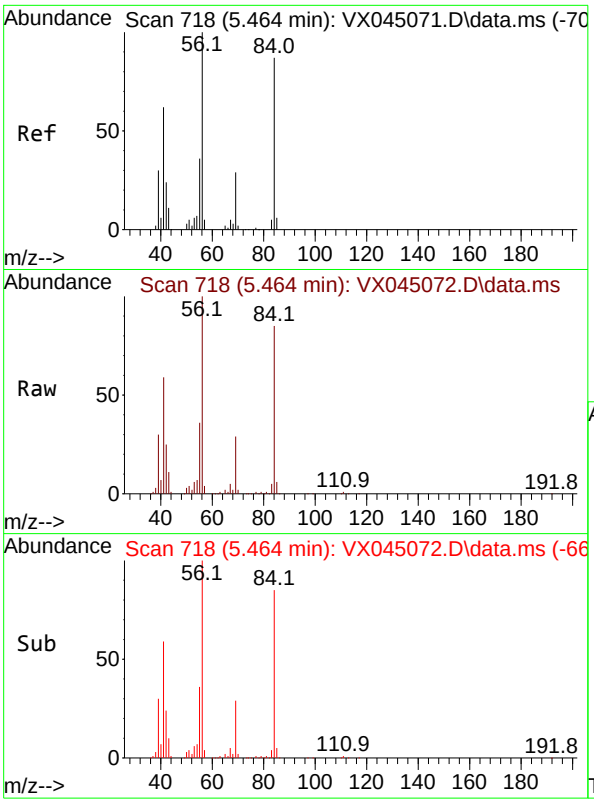



#30
Chloroform
Concen: 101.814 ug/l
RT: 5.092 min Scan# 657
Delta R.T. 0.006 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 83 Resp: 248978

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 66.9 | 51.4 | 77.2 |






#31
Cyclohexane
Concen: 100.711 ug/l
RT: 5.464 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

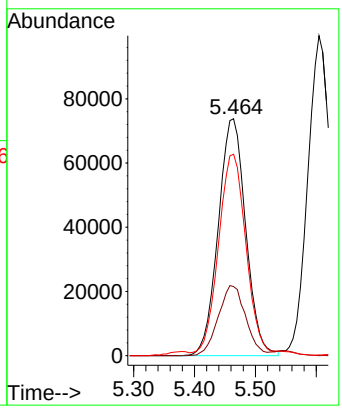
Tgt Ion: 56 Resp: 23108

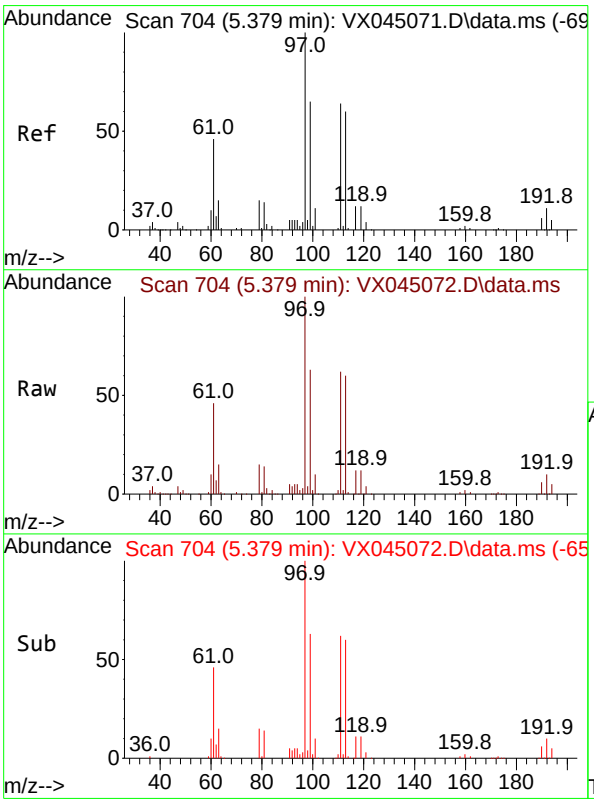
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 29.1 | 23.4 | 35.2 |
| 84 | 83.3 | 69.4 | 104.2 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

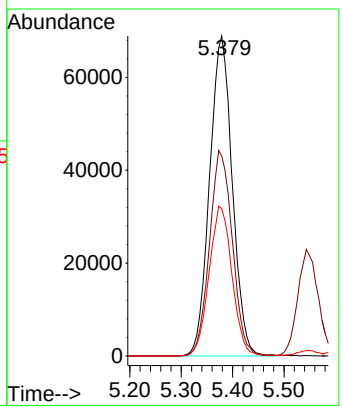


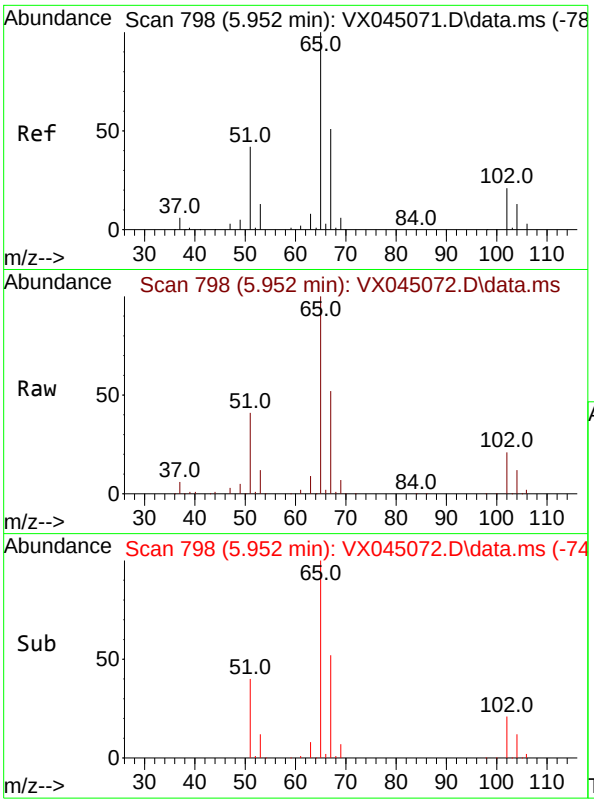




#32
1,1,1-Trichloroethane
Concen: 102.638 ug/l
RT: 5.379 min Scan# 704
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 97 Resp: 211302

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 64.7 | 51.6 | 77.4 |
| 61 | 47.3 | 38.4 | 57.6 |

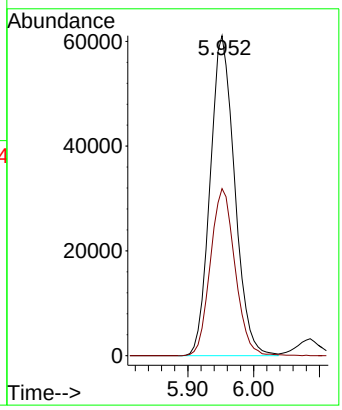





#33
1,2-Dichloroethane-d4
Concen: 106.011 ug/l
RT: 5.952 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 65 Resp: 15845

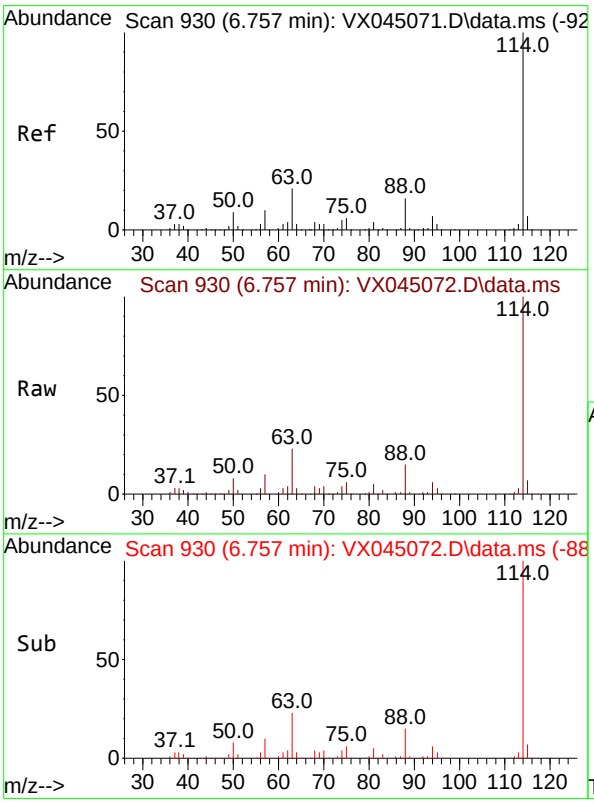
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 52.5 | 0.0 | 106.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

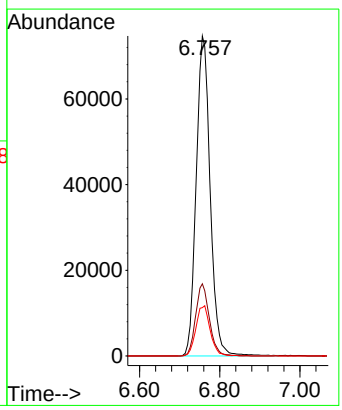
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

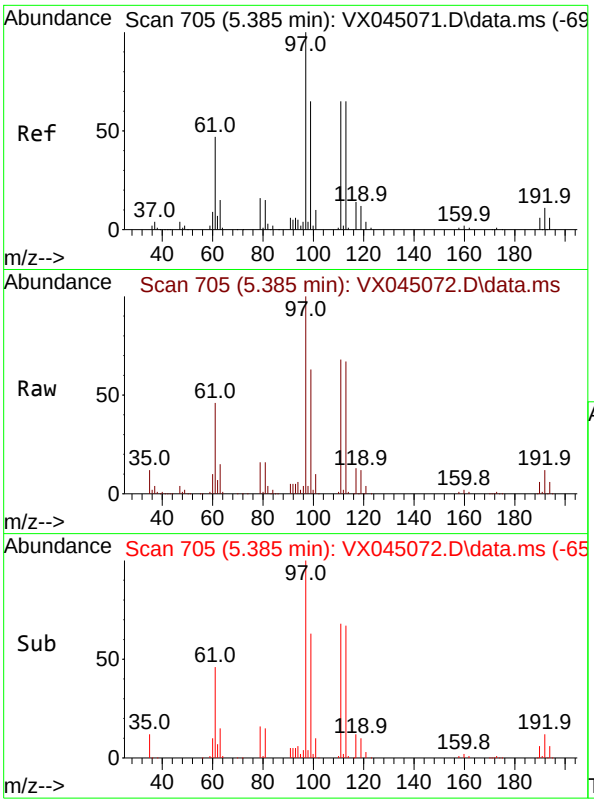



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.757 min Scan# 930
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion:114 Resp: 181031

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.5 | 0.0 | 41.8 |
| 88 | 15.1 | 0.0 | 32.8 |

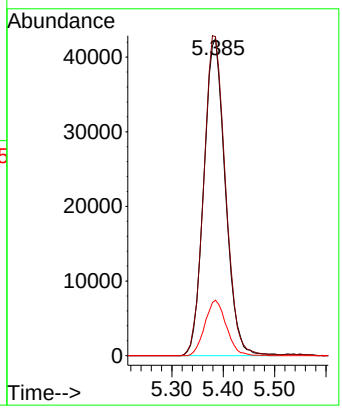





#35
Dibromofluoromethane
Concen: 104.110 ug/l
RT: 5.385 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion:113 Resp: 12318

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 102.1 | 81.8 | 122.6 |
| 192 | 17.5 | 14.3 | 21.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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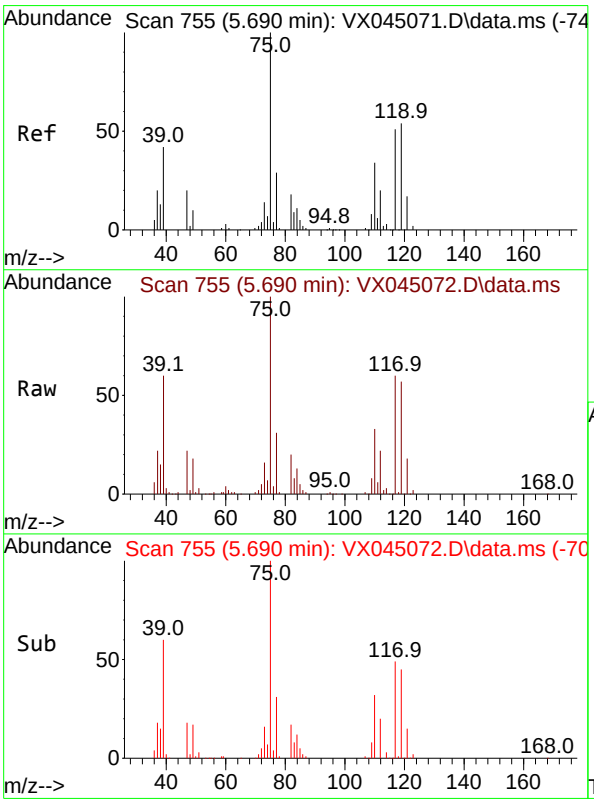
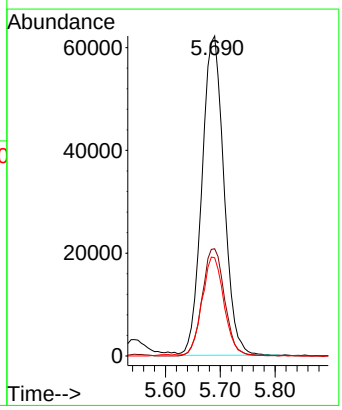
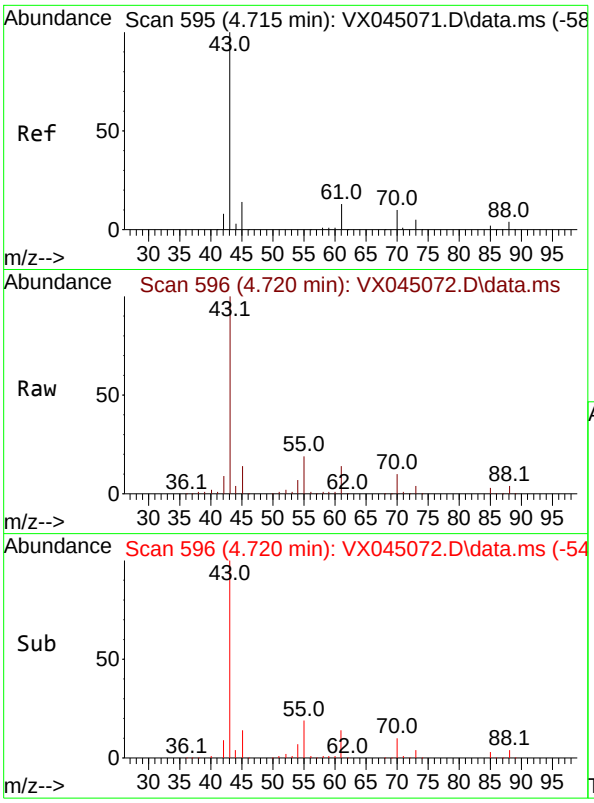



#36
1,1-Dichloropropene
Concen: 101.258 ug/l
RT: 5.690 min Scan# 755
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 75 Resp: 172295

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 34.4 | 16.9 | 50.6 |
| 77 | 31.0 | 24.5 | 36.7 |

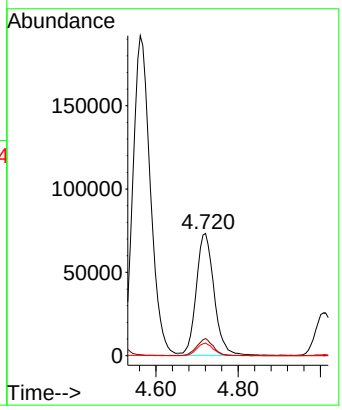





#37
Ethyl Acetate
Concen: 113.796 ug/l
RT: 4.720 min Scan# 5
Delta R.T. 0.006 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 43 Resp: 22032

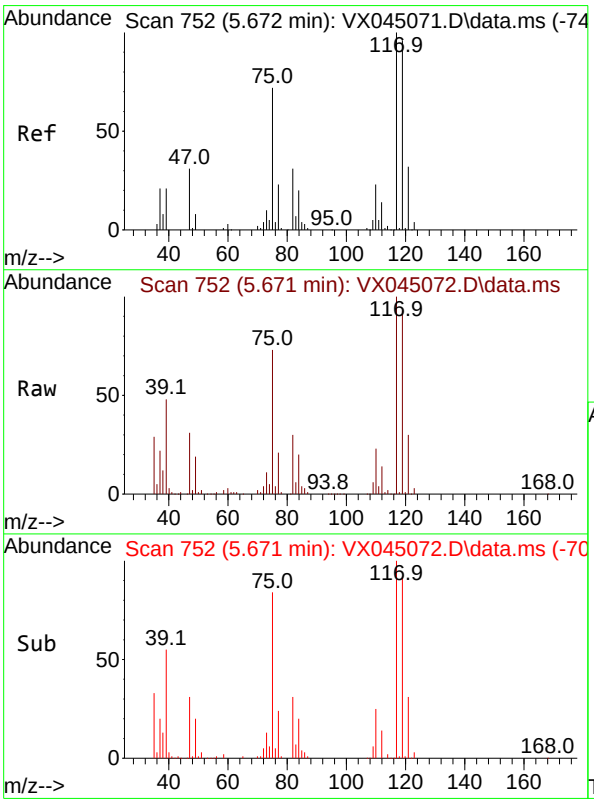
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 12.6 | 10.8 | 16.2 |
| 70 | 9.6 | 7.7 | 11.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

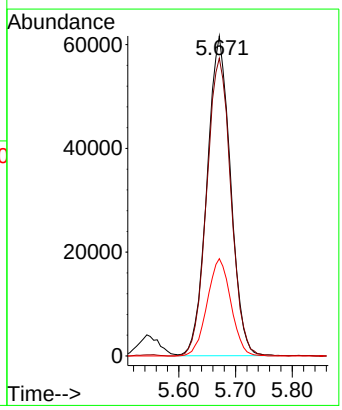
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

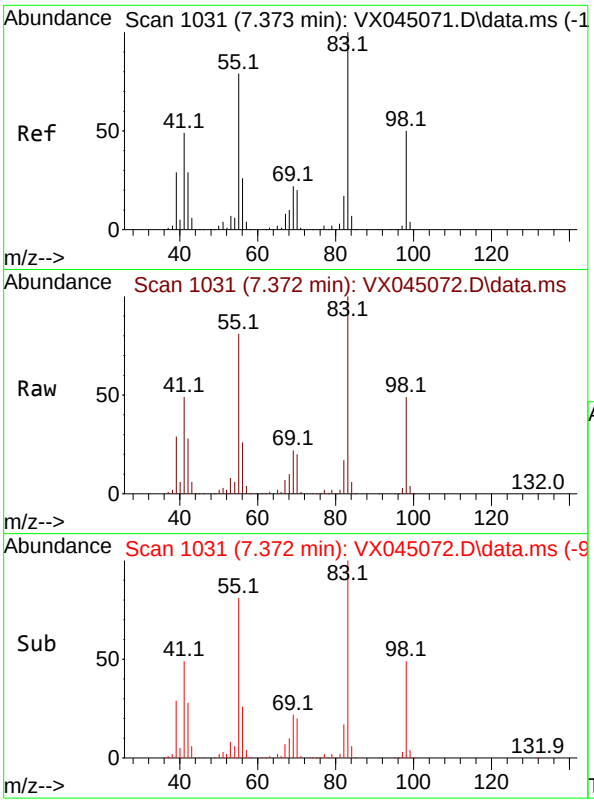



#38
Carbon Tetrachloride
Concen: 105.940 ug/l
RT: 5.671 min Scan# 752
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion:117 Resp: 177219

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 93.0 | 76.7 | 115.1 |
| 121 | 30.4 | 25.5 | 38.3 |

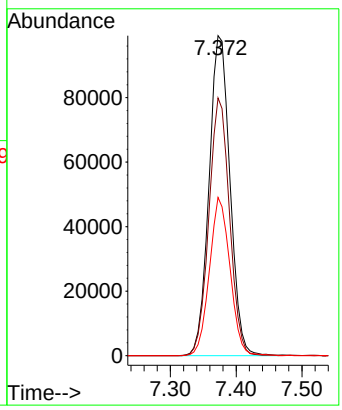





#39
Methylcyclohexane
Concen: 101.175 ug/l
RT: 7.372 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 83 Resp: 21985

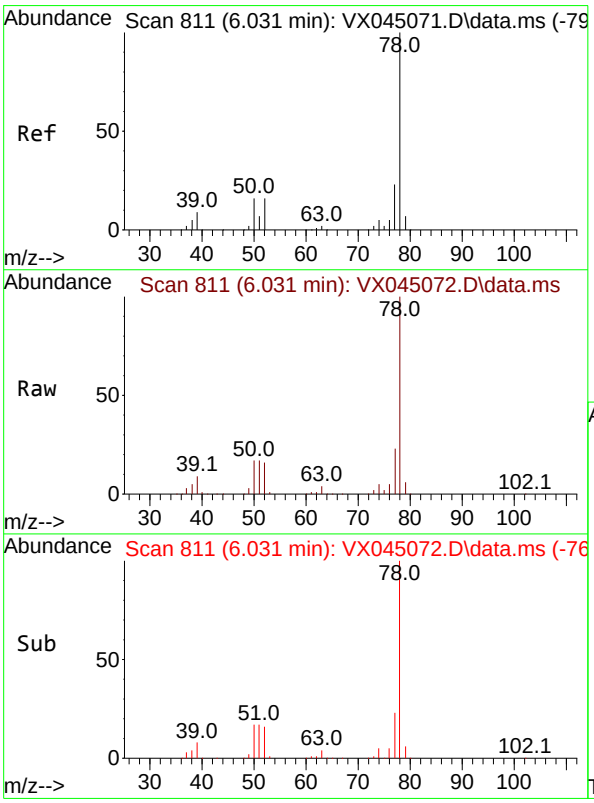
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 80.6 | 63.0 | 94.4 |
| 98 | 49.5 | 39.7 | 59.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

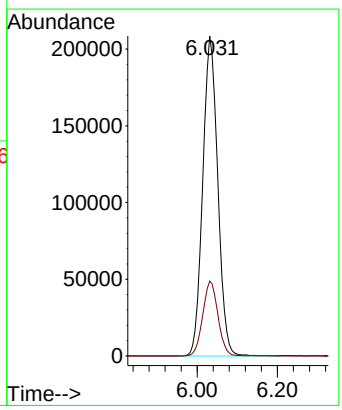
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

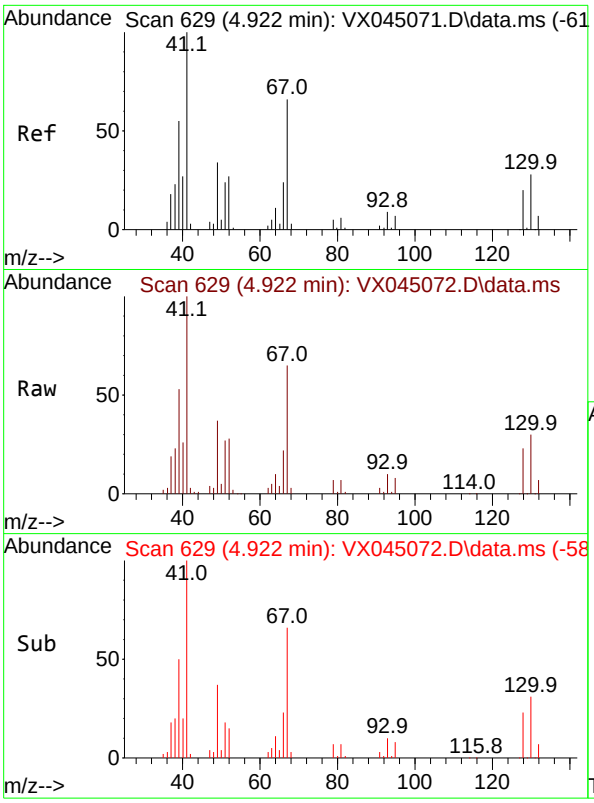



#40
Benzene
Concen: 101.908 ug/l
RT: 6.031 min Scan# 811
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 78 Resp: 541974

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.4 | 18.8 | 28.2 |

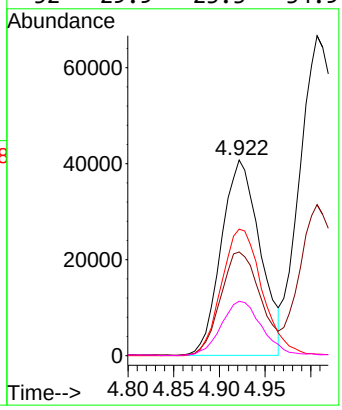





#41
Methacrylonitrile
Concen: 116.205 ug/l
RT: 4.922 min Scan# 6
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 41 Resp: 12018

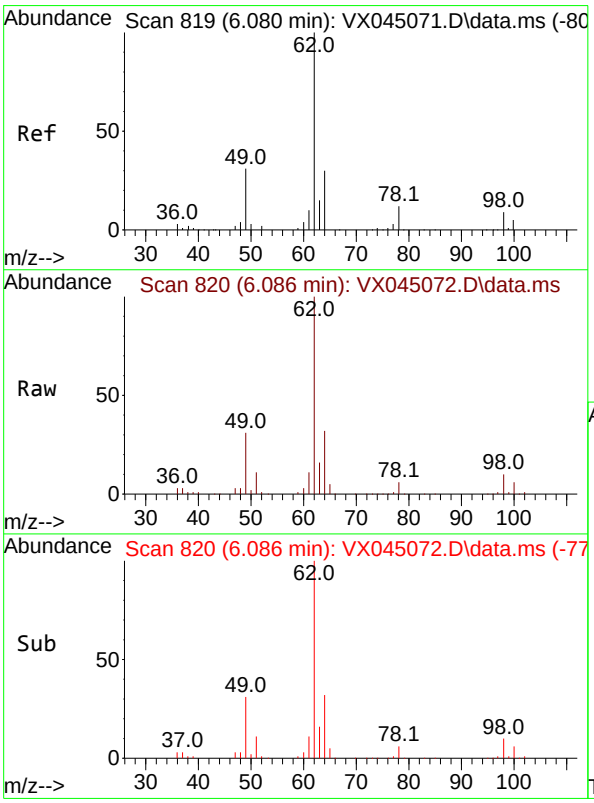
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 54.3 | 44.6 | 67.0 |
| 67 | 68.3 | 53.9 | 80.9 |
| 52 | 29.9 | 23.3 | 34.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

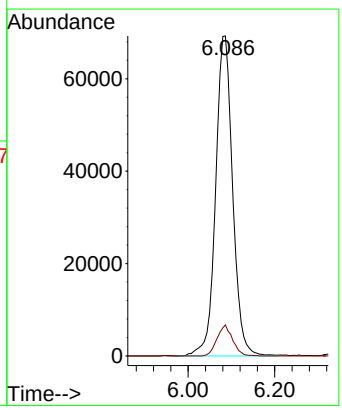
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

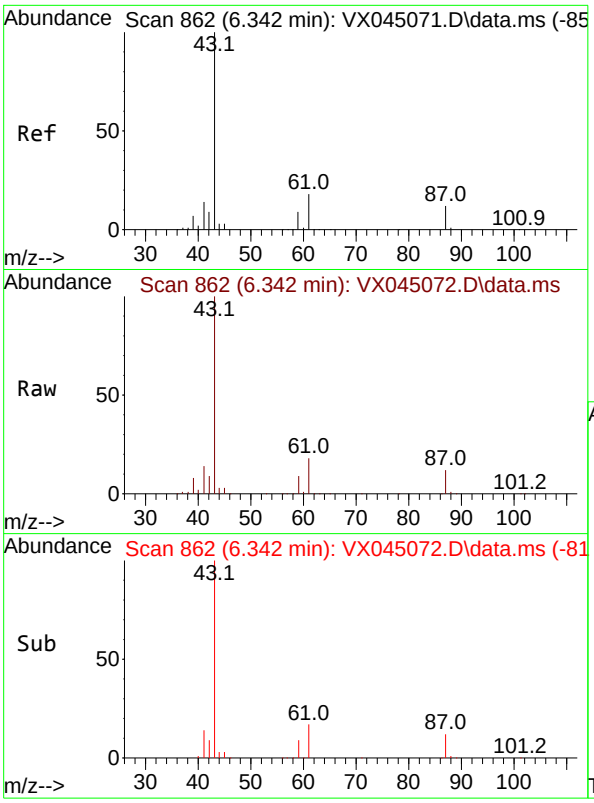



#42
1,2-Dichloroethane
Concen: 110.158 ug/l
RT: 6.086 min Scan# 820
Delta R.T. 0.006 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 62 Resp: 189857

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 8.8 | 0.0 | 18.2 |






#43
Isopropyl Acetate
Concen: 109.806 ug/l
RT: 6.342 min Scan# 8
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 43 Resp: 33841

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 18.9 | 14.9 | 22.3 |
| 87 | 12.3 | 9.4 | 14.2 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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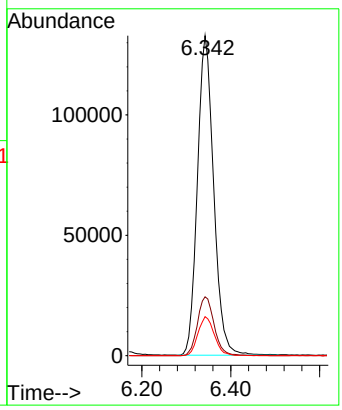
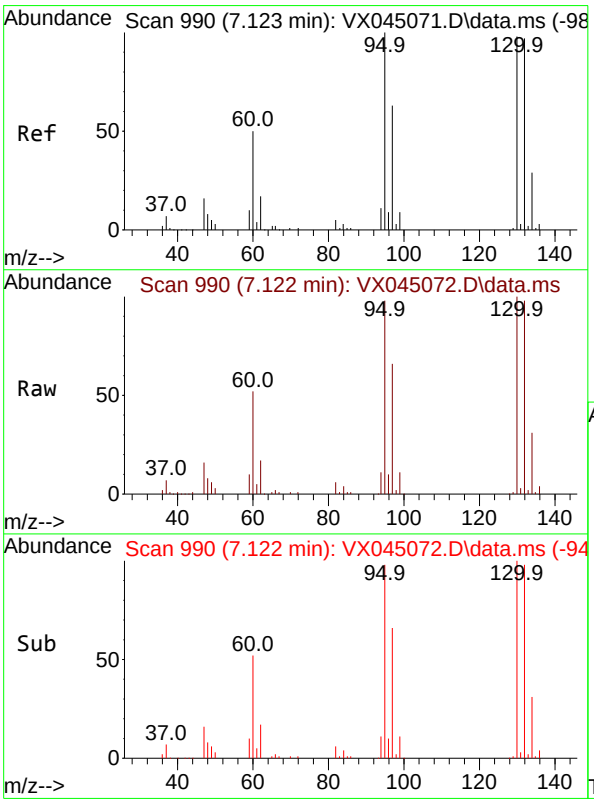
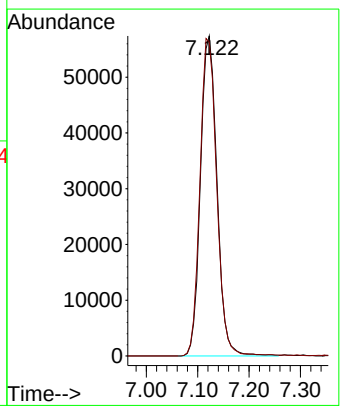


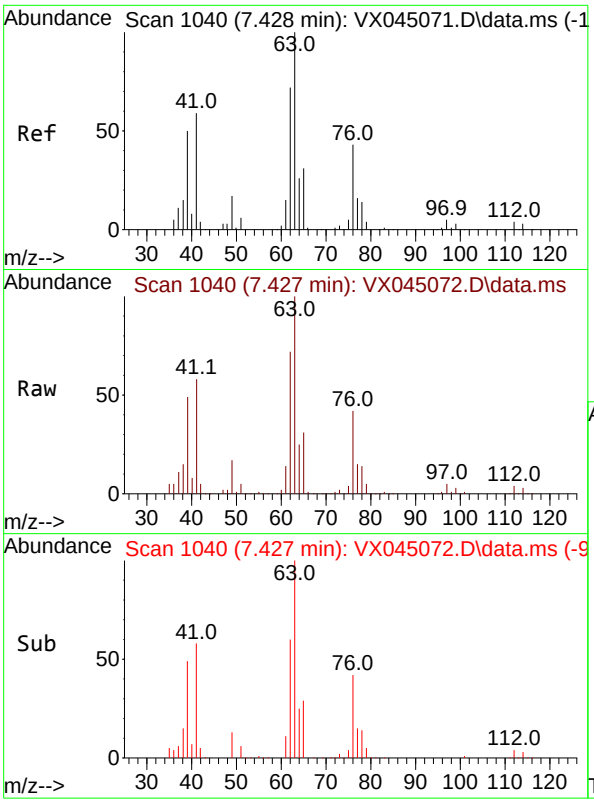




#44
Trichloroethene
Concen: 105.402 ug/l
RT: 7.122 min Scan# 990
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion:130 Resp: 128124

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 98.1 | 0.0 | 205.0 |

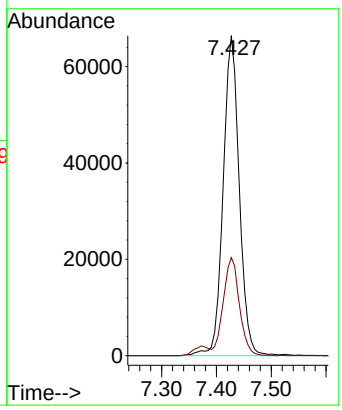





#45
1,2-Dichloropropane
Concen: 102.898 ug/l
RT: 7.427 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 63 Resp: 13599

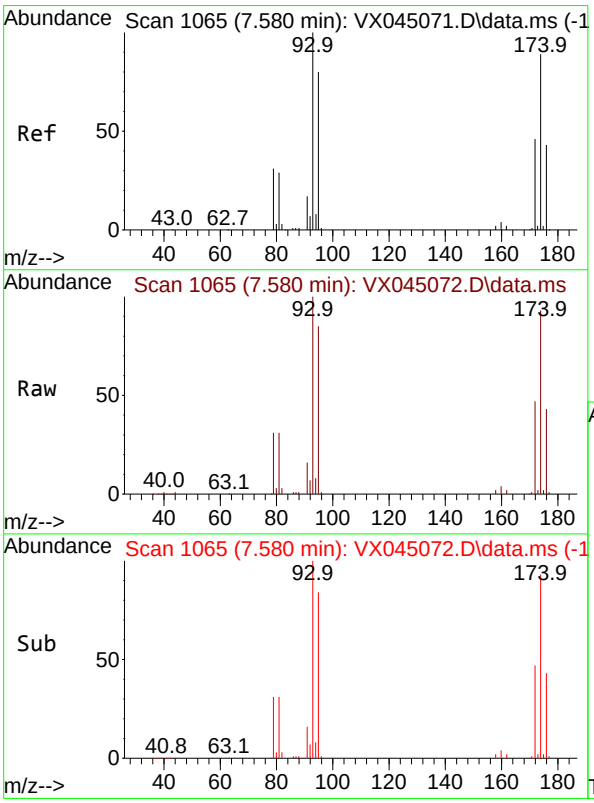
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 30.7 | 24.7 | 37.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
**APPROVED**

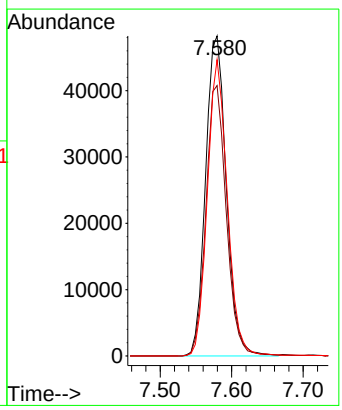
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

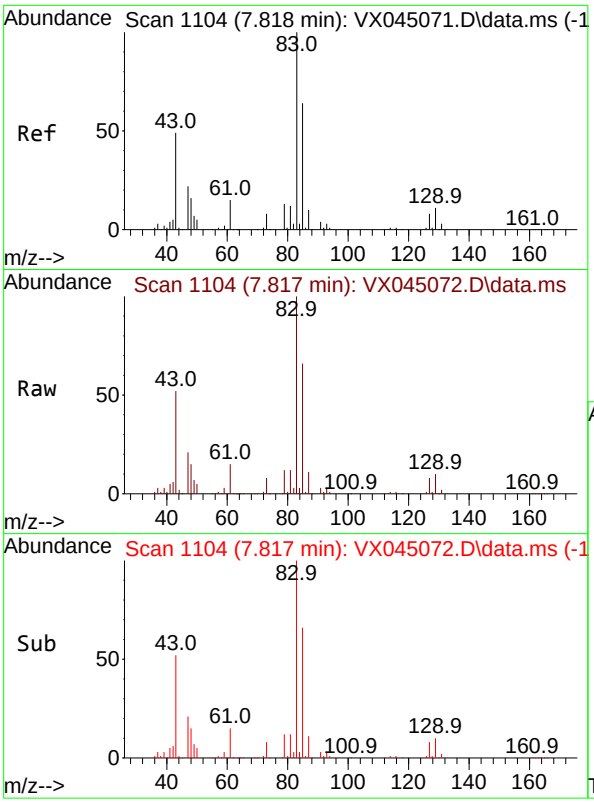



#46
Dibromomethane
Concen: 105.329 ug/l
RT: 7.580 min Scan# 1065
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 93 Resp: 97248

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 83.3 | 65.8 | 98.8 |
| 174 | 89.0 | 72.2 | 108.2 |

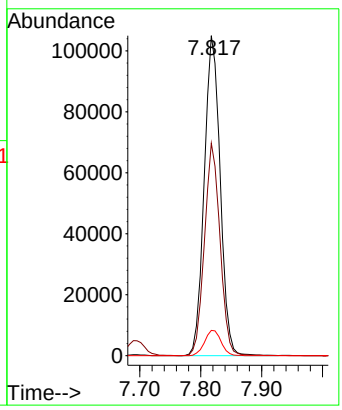





#47
Bromodichloromethane
Concen: 106.947 ug/l
RT: 7.817 min Scan# 11
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 83 Resp: 19101

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 66.4 | 51.1 | 76.7 |
| 127 | 7.9 | 6.4 | 9.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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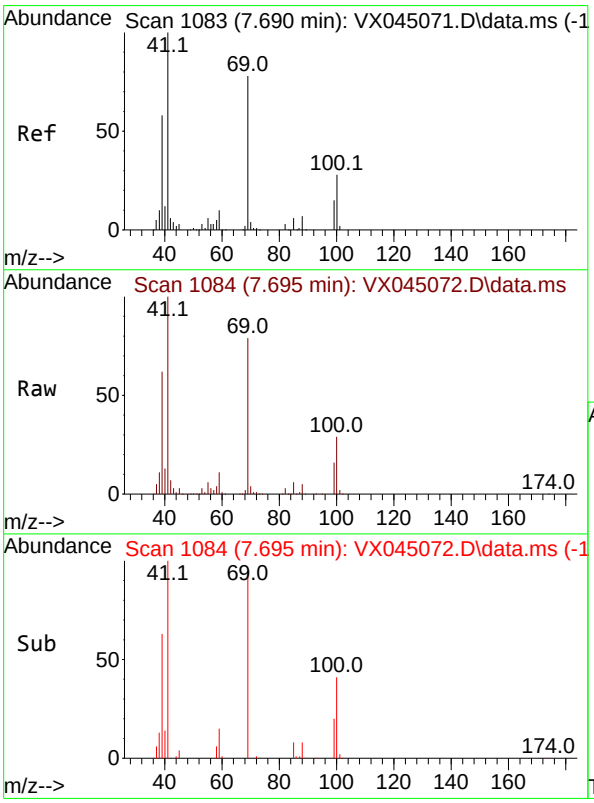
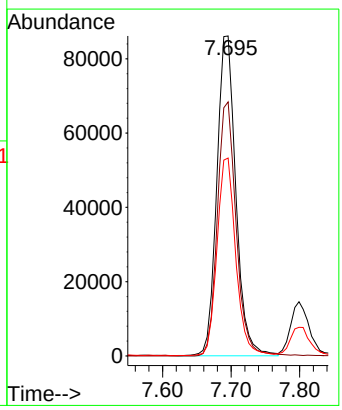
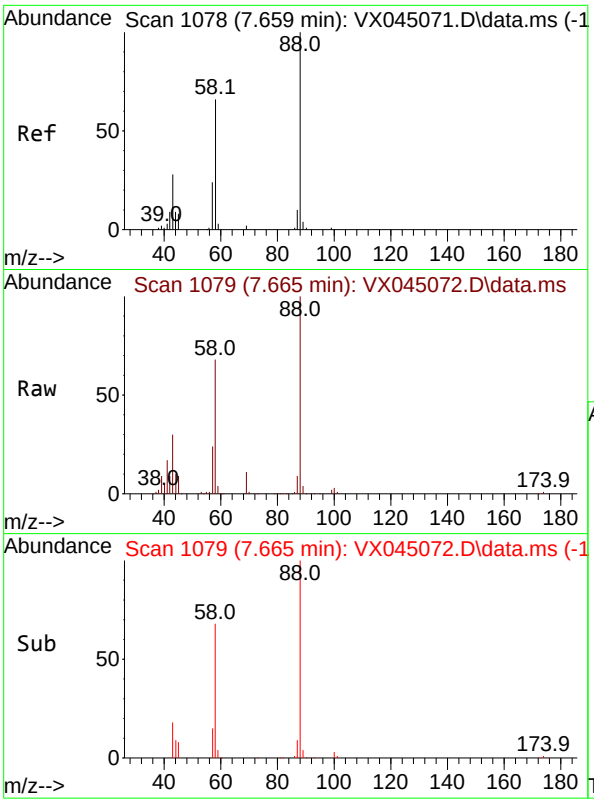



#48
Methyl methacrylate
Concen: 113.344 ug/l
RT: 7.695 min Scan# 1084
Delta R.T. 0.006 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 41 Resp: 165825

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 78.5 | 63.0 | 94.6 |
| 39 | 60.9 | 47.5 | 71.3 |






#49
1,4-Dioxane
Concen: 2132.314 ug/l
RT: 7.665 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

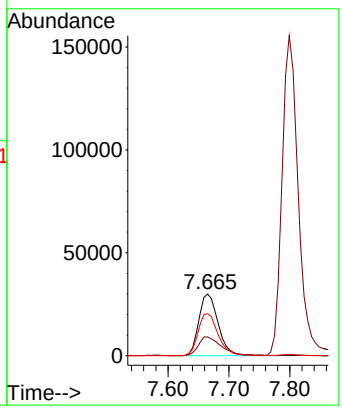
Tgt Ion: 88 Resp: 6630

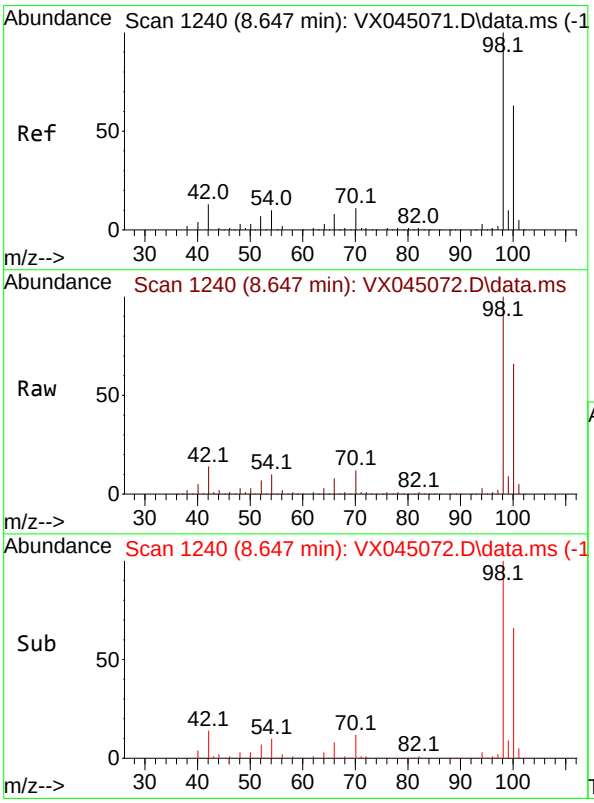
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 35.6 | 28.7 | 43.1 |
| 58 | 70.5 | 55.8 | 83.8 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

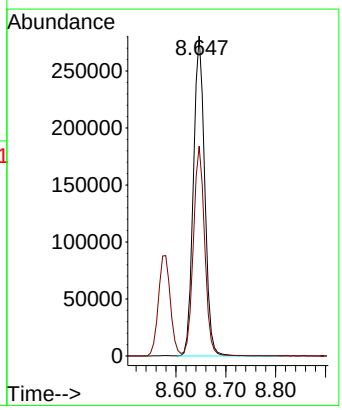


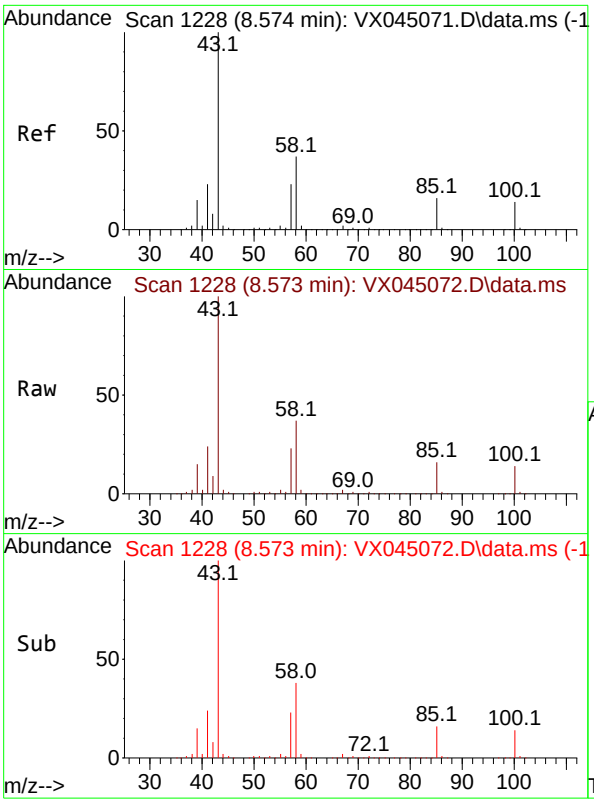




#50
Toluene-d8
Concen: 99.595 ug/l
RT: 8.647 min Scan# 1240
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 98 Resp: 441188

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.3 | 52.0 | 78.0 |

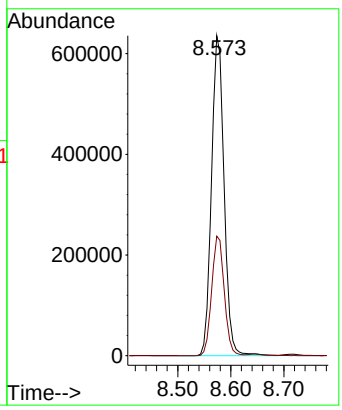





#51
4-Methyl-2-Pentanone
Concen: 555.050 ug/l
RT: 8.573 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 43 Resp: 104814

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 37.4 | 29.2 | 43.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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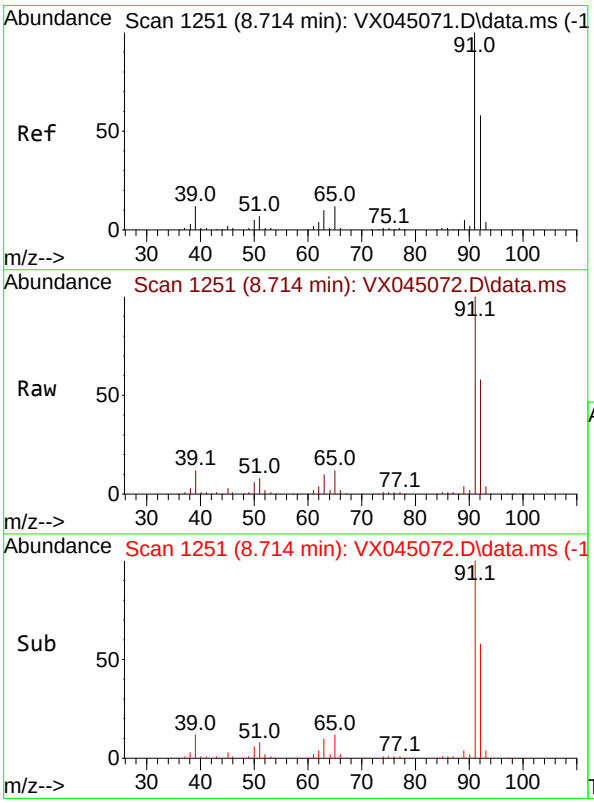
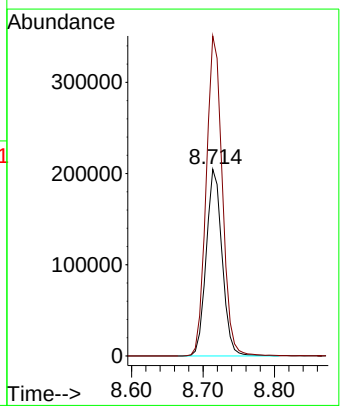
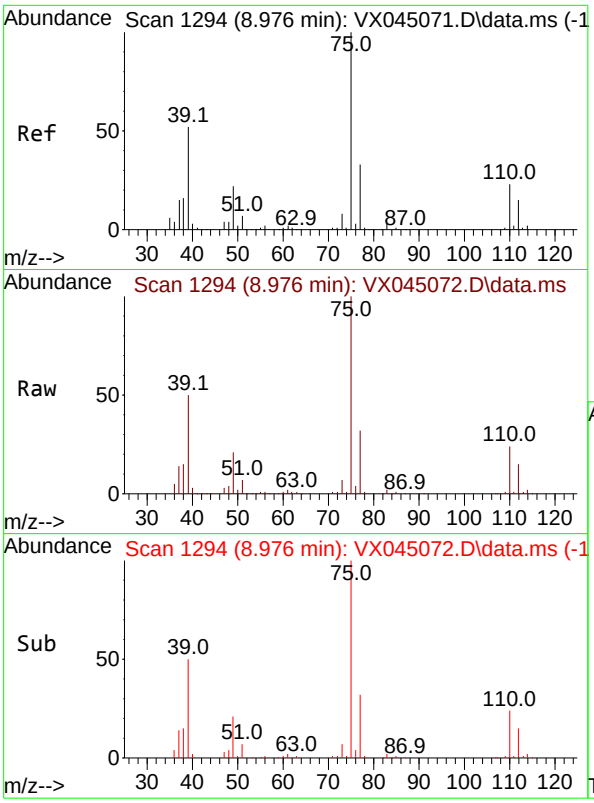



#52
Toluene
Concen: 100.178 ug/l
RT: 8.714 min Scan# 1251
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 92 Resp: 316349

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 173.2 | 138.9 | 208.3 |

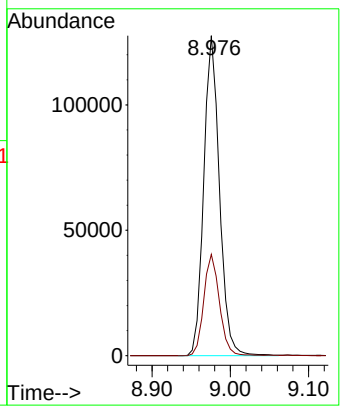





#53
t-1,3-Dichloropropene
Concen: 100.462 ug/l
RT: 8.976 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 75 Resp: 17735

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.6 | 26.5 | 39.7 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
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Reviewed By :John Carlone 02/28/2025
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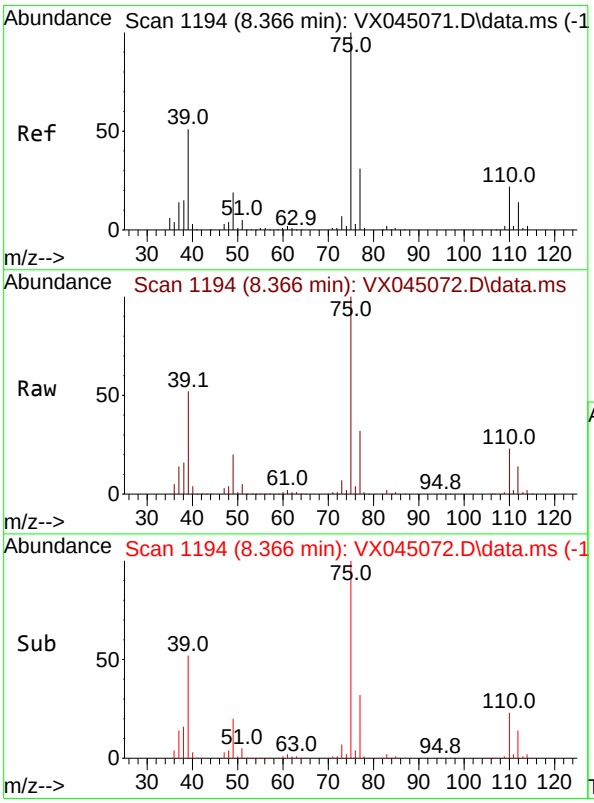
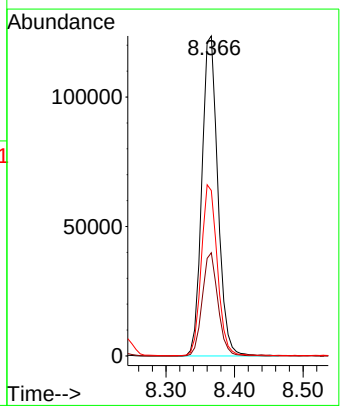
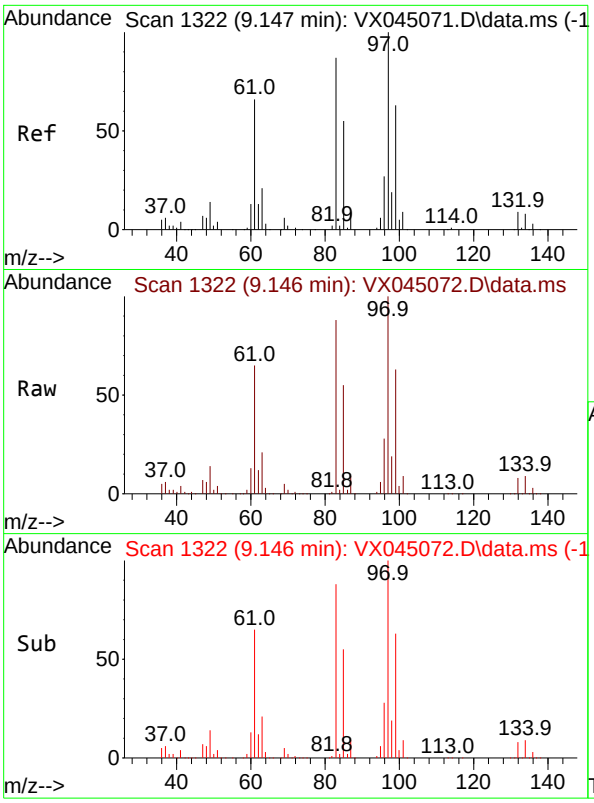



#54
cis-1,3-Dichloropropene
Concen: 101.815 ug/l
RT: 8.366 min Scan# 1194
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 75 Resp: 200943

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.2 | 24.7 | 37.1 |
| 39 | 51.6 | 40.7 | 61.1 |

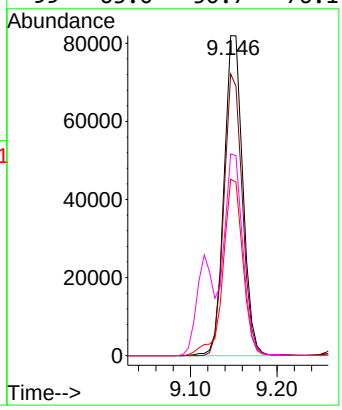





#55
1,1,2-Trichloroethane
Concen: 100.920 ug/l
RT: 9.146 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 97 Resp: 12342

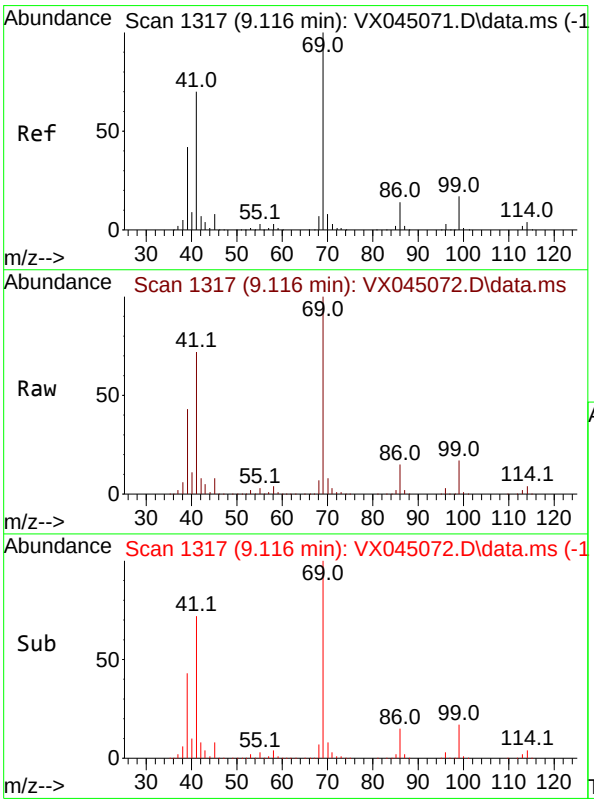
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 88.0 | 69.4 | 104.2 |
| 85 | 55.1 | 44.1 | 66.1 |
| 99 | 63.0 | 50.7 | 76.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

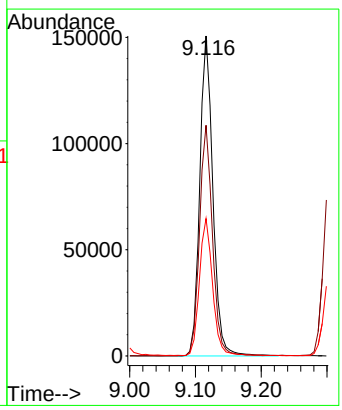
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

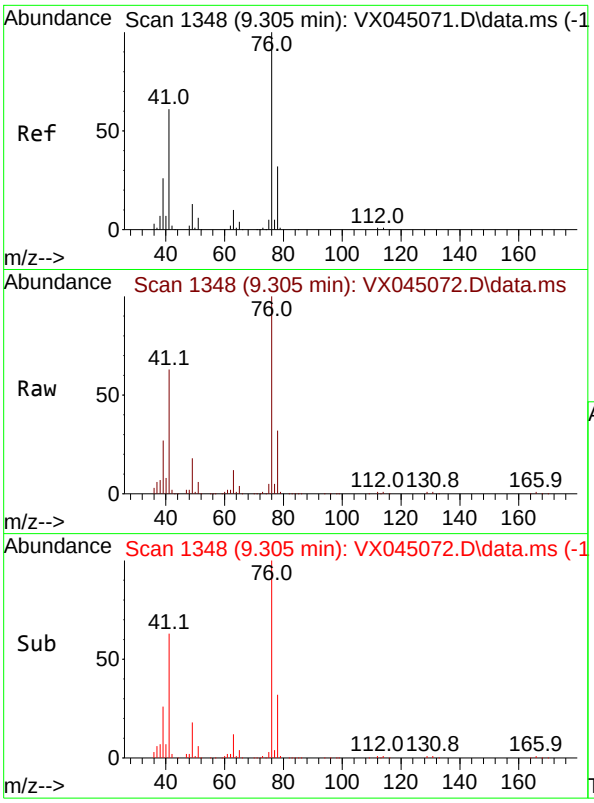



#56
Ethyl methacrylate
Concen: 106.744 ug/l
RT: 9.116 min Scan# 1317
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 69 Resp: 208782

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 71.3 | 57.0 | 85.4 |
| 39 | 43.0 | 34.2 | 51.4 |

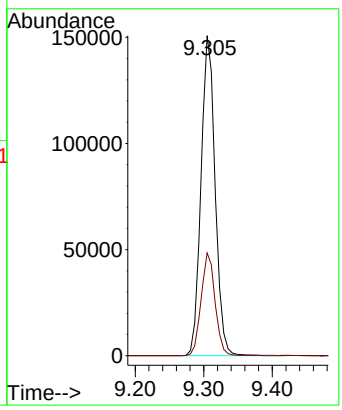





#57
1,3-Dichloropropane
Concen: 101.387 ug/l
RT: 9.305 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 76 Resp: 21626

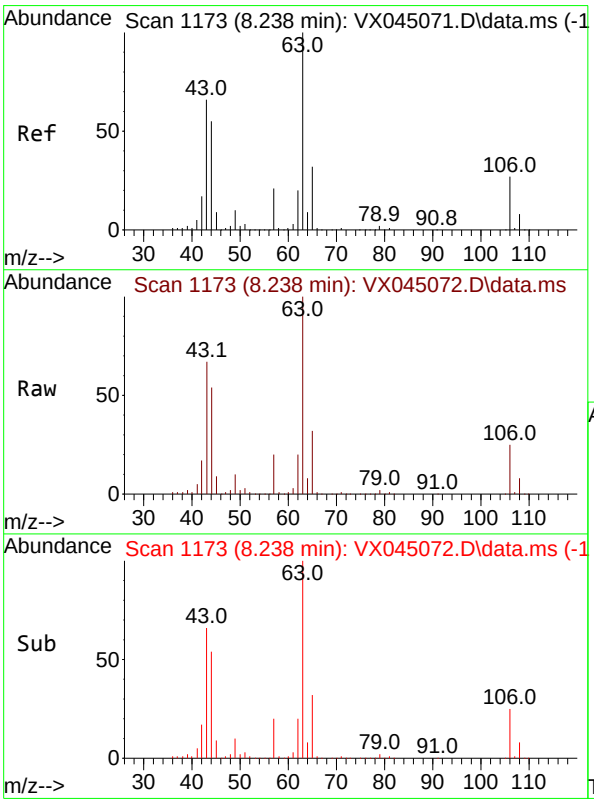
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 31.8 | 25.5 | 38.3 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
**APPROVED**

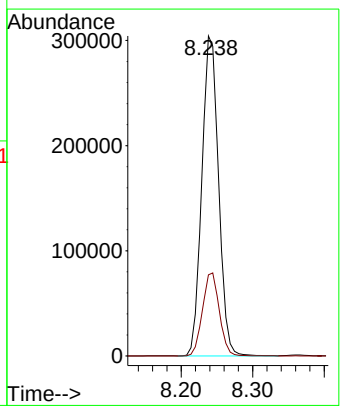
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

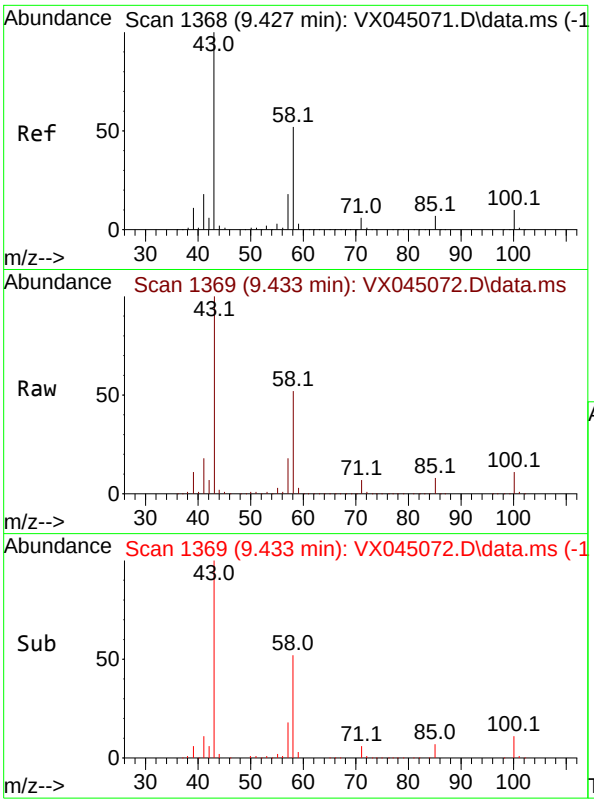



#58
2-Chloroethyl Vinyl ether
Concen: 514.987 ug/l
RT: 8.238 min Scan# 1173
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 63 Resp: 494551

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 26.1 | 21.5 | 32.3 |

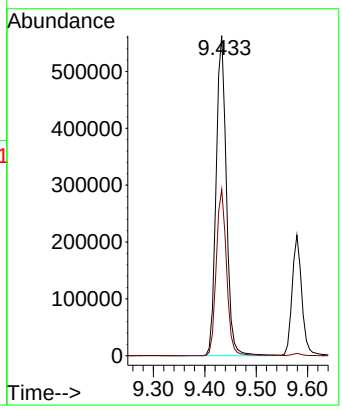





#59
2-Hexanone
Concen: 572.233 ug/l
RT: 9.433 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 43 Resp: 77949

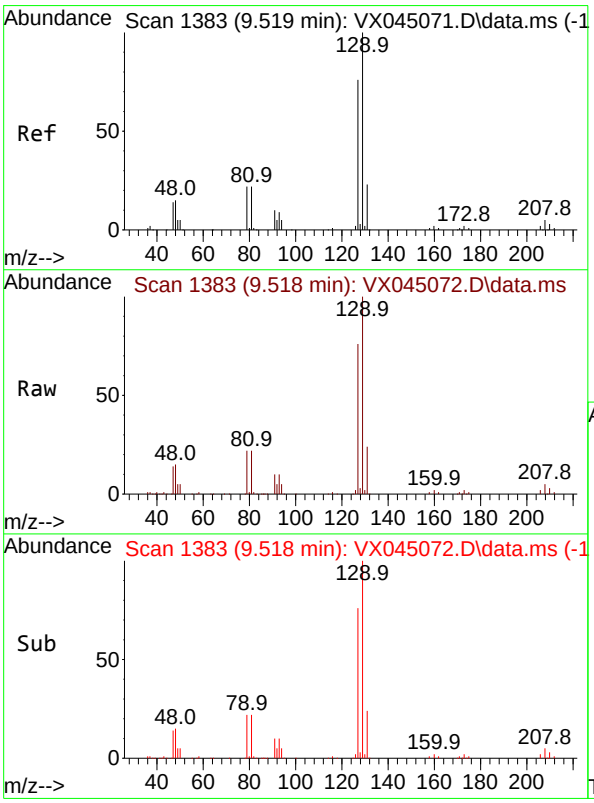
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 52.2 | 25.9 | 77.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
**APPROVED**

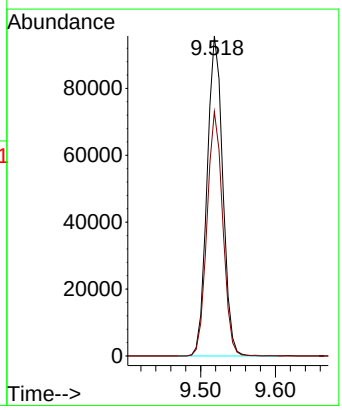
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

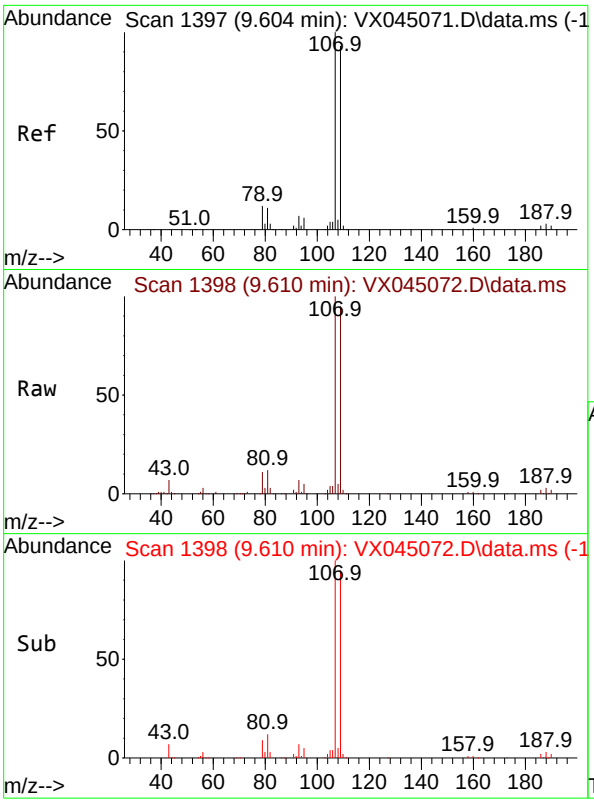



#60
Dibromochloromethane
Concen: 106.719 ug/l
RT: 9.518 min Scan# 1383
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion:129 Resp: 139245

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 76.3 | 38.5 | 115.5 |

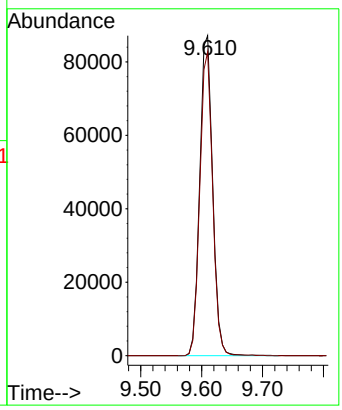





#61
1,2-Dibromoethane
Concen: 104.259 ug/l
RT: 9.610 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion:107 Resp: 12861

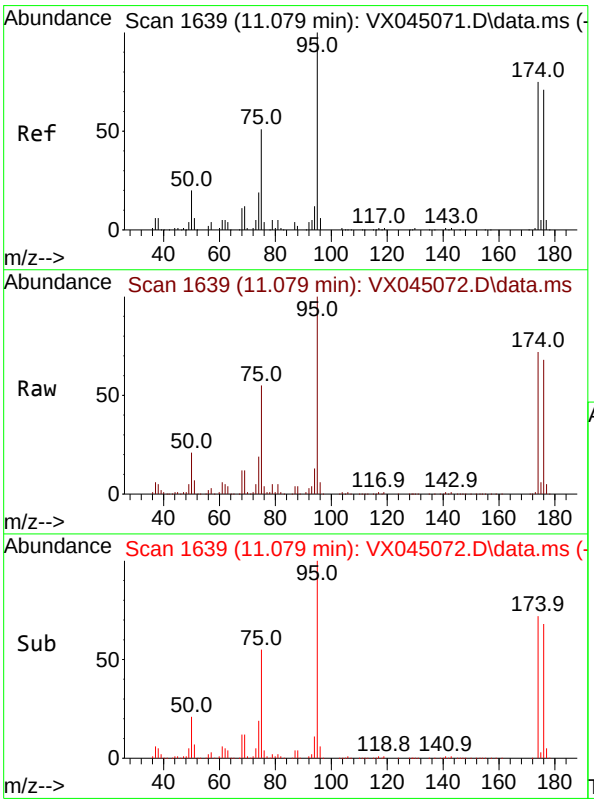
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 94.3 | 76.1 | 114.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

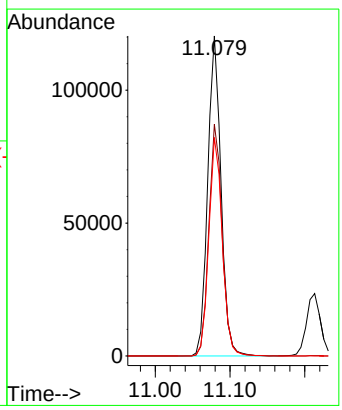
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

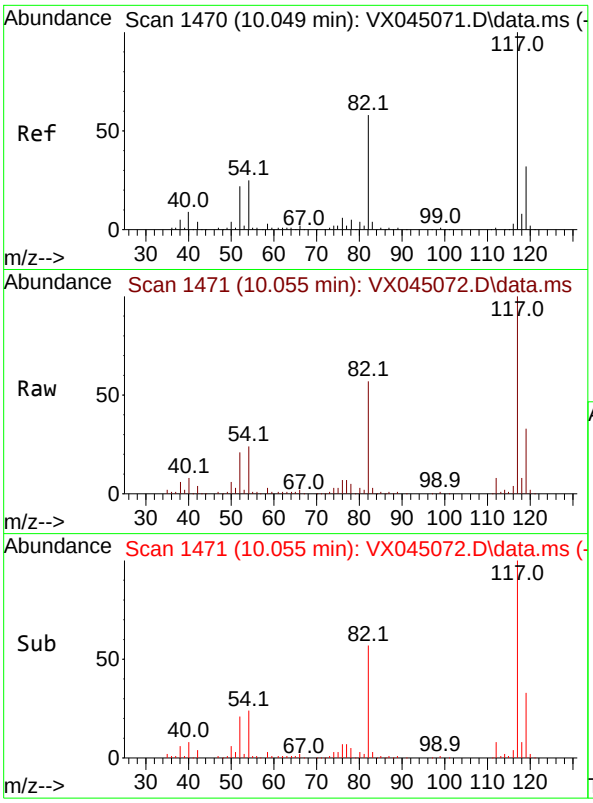



#62
4-Bromofluorobenzene
Concen: 100.365 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 95 Resp: 148476

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 73.0 | 0.0 | 148.2 |
| 176 | 69.2 | 0.0 | 141.4 |

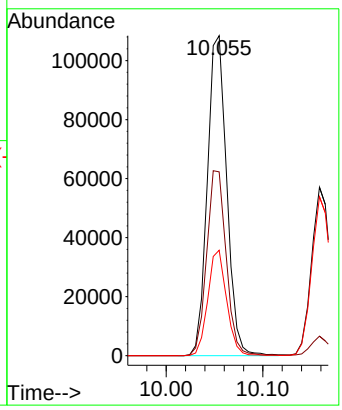





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.055 min Scan# 14
Delta R.T. 0.006 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion:117 Resp: 15117

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 57.5 | 46.3 | 69.5 |
| 119 | 33.0 | 25.7 | 38.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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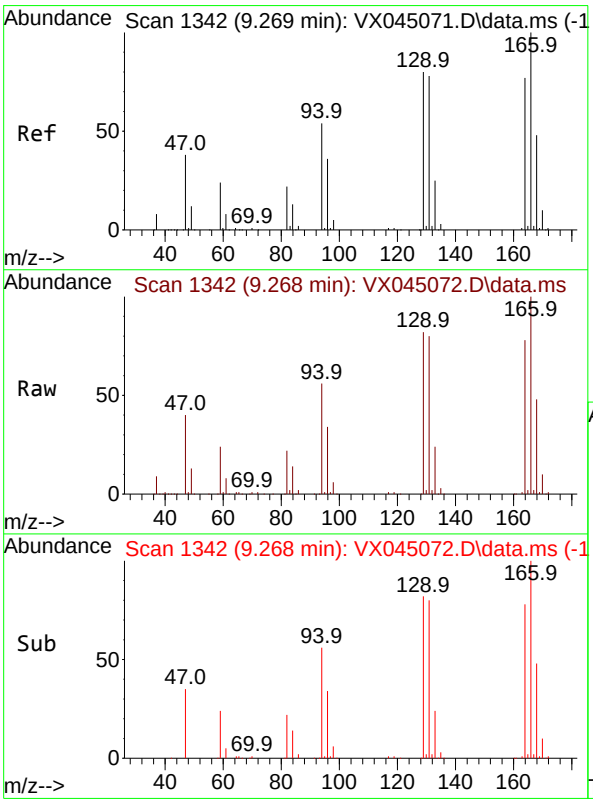
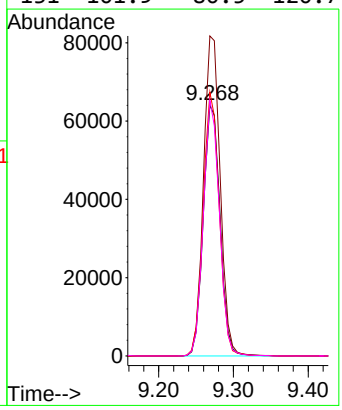
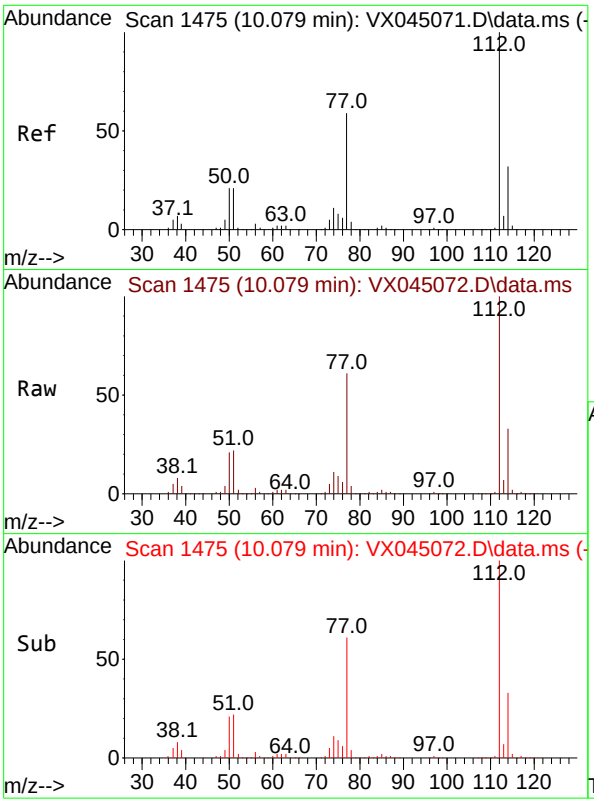



#64
Tetrachloroethene
Concen: 103.491 ug/l
RT: 9.268 min Scan# 1342
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion:164 Resp: 99386

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 127.6 | 103.6 | 155.4 |
| 129 | 105.2 | 82.7 | 124.1 |
| 131 | 101.9 | 80.5 | 120.7 |

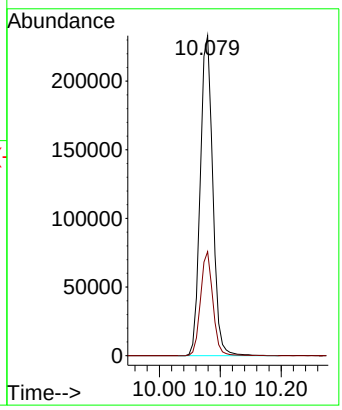





#65
Chlorobenzene
Concen: 102.456 ug/l
RT: 10.079 min Scan# 14
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion:112 Resp: 33247

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 32.5 | 26.0 | 39.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

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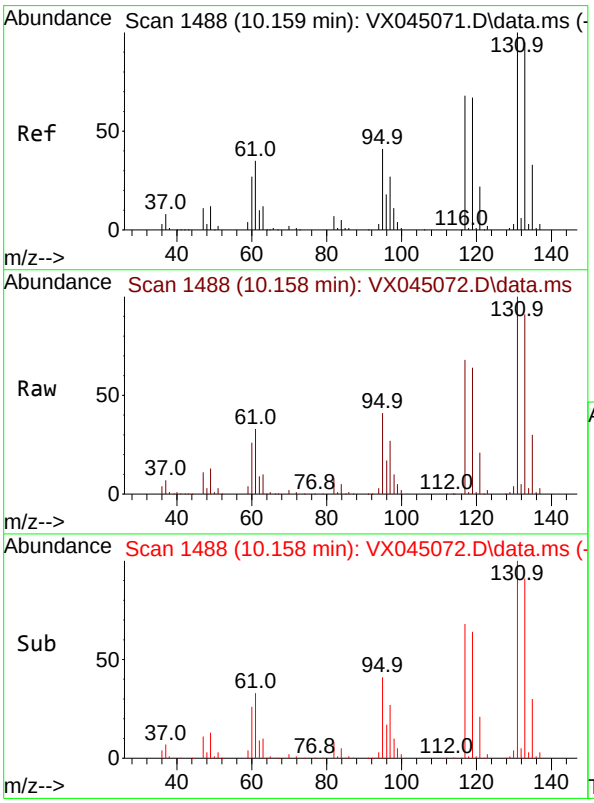
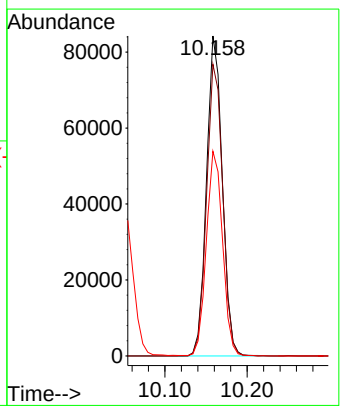
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

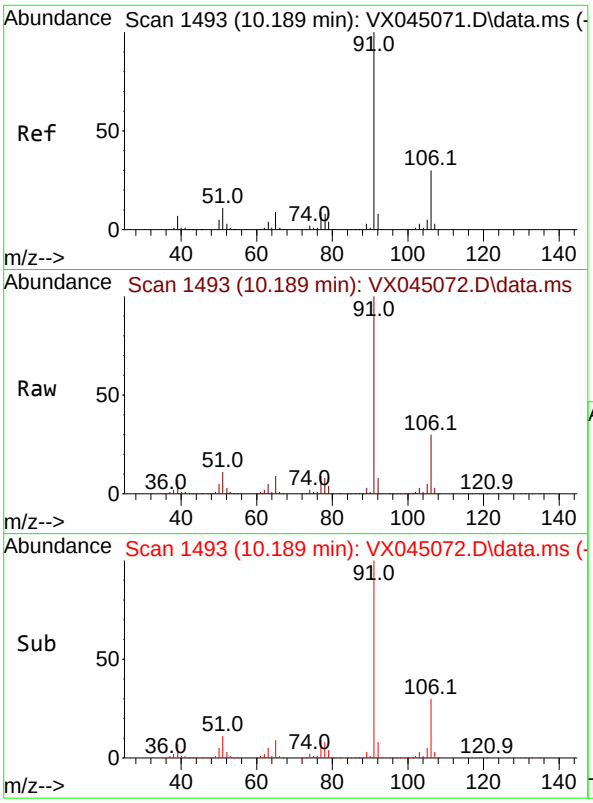



#66
1,1,1,2-Tetrachloroethane
Concen: 107.511 ug/l
RT: 10.158 min Scan# 1488
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion:131 Resp: 112451

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 93.1 | 48.6 | 145.9 |
| 119 | 65.8 | 33.9 | 101.7 |

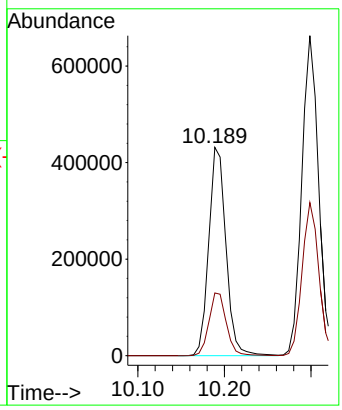





#67
Ethyl Benzene
Concen: 103.905 ug/l
RT: 10.189 min Scan# 14
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 91 Resp: 59625

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 30.1 | 23.9 | 35.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
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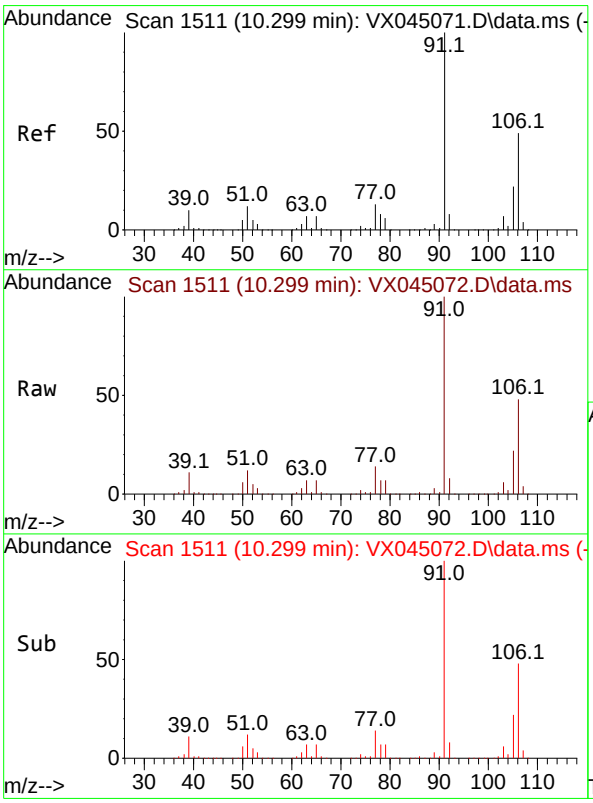
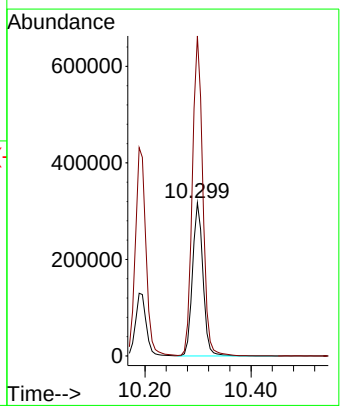
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

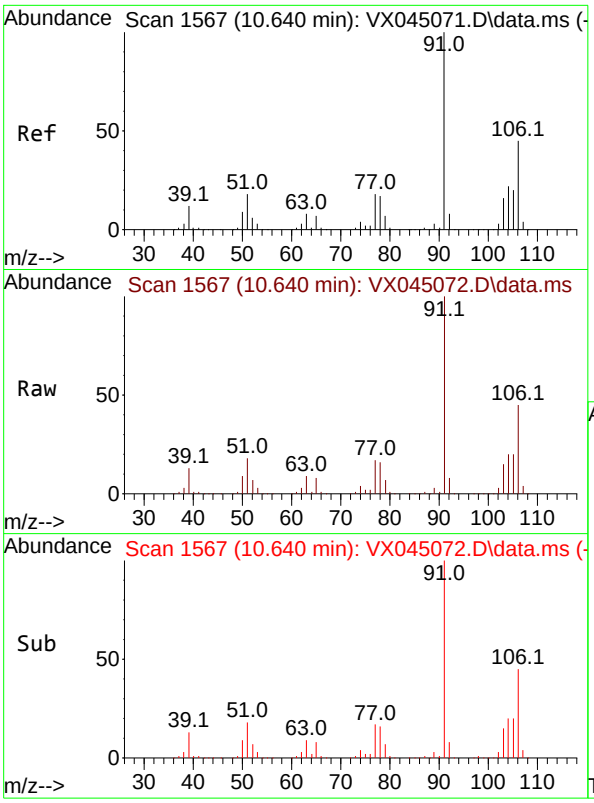



#68
m/p-Xylenes
Concen: 204.507 ug/l
RT: 10.299 min Scan# 1511
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion:106 Resp: 432214

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 208.9 | 165.4 | 248.0 |

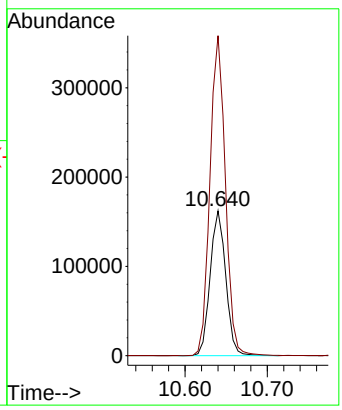





#69
o-Xylene
Concen: 100.849 ug/l
RT: 10.640 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion:106 Resp: 21383

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 218.2 | 109.9 | 329.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

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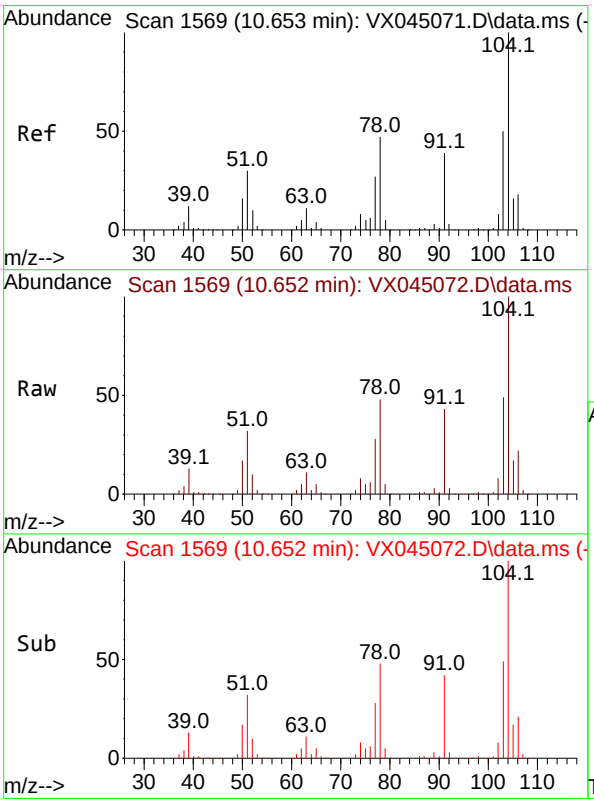
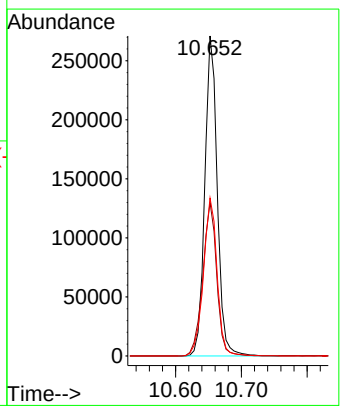
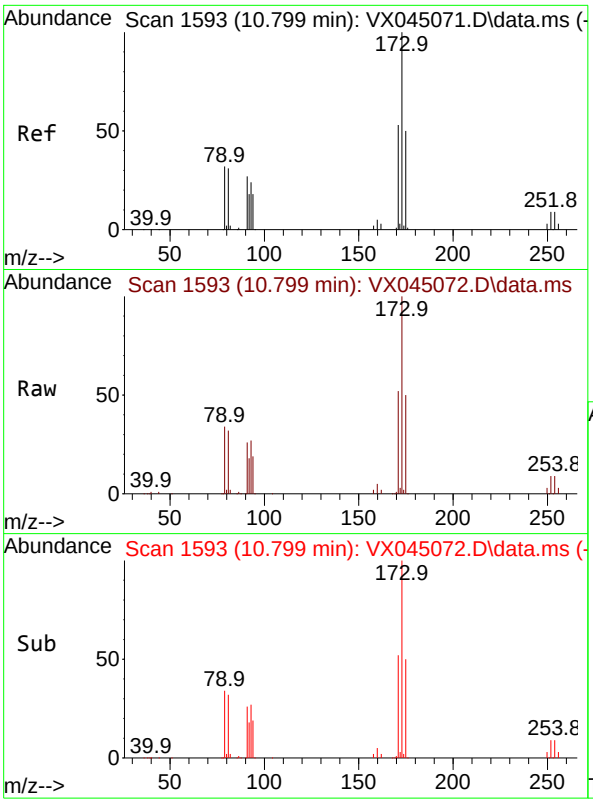



#70
Styrene
Concen: 104.948 ug/l
RT: 10.652 min Scan# 1569
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion:104 Resp: 357649

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 53.7 | 42.2 | 63.4 |
| 103 | 54.3 | 43.8 | 65.8 |

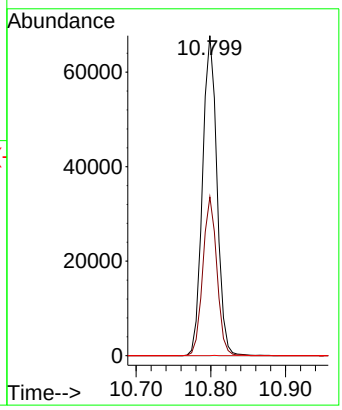





#71
Bromoform
Concen: 116.751 ug/l
RT: 10.799 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion:173 Resp: 9080

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 48.3 | 24.6 | 73.6 |
| 254 | 0.0 | 0.0 | 0.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

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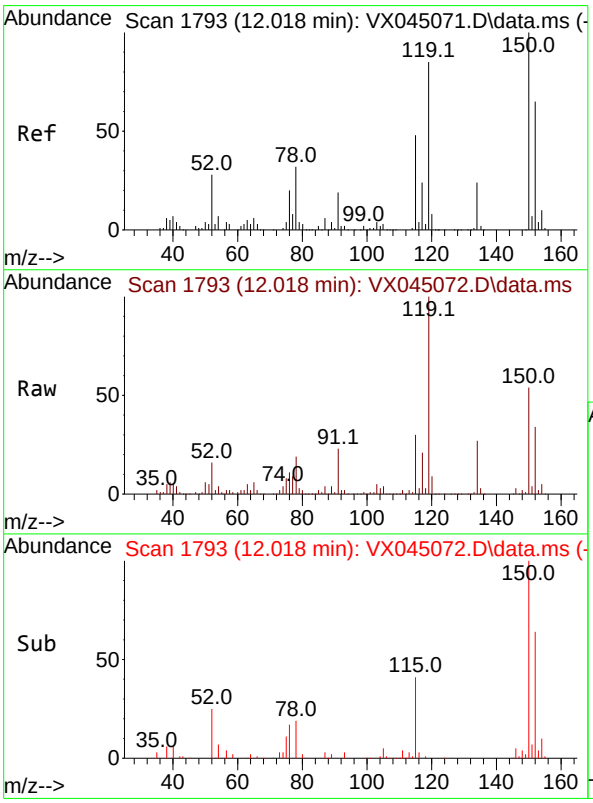
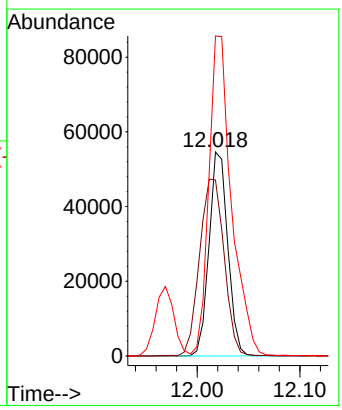
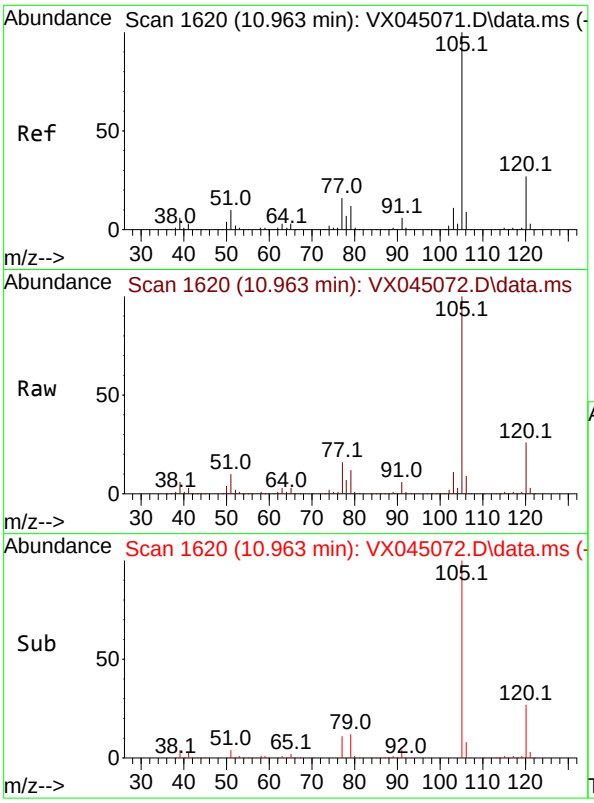



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.018 min Scan# 1793
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion:152 Resp: 69086

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 114.1 | 44.2 | 132.6 |
| 150 | 190.7 | 0.0 | 349.0 |

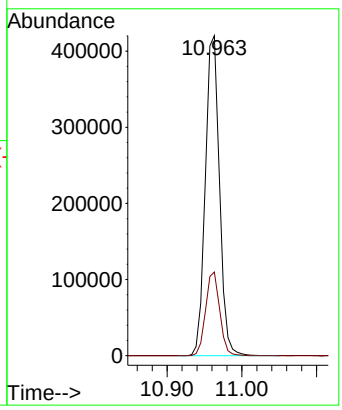





#73
Isopropylbenzene
Concen: 99.138 ug/l
RT: 10.963 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion:105 Resp: 55353

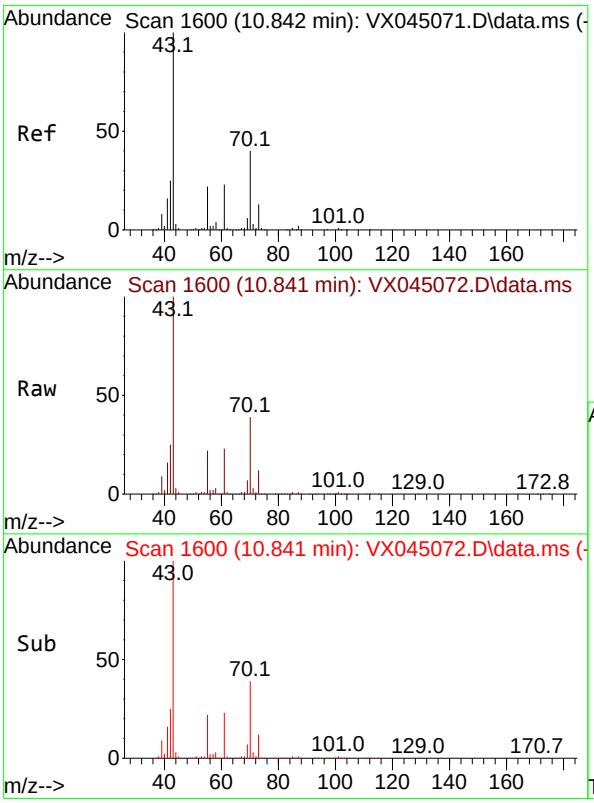
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.0 | 13.2 | 39.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

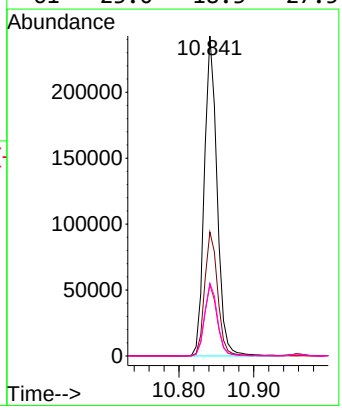
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

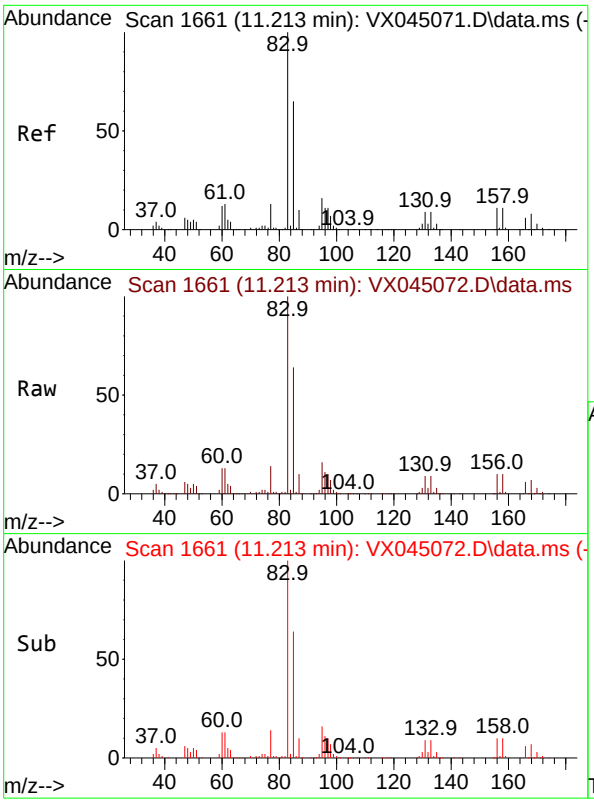



#74
N-amyl acetate
Concen: 113.277 ug/l
RT: 10.841 min Scan# 1600
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 43 Resp: 287104

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 39.6 | 31.8 | 47.6 |
| 55 | 22.3 | 18.3 | 27.5 |
| 61 | 23.0 | 18.3 | 27.5 |

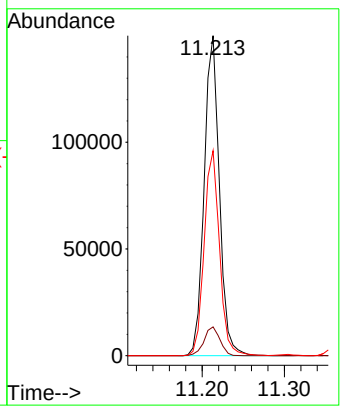





#75
1,1,2,2-Tetrachloroethane
Concen: 99.923 ug/l
RT: 11.213 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 83 Resp: 19221

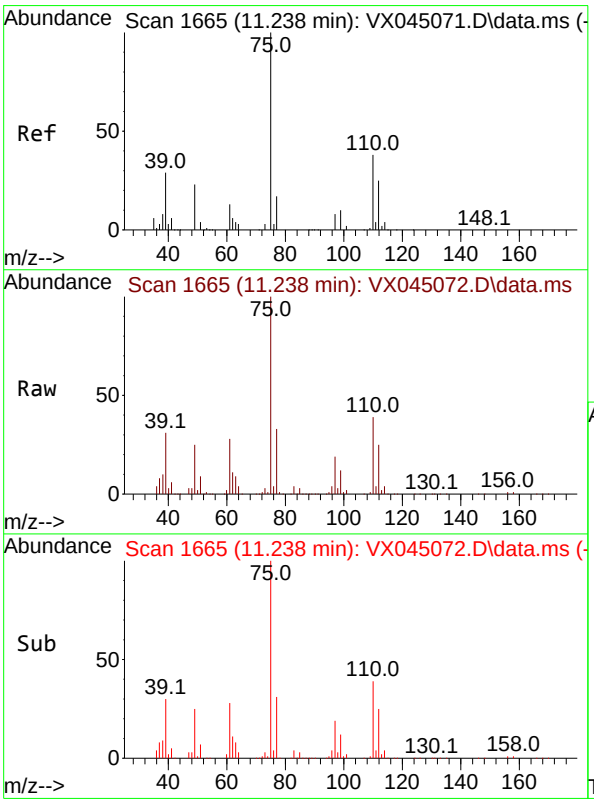
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 9.4 | 4.5 | 13.4 |
| 85 | 64.7 | 31.7 | 95.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

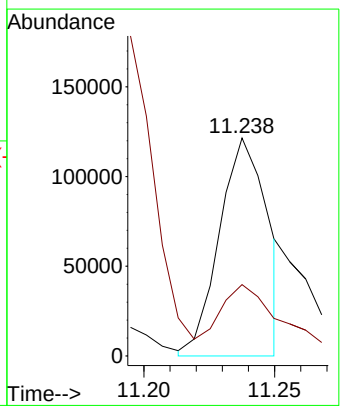
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

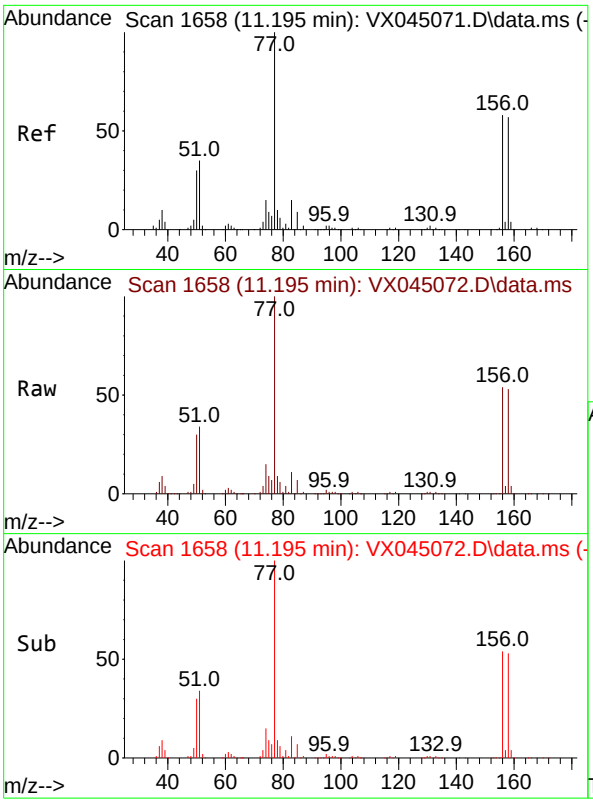



#76
1,2,3-Trichloropropane
Concen: 101.395 ug/l m
RT: 11.238 min Scan# 1665
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 75 Resp: 156259

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 42.7 | 20.7 | 62.1 |

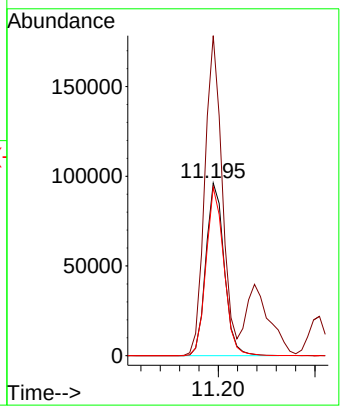





#77
Bromobenzene
Concen: 99.175 ug/l
RT: 11.195 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion:156 Resp: 12570

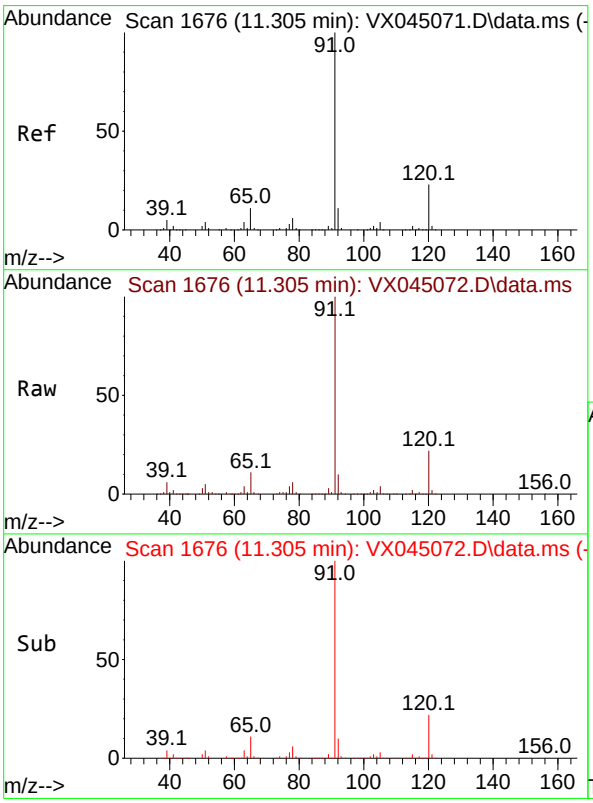
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 177.3 | 85.8 | 257.4 |
| 158 | 95.9 | 48.4 | 145.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
**APPROVED**

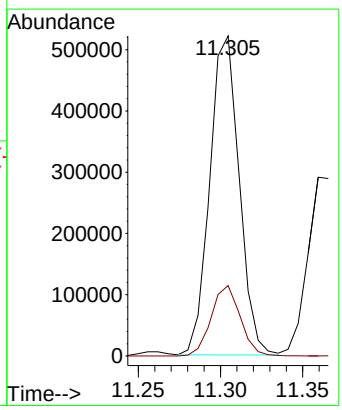
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

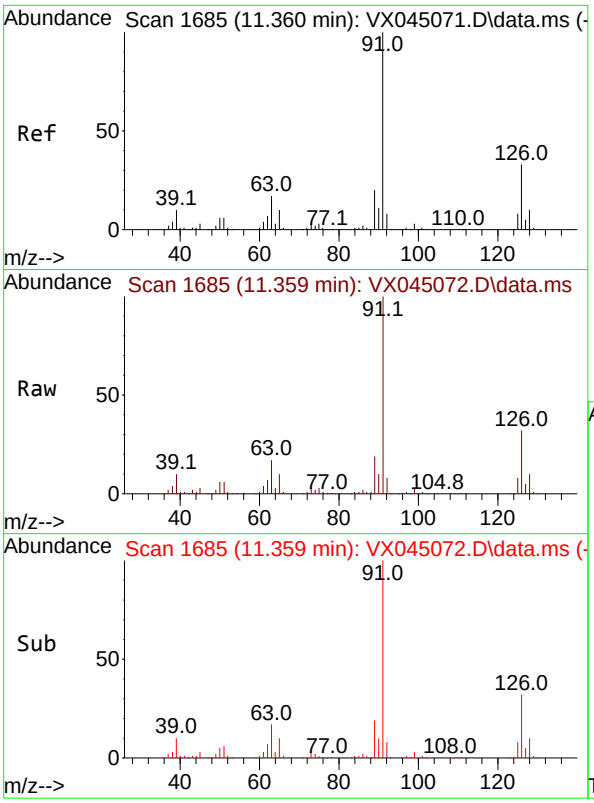



#78
n-propylbenzene
Concen: 100.758 ug/l
RT: 11.305 min Scan# 1676
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 91 Resp: 648835

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 21.8 | 11.2 | 33.6 |

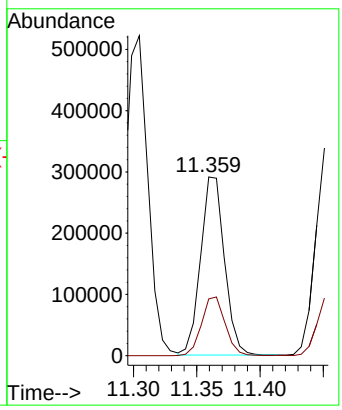





#79
2-Chlorotoluene
Concen: 96.825 ug/l
RT: 11.359 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 91 Resp: 38270

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 32.7 | 16.4 | 49.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

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Reviewed By :John Carlone 02/28/2025
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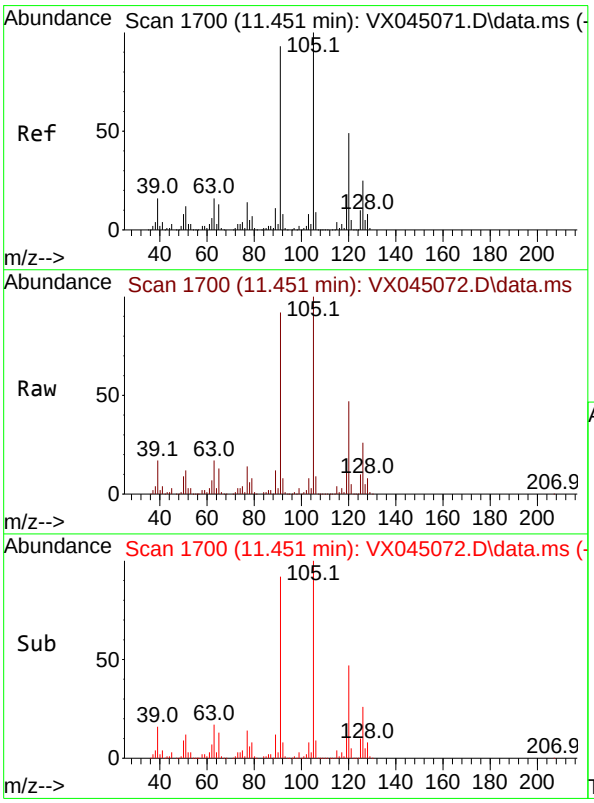
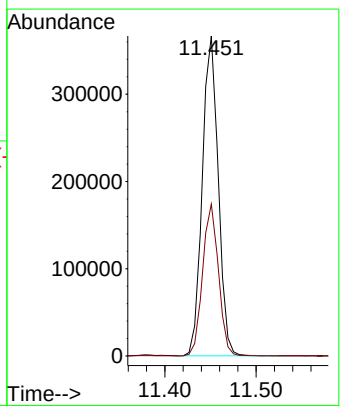
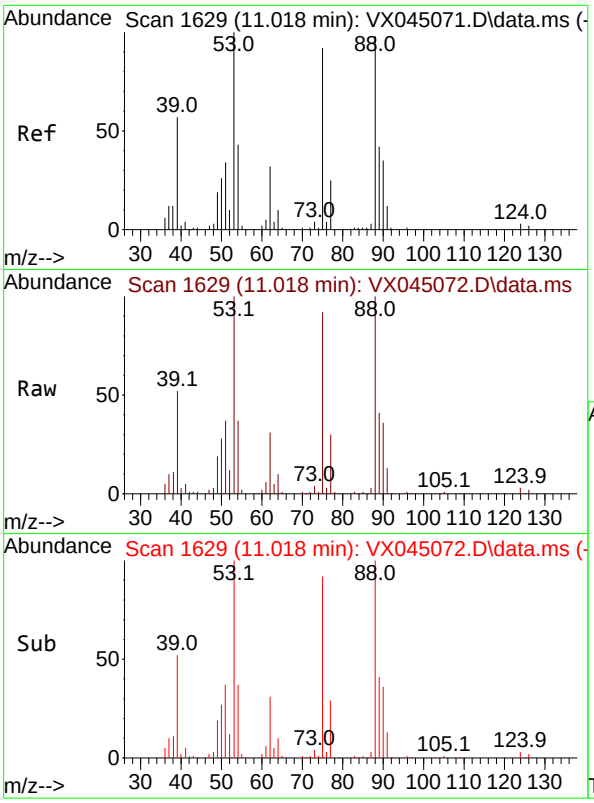



#80
1,3,5-Trimethylbenzene
Concen: 98.356 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion:105 Resp: 445466

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 47.1 | 24.1 | 72.2 |

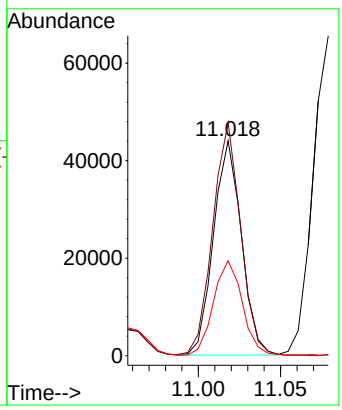





#81
trans-1,4-Dichloro-2-butene
Concen: 91.460 ug/l
RT: 11.018 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 75 Resp: 5197

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 109.9 | 88.5 | 132.7 |
| 89 | 45.7 | 36.2 | 54.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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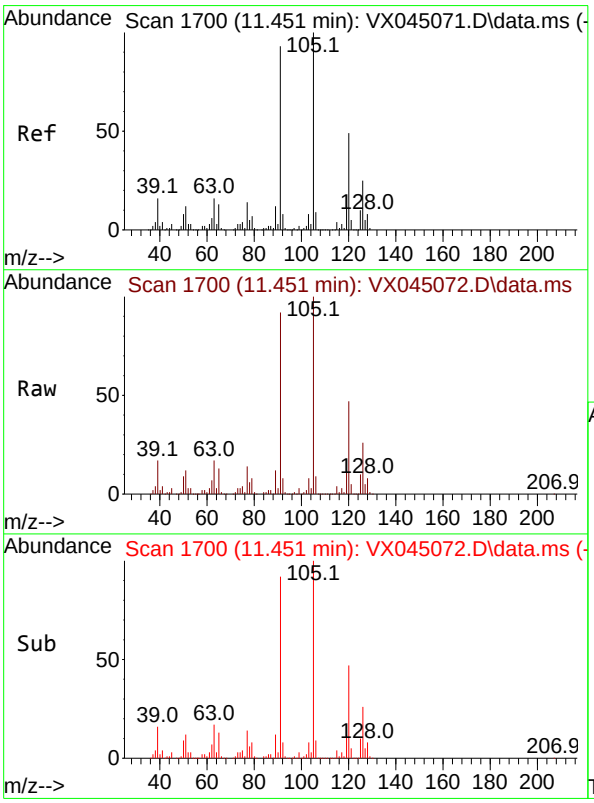
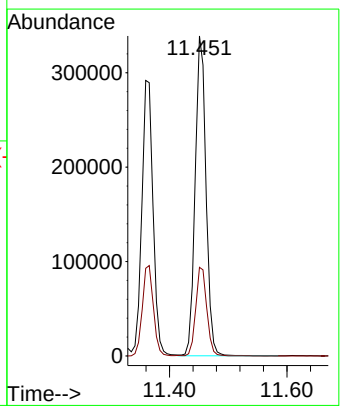
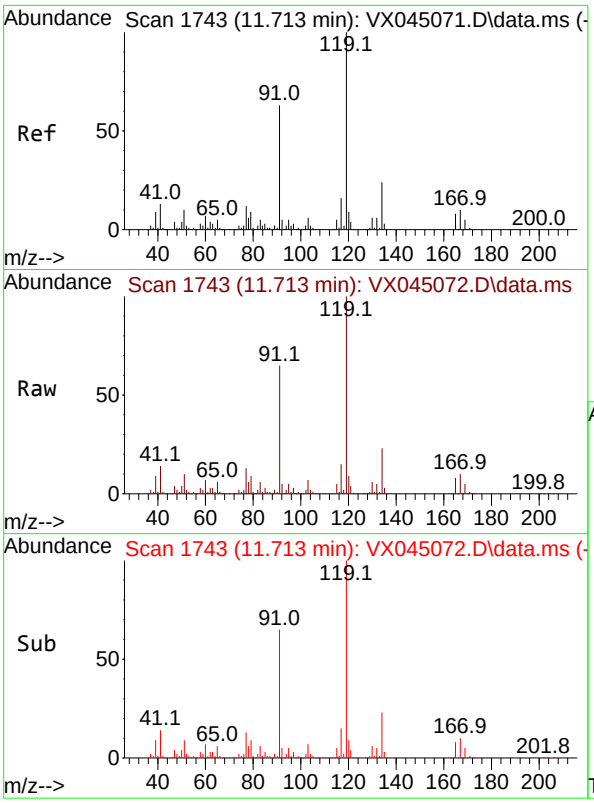



#82
4-Chlorotoluene
Concen: 99.168 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 91 Resp: 433881

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 28.2 | 14.1 | 42.4 |

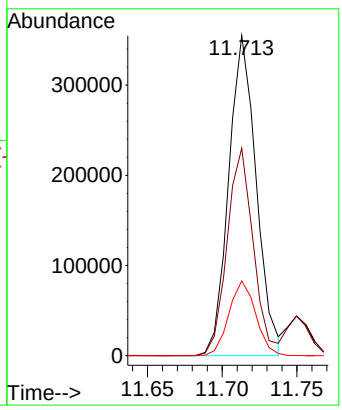





#83
tert-Butylbenzene
Concen: 99.288 ug/l
RT: 11.713 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion:119 Resp: 45485

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 61.7 | 30.7 | 92.1 |
| 134 | 22.8 | 11.7 | 35.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

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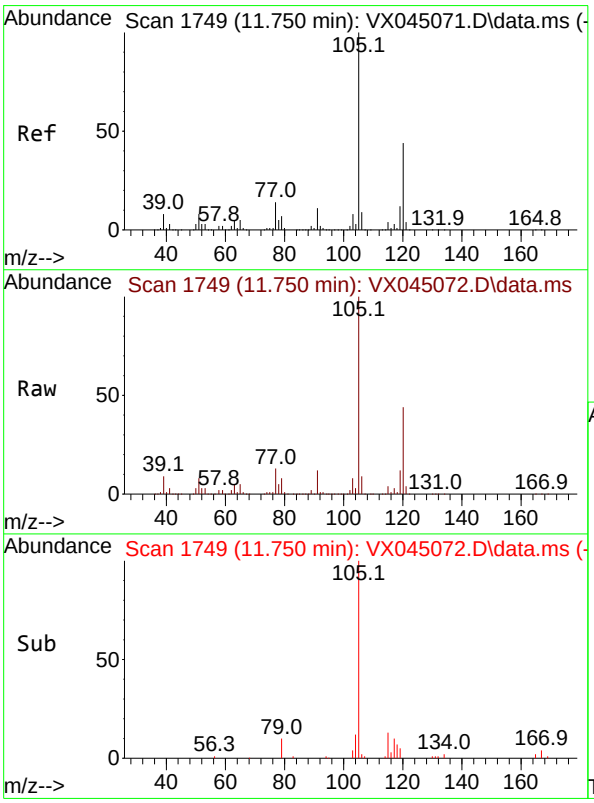
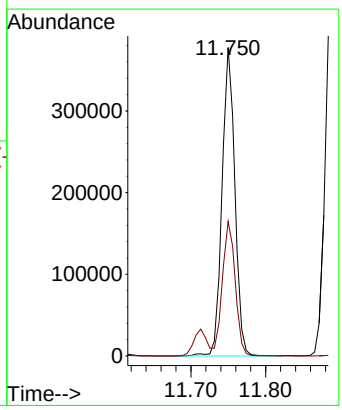
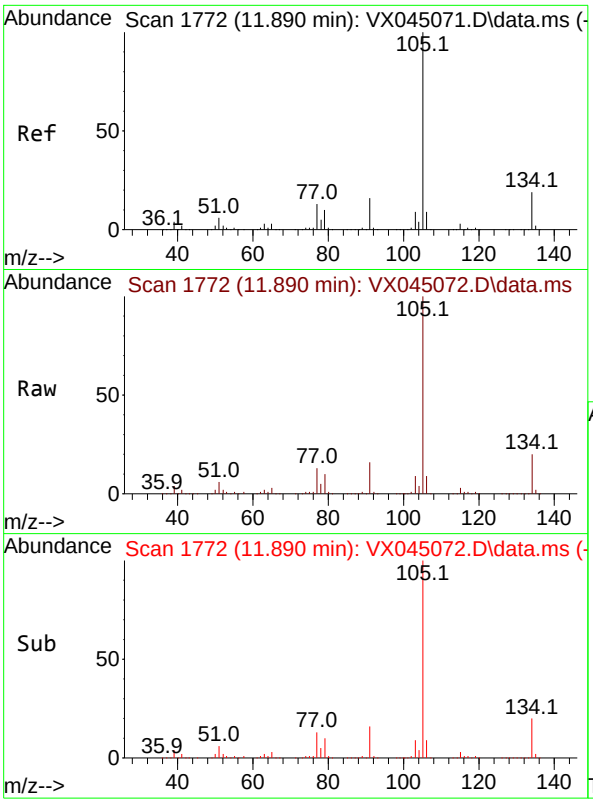



#84
1,2,4-Trimethylbenzene
Concen: 100.926 ug/l
RT: 11.750 min Scan# 1749
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion:105 Resp: 450108

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 43.4 | 22.1 | 66.1 |






#85
sec-Butylbenzene
Concen: 100.517 ug/l
RT: 11.890 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

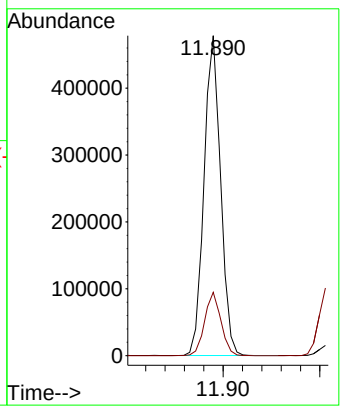
Tgt Ion:105 Resp: 57000

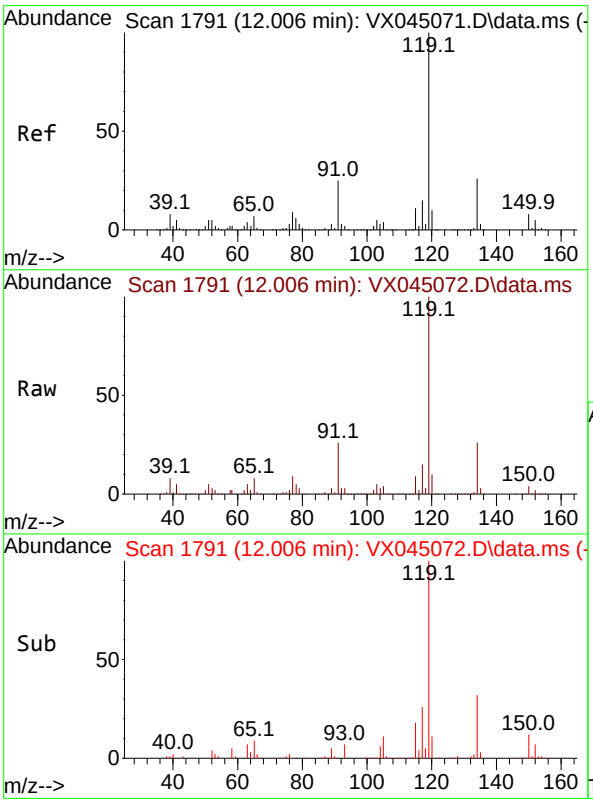
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.6 | 9.8 | 29.4 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

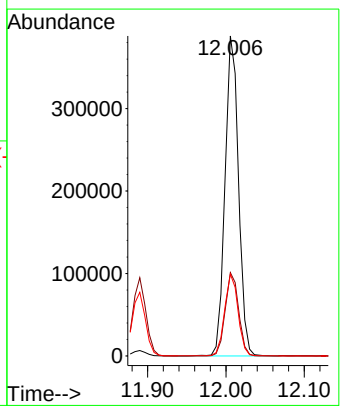


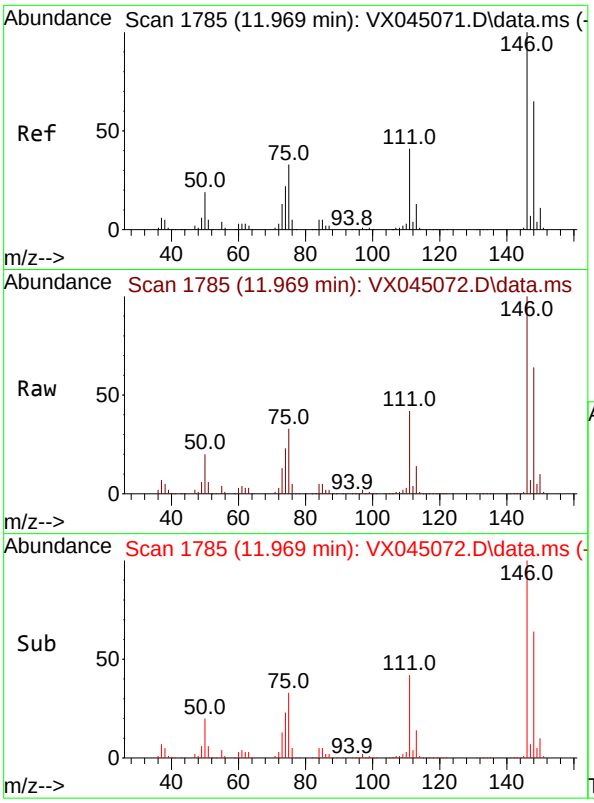




#86
p-Isopropyltoluene
Concen: 102.252 ug/l
RT: 12.006 min Scan# 1791
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion:119 Resp: 465512

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 26.0 | 12.9 | 38.6 |
| 91 | 25.3 | 12.7 | 38.0 |

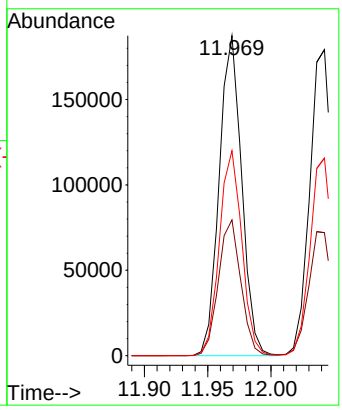





#87
1,3-Dichlorobenzene
Concen: 99.903 ug/l
RT: 11.969 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion:146 Resp: 23144

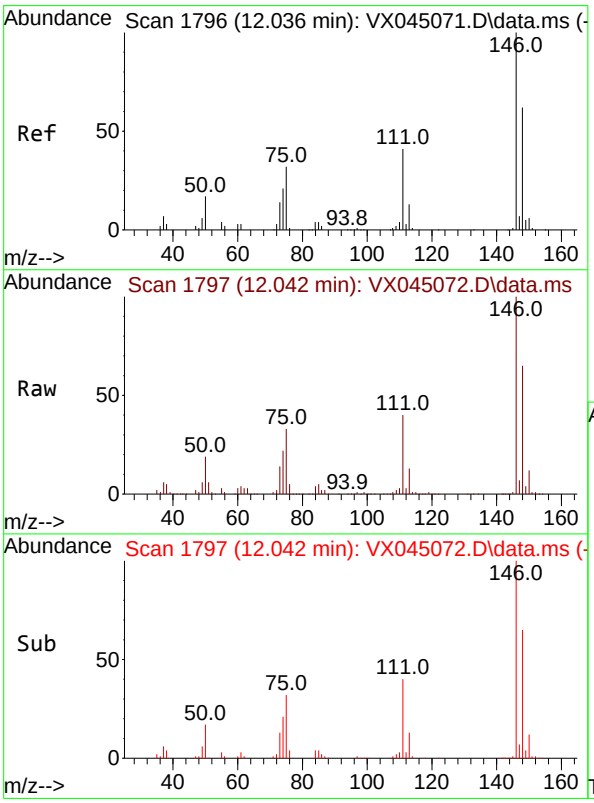
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.6 | 21.1 | 63.4 |
| 148 | 64.1 | 31.9 | 95.7 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
**APPROVED**

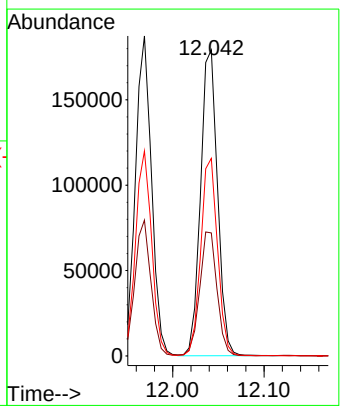
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

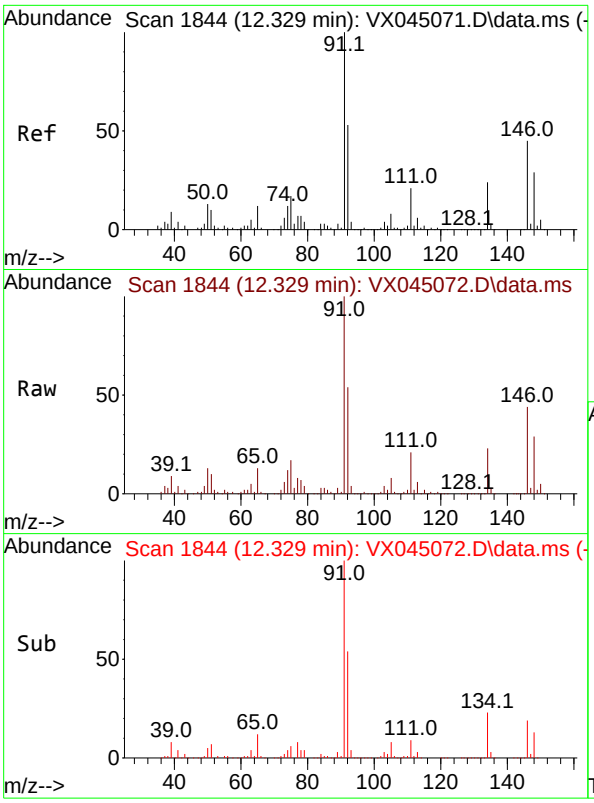



#88
1,4-Dichlorobenzene
Concen: 98.355 ug/l
RT: 12.042 min Scan# 1797
Delta R.T. 0.006 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion:146 Resp: 230663

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 41.5 | 20.2 | 60.5 |
| 148 | 63.9 | 31.9 | 95.9 |

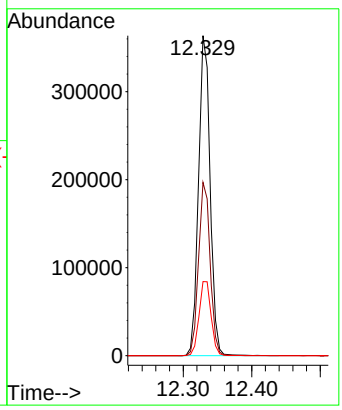





#89
n-Butylbenzene
Concen: 107.000 ug/l
RT: 12.329 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 91 Resp: 42820

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 54.4 | 26.7 | 80.0 |
| 134 | 24.2 | 12.2 | 36.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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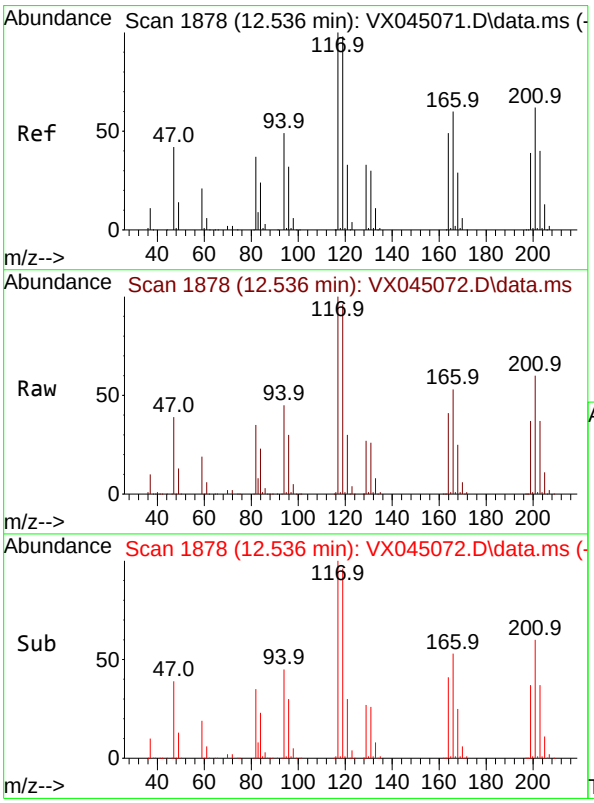
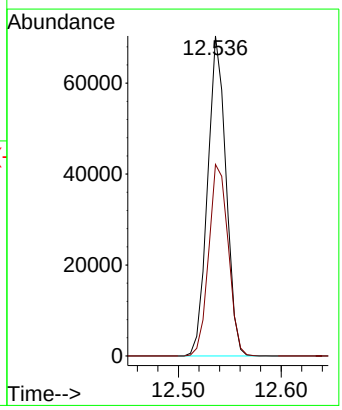
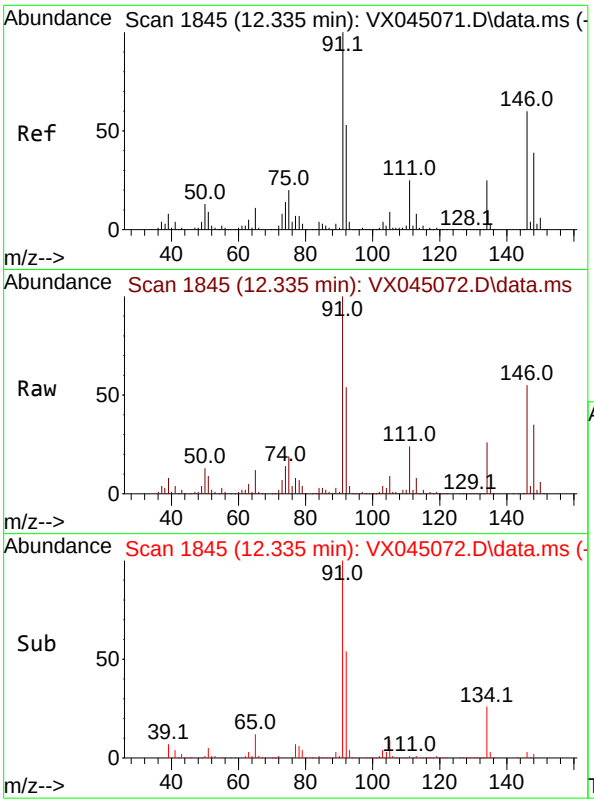



#90
Hexachloroethane
Concen: 102.980 ug/l
RT: 12.536 min Scan# 1878
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion:117 Resp: 87448

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 63.4 | 31.9 | 95.9 |

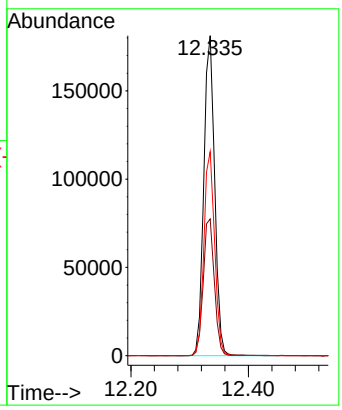





#91
1,2-Dichlorobenzene
Concen: 102.254 ug/l
RT: 12.335 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion:146 Resp: 23312

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.7 | 21.6 | 65.0 |
| 148 | 63.2 | 31.9 | 95.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

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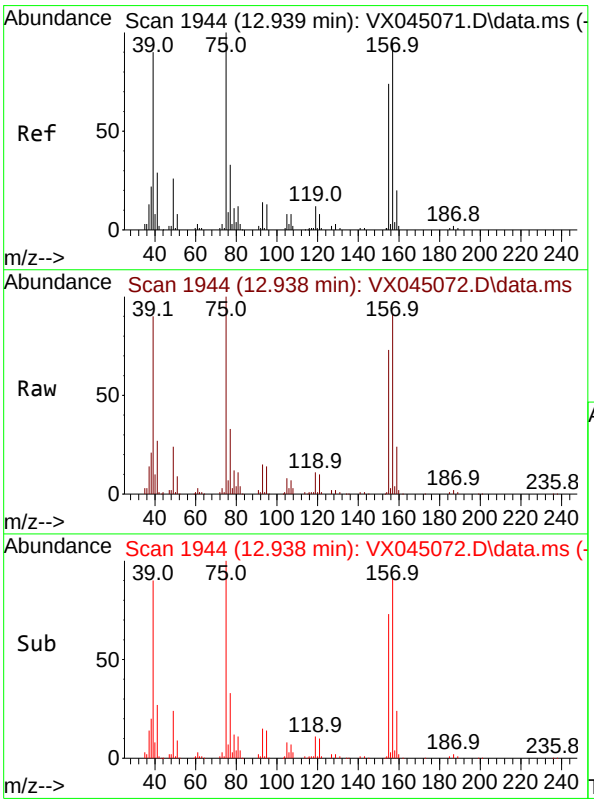
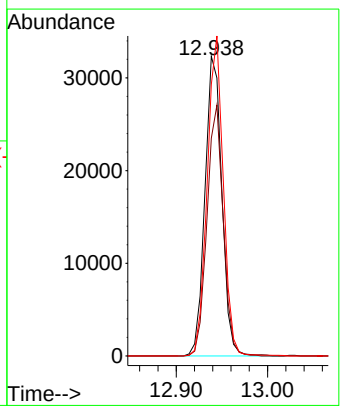
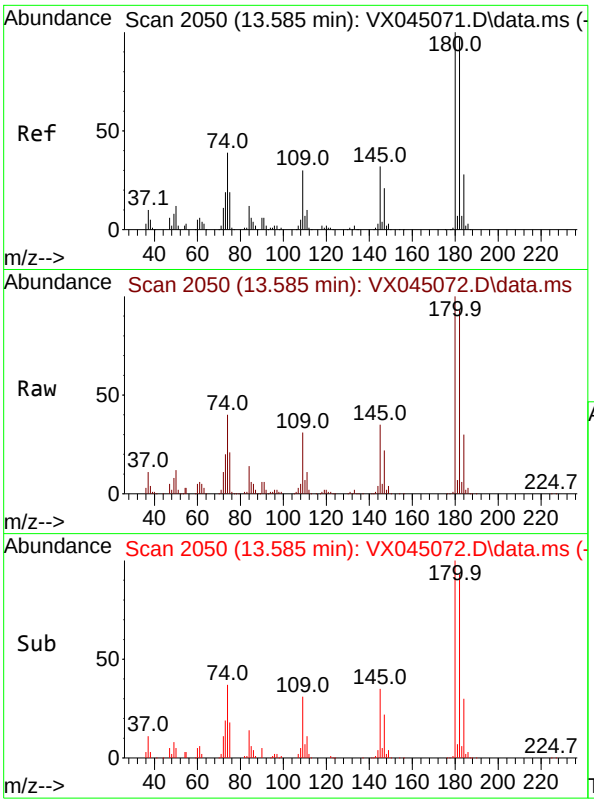



#92
1,2-Dibromo-3-Chloropropane
Concen: 116.296 ug/l
RT: 12.938 min Scan# 1944
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion: 75 Resp: 41402

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 80.6 | 39.6 | 118.7 |
| 157 | 101.8 | 51.1 | 153.4 |






#93
1,2,4-Trichlorobenzene
Concen: 107.648 ug/l
RT: 13.585 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

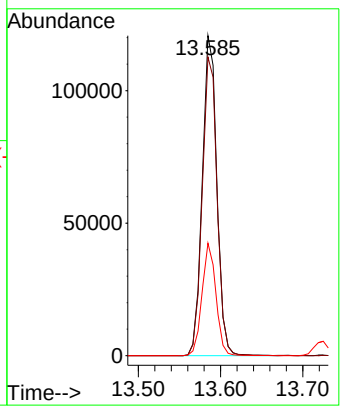
Tgt Ion:180 Resp: 14836

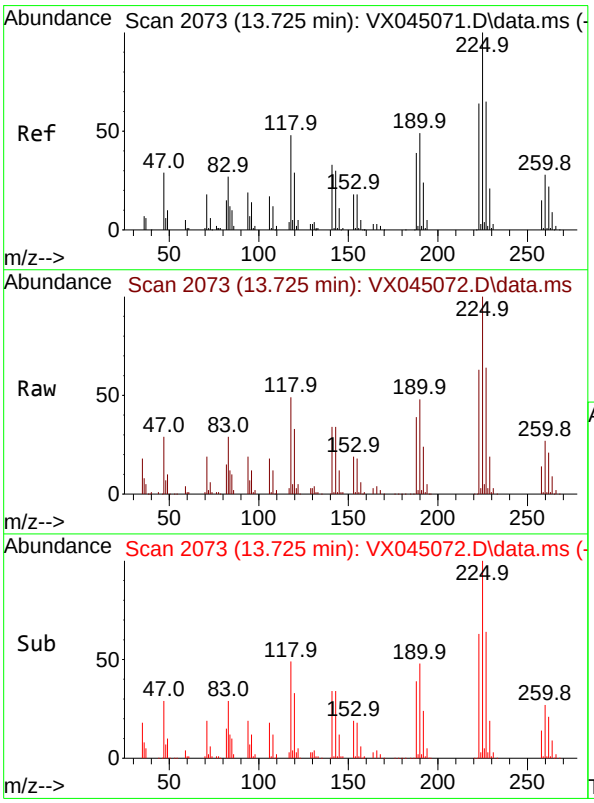
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.1 | 47.3 | 141.9 |
| 145 | 33.6 | 16.3 | 48.9 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

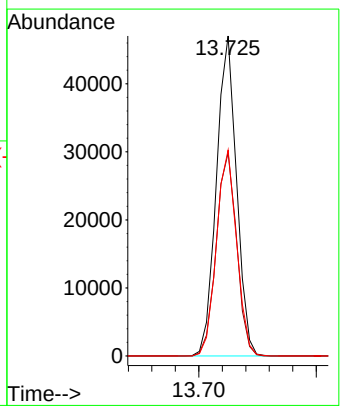


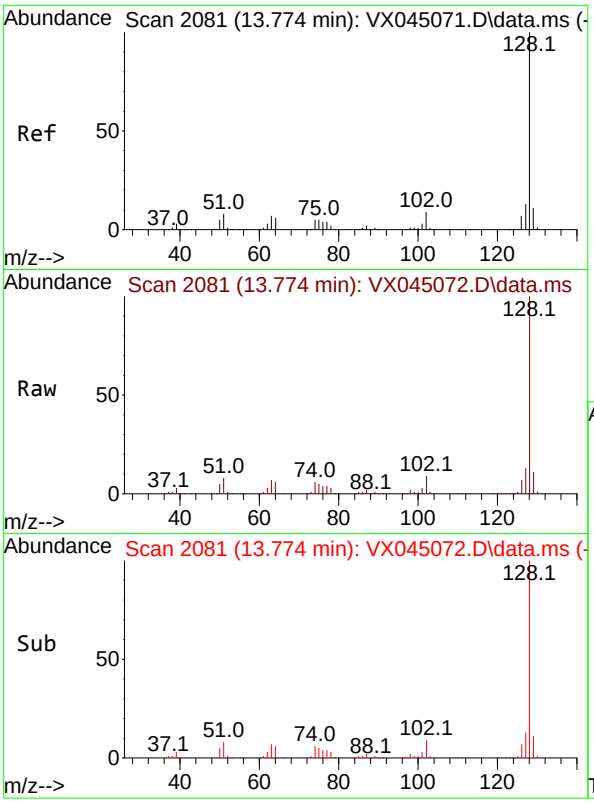




#94
Hexachlorobutadiene
Concen: 102.019 ug/l
RT: 13.725 min Scan# 2073
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion:225 Resp: 56065

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 64.1 | 31.9 | 95.7 |
| 227 | 64.4 | 31.4 | 94.0 |

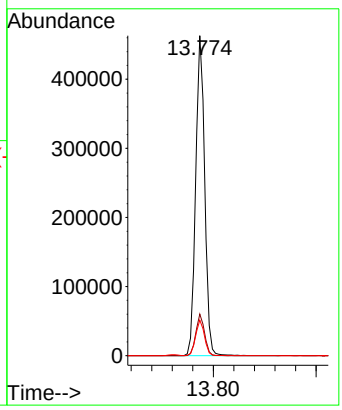





#95
Naphthalene
Concen: 112.593 ug/l
RT: 13.774 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion:128 Resp: 56525

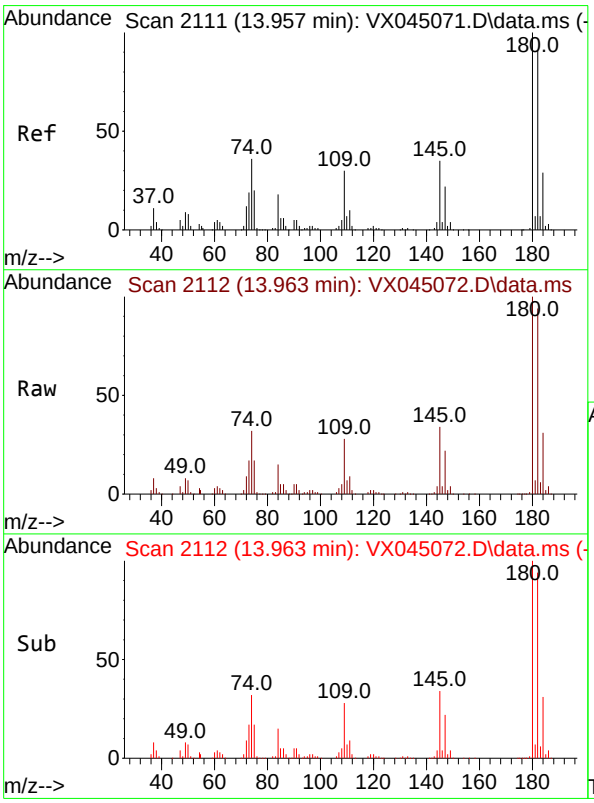
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.6 | 10.3 | 15.5 |
| 129 | 10.9 | 8.7 | 13.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

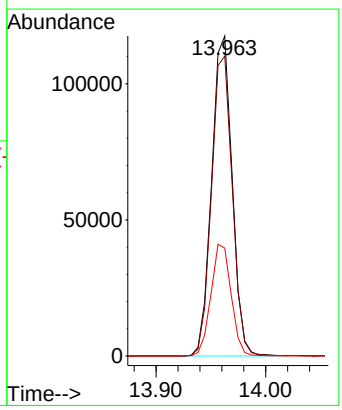
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025




#96
1,2,3-Trichlorobenzene
Concen: 109.554 ug/l
RT: 13.963 min Scan# 2112
Delta R.T. 0.006 min
Lab File: VX045072.D
Acq: 28 Feb 2025 03:23

Tgt Ion:180 Resp: 152970

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.2 | 47.5 | 142.6 |
| 145 | 34.5 | 17.0 | 50.9 |



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045073.D
Acq On : 28 Feb 2025 03:47
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 28 05:36:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) Pentafluorobenzene | 5.544 | 168 | 95754 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 6.757 | 114 | 176991 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 10.055 | 117 | 150547 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.024 | 152 | 67685 | 50.000 | ug/l | # 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 5.952 | 65 | 234624 | 165.865 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 331.740%# | | | |
| 35) Dibromofluoromethane | 5.379 | 113 | 179722 | 155.359 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 310.720%# | | | |
| 50) Toluene-d8 | 8.647 | 98 | 638979 | 147.538 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 295.080%# | | | |
| 62) 4-Bromofluorobenzene | 11.079 | 95 | 223346 | 154.420 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 308.840%# | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.166 | 85 | 174297 | 132.067 | ug/l | 96 |
| 3) Chloromethane | 1.307 | 50 | 213704 | 133.072 | ug/l | 97 |
| 4) Vinyl Chloride | 1.374 | 62 | 217672 | 138.774 | ug/l | 97 |
| 5) Bromomethane | 1.593 | 94 | 83547 | 170.379 | ug/l | 98 |
| 6) Chloroethane | 1.660 | 64 | 82101 | 137.509 | ug/l | 95 |
| 7) Trichlorofluoromethane | 1.861 | 101 | 272235 | 135.494 | ug/l | 98 |
| 8) Diethyl Ether | 2.136 | 74 | 110005 | 150.660 | ug/l | 98 |
| 9) 1,1,2-Trichlorotrifluo... | 2.313 | 101 | 161825 | 134.877 | ug/l | 99 |
| 10) Methyl Iodide | 2.441 | 142 | 212355 | 138.059 | ug/l | 99 |
| 11) Tert butyl alcohol | 3.014 | 59 | 195415 | 754.176 | ug/l | 97 |
| 12) 1,1-Dichloroethene | 2.300 | 96 | 173271 | 140.655 | ug/l | 96 |
| 13) Acrolein | 2.239 | 56 | 263999 | 940.846 | ug/l | 98 |
| 14) Allyl chloride | 2.654 | 41 | 308018 | 139.077 | ug/l | 98 |
| 15) Acrylonitrile | 3.069 | 53 | 573208 | 813.990 | ug/l | 99 |
| 16) Acetone | 2.392 | 43 | 511828 | 879.387 | ug/l | 100 |
| 17) Carbon Disulfide | 2.495 | 76 | 487720 | 145.511 | ug/l | 98 |
| 18) Methyl Acetate | 2.709 | 43 | 258303 | 147.347 | ug/l | 100 |
| 19) Methyl tert-butyl Ether | 3.117 | 73 | 619778 | 157.358 | ug/l | 99 |
| 20) Methylene Chloride | 2.782 | 84 | 202913 | 147.198 | ug/l | 99 |
| 21) trans-1,2-Dichloroethene | 3.081 | 96 | 176924 | 146.027 | ug/l | 98 |
| 22) Diisopropyl ether | 3.764 | 45 | 662828 | 156.526 | ug/l | 98 |
| 23) Vinyl Acetate | 3.721 | 43 | 2943150 | 846.586 | ug/l | 99 |
| 24) 1,1-Dichloroethane | 3.605 | 63 | 363081 | 153.453 | ug/l | 99 |
| 25) 2-Butanone | 4.568 | 43 | 818497 | 872.239 | ug/l | 99 |
| 26) 2,2-Dichloropropane | 4.465 | 77 | 179826 | 102.231 | ug/l | 99 |
| 27) cis-1,2-Dichloroethene | 4.483 | 96 | 220826 | 151.205 | ug/l | 98 |
| 28) Bromochloromethane | 4.891 | 49 | 171273 | 150.105 | ug/l | 100 |
| 29) Tetrahydrofuran | 5.007 | 42 | 528574 | 850.174 | ug/l | 99 |
| 30) Chloroform | 5.093 | 83 | 351934 | 152.067 | ug/l | 97 |
| 31) Cyclohexane | 5.458 | 56 | 302215 | 139.174 | ug/l | 96 |
| 32) 1,1,1-Trichloroethane | 5.379 | 97 | 294434 | 151.120 | ug/l | 100 |
| 36) 1,1-Dichloropropene | 5.684 | 75 | 241405 | 145.112 | ug/l | 100 |
| 37) Ethyl Acetate | 4.721 | 43 | 316250 | 167.067 | ug/l | 99 |
| 38) Carbon Tetrachloride | 5.672 | 117 | 245917 | 150.363 | ug/l | 99 |
| 39) Methylcyclohexane | 7.373 | 83 | 292216 | 137.544 | ug/l | 97 |
| 40) Benzene | 6.031 | 78 | 755854 | 145.368 | ug/l | 100 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045073.D
Acq On : 28 Feb 2025 03:47
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 28 05:36:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

| Compound | R.T. | QIon | Response | Conc Units | | Dev(Min) |
|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 4.928 | 41 | 175023 | 173.088 ug/l | | 99 |
| 42) 1,2-Dichloroethane | 6.080 | 62 | 276129 | 163.872 ug/l | | 99 |
| 43) Isopropyl Acetate | 6.342 | 43 | 511643 | 169.804 ug/l | | 99 |
| 44) Trichloroethene | 7.123 | 130 | 178483 | 150.181 ug/l | | 97 |
| 45) 1,2-Dichloropropane | 7.428 | 63 | 198135 | 153.334 ug/l | | 100 |
| 46) Dibromomethane | 7.580 | 93 | 142119 | 157.443 ug/l | | 99 |
| 47) Bromodichloromethane | 7.818 | 83 | 280255 | 160.492 ug/l | | 99 |
| 48) Methyl methacrylate | 7.696 | 41 | 252275 | 176.370 ug/l | | 99 |
| 49) 1,4-Dioxane | 7.665 | 88 | 96268 | 3166.423 ug/l | | 99 |
| 51) 4-Methyl-2-Pentanone | 8.580 | 43 | 1536157 | 832.051 ug/l | | 99 |
| 52) Toluene | 8.714 | 92 | 448664 | 145.321 ug/l | | 99 |
| 53) t-1,3-Dichloropropene | 8.976 | 75 | 266444 | 154.373 ug/l | | 96 |
| 54) cis-1,3-Dichloropropene | 8.366 | 75 | 293521 | 152.117 ug/l | | 96 |
| 55) 1,1,2-Trichloroethane | 9.147 | 97 | 178217 | 149.046 ug/l | | 98 |
| 56) Ethyl methacrylate | 9.116 | 69 | 310992 | 162.631 ug/l | | 98 |
| 57) 1,3-Dichloropropane | 9.305 | 76 | 312196 | 149.699 ug/l | | 100 |
| 58) 2-Chloroethyl Vinyl ether | 8.238 | 63 | 717328 | 764.019 ug/l | | 99 |
| 59) 2-Hexanone | 9.433 | 43 | 1156653 | 868.492 ug/l | | 100 |
| 60) Dibromochloromethane | 9.519 | 129 | 201906 | 158.276 ug/l | | 99 |
| 61) 1,2-Dibromoethane | 9.610 | 107 | 185828 | 154.074 ug/l | | 100 |
| 64) Tetrachloroethene | 9.269 | 164 | 139536 | 145.906 ug/l | | 94 |
| 65) Chlorobenzene | 10.079 | 112 | 472117 | 146.096 ug/l | | 99 |
| 66) 1,1,1,2-Tetrachloroethane | 10.159 | 131 | 163370 | 156.845 ug/l | | 97 |
| 67) Ethyl Benzene | 10.189 | 91 | 852575 | 149.191 ug/l | | 99 |
| 68) m/p-Xylenes | 10.299 | 106 | 607523 | 288.655 ug/l | | 97 |
| 69) o-Xylene | 10.640 | 106 | 302495 | 143.259 ug/l | | 99 |
| 70) Styrene | 10.653 | 104 | 512379 | 150.979 ug/l | | 99 |
| 71) Bromoform | 10.799 | 173 | 135388 | 174.808 ug/l | # | 99 |
| 73) Isopropylbenzene | 10.963 | 105 | 780706 | 142.719 ug/l | | 99 |
| 74) N-amyl acetate | 10.842 | 43 | 429686 | 173.042 ug/l | | 100 |
| 75) 1,1,2,2-Tetrachloroethane | 11.213 | 83 | 283558 | 150.458 ug/l | | 99 |
| 76) 1,2,3-Trichloropropane | 11.238 | 75 | 229435m | 151.960 ug/l | | |
| 77) Bromobenzene | 11.195 | 156 | 180997 | 145.760 ug/l | | 96 |
| 78) n-propylbenzene | 11.305 | 91 | 923593 | 146.395 ug/l | | 99 |
| 79) 2-Chlorotoluene | 11.366 | 91 | 548695 | 141.695 ug/l | | 99 |
| 80) 1,3,5-Trimethylbenzene | 11.451 | 105 | 635832 | 143.293 ug/l | | 98 |
| 81) trans-1,4-Dichloro-2-b... | 11.018 | 75 | 82267 | 147.761 ug/l | | 98 |
| 82) 4-Chlorotoluene | 11.451 | 91 | 627816 | 146.464 ug/l | | 99 |
| 83) tert-Butylbenzene | 11.713 | 119 | 641713 | 142.974 ug/l | | 99 |
| 84) 1,2,4-Trimethylbenzene | 11.750 | 105 | 647248 | 148.135 ug/l | | 100 |
| 85) sec-Butylbenzene | 11.890 | 105 | 807713 | 145.383 ug/l | | 100 |
| 86) p-Isopropyltoluene | 12.006 | 119 | 664916 | 149.075 ug/l | | 100 |
| 87) 1,3-Dichlorobenzene | 11.969 | 146 | 334751 | 147.488 ug/l | | 100 |
| 88) 1,4-Dichlorobenzene | 12.043 | 146 | 333594 | 145.189 ug/l | | 99 |
| 89) n-Butylbenzene | 12.329 | 91 | 620757 | 158.324 ug/l | | 99 |
| 90) Hexachloroethane | 12.536 | 117 | 128582 | 154.554 ug/l | | 100 |
| 91) 1,2-Dichlorobenzene | 12.335 | 146 | 329318 | 147.436 ug/l | | 99 |
| 92) 1,2-Dibromo-3-Chloropr... | 12.939 | 75 | 64958 | 186.240 ug/l | | 98 |
| 93) 1,2,4-Trichlorobenzene | 13.585 | 180 | 219313 | 162.416 ug/l | | 99 |
| 94) Hexachlorobutadiene | 13.725 | 225 | 80241 | 149.034 ug/l | | 99 |
| 95) Naphthalene | 13.774 | 128 | 828949 | 168.538 ug/l | | 100 |
| 96) 1,2,3-Trichlorobenzene | 13.957 | 180 | 222608 | 162.727 ug/l | | 99 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045073.D
Acq On : 28 Feb 2025 03:47
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

Quant Time: Feb 28 05:36:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

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

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

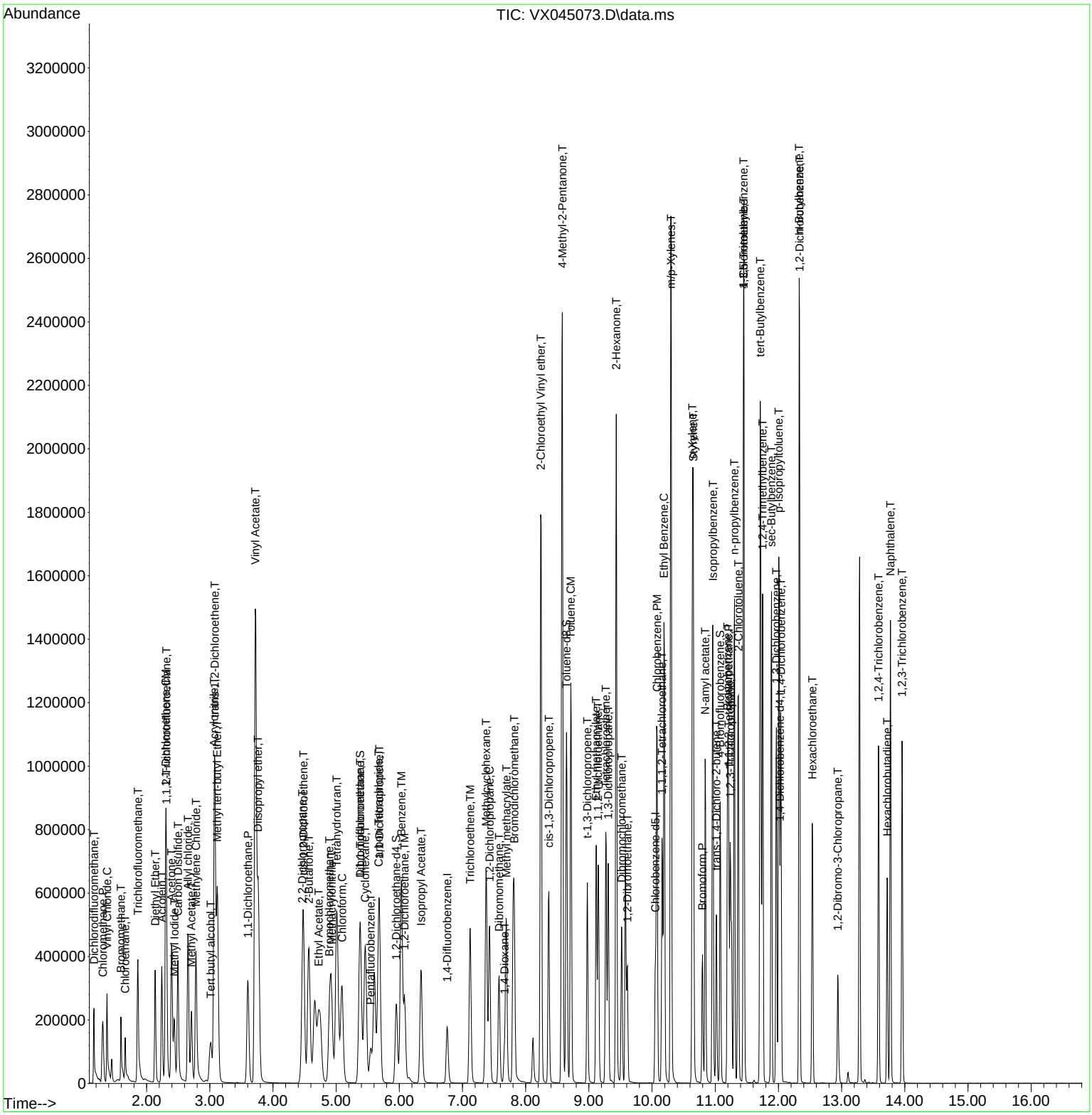
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045073.D
Acq On : 28 Feb 2025 03:47
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 22 Sample Multiplier: 1

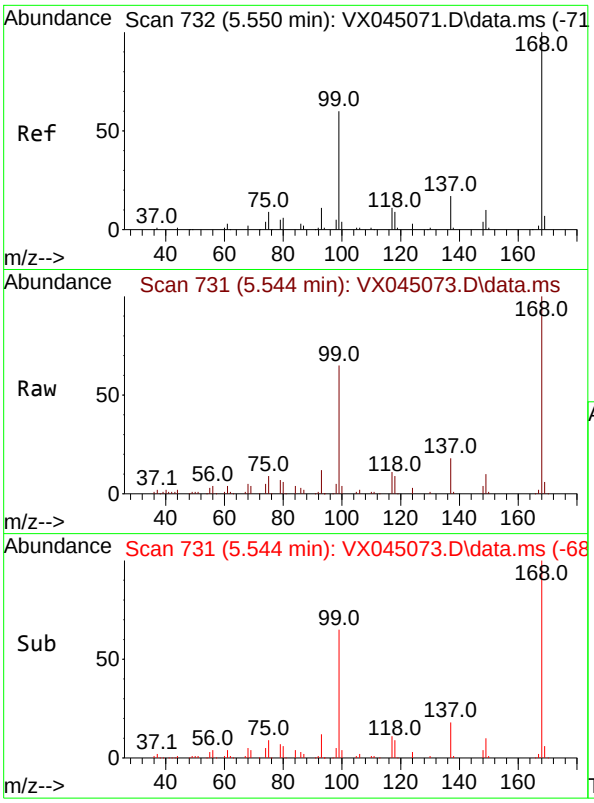
Quant Time: Feb 28 05:36:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

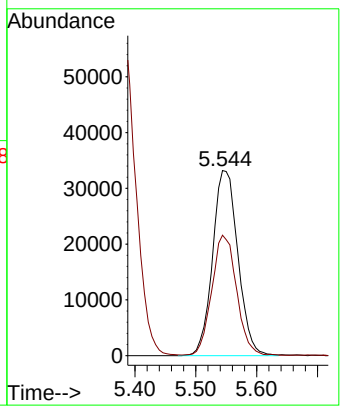





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.544 min Scan# 7
Delta R.T. -0.006 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:168 Resp: 9575

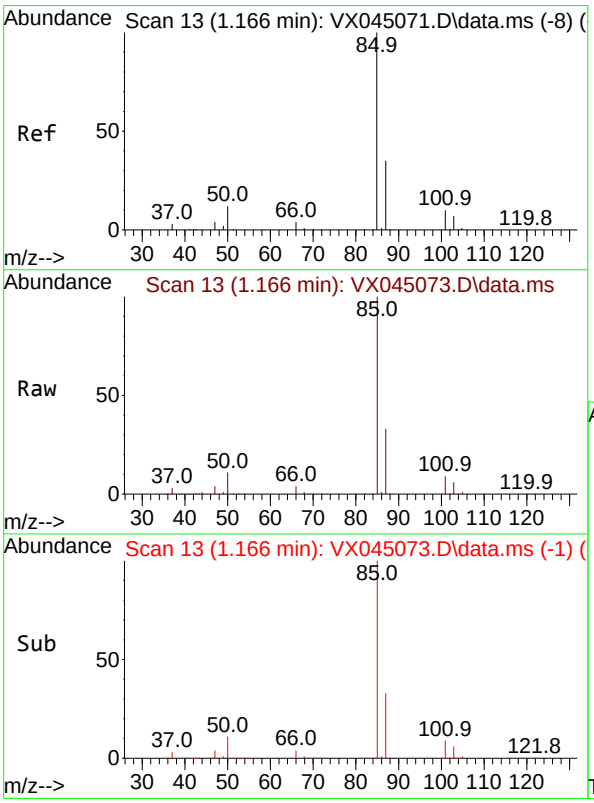
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 64.8 | 48.2 | 72.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

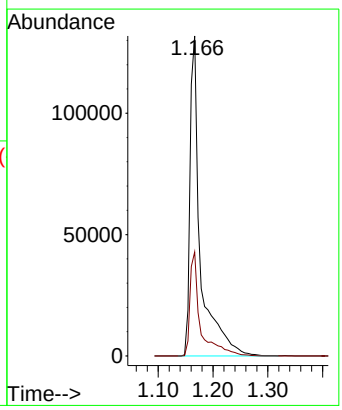
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

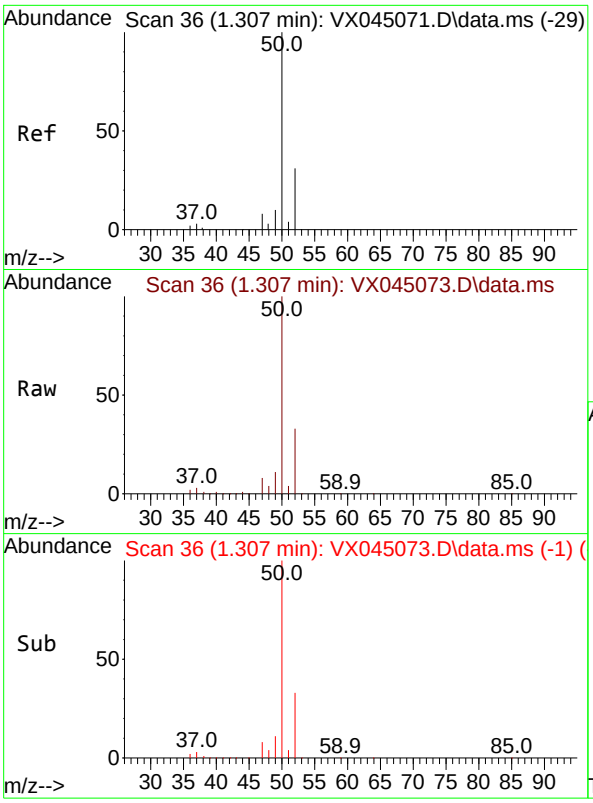



#2
Dichlorodifluoromethane
Concen: 132.067 ug/l
RT: 1.166 min Scan# 13
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 85 Resp: 174297

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.5 | 17.4 | 52.3 |

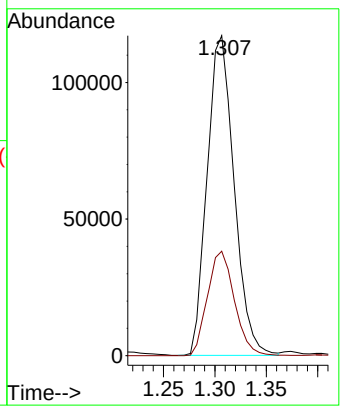





#3
Chloromethane
Concen: 133.072 ug/l
RT: 1.307 min Scan# 3
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 50 Resp: 21370

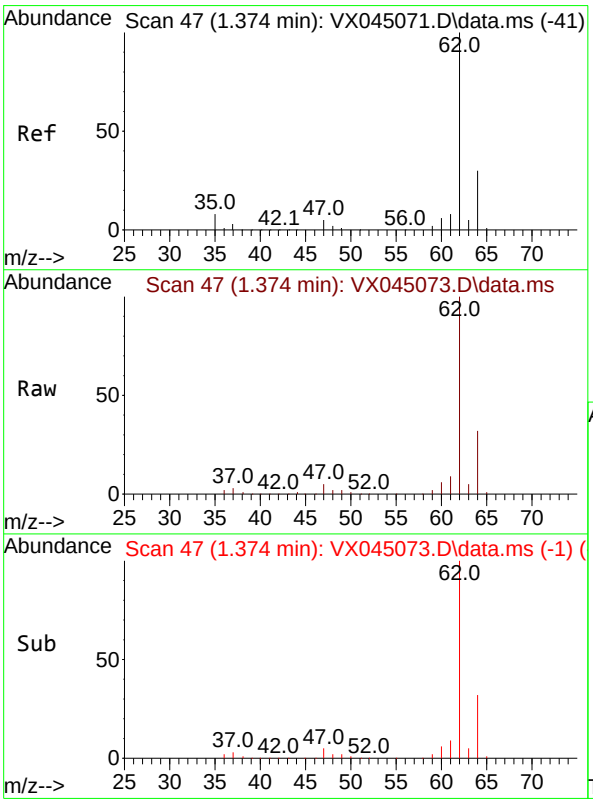
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 32.7 | 25.0 | 37.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

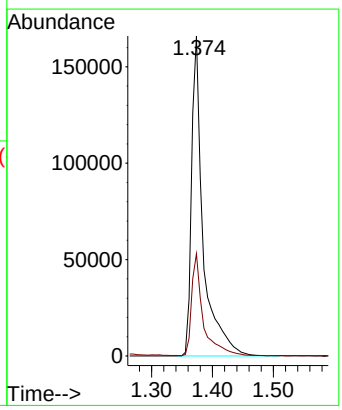
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

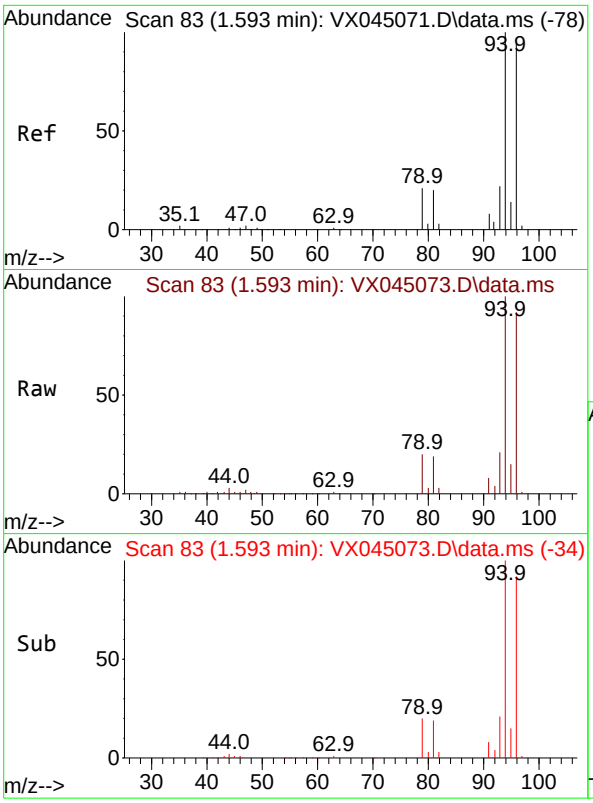



#4
Vinyl Chloride
Concen: 138.774 ug/l
RT: 1.374 min Scan# 47
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 62 Resp: 217672

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 31.8 | 24.3 | 36.5 |

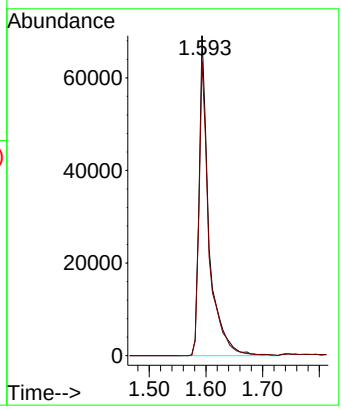





#5
Bromomethane
Concen: 170.379 ug/l
RT: 1.593 min Scan# 8
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 94 Resp: 8354

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 92.2 | 75.0 | 112.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
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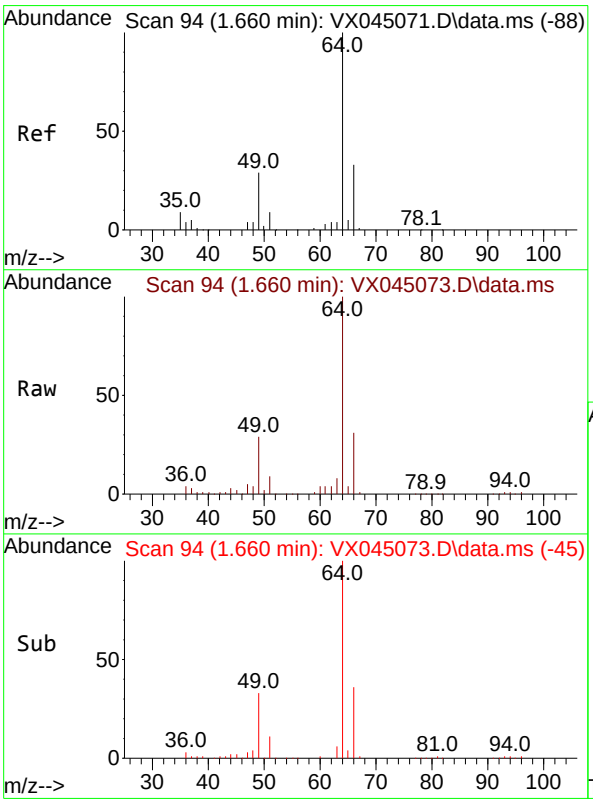
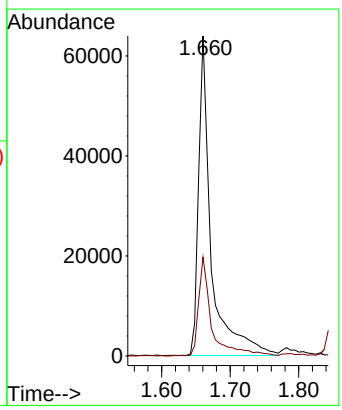
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

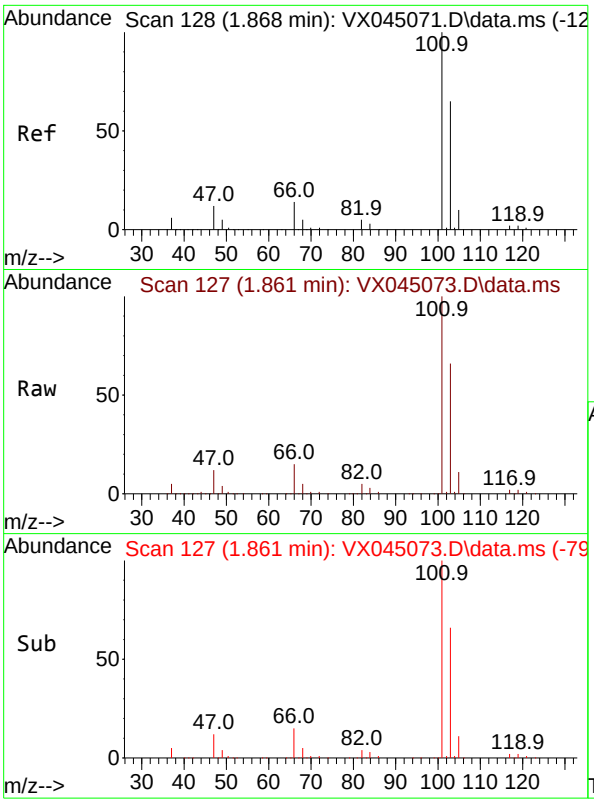



#6
Chloroethane
Concen: 137.509 ug/l
RT: 1.660 min Scan# 94
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 64 Resp: 82101

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 30.8 | 26.7 | 40.1 |

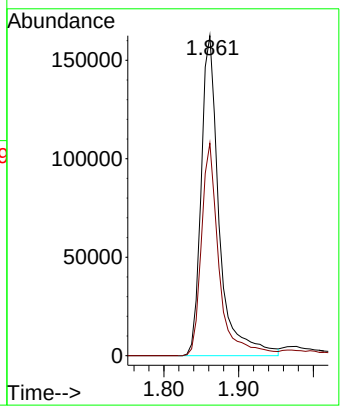





#7
Trichlorofluoromethane
Concen: 135.494 ug/l
RT: 1.861 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:101 Resp: 27223

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 66.4 | 52.1 | 78.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

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Reviewed By :John Carlone 02/28/2025
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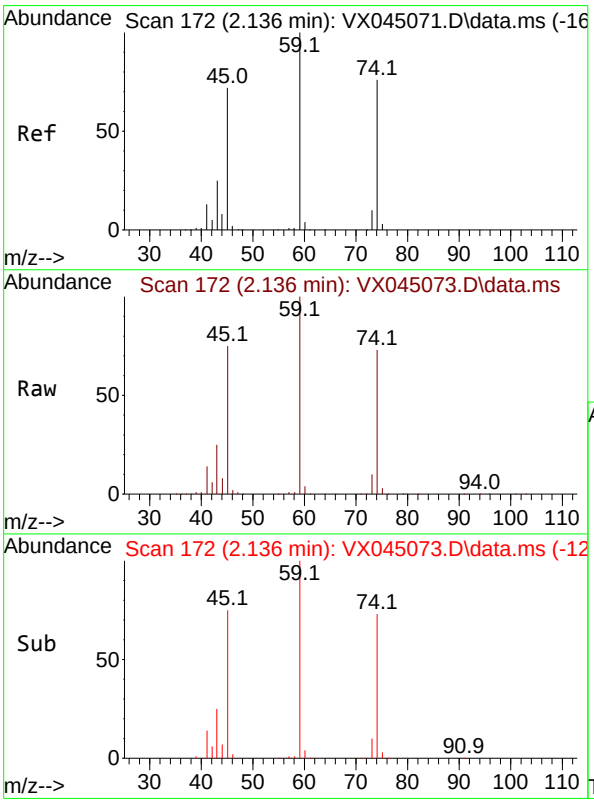
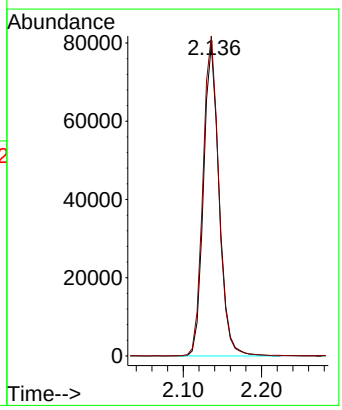
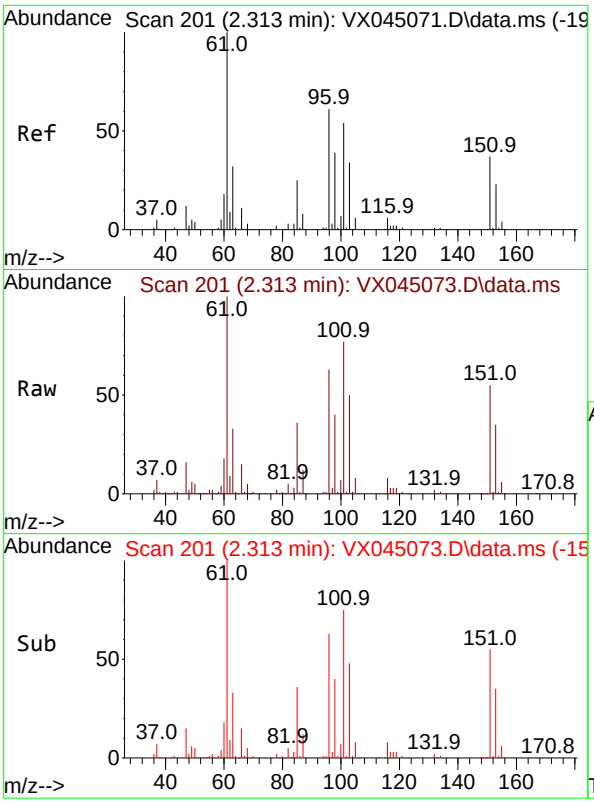



#8
Diethyl Ether
Concen: 150.660 ug/l
RT: 2.136 min Scan# 172
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 74 Resp: 110005

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 104.9 | 51.5 | 154.5 |

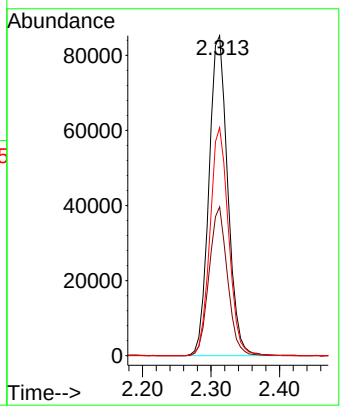





#9
1,1,2-Trichlorotrifluoroethane
Concen: 134.877 ug/l
RT: 2.313 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:101 Resp: 16182

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 45.8 | 36.2 | 54.4 |
| 151 | 70.8 | 56.4 | 84.6 |




**Instrument :**
MSVOA_X
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VSTDICC150

**Manual Integrations**
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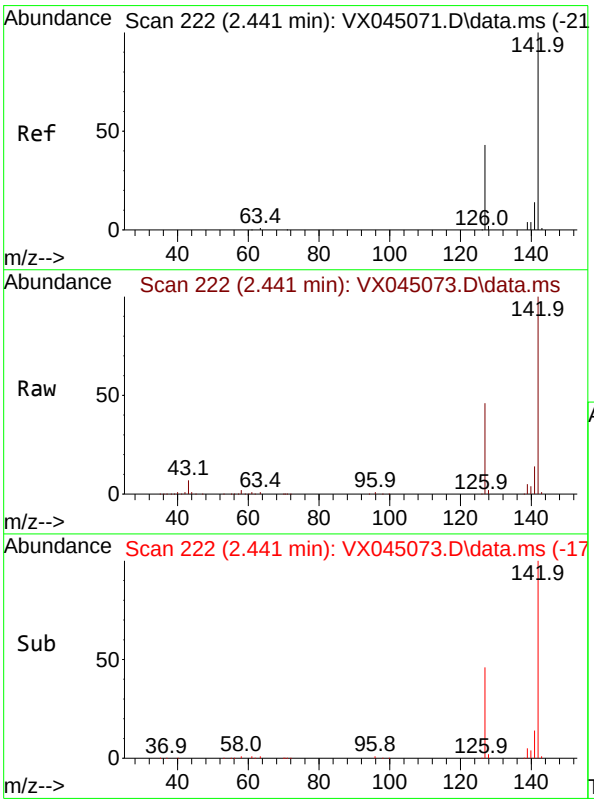
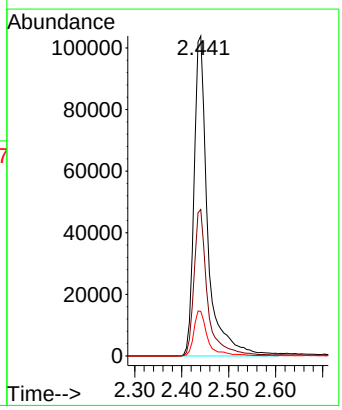
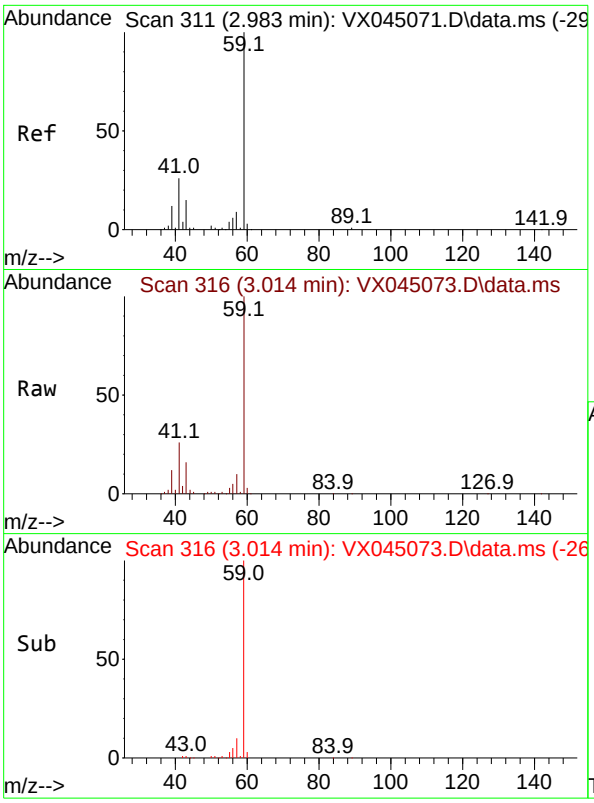



#10
Methyl Iodide
Concen: 138.059 ug/l
RT: 2.441 min Scan# 222
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:142 Resp: 212355

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 45.2 | 35.4 | 53.2 |
| 141 | 14.3 | 11.6 | 17.4 |

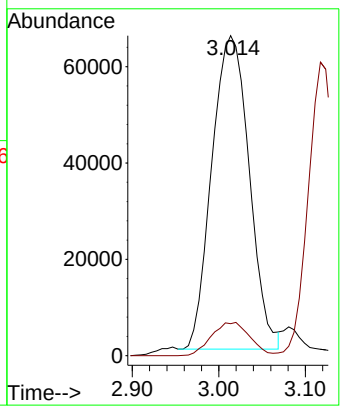





#11
Tert butyl alcohol
Concen: 754.176 ug/l
RT: 3.014 min Scan# 3
Delta R.T. 0.030 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 59 Resp: 19541

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 10.9 | 7.8 | 11.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
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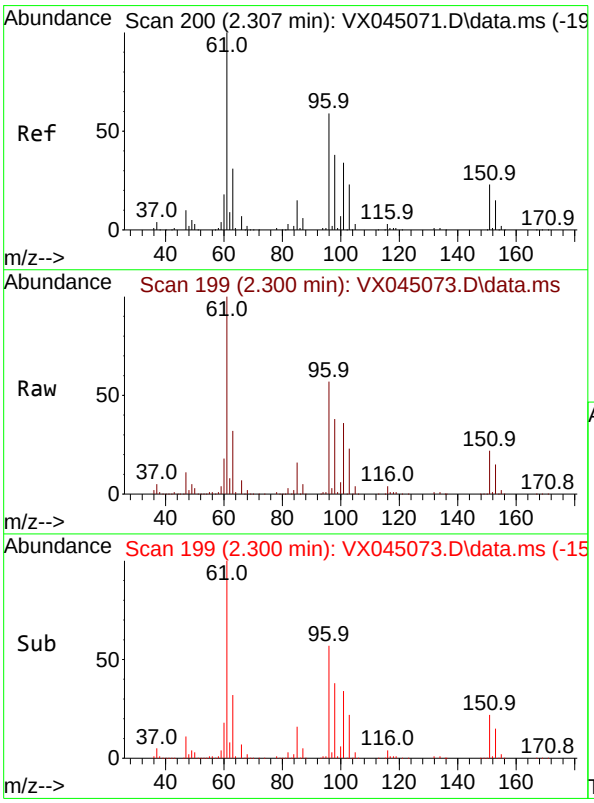
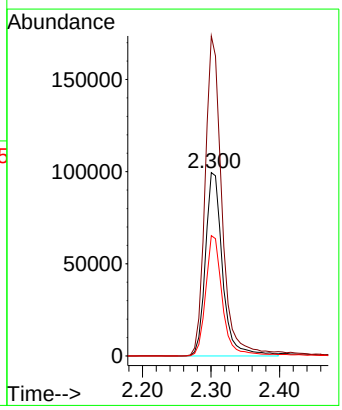
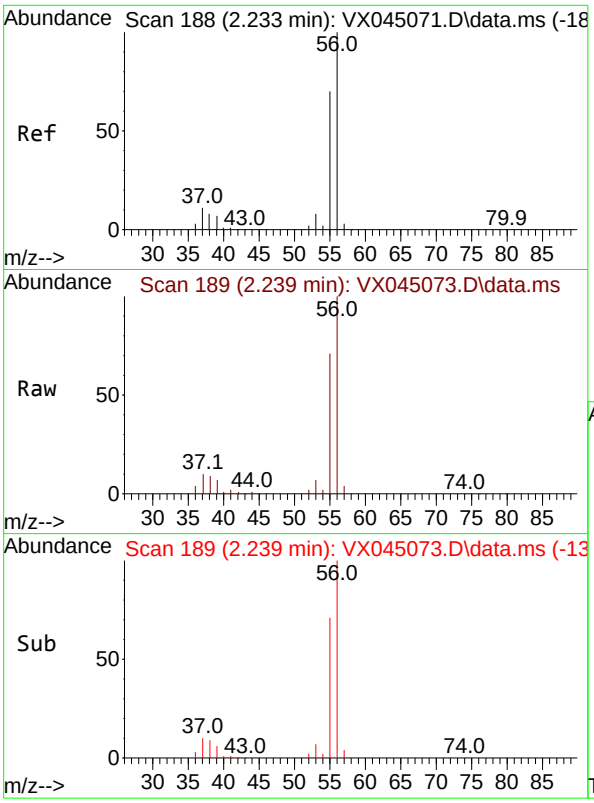



#12
1,1-Dichloroethene
Concen: 140.655 ug/l
RT: 2.300 min Scan# 199
Delta R.T. -0.006 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 96 Resp: 173271

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 174.5 | 134.6 | 202.0 |
| 98 | 65.6 | 51.0 | 76.6 |

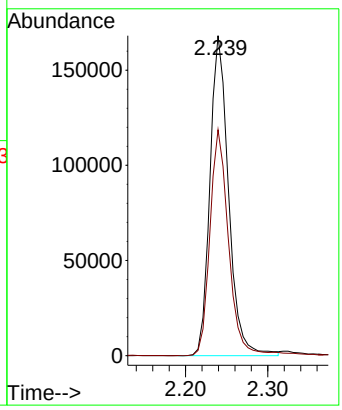





#13
Acrolein
Concen: 940.846 ug/l
RT: 2.239 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 56 Resp: 26399

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 71.6 | 56.2 | 84.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

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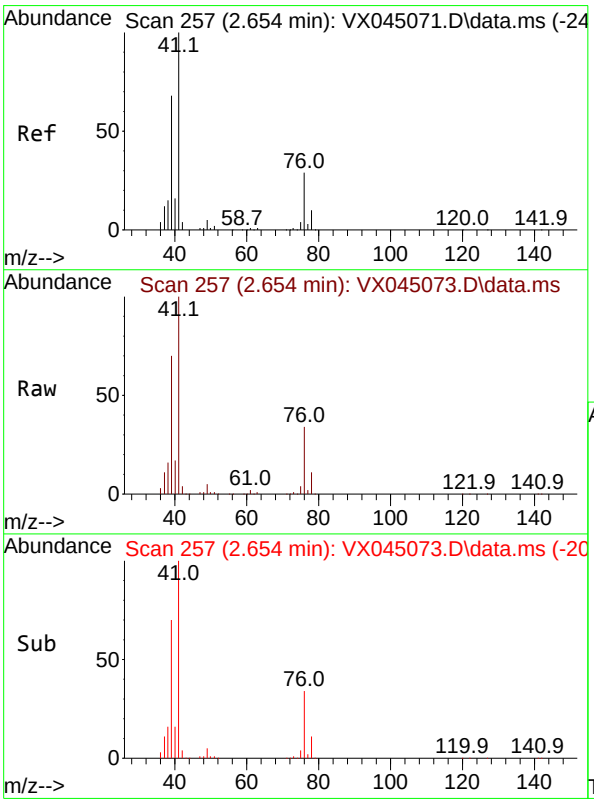
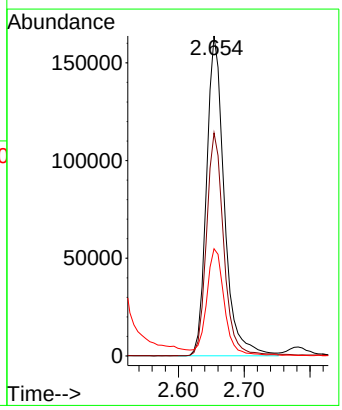
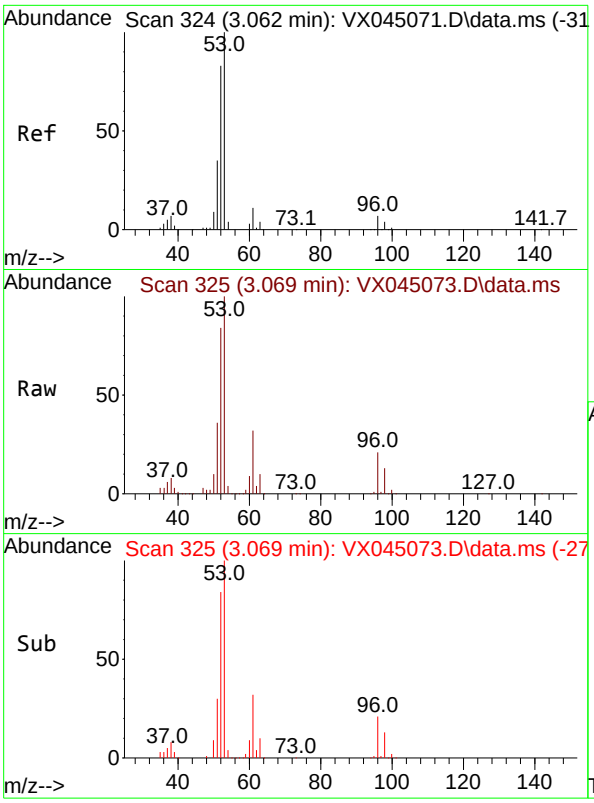



#14
Allyl chloride
Concen: 139.077 ug/l
RT: 2.654 min Scan# 257
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 41 Resp: 308018

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 67.9 | 53.8 | 80.8 |
| 76 | 33.8 | 25.2 | 37.8 |

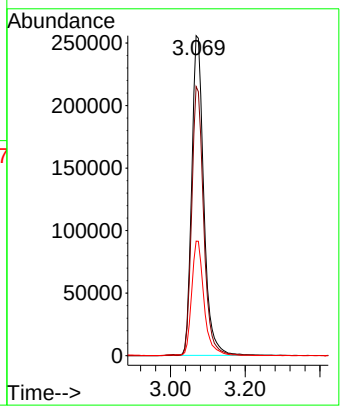





#15
Acrylonitrile
Concen: 813.990 ug/l
RT: 3.069 min Scan# 3
Delta R.T. 0.006 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 53 Resp: 57320

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 83.3 | 66.2 | 99.2 |
| 51 | 37.0 | 29.0 | 43.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

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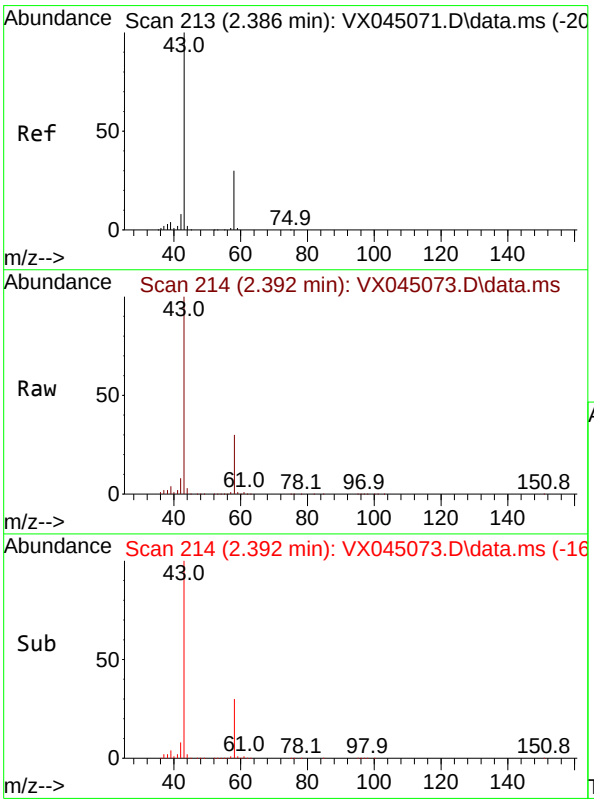
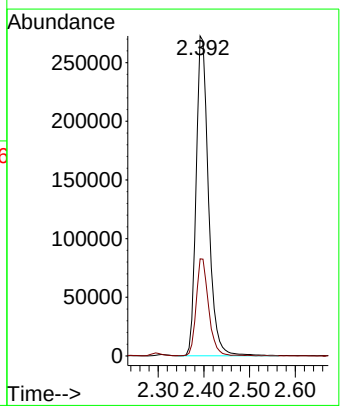
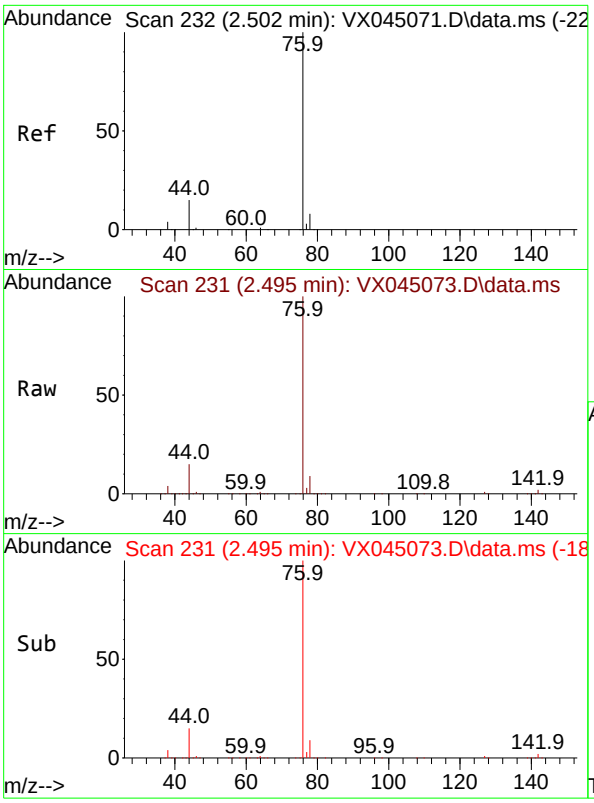



#16
Acetone
Concen: 879.387 ug/l
RT: 2.392 min Scan# 214
Delta R.T. 0.006 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 43 Resp: 511828

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 30.3 | 24.2 | 36.4 |

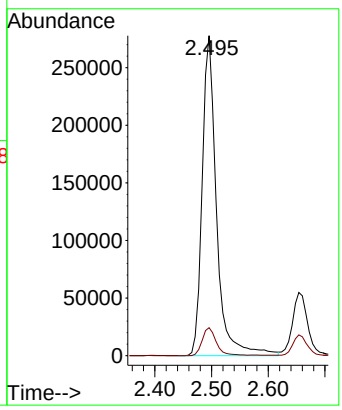





#17
Carbon Disulfide
Concen: 145.511 ug/l
RT: 2.495 min Scan# 2
Delta R.T. -0.006 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 76 Resp: 48772

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 8.8 | 6.6 | 9.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

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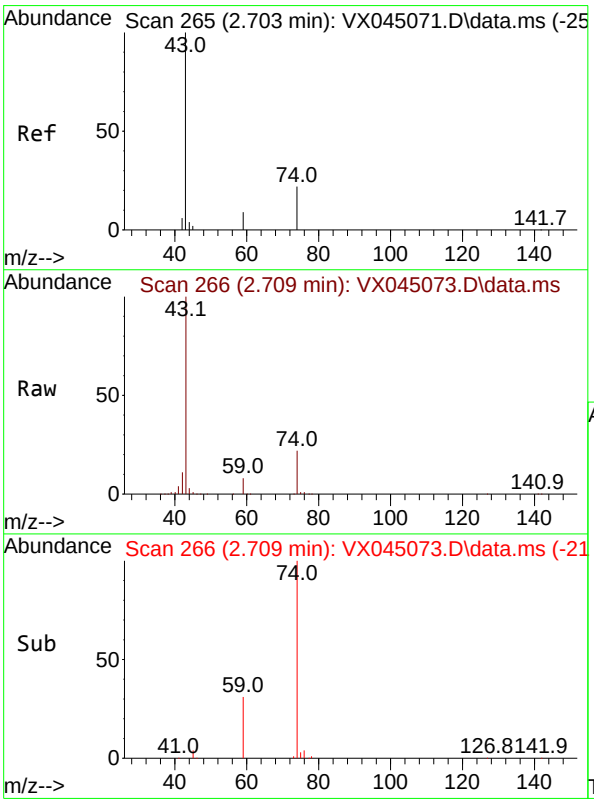
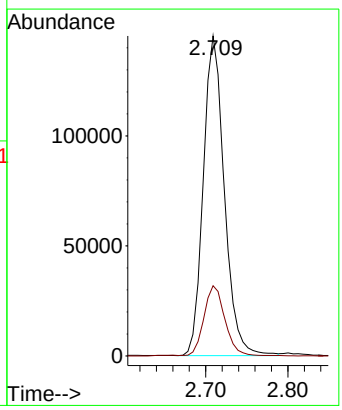
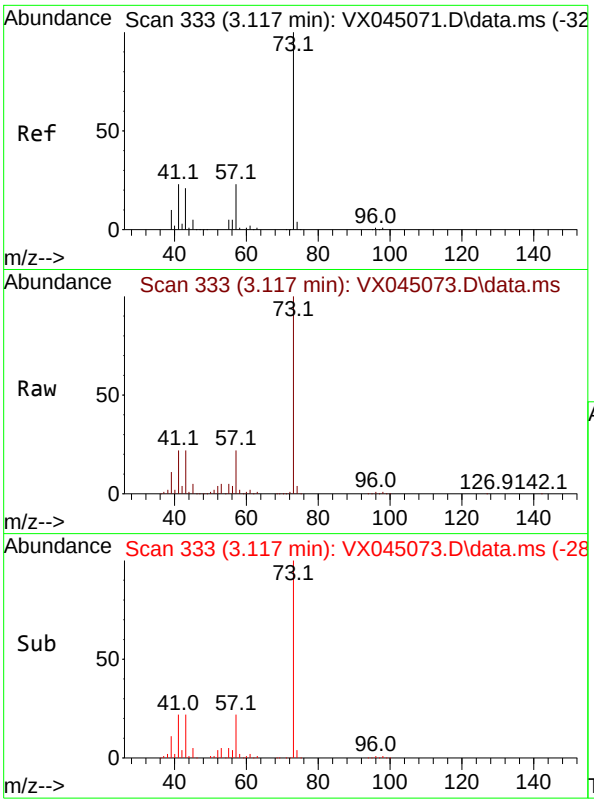



#18
Methyl Acetate
Concen: 147.347 ug/l
RT: 2.709 min Scan# 266
Delta R.T. 0.006 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 43 Resp: 258303

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 22.0 | 17.4 | 26.2 |

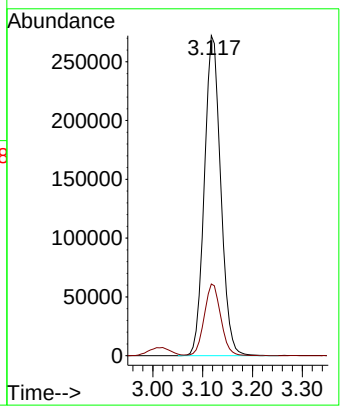





#19
Methyl tert-butyl Ether
Concen: 157.358 ug/l
RT: 3.117 min Scan# 3
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 73 Resp: 61977

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 22.4 | 18.5 | 27.7 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

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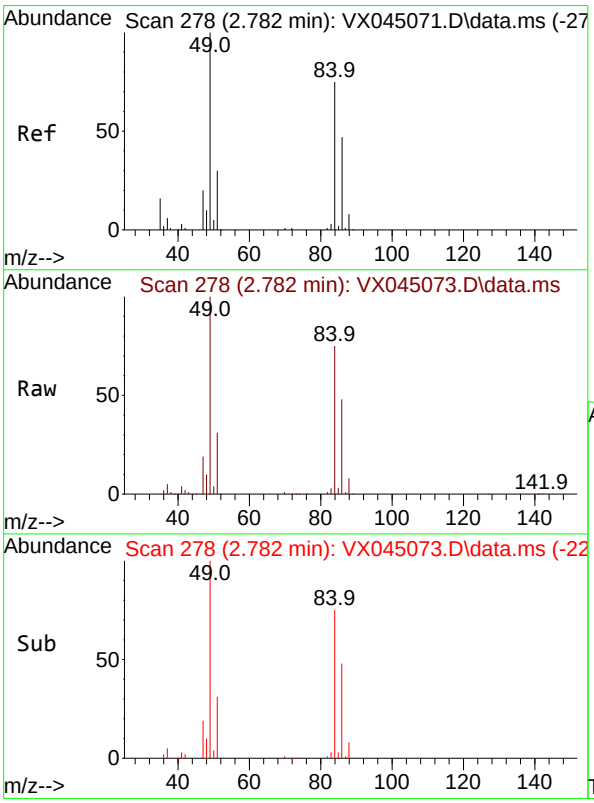
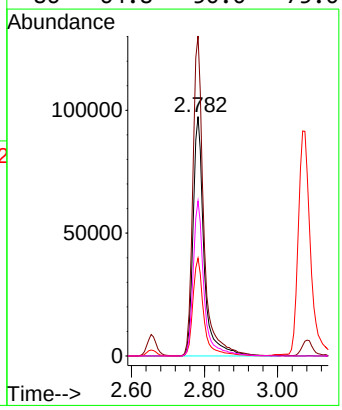
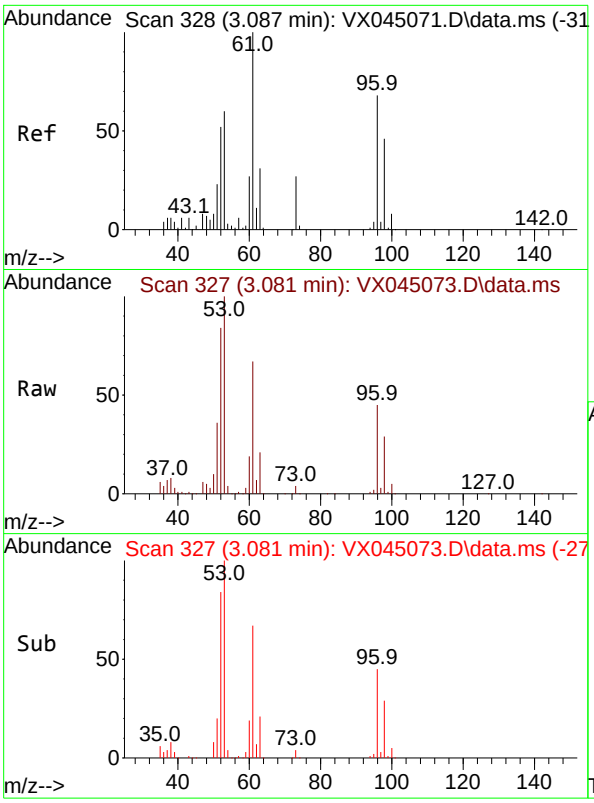



#20
Methylene Chloride
Concen: 147.198 ug/l
RT: 2.782 min Scan# 278
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 84 Resp: 202913

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 133.6 | 106.5 | 159.7 |
| 51 | 40.9 | 32.1 | 48.1 |
| 86 | 64.8 | 50.0 | 75.0 |

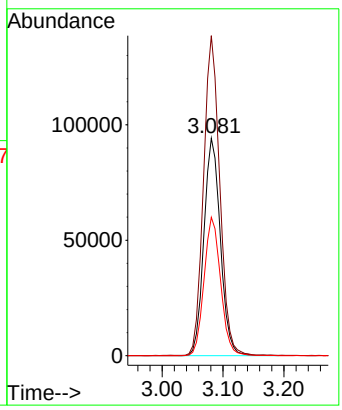





#21
trans-1,2-Dichloroethene
Concen: 146.027 ug/l
RT: 3.081 min Scan# 3
Delta R.T. -0.006 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 96 Resp: 17692

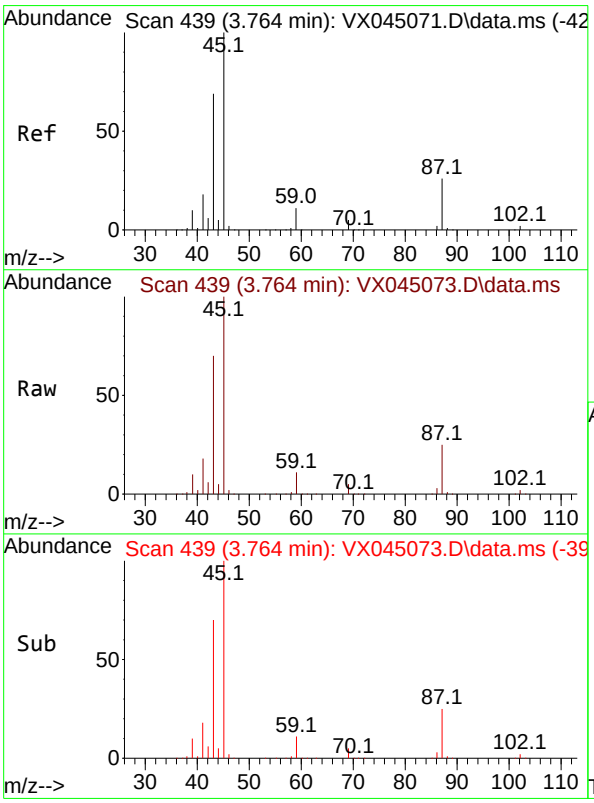
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 147.0 | 117.0 | 175.4 |
| 98 | 63.6 | 53.4 | 80.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

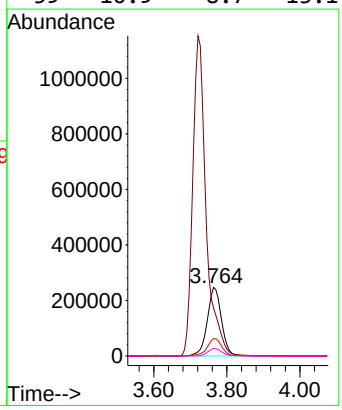
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

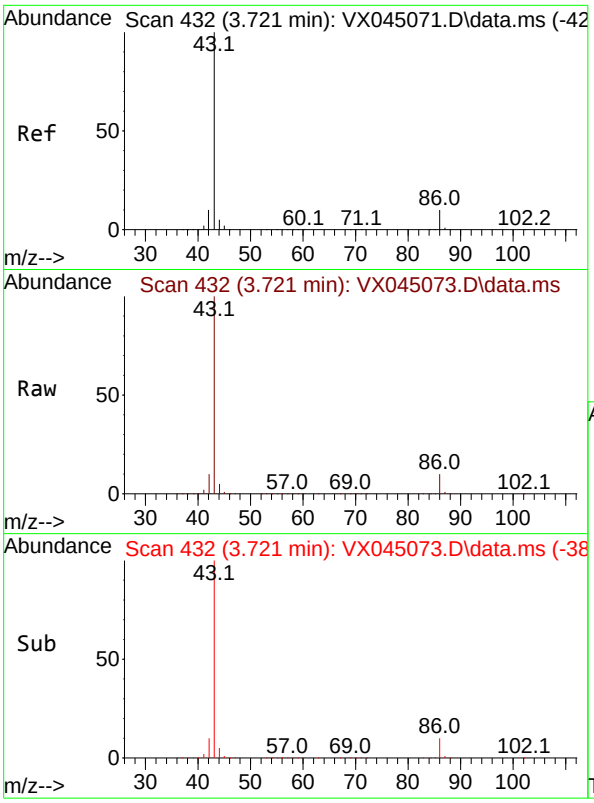



#22
Diisopropyl ether
Concen: 156.526 ug/l
RT: 3.764 min Scan# 439
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 45 Resp: 662828

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 70.0 | 54.9 | 82.3 |
| 87 | 25.2 | 21.0 | 31.4 |
| 59 | 10.9 | 8.7 | 13.1 |

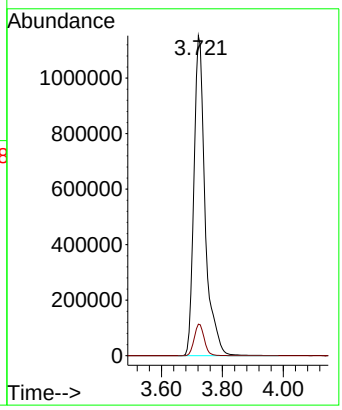





#23
Vinyl Acetate
Concen: 846.586 ug/l
RT: 3.721 min Scan# 4
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 43 Resp: 294315

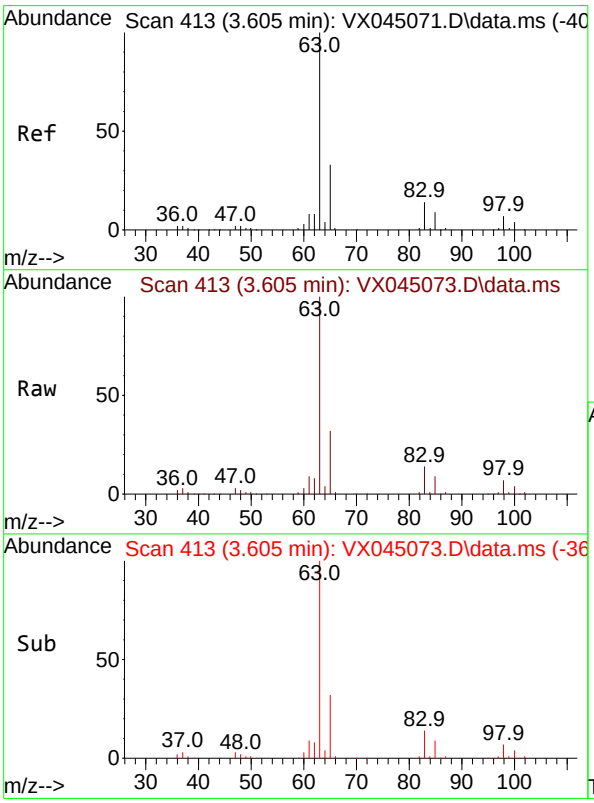
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 9.8 | 8.1 | 12.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

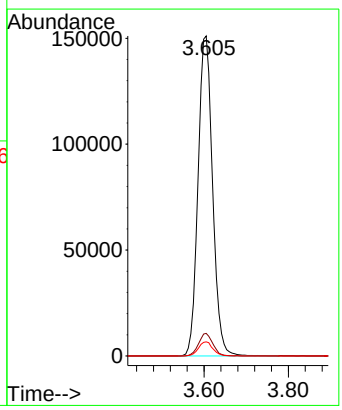
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

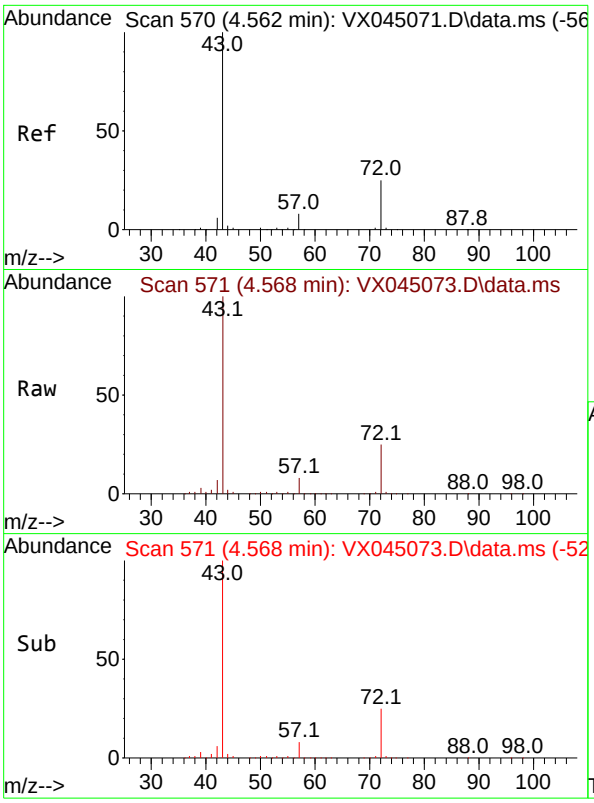



#24
1,1-Dichloroethane
Concen: 153.453 ug/l
RT: 3.605 min Scan# 413
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 63 Resp: 363081

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 7.1 | 3.4 | 10.2 |
| 100 | 4.4 | 2.1 | 6.5 |

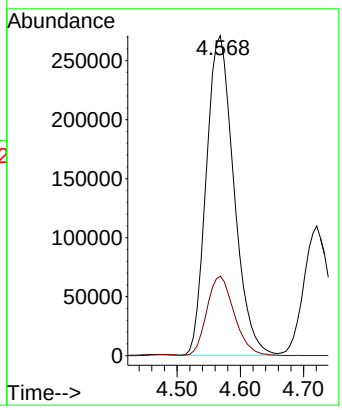





#25
2-Butanone
Concen: 872.239 ug/l
RT: 4.568 min Scan# 5
Delta R.T. 0.006 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 43 Resp: 81849

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 24.7 | 20.0 | 30.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

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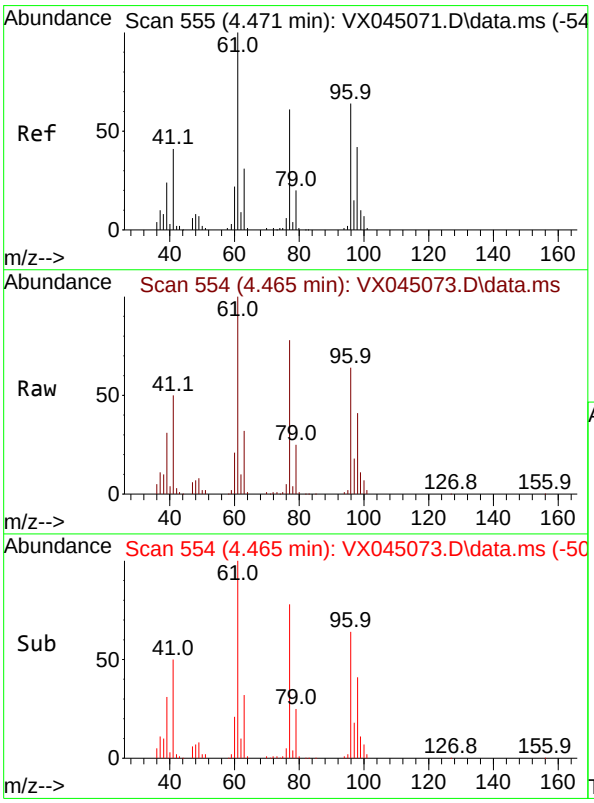
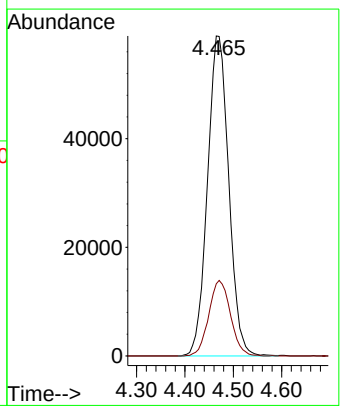
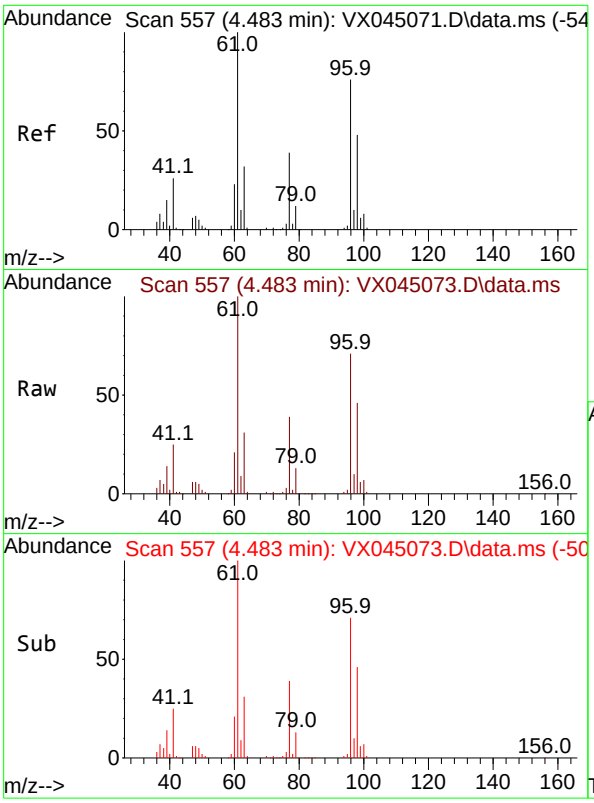



#26
2,2-Dichloropropane
Concen: 102.231 ug/l
RT: 4.465 min Scan# 554
Delta R.T. -0.006 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 77 Resp: 179826

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 24.1 | 12.4 | 37.0 |

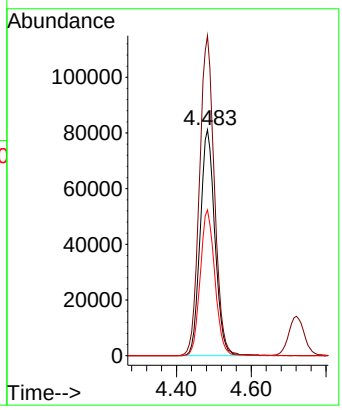





#27
cis-1,2-Dichloroethene
Concen: 151.205 ug/l
RT: 4.483 min Scan# 5
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 96 Resp: 22082

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 144.2 | 0.0 | 283.2 |
| 98 | 64.3 | 0.0 | 128.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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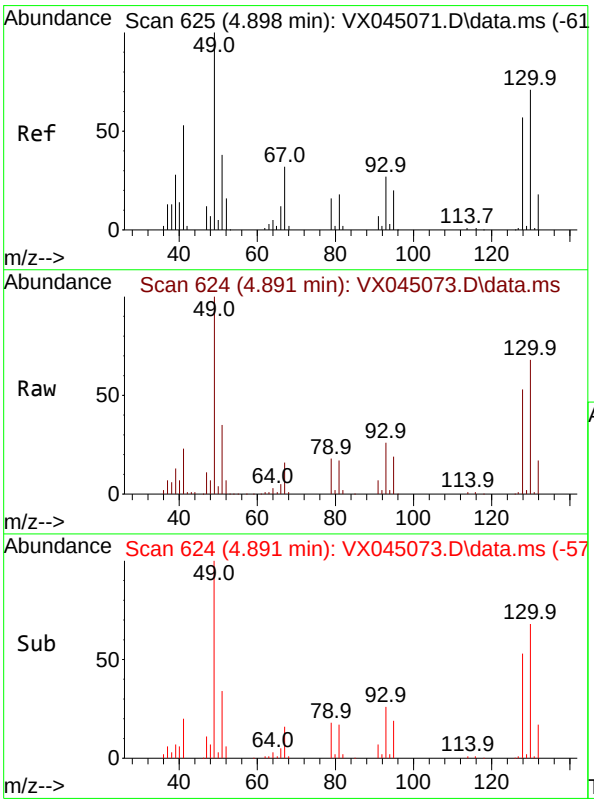
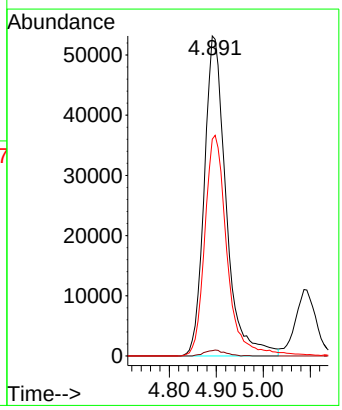
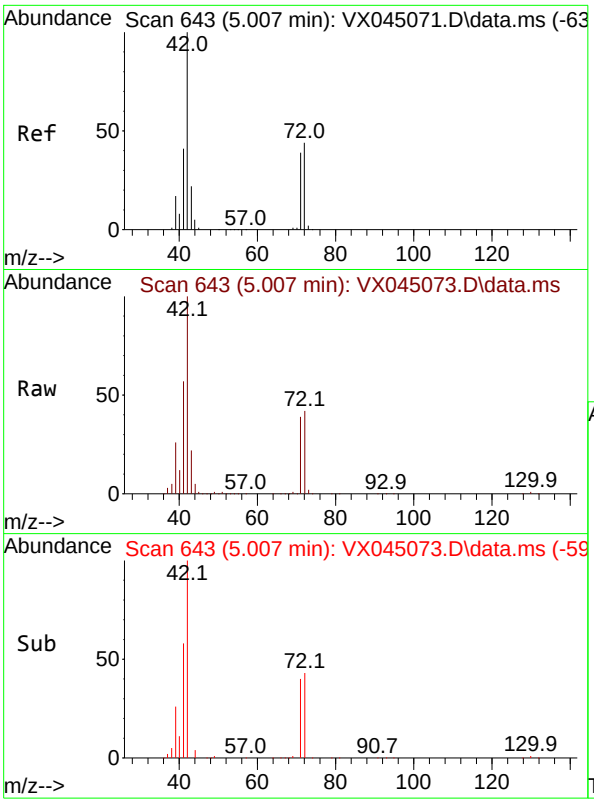



#28
Bromochloromethane
Concen: 150.105 ug/l
RT: 4.891 min Scan# 624
Delta R.T. -0.006 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 49 Resp: 171273

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.7 | 0.0 | 3.4 |
| 130 | 70.3 | 56.1 | 84.1 |






#29
Tetrahydrofuran
Concen: 850.174 ug/l
RT: 5.007 min Scan# 64
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 42 Resp: 52857

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 42.8 | 34.1 | 51.1 |
| 71 | 39.7 | 31.4 | 47.0 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
**APPROVED**

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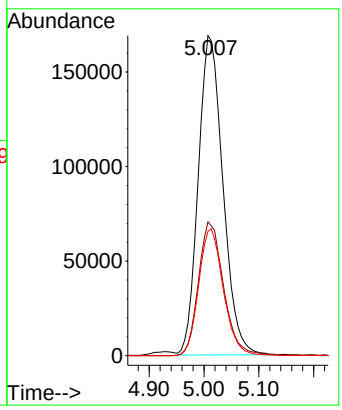
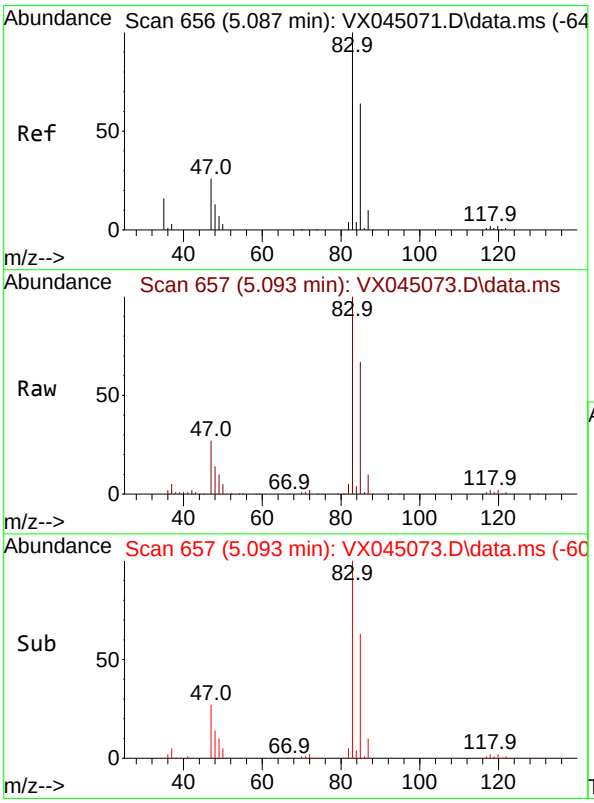
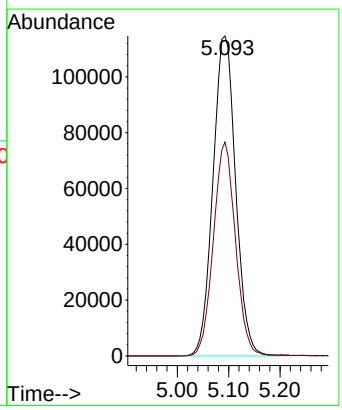


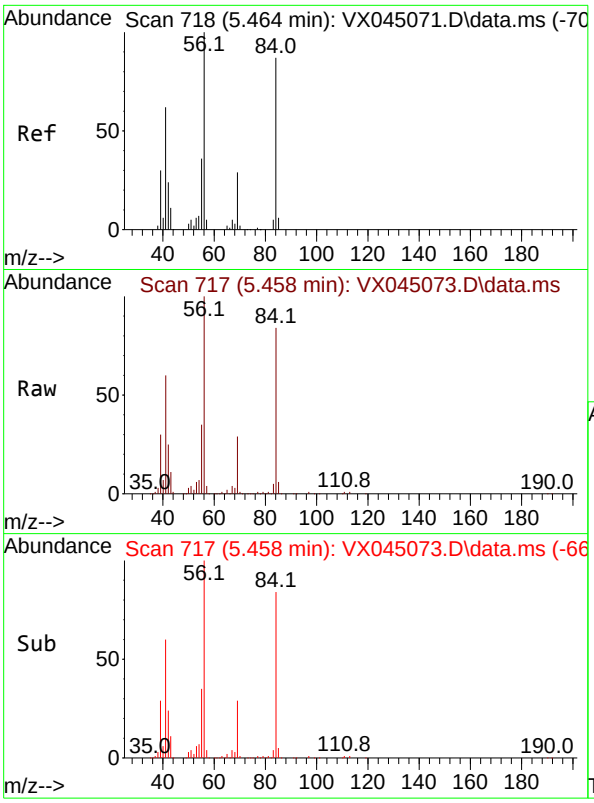




#30
Chloroform
Concen: 152.067 ug/l
RT: 5.093 min Scan# 657
Delta R.T. 0.006 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 83 Resp: 351934

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 66.9 | 51.4 | 77.2 |

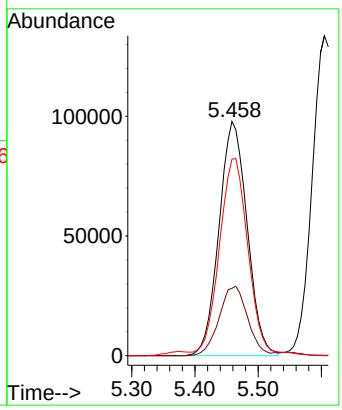





#31
Cyclohexane
Concen: 139.174 ug/l
RT: 5.458 min Scan# 7
Delta R.T. -0.006 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 56 Resp: 30221

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 28.8 | 23.4 | 35.2 |
| 84 | 82.2 | 69.4 | 104.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

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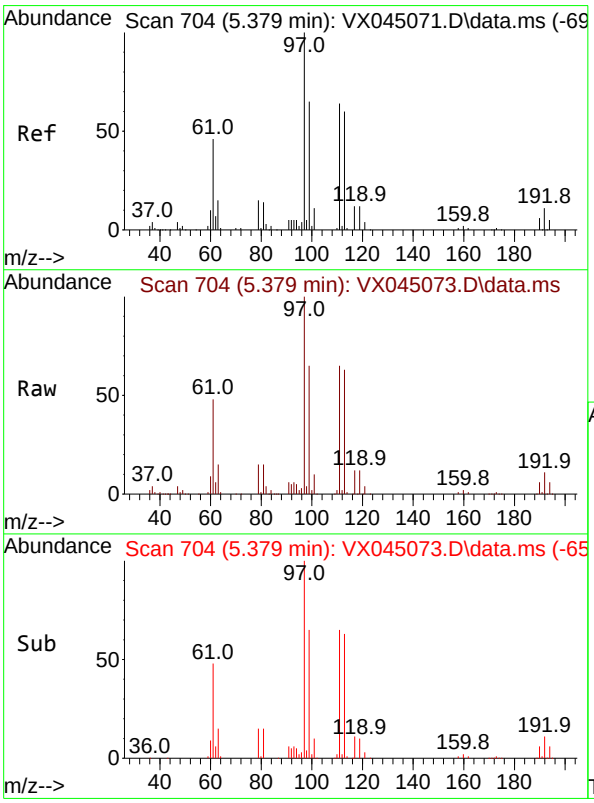
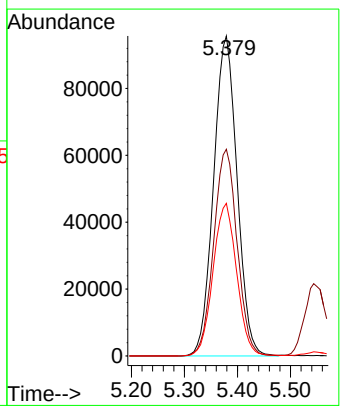
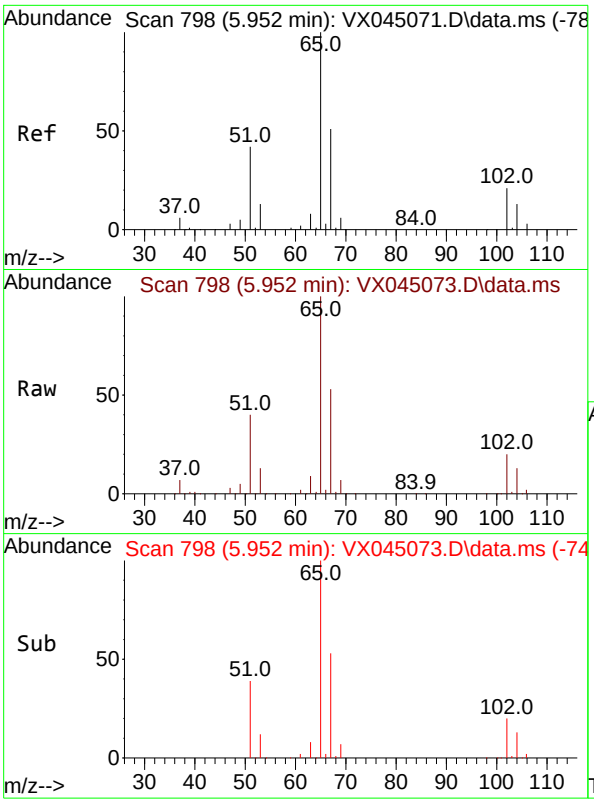



#32
1,1,1-Trichloroethane
Concen: 151.120 ug/l
RT: 5.379 min Scan# 704
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 97 Resp: 294434

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 64.7 | 51.6 | 77.4 |
| 61 | 48.1 | 38.4 | 57.6 |

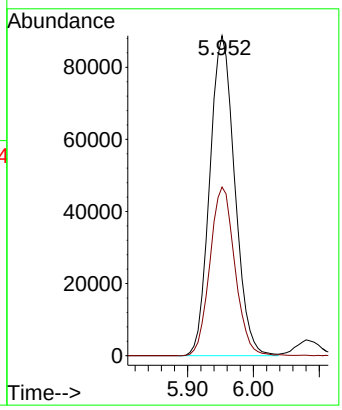





#33
1,2-Dichloroethane-d4
Concen: 165.865 ug/l
RT: 5.952 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 65 Resp: 23462

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 52.7 | 0.0 | 106.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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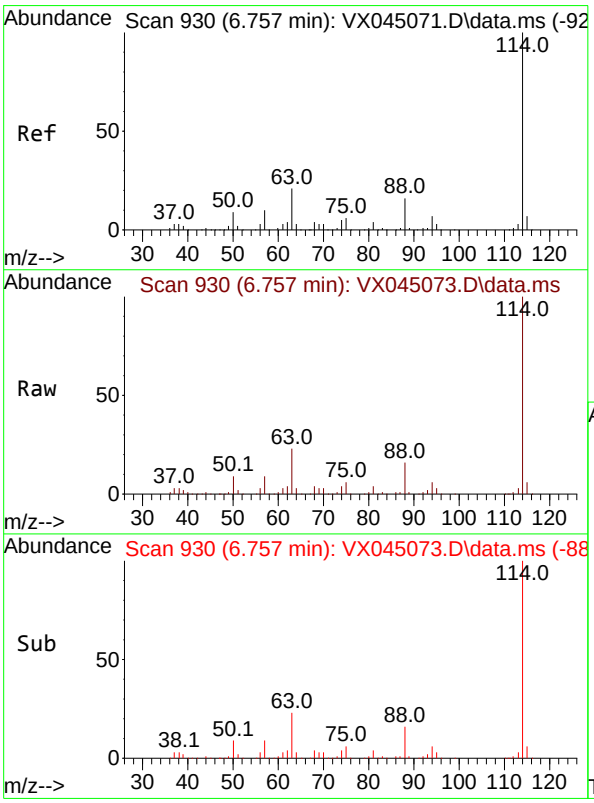
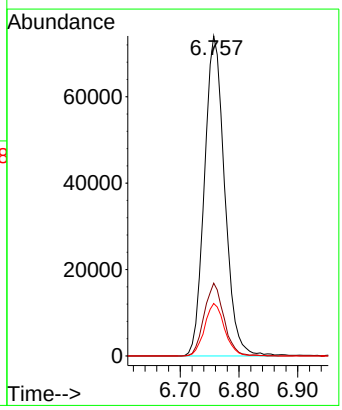
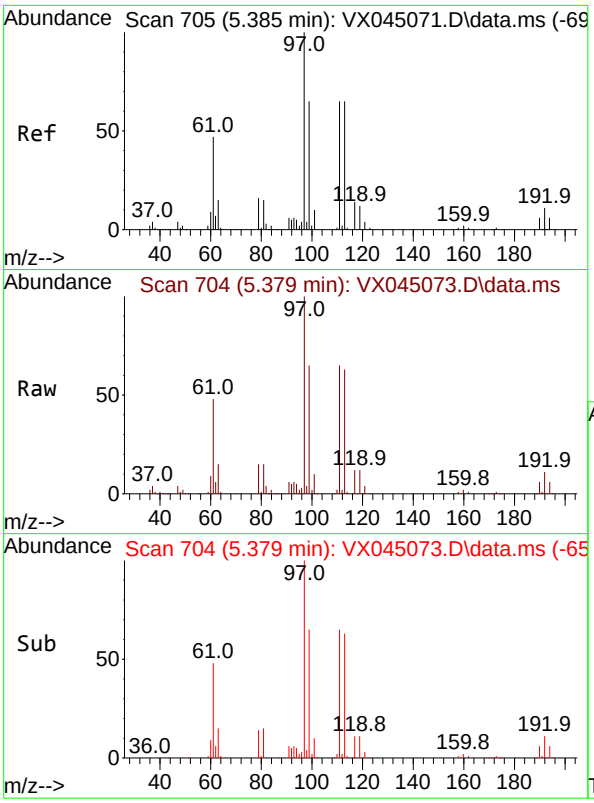



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.757 min Scan# 930
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:114 Resp: 176991

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.8 | 0.0 | 41.8 |
| 88 | 16.4 | 0.0 | 32.8 |

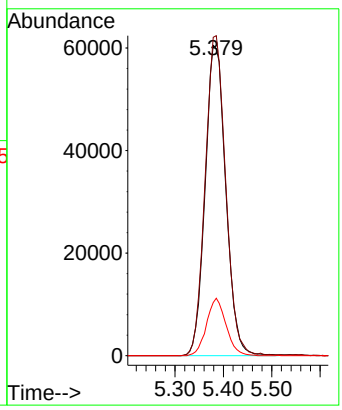





#35
Dibromofluoromethane
Concen: 155.359 ug/l
RT: 5.379 min Scan# 7
Delta R.T. -0.006 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:113 Resp: 17972

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 102.7 | 81.8 | 122.6 |
| 192 | 17.5 | 14.3 | 21.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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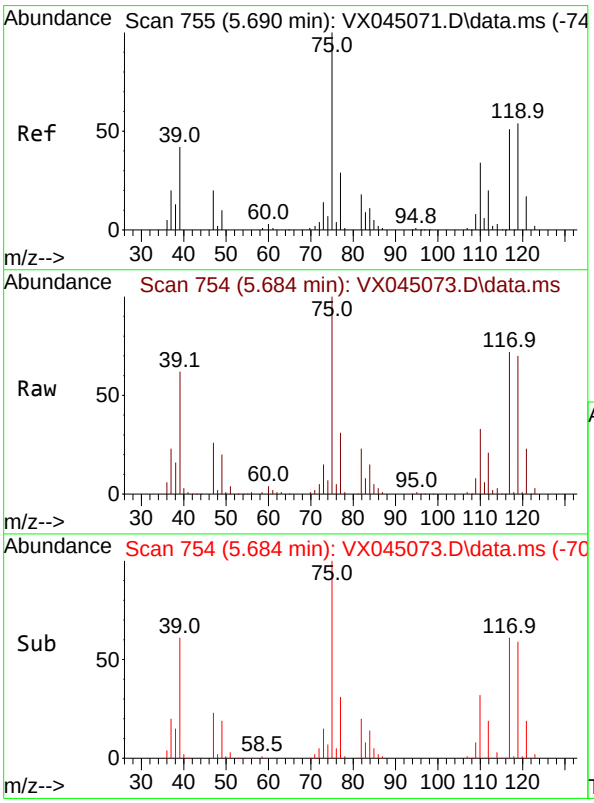
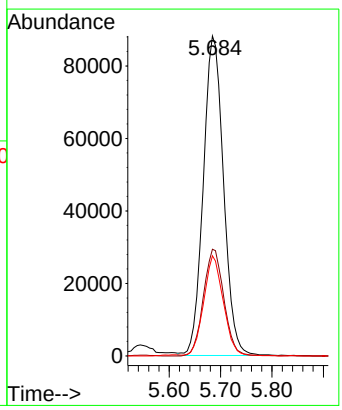
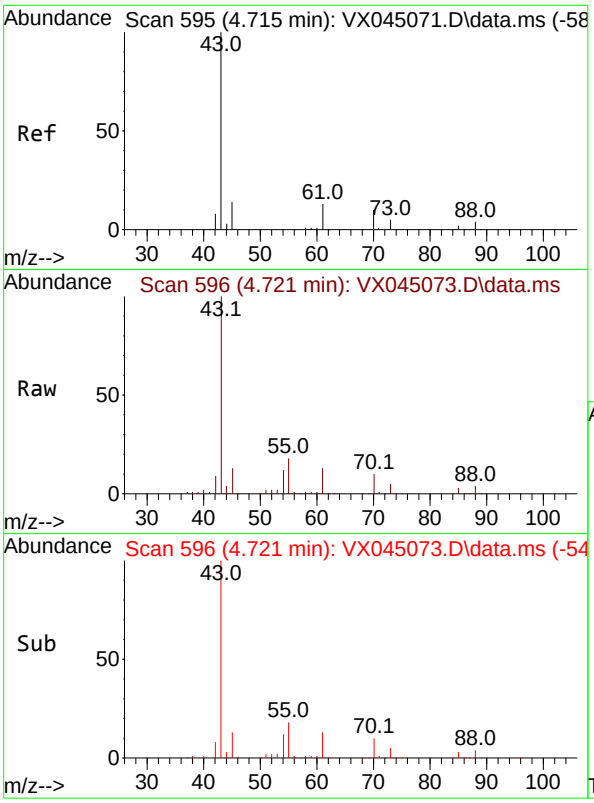



#36
1,1-Dichloropropene
Concen: 145.112 ug/l
RT: 5.684 min Scan# 754
Delta R.T. -0.006 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 75 Resp: 241405

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 33.7 | 16.9 | 50.6 |
| 77 | 30.5 | 24.5 | 36.7 |

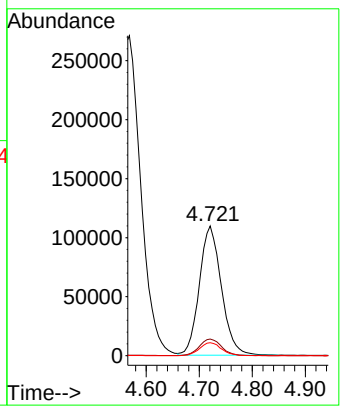





#37
Ethyl Acetate
Concen: 167.067 ug/l
RT: 4.721 min Scan# 5
Delta R.T. 0.006 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 43 Resp: 31625

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 13.2 | 10.8 | 16.2 |
| 70 | 10.1 | 7.7 | 11.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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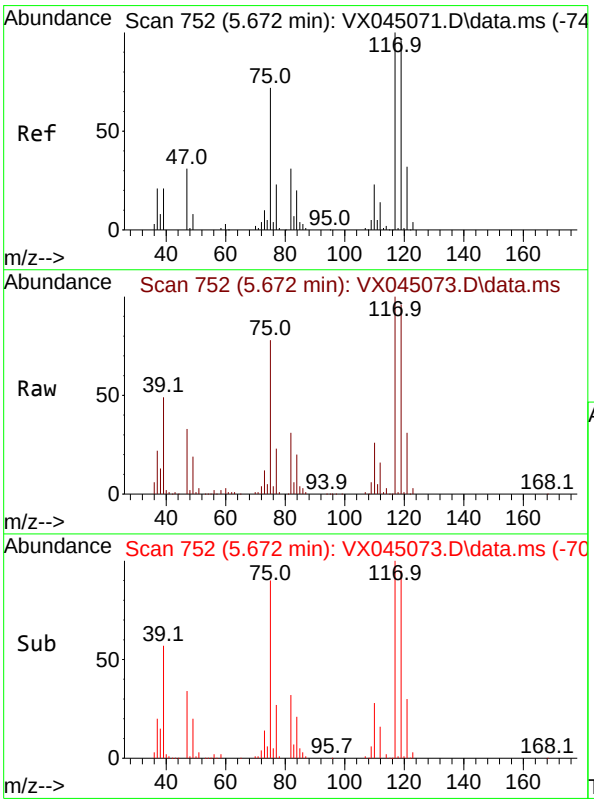
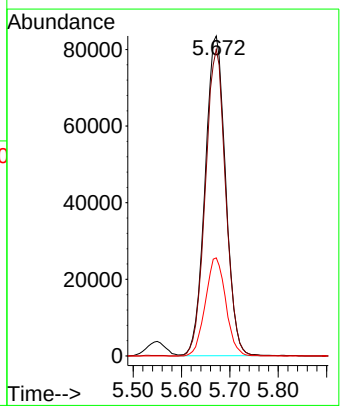
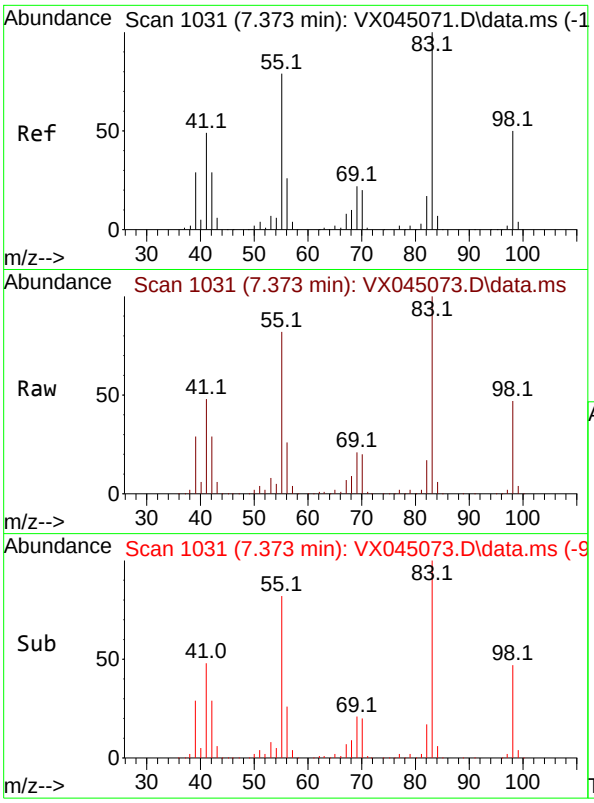



#38
Carbon Tetrachloride
Concen: 150.363 ug/l
RT: 5.672 min Scan# 752
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:117 Resp: 245917

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 95.9 | 76.7 | 115.1 |
| 121 | 30.7 | 25.5 | 38.3 |

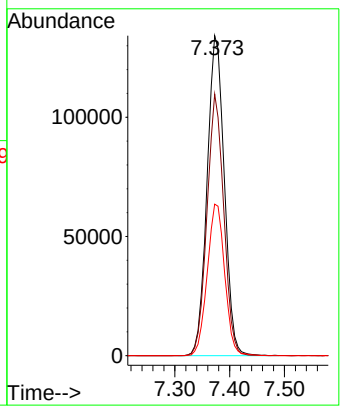





#39
Methylcyclohexane
Concen: 137.544 ug/l
RT: 7.373 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 83 Resp: 29221

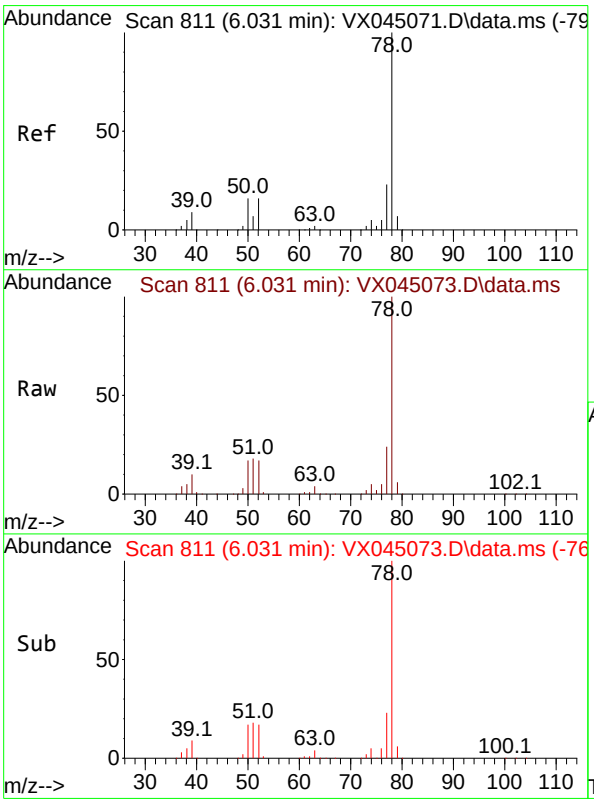
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 81.7 | 63.0 | 94.4 |
| 98 | 47.4 | 39.7 | 59.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

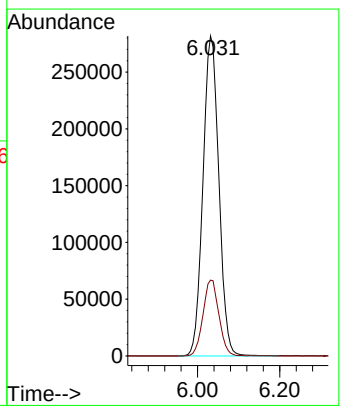
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

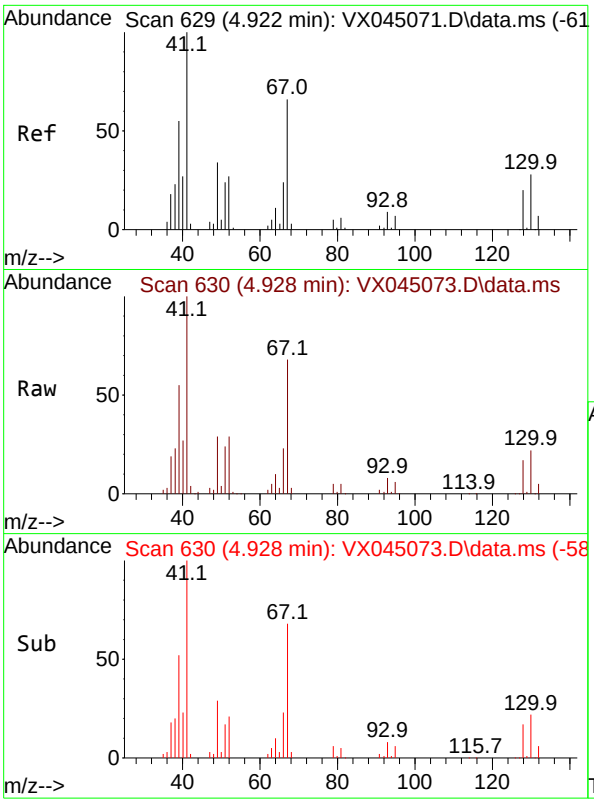



#40
Benzene
Concen: 145.368 ug/l
RT: 6.031 min Scan# 811
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 78 Resp: 755854

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.7 | 18.8 | 28.2 |

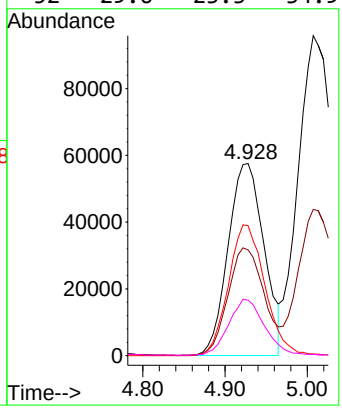





#41
Methacrylonitrile
Concen: 173.088 ug/l
RT: 4.928 min Scan# 6
Delta R.T. 0.006 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 41 Resp: 17502

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 55.9 | 44.6 | 67.0 |
| 67 | 69.5 | 53.9 | 80.9 |
| 52 | 29.6 | 23.3 | 34.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

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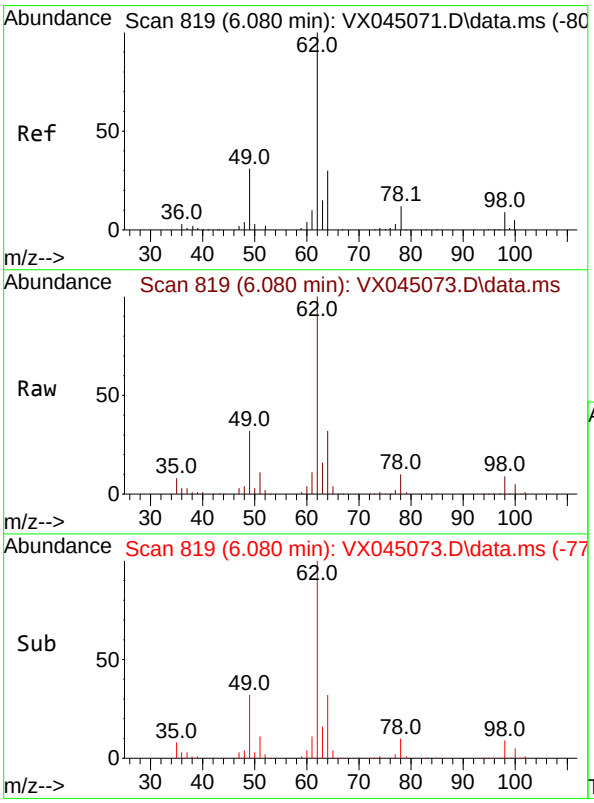
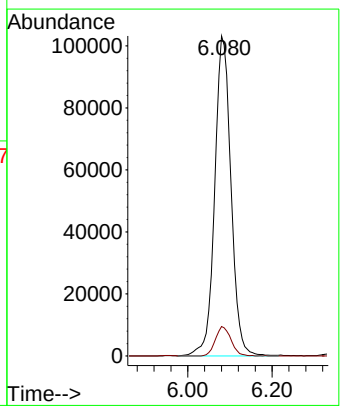
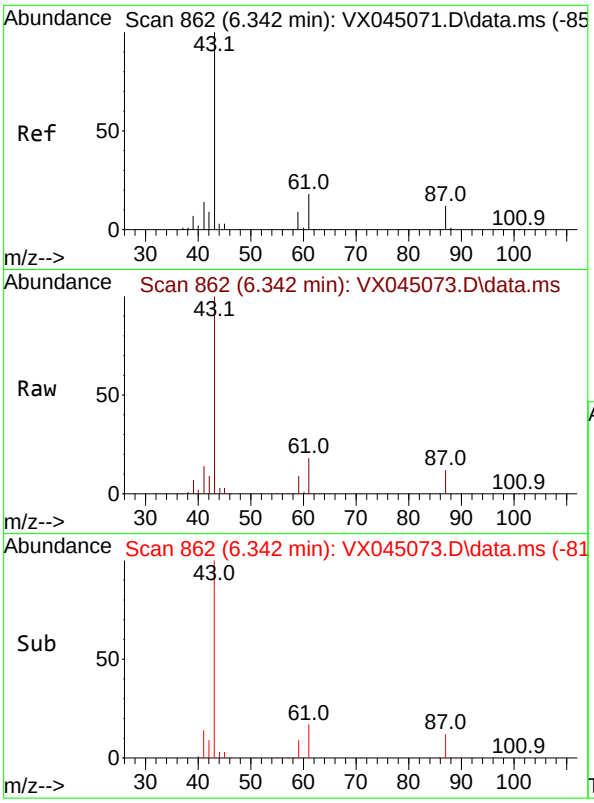



#42
1,2-Dichloroethane
Concen: 163.872 ug/l
RT: 6.080 min Scan# 819
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 62 Resp: 276129

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 8.8 | 0.0 | 18.2 |

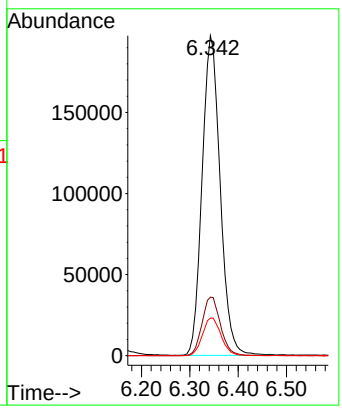





#43
Isopropyl Acetate
Concen: 169.804 ug/l
RT: 6.342 min Scan# 8
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 43 Resp: 51164

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 18.7 | 14.9 | 22.3 |
| 87 | 12.1 | 9.4 | 14.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

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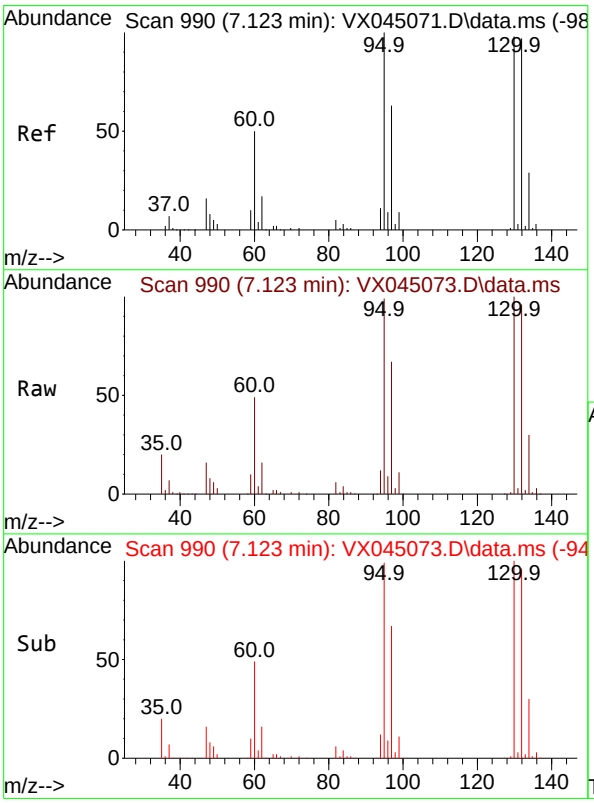
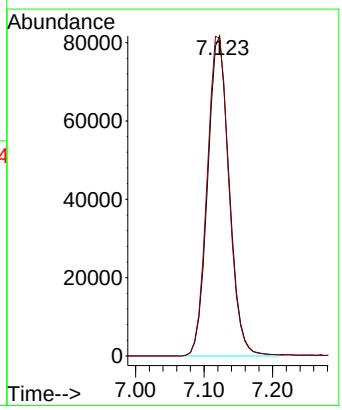
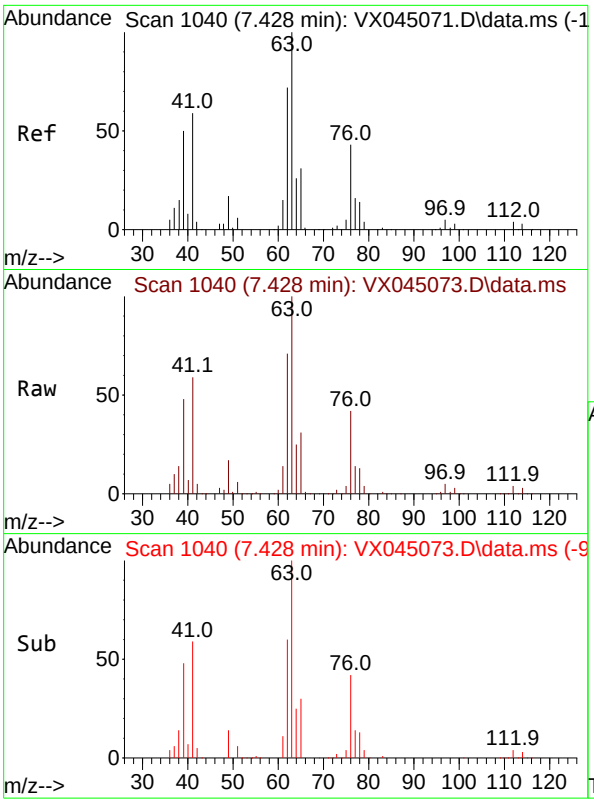



#44
Trichloroethene
Concen: 150.181 ug/l
RT: 7.123 min Scan# 990
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:130 Resp: 178483

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 99.3 | 0.0 | 205.0 |

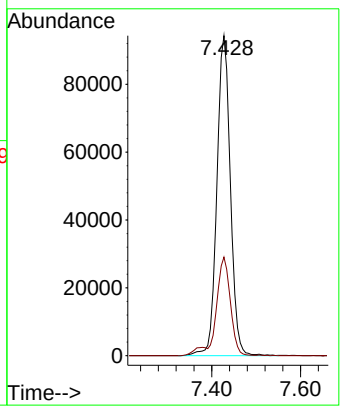





#45
1,2-Dichloropropane
Concen: 153.334 ug/l
RT: 7.428 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 63 Resp: 19813

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 30.8 | 24.7 | 37.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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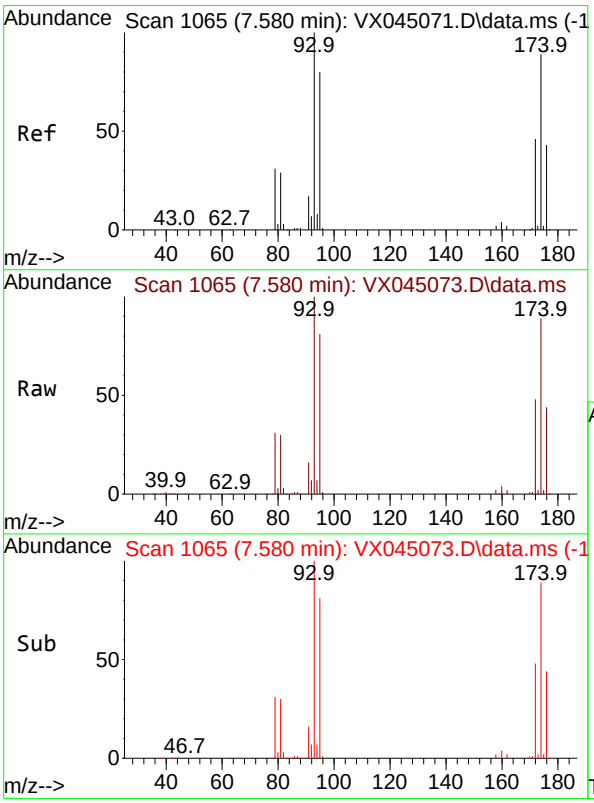
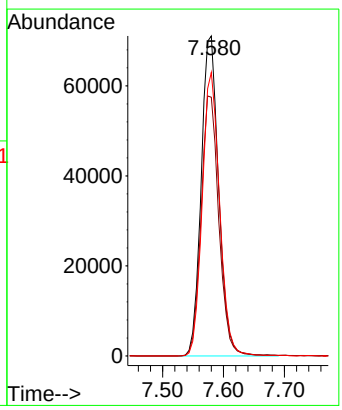
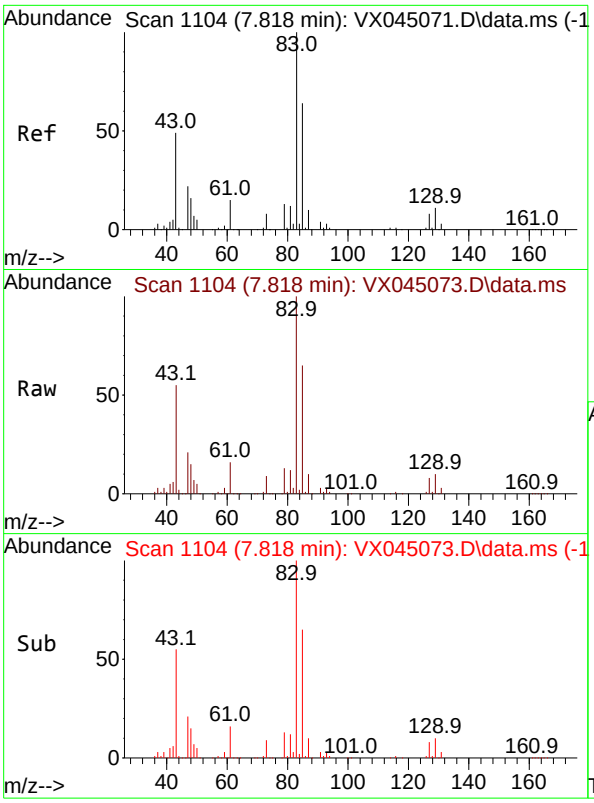



#46
Dibromomethane
Concen: 157.443 ug/l
RT: 7.580 min Scan# 1065
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 93 Resp: 142119

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 82.6 | 65.8 | 98.8 |
| 174 | 88.2 | 72.2 | 108.2 |

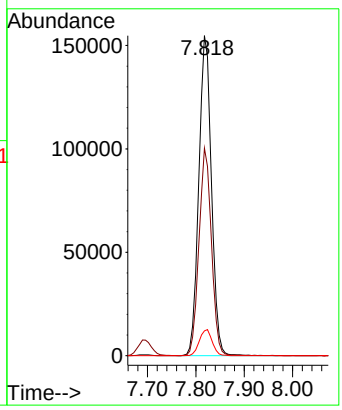





#47
Bromodichloromethane
Concen: 160.492 ug/l
RT: 7.818 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 83 Resp: 28025

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.9 | 51.1 | 76.7 |
| 127 | 7.8 | 6.4 | 9.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

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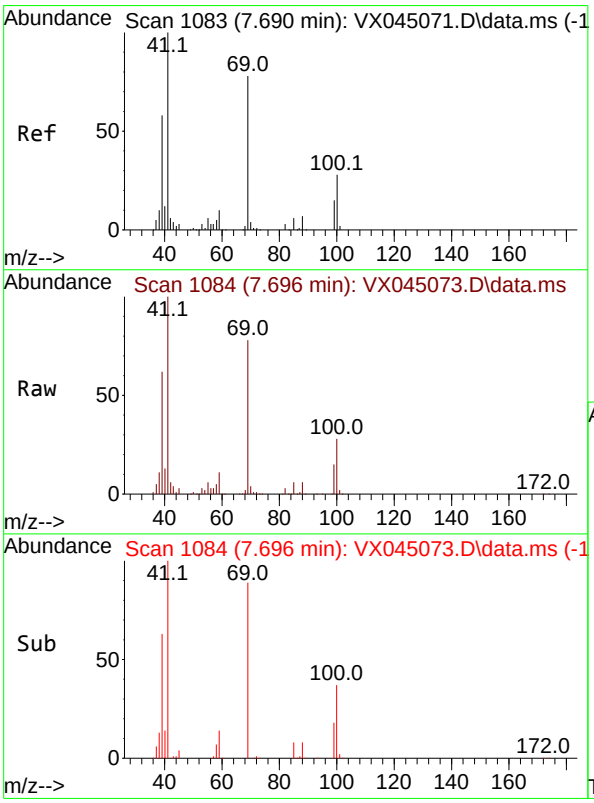
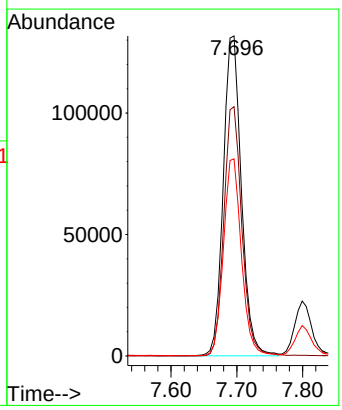
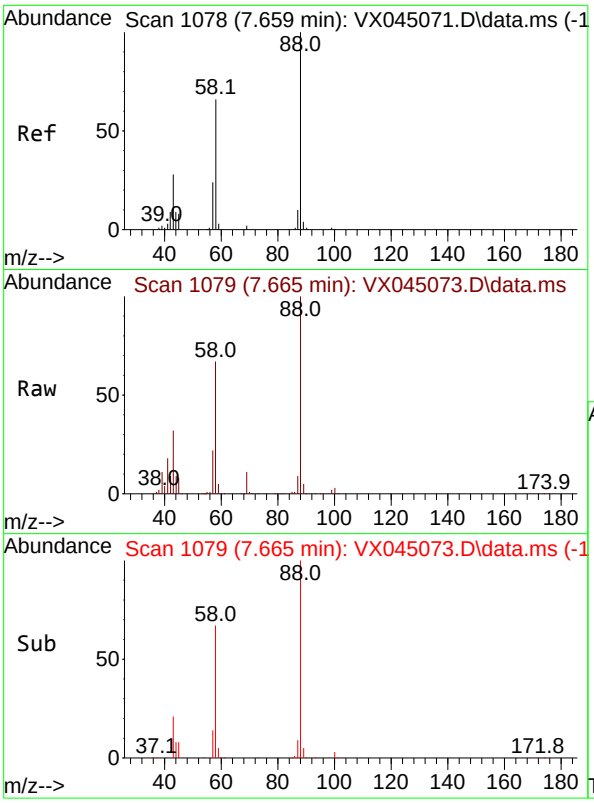



#48
Methyl methacrylate
Concen: 176.370 ug/l
RT: 7.696 min Scan# 1084
Delta R.T. 0.006 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 41 Resp: 252275

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 78.1 | 63.0 | 94.6 |
| 39 | 61.1 | 47.5 | 71.3 |

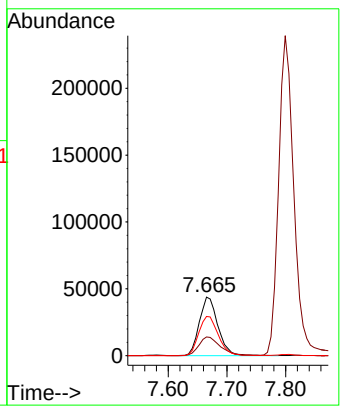





#49
1,4-Dioxane
Concen: 3166.423 ug/l
RT: 7.665 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 88 Resp: 9626

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 37.0 | 28.7 | 43.1 |
| 58 | 70.8 | 55.8 | 83.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

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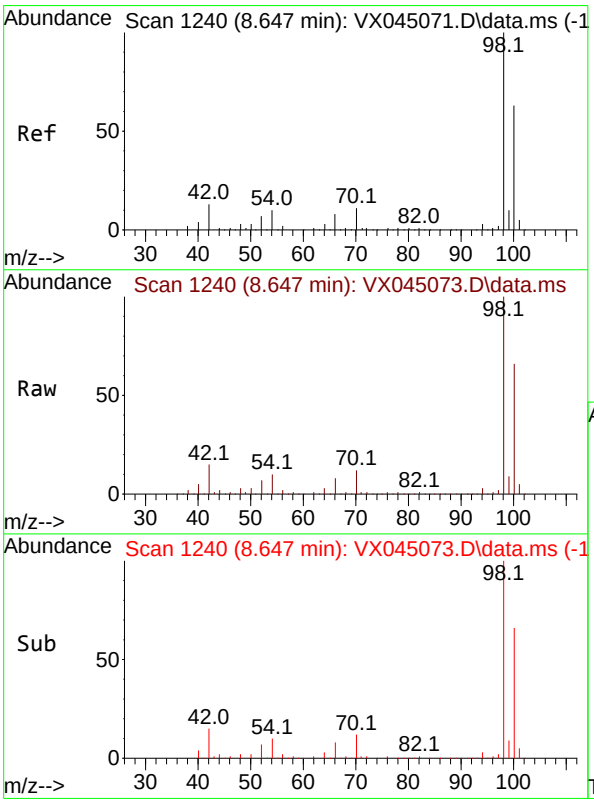
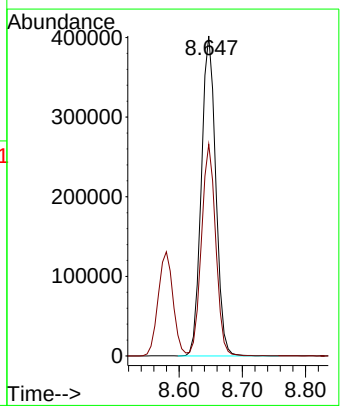
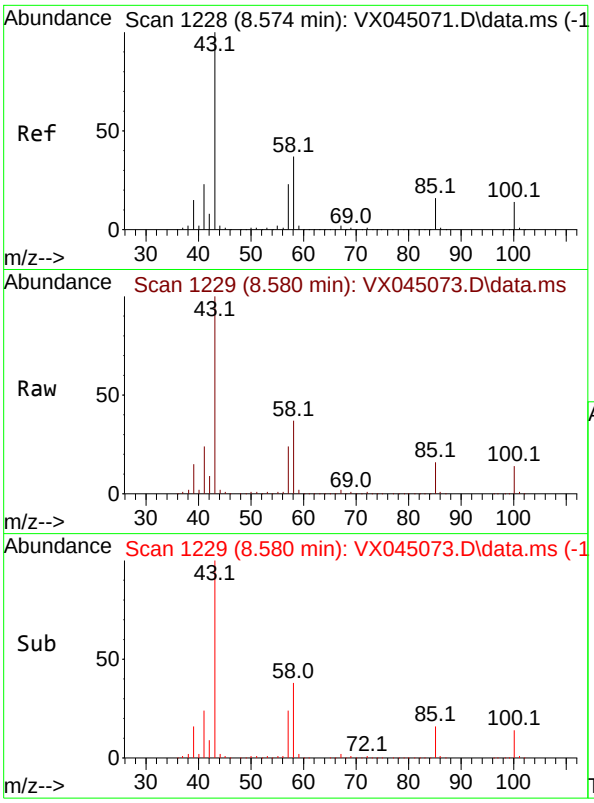



#50
Toluene-d8
Concen: 147.538 ug/l
RT: 8.647 min Scan# 1240
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 98 Resp: 638979

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.4 | 52.0 | 78.0 |






#51
4-Methyl-2-Pentanone
Concen: 832.051 ug/l
RT: 8.580 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 43 Resp: 153615

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 37.1 | 29.2 | 43.8 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

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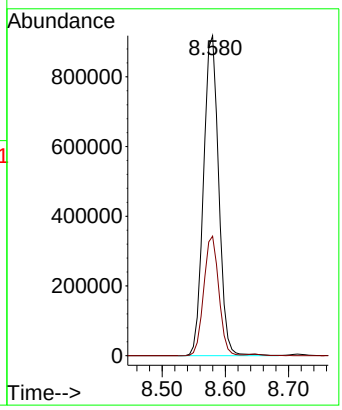
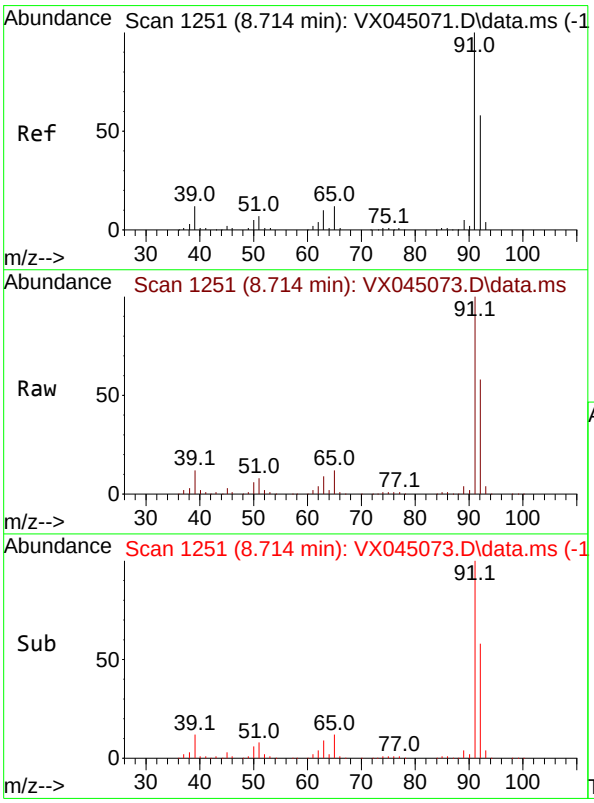
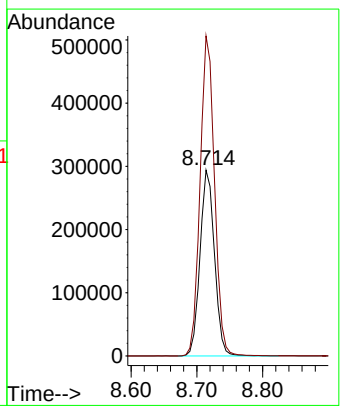


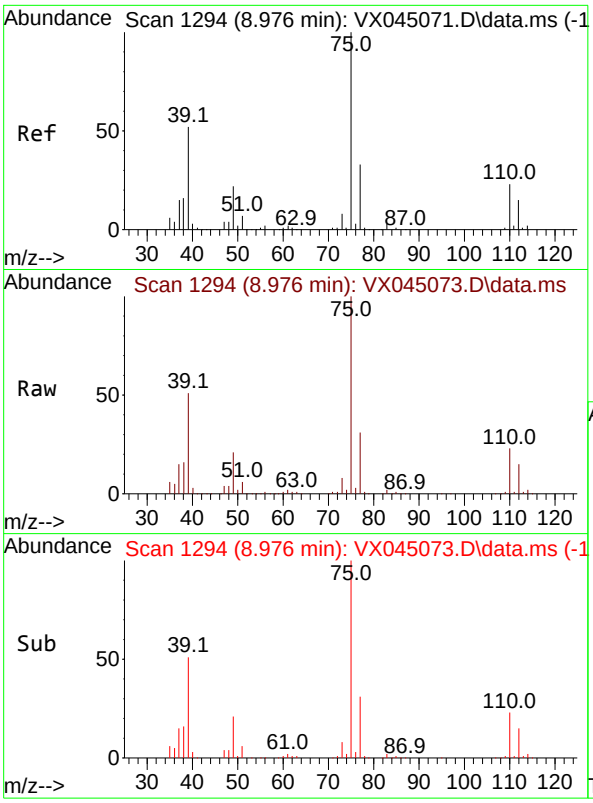




#52
Toluene
Concen: 145.321 ug/l
RT: 8.714 min Scan# 1251
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 92 Resp: 448664

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 172.3 | 138.9 | 208.3 |

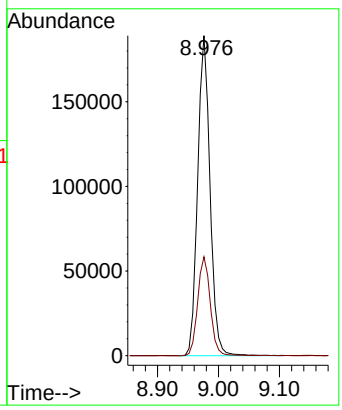





#53
t-1,3-Dichloropropene
Concen: 154.373 ug/l
RT: 8.976 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 75 Resp: 26644

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 30.9 | 26.5 | 39.7 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

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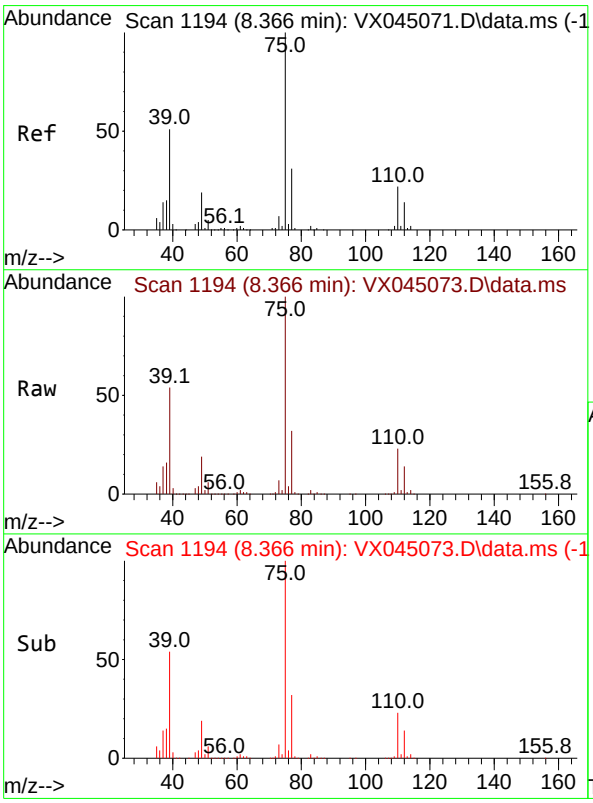
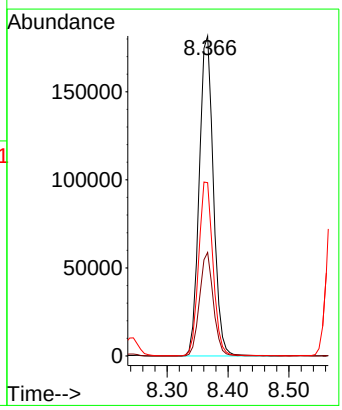
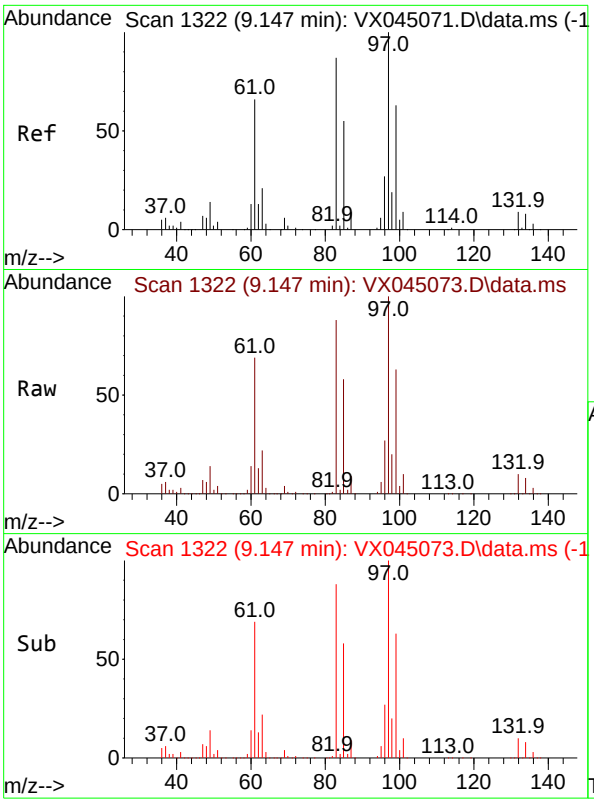



#54
cis-1,3-Dichloropropene
Concen: 152.117 ug/l
RT: 8.366 min Scan# 1194
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 75 Resp: 293521

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.3 | 24.7 | 37.1 |
| 39 | 54.0 | 40.7 | 61.1 |

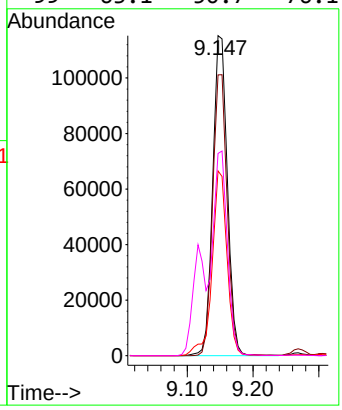





#55
1,1,2-Trichloroethane
Concen: 149.046 ug/l
RT: 9.147 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 97 Resp: 17821

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 87.8 | 69.4 | 104.2 |
| 85 | 57.8 | 44.1 | 66.1 |
| 99 | 63.1 | 50.7 | 76.1 |




**Instrument :**
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VSTDICC150

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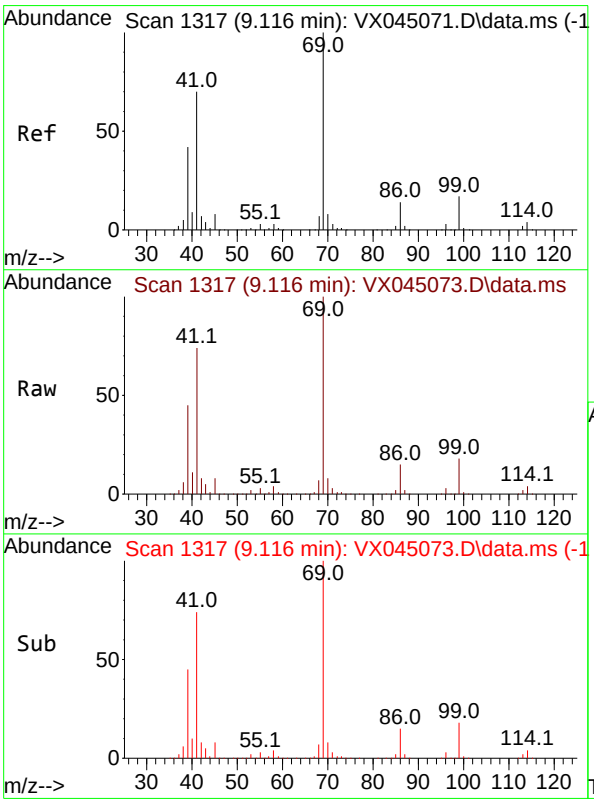
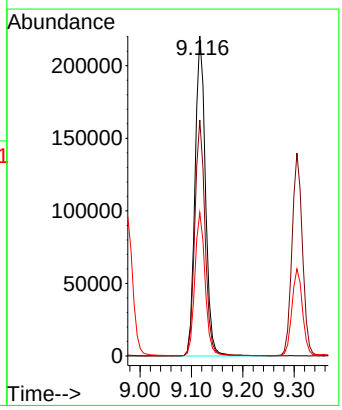
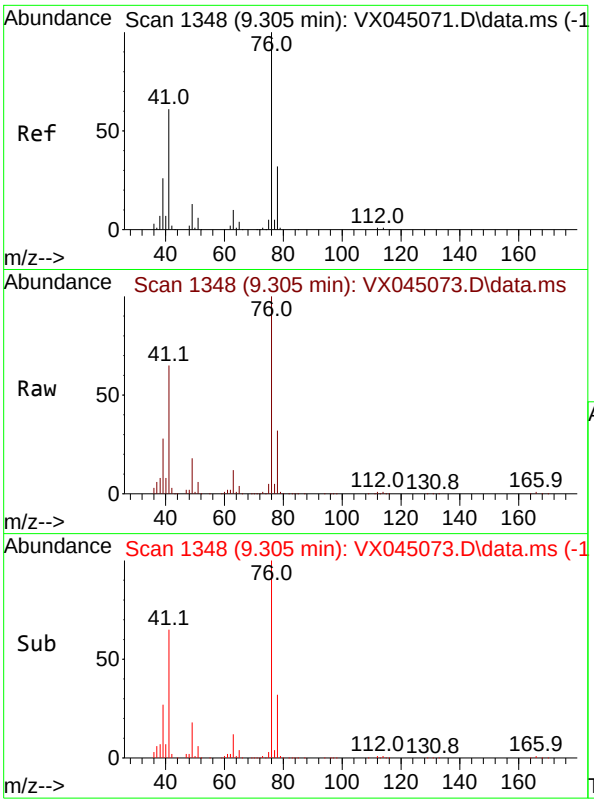



#56
Ethyl methacrylate
Concen: 162.631 ug/l
RT: 9.116 min Scan# 1317
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 69 Resp: 310992

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 72.6 | 57.0 | 85.4 |
| 39 | 44.2 | 34.2 | 51.4 |

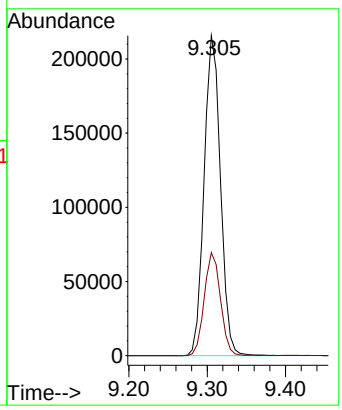





#57
1,3-Dichloropropane
Concen: 149.699 ug/l
RT: 9.305 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 76 Resp: 31219

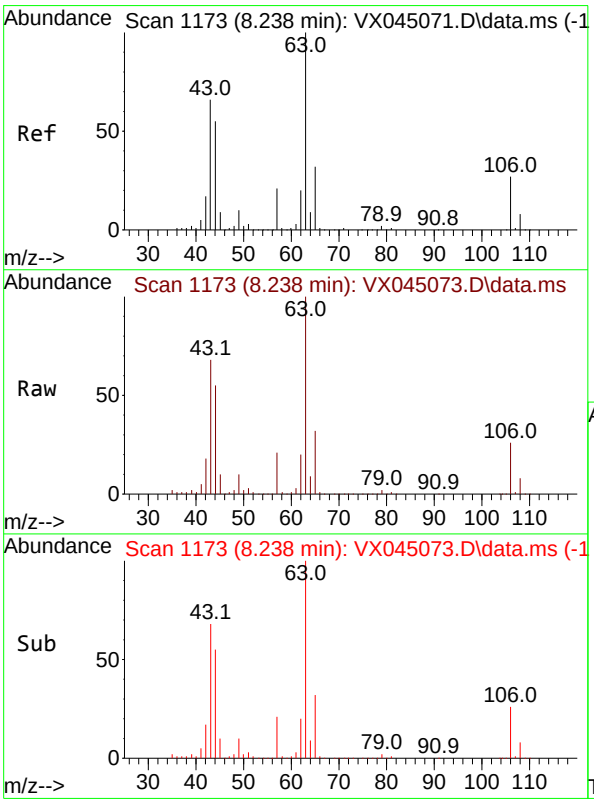
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.0 | 25.5 | 38.3 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

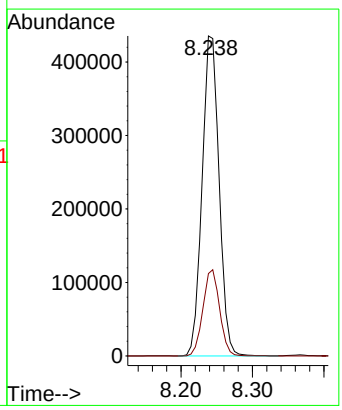
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

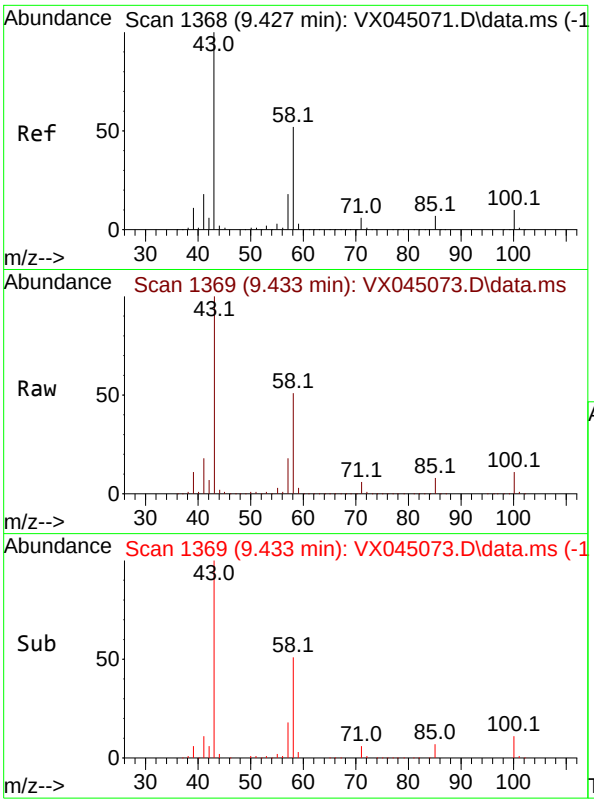



#58
2-Chloroethyl Vinyl ether
Concen: 764.019 ug/l
RT: 8.238 min Scan# 1173
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 63 Resp: 717328

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 26.5 | 21.5 | 32.3 |

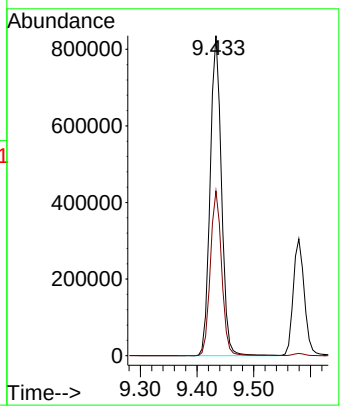





#59
2-Hexanone
Concen: 868.492 ug/l
RT: 9.433 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 43 Resp: 115665

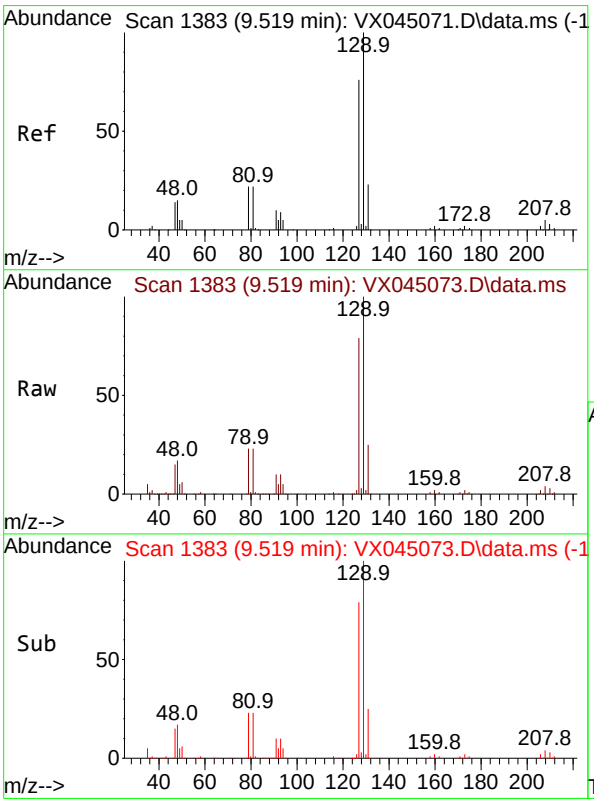
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 51.6 | 25.9 | 77.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

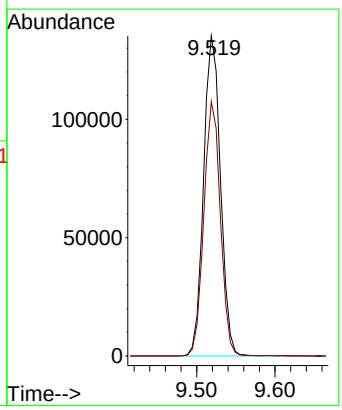
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

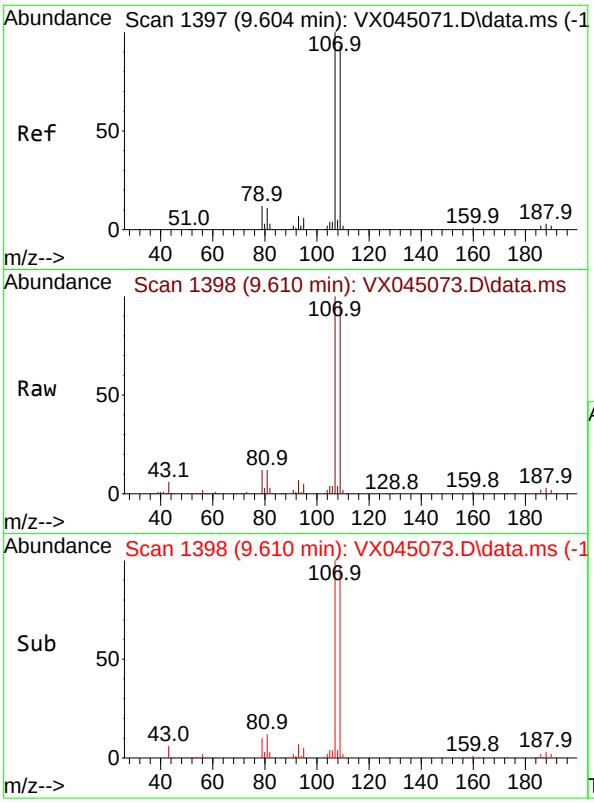



#60
Dibromochloromethane
Concen: 158.276 ug/l
RT: 9.519 min Scan# 1383
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:129 Resp: 201906

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 77.9 | 38.5 | 115.5 |

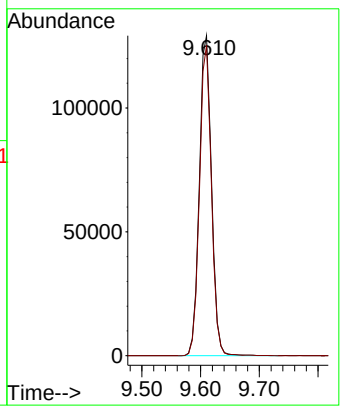





#61
1,2-Dibromoethane
Concen: 154.074 ug/l
RT: 9.610 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:107 Resp: 18582

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 95.2 | 76.1 | 114.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

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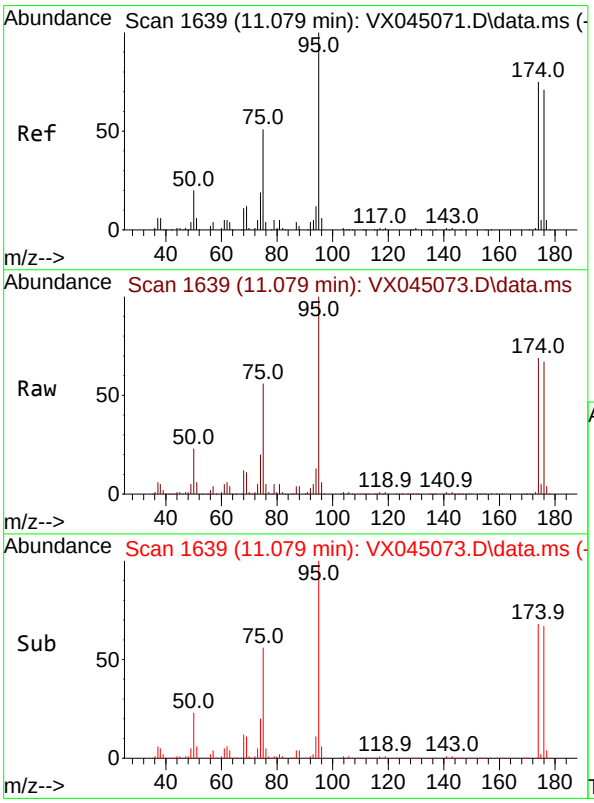
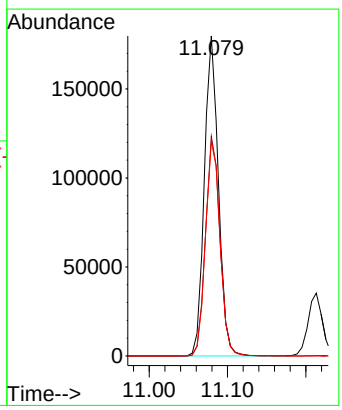
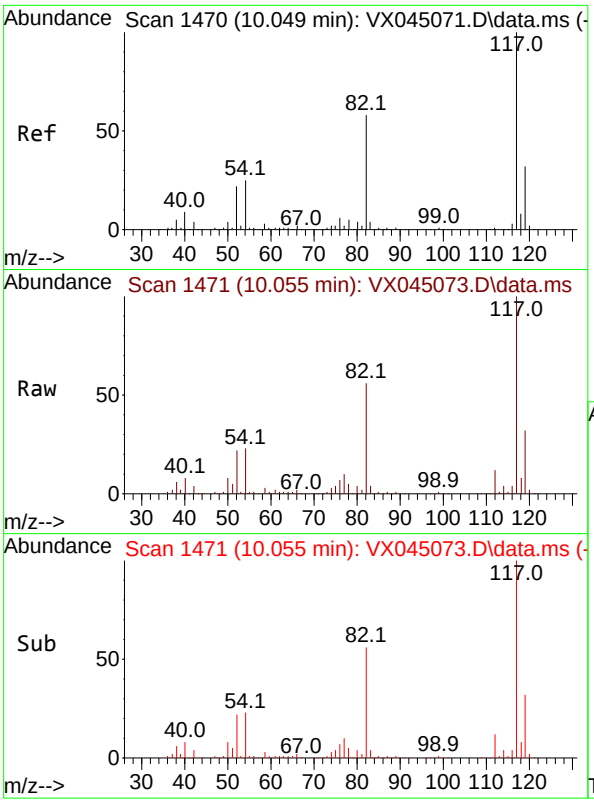



#62
4-Bromofluorobenzene
Concen: 154.420 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 95 Resp: 223346

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 70.4 | 0.0 | 148.2 |
| 176 | 69.4 | 0.0 | 141.4 |

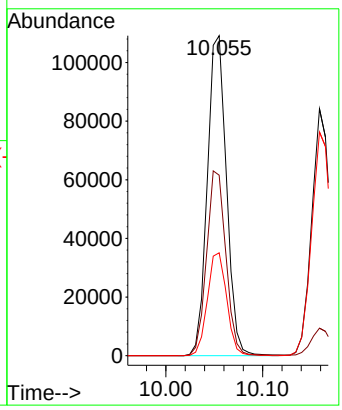





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.055 min Scan# 14
Delta R.T. 0.006 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:117 Resp: 15054

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 56.4 | 46.3 | 69.5 |
| 119 | 32.1 | 25.7 | 38.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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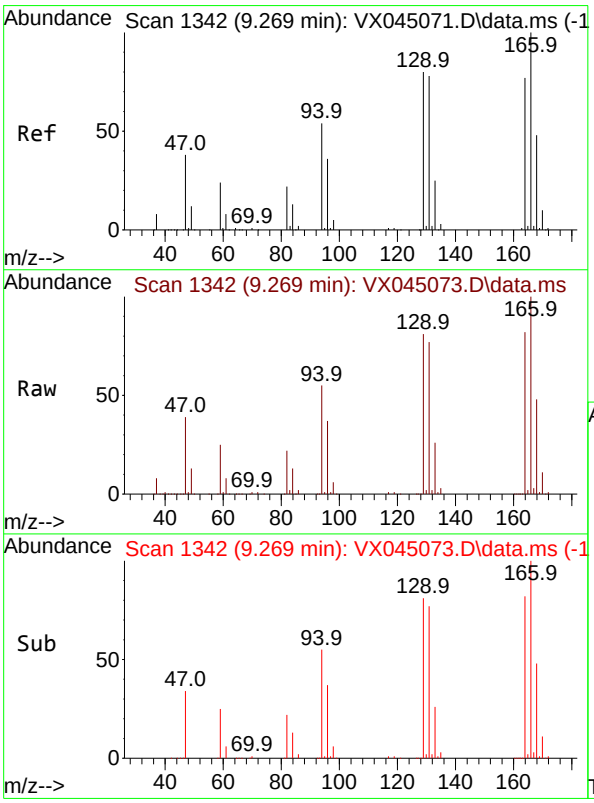
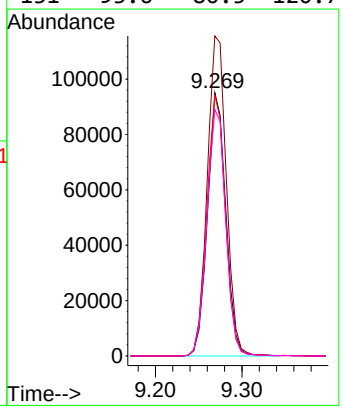
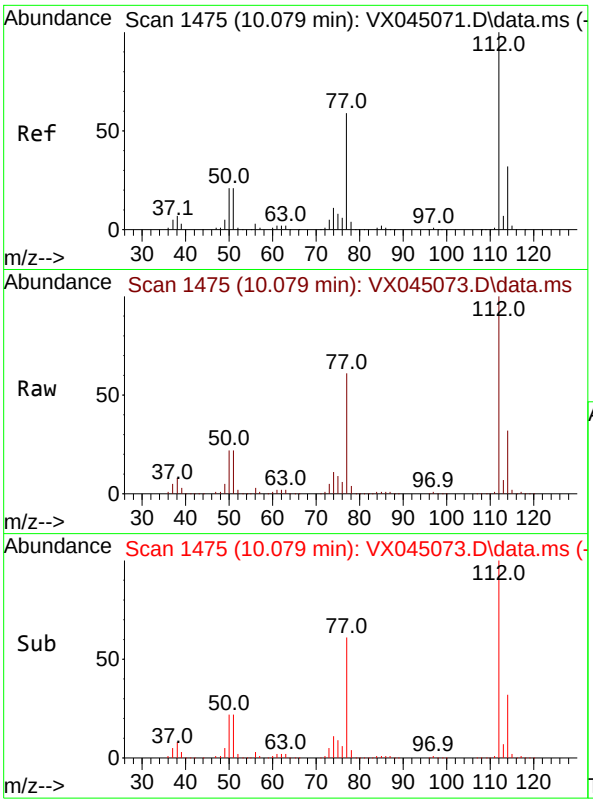



#64
Tetrachloroethene
Concen: 145.906 ug/l
RT: 9.269 min Scan# 1342
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:164 Resp: 139536

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 121.6 | 103.6 | 155.4 |
| 129 | 99.0 | 82.7 | 124.1 |
| 131 | 93.6 | 80.5 | 120.7 |

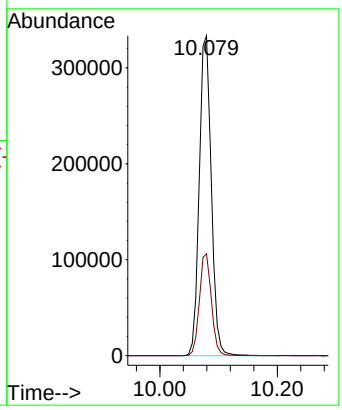





#65
Chlorobenzene
Concen: 146.096 ug/l
RT: 10.079 min Scan# 14
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:112 Resp: 47211

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 31.9 | 26.0 | 39.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

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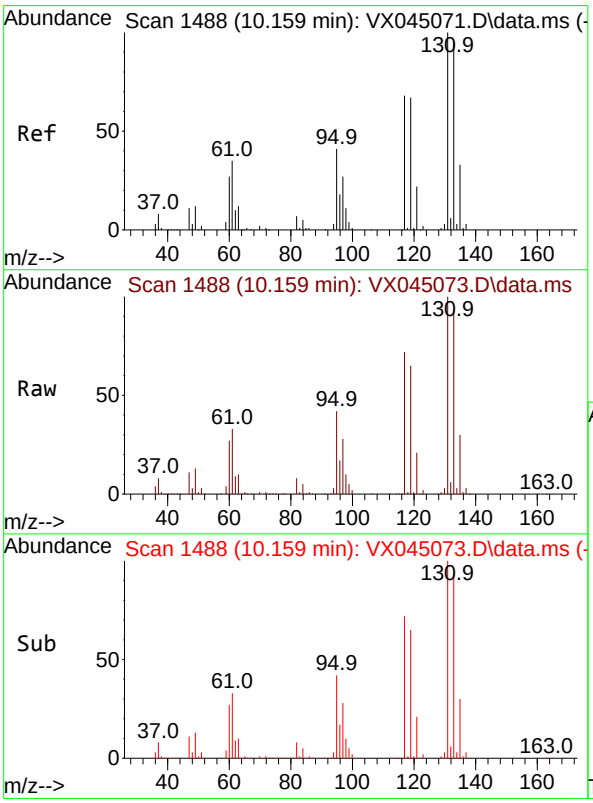
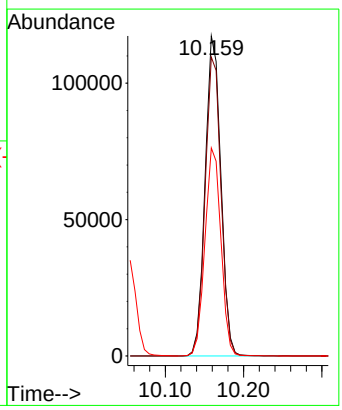
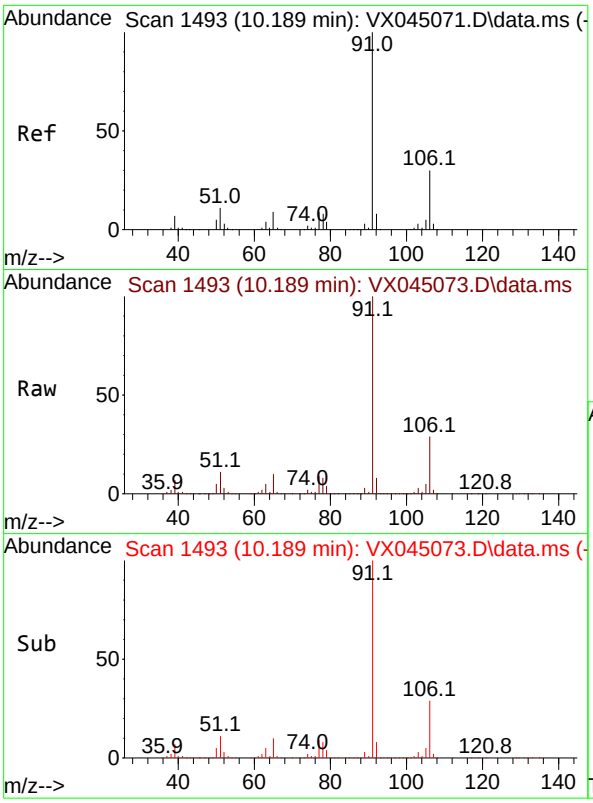



#66
1,1,1,2-Tetrachloroethane
Concen: 156.845 ug/l
RT: 10.159 min Scan# 1488
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:131 Resp: 163370

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 94.2 | 48.6 | 145.9 |
| 119 | 66.0 | 33.9 | 101.7 |






#67
Ethyl Benzene
Concen: 149.191 ug/l
RT: 10.189 min Scan# 14
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 91 Resp: 85257

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 29.5 | 23.9 | 35.9 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

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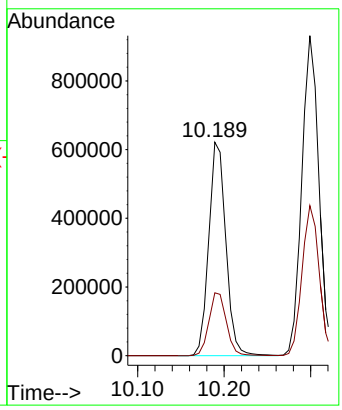
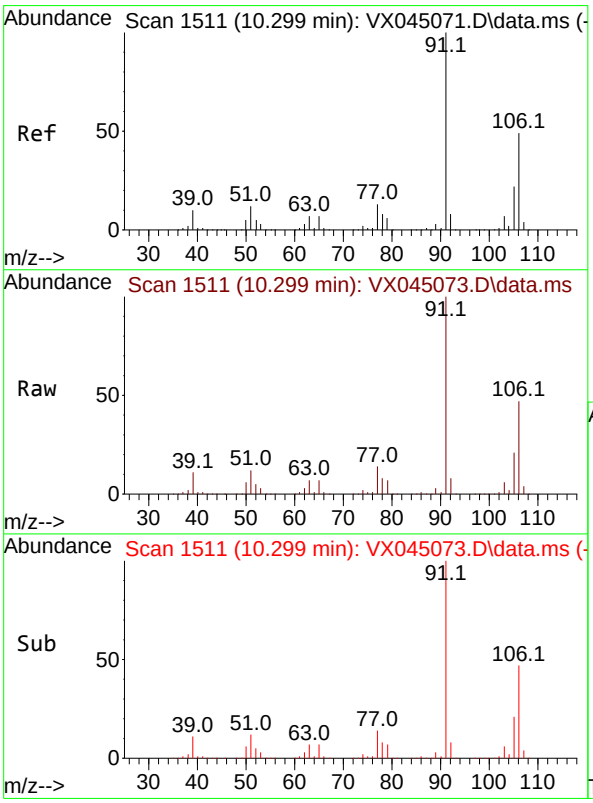
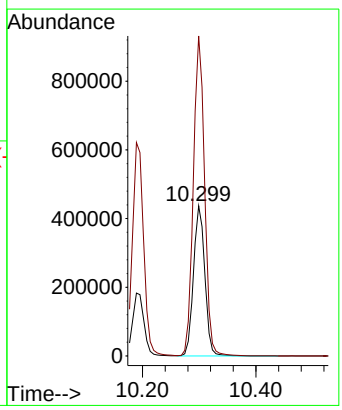


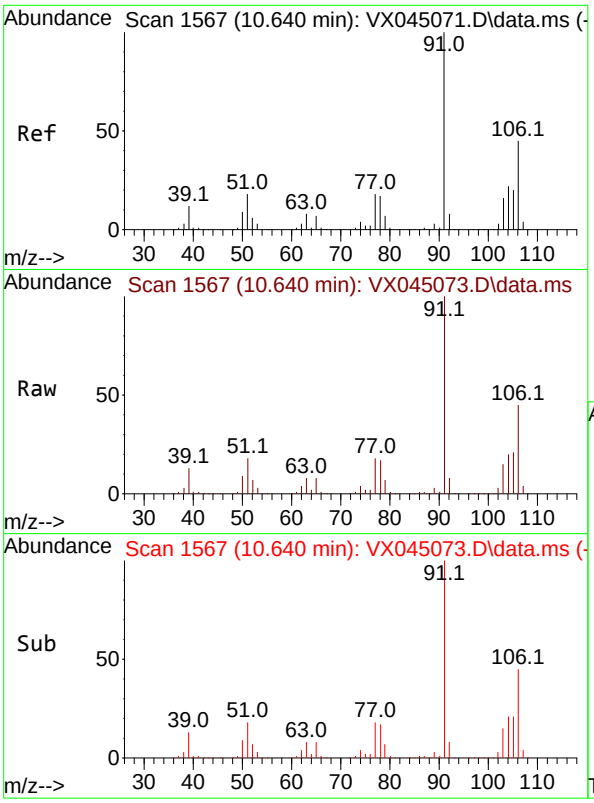




#68
m/p-Xylenes
Concen: 288.655 ug/l
RT: 10.299 min Scan# 1511
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:106 Resp: 607523

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 211.2 | 165.4 | 248.0 |

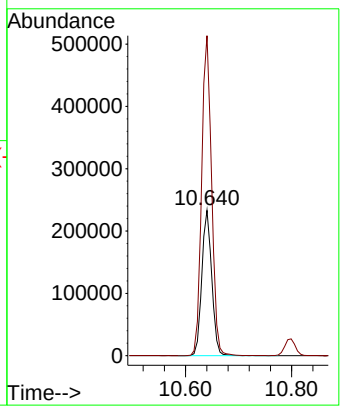





#69
o-Xylene
Concen: 143.259 ug/l
RT: 10.640 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:106 Resp: 30249

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 221.3 | 109.9 | 329.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

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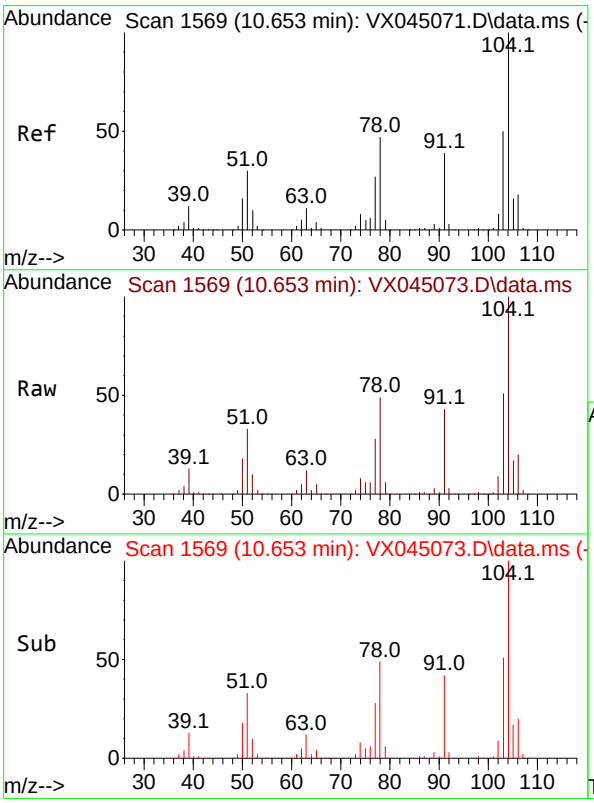
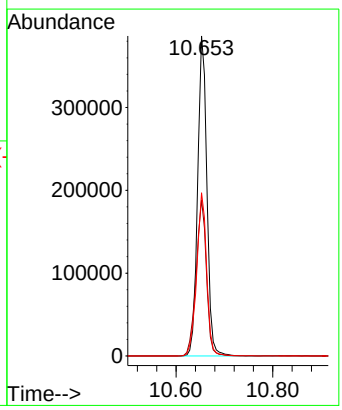
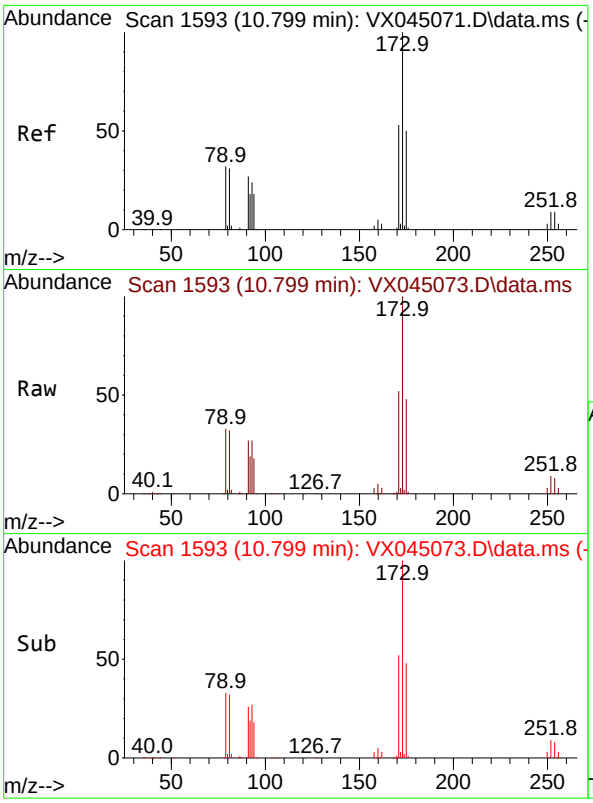



#70
Styrene
Concen: 150.979 ug/l
RT: 10.653 min Scan# 1569
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:104 Resp: 512379

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 54.4 | 42.2 | 63.4 |
| 103 | 54.8 | 43.8 | 65.8 |

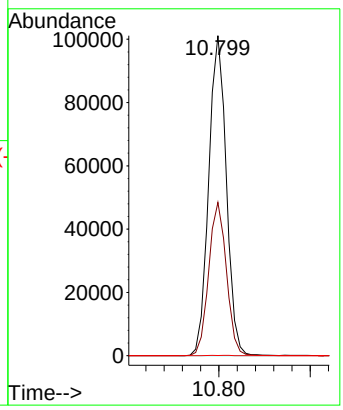





#71
Bromoform
Concen: 174.808 ug/l
RT: 10.799 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:173 Resp: 13538

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 48.3 | 24.6 | 73.6 |
| 254 | 0.1 | 0.0 | 0.0# |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

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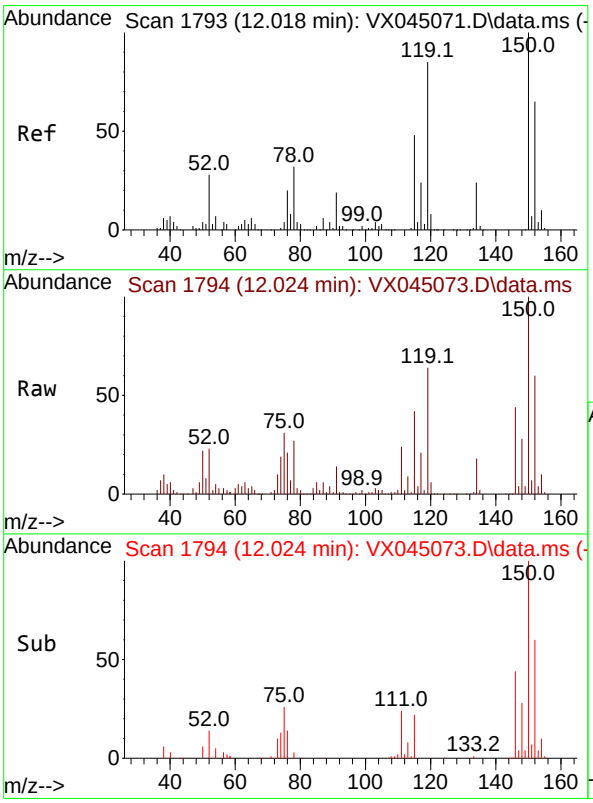
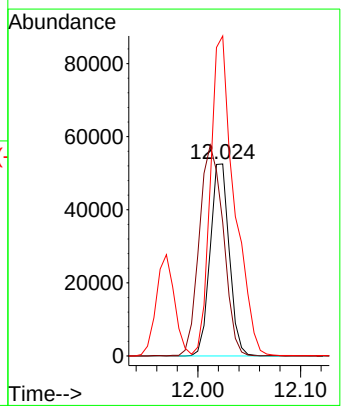
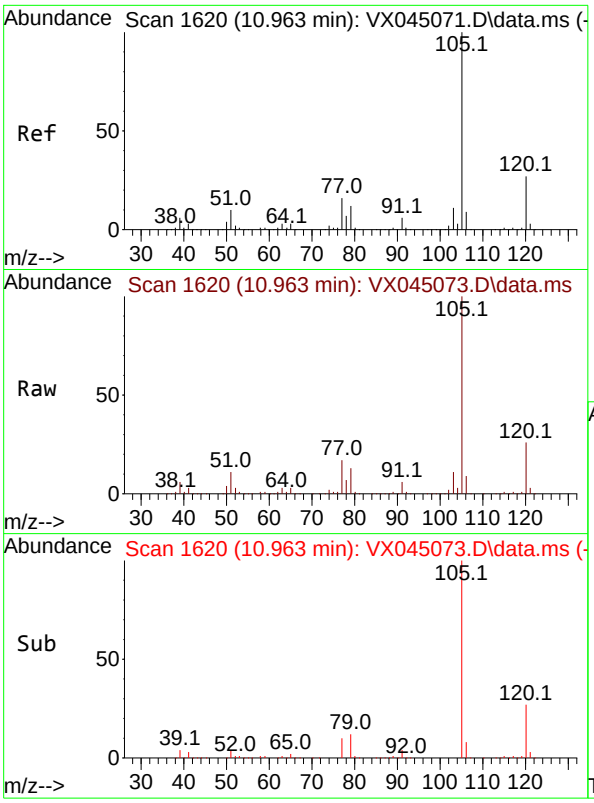



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.024 min Scan# 1794
Delta R.T. 0.006 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:152 Resp: 67685

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 138.4 | 44.2 | 132.6# |
| 150 | 208.8 | 0.0 | 349.0 |

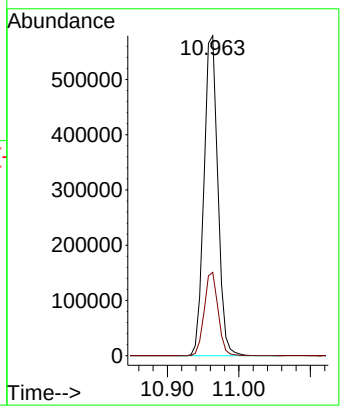





#73
Isopropylbenzene
Concen: 142.719 ug/l
RT: 10.963 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:105 Resp: 78070

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.0 | 13.2 | 39.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

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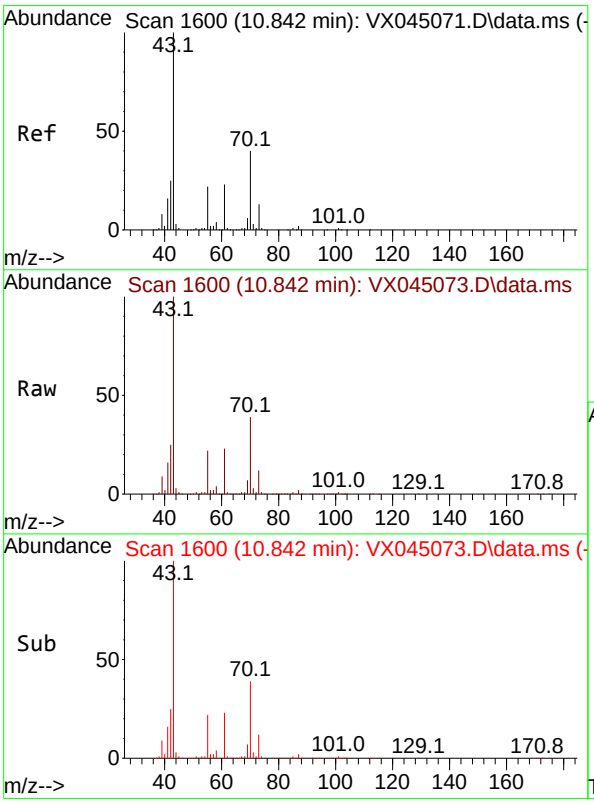
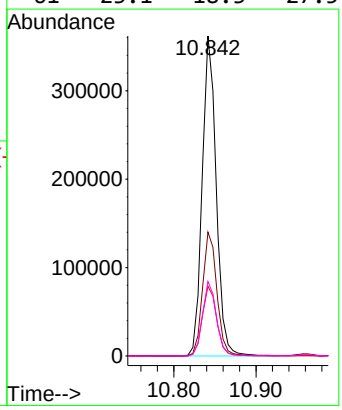
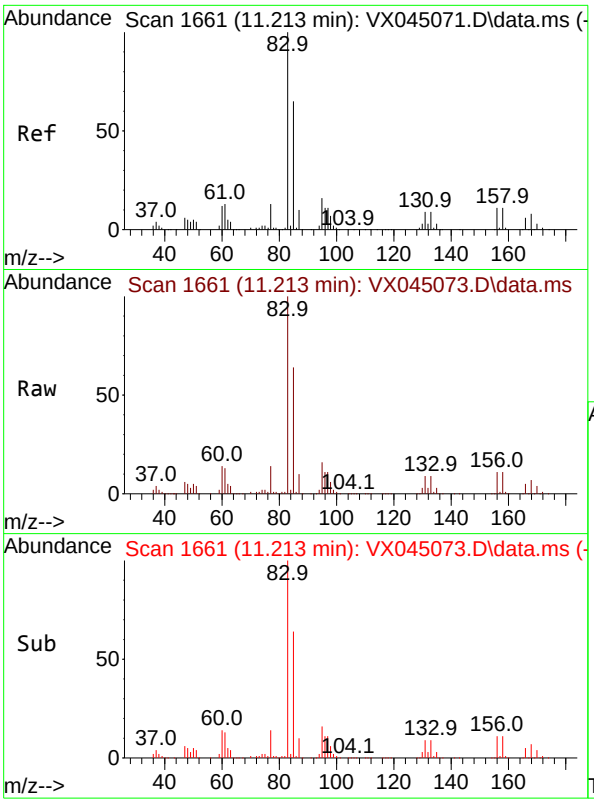



#74
N-amyl acetate
Concen: 173.042 ug/l
RT: 10.842 min Scan# 1600
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 43 Resp: 429686

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 39.6 | 31.8 | 47.6 |
| 55 | 22.5 | 18.3 | 27.5 |
| 61 | 23.1 | 18.3 | 27.5 |

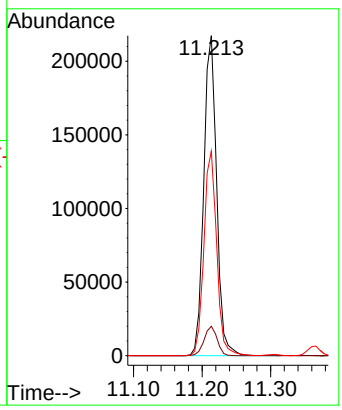





#75
1,1,2,2-Tetrachloroethane
Concen: 150.458 ug/l
RT: 11.213 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 83 Resp: 28355

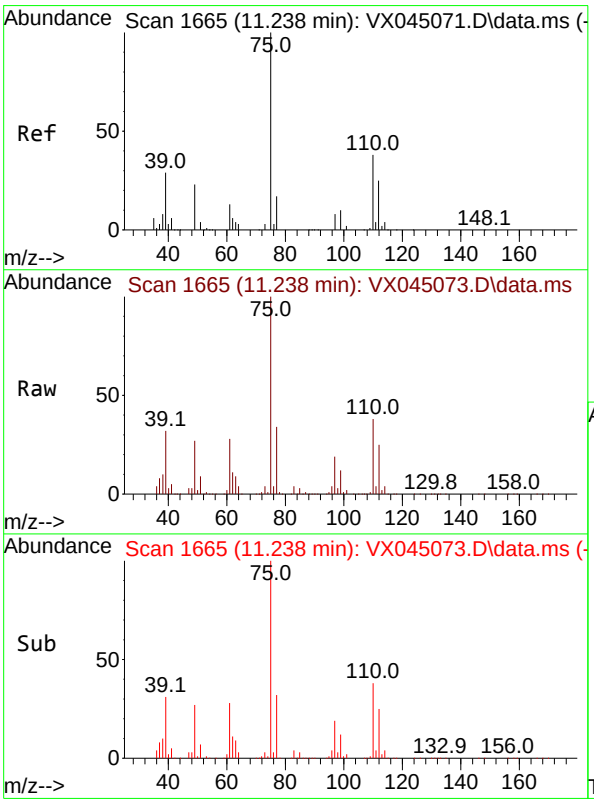
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 9.3 | 4.5 | 13.4 |
| 85 | 63.8 | 31.7 | 95.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

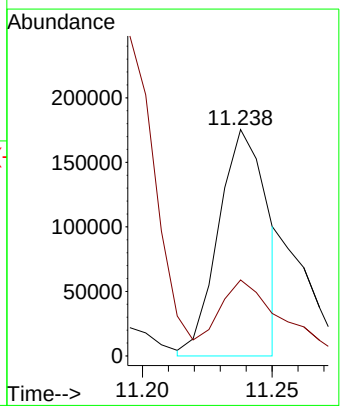
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

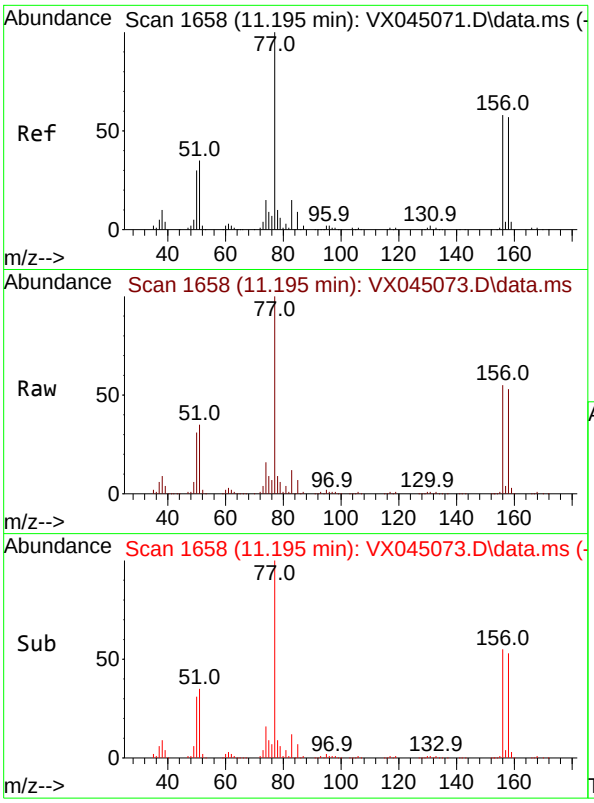



#76
1,2,3-Trichloropropane
Concen: 151.960 ug/l m
RT: 11.238 min Scan# 1665
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 75 Resp: 229435

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 43.2 | 20.7 | 62.1 |

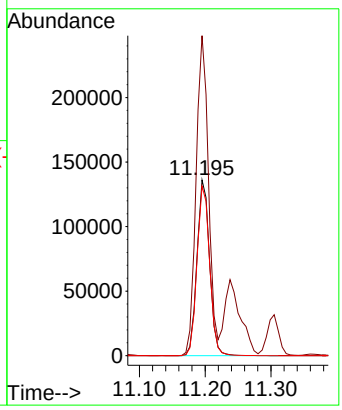





#77
Bromobenzene
Concen: 145.760 ug/l
RT: 11.195 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:156 Resp: 18099

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 179.4 | 85.8 | 257.4 |
| 158 | 97.1 | 48.4 | 145.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

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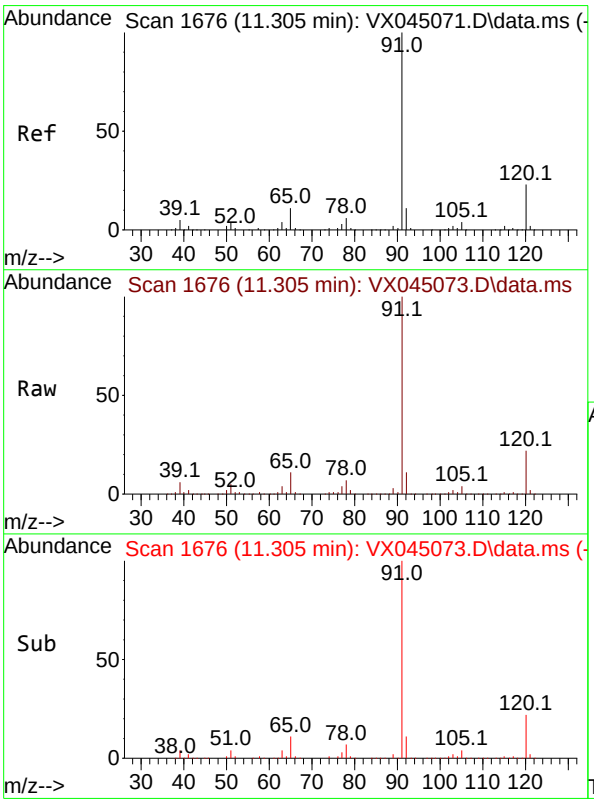
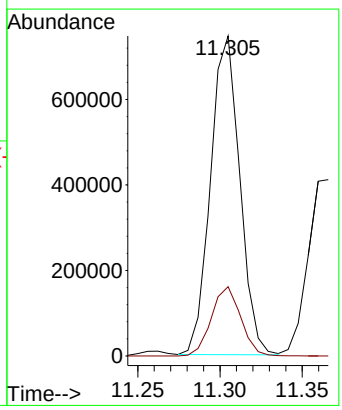
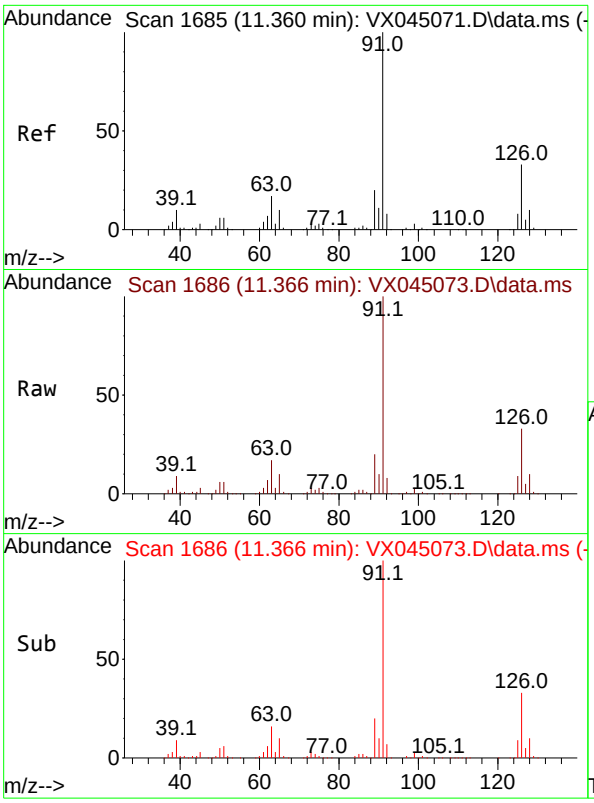



#78
n-propylbenzene
Concen: 146.395 ug/l
RT: 11.305 min Scan# 1676
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 91 Resp: 923593

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 21.8 | 11.2 | 33.6 |

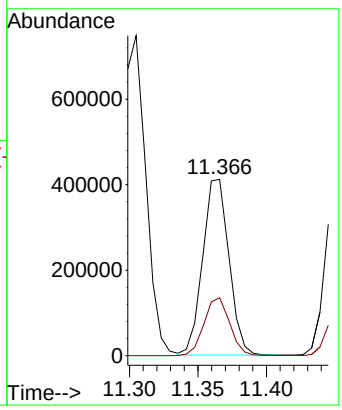





#79
2-Chlorotoluene
Concen: 141.695 ug/l
RT: 11.366 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 91 Resp: 54869

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 32.4 | 16.4 | 49.4 |




**Instrument :**
MSVOA_X
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VSTDICC150

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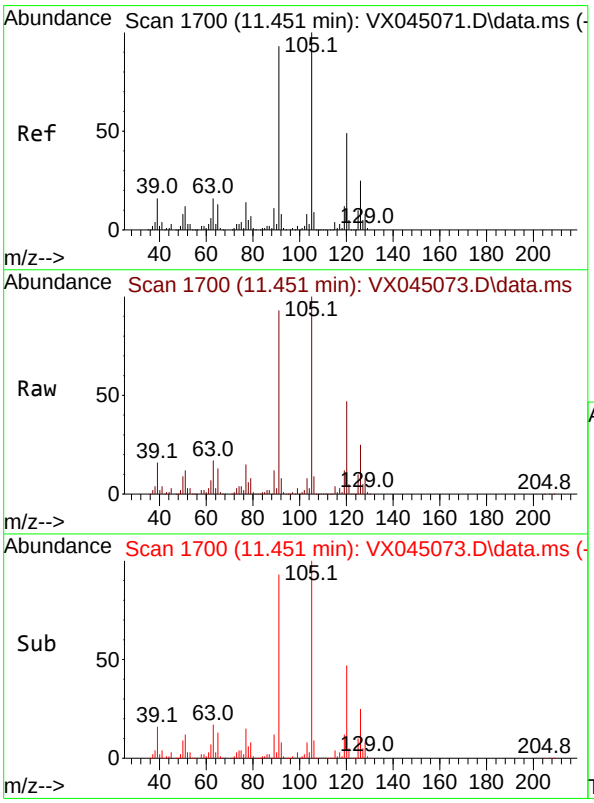
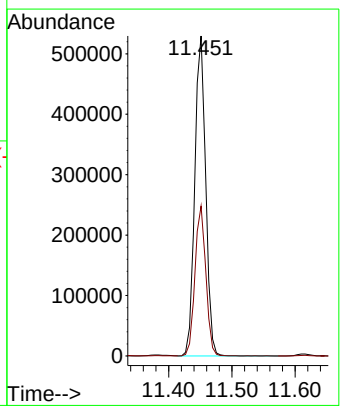
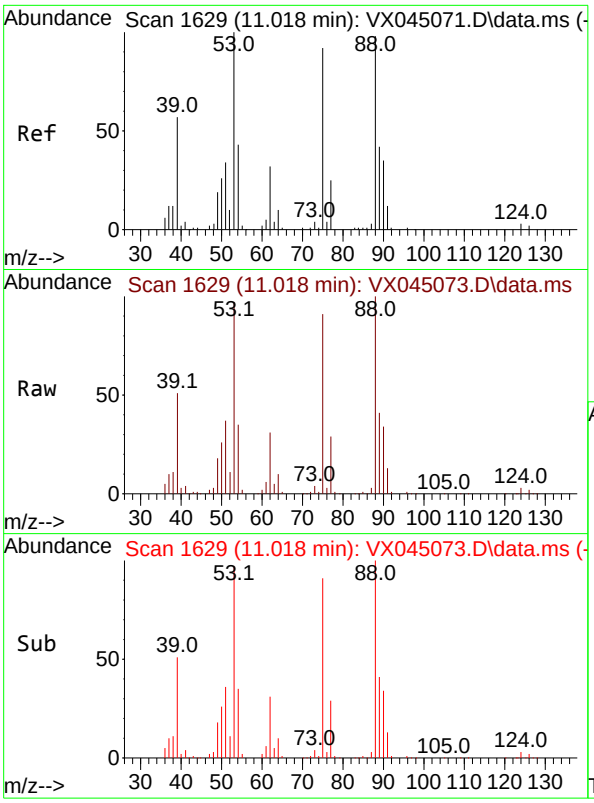



#80
1,3,5-Trimethylbenzene
Concen: 143.293 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:105 Resp: 635832

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 46.7 | 24.1 | 72.2 |

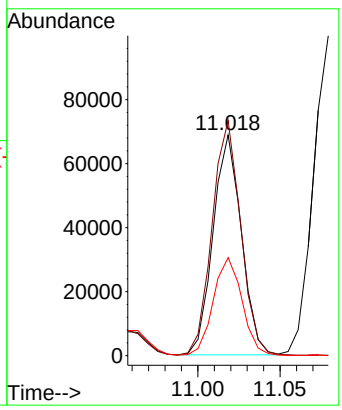





#81
trans-1,4-Dichloro-2-butene
Concen: 147.761 ug/l
RT: 11.018 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 75 Resp: 8226

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 107.7 | 88.5 | 132.7 |
| 89 | 45.2 | 36.2 | 54.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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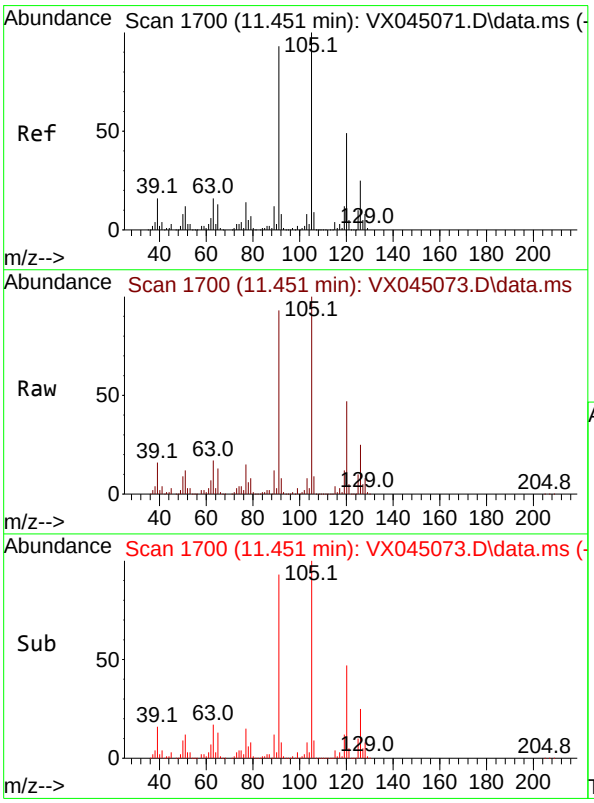
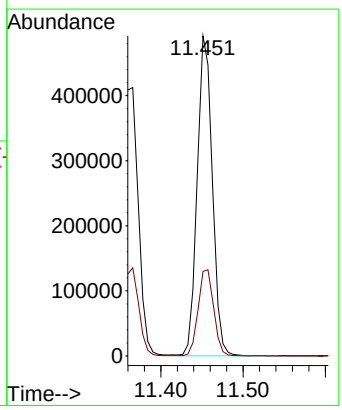
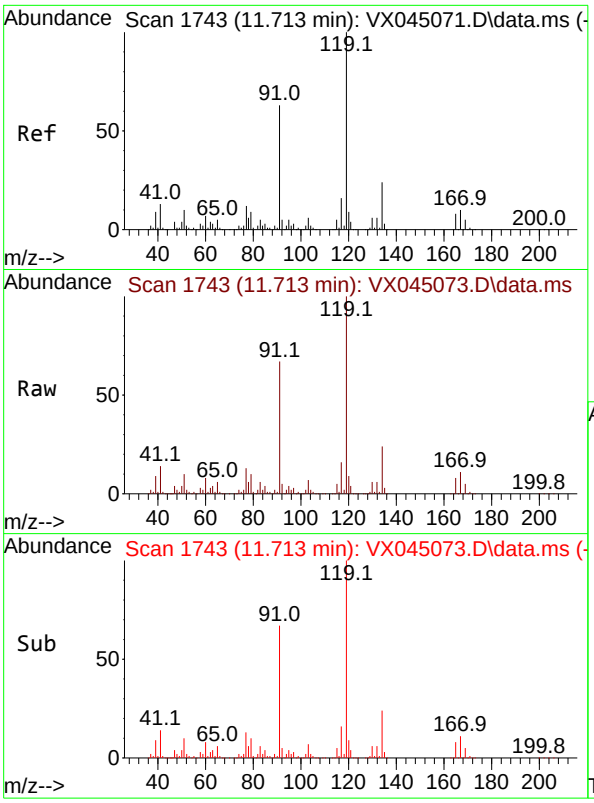



#82
4-Chlorotoluene
Concen: 146.464 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 91 Resp: 627816

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 27.8 | 14.1 | 42.4 |

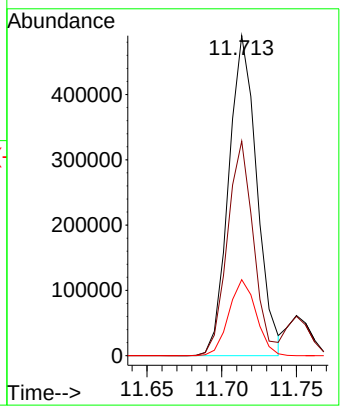





#83
tert-Butylbenzene
Concen: 142.974 ug/l
RT: 11.713 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:119 Resp: 64171

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 62.5 | 30.7 | 92.1 |
| 134 | 23.0 | 11.7 | 35.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

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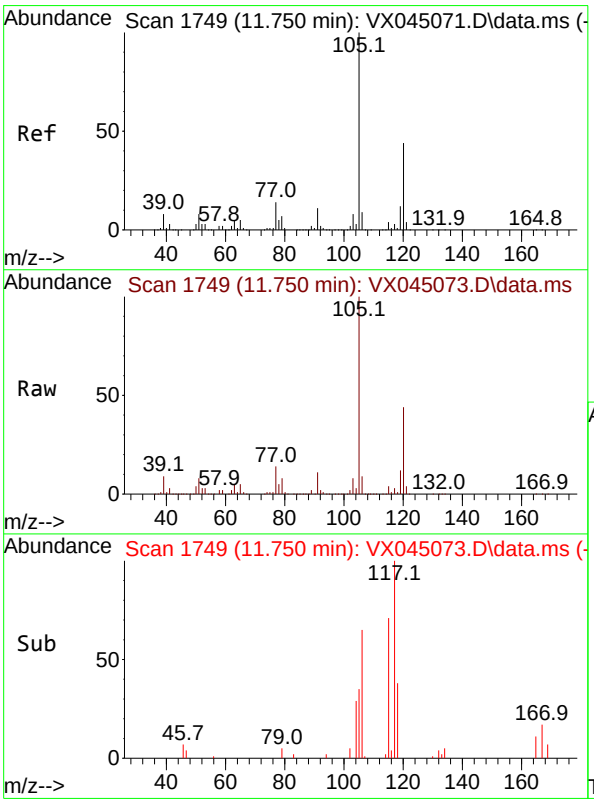
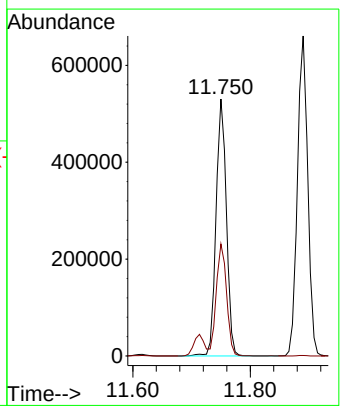
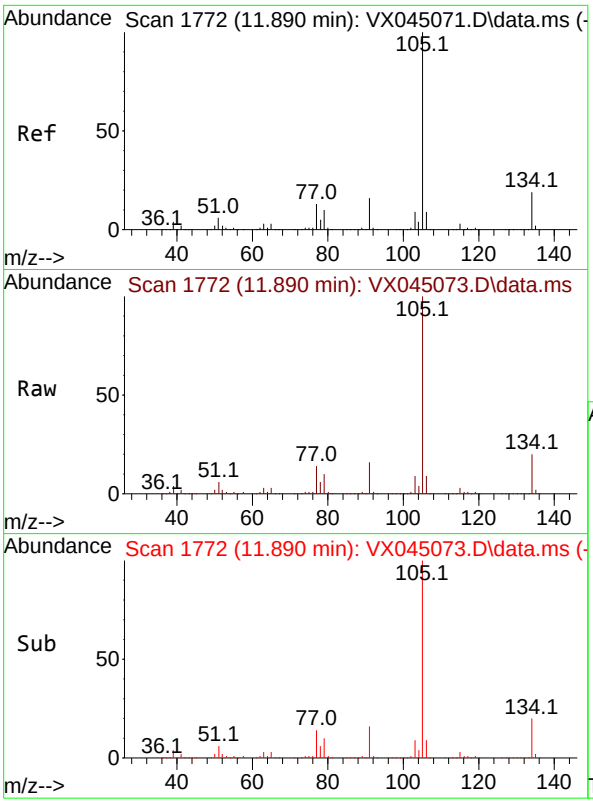



#84
1,2,4-Trimethylbenzene
Concen: 148.135 ug/l
RT: 11.750 min Scan# 1749
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:105 Resp: 647248

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 43.8 | 22.1 | 66.1 |

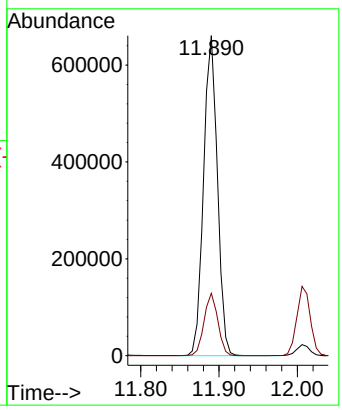





#85
sec-Butylbenzene
Concen: 145.383 ug/l
RT: 11.890 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:105 Resp: 80771

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.4 | 9.8 | 29.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

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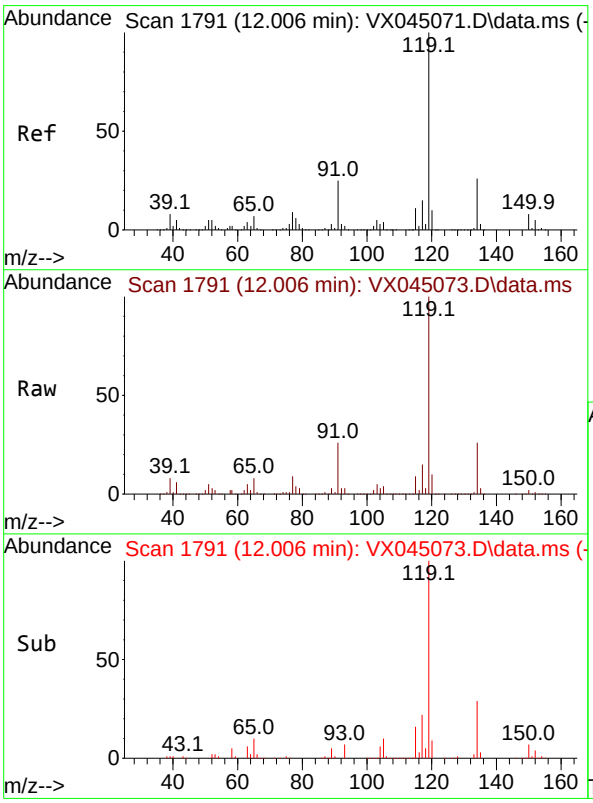
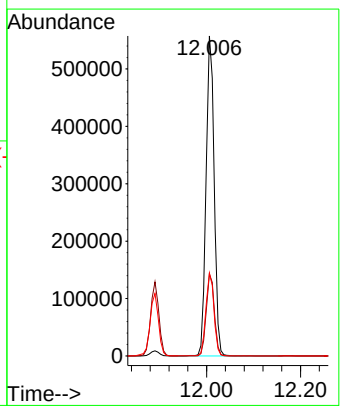
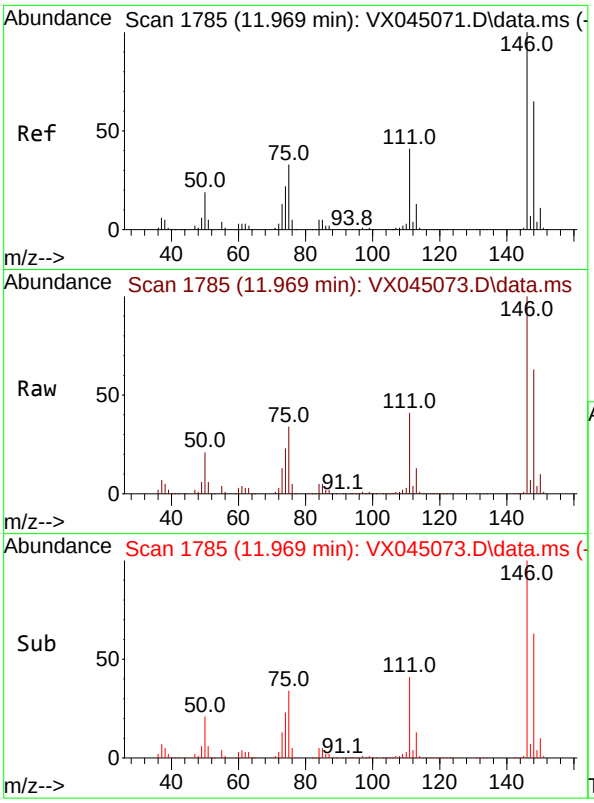



#86
p-Isopropyltoluene
Concen: 149.075 ug/l
RT: 12.006 min Scan# 1791
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:119 Resp: 664916

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.7 | 12.9 | 38.6 |
| 91 | 25.8 | 12.7 | 38.0 |

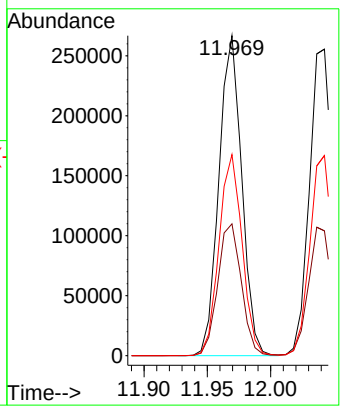





#87
1,3-Dichlorobenzene
Concen: 147.488 ug/l
RT: 11.969 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:146 Resp: 33475

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.7 | 21.1 | 63.4 |
| 148 | 63.6 | 31.9 | 95.7 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

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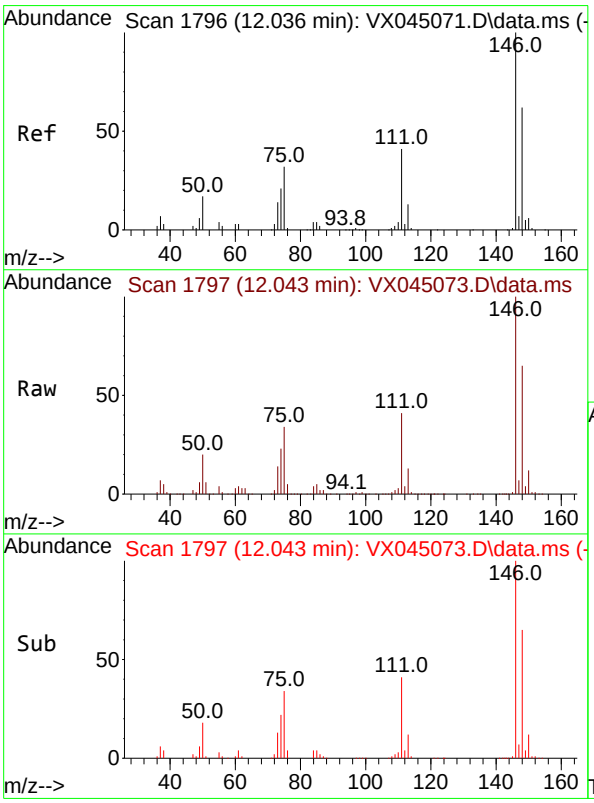
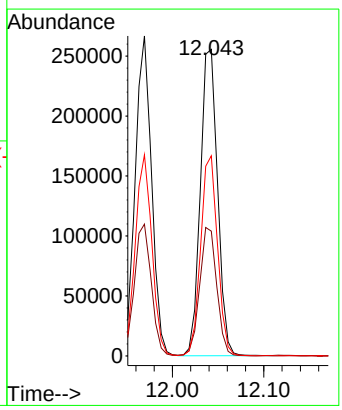
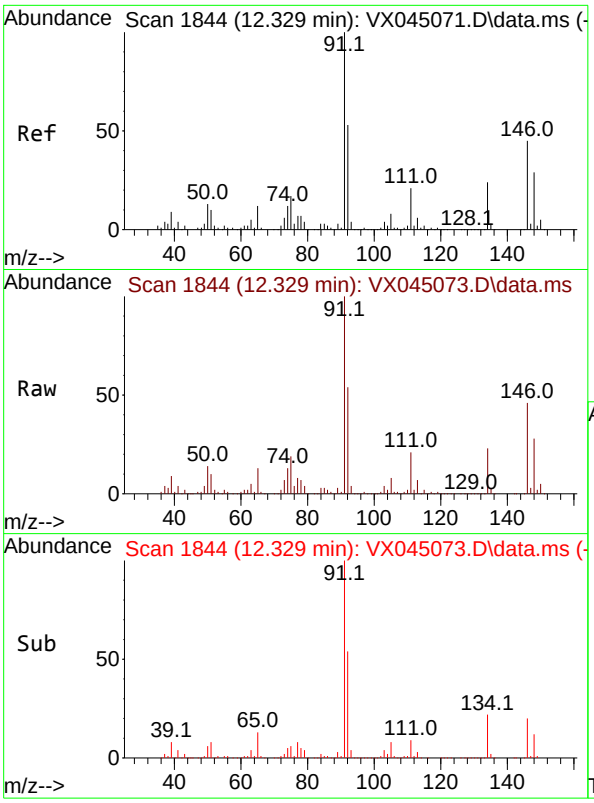



#88
1,4-Dichlorobenzene
Concen: 145.189 ug/l
RT: 12.043 min Scan# 1797
Delta R.T. 0.006 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:146 Resp: 333594

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 41.7 | 20.2 | 60.5 |
| 148 | 64.0 | 31.9 | 95.9 |

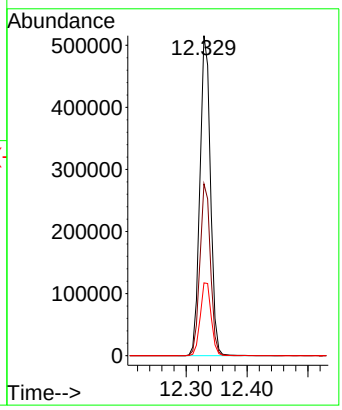





#89
n-Butylbenzene
Concen: 158.324 ug/l
RT: 12.329 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 91 Resp: 62075

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 53.9 | 26.7 | 80.0 |
| 134 | 23.6 | 12.2 | 36.6 |

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VSTDICC150

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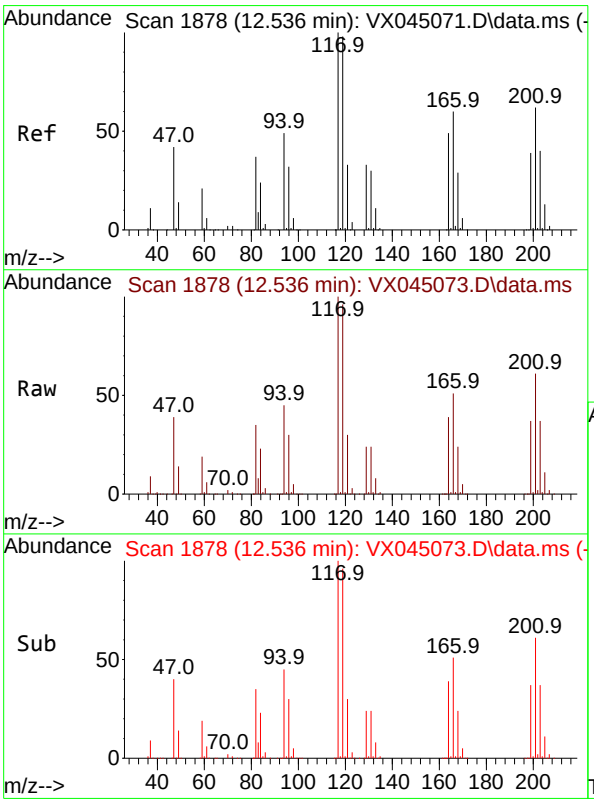
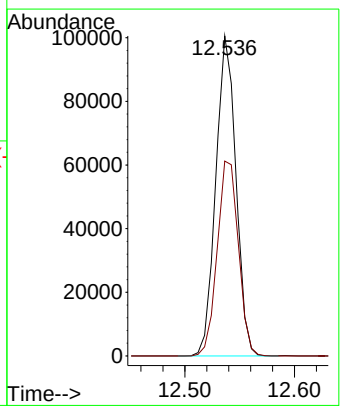
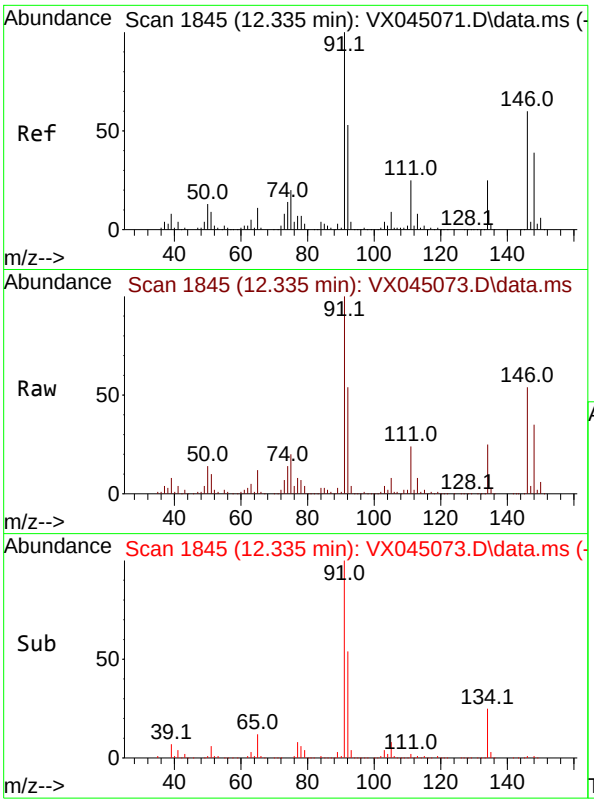



#90
Hexachloroethane
Concen: 154.554 ug/l
RT: 12.536 min Scan# 1878
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:117 Resp: 128582

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 64.2 | 31.9 | 95.9 |

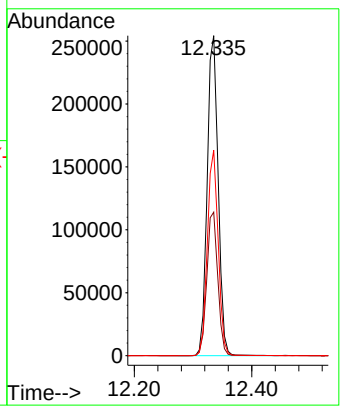





#91
1,2-Dichlorobenzene
Concen: 147.436 ug/l
RT: 12.335 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:146 Resp: 32931

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 44.9 | 21.6 | 65.0 |
| 148 | 63.4 | 31.9 | 95.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

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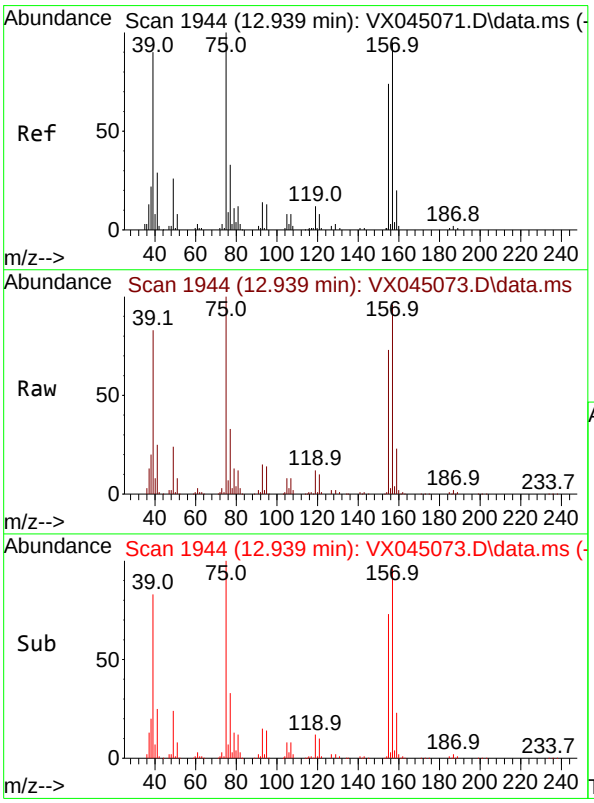
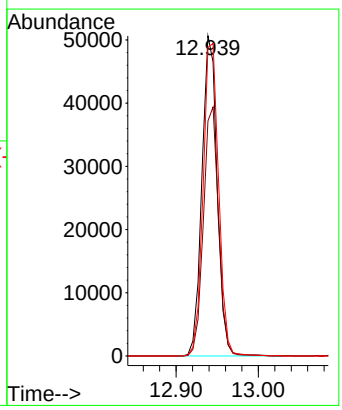
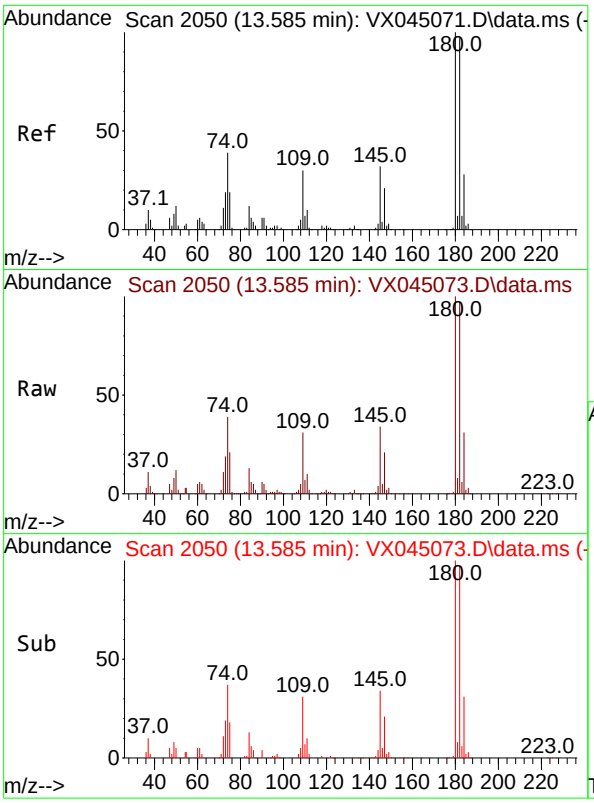



#92
1,2-Dibromo-3-Chloropropane
Concen: 186.240 ug/l
RT: 12.939 min Scan# 1944
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion: 75 Resp: 64958

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 77.9 | 39.6 | 118.7 |
| 157 | 100.1 | 51.1 | 153.4 |

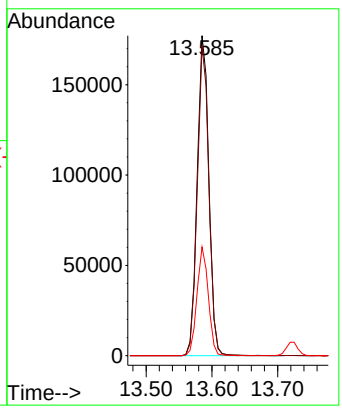





#93
1,2,4-Trichlorobenzene
Concen: 162.416 ug/l
RT: 13.585 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:180 Resp: 21931

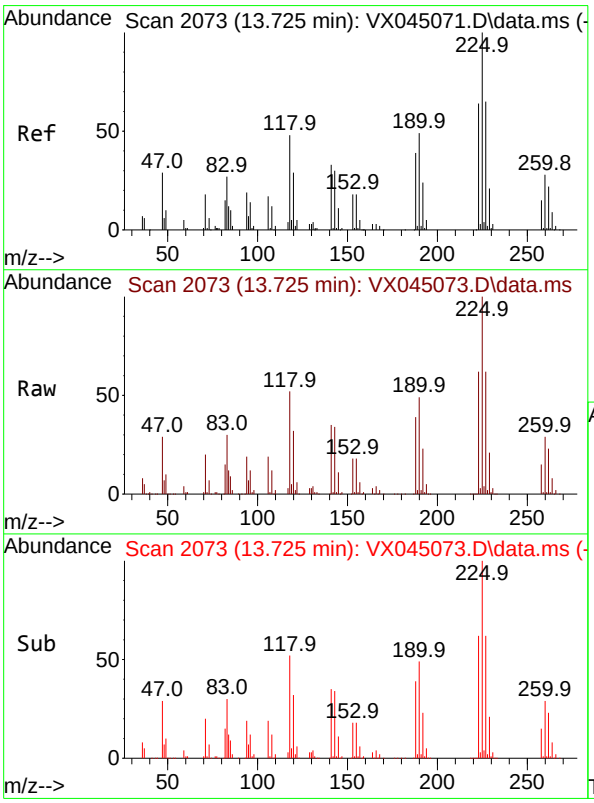
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.6 | 47.3 | 141.9 |
| 145 | 32.9 | 16.3 | 48.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

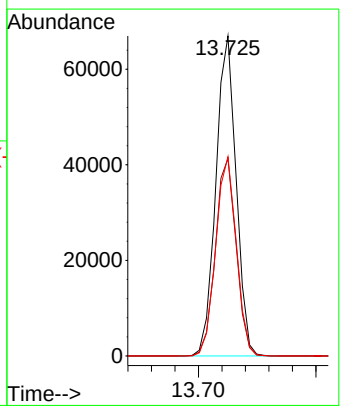
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

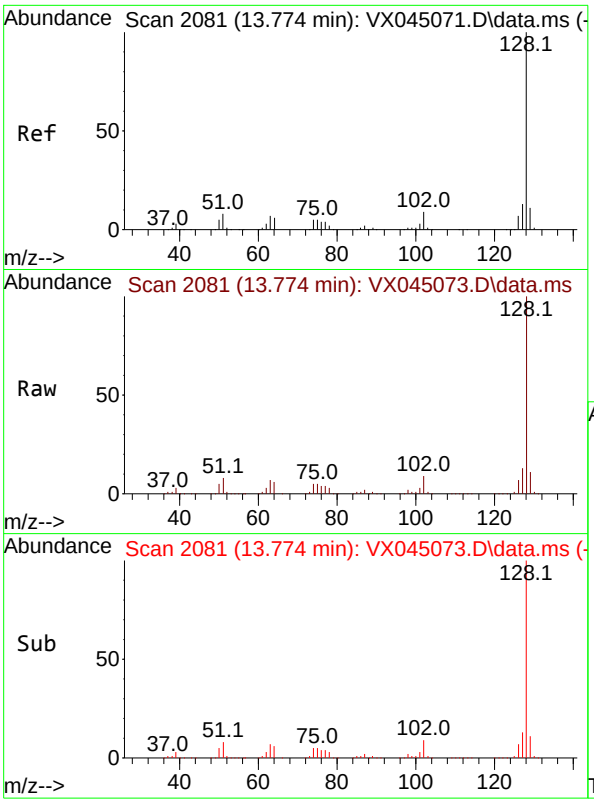



#94
Hexachlorobutadiene
Concen: 149.034 ug/l
RT: 13.725 min Scan# 2073
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:225 Resp: 80241

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 63.2 | 31.9 | 95.7 |
| 227 | 63.4 | 31.4 | 94.0 |

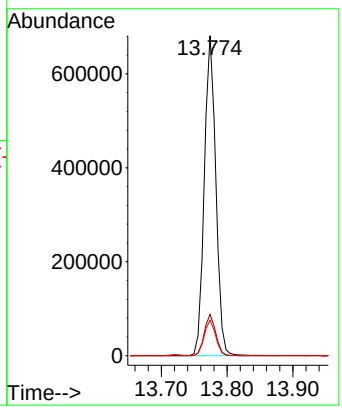





#95
Naphthalene
Concen: 168.538 ug/l
RT: 13.774 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:128 Resp: 82894

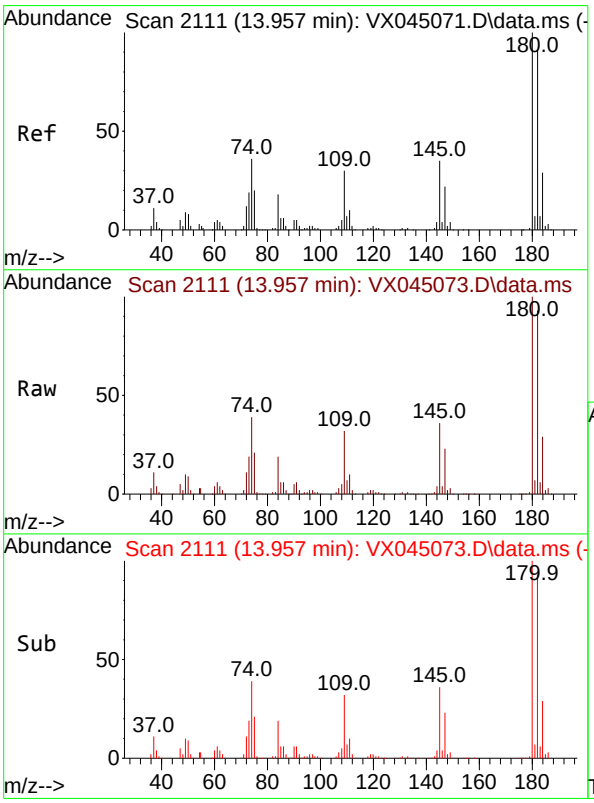
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.8 | 10.3 | 15.5 |
| 129 | 11.1 | 8.7 | 13.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

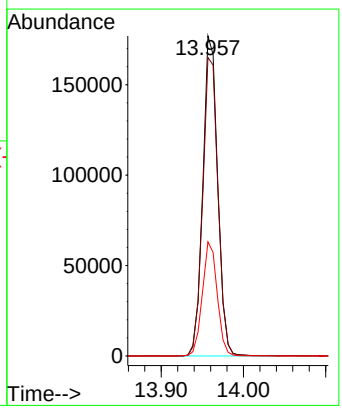
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025




#96
1,2,3-Trichlorobenzene
Concen: 162.727 ug/l
RT: 13.957 min Scan# 2111
Delta R.T. -0.000 min
Lab File: VX045073.D
Acq: 28 Feb 2025 03:47

Tgt Ion:180 Resp: 222608

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.7 | 47.5 | 142.6 |
| 145 | 35.5 | 17.0 | 50.9 |



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045075.D
Acq On : 28 Feb 2025 04:33
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 28 06:55:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

**Manual Integrations APPROVED**
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) Pentafluorobenzene | 5.550 | 168 | 101603 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 6.757 | 114 | 184964 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 10.055 | 117 | 157797 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.018 | 152 | 69357 | 50.000 | ug/l | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 5.952 | 65 | 81288 | 50.297 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 100.600% | | | |
| 35) Dibromofluoromethane | 5.385 | 113 | 62880 | 50.841 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 101.680% | | | |
| 50) Toluene-d8 | 8.647 | 98 | 225823 | 50.364 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 100.720% | | | |
| 62) 4-Bromofluorobenzene | 11.079 | 95 | 73162 | 49.240 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 98.480% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.166 | 85 | 61303 | 47.933 | ug/l | 95 |
| 3) Chloromethane | 1.306 | 50 | 76216 | 48.696 | ug/l | 94 |
| 4) Vinyl Chloride | 1.373 | 62 | 76901 | 49.529 | ug/l | 97 |
| 5) Bromomethane | 1.593 | 94 | 28193 | 46.190 | ug/l | 97 |
| 6) Chloroethane | 1.660 | 64 | 30042 | 41.948 | ug/l | 99 |
| 7) Trichlorofluoromethane | 1.867 | 101 | 101886 | 49.569 | ug/l | 98 |
| 8) Diethyl Ether | 2.136 | 74 | 39113 | 48.651 | ug/l | 96 |
| 9) 1,1,2-Trichlorotrifluo... | 2.312 | 101 | 59477 | 50.367 | ug/l | 100 |
| 10) Methyl Iodide | 2.440 | 142 | 74585 | 50.541 | ug/l | 98 |
| 11) Tert butyl alcohol | 2.989 | 59 | 73034 | 238.577 | ug/l | 98 |
| 12) 1,1-Dichloroethene | 2.306 | 96 | 61885 | 49.568 | ug/l | 98 |
| 13) Acrolein | 2.239 | 56 | 95989 | 271.255 | ug/l | 99 |
| 14) Allyl chloride | 2.654 | 41 | 114875 | 51.691 | ug/l | 98 |
| 15) Acrylonitrile | 3.068 | 53 | 209607 | 255.479 | ug/l | 99 |
| 16) Acetone | 2.392 | 43 | 182119 | 242.877 | ug/l | 100 |
| 17) Carbon Disulfide | 2.501 | 76 | 166105 | 49.952 | ug/l | 97 |
| 18) Methyl Acetate | 2.709 | 43 | 90756 | 50.312 | ug/l | 99 |
| 19) Methyl tert-butyl Ether | 3.117 | 73 | 222475 | 53.114 | ug/l | 99 |
| 20) Methylene Chloride | 2.782 | 84 | 73731 | 49.639 | ug/l | 98 |
| 21) trans-1,2-Dichloroethene | 3.081 | 96 | 63117 | 51.172 | ug/l | 98 |
| 22) Diisopropyl ether | 3.763 | 45 | 243860 | 53.955 | ug/l | 97 |
| 23) Vinyl Acetate | 3.721 | 43 | 1064817 | 282.313 | ug/l | 100 |
| 24) 1,1-Dichloroethane | 3.605 | 63 | 129666 | 51.190 | ug/l | 100 |
| 25) 2-Butanone | 4.562 | 43 | 298021 | 264.040 | ug/l | 98 |
| 26) 2,2-Dichloropropane | 4.471 | 77 | 58694 | 49.401 | ug/l | 99 |
| 27) cis-1,2-Dichloroethene | 4.483 | 96 | 78576 | 51.606 | ug/l | 100 |
| 28) Bromochloromethane | 4.891 | 49 | 60849 | 50.399 | ug/l | 100 |
| 29) Tetrahydrofuran | 5.007 | 42 | 195768 | 258.277 | ug/l | 99 |
| 30) Chloroform | 5.086 | 83 | 126437 | 50.236 | ug/l | 98 |
| 31) Cyclohexane | 5.464 | 56 | 110288 | 50.158 | ug/l | 98 |
| 32) 1,1,1-Trichloroethane | 5.373 | 97 | 103546 | 50.939 | ug/l | 99 |
| 36) 1,1-Dichloropropene | 5.684 | 75 | 82722 | 48.770 | ug/l | 99 |
| 37) Ethyl Acetate | 4.714 | 43 | 112768 | 51.596 | ug/l | 99 |
| 38) Carbon Tetrachloride | 5.672 | 117 | 85110 | 49.425 | ug/l | 99 |
| 39) Methylcyclohexane | 7.372 | 83 | 103996 | 51.169 | ug/l | 98 |
| 40) Benzene | 6.031 | 78 | 274206 | 51.195 | ug/l | 99 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045075.D
Acq On : 28 Feb 2025 04:33
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 28 06:55:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 4.922 | 41 | 63051 | 53.352 | ug/l | | 99 |
| 42) 1,2-Dichloroethane | 6.080 | 62 | 97821 | 50.718 | ug/l | | 100 |
| 43) Isopropyl Acetate | 6.342 | 43 | 175982 | 54.452 | ug/l | | 100 |
| 44) Trichloroethene | 7.122 | 130 | 61530 | 48.924 | ug/l | | 99 |
| 45) 1,2-Dichloropropane | 7.427 | 63 | 70350 | 51.086 | ug/l | | 97 |
| 46) Dibromomethane | 7.580 | 93 | 50284 | 51.661 | ug/l | | 99 |
| 47) Bromodichloromethane | 7.817 | 83 | 97236 | 50.930 | ug/l | | 99 |
| 48) Methyl methacrylate | 7.689 | 41 | 87582 | 54.016 | ug/l | | 100 |
| 49) 1,4-Dioxane | 7.665 | 88 | 35878 | 1049.007 | ug/l | | 98 |
| 51) 4-Methyl-2-Pentanone | 8.573 | 43 | 564197 | 259.995 | ug/l | | 99 |
| 52) Toluene | 8.714 | 92 | 160331 | 51.020 | ug/l | | 99 |
| 53) t-1,3-Dichloropropene | 8.976 | 75 | 86584 | 54.247 | ug/l | | 99 |
| 54) cis-1,3-Dichloropropene | 8.366 | 75 | 98146 | 52.732 | ug/l | | 95 |
| 55) 1,1,2-Trichloroethane | 9.146 | 97 | 64985 | 50.232 | ug/l | | 99 |
| 56) Ethyl methacrylate | 9.116 | 69 | 106405 | 54.109 | ug/l | | 100 |
| 57) 1,3-Dichloropropane | 9.305 | 76 | 114880 | 51.312 | ug/l | | 99 |
| 58) 2-Chloroethyl Vinyl ether | 8.238 | 63 | 264335 | 275.557 | ug/l | | 99 |
| 59) 2-Hexanone | 9.427 | 43 | 416731 | 265.049 | ug/l | | 99 |
| 60) Dibromochloromethane | 9.518 | 129 | 69492 | 51.374 | ug/l | | 98 |
| 61) 1,2-Dibromoethane | 9.610 | 107 | 66501 | 51.492 | ug/l | | 99 |
| 64) Tetrachloroethene | 9.268 | 164 | 50659 | 50.126 | ug/l | | 96 |
| 65) Chlorobenzene | 10.079 | 112 | 168885 | 50.580 | ug/l | | 99 |
| 66) 1,1,1,2-Tetrachloroethane | 10.159 | 131 | 56822 | 51.102 | ug/l | | 98 |
| 67) Ethyl Benzene | 10.189 | 91 | 300324 | 51.621 | ug/l | | 100 |
| 68) m/p-Xylenes | 10.299 | 106 | 220335 | 103.454 | ug/l | | 99 |
| 69) o-Xylene | 10.640 | 106 | 108836 | 50.668 | ug/l | | 100 |
| 70) Styrene | 10.652 | 104 | 181349 | 52.177 | ug/l | | 100 |
| 71) Bromoform | 10.799 | 173 | 44135 | 52.636 | ug/l | # | 100 |
| 73) Isopropylbenzene | 10.957 | 105 | 279278 | 51.589 | ug/l | | 99 |
| 74) N-amyl acetate | 10.841 | 43 | 144412 | 56.851 | ug/l | | 99 |
| 75) 1,1,2,2-Tetrachloroethane | 11.213 | 83 | 100800 | 50.741 | ug/l | | 99 |
| 76) 1,2,3-Trichloropropane | 11.238 | 75 | 80618m | 49.940 | ug/l | | |
| 77) Bromobenzene | 11.195 | 156 | 64324 | 50.360 | ug/l | | 100 |
| 78) n-propylbenzene | 11.305 | 91 | 319235 | 52.203 | ug/l | | 99 |
| 79) 2-Chlorotoluene | 11.360 | 91 | 192150 | 49.338 | ug/l | | 100 |
| 80) 1,3,5-Trimethylbenzene | 11.451 | 105 | 225622 | 51.544 | ug/l | | 100 |
| 81) trans-1,4-Dichloro-2-b... | 11.018 | 75 | 23943 | 50.757 | ug/l | | 99 |
| 82) 4-Chlorotoluene | 11.451 | 91 | 216511 | 51.009 | ug/l | | 100 |
| 83) tert-Butylbenzene | 11.713 | 119 | 227357 | 50.552 | ug/l | | 100 |
| 84) 1,2,4-Trimethylbenzene | 11.750 | 105 | 228729 | 51.932 | ug/l | | 100 |
| 85) sec-Butylbenzene | 11.890 | 105 | 283931 | 52.703 | ug/l | | 100 |
| 86) p-Isopropyltoluene | 12.006 | 119 | 229894 | 52.803 | ug/l | | 100 |
| 87) 1,3-Dichlorobenzene | 11.969 | 146 | 114778 | 50.372 | ug/l | | 100 |
| 88) 1,4-Dichlorobenzene | 12.036 | 146 | 115486 | 50.097 | ug/l | | 99 |
| 89) n-Butylbenzene | 12.329 | 91 | 204972 | 54.662 | ug/l | | 99 |
| 90) Hexachloroethane | 12.536 | 117 | 40844 | 51.866 | ug/l | | 99 |
| 91) 1,2-Dichlorobenzene | 12.335 | 146 | 116343 | 50.899 | ug/l | | 100 |
| 92) 1,2-Dibromo-3-Chloropr... | 12.938 | 75 | 20589 | 53.199 | ug/l | | 99 |
| 93) 1,2,4-Trichlorobenzene | 13.585 | 180 | 71368 | 54.834 | ug/l | | 98 |
| 94) Hexachlorobutadiene | 13.725 | 225 | 26697 | 50.032 | ug/l | | 99 |
| 95) Naphthalene | 13.774 | 128 | 275844 | 55.163 | ug/l | | 100 |
| 96) 1,2,3-Trichlorobenzene | 13.957 | 180 | 74211 | 54.049 | ug/l | | 99 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045075.D
Acq On : 28 Feb 2025 04:33
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 24 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

Quant Time: Feb 28 06:55:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

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

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

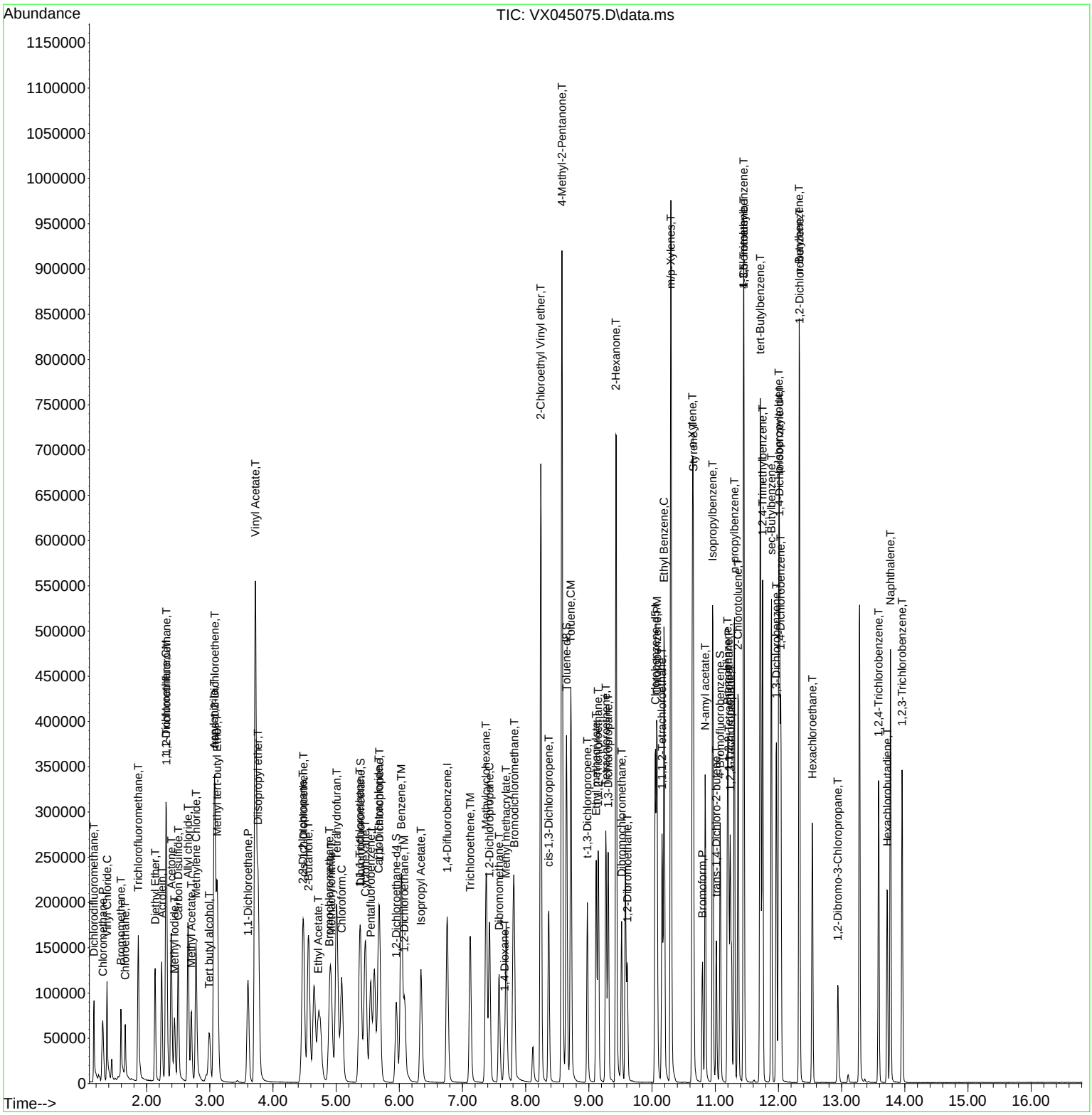
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045075.D
Acq On : 28 Feb 2025 04:33
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 24 Sample Multiplier: 1

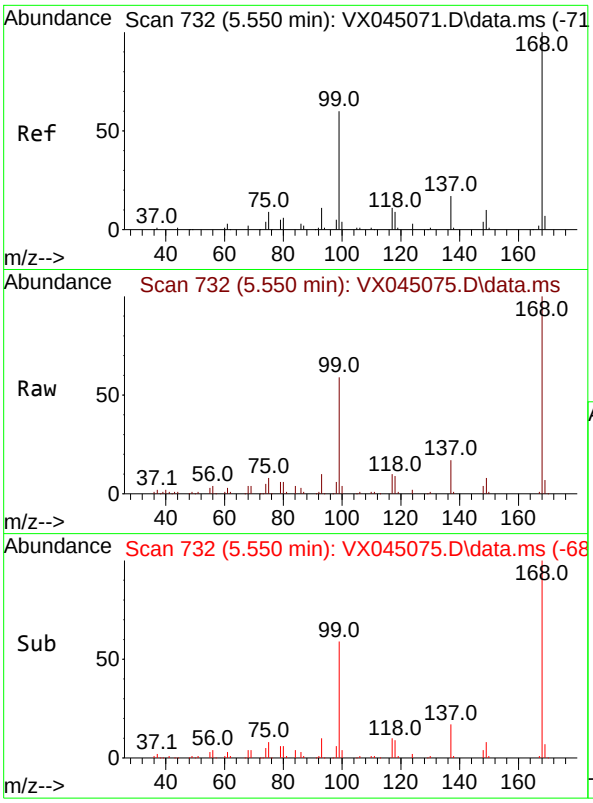
Quant Time: Feb 28 06:55:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

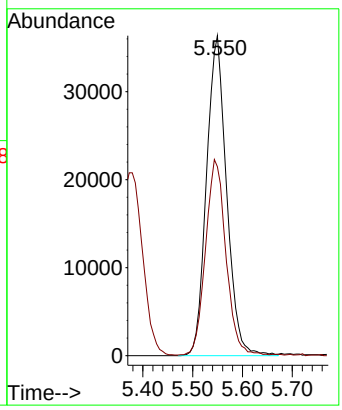





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.550 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:168 Resp: 10160

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 58.9 | 48.2 | 72.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

**Manual Integrations APPROVED**

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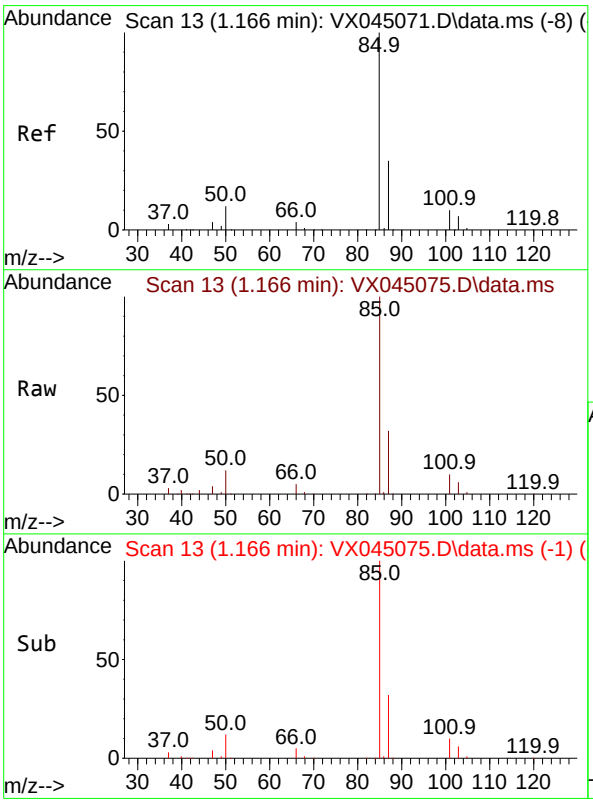
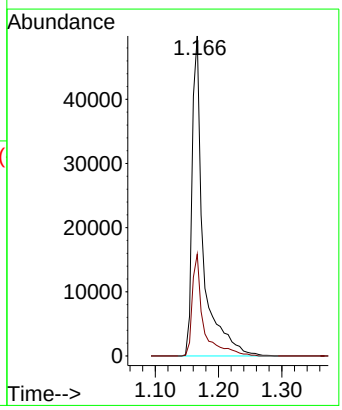
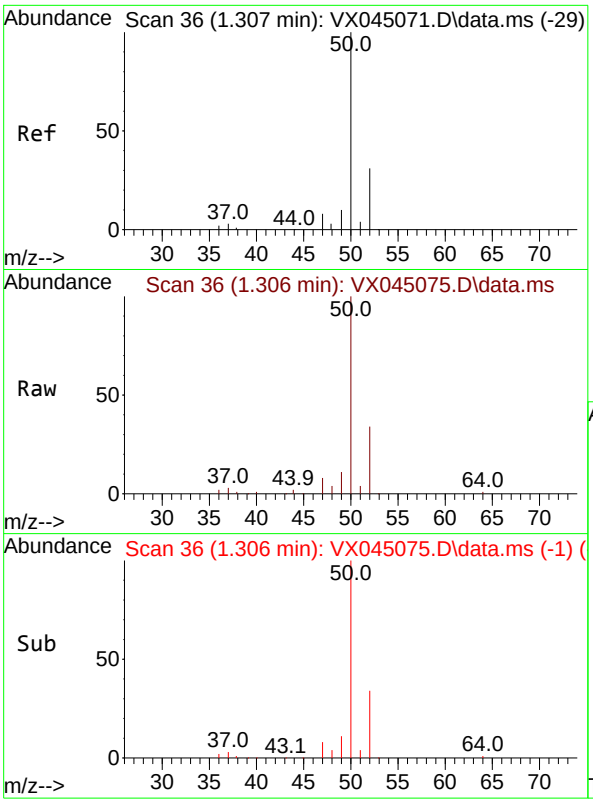



#2
Dichlorodifluoromethane
Concen: 47.933 ug/l
RT: 1.166 min Scan# 13
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 85 Resp: 61303

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 31.8 | 17.4 | 52.3 |

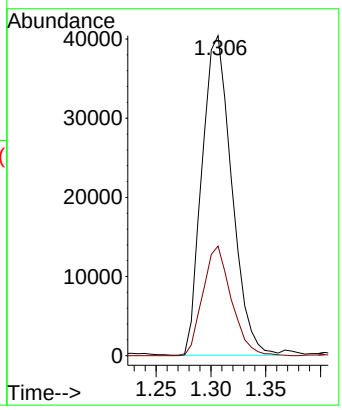





#3
Chloromethane
Concen: 48.696 ug/l
RT: 1.306 min Scan# 3(
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 50 Resp: 7621(

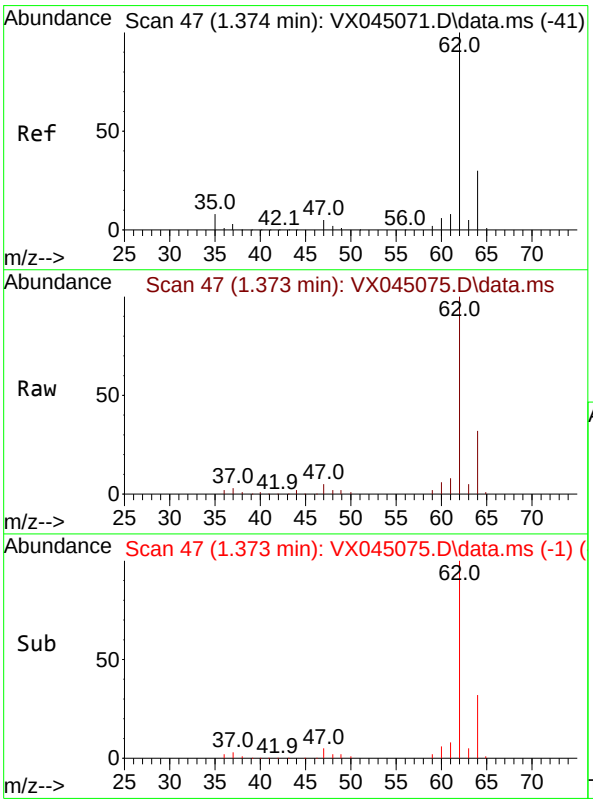
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 34.3 | 25.0 | 37.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

**Manual Integrations**
**APPROVED**

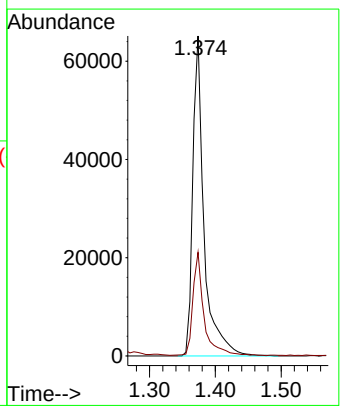
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

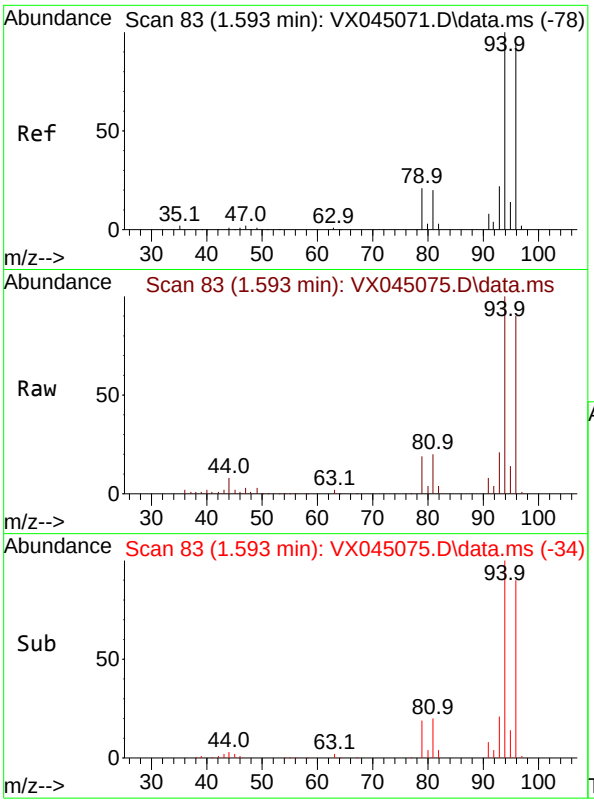



#4
Vinyl Chloride
Concen: 49.529 ug/l
RT: 1.373 min Scan# 47
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 62 Resp: 76901

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 32.2 | 24.3 | 36.5 |

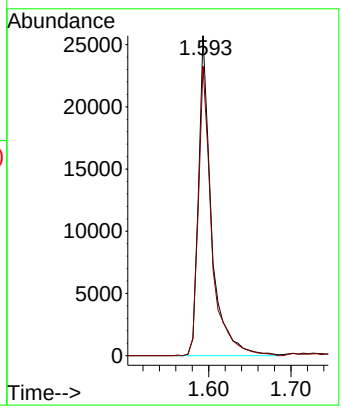





#5
Bromomethane
Concen: 46.190 ug/l
RT: 1.593 min Scan# 8
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 94 Resp: 2819

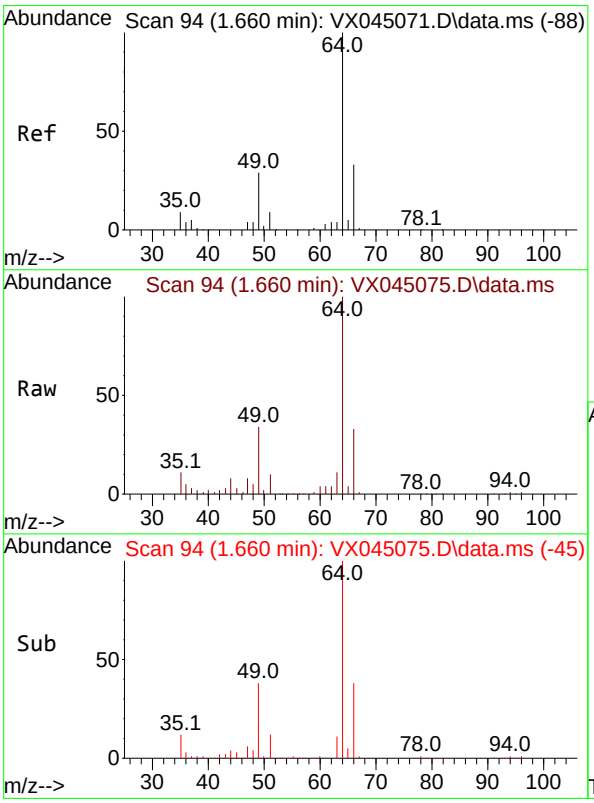
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 90.5 | 75.0 | 112.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

**Manual Integrations**
**APPROVED**

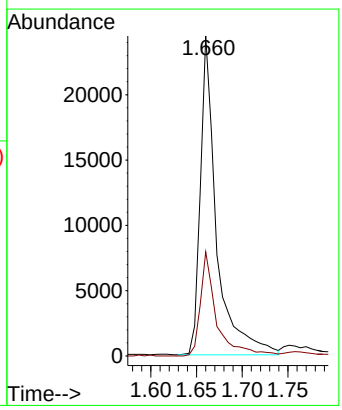
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

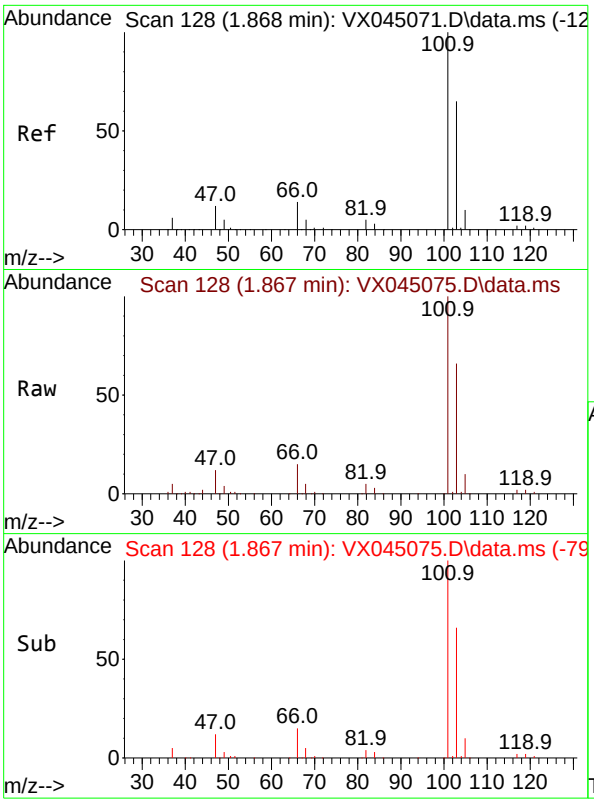



#6
Chloroethane
Concen: 41.948 ug/l
RT: 1.660 min Scan# 94
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 64 Resp: 30042

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 32.6 | 26.7 | 40.1 |

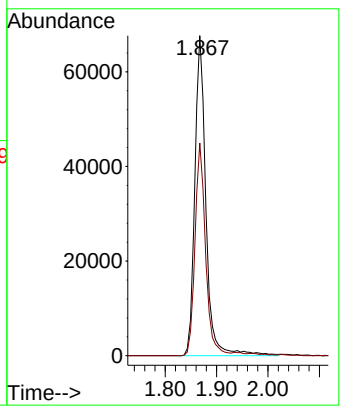





#7
Trichlorofluoromethane
Concen: 49.569 ug/l
RT: 1.867 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:101 Resp: 10188

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 66.4 | 52.1 | 78.1 |

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Reviewed By :John Carlone 02/28/2025
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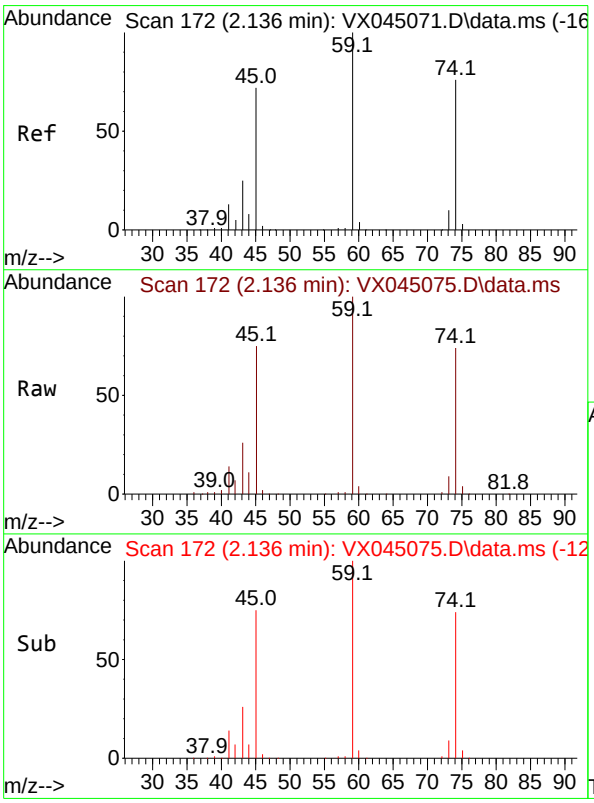
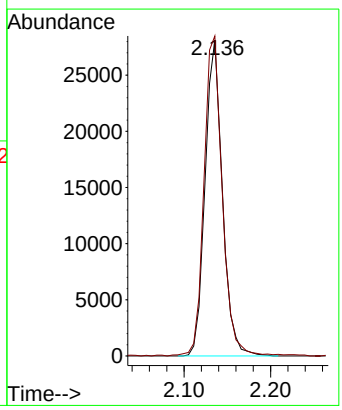
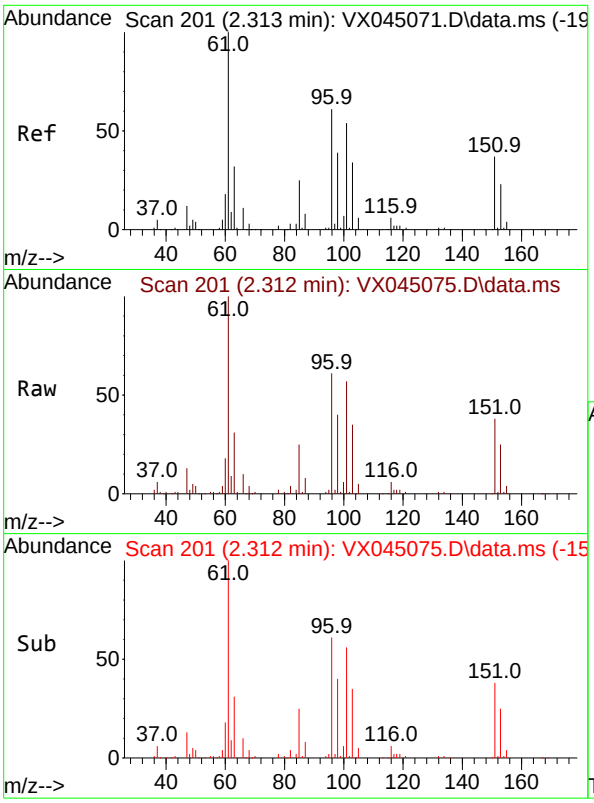



#8
Diethyl Ether
Concen: 48.651 ug/l
RT: 2.136 min Scan# 172
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 74 Resp: 39113

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 107.2 | 51.5 | 154.5 |

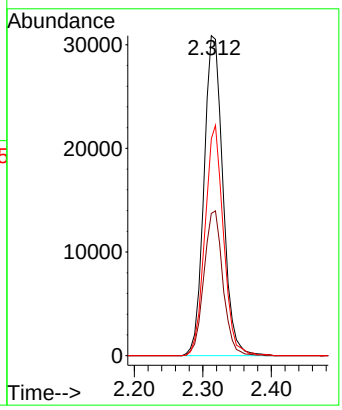





#9
1,1,2-Trichlorotrifluoroethane
Concen: 50.367 ug/l
RT: 2.312 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:101 Resp: 5947

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 45.4 | 36.2 | 54.4 |
| 151 | 70.2 | 56.4 | 84.6 |




**Instrument :**
MSVOA_X
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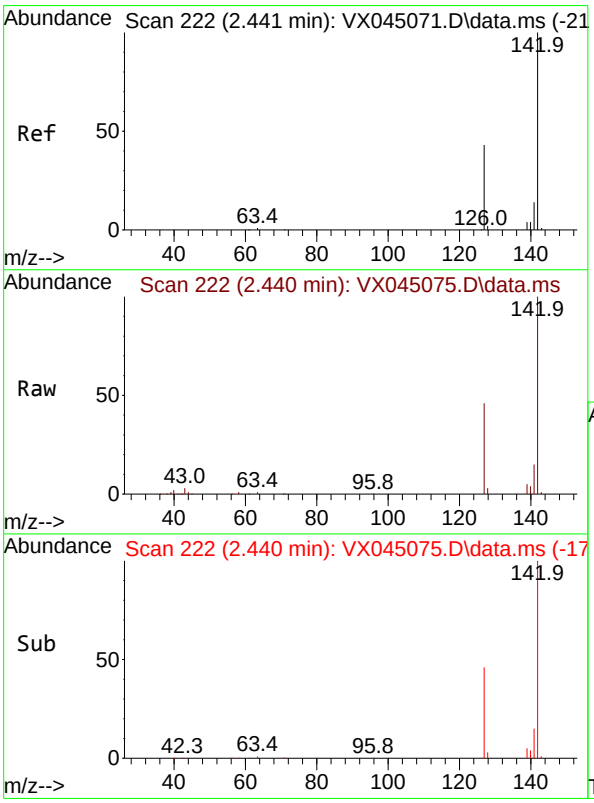
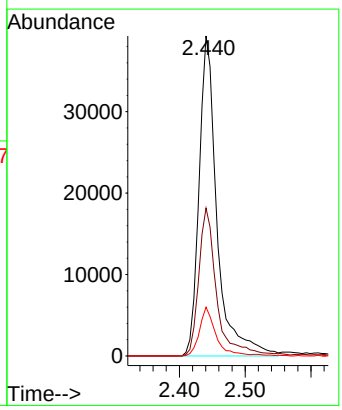
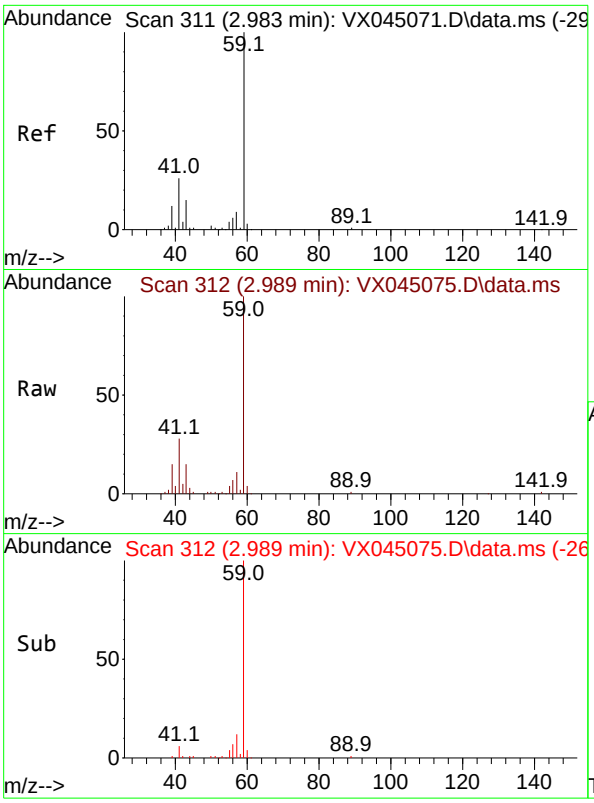



#10
Methyl Iodide
Concen: 50.541 ug/l
RT: 2.440 min Scan# 222
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:142 Resp: 74585

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 46.3 | 35.4 | 53.2 |
| 141 | 14.3 | 11.6 | 17.4 |

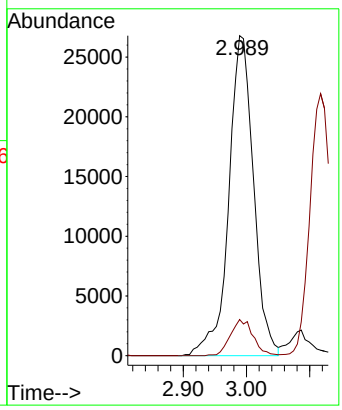





#11
Tert butyl alcohol
Concen: 238.577 ug/l
RT: 2.989 min Scan# 3
Delta R.T. 0.006 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 59 Resp: 7303

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 10.4 | 7.8 | 11.8 |




**Instrument :**
MSVOA_X
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ICVVX022825

**Manual Integrations APPROVED**

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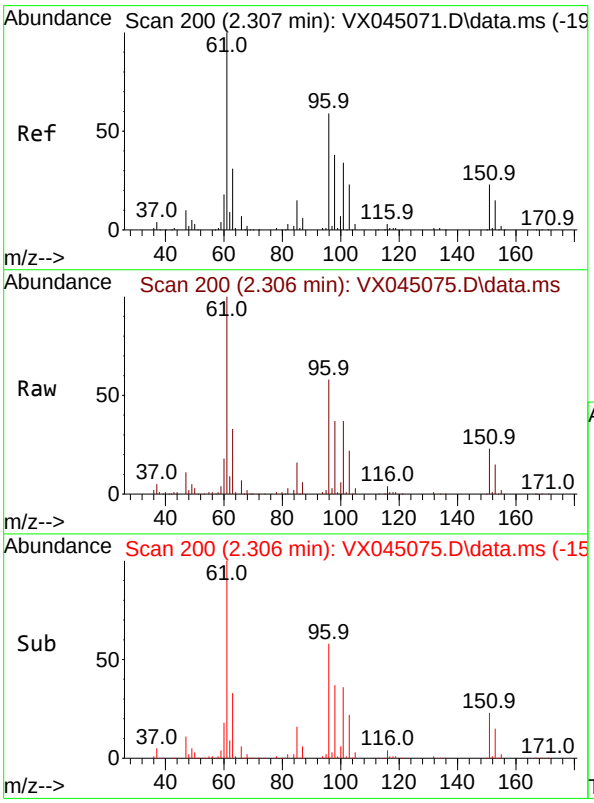
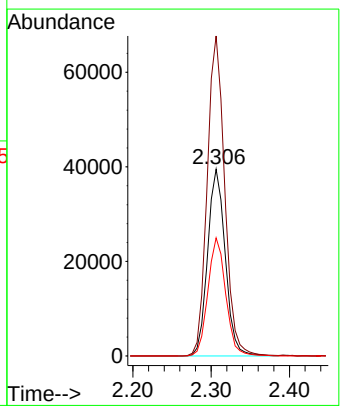
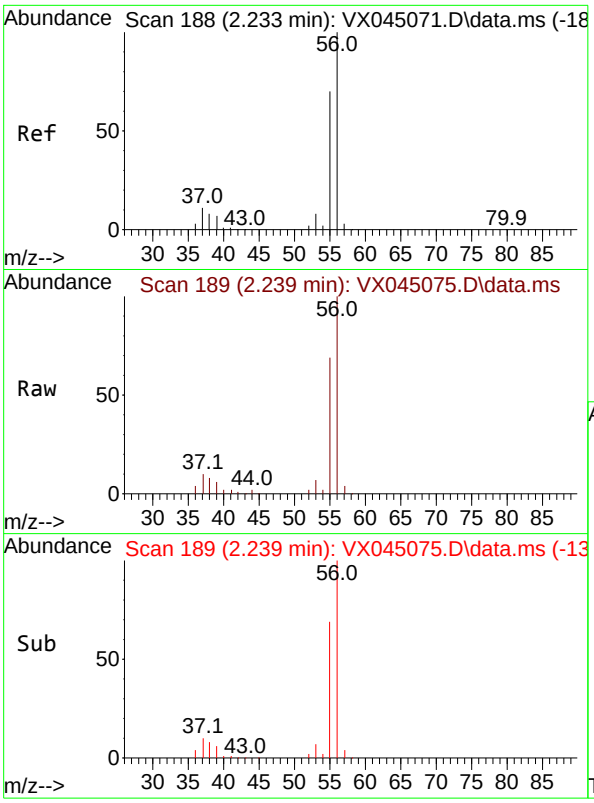



#12
1,1-Dichloroethene
Concen: 49.568 ug/l
RT: 2.306 min Scan# 200
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 96 Resp: 61885

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 171.3 | 134.6 | 202.0 |
| 98 | 63.2 | 51.0 | 76.6 |

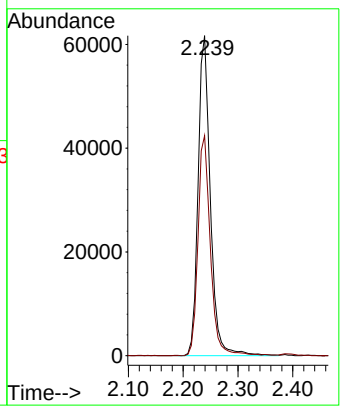





#13
Acrolein
Concen: 271.255 ug/l
RT: 2.239 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 56 Resp: 9598

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 69.5 | 56.2 | 84.4 |




**Instrument :**
MSVOA_X
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ICVVX022825

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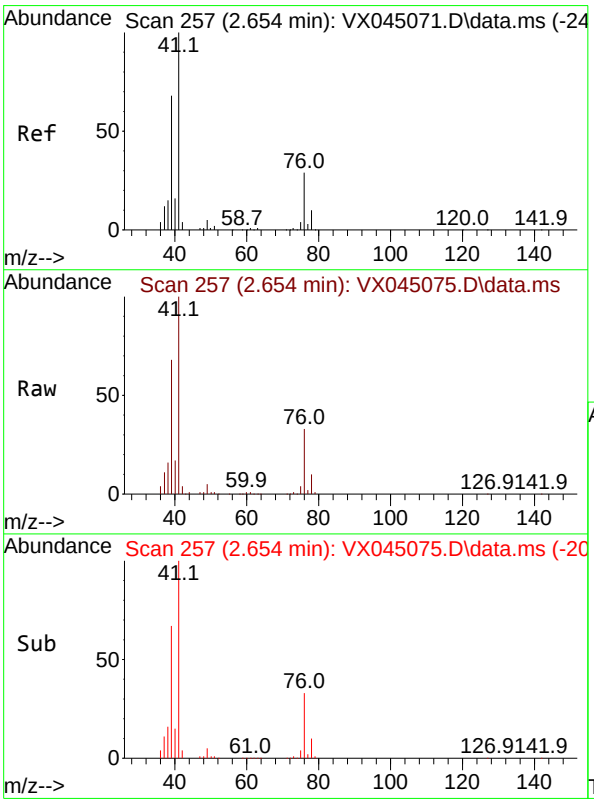
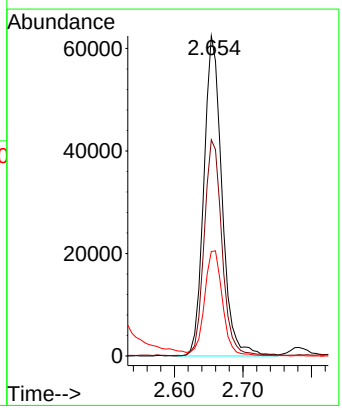
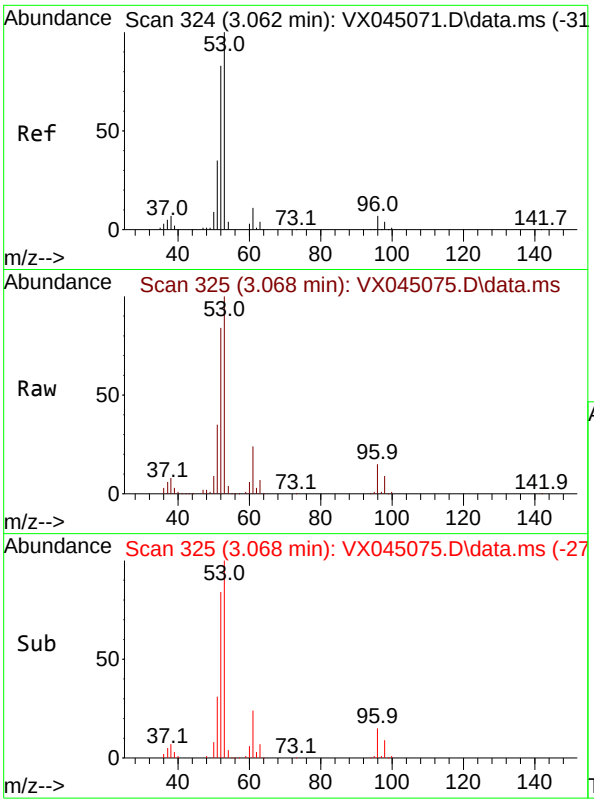



#14
Allyl chloride
Concen: 51.691 ug/l
RT: 2.654 min Scan# 257
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 41 Resp: 114875

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 66.3 | 53.8 | 80.8 |
| 76 | 33.0 | 25.2 | 37.8 |

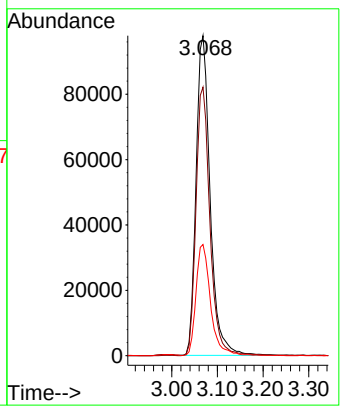





#15
Acrylonitrile
Concen: 255.479 ug/l
RT: 3.068 min Scan# 3
Delta R.T. 0.006 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 53 Resp: 20960

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 83.8 | 66.2 | 99.2 |
| 51 | 35.8 | 29.0 | 43.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

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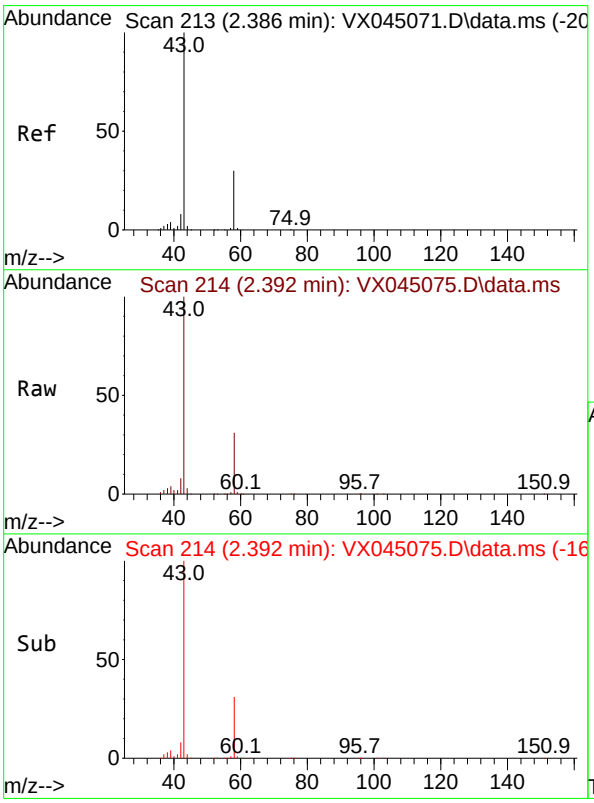
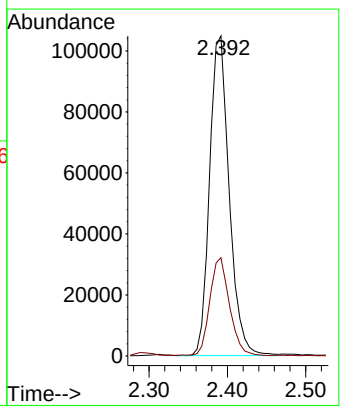
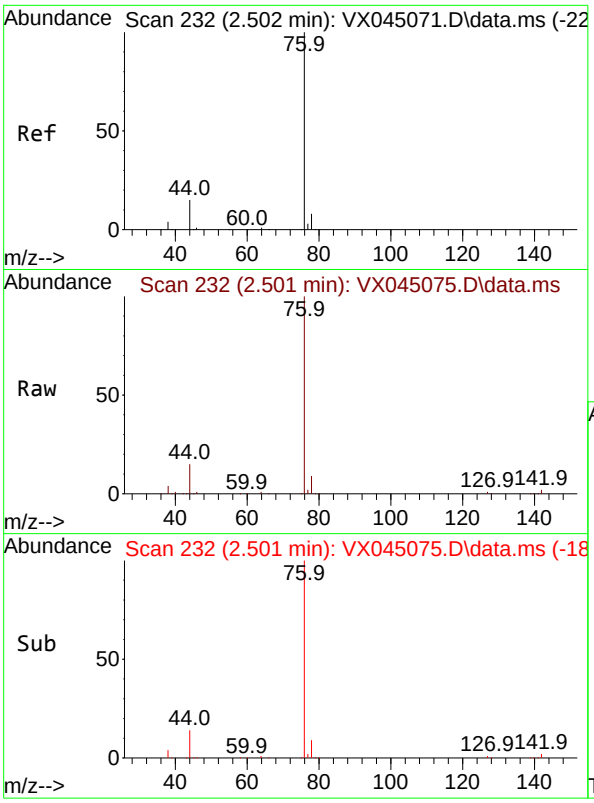



#16
Acetone
Concen: 242.877 ug/l
RT: 2.392 min Scan# 214
Delta R.T. 0.006 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 43 Resp: 182119

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 30.5 | 24.2 | 36.4 |

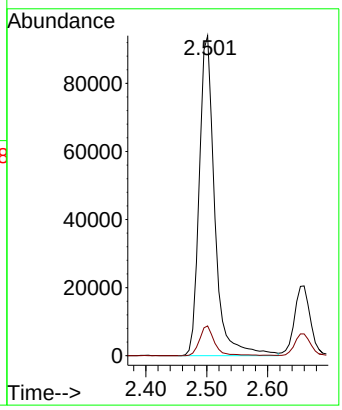





#17
Carbon Disulfide
Concen: 49.952 ug/l
RT: 2.501 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 76 Resp: 16610

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.3 | 6.6 | 9.8 |

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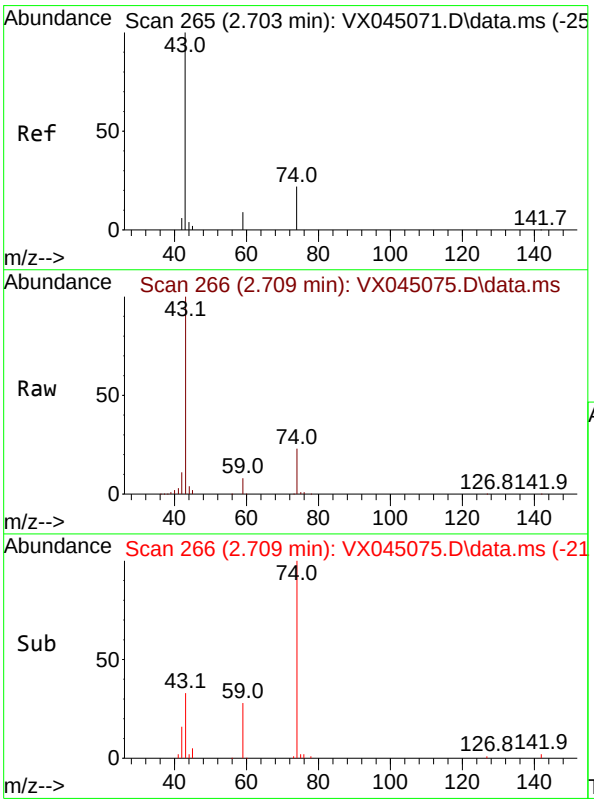
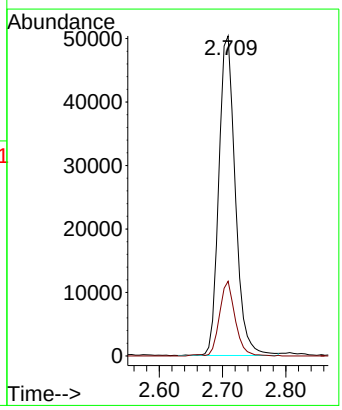
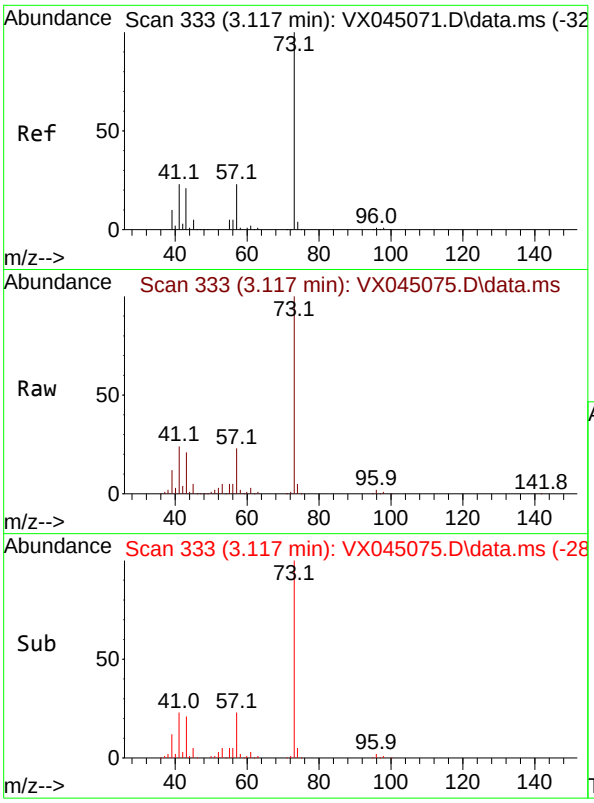



#18
Methyl Acetate
Concen: 50.312 ug/l
RT: 2.709 min Scan# 266
Delta R.T. 0.006 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 43 Resp: 90756

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 22.1 | 17.4 | 26.2 |

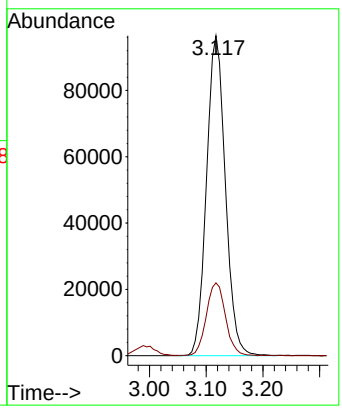





#19
Methyl tert-butyl Ether
Concen: 53.114 ug/l
RT: 3.117 min Scan# 3
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 73 Resp: 22247

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 22.7 | 18.5 | 27.7 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

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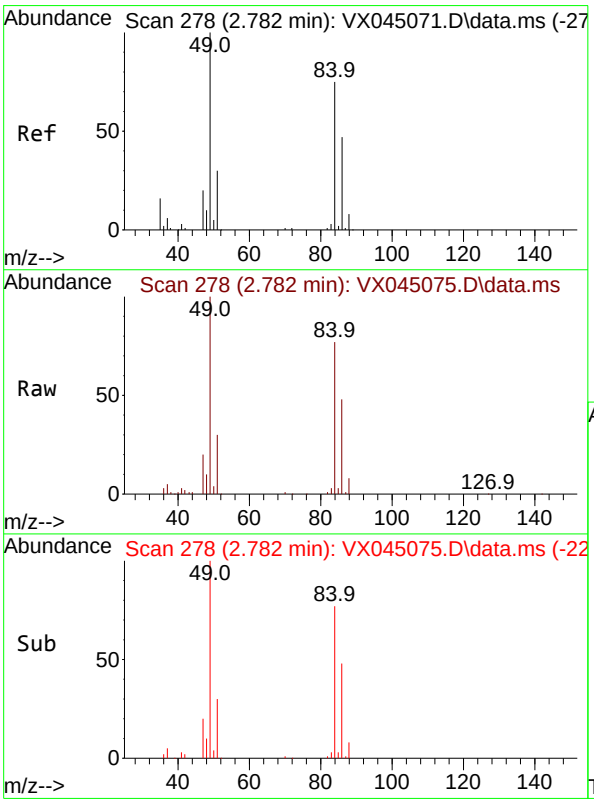
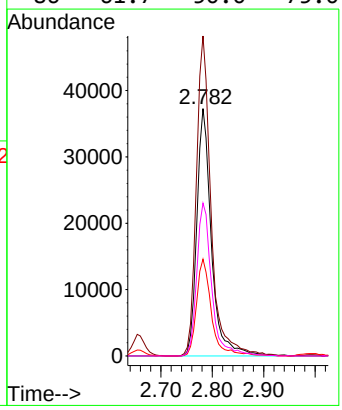
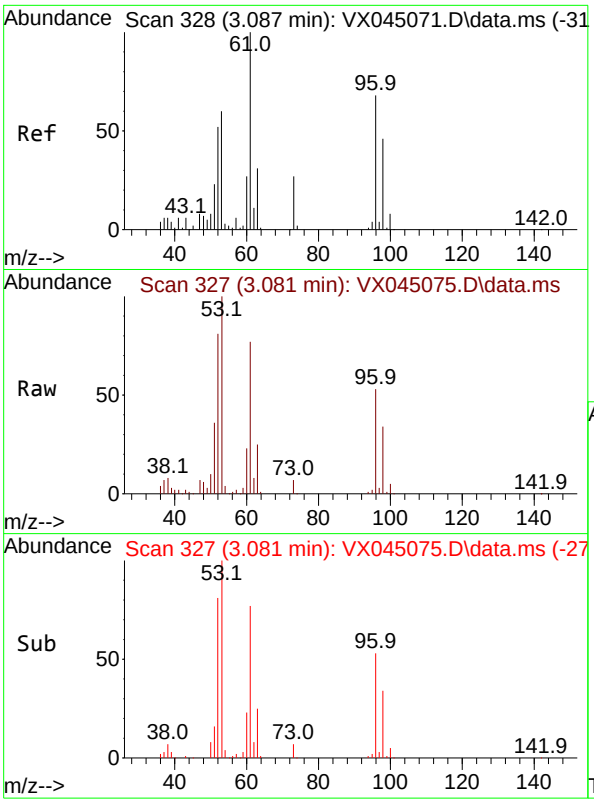



#20
Methylene Chloride
Concen: 49.639 ug/l
RT: 2.782 min Scan# 278
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 84 Resp: 73731

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 129.3 | 106.5 | 159.7 |
| 51 | 39.1 | 32.1 | 48.1 |
| 86 | 61.7 | 50.0 | 75.0 |

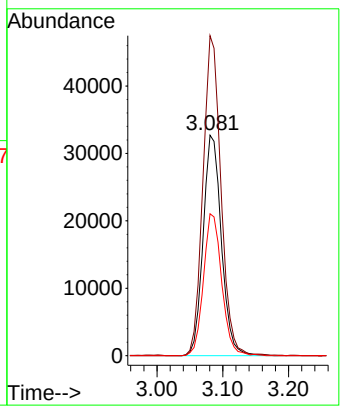





#21
trans-1,2-Dichloroethene
Concen: 51.172 ug/l
RT: 3.081 min Scan# 3
Delta R.T. -0.006 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 96 Resp: 6311

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 145.2 | 117.0 | 175.4 |
| 98 | 64.4 | 53.4 | 80.2 |

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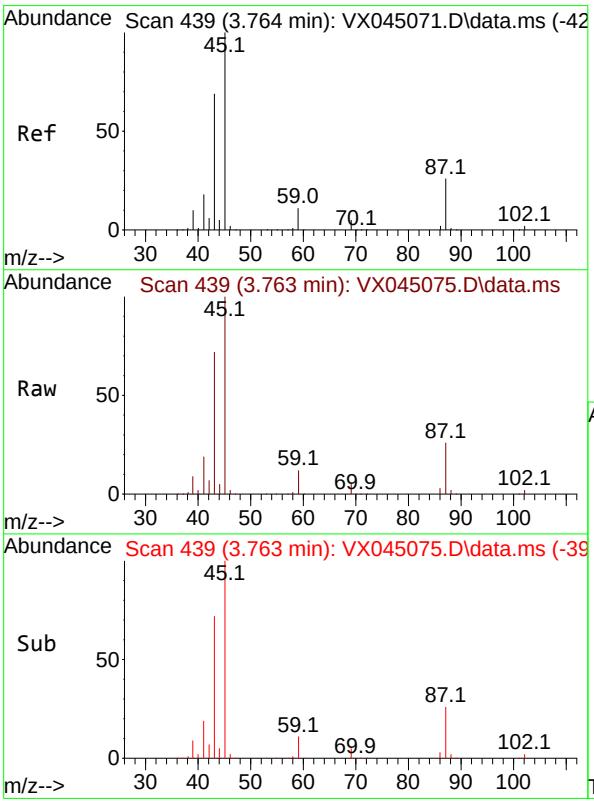
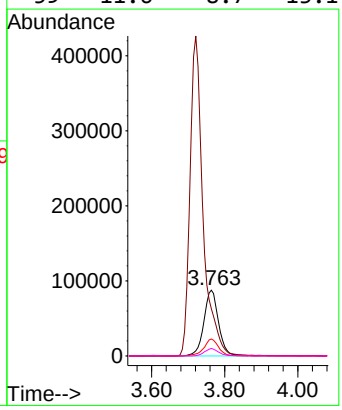
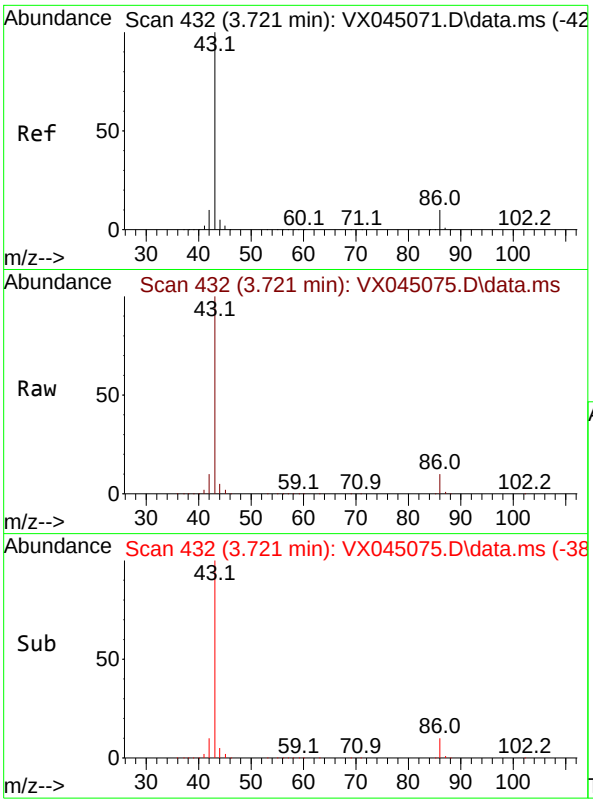



#22
Diisopropyl ether
Concen: 53.955 ug/l
RT: 3.763 min Scan# 439
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 45 Resp: 243860

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 71.9 | 54.9 | 82.3 |
| 87 | 25.8 | 21.0 | 31.4 |
| 59 | 11.6 | 8.7 | 13.1 |






#23
Vinyl Acetate
Concen: 282.313 ug/l
RT: 3.721 min Scan# 4
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 43 Resp: 106481

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 10.0 | 8.1 | 12.1 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
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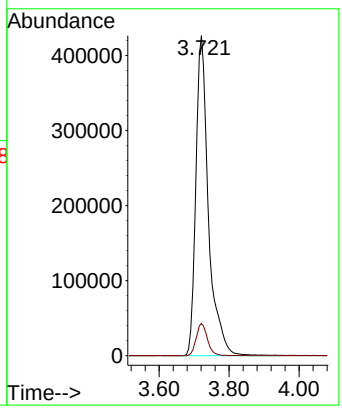
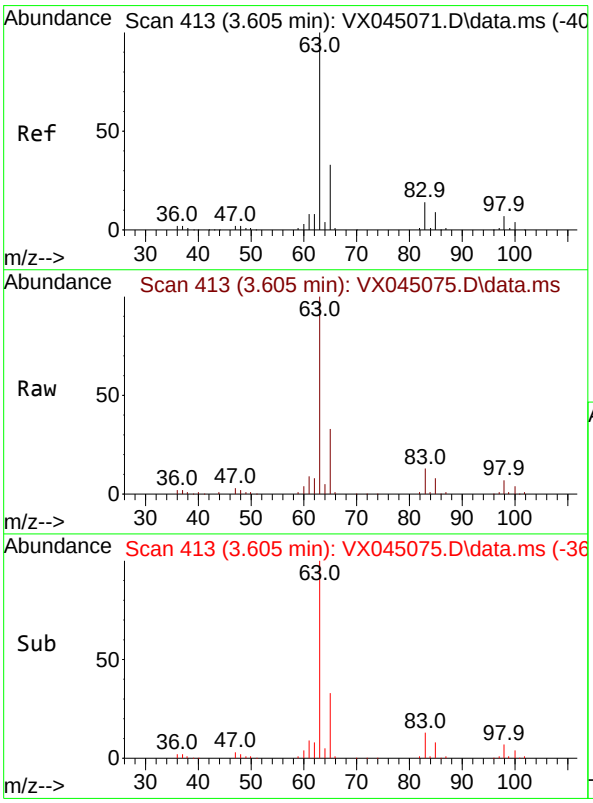
**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

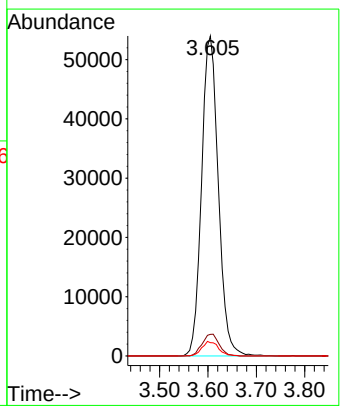


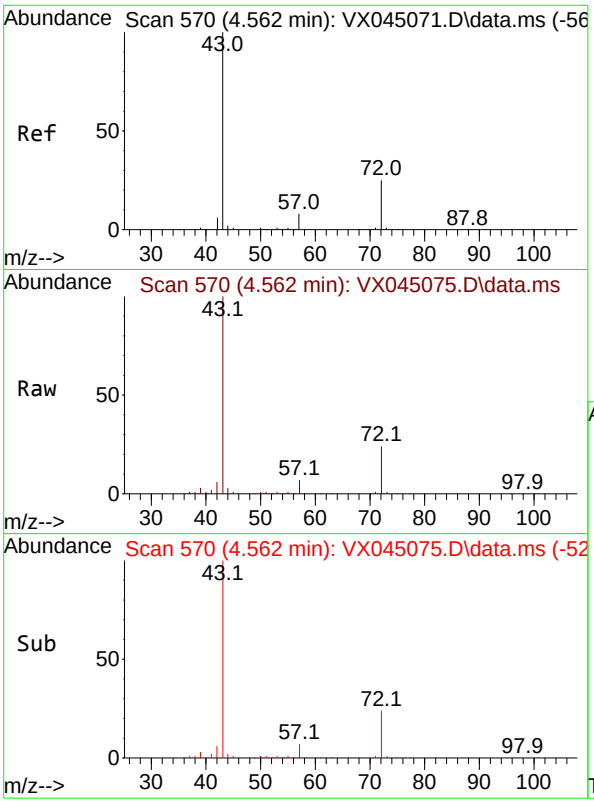




#24
1,1-Dichloroethane
Concen: 51.190 ug/l
RT: 3.605 min Scan# 413
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 63 Resp: 129666

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 6.8 | 3.4 | 10.2 |
| 100 | 4.1 | 2.1 | 6.5 |






#25
2-Butanone
Concen: 264.040 ug/l
RT: 4.562 min Scan# 5
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 43 Resp: 29802

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 24.1 | 20.0 | 30.0 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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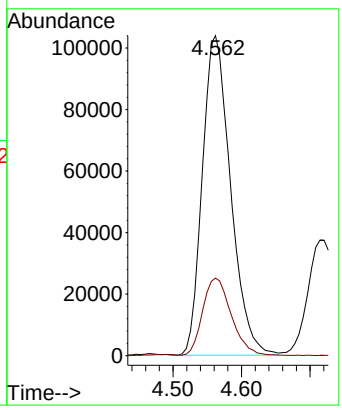
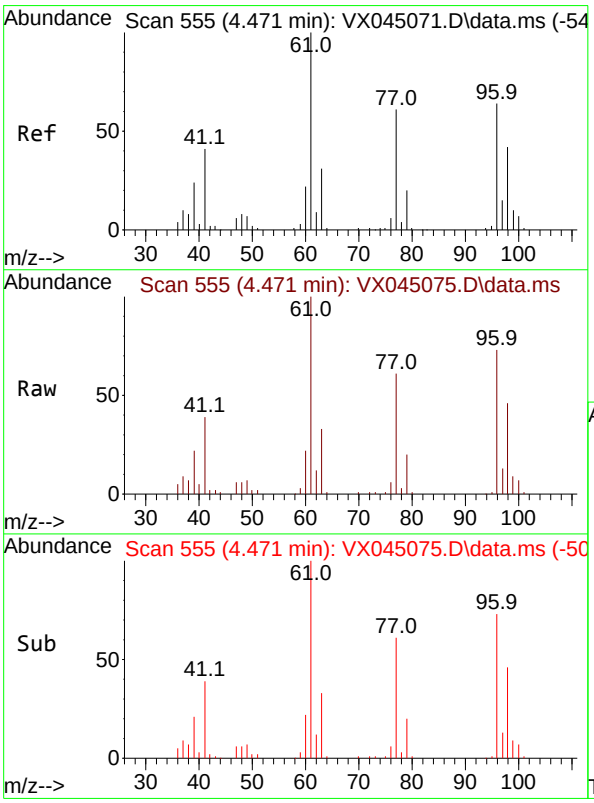
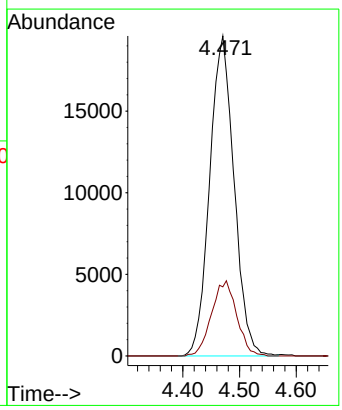


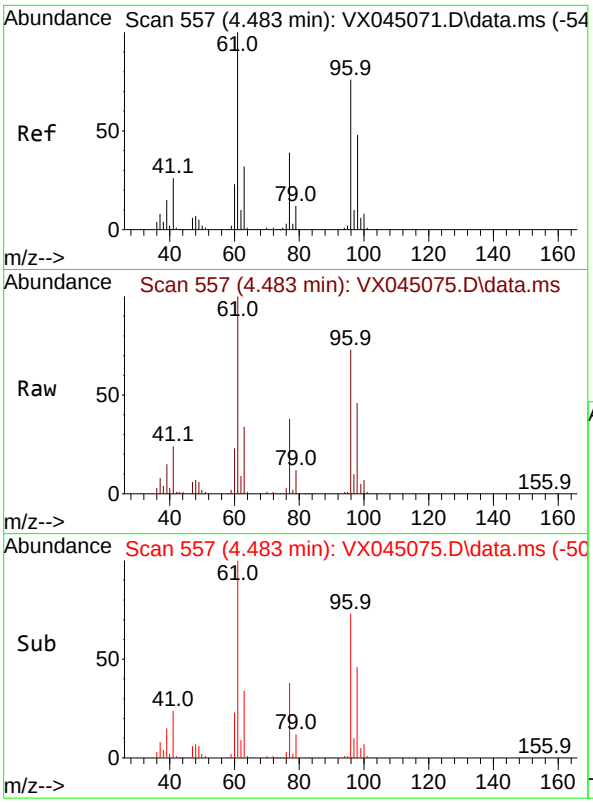




#26
2,2-Dichloropropane
Concen: 49.401 ug/l
RT: 4.471 min Scan# 555
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 77 Resp: 58694

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 24.2 | 12.4 | 37.0 |






#27
cis-1,2-Dichloroethene
Concen: 51.606 ug/l
RT: 4.483 min Scan# 5
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 96 Resp: 7857

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 141.2 | 0.0 | 283.2 |
| 98 | 63.8 | 0.0 | 128.0 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

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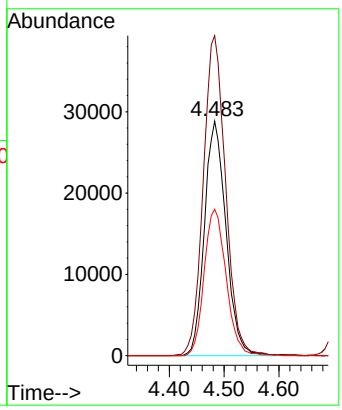
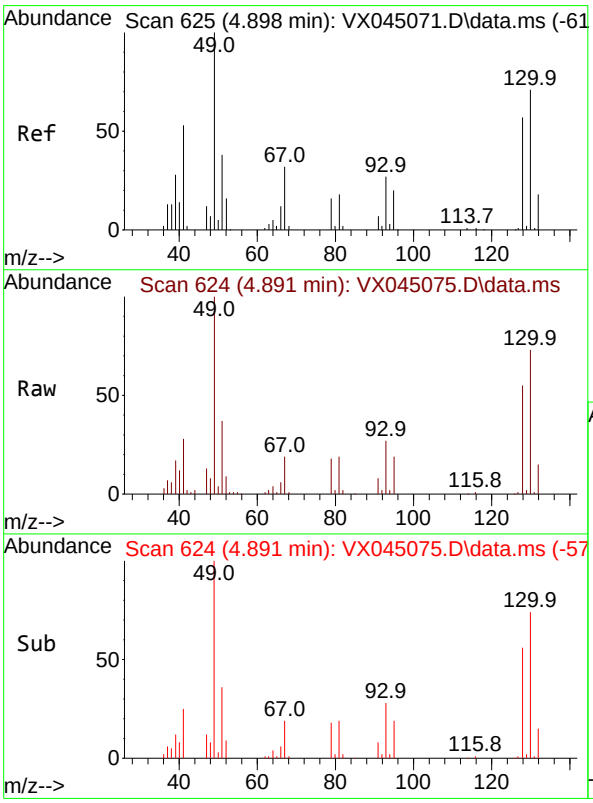
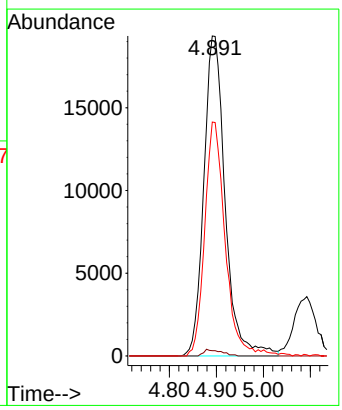


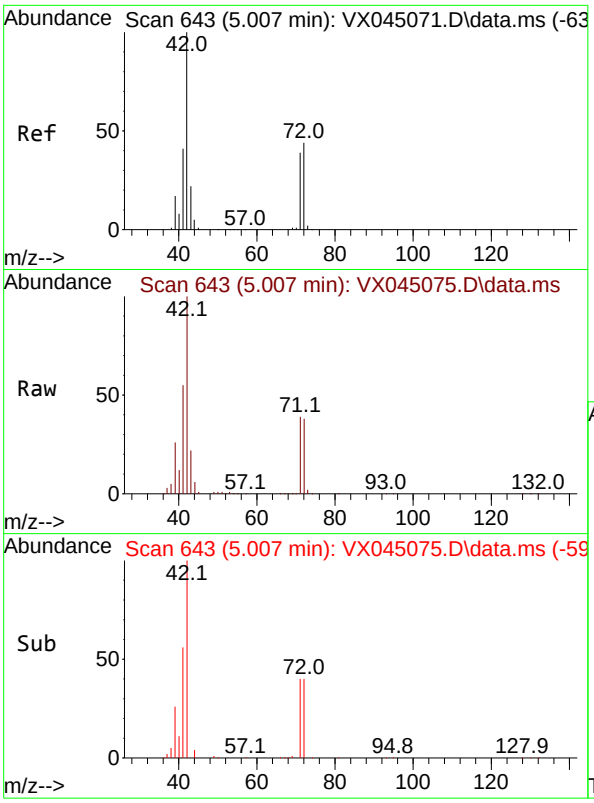




#28
Bromochloromethane
Concen: 50.399 ug/l
RT: 4.891 min Scan# 624
Delta R.T. -0.006 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 49 Resp: 60849

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.7 | 0.0 | 3.4 |
| 130 | 70.0 | 56.1 | 84.1 |

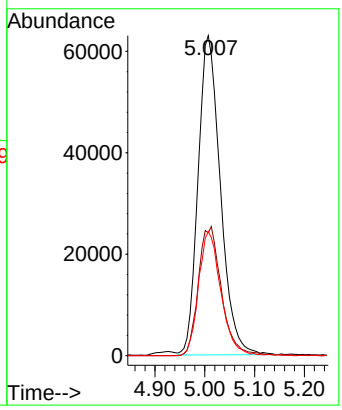





#29
Tetrahydrofuran
Concen: 258.277 ug/l
RT: 5.007 min Scan# 64
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 42 Resp: 19576

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 42.0 | 34.1 | 51.1 |
| 71 | 38.9 | 31.4 | 47.0 |




**Instrument :**
MSVOA_X
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ICVVX022825

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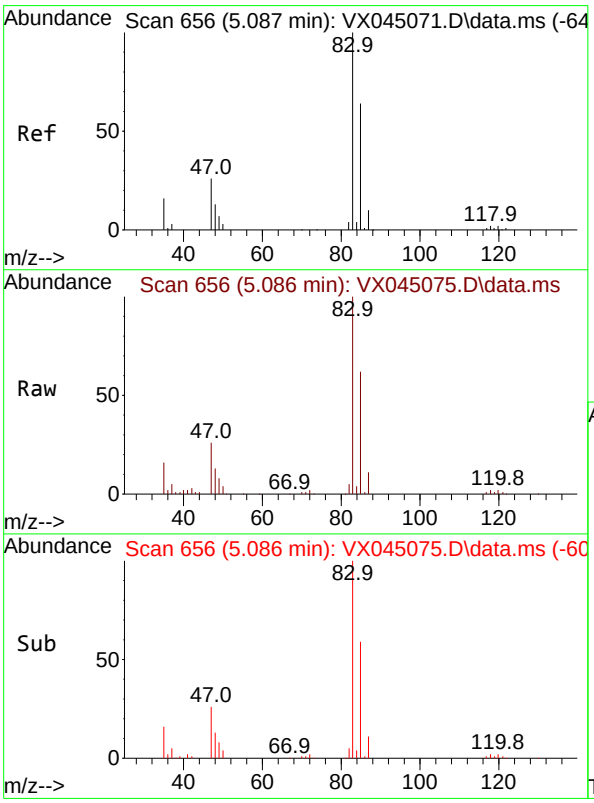
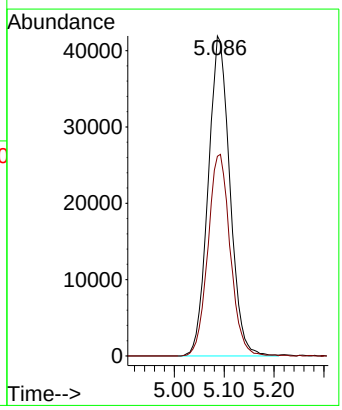
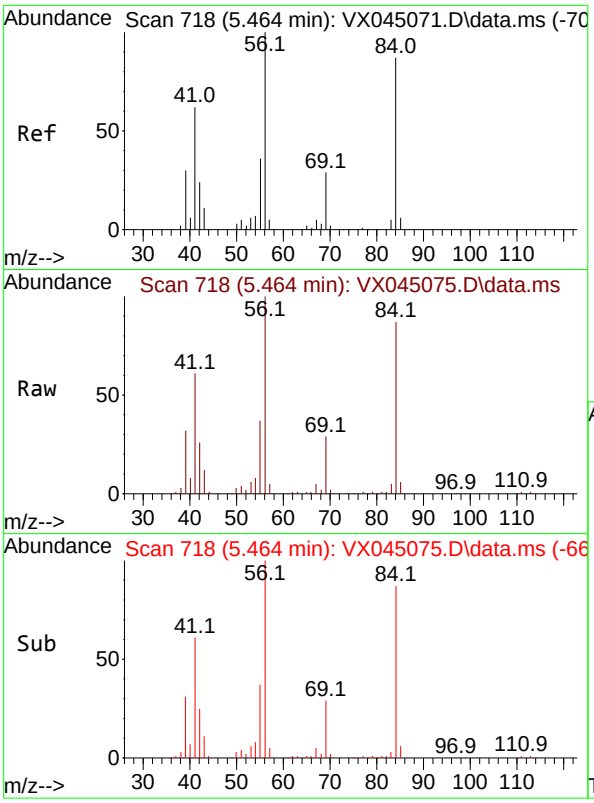



#30
Chloroform
Concen: 50.236 ug/l
RT: 5.086 min Scan# 656
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 83 Resp: 126437

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 62.4 | 51.4 | 77.2 |

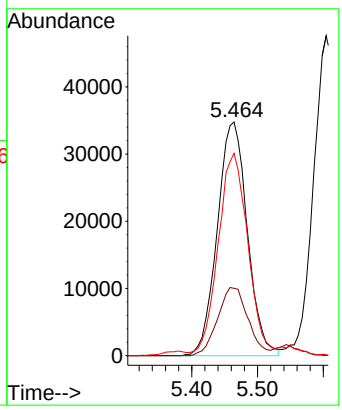





#31
Cyclohexane
Concen: 50.158 ug/l
RT: 5.464 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 56 Resp: 11028

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 28.8 | 23.4 | 35.2 |
| 84 | 84.6 | 69.4 | 104.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

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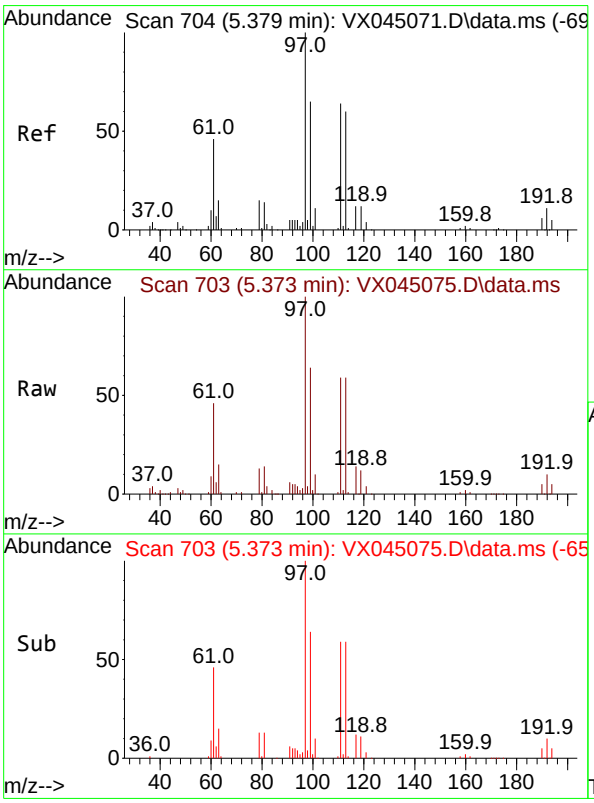
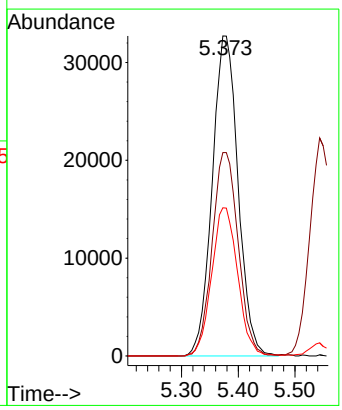
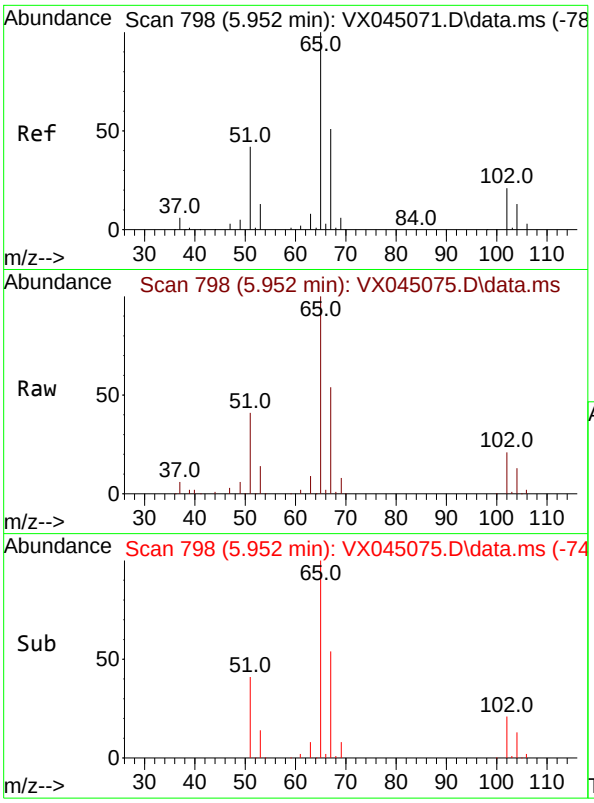



#32
1,1,1-Trichloroethane
Concen: 50.939 ug/l
RT: 5.373 min Scan# 703
Delta R.T. -0.006 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 97 Resp: 103546

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 64.0 | 51.6 | 77.4 |
| 61 | 46.7 | 38.4 | 57.6 |

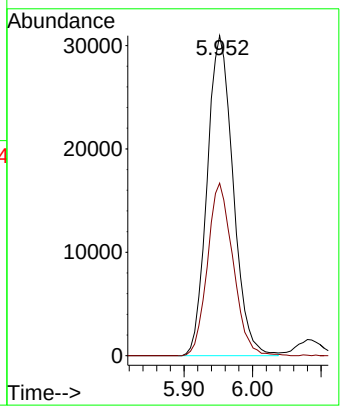





#33
1,2-Dichloroethane-d4
Concen: 50.297 ug/l
RT: 5.952 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 65 Resp: 8128

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 53.1 | 0.0 | 106.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

**Manual Integrations**
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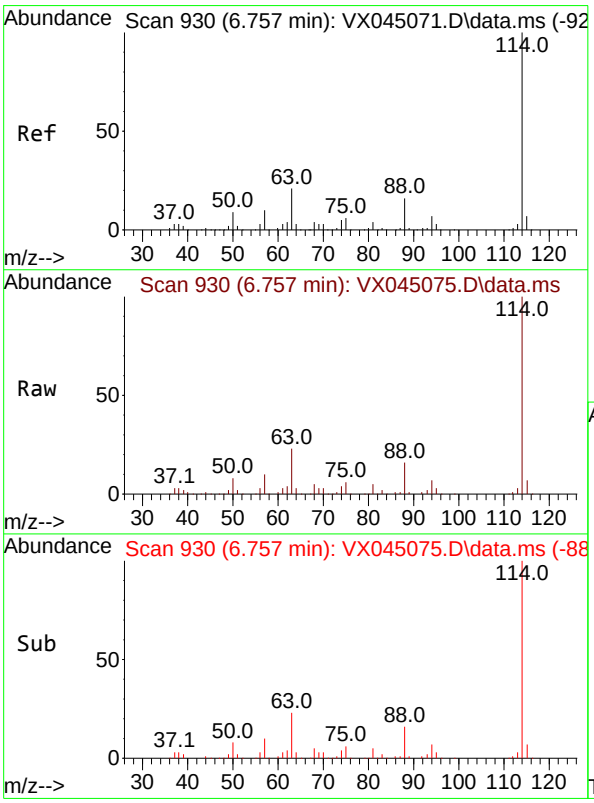
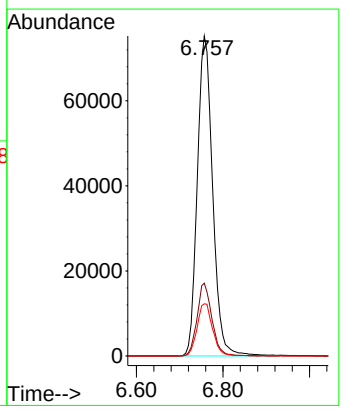
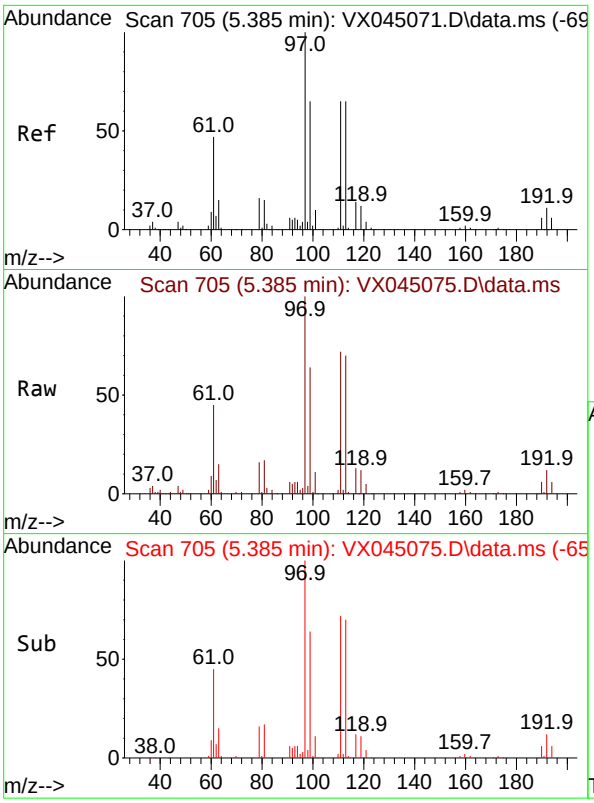



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.757 min Scan# 930
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:114 Resp: 184964

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.7 | 0.0 | 41.8 |
| 88 | 16.3 | 0.0 | 32.8 |

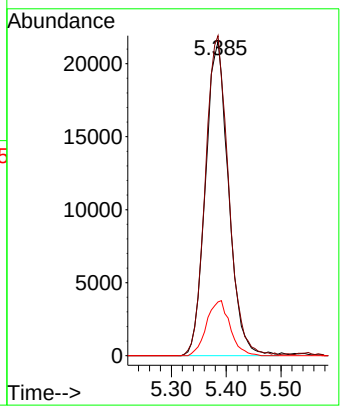





#35
Dibromofluoromethane
Concen: 50.841 ug/l
RT: 5.385 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:113 Resp: 6288

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 102.6 | 81.8 | 122.6 |
| 192 | 17.8 | 14.3 | 21.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

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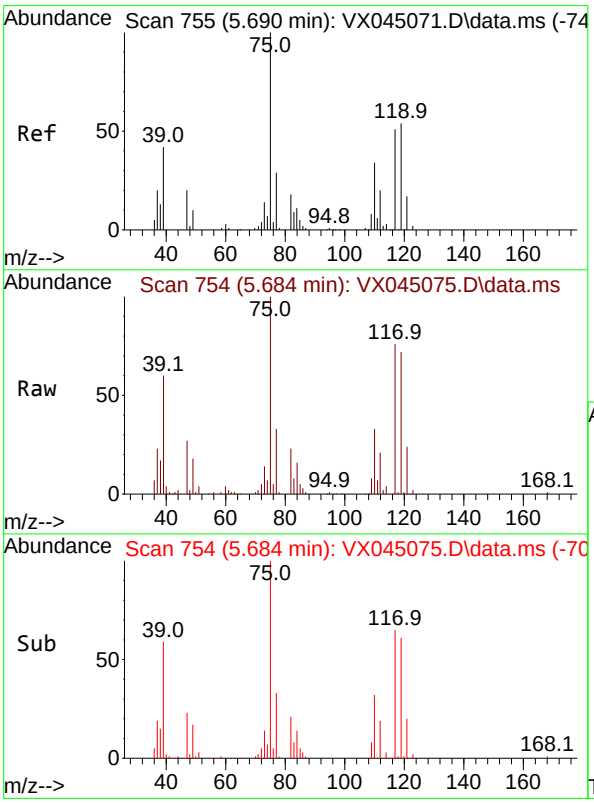
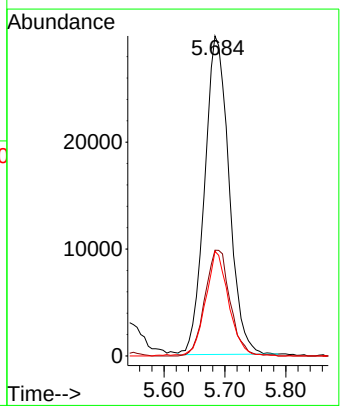
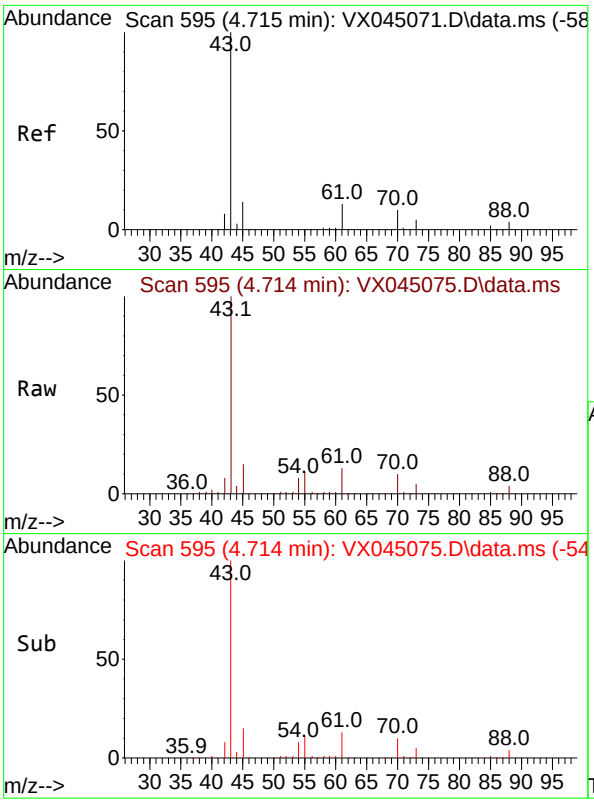



#36
1,1-Dichloropropene
Concen: 48.770 ug/l
RT: 5.684 min Scan# 754
Delta R.T. -0.006 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 75 Resp: 82722

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 34.3 | 16.9 | 50.6 |
| 77 | 31.2 | 24.5 | 36.7 |

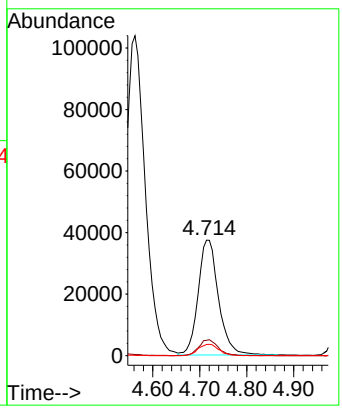





#37
Ethyl Acetate
Concen: 51.596 ug/l
RT: 4.714 min Scan# 5
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 43 Resp: 11276

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 13.3 | 10.8 | 16.2 |
| 70 | 10.1 | 7.7 | 11.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

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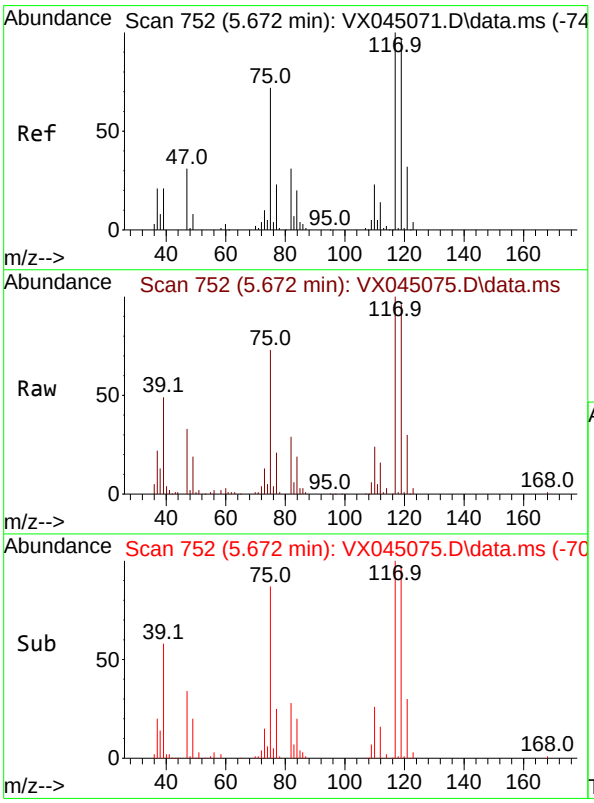
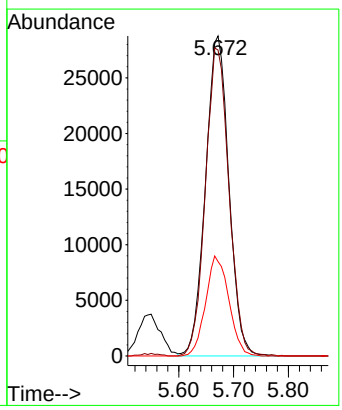
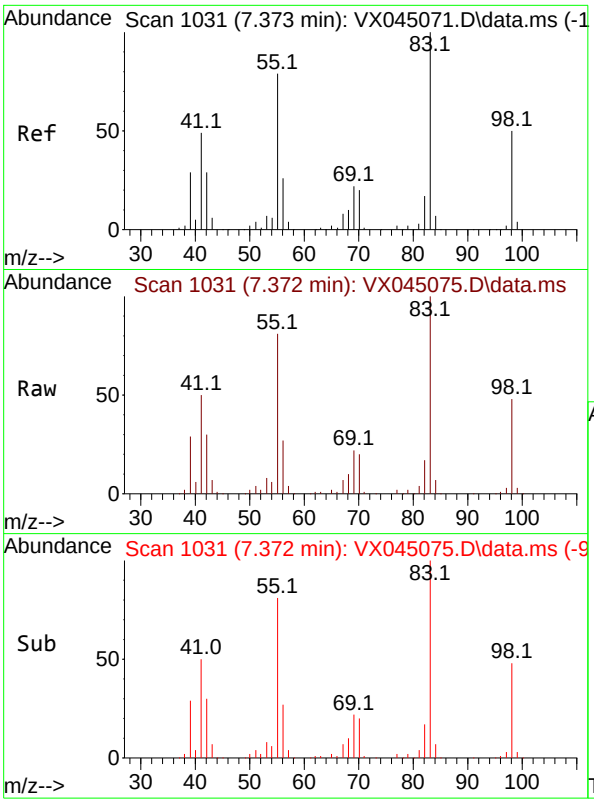



#38
Carbon Tetrachloride
Concen: 49.425 ug/l
RT: 5.672 min Scan# 752
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:117 Resp: 85110

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 95.6 | 76.7 | 115.1 |
| 121 | 29.5 | 25.5 | 38.3 |

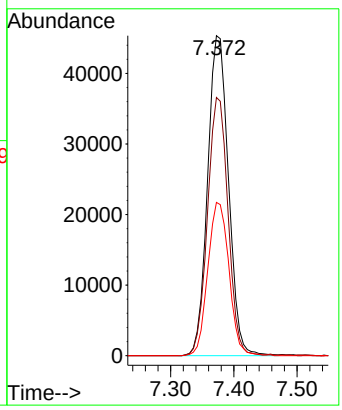





#39
Methylcyclohexane
Concen: 51.169 ug/l
RT: 7.372 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 83 Resp: 10399

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 80.7 | 63.0 | 94.4 |
| 98 | 47.9 | 39.7 | 59.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

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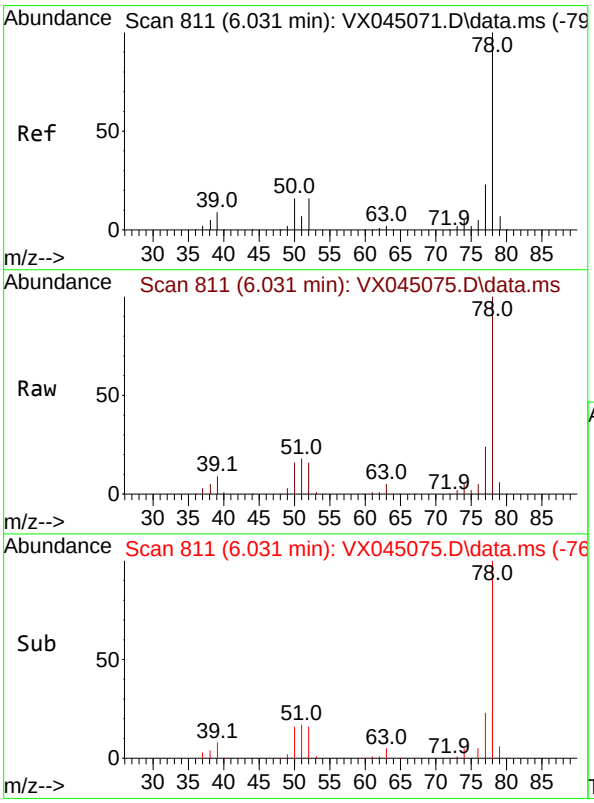
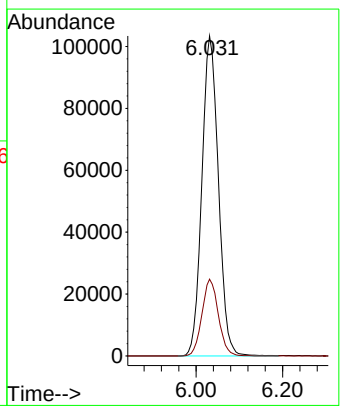
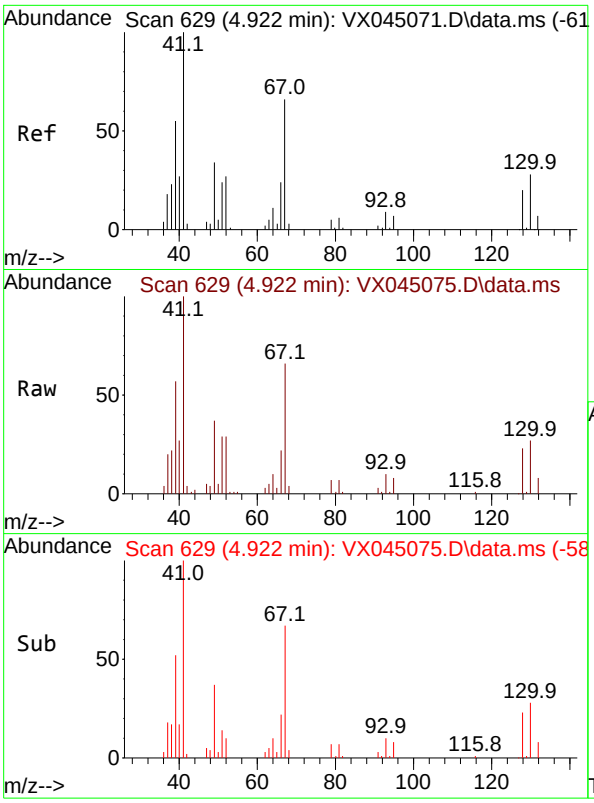



#40
Benzene
Concen: 51.195 ug/l
RT: 6.031 min Scan# 811
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 78 Resp: 274206

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 24.0 | 18.8 | 28.2 |

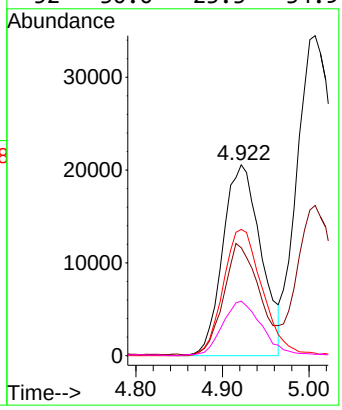





#41
Methacrylonitrile
Concen: 53.352 ug/l
RT: 4.922 min Scan# 6
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 41 Resp: 6305

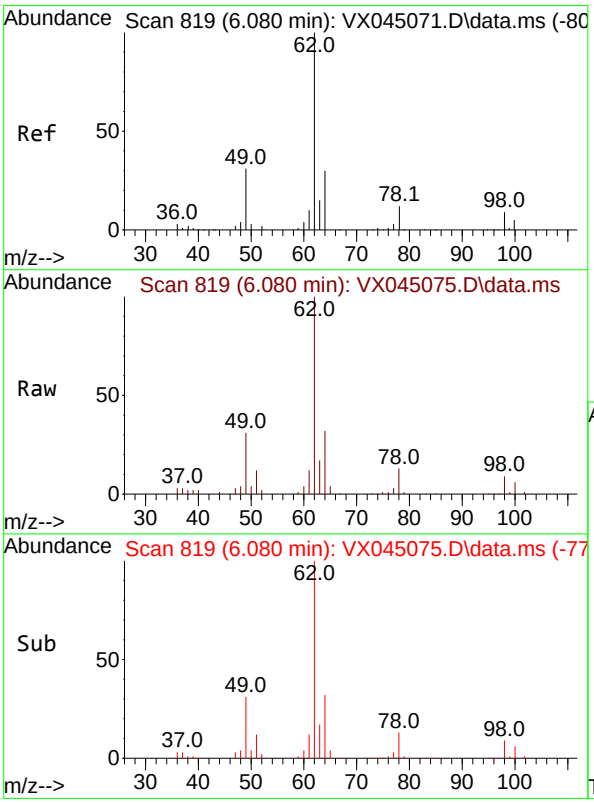
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 55.0 | 44.6 | 67.0 |
| 67 | 68.1 | 53.9 | 80.9 |
| 52 | 30.0 | 23.3 | 34.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

**Manual Integrations APPROVED**

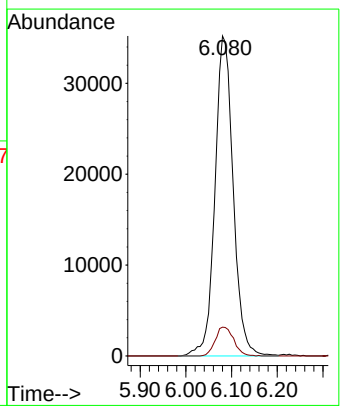
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

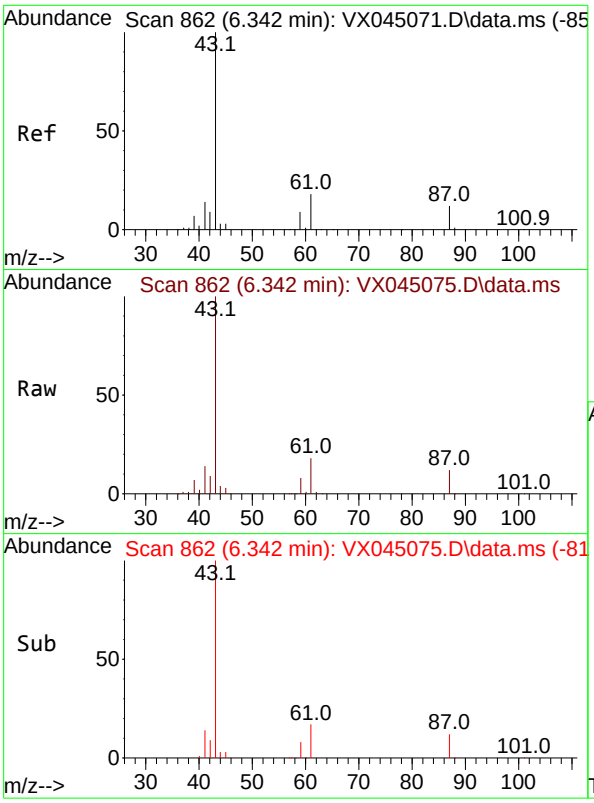



#42
1,2-Dichloroethane
Concen: 50.718 ug/l
RT: 6.080 min Scan# 819
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 62 Resp: 97821

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 9.1 | 0.0 | 18.2 |

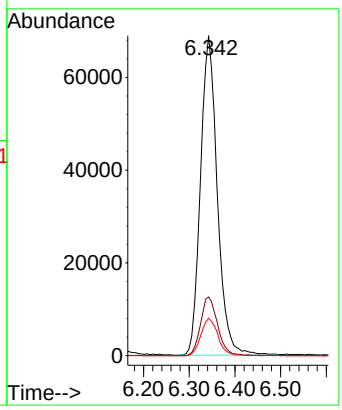





#43
Isopropyl Acetate
Concen: 54.452 ug/l
RT: 6.342 min Scan# 8
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 43 Resp: 17598

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 18.5 | 14.9 | 22.3 |
| 87 | 11.8 | 9.4 | 14.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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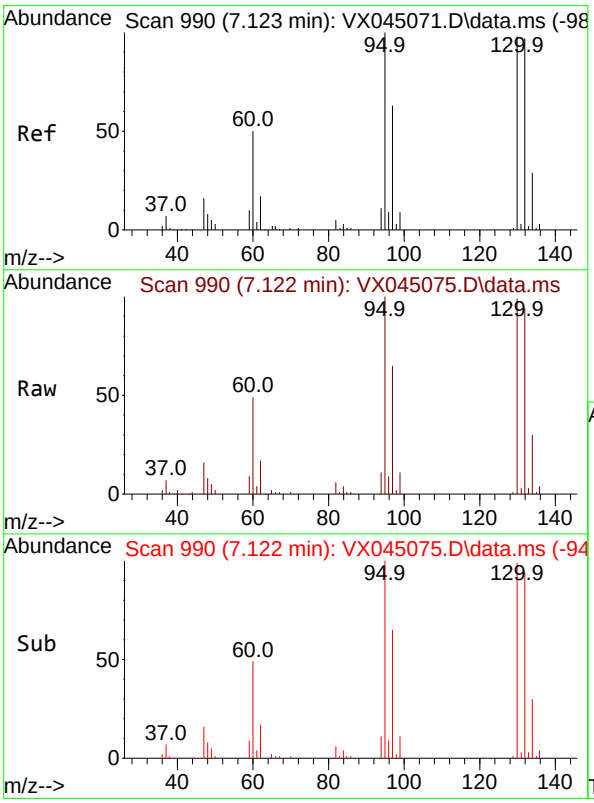
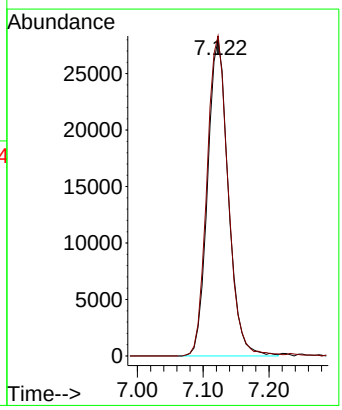
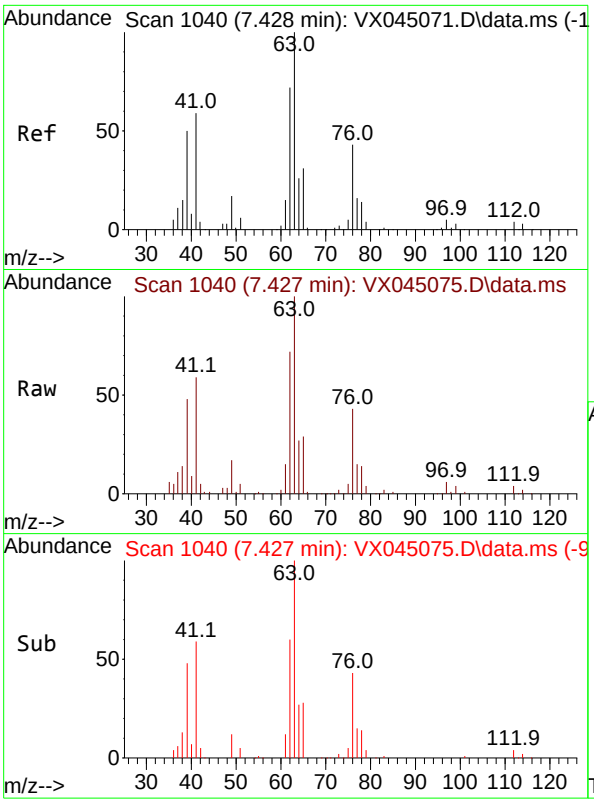



#44
Trichloroethene
Concen: 48.924 ug/l
RT: 7.122 min Scan# 990
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:130 Resp: 61530

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 101.1 | 0.0 | 205.0 |

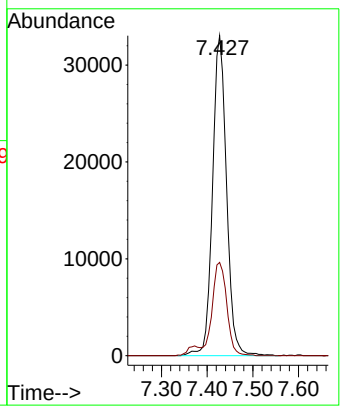





#45
1,2-Dichloropropane
Concen: 51.086 ug/l
RT: 7.427 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 63 Resp: 7035

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 29.2 | 24.7 | 37.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

**Manual Integrations APPROVED**

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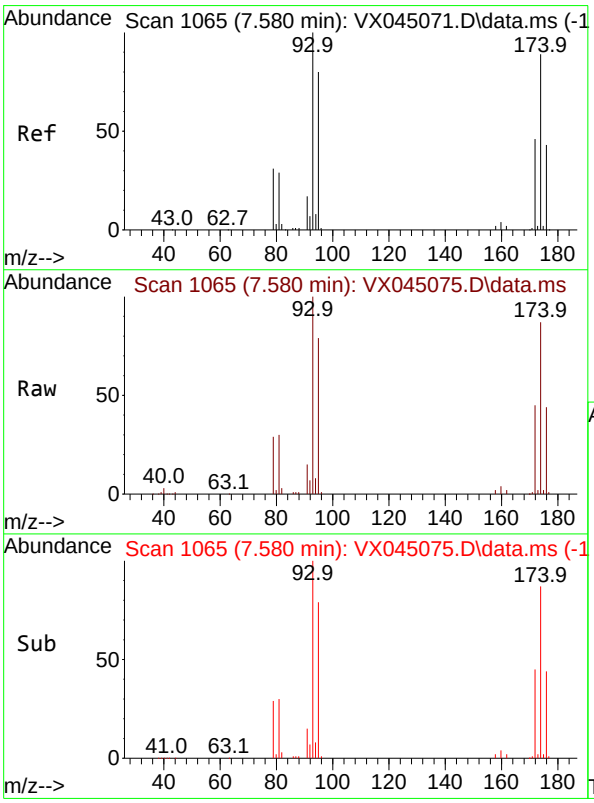
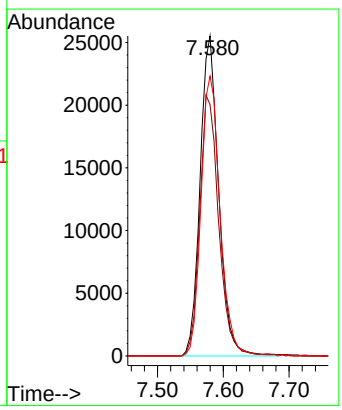
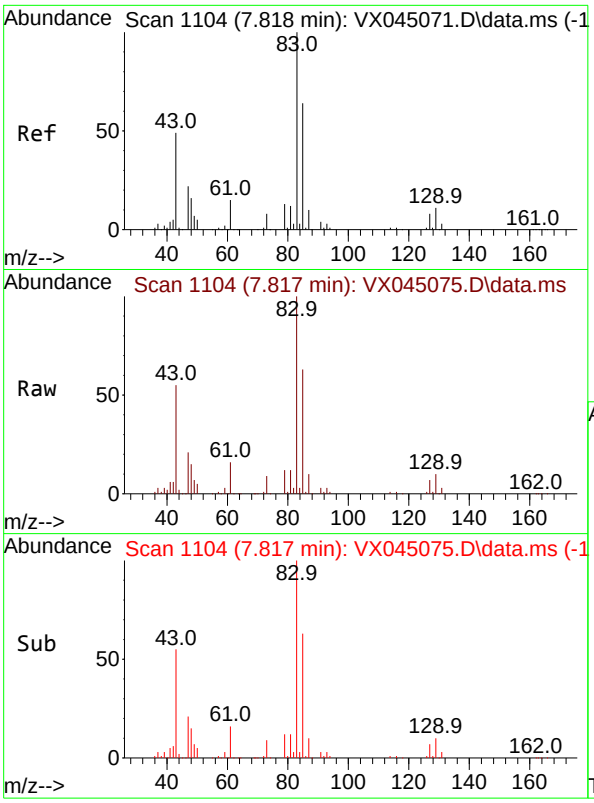



#46
Dibromomethane
Concen: 51.661 ug/l
RT: 7.580 min Scan# 1065
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 93 Resp: 50284

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 82.8 | 65.8 | 98.8 |
| 174 | 89.4 | 72.2 | 108.2 |

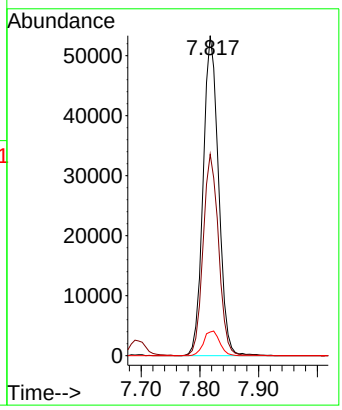





#47
Bromodichloromethane
Concen: 50.930 ug/l
RT: 7.817 min Scan# 11
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 83 Resp: 9723

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 63.0 | 51.1 | 76.7 |
| 127 | 7.4 | 6.4 | 9.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

**Manual Integrations**
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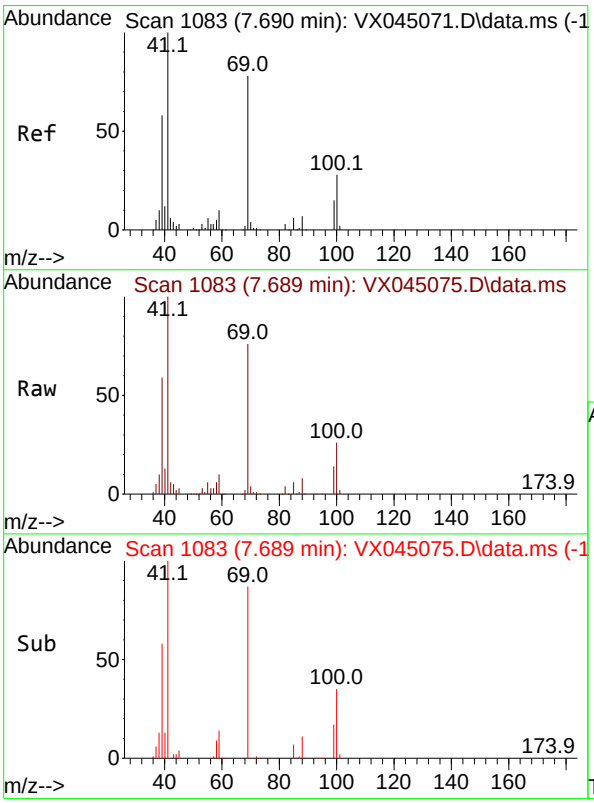
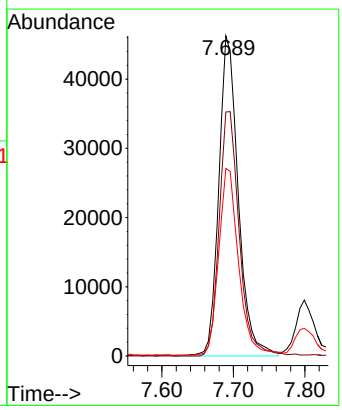
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

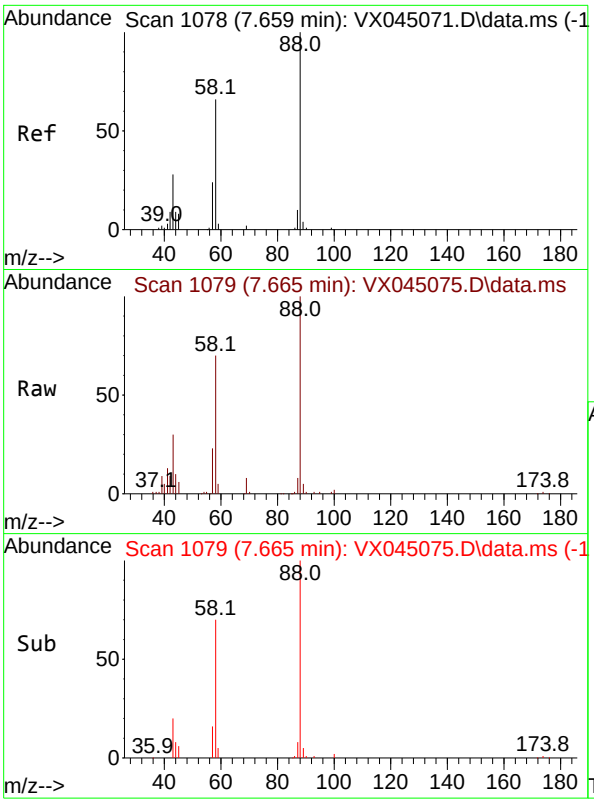



#48
Methyl methacrylate
Concen: 54.016 ug/l
RT: 7.689 min Scan# 1083
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 41 Resp: 87582

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 78.5 | 63.0 | 94.6 |
| 39 | 59.4 | 47.5 | 71.3 |

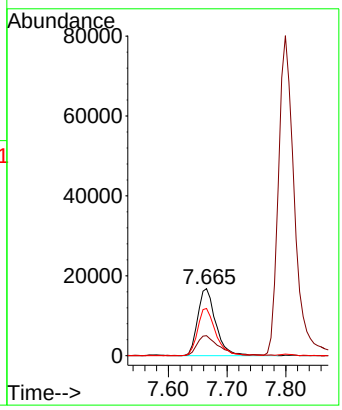





#49
1,4-Dioxane
Concen: 1049.007 ug/l
RT: 7.665 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 88 Resp: 3587

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 34.3 | 28.7 | 43.1 |
| 58 | 70.8 | 55.8 | 83.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

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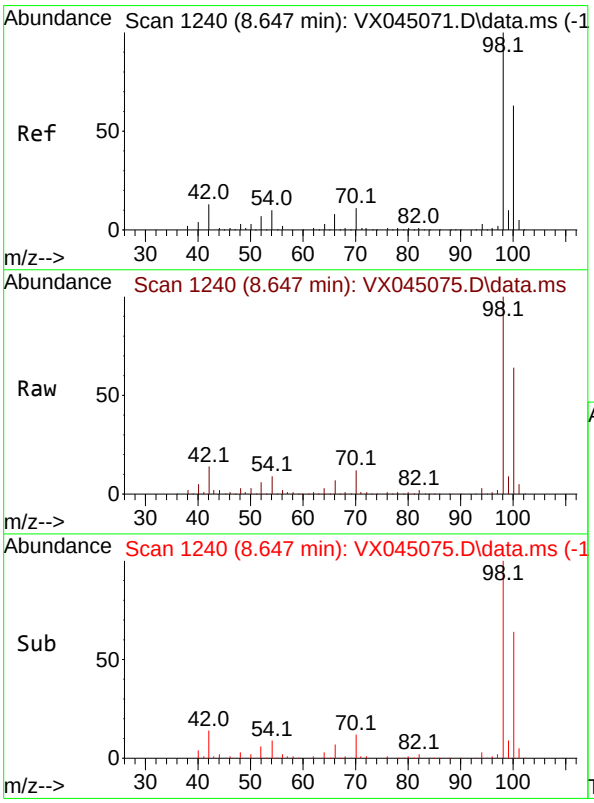
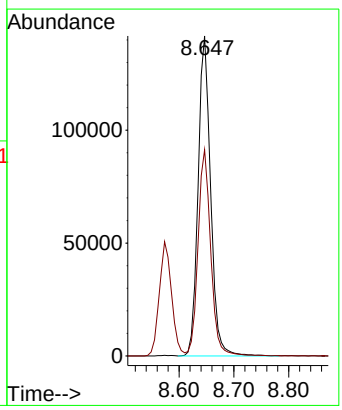
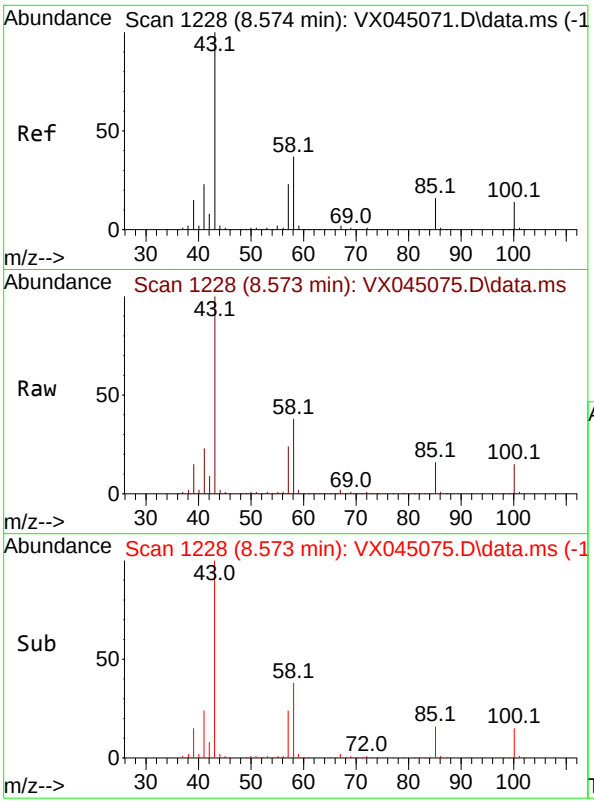



#50
Toluene-d8
Concen: 50.364 ug/l
RT: 8.647 min Scan# 1240
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 98 Resp: 225823

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.6 | 52.0 | 78.0 |






#51
4-Methyl-2-Pentanone
Concen: 259.995 ug/l
RT: 8.573 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 43 Resp: 56419

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 37.3 | 29.2 | 43.8 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

**Manual Integrations APPROVED**

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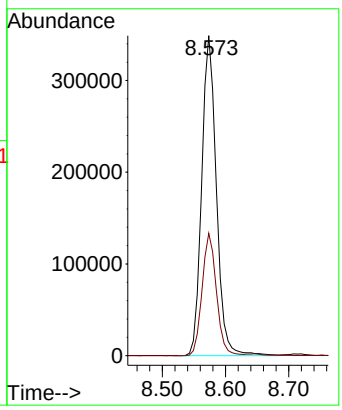
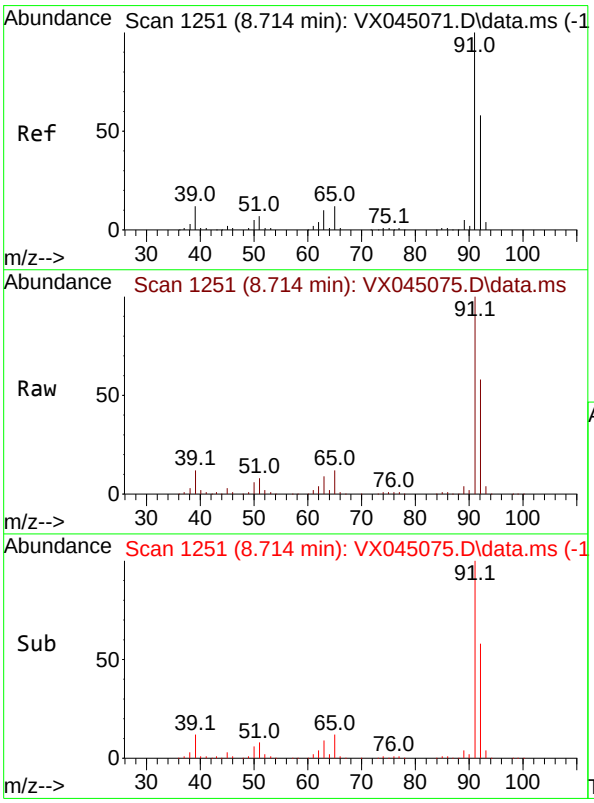
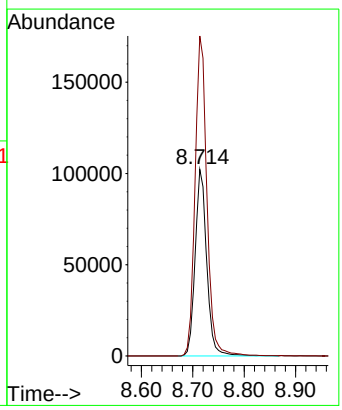


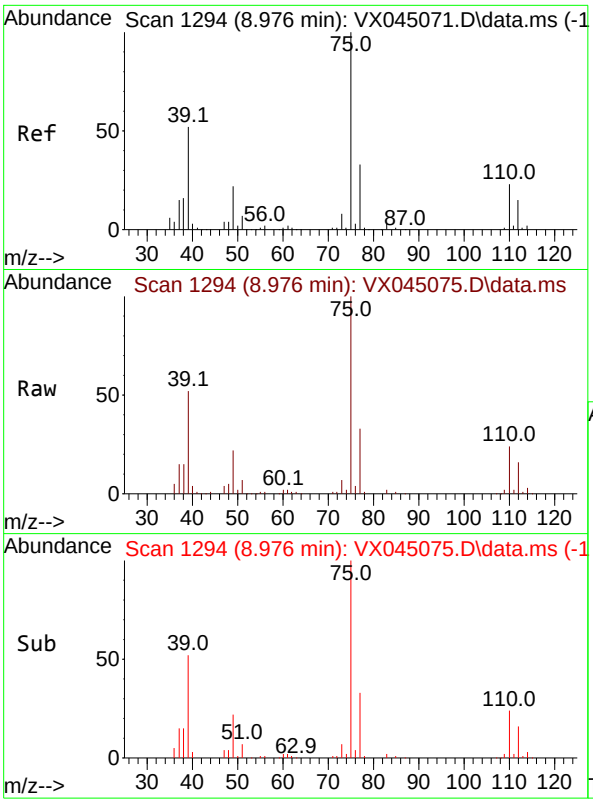




#52
Toluene
Concen: 51.020 ug/l
RT: 8.714 min Scan# 1251
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 92 Resp: 160331

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 175.1 | 138.9 | 208.3 |

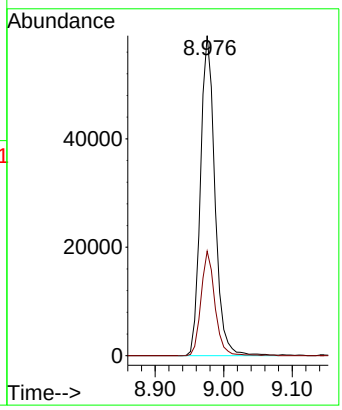





#53
t-1,3-Dichloropropene
Concen: 54.247 ug/l
RT: 8.976 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 75 Resp: 8658

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.7 | 26.5 | 39.7 |




**Instrument :**
MSVOA_X
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ICVVX022825

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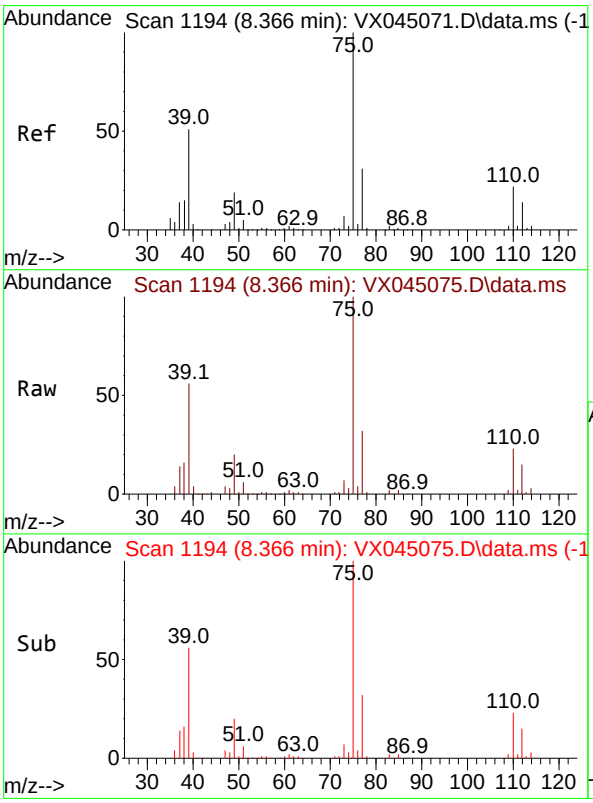
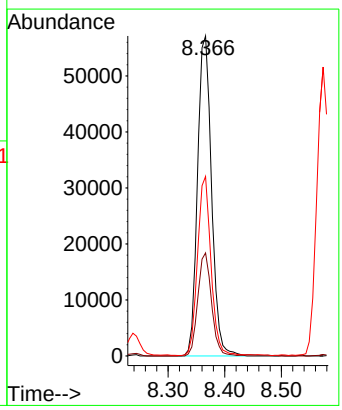
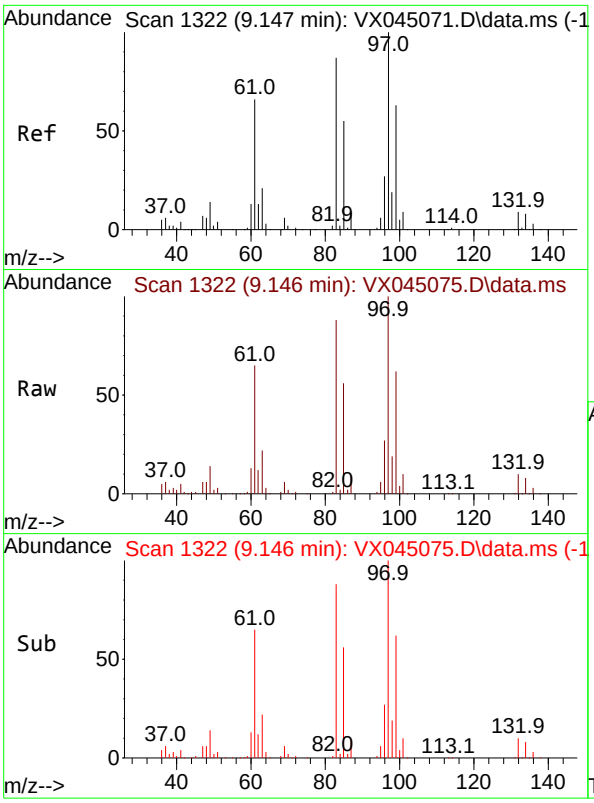



#54
cis-1,3-Dichloropropene
Concen: 52.732 ug/l
RT: 8.366 min Scan# 1194
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 75 Resp: 98146

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.2 | 24.7 | 37.1 |
| 39 | 56.0 | 40.7 | 61.1 |

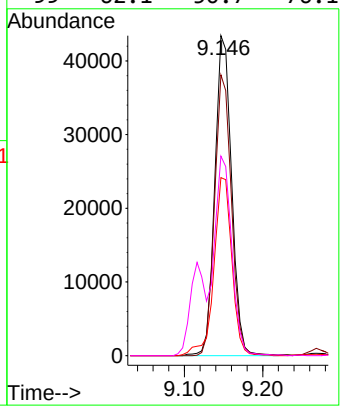





#55
1,1,2-Trichloroethane
Concen: 50.232 ug/l
RT: 9.146 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 97 Resp: 6498

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 87.8 | 69.4 | 104.2 |
| 85 | 55.6 | 44.1 | 66.1 |
| 99 | 62.1 | 50.7 | 76.1 |

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ICVVX022825

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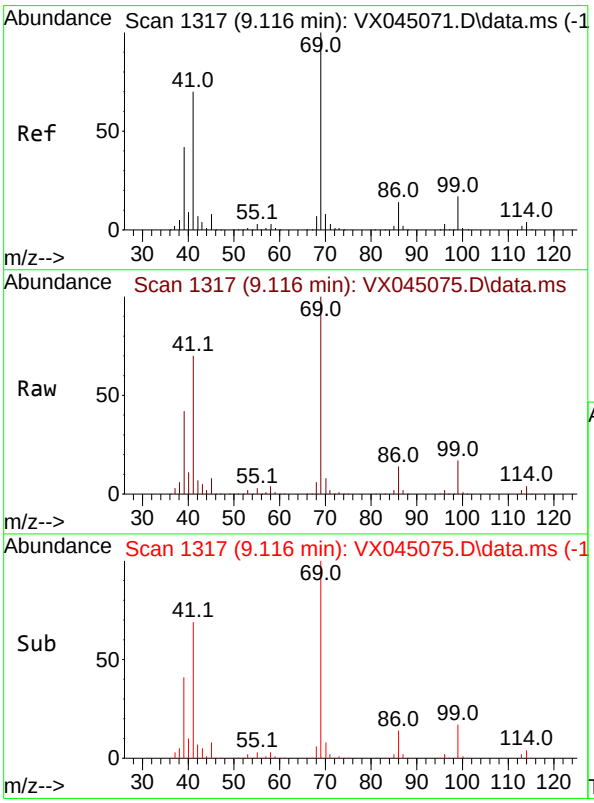
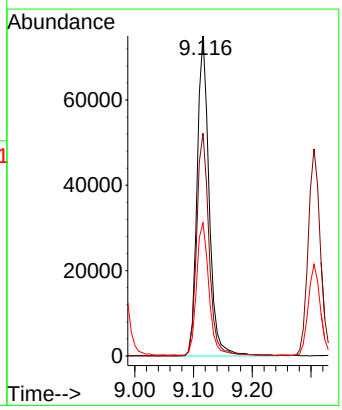
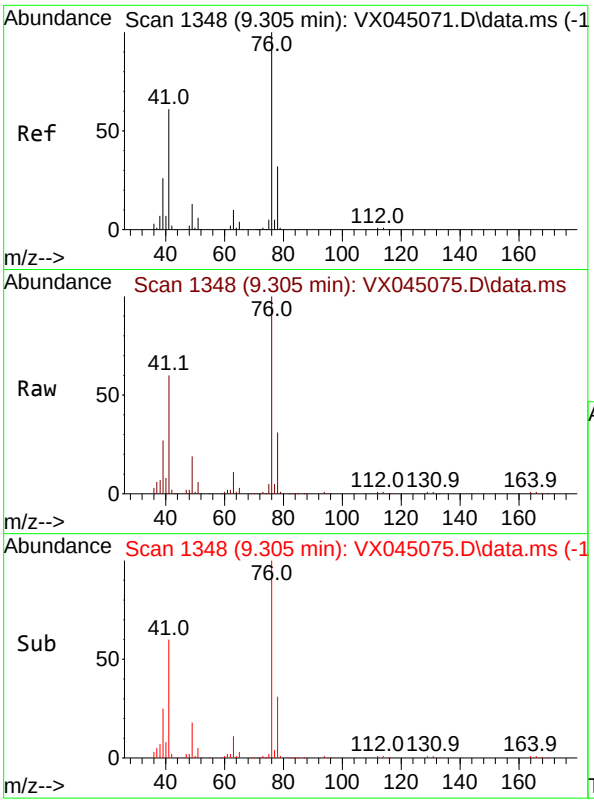



#56
Ethyl methacrylate
Concen: 54.109 ug/l
RT: 9.116 min Scan# 1317
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 69 Resp: 106405

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 71.5 | 57.0 | 85.4 |
| 39 | 43.2 | 34.2 | 51.4 |

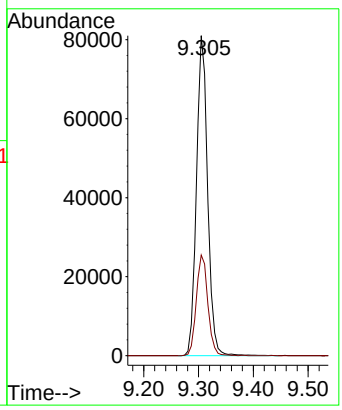





#57
1,3-Dichloropropane
Concen: 51.312 ug/l
RT: 9.305 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 76 Resp: 11488

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.5 | 25.5 | 38.3 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

**Manual Integrations APPROVED**

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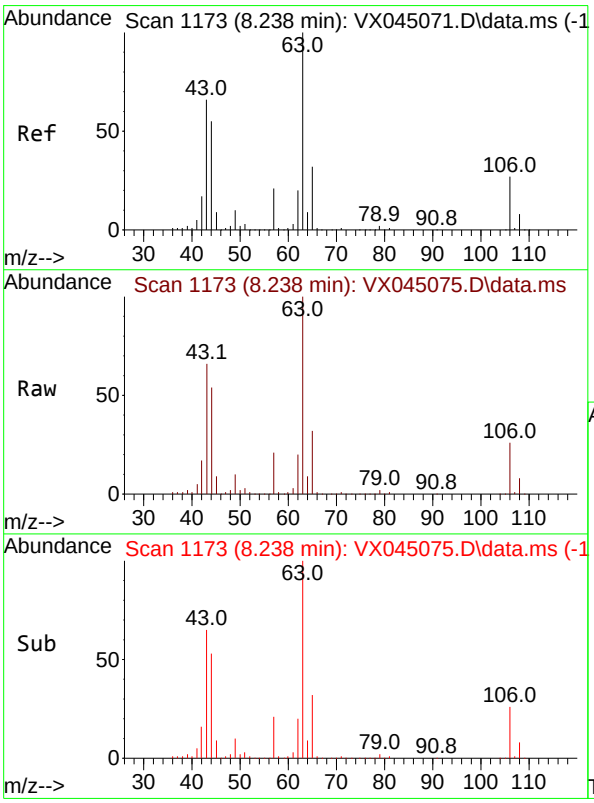
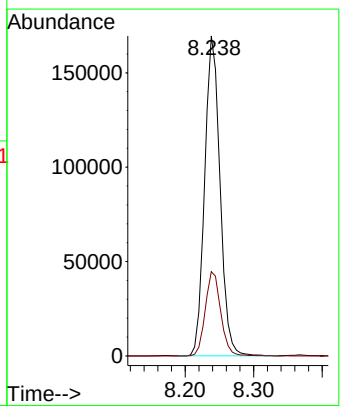
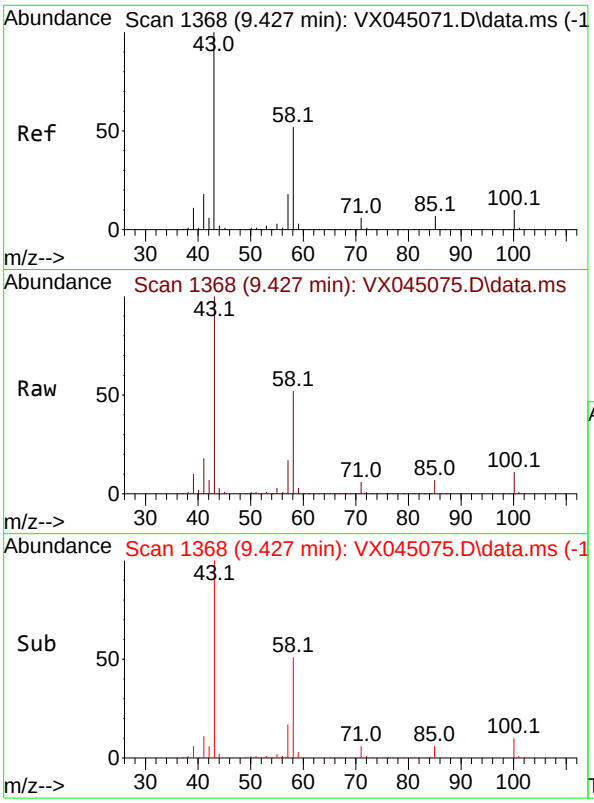



#58
2-Chloroethyl Vinyl ether
Concen: 275.557 ug/l
RT: 8.238 min Scan# 1173
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 63 Resp: 264335

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 26.5 | 21.5 | 32.3 |

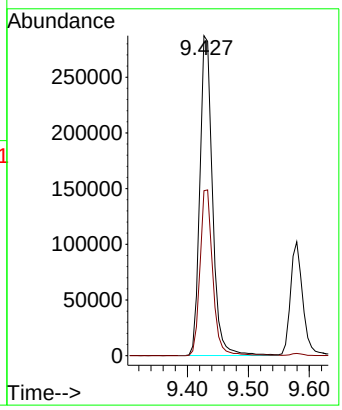





#59
2-Hexanone
Concen: 265.049 ug/l
RT: 9.427 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 43 Resp: 41673

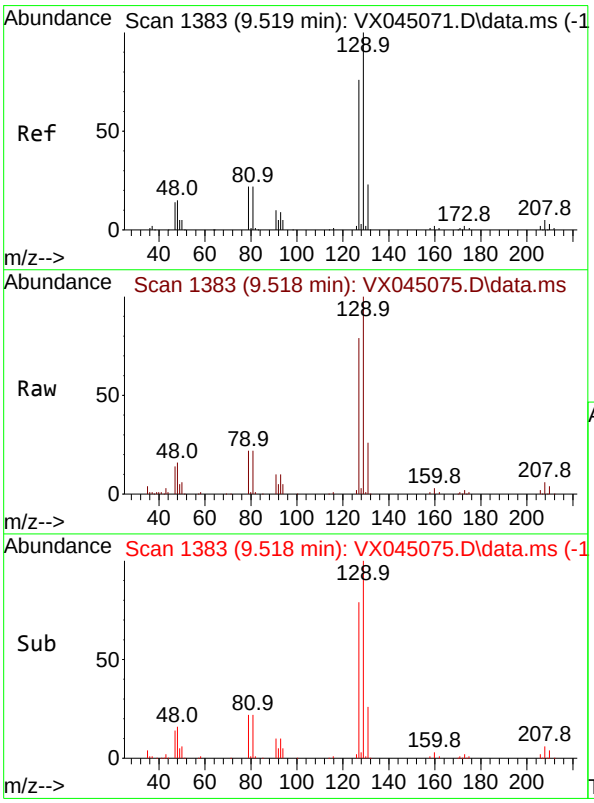
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 52.2 | 25.9 | 77.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

**Manual Integrations**
**APPROVED**

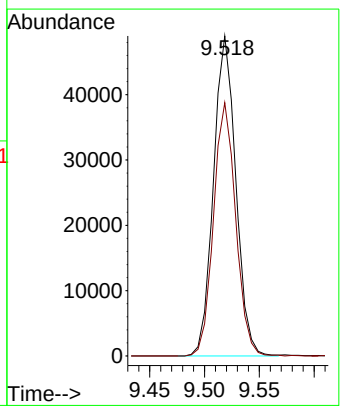
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

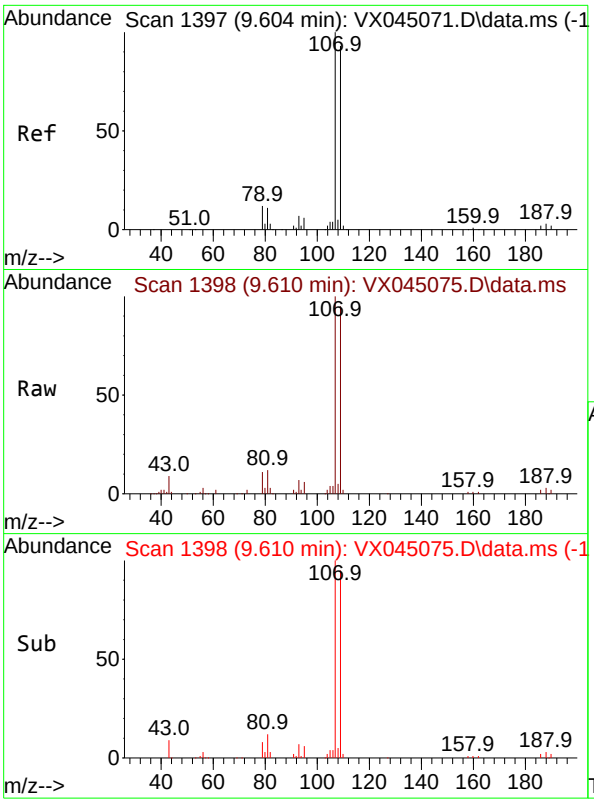



#60
Dibromochloromethane
Concen: 51.374 ug/l
RT: 9.518 min Scan# 1383
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:129 Resp: 69492

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 78.6 | 38.5 | 115.5 |

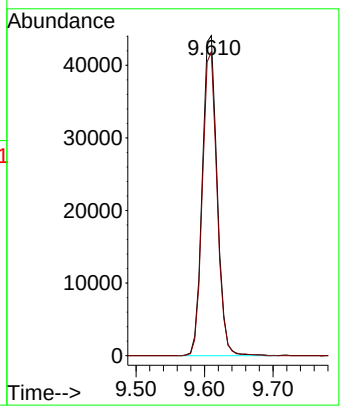





#61
1,2-Dibromoethane
Concen: 51.492 ug/l
RT: 9.610 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:107 Resp: 6650

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 93.8 | 76.1 | 114.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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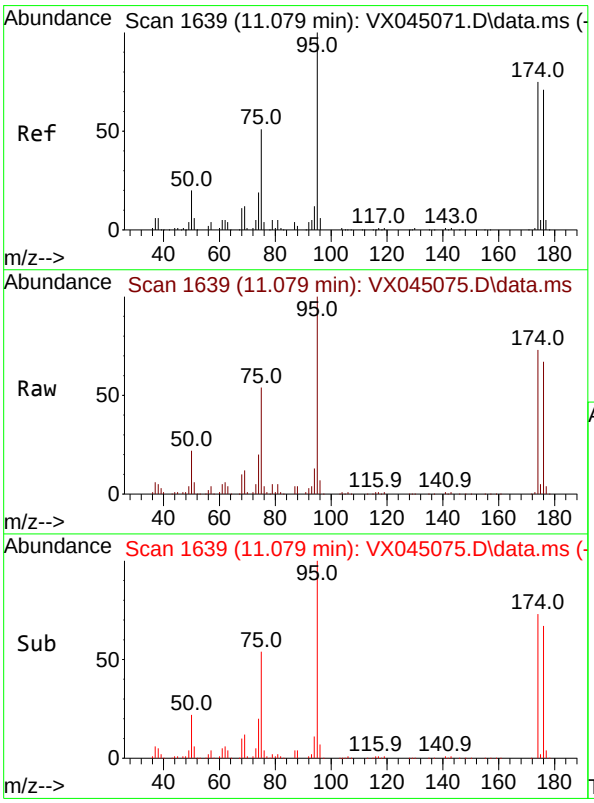
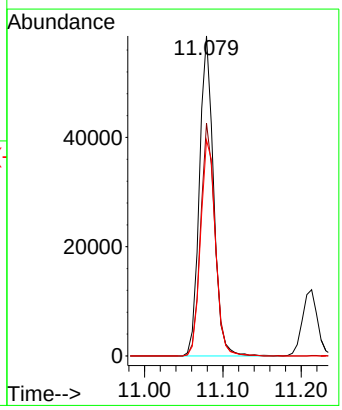
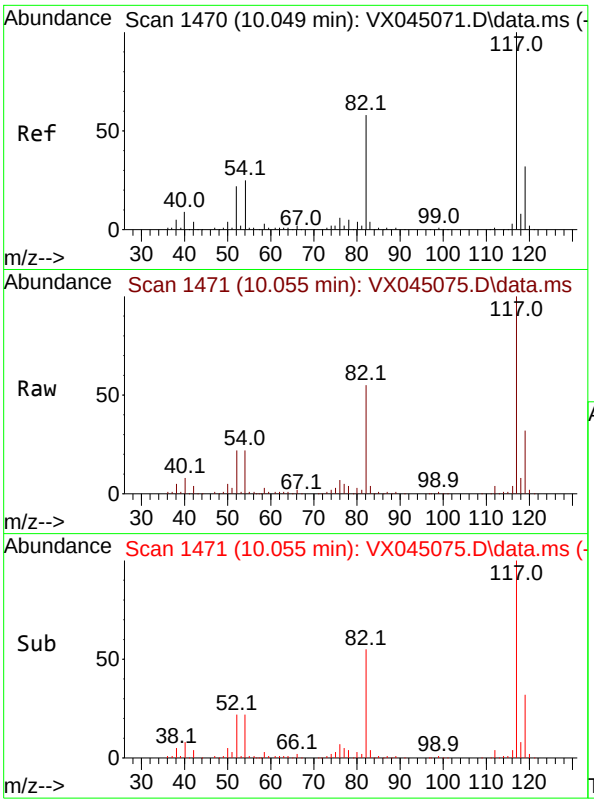



#62
4-Bromofluorobenzene
Concen: 49.240 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 95 Resp: 73162

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 74.0 | 0.0 | 148.2 |
| 176 | 71.3 | 0.0 | 141.4 |

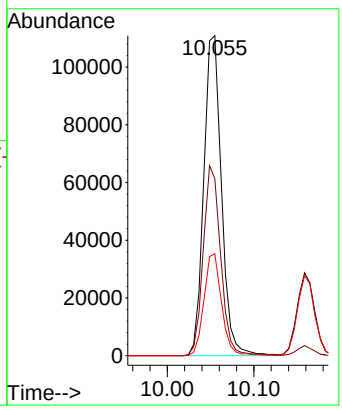





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.055 min Scan# 14
Delta R.T. 0.006 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:117 Resp: 15779

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 55.3 | 46.3 | 69.5 |
| 119 | 31.9 | 25.7 | 38.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

**Manual Integrations APPROVED**

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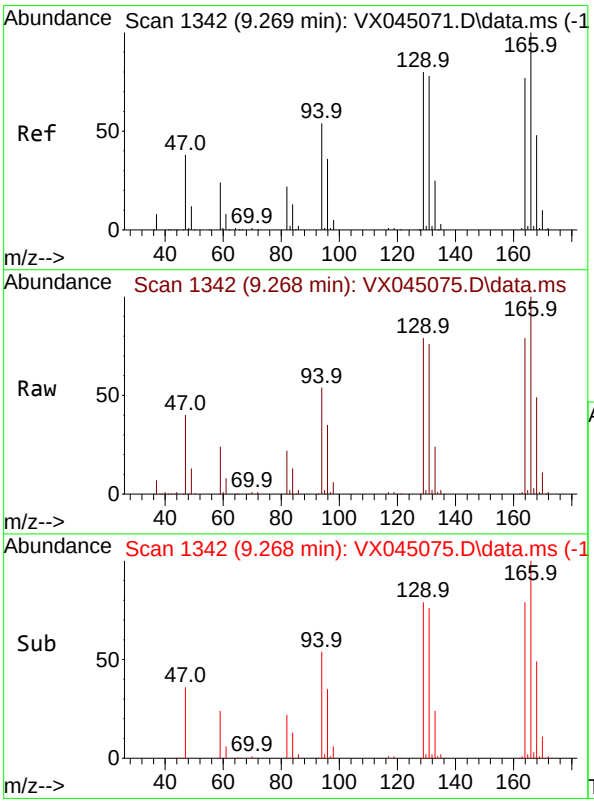
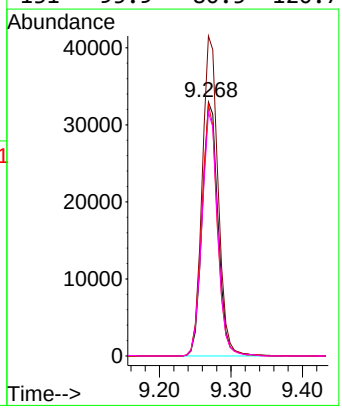
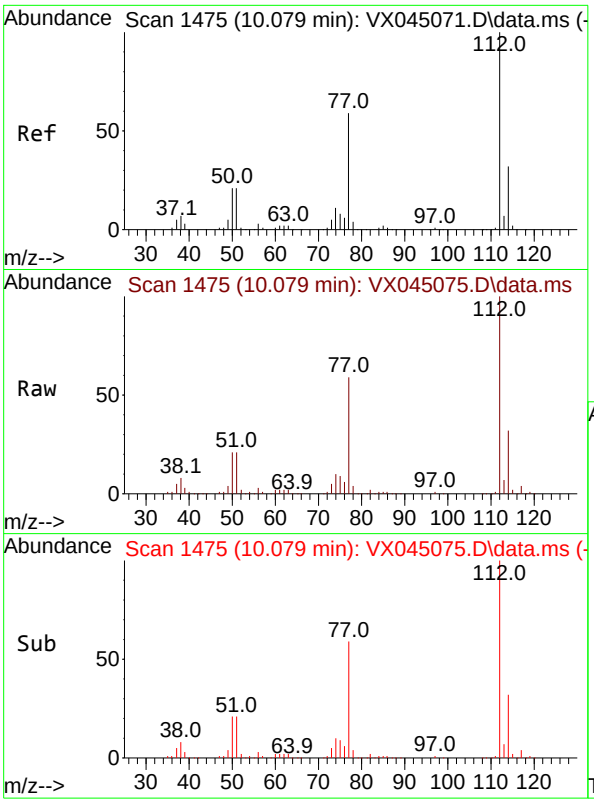



#64
Tetrachloroethene
Concen: 50.126 ug/l
RT: 9.268 min Scan# 1342
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:164 Resp: 50659

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 126.0 | 103.6 | 155.4 |
| 129 | 99.0 | 82.7 | 124.1 |
| 131 | 95.9 | 80.5 | 120.7 |

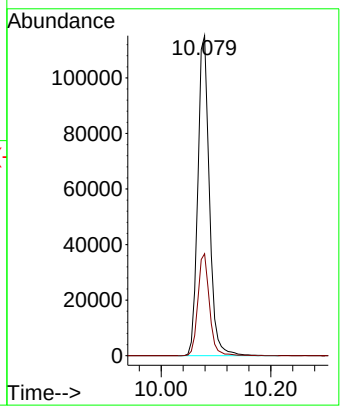





#65
Chlorobenzene
Concen: 50.580 ug/l
RT: 10.079 min Scan# 14
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:112 Resp: 16888

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 31.9 | 26.0 | 39.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

**Manual Integrations APPROVED**

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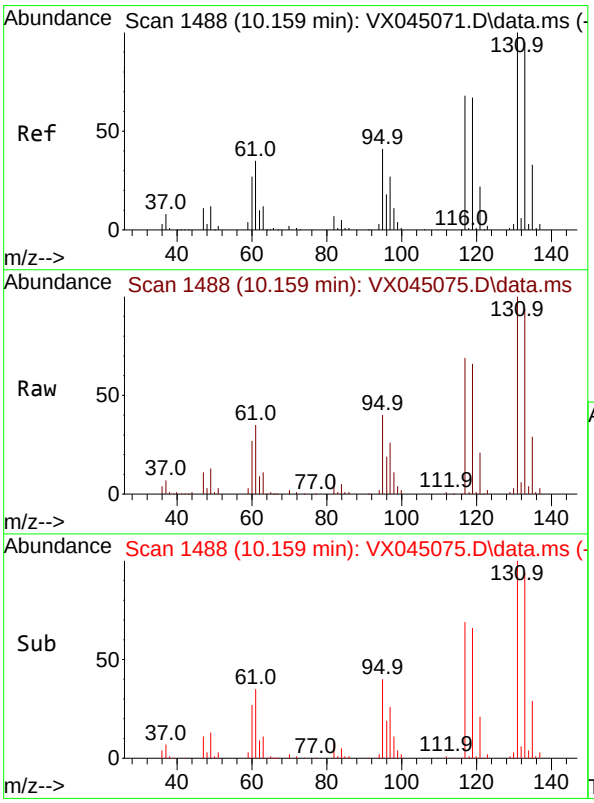
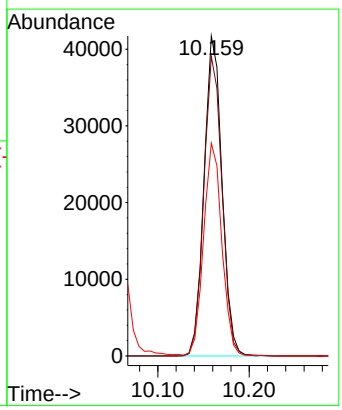
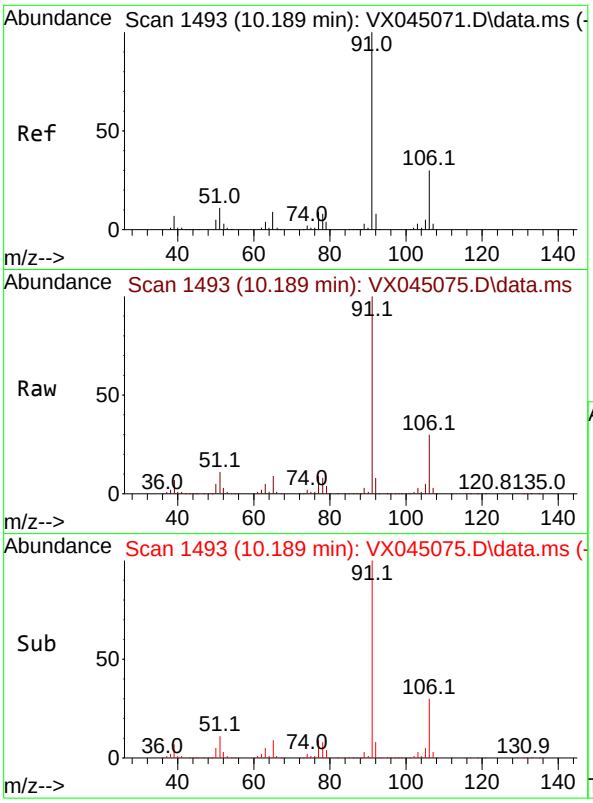



#66
1,1,1,2-Tetrachloroethane
Concen: 51.102 ug/l
RT: 10.159 min Scan# 1488
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:131 Resp: 56822

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 94.9 | 48.6 | 145.9 |
| 119 | 67.6 | 33.9 | 101.7 |

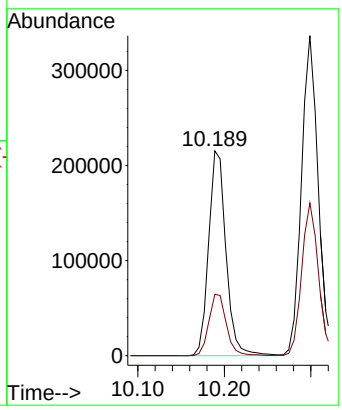





#67
Ethyl Benzene
Concen: 51.621 ug/l
RT: 10.189 min Scan# 14
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 91 Resp: 30032

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 30.0 | 23.9 | 35.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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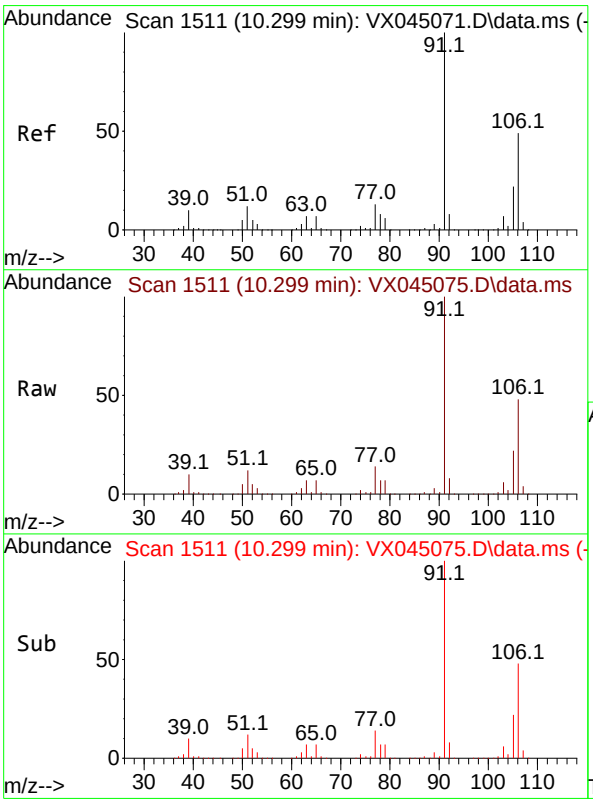
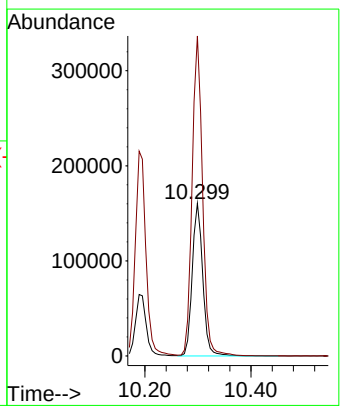
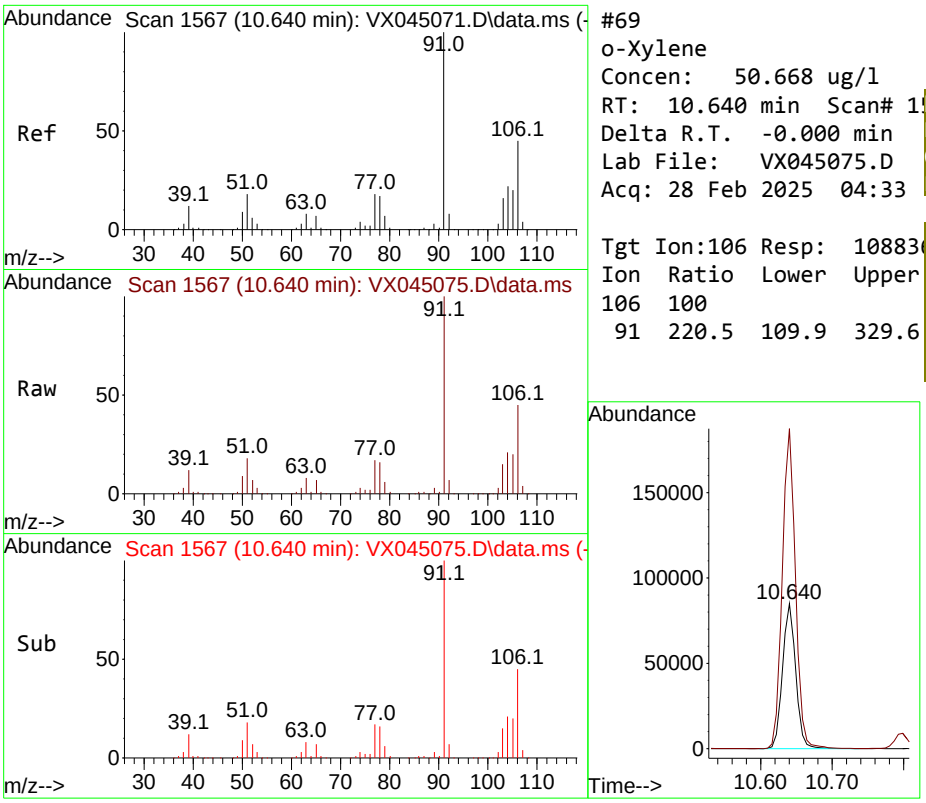



#68
m/p-Xylenes
Concen: 103.454 ug/l
RT: 10.299 min Scan# 1511
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:106 Resp: 220335

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 207.8 | 165.4 | 248.0 |






#69
o-Xylene
Concen: 50.668 ug/l
RT: 10.640 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:106 Resp: 10883

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 220.5 | 109.9 | 329.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

**Manual Integrations APPROVED**

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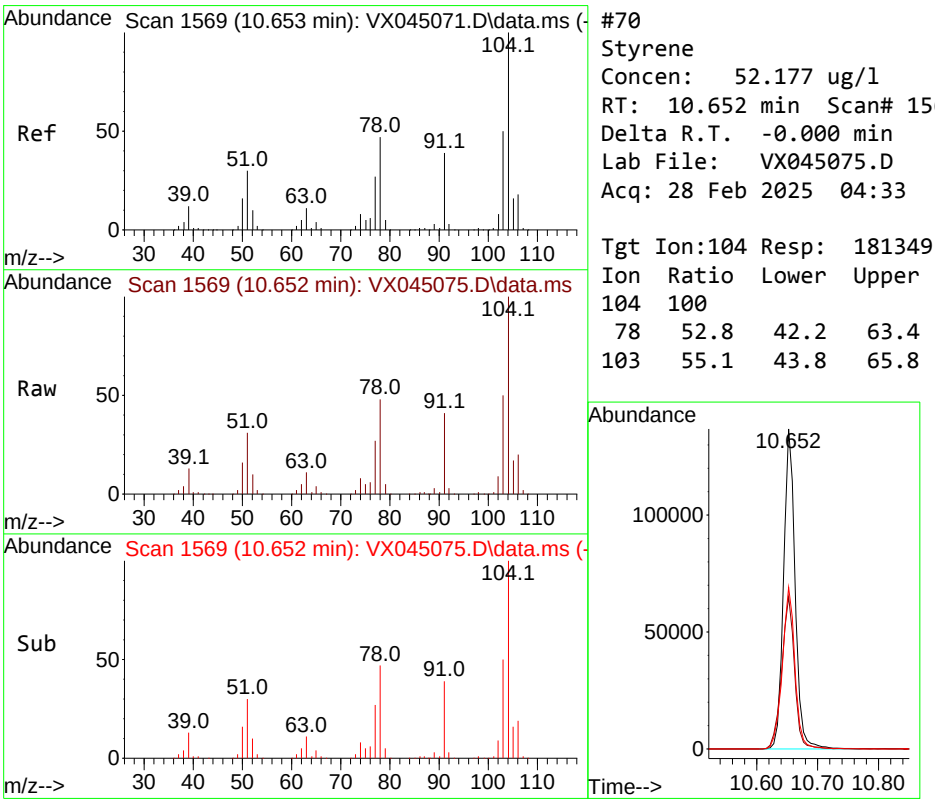
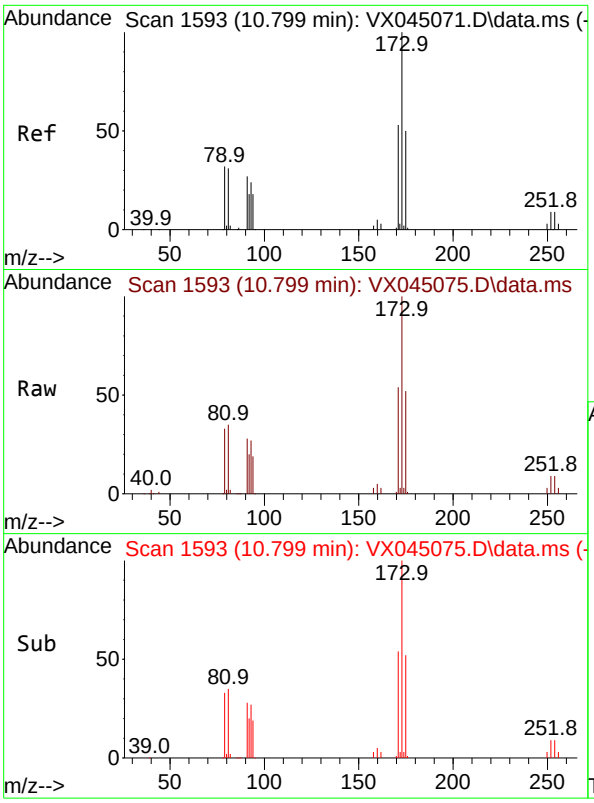



#70
Styrene
Concen: 52.177 ug/l
RT: 10.652 min Scan# 1569
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:104 Resp: 181349

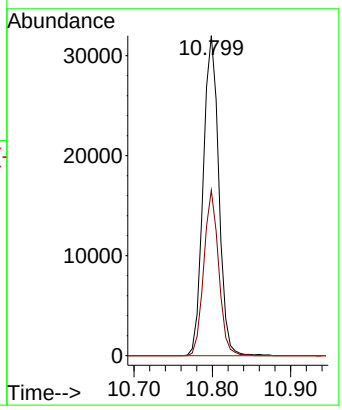
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 52.8 | 42.2 | 63.4 |
| 103 | 55.1 | 43.8 | 65.8 |




#71
Bromoform
Concen: 52.636 ug/l
RT: 10.799 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:173 Resp: 4413

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 49.3 | 24.6 | 73.6 |
| 254 | 0.0 | 0.0 | 0.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

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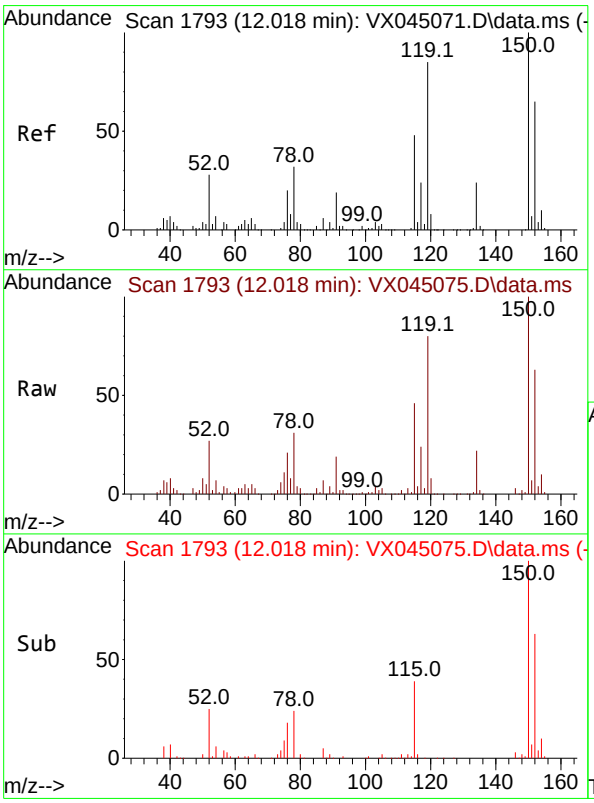
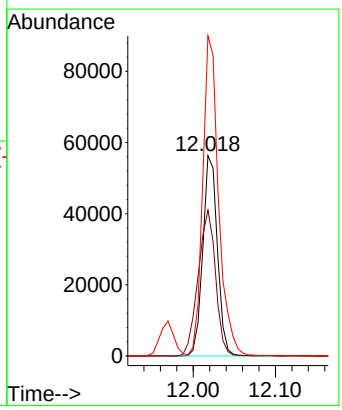
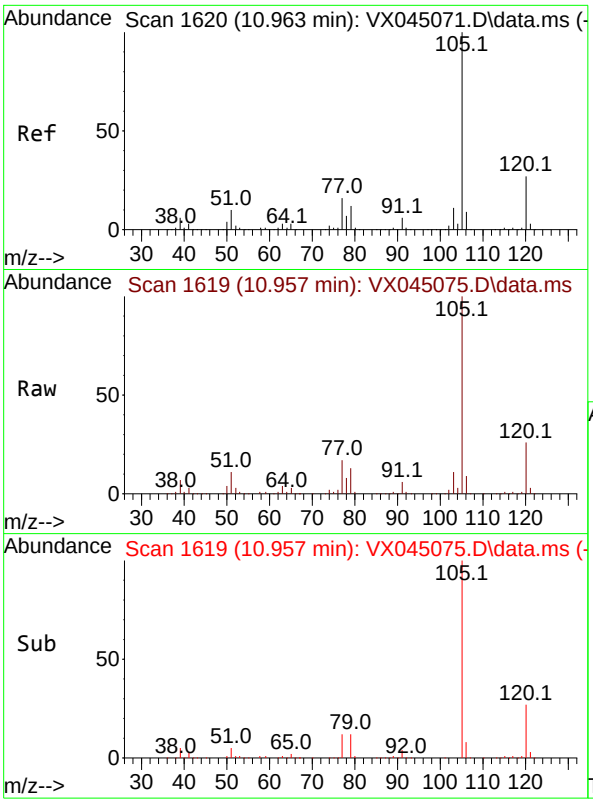



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.018 min Scan# 1793
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:152 Resp: 69357

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 86.9 | 44.2 | 132.6 |
| 150 | 174.3 | 0.0 | 349.0 |

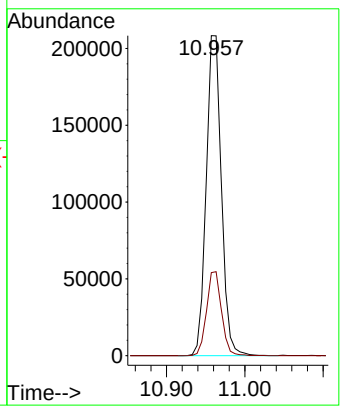





#73
Isopropylbenzene
Concen: 51.589 ug/l
RT: 10.957 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:105 Resp: 27927

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.9 | 13.2 | 39.5 |




**Instrument :**
MSVOA_X
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ICVVX022825

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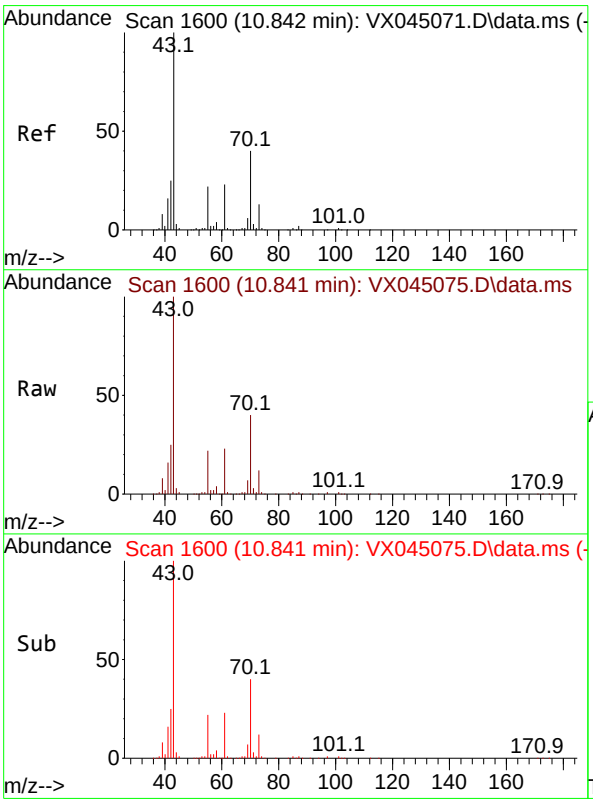
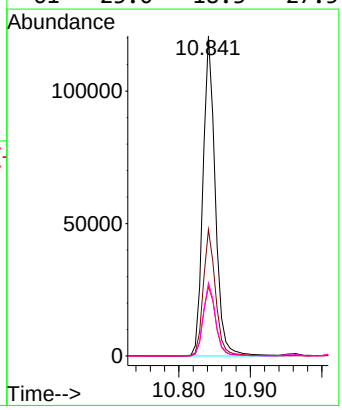
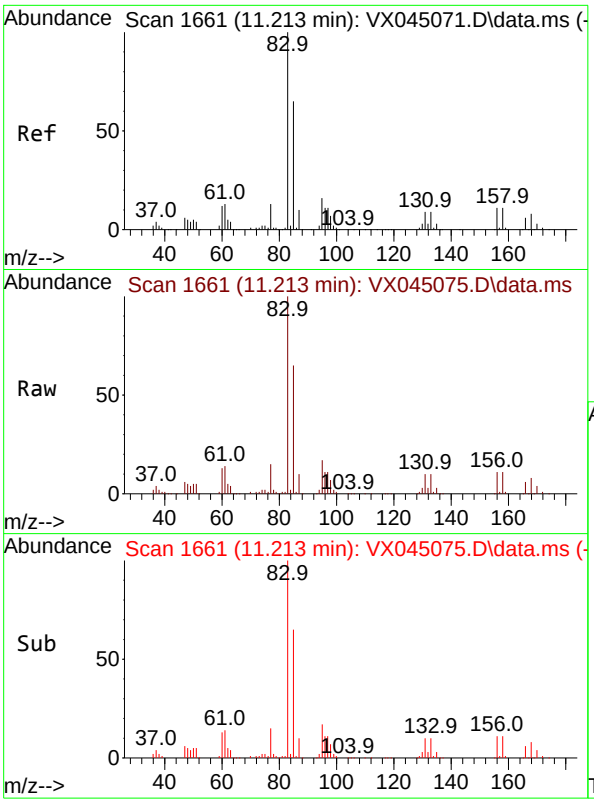



#74
N-amyl acetate
Concen: 56.851 ug/l
RT: 10.841 min Scan# 1600
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 43 Resp: 144412

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 39.5 | 31.8 | 47.6 |
| 55 | 22.3 | 18.3 | 27.5 |
| 61 | 23.0 | 18.3 | 27.5 |

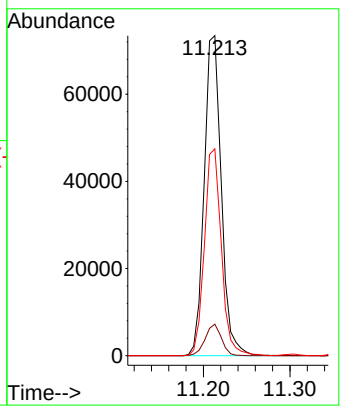





#75
1,1,2,2-Tetrachloroethane
Concen: 50.741 ug/l
RT: 11.213 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 83 Resp: 10080

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 9.4 | 4.5 | 13.4 |
| 85 | 64.0 | 31.7 | 95.1 |




**Instrument :**
MSVOA_X
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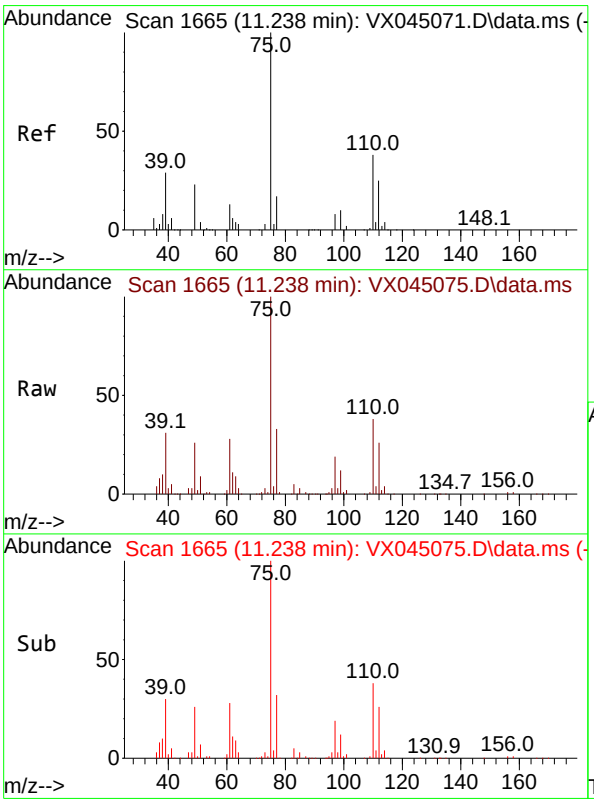
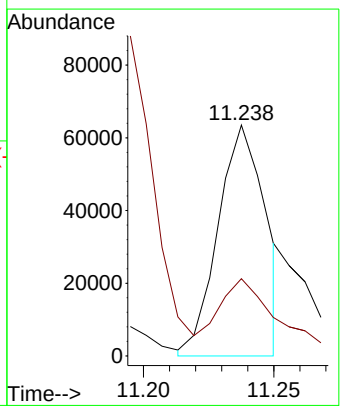
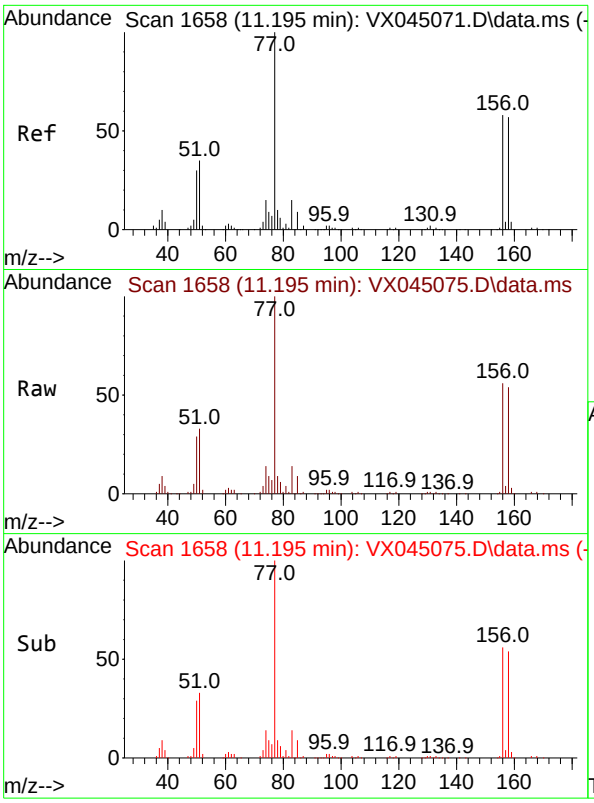



#76
1,2,3-Trichloropropane
Concen: 49.940 ug/l m
RT: 11.238 min Scan# 1665
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 75 Resp: 80618

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 42.5 | 20.7 | 62.1 |

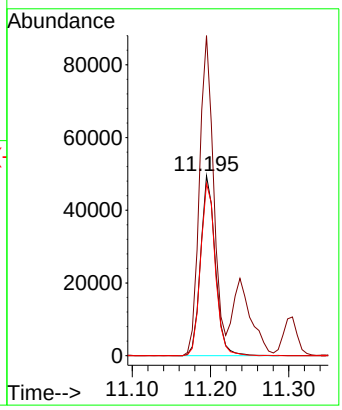





#77
Bromobenzene
Concen: 50.360 ug/l
RT: 11.195 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:156 Resp: 6432

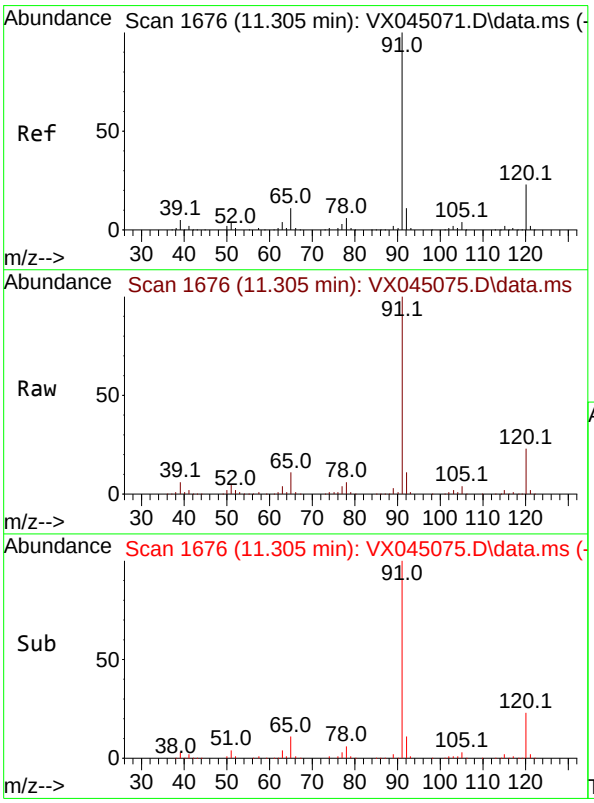
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 172.1 | 85.8 | 257.4 |
| 158 | 96.5 | 48.4 | 145.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

**Manual Integrations APPROVED**

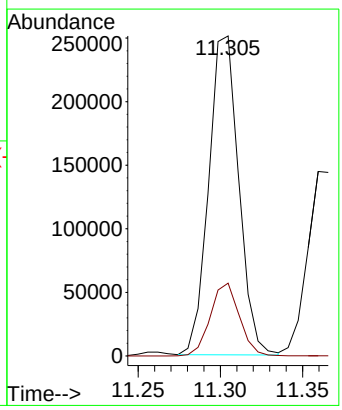
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

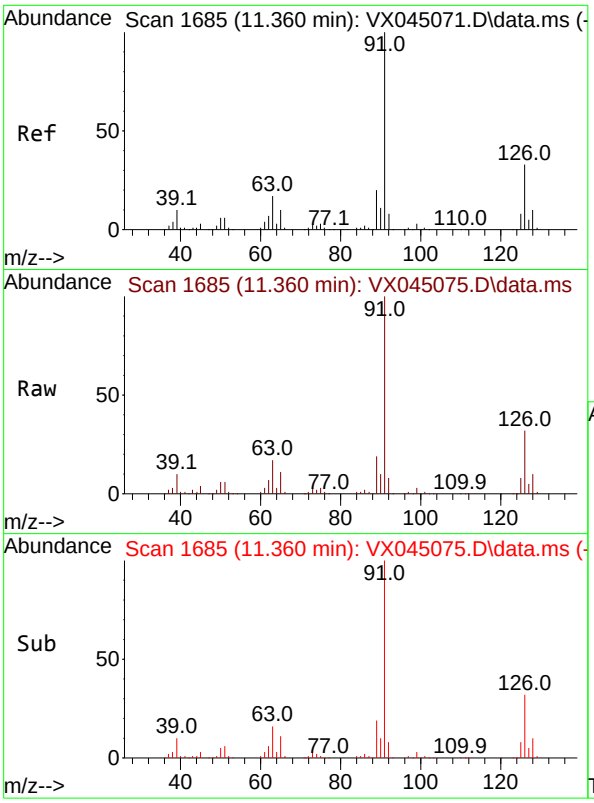



#78
n-propylbenzene
Concen: 52.203 ug/l
RT: 11.305 min Scan# 1676
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 91 Resp: 319235

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.2 | 11.2 | 33.6 |

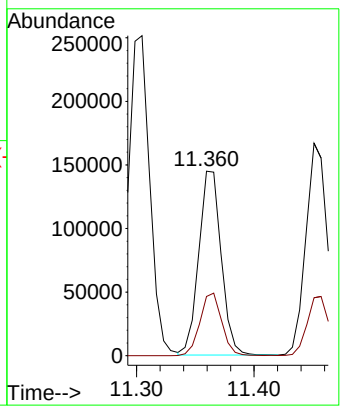





#79
2-Chlorotoluene
Concen: 49.338 ug/l
RT: 11.360 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 91 Resp: 19215

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 33.1 | 16.4 | 49.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/28/2025
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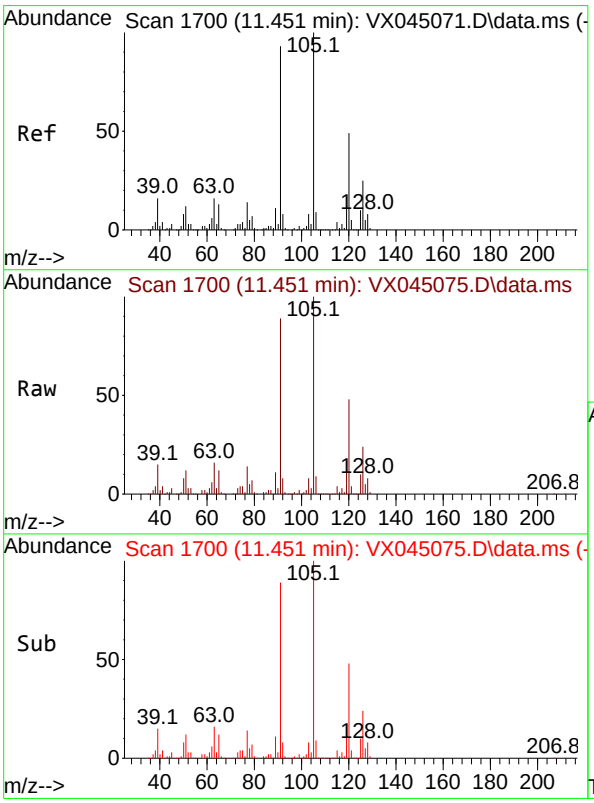
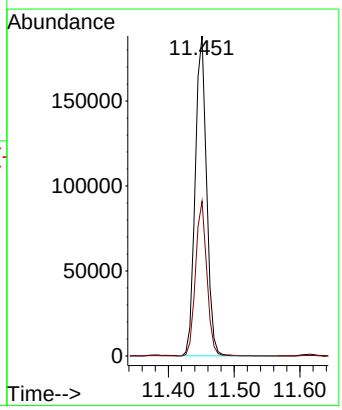
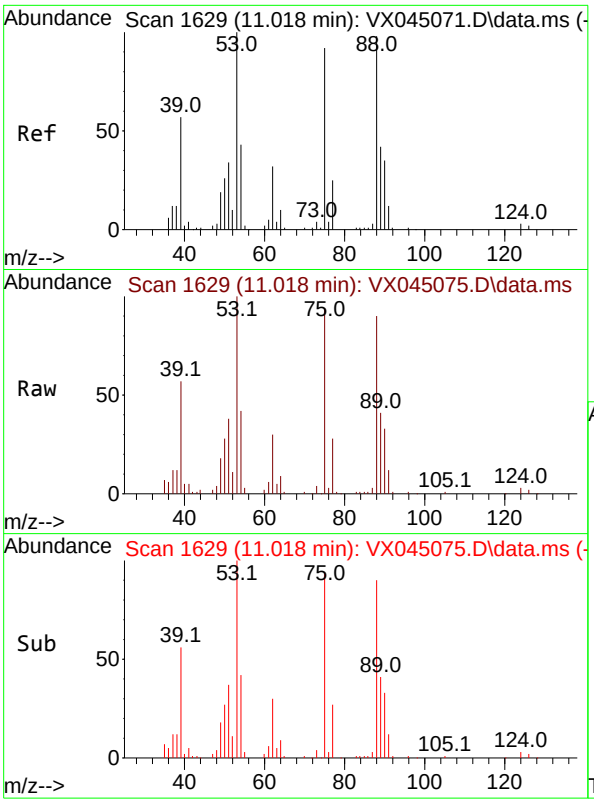



#80
1,3,5-Trimethylbenzene
Concen: 51.544 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:105 Resp: 225622

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 48.0 | 24.1 | 72.2 |






#81
trans-1,4-Dichloro-2-butene
Concen: 50.757 ug/l
RT: 11.018 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 75 Resp: 2394

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 111.4 | 88.5 | 132.7 |
| 89 | 45.8 | 36.2 | 54.4 |

**Instrument :**
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ICVVX022825

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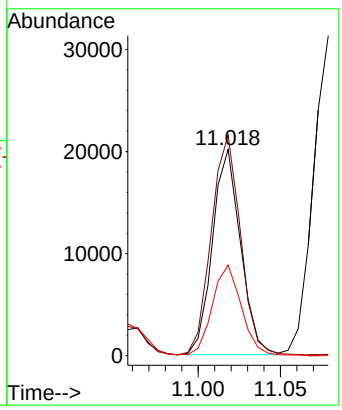
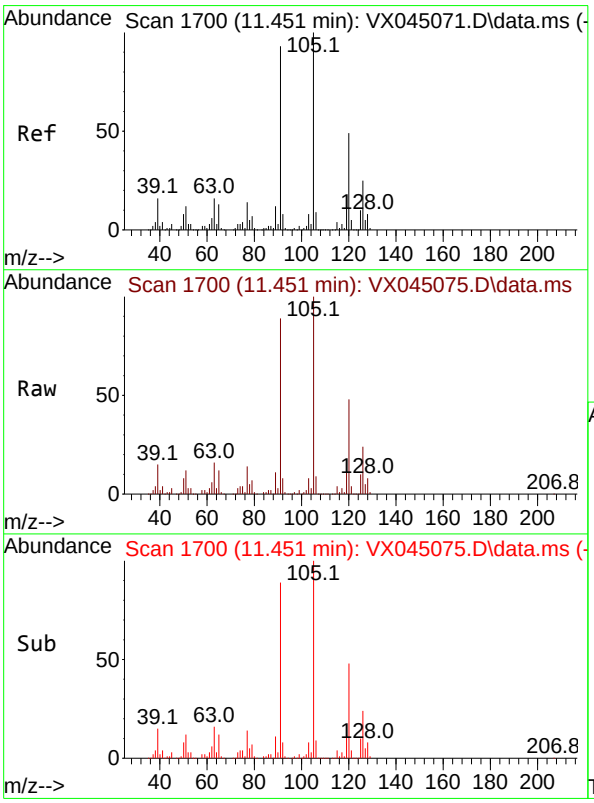
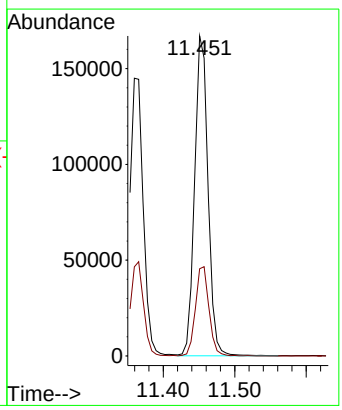


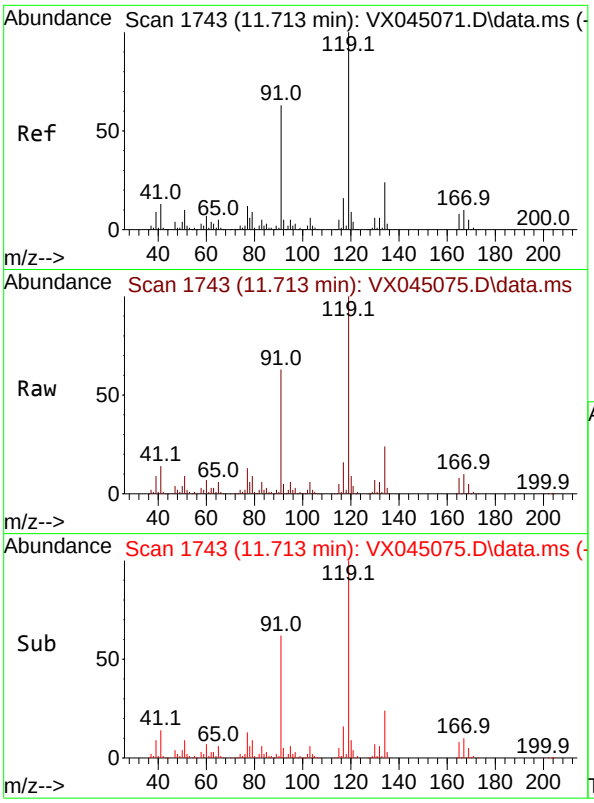




#82
4-Chlorotoluene
Concen: 51.009 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 91 Resp: 216511

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 28.3 | 14.1 | 42.4 |

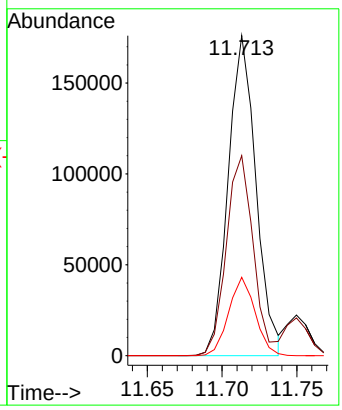





#83
tert-Butylbenzene
Concen: 50.552 ug/l
RT: 11.713 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:119 Resp: 22735

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 61.1 | 30.7 | 92.1 |
| 134 | 23.4 | 11.7 | 35.0 |

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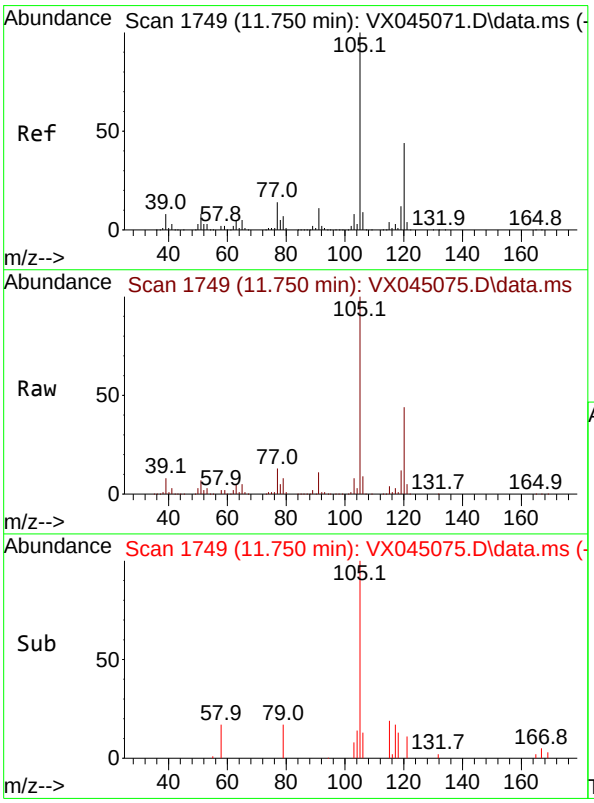
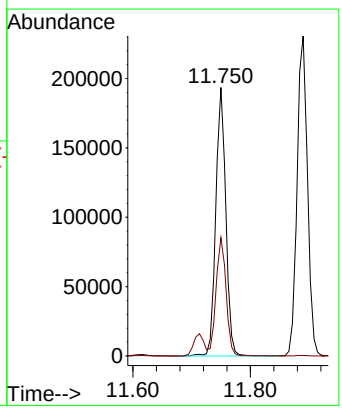
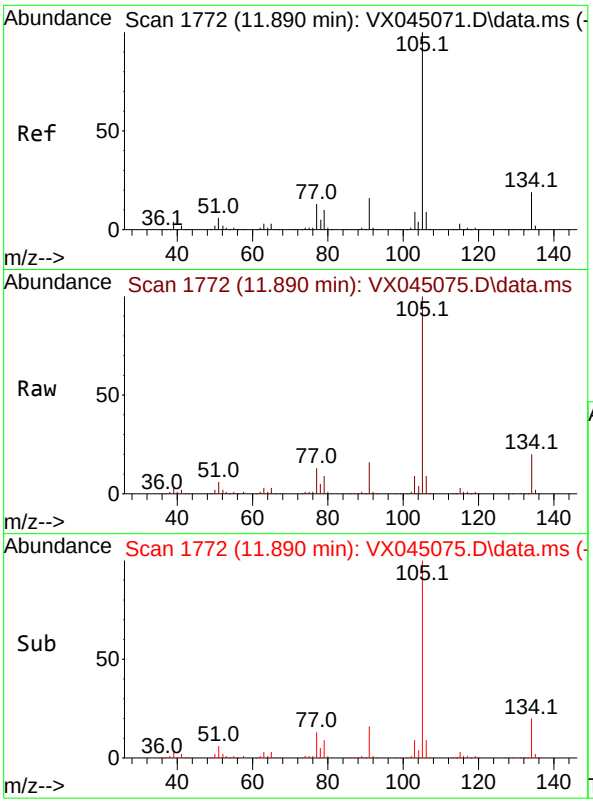



#84
1,2,4-Trimethylbenzene
Concen: 51.932 ug/l
RT: 11.750 min Scan# 1749
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:105 Resp: 228729

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 44.3 | 22.1 | 66.1 |






#85
sec-Butylbenzene
Concen: 52.703 ug/l
RT: 11.890 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:105 Resp: 28393

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.6 | 9.8 | 29.4 |

**Instrument :**
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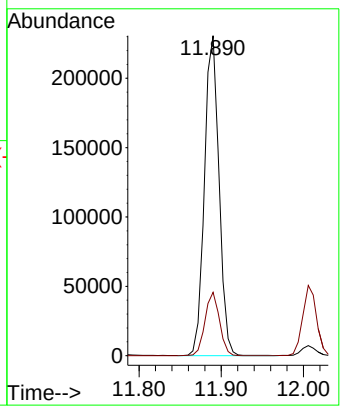
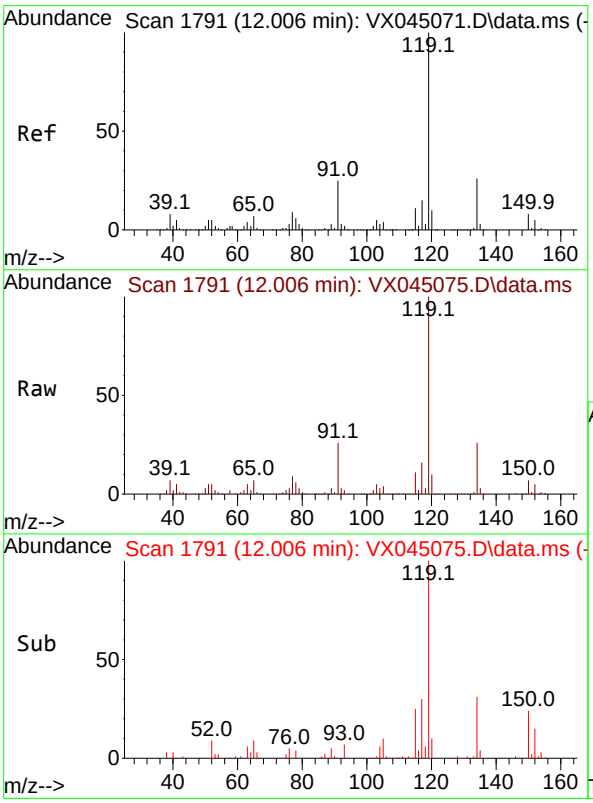
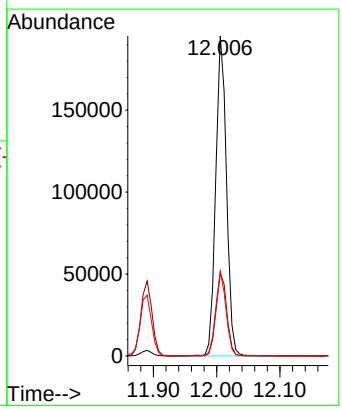


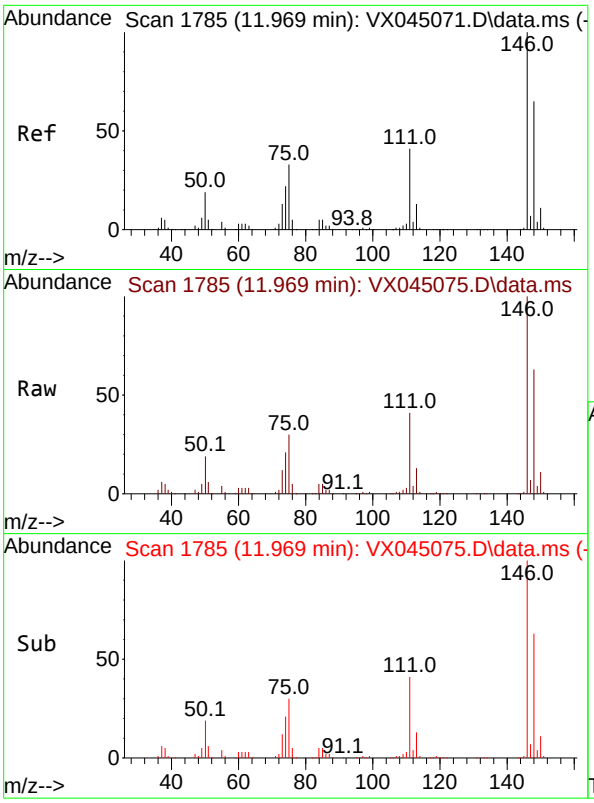




#86
p-Isopropyltoluene
Concen: 52.803 ug/l
RT: 12.006 min Scan# 1791
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:119 Resp: 229894

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.9 | 12.9 | 38.6 |
| 91 | 25.3 | 12.7 | 38.0 |

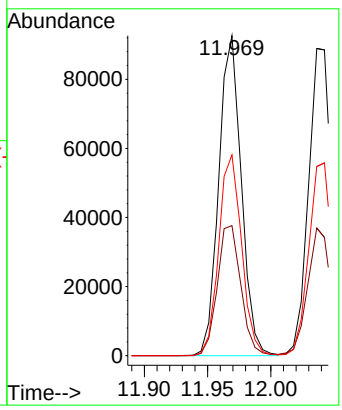





#87
1,3-Dichlorobenzene
Concen: 50.372 ug/l
RT: 11.969 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:146 Resp: 11477

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.5 | 21.1 | 63.4 |
| 148 | 63.6 | 31.9 | 95.7 |

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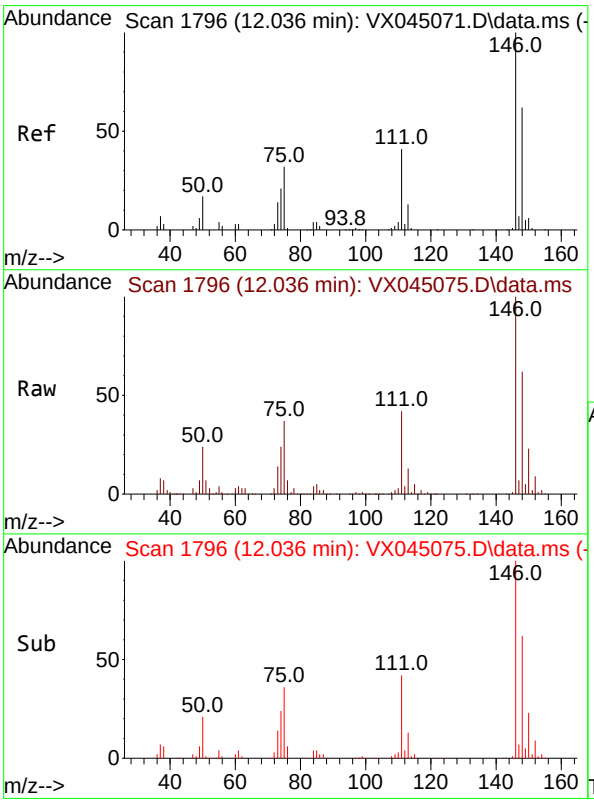
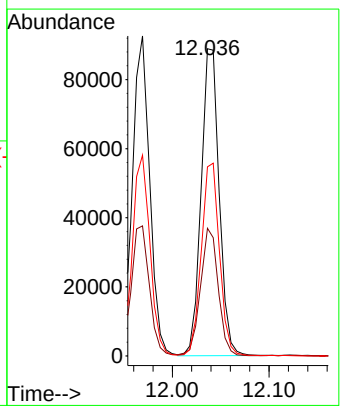
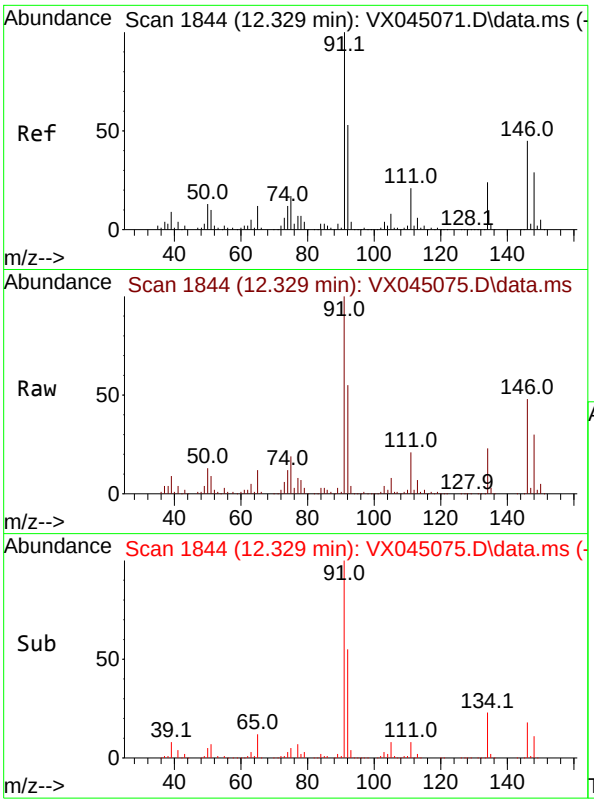



#88
1,4-Dichlorobenzene
Concen: 50.097 ug/l
RT: 12.036 min Scan# 1796
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:146 Resp: 115486

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 41.0 | 20.2 | 60.5 |
| 148 | 63.0 | 31.9 | 95.9 |

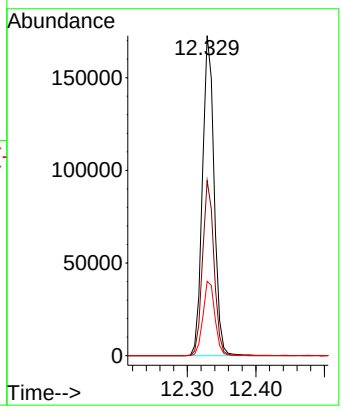





#89
n-Butylbenzene
Concen: 54.662 ug/l
RT: 12.329 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 91 Resp: 20497

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 53.8 | 26.7 | 80.0 |
| 134 | 23.9 | 12.2 | 36.6 |

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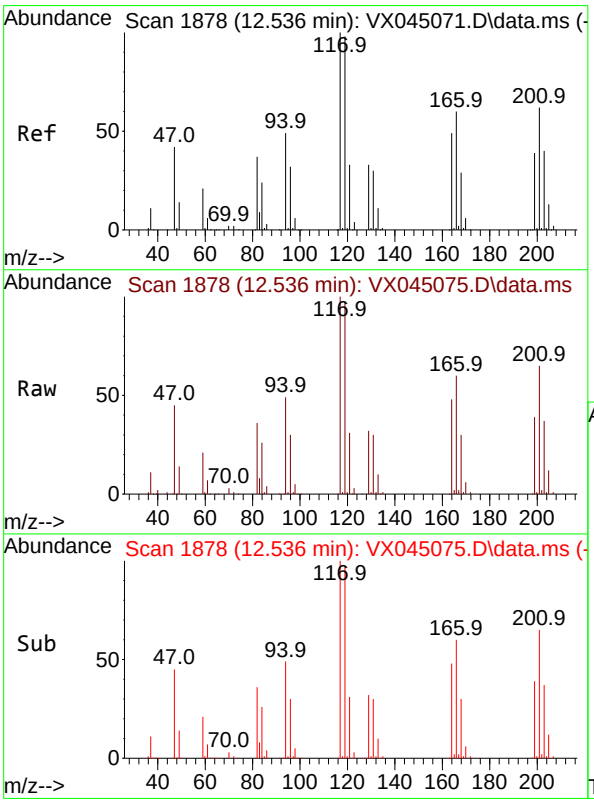
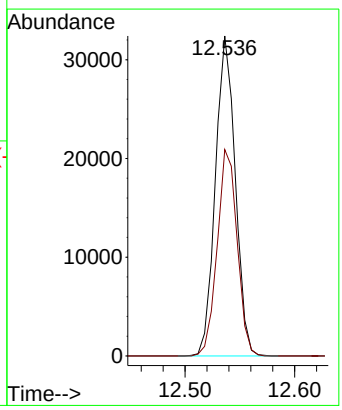
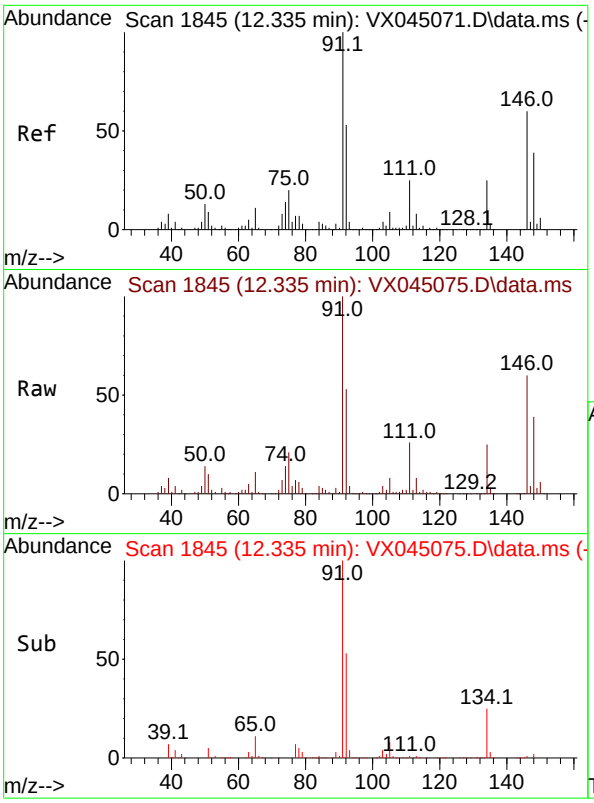



#90
Hexachloroethane
Concen: 51.866 ug/l
RT: 12.536 min Scan# 1878
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:117 Resp: 40844

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 64.7 | 31.9 | 95.9 |

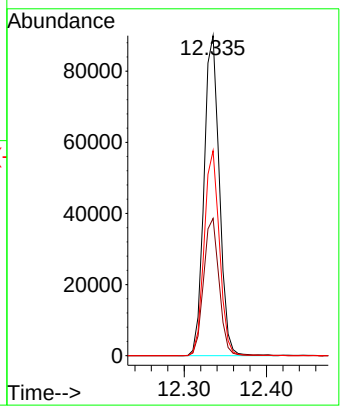





#91
1,2-Dichlorobenzene
Concen: 50.899 ug/l
RT: 12.335 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:146 Resp: 11634

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.2 | 21.6 | 65.0 |
| 148 | 63.9 | 31.9 | 95.9 |

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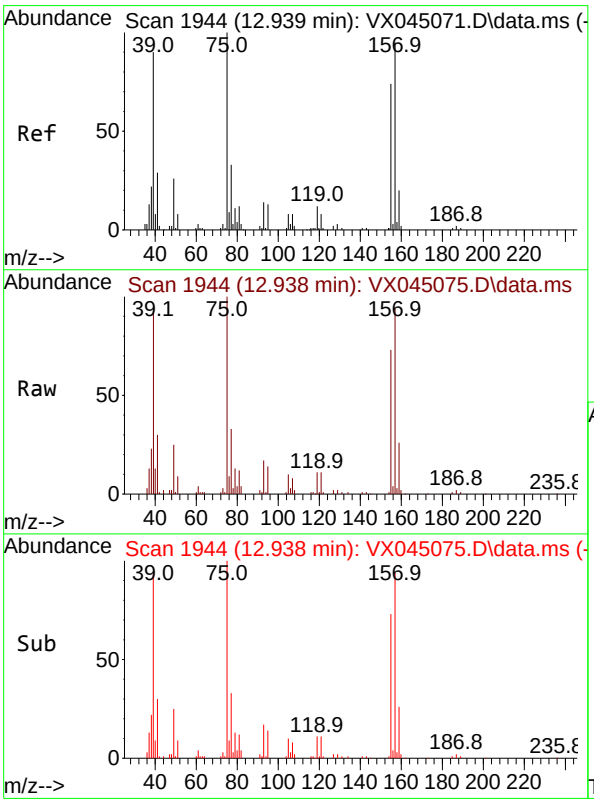
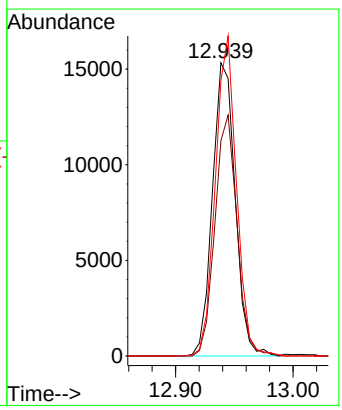
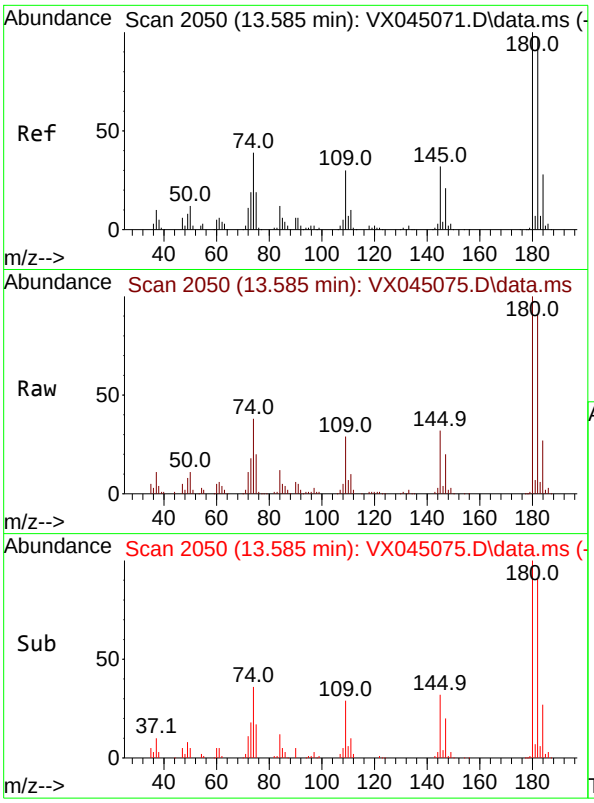



#92
1,2-Dibromo-3-Chloropropane
Concen: 53.199 ug/l
RT: 12.938 min Scan# 1944
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion: 75 Resp: 20589

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 79.8 | 39.6 | 118.7 |
| 157 | 101.7 | 51.1 | 153.4 |

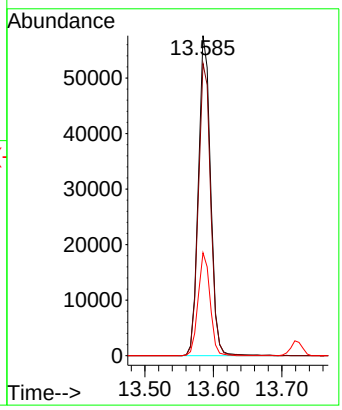





#93
1,2,4-Trichlorobenzene
Concen: 54.834 ug/l
RT: 13.585 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:180 Resp: 7136

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 92.4 | 47.3 | 141.9 |
| 145 | 31.6 | 16.3 | 48.9 |

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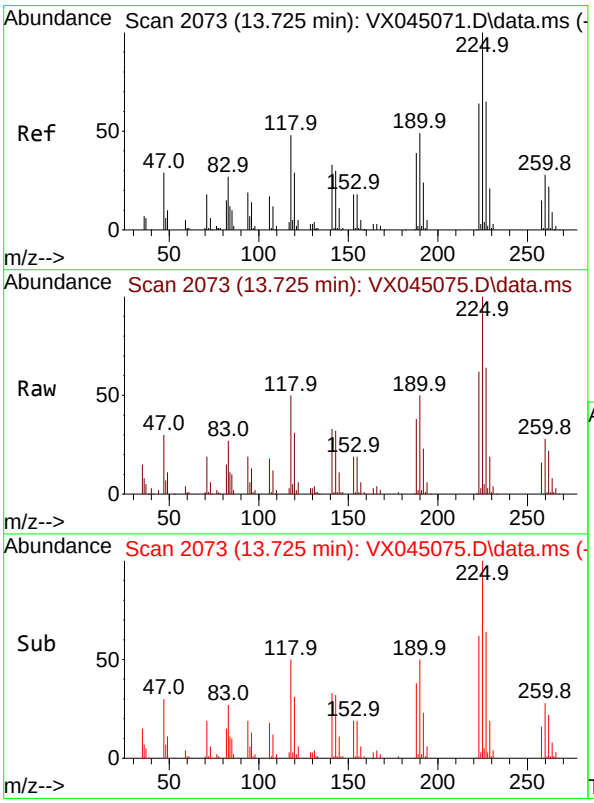
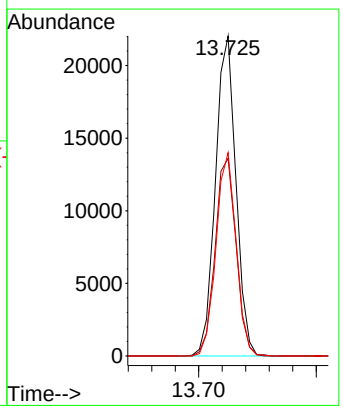
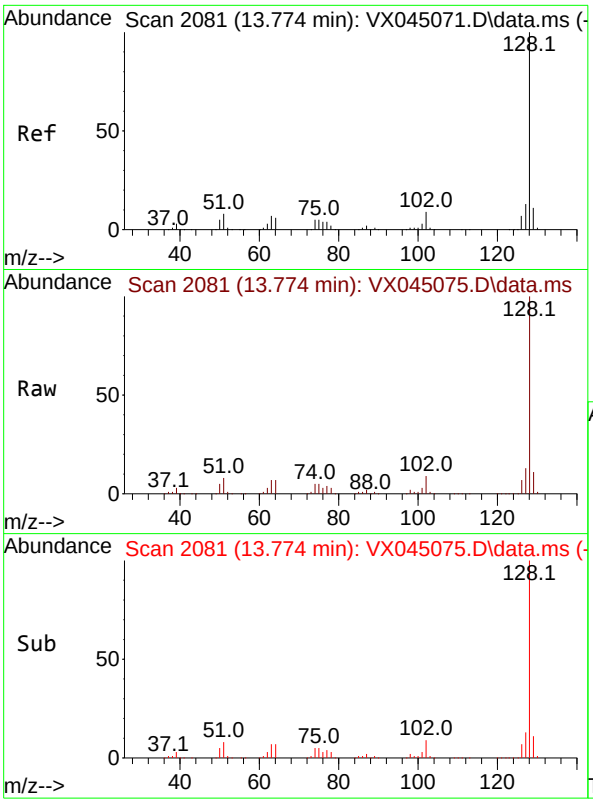



#94
Hexachlorobutadiene
Concen: 50.032 ug/l
RT: 13.725 min Scan# 2073
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:225 Resp: 26697

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 63.2 | 31.9 | 95.7 |
| 227 | 62.4 | 31.4 | 94.0 |

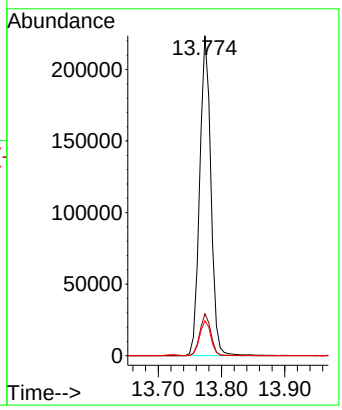





#95
Naphthalene
Concen: 55.163 ug/l
RT: 13.774 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:128 Resp: 27584

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.8 | 10.3 | 15.5 |
| 129 | 10.9 | 8.7 | 13.1 |

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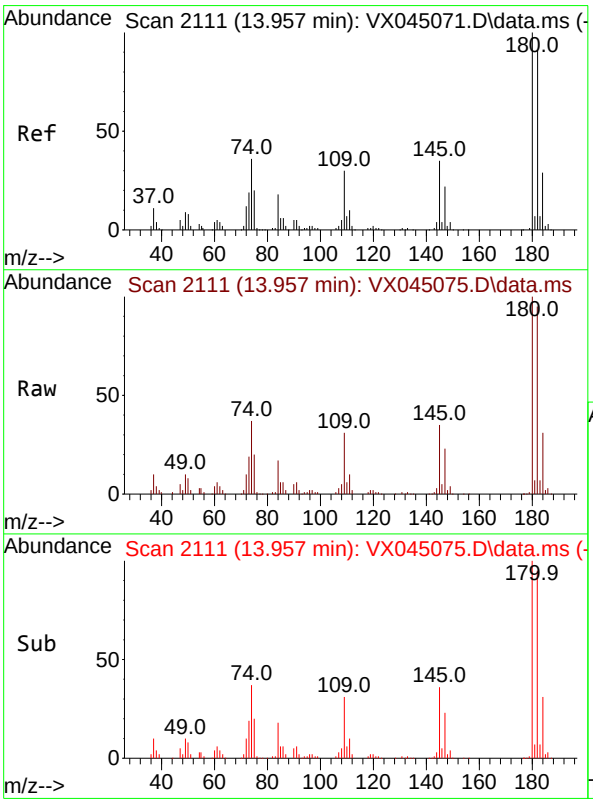
**ClientSampleId :**
ICVVX022825

**Manual Integrations**
**APPROVED**

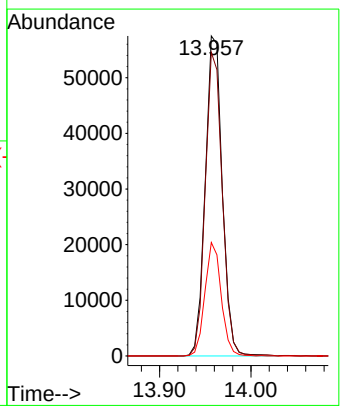
Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025




#96
1,2,3-Trichlorobenzene
Concen: 54.049 ug/l
RT: 13.957 min Scan# 2111
Delta R.T. -0.000 min
Lab File: VX045075.D
Acq: 28 Feb 2025 04:33

Tgt Ion:180 Resp: 74211

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 94.5 | 47.5 | 142.6 |
| 145 | 33.9 | 17.0 | 50.9 |



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045075.D
Acq On : 28 Feb 2025 04:33
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 24 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

Quant Time: Feb 28 06:55:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | Pentafluorobenzene | 1.000 | 1.000 | 0.0 | 98 | 0.00 |
| 2 | T | Dichlorodifluoromethane | 0.629 | 0.603 | 4.1 | 95 | 0.00 |
| 3 | P | Chloromethane | 0.770 | 0.750 | 2.6 | 98 | 0.00 |
| 4 | C | Vinyl Chloride | 0.764 | 0.757 | 0.9# | 98 | 0.00 |
| 5 | T | Bromomethane | 0.300 | 0.277 | 7.7 | 93 | 0.00 |
| 6 | T | Chloroethane | 0.352 | 0.296 | 15.9 | 78 | 0.00 |
| 7 | T | Trichlorofluoromethane | 1.011 | 1.003 | 0.8 | 94 | 0.00 |
| 8 | T | Diethyl Ether | 0.396 | 0.385 | 2.8 | 98 | 0.00 |
| 9 | T | 1,1,2-Trichlorotrifluoroeth | 0.581 | 0.585 | -0.7 | 97 | 0.00 |
| 10 | T | Methyl Iodide | 0.726 | 0.734 | -1.1 | 94 | 0.00 |
| 11 | T | Tert butyl alcohol | 0.151 | 0.144 | 4.6 | 106 | 0.00 |
| 12 | CM | 1,1-Dichloroethene | 0.614 | 0.609 | 0.8# | 96 | 0.00 |
| 13 | T | Acrolein | 0.174 | 0.189 | -8.6 | 107 | 0.00 |
| 14 | T | Allyl chloride | 1.094 | 1.131 | -3.4 | 100 | 0.00 |
| 15 | T | Acrylonitrile | 0.404 | 0.413 | -2.2 | 99 | 0.00 |
| 16 | T | Acetone | 0.369 | 0.358 | 3.0 | 100 | 0.00 |
| 17 | T | Carbon Disulfide | 1.636 | 1.635 | 0.1 | 97 | 0.00 |
| 18 | T | Methyl Acetate | 0.888 | 0.893 | -0.6 | 101 | 0.00 |
| 19 | T | Methyl tert-butyl Ether | 2.061 | 2.190 | -6.3 | 103 | 0.00 |
| 20 | T | Methylene Chloride | 0.731 | 0.726 | 0.7 | 102 | 0.00 |
| 21 | T | trans-1,2-Dichloroethene | 0.607 | 0.621 | -2.3 | 97 | 0.00 |
| 22 | T | Diisopropyl ether | 2.224 | 2.400 | -7.9 | 103 | 0.00 |
| 23 | T | Vinyl Acetate | 1.856 | 2.096 | -12.9 | 105 | 0.00 |
| 24 | P | 1,1-Dichloroethane | 1.247 | 1.276 | -2.3 | 101 | 0.00 |
| 25 | T | 2-Butanone | 0.555 | 0.587 | -5.8 | 100 | 0.00 |
| 26 | T | 2,2-Dichloropropane | 0.585 | 0.578 | 1.2 | 95 | 0.00 |
| 27 | T | cis-1,2-Dichloroethene | 0.749 | 0.773 | -3.2 | 100 | 0.00 |
| 28 | T | Bromochloromethane | 0.594 | 0.599 | -0.8 | 98 | 0.00 |
| 29 | T | Tetrahydrofuran | 0.373 | 0.385 | -3.2 | 102 | 0.00 |
| 30 | C | Chloroform | 1.239 | 1.244 | -0.4# | 98 | 0.00 |
| 31 | T | Cyclohexane | 1.082 | 1.085 | -0.3 | 96 | 0.00 |
| 32 | T | 1,1,1-Trichloroethane | 1.000 | 1.019 | -1.9 | 98 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 | 0.795 | 0.800 | -0.6 | 104 | 0.00 |
| 34 | I | 1,4-Difluorobenzene | 1.000 | 1.000 | 0.0 | 99 | 0.00 |
| 35 | S | Dibromofluoromethane | 0.334 | 0.340 | -1.8 | 103 | 0.00 |
| 36 | T | 1,1-Dichloropropene | 0.459 | 0.447 | 2.6 | 95 | 0.00 |
| 37 | T | Ethyl Acetate | 0.591 | 0.610 | -3.2 | 100 | 0.00 |
| 38 | T | Carbon Tetrachloride | 0.465 | 0.460 | 1.1 | 98 | 0.00 |
| 39 | T | Methylcyclohexane | 0.549 | 0.562 | -2.4 | 95 | 0.00 |
| 40 | TM | Benzene | 1.448 | 1.482 | -2.3 | 98 | 0.00 |
| 41 | T | Methacrylonitrile | 0.319 | 0.341 | -6.9 | 99 | 0.00 |
| 42 | TM | 1,2-Dichloroethane | 0.521 | 0.529 | -1.5 | 99 | 0.00 |
| 43 | T | Isopropyl Acetate | 0.874 | 0.951 | -8.8 | 102 | 0.00 |
| 44 | TM | Trichloroethene | 0.340 | 0.333 | 2.1 | 97 | 0.00 |
| 45 | C | 1,2-Dichloropropane | 0.372 | 0.380 | -2.2# | 102 | 0.00 |
| 46 | T | Dibromomethane | 0.263 | 0.272 | -3.4 | 100 | 0.00 |
| 47 | T | Bromodichloromethane | 0.516 | 0.526 | -1.9 | 99 | 0.00 |
| 48 | T | Methyl methacrylate | 0.438 | 0.474 | -8.2 | 102 | 0.00 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045075.D
Acq On : 28 Feb 2025 04:33
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 24 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

Quant Time: Feb 28 06:55:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 49 | T | 1,4-Dioxane | 0.009 | 0.010 | -11.1 | 102 | 0.00 |
| 50 | S | Toluene-d8 | 1.212 | 1.221 | -0.7 | 100 | 0.00 |
| 51 | T | 4-Methyl-2-Pentanone | 0.587 | 0.610 | -3.9 | 99 | 0.00 |
| 52 | CM | Toluene | 0.849 | 0.867 | -2.1# | 96 | 0.00 |
| 53 | T | t-1,3-Dichloropropene | 0.431 | 0.468 | -8.6 | 99 | 0.00 |
| 54 | T | cis-1,3-Dichloropropene | 0.503 | 0.531 | -5.6 | 98 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 0.350 | 0.351 | -0.3 | 98 | 0.00 |
| 56 | T | Ethyl methacrylate | 0.532 | 0.575 | -8.1 | 100 | 0.00 |
| 57 | T | 1,3-Dichloropropane | 0.605 | 0.621 | -2.6 | 99 | 0.00 |
| 58 | T | 2-Chloroethyl Vinyl ether | 0.259 | 0.286 | -10.4 | 100 | 0.00 |
| 59 | T | 2-Hexanone | 0.425 | 0.451 | -6.1 | 100 | 0.00 |
| 60 | T | Dibromochloromethane | 0.366 | 0.376 | -2.7 | 97 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 0.349 | 0.360 | -3.2 | 100 | 0.00 |
| 62 | S | 4-Bromofluorobenzene | 0.402 | 0.396 | 1.5 | 98 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 97 | 0.00 |
| 64 | T | Tetrachloroethene | 0.320 | 0.321 | -0.3 | 96 | 0.00 |
| 65 | PM | Chlorobenzene | 1.058 | 1.070 | -1.1 | 95 | 0.00 |
| 66 | T | 1,1,1,2-Tetrachloroethane | 0.352 | 0.360 | -2.3 | 99 | 0.00 |
| 67 | C | Ethyl Benzene | 1.843 | 1.903 | -3.3# | 95 | 0.00 |
| 68 | T | m/p-Xylenes | 0.675 | 0.698 | -3.4 | 94 | 0.00 |
| 69 | T | o-Xylene | 0.681 | 0.690 | -1.3 | 95 | 0.00 |
| 70 | T | Styrene | 1.101 | 1.149 | -4.4 | 95 | 0.00 |
| 71 | P | Bromoform | 0.266 | 0.280 | -5.3 | 99 | 0.00 |
| 72 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 97 | 0.00 |
| 73 | T | Isopropylbenzene | 3.903 | 4.027 | -3.2 | 95 | 0.00 |
| 74 | T | N-amyl acetate | 1.831 | 2.082 | -13.7 | 103 | 0.00 |
| 75 | P | 1,1,2,2-Tetrachloroethane | 1.432 | 1.453 | -1.5 | 100 | 0.00 |
| 76 | T | 1,2,3-Trichloropropane | 1.164 | 1.162 | 0.2 | 99 | 0.00 |
| 77 | T | Bromobenzene | 0.921 | 0.927 | -0.7 | 96 | 0.00 |
| 78 | T | n-propylbenzene | 4.409 | 4.603 | -4.4 | 93 | 0.00 |
| 79 | T | 2-Chlorotoluene | 2.808 | 2.770 | 1.4 | 94 | 0.00 |
| 80 | T | 1,3,5-Trimethylbenzene | 3.156 | 3.253 | -3.1 | 94 | 0.00 |
| 81 | T | trans-1,4-Dichloro-2-butene | 0.340 | 0.345 | -1.5 | 99 | 0.00 |
| 82 | T | 4-Chlorotoluene | 3.060 | 3.122 | -2.0 | 94 | 0.00 |
| 83 | T | tert-Butylbenzene | 3.242 | 3.278 | -1.1 | 95 | 0.00 |
| 84 | T | 1,2,4-Trimethylbenzene | 3.175 | 3.298 | -3.9 | 95 | 0.00 |
| 85 | T | sec-Butylbenzene | 3.884 | 4.094 | -5.4 | 95 | 0.00 |
| 86 | T | p-Isopropyltoluene | 3.139 | 3.315 | -5.6 | 94 | 0.00 |
| 87 | T | 1,3-Dichlorobenzene | 1.643 | 1.655 | -0.7 | 97 | 0.00 |
| 88 | T | 1,4-Dichlorobenzene | 1.662 | 1.665 | -0.2 | 96 | 0.00 |
| 89 | T | n-Butylbenzene | 2.703 | 2.955 | -9.3 | 95 | 0.00 |
| 90 | T | Hexachloroethane | 0.568 | 0.589 | -3.7 | 95 | 0.00 |
| 91 | T | 1,2-Dichlorobenzene | 1.648 | 1.677 | -1.8 | 98 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 0.279 | 0.297 | -6.5 | 100 | 0.00 |
| 93 | T | 1,2,4-Trichlorobenzene | 0.938 | 1.029 | -9.7 | 99 | 0.00 |
| 94 | T | Hexachlorobutadiene | 0.385 | 0.385 | 0.0 | 96 | 0.00 |
| 95 | T | Naphthalene | 3.605 | 3.977 | -10.3 | 99 | 0.00 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045075.D
Acq On : 28 Feb 2025 04:33
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 24 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

Quant Time: Feb 28 06:55:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|
| 96 T | 1,2,3-Trichlorobenzene | 0.990 | 1.070 | -8.1 | 98 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045075.D
Acq On : 28 Feb 2025 04:33
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 24 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

Quant Time: Feb 28 06:55:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | Pentafluorobenzene | 50.000 | 50.000 | 0.0 | 98 | 0.00 |
| 2 | T | Dichlorodifluoromethane | 50.000 | 47.933 | 4.1 | 95 | 0.00 |
| 3 | P | Chloromethane | 50.000 | 48.696 | 2.6 | 98 | 0.00 |
| 4 | C | Vinyl Chloride | 50.000 | 49.529 | 0.9# | 98 | 0.00 |
| 5 | T | Bromomethane | 50.000 | 46.190 | 7.6 | 93 | 0.00 |
| 6 | T | Chloroethane | 50.000 | 41.948 | 16.1 | 78 | 0.00 |
| 7 | T | Trichlorofluoromethane | 50.000 | 49.569 | 0.9 | 94 | 0.00 |
| 8 | T | Diethyl Ether | 50.000 | 48.651 | 2.7 | 98 | 0.00 |
| 9 | T | 1,1,2-Trichlorotrifluoroeth | 50.000 | 50.367 | -0.7 | 97 | 0.00 |
| 10 | T | Methyl Iodide | 50.000 | 50.541 | -1.1 | 94 | 0.00 |
| 11 | T | Tert butyl alcohol | 250.000 | 238.577 | 4.6 | 106 | 0.00 |
| 12 | CM | 1,1-Dichloroethene | 50.000 | 49.568 | 0.9# | 96 | 0.00 |
| 13 | T | Acrolein | 250.000 | 271.255 | -8.5 | 107 | 0.00 |
| 14 | T | Allyl chloride | 50.000 | 51.691 | -3.4 | 100 | 0.00 |
| 15 | T | Acrylonitrile | 250.000 | 255.479 | -2.2 | 99 | 0.00 |
| 16 | T | Acetone | 250.000 | 242.877 | 2.8 | 100 | 0.00 |
| 17 | T | Carbon Disulfide | 50.000 | 49.952 | 0.1 | 97 | 0.00 |
| 18 | T | Methyl Acetate | 50.000 | 50.312 | -0.6 | 101 | 0.00 |
| 19 | T | Methyl tert-butyl Ether | 50.000 | 53.114 | -6.2 | 103 | 0.00 |
| 20 | T | Methylene Chloride | 50.000 | 49.639 | 0.7 | 102 | 0.00 |
| 21 | T | trans-1,2-Dichloroethene | 50.000 | 51.172 | -2.3 | 97 | 0.00 |
| 22 | T | Diisopropyl ether | 50.000 | 53.955 | -7.9 | 103 | 0.00 |
| 23 | T | Vinyl Acetate | 250.000 | 282.313 | -12.9 | 105 | 0.00 |
| 24 | P | 1,1-Dichloroethane | 50.000 | 51.190 | -2.4 | 101 | 0.00 |
| 25 | T | 2-Butanone | 250.000 | 264.040 | -5.6 | 100 | 0.00 |
| 26 | T | 2,2-Dichloropropane | 50.000 | 49.401 | 1.2 | 95 | 0.00 |
| 27 | T | cis-1,2-Dichloroethene | 50.000 | 51.606 | -3.2 | 100 | 0.00 |
| 28 | T | Bromochloromethane | 50.000 | 50.399 | -0.8 | 98 | 0.00 |
| 29 | T | Tetrahydrofuran | 250.000 | 258.277 | -3.3 | 102 | 0.00 |
| 30 | C | Chloroform | 50.000 | 50.236 | -0.5# | 98 | 0.00 |
| 31 | T | Cyclohexane | 50.000 | 50.158 | -0.3 | 96 | 0.00 |
| 32 | T | 1,1,1-Trichloroethane | 50.000 | 50.939 | -1.9 | 98 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 | 50.000 | 50.297 | -0.6 | 104 | 0.00 |
| 34 | I | 1,4-Difluorobenzene | 50.000 | 50.000 | 0.0 | 99 | 0.00 |
| 35 | S | Dibromofluoromethane | 50.000 | 50.841 | -1.7 | 103 | 0.00 |
| 36 | T | 1,1-Dichloropropene | 50.000 | 48.770 | 2.5 | 95 | 0.00 |
| 37 | T | Ethyl Acetate | 50.000 | 51.596 | -3.2 | 100 | 0.00 |
| 38 | T | Carbon Tetrachloride | 50.000 | 49.425 | 1.2 | 98 | 0.00 |
| 39 | T | Methylcyclohexane | 50.000 | 51.169 | -2.3 | 95 | 0.00 |
| 40 | TM | Benzene | 50.000 | 51.195 | -2.4 | 98 | 0.00 |
| 41 | T | Methacrylonitrile | 50.000 | 53.352 | -6.7 | 99 | 0.00 |
| 42 | TM | 1,2-Dichloroethane | 50.000 | 50.718 | -1.4 | 99 | 0.00 |
| 43 | T | Isopropyl Acetate | 50.000 | 54.452 | -8.9 | 102 | 0.00 |
| 44 | TM | Trichloroethene | 50.000 | 48.924 | 2.2 | 97 | 0.00 |
| 45 | C | 1,2-Dichloropropane | 50.000 | 51.086 | -2.2# | 102 | 0.00 |
| 46 | T | Dibromomethane | 50.000 | 51.661 | -3.3 | 100 | 0.00 |
| 47 | T | Bromodichloromethane | 50.000 | 50.930 | -1.9 | 99 | 0.00 |
| 48 | T | Methyl methacrylate | 50.000 | 54.016 | -8.0 | 102 | 0.00 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045075.D
Acq On : 28 Feb 2025 04:33
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 24 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

Quant Time: Feb 28 06:55:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 49 | T | 1,4-Dioxane | 1000.000 | 1049.007 | -4.9 | 102 | 0.00 |
| 50 | S | Toluene-d8 | 50.000 | 50.364 | -0.7 | 100 | 0.00 |
| 51 | T | 4-Methyl-2-Pentanone | 250.000 | 259.995 | -4.0 | 99 | 0.00 |
| 52 | CM | Toluene | 50.000 | 51.020 | -2.0# | 96 | 0.00 |
| 53 | T | t-1,3-Dichloropropene | 50.000 | 54.247 | -8.5 | 99 | 0.00 |
| 54 | T | cis-1,3-Dichloropropene | 50.000 | 52.732 | -5.5 | 98 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 50.000 | 50.232 | -0.5 | 98 | 0.00 |
| 56 | T | Ethyl methacrylate | 50.000 | 54.109 | -8.2 | 100 | 0.00 |
| 57 | T | 1,3-Dichloropropane | 50.000 | 51.312 | -2.6 | 99 | 0.00 |
| 58 | T | 2-Chloroethyl Vinyl ether | 250.000 | 275.557 | -10.2 | 100 | 0.00 |
| 59 | T | 2-Hexanone | 250.000 | 265.049 | -6.0 | 100 | 0.00 |
| 60 | T | Dibromochloromethane | 50.000 | 51.374 | -2.7 | 97 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 50.000 | 51.492 | -3.0 | 100 | 0.00 |
| 62 | S | 4-Bromofluorobenzene | 50.000 | 49.240 | 1.5 | 98 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 50.000 | 50.000 | 0.0 | 97 | 0.00 |
| 64 | T | Tetrachloroethene | 50.000 | 50.126 | -0.3 | 96 | 0.00 |
| 65 | PM | Chlorobenzene | 50.000 | 50.580 | -1.2 | 95 | 0.00 |
| 66 | T | 1,1,1,2-Tetrachloroethane | 50.000 | 51.102 | -2.2 | 99 | 0.00 |
| 67 | C | Ethyl Benzene | 50.000 | 51.621 | -3.2# | 95 | 0.00 |
| 68 | T | m/p-Xylenes | 100.000 | 103.454 | -3.5 | 94 | 0.00 |
| 69 | T | o-Xylene | 50.000 | 50.668 | -1.3 | 95 | 0.00 |
| 70 | T | Styrene | 50.000 | 52.177 | -4.4 | 95 | 0.00 |
| 71 | P | Bromoform | 50.000 | 52.636 | -5.3 | 99 | 0.00 |
| 72 | I | 1,4-Dichlorobenzene-d4 | 50.000 | 50.000 | 0.0 | 97 | 0.00 |
| 73 | T | Isopropylbenzene | 50.000 | 51.589 | -3.2 | 95 | 0.00 |
| 74 | T | N-amyl acetate | 50.000 | 56.851 | -13.7 | 103 | 0.00 |
| 75 | P | 1,1,2,2-Tetrachloroethane | 50.000 | 50.741 | -1.5 | 100 | 0.00 |
| 76 | T | 1,2,3-Trichloropropane | 50.000 | 49.940 | 0.1 | 99 | 0.00 |
| 77 | T | Bromobenzene | 50.000 | 50.360 | -0.7 | 96 | 0.00 |
| 78 | T | n-propylbenzene | 50.000 | 52.203 | -4.4 | 93 | 0.00 |
| 79 | T | 2-Chlorotoluene | 50.000 | 49.338 | 1.3 | 94 | 0.00 |
| 80 | T | 1,3,5-Trimethylbenzene | 50.000 | 51.544 | -3.1 | 94 | 0.00 |
| 81 | T | trans-1,4-Dichloro-2-butene | 50.000 | 50.757 | -1.5 | 99 | 0.00 |
| 82 | T | 4-Chlorotoluene | 50.000 | 51.009 | -2.0 | 94 | 0.00 |
| 83 | T | tert-Butylbenzene | 50.000 | 50.552 | -1.1 | 95 | 0.00 |
| 84 | T | 1,2,4-Trimethylbenzene | 50.000 | 51.932 | -3.9 | 95 | 0.00 |
| 85 | T | sec-Butylbenzene | 50.000 | 52.703 | -5.4 | 95 | 0.00 |
| 86 | T | p-Isopropyltoluene | 50.000 | 52.803 | -5.6 | 94 | 0.00 |
| 87 | T | 1,3-Dichlorobenzene | 50.000 | 50.372 | -0.7 | 97 | 0.00 |
| 88 | T | 1,4-Dichlorobenzene | 50.000 | 50.097 | -0.2 | 96 | 0.00 |
| 89 | T | n-Butylbenzene | 50.000 | 54.662 | -9.3 | 95 | 0.00 |
| 90 | T | Hexachloroethane | 50.000 | 51.866 | -3.7 | 95 | 0.00 |
| 91 | T | 1,2-Dichlorobenzene | 50.000 | 50.899 | -1.8 | 98 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 50.000 | 53.199 | -6.4 | 100 | 0.00 |
| 93 | T | 1,2,4-Trichlorobenzene | 50.000 | 54.834 | -9.7 | 99 | 0.00 |
| 94 | T | Hexachlorobutadiene | 50.000 | 50.032 | -0.1 | 96 | 0.00 |
| 95 | T | Naphthalene | 50.000 | 55.163 | -10.3 | 99 | 0.00 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045075.D
Acq On : 28 Feb 2025 04:33
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 24 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX022825

Quant Time: Feb 28 06:55:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|
| 96 T | 1,2,3-Trichlorobenzene | 50.000 | 54.049 | -8.1 | 98 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

## VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q1478 SAS No.: Q1478 SDG No.: Q1478

Instrument ID: MSVOA_X Calibration Date/Time: 03/06/2025 09:56

Lab File ID: VX045155.D Init. Calib. Date(s): 02/28/2025 02/28/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 01:27 03:47

GC Column: DB-624UI ID: 0.18 (mm)

| COMPOUND | RRF | RRF050 | MIN RRF | %D | MAX%D |
|---|---|---|---|---|---|
| Vinyl Chloride | 0.764 | 0.725 | | -5.11 | 20 |
| 1,1-Dichloroethene | 0.614 | 0.600 | | -2.28 | 20 |
| 2-Butanone | 0.555 | 0.564 | | 1.62 | 20 |
| Carbon Tetrachloride | 0.465 | 0.458 | | -1.5 | 20 |
| Chloroform | 1.239 | 1.209 | | -2.42 | 20 |
| Benzene | 1.448 | 1.464 | | 1.11 | 20 |
| 1,2-Dichloroethane | 0.521 | 0.534 | | 2.49 | 20 |
| Trichloroethene | 0.340 | 0.341 | | 0.29 | 20 |
| Tetrachloroethene | 0.320 | 0.322 | | 0.63 | 20 |
| Chlorobenzene | 1.058 | 1.078 | 0.3 | 1.89 | 20 |
| 1,2-Dichloroethane-d4 | 0.795 | 0.783 | | -1.51 | 20 |
| Dibromofluoromethane | 0.334 | 0.341 | | 2.1 | 20 |
| Toluene-d8 | 1.212 | 1.244 | | 2.64 | 20 |
| 4-Bromofluorobenzene | 0.402 | 0.419 | | 4.23 | 20 |

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX030625\
Data File : VX045155.D
Acq On : 06 Mar 2025 09:56
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 07 00:36:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 5.544 | 168 | 99532 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 6.757 | 114 | 175834 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 10.049 | 117 | 153746 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.018 | 152 | 69403 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 5.952 | 65 | 77946 | 49.233 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 98.460% | | | |
| 35) Dibromofluoromethane | 5.379 | 113 | 59938 | 50.978 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 101.960% | | | |
| 50) Toluene-d8 | 8.647 | 98 | 218659 | 51.298 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 102.600% | | | |
| 62) 4-Bromofluorobenzene | 11.079 | 95 | 73689 | 52.170 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 104.340% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.166 | 85 | 62832 | 50.150 | ug/l | 97 |
| 3) Chloromethane | 1.307 | 50 | 71998 | 46.958 | ug/l | 97 |
| 4) Vinyl Chloride | 1.374 | 62 | 72148 | 47.434 | ug/l | 95 |
| 5) Bromomethane | 1.593 | 94 | 27896 | 46.654 | ug/l | 97 |
| 6) Chloroethane | 1.660 | 64 | 29705 | 42.341 | ug/l | 95 |
| 7) Trichlorofluoromethane | 1.861 | 101 | 96812 | 48.081 | ug/l | 100 |
| 8) Diethyl Ether | 2.136 | 74 | 36087 | 45.821 | ug/l | 96 |
| 9) 1,1,2-Trichlorotrifluo... | 2.313 | 101 | 61310 | 52.999 | ug/l | 99 |
| 10) Methyl Iodide | 2.441 | 142 | 74610 | 51.610 | ug/l | 98 |
| 11) Tert butyl alcohol | 3.002 | 59 | 58538 | 195.202 | ug/l | 98 |
| 12) 1,1-Dichloroethene | 2.307 | 96 | 59671 | 48.789 | ug/l | 96 |
| 13) Acrolein | 2.239 | 56 | 73987 | 213.430 | ug/l | 100 |
| 14) Allyl chloride | 2.654 | 41 | 109096 | 50.112 | ug/l | 98 |
| 15) Acrylonitrile | 3.069 | 53 | 198270 | 246.689 | ug/l | 99 |
| 16) Acetone | 2.392 | 43 | 171774 | 233.847 | ug/l | 100 |
| 17) Carbon Disulfide | 2.495 | 76 | 145559 | 44.684 | ug/l | 98 |
| 18) Methyl Acetate | 2.709 | 43 | 95234 | 53.893 | ug/l | 97 |
| 19) Methyl tert-butyl Ether | 3.117 | 73 | 200537 | 48.872 | ug/l | 99 |
| 20) Methylene Chloride | 2.782 | 84 | 70093 | 48.172 | ug/l | 96 |
| 21) trans-1,2-Dichloroethene | 3.081 | 96 | 60722 | 50.255 | ug/l | 98 |
| 22) Diisopropyl ether | 3.764 | 45 | 224890 | 50.793 | ug/l | 96 |
| 23) Vinyl Acetate | 3.721 | 43 | 950142 | 257.151 | ug/l | 100 |
| 24) 1,1-Dichloroethane | 3.599 | 63 | 120920 | 48.731 | ug/l | 99 |
| 25) 2-Butanone | 4.562 | 43 | 280778 | 253.939 | ug/l | 96 |
| 26) 2,2-Dichloropropane | 4.465 | 77 | 79357 | 68.182 | ug/l | 95 |
| 27) cis-1,2-Dichloroethene | 4.483 | 96 | 74696 | 50.079 | ug/l | 98 |
| 28) Bromochloromethane | 4.891 | 49 | 54795 | 46.329 | ug/l | 98 |
| 29) Tetrahydrofuran | 5.007 | 42 | 181493 | 244.426 | ug/l | 99 |
| 30) Chloroform | 5.087 | 83 | 120327 | 48.804 | ug/l | 99 |
| 31) Cyclohexane | 5.464 | 56 | 108111 | 50.191 | ug/l | 95 |
| 32) 1,1,1-Trichloroethane | 5.379 | 97 | 97325 | 48.875 | ug/l | 99 |
| 36) 1,1-Dichloropropene | 5.684 | 75 | 80527 | 49.941 | ug/l | 99 |
| 37) Ethyl Acetate | 4.715 | 43 | 104246 | 50.173 | ug/l | 99 |
| 38) Carbon Tetrachloride | 5.666 | 117 | 80480 | 49.163 | ug/l | 98 |
| 39) Methylcyclohexane | 7.373 | 83 | 105138 | 54.417 | ug/l | 98 |
| 40) Benzene | 6.031 | 78 | 257458 | 50.564 | ug/l | 100 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX030625\
Data File : VX045155.D
Acq On : 06 Mar 2025 09:56
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 07 00:36:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 4.922 | 41 | 58347 | 51.935 | ug/l | | 98 |
| 42) 1,2-Dichloroethane | 6.086 | 62 | 93921 | 51.224 | ug/l | | 100 |
| 43) Isopropyl Acetate | 6.342 | 43 | 158752 | 51.671 | ug/l | | 99 |
| 44) Trichloroethene | 7.123 | 130 | 60024 | 50.205 | ug/l | | 99 |
| 45) 1,2-Dichloropropane | 7.428 | 63 | 66275 | 50.625 | ug/l | | 99 |
| 46) Dibromomethane | 7.580 | 93 | 47874 | 51.739 | ug/l | | 100 |
| 47) Bromodichloromethane | 7.818 | 83 | 91992 | 50.685 | ug/l | | 98 |
| 48) Methyl methacrylate | 7.690 | 41 | 80137 | 51.991 | ug/l | | 99 |
| 49) 1,4-Dioxane | 7.665 | 88 | 32662 | 1004.564 | ug/l | | 100 |
| 51) 4-Methyl-2-Pentanone | 8.574 | 43 | 541338 | 262.414 | ug/l | | 99 |
| 52) Toluene | 8.714 | 92 | 156953 | 52.538 | ug/l | | 99 |
| 53) t-1,3-Dichloropropene | 8.976 | 75 | 82047 | 54.074 | ug/l | | 97 |
| 54) cis-1,3-Dichloropropene | 8.360 | 75 | 95642 | 54.055 | ug/l | | 96 |
| 55) 1,1,2-Trichloroethane | 9.147 | 97 | 62335 | 50.685 | ug/l | | 99 |
| 56) Ethyl methacrylate | 9.116 | 69 | 97896 | 52.367 | ug/l | | 99 |
| 57) 1,3-Dichloropropane | 9.305 | 76 | 107677 | 50.592 | ug/l | | 99 |
| 58) 2-Chloroethyl Vinyl ether | 8.238 | 63 | 249971 | 274.113 | ug/l | | 99 |
| 59) 2-Hexanone | 9.433 | 43 | 396084 | 264.998 | ug/l | | 100 |
| 60) Dibromochloromethane | 9.519 | 129 | 66396 | 51.634 | ug/l | | 100 |
| 61) 1,2-Dibromoethane | 9.610 | 107 | 62076 | 50.561 | ug/l | | 100 |
| 64) Tetrachloroethene | 9.269 | 164 | 49532 | 50.303 | ug/l | | 92 |
| 65) Chlorobenzene | 10.073 | 112 | 165756 | 50.951 | ug/l | | 97 |
| 66) 1,1,1,2-Tetrachloroethane | 10.159 | 131 | 54204 | 50.032 | ug/l | | 99 |
| 67) Ethyl Benzene | 10.189 | 91 | 296897 | 52.376 | ug/l | | 100 |
| 68) m/p-Xylenes | 10.299 | 106 | 216494 | 104.329 | ug/l | | 97 |
| 69) o-Xylene | 10.640 | 106 | 106776 | 51.019 | ug/l | | 100 |
| 70) Styrene | 10.653 | 104 | 178838 | 52.810 | ug/l | | 100 |
| 71) Bromoform | 10.799 | 173 | 40824 | 49.970 | ug/l | # | 99 |
| 73) Isopropylbenzene | 10.957 | 105 | 276189 | 50.984 | ug/l | | 99 |
| 74) N-amyl acetate | 10.842 | 43 | 131698 | 51.811 | ug/l | | 99 |
| 75) 1,1,2,2-Tetrachloroethane | 11.213 | 83 | 98154 | 49.376 | ug/l | | 99 |
| 76) 1,2,3-Trichloropropane | 11.238 | 75 | 79287m | 49.083 | ug/l | | |
| 77) Bromobenzene | 11.195 | 156 | 64179 | 50.213 | ug/l | | 98 |
| 78) n-propylbenzene | 11.305 | 91 | 322984 | 52.781 | ug/l | | 99 |
| 79) 2-Chlorotoluene | 11.360 | 91 | 193846 | 49.740 | ug/l | | 100 |
| 80) 1,3,5-Trimethylbenzene | 11.451 | 105 | 224986 | 51.365 | ug/l | | 100 |
| 81) trans-1,4-Dichloro-2-b... | 11.018 | 75 | 24421 | 51.737 | ug/l | | 94 |
| 82) 4-Chlorotoluene | 11.451 | 91 | 215920 | 50.836 | ug/l | | 99 |
| 83) tert-Butylbenzene | 11.713 | 119 | 226930 | 50.423 | ug/l | | 100 |
| 84) 1,2,4-Trimethylbenzene | 11.750 | 105 | 227267 | 51.566 | ug/l | | 100 |
| 85) sec-Butylbenzene | 11.890 | 105 | 284085 | 52.696 | ug/l | | 99 |
| 86) p-Isopropyltoluene | 12.006 | 119 | 233986 | 53.707 | ug/l | | 100 |
| 87) 1,3-Dichlorobenzene | 11.969 | 146 | 113668 | 49.852 | ug/l | | 99 |
| 88) 1,4-Dichlorobenzene | 12.036 | 146 | 114115 | 49.469 | ug/l | | 98 |
| 89) n-Butylbenzene | 12.329 | 91 | 209635 | 55.868 | ug/l | | 99 |
| 90) Hexachloroethane | 12.536 | 117 | 39179 | 49.718 | ug/l | | 99 |
| 91) 1,2-Dichlorobenzene | 12.335 | 146 | 117105 | 51.199 | ug/l | | 100 |
| 92) 1,2-Dibromo-3-Chloropr... | 12.939 | 75 | 19847 | 51.248 | ug/l | | 98 |
| 93) 1,2,4-Trichlorobenzene | 13.585 | 180 | 70127 | 53.845 | ug/l | | 99 |
| 94) Hexachlorobutadiene | 13.725 | 225 | 27989 | 52.418 | ug/l | | 99 |
| 95) Naphthalene | 13.774 | 128 | 266376 | 53.234 | ug/l | | 100 |
| 96) 1,2,3-Trichlorobenzene | 13.963 | 180 | 73124 | 53.222 | ug/l | | 99 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX030625\
Data File : VX045155.D
Acq On : 06 Mar 2025 09:56
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 07 00:36:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

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

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

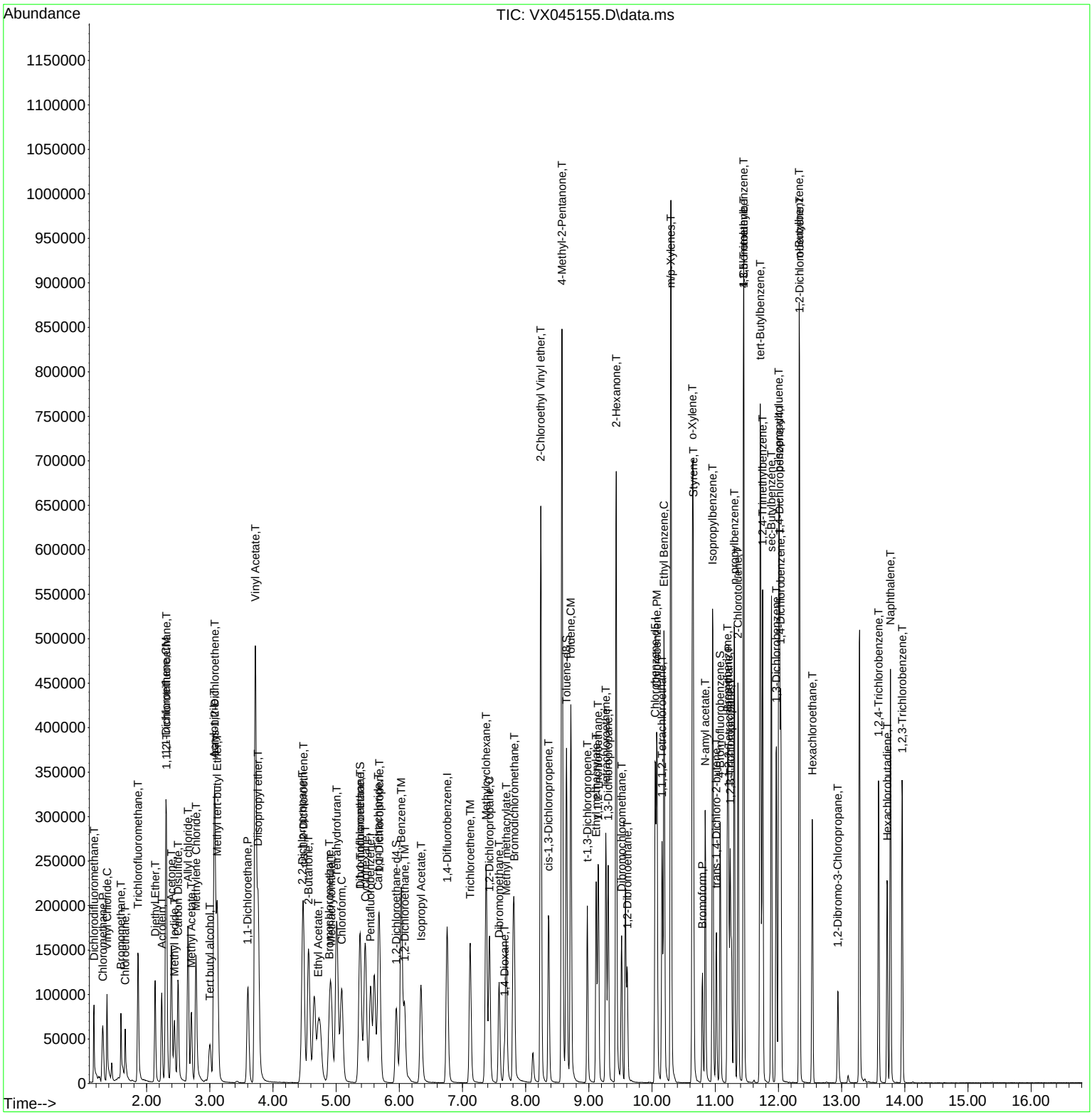
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX030625\
Data File : VX045155.D
Acq On : 06 Mar 2025 09:56
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 3 Sample Multiplier: 1

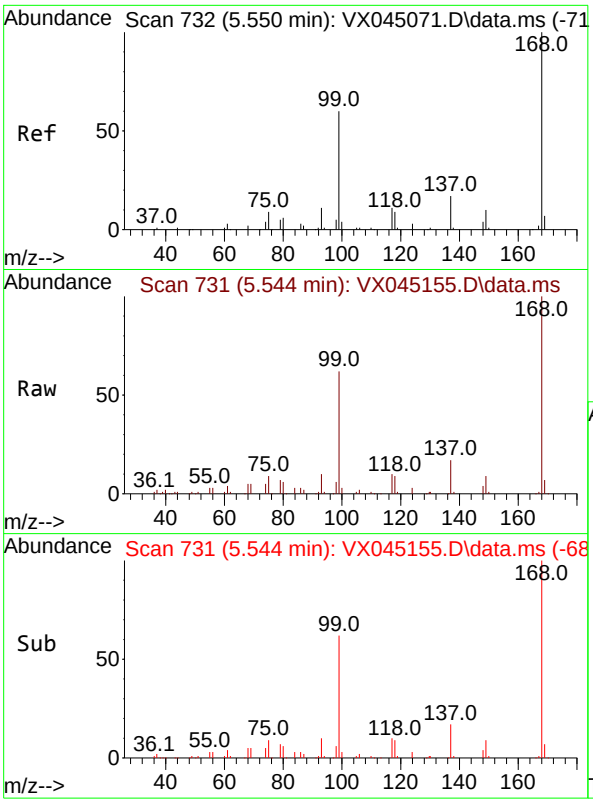
Quant Time: Mar 07 00:36:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

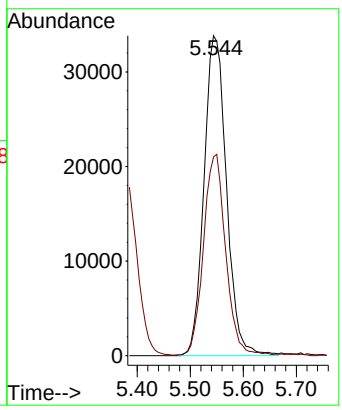





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.544 min Scan# 7
Delta R.T. -0.006 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:168 Resp: 9953

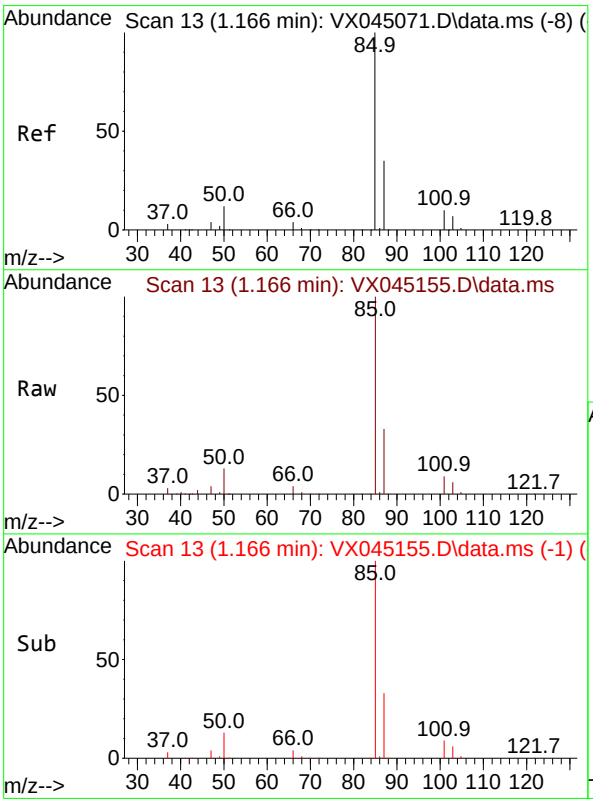
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 61.9 | 48.2 | 72.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

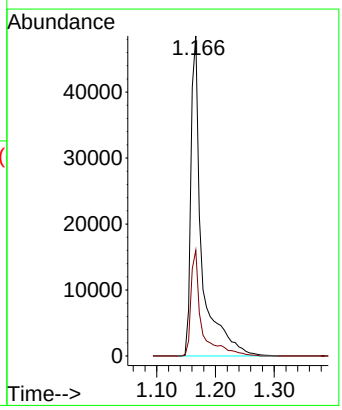
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

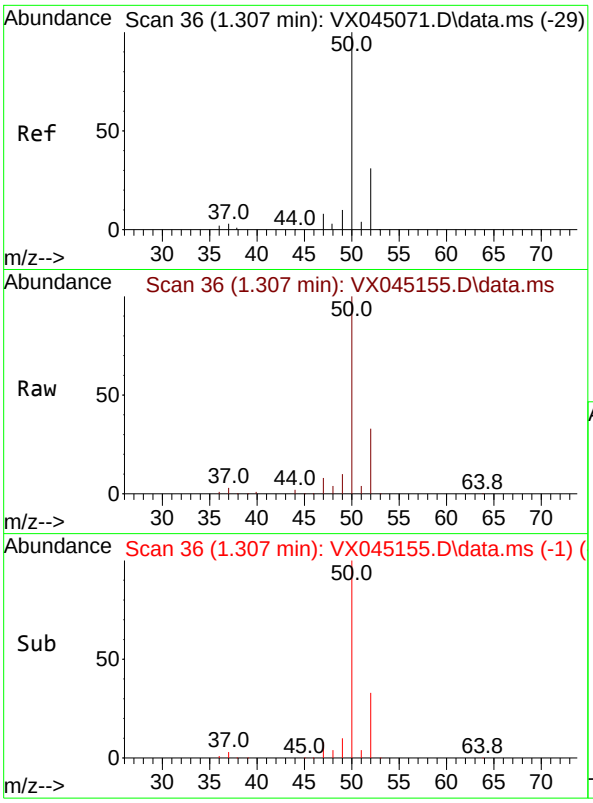



#2
Dichlorodifluoromethane
Concen: 50.150 ug/l
RT: 1.166 min Scan# 13
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 85 Resp: 62832

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 33.0 | 17.4 | 52.3 |

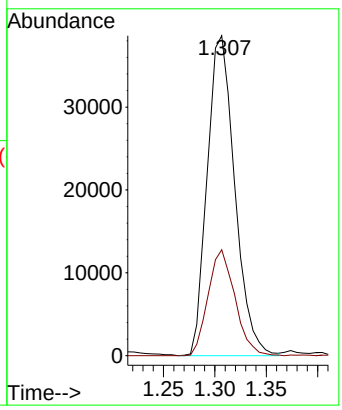





#3
Chloromethane
Concen: 46.958 ug/l
RT: 1.307 min Scan# 3
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 50 Resp: 7199

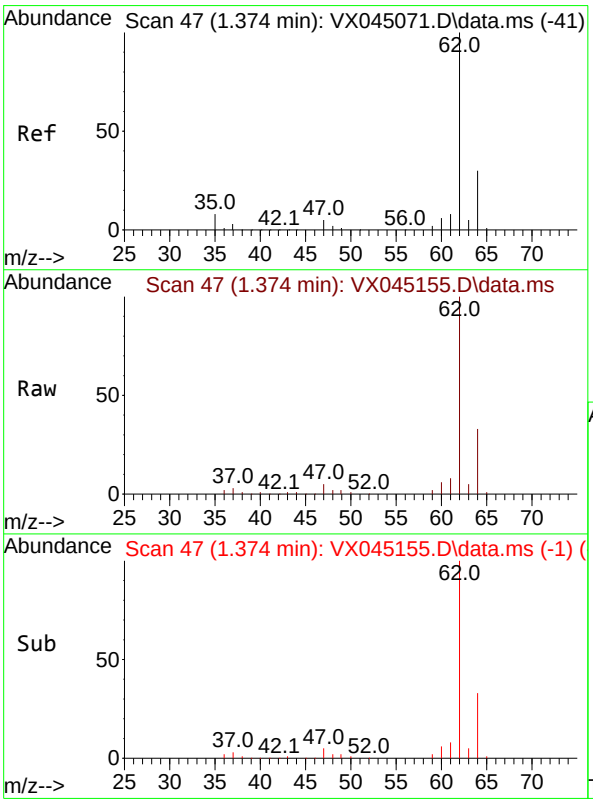
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 33.1 | 25.0 | 37.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

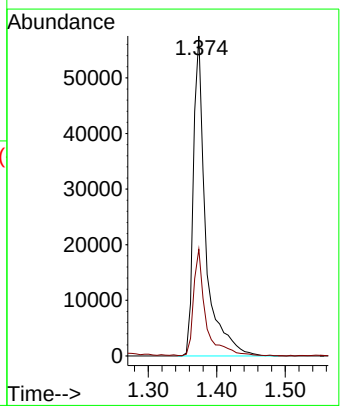
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

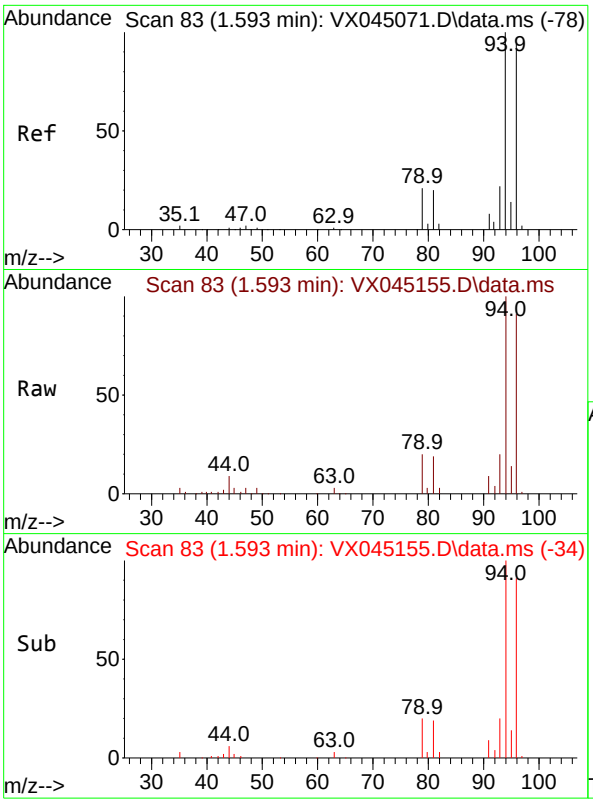



#4
Vinyl Chloride
Concen: 47.434 ug/l
RT: 1.374 min Scan# 47
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 62 Resp: 72148

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 33.2 | 24.3 | 36.5 |

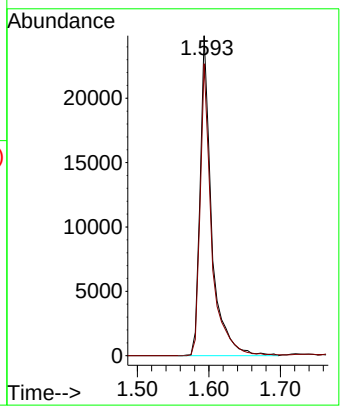





#5
Bromomethane
Concen: 46.654 ug/l
RT: 1.593 min Scan# 8
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 94 Resp: 2789

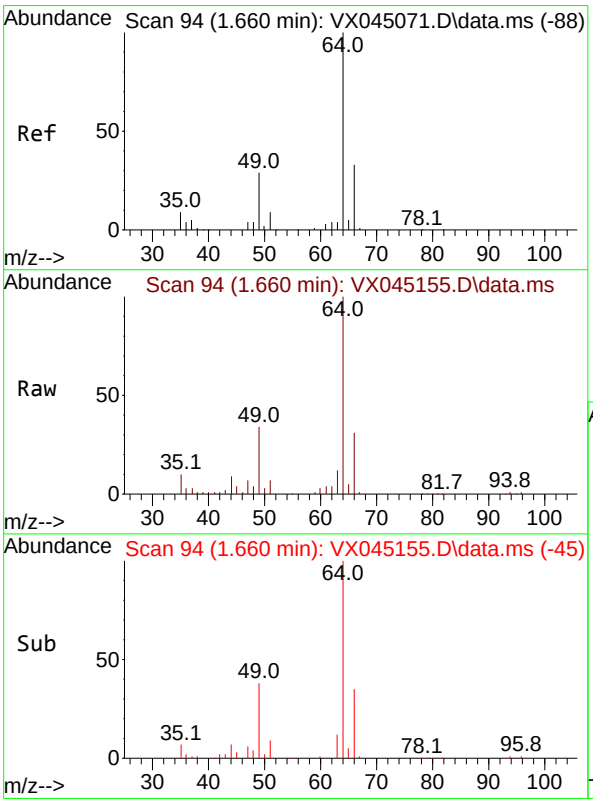
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 91.2 | 75.0 | 112.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

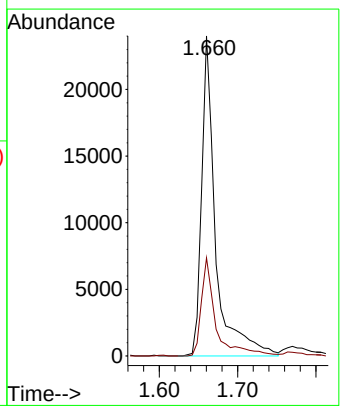
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

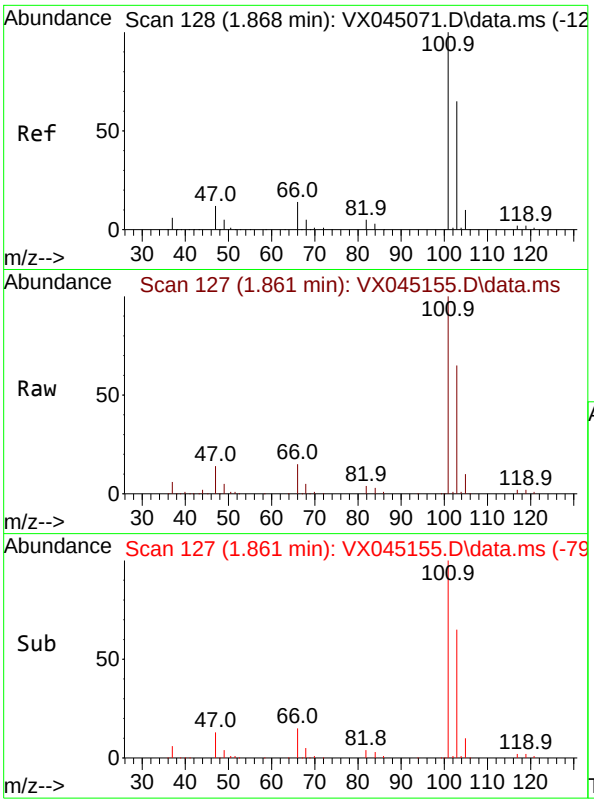



#6
Chloroethane
Concen: 42.341 ug/l
RT: 1.660 min Scan# 94
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 64 Resp: 29705

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 30.6 | 26.7 | 40.1 |






#7
Trichlorofluoromethane
Concen: 48.081 ug/l
RT: 1.861 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:101 Resp: 9681

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 64.9 | 52.1 | 78.1 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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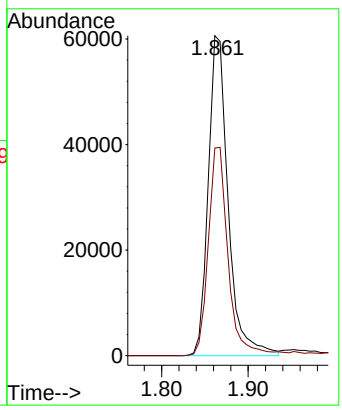
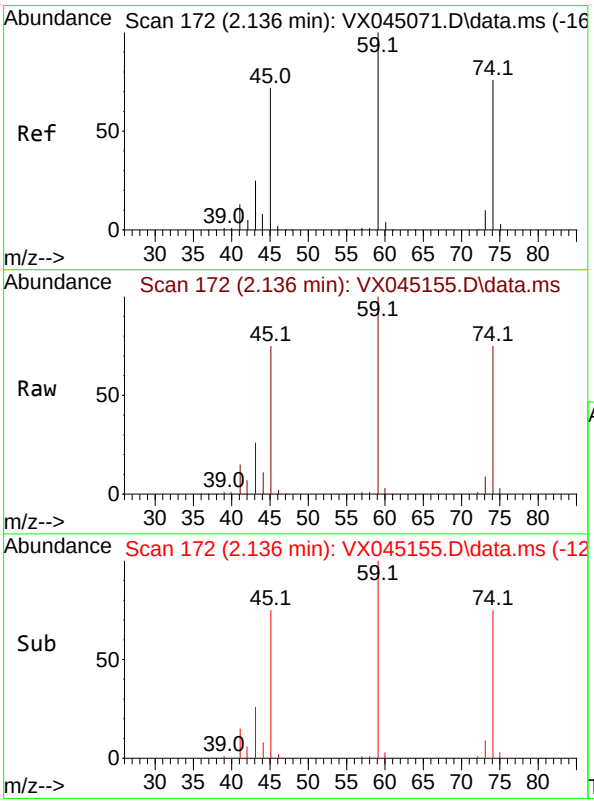
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

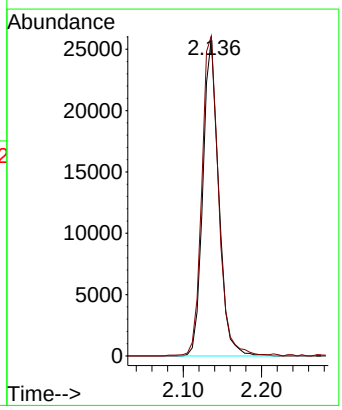


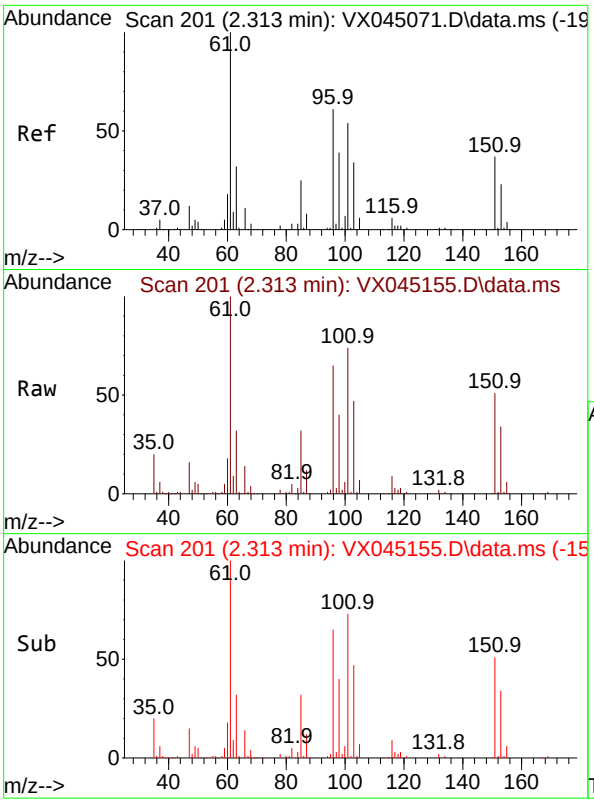




#8
Diethyl Ether
Concen: 45.821 ug/l
RT: 2.136 min Scan# 172
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 74 Resp: 36087

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 107.4 | 51.5 | 154.5 |






#9
1,1,2-Trichlorotrifluoroethane
Concen: 52.999 ug/l
RT: 2.313 min Scan# 2
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

Tgt Ion:101 Resp: 6131

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 46.2 | 36.2 | 54.4 |
| 151 | 71.8 | 56.4 | 84.6 |

**Manual Integrations**
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Reviewed By :John Carlone 03/10/2025
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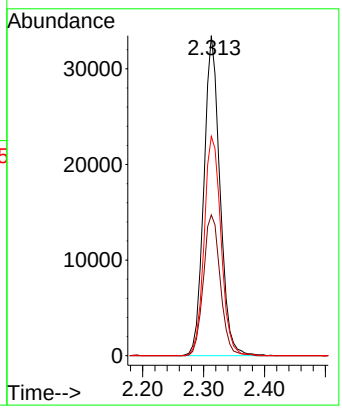
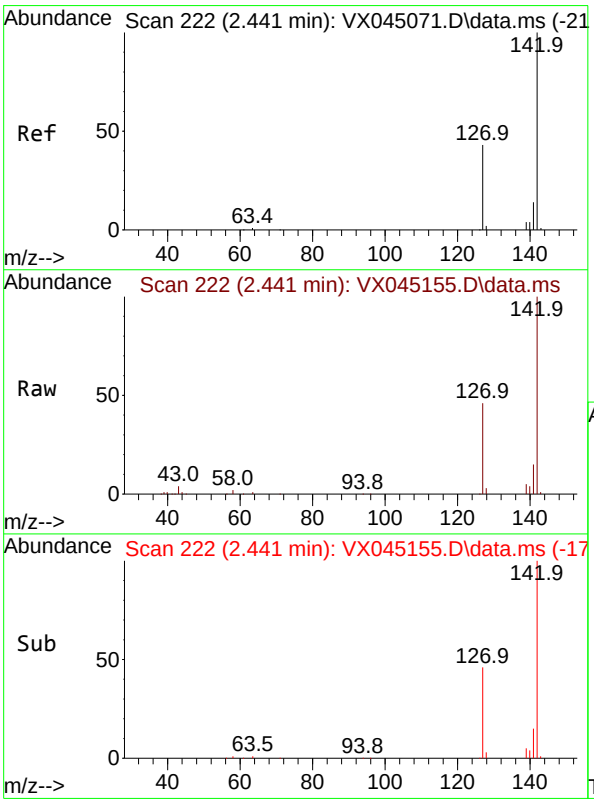
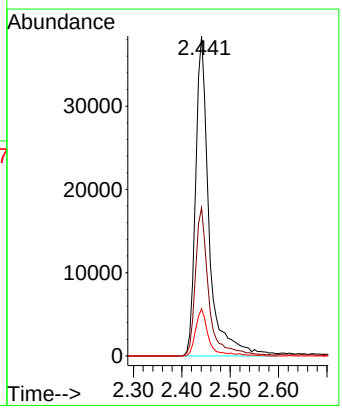


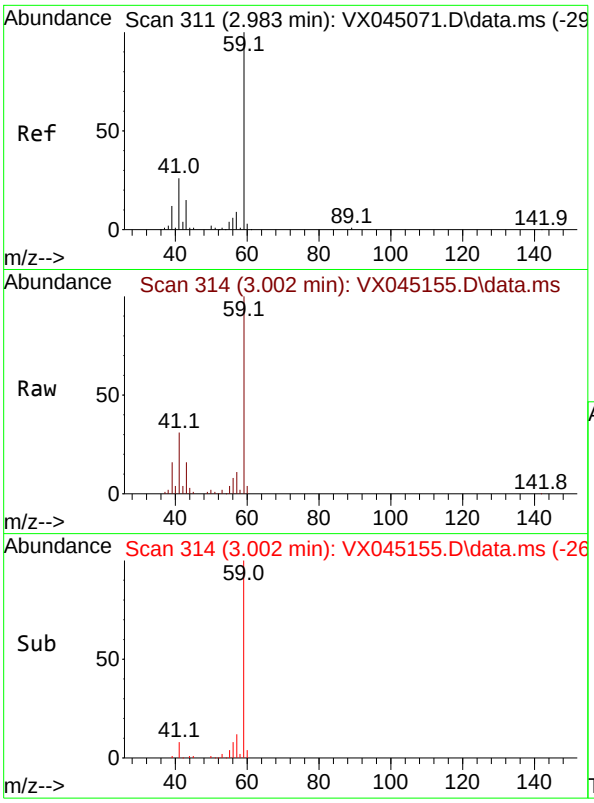




#10
Methyl Iodide
Concen: 51.610 ug/l
RT: 2.441 min Scan# 222
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:142 Resp: 74610

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 46.1 | 35.4 | 53.2 |
| 141 | 14.3 | 11.6 | 17.4 |

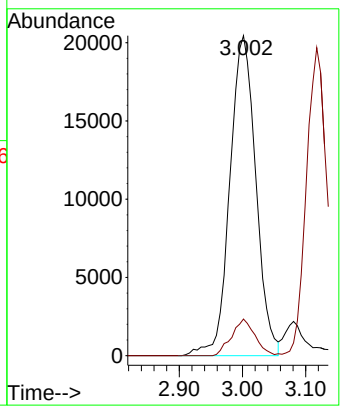





#11
Tert butyl alcohol
Concen: 195.202 ug/l
RT: 3.002 min Scan# 3
Delta R.T. 0.018 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 59 Resp: 5853

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 10.4 | 7.8 | 11.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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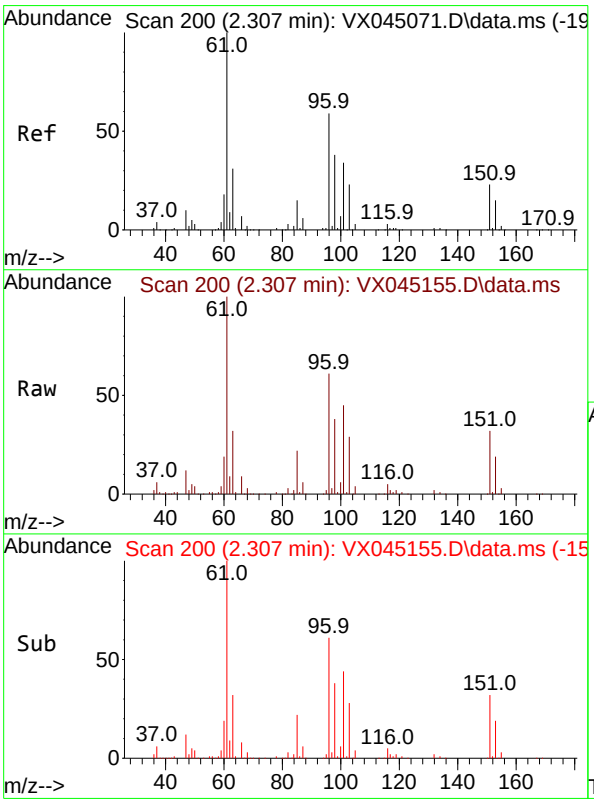
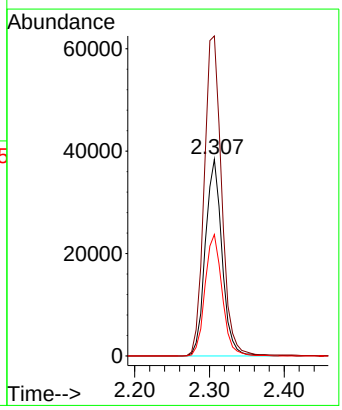
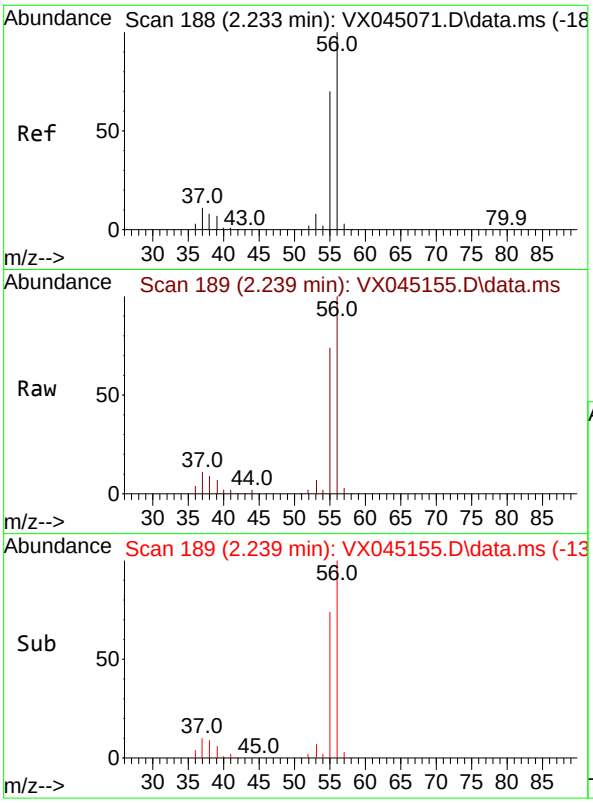



#12
1,1-Dichloroethene
Concen: 48.789 ug/l
RT: 2.307 min Scan# 200
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 96 Resp: 59671

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 162.7 | 134.6 | 202.0 |
| 98 | 61.8 | 51.0 | 76.6 |

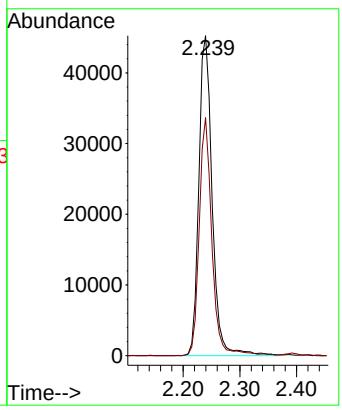





#13
Acrolein
Concen: 213.430 ug/l
RT: 2.239 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 56 Resp: 7398

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 70.4 | 56.2 | 84.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

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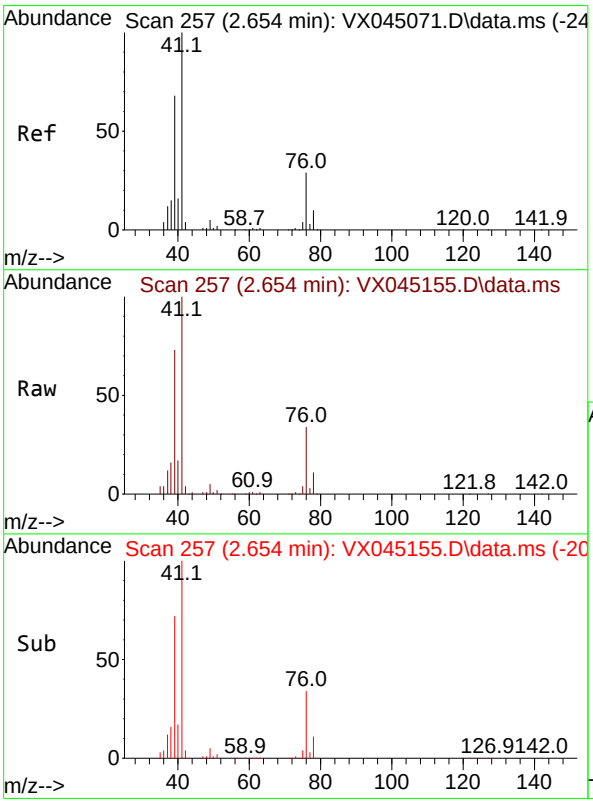
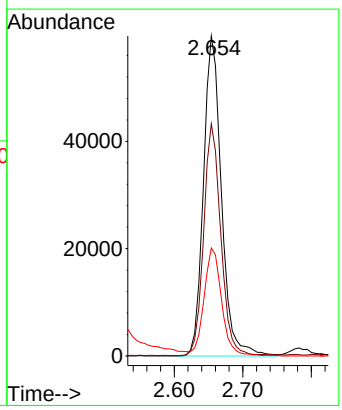
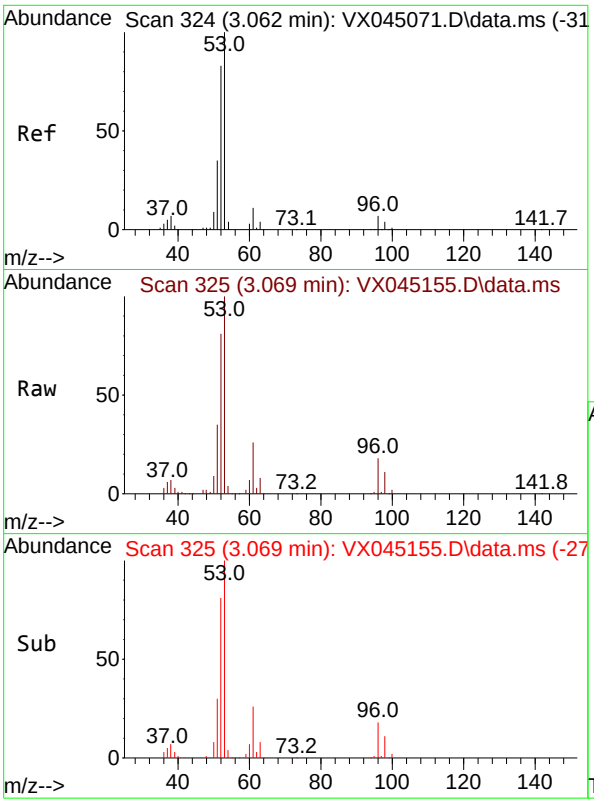



#14
Allyl chloride
Concen: 50.112 ug/l
RT: 2.654 min Scan# 257
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 41 Resp: 109096

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 68.9 | 53.8 | 80.8 |
| 76 | 32.5 | 25.2 | 37.8 |

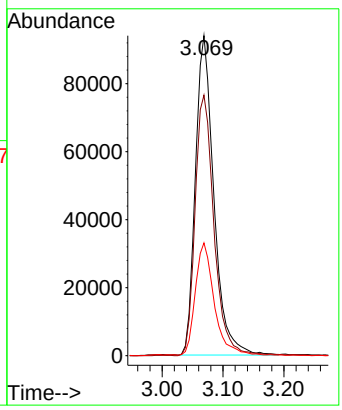





#15
Acrylonitrile
Concen: 246.689 ug/l
RT: 3.069 min Scan# 3
Delta R.T. 0.006 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 53 Resp: 19827

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 83.6 | 66.2 | 99.2 |
| 51 | 35.6 | 29.0 | 43.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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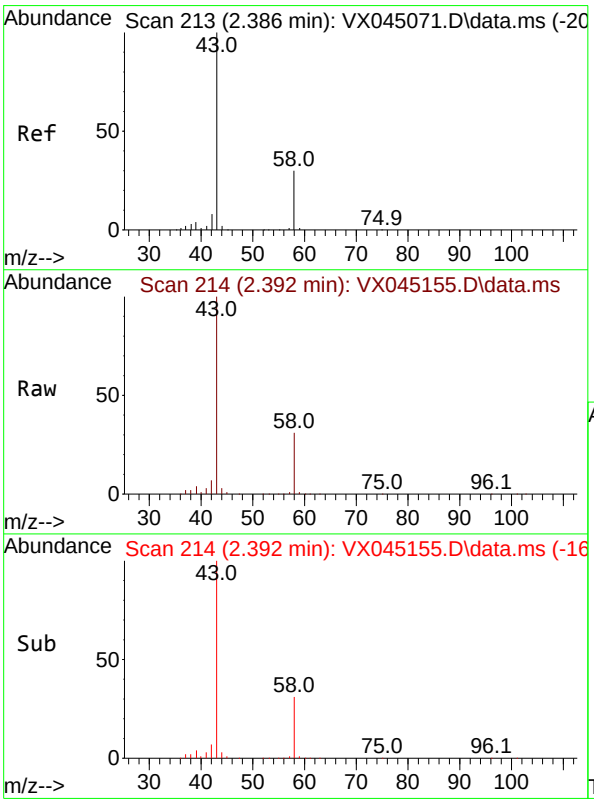
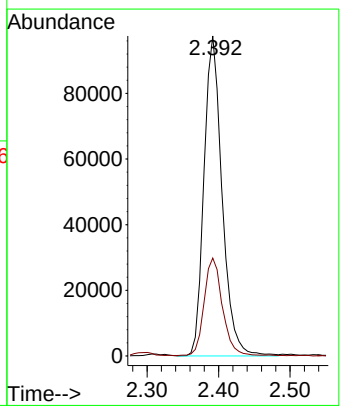
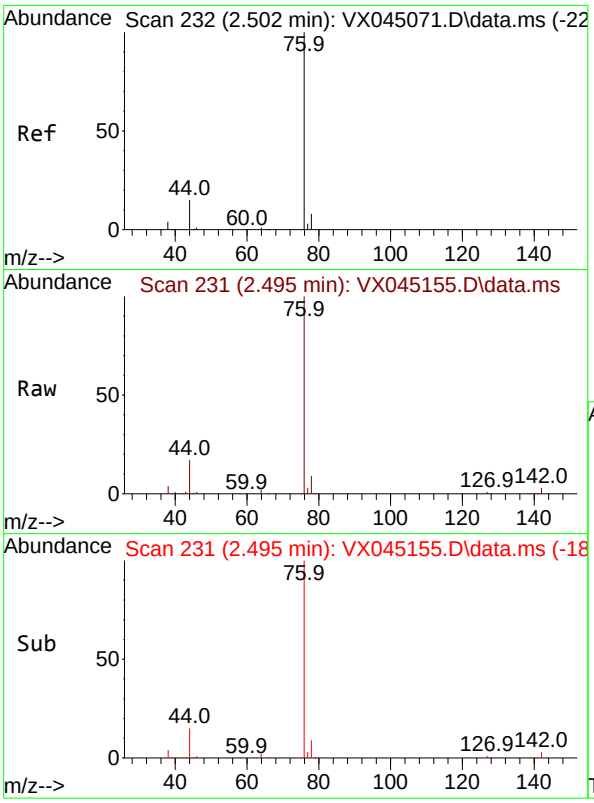



#16
Acetone
Concen: 233.847 ug/l
RT: 2.392 min Scan# 214
Delta R.T. 0.006 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 43 Resp: 171774

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 30.5 | 24.2 | 36.4 |

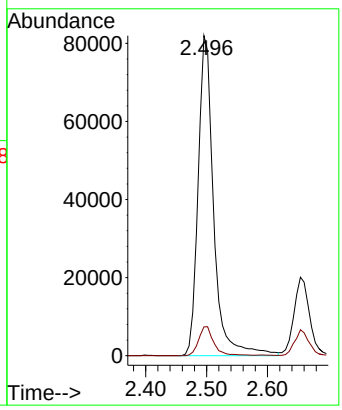





#17
Carbon Disulfide
Concen: 44.684 ug/l
RT: 2.495 min Scan# 2
Delta R.T. -0.006 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 76 Resp: 14555

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.0 | 6.6 | 9.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

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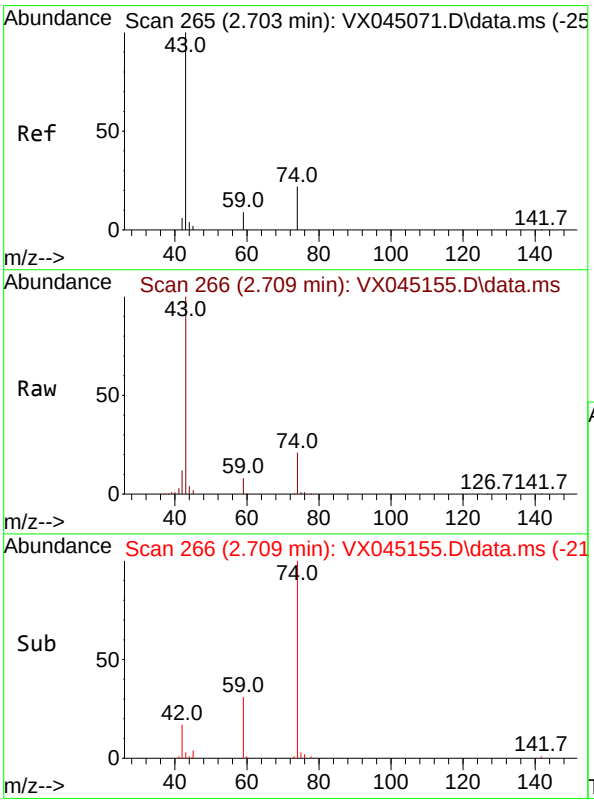
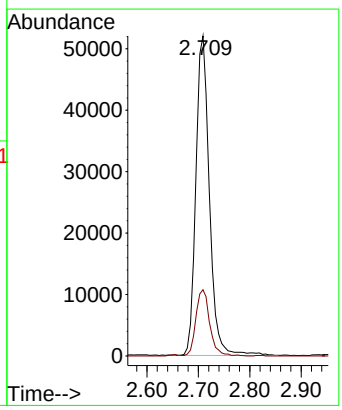
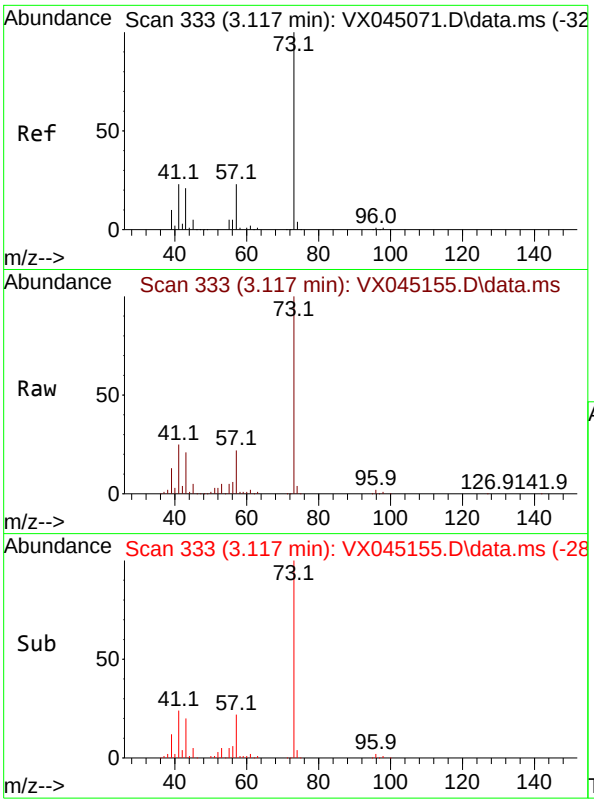



#18
Methyl Acetate
Concen: 53.893 ug/l
RT: 2.709 min Scan# 266
Delta R.T. 0.006 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 43 Resp: 95234

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 20.6 | 17.4 | 26.2 |






#19
Methyl tert-butyl Ether
Concen: 48.872 ug/l
RT: 3.117 min Scan# 3
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 73 Resp: 20053

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 22.5 | 18.5 | 27.7 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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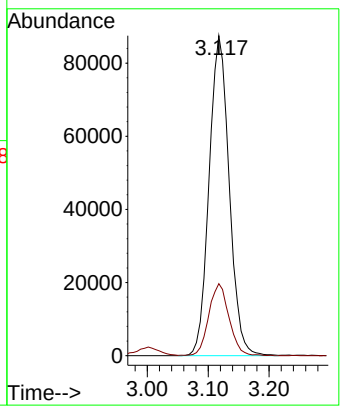
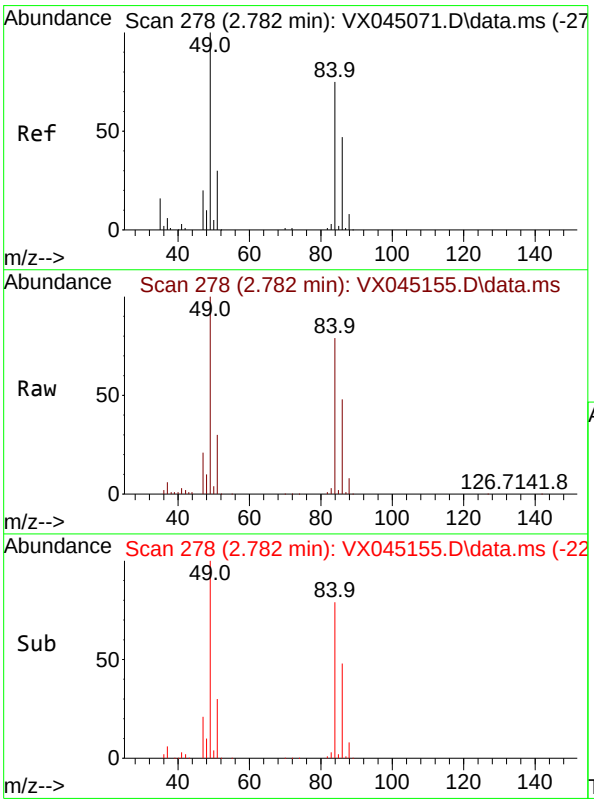
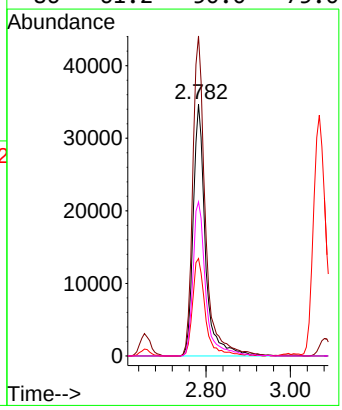


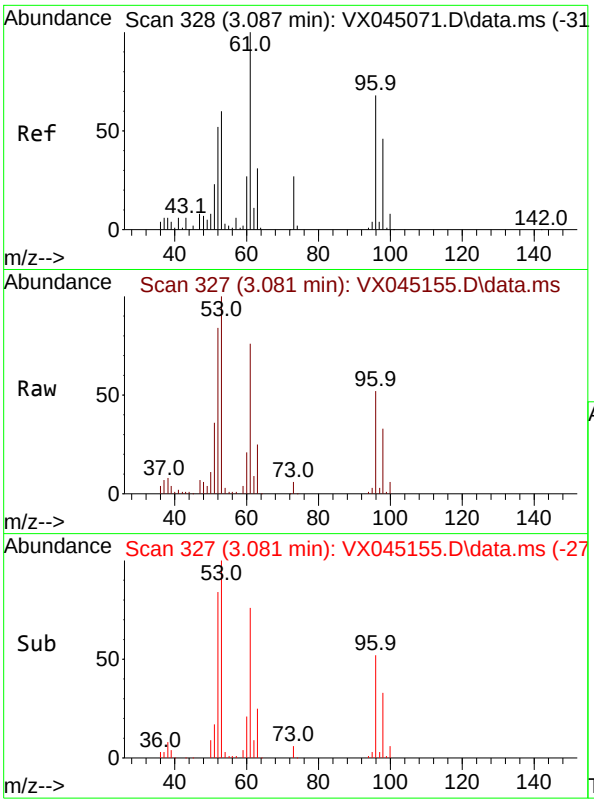




#20
Methylene Chloride
Concen: 48.172 ug/l
RT: 2.782 min Scan# 278
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 84 Resp: 70093

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 127.1 | 106.5 | 159.7 |
| 51 | 38.7 | 32.1 | 48.1 |
| 86 | 61.2 | 50.0 | 75.0 |

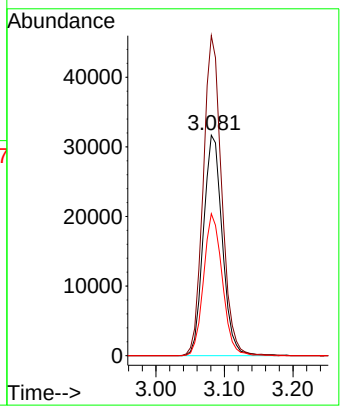





#21
trans-1,2-Dichloroethene
Concen: 50.255 ug/l
RT: 3.081 min Scan# 3
Delta R.T. -0.006 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 96 Resp: 6072

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 145.1 | 117.0 | 175.4 |
| 98 | 64.4 | 53.4 | 80.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

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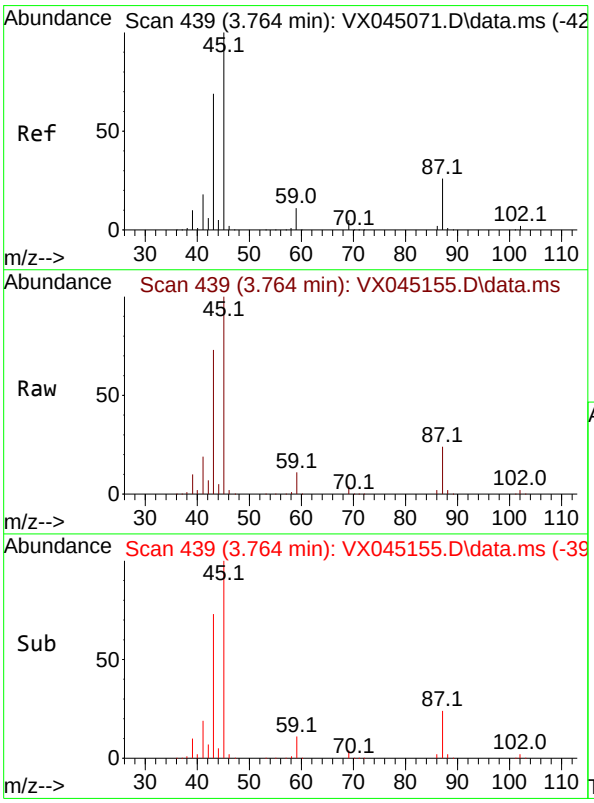
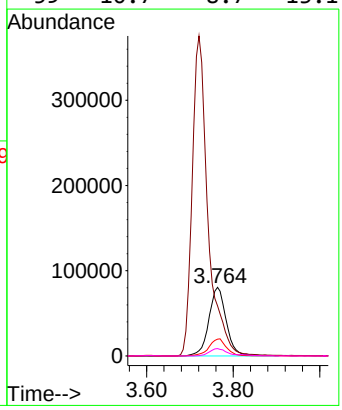
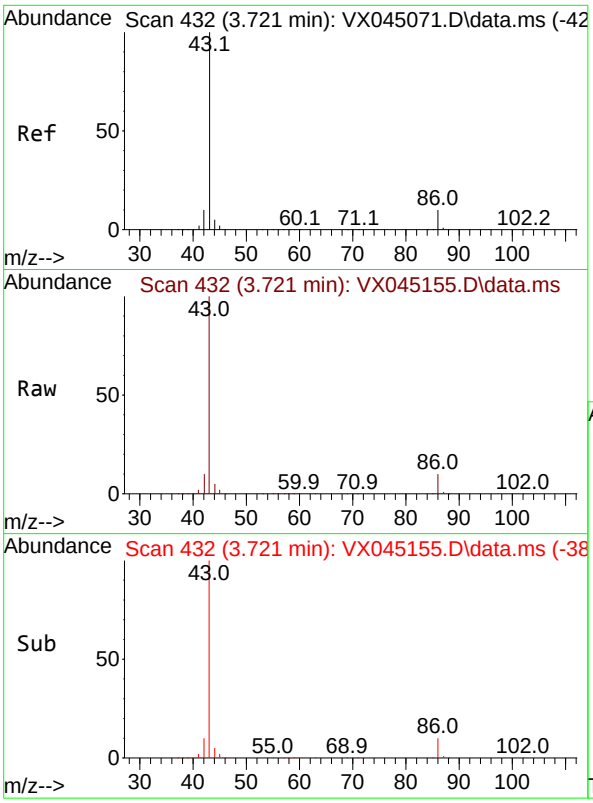



#22
Diisopropyl ether
Concen: 50.793 ug/l
RT: 3.764 min Scan# 439
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 45 Resp: 224890

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 72.7 | 54.9 | 82.3 |
| 87 | 24.4 | 21.0 | 31.4 |
| 59 | 10.7 | 8.7 | 13.1 |






#23
Vinyl Acetate
Concen: 257.151 ug/l
RT: 3.721 min Scan# 4
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 43 Resp: 95014

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 10.1 | 8.1 | 12.1 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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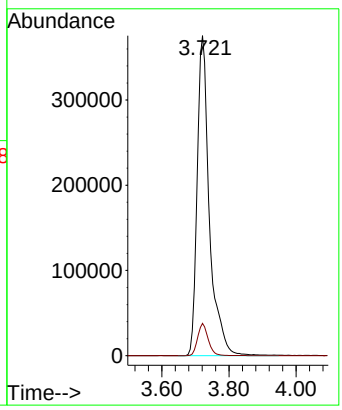
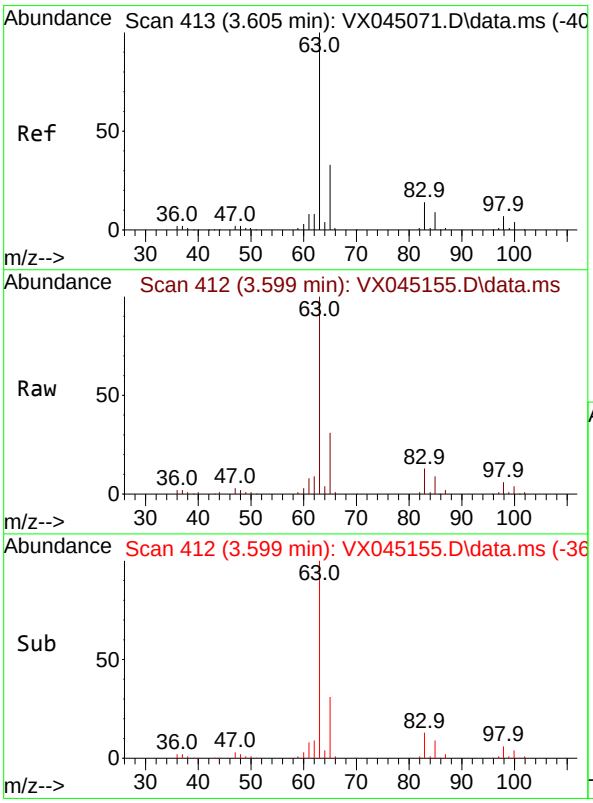
Supervised By :Mahesh Dadoda 03/10/2025

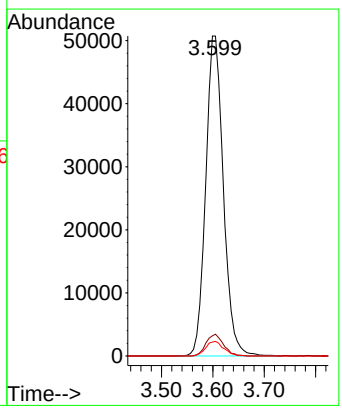


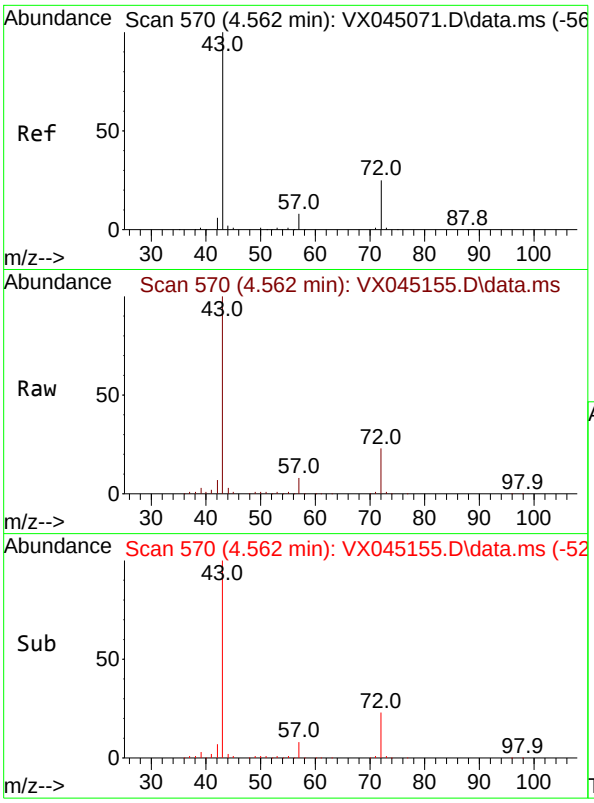




#24
1,1-Dichloroethane
Concen: 48.731 ug/l
RT: 3.599 min Scan# 412
Delta R.T. -0.006 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 63 Resp: 120920

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 6.3 | 3.4 | 10.2 |
| 100 | 4.4 | 2.1 | 6.5 |






#25
2-Butanone
Concen: 253.939 ug/l
RT: 4.562 min Scan# 5
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 43 Resp: 28077

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 23.2 | 20.0 | 30.0 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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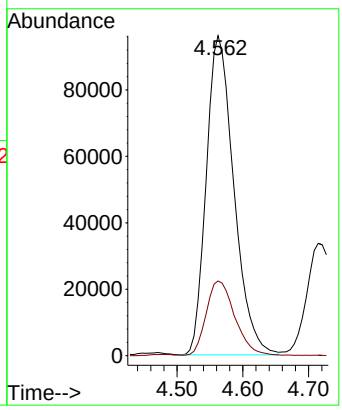
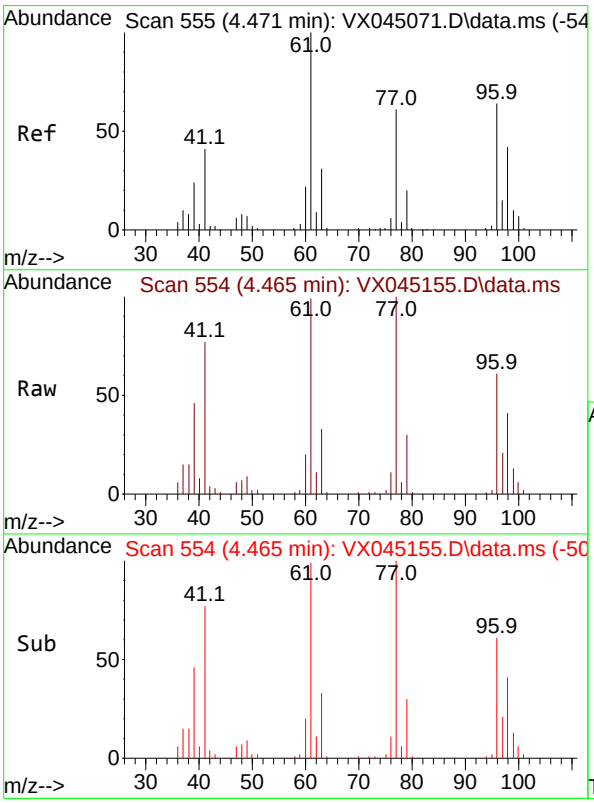
Supervised By :Mahesh Dadoda 03/10/2025

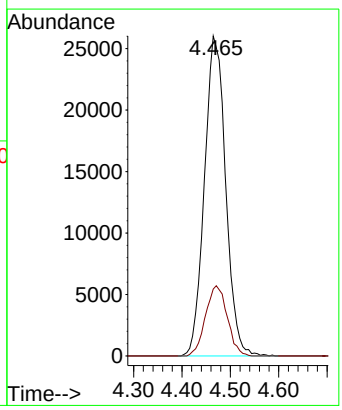


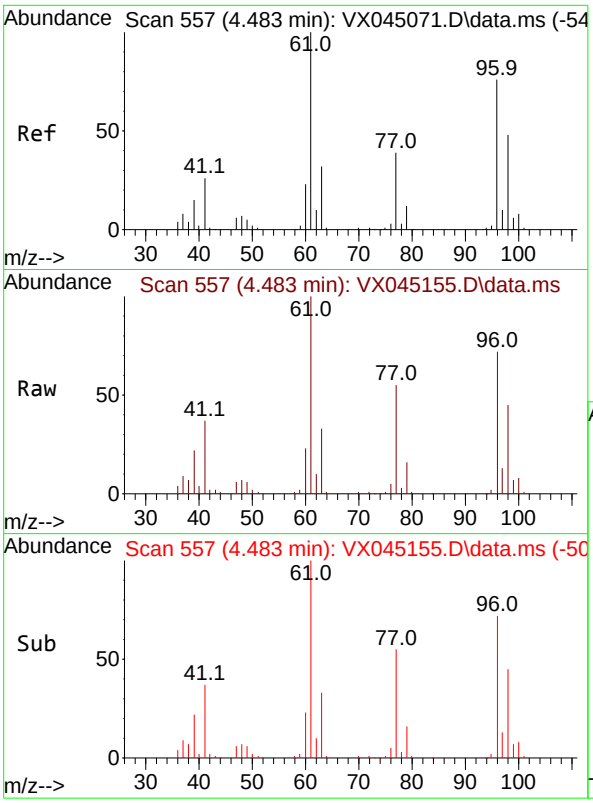




#26
2,2-Dichloropropane
Concen: 68.182 ug/l
RT: 4.465 min Scan# 554
Delta R.T. -0.006 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 77 Resp: 79357

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 22.4 | 12.4 | 37.0 |

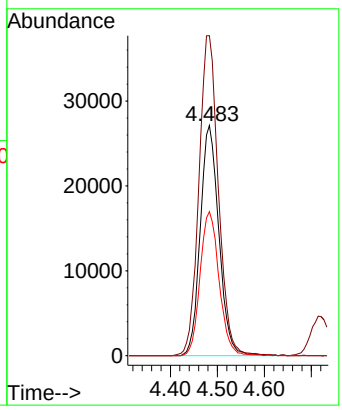





#27
cis-1,2-Dichloroethene
Concen: 50.079 ug/l
RT: 4.483 min Scan# 5
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 96 Resp: 7469

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 145.5 | 0.0 | 283.2 |
| 98 | 63.7 | 0.0 | 128.0 |




**Instrument :**
MSVOA_X
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VSTDCCC050

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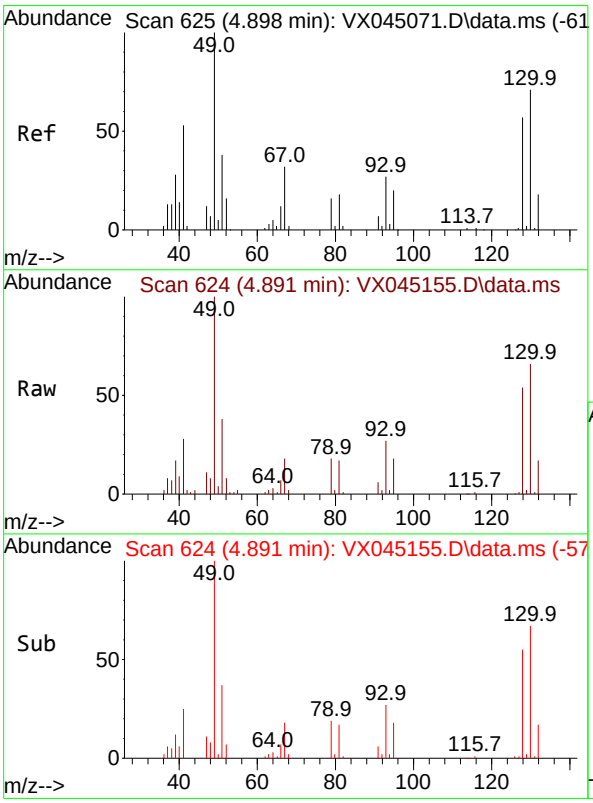
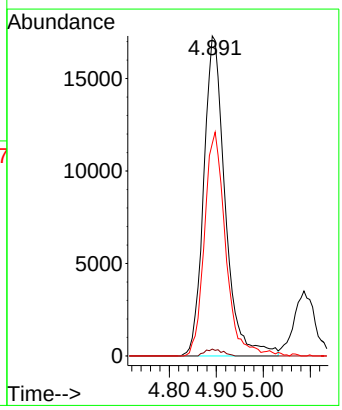
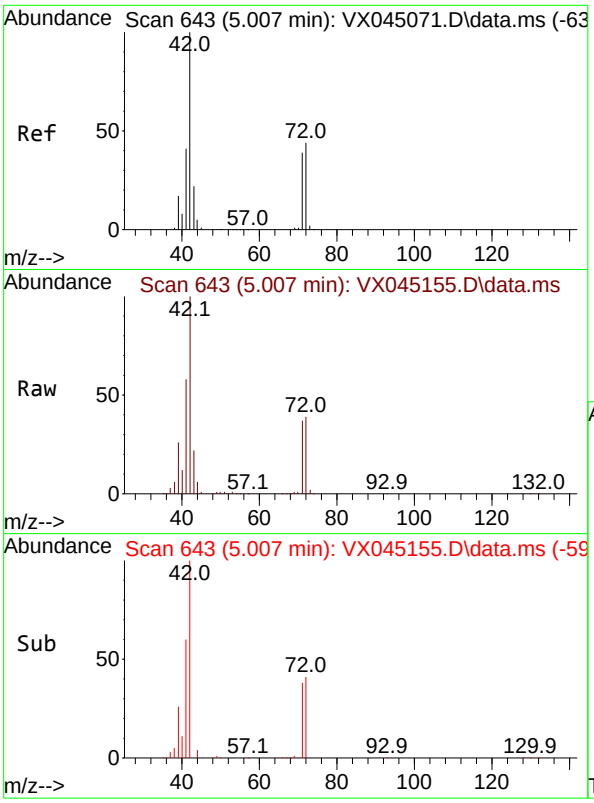



#28
Bromochloromethane
Concen: 46.329 ug/l
RT: 4.891 min Scan# 624
Delta R.T. -0.006 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 49 Resp: 54795

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.8 | 0.0 | 3.4 |
| 130 | 68.4 | 56.1 | 84.1 |

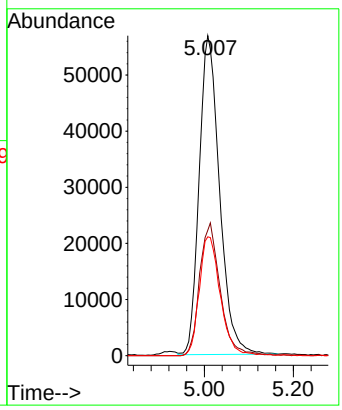





#29
Tetrahydrofuran
Concen: 244.426 ug/l
RT: 5.007 min Scan# 64
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 42 Resp: 18149

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 41.9 | 34.1 | 51.1 |
| 71 | 38.3 | 31.4 | 47.0 |




**Instrument :**
MSVOA_X
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VSTDCCC050

**Manual Integrations**
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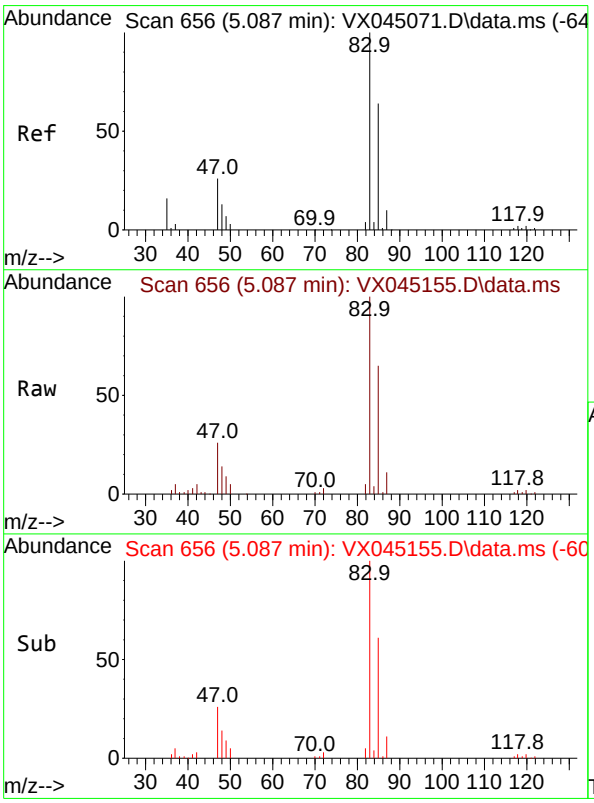
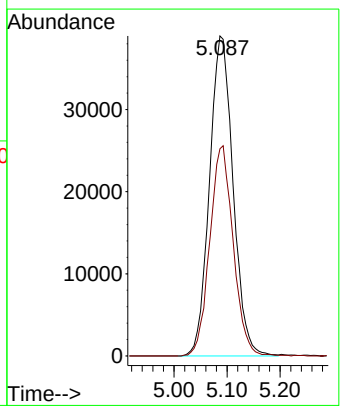
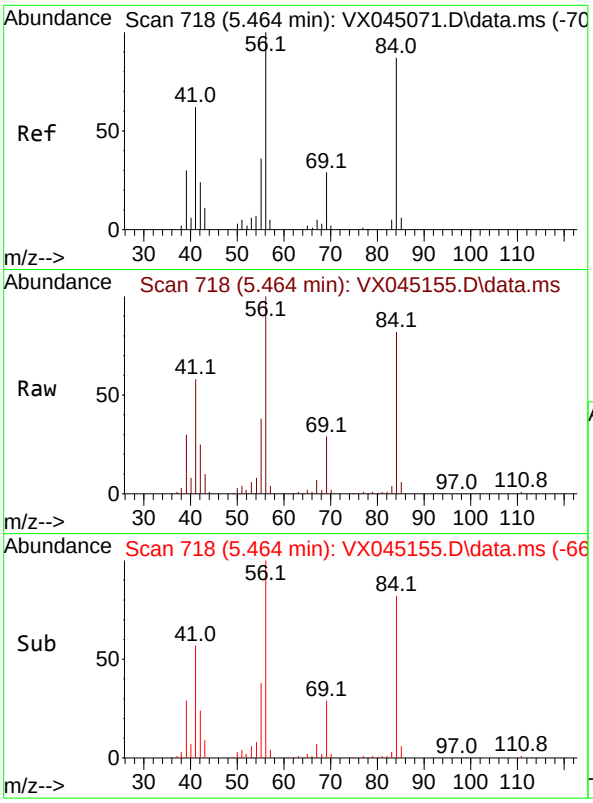



#30
Chloroform
Concen: 48.804 ug/l
RT: 5.087 min Scan# 656
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 83 Resp: 120327

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.7 | 51.4 | 77.2 |

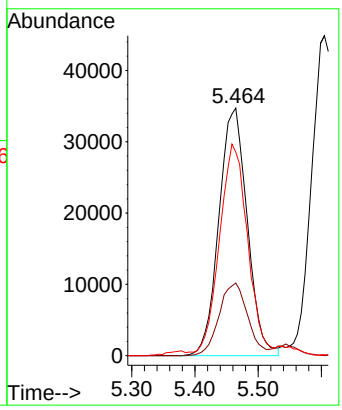





#31
Cyclohexane
Concen: 50.191 ug/l
RT: 5.464 min Scan# 7
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 56 Resp: 10811

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 29.4 | 23.4 | 35.2 |
| 84 | 80.2 | 69.4 | 104.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

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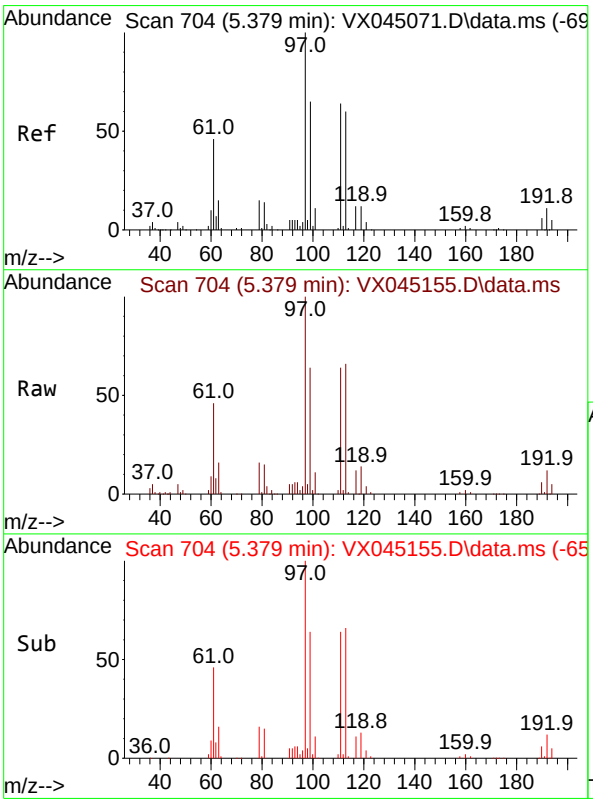
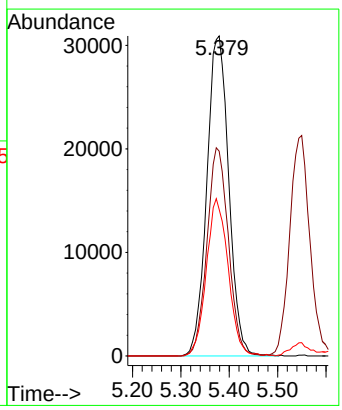
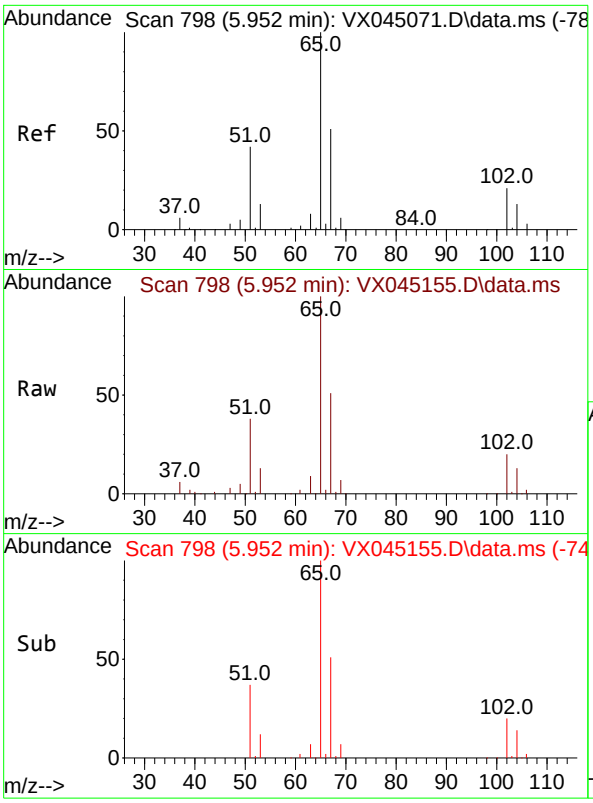



#32
1,1,1-Trichloroethane
Concen: 48.875 ug/l
RT: 5.379 min Scan# 704
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 97 Resp: 97325

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 63.6 | 51.6 | 77.4 |
| 61 | 49.0 | 38.4 | 57.6 |

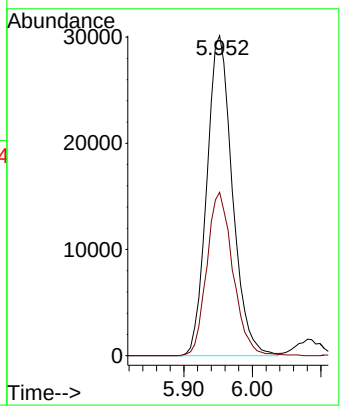





#33
1,2-Dichloroethane-d4
Concen: 49.233 ug/l
RT: 5.952 min Scan# 7
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 65 Resp: 7794

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 52.3 | 0.0 | 106.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

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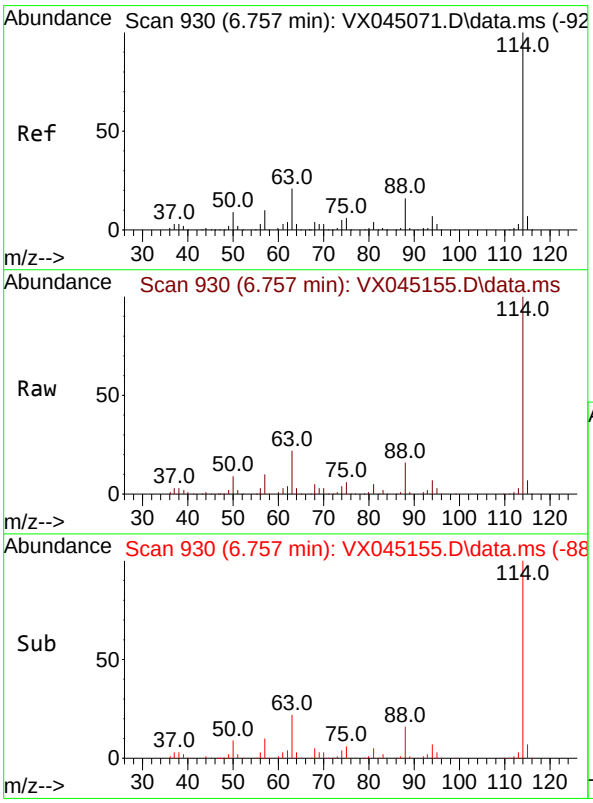
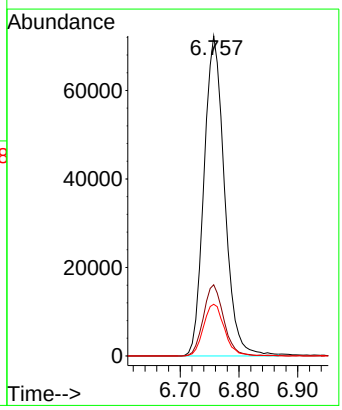
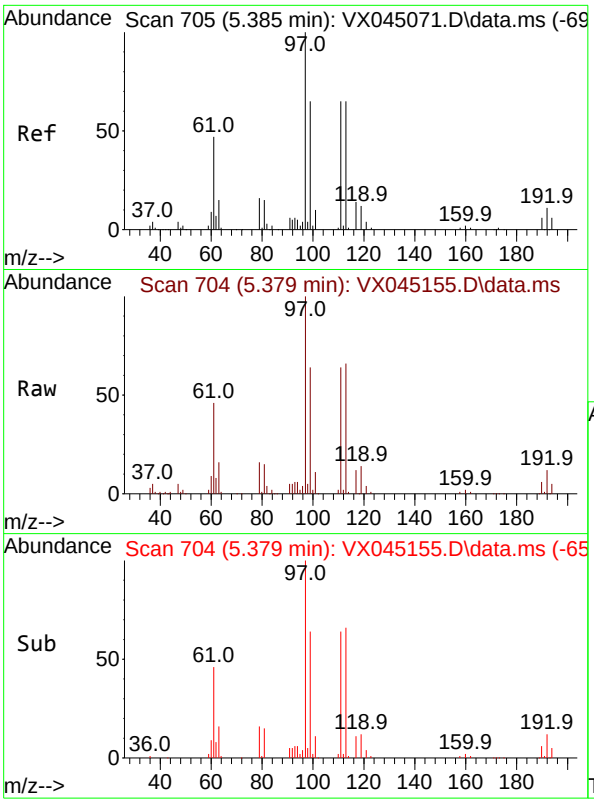



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.757 min Scan# 930
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:114 Resp: 175834

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.2 | 0.0 | 41.8 |
| 88 | 16.2 | 0.0 | 32.8 |

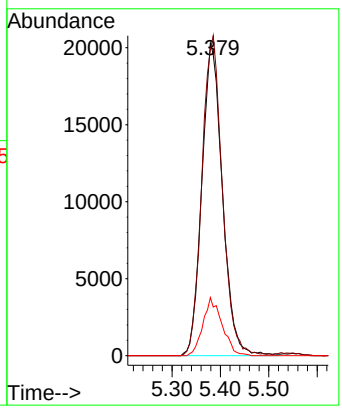





#35
Dibromofluoromethane
Concen: 50.978 ug/l
RT: 5.379 min Scan# 7
Delta R.T. -0.006 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:113 Resp: 5993

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 101.6 | 81.8 | 122.6 |
| 192 | 17.3 | 14.3 | 21.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

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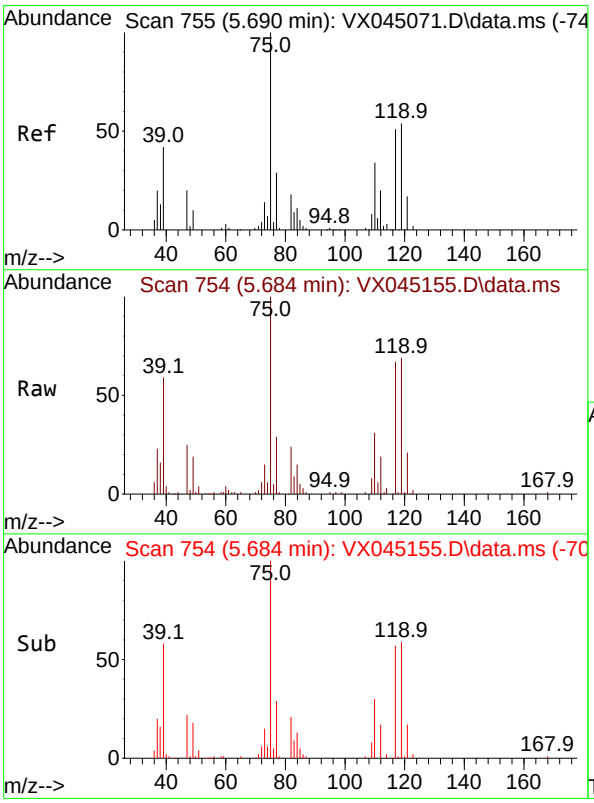
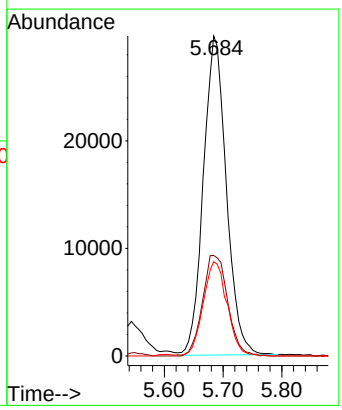
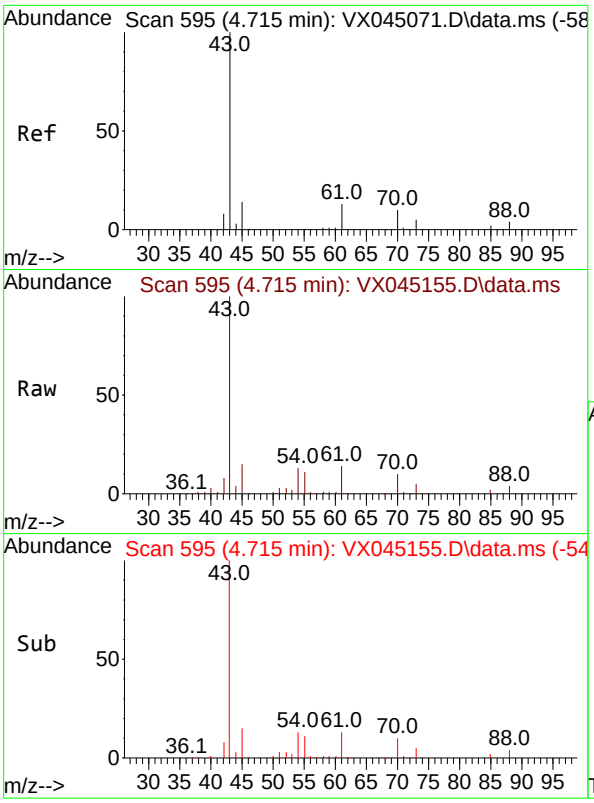



#36
1,1-Dichloropropene
Concen: 49.941 ug/l
RT: 5.684 min Scan# 754
Delta R.T. -0.006 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 75 Resp: 80527

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 34.4 | 16.9 | 50.6 |
| 77 | 30.7 | 24.5 | 36.7 |

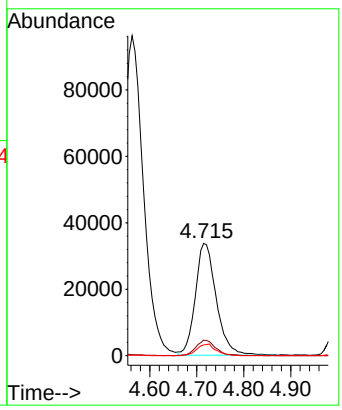





#37
Ethyl Acetate
Concen: 50.173 ug/l
RT: 4.715 min Scan# 5
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 43 Resp: 10424

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 13.2 | 10.8 | 16.2 |
| 70 | 9.5 | 7.7 | 11.5 |




**Instrument :**
MSVOA_X
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VSTDCCC050

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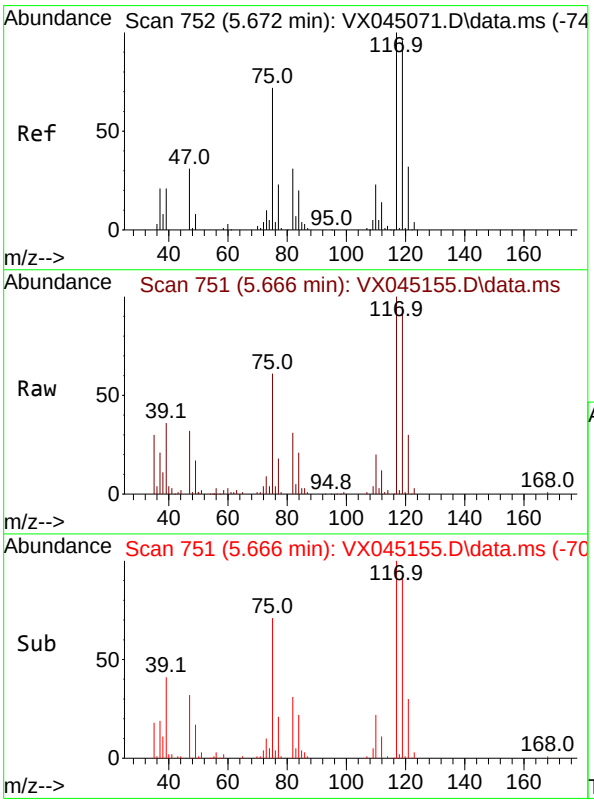
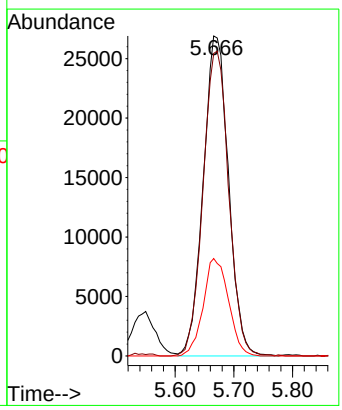
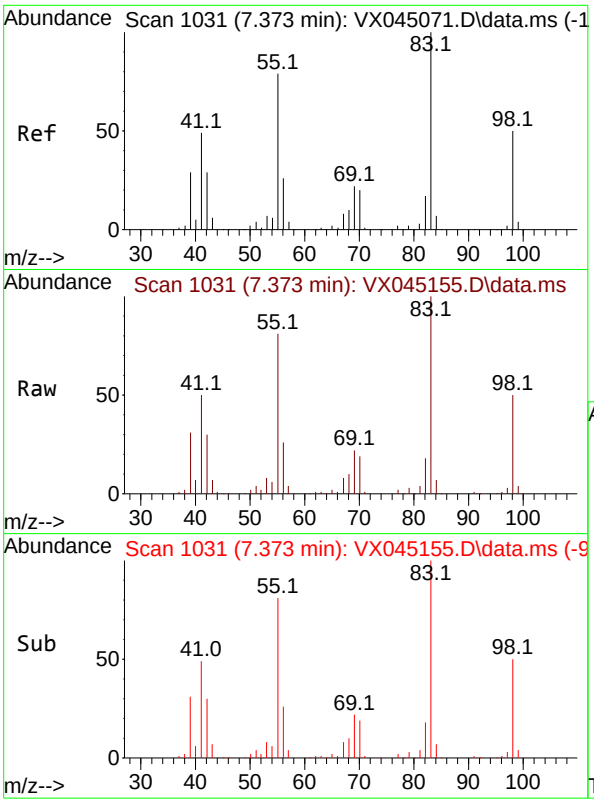



#38
Carbon Tetrachloride
Concen: 49.163 ug/l
RT: 5.666 min Scan# 751
Delta R.T. -0.006 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:117 Resp: 80480

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 94.2 | 76.7 | 115.1 |
| 121 | 30.4 | 25.5 | 38.3 |

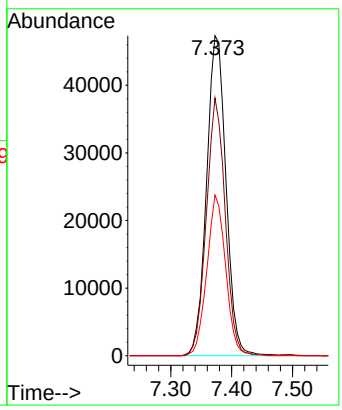





#39
Methylcyclohexane
Concen: 54.417 ug/l
RT: 7.373 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 83 Resp: 10513

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 80.5 | 63.0 | 94.4 |
| 98 | 50.2 | 39.7 | 59.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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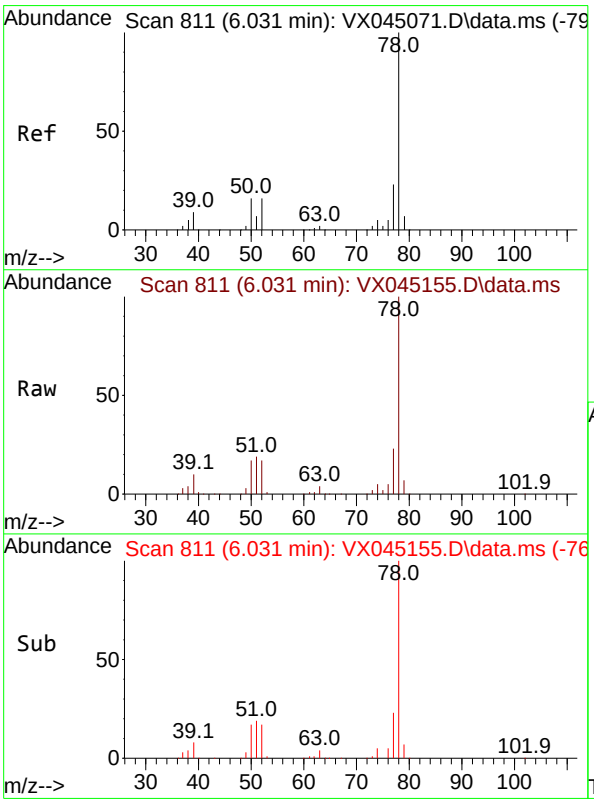
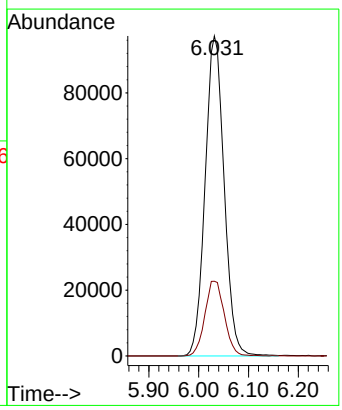
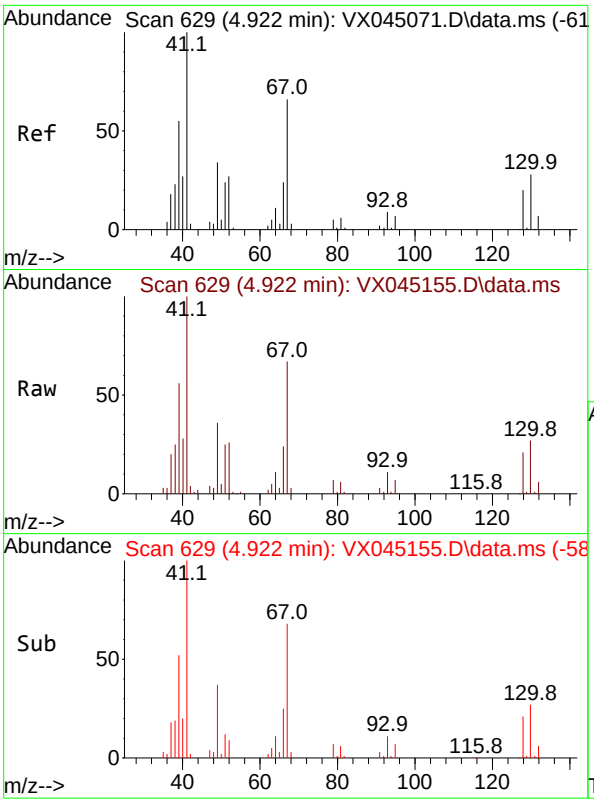



#40
Benzene
Concen: 50.564 ug/l
RT: 6.031 min Scan# 811
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 78 Resp: 257458

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.3 | 18.8 | 28.2 |

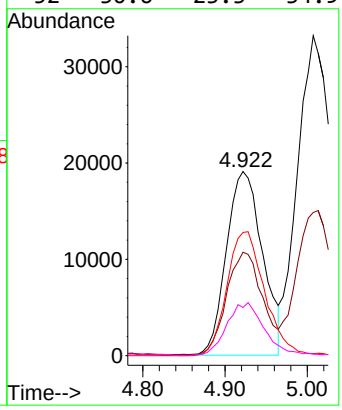





#41
Methacrylonitrile
Concen: 51.935 ug/l
RT: 4.922 min Scan# 6
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 41 Resp: 5834

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 55.9 | 44.6 | 67.0 |
| 67 | 70.7 | 53.9 | 80.9 |
| 52 | 30.6 | 23.3 | 34.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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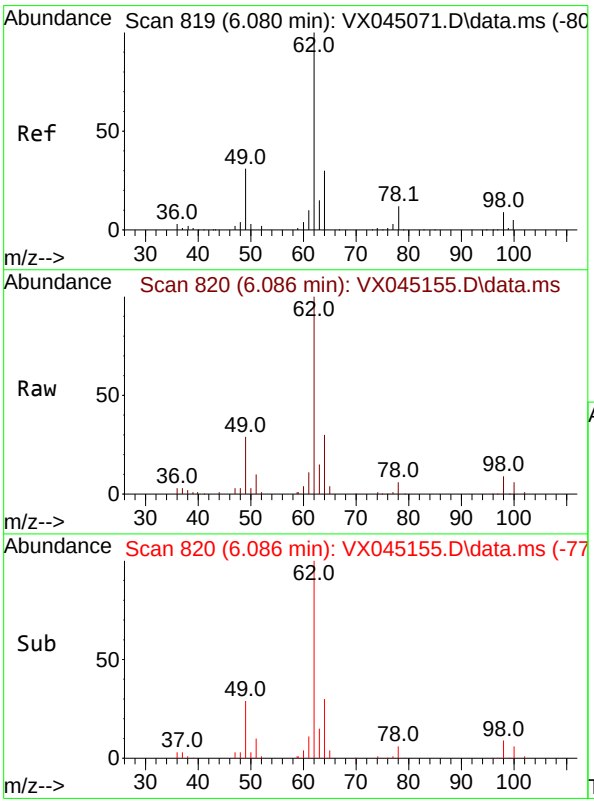
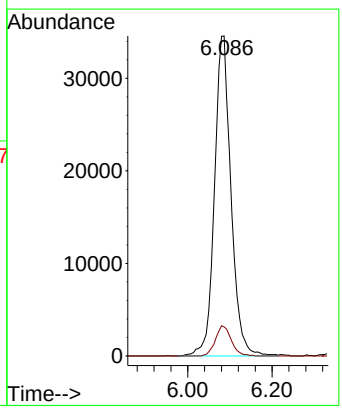
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

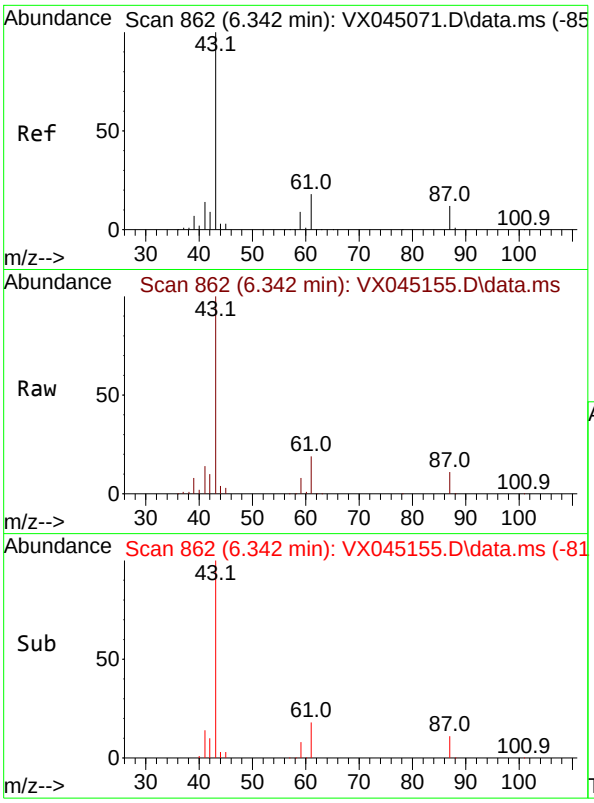



#42
1,2-Dichloroethane
Concen: 51.224 ug/l
RT: 6.086 min Scan# 820
Delta R.T. 0.006 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 62 Resp: 93921

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 9.0 | 0.0 | 18.2 |

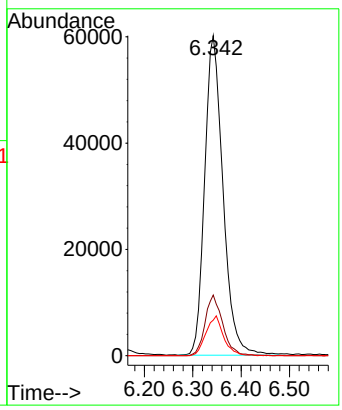





#43
Isopropyl Acetate
Concen: 51.671 ug/l
RT: 6.342 min Scan# 8
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 43 Resp: 15875

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 18.2 | 14.9 | 22.3 |
| 87 | 11.9 | 9.4 | 14.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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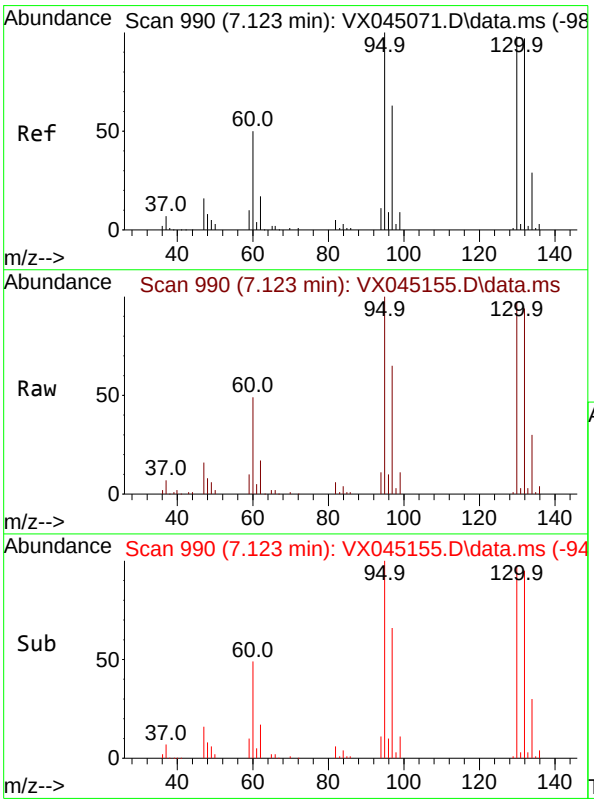
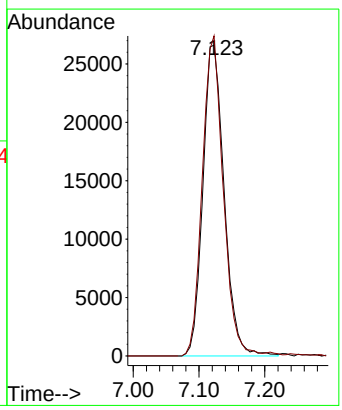
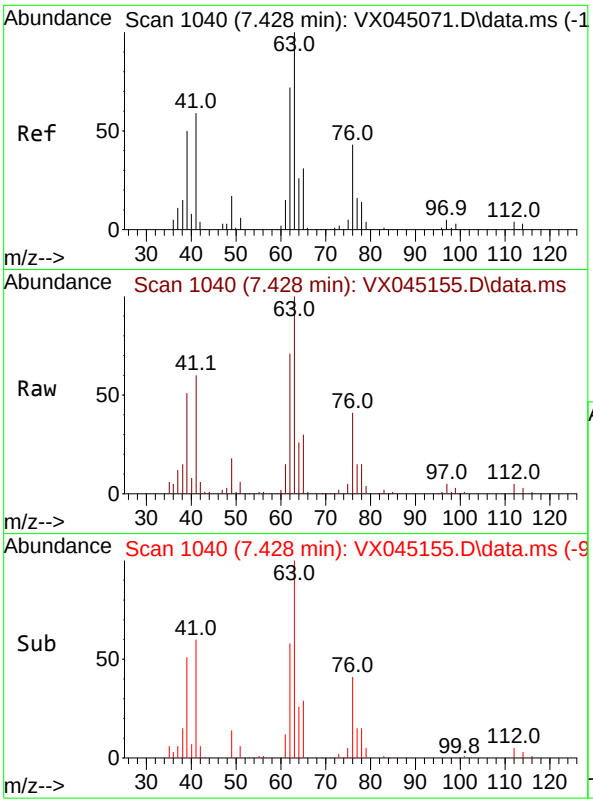



#44
Trichloroethene
Concen: 50.205 ug/l
RT: 7.123 min Scan# 990
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:130 Resp: 60024

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 103.0 | 0.0 | 205.0 |

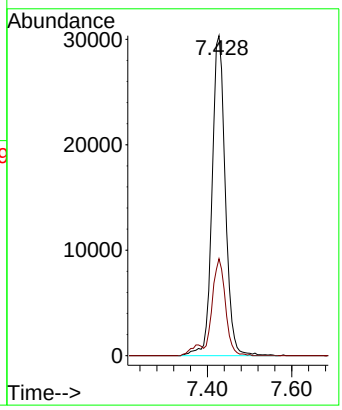





#45
1,2-Dichloropropane
Concen: 50.625 ug/l
RT: 7.428 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 63 Resp: 6627

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 30.3 | 24.7 | 37.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

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Reviewed By :John Carlone 03/10/2025
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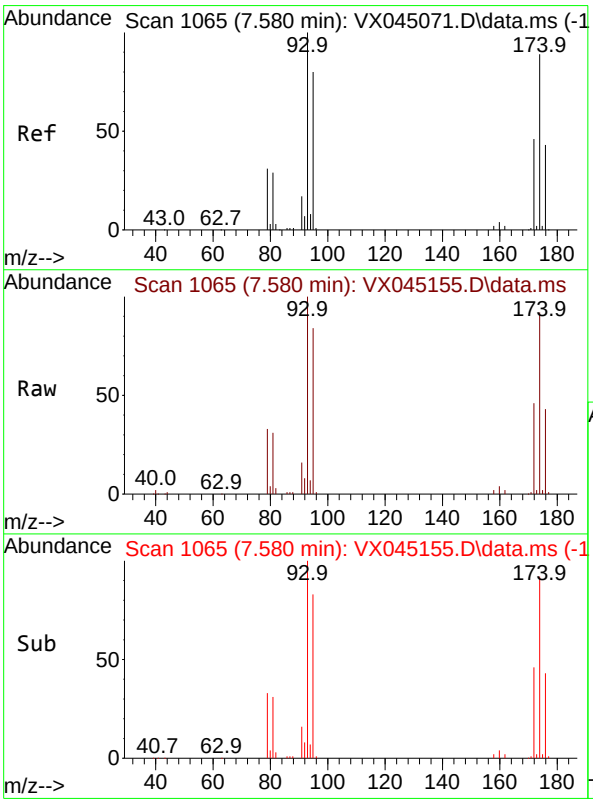
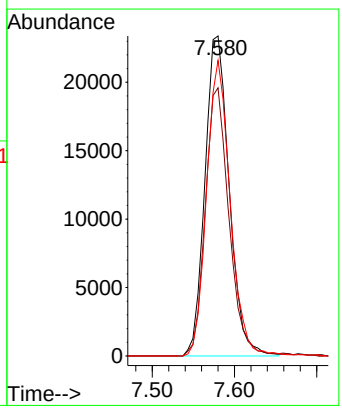
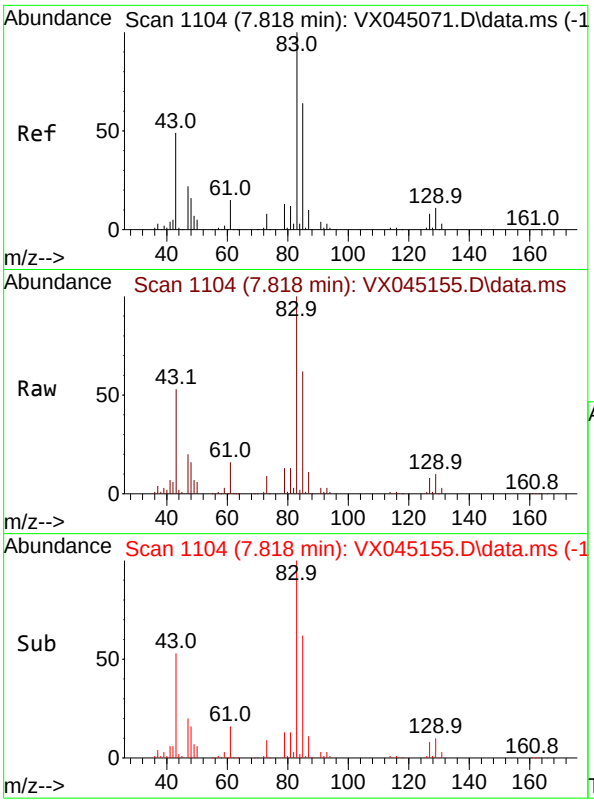



#46
Dibromomethane
Concen: 51.739 ug/l
RT: 7.580 min Scan# 1065
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 93 Resp: 47874

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 82.5 | 65.8 | 98.8 |
| 174 | 90.1 | 72.2 | 108.2 |

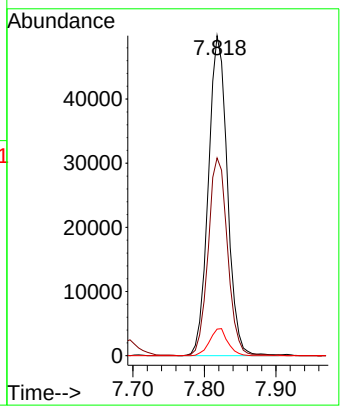





#47
Bromodichloromethane
Concen: 50.685 ug/l
RT: 7.818 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 83 Resp: 9199

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 61.8 | 51.1 | 76.7 |
| 127 | 8.3 | 6.4 | 9.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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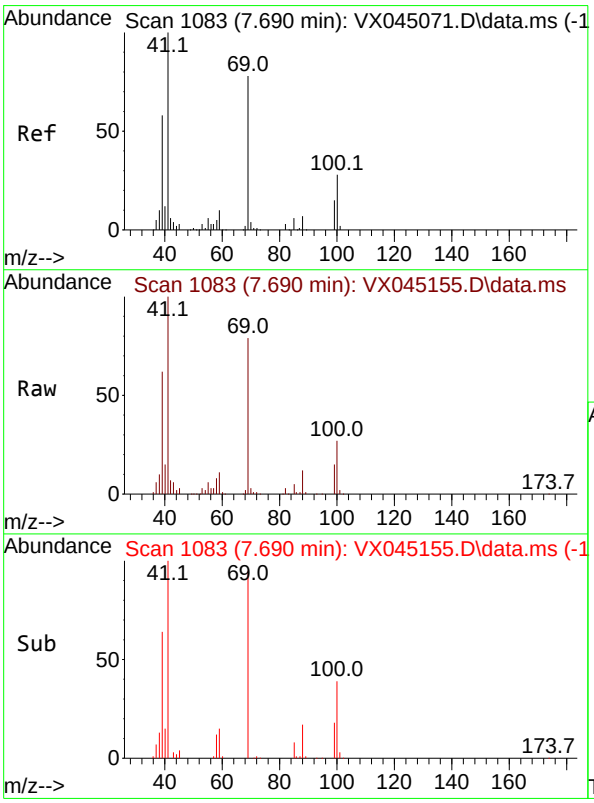
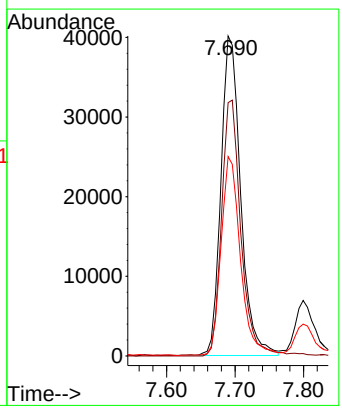
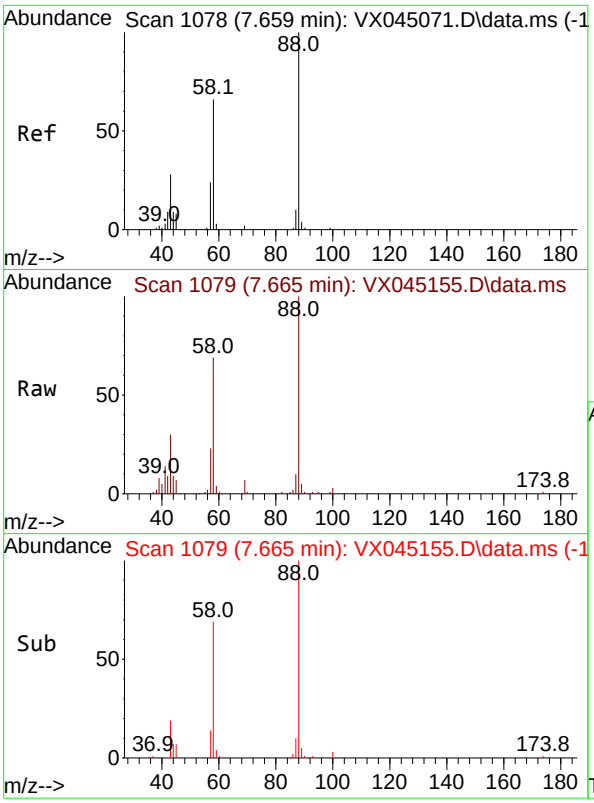



#48
Methyl methacrylate
Concen: 51.991 ug/l
RT: 7.690 min Scan# 1083
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 41 Resp: 80137

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 78.3 | 63.0 | 94.6 |
| 39 | 61.0 | 47.5 | 71.3 |

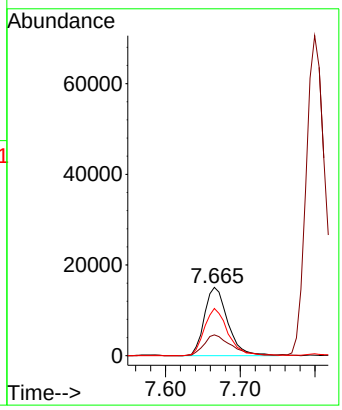





#49
1,4-Dioxane
Concen: 1004.564 ug/l
RT: 7.665 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 88 Resp: 3266

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 35.7 | 28.7 | 43.1 |
| 58 | 70.0 | 55.8 | 83.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

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Reviewed By :John Carlone 03/10/2025
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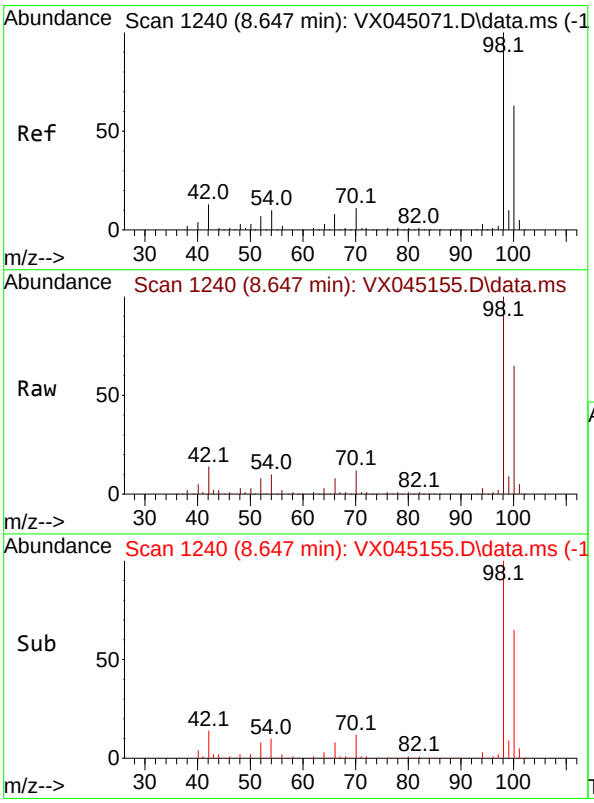
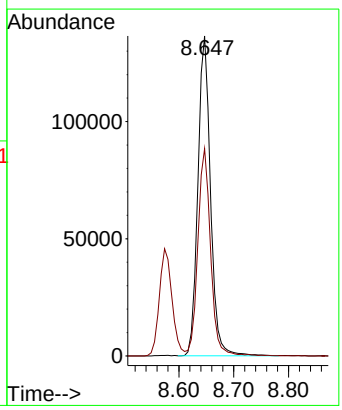
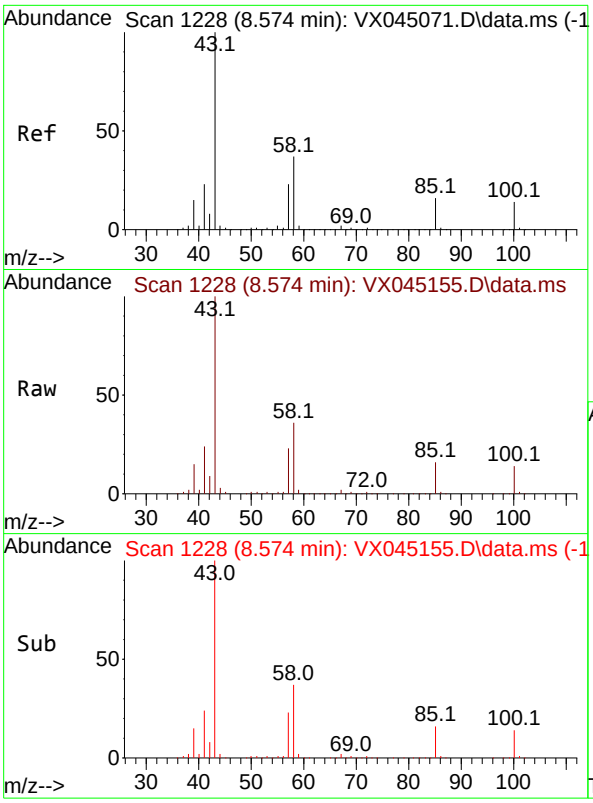



#50
Toluene-d8
Concen: 51.298 ug/l
RT: 8.647 min Scan# 1240
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 98 Resp: 218659

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.6 | 52.0 | 78.0 |

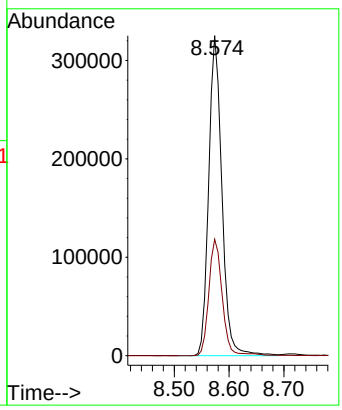





#51
4-Methyl-2-Pentanone
Concen: 262.414 ug/l
RT: 8.574 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 43 Resp: 54133

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 37.2 | 29.2 | 43.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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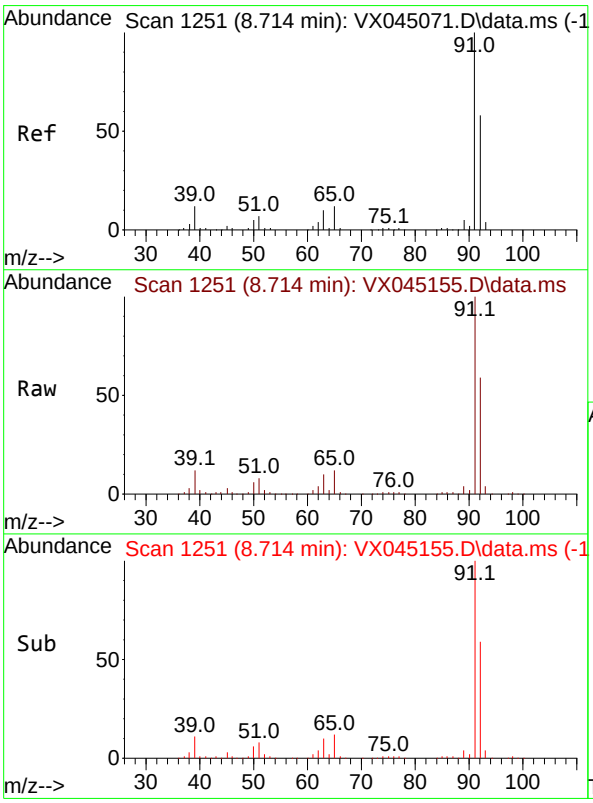
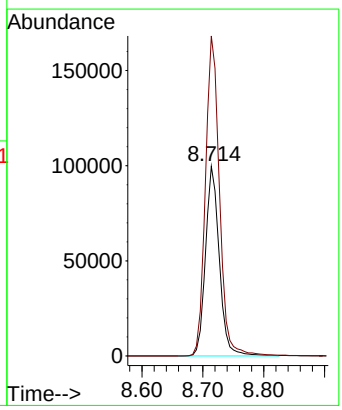
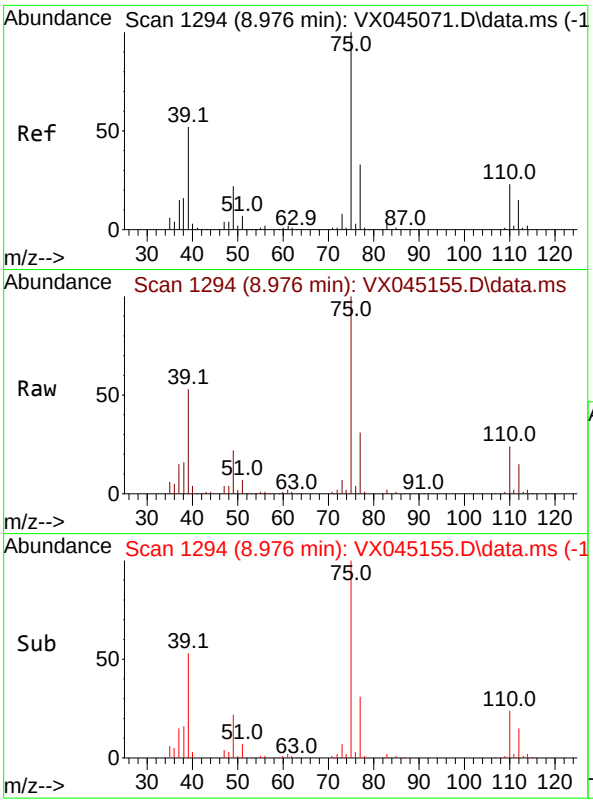



#52
Toluene
Concen: 52.538 ug/l
RT: 8.714 min Scan# 1251
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 92 Resp: 156953

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 172.1 | 138.9 | 208.3 |

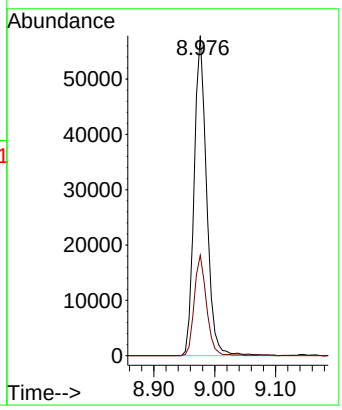





#53
t-1,3-Dichloropropene
Concen: 54.074 ug/l
RT: 8.976 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 75 Resp: 8204

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.4 | 26.5 | 39.7 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

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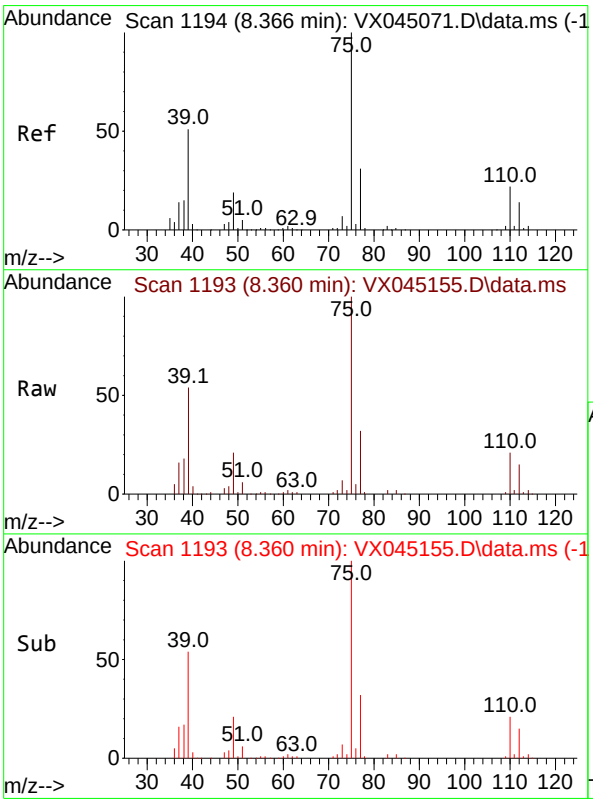
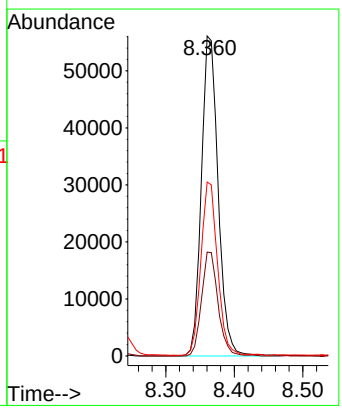
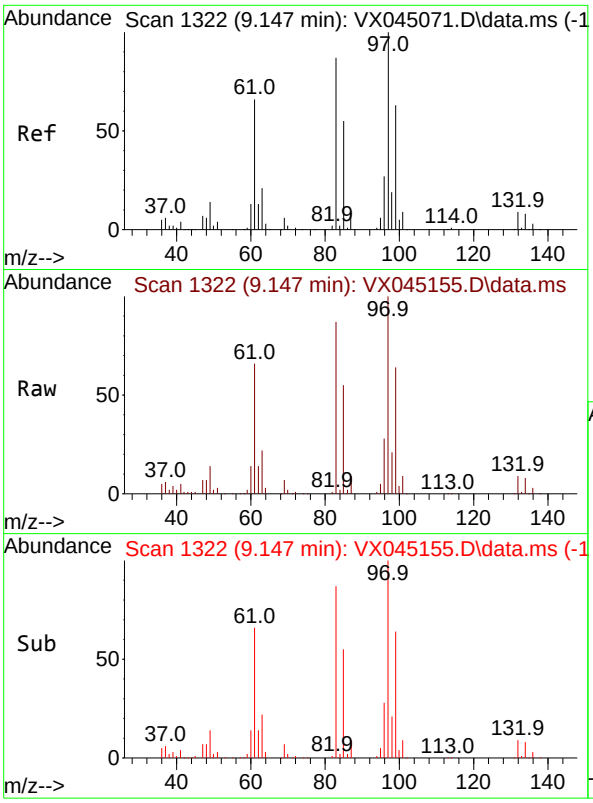



#54
cis-1,3-Dichloropropene
Concen: 54.055 ug/l
RT: 8.360 min Scan# 1193
Delta R.T. -0.006 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 75 Resp: 95642

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.4 | 24.7 | 37.1 |
| 39 | 54.2 | 40.7 | 61.1 |

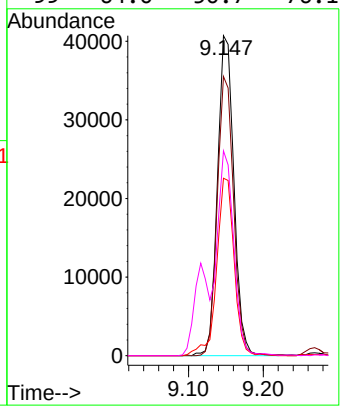





#55
1,1,2-Trichloroethane
Concen: 50.685 ug/l
RT: 9.147 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 97 Resp: 6233

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 87.3 | 69.4 | 104.2 |
| 85 | 55.5 | 44.1 | 66.1 |
| 99 | 64.0 | 50.7 | 76.1 |




**Instrument :**
MSVOA_X
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VSTDCCC050

**Manual Integrations**
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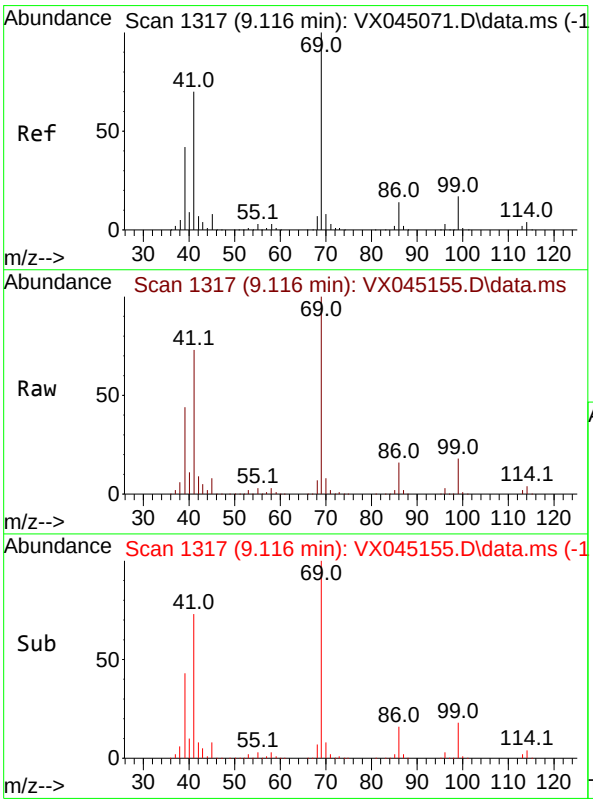
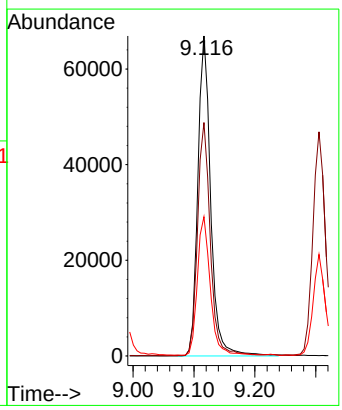
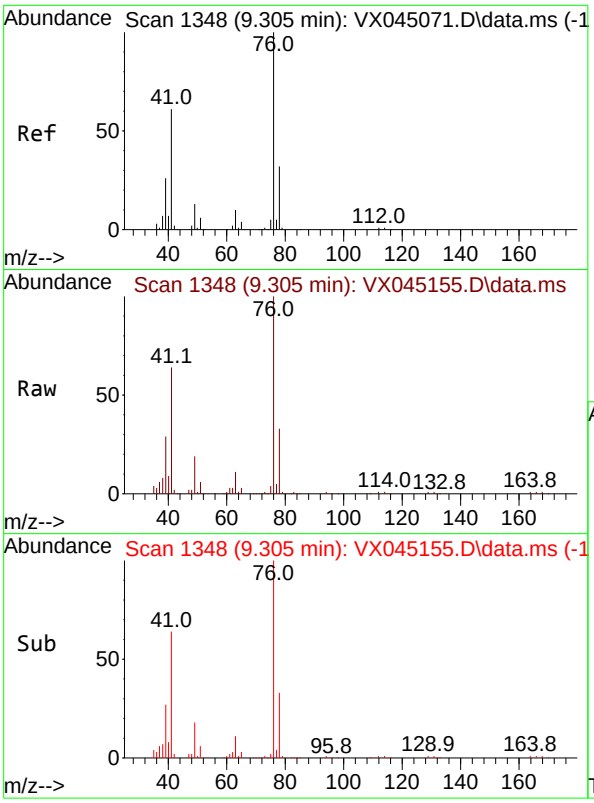



#56
Ethyl methacrylate
Concen: 52.367 ug/l
RT: 9.116 min Scan# 1317
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 69 Resp: 97896

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 72.4 | 57.0 | 85.4 |
| 39 | 43.4 | 34.2 | 51.4 |

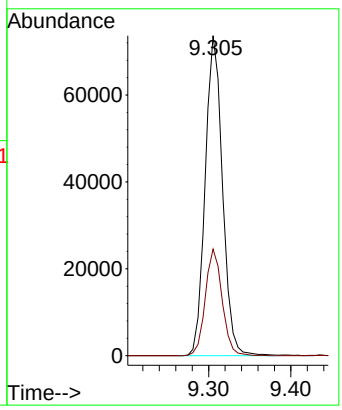





#57
1,3-Dichloropropane
Concen: 50.592 ug/l
RT: 9.305 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 76 Resp: 10767

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.4 | 25.5 | 38.3 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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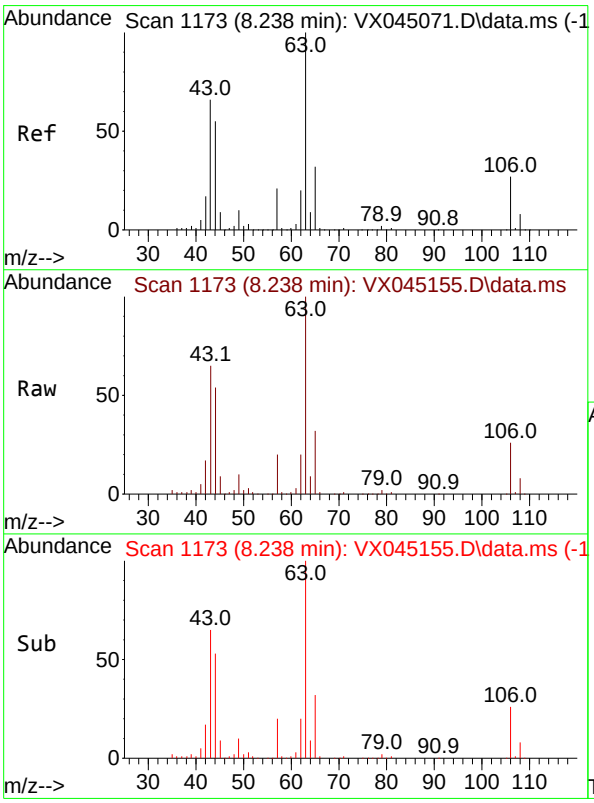
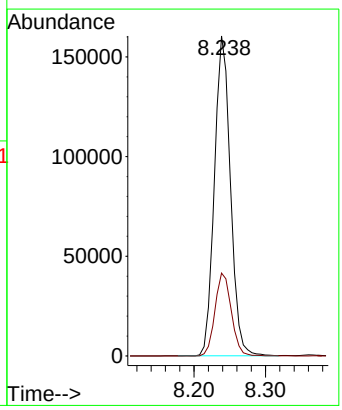
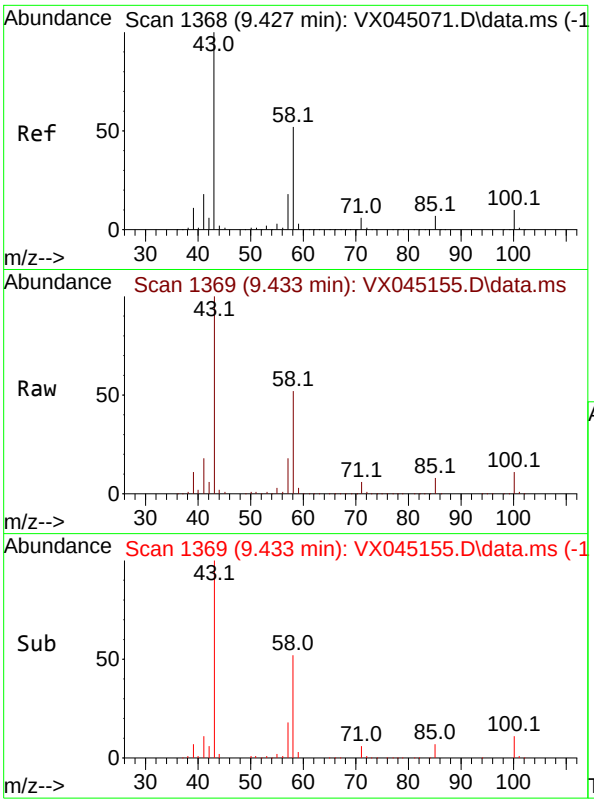



#58
2-Chloroethyl Vinyl ether
Concen: 274.113 ug/l
RT: 8.238 min Scan# 1173
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 63 Resp: 249971

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 26.4 | 21.5 | 32.3 |

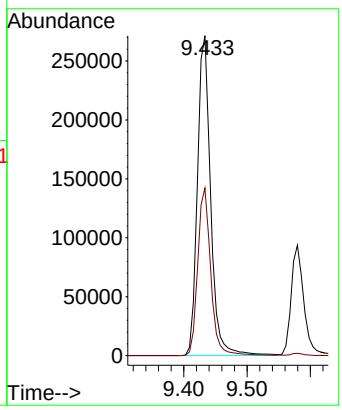





#59
2-Hexanone
Concen: 264.998 ug/l
RT: 9.433 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 43 Resp: 39608

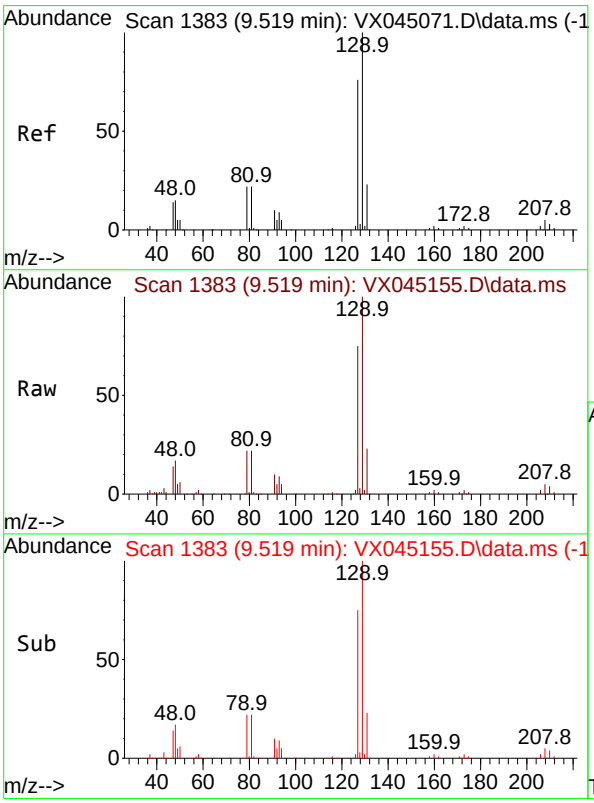
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 51.8 | 25.9 | 77.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

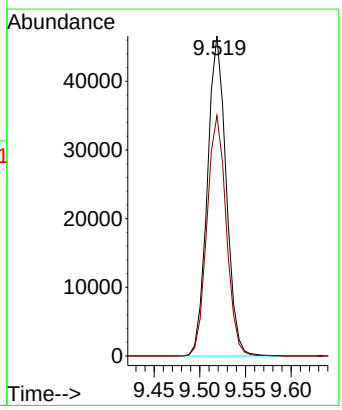
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

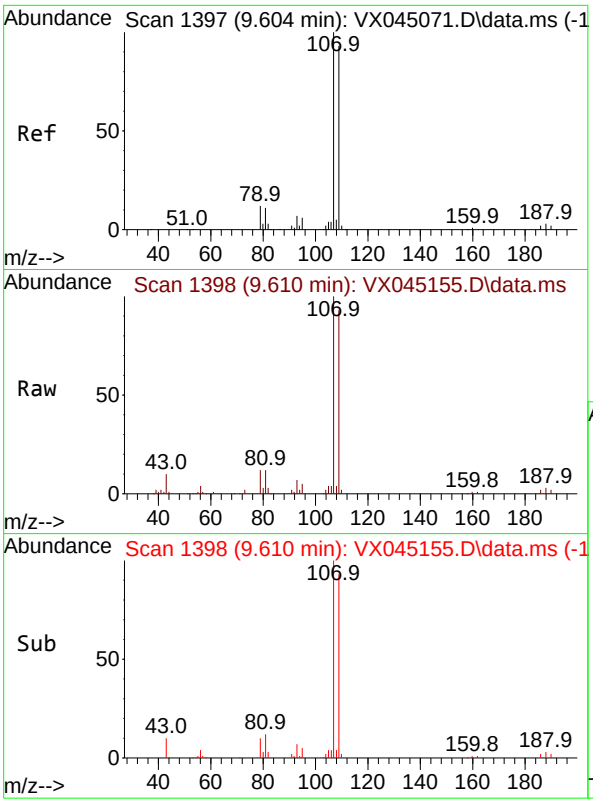



#60
Dibromochloromethane
Concen: 51.634 ug/l
RT: 9.519 min Scan# 1383
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:129 Resp: 66396

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 77.1 | 38.5 | 115.5 |

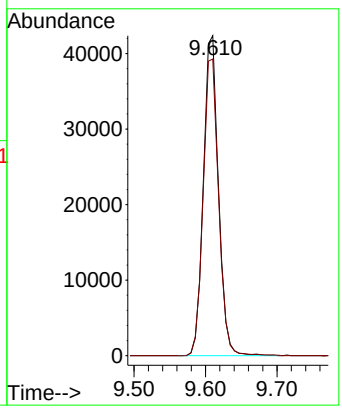





#61
1,2-Dibromoethane
Concen: 50.561 ug/l
RT: 9.610 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:107 Resp: 6207

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 95.4 | 76.1 | 114.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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Reviewed By :John Carlone 03/10/2025
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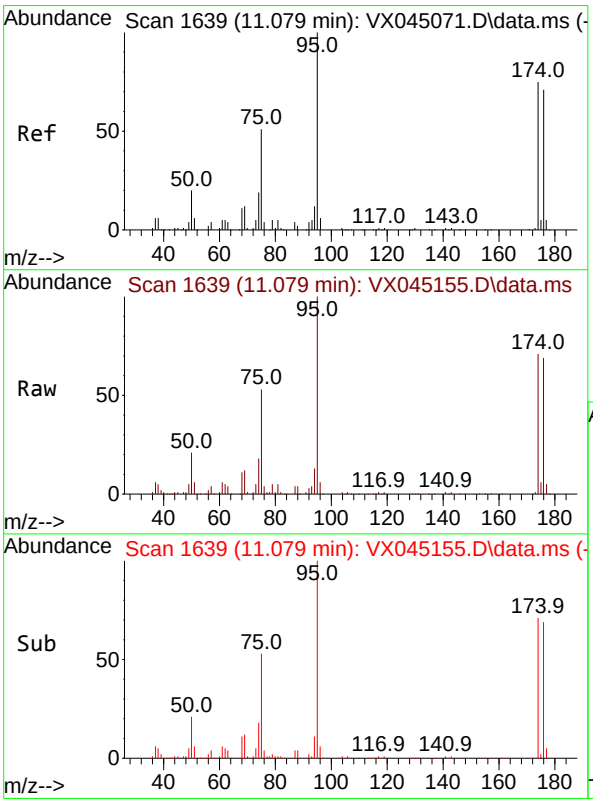
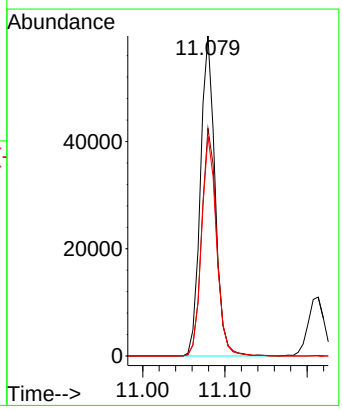
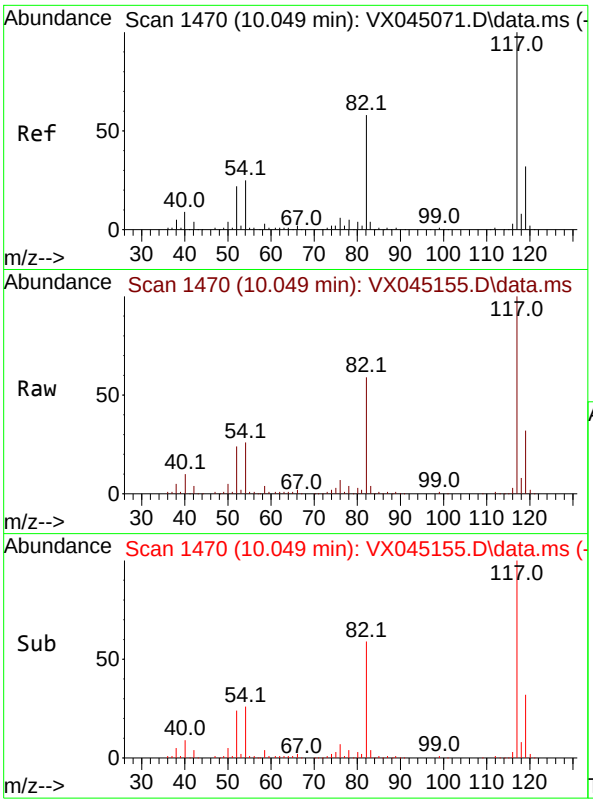



#62
4-Bromofluorobenzene
Concen: 52.170 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 95 Resp: 73689

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 72.7 | 0.0 | 148.2 |
| 176 | 70.0 | 0.0 | 141.4 |

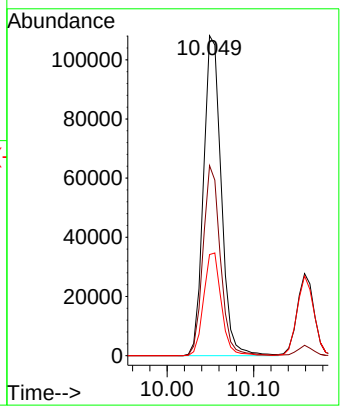





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.049 min Scan# 14
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:117 Resp: 15374

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 59.4 | 46.3 | 69.5 |
| 119 | 31.6 | 25.7 | 38.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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Reviewed By :John Carlone 03/10/2025
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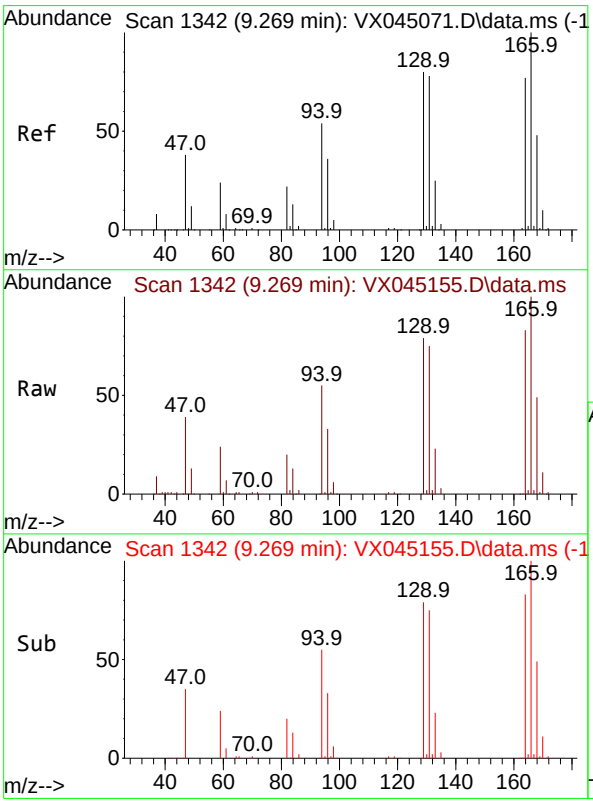
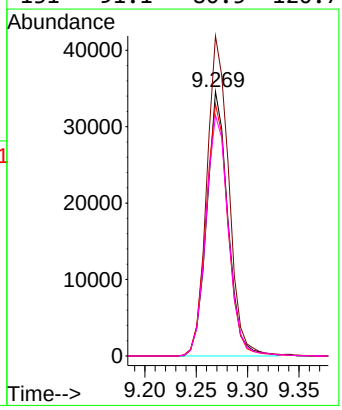
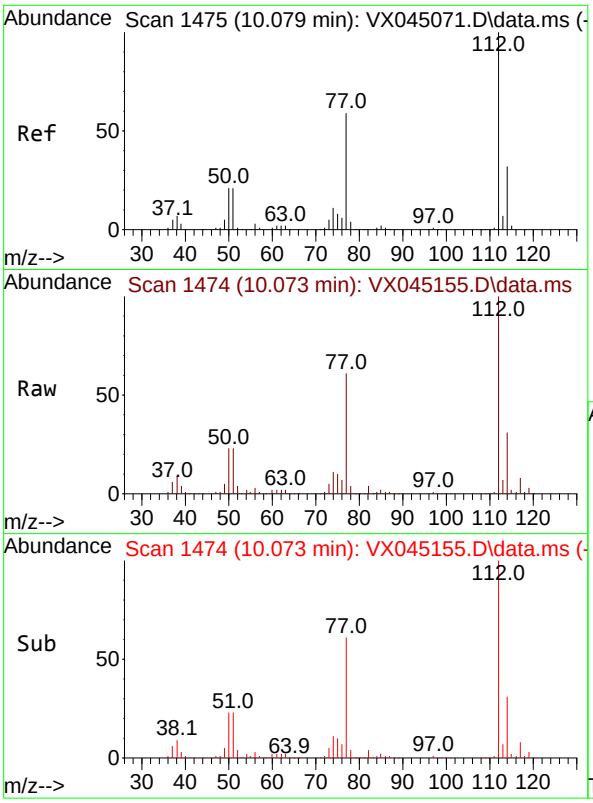



#64
Tetrachloroethene
Concen: 50.303 ug/l
RT: 9.269 min Scan# 1342
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:164 Resp: 49532

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 121.0 | 103.6 | 155.4 |
| 129 | 95.3 | 82.7 | 124.1 |
| 131 | 91.1 | 80.5 | 120.7 |






#65
Chlorobenzene
Concen: 50.951 ug/l
RT: 10.073 min Scan# 14
Delta R.T. -0.006 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:112 Resp: 16575

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 30.8 | 26.0 | 39.0 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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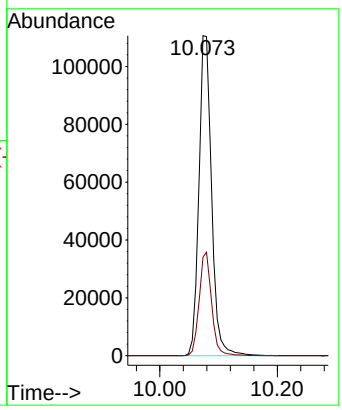
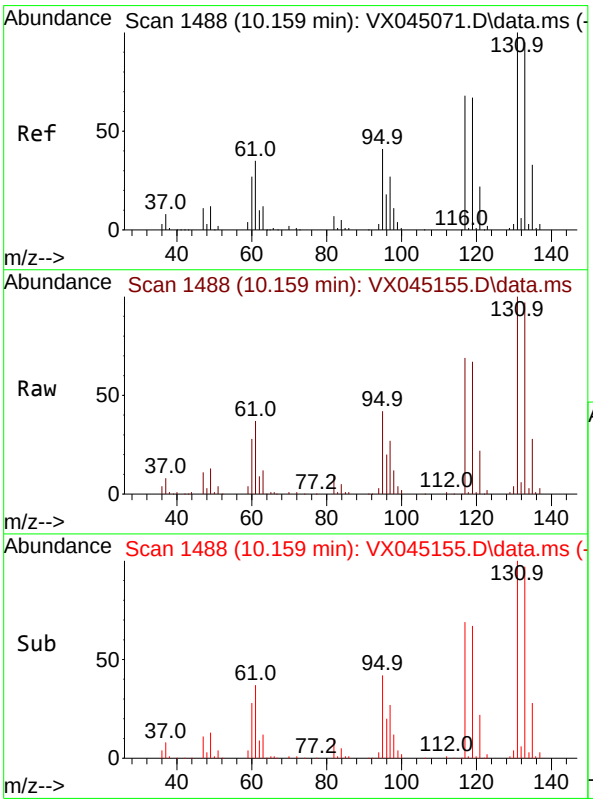
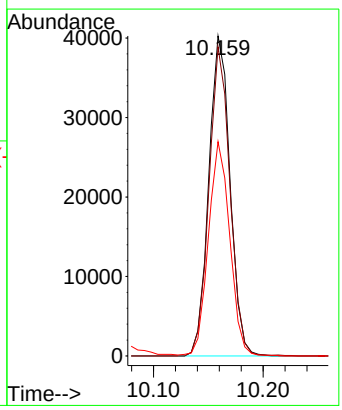


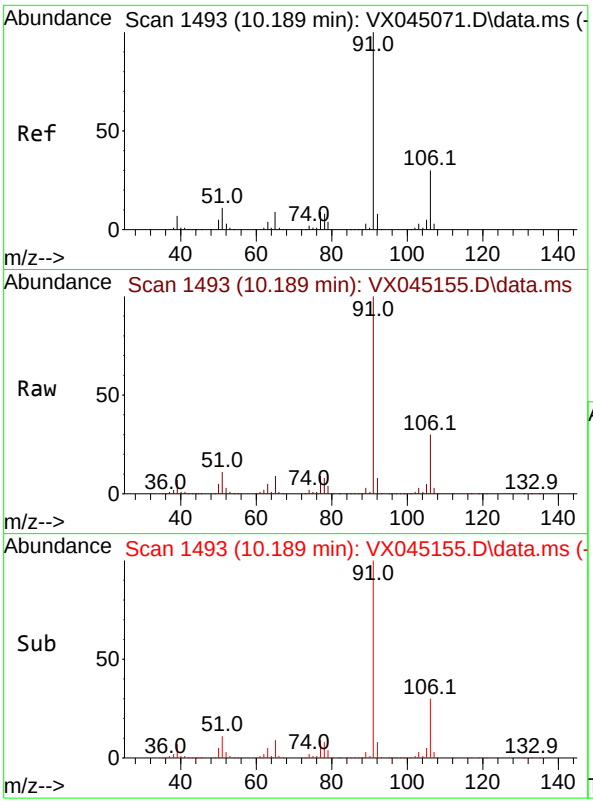




#66
1,1,1,2-Tetrachloroethane
Concen: 50.032 ug/l
RT: 10.159 min Scan# 1488
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:131 Resp: 54204

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 95.4 | 48.6 | 145.9 |
| 119 | 67.4 | 33.9 | 101.7 |

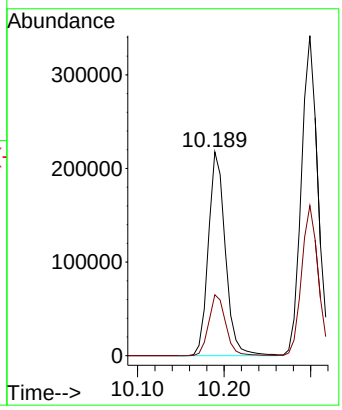





#67
Ethyl Benzene
Concen: 52.376 ug/l
RT: 10.189 min Scan# 14
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 91 Resp: 29689

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 29.9 | 23.9 | 35.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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Reviewed By :John Carlone 03/10/2025
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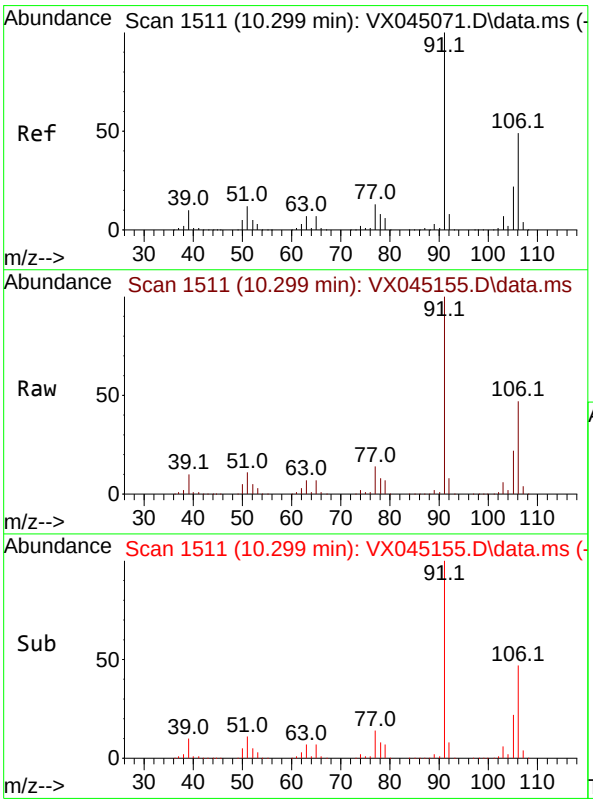
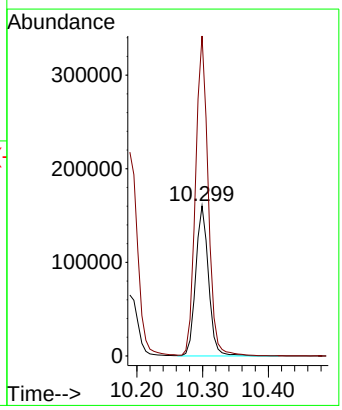
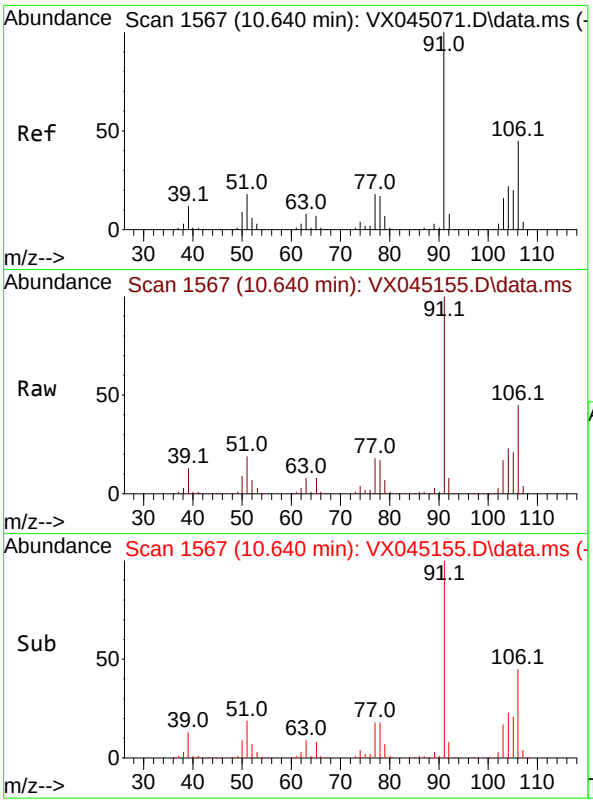



#68
m/p-Xylenes
Concen: 104.329 ug/l
RT: 10.299 min Scan# 1511
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:106 Resp: 216494

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 210.8 | 165.4 | 248.0 |

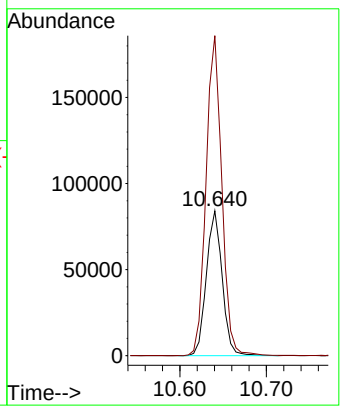





#69
o-Xylene
Concen: 51.019 ug/l
RT: 10.640 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:106 Resp: 10677

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 219.8 | 109.9 | 329.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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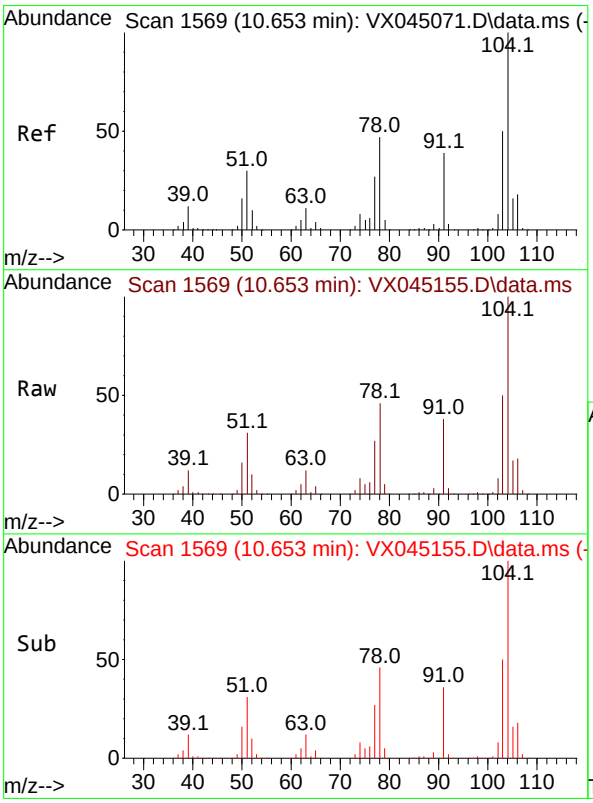
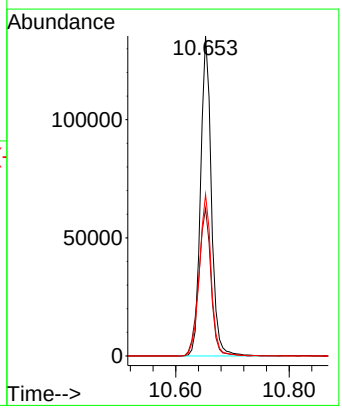
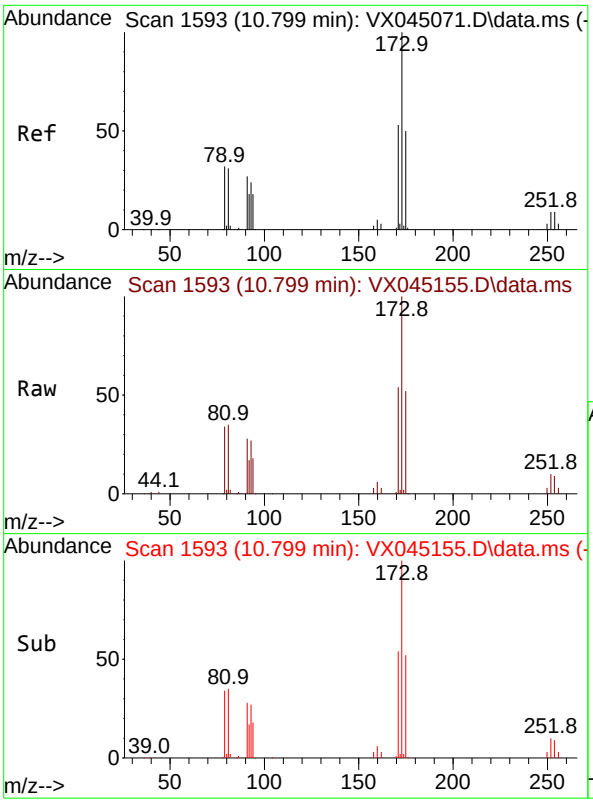



#70
Styrene
Concen: 52.810 ug/l
RT: 10.653 min Scan# 1569
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:104 Resp: 178838

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 52.7 | 42.2 | 63.4 |
| 103 | 55.2 | 43.8 | 65.8 |

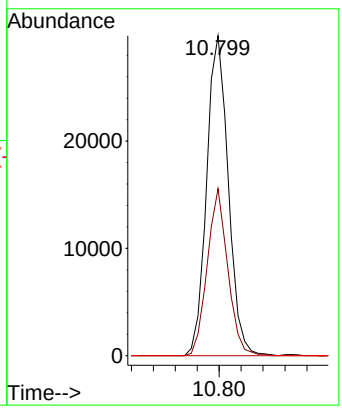





#71
Bromoform
Concen: 49.970 ug/l
RT: 10.799 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:173 Resp: 4082

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 49.6 | 24.6 | 73.6 |
| 254 | 0.0 | 0.0 | 0.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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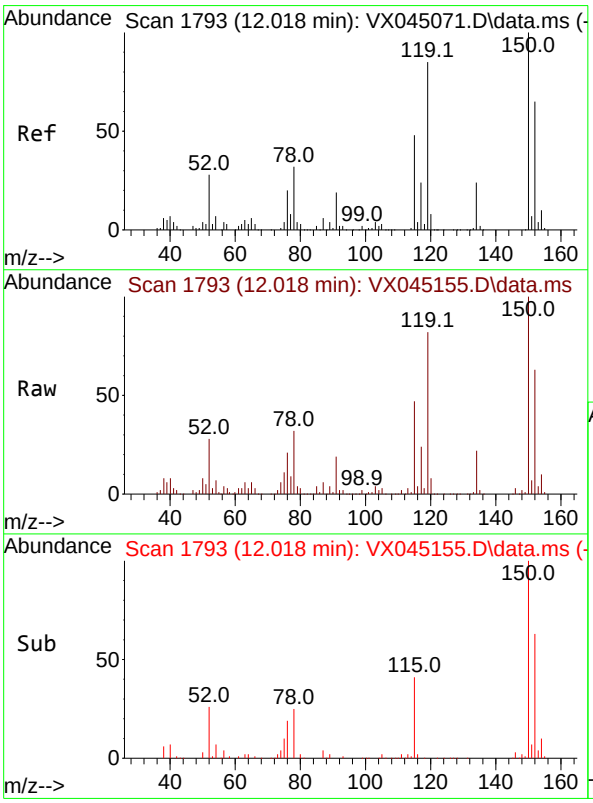
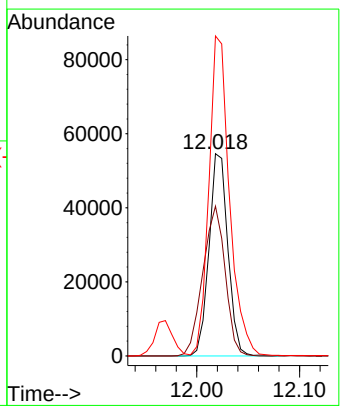
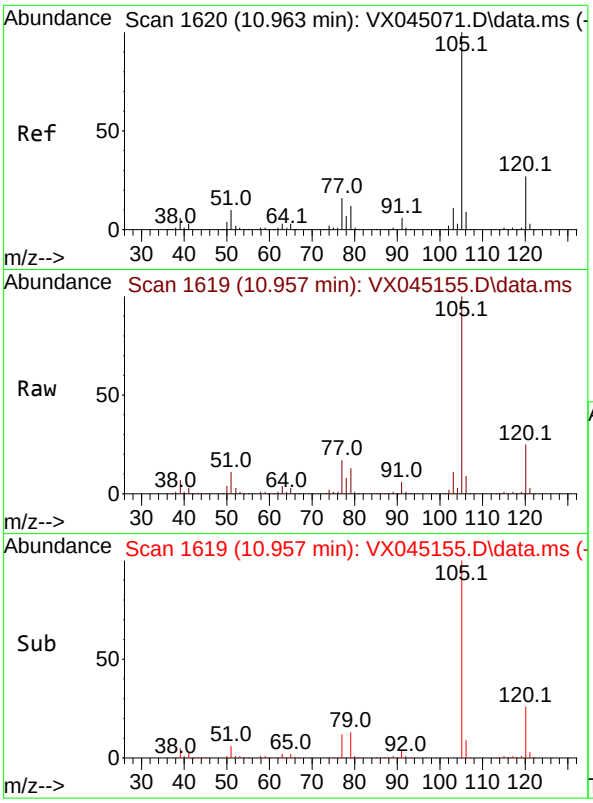



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.018 min Scan# 1793
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:152 Resp: 69403

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 87.7 | 44.2 | 132.6 |
| 150 | 173.0 | 0.0 | 349.0 |

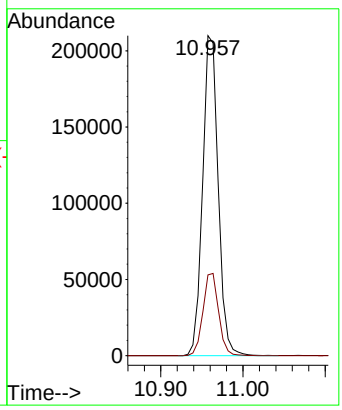





#73
Isopropylbenzene
Concen: 50.984 ug/l
RT: 10.957 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:105 Resp: 27618

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.8 | 13.2 | 39.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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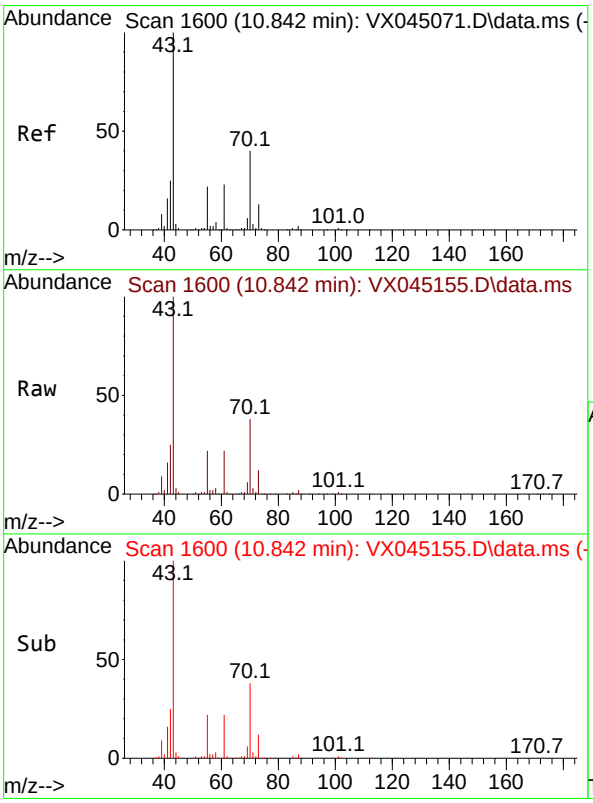
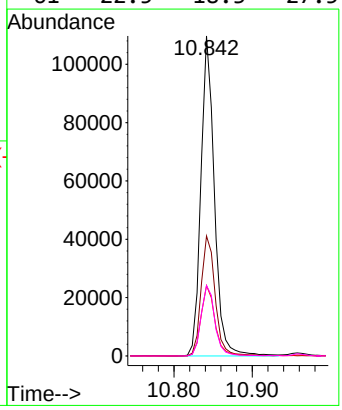
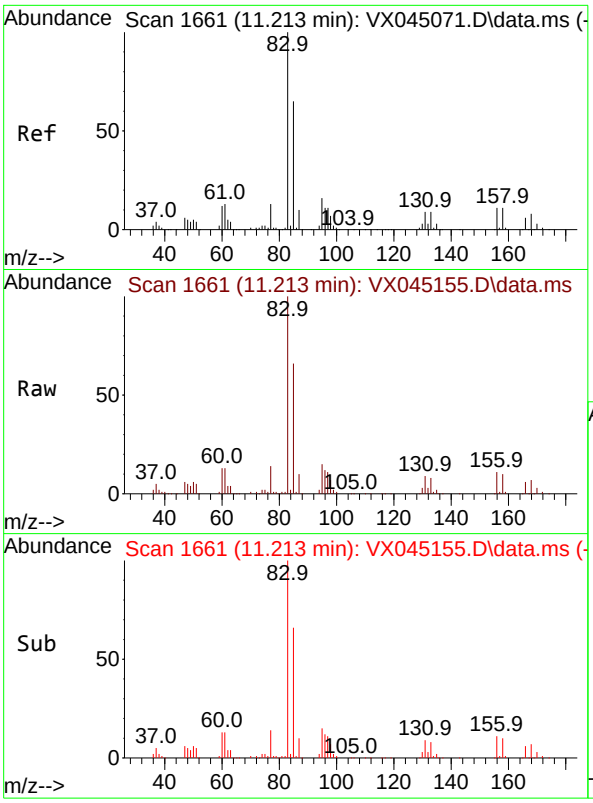



#74
N-amyl acetate
Concen: 51.811 ug/l
RT: 10.842 min Scan# 1600
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 43 Resp: 131698

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 39.0 | 31.8 | 47.6 |
| 55 | 22.9 | 18.3 | 27.5 |
| 61 | 22.5 | 18.3 | 27.5 |

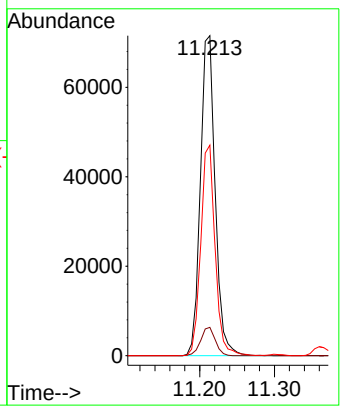





#75
1,1,2,2-Tetrachloroethane
Concen: 49.376 ug/l
RT: 11.213 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 83 Resp: 9815

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 8.8 | 4.5 | 13.4 |
| 85 | 63.9 | 31.7 | 95.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 03/10/2025
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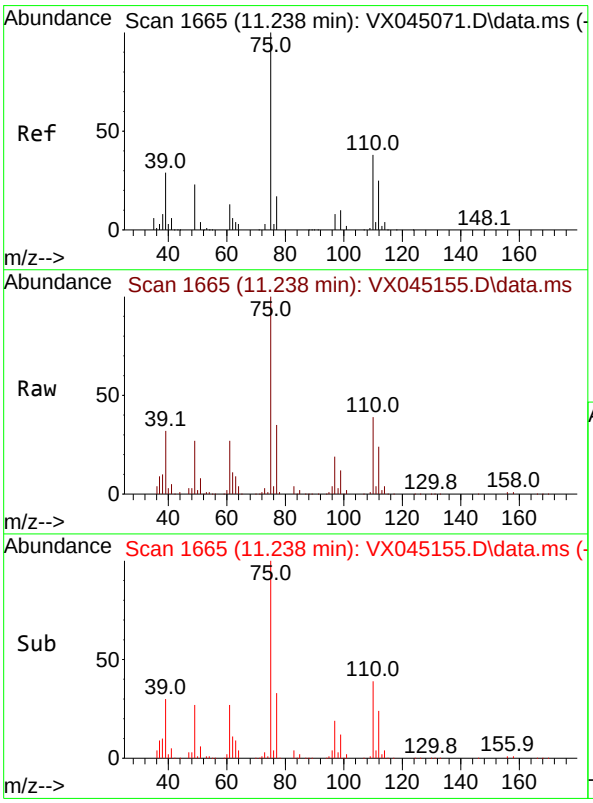
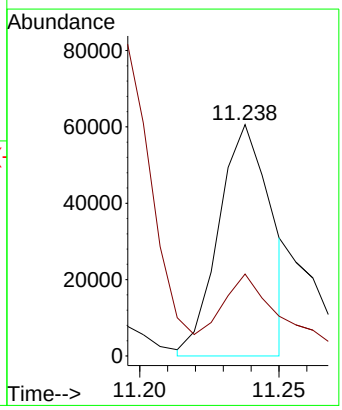
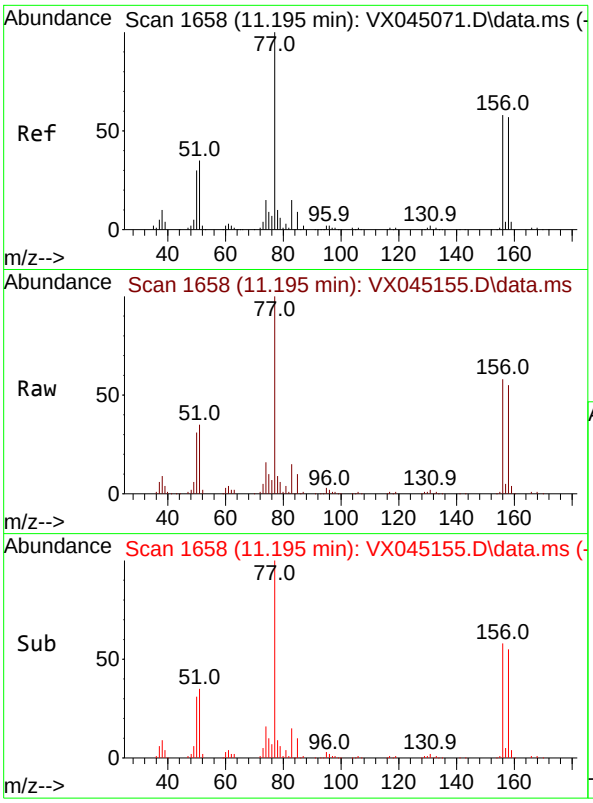



#76
1,2,3-Trichloropropane
Concen: 49.083 ug/l m
RT: 11.238 min Scan# 1665
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 75 Resp: 79287

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 42.3 | 20.7 | 62.1 |

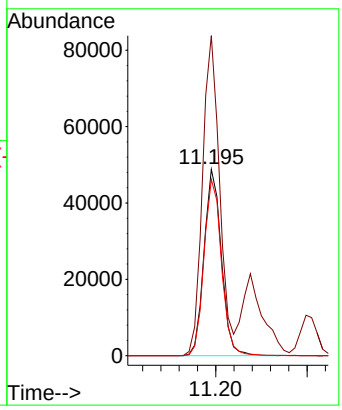





#77
Bromobenzene
Concen: 50.213 ug/l
RT: 11.195 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:156 Resp: 6417

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 169.2 | 85.8 | 257.4 |
| 158 | 95.3 | 48.4 | 145.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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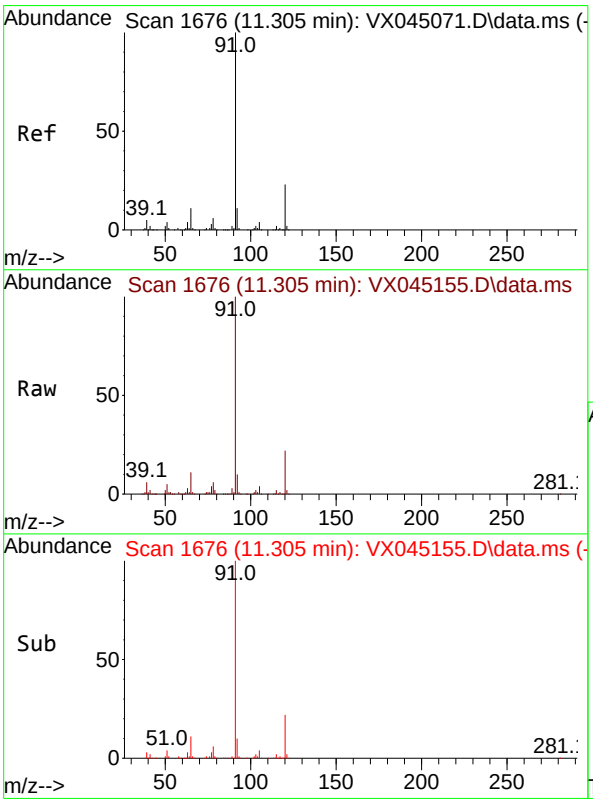
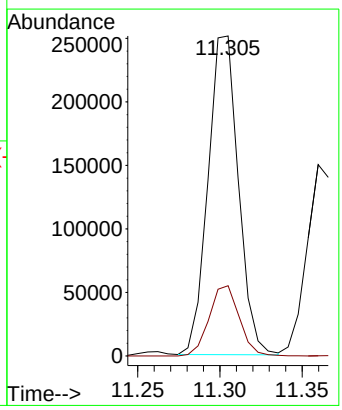
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

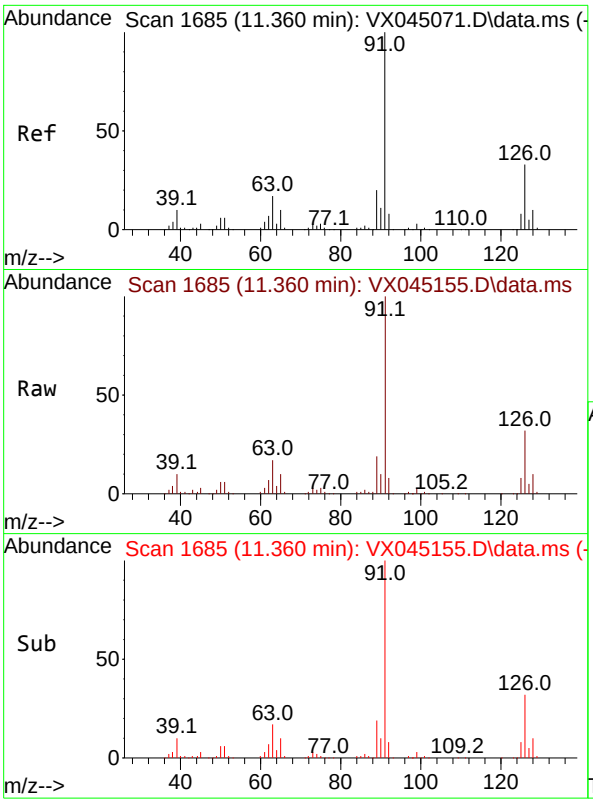



#78
n-propylbenzene
Concen: 52.781 ug/l
RT: 11.305 min Scan# 1676
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 91 Resp: 322984

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 21.9 | 11.2 | 33.6 |

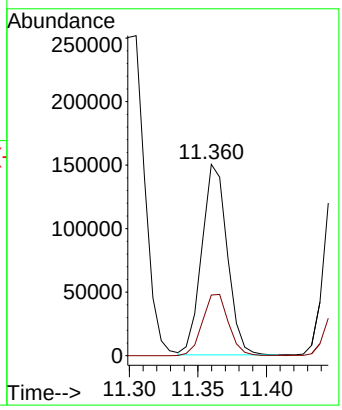





#79
2-Chlorotoluene
Concen: 49.740 ug/l
RT: 11.360 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 91 Resp: 19384

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 33.0 | 16.4 | 49.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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Reviewed By :John Carlone 03/10/2025
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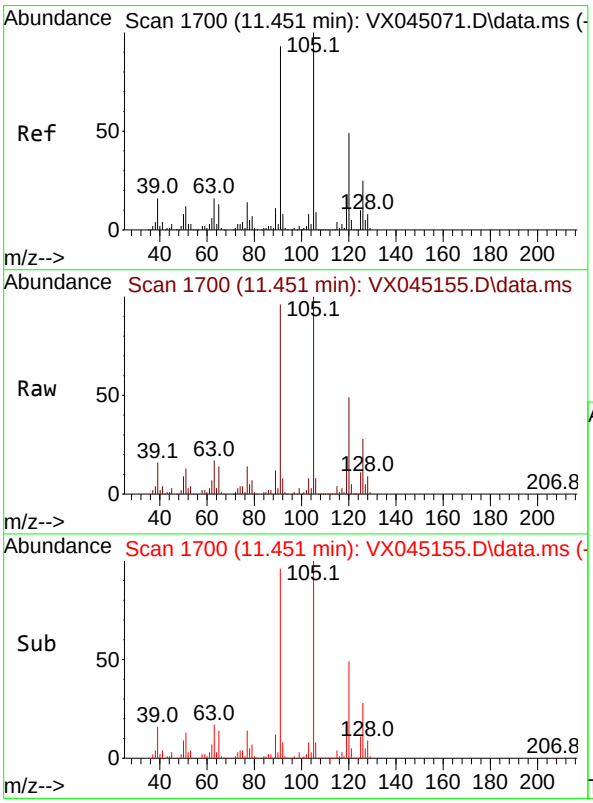
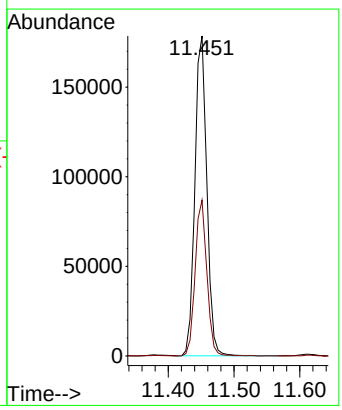
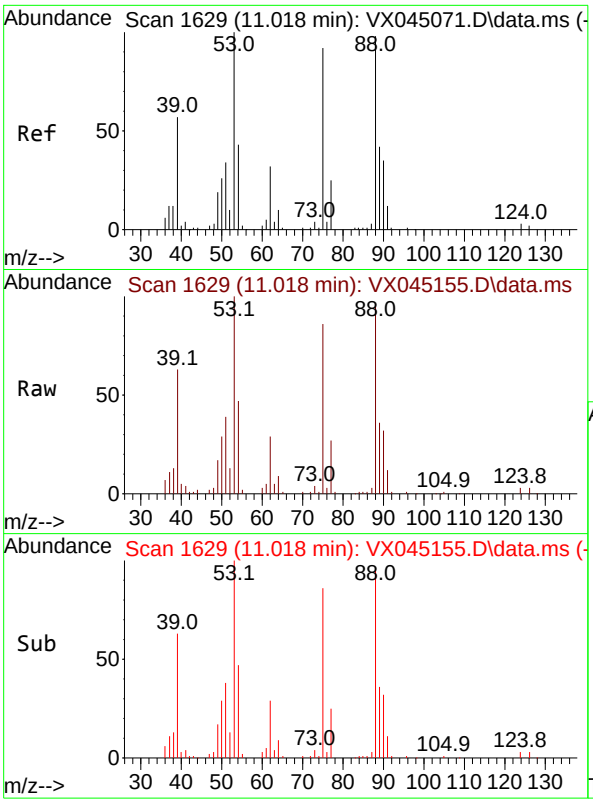



#80
1,3,5-Trimethylbenzene
Concen: 51.365 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:105 Resp: 224986

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 47.9 | 24.1 | 72.2 |

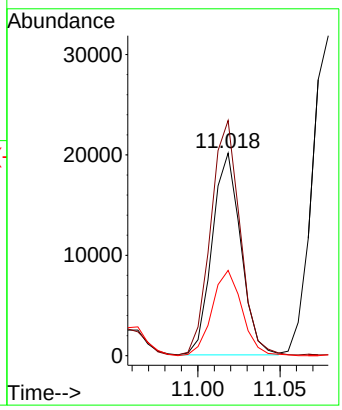





#81
trans-1,4-Dichloro-2-butene
Concen: 51.737 ug/l
RT: 11.018 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 75 Resp: 2442

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 118.4 | 88.5 | 132.7 |
| 89 | 44.2 | 36.2 | 54.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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Reviewed By :John Carlone 03/10/2025
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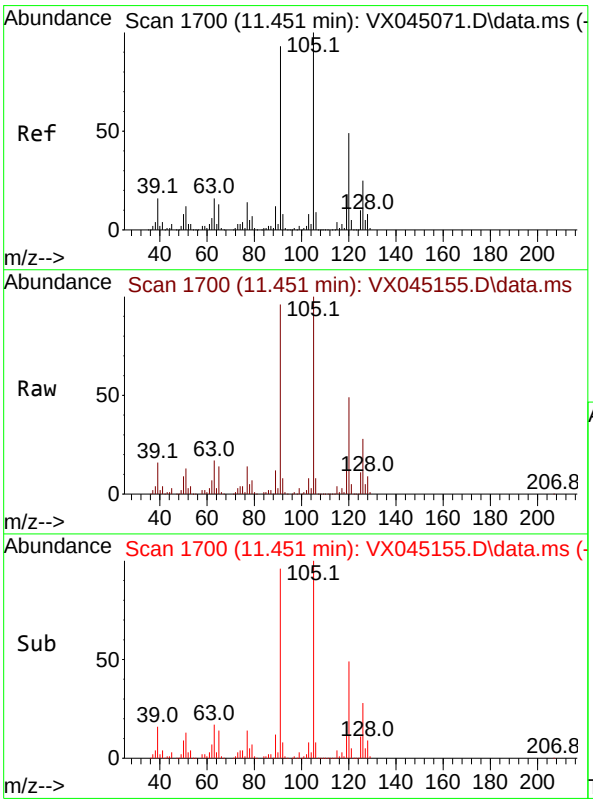
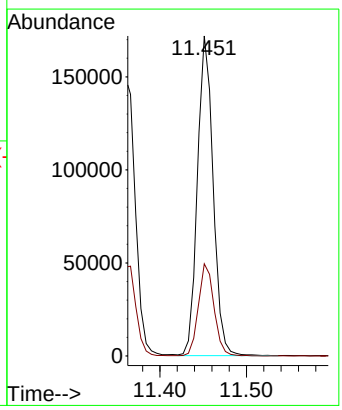
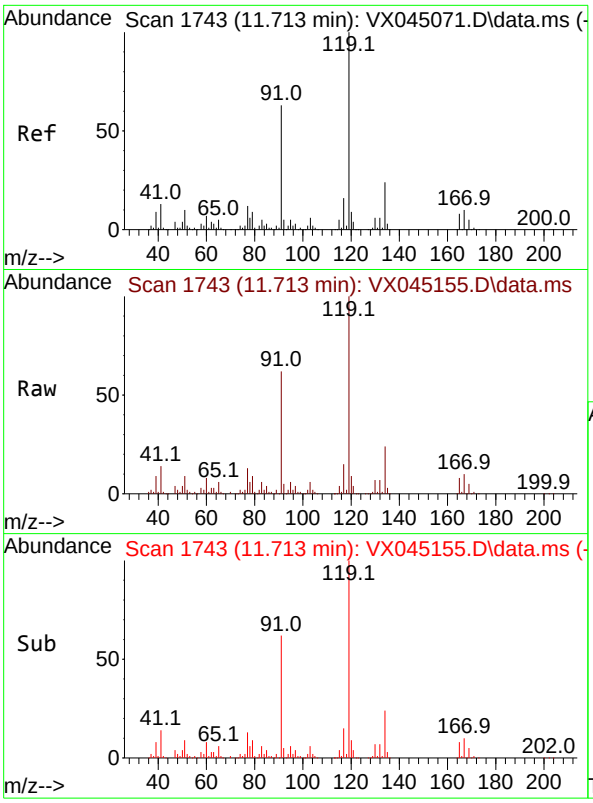



#82
4-Chlorotoluene
Concen: 50.836 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 91 Resp: 215920

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 28.8 | 14.1 | 42.4 |

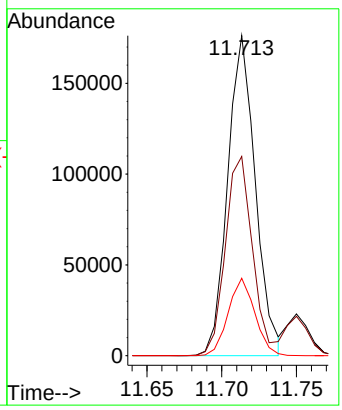





#83
tert-Butylbenzene
Concen: 50.423 ug/l
RT: 11.713 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:119 Resp: 22693

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 61.6 | 30.7 | 92.1 |
| 134 | 23.3 | 11.7 | 35.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 03/10/2025
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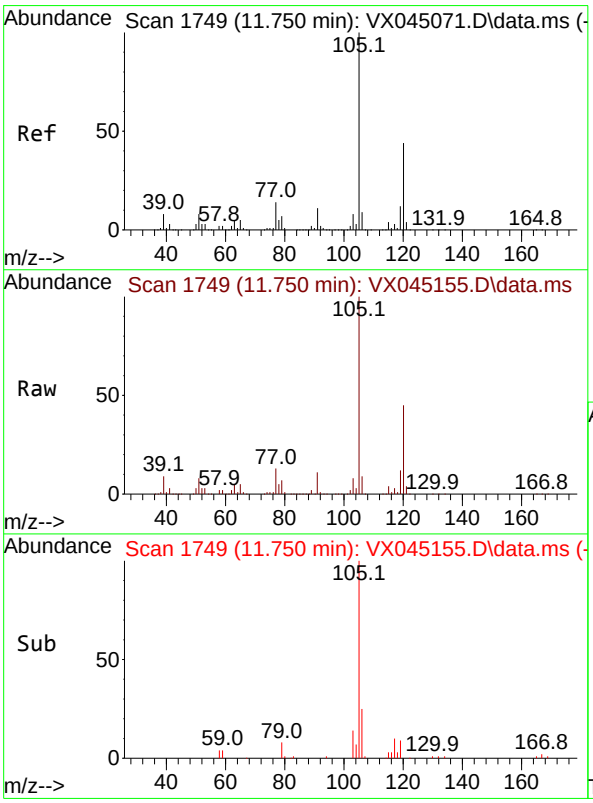
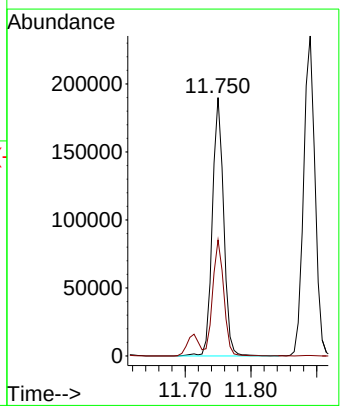
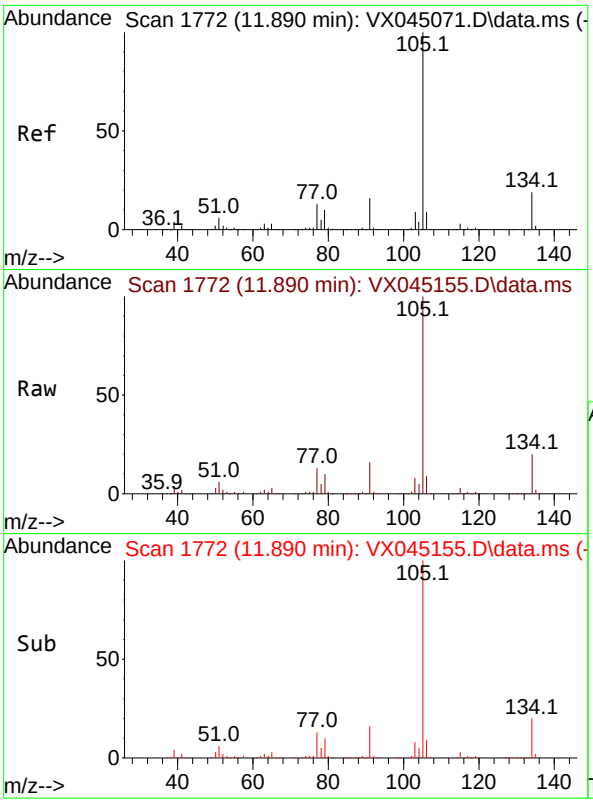



#84
1,2,4-Trimethylbenzene
Concen: 51.566 ug/l
RT: 11.750 min Scan# 1749
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:105 Resp: 227267

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 44.3 | 22.1 | 66.1 |






#85
sec-Butylbenzene
Concen: 52.696 ug/l
RT: 11.890 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:105 Resp: 28408

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.3 | 9.8 | 29.4 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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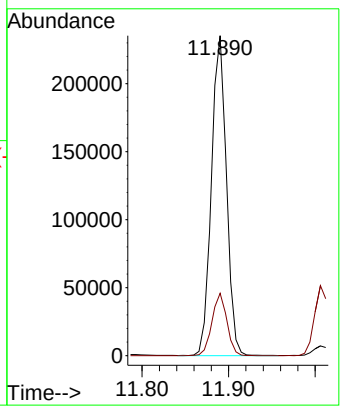
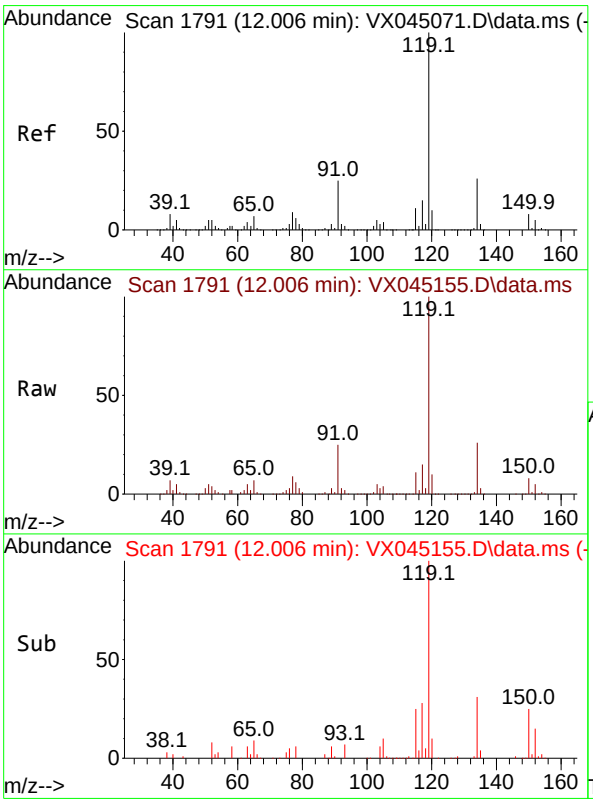
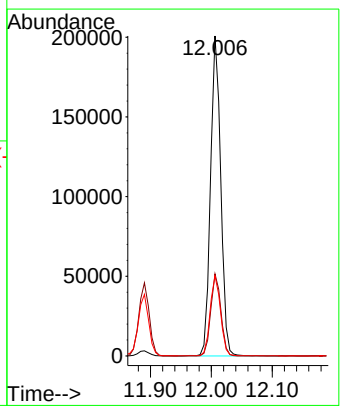


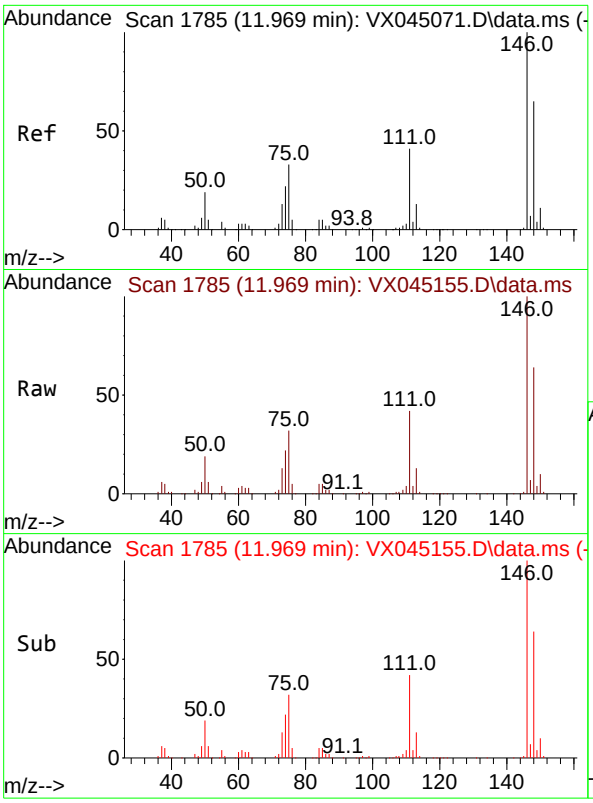




#86
p-Isopropyltoluene
Concen: 53.707 ug/l
RT: 12.006 min Scan# 1791
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:119 Resp: 233986

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.5 | 12.9 | 38.6 |
| 91 | 25.3 | 12.7 | 38.0 |

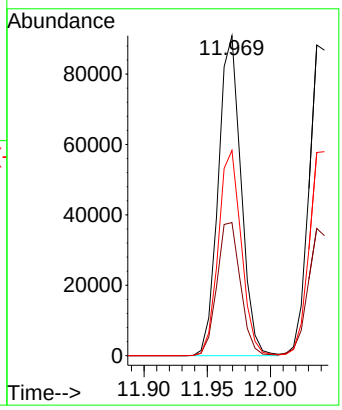





#87
1,3-Dichlorobenzene
Concen: 49.852 ug/l
RT: 11.969 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:146 Resp: 11366

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.1 | 21.1 | 63.4 |
| 148 | 64.6 | 31.9 | 95.7 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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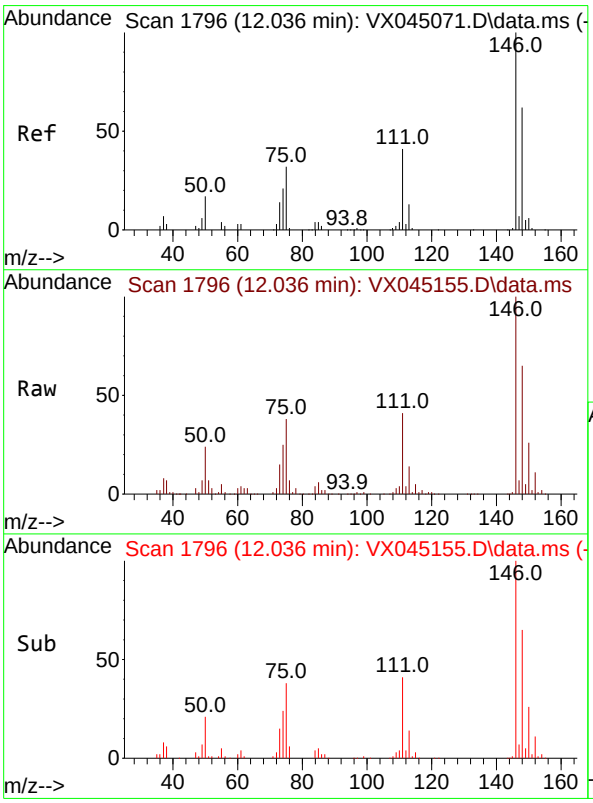
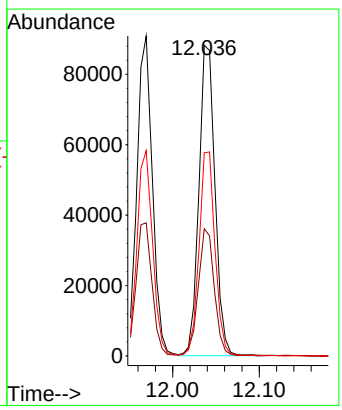
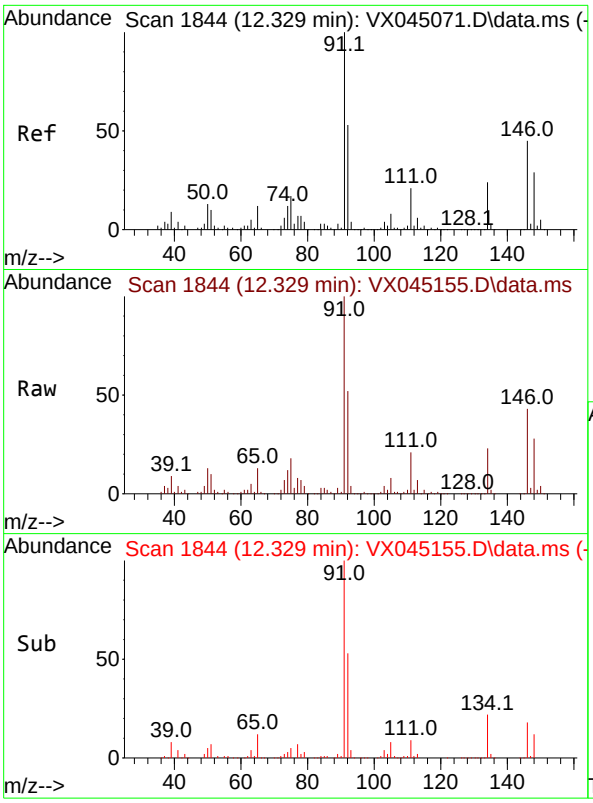



#88
1,4-Dichlorobenzene
Concen: 49.469 ug/l
RT: 12.036 min Scan# 1796
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:146 Resp: 114115

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 40.9 | 20.2 | 60.5 |
| 148 | 65.5 | 31.9 | 95.9 |






#89
n-Butylbenzene
Concen: 55.868 ug/l
RT: 12.329 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 91 Resp: 20963

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 52.6 | 26.7 | 80.0 |
| 134 | 24.0 | 12.2 | 36.6 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

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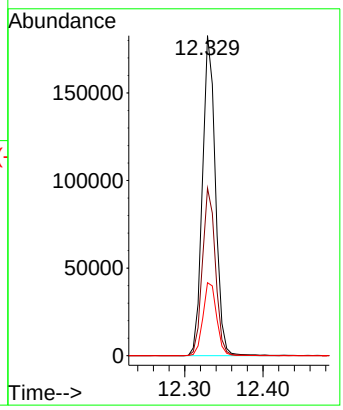
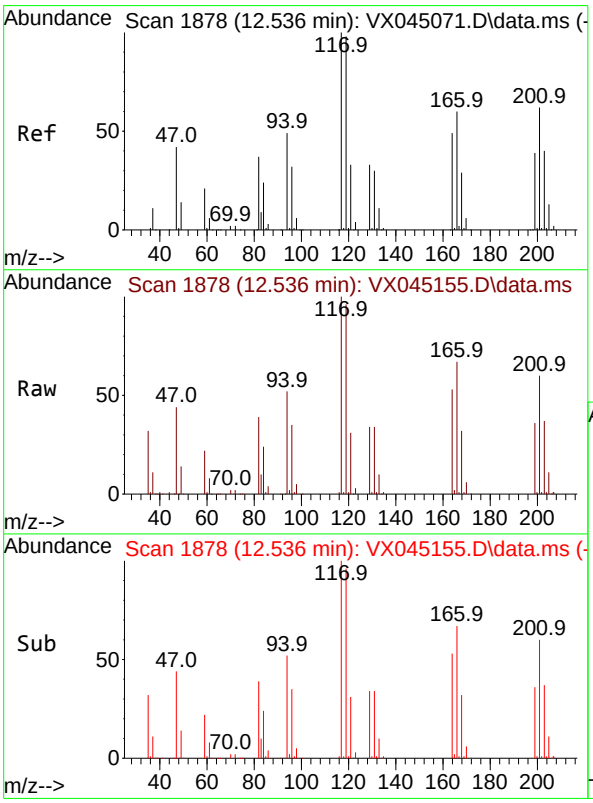
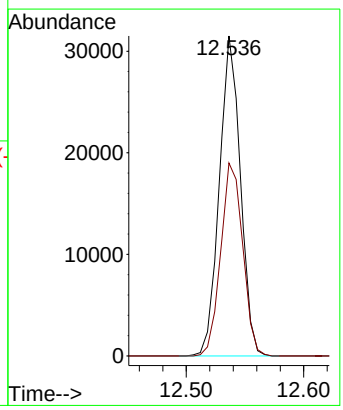


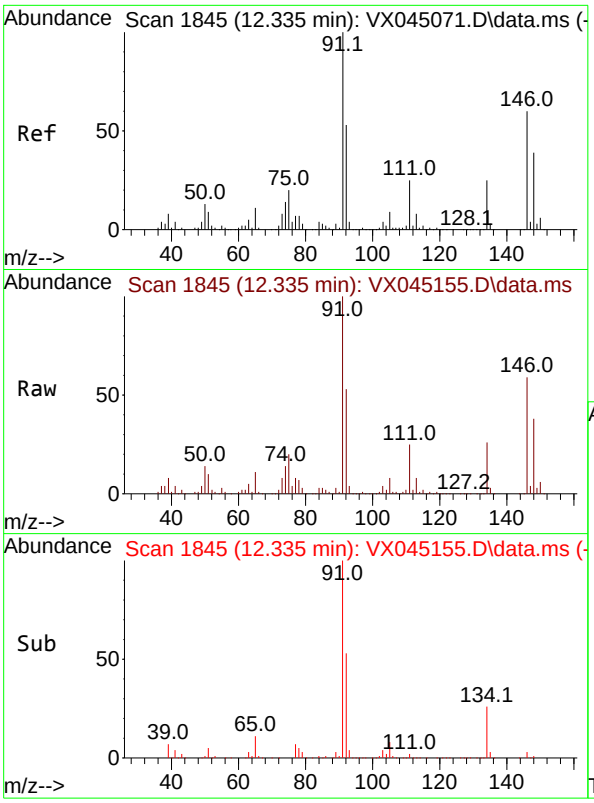




#90
Hexachloroethane
Concen: 49.718 ug/l
RT: 12.536 min Scan# 1878
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:117 Resp: 39179

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 63.1 | 31.9 | 95.9 |

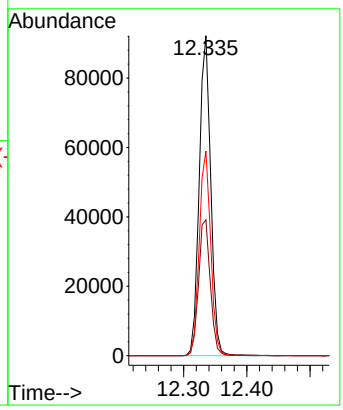





#91
1,2-Dichlorobenzene
Concen: 51.199 ug/l
RT: 12.335 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:146 Resp: 11710

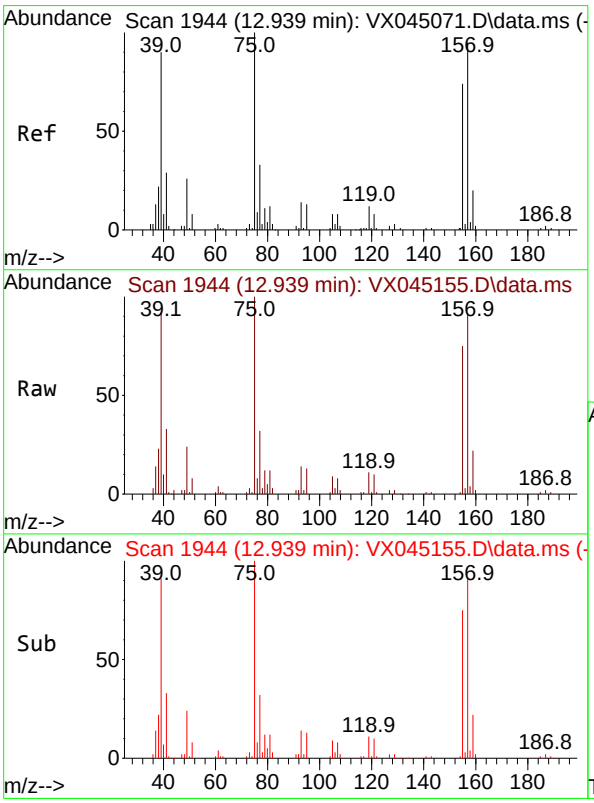
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.4 | 21.6 | 65.0 |
| 148 | 63.6 | 31.9 | 95.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

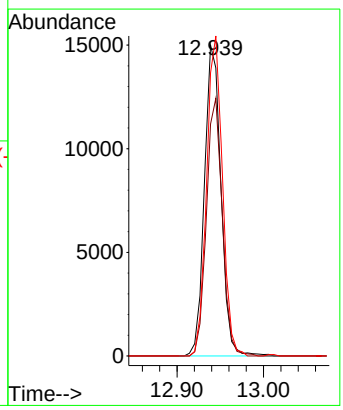
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

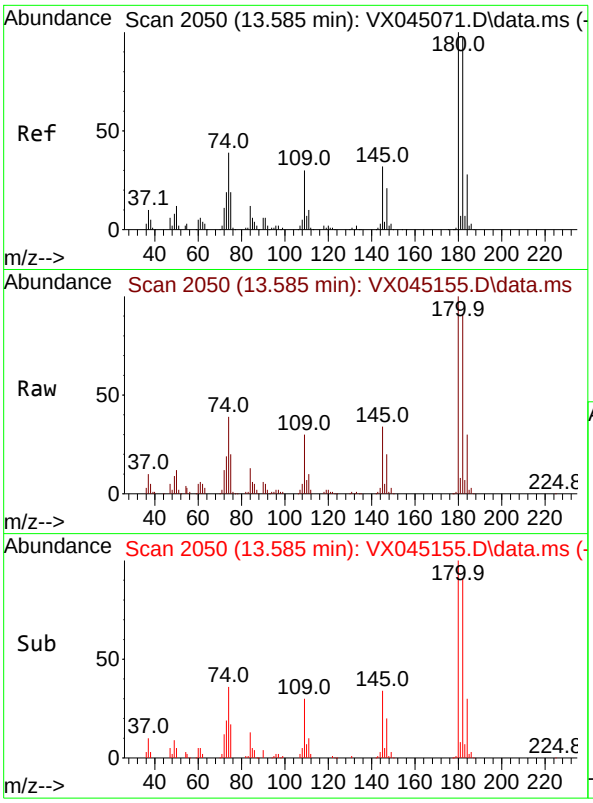



#92
1,2-Dibromo-3-Chloropropane
Concen: 51.248 ug/l
RT: 12.939 min Scan# 1944
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion: 75 Resp: 19847

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 80.0 | 39.6 | 118.7 |
| 157 | 98.8 | 51.1 | 153.4 |

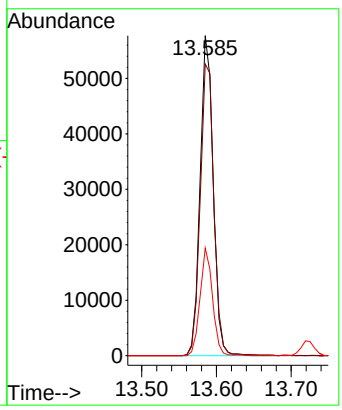





#93
1,2,4-Trichlorobenzene
Concen: 53.845 ug/l
RT: 13.585 min Scan# 2
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:180 Resp: 7012

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.0 | 47.3 | 141.9 |
| 145 | 32.1 | 16.3 | 48.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

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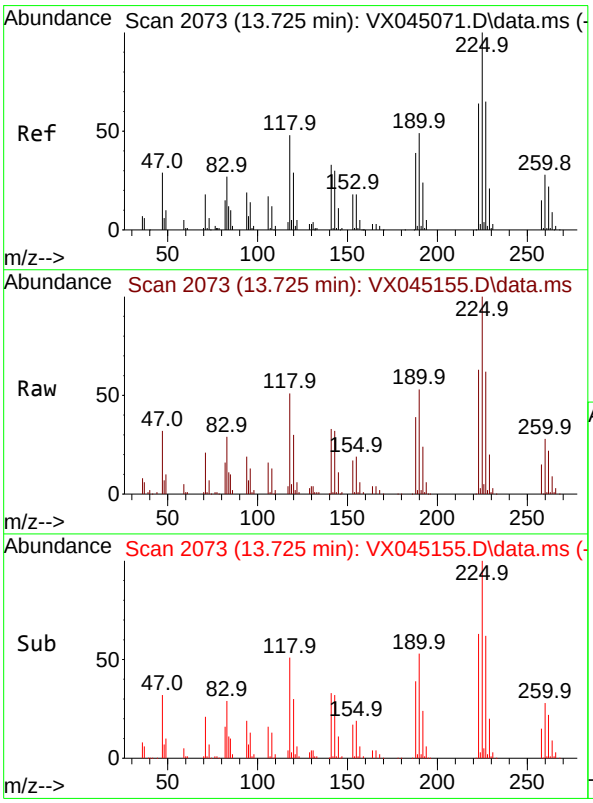
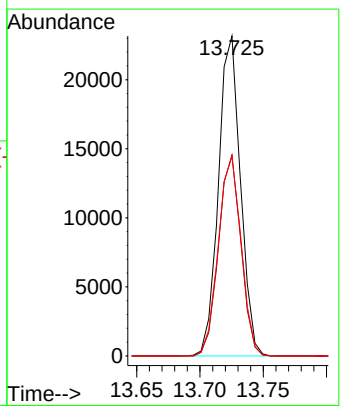
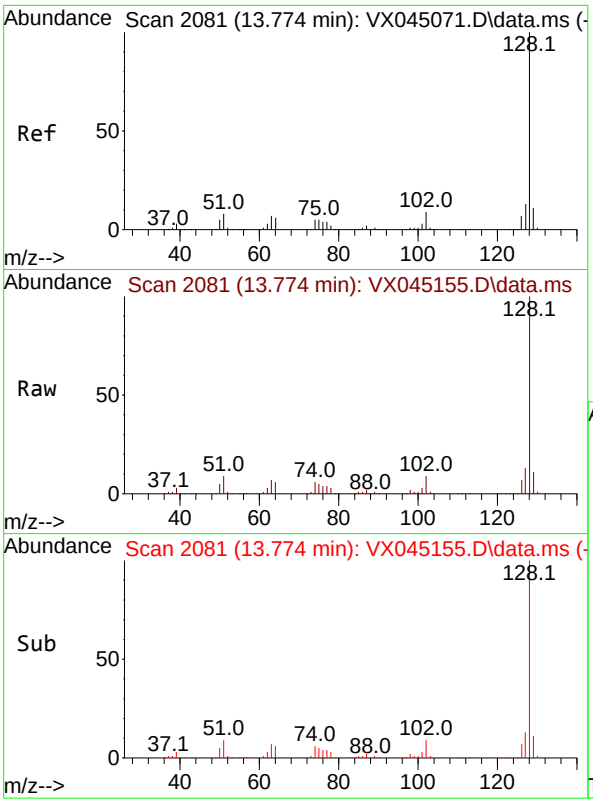



#94
Hexachlorobutadiene
Concen: 52.418 ug/l
RT: 13.725 min Scan# 2073
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:225 Resp: 27989

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 63.6 | 31.9 | 95.7 |
| 227 | 64.8 | 31.4 | 94.0 |

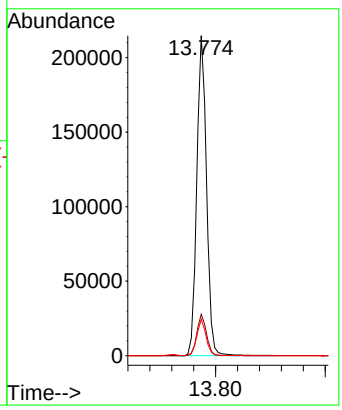





#95
Naphthalene
Concen: 53.234 ug/l
RT: 13.774 min Scan# 2
Delta R.T. 0.000 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:128 Resp: 26637

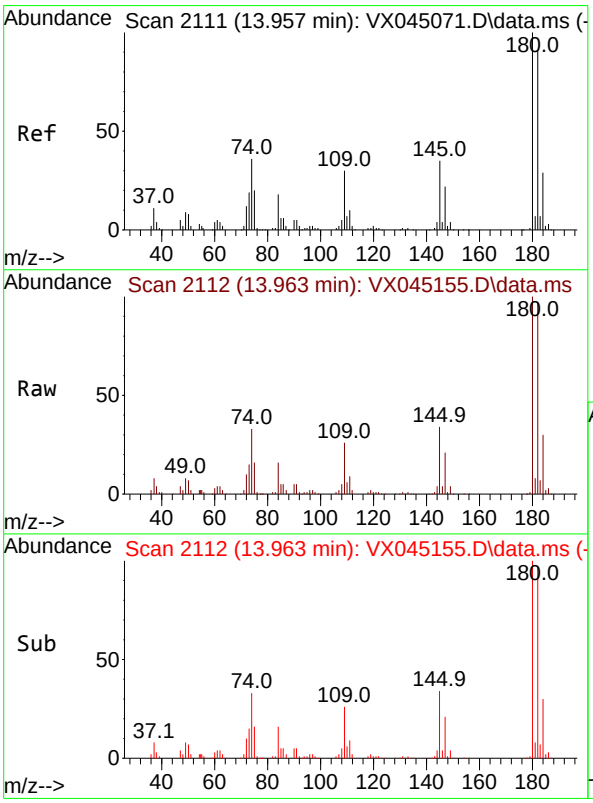
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.7 | 10.3 | 15.5 |
| 129 | 10.9 | 8.7 | 13.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

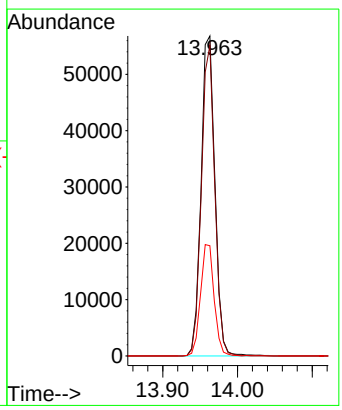
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025




#96
1,2,3-Trichlorobenzene
Concen: 53.222 ug/l
RT: 13.963 min Scan# 2112
Delta R.T. 0.006 min
Lab File: VX045155.D
Acq: 06 Mar 2025 09:56

Tgt Ion:180 Resp: 73124

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 93.9 | 47.5 | 142.6 |
| 145 | 34.3 | 17.0 | 50.9 |



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX030625\
Data File : VX045155.D
Acq On : 06 Mar 2025 09:56
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**LabSampleId :**
VSTDCCC050

Quant Time: Mar 07 00:36:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | Pentafluorobenzene | 1.000 | 1.000 | 0.0 | 96 | 0.00 |
| 2 | T | Dichlorodifluoromethane | 0.629 | 0.631 | -0.3 | 97 | 0.00 |
| 3 | P | Chloromethane | 0.770 | 0.723 | 6.1 | 93 | 0.00 |
| 4 | C | Vinyl Chloride | 0.764 | 0.725 | 5.1# | 92 | 0.00 |
| 5 | T | Bromomethane | 0.300 | 0.280 | 6.7 | 92 | 0.00 |
| 6 | T | Chloroethane | 0.352 | 0.298 | 15.3 | 77 | 0.00 |
| 7 | T | Trichlorofluoromethane | 1.011 | 0.973 | 3.8 | 89 | 0.00 |
| 8 | T | Diethyl Ether | 0.396 | 0.363 | 8.3 | 90 | 0.00 |
| 9 | T | 1,1,2-Trichlorotrifluoroeth | 0.581 | 0.616 | -6.0 | 100 | 0.00 |
| 10 | T | Methyl Iodide | 0.726 | 0.750 | -3.3 | 94 | 0.00 |
| 11 | T | Tert butyl alcohol | 0.151 | 0.118 | 21.9 | 85 | 0.02 |
| 12 | CM | 1,1-Dichloroethene | 0.614 | 0.600 | 2.3# | 93 | 0.00 |
| 13 | T | Acrolein | 0.174 | 0.149 | 14.4 | 83 | 0.00 |
| 14 | T | Allyl chloride | 1.094 | 1.096 | -0.2 | 95 | 0.00 |
| 15 | T | Acrylonitrile | 0.404 | 0.398 | 1.5 | 94 | 0.00 |
| 16 | T | Acetone | 0.369 | 0.345 | 6.5 | 95 | 0.00 |
| 17 | T | Carbon Disulfide | 1.636 | 1.462 | 10.6 | 85 | 0.00 |
| 18 | T | Methyl Acetate | 0.888 | 0.957 | -7.8 | 106 | 0.00 |
| 19 | T | Methyl tert-butyl Ether | 2.061 | 2.015 | 2.2 | 93 | 0.00 |
| 20 | T | Methylene Chloride | 0.731 | 0.704 | 3.7 | 97 | 0.00 |
| 21 | T | trans-1,2-Dichloroethene | 0.607 | 0.610 | -0.5 | 93 | 0.00 |
| 22 | T | Diisopropyl ether | 2.224 | 2.259 | -1.6 | 95 | 0.00 |
| 23 | T | Vinyl Acetate | 1.856 | 1.909 | -2.9 | 93 | 0.00 |
| 24 | P | 1,1-Dichloroethane | 1.247 | 1.215 | 2.6 | 94 | 0.00 |
| 25 | T | 2-Butanone | 0.555 | 0.564 | -1.6 | 94 | 0.00 |
| 26 | T | 2,2-Dichloropropane | 0.585 | 0.797 | -36.2# | 129 | 0.00 |
| 27 | T | cis-1,2-Dichloroethene | 0.749 | 0.750 | -0.1 | 95 | 0.00 |
| 28 | T | Bromochloromethane | 0.594 | 0.551 | 7.2 | 88 | 0.00 |
| 29 | T | Tetrahydrofuran | 0.373 | 0.365 | 2.1 | 94 | 0.00 |
| 30 | C | Chloroform | 1.239 | 1.209 | 2.4# | 94 | 0.00 |
| 31 | T | Cyclohexane | 1.082 | 1.086 | -0.4 | 95 | 0.00 |
| 32 | T | 1,1,1-Trichloroethane | 1.000 | 0.978 | 2.2 | 92 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 | 0.795 | 0.783 | 1.5 | 100 | 0.00 |
| 34 | I | 1,4-Difluorobenzene | 1.000 | 1.000 | 0.0 | 94 | 0.00 |
| 35 | S | Dibromofluoromethane | 0.334 | 0.341 | -2.1 | 98 | 0.00 |
| 36 | T | 1,1-Dichloropropene | 0.459 | 0.458 | 0.2 | 92 | 0.00 |
| 37 | T | Ethyl Acetate | 0.591 | 0.593 | -0.3 | 92 | 0.00 |
| 38 | T | Carbon Tetrachloride | 0.465 | 0.458 | 1.5 | 92 | 0.00 |
| 39 | T | Methylcyclohexane | 0.549 | 0.598 | -8.9 | 96 | 0.00 |
| 40 | TM | Benzene | 1.448 | 1.464 | -1.1 | 92 | 0.00 |
| 41 | T | Methacrylonitrile | 0.319 | 0.332 | -4.1 | 92 | 0.00 |
| 42 | TM | 1,2-Dichloroethane | 0.521 | 0.534 | -2.5 | 96 | 0.00 |
| 43 | T | Isopropyl Acetate | 0.874 | 0.903 | -3.3 | 92 | 0.00 |
| 44 | TM | Trichloroethene | 0.340 | 0.341 | -0.3 | 95 | 0.00 |
| 45 | C | 1,2-Dichloropropane | 0.372 | 0.377 | -1.3# | 96 | 0.00 |
| 46 | T | Dibromomethane | 0.263 | 0.272 | -3.4 | 95 | 0.00 |
| 47 | T | Bromodichloromethane | 0.516 | 0.523 | -1.4 | 94 | 0.00 |
| 48 | T | Methyl methacrylate | 0.438 | 0.456 | -4.1 | 93 | 0.00 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX030625\
Data File : VX045155.D
Acq On : 06 Mar 2025 09:56
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**LabSampleId :**
VSTDCCC050

Quant Time: Mar 07 00:36:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 49 | T | 1,4-Dioxane | 0.009 | 0.009 | 0.0 | 93 | 0.00 |
| 50 | S | Toluene-d8 | 1.212 | 1.244 | -2.6 | 97 | 0.00 |
| 51 | T | 4-Methyl-2-Pentanone | 0.587 | 0.616 | -4.9 | 95 | 0.00 |
| 52 | CM | Toluene | 0.849 | 0.893 | -5.2# | 94 | 0.00 |
| 53 | T | t-1,3-Dichloropropene | 0.431 | 0.467 | -8.4 | 94 | 0.00 |
| 54 | T | cis-1,3-Dichloropropene | 0.503 | 0.544 | -8.2 | 96 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 0.350 | 0.355 | -1.4 | 94 | 0.00 |
| 56 | T | Ethyl methacrylate | 0.532 | 0.557 | -4.7 | 92 | 0.00 |
| 57 | T | 1,3-Dichloropropane | 0.605 | 0.612 | -1.2 | 93 | 0.00 |
| 58 | T | 2-Chloroethyl Vinyl ether | 0.259 | 0.284 | -9.7 | 94 | 0.00 |
| 59 | T | 2-Hexanone | 0.425 | 0.451 | -6.1 | 95 | 0.00 |
| 60 | T | Dibromochloromethane | 0.366 | 0.378 | -3.3 | 93 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 0.349 | 0.353 | -1.1 | 94 | 0.00 |
| 62 | S | 4-Bromofluorobenzene | 0.402 | 0.419 | -4.2 | 98 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 95 | 0.00 |
| 64 | T | Tetrachloroethene | 0.320 | 0.322 | -0.6 | 94 | 0.00 |
| 65 | PM | Chlorobenzene | 1.058 | 1.078 | -1.9 | 94 | 0.00 |
| 66 | T | 1,1,1,2-Tetrachloroethane | 0.352 | 0.353 | -0.3 | 94 | 0.00 |
| 67 | C | Ethyl Benzene | 1.843 | 1.931 | -4.8# | 94 | 0.00 |
| 68 | T | m/p-Xylenes | 0.675 | 0.704 | -4.3 | 92 | 0.00 |
| 69 | T | o-Xylene | 0.681 | 0.694 | -1.9 | 93 | 0.00 |
| 70 | T | Styrene | 1.101 | 1.163 | -5.6 | 93 | 0.00 |
| 71 | P | Bromoform | 0.266 | 0.266 | 0.0 | 91 | 0.00 |
| 72 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 97 | 0.00 |
| 73 | T | Isopropylbenzene | 3.903 | 3.979 | -1.9 | 94 | 0.00 |
| 74 | T | N-amyl acetate | 1.831 | 1.898 | -3.7 | 93 | 0.00 |
| 75 | P | 1,1,2,2-Tetrachloroethane | 1.432 | 1.414 | 1.3 | 97 | 0.00 |
| 76 | T | 1,2,3-Trichloropropane | 1.164 | 1.142 | 1.9 | 97 | 0.00 |
| 77 | T | Bromobenzene | 0.921 | 0.925 | -0.4 | 96 | 0.00 |
| 78 | T | n-propylbenzene | 4.409 | 4.654 | -5.6 | 94 | 0.00 |
| 79 | T | 2-Chlorotoluene | 2.808 | 2.793 | 0.5 | 95 | 0.00 |
| 80 | T | 1,3,5-Trimethylbenzene | 3.156 | 3.242 | -2.7 | 93 | 0.00 |
| 81 | T | trans-1,4-Dichloro-2-butene | 0.340 | 0.352 | -3.5 | 101 | 0.00 |
| 82 | T | 4-Chlorotoluene | 3.060 | 3.111 | -1.7 | 94 | 0.00 |
| 83 | T | tert-Butylbenzene | 3.242 | 3.270 | -0.9 | 94 | 0.00 |
| 84 | T | 1,2,4-Trimethylbenzene | 3.175 | 3.275 | -3.1 | 94 | 0.00 |
| 85 | T | sec-Butylbenzene | 3.884 | 4.093 | -5.4 | 95 | 0.00 |
| 86 | T | p-Isopropyltoluene | 3.139 | 3.371 | -7.4 | 96 | 0.00 |
| 87 | T | 1,3-Dichlorobenzene | 1.643 | 1.638 | 0.3 | 96 | 0.00 |
| 88 | T | 1,4-Dichlorobenzene | 1.662 | 1.644 | 1.1 | 95 | 0.00 |
| 89 | T | n-Butylbenzene | 2.703 | 3.021 | -11.8 | 98 | 0.00 |
| 90 | T | Hexachloroethane | 0.568 | 0.565 | 0.5 | 91 | 0.00 |
| 91 | T | 1,2-Dichlorobenzene | 1.648 | 1.687 | -2.4 | 98 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 0.279 | 0.286 | -2.5 | 96 | 0.00 |
| 93 | T | 1,2,4-Trichlorobenzene | 0.938 | 1.010 | -7.7 | 98 | 0.00 |
| 94 | T | Hexachlorobutadiene | 0.385 | 0.403 | -4.7 | 100 | 0.00 |
| 95 | T | Naphthalene | 3.605 | 3.838 | -6.5 | 96 | 0.00 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX030625\
Data File : VX045155.D
Acq On : 06 Mar 2025 09:56
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**LabSampleId :**
VSTDCCC050

Quant Time: Mar 07 00:36:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|
| 96 T | 1,2,3-Trichlorobenzene | 0.990 | 1.054 | -6.5 | 97 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX030625\
Data File : VX045155.D
Acq On : 06 Mar 2025 09:56
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**LabSampleId :**
VSTDCCC050

Quant Time: Mar 07 00:36:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | Pentafluorobenzene | 50.000 | 50.000 | 0.0 | 96 | 0.00 |
| 2 | T | Dichlorodifluoromethane | 50.000 | 50.150 | -0.3 | 97 | 0.00 |
| 3 | P | Chloromethane | 50.000 | 46.958 | 6.1 | 93 | 0.00 |
| 4 | C | Vinyl Chloride | 50.000 | 47.434 | 5.1# | 92 | 0.00 |
| 5 | T | Bromomethane | 50.000 | 46.654 | 6.7 | 92 | 0.00 |
| 6 | T | Chloroethane | 50.000 | 42.341 | 15.3 | 77 | 0.00 |
| 7 | T | Trichlorofluoromethane | 50.000 | 48.081 | 3.8 | 89 | 0.00 |
| 8 | T | Diethyl Ether | 50.000 | 45.821 | 8.4 | 90 | 0.00 |
| 9 | T | 1,1,2-Trichlorotrifluoroeth | 50.000 | 52.999 | -6.0 | 100 | 0.00 |
| 10 | T | Methyl Iodide | 50.000 | 51.610 | -3.2 | 94 | 0.00 |
| 11 | T | Tert butyl alcohol | 250.000 | 195.202 | 21.9 | 85 | 0.02 |
| 12 | CM | 1,1-Dichloroethene | 50.000 | 48.789 | 2.4# | 93 | 0.00 |
| 13 | T | Acrolein | 250.000 | 213.430 | 14.6 | 83 | 0.00 |
| 14 | T | Allyl chloride | 50.000 | 50.112 | -0.2 | 95 | 0.00 |
| 15 | T | Acrylonitrile | 250.000 | 246.689 | 1.3 | 94 | 0.00 |
| 16 | T | Acetone | 250.000 | 233.847 | 6.5 | 95 | 0.00 |
| 17 | T | Carbon Disulfide | 50.000 | 44.684 | 10.6 | 85 | 0.00 |
| 18 | T | Methyl Acetate | 50.000 | 53.893 | -7.8 | 106 | 0.00 |
| 19 | T | Methyl tert-butyl Ether | 50.000 | 48.872 | 2.3 | 93 | 0.00 |
| 20 | T | Methylene Chloride | 50.000 | 48.172 | 3.7 | 97 | 0.00 |
| 21 | T | trans-1,2-Dichloroethene | 50.000 | 50.255 | -0.5 | 93 | 0.00 |
| 22 | T | Diisopropyl ether | 50.000 | 50.793 | -1.6 | 95 | 0.00 |
| 23 | T | Vinyl Acetate | 250.000 | 257.151 | -2.9 | 93 | 0.00 |
| 24 | P | 1,1-Dichloroethane | 50.000 | 48.731 | 2.5 | 94 | 0.00 |
| 25 | T | 2-Butanone | 250.000 | 253.939 | -1.6 | 94 | 0.00 |
| 26 | T | 2,2-Dichloropropane | 50.000 | 68.182 | -36.4# | 129 | 0.00 |
| 27 | T | cis-1,2-Dichloroethene | 50.000 | 50.079 | -0.2 | 95 | 0.00 |
| 28 | T | Bromochloromethane | 50.000 | 46.329 | 7.3 | 88 | 0.00 |
| 29 | T | Tetrahydrofuran | 250.000 | 244.426 | 2.2 | 94 | 0.00 |
| 30 | C | Chloroform | 50.000 | 48.804 | 2.4# | 94 | 0.00 |
| 31 | T | Cyclohexane | 50.000 | 50.191 | -0.4 | 95 | 0.00 |
| 32 | T | 1,1,1-Trichloroethane | 50.000 | 48.875 | 2.3 | 92 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 | 50.000 | 49.233 | 1.5 | 100 | 0.00 |
| 34 | I | 1,4-Difluorobenzene | 50.000 | 50.000 | 0.0 | 94 | 0.00 |
| 35 | S | Dibromofluoromethane | 50.000 | 50.978 | -2.0 | 98 | 0.00 |
| 36 | T | 1,1-Dichloropropene | 50.000 | 49.941 | 0.1 | 92 | 0.00 |
| 37 | T | Ethyl Acetate | 50.000 | 50.173 | -0.3 | 92 | 0.00 |
| 38 | T | Carbon Tetrachloride | 50.000 | 49.163 | 1.7 | 92 | 0.00 |
| 39 | T | Methylcyclohexane | 50.000 | 54.417 | -8.8 | 96 | 0.00 |
| 40 | TM | Benzene | 50.000 | 50.564 | -1.1 | 92 | 0.00 |
| 41 | T | Methacrylonitrile | 50.000 | 51.935 | -3.9 | 92 | 0.00 |
| 42 | TM | 1,2-Dichloroethane | 50.000 | 51.224 | -2.4 | 96 | 0.00 |
| 43 | T | Isopropyl Acetate | 50.000 | 51.671 | -3.3 | 92 | 0.00 |
| 44 | TM | Trichloroethene | 50.000 | 50.205 | -0.4 | 95 | 0.00 |
| 45 | C | 1,2-Dichloropropane | 50.000 | 50.625 | -1.3# | 96 | 0.00 |
| 46 | T | Dibromomethane | 50.000 | 51.739 | -3.5 | 95 | 0.00 |
| 47 | T | Bromodichloromethane | 50.000 | 50.685 | -1.4 | 94 | 0.00 |
| 48 | T | Methyl methacrylate | 50.000 | 51.991 | -4.0 | 93 | 0.00 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX030625\
Data File : VX045155.D
Acq On : 06 Mar 2025 09:56
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**LabSampleId :**
VSTDCCC050

Quant Time: Mar 07 00:36:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 49 | T | 1,4-Dioxane | 1000.000 | 1004.564 | -0.5 | 93 | 0.00 |
| 50 | S | Toluene-d8 | 50.000 | 51.298 | -2.6 | 97 | 0.00 |
| 51 | T | 4-Methyl-2-Pentanone | 250.000 | 262.414 | -5.0 | 95 | 0.00 |
| 52 | CM | Toluene | 50.000 | 52.538 | -5.1# | 94 | 0.00 |
| 53 | T | t-1,3-Dichloropropene | 50.000 | 54.074 | -8.1 | 94 | 0.00 |
| 54 | T | cis-1,3-Dichloropropene | 50.000 | 54.055 | -8.1 | 96 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 50.000 | 50.685 | -1.4 | 94 | 0.00 |
| 56 | T | Ethyl methacrylate | 50.000 | 52.367 | -4.7 | 92 | 0.00 |
| 57 | T | 1,3-Dichloropropane | 50.000 | 50.592 | -1.2 | 93 | 0.00 |
| 58 | T | 2-Chloroethyl Vinyl ether | 250.000 | 274.113 | -9.6 | 94 | 0.00 |
| 59 | T | 2-Hexanone | 250.000 | 264.998 | -6.0 | 95 | 0.00 |
| 60 | T | Dibromochloromethane | 50.000 | 51.634 | -3.3 | 93 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 50.000 | 50.561 | -1.1 | 94 | 0.00 |
| 62 | S | 4-Bromofluorobenzene | 50.000 | 52.170 | -4.3 | 98 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 50.000 | 50.000 | 0.0 | 95 | 0.00 |
| 64 | T | Tetrachloroethene | 50.000 | 50.303 | -0.6 | 94 | 0.00 |
| 65 | PM | Chlorobenzene | 50.000 | 50.951 | -1.9 | 94 | 0.00 |
| 66 | T | 1,1,1,2-Tetrachloroethane | 50.000 | 50.032 | -0.1 | 94 | 0.00 |
| 67 | C | Ethyl Benzene | 50.000 | 52.376 | -4.8# | 94 | 0.00 |
| 68 | T | m/p-Xylenes | 100.000 | 104.329 | -4.3 | 92 | 0.00 |
| 69 | T | o-Xylene | 50.000 | 51.019 | -2.0 | 93 | 0.00 |
| 70 | T | Styrene | 50.000 | 52.810 | -5.6 | 93 | 0.00 |
| 71 | P | Bromoform | 50.000 | 49.970 | 0.1 | 91 | 0.00 |
| 72 | I | 1,4-Dichlorobenzene-d4 | 50.000 | 50.000 | 0.0 | 97 | 0.00 |
| 73 | T | Isopropylbenzene | 50.000 | 50.984 | -2.0 | 94 | 0.00 |
| 74 | T | N-amyl acetate | 50.000 | 51.811 | -3.6 | 93 | 0.00 |
| 75 | P | 1,1,2,2-Tetrachloroethane | 50.000 | 49.376 | 1.2 | 97 | 0.00 |
| 76 | T | 1,2,3-Trichloropropane | 50.000 | 49.083 | 1.8 | 97 | 0.00 |
| 77 | T | Bromobenzene | 50.000 | 50.213 | -0.4 | 96 | 0.00 |
| 78 | T | n-propylbenzene | 50.000 | 52.781 | -5.6 | 94 | 0.00 |
| 79 | T | 2-Chlorotoluene | 50.000 | 49.740 | 0.5 | 95 | 0.00 |
| 80 | T | 1,3,5-Trimethylbenzene | 50.000 | 51.365 | -2.7 | 93 | 0.00 |
| 81 | T | trans-1,4-Dichloro-2-butene | 50.000 | 51.737 | -3.5 | 101 | 0.00 |
| 82 | T | 4-Chlorotoluene | 50.000 | 50.836 | -1.7 | 94 | 0.00 |
| 83 | T | tert-Butylbenzene | 50.000 | 50.423 | -0.8 | 94 | 0.00 |
| 84 | T | 1,2,4-Trimethylbenzene | 50.000 | 51.566 | -3.1 | 94 | 0.00 |
| 85 | T | sec-Butylbenzene | 50.000 | 52.696 | -5.4 | 95 | 0.00 |
| 86 | T | p-Isopropyltoluene | 50.000 | 53.707 | -7.4 | 96 | 0.00 |
| 87 | T | 1,3-Dichlorobenzene | 50.000 | 49.852 | 0.3 | 96 | 0.00 |
| 88 | T | 1,4-Dichlorobenzene | 50.000 | 49.469 | 1.1 | 95 | 0.00 |
| 89 | T | n-Butylbenzene | 50.000 | 55.868 | -11.7 | 98 | 0.00 |
| 90 | T | Hexachloroethane | 50.000 | 49.718 | 0.6 | 91 | 0.00 |
| 91 | T | 1,2-Dichlorobenzene | 50.000 | 51.199 | -2.4 | 98 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 50.000 | 51.248 | -2.5 | 96 | 0.00 |
| 93 | T | 1,2,4-Trichlorobenzene | 50.000 | 53.845 | -7.7 | 98 | 0.00 |
| 94 | T | Hexachlorobutadiene | 50.000 | 52.418 | -4.8 | 100 | 0.00 |
| 95 | T | Naphthalene | 50.000 | 53.234 | -6.5 | 96 | 0.00 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX030625\
Data File : VX045155.D
Acq On : 06 Mar 2025 09:56
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**LabSampleId :**
VSTDCCC050

Quant Time: Mar 07 00:36:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|
| 96 T | 1,2,3-Trichlorobenzene | 50.000 | 53.222 | -6.4 | 97 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 6

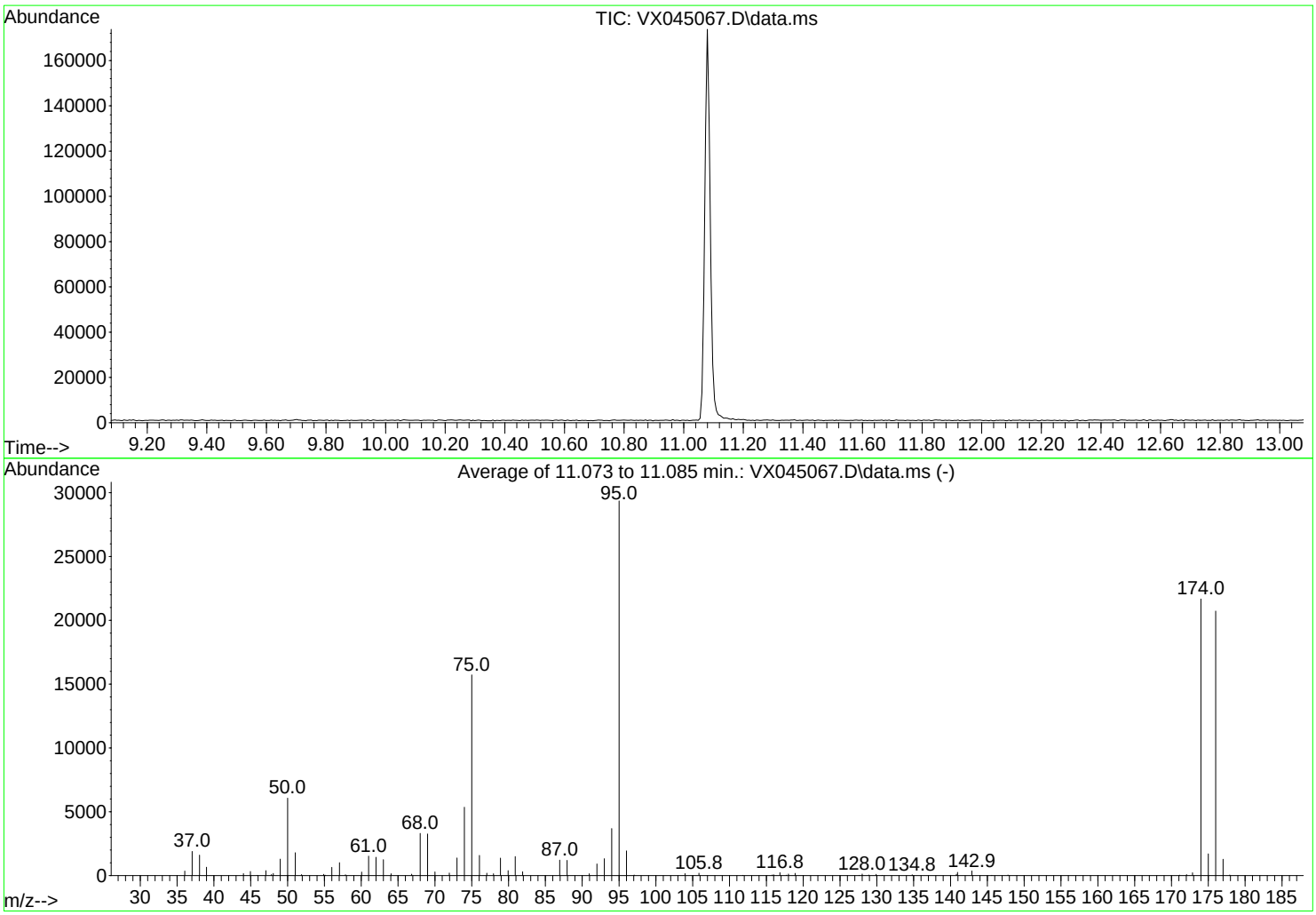
# QC SAMPLE DATA

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045067.D
Acq On : 28 Feb 2025 01:03
Operator : JC/MD
Sample : BFB
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 15 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Title : SW846 8260
Last Update : Fri Feb 28 06:45:16 2025




AutoFind: Scans 1638, 1639, 1640; Background Corrected with Scan 1632

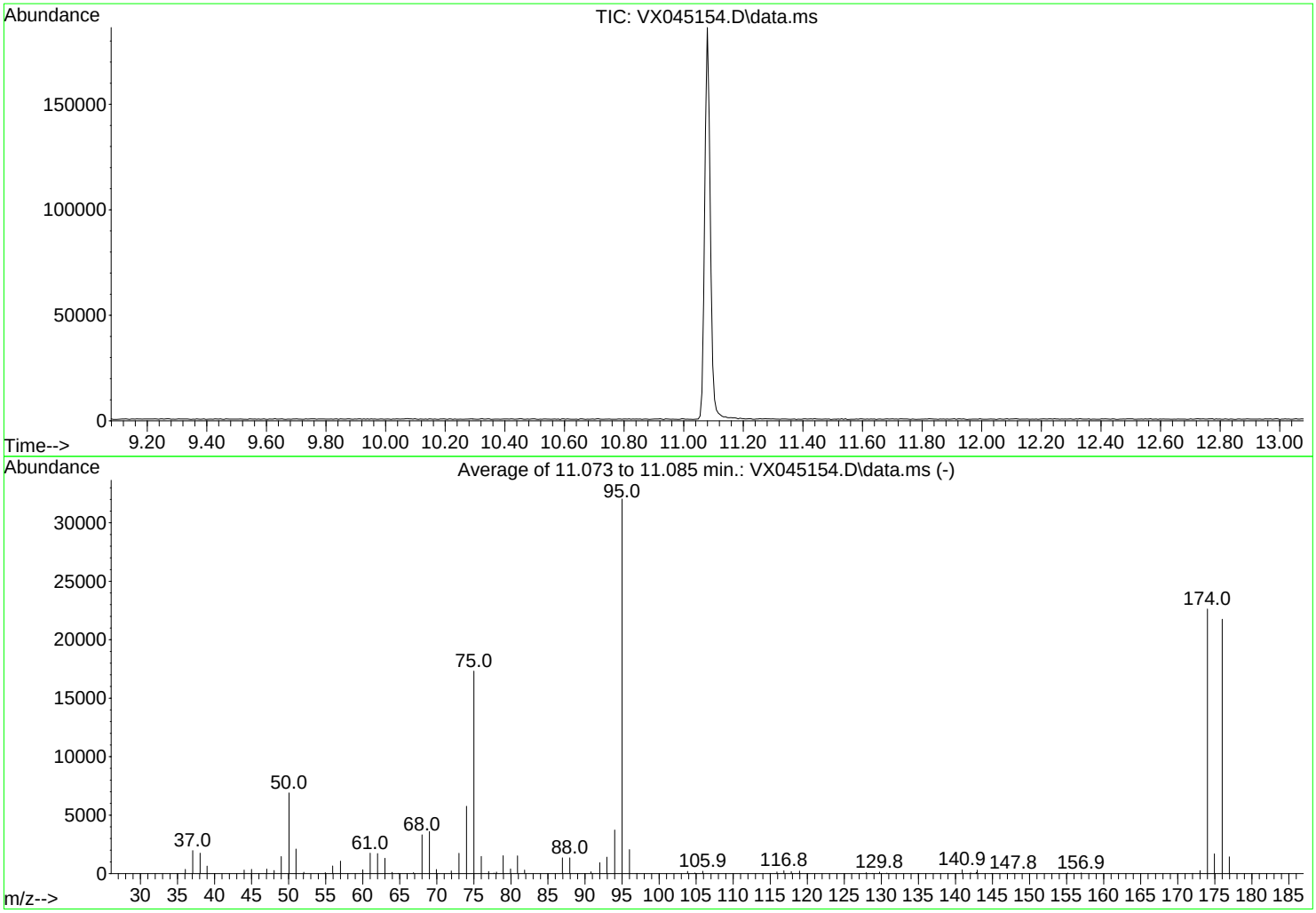
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 20.7 | 6072 | PASS |
| 75 | 95 | 30 | 60 | 53.6 | 15726 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 29360 | PASS |
| 96 | 95 | 5 | 9 | 6.6 | 1942 | PASS |
| 173 | 174 | 0.00 | 2 | 1.0 | 219 | PASS |
| 174 | 95 | 50 | 100 | 73.8 | 21677 | PASS |
| 175 | 174 | 5 | 9 | 7.9 | 1702 | PASS |
| 176 | 174 | 95 | 101 | 95.6 | 20723 | PASS |
| 177 | 176 | 5 | 9 | 6.2 | 1277 | PASS |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX030625\
Data File : VX045154.D
Acq On : 06 Mar 2025 09:09
Operator : JC/MD
Sample : BFB
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Title : SW846 8260
Last Update : Fri Feb 28 06:45:16 2025




AutoFind: Scans 1638, 1639, 1640; Background Corrected with Scan 1632

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 21.5 | 6899 | PASS |
| 75 | 95 | 30 | 60 | 54.0 | 17313 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 32037 | PASS |
| 96 | 95 | 5 | 9 | 6.4 | 2059 | PASS |
| 173 | 174 | 0.00 | 2 | 1.1 | 256 | PASS |
| 174 | 95 | 50 | 100 | 70.6 | 22629 | PASS |
| 175 | 174 | 5 | 9 | 7.5 | 1688 | PASS |
| 176 | 174 | 95 | 101 | 96.1 | 21751 | PASS |
| 177 | 176 | 5 | 9 | 6.6 | 1434 | PASS |

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | |
| Project: | Former Schlumberger STC PTC Site # D3868221 | Date Received: | |
| Client Sample ID: | VX0306WBL01 | SDG No.: | Q1478 |
| Lab Sample ID: | VX0306WBL01 | Matrix: | TCLP |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | TCLP VOA |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX045157.D | 1 | | 03/06/25 10:46 | VX030625 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-01-4 | Vinyl Chloride | 0.34 | U | 0.34 | 1.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 0.26 | U | 0.26 | 1.00 | ug/L |
| 78-93-3 | 2-Butanone | 1.30 | U | 1.30 | 5.00 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 0.25 | U | 0.25 | 1.00 | ug/L |
| 67-66-3 | Chloroform | 0.26 | U | 0.26 | 1.00 | ug/L |
| 71-43-2 | Benzene | 0.16 | U | 0.16 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 0.24 | U | 0.24 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 0.32 | U | 0.32 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 0.25 | U | 0.25 | 1.00 | ug/L |
| 108-90-7 | Chlorobenzene | 0.13 | U | 0.13 | 1.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 53.9 | | 70 (74) - 130 (125) | 108% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 52.4 | | 70 (75) - 130 (124) | 105% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 52.3 | | 70 (86) - 130 (113) | 105% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 51.8 | | 70 (77) - 130 (121) | 104% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 71200 | 5.544 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 140000 | 6.757 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 129000 | 10.049 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 53700 | 12.024 | | | |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements
J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX030625\
Data File : VX045157.D
Acq On : 06 Mar 2025 10:46
Operator : JC/MD
Sample : VX0306WBL01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBL01

Quant Time: Mar 07 00:37:36 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 5.544 | 168 | 71177 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 6.757 | 114 | 139793 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 10.049 | 117 | 129041 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.024 | 152 | 53719 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 5.952 | 65 | 61044 | 53.917 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 107.840% | | | |
| 35) Dibromofluoromethane | 5.379 | 113 | 48946 | 52.362 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 104.720% | | | |
| 50) Toluene-d8 | 8.647 | 98 | 177288 | 52.315 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 104.640% | | | |
| 62) 4-Bromofluorobenzene | 11.079 | 95 | 58160 | 51.792 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 103.580% | | | |

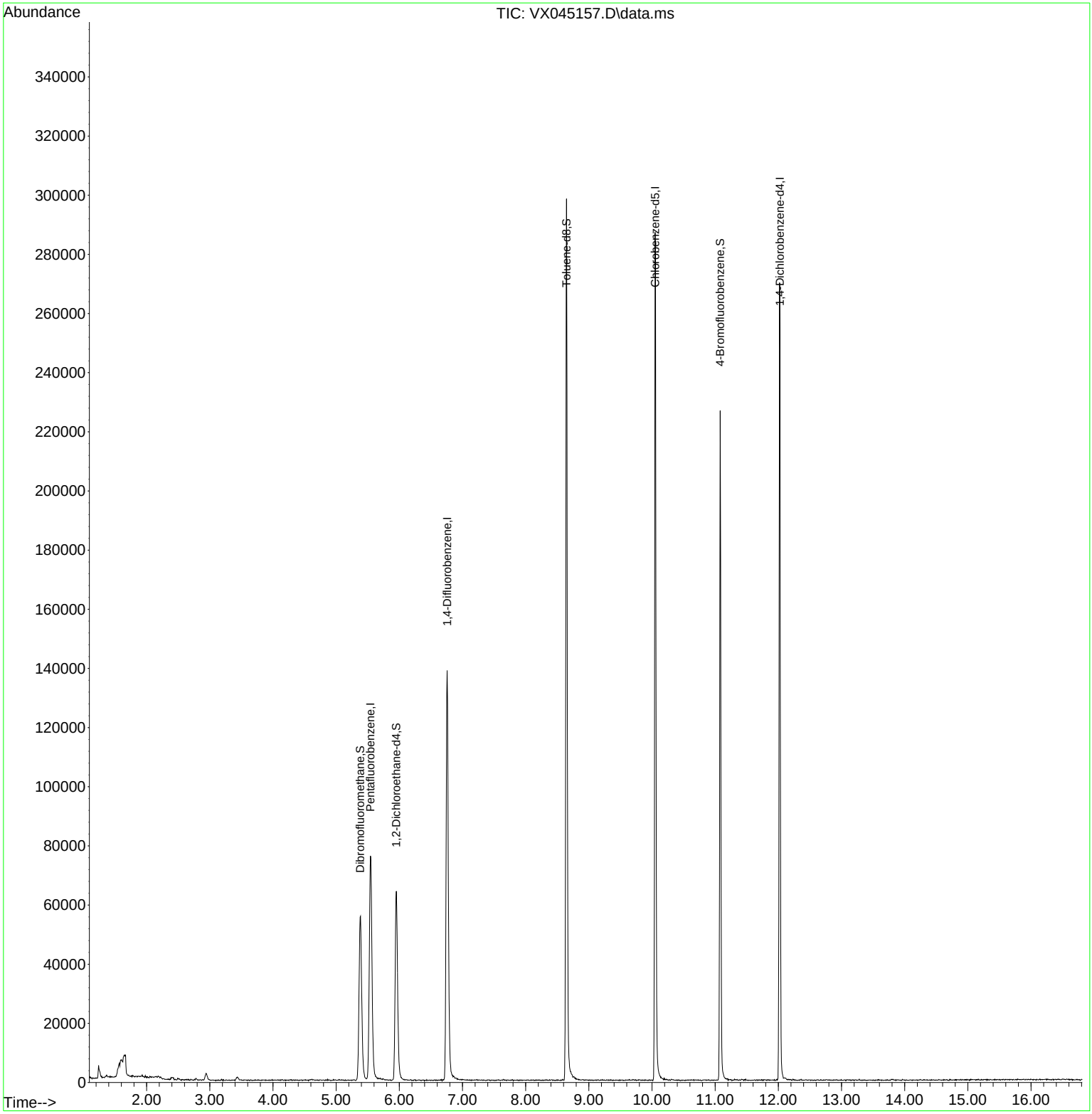
Target Compounds Qvalue

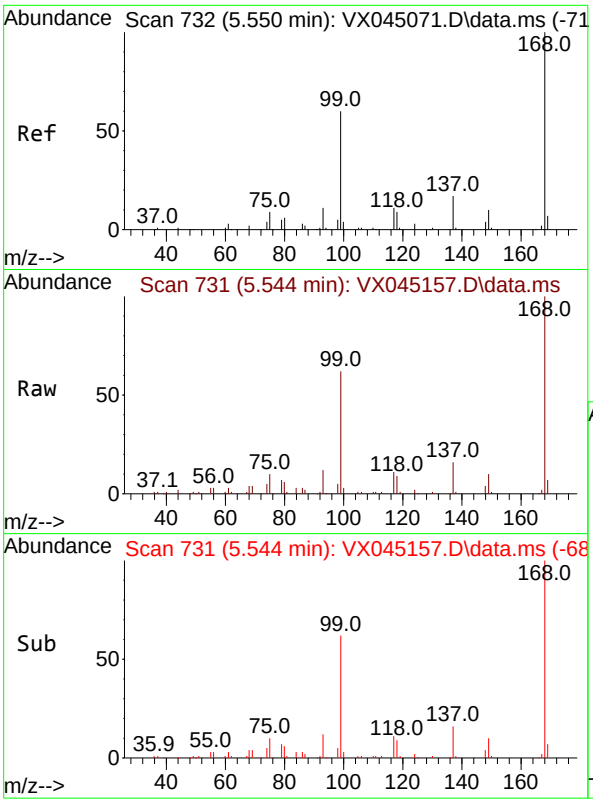
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX030625\
Data File : VX045157.D
Acq On : 06 Mar 2025 10:46
Operator : JC/MD
Sample : VX0306WBL01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBL01

Quant Time: Mar 07 00:37:36 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration



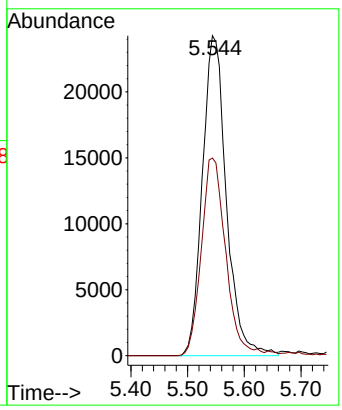


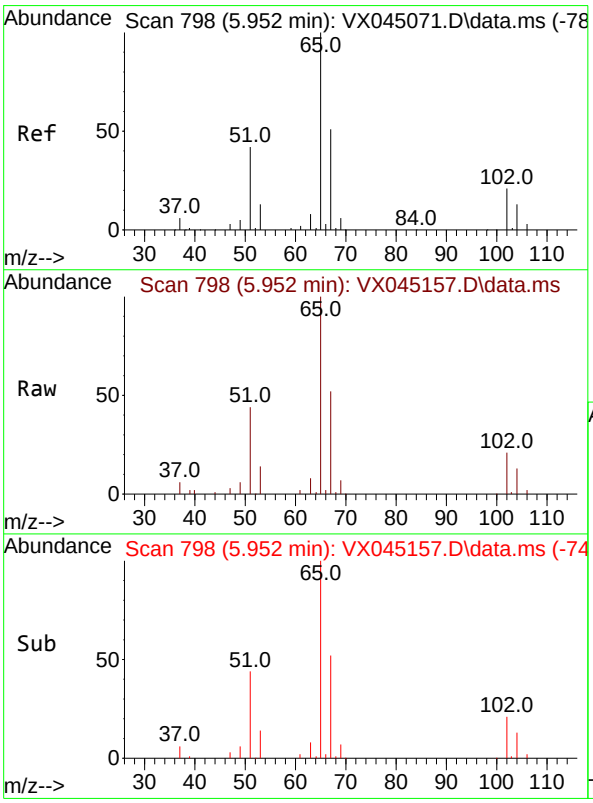

#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.544 min Scan# 7
Delta R.T. -0.006 min
Lab File: VX045157.D
Acq: 06 Mar 2025 10:46

**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBL01

Tgt Ion:168 Resp: 71177

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 61.8 | 48.2 | 72.4 |

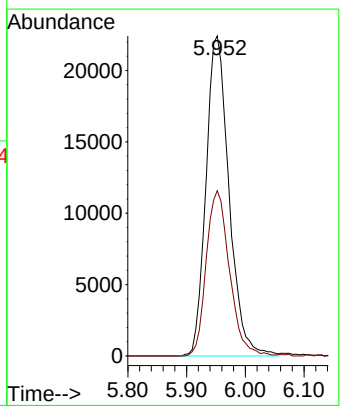


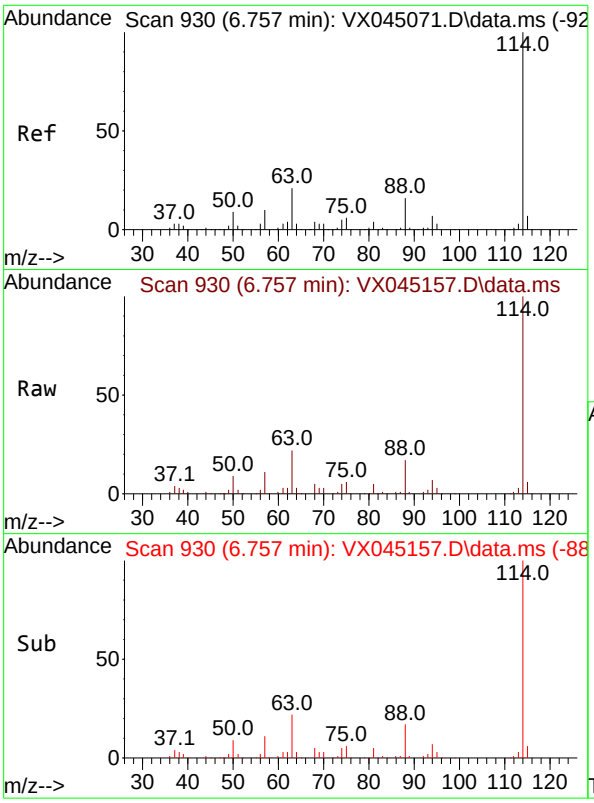




#33
1,2-Dichloroethane-d4
Concen: 53.917 ug/l
RT: 5.952 min Scan# 798
Delta R.T. 0.000 min
Lab File: VX045157.D
Acq: 06 Mar 2025 10:46

Tgt Ion: 65 Resp: 61044

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 52.1 | 0.0 | 106.2 |



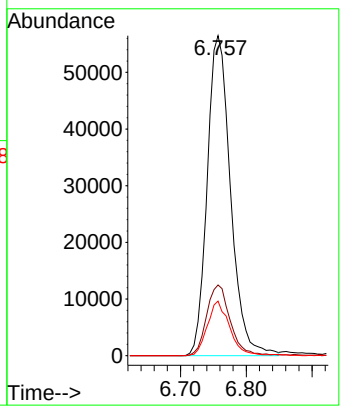


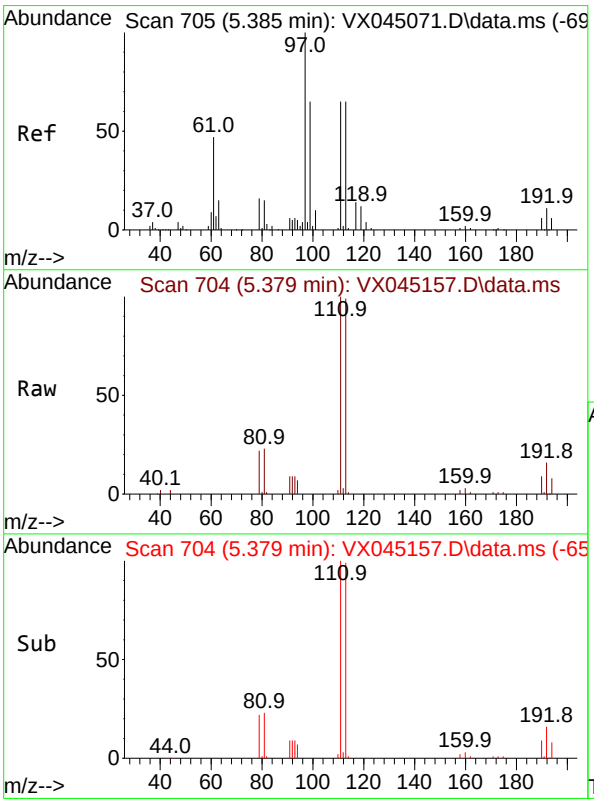

#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.757 min Scan# 9
Delta R.T. 0.000 min
Lab File: VX045157.D
Acq: 06 Mar 2025 10:46

**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBL01

Tgt Ion:114 Resp: 139793

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.1 | 0.0 | 41.8 |
| 88 | 17.1 | 0.0 | 32.8 |

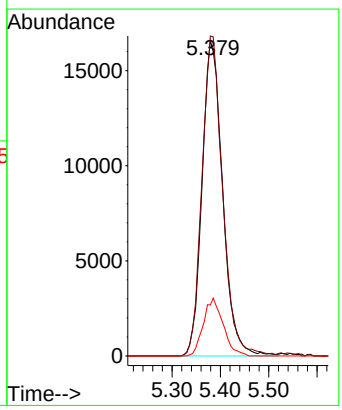


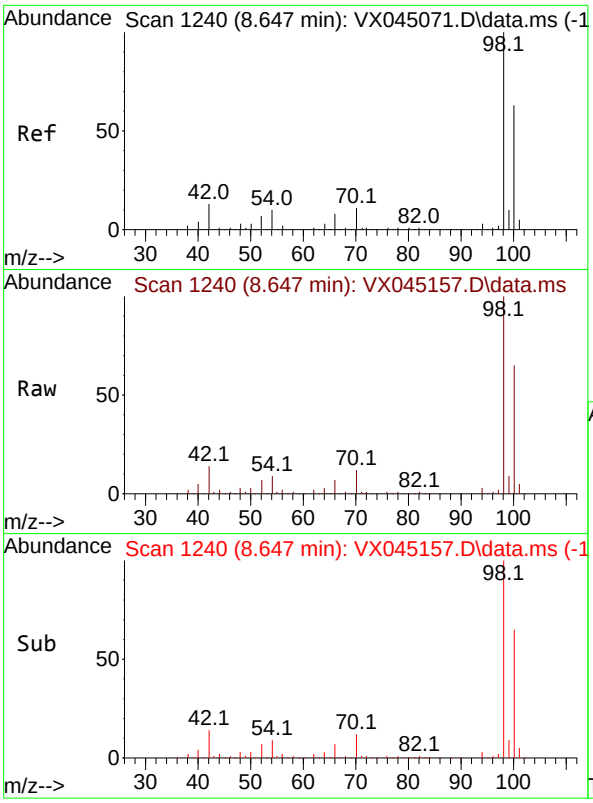




#35
Dibromofluoromethane
Concen: 52.362 ug/l
RT: 5.379 min Scan# 704
Delta R.T. -0.006 min
Lab File: VX045157.D
Acq: 06 Mar 2025 10:46

Tgt Ion:113 Resp: 48946

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 101.8 | 81.8 | 122.6 |
| 192 | 17.7 | 14.3 | 21.5 |



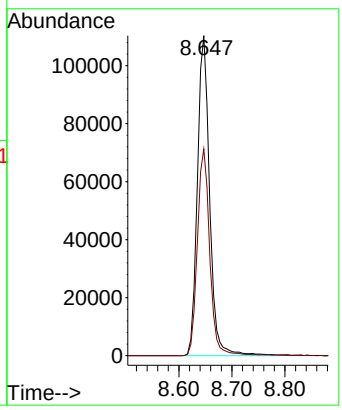


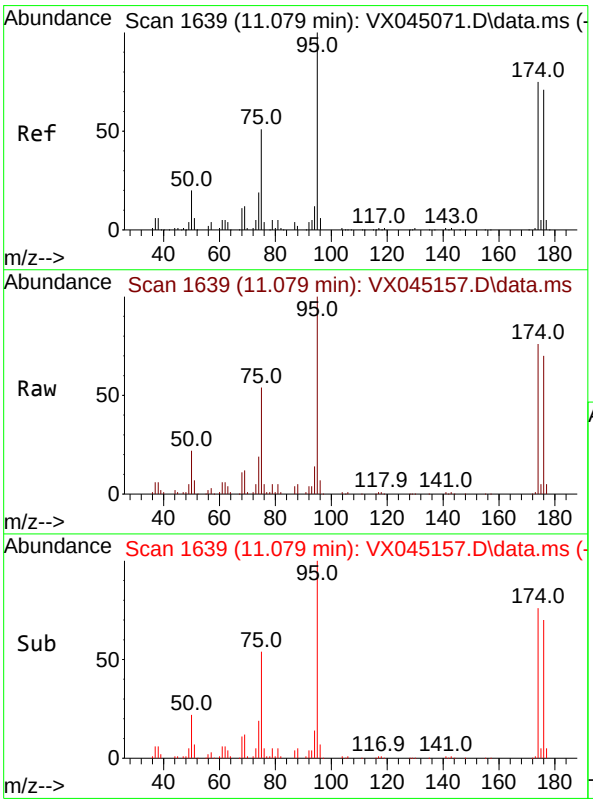

#50
Toluene-d8
Concen: 52.315 ug/l
RT: 8.647 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045157.D
Acq: 06 Mar 2025 10:46

**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBL01

Tgt Ion: 98 Resp: 177288

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.5 | 52.0 | 78.0 |

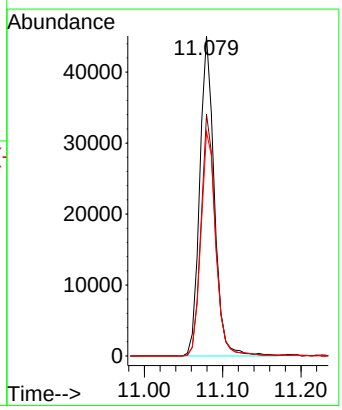


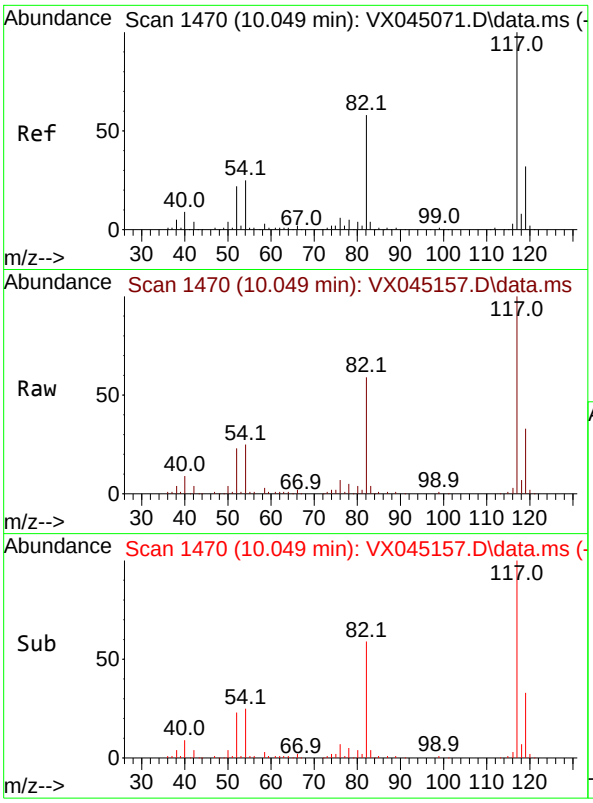




#62
4-Bromofluorobenzene
Concen: 51.792 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. 0.000 min
Lab File: VX045157.D
Acq: 06 Mar 2025 10:46

Tgt Ion: 95 Resp: 58160

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 75.2 | 0.0 | 148.2 |
| 176 | 71.7 | 0.0 | 141.4 |



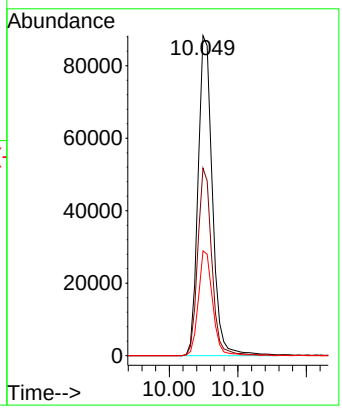


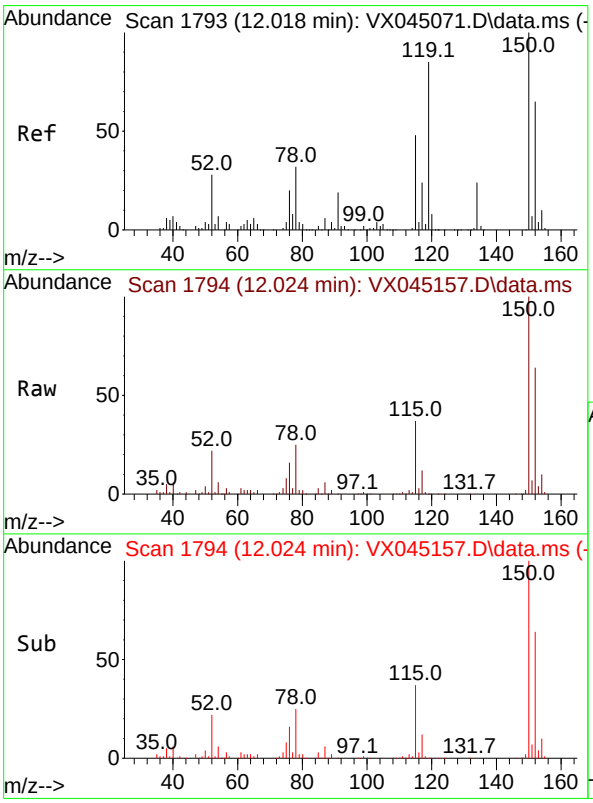

#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.049 min Scan# 14
Delta R.T. 0.000 min
Lab File: VX045157.D
Acq: 06 Mar 2025 10:46

**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBL01

Tgt Ion:117 Resp: 129041

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 58.6 | 46.3 | 69.5 |
| 119 | 32.8 | 25.7 | 38.5 |

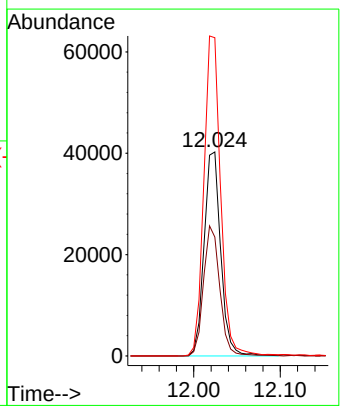



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.024 min Scan# 1794
Delta R.T. 0.006 min
Lab File: VX045157.D
Acq: 06 Mar 2025 10:46

Tgt Ion:152 Resp: 53719

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 62.5 | 44.2 | 132.6 |
| 150 | 159.1 | 0.0 | 349.0 |



Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | |
| Project: | Former Schlumberger STC PTC Site # D3868221 | Date Received: | |
| Client Sample ID: | VX0306WBS01 | SDG No.: | Q1478 |
| Lab Sample ID: | VX0306WBS01 | Matrix: | TCLP |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | TCLP VOA |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX045158.D | 1 | | 03/06/25 11:10 | VX030625 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-01-4 | Vinyl Chloride | 19.4 | | 0.34 | 1.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 21.3 | | 0.26 | 1.00 | ug/L |
| 78-93-3 | 2-Butanone | 100 | | 1.30 | 5.00 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 20.5 | | 0.25 | 1.00 | ug/L |
| 67-66-3 | Chloroform | 21.2 | | 0.26 | 1.00 | ug/L |
| 71-43-2 | Benzene | 21.5 | | 0.16 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 21.4 | | 0.24 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 20.8 | | 0.32 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 22.2 | | 0.25 | 1.00 | ug/L |
| 108-90-7 | Chlorobenzene | 21.6 | | 0.13 | 1.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 50.2 | | 70 (74) - 130 (125) | 100% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 50.8 | | 70 (75) - 130 (124) | 102% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 50.3 | | 70 (86) - 130 (113) | 101% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 49.2 | | 70 (77) - 130 (121) | 98% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 97100 | 5.544 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 176000 | 6.757 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 148000 | 10.049 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 67100 | 12.024 | | | |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX030625\
Data File : VX045158.D
Acq On : 06 Mar 2025 11:10
Operator : JC/MD
Sample : VX0306WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 07 00:37:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations APPROVED**

Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 5.544 | 168 | 97102 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 6.757 | 114 | 175752 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 10.049 | 117 | 147757 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.024 | 152 | 67123 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 5.952 | 65 | 77517 | 50.187 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 100.380% | | | |
| 35) Dibromofluoromethane | 5.385 | 113 | 59755 | 50.846 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 101.700% | | | |
| 50) Toluene-d8 | 8.647 | 98 | 214149 | 50.263 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 100.520% | | | |
| 62) 4-Bromofluorobenzene | 11.079 | 95 | 69431 | 49.179 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 98.360% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.166 | 85 | 25313 | 20.710 | ug/l | 96 |
| 3) Chloromethane | 1.307 | 50 | 28610 | 19.127 | ug/l | 99 |
| 4) Vinyl Chloride | 1.374 | 62 | 28735 | 19.365 | ug/l | 96 |
| 5) Bromomethane | 1.593 | 94 | 11051 | 18.945 | ug/l | 98 |
| 6) Chloroethane | 1.660 | 64 | 11910 | 17.401 | ug/l | 94 |
| 7) Trichlorofluoromethane | 1.861 | 101 | 41329 | 21.039 | ug/l | 98 |
| 8) Diethyl Ether | 2.136 | 74 | 15031 | 19.563 | ug/l | 95 |
| 9) 1,1,2-Trichlorotrifluo... | 2.312 | 101 | 25913 | 22.961 | ug/l | 99 |
| 10) Methyl Iodide | 2.440 | 142 | 28535 | 20.232 | ug/l | 97 |
| 11) Tert butyl alcohol | 2.995 | 59 | 24878 | 85.035 | ug/l | 99 |
| 12) 1,1-Dichloroethene | 2.306 | 96 | 25437 | 21.319 | ug/l | 96 |
| 13) Acrolein | 2.239 | 56 | 32240 | 95.330 | ug/l | 97 |
| 14) Allyl chloride | 2.654 | 41 | 45464 | 21.406 | ug/l | 99 |
| 15) Acrylonitrile | 3.068 | 53 | 80620 | 102.818 | ug/l | 100 |
| 16) Acetone | 2.392 | 43 | 70356 | 98.177 | ug/l | 100 |
| 17) Carbon Disulfide | 2.495 | 76 | 56434 | 17.758 | ug/l | 100 |
| 18) Methyl Acetate | 2.709 | 43 | 38789 | 22.500 | ug/l | 99 |
| 19) Methyl tert-butyl Ether | 3.117 | 73 | 83027 | 20.741 | ug/l | 98 |
| 20) Methylene Chloride | 2.782 | 84 | 28513 | 20.086 | ug/l | 93 |
| 21) trans-1,2-Dichloroethene | 3.081 | 96 | 25882 | 21.957 | ug/l | 92 |
| 22) Diisopropyl ether | 3.763 | 45 | 92263 | 21.360 | ug/l | 92 |
| 23) Vinyl Acetate | 3.721 | 43 | 379422 | 105.258 | ug/l | 99 |
| 24) 1,1-Dichloroethane | 3.605 | 63 | 50777 | 20.975 | ug/l | 99 |
| 25) 2-Butanone | 4.568 | 43 | 112114 | 103.935 | ug/l | 100 |
| 26) 2,2-Dichloropropane | 4.464 | 77 | 31636 | 27.861 | ug/l | 98 |
| 27) cis-1,2-Dichloroethene | 4.483 | 96 | 30793 | 21.161 | ug/l | 95 |
| 28) Bromochloromethane | 4.897 | 49 | 20937 | 18.145 | ug/l | 98 |
| 29) Tetrahydrofuran | 5.007 | 42 | 72574 | 100.185 | ug/l | 99 |
| 30) Chloroform | 5.092 | 83 | 50960 | 21.186 | ug/l | 100 |
| 31) Cyclohexane | 5.458 | 56 | 46499 | 22.128 | ug/l | 91 |
| 32) 1,1,1-Trichloroethane | 5.379 | 97 | 40911 | 21.059 | ug/l | 98 |
| 36) 1,1-Dichloropropene | 5.684 | 75 | 34442 | 21.370 | ug/l | 99 |
| 37) Ethyl Acetate | 4.714 | 43 | 41415 | 19.942 | ug/l | 100 |
| 38) Carbon Tetrachloride | 5.672 | 117 | 33530 | 20.492 | ug/l | 98 |
| 39) Methylcyclohexane | 7.372 | 83 | 44224 | 22.900 | ug/l | 97 |
| 40) Benzene | 6.031 | 78 | 109500 | 21.516 | ug/l | 99 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX030625\
Data File : VX045158.D
Acq On : 06 Mar 2025 11:10
Operator : JC/MD
Sample : VX0306WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 07 00:37:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations APPROVED**

Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 4.922 | 41 | 23322 | 20.769 | ug/l | | 99 |
| 42) 1,2-Dichloroethane | 6.086 | 62 | 39213 | 21.397 | ug/l | | 100 |
| 43) Isopropyl Acetate | 6.342 | 43 | 62094 | 20.220 | ug/l | | 100 |
| 44) Trichloroethene | 7.123 | 130 | 24906 | 20.842 | ug/l | | 97 |
| 45) 1,2-Dichloropropane | 7.427 | 63 | 27481 | 21.002 | ug/l | | 99 |
| 46) Dibromomethane | 7.580 | 93 | 19832 | 21.443 | ug/l | | 98 |
| 47) Bromodichloromethane | 7.818 | 83 | 37772 | 20.821 | ug/l | | 97 |
| 48) Methyl methacrylate | 7.696 | 41 | 31277 | 20.301 | ug/l | | 98 |
| 49) 1,4-Dioxane | 7.665 | 88 | 13860 | 426.482 | ug/l | | 99 |
| 51) 4-Methyl-2-Pentanone | 8.573 | 43 | 215309 | 104.420 | ug/l | | 99 |
| 52) Toluene | 8.714 | 92 | 65138 | 21.814 | ug/l | | 100 |
| 53) t-1,3-Dichloropropene | 8.976 | 75 | 30950 | 20.407 | ug/l | | 97 |
| 54) cis-1,3-Dichloropropene | 8.366 | 75 | 37460 | 21.182 | ug/l | | 96 |
| 55) 1,1,2-Trichloroethane | 9.153 | 97 | 24854 | 20.219 | ug/l | | 97 |
| 56) Ethyl methacrylate | 9.116 | 69 | 37529 | 20.084 | ug/l | | 97 |
| 57) 1,3-Dichloropropane | 9.305 | 76 | 43951 | 20.660 | ug/l | | 98 |
| 58) 2-Chloroethyl Vinyl ether | 8.238 | 63 | 89701 | 98.410 | ug/l | | 99 |
| 59) 2-Hexanone | 9.433 | 43 | 158142 | 105.853 | ug/l | | 99 |
| 60) Dibromochloromethane | 9.518 | 129 | 25020 | 19.466 | ug/l | | 99 |
| 61) 1,2-Dibromoethane | 9.610 | 107 | 24964 | 20.343 | ug/l | | 100 |
| 64) Tetrachloroethene | 9.268 | 164 | 21040 | 22.233 | ug/l | | 91 |
| 65) Chlorobenzene | 10.079 | 112 | 67652 | 21.638 | ug/l | | 97 |
| 66) 1,1,1,2-Tetrachloroethane | 10.159 | 131 | 21012 | 20.181 | ug/l | | 97 |
| 67) Ethyl Benzene | 10.189 | 91 | 118147 | 21.687 | ug/l | | 99 |
| 68) m/p-Xylenes | 10.299 | 106 | 87720 | 43.986 | ug/l | | 99 |
| 69) o-Xylene | 10.640 | 106 | 43323 | 21.539 | ug/l | | 99 |
| 70) Styrene | 10.652 | 104 | 70623 | 21.700 | ug/l | | 99 |
| 71) Bromoform | 10.799 | 173 | 15238 | 19.408 | ug/l | # | 100 |
| 73) Isopropylbenzene | 10.963 | 105 | 111617 | 21.304 | ug/l | | 100 |
| 74) N-amyl acetate | 10.841 | 43 | 50220 | 20.428 | ug/l | | 99 |
| 75) 1,1,2,2-Tetrachloroethane | 11.213 | 83 | 39941 | 20.775 | ug/l | | 99 |
| 76) 1,2,3-Trichloropropane | 11.238 | 75 | 31293m | 20.030 | ug/l | | |
| 77) Bromobenzene | 11.195 | 156 | 25608 | 20.716 | ug/l | | 100 |
| 78) n-propylbenzene | 11.305 | 91 | 126790 | 21.423 | ug/l | | 100 |
| 79) 2-Chlorotoluene | 11.360 | 91 | 77393 | 20.533 | ug/l | | 100 |
| 80) 1,3,5-Trimethylbenzene | 11.451 | 105 | 91126 | 21.511 | ug/l | | 99 |
| 81) trans-1,4-Dichloro-2-b... | 11.018 | 75 | 7740 | 16.954 | ug/l | # | 82 |
| 82) 4-Chlorotoluene | 11.451 | 91 | 87322 | 21.257 | ug/l | | 99 |
| 83) tert-Butylbenzene | 11.713 | 119 | 91061 | 20.921 | ug/l | | 98 |
| 84) 1,2,4-Trimethylbenzene | 11.750 | 105 | 91832 | 21.544 | ug/l | | 100 |
| 85) sec-Butylbenzene | 11.890 | 105 | 112914 | 21.656 | ug/l | | 100 |
| 86) p-Isopropyltoluene | 12.006 | 119 | 90968 | 21.589 | ug/l | | 99 |
| 87) 1,3-Dichlorobenzene | 11.969 | 146 | 45783 | 20.761 | ug/l | | 99 |
| 88) 1,4-Dichlorobenzene | 12.042 | 146 | 46189 | 20.703 | ug/l | | 97 |
| 89) n-Butylbenzene | 12.329 | 91 | 79568 | 21.925 | ug/l | | 99 |
| 90) Hexachloroethane | 12.536 | 117 | 14633 | 19.200 | ug/l | | 97 |
| 91) 1,2-Dichlorobenzene | 12.335 | 146 | 46647 | 21.087 | ug/l | | 98 |
| 92) 1,2-Dibromo-3-Chloropr... | 12.939 | 75 | 7641 | 20.400 | ug/l | | 95 |
| 93) 1,2,4-Trichlorobenzene | 13.585 | 180 | 26728 | 21.219 | ug/l | | 99 |
| 94) Hexachlorobutadiene | 13.725 | 225 | 11477 | 22.224 | ug/l | | 96 |
| 95) Naphthalene | 13.774 | 128 | 102859 | 21.254 | ug/l | | 99 |
| 96) 1,2,3-Trichlorobenzene | 13.957 | 180 | 28765 | 21.647 | ug/l | | 99 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX030625\
Data File : VX045158.D
Acq On : 06 Mar 2025 11:10
Operator : JC/MD
Sample : VX0306WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 07 00:37:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations APPROVED**

Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

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

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

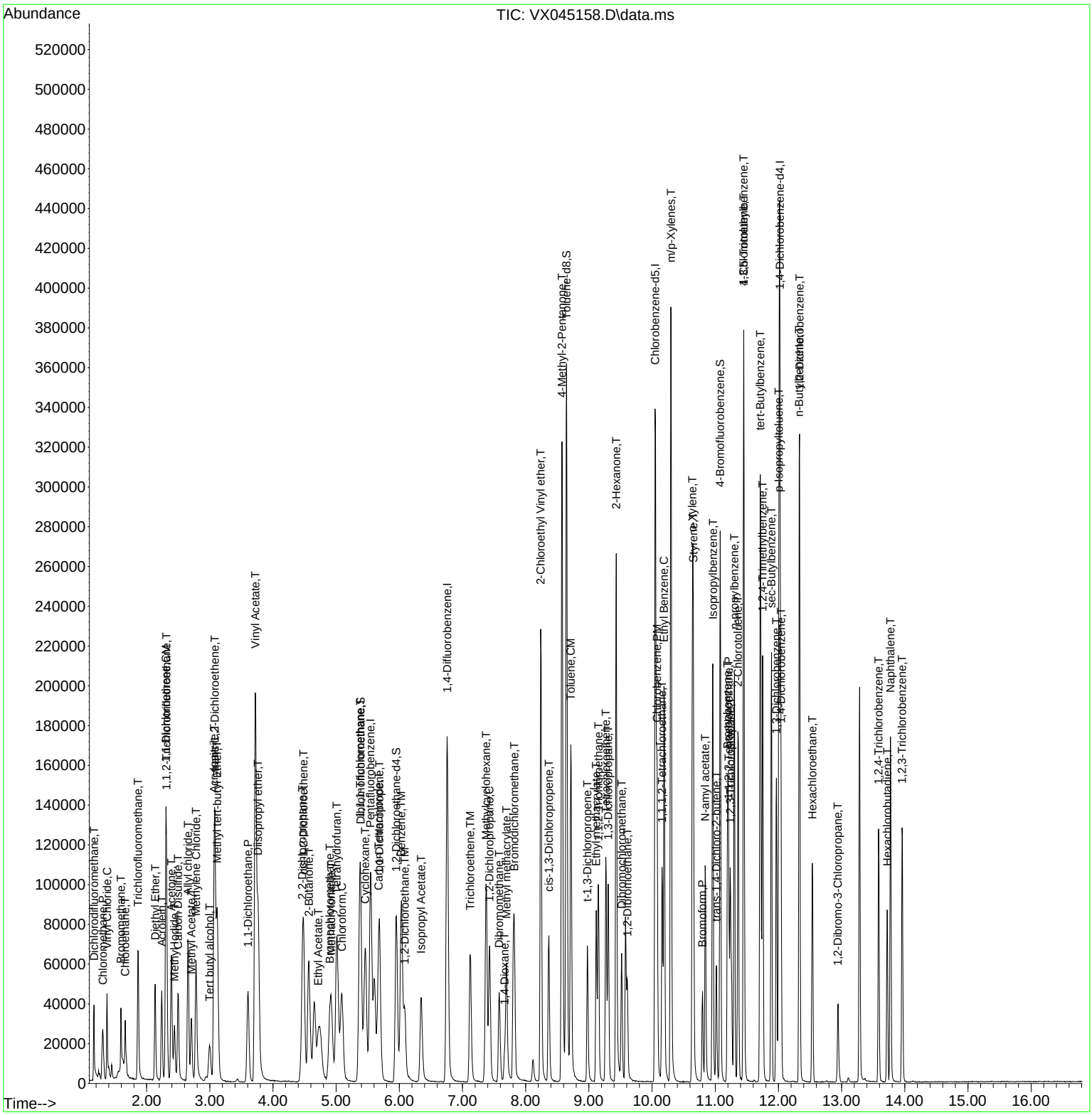
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX030625\
Data File : VX045158.D
Acq On : 06 Mar 2025 11:10
Operator : JC/MD
Sample : VX0306WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

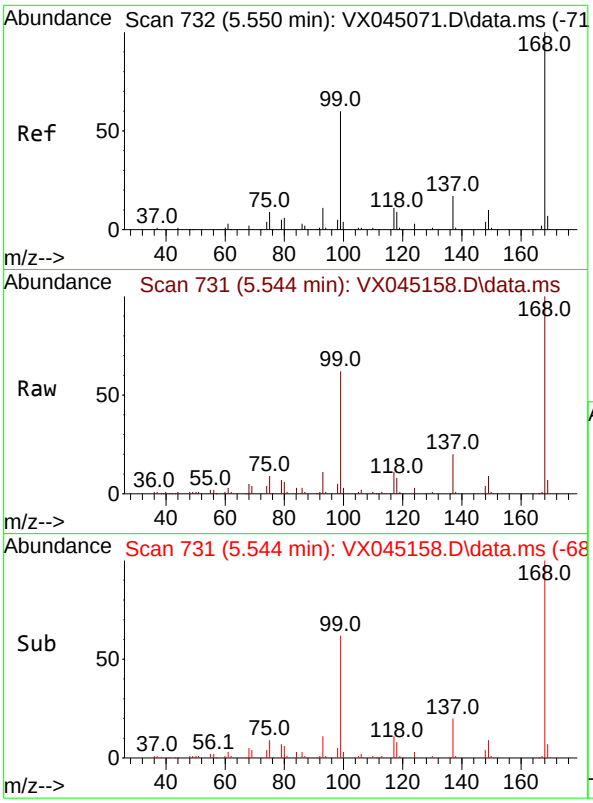
Quant Time: Mar 07 00:37:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations APPROVED**

Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

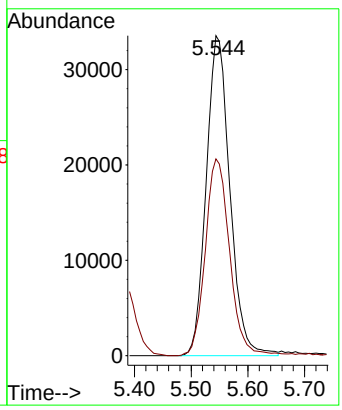





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.544 min Scan# 7
Delta R.T. -0.006 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:168 Resp: 9710

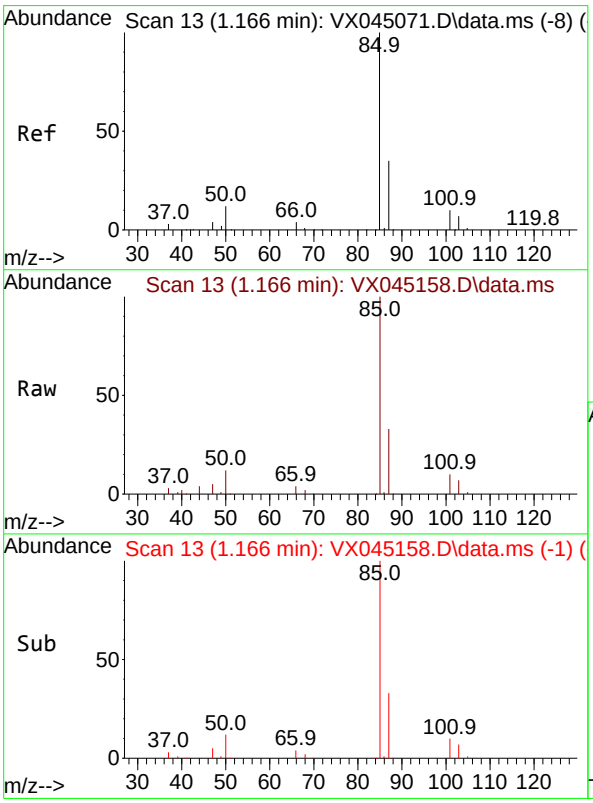
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 61.5 | 48.2 | 72.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations**
**APPROVED**

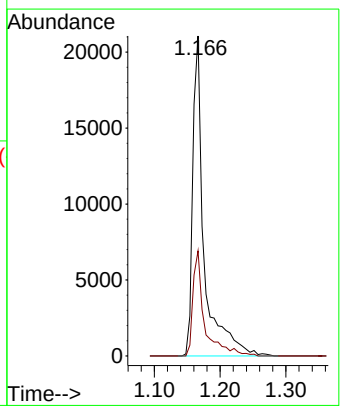
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

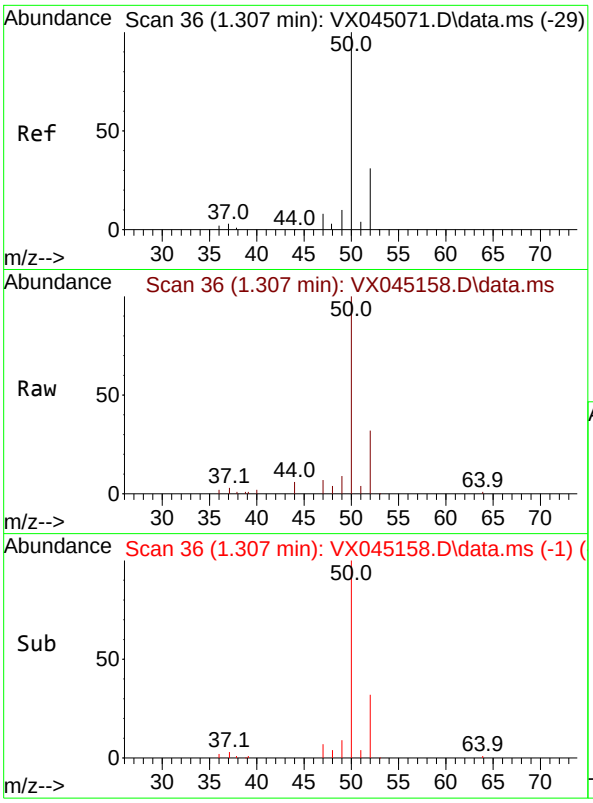



#2
Dichlorodifluoromethane
Concen: 20.710 ug/l
RT: 1.166 min Scan# 13
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 85 Resp: 25313

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.8 | 17.4 | 52.3 |

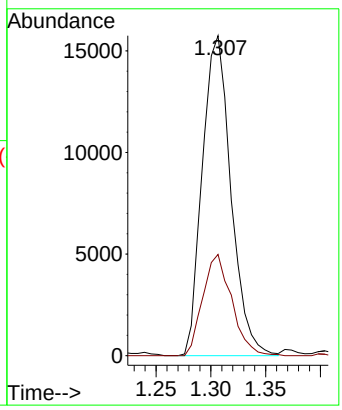





#3
Chloromethane
Concen: 19.127 ug/l
RT: 1.307 min Scan# 3
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 50 Resp: 2861

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 31.6 | 25.0 | 37.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 03/10/2025
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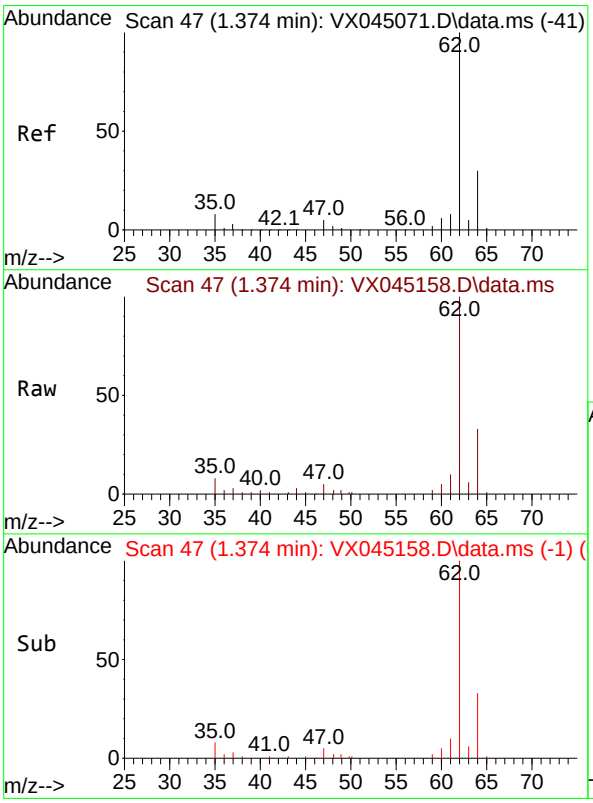
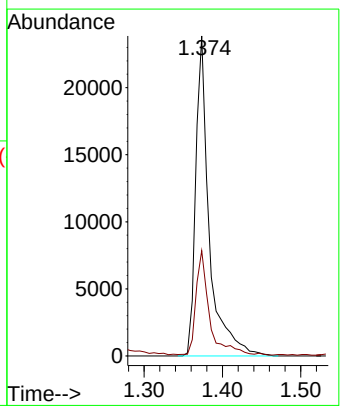
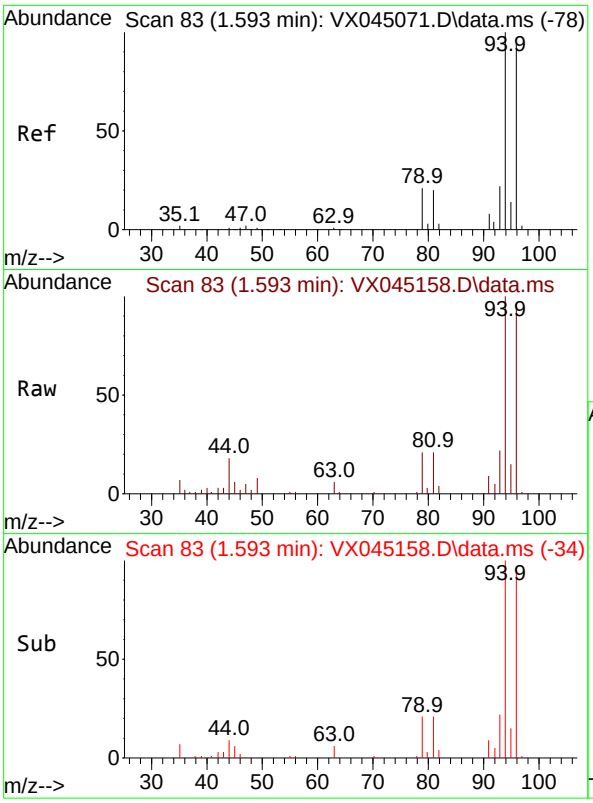



#4
Vinyl Chloride
Concen: 19.365 ug/l
RT: 1.374 min Scan# 47
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 62 Resp: 28735

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 32.4 | 24.3 | 36.5 |

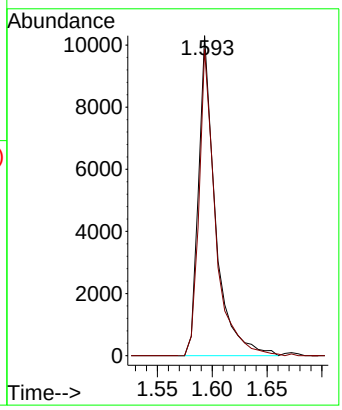





#5
Bromomethane
Concen: 18.945 ug/l
RT: 1.593 min Scan# 8
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 94 Resp: 1105

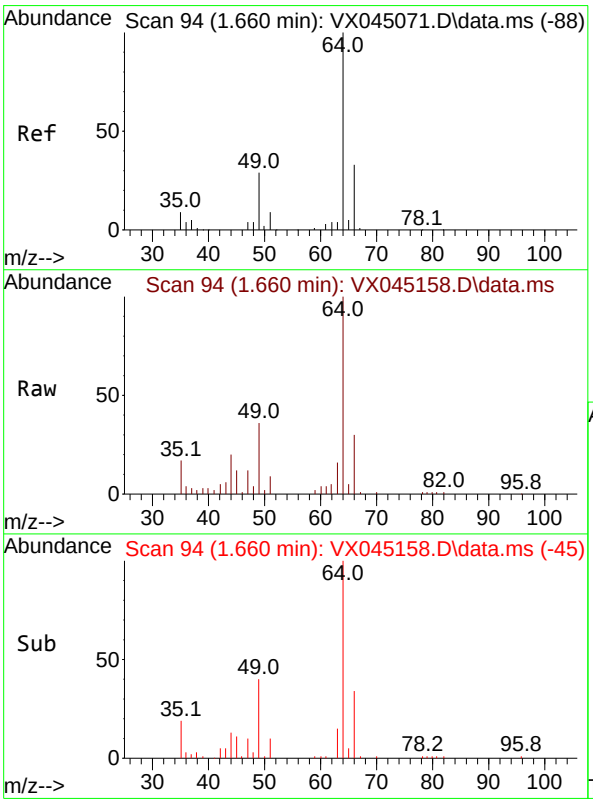
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 95.7 | 75.0 | 112.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations**
**APPROVED**

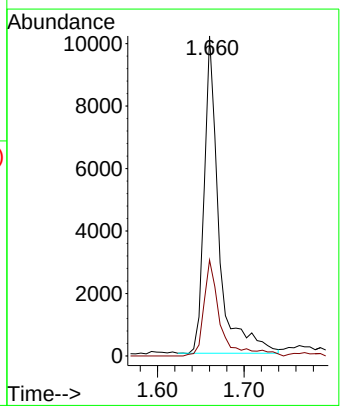
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

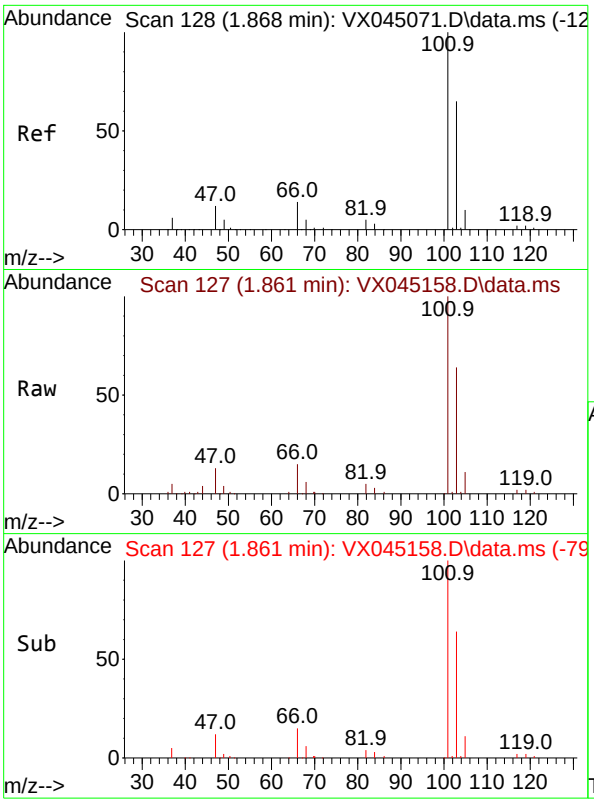



#6
Chloroethane
Concen: 17.401 ug/l
RT: 1.660 min Scan# 94
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 64 Resp: 11910

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 30.2 | 26.7 | 40.1 |

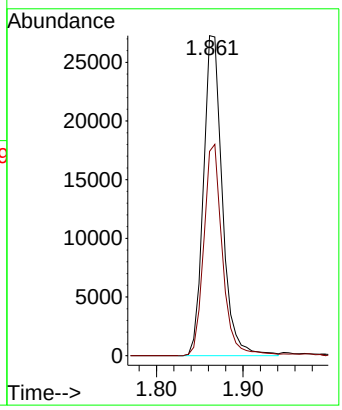





#7
Trichlorofluoromethane
Concen: 21.039 ug/l
RT: 1.861 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:101 Resp: 4132

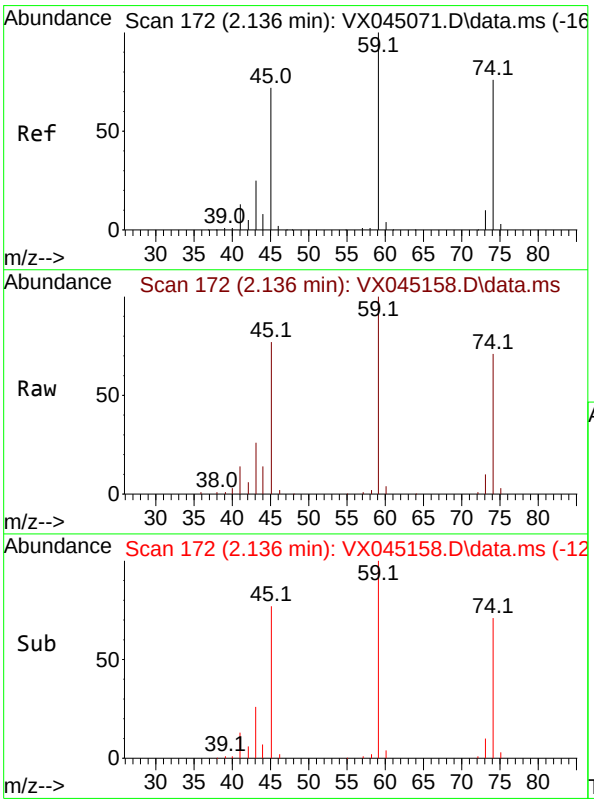
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 63.8 | 52.1 | 78.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations**
**APPROVED**

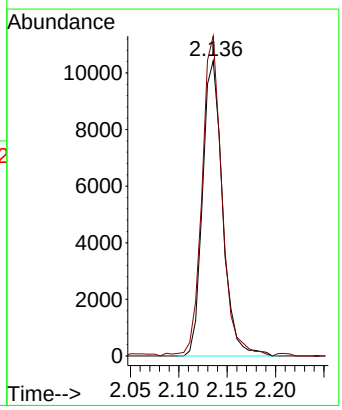
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

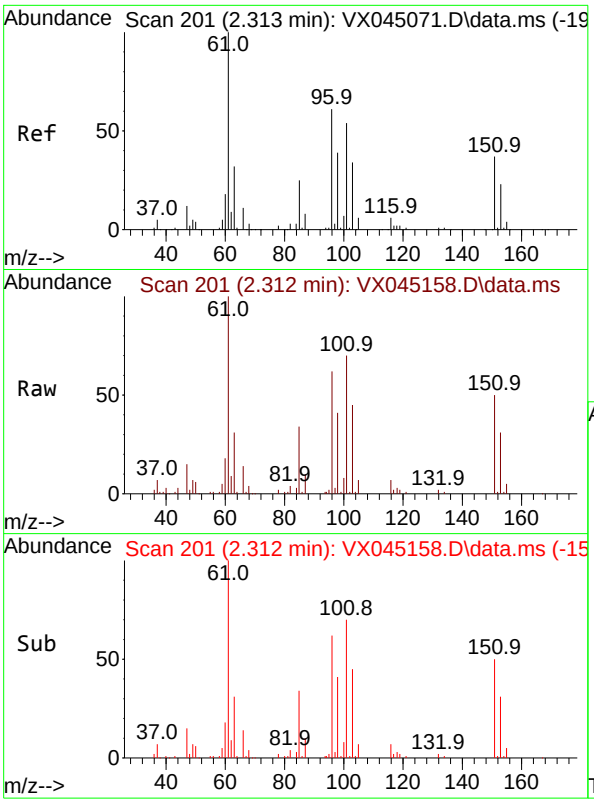



#8
Diethyl Ether
Concen: 19.563 ug/l
RT: 2.136 min Scan# 172
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 74 Resp: 15031

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 108.5 | 51.5 | 154.5 |

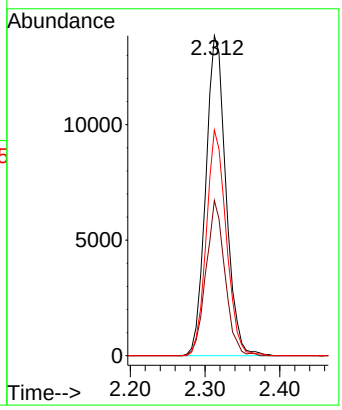





#9
1,1,2-Trichlorotrifluoroethane
Concen: 22.961 ug/l
RT: 2.312 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:101 Resp: 2591

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 45.6 | 36.2 | 54.4 |
| 151 | 69.8 | 56.4 | 84.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations**
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Reviewed By :John Carlone 03/10/2025
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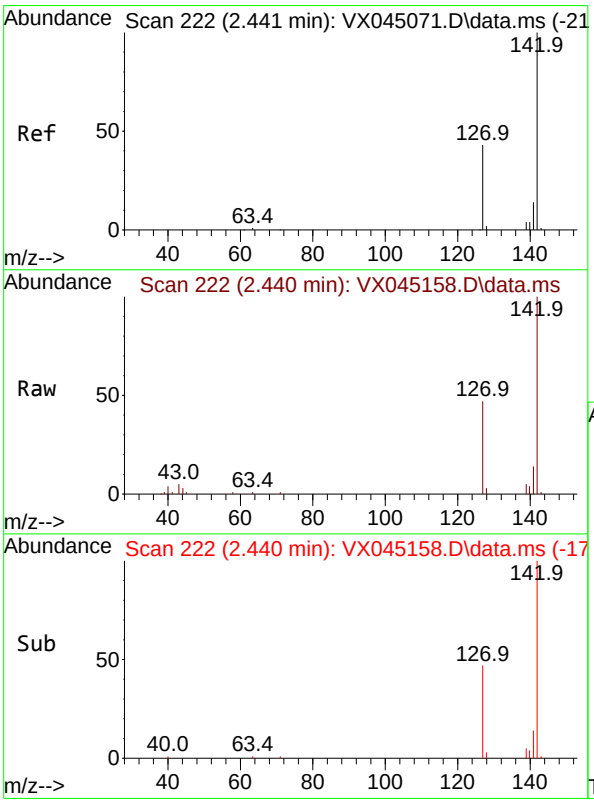
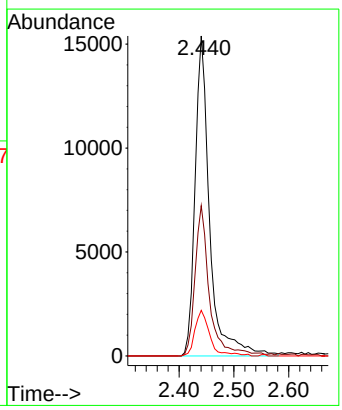
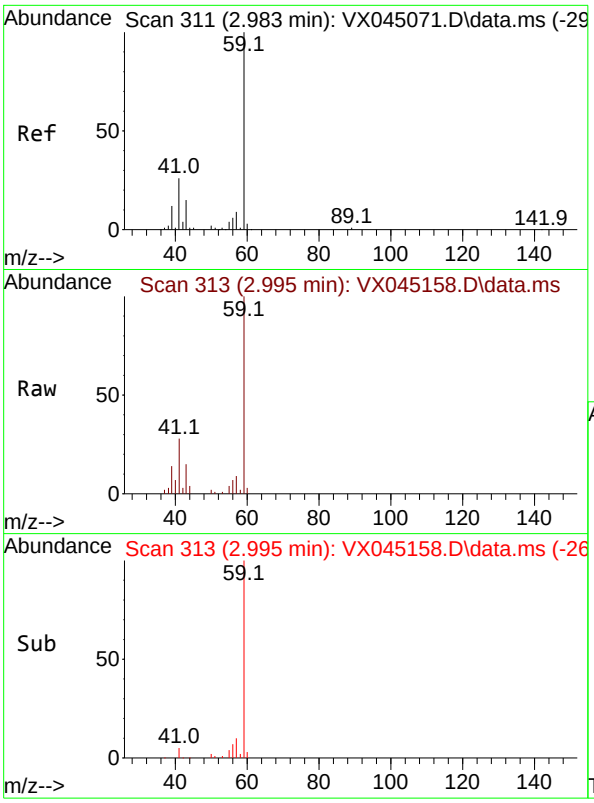



#10
Methyl Iodide
Concen: 20.232 ug/l
RT: 2.440 min Scan# 222
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:142 Resp: 28535

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 46.5 | 35.4 | 53.2 |
| 141 | 14.5 | 11.6 | 17.4 |

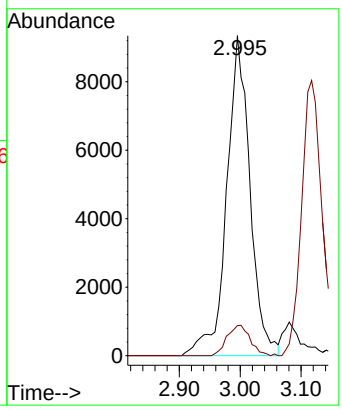





#11
Tert butyl alcohol
Concen: 85.035 ug/l
RT: 2.995 min Scan# 3
Delta R.T. 0.012 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 59 Resp: 2487

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 9.5 | 7.8 | 11.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations**
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Reviewed By :John Carlone 03/10/2025
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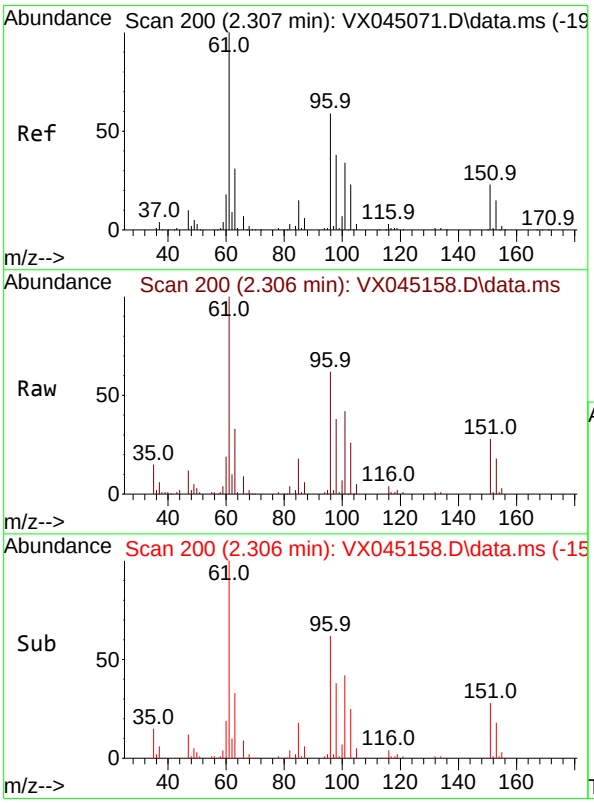
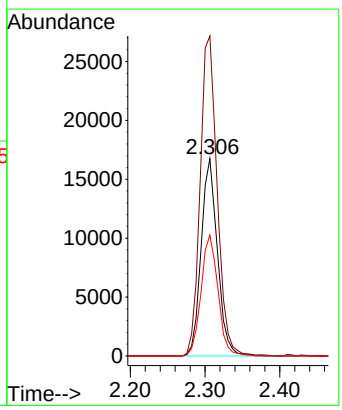
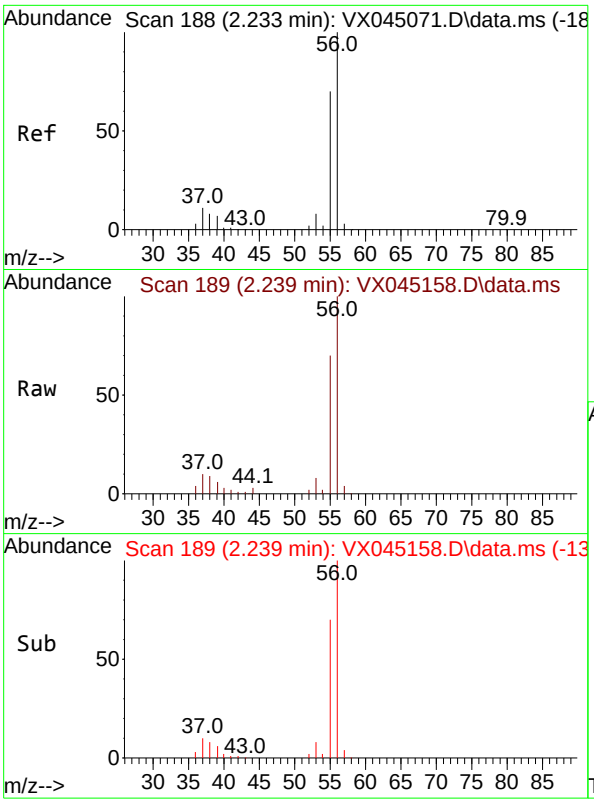



#12
1,1-Dichloroethene
Concen: 21.319 ug/l
RT: 2.306 min Scan# 200
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 96 Resp: 25437

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 162.3 | 134.6 | 202.0 |
| 98 | 61.3 | 51.0 | 76.6 |

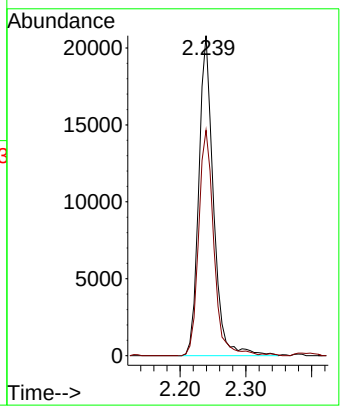





#13
Acrolein
Concen: 95.330 ug/l
RT: 2.239 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 56 Resp: 3224

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 72.9 | 56.2 | 84.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 03/10/2025
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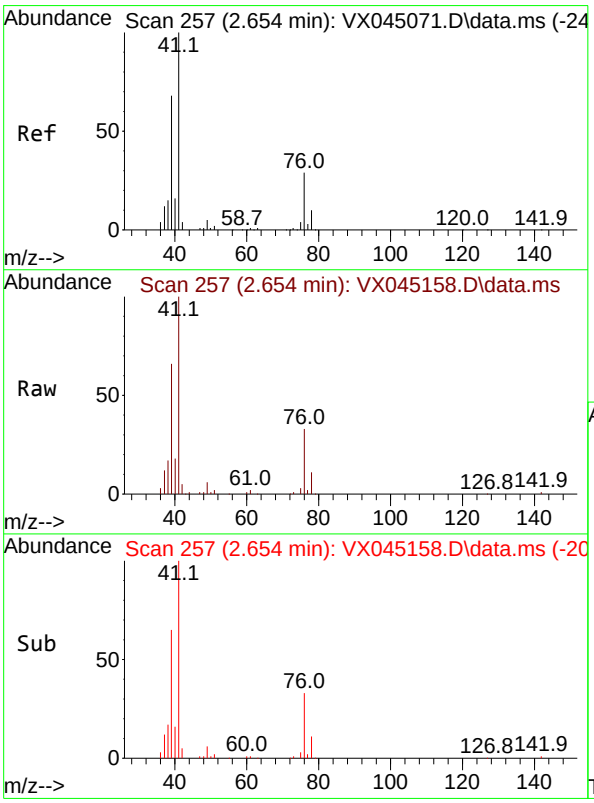
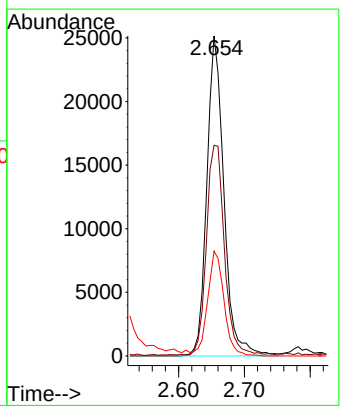
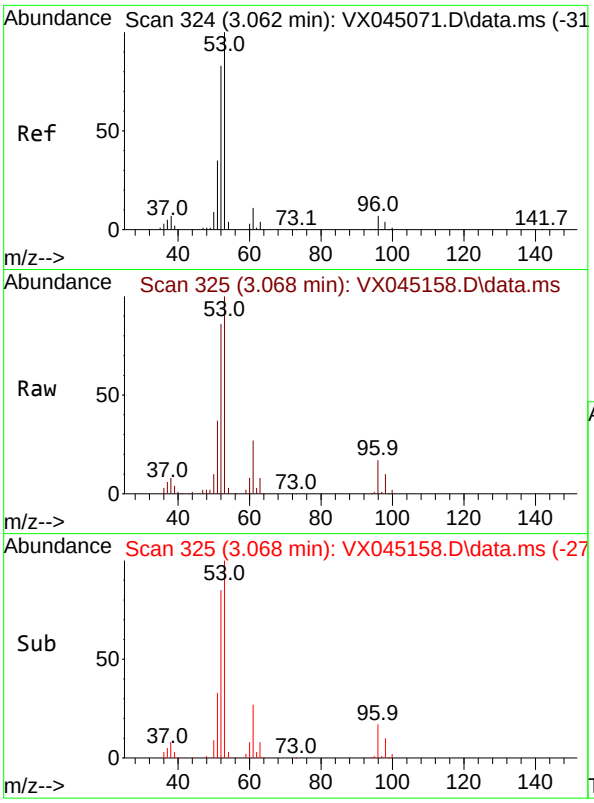



#14
Allyl chloride
Concen: 21.406 ug/l
RT: 2.654 min Scan# 257
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 41 Resp: 45464

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 68.7 | 53.8 | 80.8 |
| 76 | 31.5 | 25.2 | 37.8 |

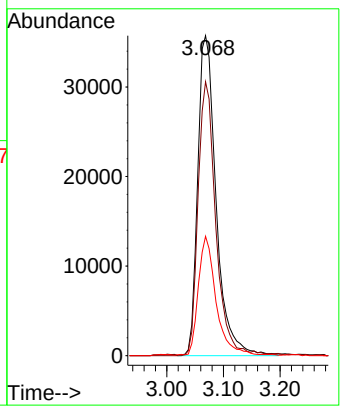





#15
Acrylonitrile
Concen: 102.818 ug/l
RT: 3.068 min Scan# 3
Delta R.T. 0.006 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 53 Resp: 8062

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 83.0 | 66.2 | 99.2 |
| 51 | 35.7 | 29.0 | 43.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations**
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Reviewed By :John Carlone 03/10/2025
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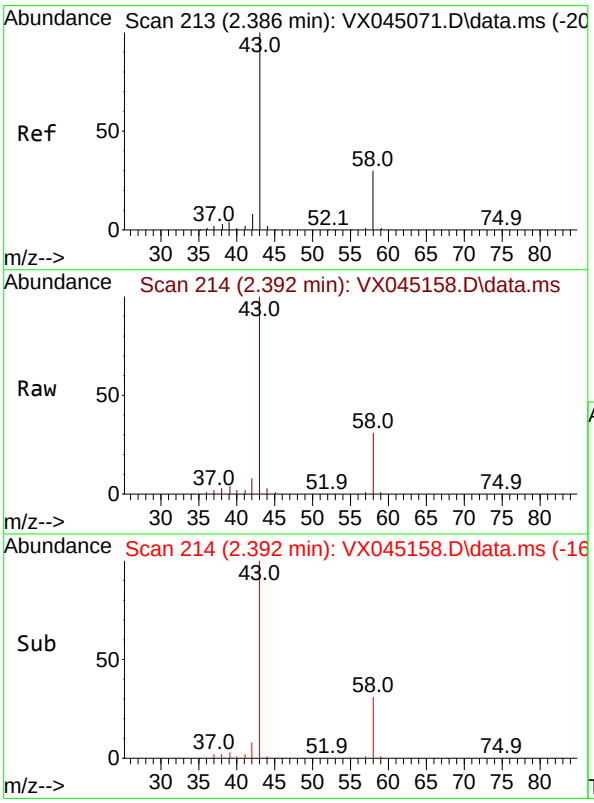
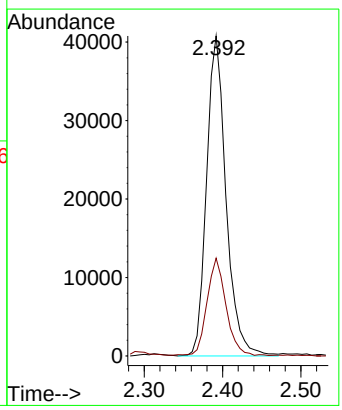
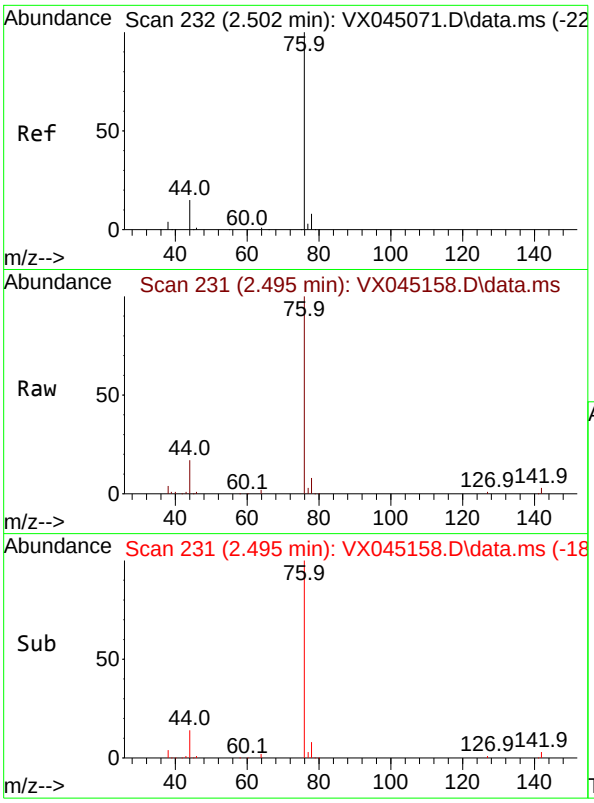



#16
Acetone
Concen: 98.177 ug/l
RT: 2.392 min Scan# 214
Delta R.T. 0.006 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 43 Resp: 70356

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 30.3 | 24.2 | 36.4 |

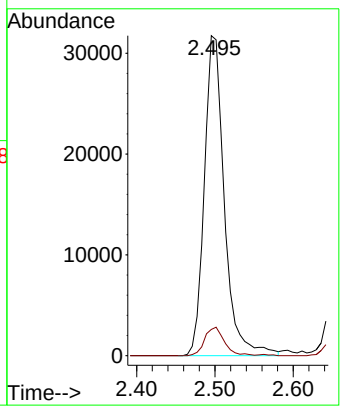





#17
Carbon Disulfide
Concen: 17.758 ug/l
RT: 2.495 min Scan# 2
Delta R.T. -0.006 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 76 Resp: 5643

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 8.2 | 6.6 | 9.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations APPROVED**

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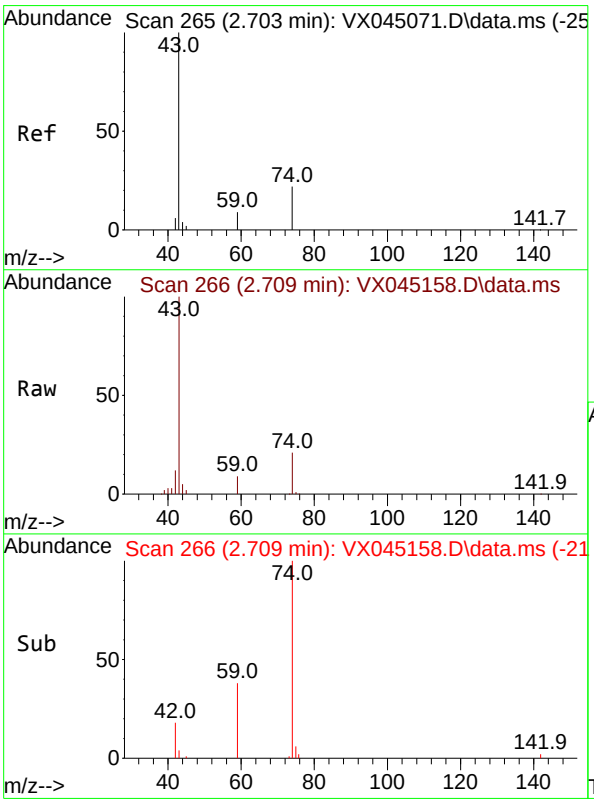
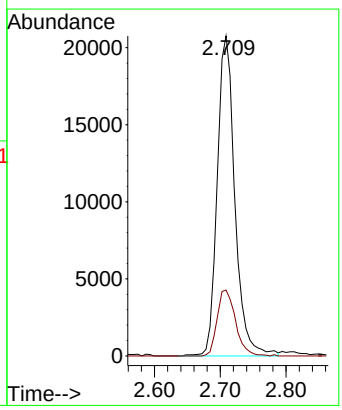
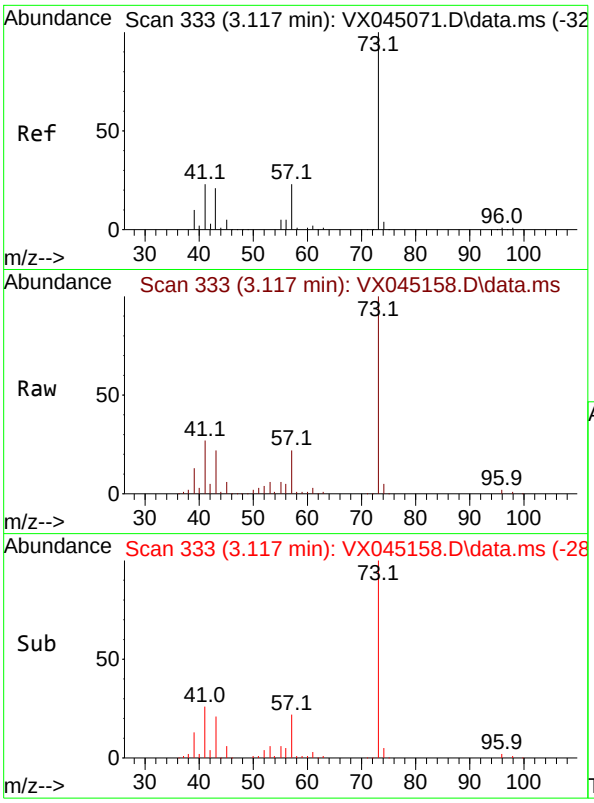



#18
Methyl Acetate
Concen: 22.500 ug/l
RT: 2.709 min Scan# 266
Delta R.T. 0.006 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 43 Resp: 38789

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 21.5 | 17.4 | 26.2 |

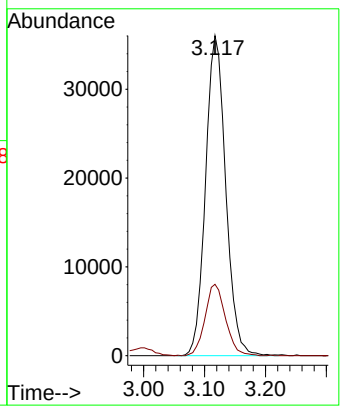





#19
Methyl tert-butyl Ether
Concen: 20.741 ug/l
RT: 3.117 min Scan# 3
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 73 Resp: 8302

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 22.3 | 18.5 | 27.7 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations APPROVED**

Reviewed By :John Carlone 03/10/2025
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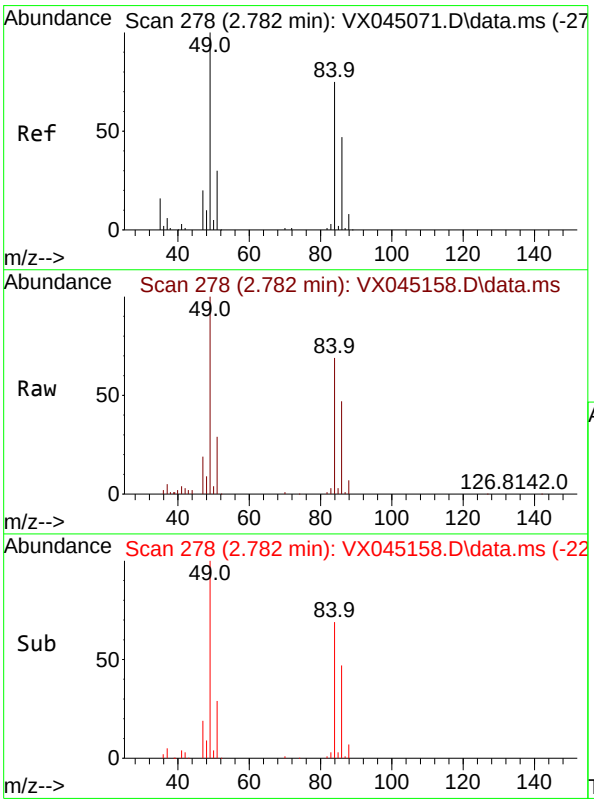
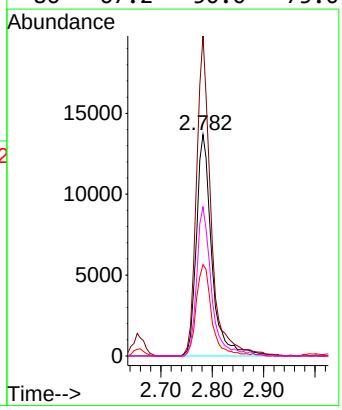
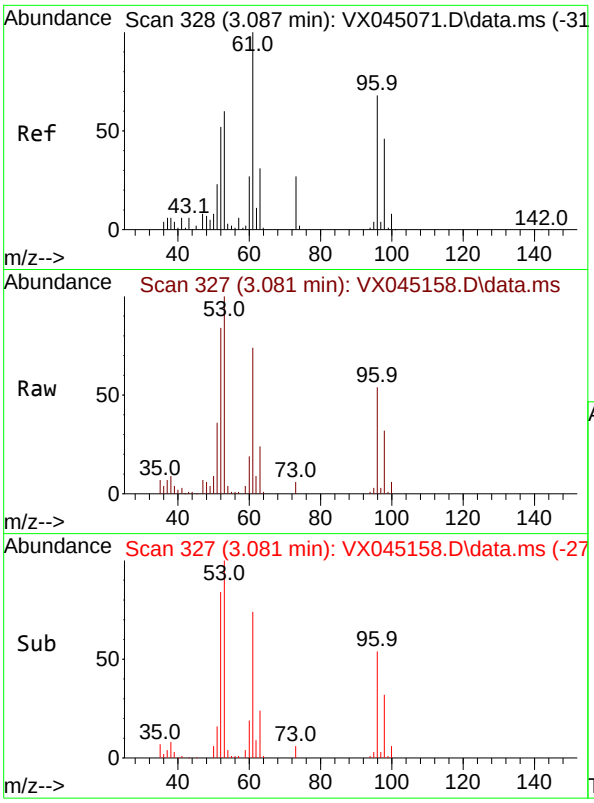



#20
Methylene Chloride
Concen: 20.086 ug/l
RT: 2.782 min Scan# 278
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 84 Resp: 28513

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 144.5 | 106.5 | 159.7 |
| 51 | 41.2 | 32.1 | 48.1 |
| 86 | 67.2 | 50.0 | 75.0 |

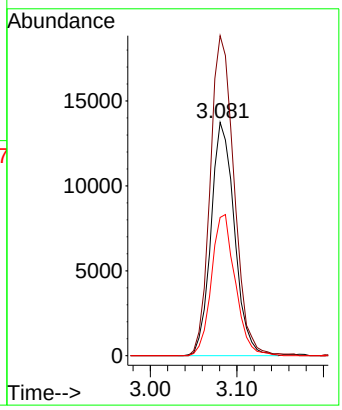





#21
trans-1,2-Dichloroethene
Concen: 21.957 ug/l
RT: 3.081 min Scan# 3
Delta R.T. -0.006 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 96 Resp: 2588

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 137.2 | 117.0 | 175.4 |
| 98 | 59.2 | 53.4 | 80.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations**
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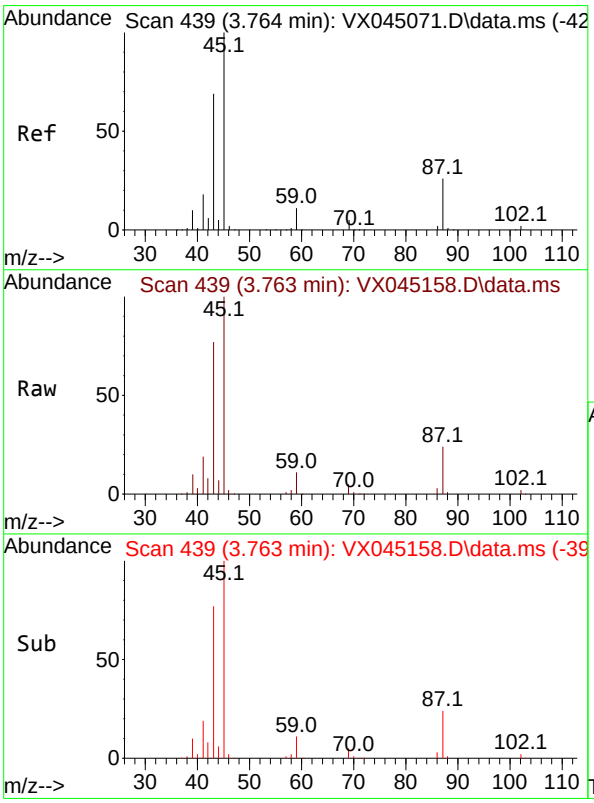
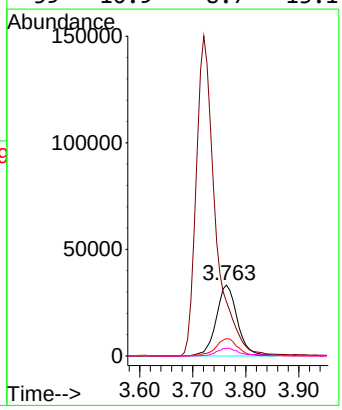
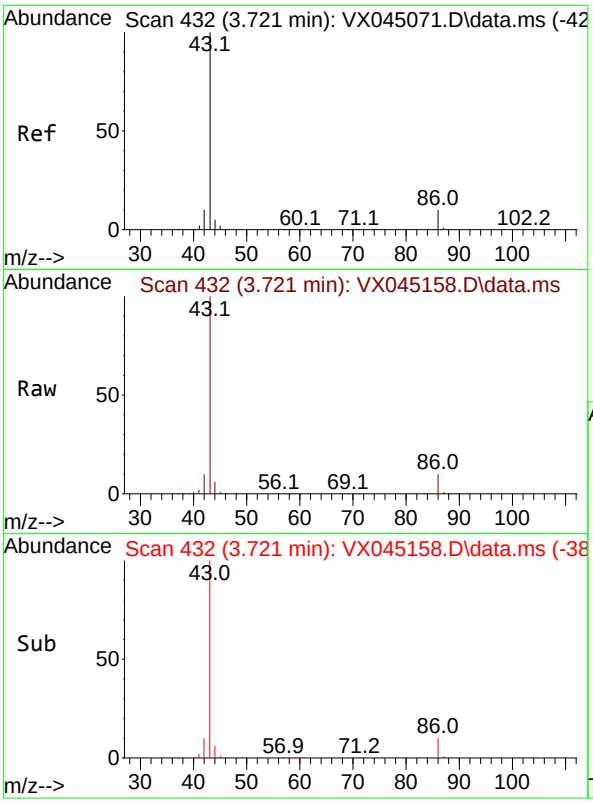



#22
Diisopropyl ether
Concen: 21.360 ug/l
RT: 3.763 min Scan# 439
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 45 Resp: 92263

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 77.1 | 54.9 | 82.3 |
| 87 | 24.5 | 21.0 | 31.4 |
| 59 | 10.9 | 8.7 | 13.1 |






#23
Vinyl Acetate
Concen: 105.258 ug/l
RT: 3.721 min Scan# 4
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 43 Resp: 37942

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 9.8 | 8.1 | 12.1 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations**
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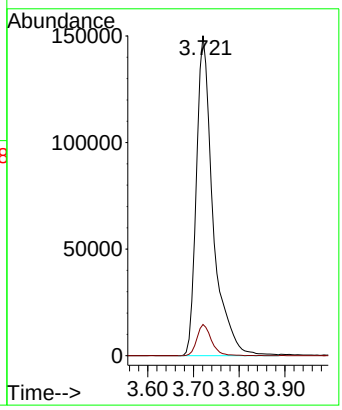
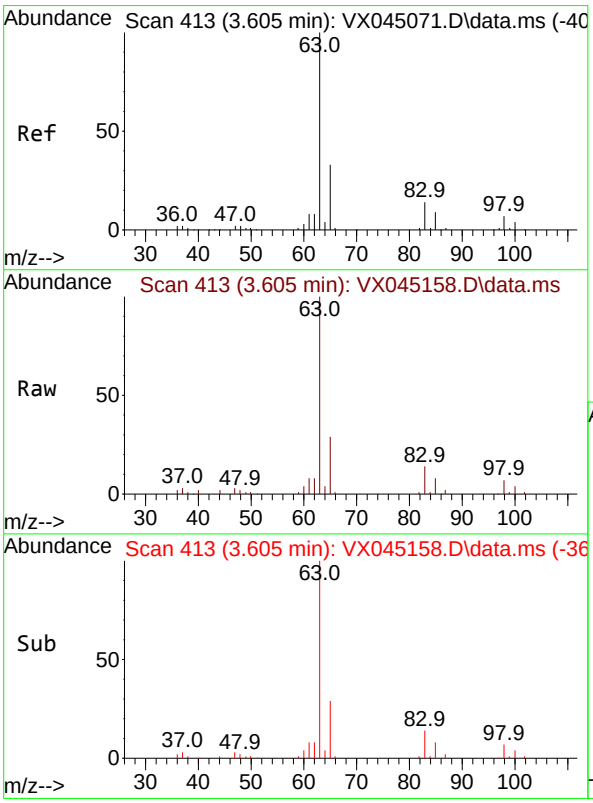
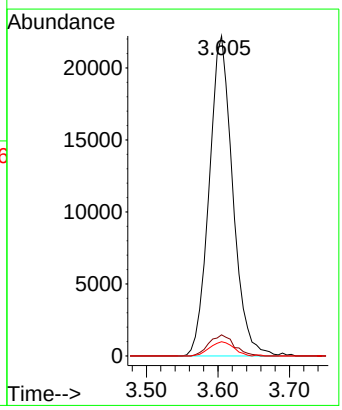


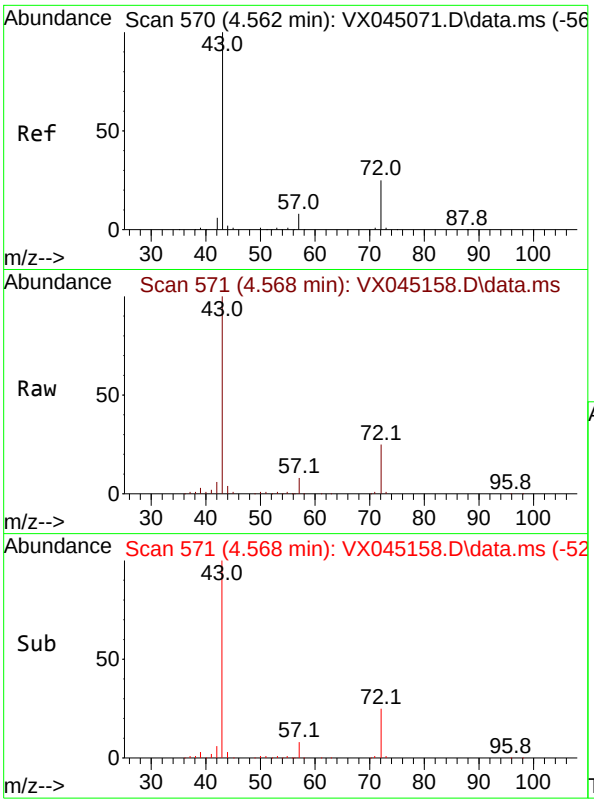




#24
1,1-Dichloroethane
Concen: 20.975 ug/l
RT: 3.605 min Scan# 413
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 63 Resp: 50777

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 6.6 | 3.4 | 10.2 |
| 100 | 4.5 | 2.1 | 6.5 |






#25
2-Butanone
Concen: 103.935 ug/l
RT: 4.568 min Scan# 5
Delta R.T. 0.006 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

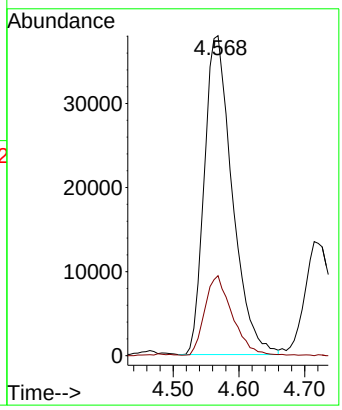
Tgt Ion: 43 Resp: 11211

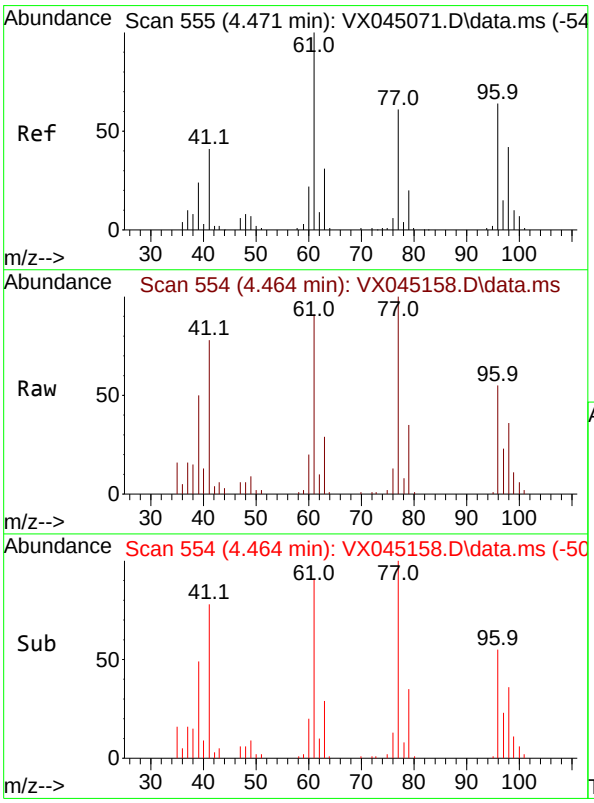
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 24.8 | 20.0 | 30.0 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

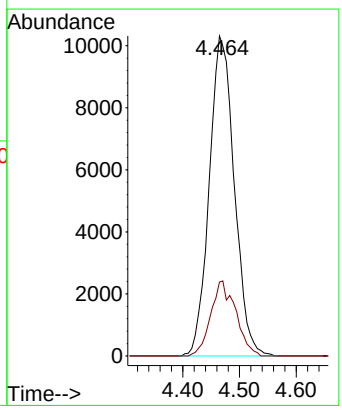


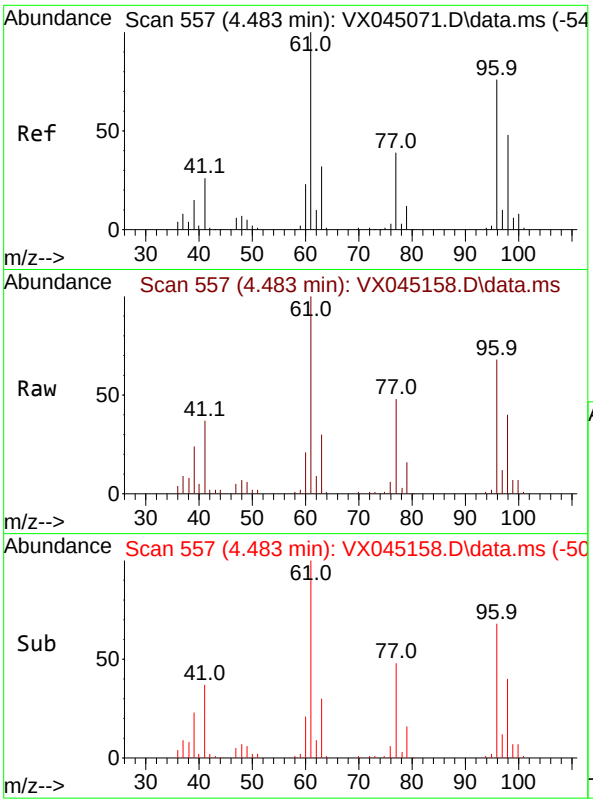




#26
2,2-Dichloropropane
Concen: 27.861 ug/l
RT: 4.464 min Scan# 554
Delta R.T. -0.006 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 77 Resp: 31636

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 23.5 | 12.4 | 37.0 |

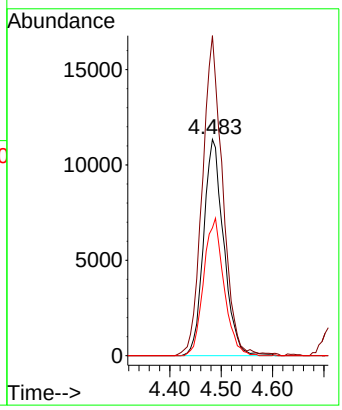





#27
cis-1,2-Dichloroethene
Concen: 21.161 ug/l
RT: 4.483 min Scan# 5
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 96 Resp: 3079

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 149.9 | 0.0 | 283.2 |
| 98 | 64.3 | 0.0 | 128.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations**
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Reviewed By :John Carlone 03/10/2025
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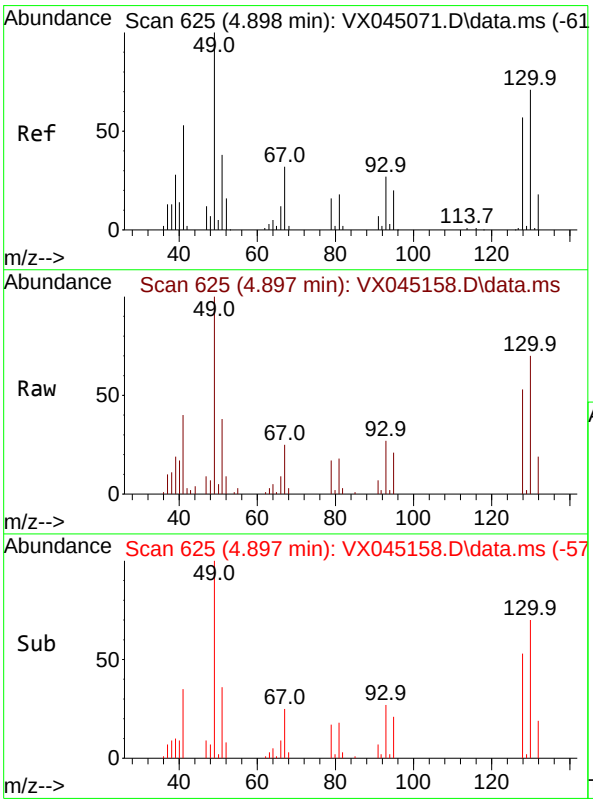
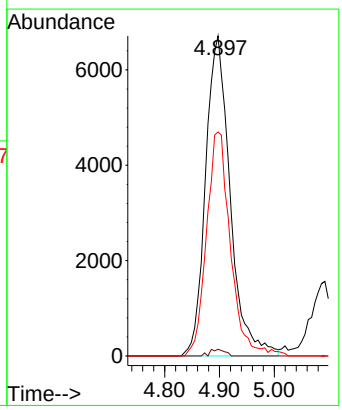
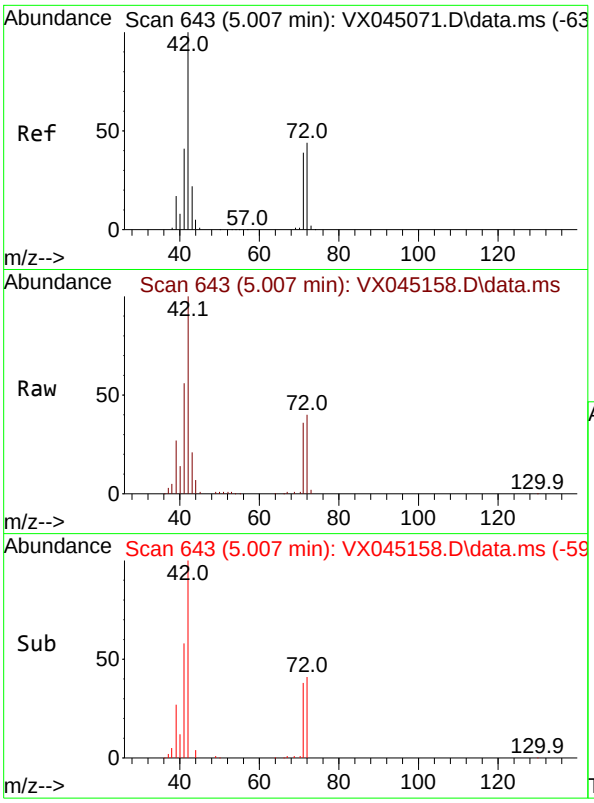



#28
Bromochloromethane
Concen: 18.145 ug/l
RT: 4.897 min Scan# 625
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 49 Resp: 20937

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.3 | 0.0 | 3.4 |
| 130 | 68.1 | 56.1 | 84.1 |

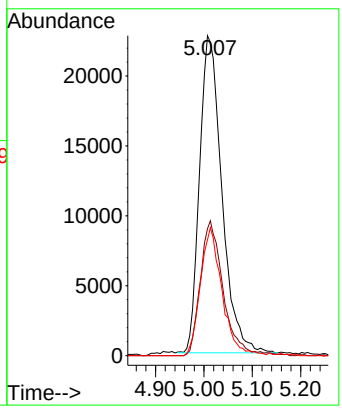





#29
Tetrahydrofuran
Concen: 100.185 ug/l
RT: 5.007 min Scan# 64
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 42 Resp: 7257

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 43.6 | 34.1 | 51.1 |
| 71 | 39.1 | 31.4 | 47.0 |




**Instrument :**
MSVOA_X
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VX0306WBS01

**Manual Integrations APPROVED**

Reviewed By :John Carlone 03/10/2025
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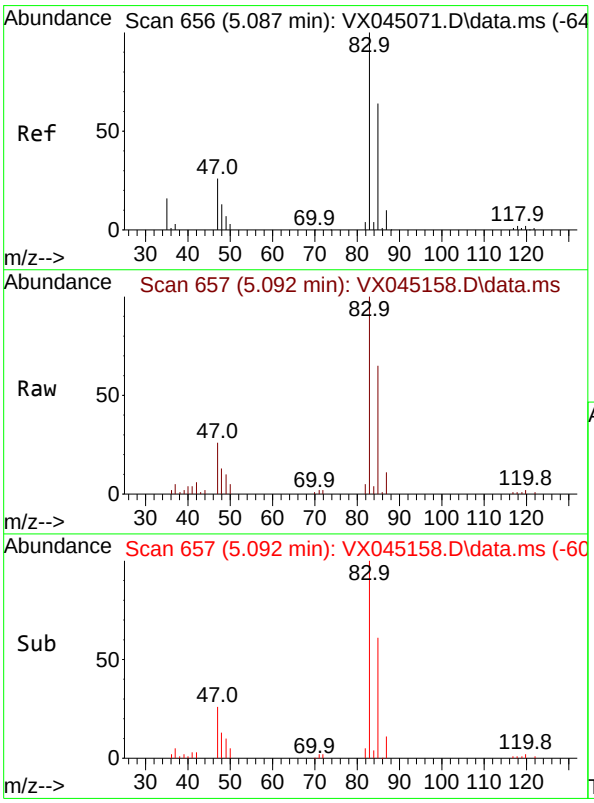
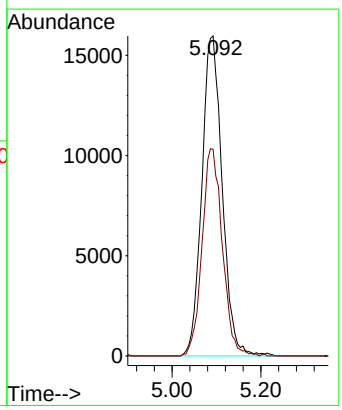
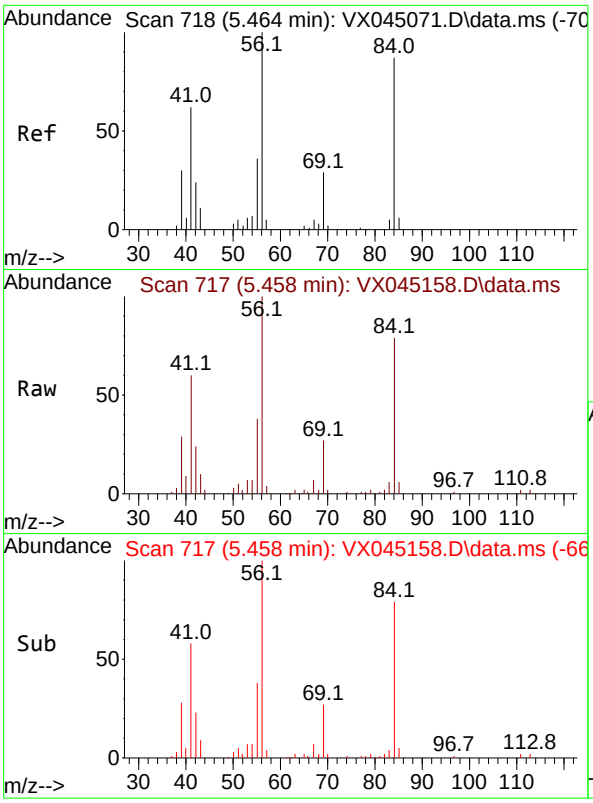



#30
Chloroform
Concen: 21.186 ug/l
RT: 5.092 min Scan# 657
Delta R.T. 0.006 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 83 Resp: 50960

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.6 | 51.4 | 77.2 |

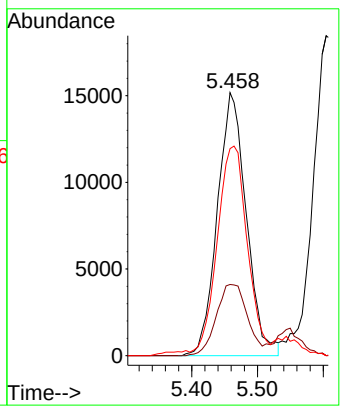





#31
Cyclohexane
Concen: 22.128 ug/l
RT: 5.458 min Scan# 7
Delta R.T. -0.006 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 56 Resp: 4649

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 27.1 | 23.4 | 35.2 |
| 84 | 77.2 | 69.4 | 104.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations APPROVED**

Reviewed By :John Carlone 03/10/2025
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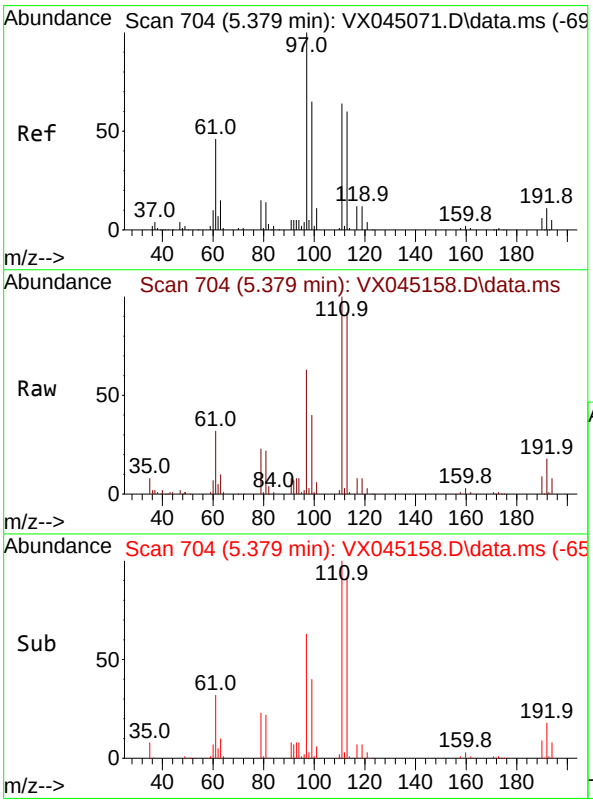
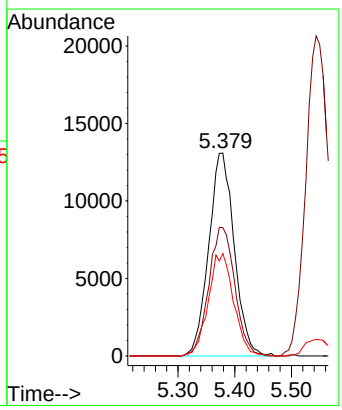
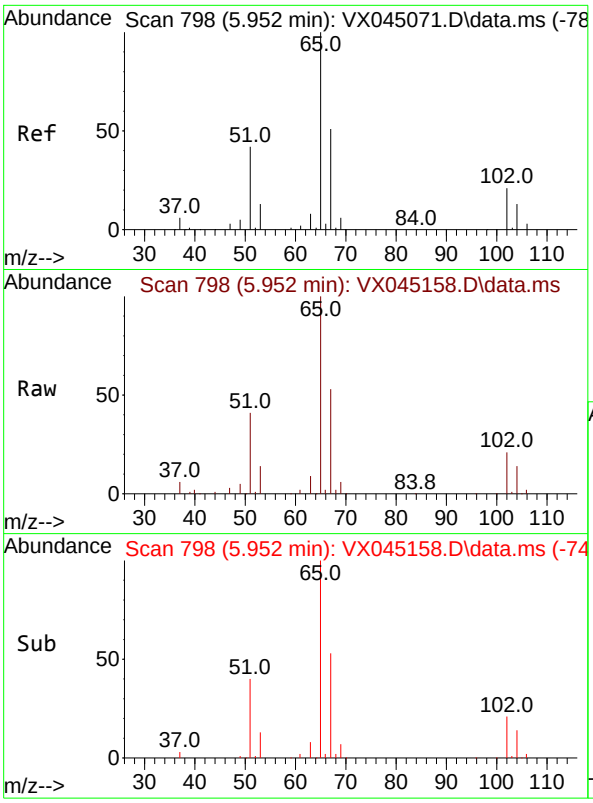



#32
1,1,1-Trichloroethane
Concen: 21.059 ug/l
RT: 5.379 min Scan# 704
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 97 Resp: 40911

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 64.7 | 51.6 | 77.4 |
| 61 | 50.3 | 38.4 | 57.6 |

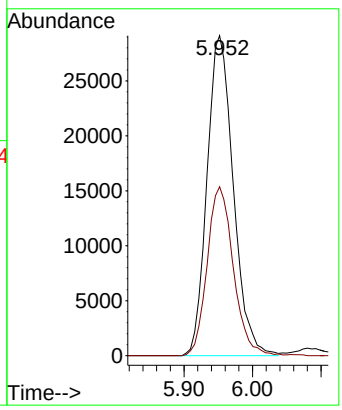





#33
1,2-Dichloroethane-d4
Concen: 50.187 ug/l
RT: 5.952 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 65 Resp: 7751

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 52.6 | 0.0 | 106.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations APPROVED**

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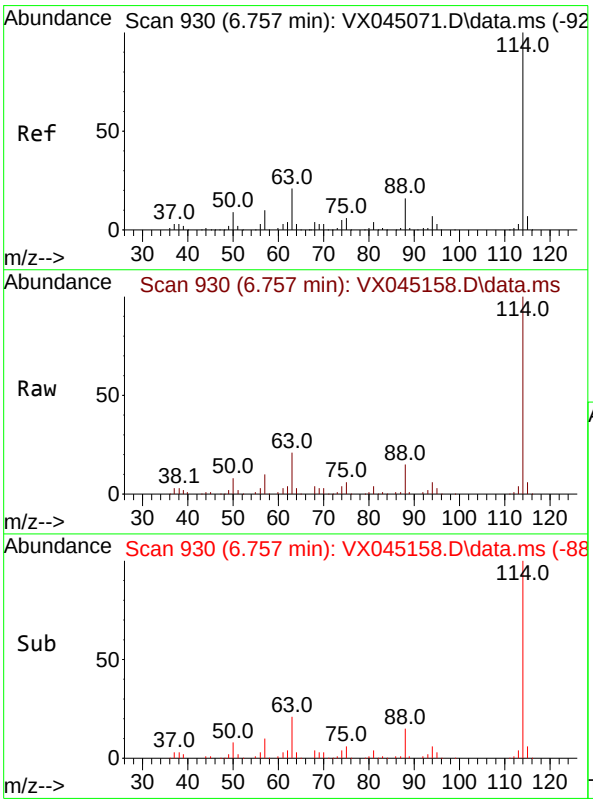
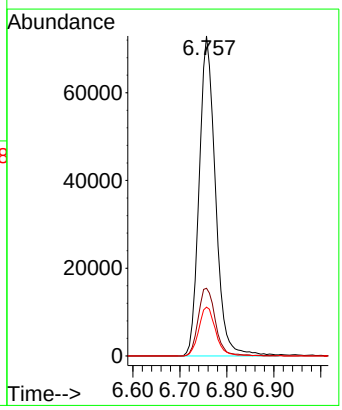
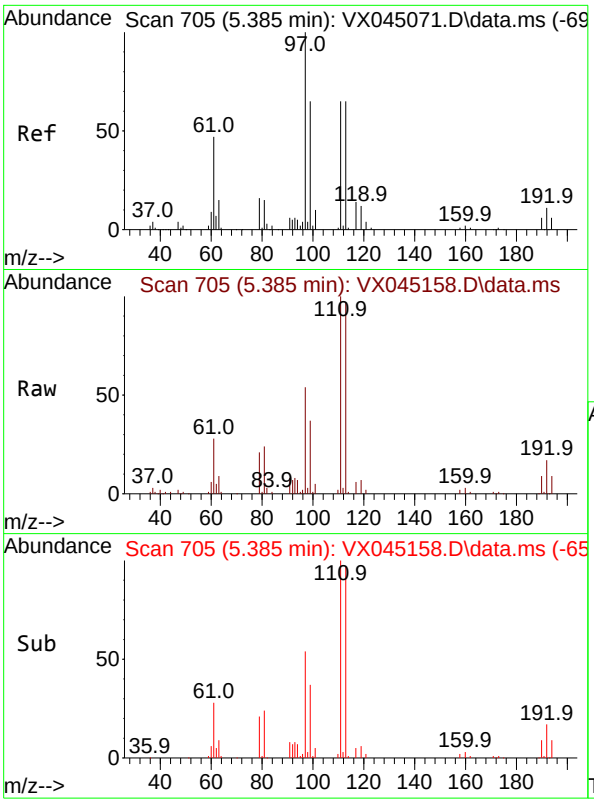



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.757 min Scan# 930
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:114 Resp: 175752

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 21.1 | 0.0 | 41.8 |
| 88 | 15.2 | 0.0 | 32.8 |

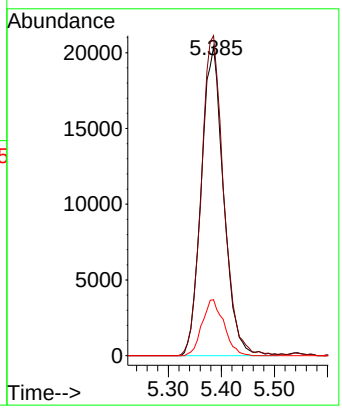





#35
Dibromofluoromethane
Concen: 50.846 ug/l
RT: 5.385 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:113 Resp: 5975

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 103.3 | 81.8 | 122.6 |
| 192 | 17.7 | 14.3 | 21.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

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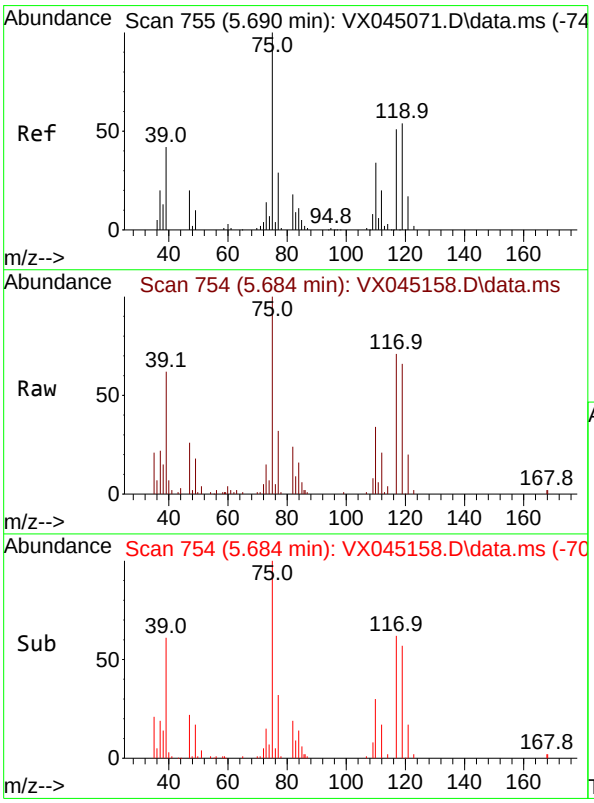
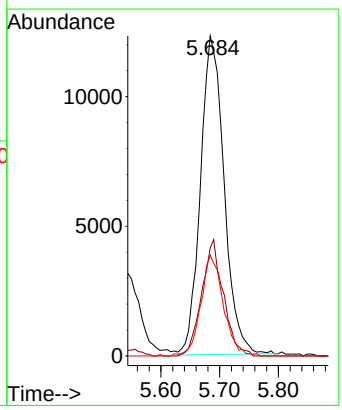
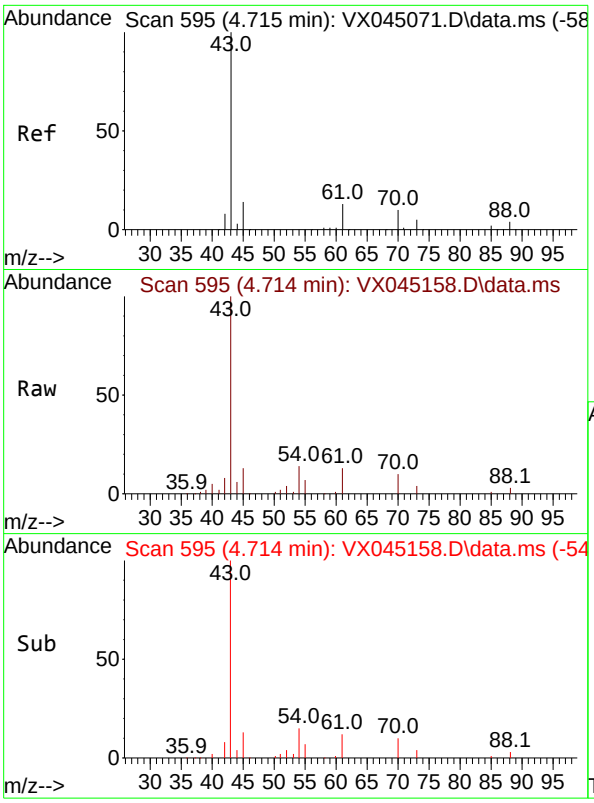



#36
1,1-Dichloropropene
Concen: 21.370 ug/l
RT: 5.684 min Scan# 754
Delta R.T. -0.006 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 75 Resp: 34442

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 33.3 | 16.9 | 50.6 |
| 77 | 30.0 | 24.5 | 36.7 |

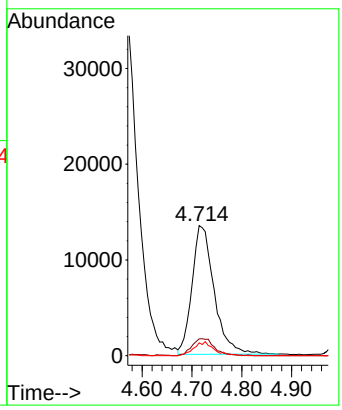





#37
Ethyl Acetate
Concen: 19.942 ug/l
RT: 4.714 min Scan# 5
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 43 Resp: 4141

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 13.4 | 10.8 | 16.2 |
| 70 | 9.7 | 7.7 | 11.5 |




**Instrument :**
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VX0306WBS01

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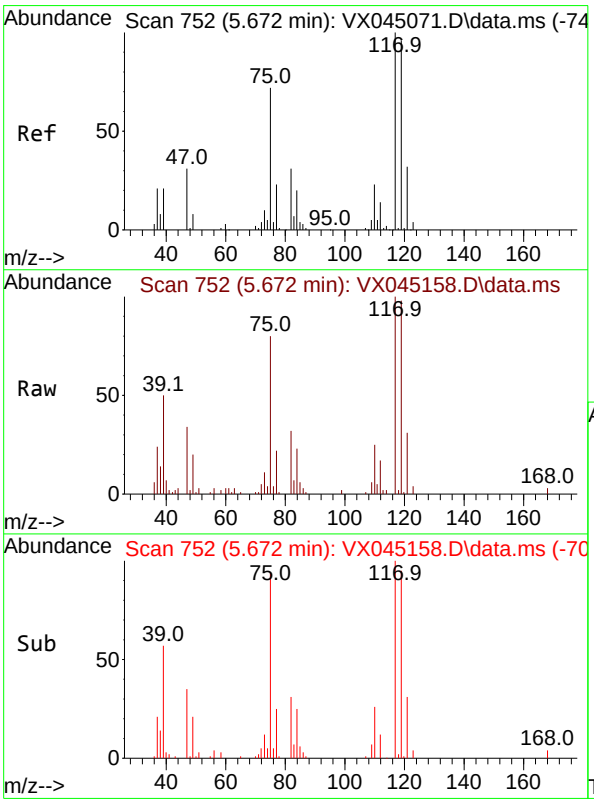
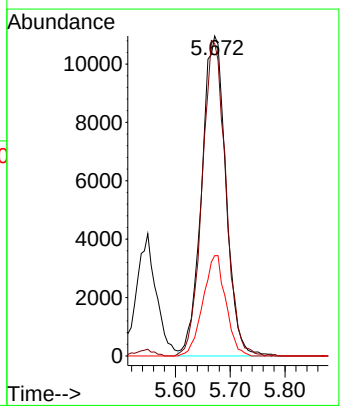
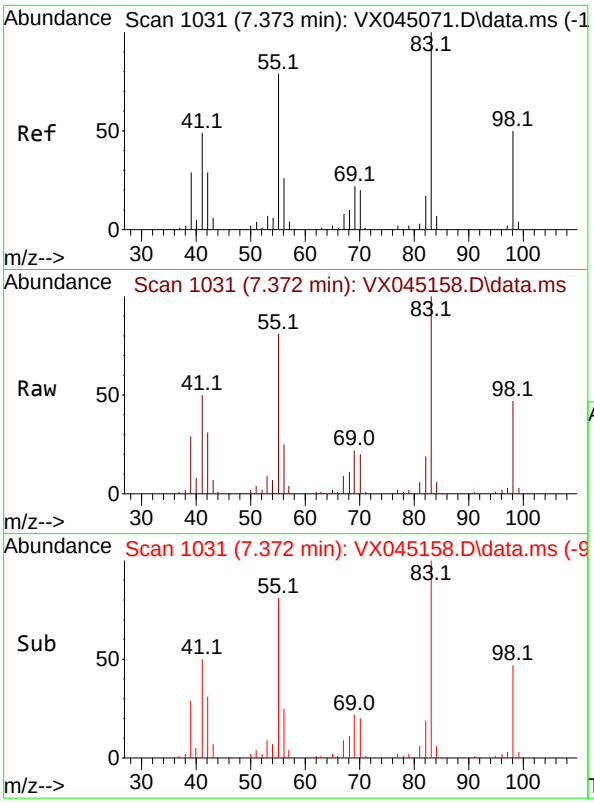



#38
Carbon Tetrachloride
Concen: 20.492 ug/l
RT: 5.672 min Scan# 752
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:117 Resp: 33530

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 97.6 | 76.7 | 115.1 |
| 121 | 31.4 | 25.5 | 38.3 |

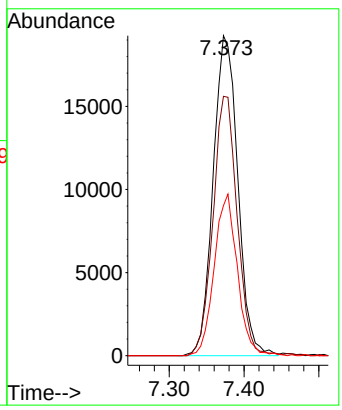





#39
Methylcyclohexane
Concen: 22.900 ug/l
RT: 7.372 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 83 Resp: 4422

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 81.1 | 63.0 | 94.4 |
| 98 | 46.9 | 39.7 | 59.5 |




**Instrument :**
MSVOA_X
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VX0306WBS01

**Manual Integrations**
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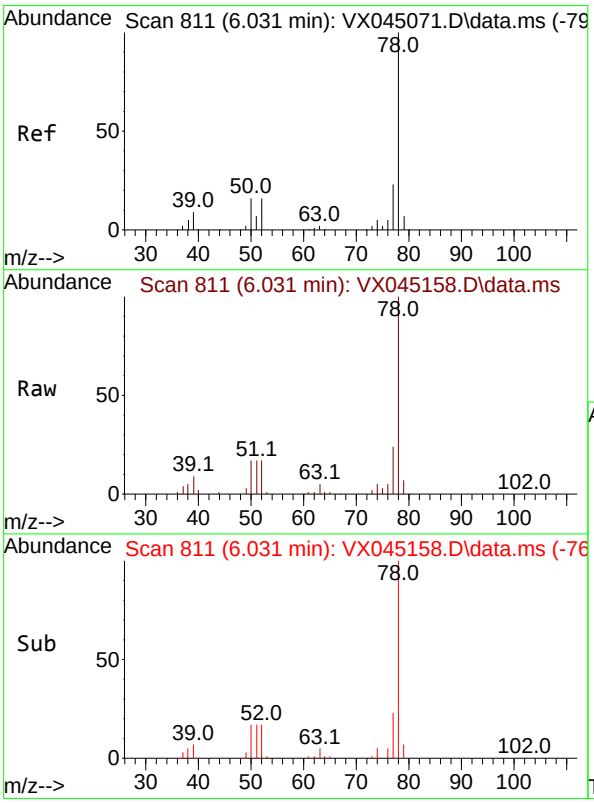
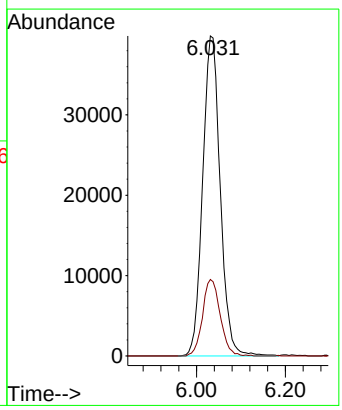
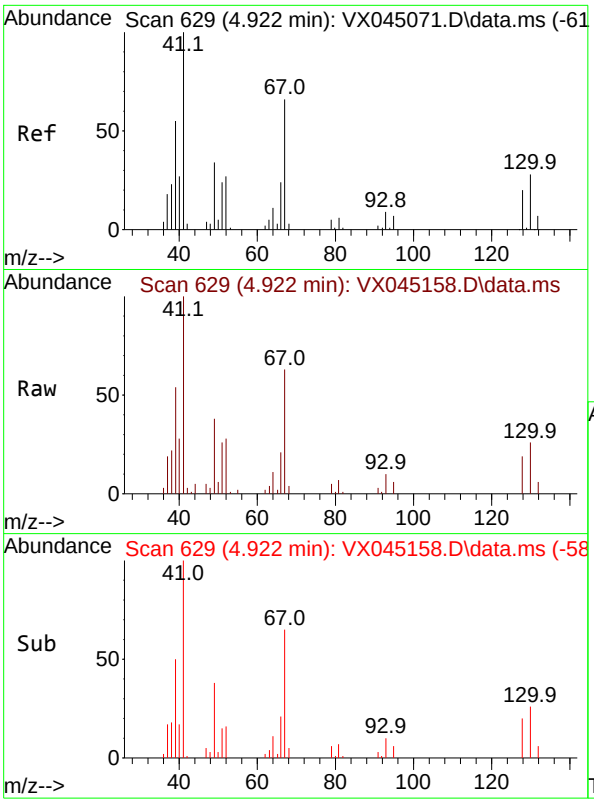



#40
Benzene
Concen: 21.516 ug/l
RT: 6.031 min Scan# 811
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 78 Resp: 109500

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.9 | 18.8 | 28.2 |

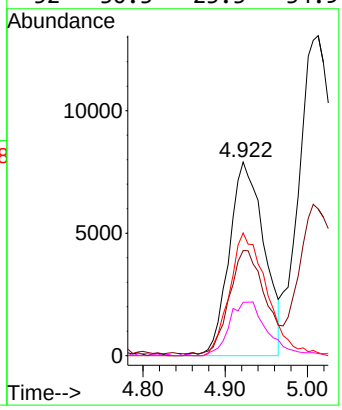





#41
Methacrylonitrile
Concen: 20.769 ug/l
RT: 4.922 min Scan# 6
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 41 Resp: 2332

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 55.4 | 44.6 | 67.0 |
| 67 | 67.5 | 53.9 | 80.9 |
| 52 | 30.3 | 23.3 | 34.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations APPROVED**

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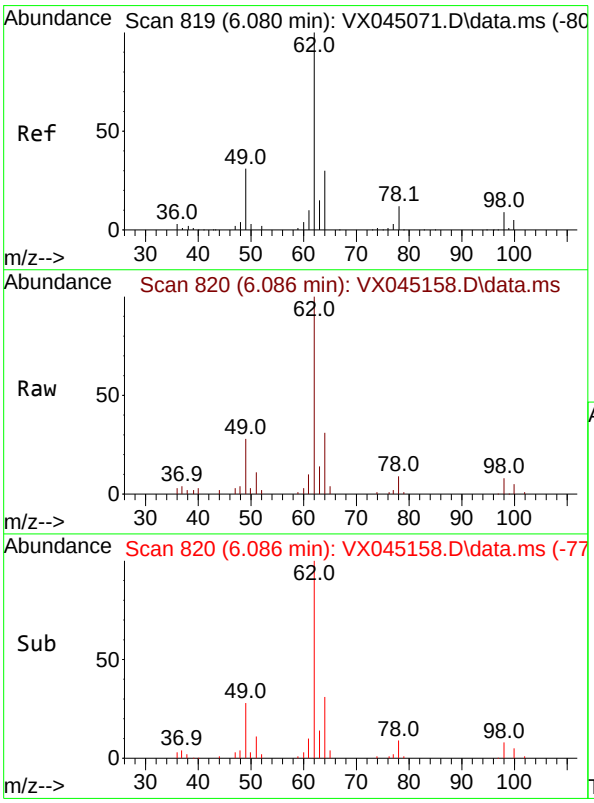
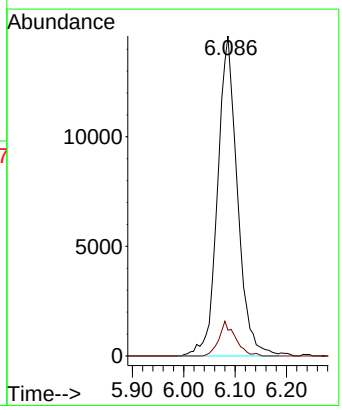
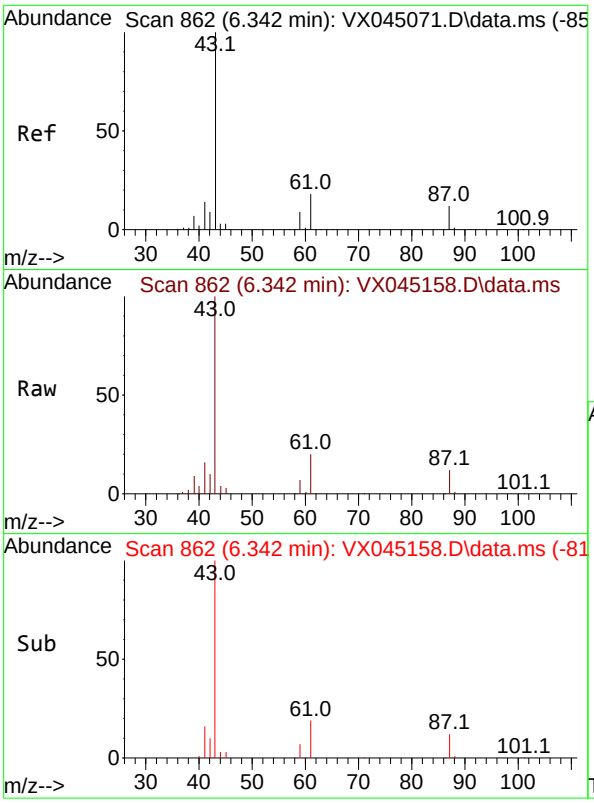



#42
1,2-Dichloroethane
Concen: 21.397 ug/l
RT: 6.086 min Scan# 820
Delta R.T. 0.006 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 62 Resp: 39213

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 9.0 | 0.0 | 18.2 |






#43
Isopropyl Acetate
Concen: 20.220 ug/l
RT: 6.342 min Scan# 8
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

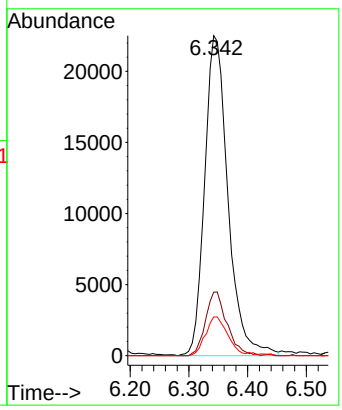
Tgt Ion: 43 Resp: 6209

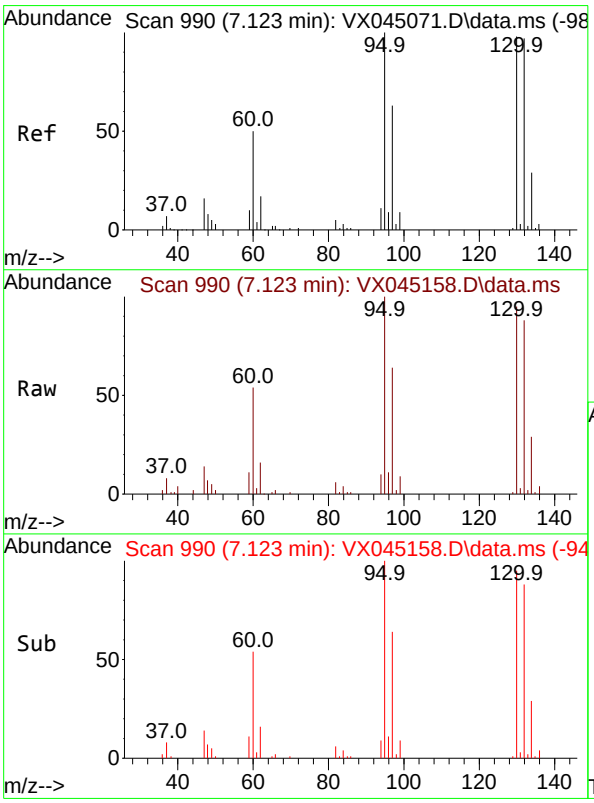
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 18.5 | 14.9 | 22.3 |
| 87 | 11.7 | 9.4 | 14.2 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations APPROVED**

Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

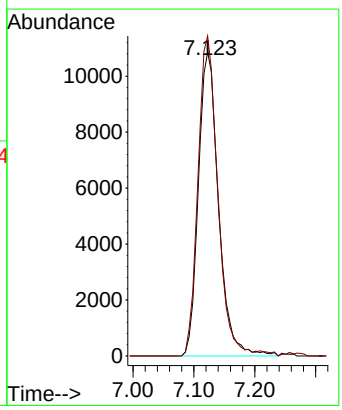


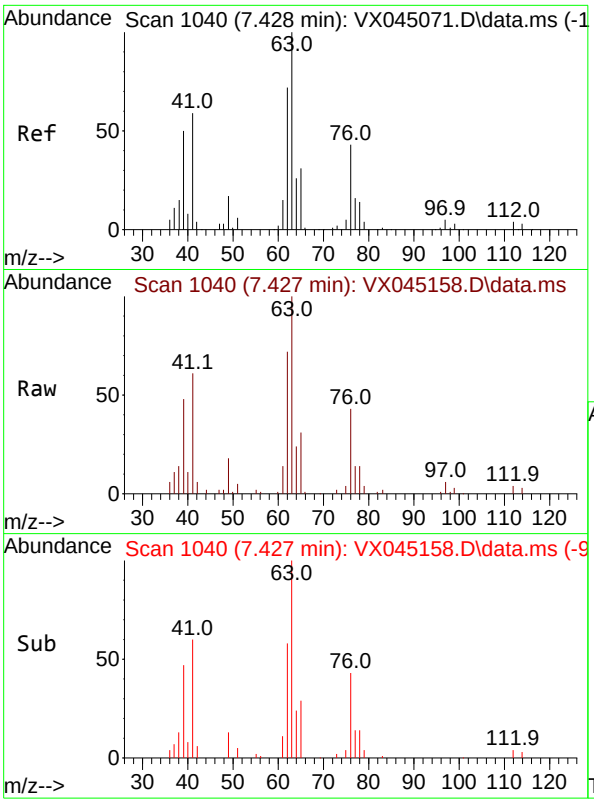




#44
Trichloroethene
Concen: 20.842 ug/l
RT: 7.123 min Scan# 990
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:130 Resp: 24906

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 105.2 | 0.0 | 205.0 |

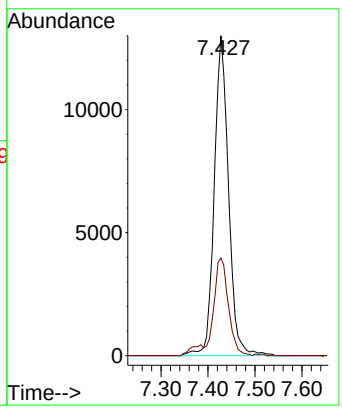





#45
1,2-Dichloropropane
Concen: 21.002 ug/l
RT: 7.427 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 63 Resp: 2748

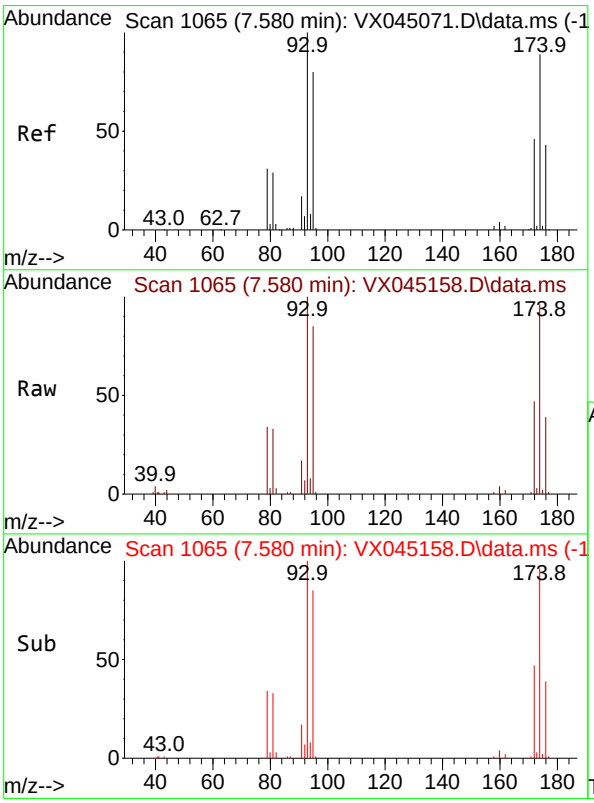
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 30.5 | 24.7 | 37.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations**
**APPROVED**

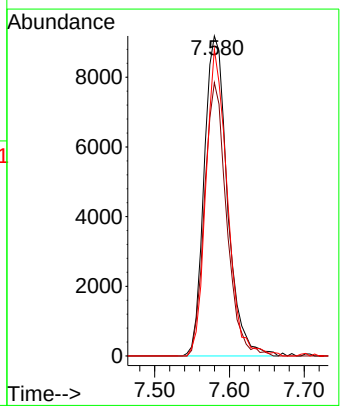
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

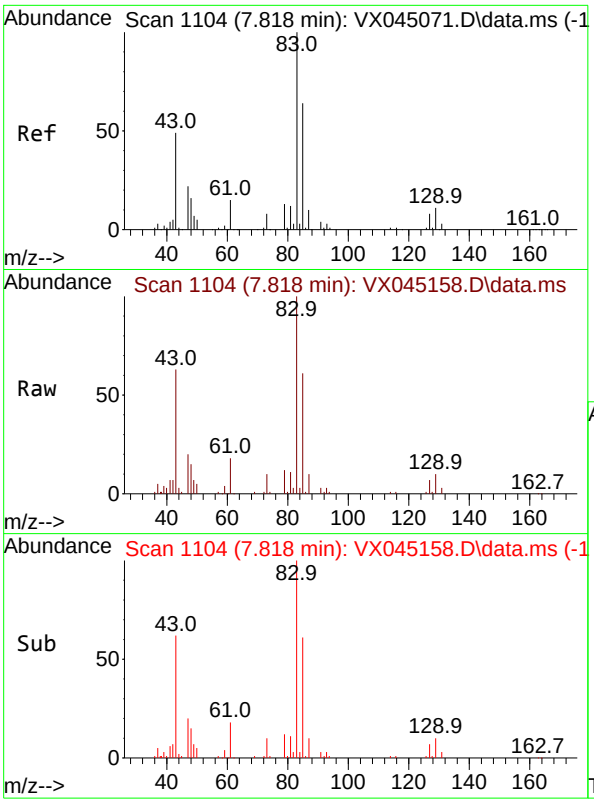



#46
Dibromomethane
Concen: 21.443 ug/l
RT: 7.580 min Scan# 1065
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 93 Resp: 19832

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 81.1 | 65.8 | 98.8 |
| 174 | 88.4 | 72.2 | 108.2 |

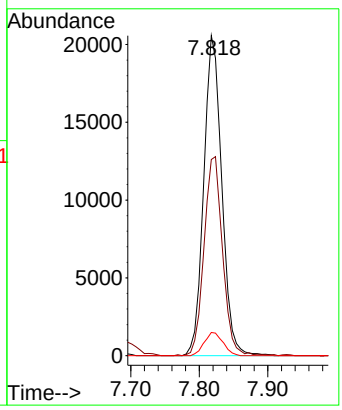





#47
Bromodichloromethane
Concen: 20.821 ug/l
RT: 7.818 min Scan# 11
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 83 Resp: 3777

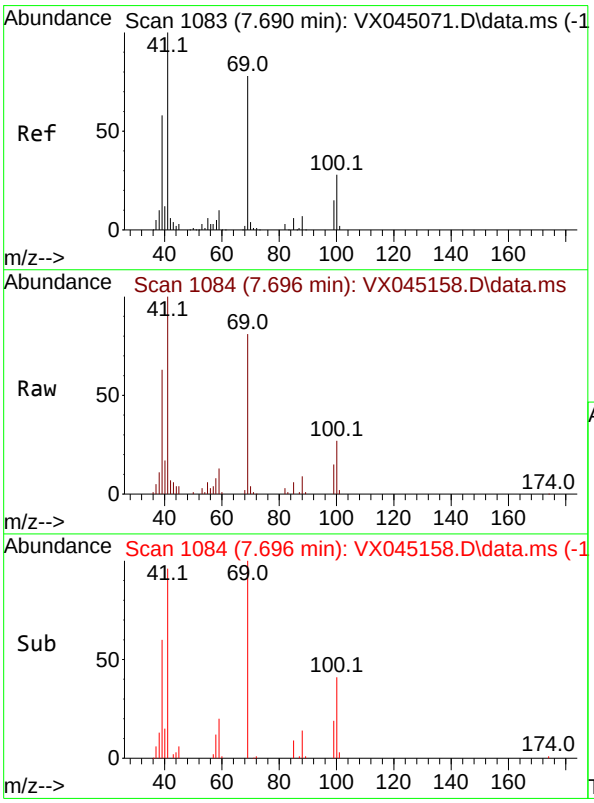
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 61.3 | 51.1 | 76.7 |
| 127 | 7.2 | 6.4 | 9.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations**
**APPROVED**

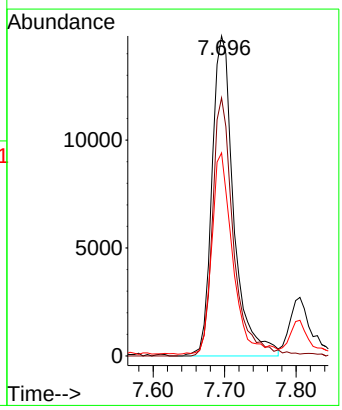
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

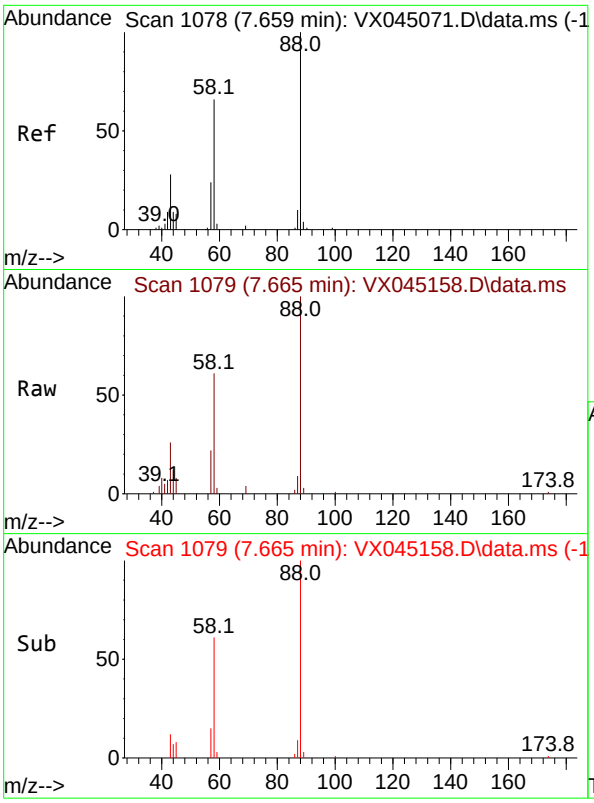



#48
Methyl methacrylate
Concen: 20.301 ug/l
RT: 7.696 min Scan# 1084
Delta R.T. 0.006 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 41 Resp: 31277

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 77.5 | 63.0 | 94.6 |
| 39 | 61.0 | 47.5 | 71.3 |

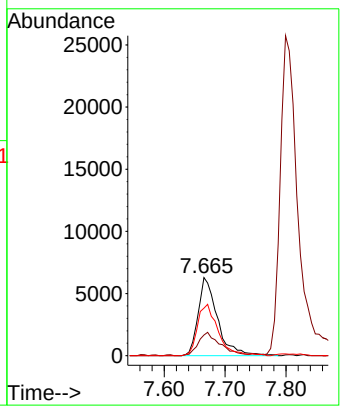





#49
1,4-Dioxane
Concen: 426.482 ug/l
RT: 7.665 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 88 Resp: 1386

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 33.7 | 28.7 | 43.1 |
| 58 | 69.7 | 55.8 | 83.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations APPROVED**

Reviewed By :John Carlone 03/10/2025
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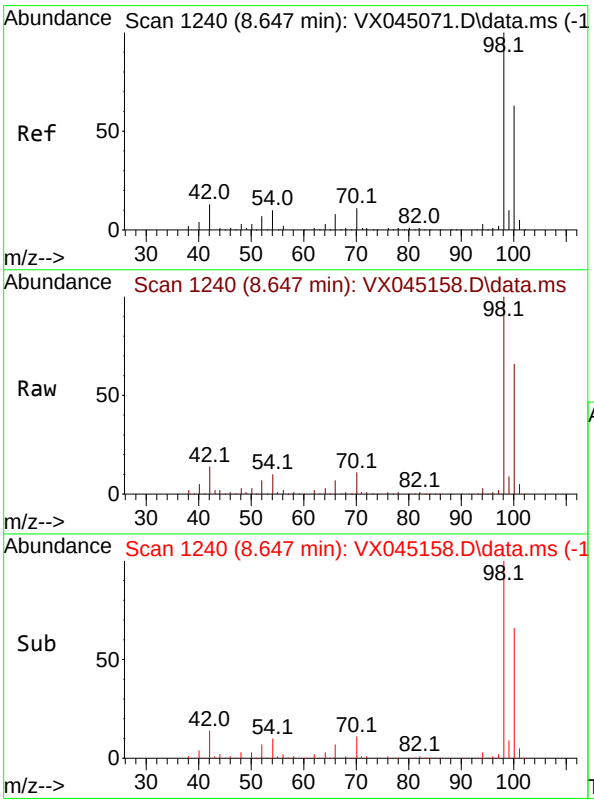
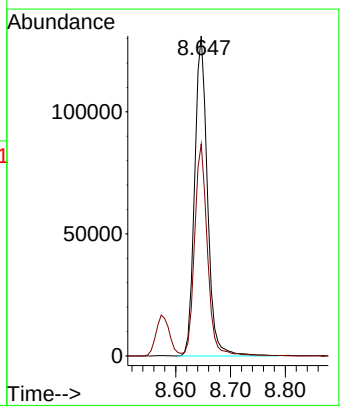
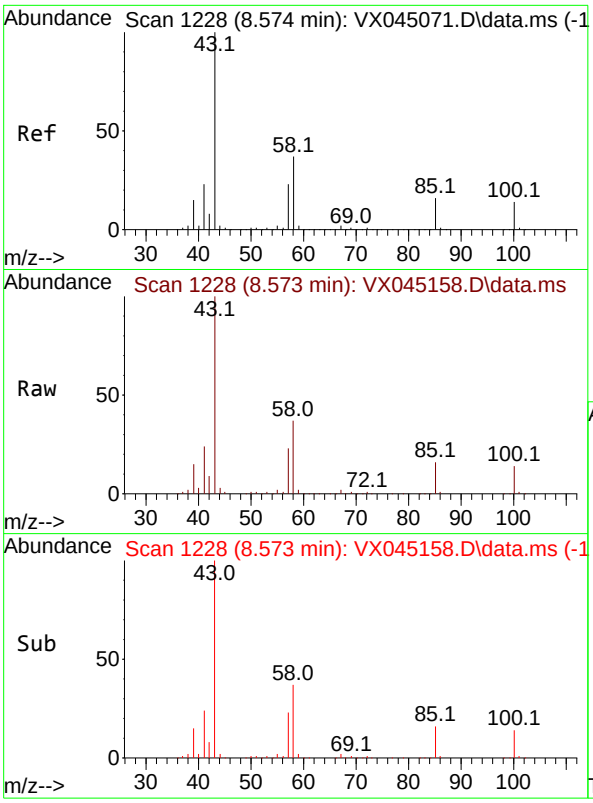



#50
Toluene-d8
Concen: 50.263 ug/l
RT: 8.647 min Scan# 1240
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 98 Resp: 214149

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.7 | 52.0 | 78.0 |

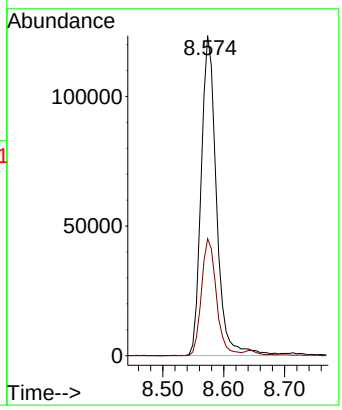





#51
4-Methyl-2-Pentanone
Concen: 104.420 ug/l
RT: 8.573 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 43 Resp: 21530

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 35.8 | 29.2 | 43.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations APPROVED**

Reviewed By :John Carlone 03/10/2025
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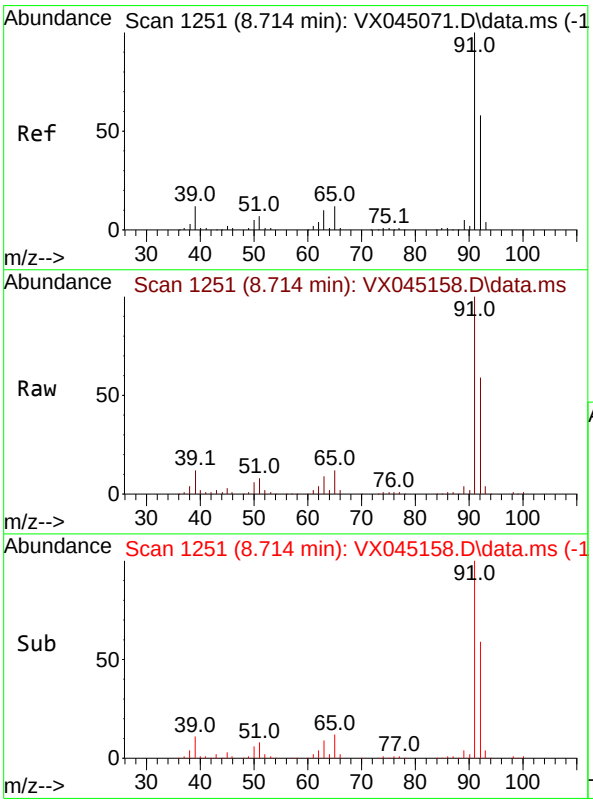
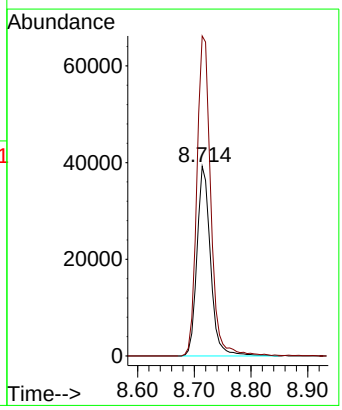
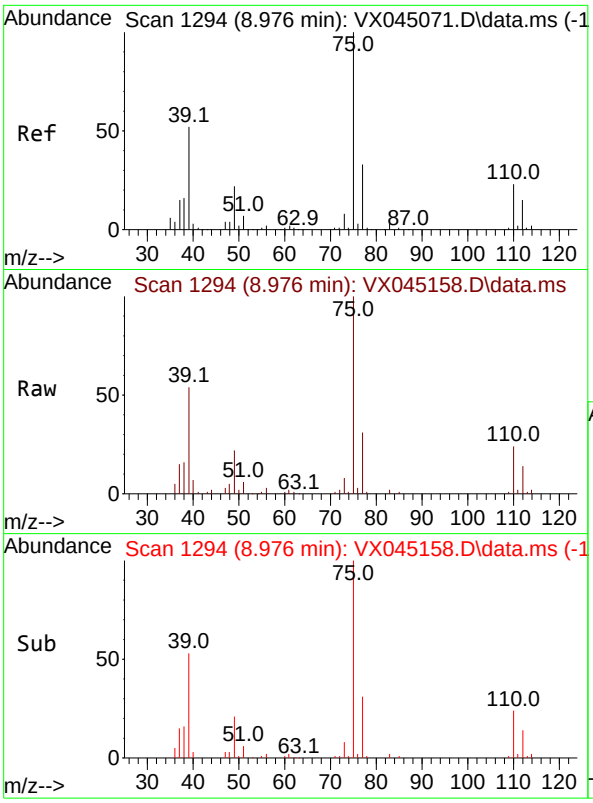



#52
Toluene
Concen: 21.814 ug/l
RT: 8.714 min Scan# 1251
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 92 Resp: 65138

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 172.9 | 138.9 | 208.3 |

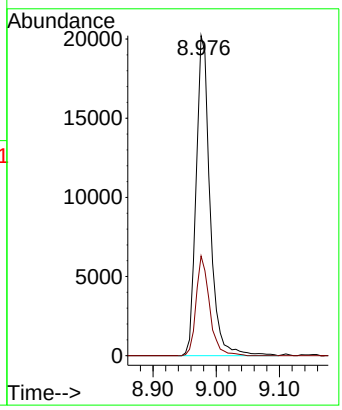





#53
t-1,3-Dichloropropene
Concen: 20.407 ug/l
RT: 8.976 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 75 Resp: 3095

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.1 | 26.5 | 39.7 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 03/10/2025
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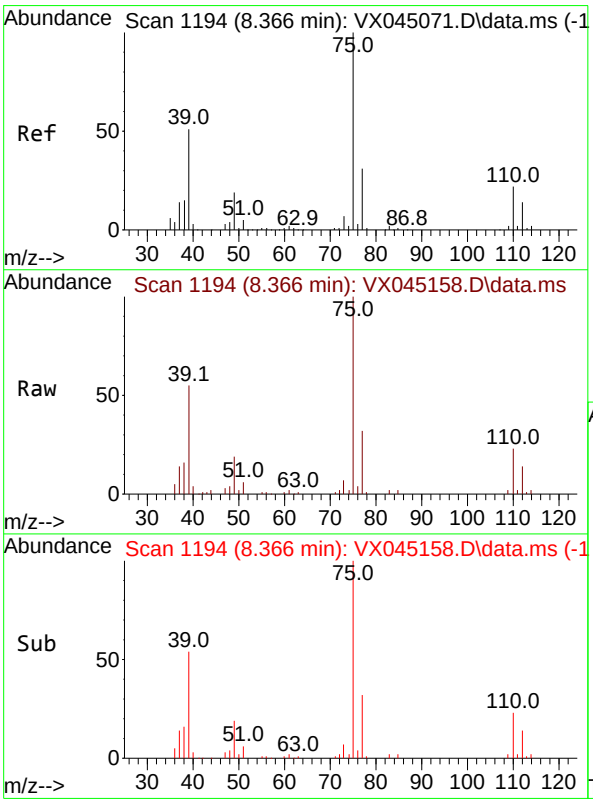
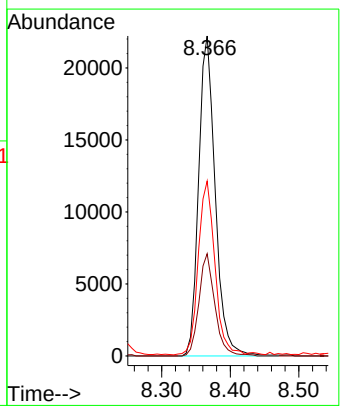
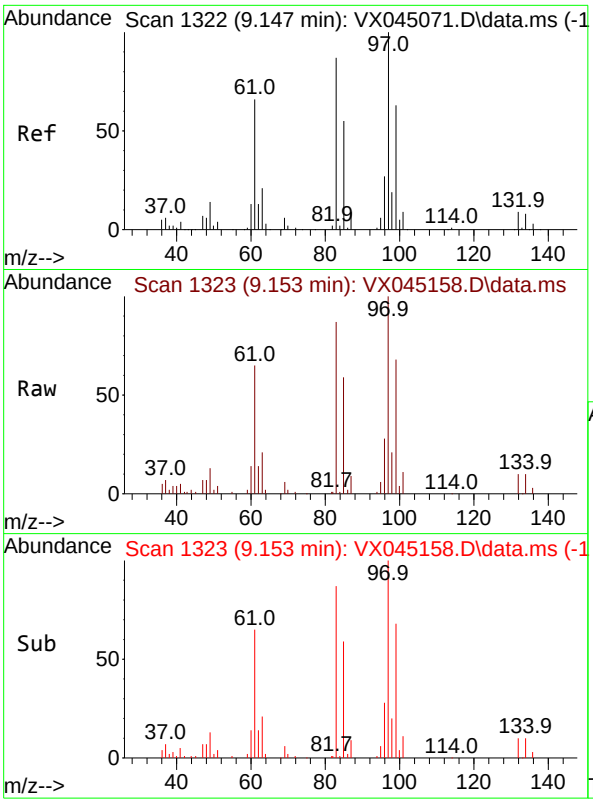



#54
cis-1,3-Dichloropropene
Concen: 21.182 ug/l
RT: 8.366 min Scan# 1194
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 75 Resp: 37460

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.9 | 24.7 | 37.1 |
| 39 | 54.1 | 40.7 | 61.1 |

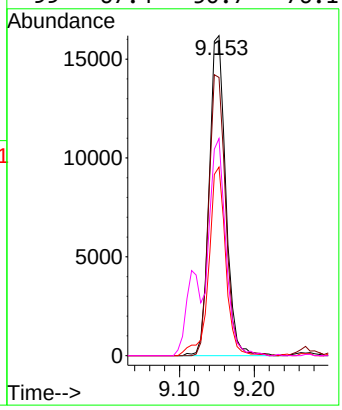





#55
1,1,2-Trichloroethane
Concen: 20.219 ug/l
RT: 9.153 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 97 Resp: 2485

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 87.0 | 69.4 | 104.2 |
| 85 | 59.0 | 44.1 | 66.1 |
| 99 | 67.4 | 50.7 | 76.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

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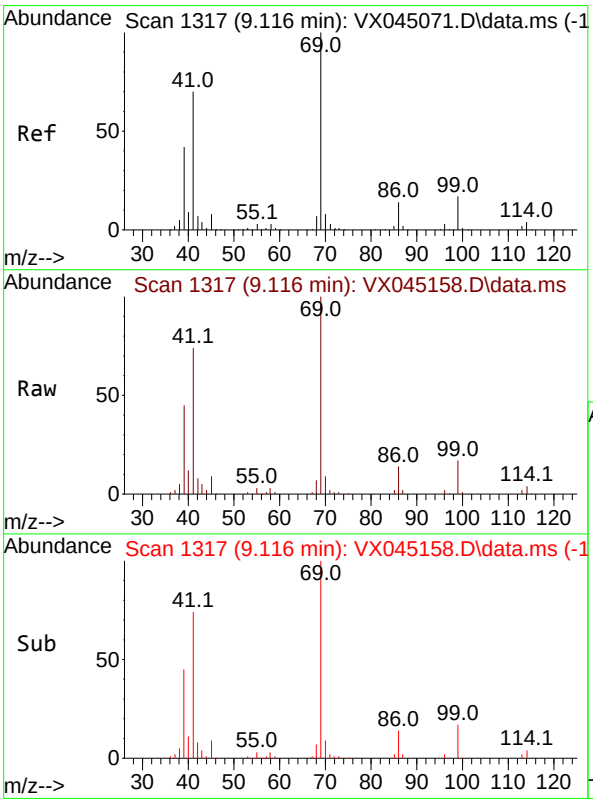
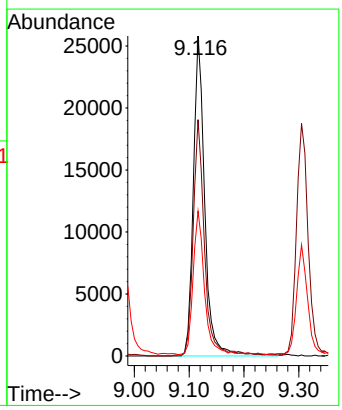
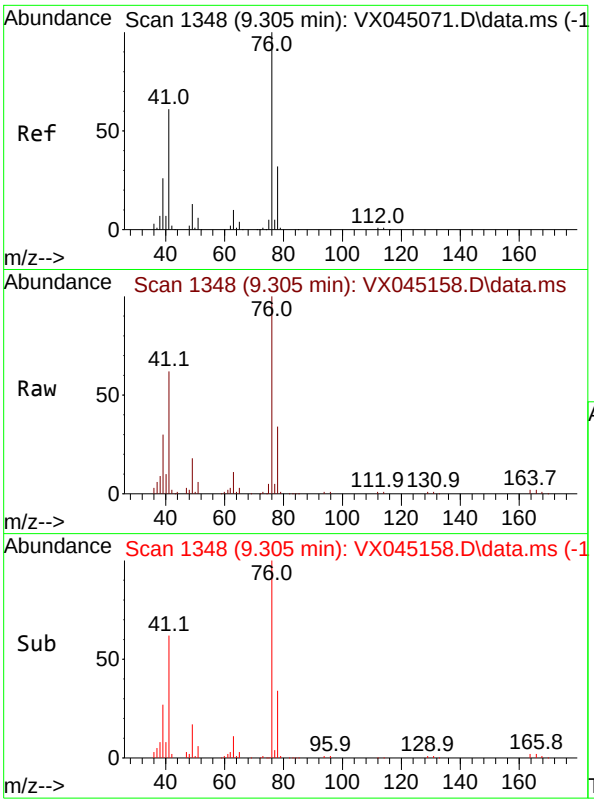



#56
Ethyl methacrylate
Concen: 20.084 ug/l
RT: 9.116 min Scan# 1317
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 69 Resp: 37529

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 73.8 | 57.0 | 85.4 |
| 39 | 44.2 | 34.2 | 51.4 |






#57
1,3-Dichloropropane
Concen: 20.660 ug/l
RT: 9.305 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 76 Resp: 4395

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.8 | 25.5 | 38.3 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 03/10/2025
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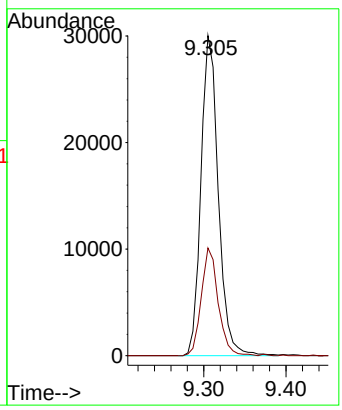
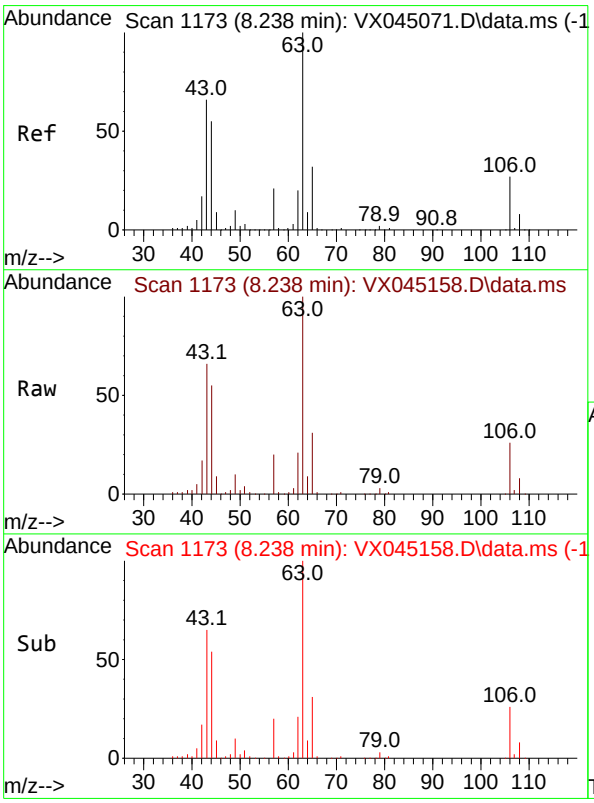
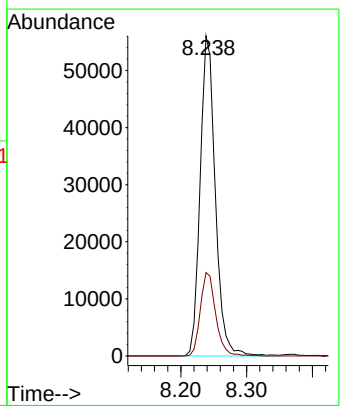


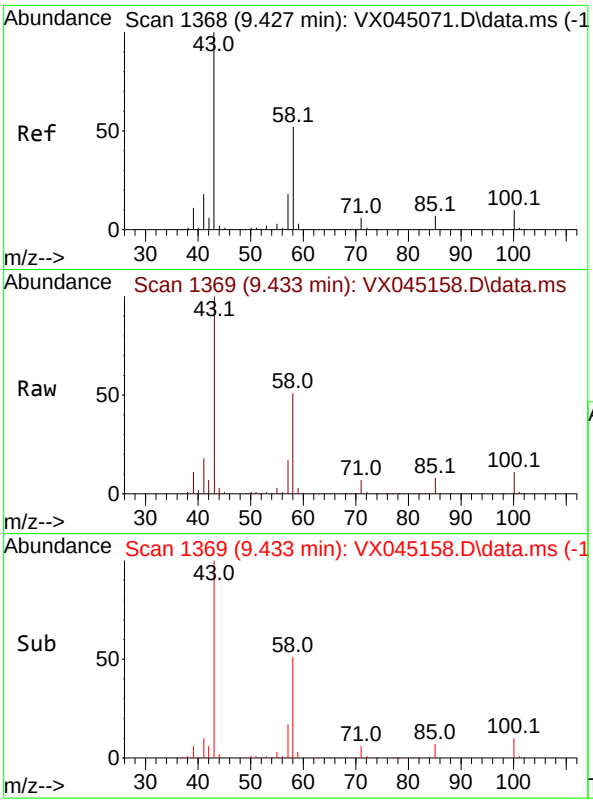




#58
2-Chloroethyl Vinyl ether
Concen: 98.410 ug/l
RT: 8.238 min Scan# 1173
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 63 Resp: 89701

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 26.4 | 21.5 | 32.3 |

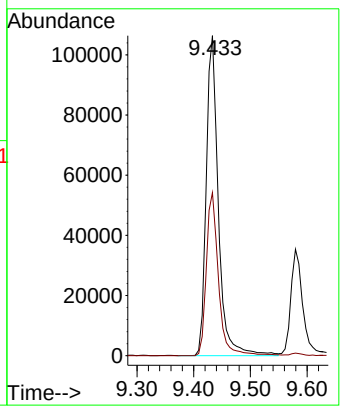





#59
2-Hexanone
Concen: 105.853 ug/l
RT: 9.433 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 43 Resp: 15814

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 51.1 | 25.9 | 77.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations**
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Reviewed By :John Carlone 03/10/2025
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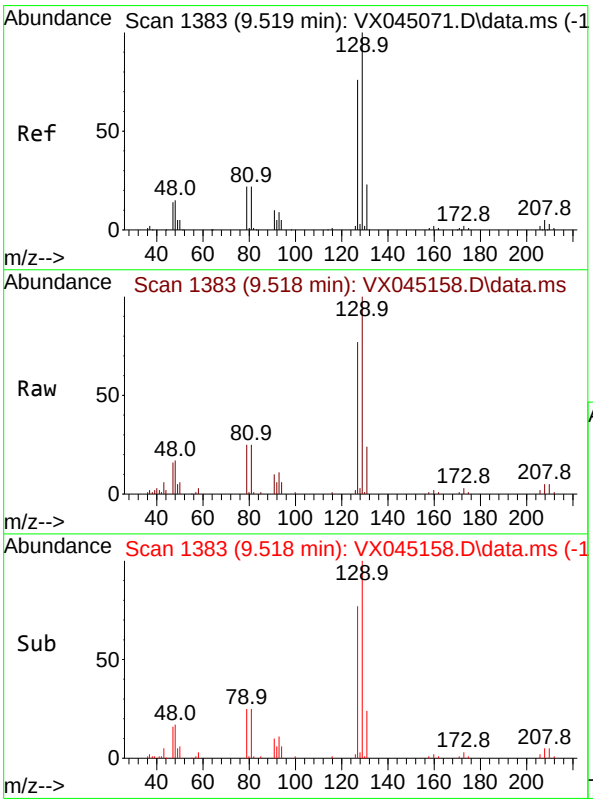
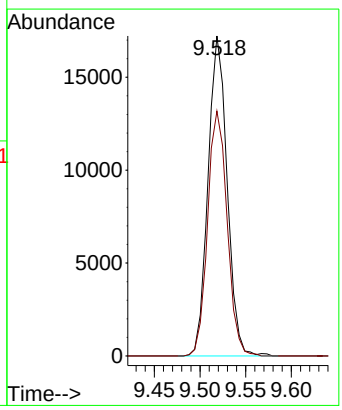
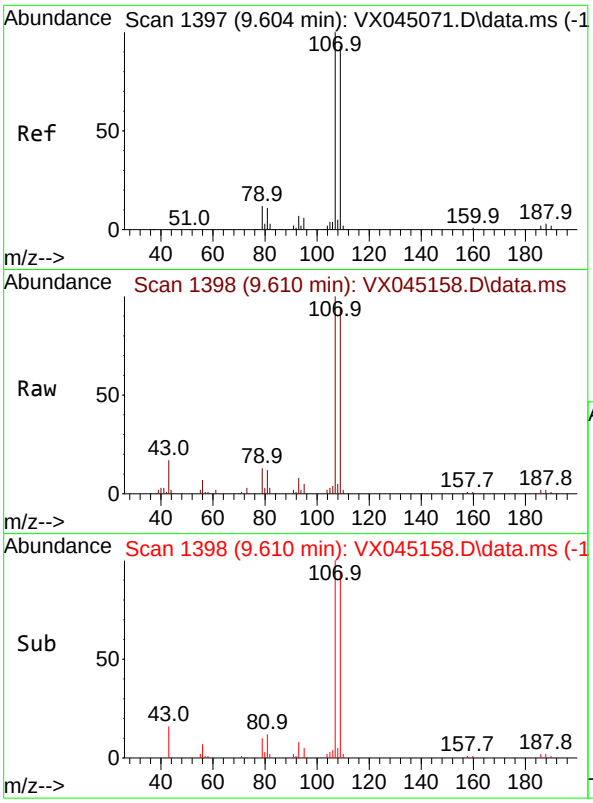



#60
Dibromochloromethane
Concen: 19.466 ug/l
RT: 9.518 min Scan# 1383
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:129 Resp: 25020

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 78.3 | 38.5 | 115.5 |

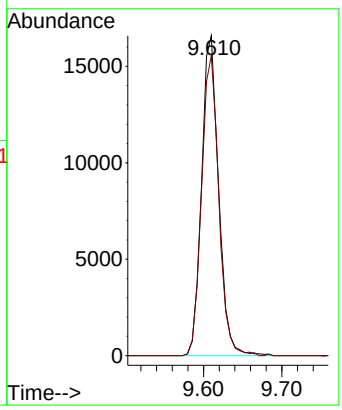





#61
1,2-Dibromoethane
Concen: 20.343 ug/l
RT: 9.610 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:107 Resp: 2496

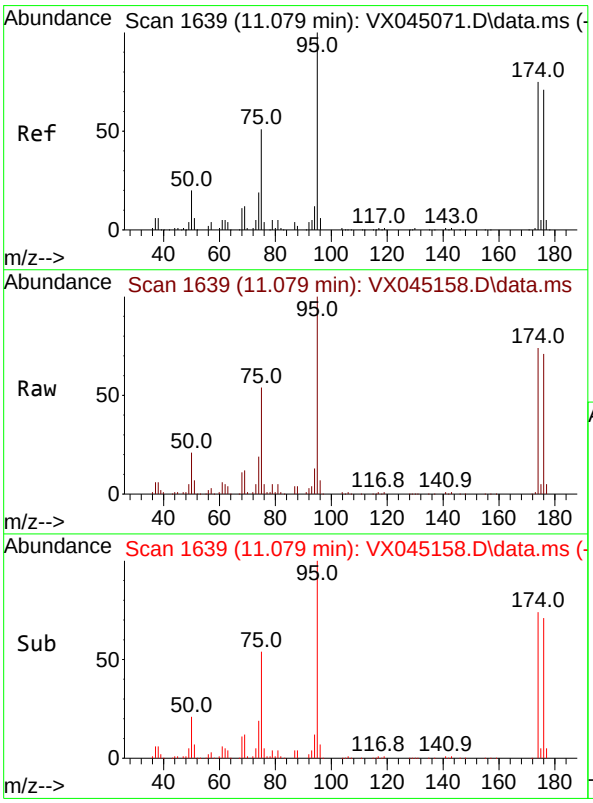
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 94.9 | 76.1 | 114.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations**
**APPROVED**

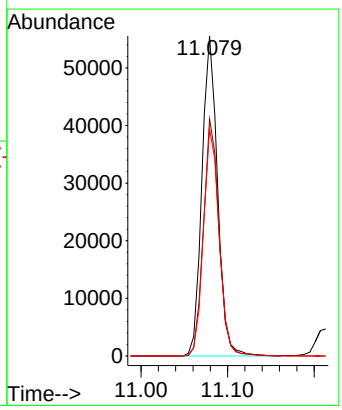
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

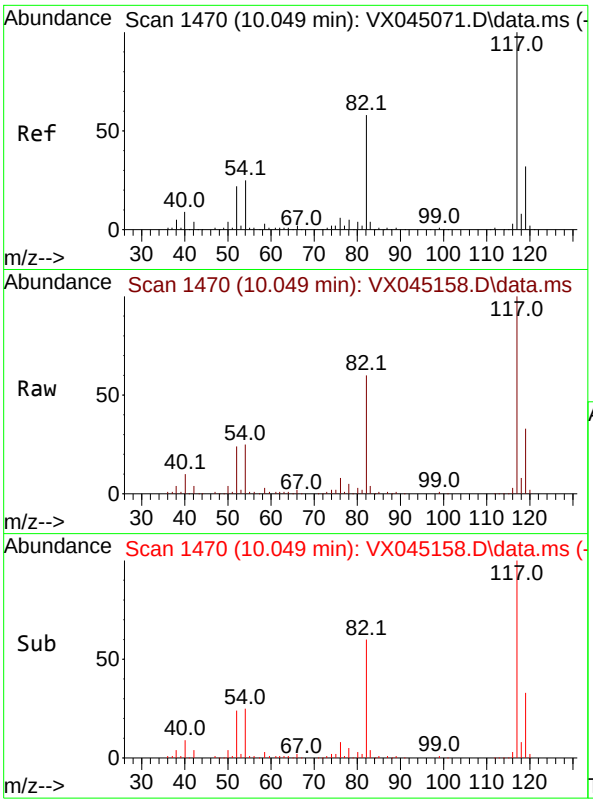



#62
4-Bromofluorobenzene
Concen: 49.179 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 95 Resp: 69431

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 74.1 | 0.0 | 148.2 |
| 176 | 71.6 | 0.0 | 141.4 |

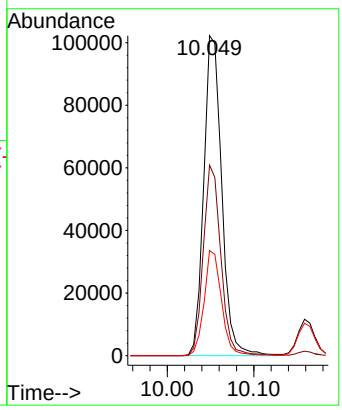





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.049 min Scan# 14
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:117 Resp: 14775

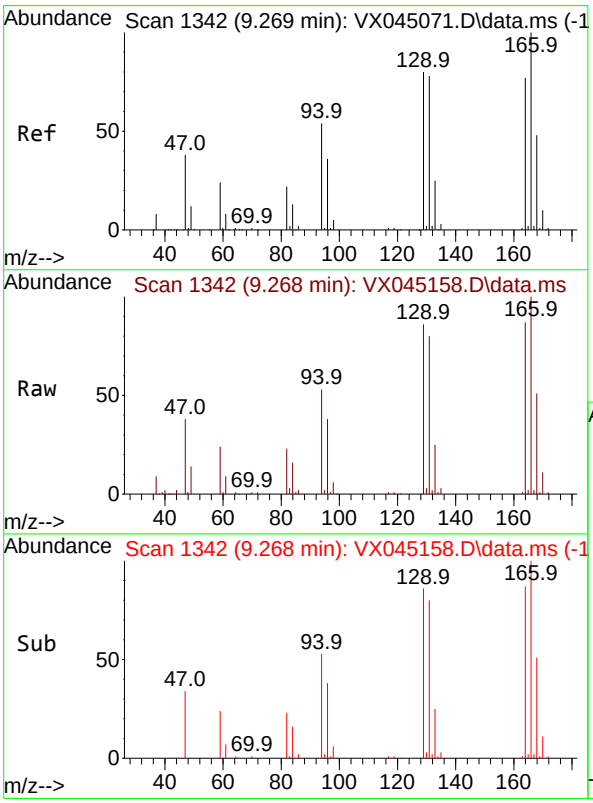
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 59.6 | 46.3 | 69.5 |
| 119 | 32.8 | 25.7 | 38.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations**
**APPROVED**

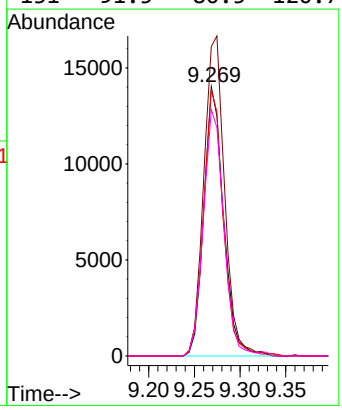
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

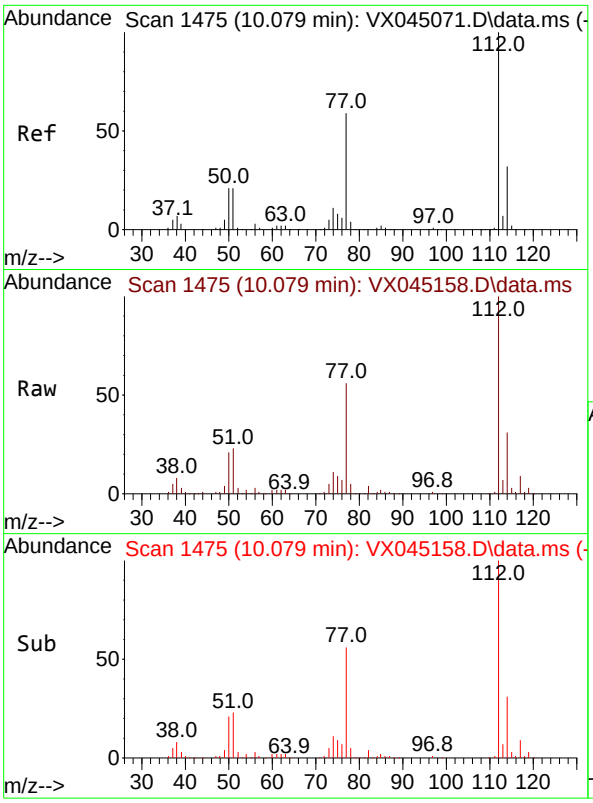



#64
Tetrachloroethene
Concen: 22.233 ug/l
RT: 9.268 min Scan# 1342
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:164 Resp: 21040

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 115.0 | 103.6 | 155.4 |
| 129 | 98.8 | 82.7 | 124.1 |
| 131 | 91.5 | 80.5 | 120.7 |

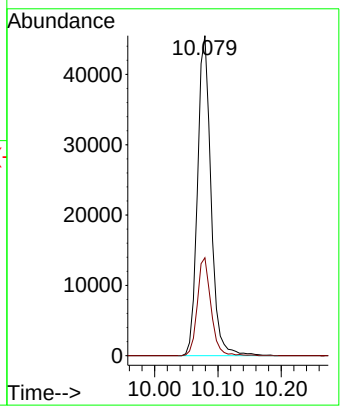





#65
Chlorobenzene
Concen: 21.638 ug/l
RT: 10.079 min Scan# 14
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:112 Resp: 6765

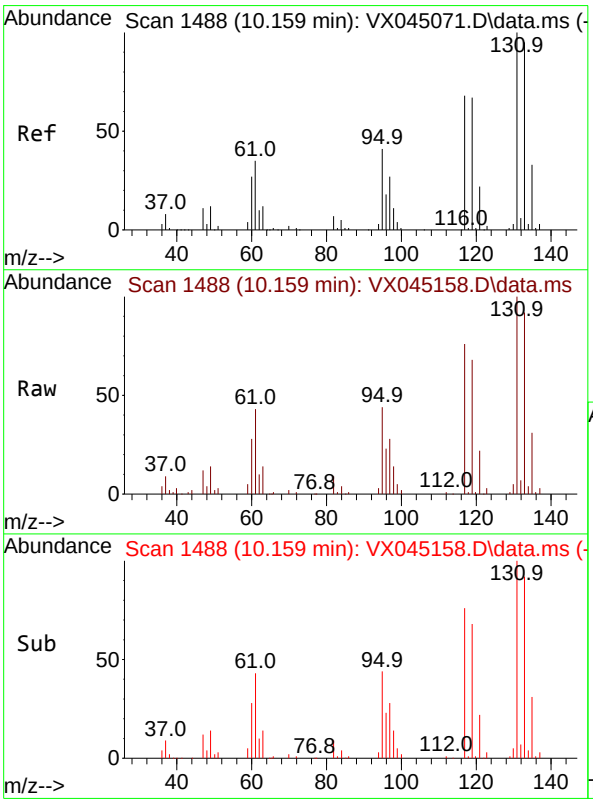
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 30.6 | 26.0 | 39.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations APPROVED**

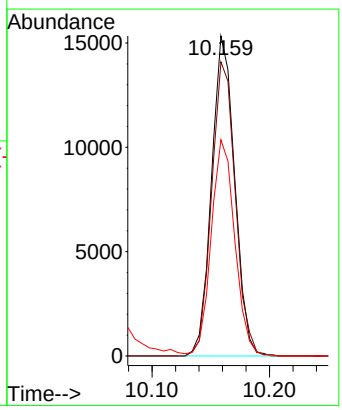
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

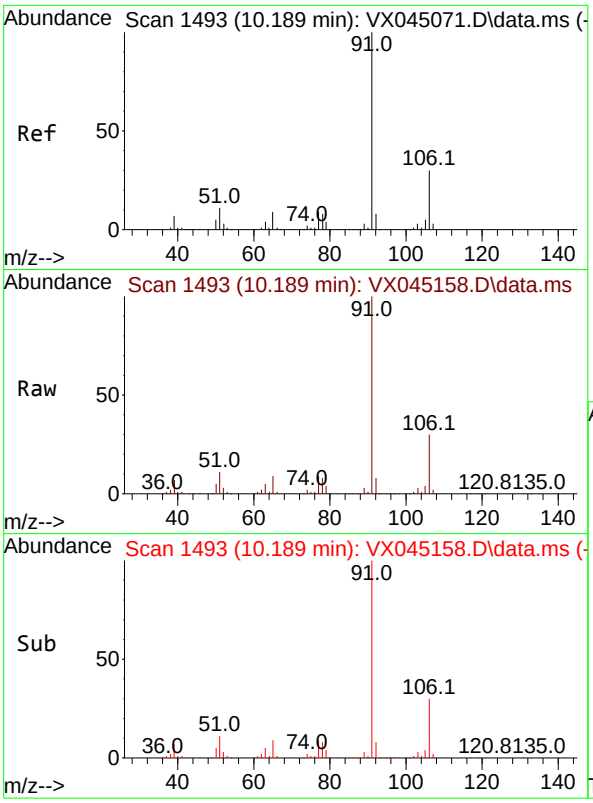



#66
1,1,1,2-Tetrachloroethane
Concen: 20.181 ug/l
RT: 10.159 min Scan# 1488
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:131 Resp: 21012

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 94.0 | 48.6 | 145.9 |
| 119 | 68.9 | 33.9 | 101.7 |

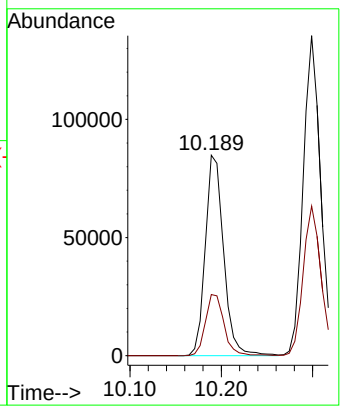





#67
Ethyl Benzene
Concen: 21.687 ug/l
RT: 10.189 min Scan# 14
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 91 Resp: 11814

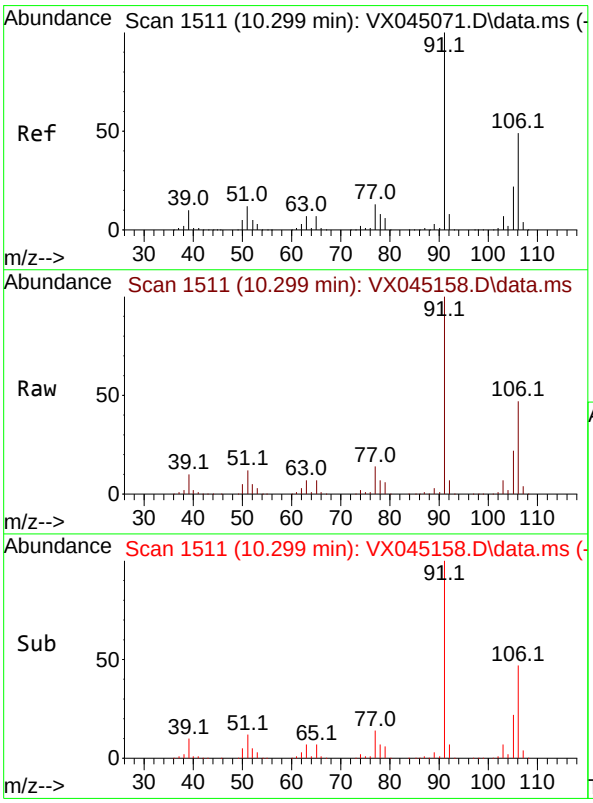
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 30.5 | 23.9 | 35.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations**
**APPROVED**

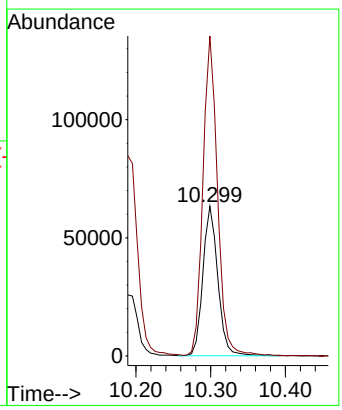
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

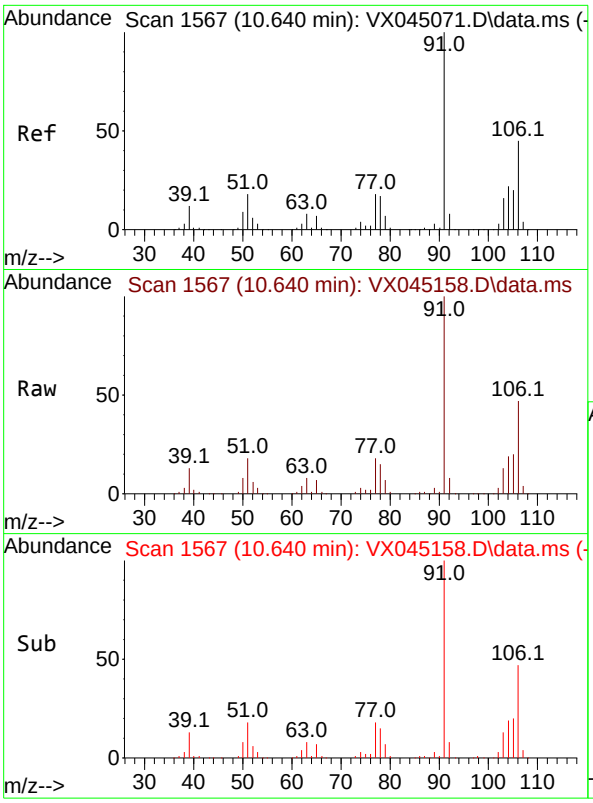



#68
m/p-Xylenes
Concen: 43.986 ug/l
RT: 10.299 min Scan# 1511
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:106 Resp: 87720

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 208.7 | 165.4 | 248.0 |

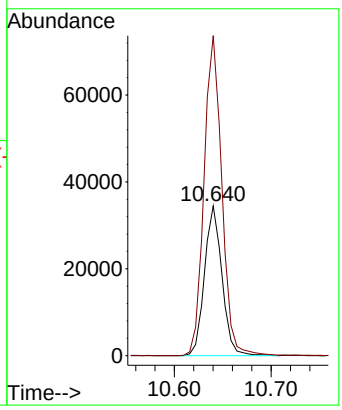





#69
o-Xylene
Concen: 21.539 ug/l
RT: 10.640 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:106 Resp: 4332

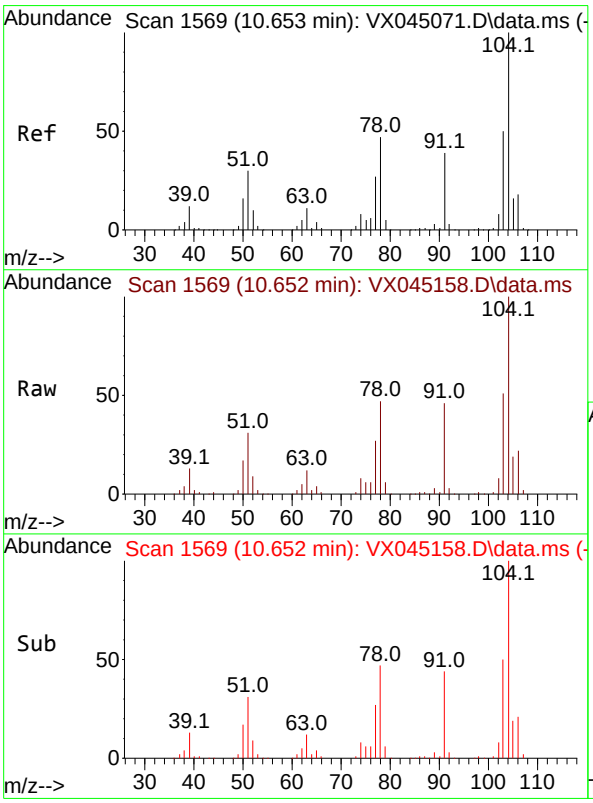
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 218.3 | 109.9 | 329.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations APPROVED**

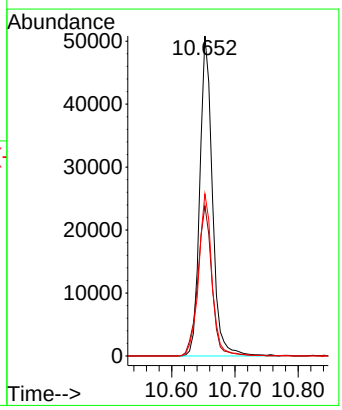
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

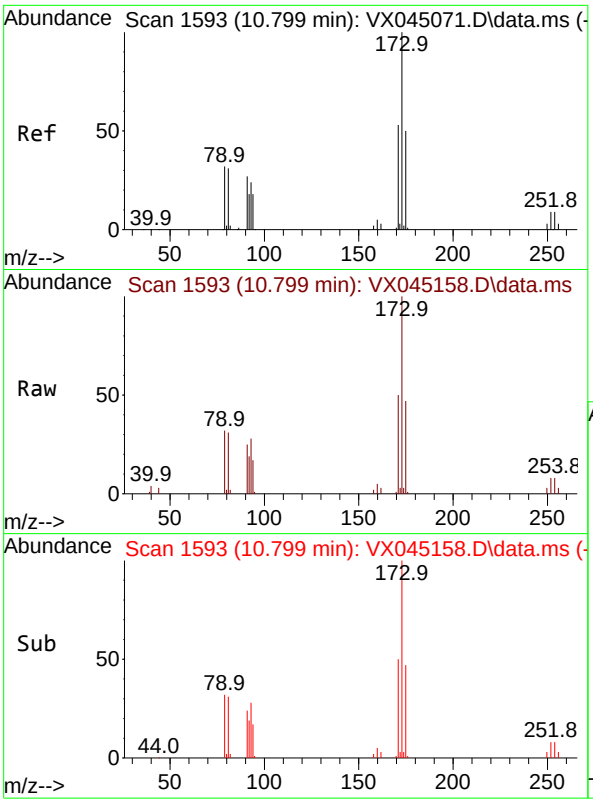



#70
Styrene
Concen: 21.700 ug/l
RT: 10.652 min Scan# 1569
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:104 Resp: 70623

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 52.5 | 42.2 | 63.4 |
| 103 | 53.9 | 43.8 | 65.8 |

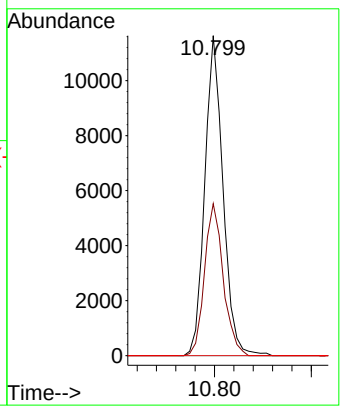





#71
Bromoform
Concen: 19.408 ug/l
RT: 10.799 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:173 Resp: 1523

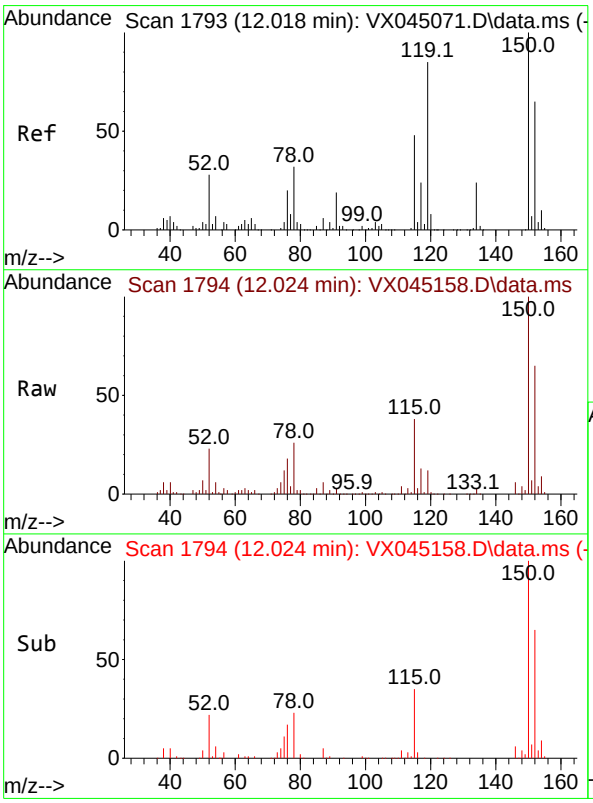
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 48.9 | 24.6 | 73.6 |
| 254 | 0.0 | 0.0 | 0.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations APPROVED**

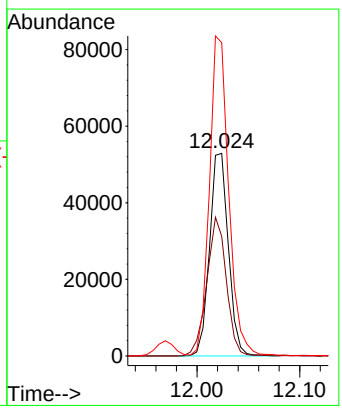
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

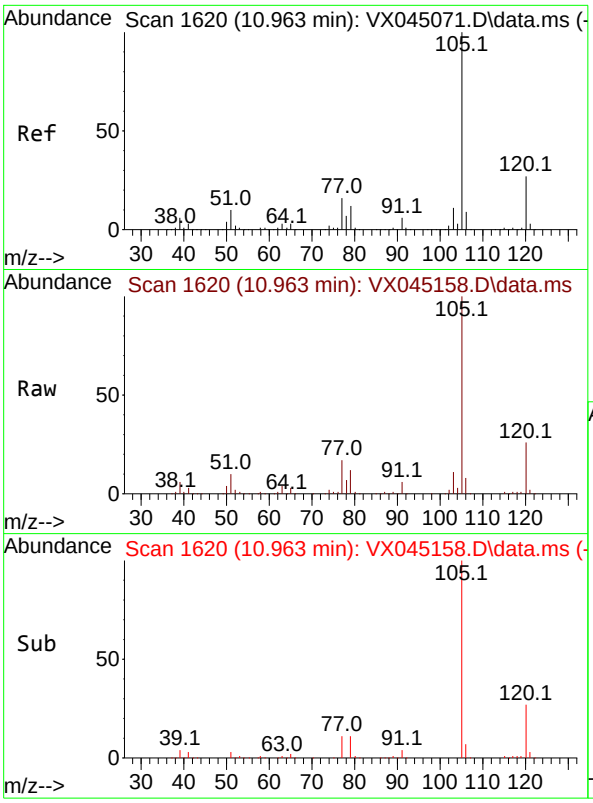



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.024 min Scan# 1794
Delta R.T. 0.006 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:152 Resp: 67123

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 71.3 | 44.2 | 132.6 |
| 150 | 161.6 | 0.0 | 349.0 |

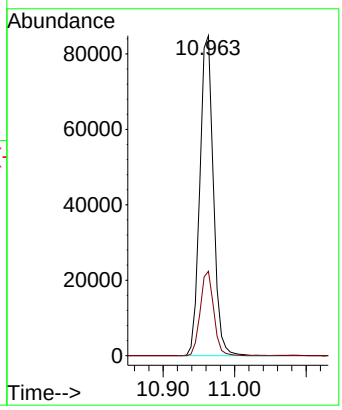





#73
Isopropylbenzene
Concen: 21.304 ug/l
RT: 10.963 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:105 Resp: 11161

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.2 | 13.2 | 39.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

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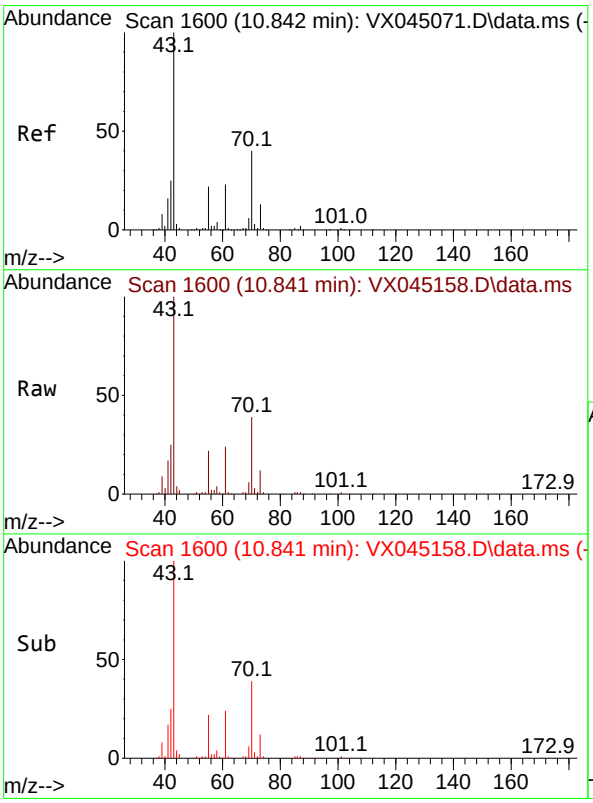
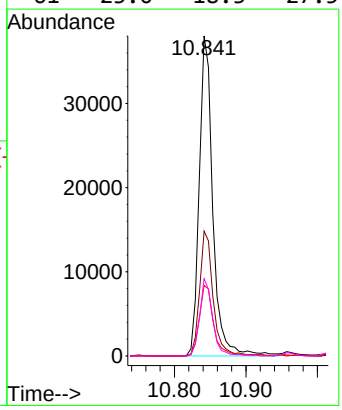
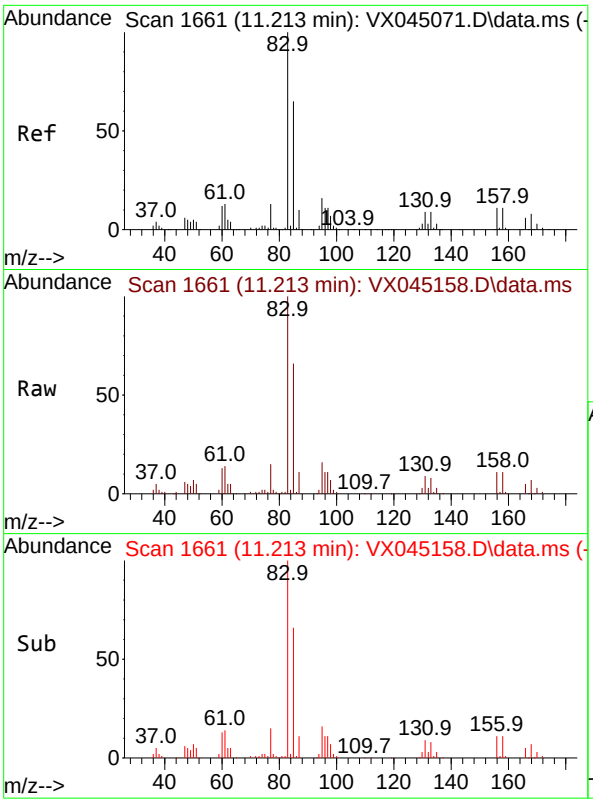



#74
N-amyl acetate
Concen: 20.428 ug/l
RT: 10.841 min Scan# 1600
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 43 Resp: 50220

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 39.0 | 31.8 | 47.6 |
| 55 | 23.0 | 18.3 | 27.5 |
| 61 | 23.0 | 18.3 | 27.5 |






#75
1,1,2,2-Tetrachloroethane
Concen: 20.775 ug/l
RT: 11.213 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

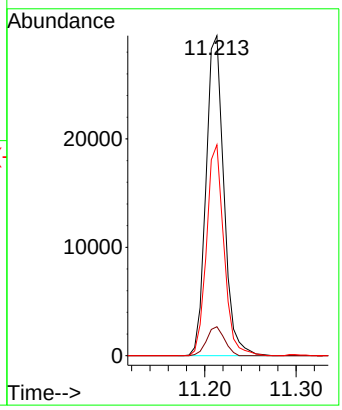
Tgt Ion: 83 Resp: 3994

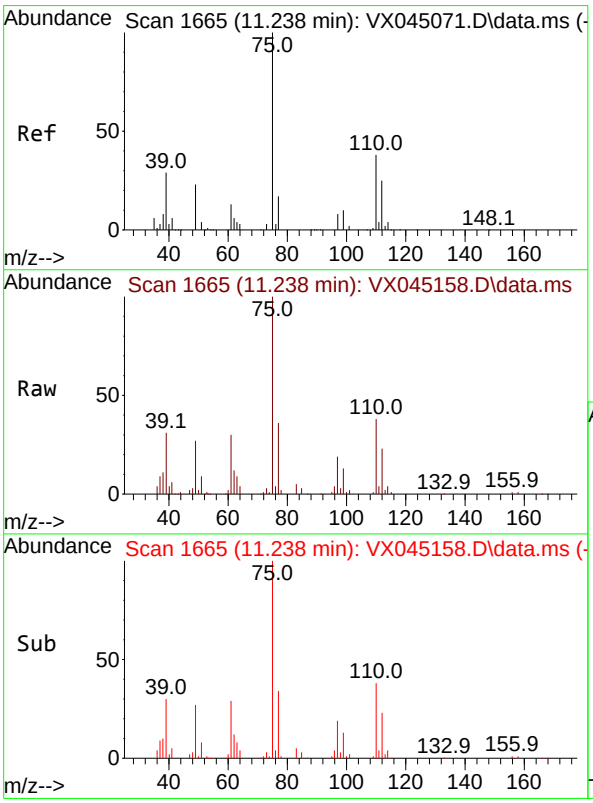
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 9.1 | 4.5 | 13.4 |
| 85 | 64.2 | 31.7 | 95.1 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

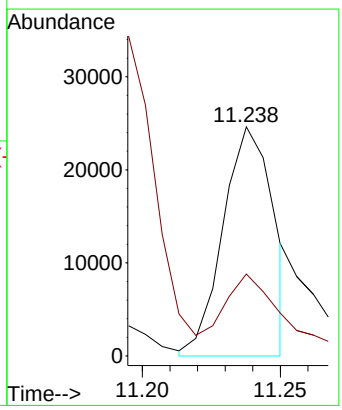


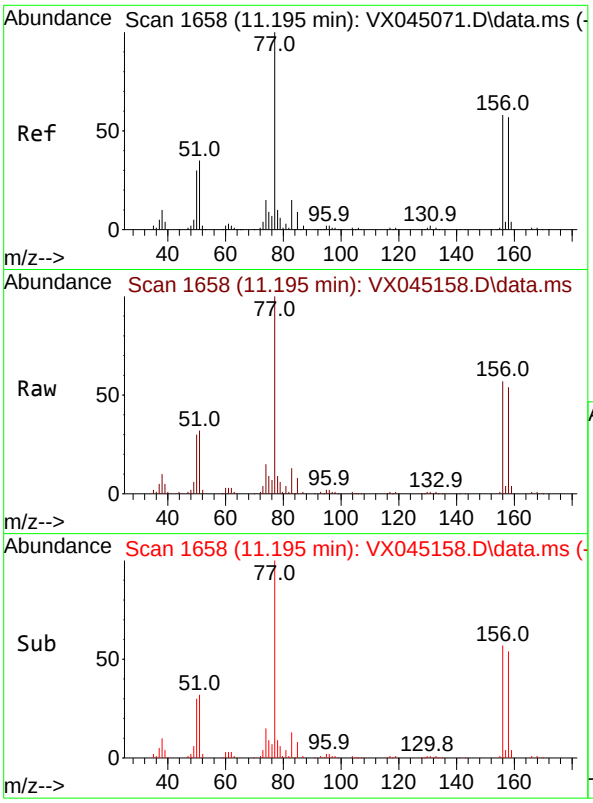




#76
1,2,3-Trichloropropane
Concen: 20.030 ug/l m
RT: 11.238 min Scan# 1665
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 75 Resp: 31293

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 43.4 | 20.7 | 62.1 |

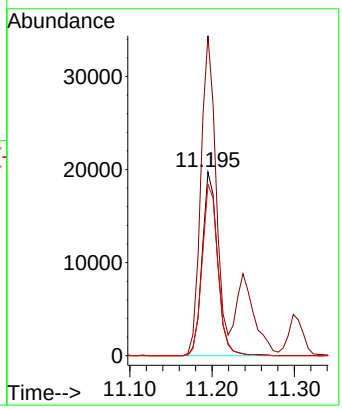





#77
Bromobenzene
Concen: 20.716 ug/l
RT: 11.195 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:156 Resp: 2560

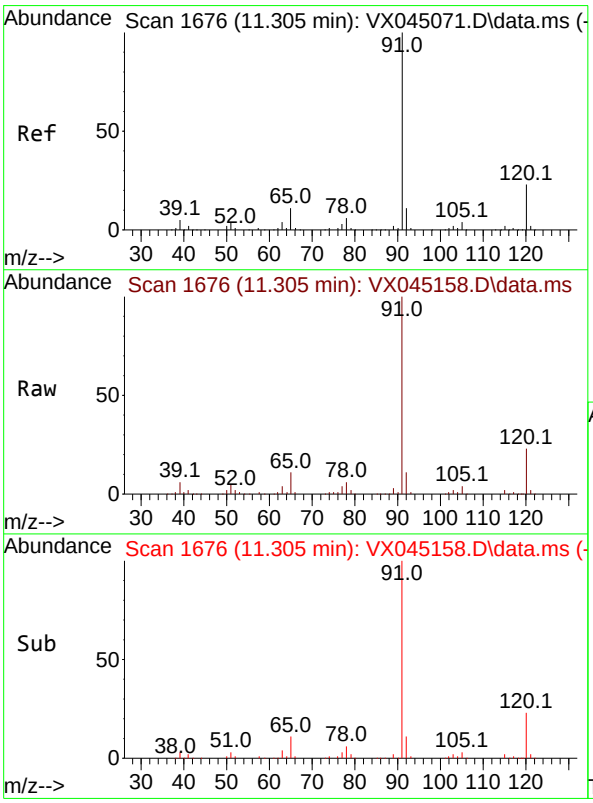
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 171.8 | 85.8 | 257.4 |
| 158 | 96.3 | 48.4 | 145.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations**
**APPROVED**

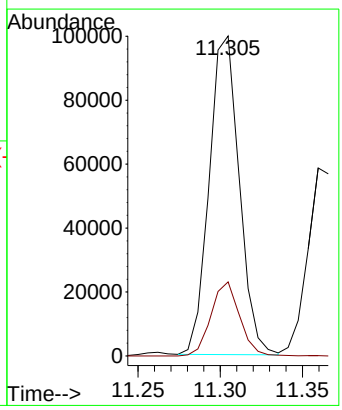
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

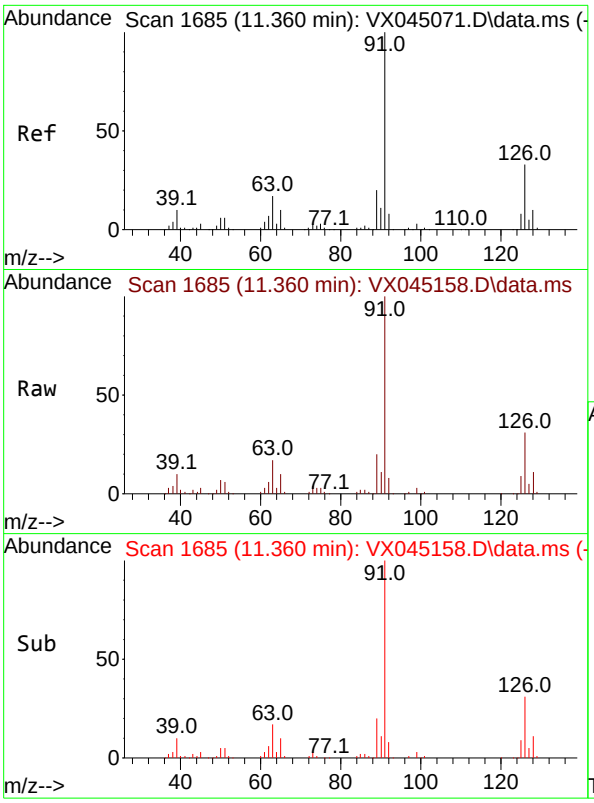



#78
n-propylbenzene
Concen: 21.423 ug/l
RT: 11.305 min Scan# 1676
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 91 Resp: 126790

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.2 | 11.2 | 33.6 |

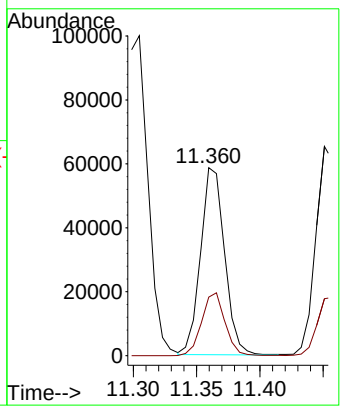





#79
2-Chlorotoluene
Concen: 20.533 ug/l
RT: 11.360 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 91 Resp: 7739

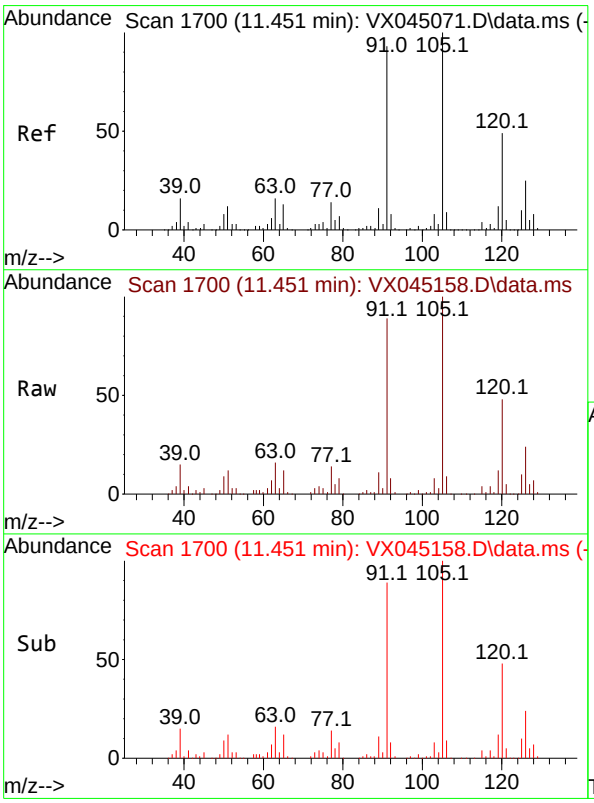
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 32.8 | 16.4 | 49.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations APPROVED**

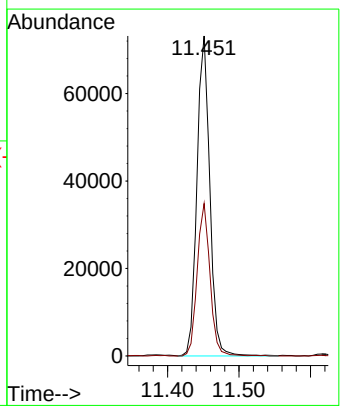
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

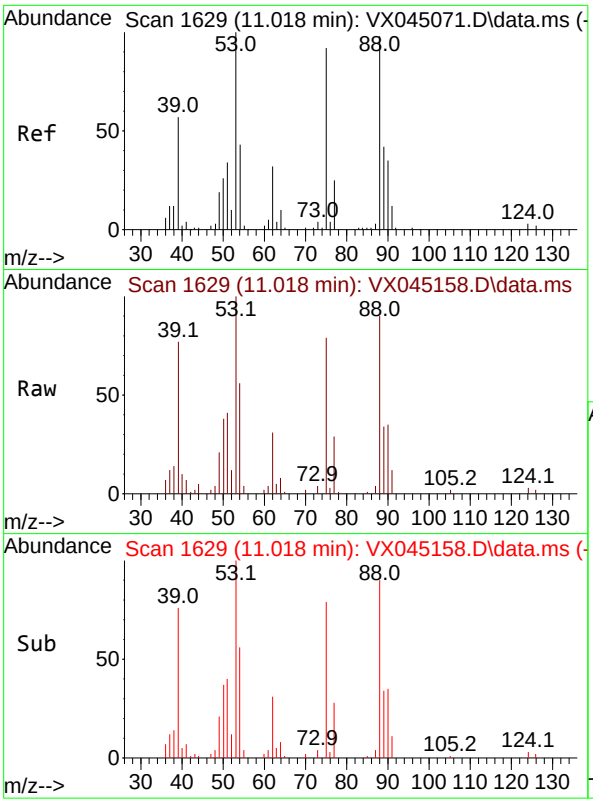



#80
1,3,5-Trimethylbenzene
Concen: 21.511 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:105 Resp: 91126

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 47.6 | 24.1 | 72.2 |






#81
trans-1,4-Dichloro-2-butene
Concen: 16.954 ug/l
RT: 11.018 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

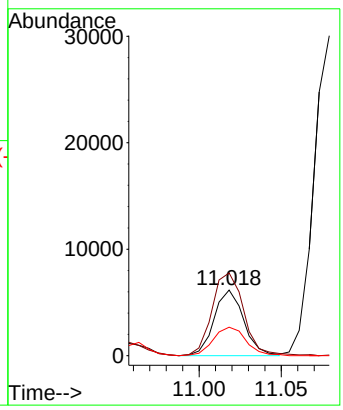
Tgt Ion: 75 Resp: 774

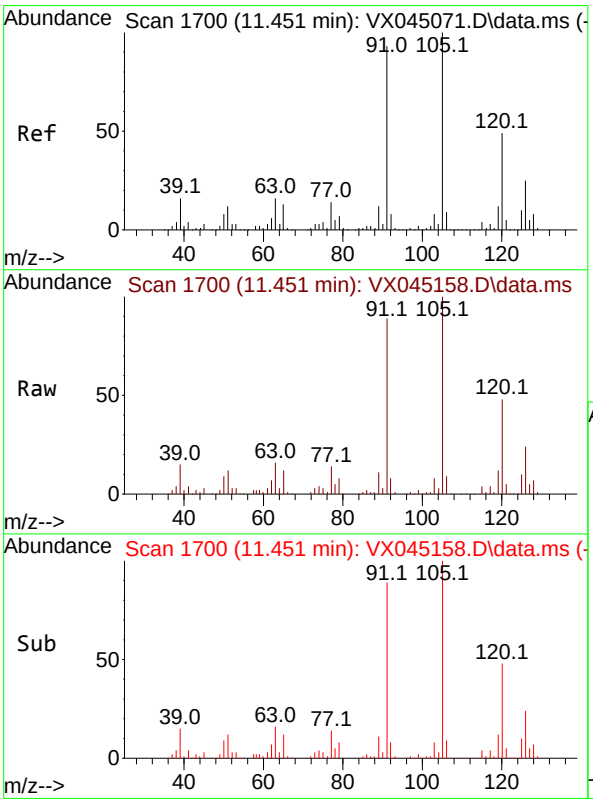
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 135.5 | 88.5 | 132.7 |
| 89 | 47.9 | 36.2 | 54.4 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

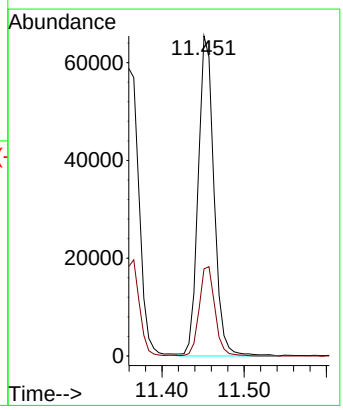


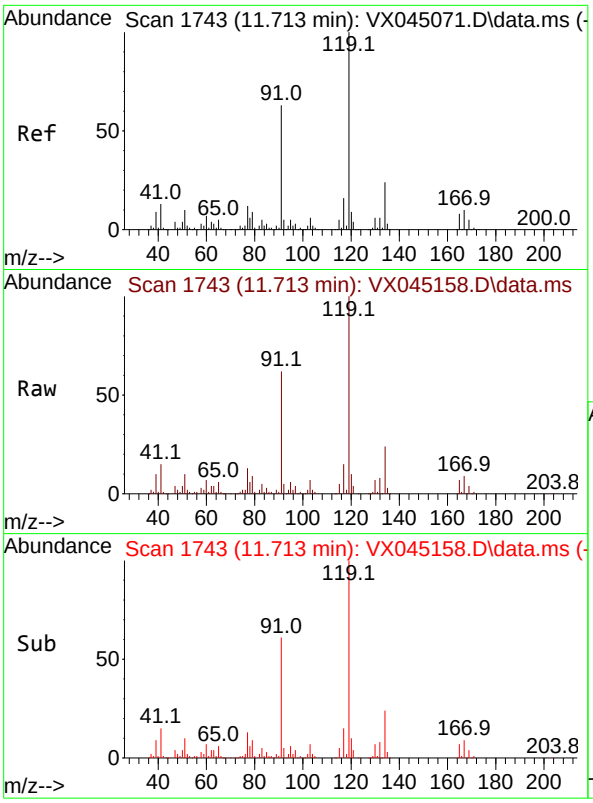




#82
4-Chlorotoluene
Concen: 21.257 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 91 Resp: 87322

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 27.8 | 14.1 | 42.4 |

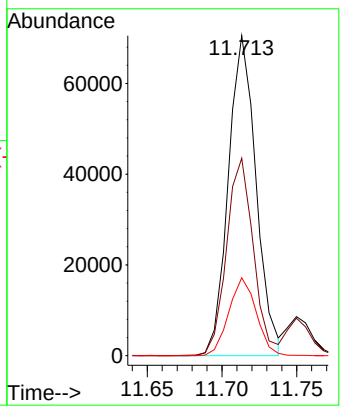





#83
tert-Butylbenzene
Concen: 20.921 ug/l
RT: 11.713 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:119 Resp: 9106

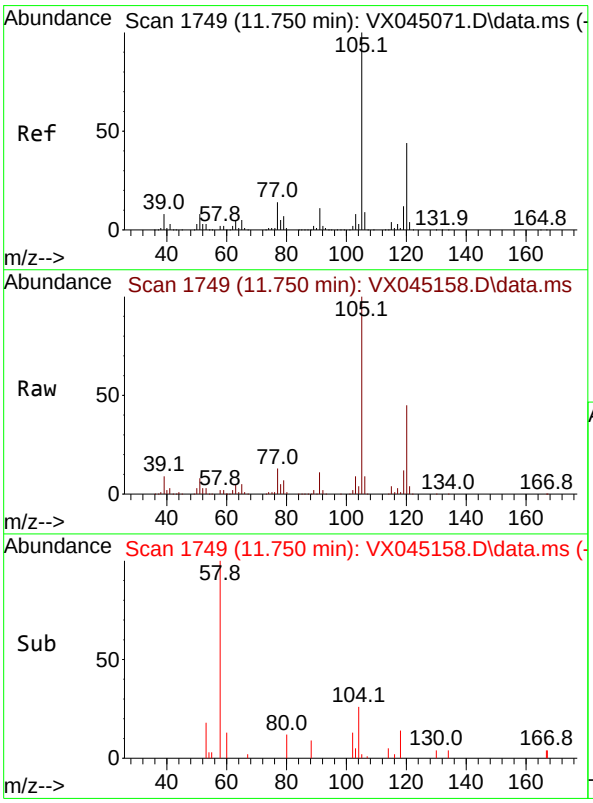
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 60.0 | 30.7 | 92.1 |
| 134 | 24.1 | 11.7 | 35.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations APPROVED**

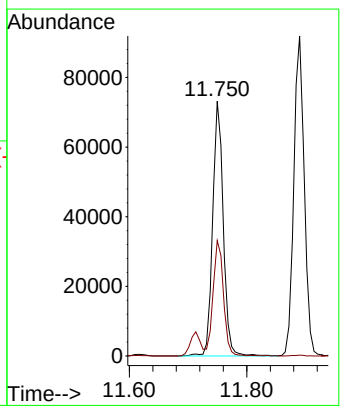
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

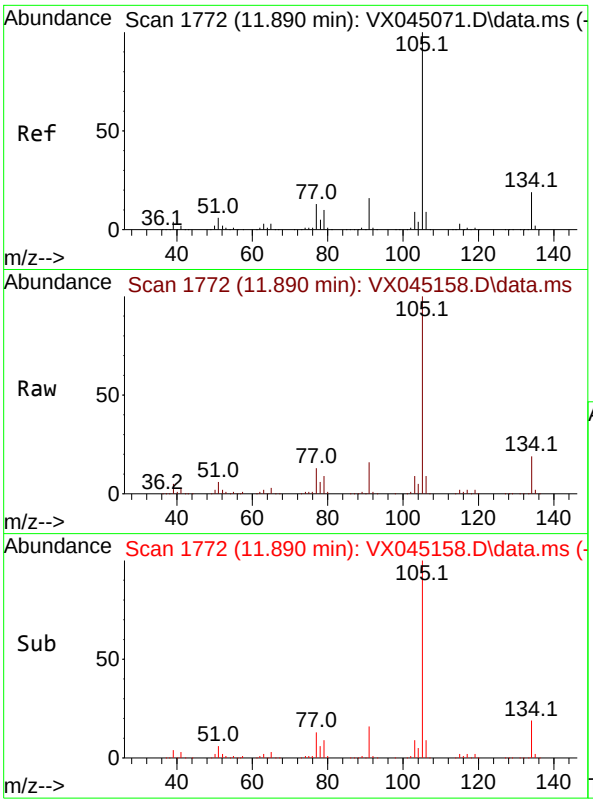



#84
1,2,4-Trimethylbenzene
Concen: 21.544 ug/l
RT: 11.750 min Scan# 1749
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:105 Resp: 91832

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 44.1 | 22.1 | 66.1 |

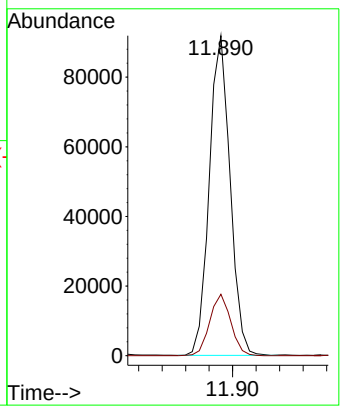





#85
sec-Butylbenzene
Concen: 21.656 ug/l
RT: 11.890 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:105 Resp: 11291

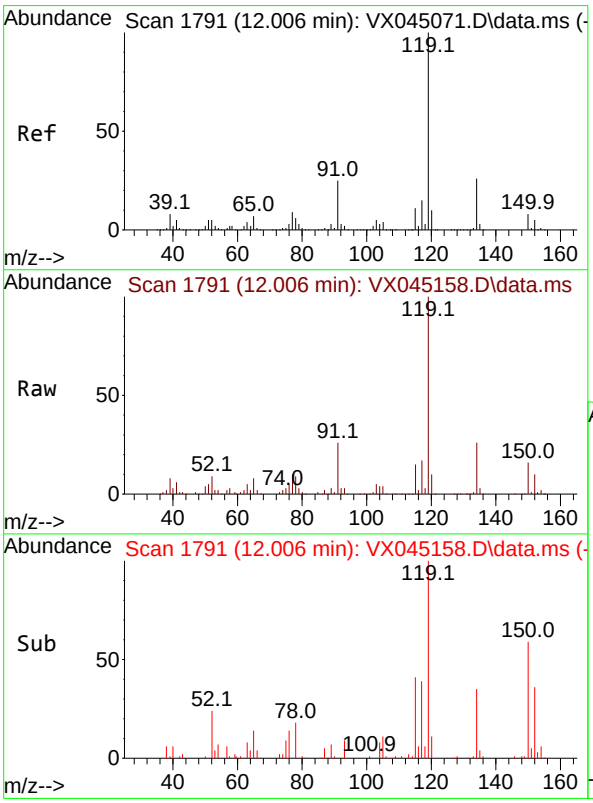
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.4 | 9.8 | 29.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations**
**APPROVED**

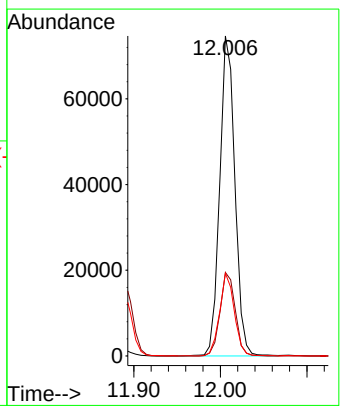
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

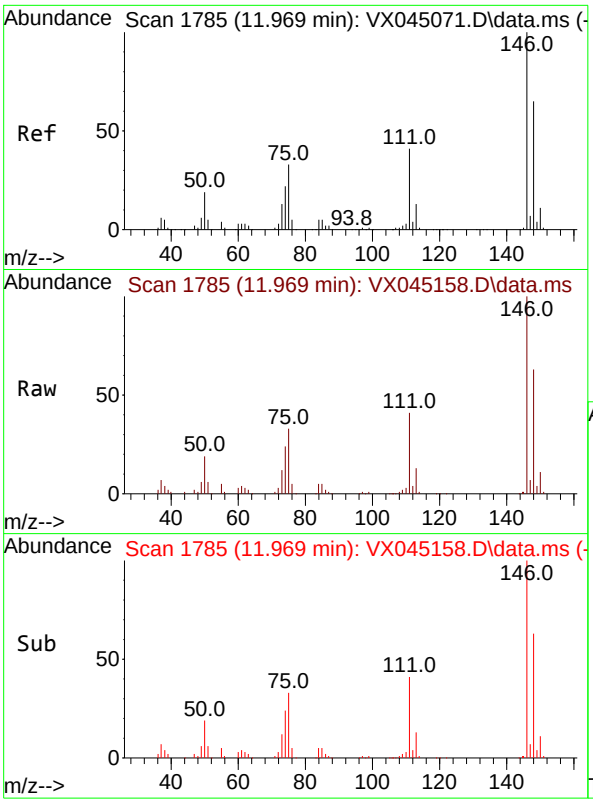



#86
p-Isopropyltoluene
Concen: 21.589 ug/l
RT: 12.006 min Scan# 1791
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:119 Resp: 90968

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 26.2 | 12.9 | 38.6 |
| 91 | 25.1 | 12.7 | 38.0 |

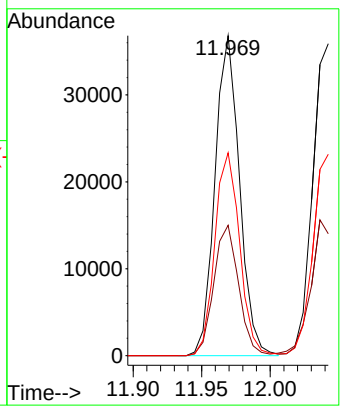





#87
1,3-Dichlorobenzene
Concen: 20.761 ug/l
RT: 11.969 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:146 Resp: 4578

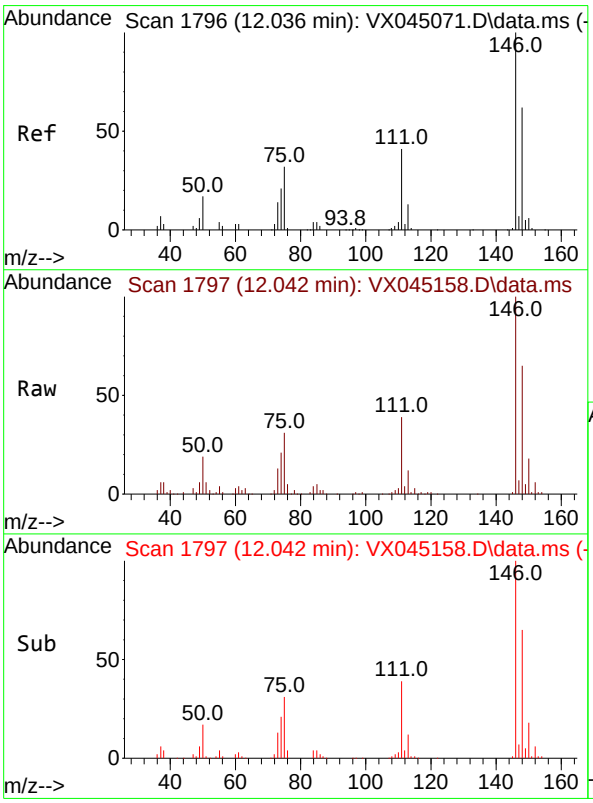
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 41.4 | 21.1 | 63.4 |
| 148 | 64.3 | 31.9 | 95.7 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations**
**APPROVED**

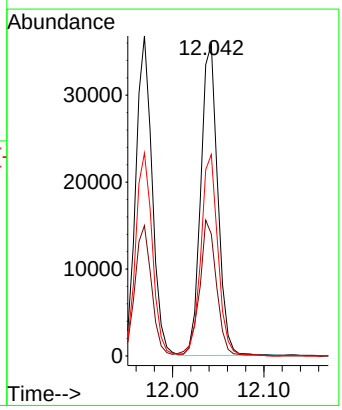
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

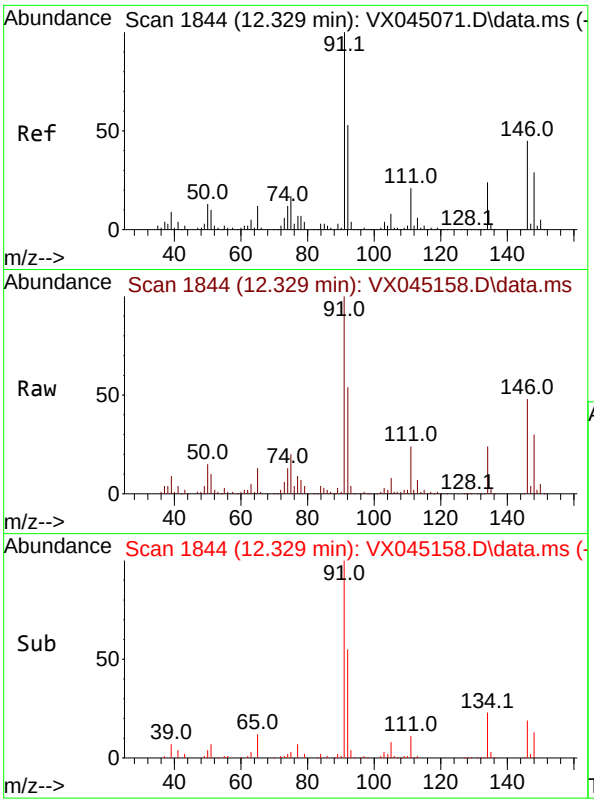



#88
1,4-Dichlorobenzene
Concen: 20.703 ug/l
RT: 12.042 min Scan# 1797
Delta R.T. 0.006 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:146 Resp: 46189

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 44.1 | 20.2 | 60.5 |
| 148 | 65.0 | 31.9 | 95.9 |

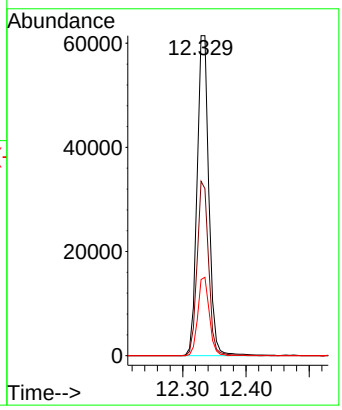





#89
n-Butylbenzene
Concen: 21.925 ug/l
RT: 12.329 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 91 Resp: 7956

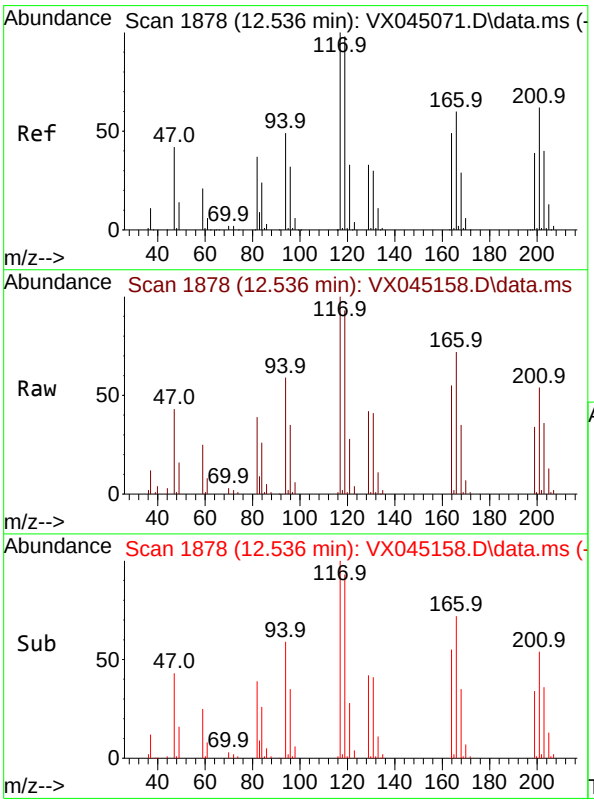
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 53.0 | 26.7 | 80.0 |
| 134 | 23.9 | 12.2 | 36.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations**
**APPROVED**

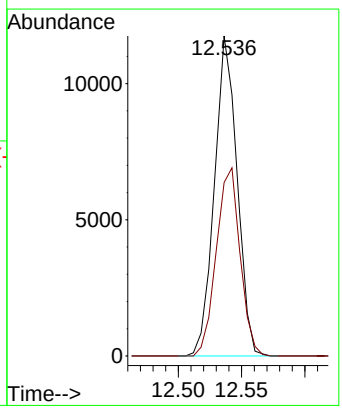
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

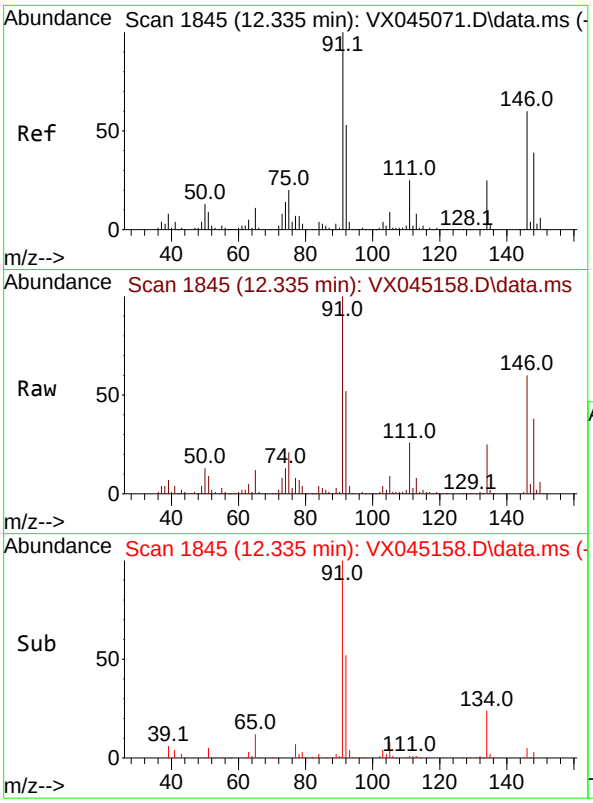



#90
Hexachloroethane
Concen: 19.200 ug/l
RT: 12.536 min Scan# 1878
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:117 Resp: 14633

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 61.6 | 31.9 | 95.9 |

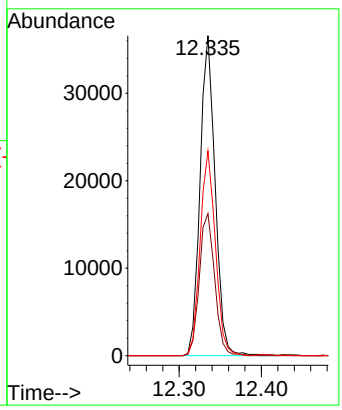





#91
1,2-Dichlorobenzene
Concen: 21.087 ug/l
RT: 12.335 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:146 Resp: 4664

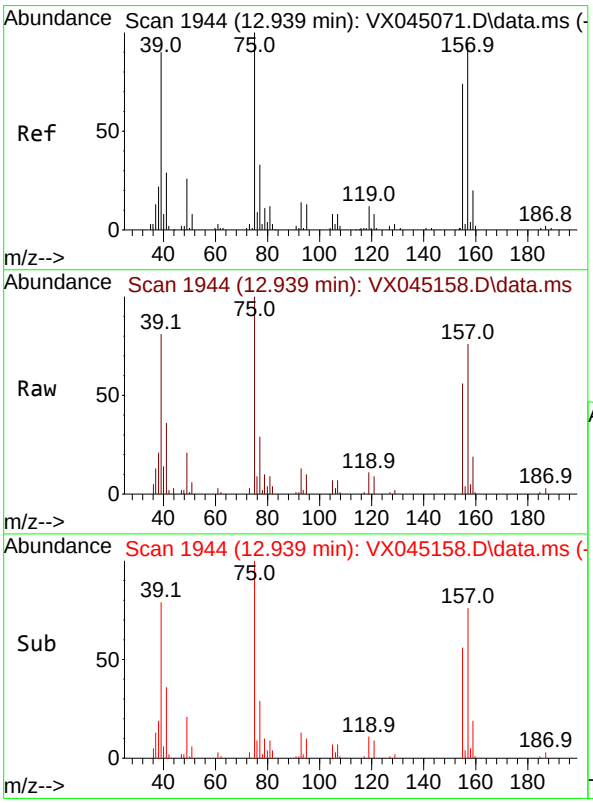
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 45.4 | 21.6 | 65.0 |
| 148 | 64.5 | 31.9 | 95.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations APPROVED**

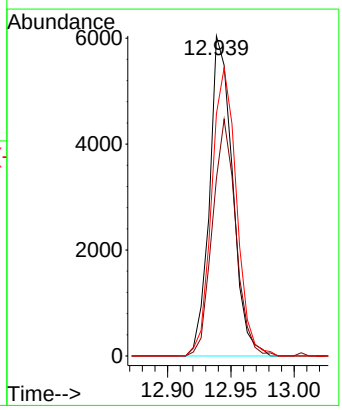
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

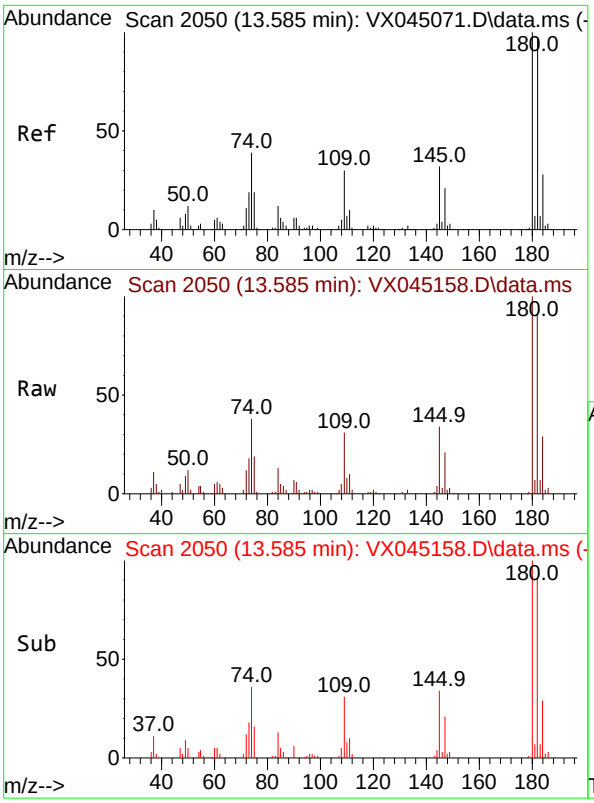



#92
1,2-Dibromo-3-Chloropropane
Concen: 20.400 ug/l
RT: 12.939 min Scan# 1944
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion: 75 Resp: 7641

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 74.8 | 39.6 | 118.7 |
| 157 | 97.2 | 51.1 | 153.4 |

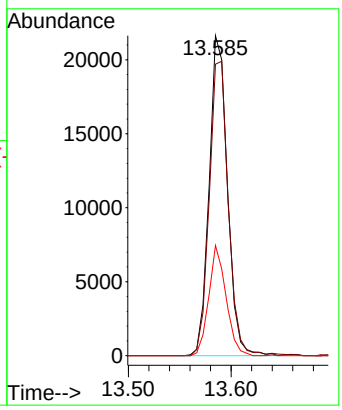





#93
1,2,4-Trichlorobenzene
Concen: 21.219 ug/l
RT: 13.585 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:180 Resp: 2672

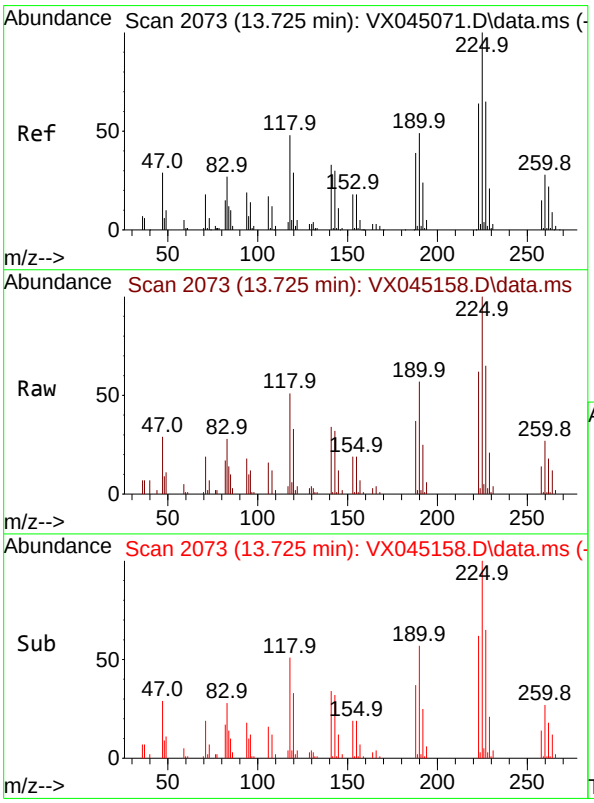
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 96.0 | 47.3 | 141.9 |
| 145 | 32.6 | 16.3 | 48.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations APPROVED**

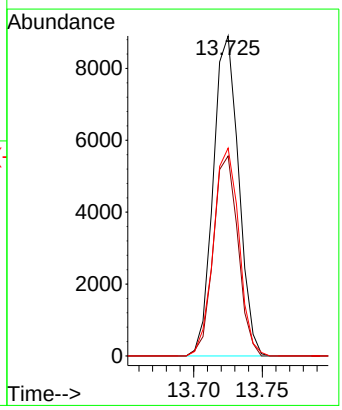
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

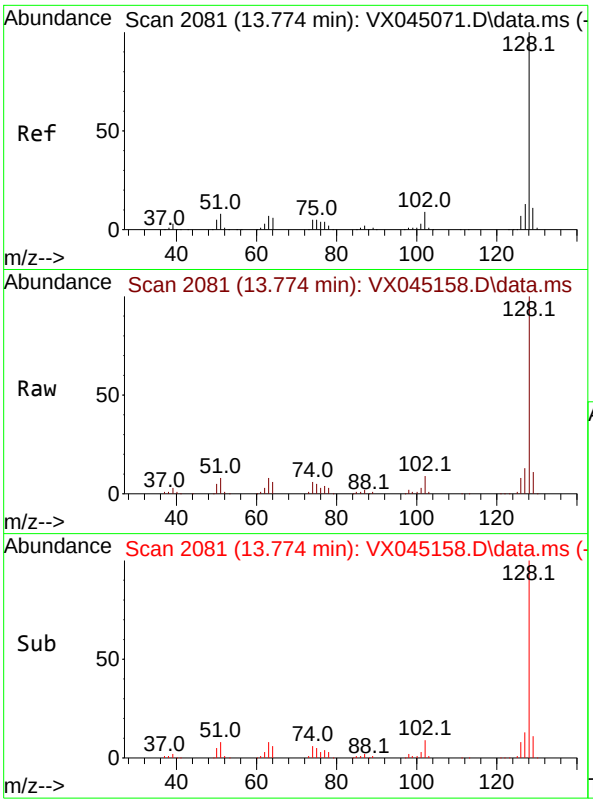



#94
Hexachlorobutadiene
Concen: 22.224 ug/l
RT: 13.725 min Scan# 2073
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:225 Resp: 11477

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 60.8 | 31.9 | 95.7 |
| 227 | 65.2 | 31.4 | 94.0 |

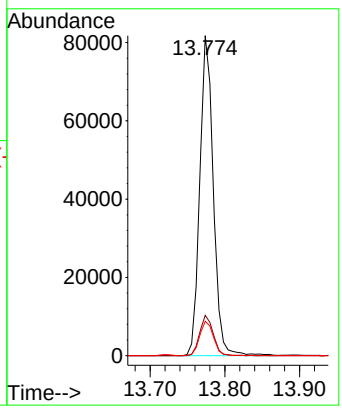





#95
Naphthalene
Concen: 21.254 ug/l
RT: 13.774 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:128 Resp: 10285

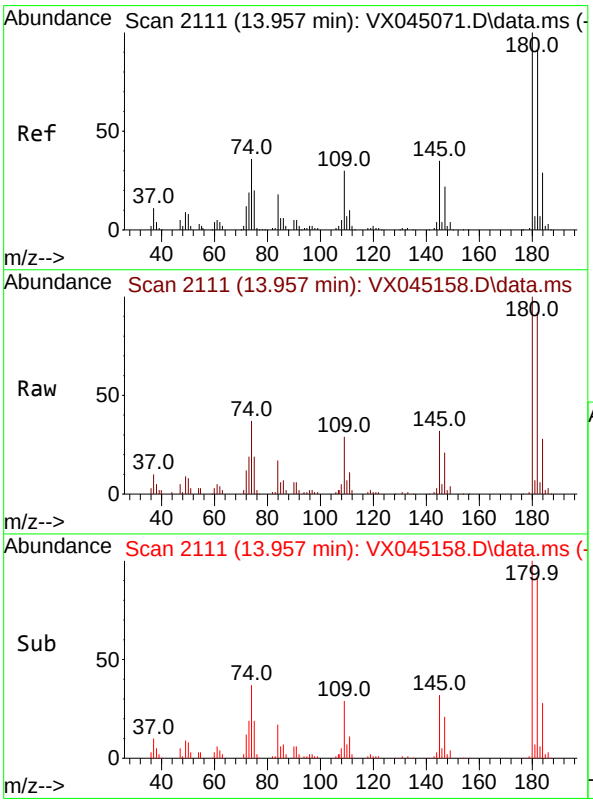
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.6 | 10.3 | 15.5 |
| 129 | 11.0 | 8.7 | 13.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0306WBS01

**Manual Integrations APPROVED**

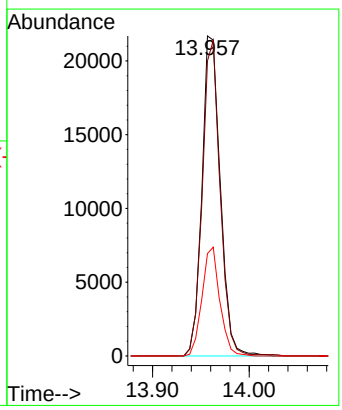
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025




#96
1,2,3-Trichlorobenzene
Concen: 21.647 ug/l
RT: 13.957 min Scan# 2111
Delta R.T. -0.000 min
Lab File: VX045158.D
Acq: 06 Mar 2025 11:10

Tgt Ion:180 Resp: 28765

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.4 | 47.5 | 142.6 |
| 145 | 32.9 | 17.0 | 50.9 |



Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | 03/05/25 |
| Project: | Former Schlumberger STC PTC Site # D3868221 | Date Received: | 03/05/25 |
| Client Sample ID: | BR-05-465-030525MS | SDG No.: | Q1478 |
| Lab Sample ID: | Q1501-05MS | Matrix: | TCLP |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | TCLP VOA |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX045163.D | 1 | | 03/06/25 13:09 | VX030625 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-01-4 | Vinyl Chloride | 47.4 | | 0.34 | 1.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 70.0 | | 0.26 | 1.00 | ug/L |
| 78-93-3 | 2-Butanone | 290 | | 1.30 | 5.00 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 50.1 | | 0.25 | 1.00 | ug/L |
| 67-66-3 | Chloroform | 50.2 | | 0.26 | 1.00 | ug/L |
| 71-43-2 | Benzene | 51.7 | | 0.16 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 51.6 | | 0.24 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 94.9 | | 0.32 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 88.9 | | 0.25 | 1.00 | ug/L |
| 108-90-7 | Chlorobenzene | 51.6 | | 0.13 | 1.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 51.4 | | 70 (74) - 130 (125) | 103% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 0 | * | 70 (75) - 130 (124) | 0% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 53.2 | | 70 (86) - 130 (113) | 106% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 54.7 | | 70 (77) - 130 (121) | 109% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 101000 | 5.543 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 179000 | 6.757 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 156000 | 10.055 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 67200 | 12.018 | | | |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX030625\
Data File : VX045163.D
Acq On : 06 Mar 2025 13:09
Operator : JC/MD
Sample : Q1501-05MS
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 07 00:40:49 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations APPROVED**

Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 5.543 | 168 | 101112 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 6.757 | 114 | 179083 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 10.055 | 117 | 156313 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.018 | 152 | 67219 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 5.952 | 65 | 82650 | 51.389 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 102.780% | | | |
| 35) Dibromofluoromethane | 0.000 | 113 | 0d | 0.000 | ug/l | |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 0.000%# | | | |
| 50) Toluene-d8 | 8.646 | 98 | 230975 | 53.204 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 106.400% | | | |
| 62) 4-Bromofluorobenzene | 11.079 | 95 | 78735 | 54.731 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 109.460% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.166 | 85 | 60860 | 47.817 | ug/l | 98 |
| 3) Chloromethane | 1.306 | 50 | 74253 | 47.672 | ug/l | 95 |
| 4) Vinyl Chloride | 1.373 | 62 | 73181 | 47.362 | ug/l | 96 |
| 5) Bromomethane | 1.593 | 94 | 28933 | 47.633 | ug/l | 96 |
| 6) Chloroethane | 1.666 | 64 | 39700 | 55.703 | ug/l | 98 |
| 7) Trichlorofluoromethane | 1.873 | 101 | 103012 | 50.360 | ug/l | 100 |
| 8) Diethyl Ether | 2.129 | 74 | 36356 | 45.441 | ug/l | 95 |
| 9) 1,1,2-Trichlorotrifluo... | 2.318 | 101 | 60302 | 51.313 | ug/l | 99 |
| 10) Methyl Iodide | 2.440 | 142 | 78618 | 53.532 | ug/l | 98 |
| 11) Tert butyl alcohol | 2.983 | 59 | 59207 | 194.348 | ug/l | 100 |
| 12) 1,1-Dichloroethene | 2.312 | 96 | 86935 | 69.970 | ug/l | 94 |
| 13) Acrolein | 2.239 | 56 | 17262 | 49.018 | ug/l | 98 |
| 14) Allyl chloride | 2.654 | 41 | 112939 | 51.066 | ug/l | 97 |
| 15) Acrylonitrile | 3.062 | 53 | 199269 | 244.058 | ug/l | 99 |
| 16) Acetone | 2.385 | 43 | 266010 | 356.478 | ug/l | 100 |
| 17) Carbon Disulfide | 2.501 | 76 | 102631 | 31.014 | ug/l | 97 |
| 18) Methyl Acetate | 2.708 | 43 | 9884 | 5.506 | ug/l | 98 |
| 19) Methyl tert-butyl Ether | 3.117 | 73 | 208471 | 50.012 | ug/l | 99 |
| 20) Methylene Chloride | 2.782 | 84 | 70867 | 47.942 | ug/l | 97 |
| 21) trans-1,2-Dichloroethene | 3.086 | 96 | 62346 | 50.793 | ug/l | 96 |
| 22) Diisopropyl ether | 3.763 | 45 | 220358 | 48.991 | ug/l # | 86 |
| 24) 1,1-Dichloroethane | 3.605 | 63 | 126603 | 50.224 | ug/l | 99 |
| 25) 2-Butanone | 4.556 | 43 | 325439 | 289.732 | ug/l | 99 |
| 26) 2,2-Dichloropropane | 4.470 | 77 | 80790 | 68.329 | ug/l | 97 |
| 27) cis-1,2-Dichloroethene | 4.483 | 96 | 76731 | 50.639 | ug/l | 96 |
| 28) Bromochloromethane | 4.897 | 49 | 62516 | 52.031 | ug/l | 99 |
| 29) Tetrahydrofuran | 5.007 | 42 | 191259 | 253.553 | ug/l | 99 |
| 30) Chloroform | 5.092 | 83 | 125714 | 50.192 | ug/l | 97 |
| 31) Cyclohexane | 5.464 | 56 | 109491 | 50.038 | ug/l | 97 |
| 32) 1,1,1-Trichloroethane | 5.379 | 97 | 100914 | 49.885 | ug/l | 98 |
| 36) 1,1-Dichloropropene | 5.684 | 75 | 83195 | 50.660 | ug/l | 98 |
| 38) Carbon Tetrachloride | 5.671 | 117 | 83458 | 50.057 | ug/l | 99 |
| 39) Methylcyclohexane | 7.378 | 83 | 103797 | 52.749 | ug/l | 99 |
| 40) Benzene | 6.031 | 78 | 268012 | 51.682 | ug/l | 99 |
| 41) Methacrylonitrile | 4.915 | 41 | 62416 | 54.549 | ug/l | 99 |
| 42) 1,2-Dichloroethane | 6.080 | 62 | 96342 | 51.592 | ug/l | 99 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX030625\
Data File : VX045163.D
Acq On : 06 Mar 2025 13:09
Operator : JC/MD
Sample : Q1501-05MS
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 07 00:40:49 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations APPROVED**

Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 44) Trichloroethene | 7.122 | 130 | 115549 | 94.894 | ug/l | | 99 |
| 45) 1,2-Dichloropropane | 7.427 | 63 | 68277 | 51.209 | ug/l | | 99 |
| 46) Dibromomethane | 7.580 | 93 | 49559 | 52.588 | ug/l | | 98 |
| 47) Bromodichloromethane | 7.817 | 83 | 76414 | 41.338 | ug/l | | 97 |
| 49) 1,4-Dioxane | 7.659 | 88 | 30248 | 913.440 | ug/l | | 96 |
| 51) 4-Methyl-2-Pentanone | 8.573 | 43 | 568444 | 270.554 | ug/l | | 100 |
| 52) Toluene | 8.713 | 92 | 188456 | 61.939 | ug/l | | 100 |
| 53) t-1,3-Dichloropropene | 8.976 | 75 | 84014 | 54.366 | ug/l | | 97 |
| 54) cis-1,3-Dichloropropene | 8.360 | 75 | 96507 | 53.555 | ug/l | | 95 |
| 55) 1,1,2-Trichloroethane | 9.152 | 97 | 29577 | 23.613 | ug/l | | 95 |
| 57) 1,3-Dichloropropane | 9.305 | 76 | 111722 | 51.541 | ug/l | | 99 |
| 58) 2-Chloroethyl Vinyl ether | 8.238 | 63 | 248600 | 267.664 | ug/l | | 99 |
| 59) 2-Hexanone | 9.427 | 43 | 417312 | 274.135 | ug/l | | 99 |
| 60) Dibromochloromethane | 9.518 | 129 | 60250 | 46.004 | ug/l | | 99 |
| 61) 1,2-Dibromoethane | 9.610 | 107 | 64009 | 51.190 | ug/l | | 98 |
| 64) Tetrachloroethene | 9.268 | 164 | 89022 | 88.922 | ug/l | | 97 |
| 65) Chlorobenzene | 10.079 | 112 | 170804 | 51.641 | ug/l | | 98 |
| 66) 1,1,1,2-Tetrachloroethane | 10.158 | 131 | 50008 | 45.401 | ug/l | | 98 |
| 67) Ethyl Benzene | 10.189 | 91 | 306222 | 53.134 | ug/l | | 99 |
| 68) m/p-Xylenes | 10.299 | 106 | 226689 | 107.448 | ug/l | | 100 |
| 69) o-Xylene | 10.640 | 106 | 111494 | 52.398 | ug/l | | 100 |
| 70) Styrene | 10.652 | 104 | 186579 | 54.191 | ug/l | | 100 |
| 71) Bromoform | 10.798 | 173 | 40798 | 49.118 | ug/l | # | 99 |
| 73) Isopropylbenzene | 10.963 | 105 | 285788 | 54.471 | ug/l | | 99 |
| 76) 1,2,3-Trichloropropane | 11.237 | 75 | 75260m | 48.104 | ug/l | | |
| 77) Bromobenzene | 11.195 | 156 | 64652 | 52.227 | ug/l | | 99 |
| 78) n-propylbenzene | 11.304 | 91 | 334012 | 56.356 | ug/l | | 99 |
| 79) 2-Chlorotoluene | 11.359 | 91 | 196885 | 52.161 | ug/l | | 100 |
| 80) 1,3,5-Trimethylbenzene | 11.451 | 105 | 232590 | 54.826 | ug/l | | 99 |
| 81) trans-1,4-Dichloro-2-b... | 11.018 | 75 | 23264 | 50.887 | ug/l | | 92 |
| 82) 4-Chlorotoluene | 11.451 | 91 | 222235 | 54.023 | ug/l | | 100 |
| 83) tert-Butylbenzene | 11.713 | 119 | 200520 | 46.003 | ug/l | | 90 |
| 84) 1,2,4-Trimethylbenzene | 11.750 | 105 | 233112 | 54.611 | ug/l | | 100 |
| 85) sec-Butylbenzene | 11.890 | 105 | 291621 | 55.852 | ug/l | | 99 |
| 86) p-Isopropyltoluene | 12.006 | 119 | 234622 | 55.603 | ug/l | | 99 |
| 87) 1,3-Dichlorobenzene | 11.969 | 146 | 117796 | 53.341 | ug/l | | 99 |
| 88) 1,4-Dichlorobenzene | 12.042 | 146 | 115251 | 51.585 | ug/l | | 100 |
| 89) n-Butylbenzene | 12.329 | 91 | 210010 | 57.787 | ug/l | | 99 |
| 90) Hexachloroethane | 12.536 | 117 | 38828 | 50.874 | ug/l | | 100 |
| 91) 1,2-Dichlorobenzene | 12.335 | 146 | 114665 | 51.761 | ug/l | | 99 |
| 92) 1,2-Dibromo-3-Chloropr... | 12.938 | 75 | 9203 | 24.536 | ug/l | | 95 |
| 93) 1,2,4-Trichlorobenzene | 13.585 | 180 | 68791 | 54.535 | ug/l | | 100 |
| 94) Hexachlorobutadiene | 13.725 | 225 | 28043 | 54.226 | ug/l | | 99 |
| 95) Naphthalene | 13.774 | 128 | 265803 | 54.845 | ug/l | | 100 |
| 96) 1,2,3-Trichlorobenzene | 13.963 | 180 | 70129 | 52.700 | ug/l | | 97 |

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

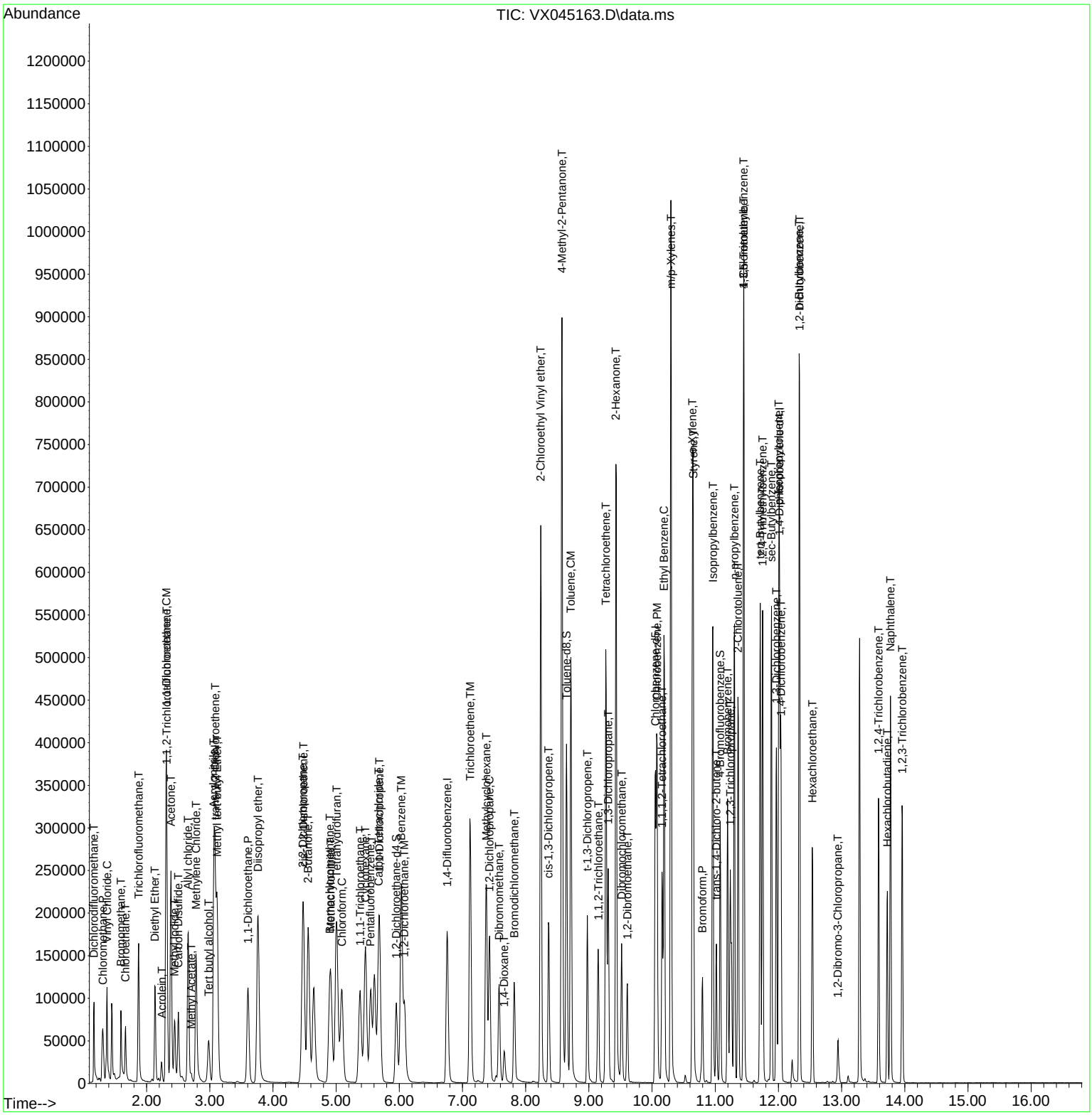
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX030625\
Data File : VX045163.D
Acq On : 06 Mar 2025 13:09
Operator : JC/MD
Sample : Q1501-05MS
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 11 Sample Multiplier: 1

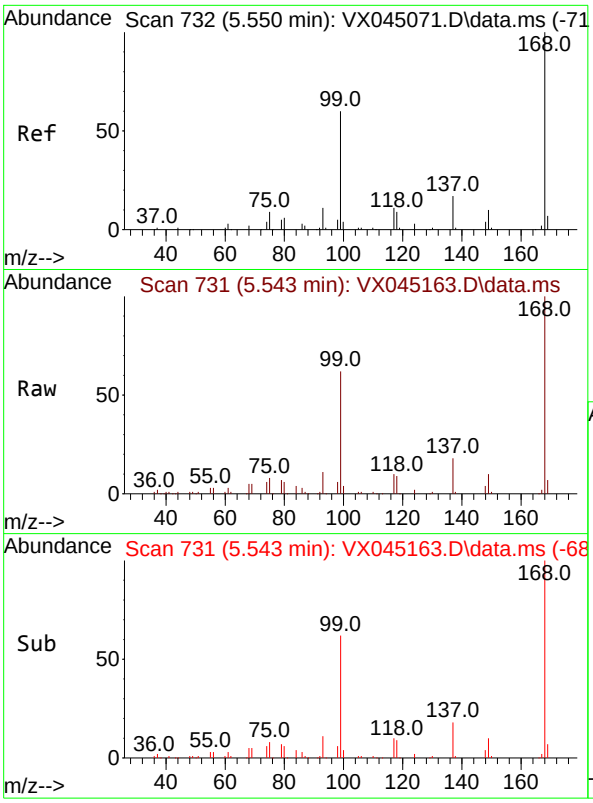
Quant Time: Mar 07 00:40:49 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations APPROVED**

Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

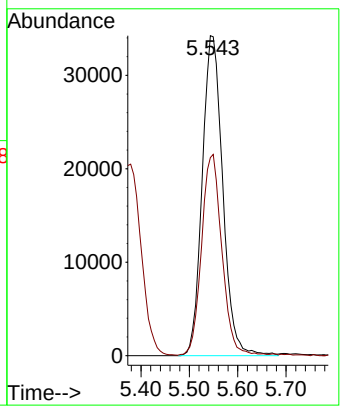





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.543 min Scan# 7
Delta R.T. -0.007 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion:168 Resp: 10111

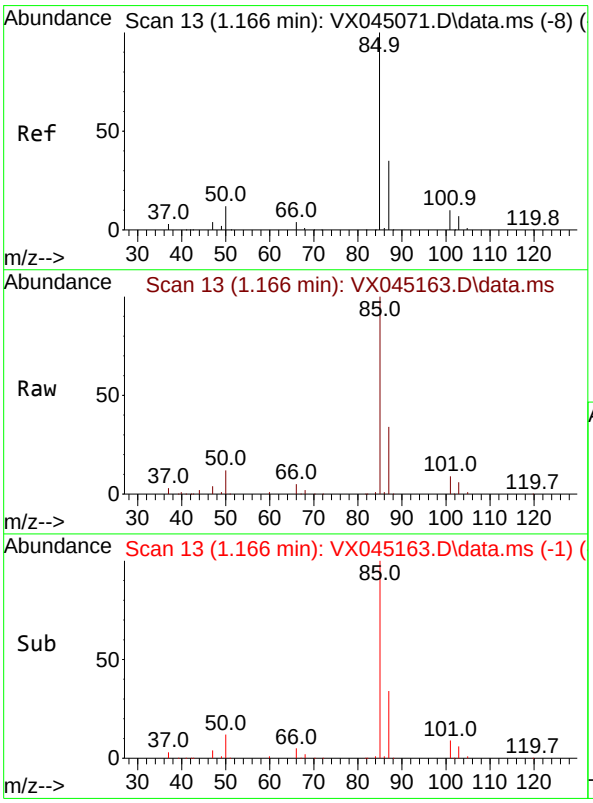
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 61.7 | 48.2 | 72.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
**APPROVED**

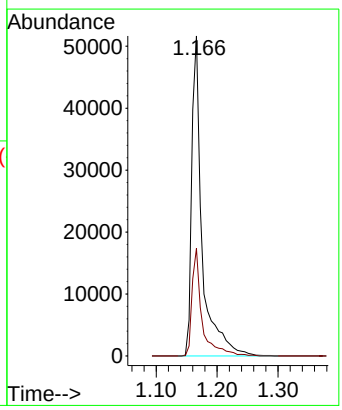
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

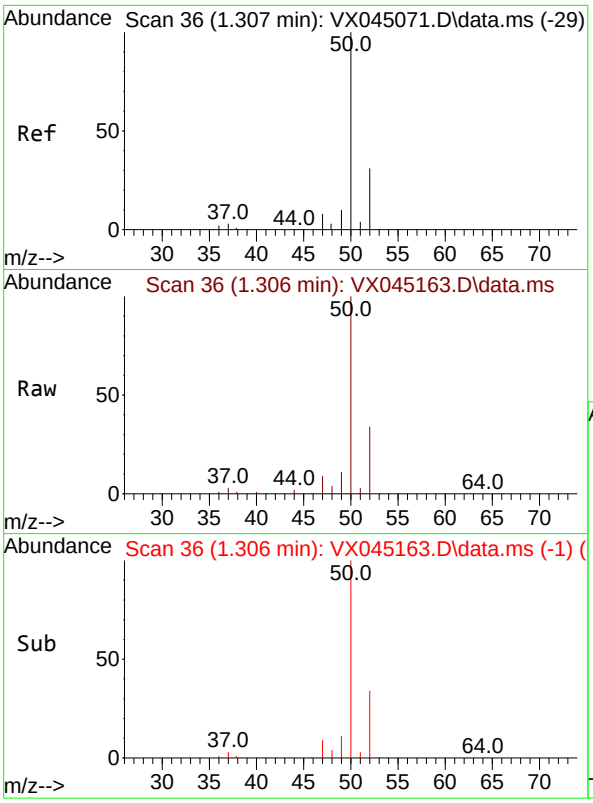



#2
Dichlorodifluoromethane
Concen: 47.817 ug/l
RT: 1.166 min Scan# 13
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 85 Resp: 60860

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 33.6 | 17.4 | 52.3 |

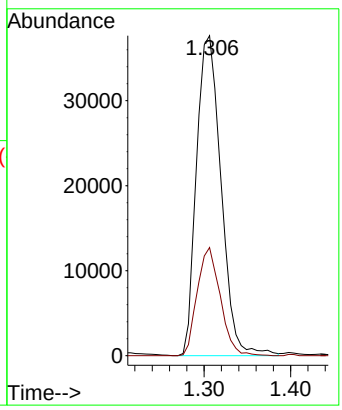





#3
Chloromethane
Concen: 47.672 ug/l
RT: 1.306 min Scan# 3
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 50 Resp: 7425

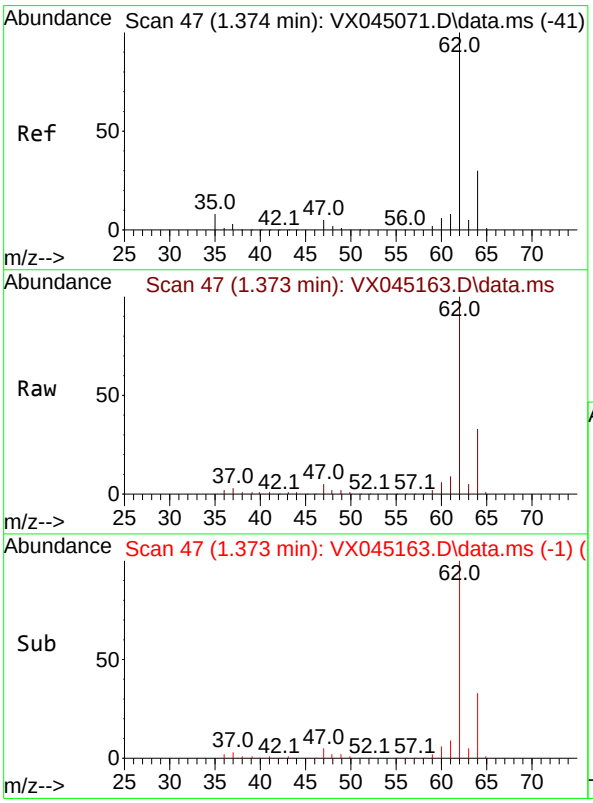
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 33.8 | 25.0 | 37.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
**APPROVED**

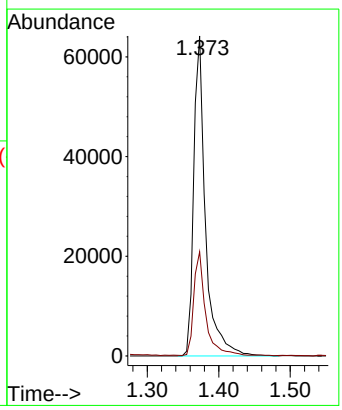
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

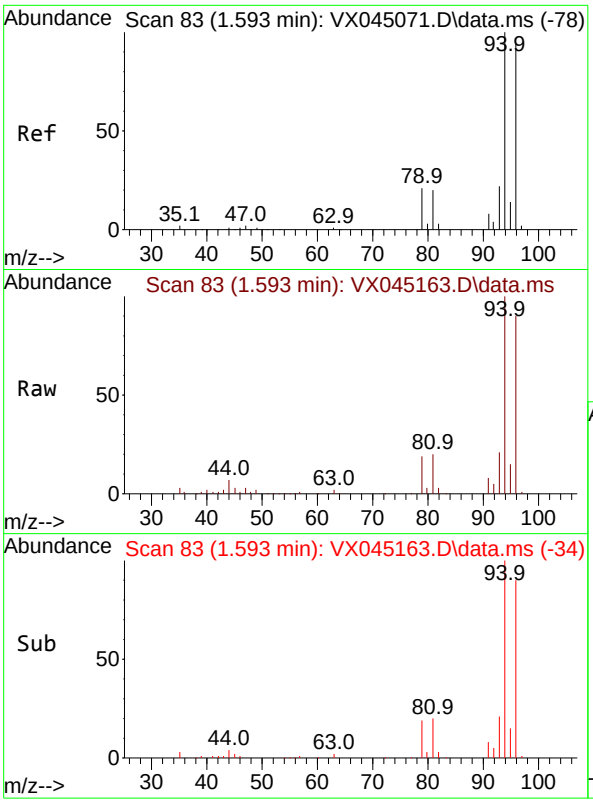



#4
Vinyl Chloride
Concen: 47.362 ug/l
RT: 1.373 min Scan# 47
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 62 Resp: 73181

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 32.4 | 24.3 | 36.5 |

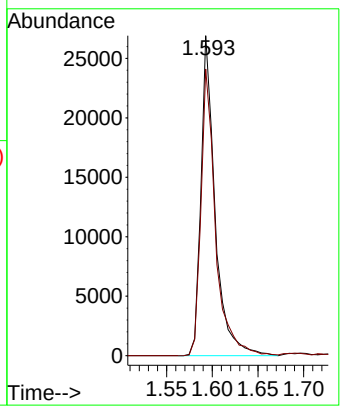





#5
Bromomethane
Concen: 47.633 ug/l
RT: 1.593 min Scan# 8
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 94 Resp: 2893

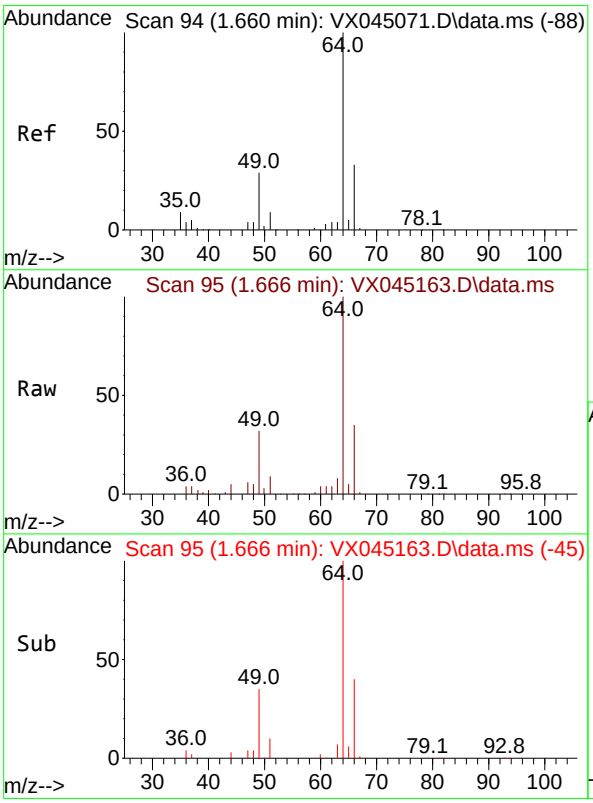
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 89.6 | 75.0 | 112.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
**APPROVED**

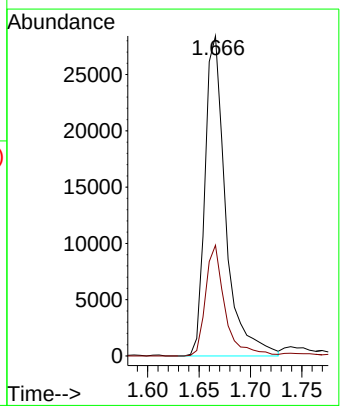
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

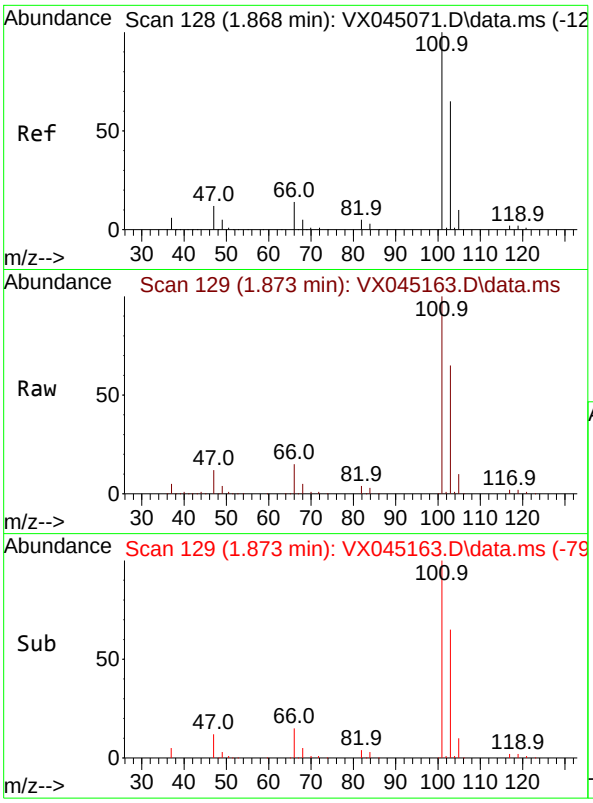



#6
Chloroethane
Concen: 55.703 ug/l
RT: 1.666 min Scan# 95
Delta R.T. 0.006 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 64 Resp: 39700

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 34.6 | 26.7 | 40.1 |

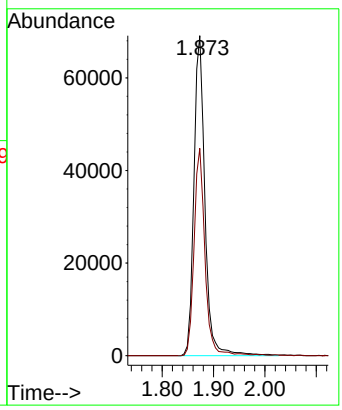





#7
Trichlorofluoromethane
Concen: 50.360 ug/l
RT: 1.873 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion:101 Resp: 10301

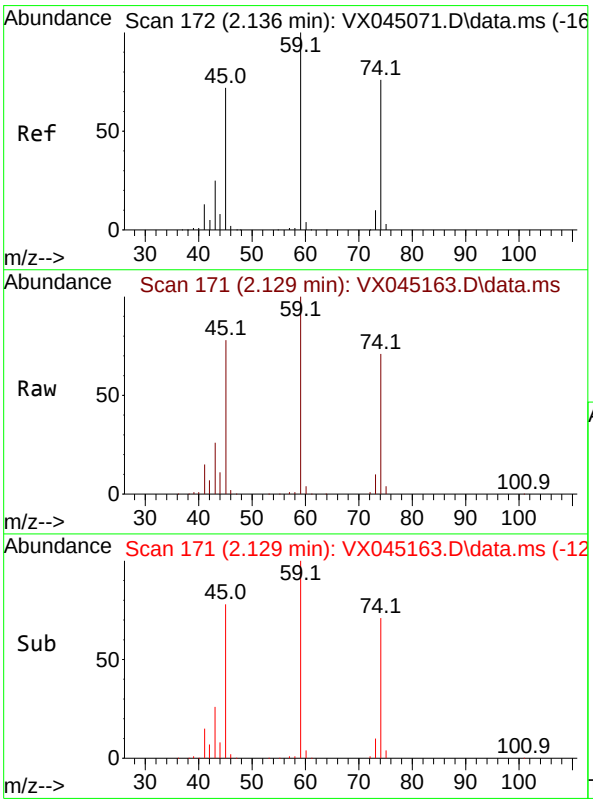
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 64.8 | 52.1 | 78.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations APPROVED**

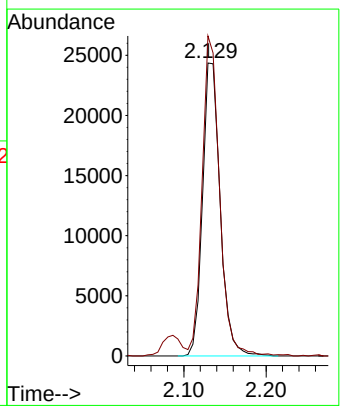
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

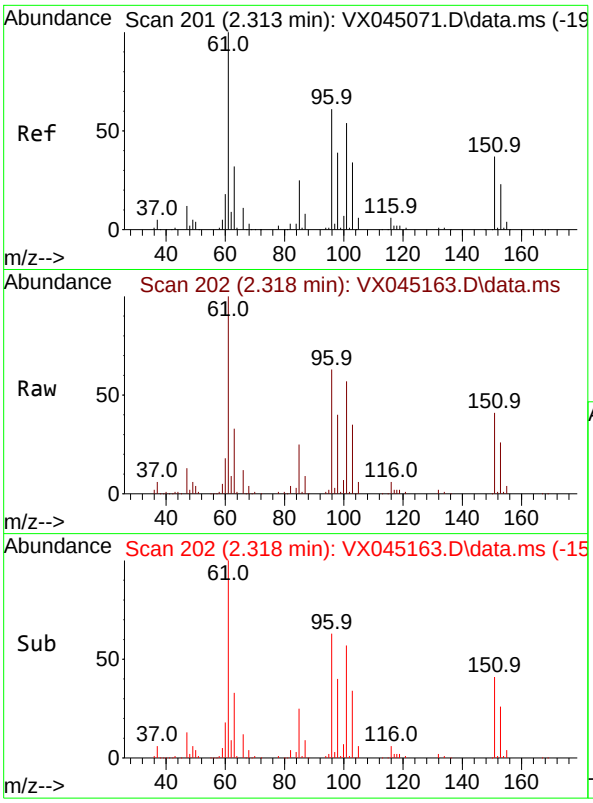



#8
Diethyl Ether
Concen: 45.441 ug/l
RT: 2.129 min Scan# 171
Delta R.T. -0.006 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 74 Resp: 36356

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 107.9 | 51.5 | 154.5 |






#9
1,1,2-Trichlorotrifluoroethane
Concen: 51.313 ug/l
RT: 2.318 min Scan# 2
Delta R.T. 0.006 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion:101 Resp: 6030

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 45.2 | 36.2 | 54.4 |
| 151 | 71.5 | 56.4 | 84.6 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 03/10/2025
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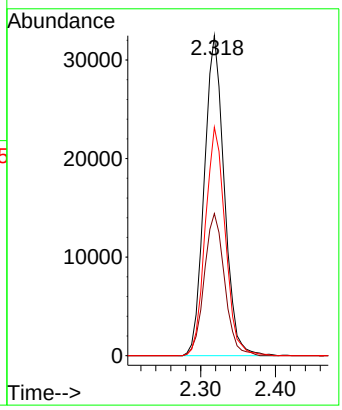
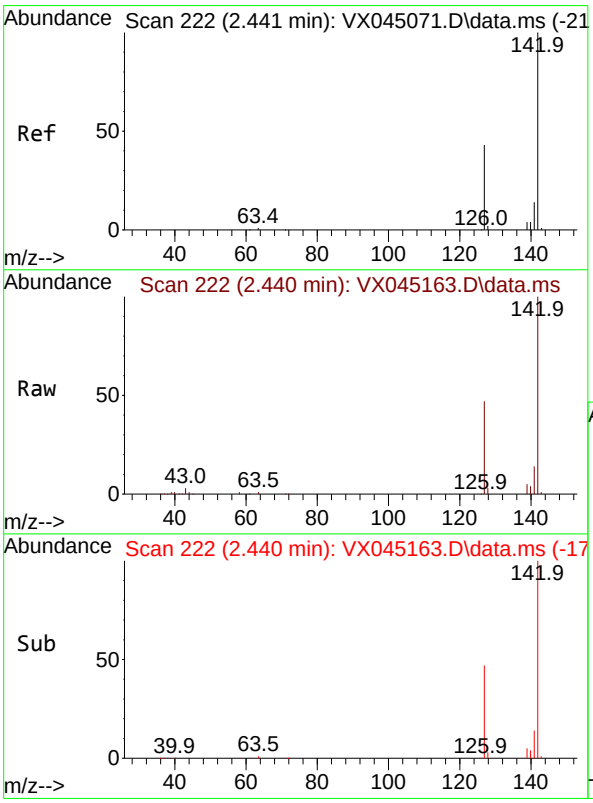
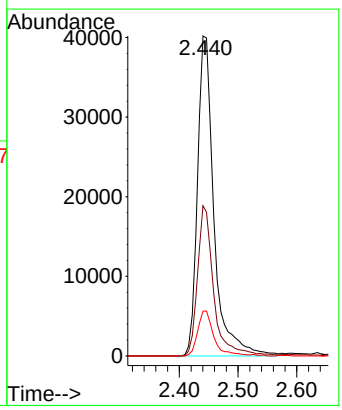


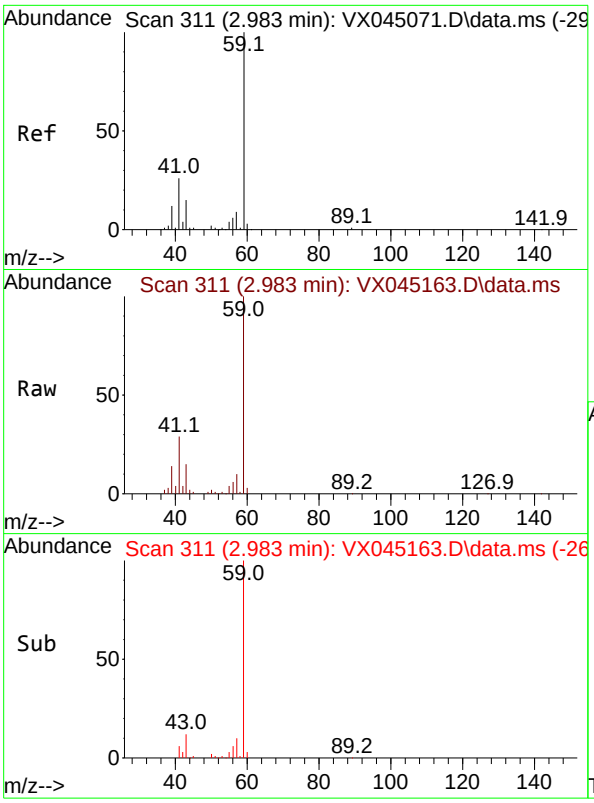




#10
Methyl Iodide
Concen: 53.532 ug/l
RT: 2.440 min Scan# 222
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion:142 Resp: 78618

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 45.9 | 35.4 | 53.2 |
| 141 | 14.0 | 11.6 | 17.4 |

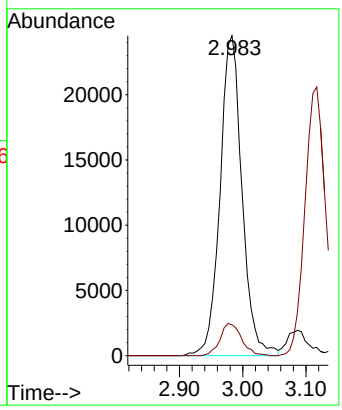





#11
Tert butyl alcohol
Concen: 194.348 ug/l
RT: 2.983 min Scan# 3
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 59 Resp: 5920

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 9.9 | 7.8 | 11.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
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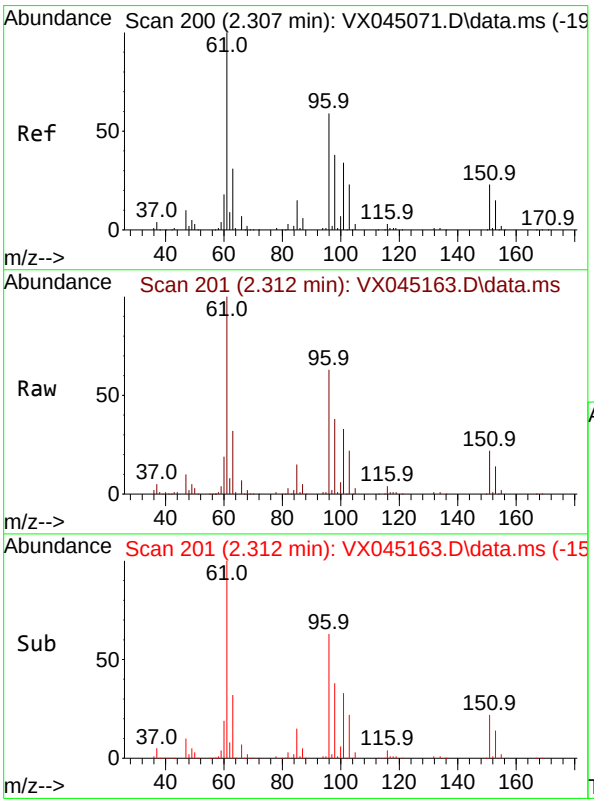
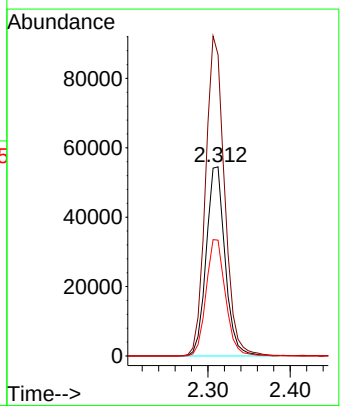
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

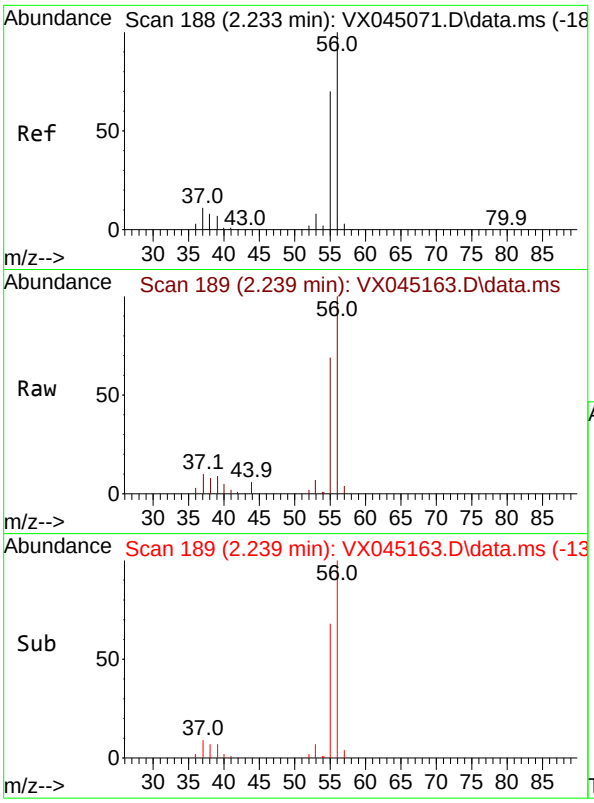



#12
1,1-Dichloroethene
Concen: 69.970 ug/l
RT: 2.312 min Scan# 201
Delta R.T. 0.006 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 96 Resp: 86935

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 159.3 | 134.6 | 202.0 |
| 98 | 61.3 | 51.0 | 76.6 |






#13
Acrolein
Concen: 49.018 ug/l
RT: 2.239 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 56 Resp: 1726

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 72.4 | 56.2 | 84.4 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
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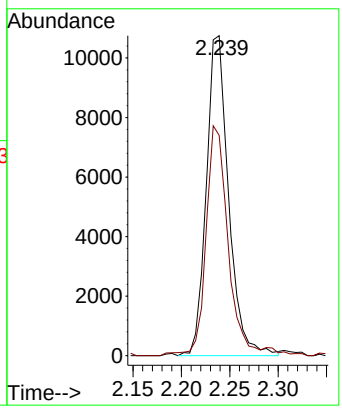
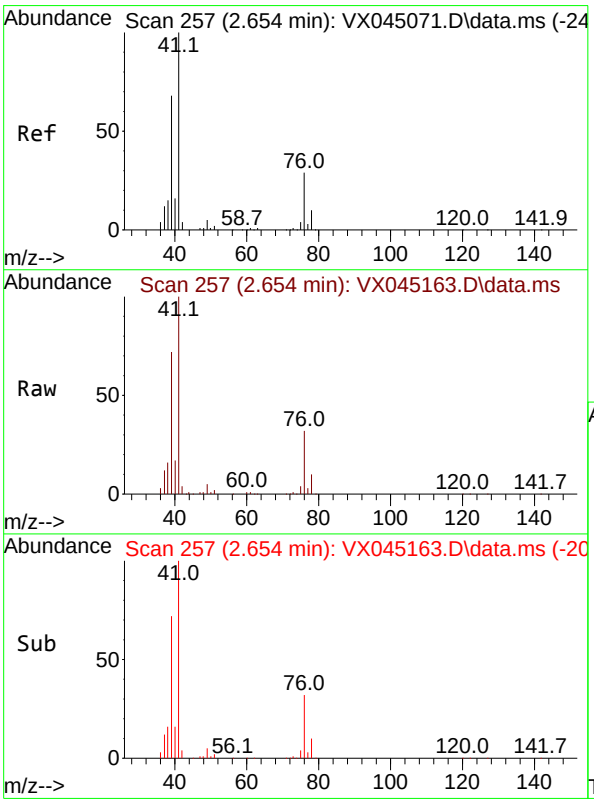
Supervised By :Mahesh Dadoda 03/10/2025

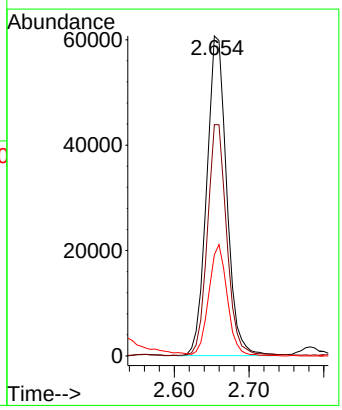


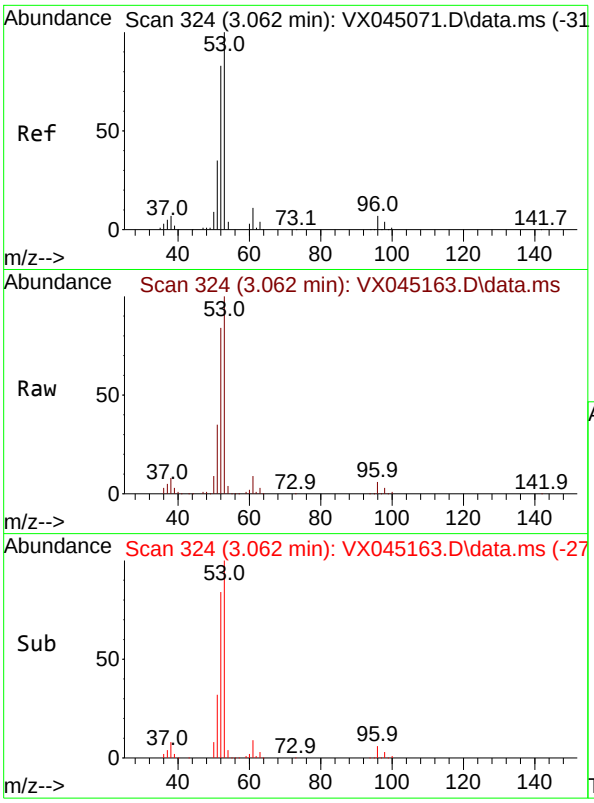




#14
Allyl chloride
Concen: 51.066 ug/l
RT: 2.654 min Scan# 257
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 41 Resp: 112939

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 69.9 | 53.8 | 80.8 |
| 76 | 32.4 | 25.2 | 37.8 |






#15
Acrylonitrile
Concen: 244.058 ug/l
RT: 3.062 min Scan# 3
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

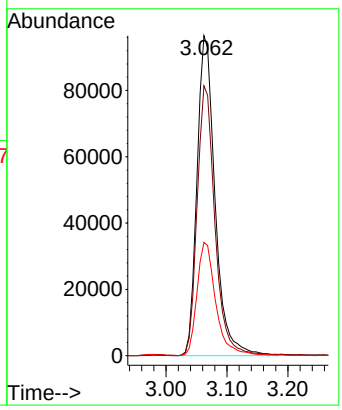
Tgt Ion: 53 Resp: 19926

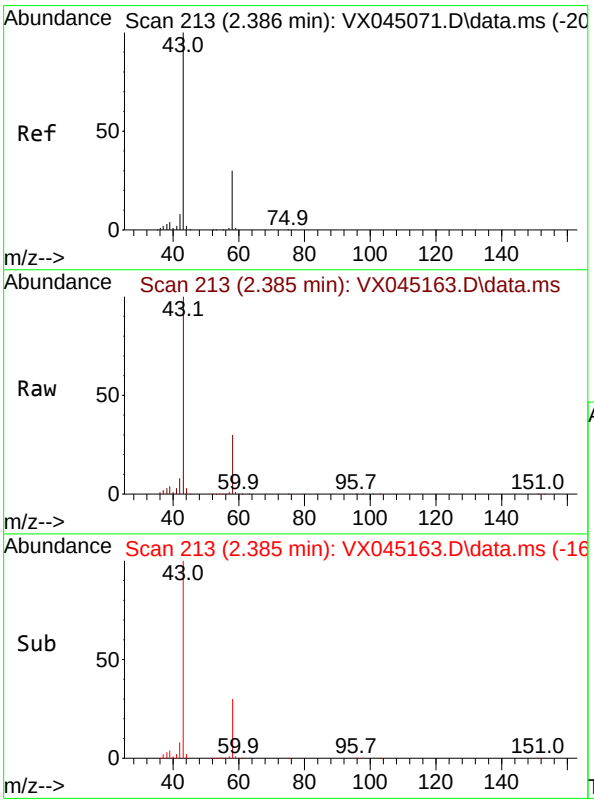
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 83.5 | 66.2 | 99.2 |
| 51 | 37.1 | 29.0 | 43.4 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

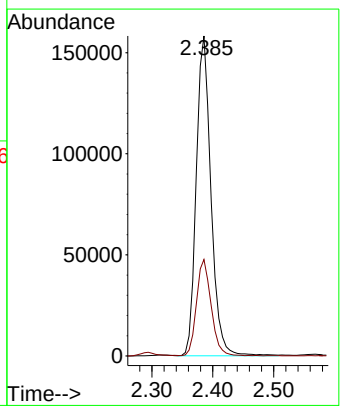


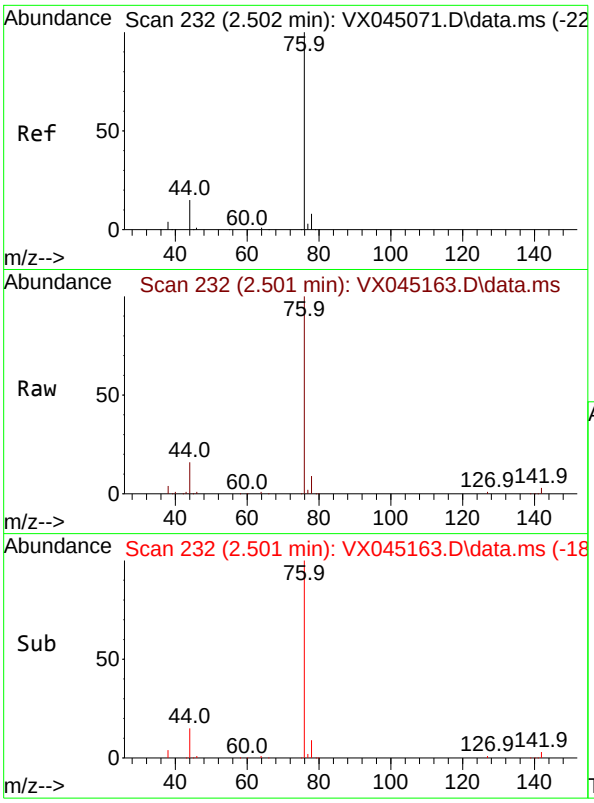




#16
Acetone
Concen: 356.478 ug/l
RT: 2.385 min Scan# 213
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 43 Resp: 266010

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 30.1 | 24.2 | 36.4 |

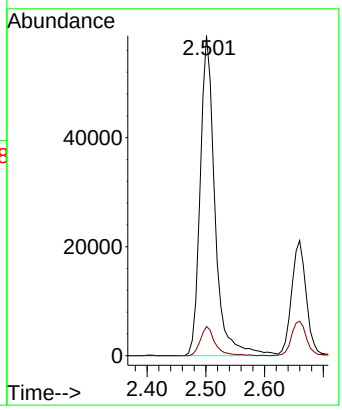





#17
Carbon Disulfide
Concen: 31.014 ug/l
RT: 2.501 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 76 Resp: 10263

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.1 | 6.6 | 9.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
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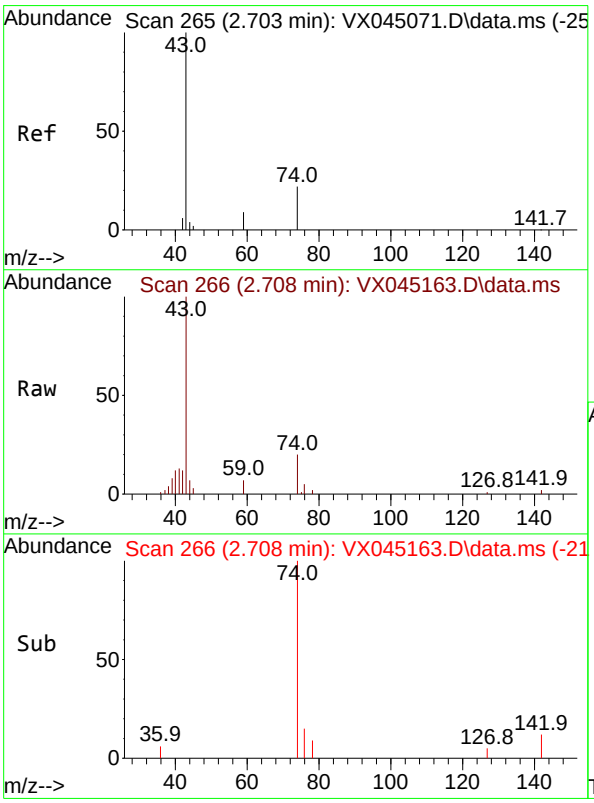
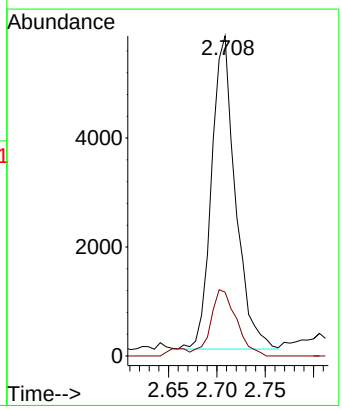
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

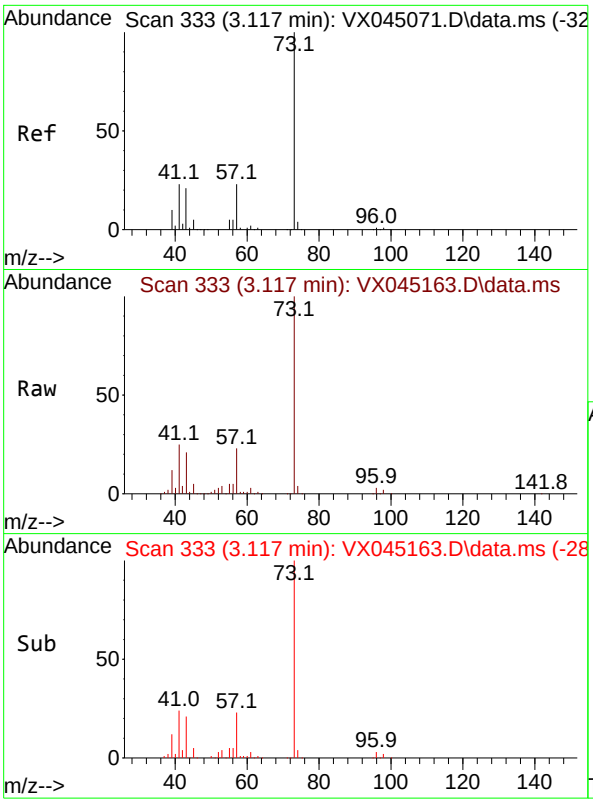



#18
Methyl Acetate
Concen: 5.506 ug/l
RT: 2.708 min Scan# 266
Delta R.T. 0.006 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 43 Resp: 9884

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 22.7 | 17.4 | 26.2 |






#19
Methyl tert-butyl Ether
Concen: 50.012 ug/l
RT: 3.117 min Scan# 3
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 73 Resp: 20847

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 22.6 | 18.5 | 27.7 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
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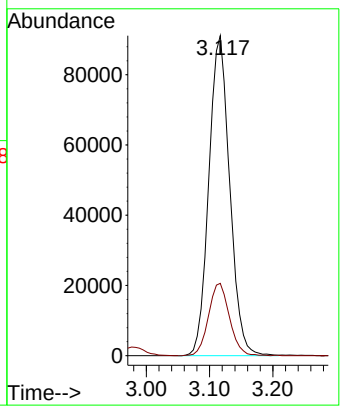
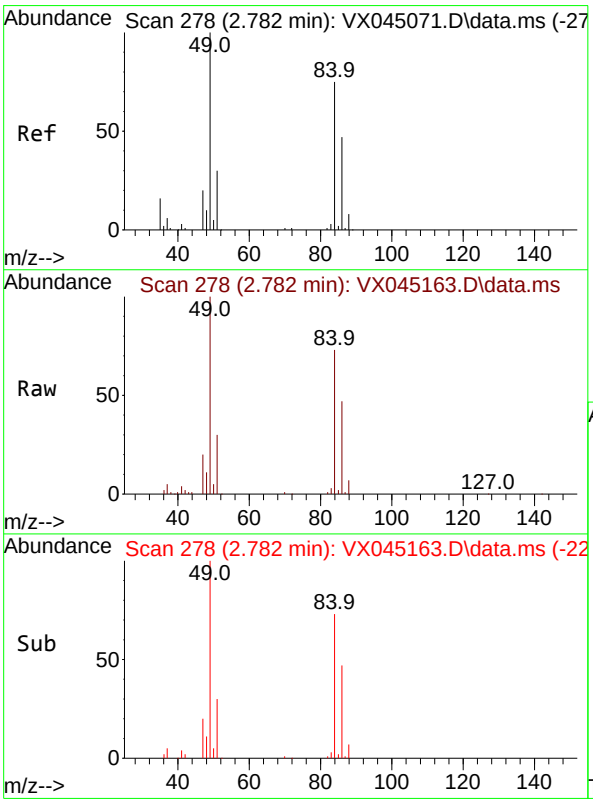
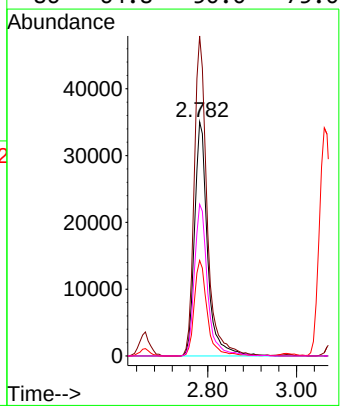


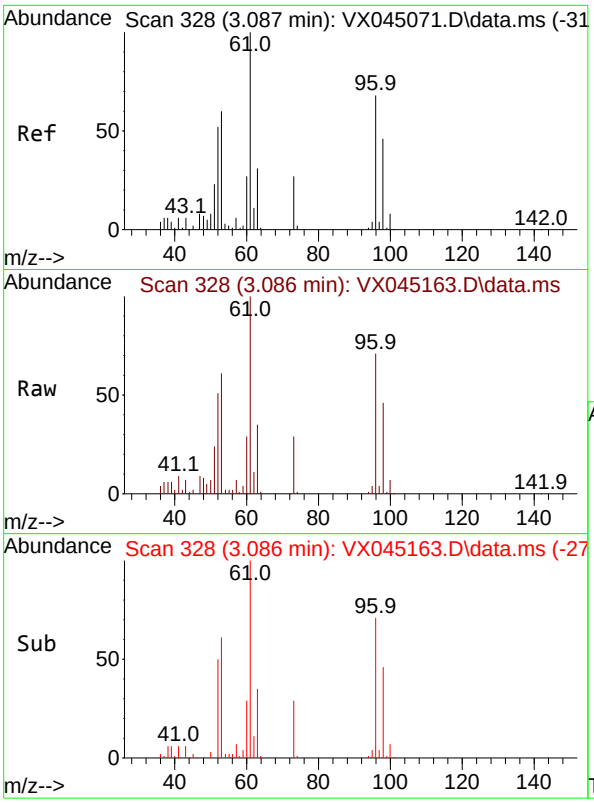




#20
Methylene Chloride
Concen: 47.942 ug/l
RT: 2.782 min Scan# 278
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 84 Resp: 70867

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 136.7 | 106.5 | 159.7 |
| 51 | 40.8 | 32.1 | 48.1 |
| 86 | 64.8 | 50.0 | 75.0 |






#21
trans-1,2-Dichloroethene
Concen: 50.793 ug/l
RT: 3.086 min Scan# 3
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 96 Resp: 6234

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 140.3 | 117.0 | 175.4 |
| 98 | 63.9 | 53.4 | 80.2 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
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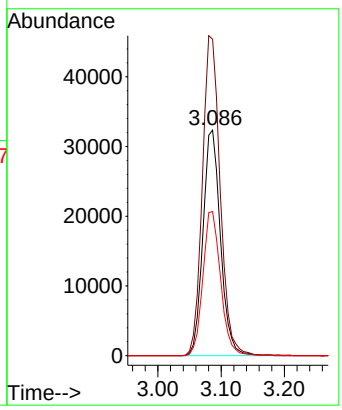
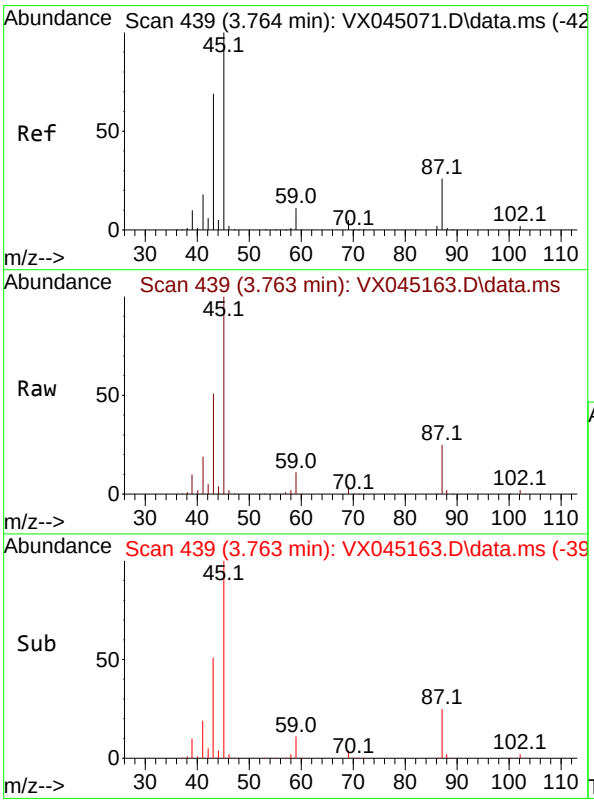
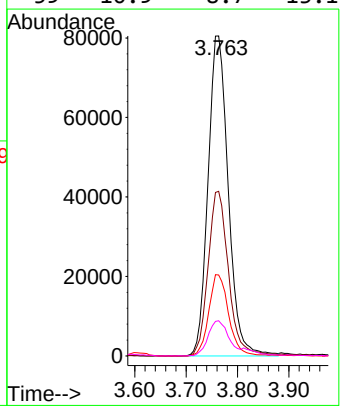


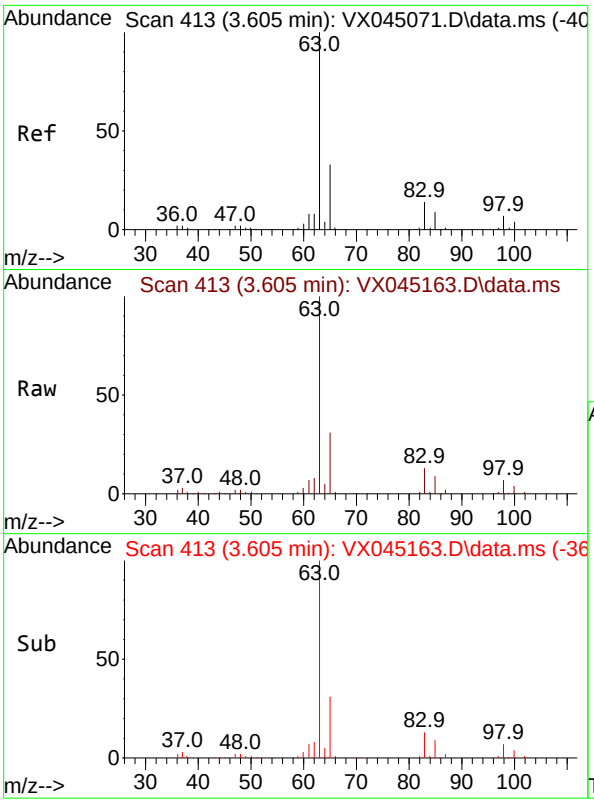




#22
Diisopropyl ether
Concen: 48.991 ug/l
RT: 3.763 min Scan# 439
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 45 Resp: 220358

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 51.5 | 54.9 | 82.3# |
| 87 | 25.3 | 21.0 | 31.4 |
| 59 | 10.9 | 8.7 | 13.1 |

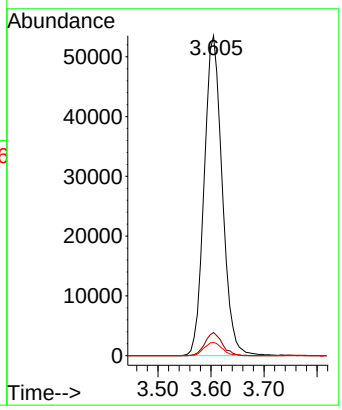





#24
1,1-Dichloroethane
Concen: 50.224 ug/l
RT: 3.605 min Scan# 4
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 63 Resp: 12660

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 7.3 | 3.4 | 10.2 |
| 100 | 4.1 | 2.1 | 6.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
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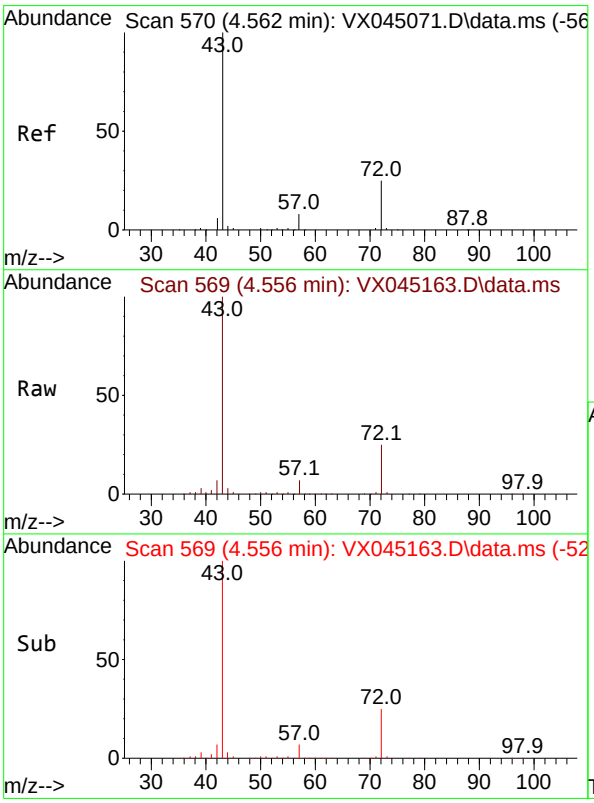
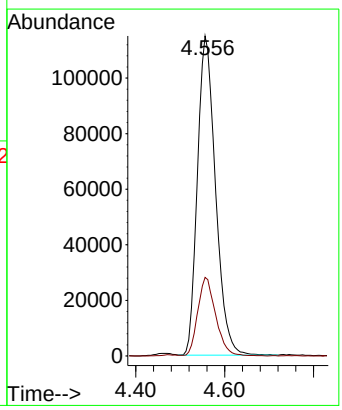
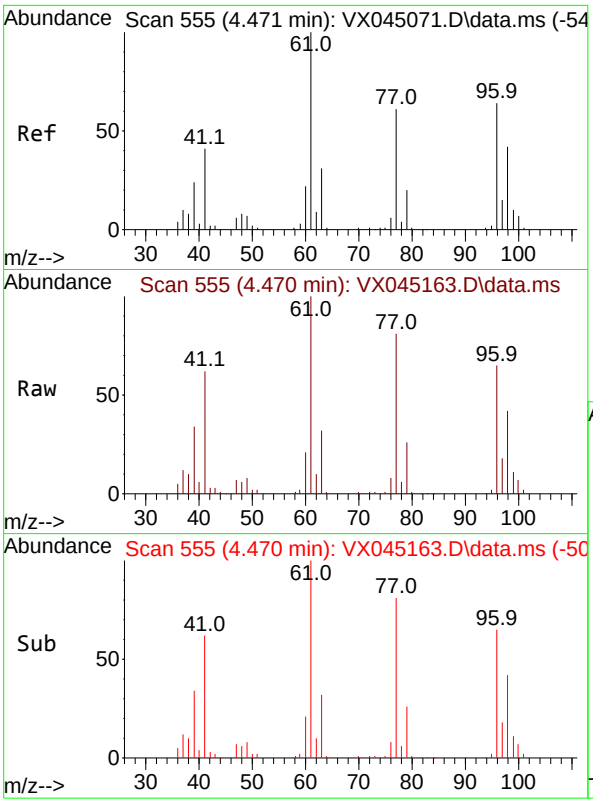



#25
2-Butanone
Concen: 289.732 ug/l
RT: 4.556 min Scan# 569
Delta R.T. -0.006 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 43 Resp: 325439

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 24.6 | 20.0 | 30.0 |

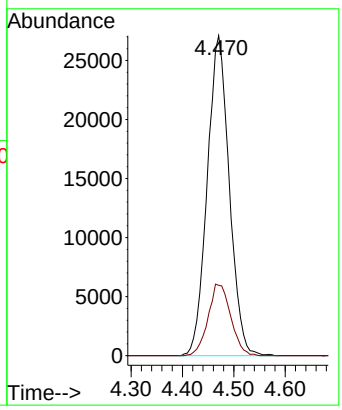





#26
2,2-Dichloropropane
Concen: 68.329 ug/l
RT: 4.470 min Scan# 5
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 77 Resp: 8079

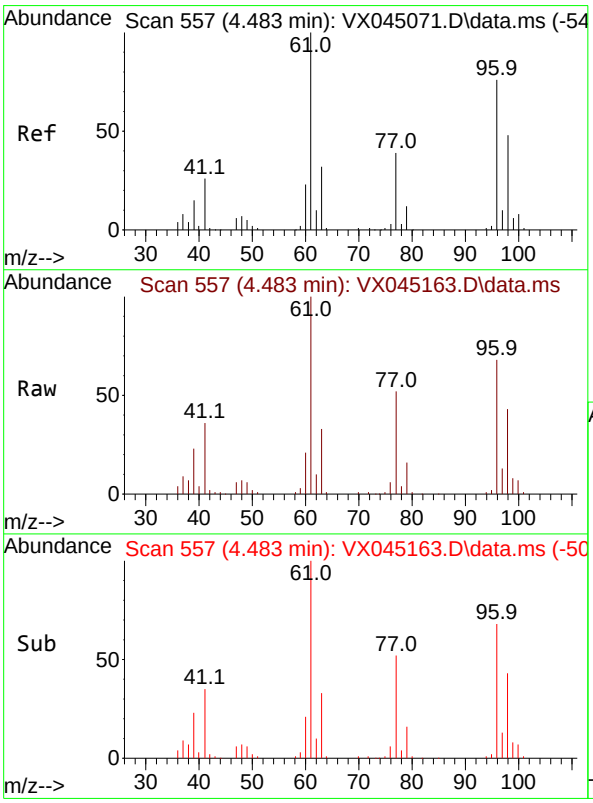
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 23.0 | 12.4 | 37.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
**APPROVED**

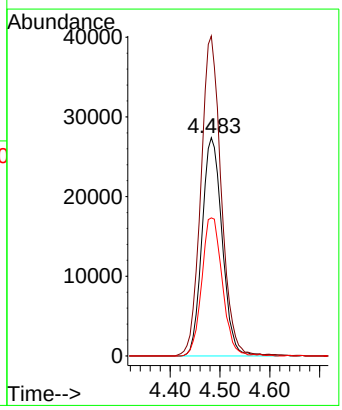
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

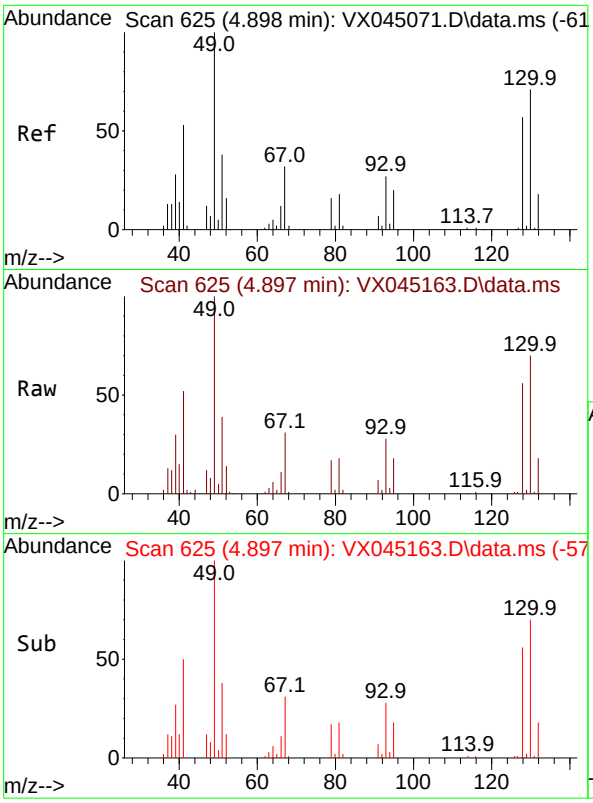



#27
cis-1,2-Dichloroethene
Concen: 50.639 ug/l
RT: 4.483 min Scan# 557
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 96 Resp: 76731

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 147.6 | 0.0 | 283.2 |
| 98 | 64.4 | 0.0 | 128.0 |

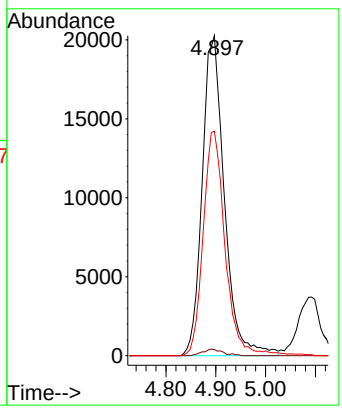





#28
Bromochloromethane
Concen: 52.031 ug/l
RT: 4.897 min Scan# 6
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 49 Resp: 6251

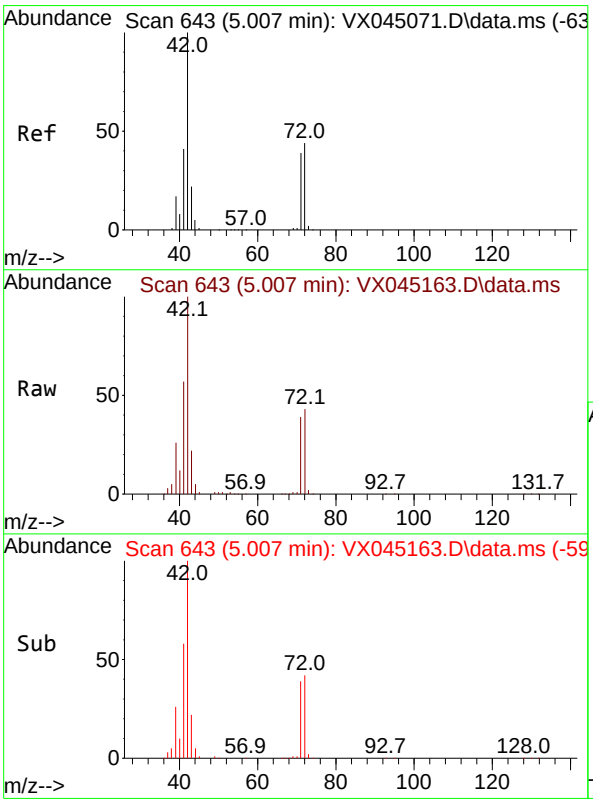
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.9 | 0.0 | 3.4 |
| 130 | 69.5 | 56.1 | 84.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
**APPROVED**

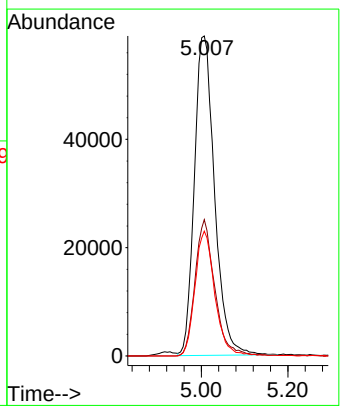
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

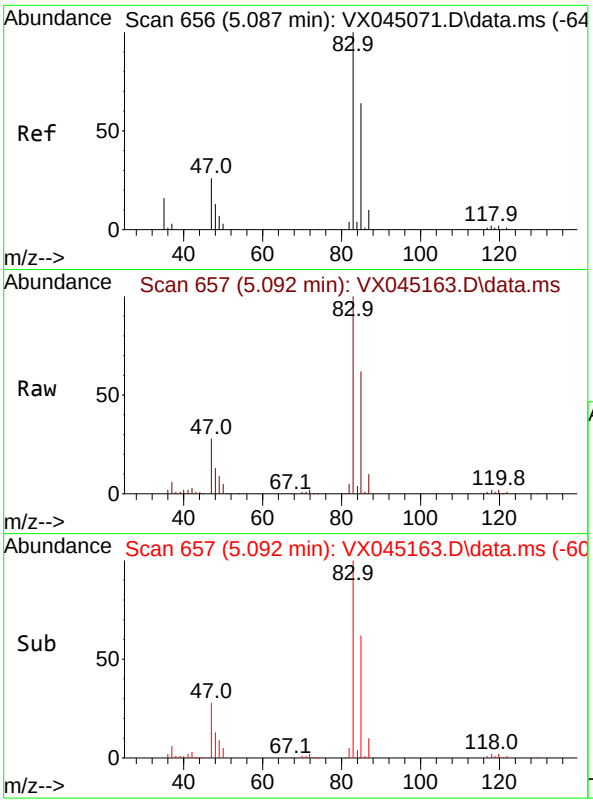



#29
Tetrahydrofuran
Concen: 253.553 ug/l
RT: 5.007 min Scan# 643
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 42 Resp: 191259

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 41.7 | 34.1 | 51.1 |
| 71 | 38.5 | 31.4 | 47.0 |






#30
Chloroform
Concen: 50.192 ug/l
RT: 5.092 min Scan# 6
Delta R.T. 0.006 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

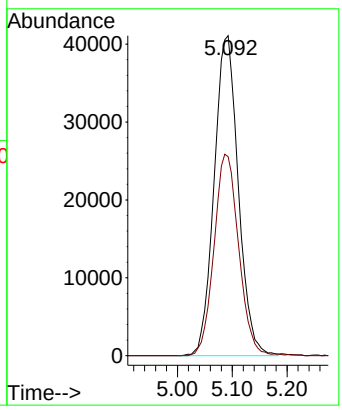
Tgt Ion: 83 Resp: 12571

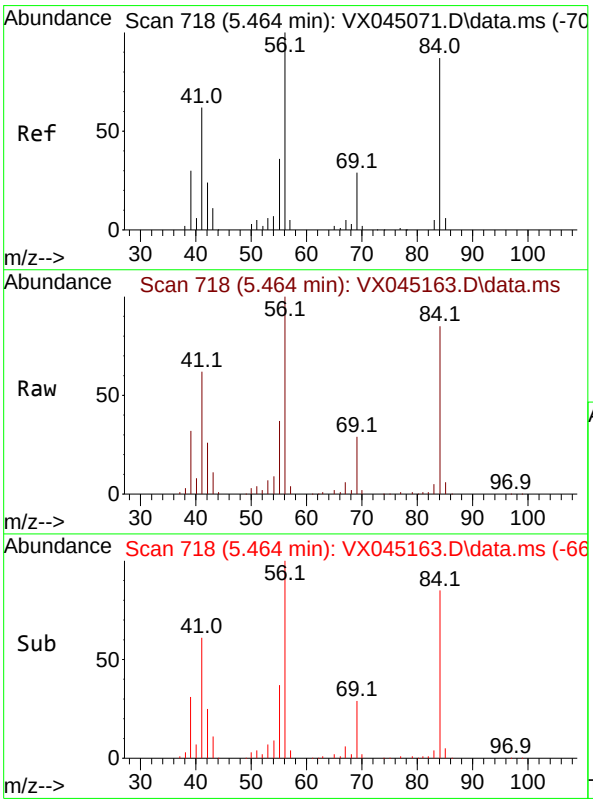
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 62.2 | 51.4 | 77.2 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

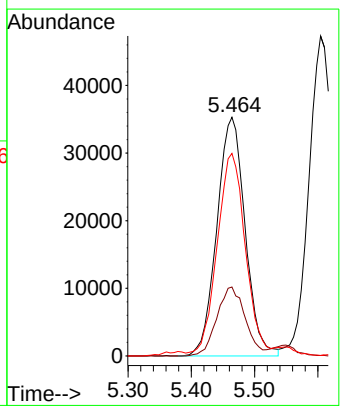


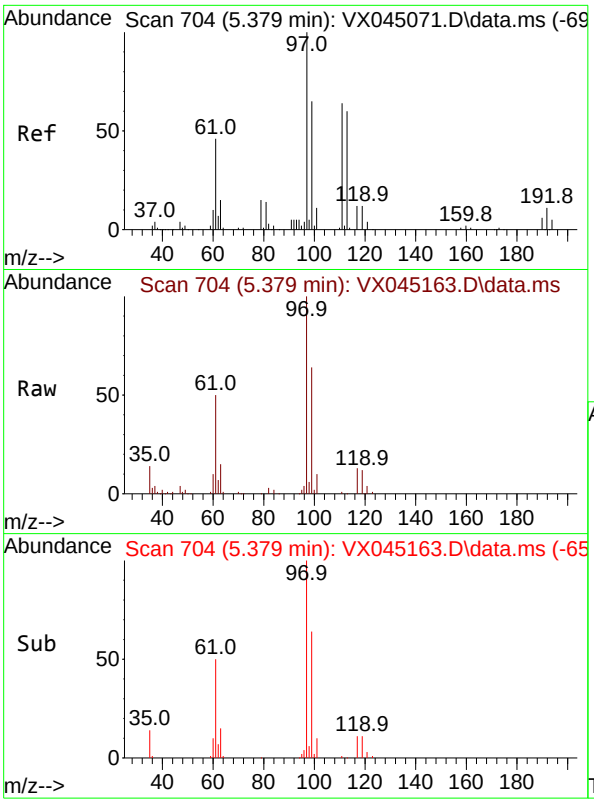




#31
Cyclohexane
Concen: 50.038 ug/l
RT: 5.464 min Scan# 718
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 56 Resp: 109491

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 28.9 | 23.4 | 35.2 |
| 84 | 83.0 | 69.4 | 104.2 |

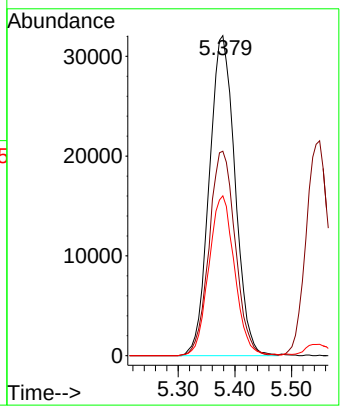





#32
1,1,1-Trichloroethane
Concen: 49.885 ug/l
RT: 5.379 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 97 Resp: 10091

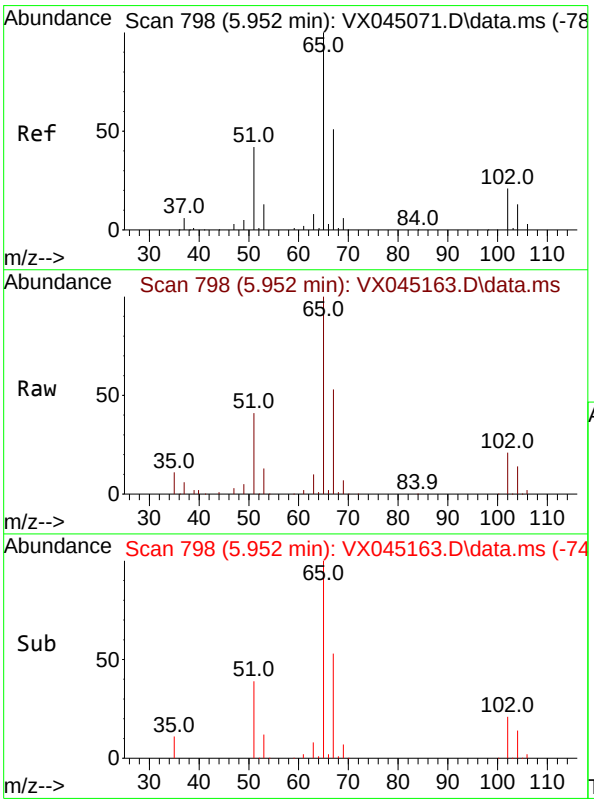
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 65.2 | 51.6 | 77.4 |
| 61 | 50.2 | 38.4 | 57.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
**APPROVED**

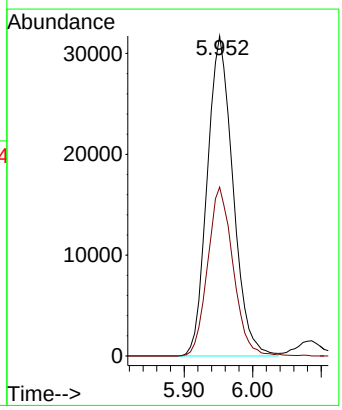
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

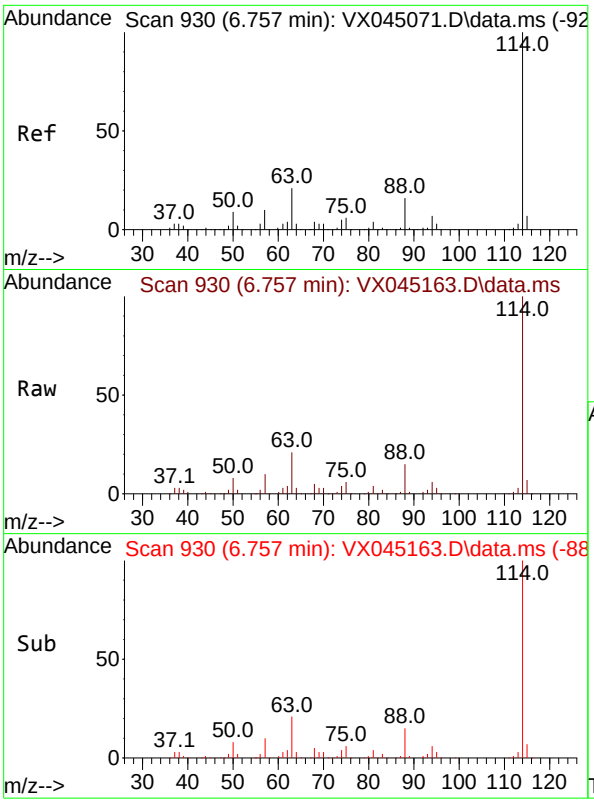



#33
1,2-Dichloroethane-d4
Concen: 51.389 ug/l
RT: 5.952 min Scan# 798
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 65 Resp: 82650

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 52.2 | 0.0 | 106.2 |






#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.757 min Scan# 9
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion:114 Resp: 17908

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 21.4 | 0.0 | 41.8 |
| 88 | 15.3 | 0.0 | 32.8 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 03/10/2025
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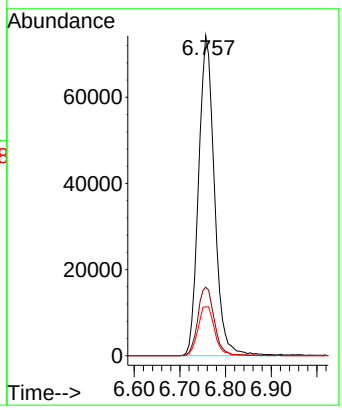
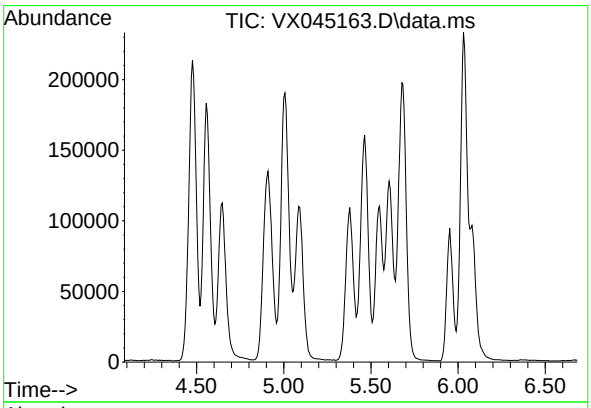


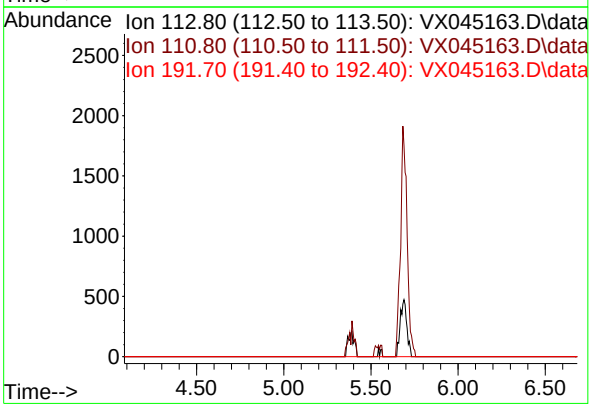



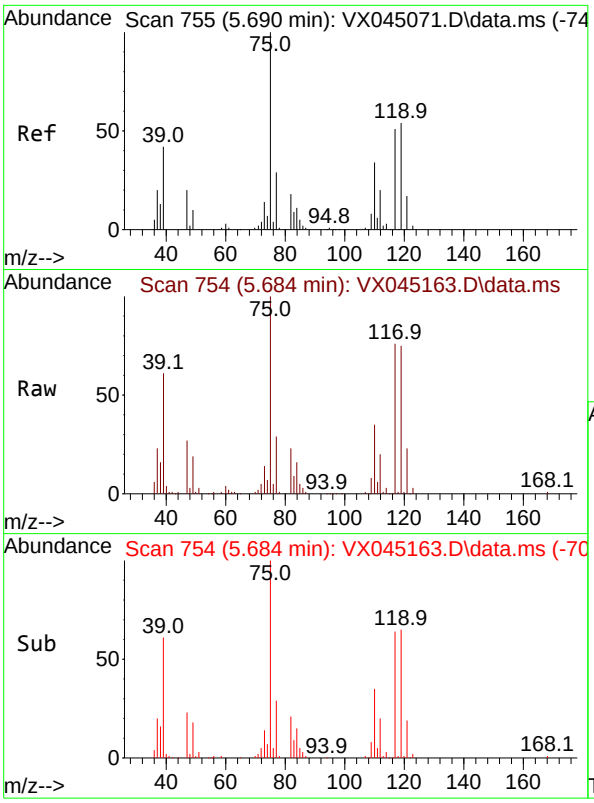

#35
Dibromofluoromethane
Concen: 0.000 ug/l
Expected RT: 5.39 min

Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 113

| Sig | Exp Ratio |
|---|---|
| 113 | 100 |
| 111 | 102.2 |
| 192 | 17.9 |

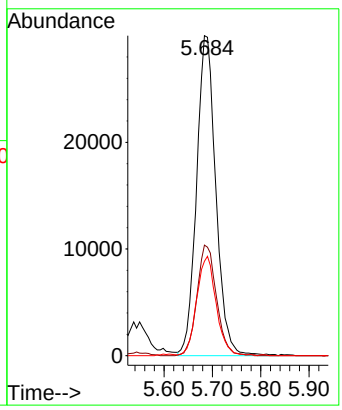





#36
1,1-Dichloropropene
Concen: 50.660 ug/l
RT: 5.684 min Scan# 7
Delta R.T. -0.006 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 75 Resp: 8319

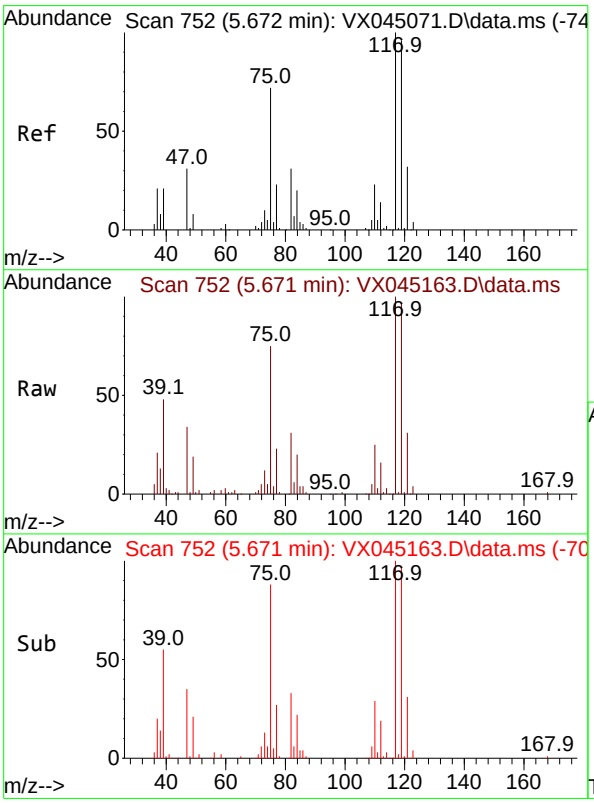
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 34.9 | 16.9 | 50.6 |
| 77 | 31.4 | 24.5 | 36.7 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
**APPROVED**

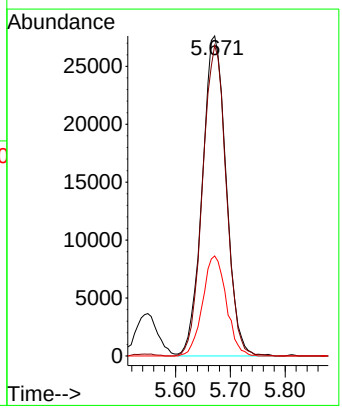
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

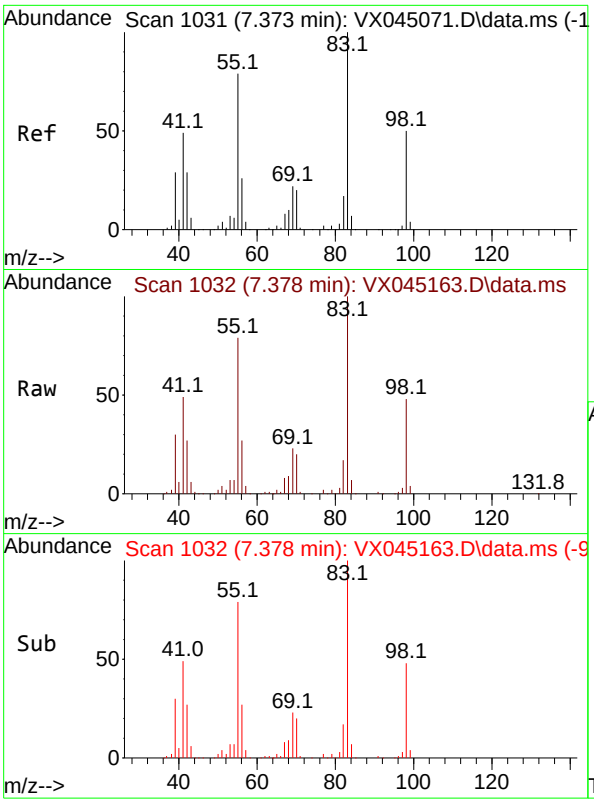



#38
Carbon Tetrachloride
Concen: 50.057 ug/l
RT: 5.671 min Scan# 752
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion:117 Resp: 83458

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 97.1 | 76.7 | 115.1 |
| 121 | 31.2 | 25.5 | 38.3 |






#39
Methylcyclohexane
Concen: 52.749 ug/l
RT: 7.378 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 83 Resp: 10379

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 79.1 | 63.0 | 94.4 |
| 98 | 47.7 | 39.7 | 59.5 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
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Reviewed By :John Carlone 03/10/2025
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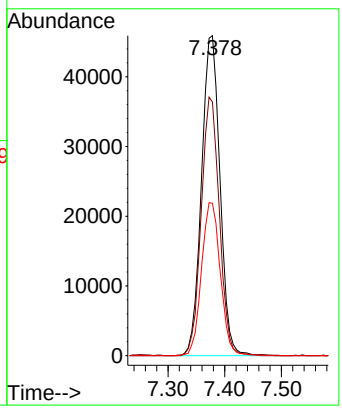
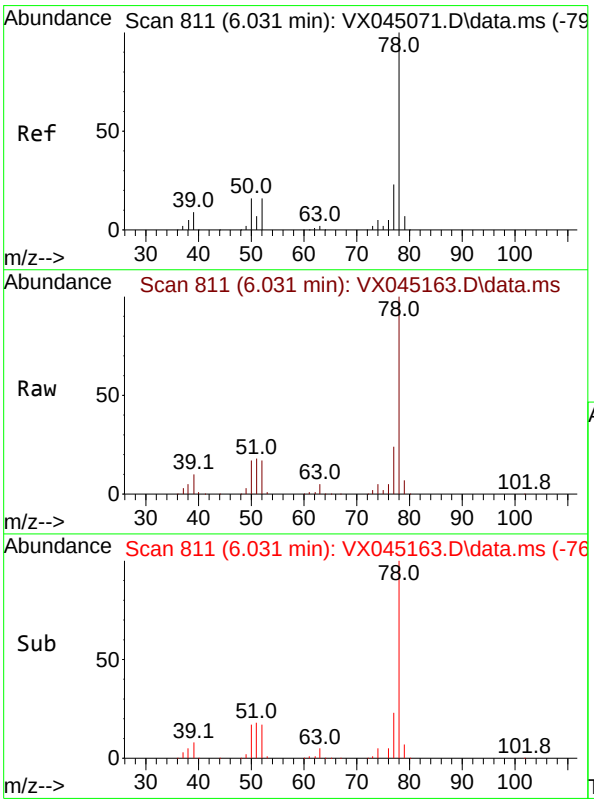
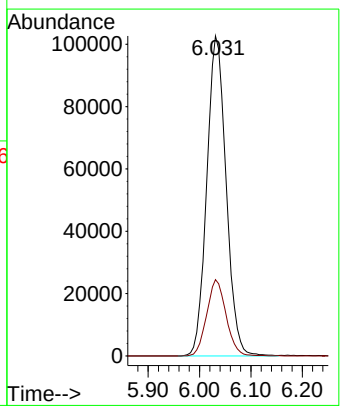


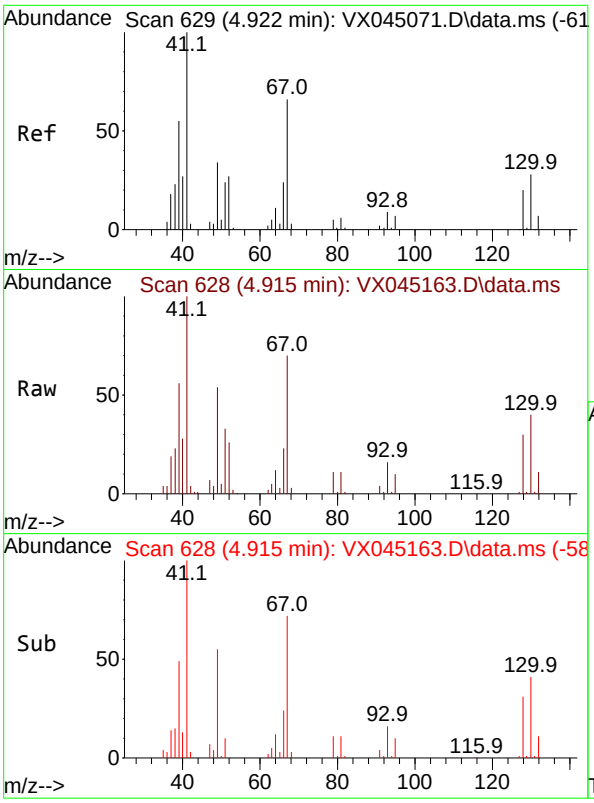




#40
Benzene
Concen: 51.682 ug/l
RT: 6.031 min Scan# 811
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 78 Resp: 268012

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.9 | 18.8 | 28.2 |

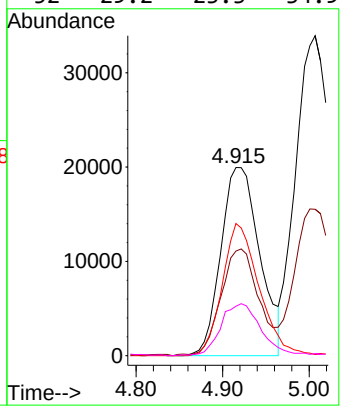





#41
Methacrylonitrile
Concen: 54.549 ug/l
RT: 4.915 min Scan# 6
Delta R.T. -0.006 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 41 Resp: 6241

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 54.1 | 44.6 | 67.0 |
| 67 | 66.6 | 53.9 | 80.9 |
| 52 | 29.2 | 23.3 | 34.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 03/10/2025
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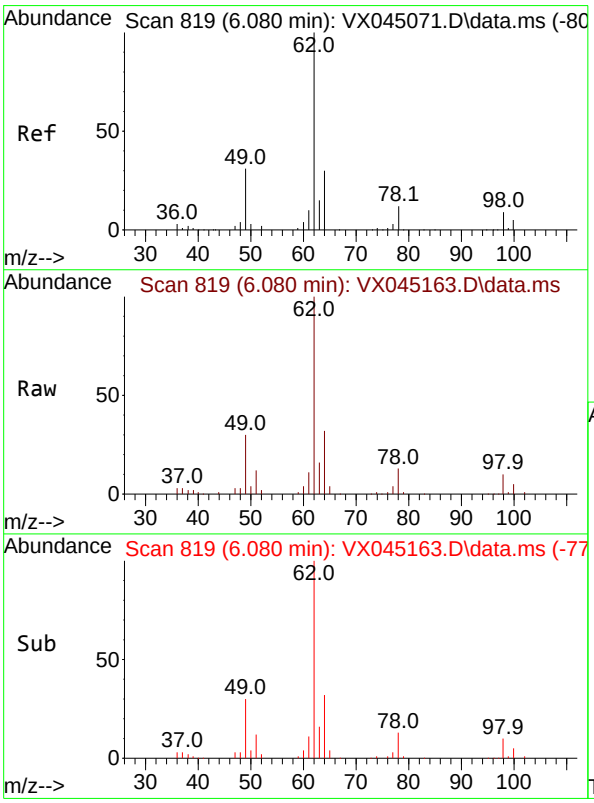
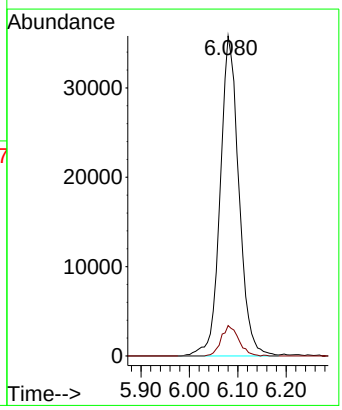
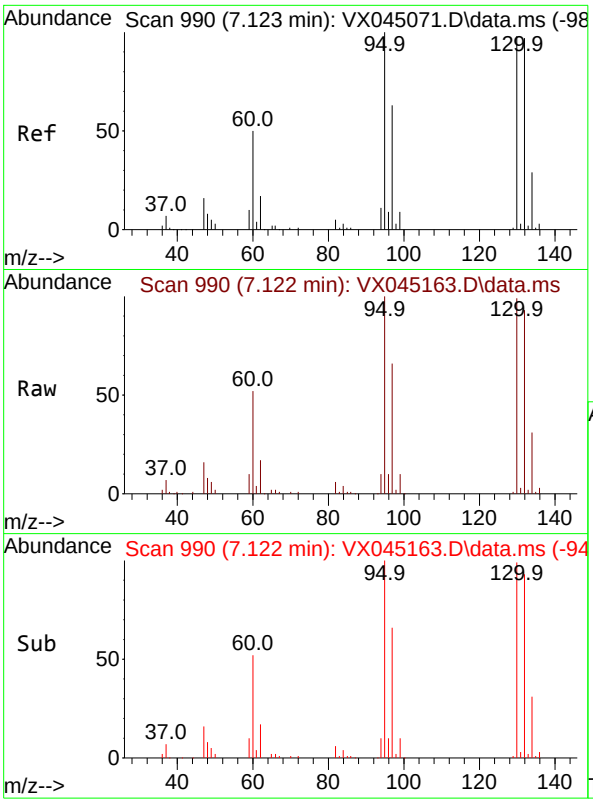



#42
1,2-Dichloroethane
Concen: 51.592 ug/l
RT: 6.080 min Scan# 819
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 62 Resp: 96342

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 8.9 | 0.0 | 18.2 |

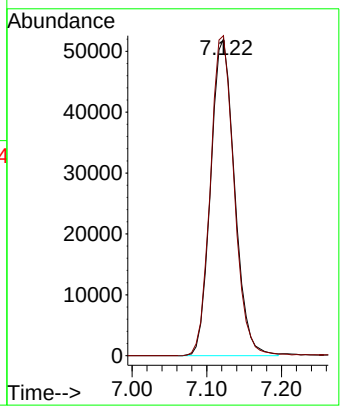





#44
Trichloroethene
Concen: 94.894 ug/l
RT: 7.122 min Scan# 9
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion:130 Resp: 11554

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 101.0 | 0.0 | 205.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
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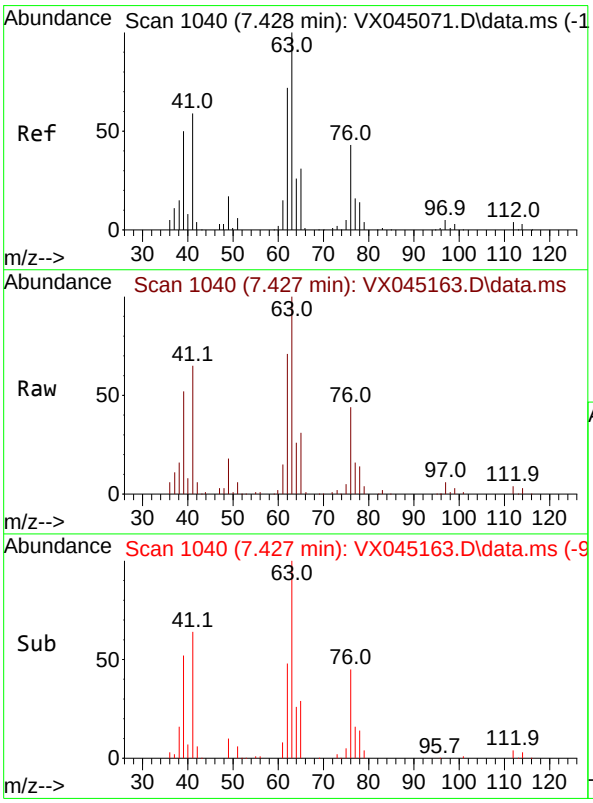
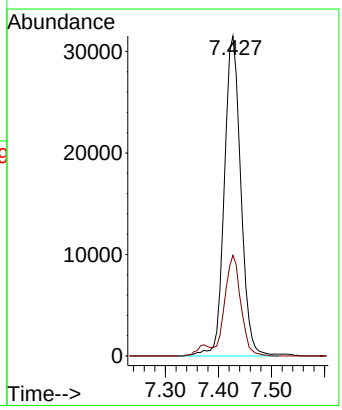
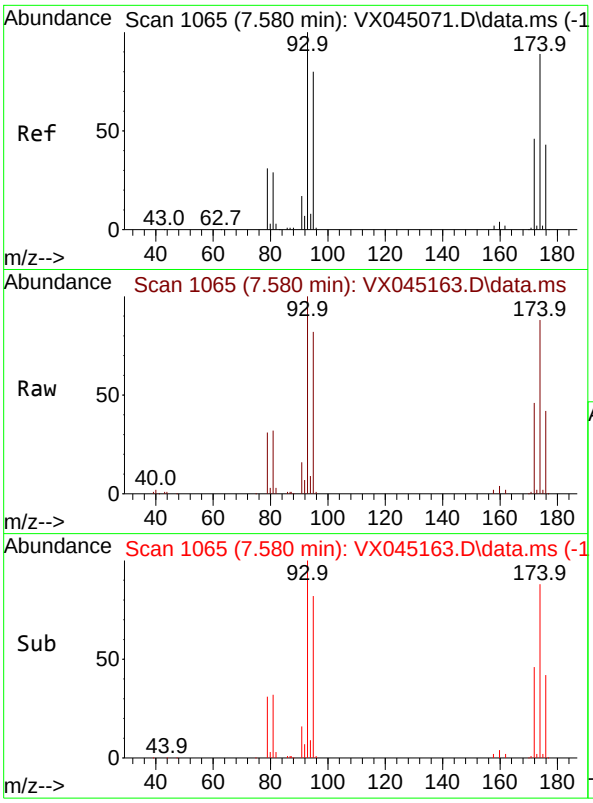



#45
1,2-Dichloropropane
Concen: 51.209 ug/l
RT: 7.427 min Scan# 1040
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 63 Resp: 68277

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 31.5 | 24.7 | 37.1 |

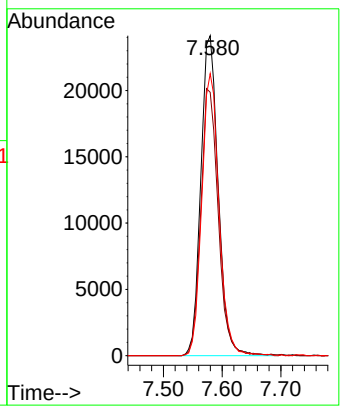





#46
Dibromomethane
Concen: 52.588 ug/l
RT: 7.580 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 93 Resp: 4955

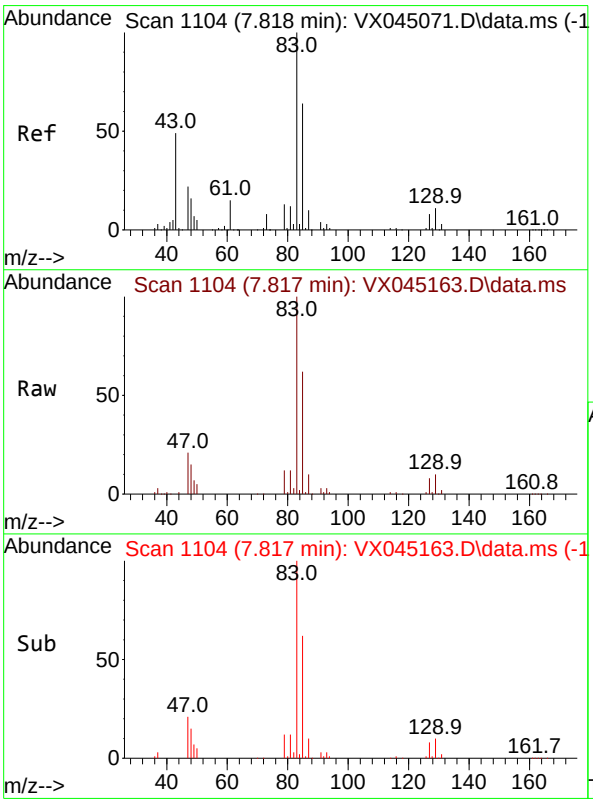
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 83.8 | 65.8 | 98.8 |
| 174 | 87.8 | 72.2 | 108.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
**APPROVED**

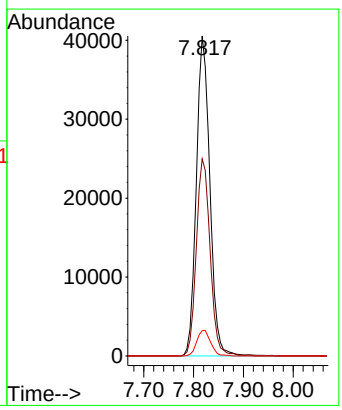
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

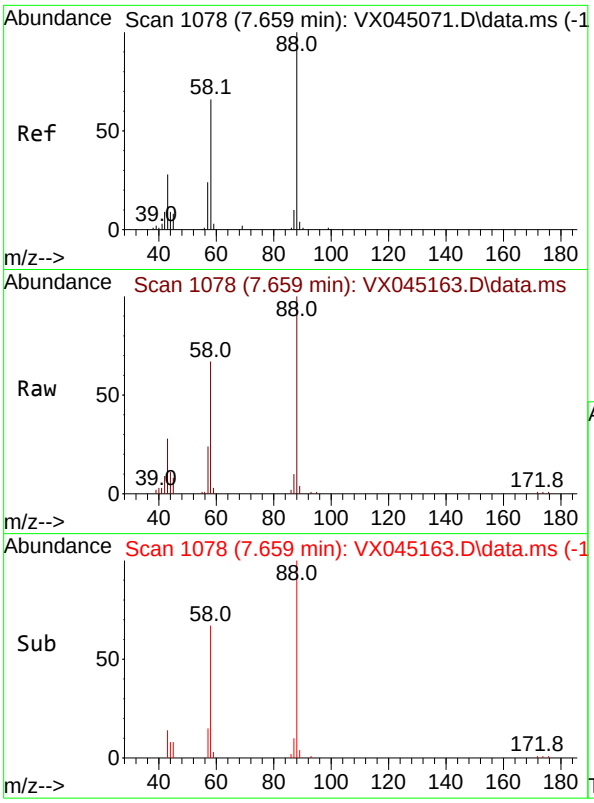



#47
Bromodichloromethane
Concen: 41.338 ug/l
RT: 7.817 min Scan# 1104
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 83 Resp: 76414

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 61.6 | 51.1 | 76.7 |
| 127 | 7.9 | 6.4 | 9.6 |






#49
1,4-Dioxane
Concen: 913.440 ug/l
RT: 7.659 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

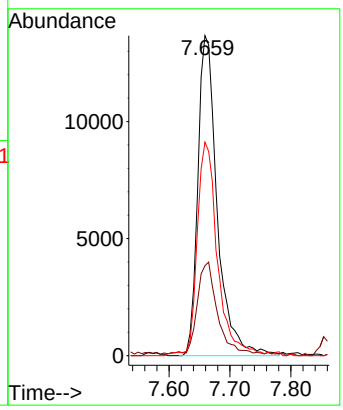
Tgt Ion: 88 Resp: 3024

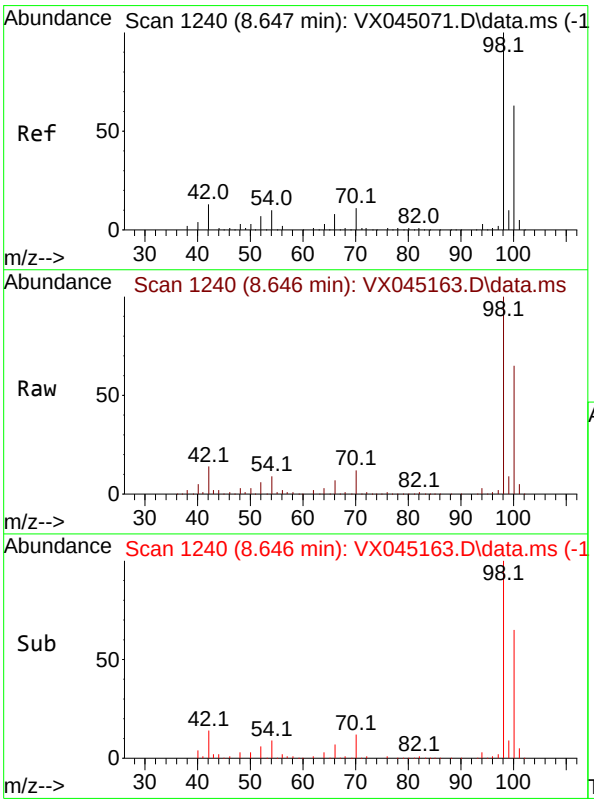
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 29.3 | 28.7 | 43.1 |
| 58 | 69.7 | 55.8 | 83.8 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

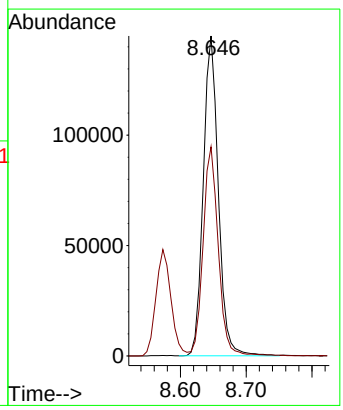


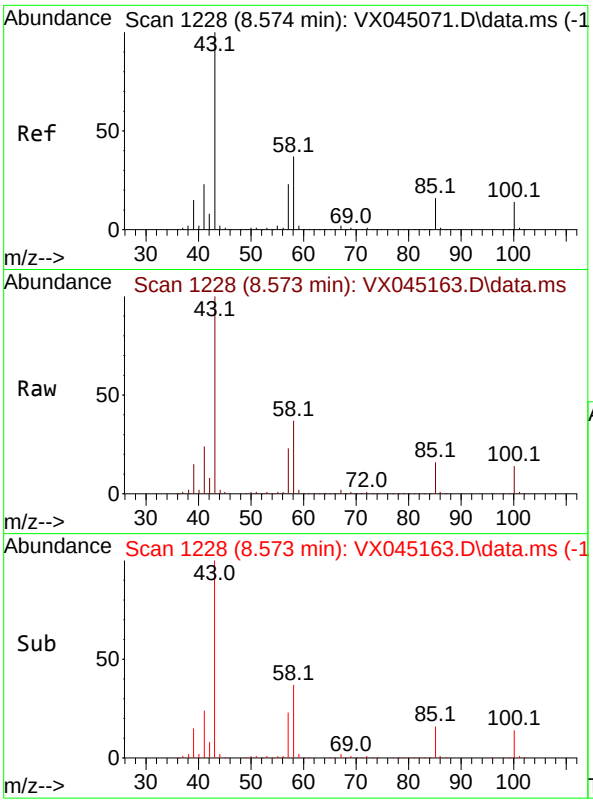




#50
Toluene-d8
Concen: 53.204 ug/l
RT: 8.646 min Scan# 1240
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 98 Resp: 230975

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 66.0 | 52.0 | 78.0 |

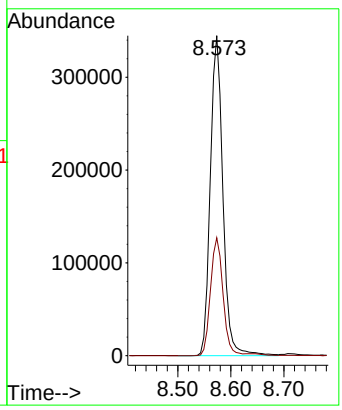





#51
4-Methyl-2-Pentanone
Concen: 270.554 ug/l
RT: 8.573 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 43 Resp: 56844

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 36.8 | 29.2 | 43.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
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Reviewed By :John Carlone 03/10/2025
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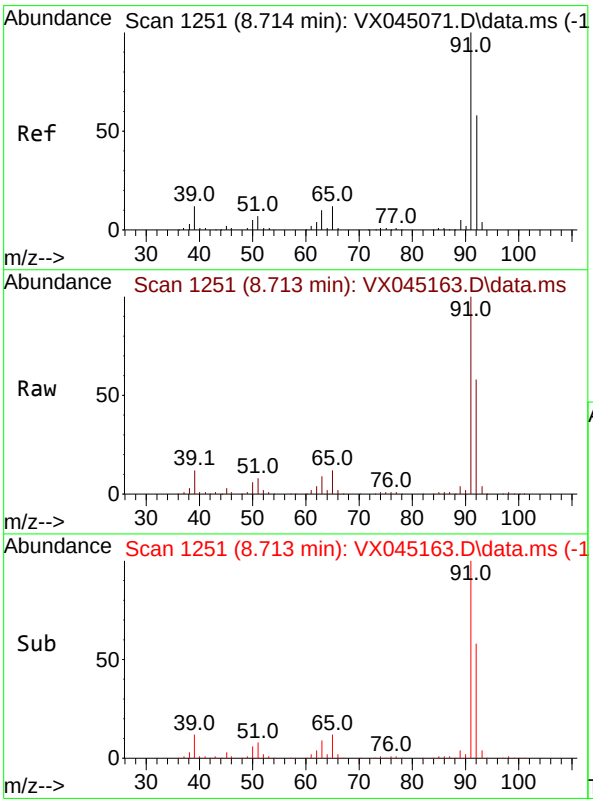
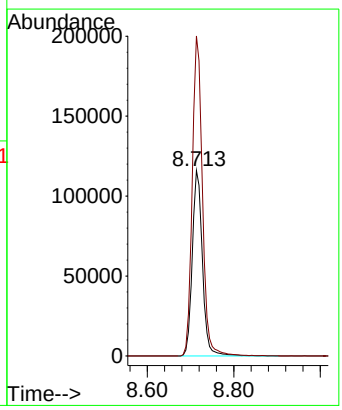
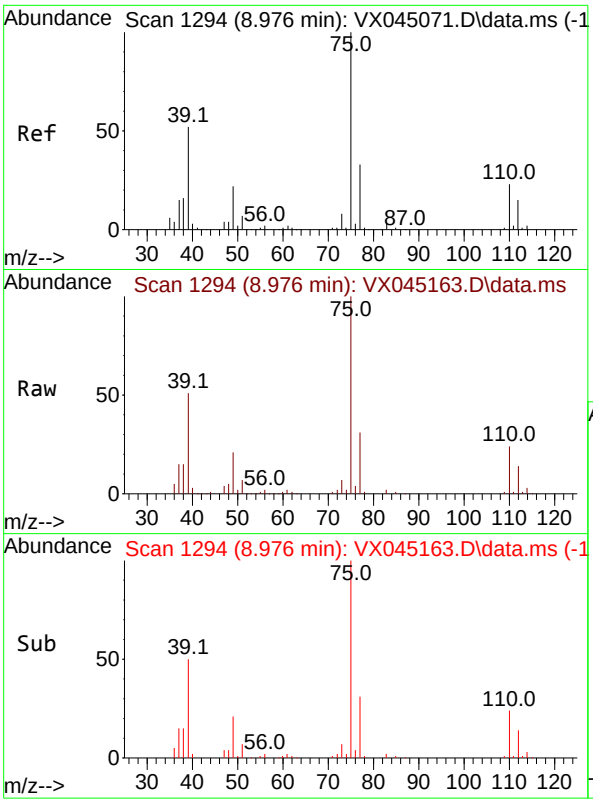



#52
Toluene
Concen: 61.939 ug/l
RT: 8.713 min Scan# 1251
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 92 Resp: 188456

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 173.0 | 138.9 | 208.3 |

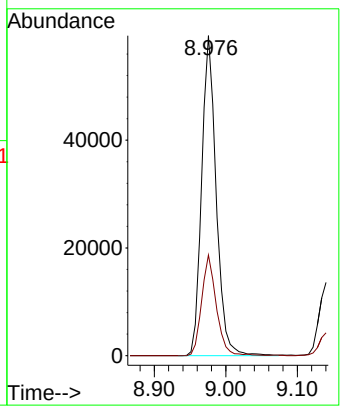





#53
t-1,3-Dichloropropene
Concen: 54.366 ug/l
RT: 8.976 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 75 Resp: 8401

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.5 | 26.5 | 39.7 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
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Reviewed By :John Carlone 03/10/2025
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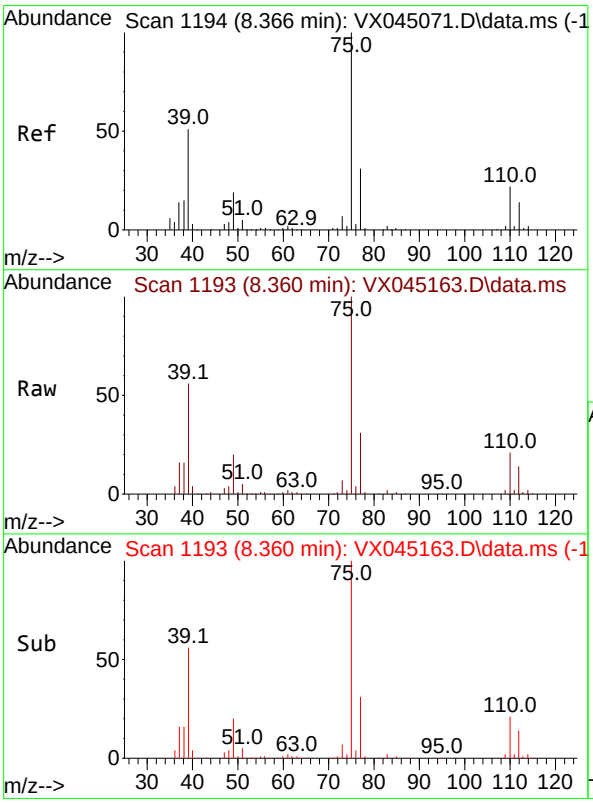
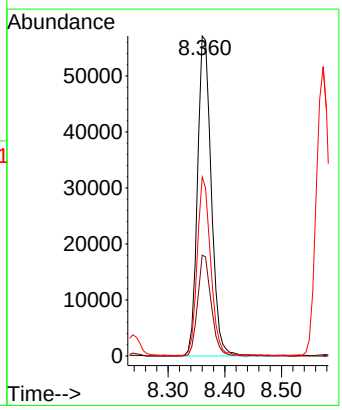
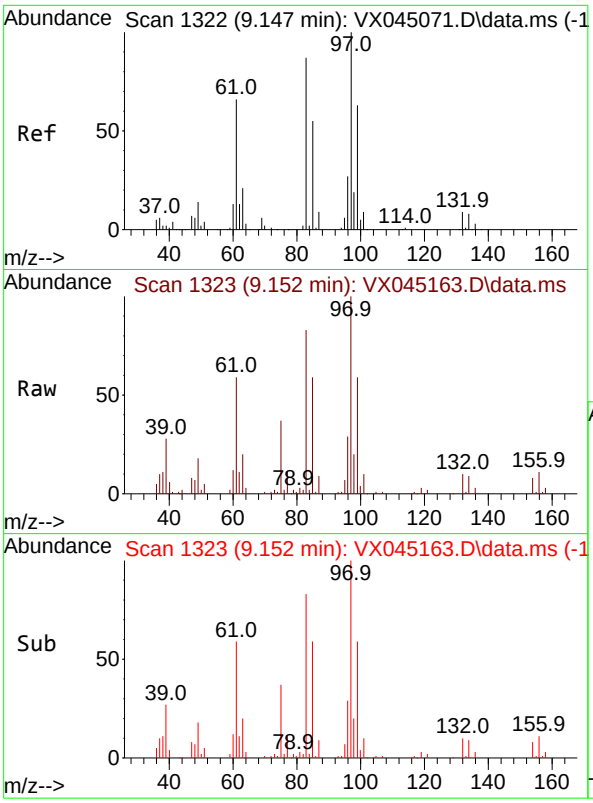



#54
cis-1,3-Dichloropropene
Concen: 53.555 ug/l
RT: 8.360 min Scan# 1193
Delta R.T. -0.007 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 75 Resp: 96507

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.5 | 24.7 | 37.1 |
| 39 | 55.7 | 40.7 | 61.1 |

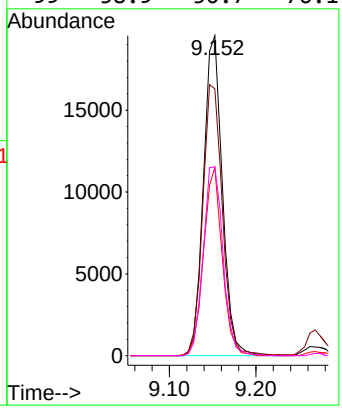





#55
1,1,2-Trichloroethane
Concen: 23.613 ug/l
RT: 9.152 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 97 Resp: 2957

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 83.4 | 69.4 | 104.2 |
| 85 | 58.8 | 44.1 | 66.1 |
| 99 | 58.9 | 50.7 | 76.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
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Reviewed By :John Carlone 03/10/2025
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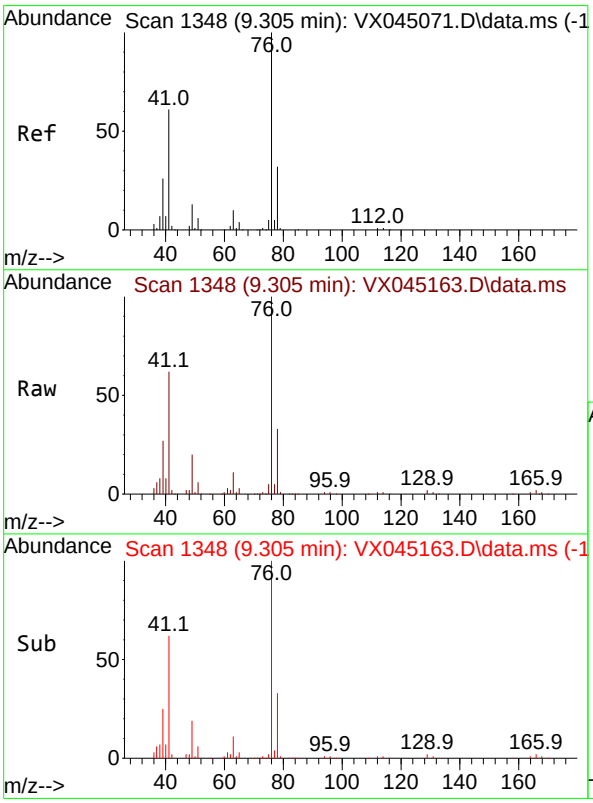
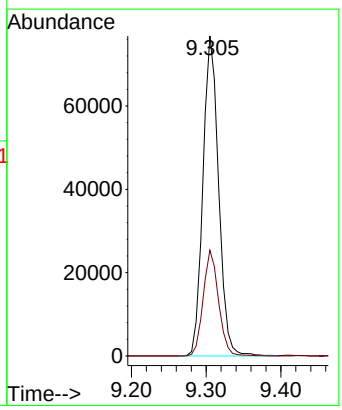
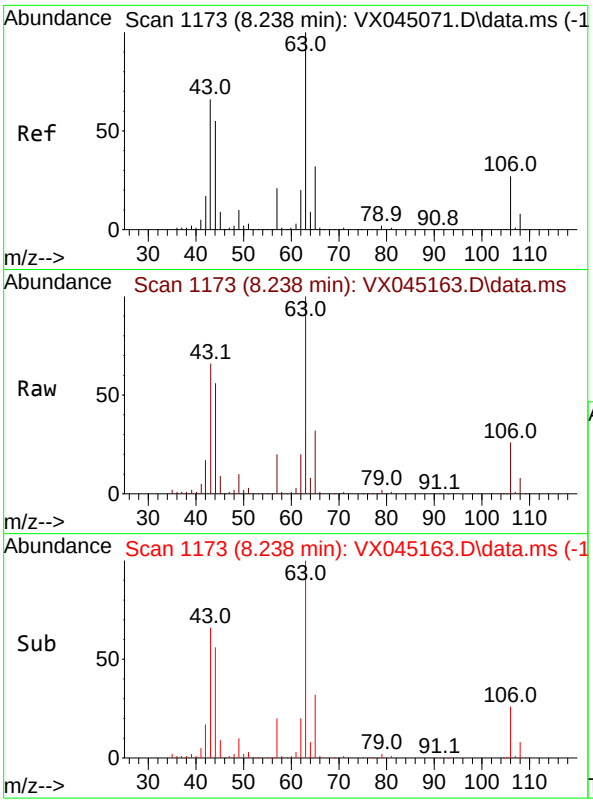



#57
1,3-Dichloropropane
Concen: 51.541 ug/l
RT: 9.305 min Scan# 1348
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 76 Resp: 111722

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.4 | 25.5 | 38.3 |






#58
2-Chloroethyl Vinyl ether
Concen: 267.664 ug/l
RT: 8.238 min Scan# 11
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 63 Resp: 24860

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 26.4 | 21.5 | 32.3 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
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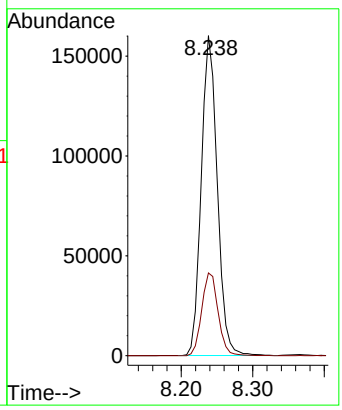
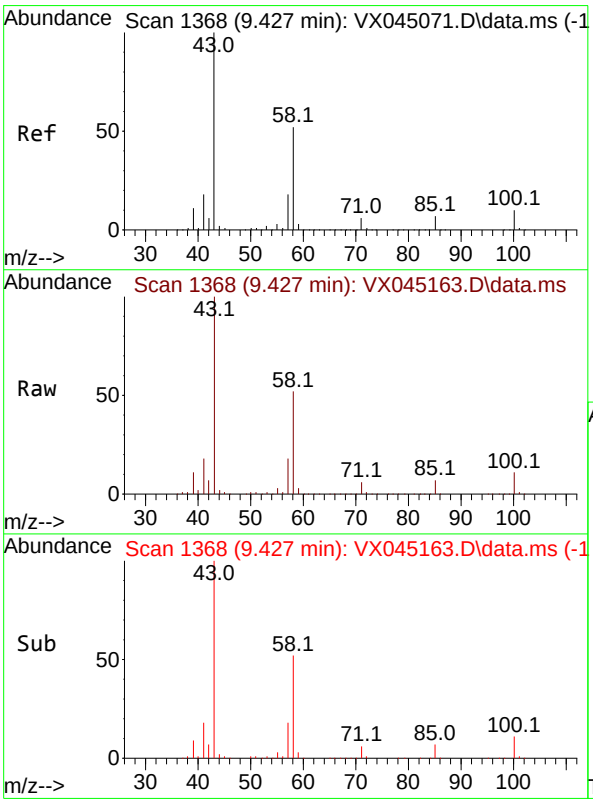
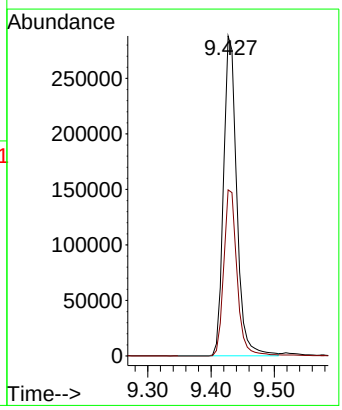


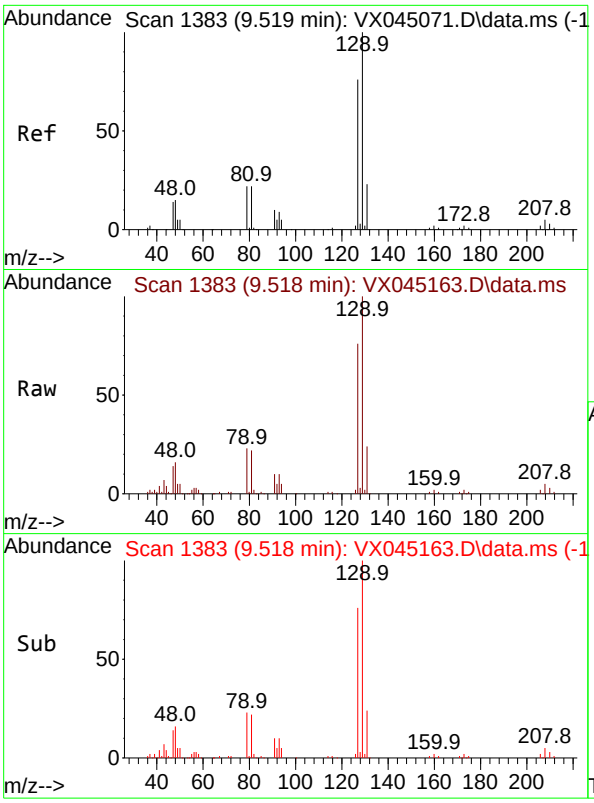




#59
2-Hexanone
Concen: 274.135 ug/l
RT: 9.427 min Scan# 1368
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 43 Resp: 417312

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 52.6 | 25.9 | 77.6 |

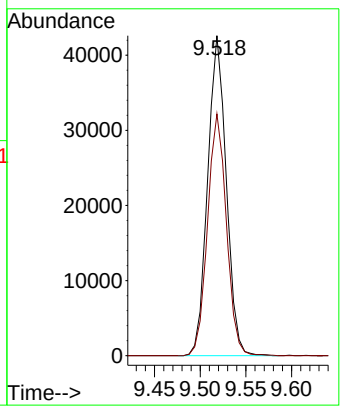





#60
Dibromochloromethane
Concen: 46.004 ug/l
RT: 9.518 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion:129 Resp: 6025

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 76.6 | 38.5 | 115.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

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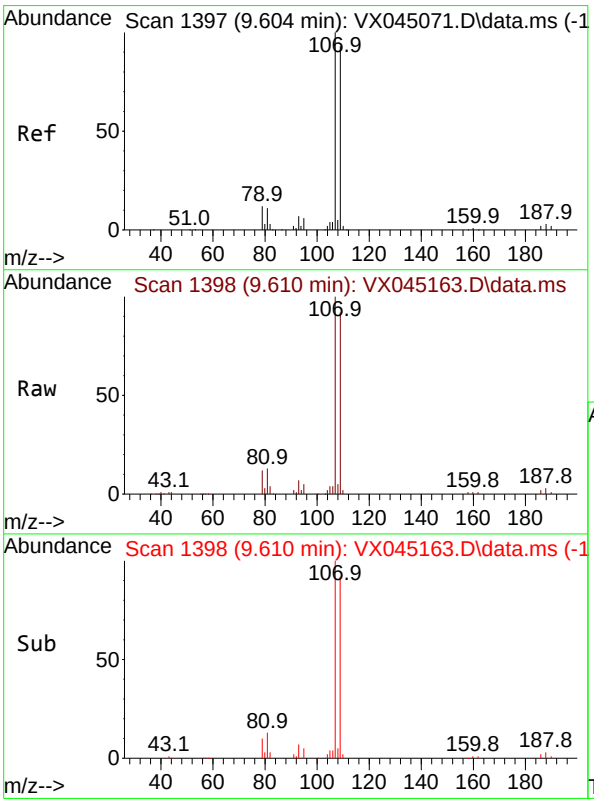
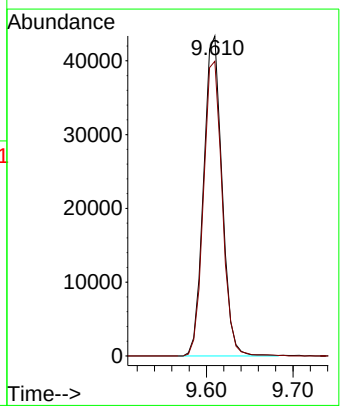
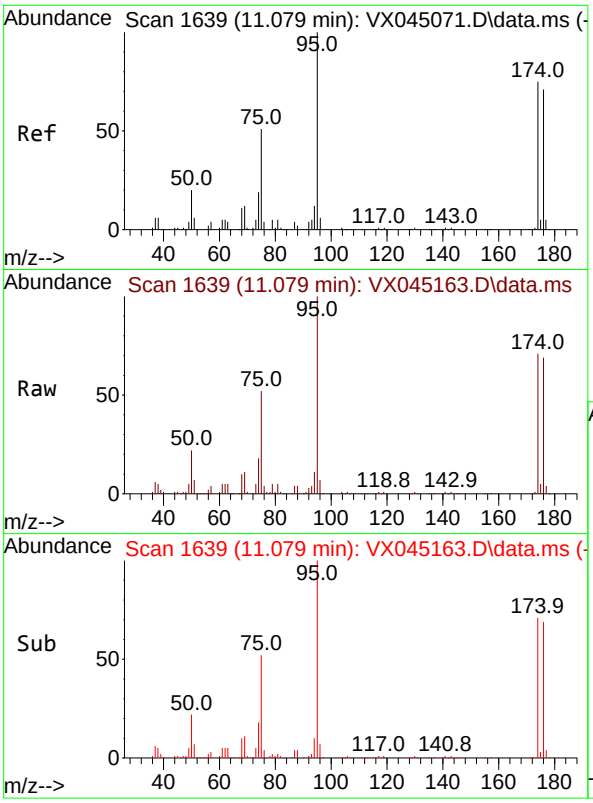



#61
1,2-Dibromoethane
Concen: 51.190 ug/l
RT: 9.610 min Scan# 1398
Delta R.T. 0.006 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion:107 Resp: 64009

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 93.3 | 76.1 | 114.1 |

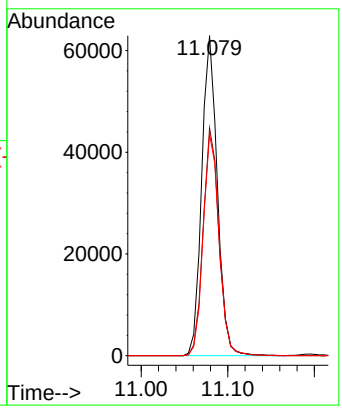





#62
4-Bromofluorobenzene
Concen: 54.731 ug/l
RT: 11.079 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 95 Resp: 7873

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 72.1 | 0.0 | 148.2 |
| 176 | 70.5 | 0.0 | 141.4 |




**Instrument :**
MSVOA_X
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BR-05-465-030525MS

**Manual Integrations**
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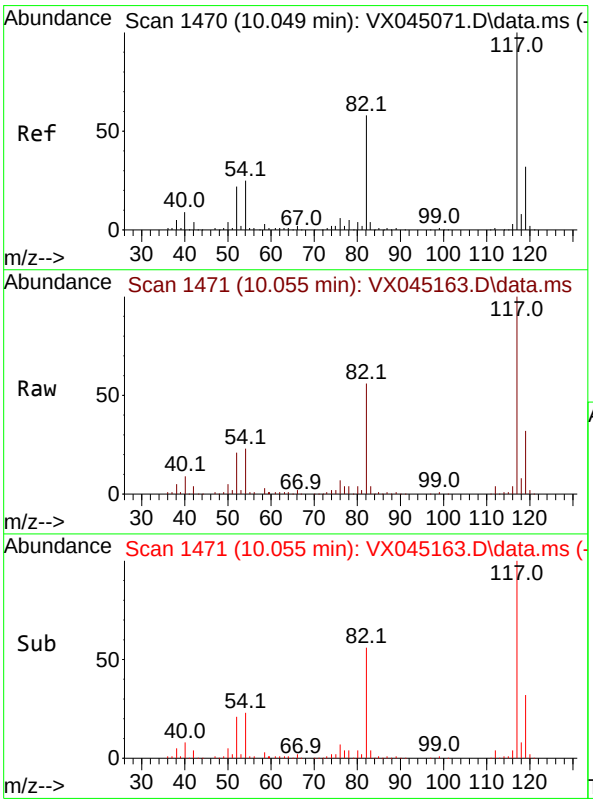
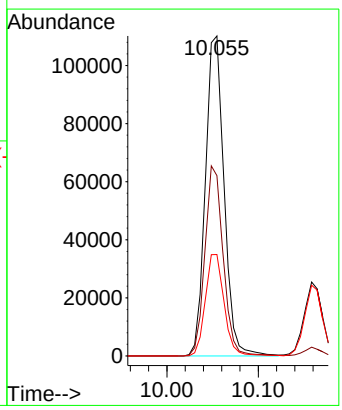
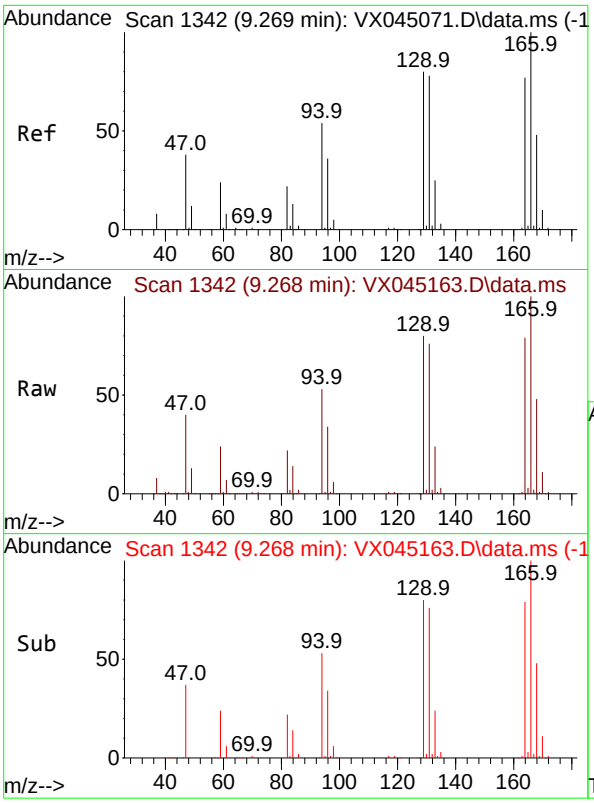



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.055 min Scan# 1471
Delta R.T. 0.006 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion:117 Resp: 156313

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 56.4 | 46.3 | 69.5 |
| 119 | 31.7 | 25.7 | 38.5 |

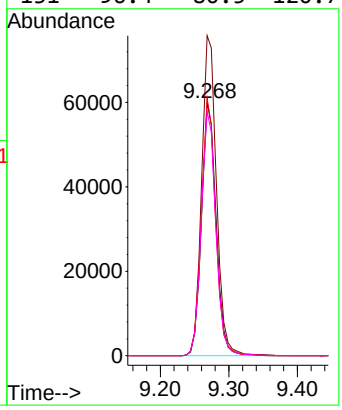





#64
Tetrachloroethene
Concen: 88.922 ug/l
RT: 9.268 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion:164 Resp: 8902

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 126.4 | 103.6 | 155.4 |
| 129 | 101.7 | 82.7 | 124.1 |
| 131 | 96.4 | 80.5 | 120.7 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
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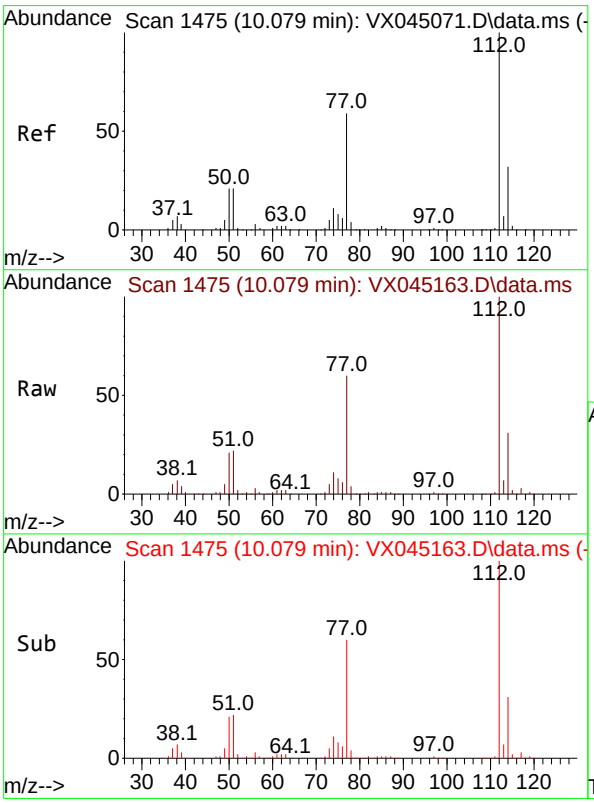
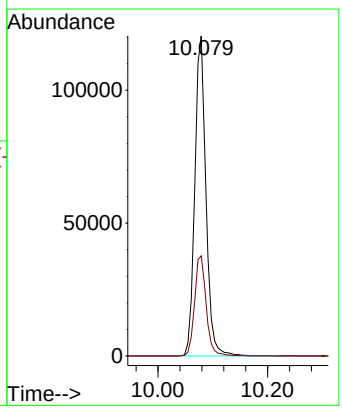
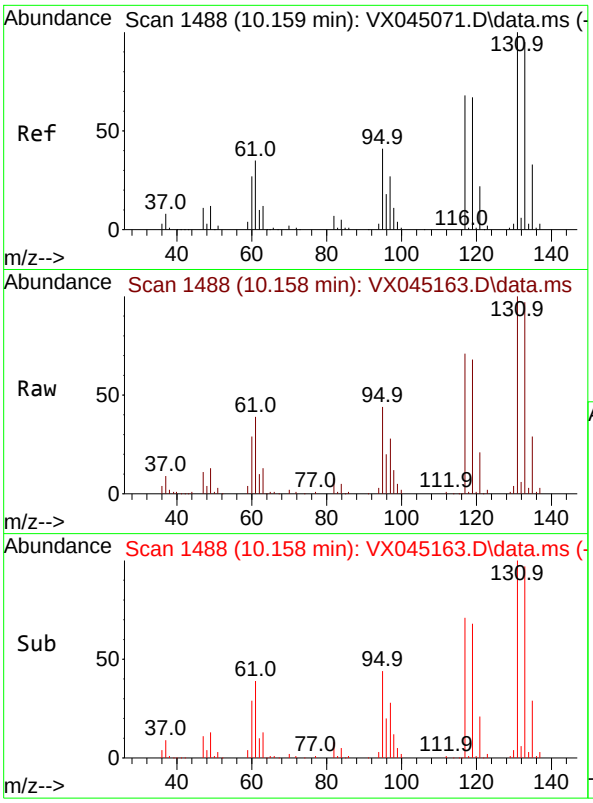



#65
Chlorobenzene
Concen: 51.641 ug/l
RT: 10.079 min Scan# 1475
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion:112 Resp: 170804

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 31.3 | 26.0 | 39.0 |






#66
1,1,1,2-Tetrachloroethane
Concen: 45.401 ug/l
RT: 10.158 min Scan# 14
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

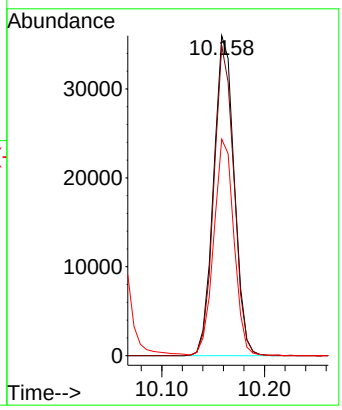
Tgt Ion:131 Resp: 5000

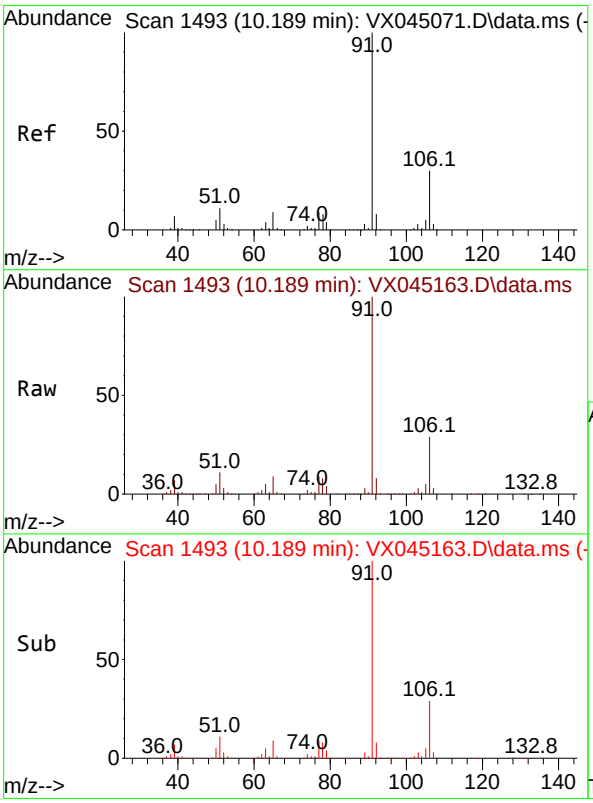
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 94.5 | 48.6 | 145.9 |
| 119 | 66.4 | 33.9 | 101.7 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

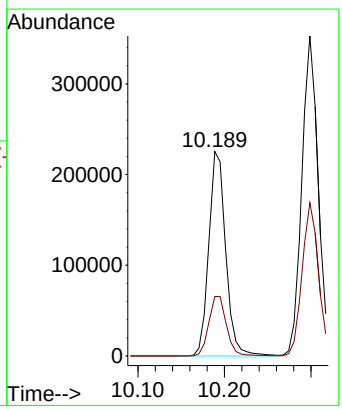


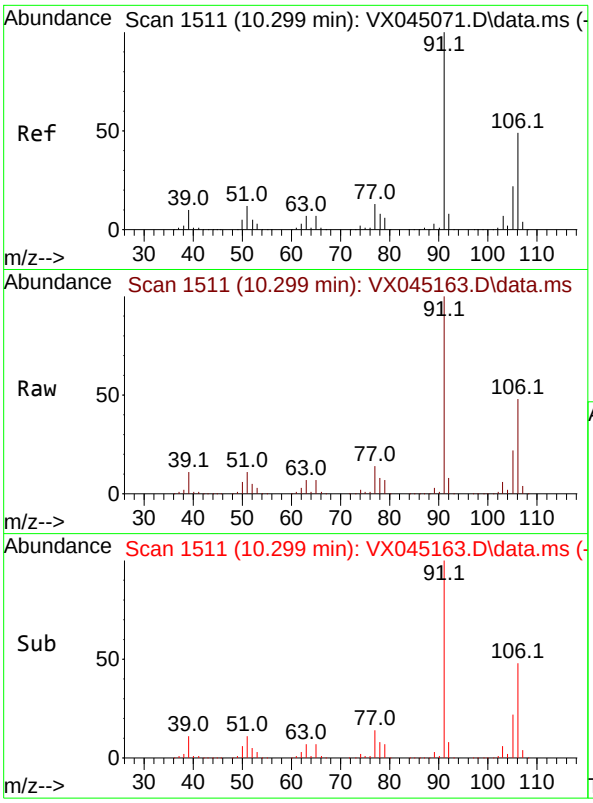




#67
Ethyl Benzene
Concen: 53.134 ug/l
RT: 10.189 min Scan# 1493
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 91 Resp: 306222

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 29.1 | 23.9 | 35.9 |

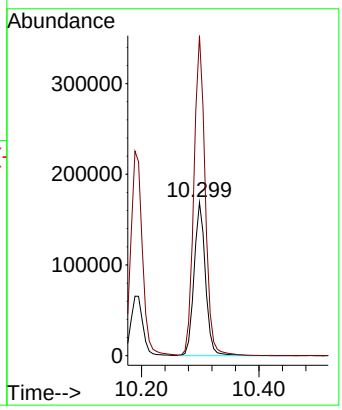





#68
m/p-Xylenes
Concen: 107.448 ug/l
RT: 10.299 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion:106 Resp: 22668

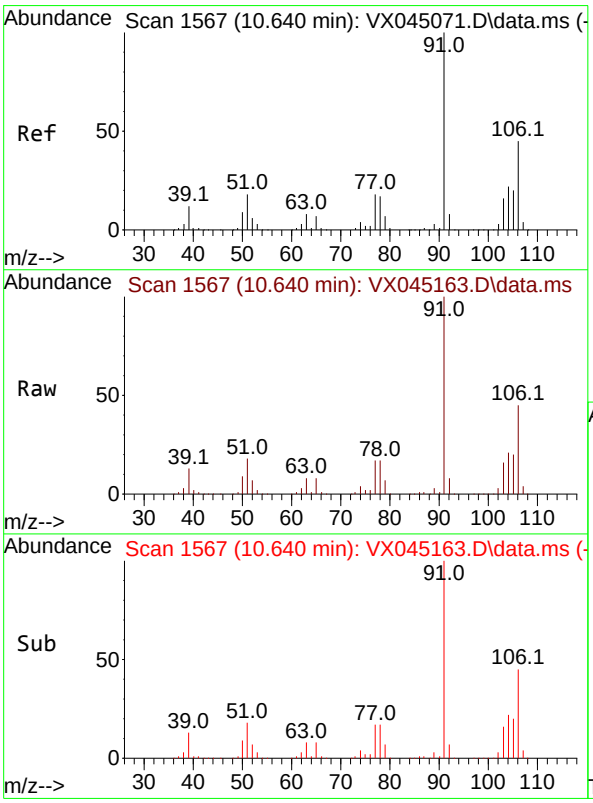
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 207.2 | 165.4 | 248.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
**APPROVED**

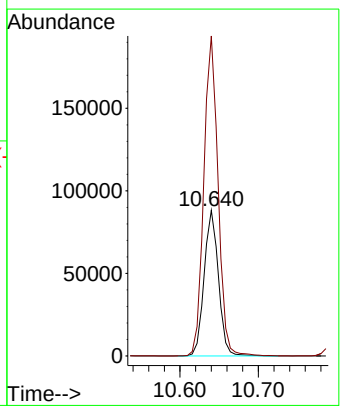
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

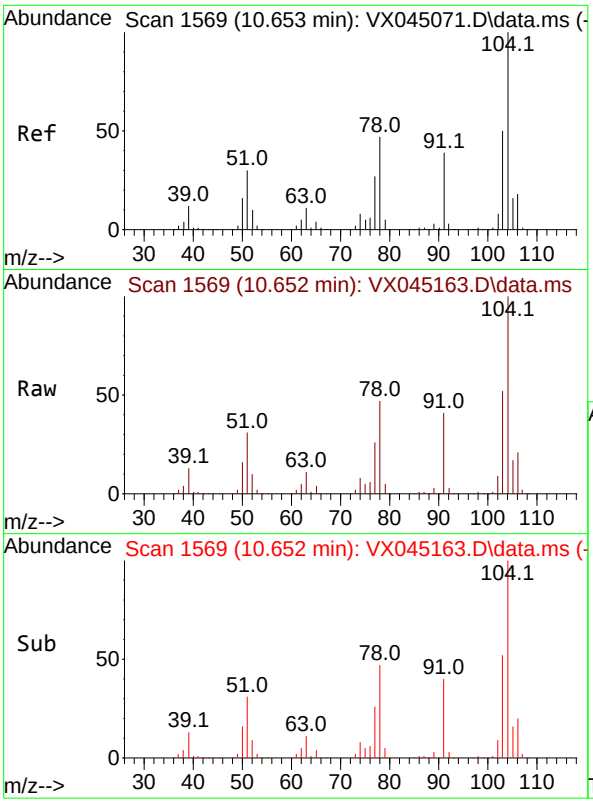



#69
o-Xylene
Concen: 52.398 ug/l
RT: 10.640 min Scan# 1567
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion:106 Resp: 111494

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 219.3 | 109.9 | 329.6 |

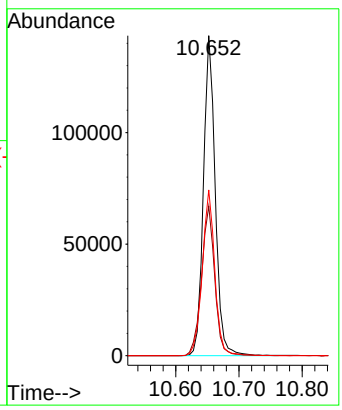





#70
Styrene
Concen: 54.191 ug/l
RT: 10.652 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion:104 Resp: 18657

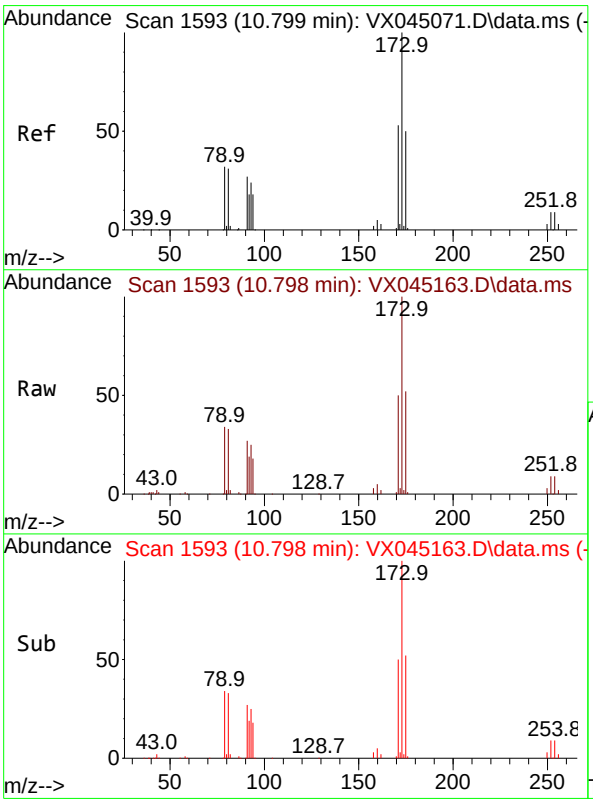
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 52.5 | 42.2 | 63.4 |
| 103 | 55.1 | 43.8 | 65.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
**APPROVED**

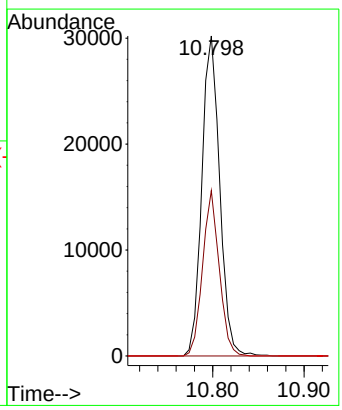
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

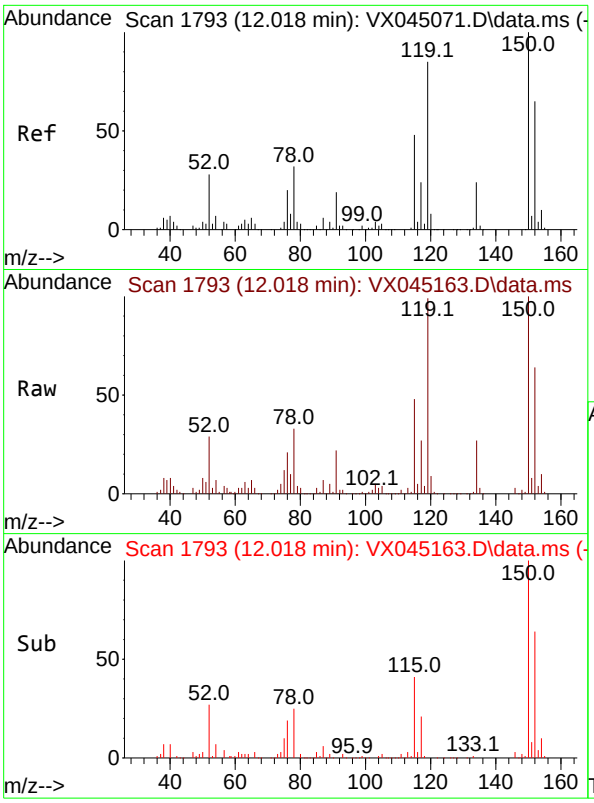



#71
Bromoform
Concen: 49.118 ug/l
RT: 10.798 min Scan# 1593
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion:173 Resp: 40798

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 48.3 | 24.6 | 73.6 |
| 254 | 0.0 | 0.0 | 0.0 |

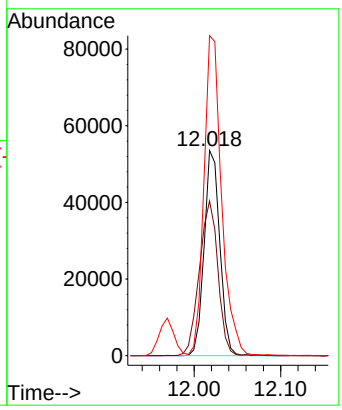





#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.018 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion:152 Resp: 6721

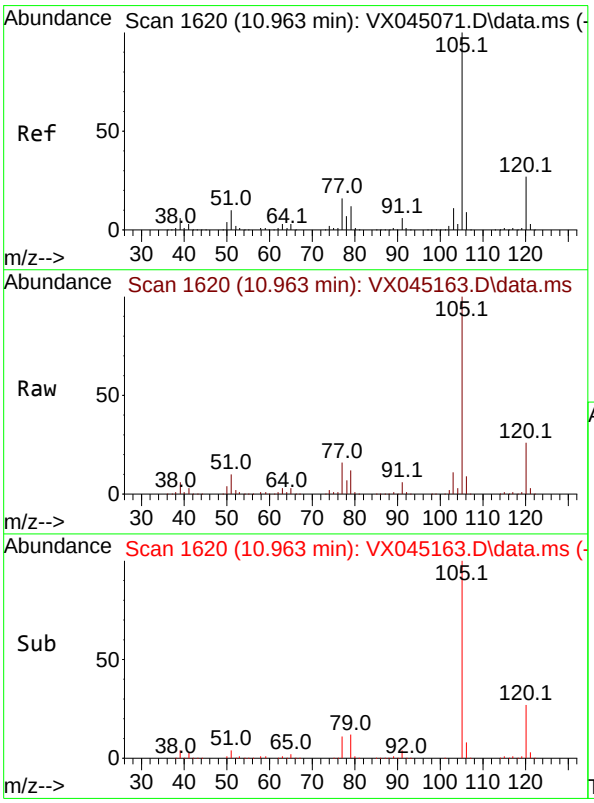
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 89.6 | 44.2 | 132.6 |
| 150 | 176.3 | 0.0 | 349.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
**APPROVED**

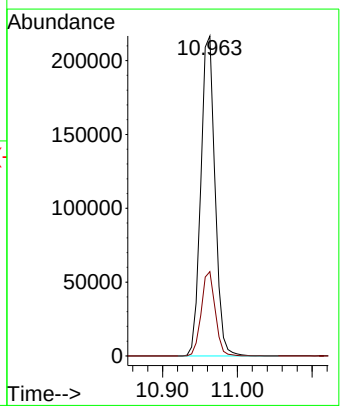
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

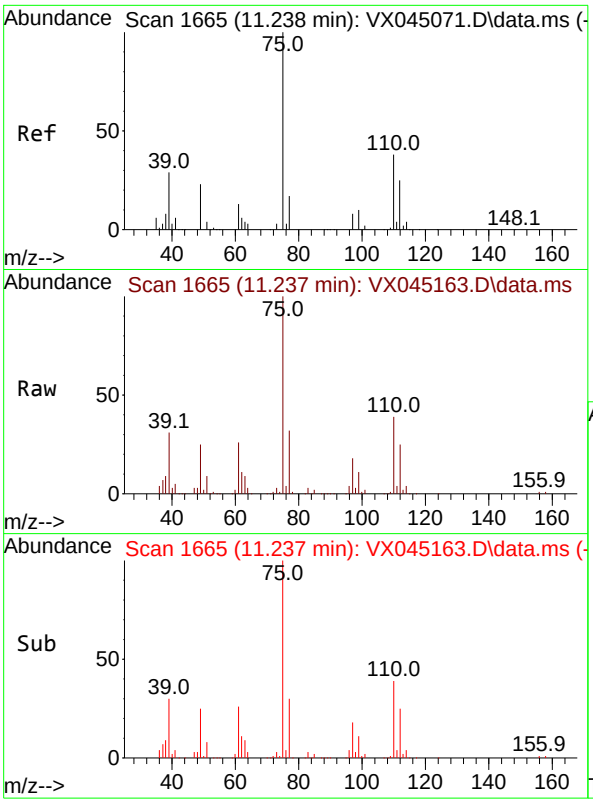



#73
Isopropylbenzene
Concen: 54.471 ug/l
RT: 10.963 min Scan# 1620
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion:105 Resp: 285788

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.9 | 13.2 | 39.5 |






#76
1,2,3-Trichloropropane
Concen: 48.104 ug/l m
RT: 11.237 min Scan# 1(
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

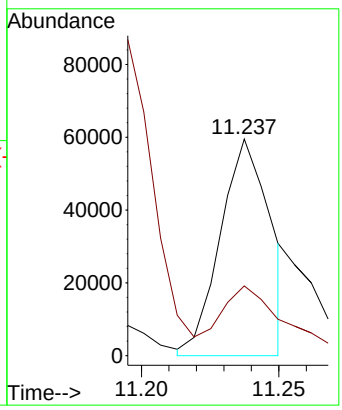
Tgt Ion: 75 Resp: 7526(

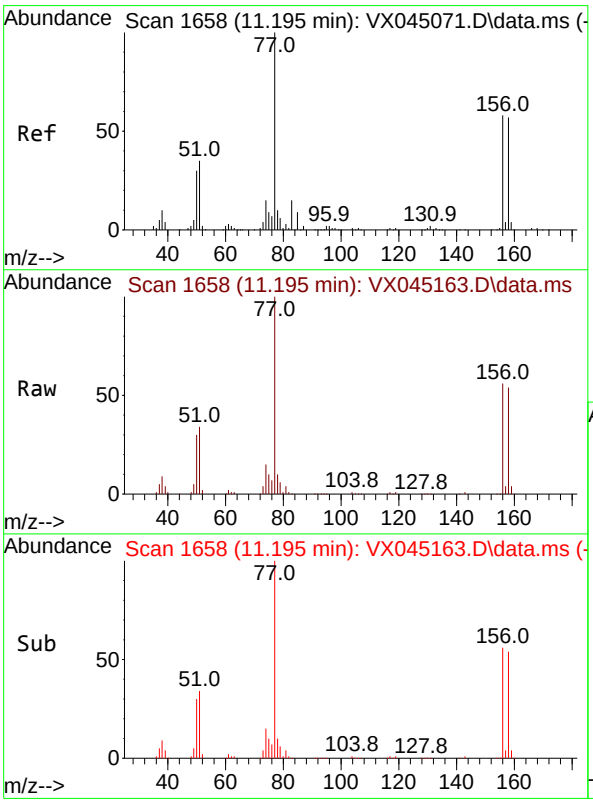
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 41.8 | 20.7 | 62.1 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

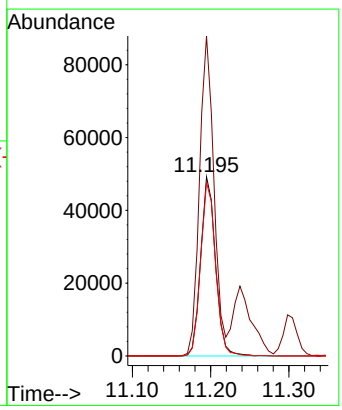


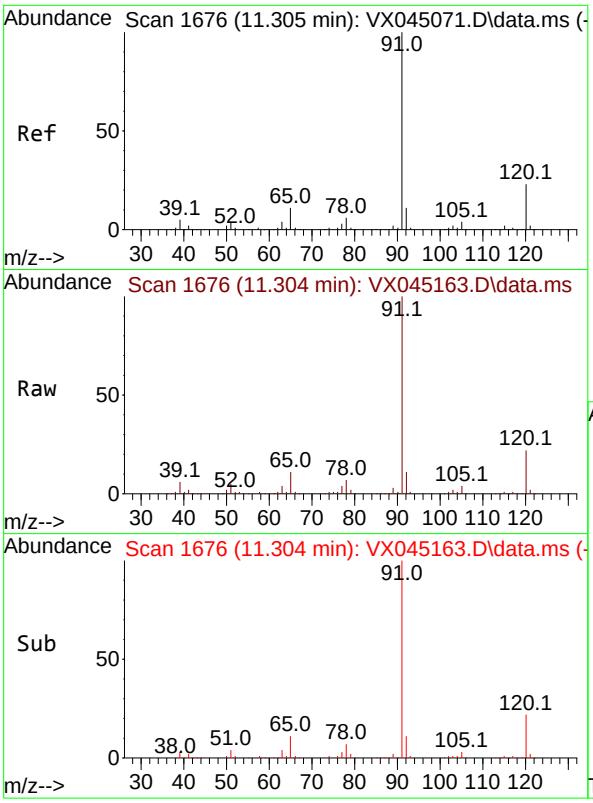




#77
Bromobenzene
Concen: 52.227 ug/l
RT: 11.195 min Scan# 1658
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion:156 Resp: 64652

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 173.8 | 85.8 | 257.4 |
| 158 | 97.2 | 48.4 | 145.2 |






#78
n-propylbenzene
Concen: 56.356 ug/l
RT: 11.304 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

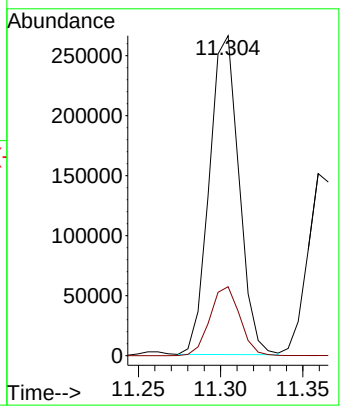
Tgt Ion: 91 Resp: 33401

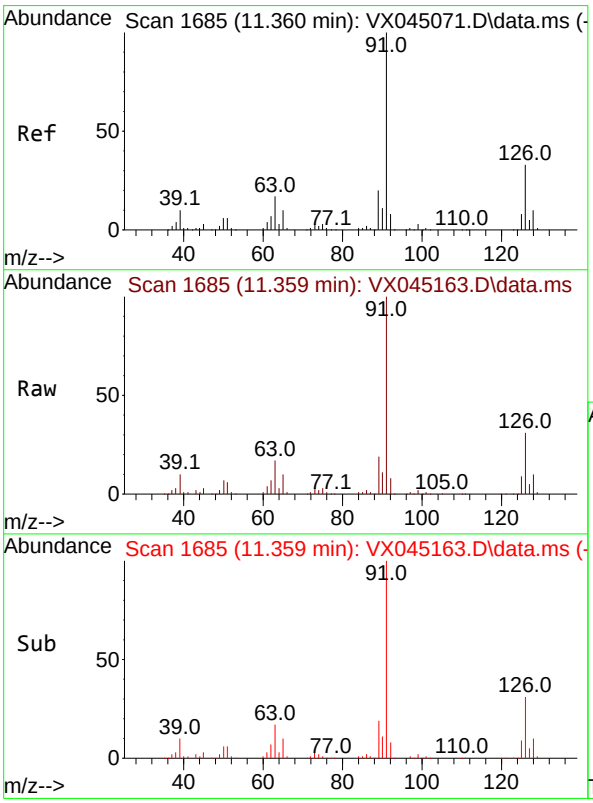
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 21.9 | 11.2 | 33.6 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

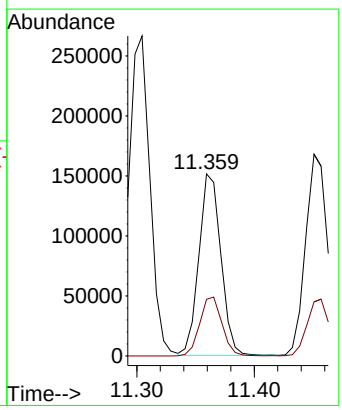


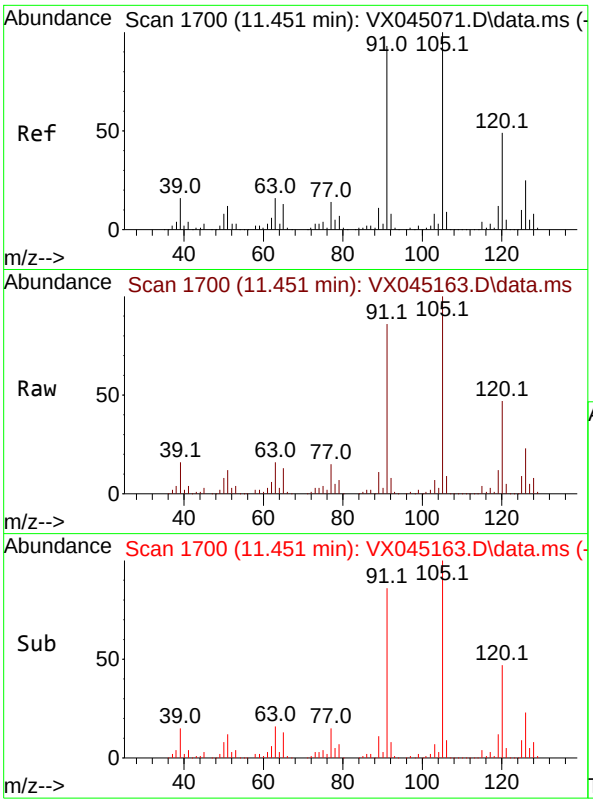




#79
2-Chlorotoluene
Concen: 52.161 ug/l
RT: 11.359 min Scan# 1685
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 91 Resp: 196885

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 33.0 | 16.4 | 49.4 |

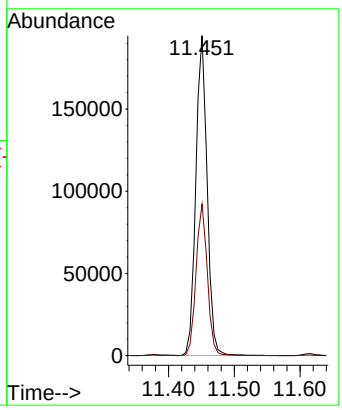





#80
1,3,5-Trimethylbenzene
Concen: 54.826 ug/l
RT: 11.451 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion:105 Resp: 23259

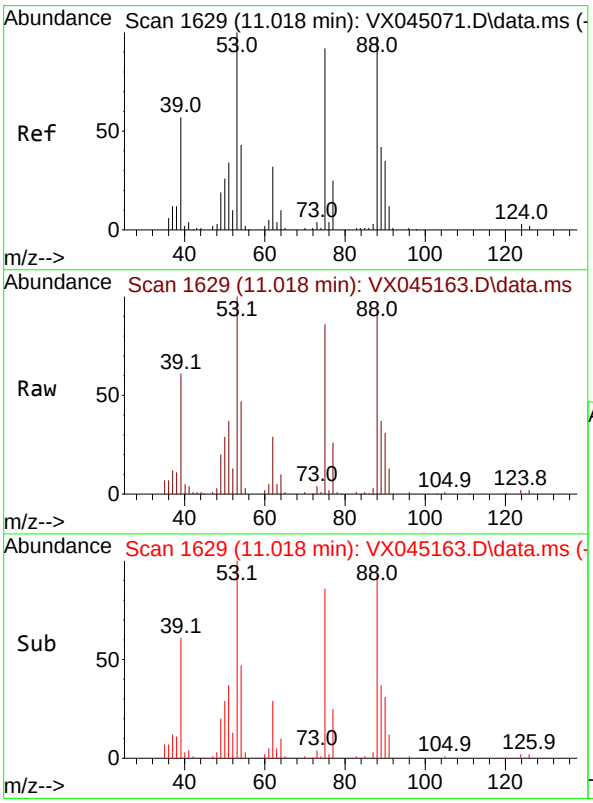
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 47.6 | 24.1 | 72.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
**APPROVED**

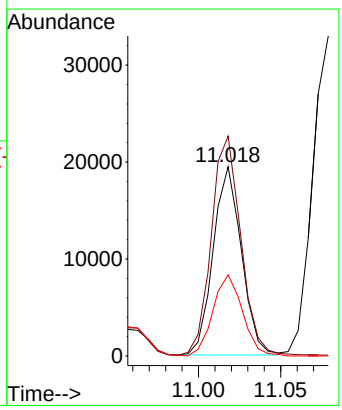
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

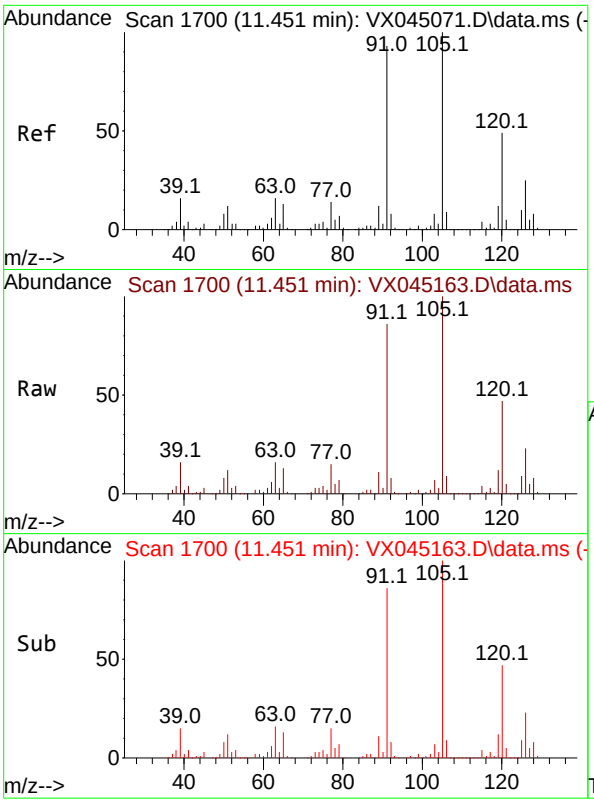



#81
trans-1,4-Dichloro-2-butene
Concen: 50.887 ug/l
RT: 11.018 min Scan# 1629
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 75 Resp: 23264

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 122.9 | 88.5 | 132.7 |
| 89 | 44.8 | 36.2 | 54.4 |

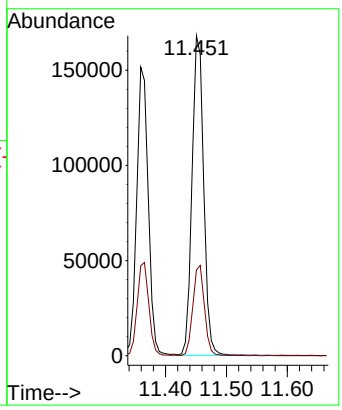





#82
4-Chlorotoluene
Concen: 54.023 ug/l
RT: 11.451 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 91 Resp: 22223

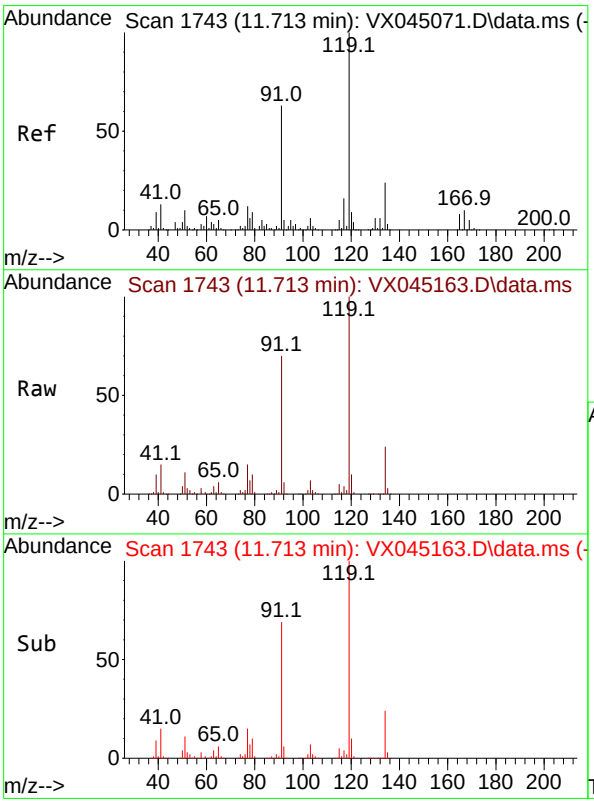
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 28.2 | 14.1 | 42.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
**APPROVED**

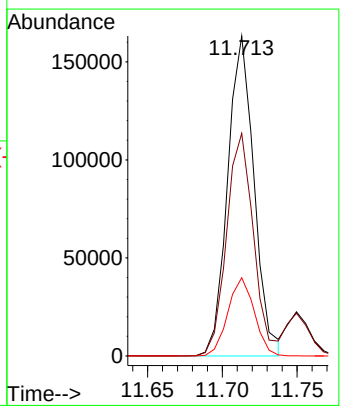
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

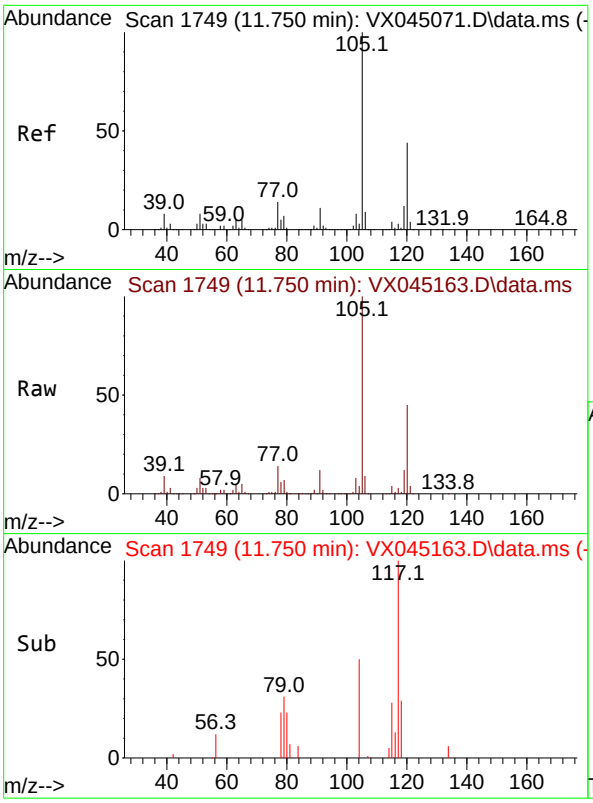



#83
tert-Butylbenzene
Concen: 46.003 ug/l
RT: 11.713 min Scan# 1743
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion:119 Resp: 200520

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 71.1 | 30.7 | 92.1 |
| 134 | 24.4 | 11.7 | 35.0 |






#84
1,2,4-Trimethylbenzene
Concen: 54.611 ug/l
RT: 11.750 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

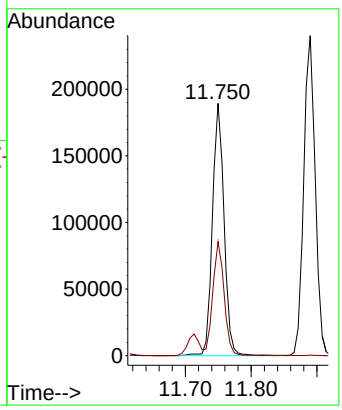
Tgt Ion:105 Resp: 23311

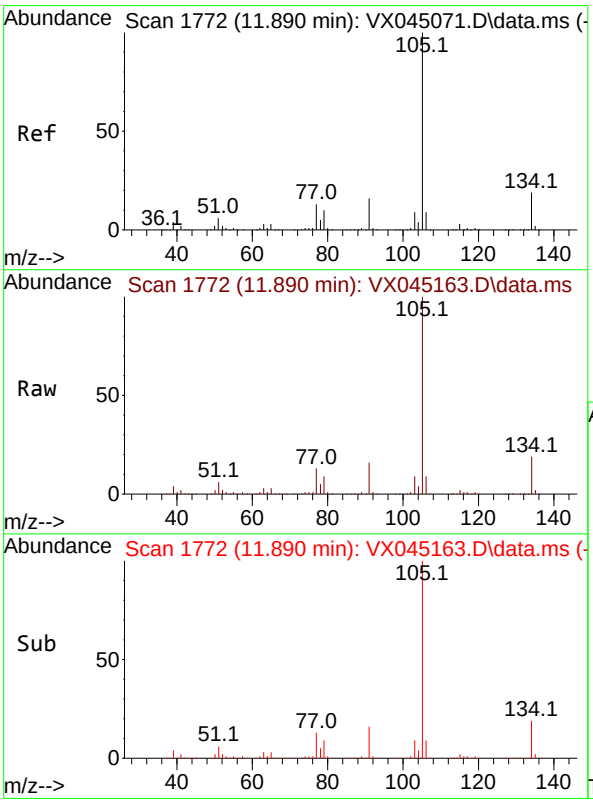
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 44.2 | 22.1 | 66.1 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

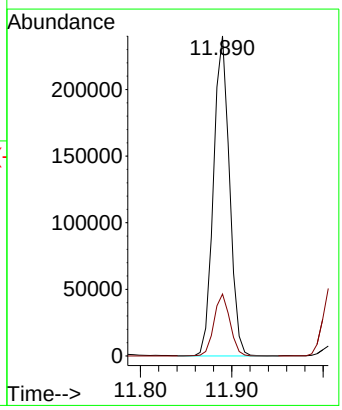


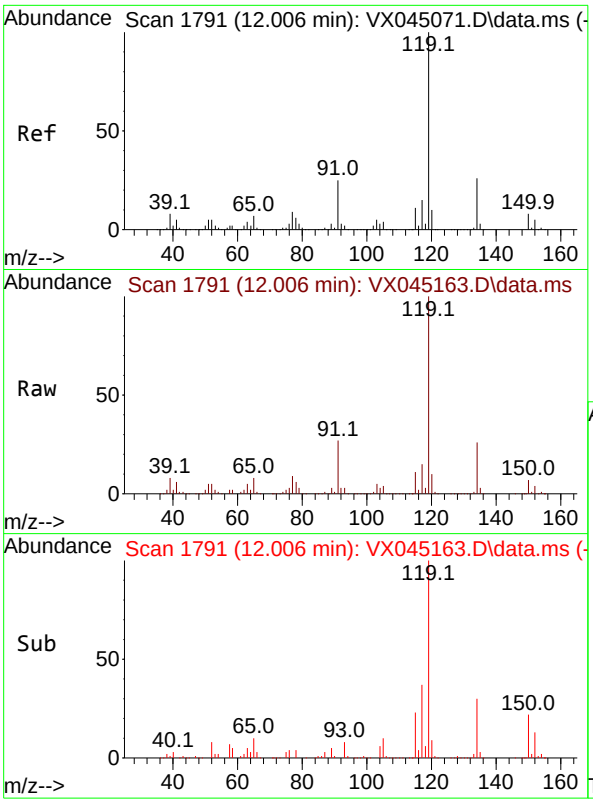




#85
sec-Butylbenzene
Concen: 55.852 ug/l
RT: 11.890 min Scan# 1772
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion:105 Resp: 291621

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.3 | 9.8 | 29.4 |






#86
p-Isopropyltoluene
Concen: 55.603 ug/l
RT: 12.006 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

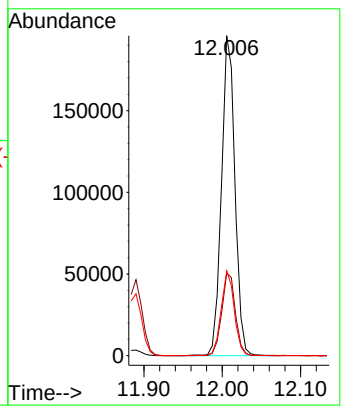
Tgt Ion:119 Resp: 23462

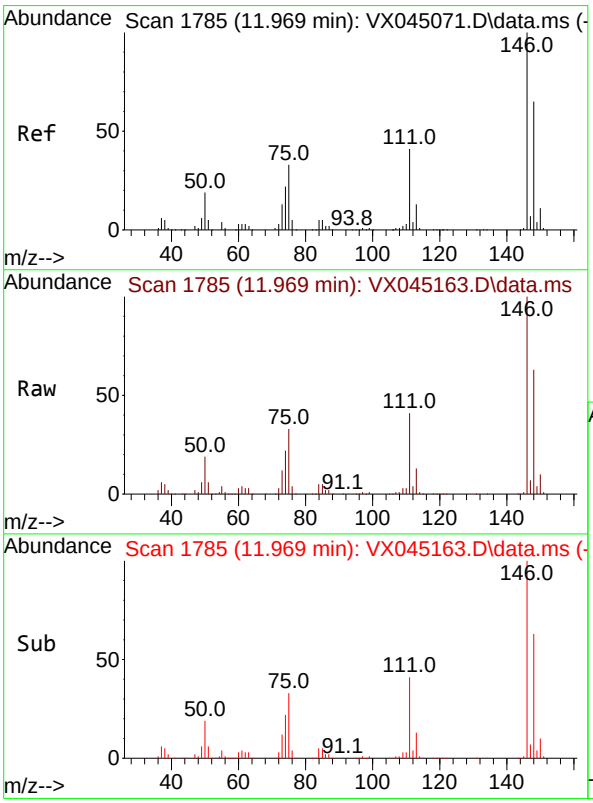
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 26.2 | 12.9 | 38.6 |
| 91 | 25.8 | 12.7 | 38.0 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

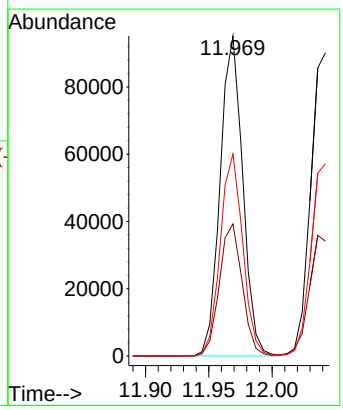


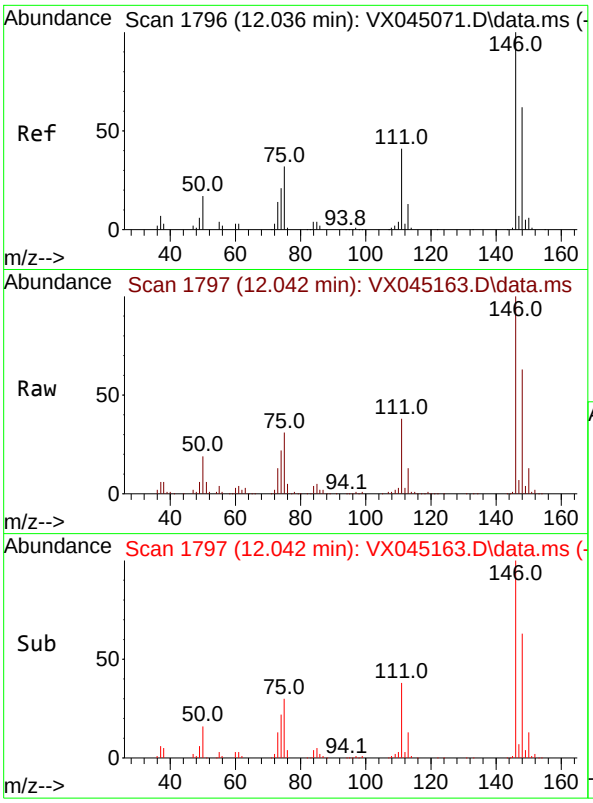




#87
1,3-Dichlorobenzene
Concen: 53.341 ug/l
RT: 11.969 min Scan# 1785
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion:146 Resp: 117796

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 41.7 | 21.1 | 63.4 |
| 148 | 63.0 | 31.9 | 95.7 |

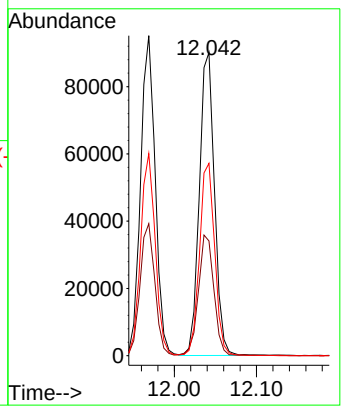





#88
1,4-Dichlorobenzene
Concen: 51.585 ug/l
RT: 12.042 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion:146 Resp: 11525

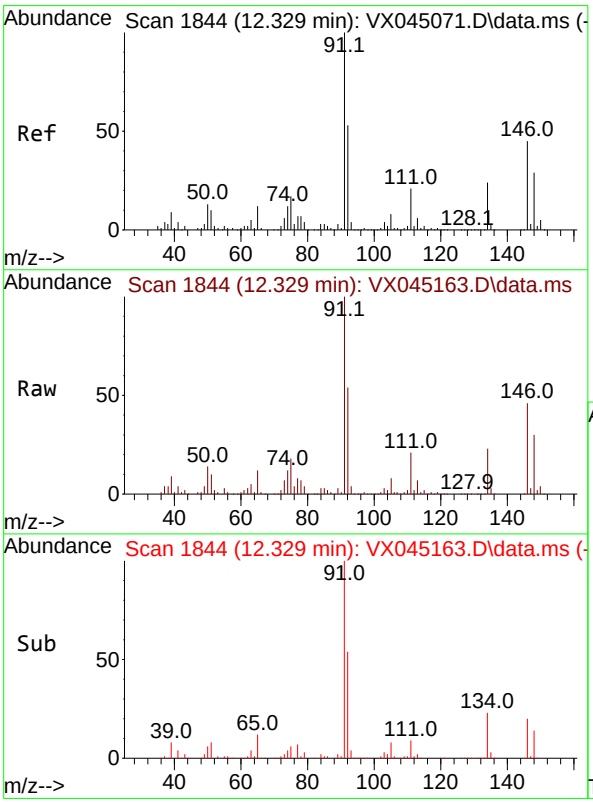
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 40.5 | 20.2 | 60.5 |
| 148 | 64.0 | 31.9 | 95.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations APPROVED**

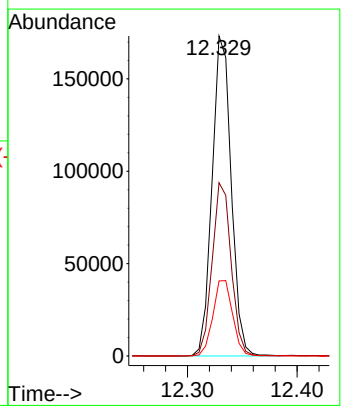
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

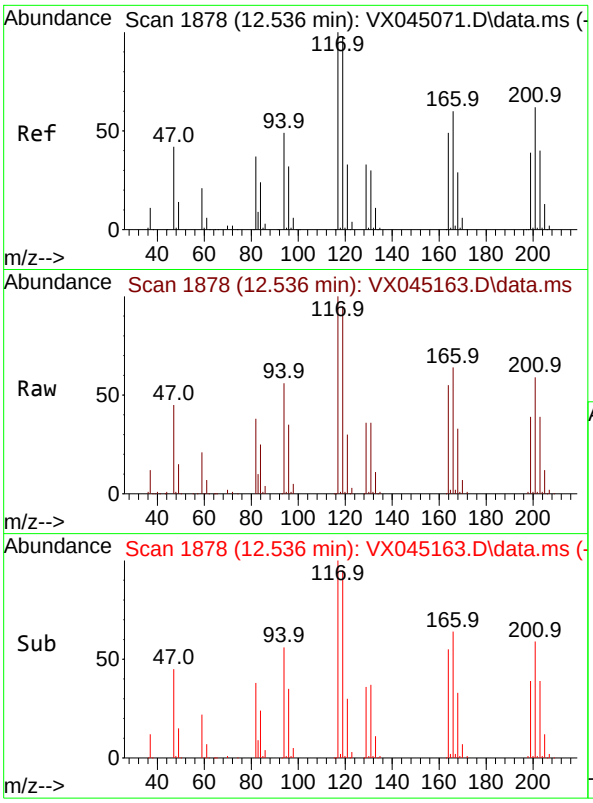



#89
n-Butylbenzene
Concen: 57.787 ug/l
RT: 12.329 min Scan# 1844
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion: 91 Resp: 210010

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 53.9 | 26.7 | 80.0 |
| 134 | 24.3 | 12.2 | 36.6 |

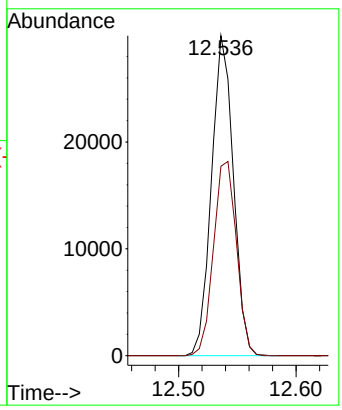





#90
Hexachloroethane
Concen: 50.874 ug/l
RT: 12.536 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion:117 Resp: 3882

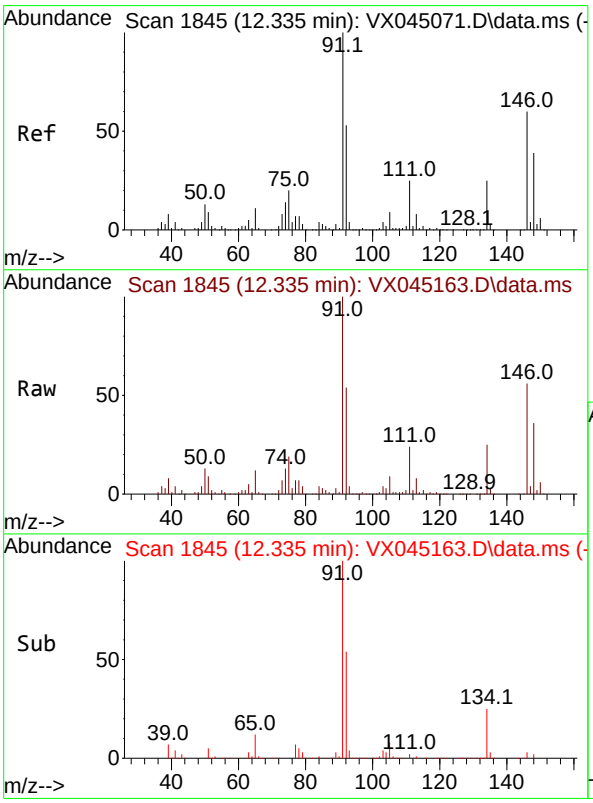
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 63.7 | 31.9 | 95.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
**APPROVED**

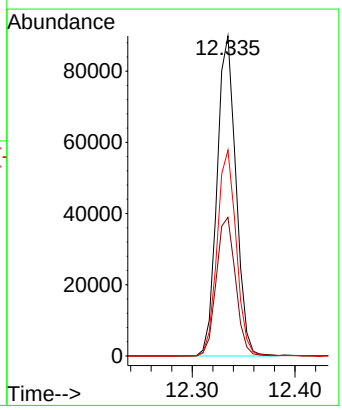
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

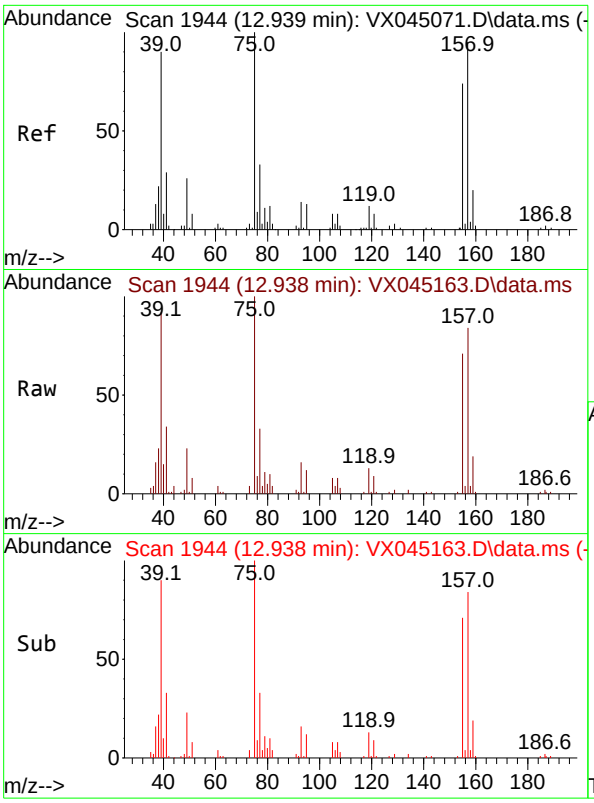



#91
1,2-Dichlorobenzene
Concen: 51.761 ug/l
RT: 12.335 min Scan# 1845
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion:146 Resp: 114665

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 44.2 | 21.6 | 65.0 |
| 148 | 64.9 | 31.9 | 95.9 |






#92
1,2-Dibromo-3-Chloropropane
Concen: 24.536 ug/l
RT: 12.938 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

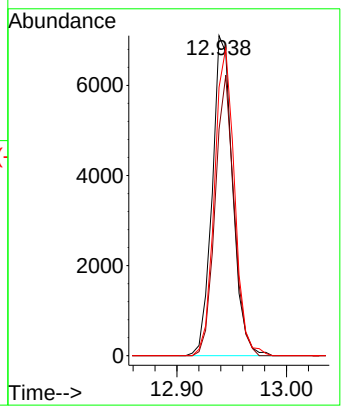
Tgt Ion: 75 Resp: 920

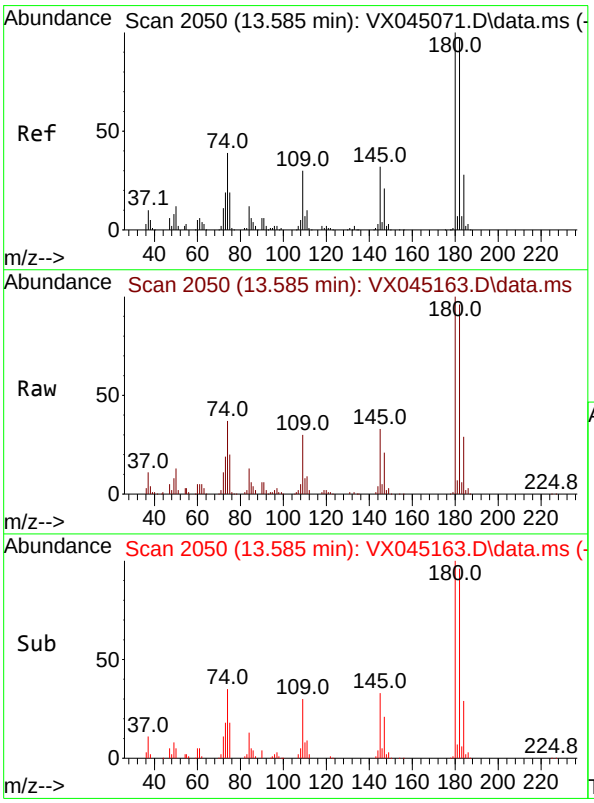
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 81.2 | 39.6 | 118.7 |
| 157 | 94.5 | 51.1 | 153.4 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

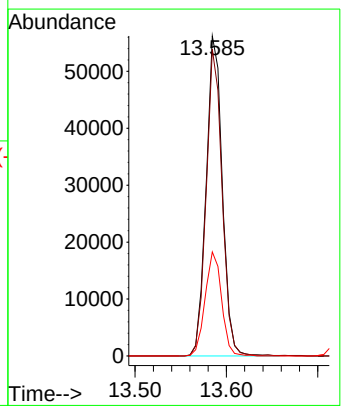


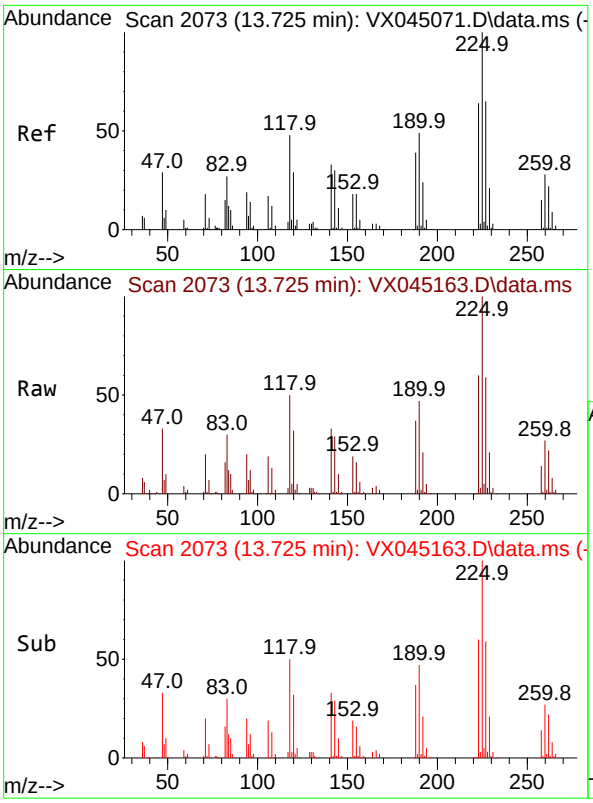




#93
1,2,4-Trichlorobenzene
Concen: 54.535 ug/l
RT: 13.585 min Scan# 2050
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion:180 Resp: 68791

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 94.4 | 47.3 | 141.9 |
| 145 | 33.2 | 16.3 | 48.9 |

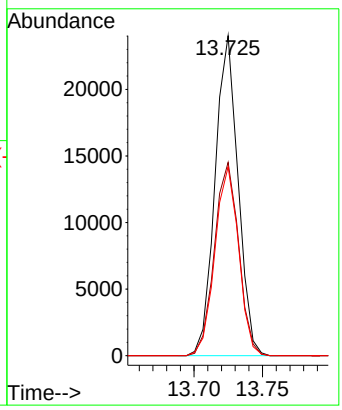





#94
Hexachlorobutadiene
Concen: 54.226 ug/l
RT: 13.725 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion:225 Resp: 2804

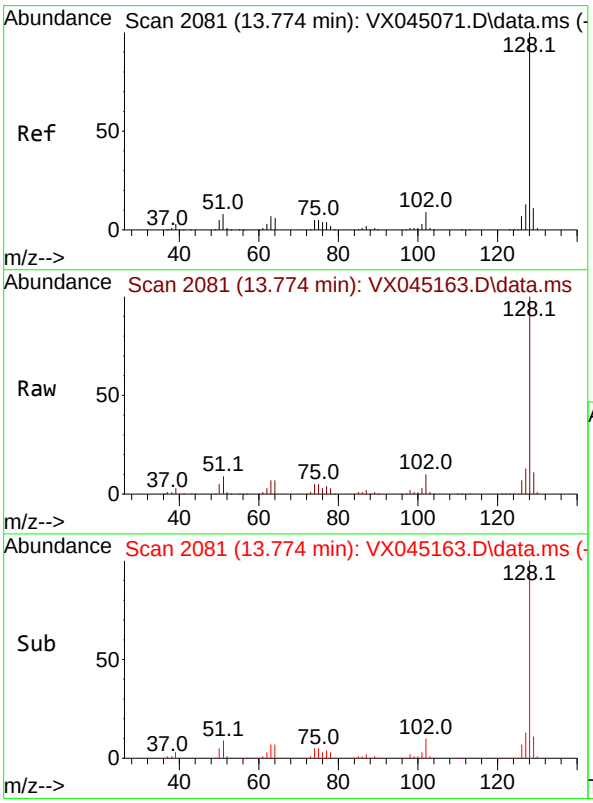
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 63.6 | 31.9 | 95.7 |
| 227 | 60.8 | 31.4 | 94.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
**APPROVED**

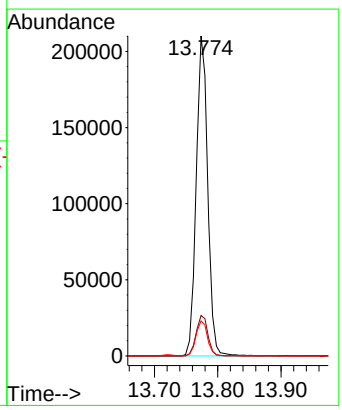
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

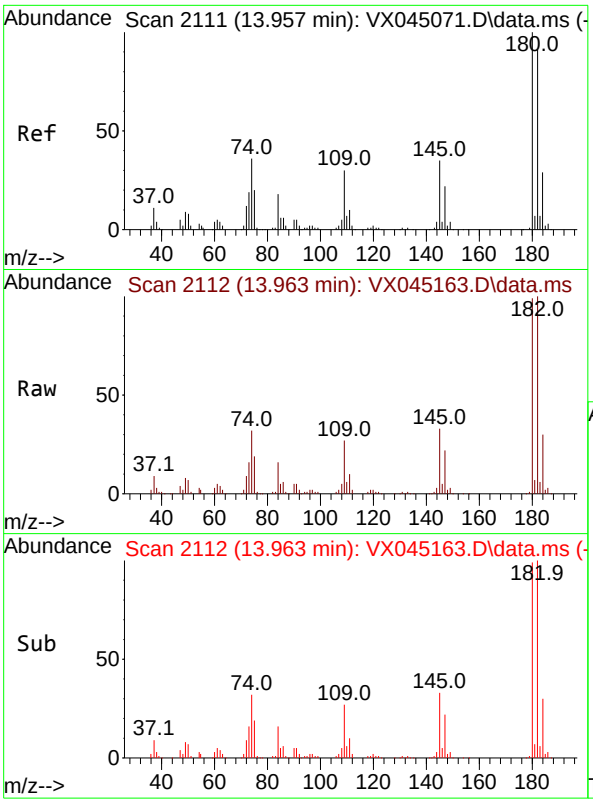



#95
Naphthalene
Concen: 54.845 ug/l
RT: 13.774 min Scan# 2081
Delta R.T. -0.000 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion:128 Resp: 265803

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 13.0 | 10.3 | 15.5 |
| 129 | 11.1 | 8.7 | 13.1 |

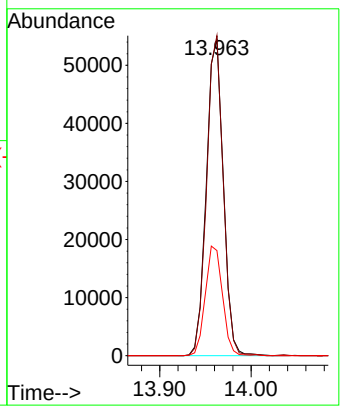





#96
1,2,3-Trichlorobenzene
Concen: 52.700 ug/l
RT: 13.963 min Scan# 2
Delta R.T. 0.006 min
Lab File: VX045163.D
Acq: 06 Mar 2025 13:09

Tgt Ion:180 Resp: 7012

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 98.5 | 47.5 | 142.6 |
| 145 | 35.1 | 17.0 | 50.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MS

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | 03/05/25 |
| Project: | Former Schlumberger STC PTC Site # D3868221 | Date Received: | 03/05/25 |
| Client Sample ID: | BR-05-465-030525MSD | SDG No.: | Q1478 |
| Lab Sample ID: | Q1501-06MSD | Matrix: | TCLP |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | TCLP VOA |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX045164.D | 1 | | 03/06/25 13:33 | VX030625 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-01-4 | Vinyl Chloride | 43.3 | | 0.34 | 1.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 73.0 | | 0.26 | 1.00 | ug/L |
| 78-93-3 | 2-Butanone | 280 | | 1.30 | 5.00 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 47.3 | | 0.25 | 1.00 | ug/L |
| 67-66-3 | Chloroform | 48.6 | | 0.26 | 1.00 | ug/L |
| 71-43-2 | Benzene | 49.0 | | 0.16 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 49.8 | | 0.24 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 91.5 | | 0.32 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 85.3 | | 0.25 | 1.00 | ug/L |
| 108-90-7 | Chlorobenzene | 49.8 | | 0.13 | 1.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 49.2 | | 70 (74) - 130 (125) | 98% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 0 | * | 70 (75) - 130 (124) | 0% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 48.1 | | 70 (86) - 130 (113) | 96% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 48.8 | | 70 (77) - 130 (121) | 98% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 101000 | 5.55 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 183000 | 6.757 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 155000 | 10.049 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 68400 | 12.018 | | | |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements
J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX030625\
Data File : VX045164.D
Acq On : 06 Mar 2025 13:33
Operator : JC/MD
Sample : Q1501-06MSD
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 07 00:41:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations APPROVED**

Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) Pentafluorobenzene | 5.550 | 168 | 100565 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 6.757 | 114 | 182698 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 10.049 | 117 | 154927 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.018 | 152 | 68360 | 50.000 | ug/l | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 5.952 | 65 | 78636 | 49.159 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 98.320% | | | |
| 35) Dibromofluoromethane | 0.000 | 113 | 0d | 0.000 | ug/l | |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 0.000%# | | | |
| 50) Toluene-d8 | 8.647 | 98 | 212901 | 48.071 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 96.140% | | | |
| 62) 4-Bromofluorobenzene | 11.079 | 95 | 71643 | 48.816 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 97.640% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.166 | 85 | 52592 | 41.546 | ug/l | 96 |
| 3) Chloromethane | 1.307 | 50 | 67681 | 43.689 | ug/l | 100 |
| 4) Vinyl Chloride | 1.374 | 62 | 66508 | 43.277 | ug/l | 97 |
| 5) Bromomethane | 1.593 | 94 | 27968 | 46.294 | ug/l | 96 |
| 6) Chloroethane | 1.672 | 64 | 37111 | 52.353 | ug/l | 99 |
| 7) Trichlorofluoromethane | 1.874 | 101 | 94521 | 46.461 | ug/l | 100 |
| 8) Diethyl Ether | 2.136 | 74 | 36224 | 45.522 | ug/l | 97 |
| 9) 1,1,2-Trichlorotrifluo... | 2.319 | 101 | 54209 | 46.379 | ug/l | 99 |
| 10) Methyl Iodide | 2.447 | 142 | 73533 | 50.342 | ug/l | 99 |
| 11) Tert butyl alcohol | 2.977 | 59 | 59447 | 196.197 | ug/l | 99 |
| 12) 1,1-Dichloroethene | 2.313 | 96 | 90255 | 73.038 | ug/l | 96 |
| 13) Acrolein | 2.233 | 56 | 16708 | 47.702 | ug/l | 98 |
| 14) Allyl chloride | 2.660 | 41 | 111224 | 50.564 | ug/l | 98 |
| 15) Acrylonitrile | 3.062 | 53 | 192121 | 236.583 | ug/l | 100 |
| 16) Acetone | 2.380 | 43 | 261029 | 351.705 | ug/l | 100 |
| 17) Carbon Disulfide | 2.502 | 76 | 86177 | 26.183 | ug/l | 99 |
| 18) Methyl Acetate | 2.709 | 43 | 4472 | 2.505 | ug/l # | 88 |
| 19) Methyl tert-butyl Ether | 3.117 | 73 | 204923 | 49.428 | ug/l | 100 |
| 20) Methylene Chloride | 2.782 | 84 | 68883 | 46.854 | ug/l | 98 |
| 21) trans-1,2-Dichloroethene | 3.087 | 96 | 60413 | 49.486 | ug/l | 97 |
| 22) Diisopropyl ether | 3.757 | 45 | 212844 | 47.578 | ug/l # | 84 |
| 24) 1,1-Dichloroethane | 3.605 | 63 | 122367 | 48.807 | ug/l | 100 |
| 25) 2-Butanone | 4.556 | 43 | 316746 | 283.527 | ug/l | 99 |
| 26) 2,2-Dichloropropane | 4.465 | 77 | 77718 | 66.088 | ug/l | 97 |
| 27) cis-1,2-Dichloroethene | 4.489 | 96 | 73559 | 48.810 | ug/l | 96 |
| 28) Bromochloromethane | 4.891 | 49 | 56433 | 47.224 | ug/l | 100 |
| 29) Tetrahydrofuran | 5.001 | 42 | 186941 | 249.177 | ug/l | 99 |
| 30) Chloroform | 5.086 | 83 | 121146 | 48.631 | ug/l | 99 |
| 31) Cyclohexane | 5.464 | 56 | 98498 | 45.259 | ug/l | 98 |
| 32) 1,1,1-Trichloroethane | 5.379 | 97 | 99374 | 49.391 | ug/l | 98 |
| 36) 1,1-Dichloropropene | 5.690 | 75 | 80938 | 48.310 | ug/l | 100 |
| 38) Carbon Tetrachloride | 5.672 | 117 | 80499 | 47.327 | ug/l | 99 |
| 39) Methylcyclohexane | 7.373 | 83 | 90498 | 45.080 | ug/l | 98 |
| 40) Benzene | 6.031 | 78 | 259017 | 48.959 | ug/l | 98 |
| 41) Methacrylonitrile | 4.916 | 41 | 59324 | 50.821 | ug/l | 97 |
| 42) 1,2-Dichloroethane | 6.080 | 62 | 94946 | 49.838 | ug/l | 99 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX030625\
Data File : VX045164.D
Acq On : 06 Mar 2025 13:33
Operator : JC/MD
Sample : Q1501-06MSD
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 07 00:41:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations APPROVED**

Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 44) Trichloroethene | 7.123 | 130 | 113651 | 91.488 | ug/l | | 99 |
| 45) 1,2-Dichloropropane | 7.428 | 63 | 65772 | 48.354 | ug/l | | 98 |
| 46) Dibromomethane | 7.580 | 93 | 48250 | 50.186 | ug/l | | 99 |
| 47) Bromodichloromethane | 7.818 | 83 | 65772 | 34.877 | ug/l | | 98 |
| 49) 1,4-Dioxane | 7.659 | 88 | 29006 | 858.601 | ug/l | # | 94 |
| 51) 4-Methyl-2-Pentanone | 8.574 | 43 | 554203 | 258.557 | ug/l | | 99 |
| 52) Toluene | 8.714 | 92 | 180949 | 58.295 | ug/l | | 99 |
| 53) t-1,3-Dichloropropene | 8.976 | 75 | 80501 | 51.062 | ug/l | | 100 |
| 54) cis-1,3-Dichloropropene | 8.366 | 75 | 92567 | 50.352 | ug/l | | 98 |
| 55) 1,1,2-Trichloroethane | 9.147 | 97 | 19996 | 15.648 | ug/l | | 97 |
| 57) 1,3-Dichloropropane | 9.305 | 76 | 107755 | 48.727 | ug/l | | 98 |
| 58) 2-Chloroethyl Vinyl ether | 8.238 | 63 | 266560 | 281.323 | ug/l | | 99 |
| 59) 2-Hexanone | 9.427 | 43 | 411304 | 264.842 | ug/l | | 99 |
| 60) Dibromochloromethane | 9.519 | 129 | 54948 | 41.126 | ug/l | | 99 |
| 61) 1,2-Dibromoethane | 9.610 | 107 | 62043 | 48.636 | ug/l | | 100 |
| 64) Tetrachloroethene | 9.269 | 164 | 84629 | 85.290 | ug/l | | 99 |
| 65) Chlorobenzene | 10.079 | 112 | 163317 | 49.819 | ug/l | | 99 |
| 66) 1,1,1,2-Tetrachloroethane | 10.159 | 131 | 45565 | 41.737 | ug/l | | 98 |
| 67) Ethyl Benzene | 10.189 | 91 | 291242 | 50.987 | ug/l | | 99 |
| 68) m/p-Xylenes | 10.299 | 106 | 215055 | 102.845 | ug/l | | 100 |
| 69) o-Xylene | 10.640 | 106 | 106073 | 50.296 | ug/l | | 99 |
| 70) Styrene | 10.653 | 104 | 175907 | 51.549 | ug/l | | 99 |
| 71) Bromoform | 10.799 | 173 | 39363 | 47.814 | ug/l | # | 99 |
| 73) Isopropylbenzene | 10.957 | 105 | 270349 | 50.668 | ug/l | | 99 |
| 76) 1,2,3-Trichloropropane | 11.238 | 75 | 73469m | 46.175 | ug/l | | |
| 77) Bromobenzene | 11.195 | 156 | 62298 | 49.485 | ug/l | | 100 |
| 78) n-propylbenzene | 11.299 | 91 | 313137 | 51.952 | ug/l | | 99 |
| 79) 2-Chlorotoluene | 11.360 | 91 | 187387 | 48.816 | ug/l | | 100 |
| 80) 1,3,5-Trimethylbenzene | 11.451 | 105 | 219930 | 50.977 | ug/l | | 99 |
| 81) trans-1,4-Dichloro-2-b... | 11.018 | 75 | 22368 | 48.110 | ug/l | | 93 |
| 82) 4-Chlorotoluene | 11.451 | 91 | 210926 | 50.418 | ug/l | | 100 |
| 83) tert-Butylbenzene | 11.713 | 119 | 191439 | 43.186 | ug/l | | 90 |
| 84) 1,2,4-Trimethylbenzene | 11.750 | 105 | 224549 | 51.727 | ug/l | | 100 |
| 85) sec-Butylbenzene | 11.890 | 105 | 274996 | 51.789 | ug/l | | 99 |
| 86) p-Isopropyltoluene | 12.006 | 119 | 222566 | 51.865 | ug/l | | 100 |
| 87) 1,3-Dichlorobenzene | 11.969 | 146 | 111489 | 49.643 | ug/l | | 100 |
| 88) 1,4-Dichlorobenzene | 12.036 | 146 | 109759 | 48.307 | ug/l | | 99 |
| 89) n-Butylbenzene | 12.329 | 91 | 198557 | 53.723 | ug/l | | 99 |
| 90) Hexachloroethane | 12.536 | 117 | 38087 | 49.070 | ug/l | | 98 |
| 91) 1,2-Dichlorobenzene | 12.335 | 146 | 110193 | 48.912 | ug/l | | 100 |
| 92) 1,2-Dibromo-3-Chloropr... | 12.939 | 75 | 6556 | 17.187 | ug/l | | 96 |
| 93) 1,2,4-Trichlorobenzene | 13.585 | 180 | 64085 | 49.957 | ug/l | | 99 |
| 94) Hexachlorobutadiene | 13.725 | 225 | 25380 | 48.257 | ug/l | | 98 |
| 95) Naphthalene | 13.774 | 128 | 258663 | 52.481 | ug/l | | 100 |
| 96) 1,2,3-Trichlorobenzene | 13.957 | 180 | 68914 | 50.923 | ug/l | | 98 |

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

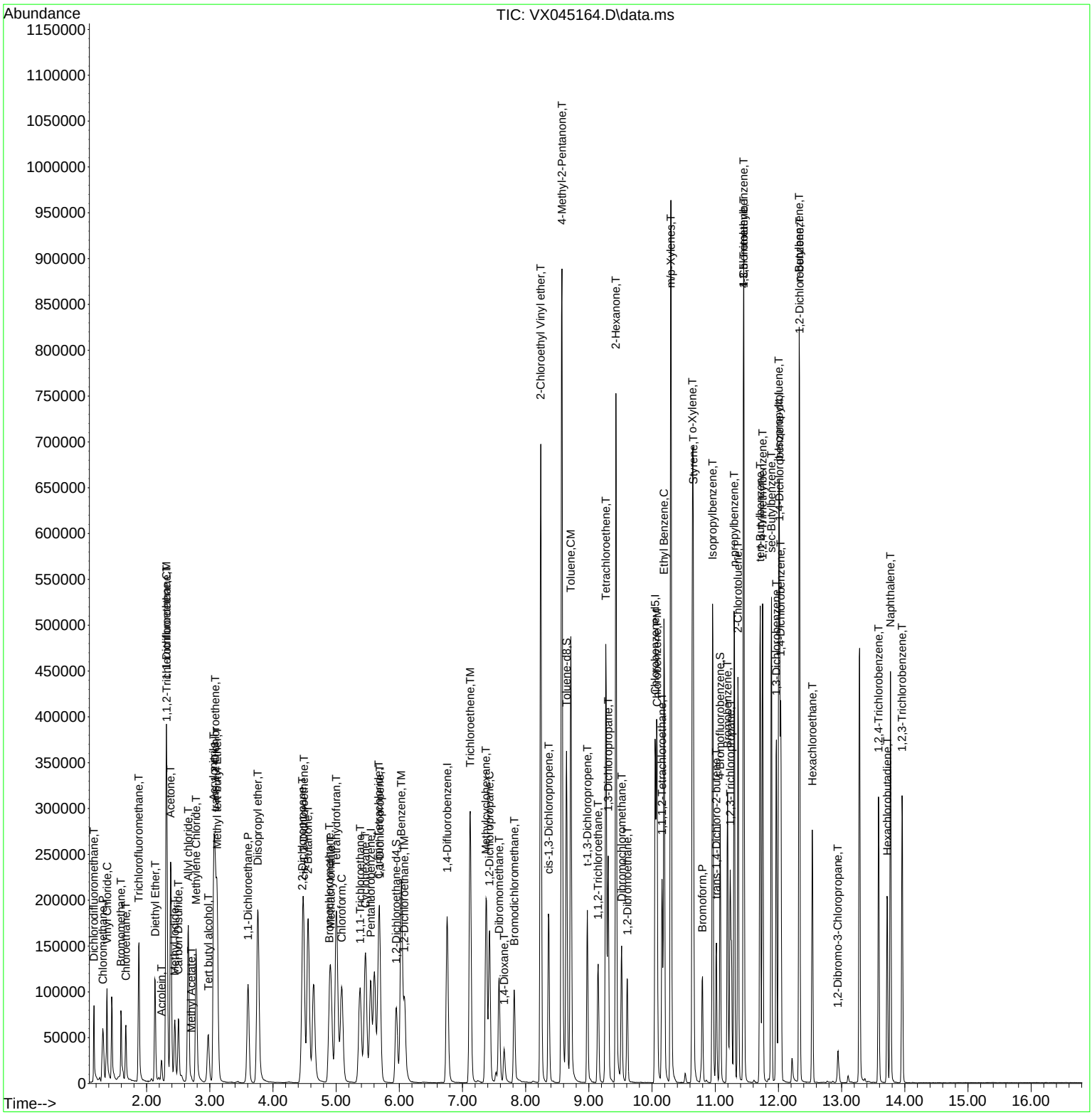
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX030625\
Data File : VX045164.D
Acq On : 06 Mar 2025 13:33
Operator : JC/MD
Sample : Q1501-06MSD
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

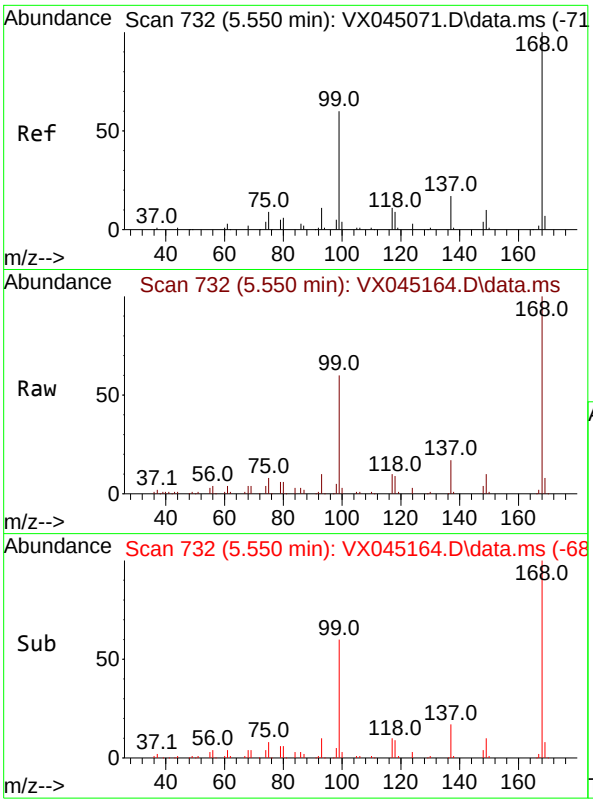
Quant Time: Mar 07 00:41:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations APPROVED**

Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

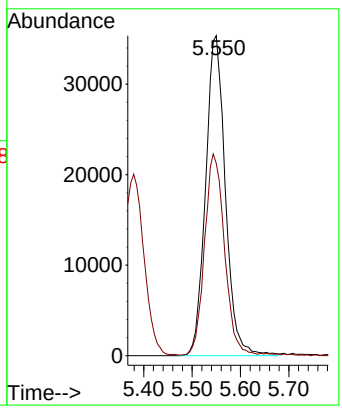





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.550 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion:168 Resp: 10056

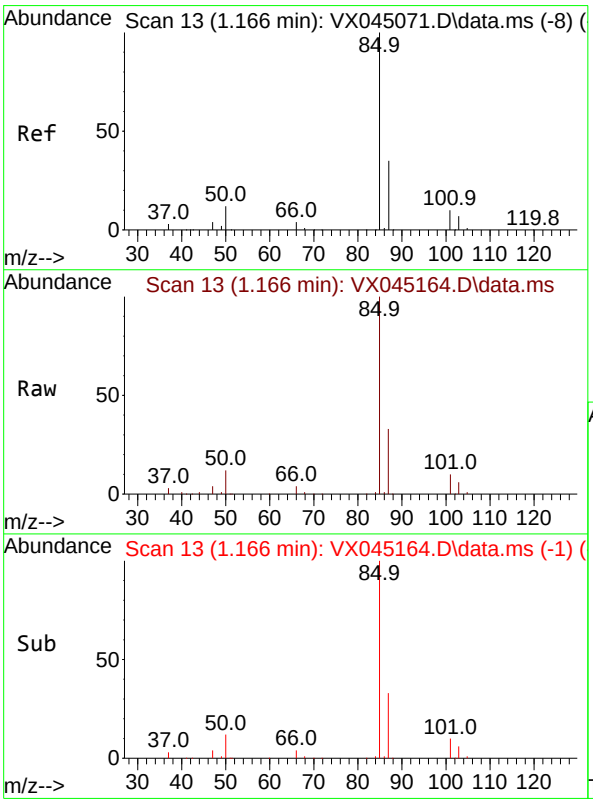
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 59.8 | 48.2 | 72.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
**APPROVED**

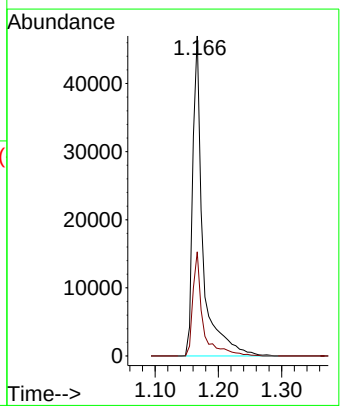
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

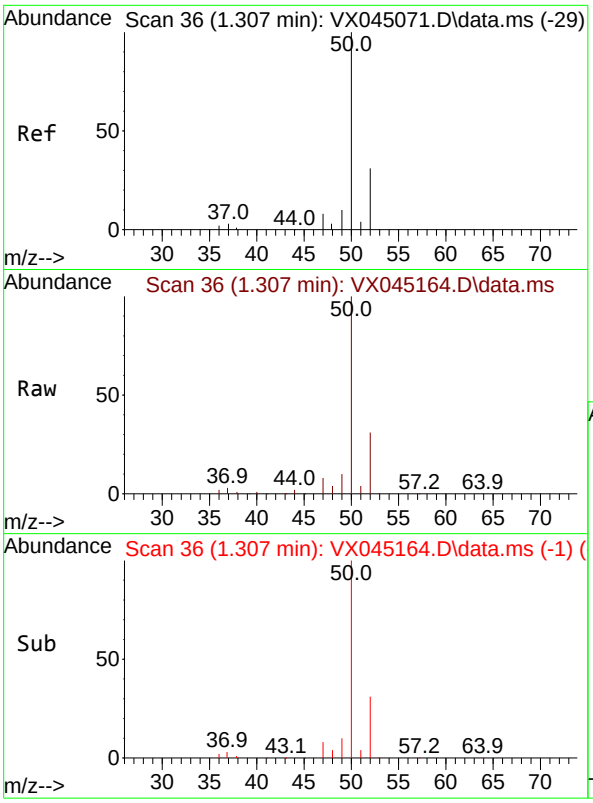



#2
Dichlorodifluoromethane
Concen: 41.546 ug/l
RT: 1.166 min Scan# 13
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 85 Resp: 52592

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.5 | 17.4 | 52.3 |

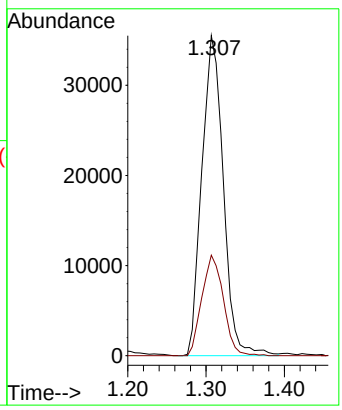





#3
Chloromethane
Concen: 43.689 ug/l
RT: 1.307 min Scan# 3
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 50 Resp: 6768

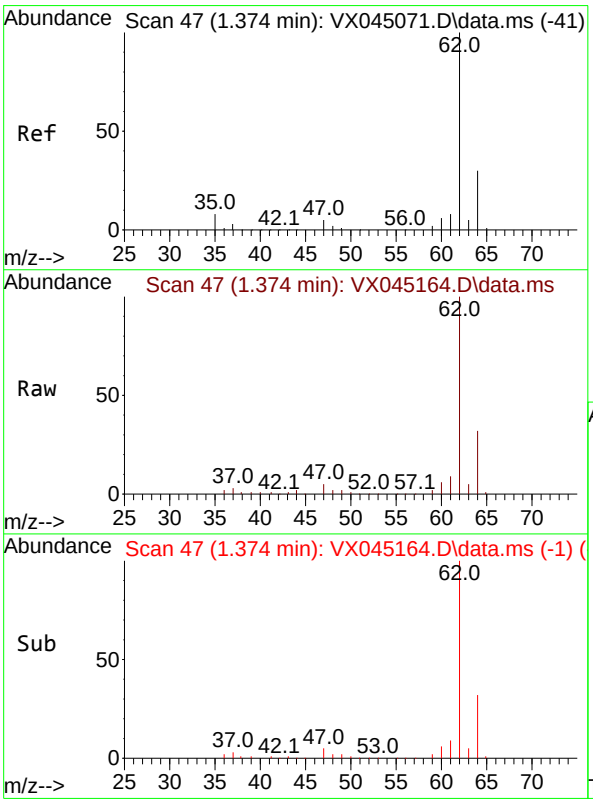
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 31.4 | 25.0 | 37.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
**APPROVED**

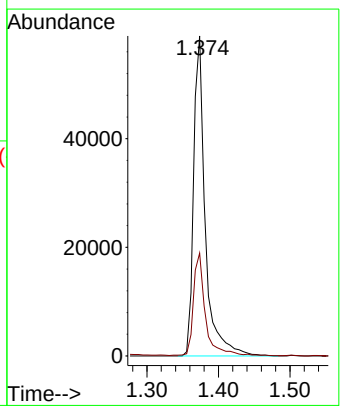
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

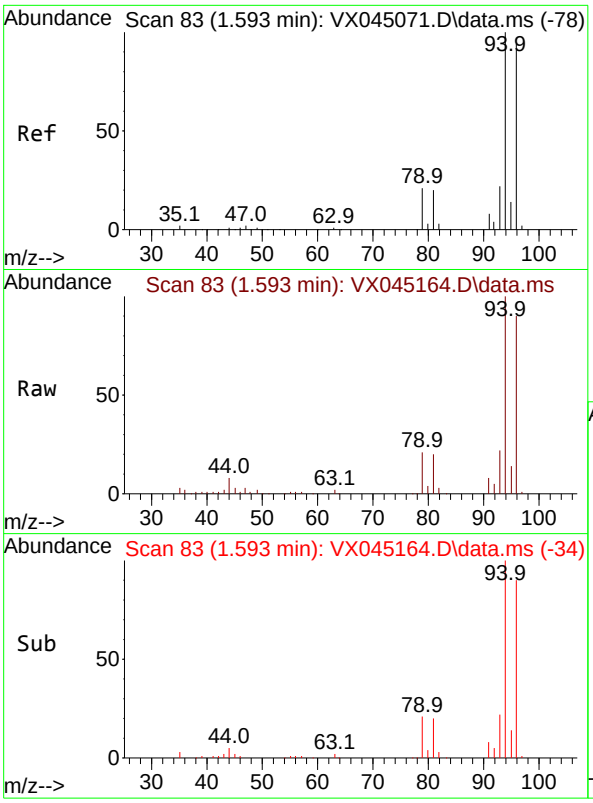



#4
Vinyl Chloride
Concen: 43.277 ug/l
RT: 1.374 min Scan# 47
Delta R.T. -0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 62 Resp: 66508

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 32.1 | 24.3 | 36.5 |

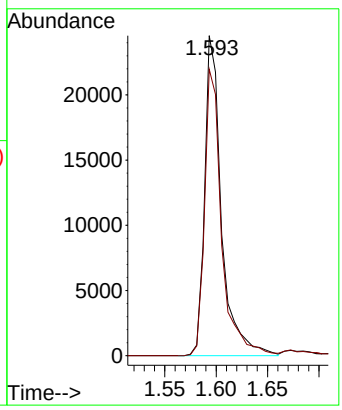





#5
Bromomethane
Concen: 46.294 ug/l
RT: 1.593 min Scan# 8
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 94 Resp: 2796

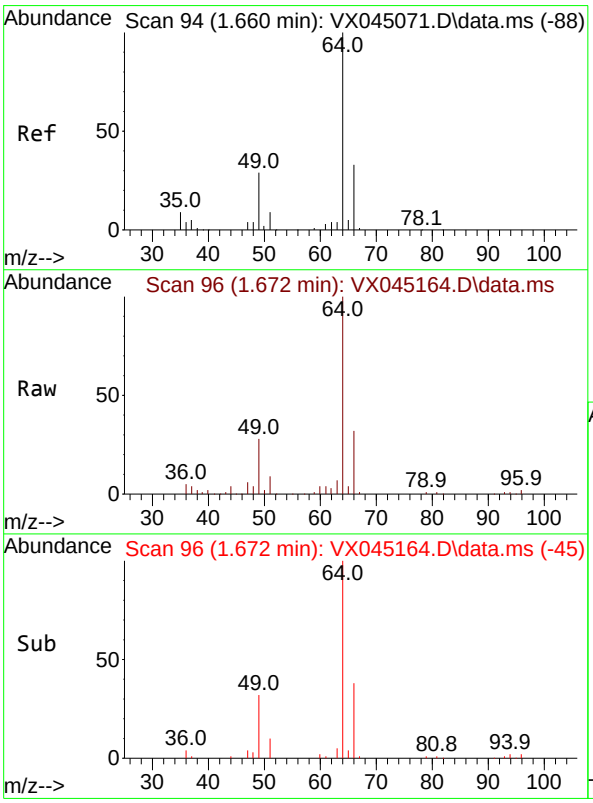
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 89.5 | 75.0 | 112.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
**APPROVED**

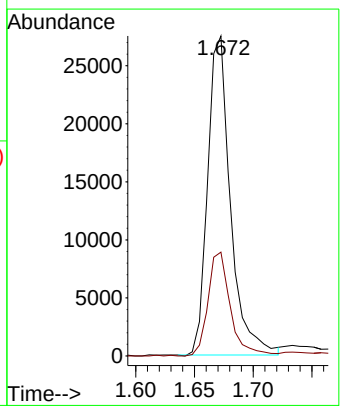
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

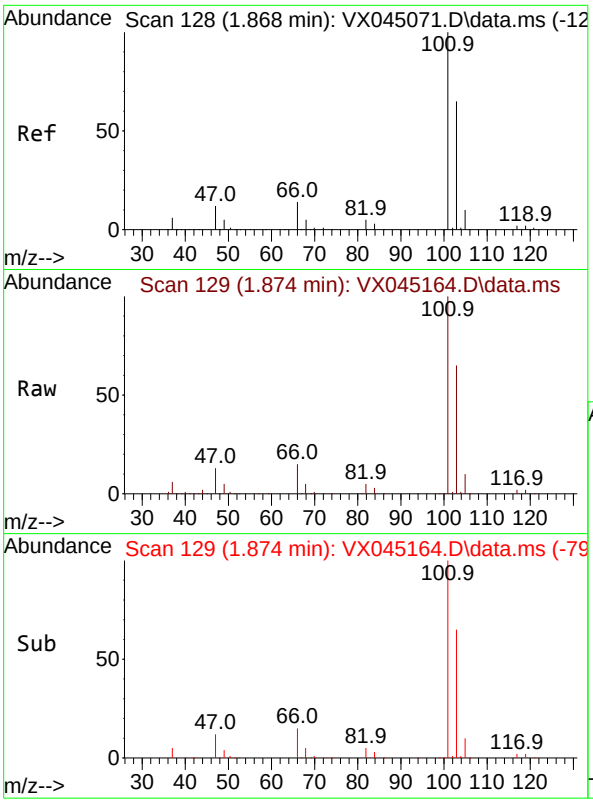



#6
Chloroethane
Concen: 52.353 ug/l
RT: 1.672 min Scan# 96
Delta R.T. 0.012 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 64 Resp: 37111

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 32.5 | 26.7 | 40.1 |

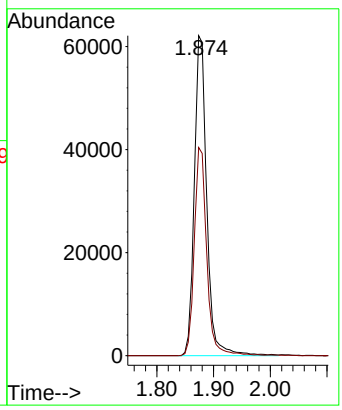





#7
Trichlorofluoromethane
Concen: 46.461 ug/l
RT: 1.874 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion:101 Resp: 9452

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 65.0 | 52.1 | 78.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 03/10/2025
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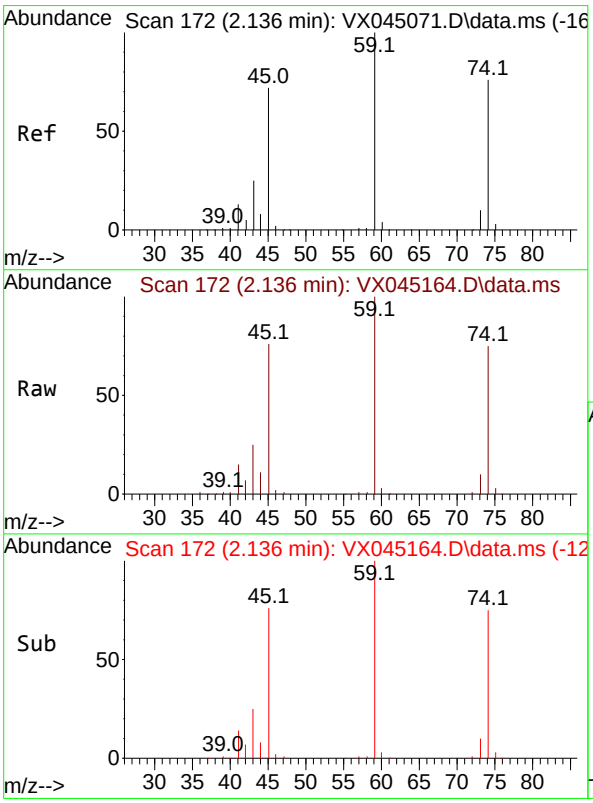
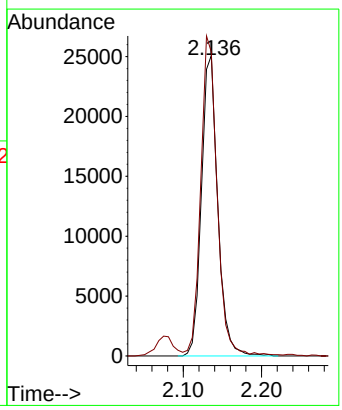
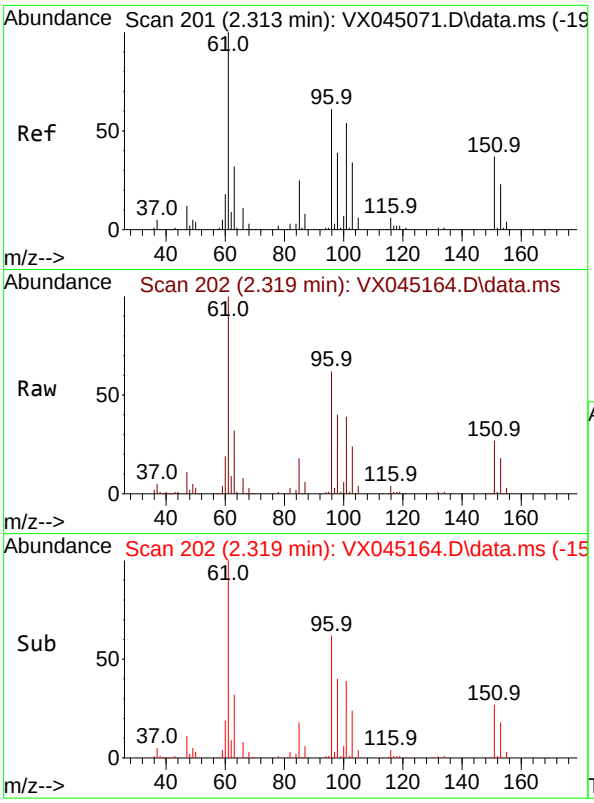



#8
Diethyl Ether
Concen: 45.522 ug/l
RT: 2.136 min Scan# 172
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 74 Resp: 36224

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 106.3 | 51.5 | 154.5 |






#9
1,1,2-Trichlorotrifluoroethane
Concen: 46.379 ug/l
RT: 2.319 min Scan# 2
Delta R.T. 0.006 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion:101 Resp: 5420

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 45.5 | 36.2 | 54.4 |
| 151 | 69.1 | 56.4 | 84.6 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
**APPROVED**

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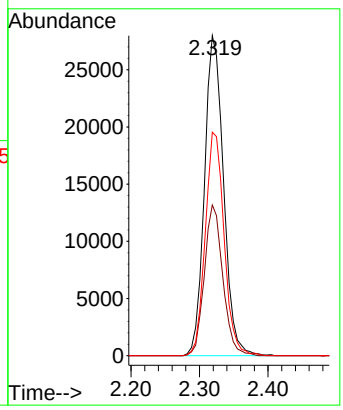
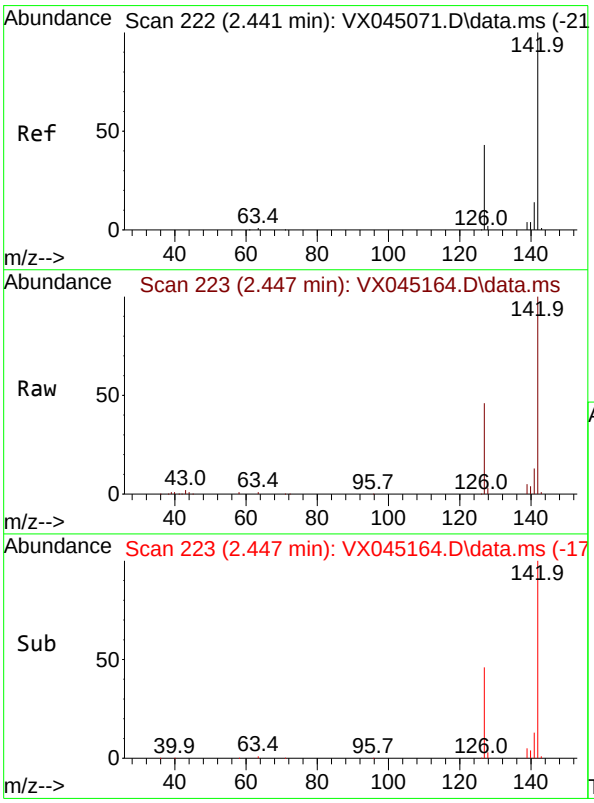
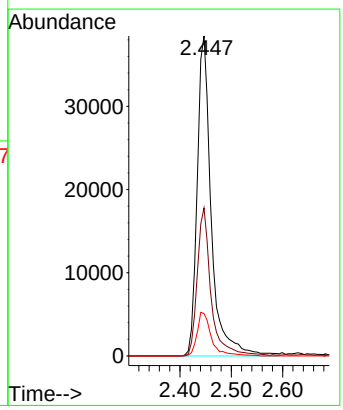


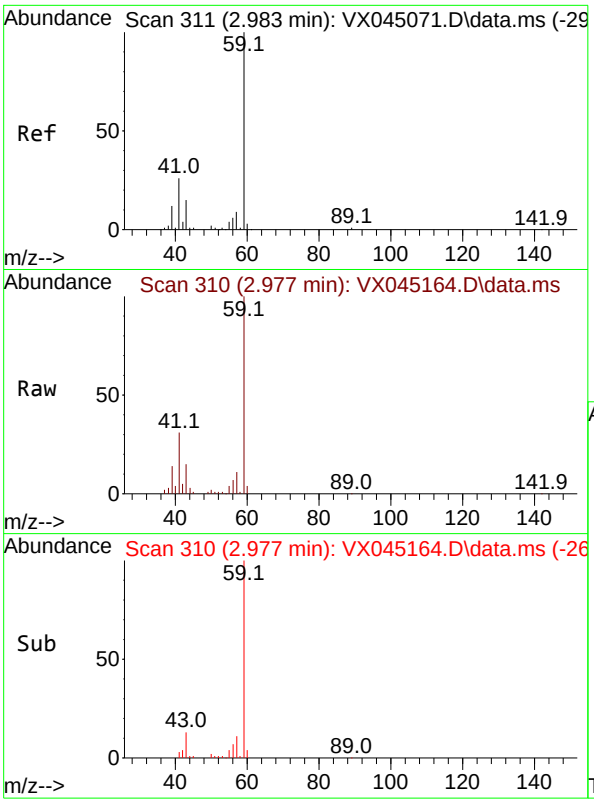




#10
Methyl Iodide
Concen: 50.342 ug/l
RT: 2.447 min Scan# 223
Delta R.T. 0.006 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion:142 Resp: 73533

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 45.2 | 35.4 | 53.2 |
| 141 | 13.8 | 11.6 | 17.4 |

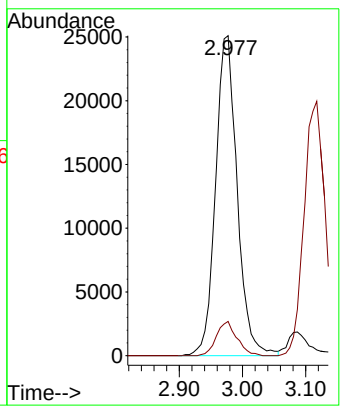





#11
Tert butyl alcohol
Concen: 196.197 ug/l
RT: 2.977 min Scan# 3
Delta R.T. -0.006 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 59 Resp: 5944

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 10.2 | 7.8 | 11.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 03/10/2025
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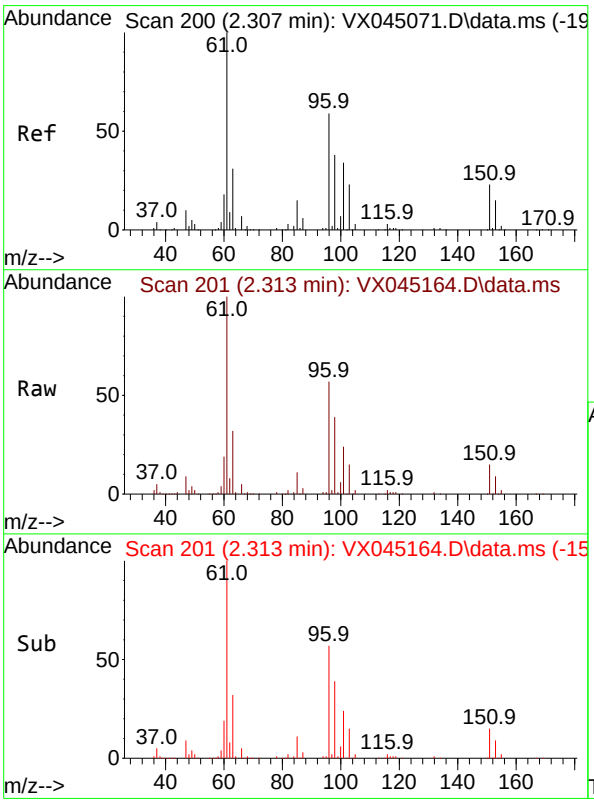
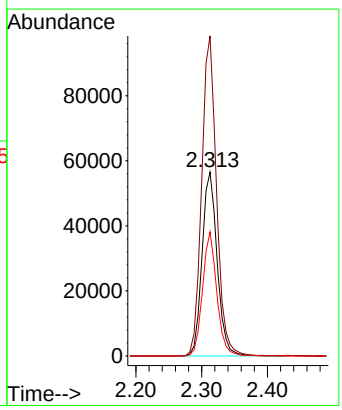
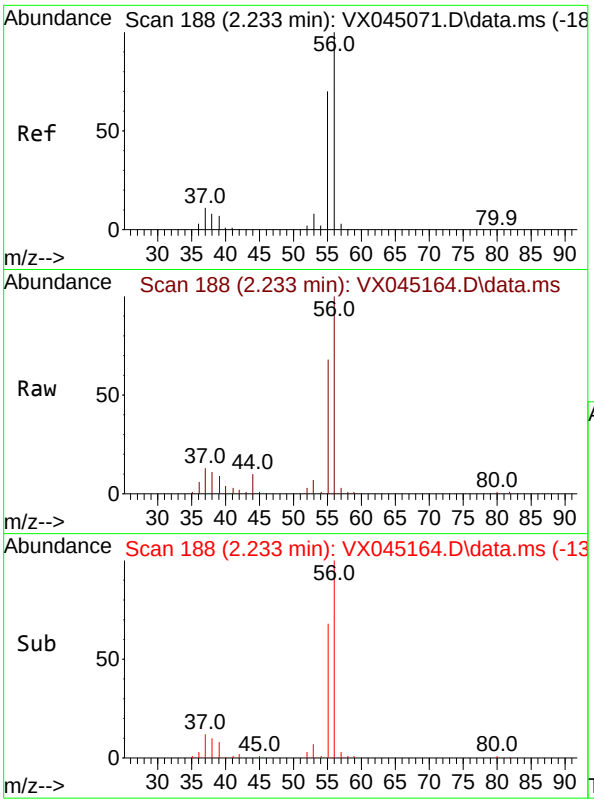



#12
1,1-Dichloroethene
Concen: 73.038 ug/l
RT: 2.313 min Scan# 201
Delta R.T. 0.006 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 96 Resp: 90255

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 174.0 | 134.6 | 202.0 |
| 98 | 67.5 | 51.0 | 76.6 |

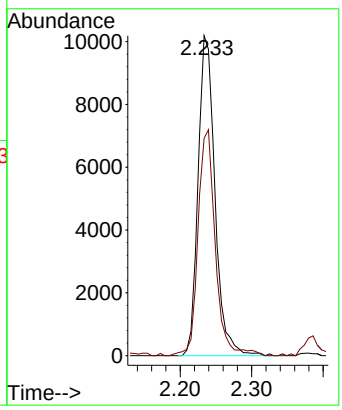





#13
Acrolein
Concen: 47.702 ug/l
RT: 2.233 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 56 Resp: 1670

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 72.2 | 56.2 | 84.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
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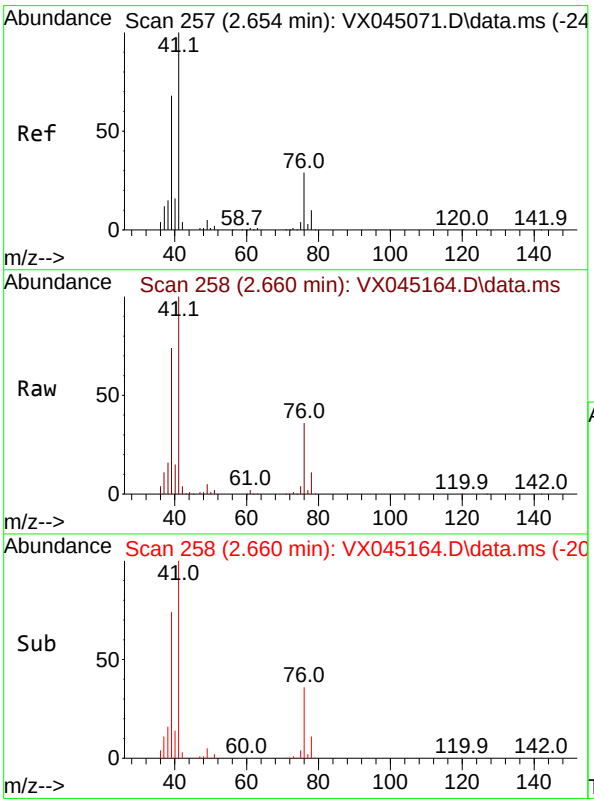
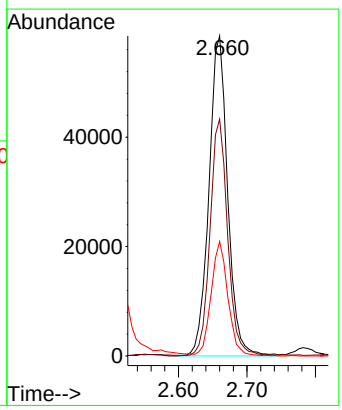
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

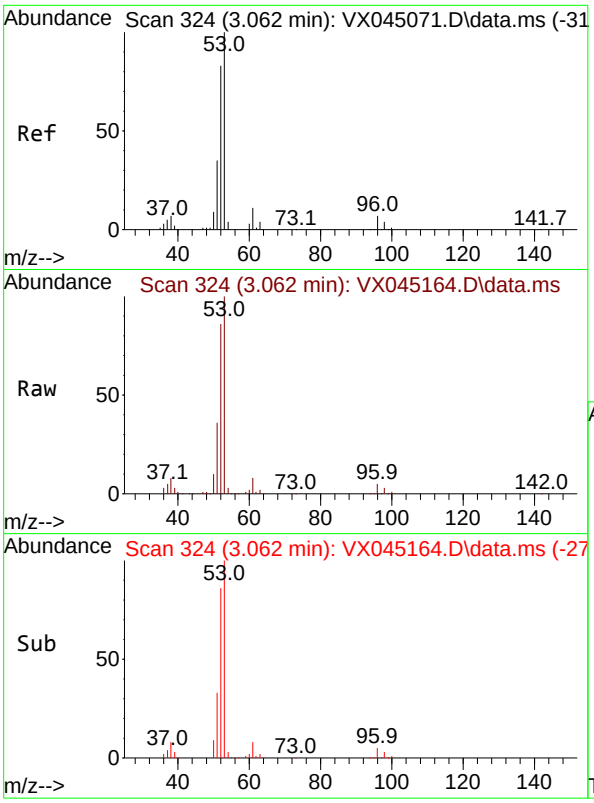



#14
Allyl chloride
Concen: 50.564 ug/l
RT: 2.660 min Scan# 258
Delta R.T. 0.006 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 41 Resp: 111224

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 68.8 | 53.8 | 80.8 |
| 76 | 32.4 | 25.2 | 37.8 |

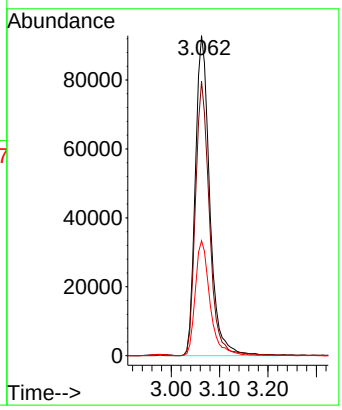





#15
Acrylonitrile
Concen: 236.583 ug/l
RT: 3.062 min Scan# 3
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 53 Resp: 19212

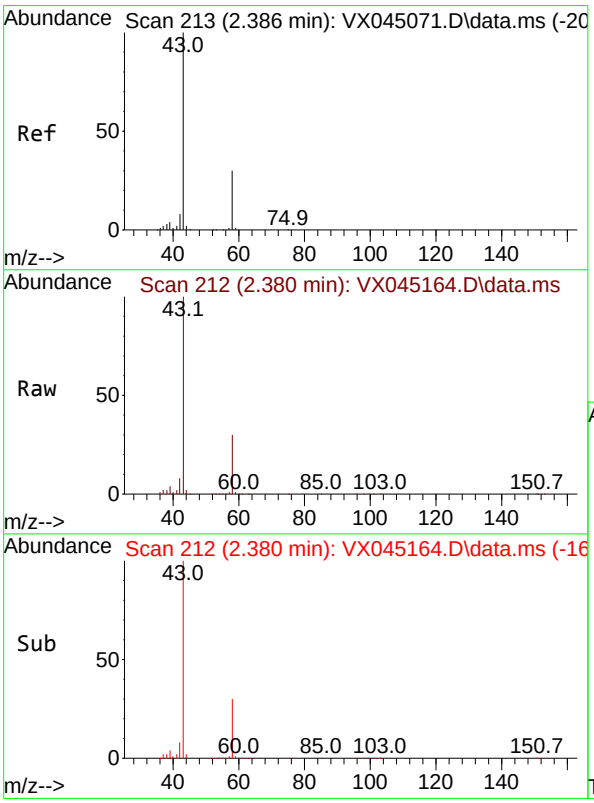
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 83.1 | 66.2 | 99.2 |
| 51 | 36.4 | 29.0 | 43.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
**APPROVED**

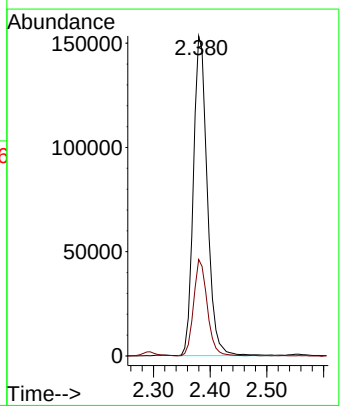
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

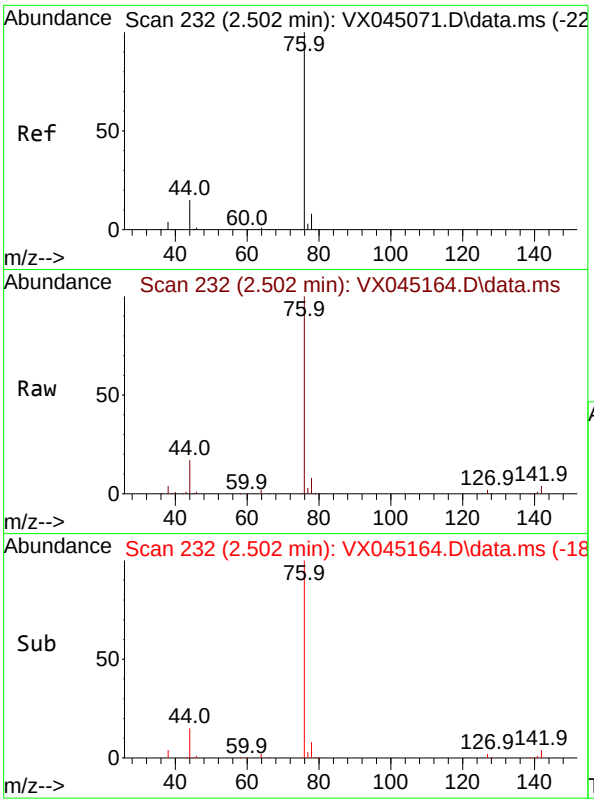



#16
Acetone
Concen: 351.705 ug/l
RT: 2.380 min Scan# 212
Delta R.T. -0.006 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 43 Resp: 261029

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 30.1 | 24.2 | 36.4 |






#17
Carbon Disulfide
Concen: 26.183 ug/l
RT: 2.502 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 76 Resp: 8617

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 8.5 | 6.6 | 9.8 |

**Instrument :**
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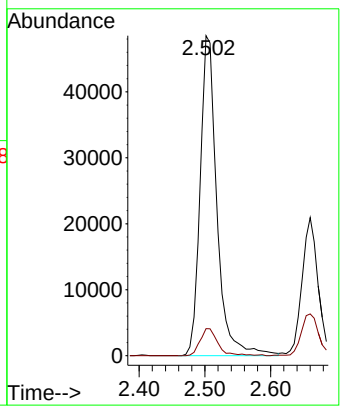
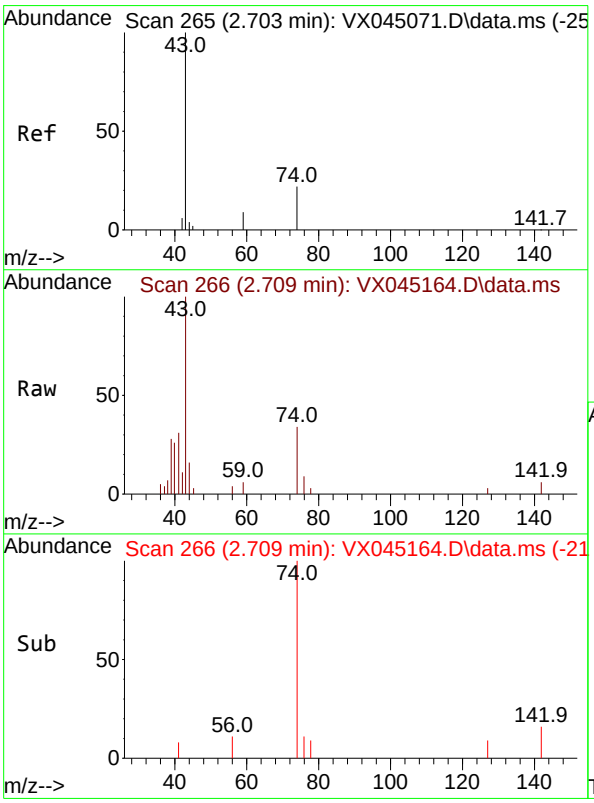
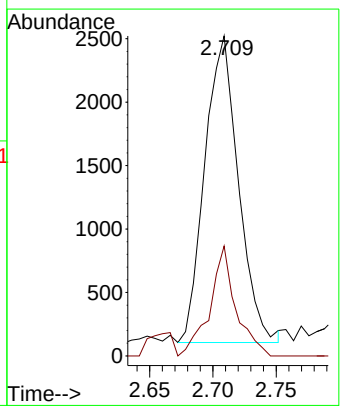


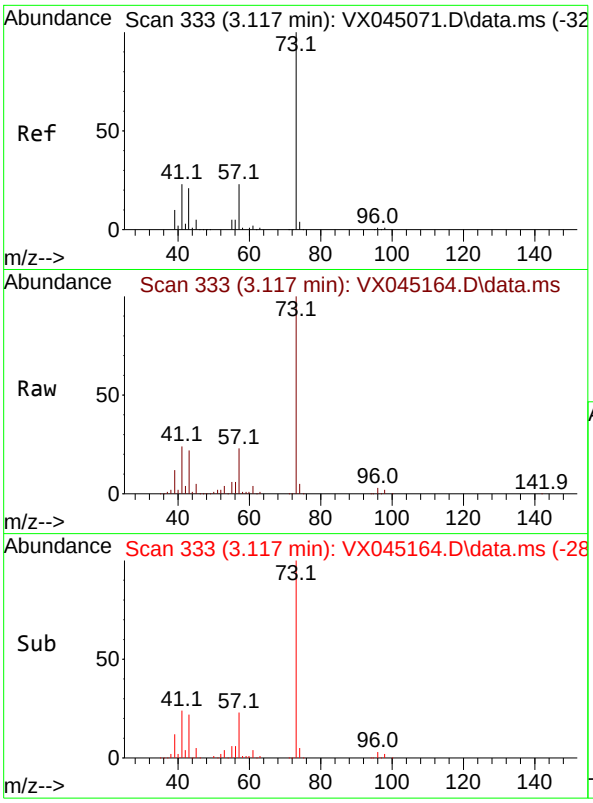




#18
Methyl Acetate
Concen: 2.505 ug/l
RT: 2.709 min Scan# 266
Delta R.T. 0.006 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 43 Resp: 4472

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 27.5 | 17.4 | 26.2# |






#19
Methyl tert-butyl Ether
Concen: 49.428 ug/l
RT: 3.117 min Scan# 3
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 73 Resp: 20492

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 23.0 | 18.5 | 27.7 |

**Instrument :**
MSVOA_X
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BR-05-465-030525MSD

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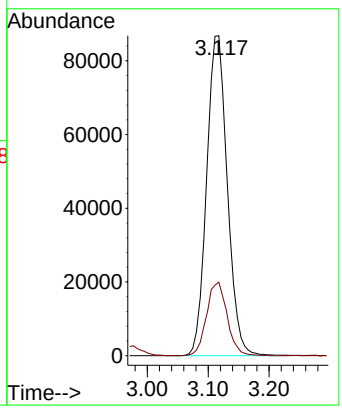
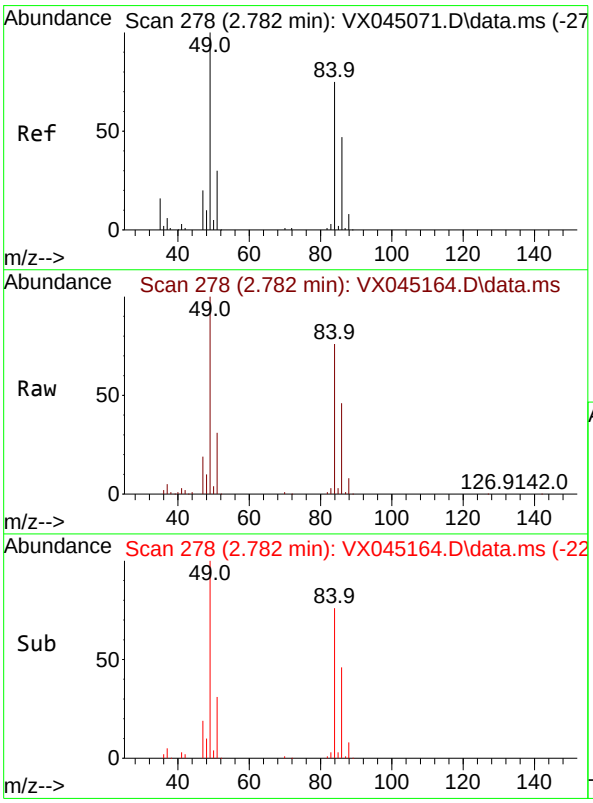
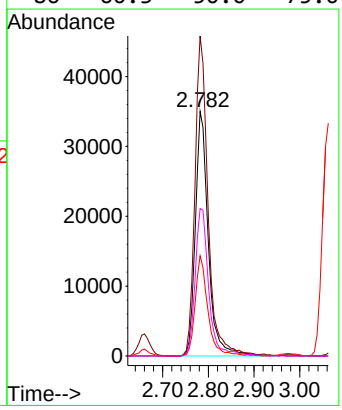


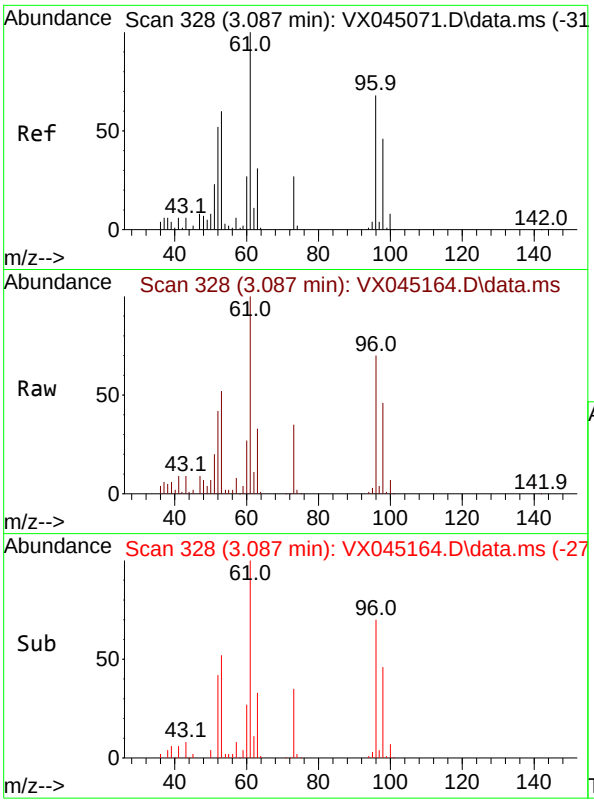




#20
Methylene Chloride
Concen: 46.854 ug/l
RT: 2.782 min Scan# 278
Delta R.T. -0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 84 Resp: 68883

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 130.9 | 106.5 | 159.7 |
| 51 | 40.9 | 32.1 | 48.1 |
| 86 | 60.3 | 50.0 | 75.0 |

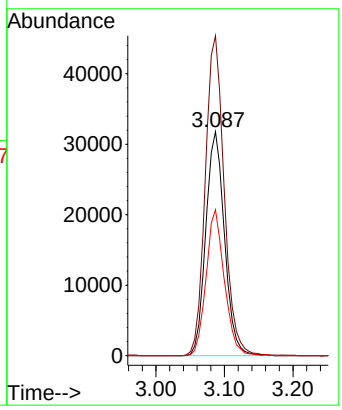





#21
trans-1,2-Dichloroethene
Concen: 49.486 ug/l
RT: 3.087 min Scan# 3
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 96 Resp: 6041

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 142.8 | 117.0 | 175.4 |
| 98 | 65.1 | 53.4 | 80.2 |




**Instrument :**
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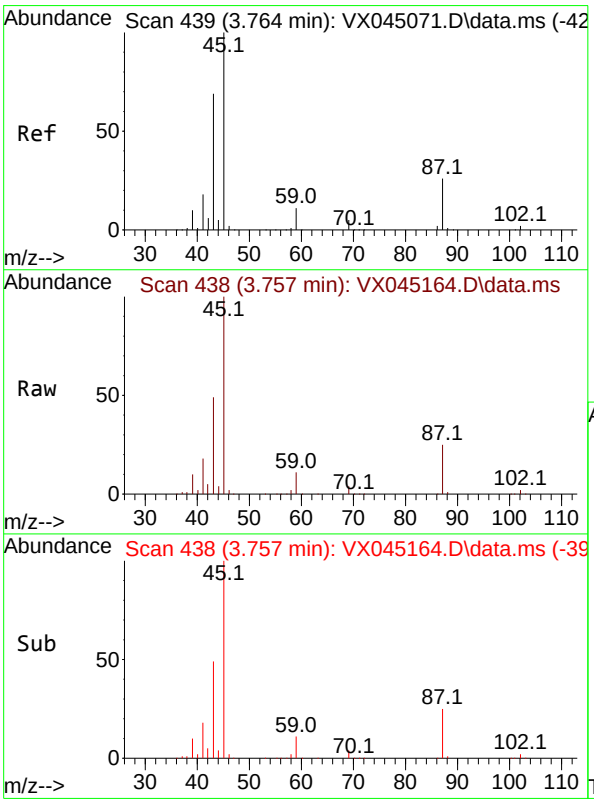
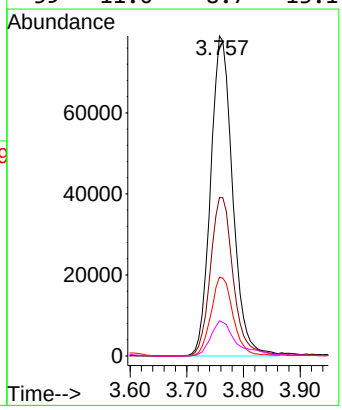
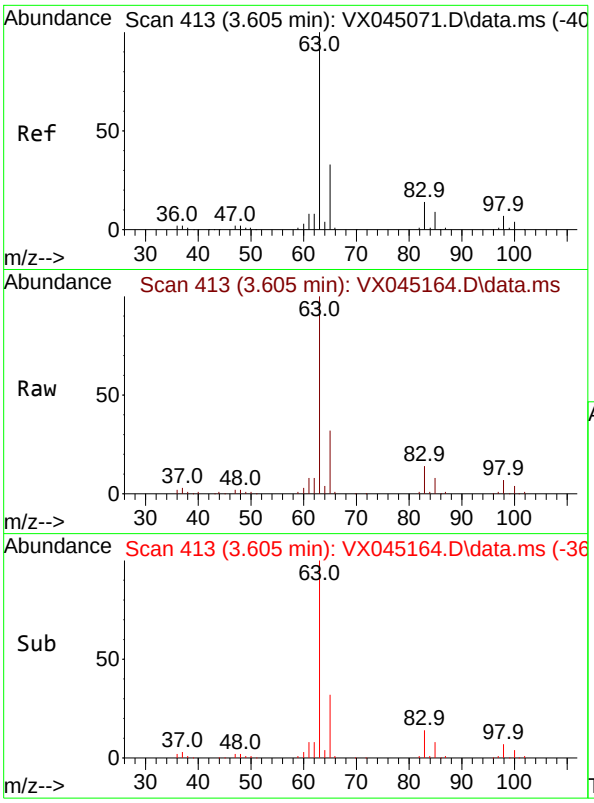



#22
Diisopropyl ether
Concen: 47.578 ug/l
RT: 3.757 min Scan# 438
Delta R.T. -0.006 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 45 Resp: 212844

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 49.5 | 54.9 | 82.3# |
| 87 | 24.7 | 21.0 | 31.4 |
| 59 | 11.0 | 8.7 | 13.1 |

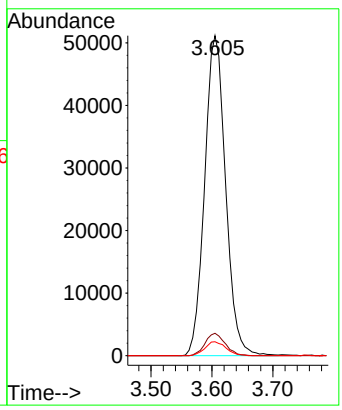





#24
1,1-Dichloroethane
Concen: 48.807 ug/l
RT: 3.605 min Scan# 41
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 63 Resp: 12236

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 7.0 | 3.4 | 10.2 |
| 100 | 4.4 | 2.1 | 6.5 |




**Instrument :**
MSVOA_X
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BR-05-465-030525MSD

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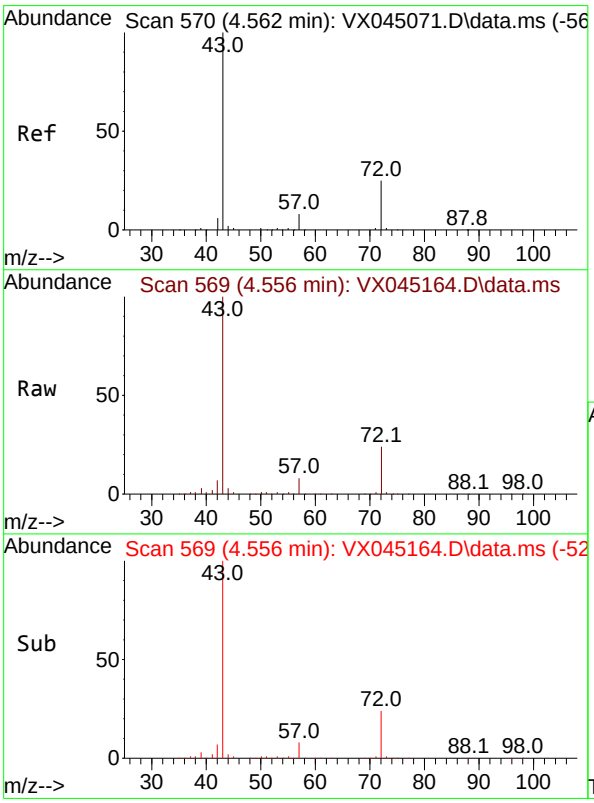
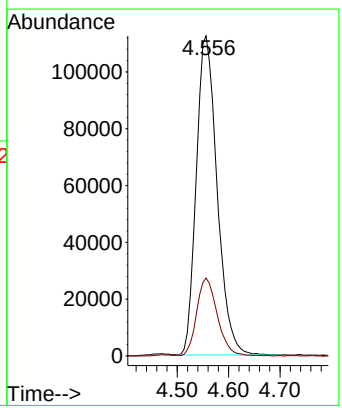
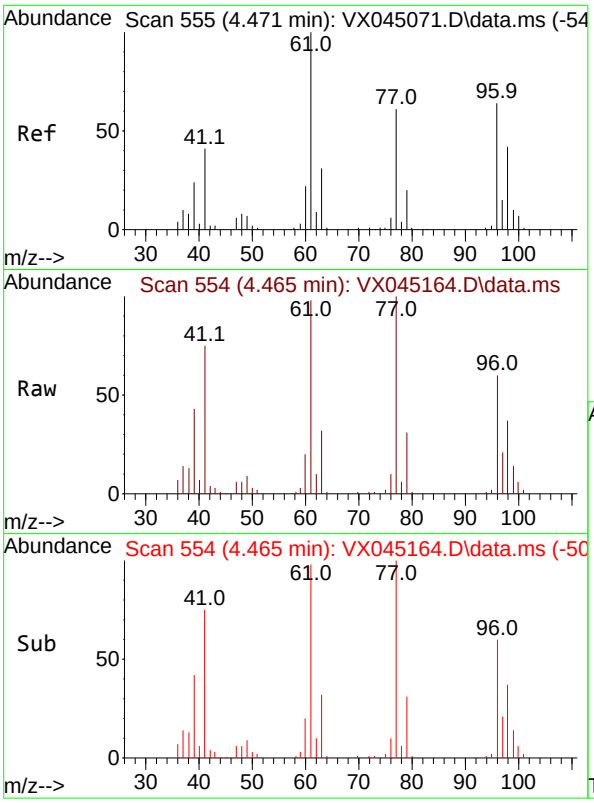



#25
2-Butanone
Concen: 283.527 ug/l
RT: 4.556 min Scan# 569
Delta R.T. -0.006 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 43 Resp: 316746

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 24.3 | 20.0 | 30.0 |

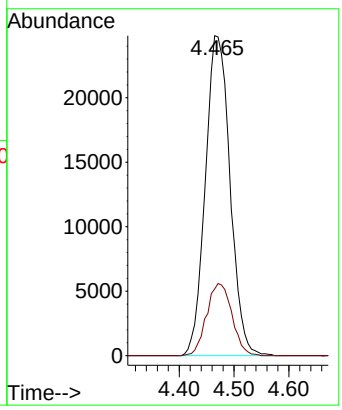





#26
2,2-Dichloropropane
Concen: 66.088 ug/l
RT: 4.465 min Scan# 5
Delta R.T. -0.006 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 77 Resp: 7771

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 23.1 | 12.4 | 37.0 |




**Instrument :**
MSVOA_X
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BR-05-465-030525MSD

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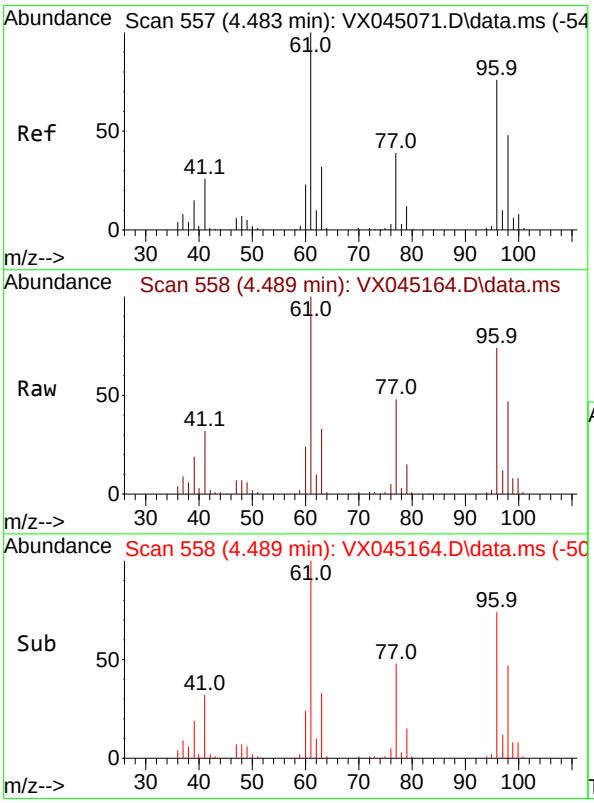
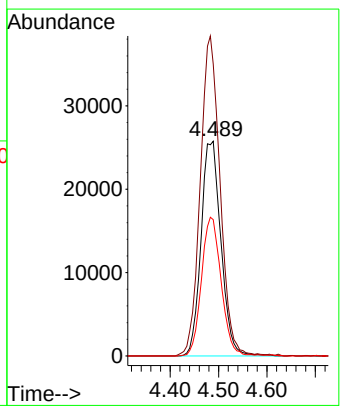
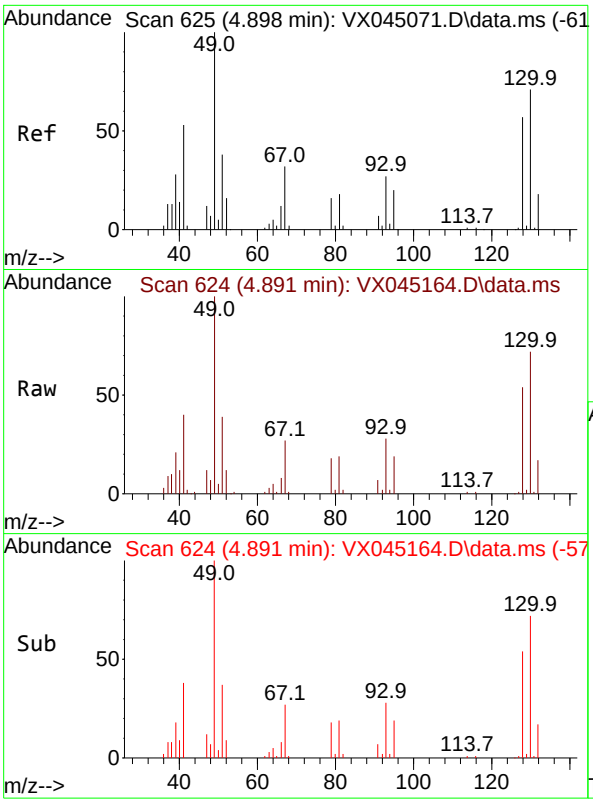



#27
cis-1,2-Dichloroethene
Concen: 48.810 ug/l
RT: 4.489 min Scan# 558
Delta R.T. 0.006 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 96 Resp: 73559

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 148.4 | 0.0 | 283.2 |
| 98 | 64.0 | 0.0 | 128.0 |

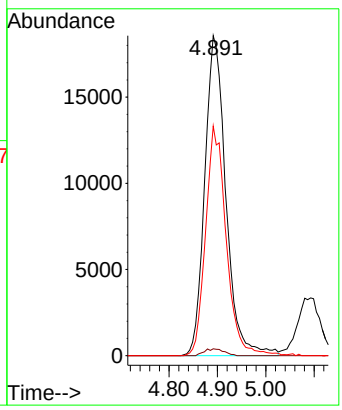





#28
Bromochloromethane
Concen: 47.224 ug/l
RT: 4.891 min Scan# 6
Delta R.T. -0.006 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 49 Resp: 5643

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 2.0 | 0.0 | 3.4 |
| 130 | 70.1 | 56.1 | 84.1 |




**Instrument :**
MSVOA_X
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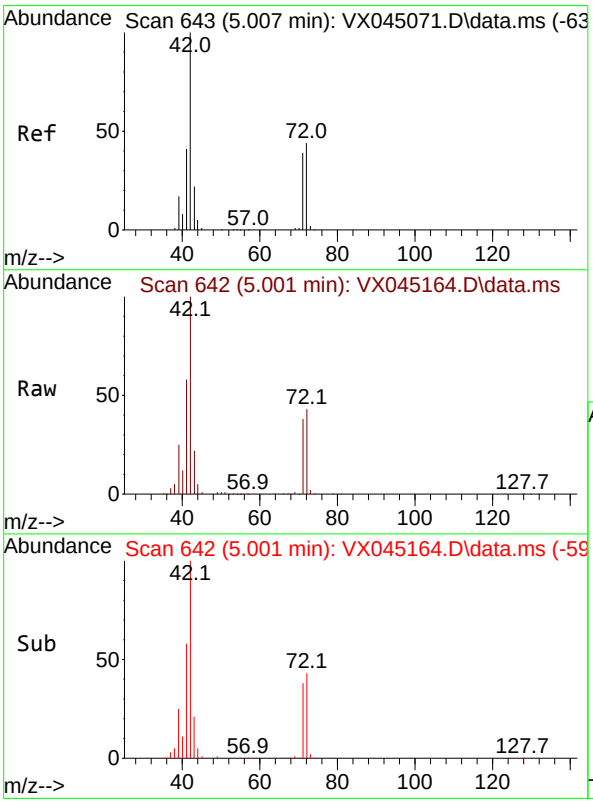
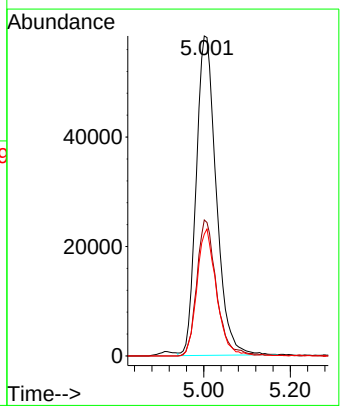
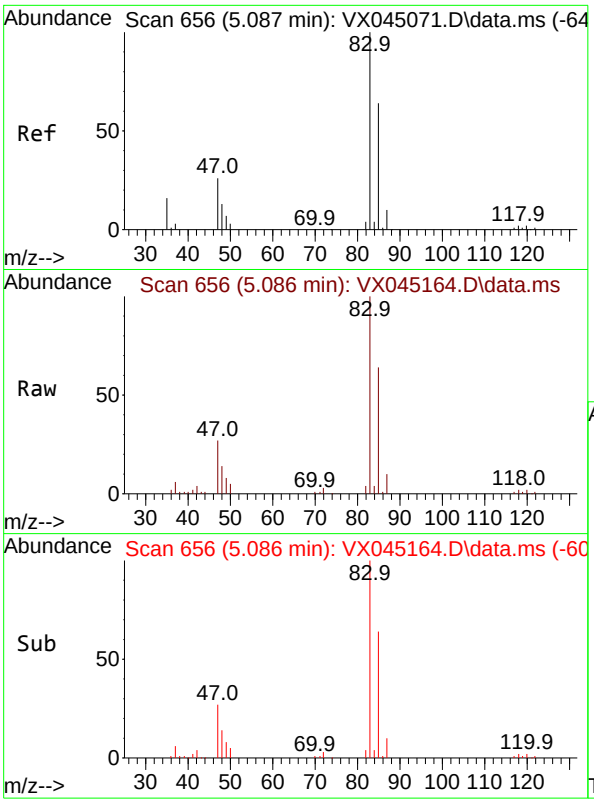



#29
Tetrahydrofuran
Concen: 249.177 ug/l
RT: 5.001 min Scan# 642
Delta R.T. -0.006 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 42 Resp: 186941

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 42.3 | 34.1 | 51.1 |
| 71 | 38.8 | 31.4 | 47.0 |






#30
Chloroform
Concen: 48.631 ug/l
RT: 5.086 min Scan# 6
Delta R.T. -0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 83 Resp: 12114

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 63.7 | 51.4 | 77.2 |

**Instrument :**
MSVOA_X
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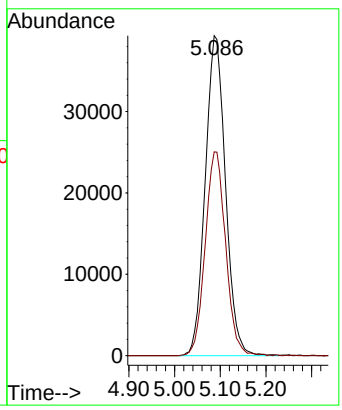
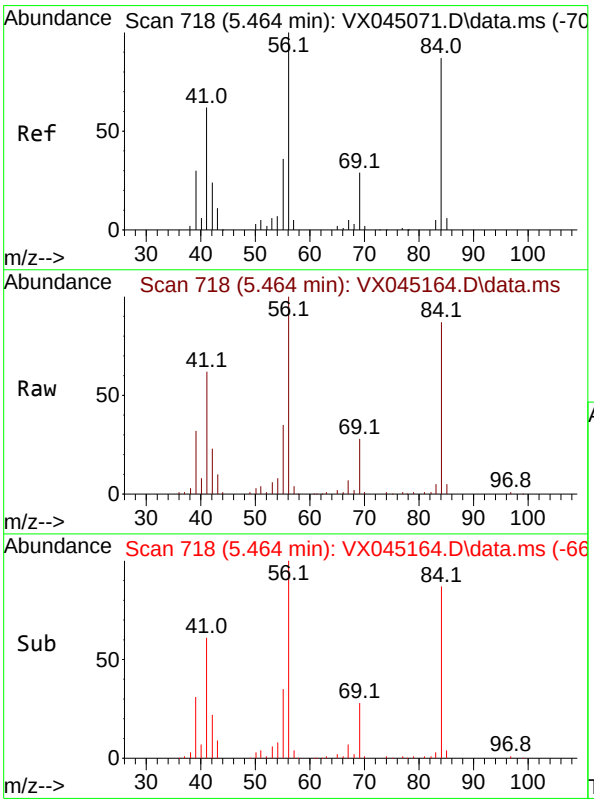
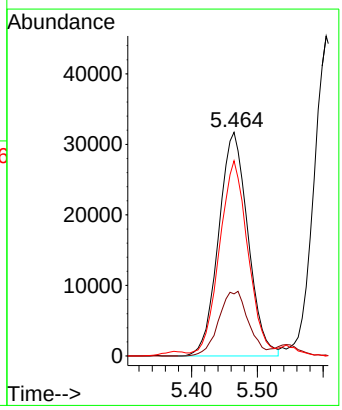


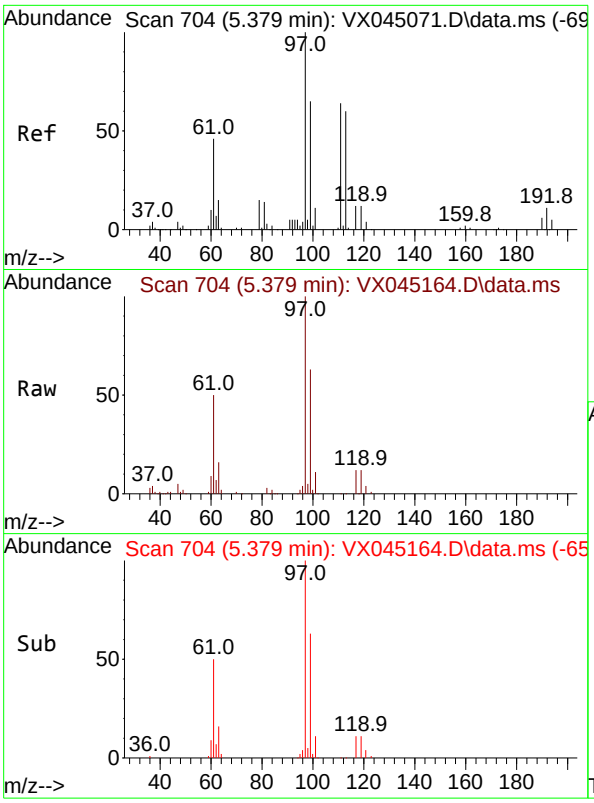




#31
Cyclohexane
Concen: 45.259 ug/l
RT: 5.464 min Scan# 718
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 56 Resp: 98498

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 27.8 | 23.4 | 35.2 |
| 84 | 85.4 | 69.4 | 104.2 |

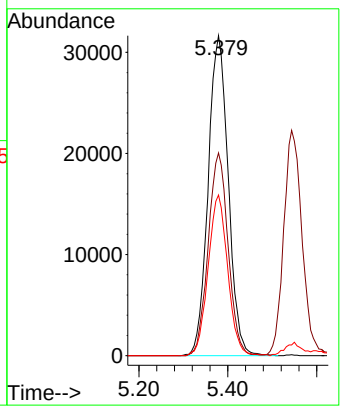





#32
1,1,1-Trichloroethane
Concen: 49.391 ug/l
RT: 5.379 min Scan# 7
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 97 Resp: 9937

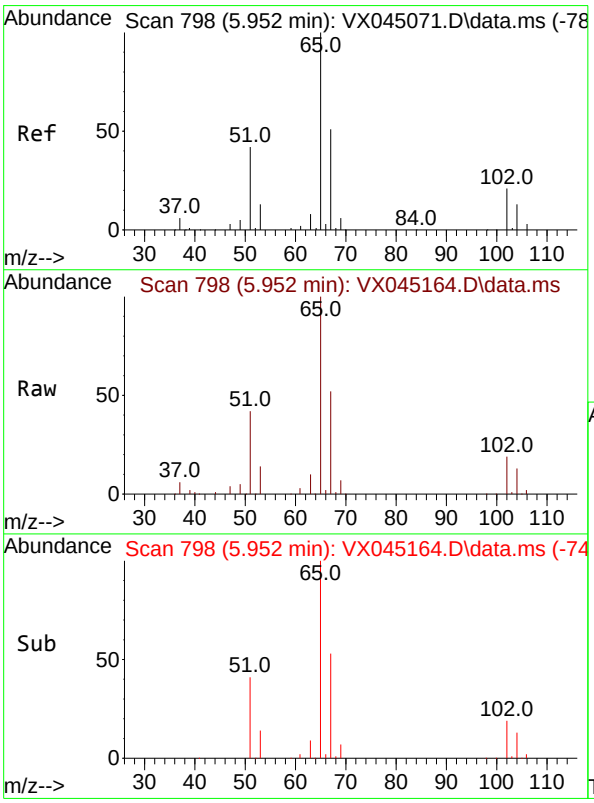
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 62.7 | 51.6 | 77.4 |
| 61 | 49.1 | 38.4 | 57.6 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
**APPROVED**

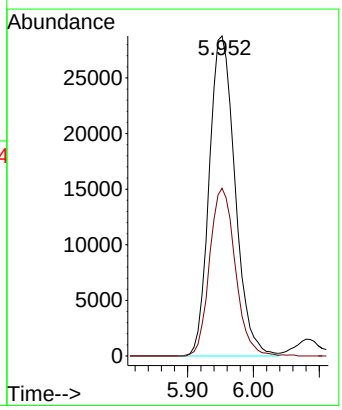
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

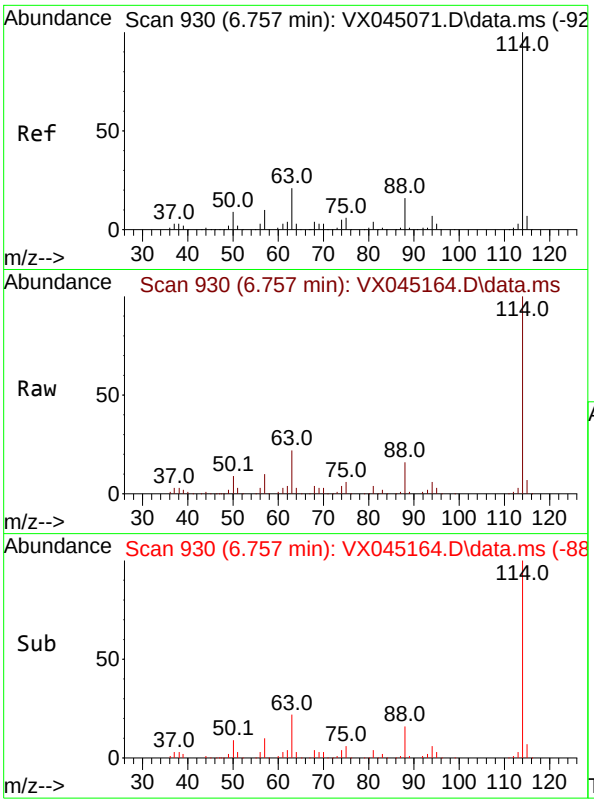



#33
1,2-Dichloroethane-d4
Concen: 49.159 ug/l
RT: 5.952 min Scan# 798
Delta R.T. -0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 65 Resp: 78636

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 52.1 | 0.0 | 106.2 |






#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.757 min Scan# 9
Delta R.T. -0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

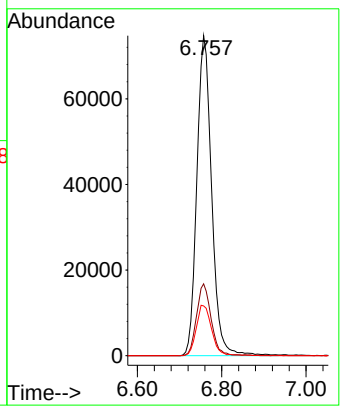
Tgt Ion:114 Resp: 18269

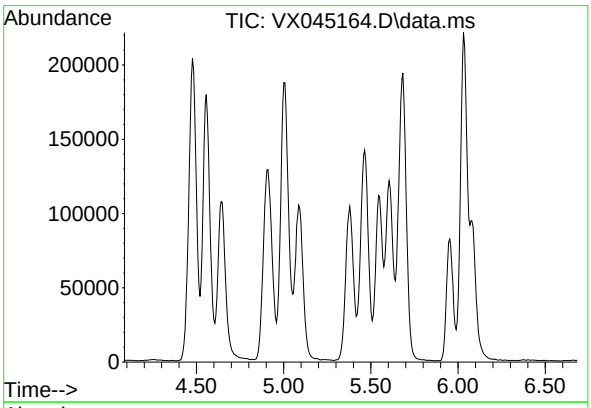
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.5 | 0.0 | 41.8 |
| 88 | 15.5 | 0.0 | 32.8 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025



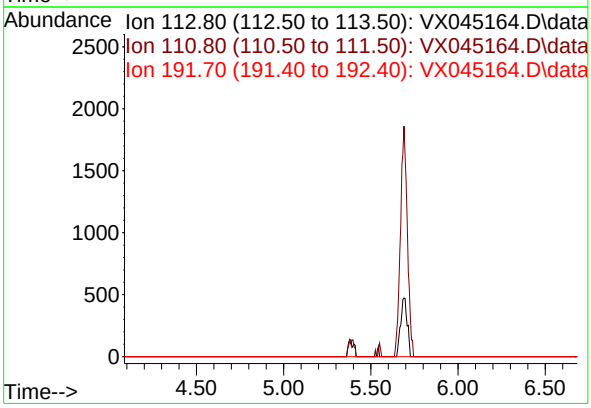



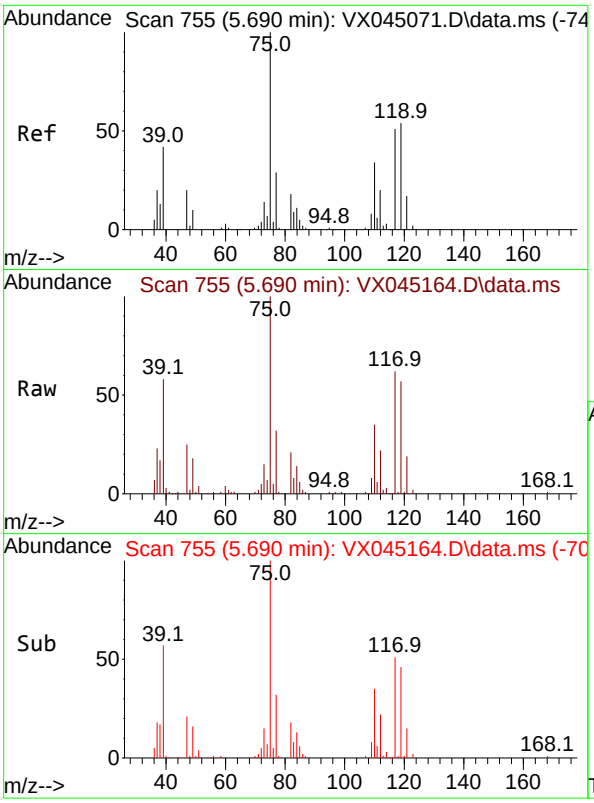

#35
Dibromofluoromethane
Concen: 0.000 ug/l
Expected RT: 5.39 min

Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 113

| Sig | Exp Ratio |
|---|---|
| 113 | 100 |
| 111 | 102.2 |
| 192 | 17.9 |

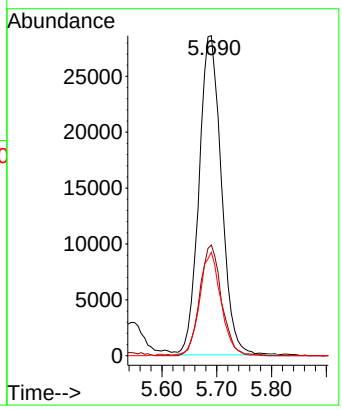





#36
1,1-Dichloropropene
Concen: 48.310 ug/l
RT: 5.690 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 75 Resp: 8093

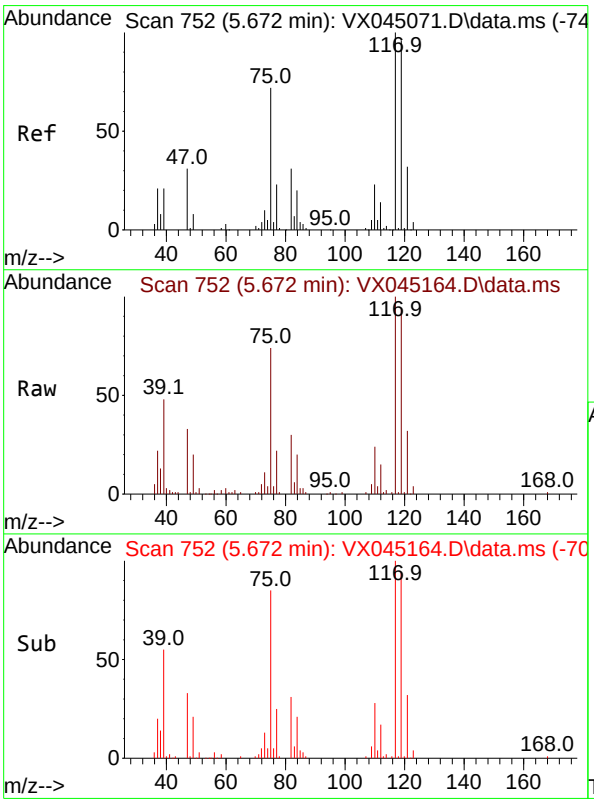
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 33.8 | 16.9 | 50.6 |
| 77 | 31.1 | 24.5 | 36.7 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
**APPROVED**

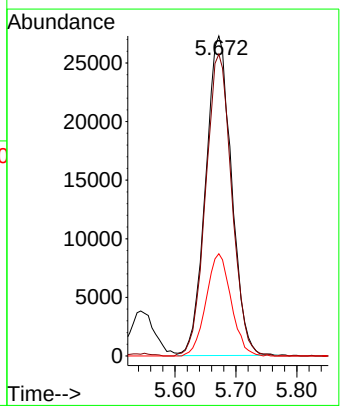
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

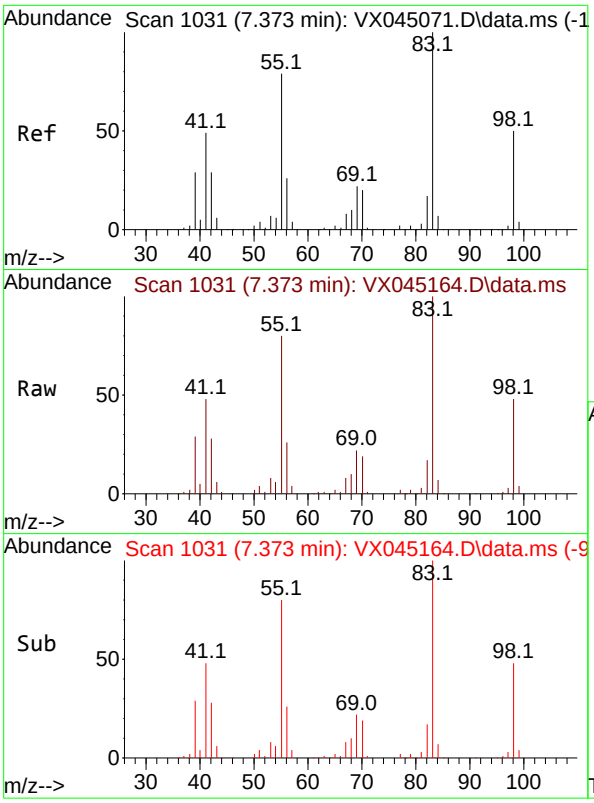



#38
Carbon Tetrachloride
Concen: 47.327 ug/l
RT: 5.672 min Scan# 752
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion:117 Resp: 80499

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 94.5 | 76.7 | 115.1 |
| 121 | 32.0 | 25.5 | 38.3 |

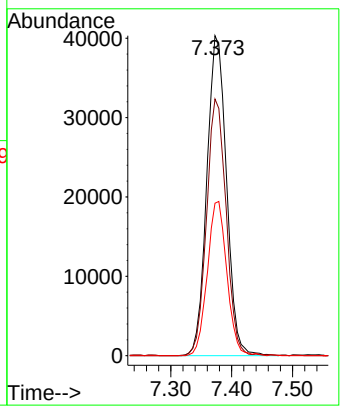





#39
Methylcyclohexane
Concen: 45.080 ug/l
RT: 7.373 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 83 Resp: 9049

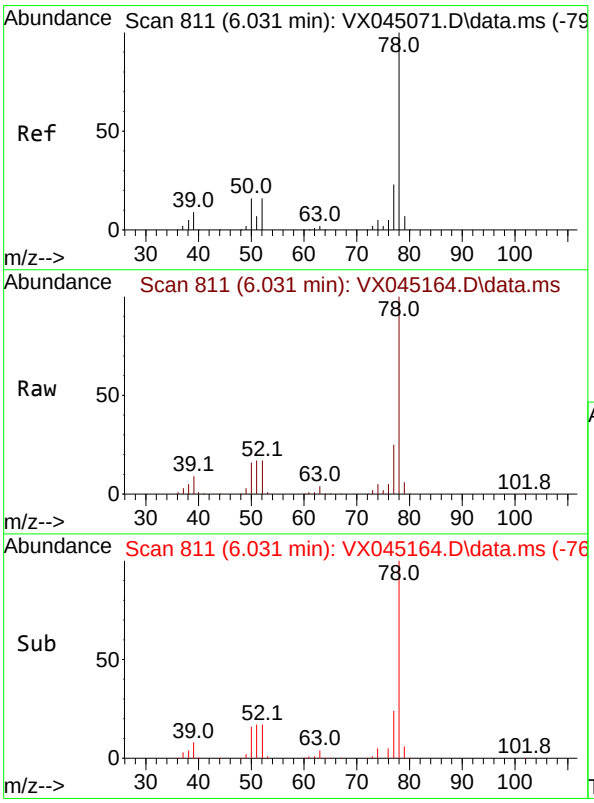
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 80.2 | 63.0 | 94.4 |
| 98 | 47.6 | 39.7 | 59.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
**APPROVED**

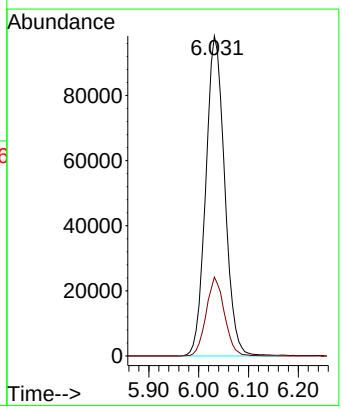
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

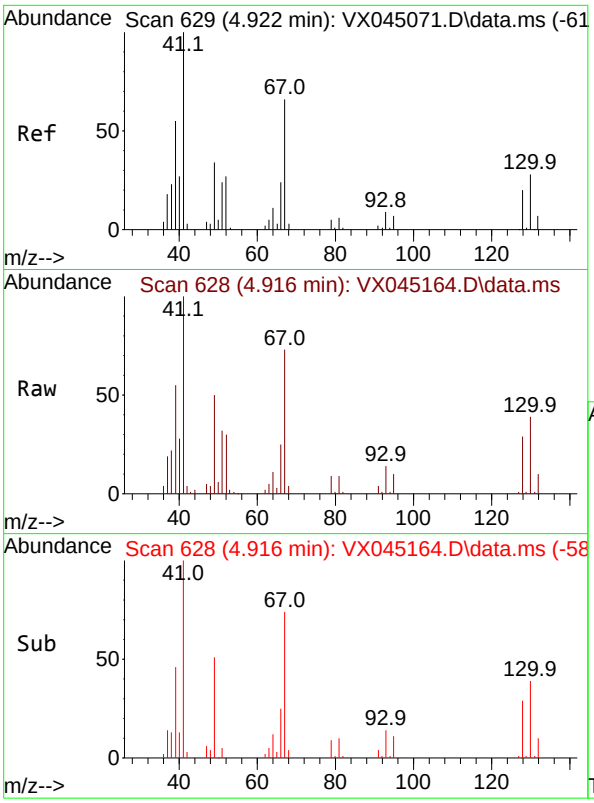



#40
Benzene
Concen: 48.959 ug/l
RT: 6.031 min Scan# 811
Delta R.T. -0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 78 Resp: 259017

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 24.6 | 18.8 | 28.2 |

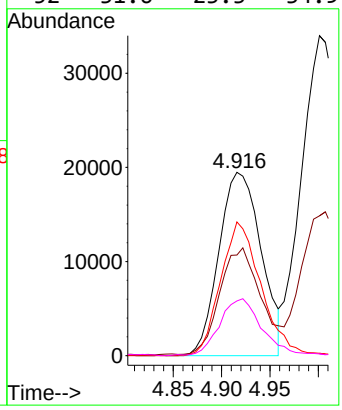





#41
Methacrylonitrile
Concen: 50.821 ug/l
RT: 4.916 min Scan# 6
Delta R.T. -0.006 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 41 Resp: 5932

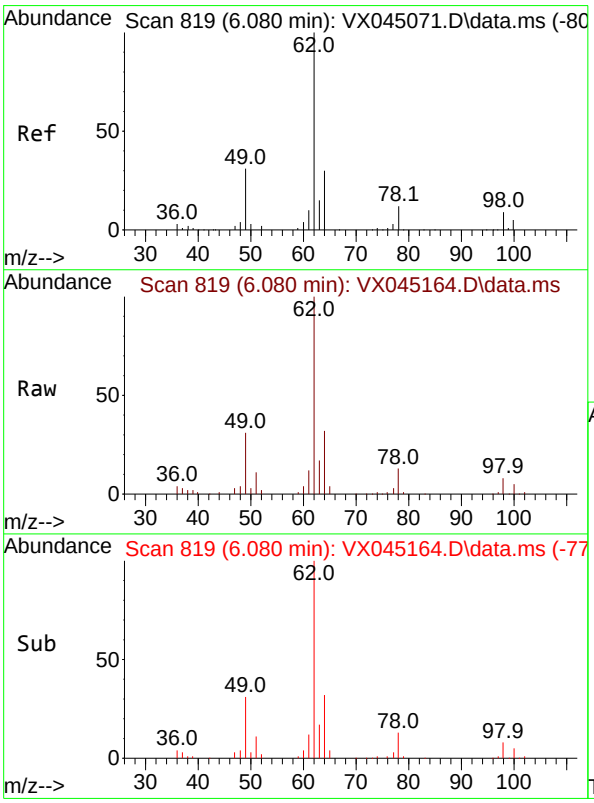
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 57.1 | 44.6 | 67.0 |
| 67 | 69.9 | 53.9 | 80.9 |
| 52 | 31.6 | 23.3 | 34.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
**APPROVED**

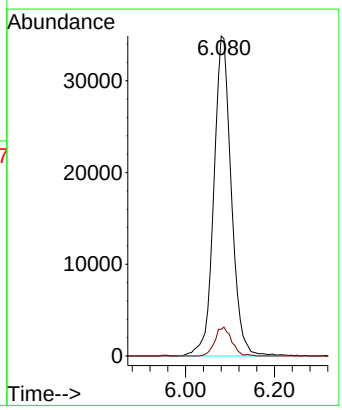
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

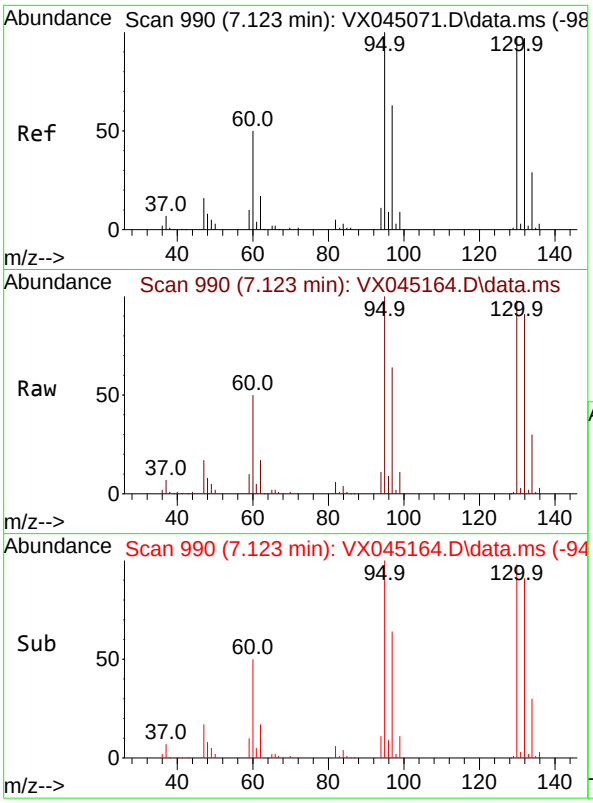



#42
1,2-Dichloroethane
Concen: 49.838 ug/l
RT: 6.080 min Scan# 819
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 62 Resp: 94946

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 8.6 | 0.0 | 18.2 |






#44
Trichloroethene
Concen: 91.488 ug/l
RT: 7.123 min Scan# 9
Delta R.T. -0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion:130 Resp: 11365

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 101.9 | 0.0 | 205.0 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 03/10/2025
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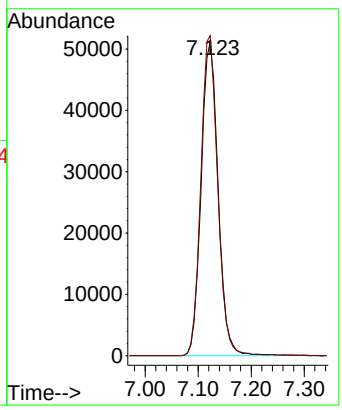
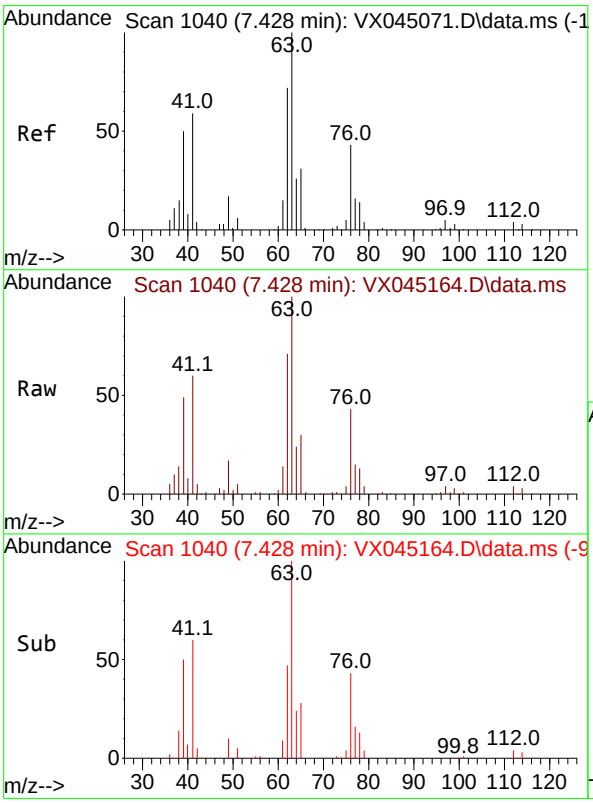
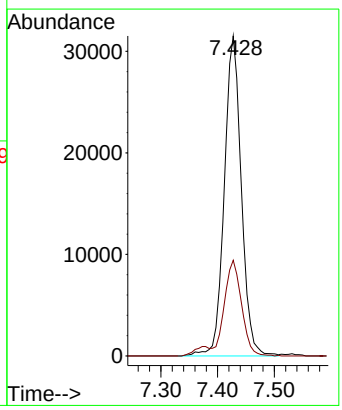


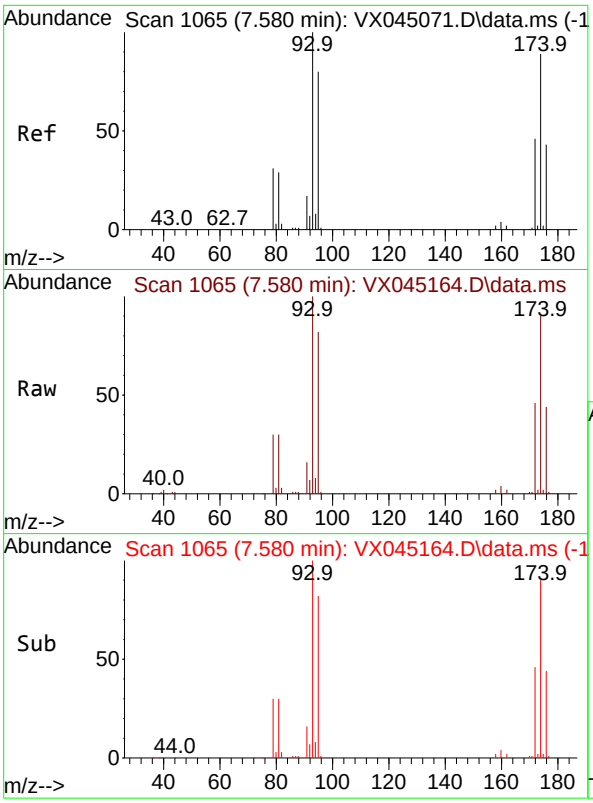




#45
1,2-Dichloropropane
Concen: 48.354 ug/l
RT: 7.428 min Scan# 1040
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 63 Resp: 65772

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 29.9 | 24.7 | 37.1 |

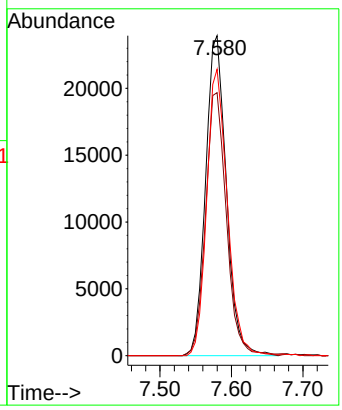





#46
Dibromomethane
Concen: 50.186 ug/l
RT: 7.580 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 93 Resp: 4825

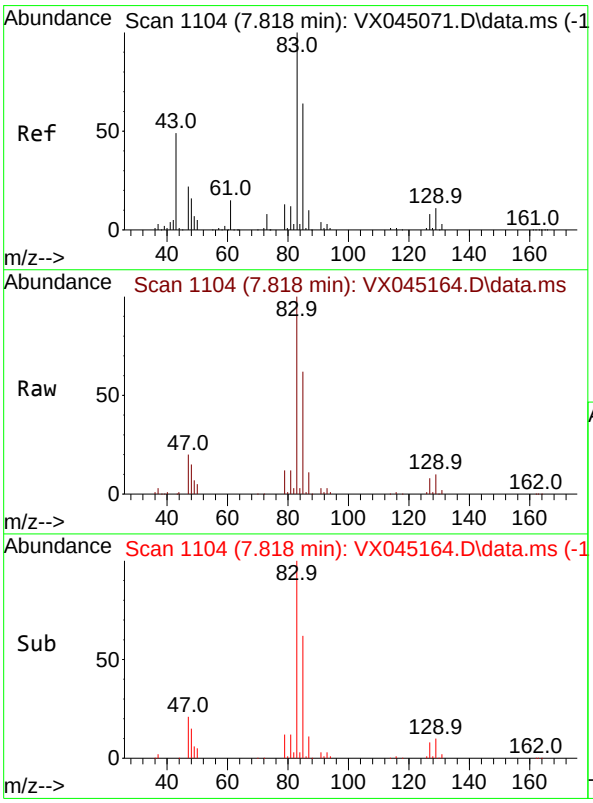
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 82.3 | 65.8 | 98.8 |
| 174 | 89.0 | 72.2 | 108.2 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
**APPROVED**

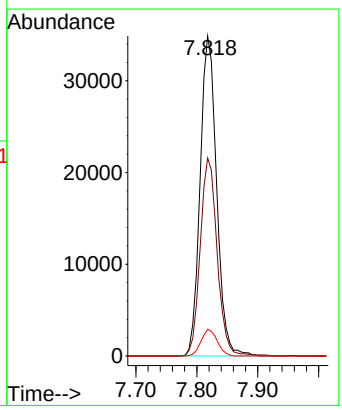
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

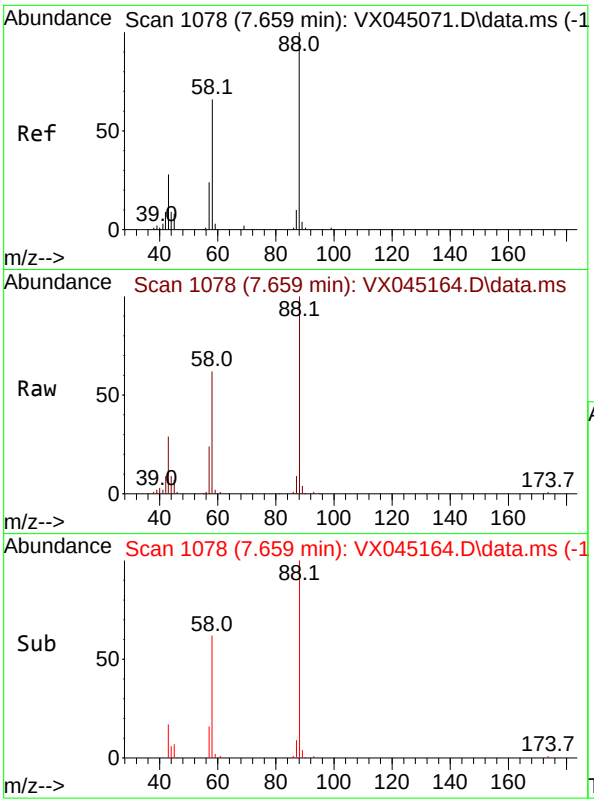



#47
Bromodichloromethane
Concen: 34.877 ug/l
RT: 7.818 min Scan# 1104
Delta R.T. -0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 83 Resp: 65772

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 61.9 | 51.1 | 76.7 |
| 127 | 8.3 | 6.4 | 9.6 |






#49
1,4-Dioxane
Concen: 858.601 ug/l
RT: 7.659 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 88 Resp: 2900

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 28.5 | 28.7 | 43.1# |
| 58 | 67.7 | 55.8 | 83.8 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
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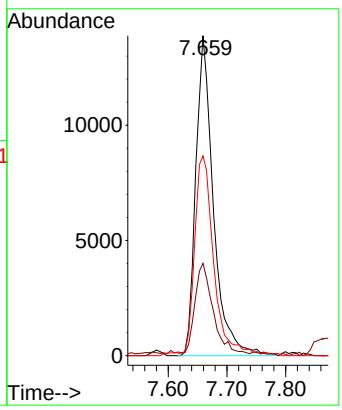
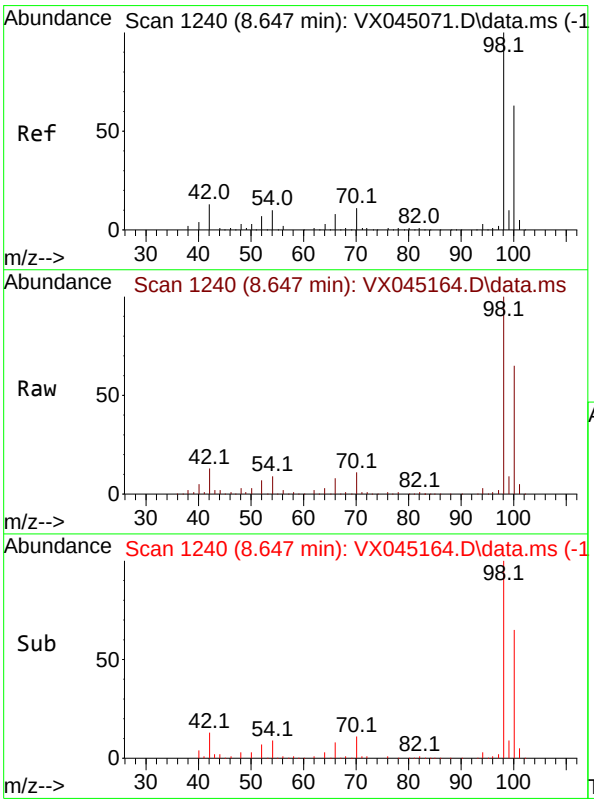
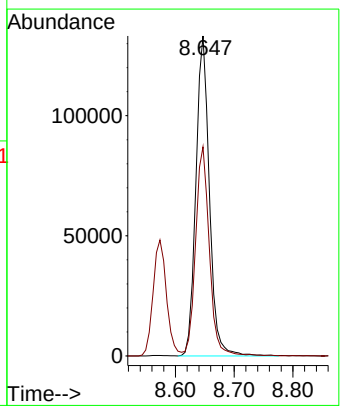


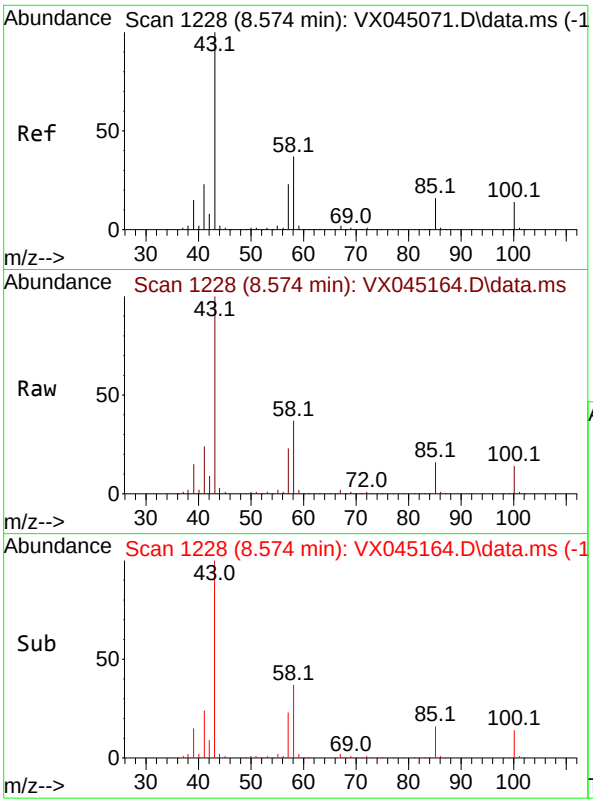




#50
Toluene-d8
Concen: 48.071 ug/l
RT: 8.647 min Scan# 1240
Delta R.T. -0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 98 Resp: 212901

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 66.1 | 52.0 | 78.0 |

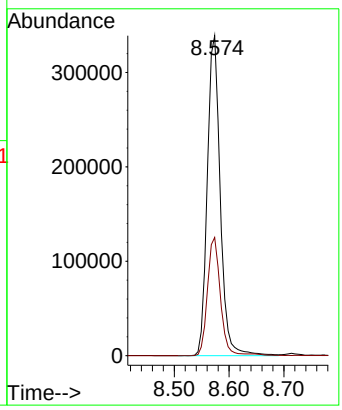





#51
4-Methyl-2-Pentanone
Concen: 258.557 ug/l
RT: 8.574 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 43 Resp: 55420

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 37.3 | 29.2 | 43.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
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Reviewed By :John Carlone 03/10/2025
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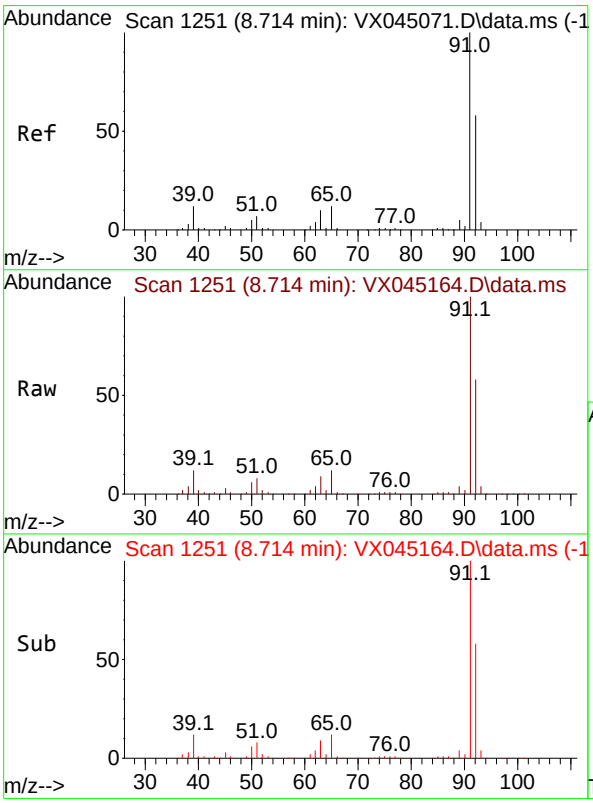
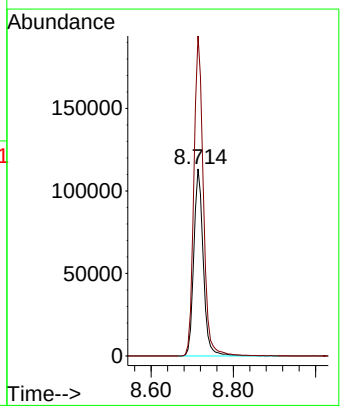
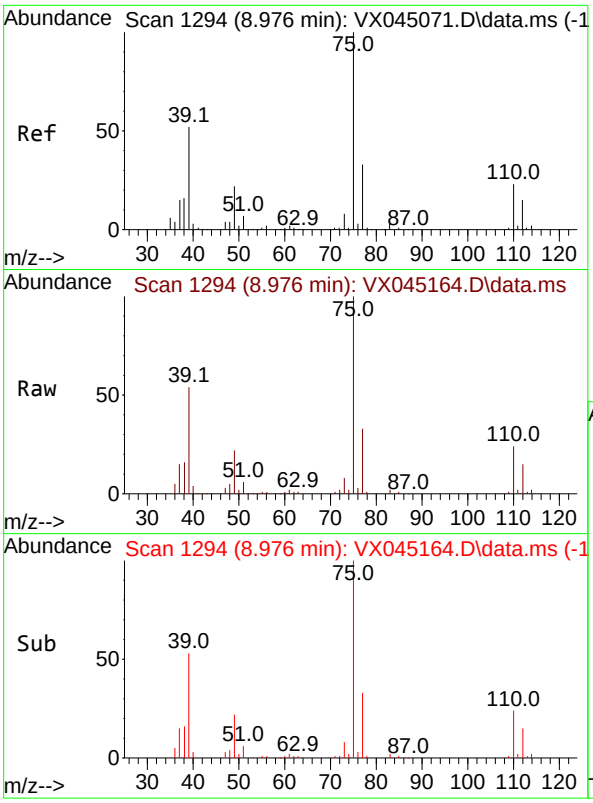



#52
Toluene
Concen: 58.295 ug/l
RT: 8.714 min Scan# 1251
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 92 Resp: 180949

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 171.8 | 138.9 | 208.3 |

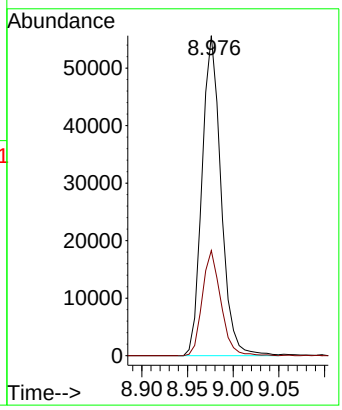





#53
t-1,3-Dichloropropene
Concen: 51.062 ug/l
RT: 8.976 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 75 Resp: 8050

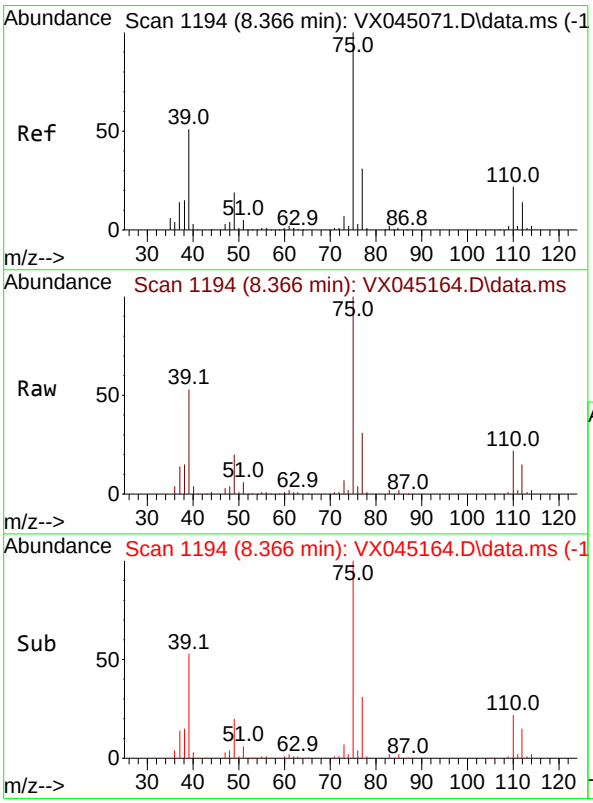
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.9 | 26.5 | 39.7 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
**APPROVED**

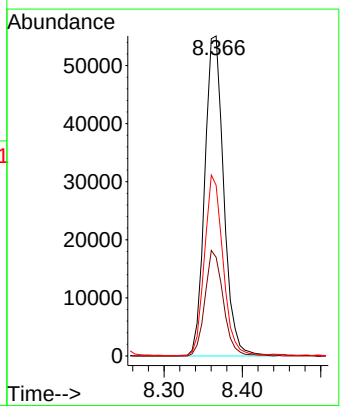
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

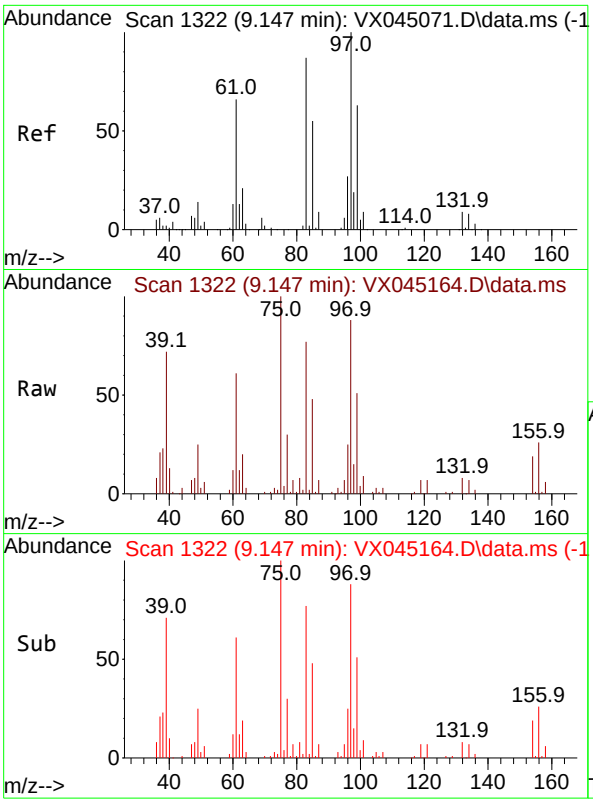



#54
cis-1,3-Dichloropropene
Concen: 50.352 ug/l
RT: 8.366 min Scan# 1194
Delta R.T. -0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 75 Resp: 92567

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 30.8 | 24.7 | 37.1 |
| 39 | 53.2 | 40.7 | 61.1 |

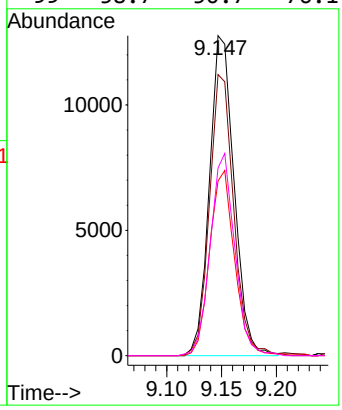





#55
1,1,2-Trichloroethane
Concen: 15.648 ug/l
RT: 9.147 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 97 Resp: 1999

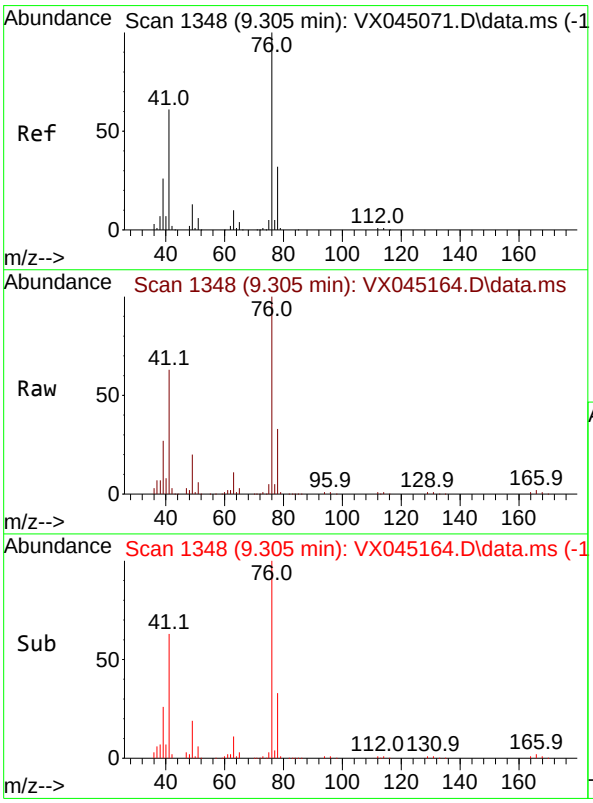
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 87.8 | 69.4 | 104.2 |
| 85 | 54.6 | 44.1 | 66.1 |
| 99 | 58.7 | 50.7 | 76.1 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
**APPROVED**

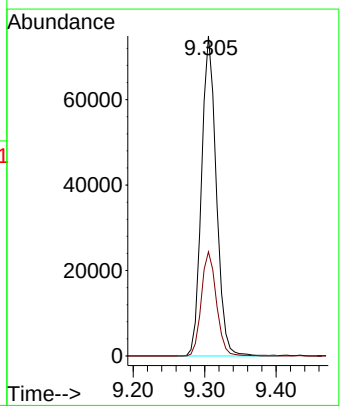
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

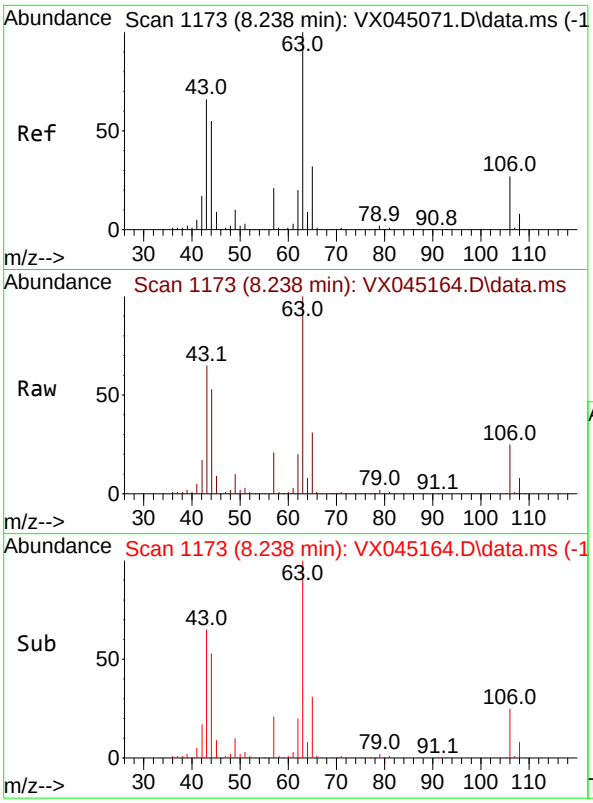



#57
1,3-Dichloropropane
Concen: 48.727 ug/l
RT: 9.305 min Scan# 1348
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 76 Resp: 107755

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 33.1 | 25.5 | 38.3 |






#58
2-Chloroethyl Vinyl ether
Concen: 281.323 ug/l
RT: 8.238 min Scan# 11
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

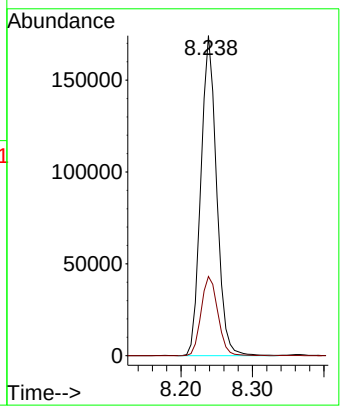
Tgt Ion: 63 Resp: 26656

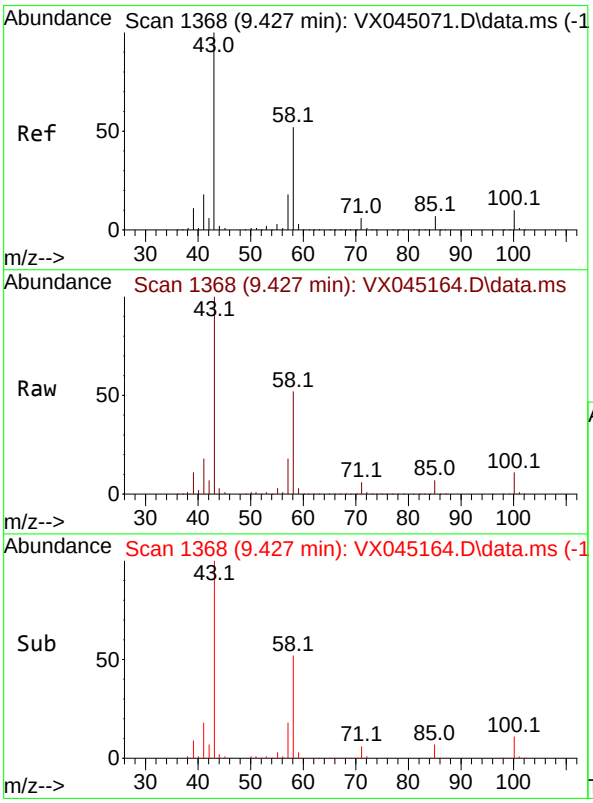
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 26.2 | 21.5 | 32.3 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

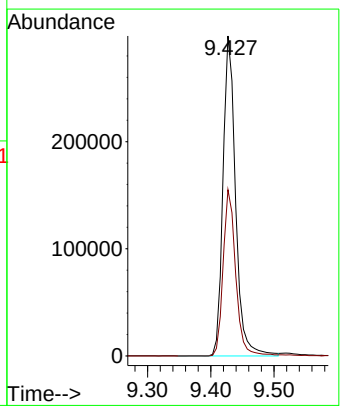


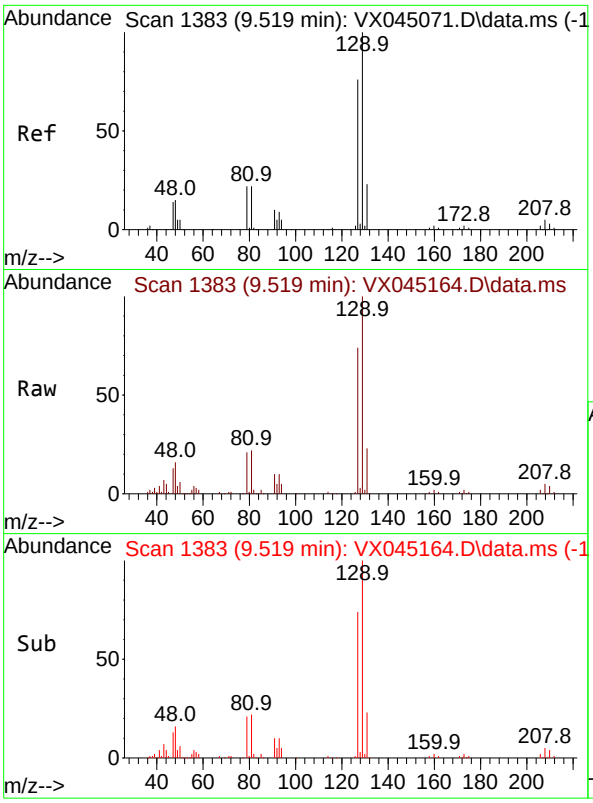




#59
2-Hexanone
Concen: 264.842 ug/l
RT: 9.427 min Scan# 1368
Delta R.T. -0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 43 Resp: 411304

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 52.2 | 25.9 | 77.6 |

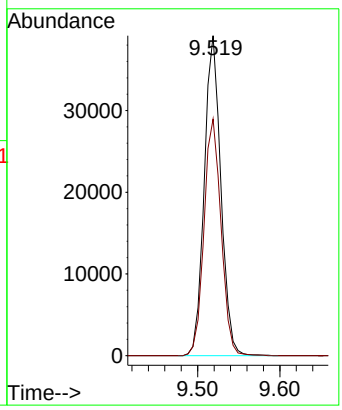





#60
Dibromochloromethane
Concen: 41.126 ug/l
RT: 9.519 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion:129 Resp: 5494

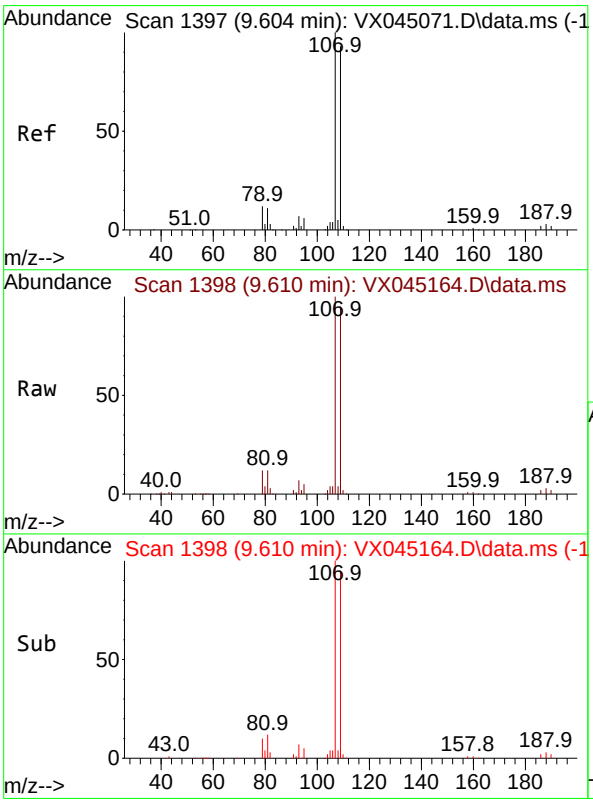
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 75.9 | 38.5 | 115.5 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
**APPROVED**

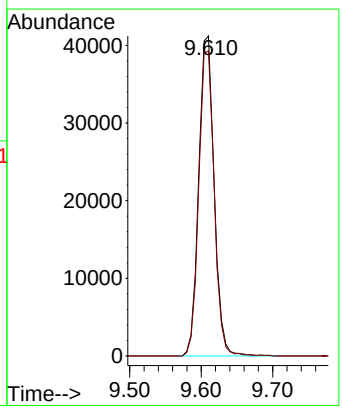
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

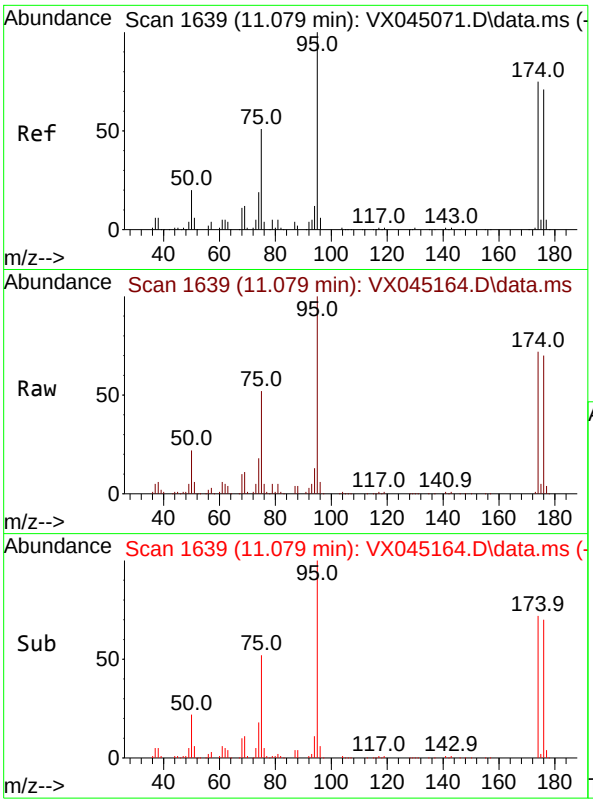



#61
1,2-Dibromoethane
Concen: 48.636 ug/l
RT: 9.610 min Scan# 1398
Delta R.T. 0.006 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion:107 Resp: 62043

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 94.9 | 76.1 | 114.1 |

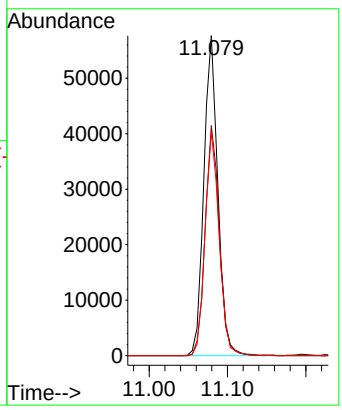





#62
4-Bromofluorobenzene
Concen: 48.816 ug/l
RT: 11.079 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 95 Resp: 7164

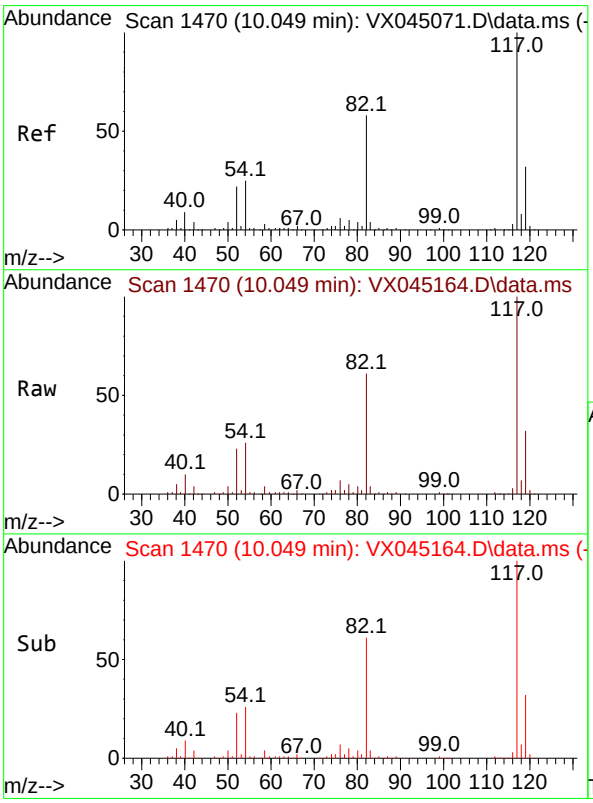
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 72.4 | 0.0 | 148.2 |
| 176 | 70.3 | 0.0 | 141.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
**APPROVED**

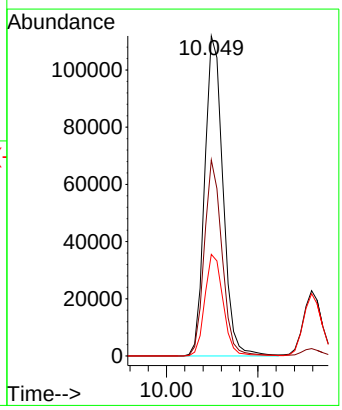
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

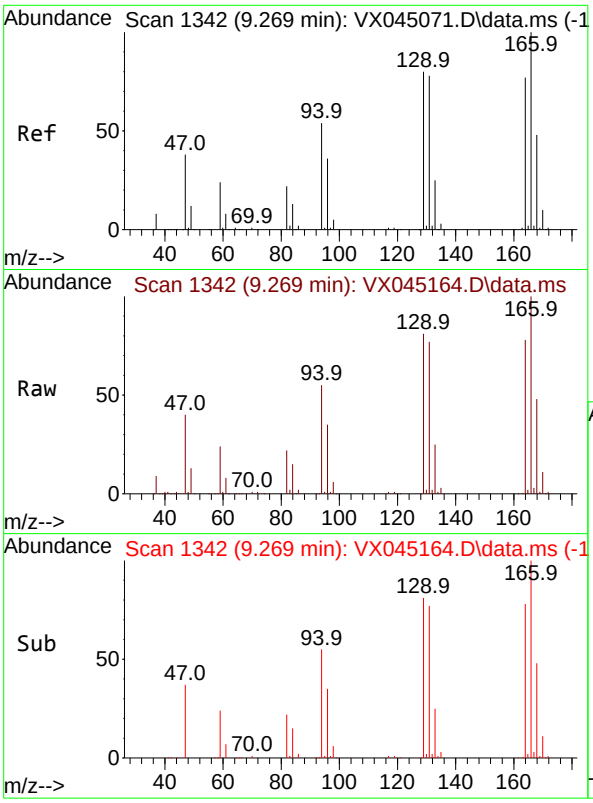



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.049 min Scan# 1470
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion:117 Resp: 154927

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 61.3 | 46.3 | 69.5 |
| 119 | 31.7 | 25.7 | 38.5 |

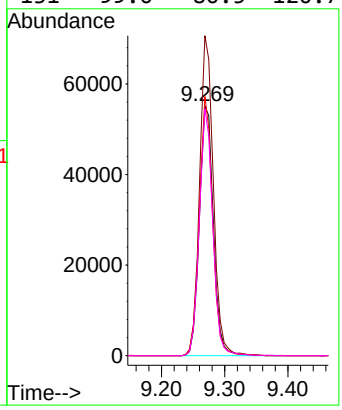





#64
Tetrachloroethene
Concen: 85.290 ug/l
RT: 9.269 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion:164 Resp: 8462

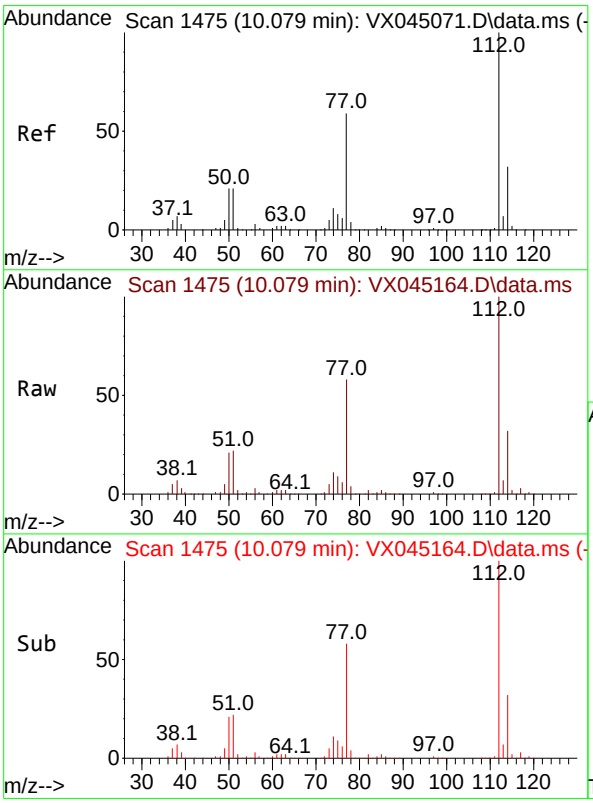
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 128.3 | 103.6 | 155.4 |
| 129 | 103.8 | 82.7 | 124.1 |
| 131 | 99.0 | 80.5 | 120.7 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
**APPROVED**

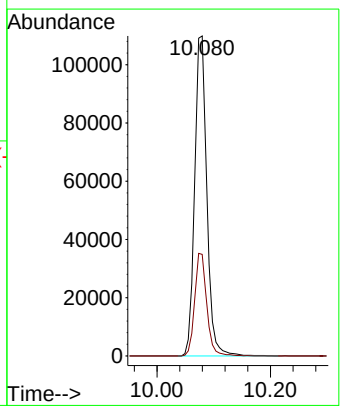
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

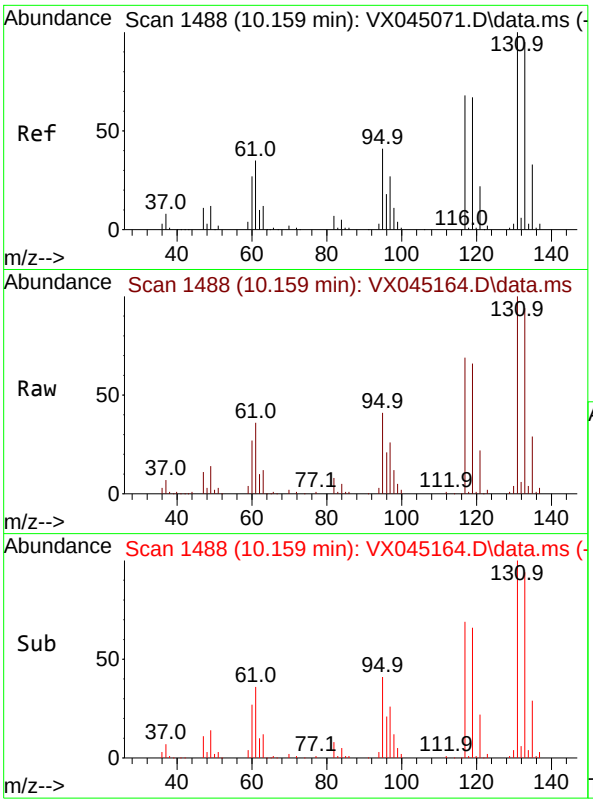



#65
Chlorobenzene
Concen: 49.819 ug/l
RT: 10.079 min Scan# 1475
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion:112 Resp: 163317

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 31.8 | 26.0 | 39.0 |






#66
1,1,1,2-Tetrachloroethane
Concen: 41.737 ug/l
RT: 10.159 min Scan# 14
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion:131 Resp: 4556

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 94.4 | 48.6 | 145.9 |
| 119 | 66.4 | 33.9 | 101.7 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
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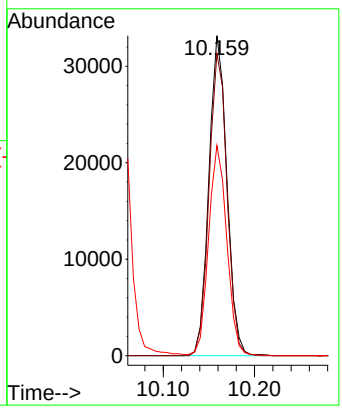
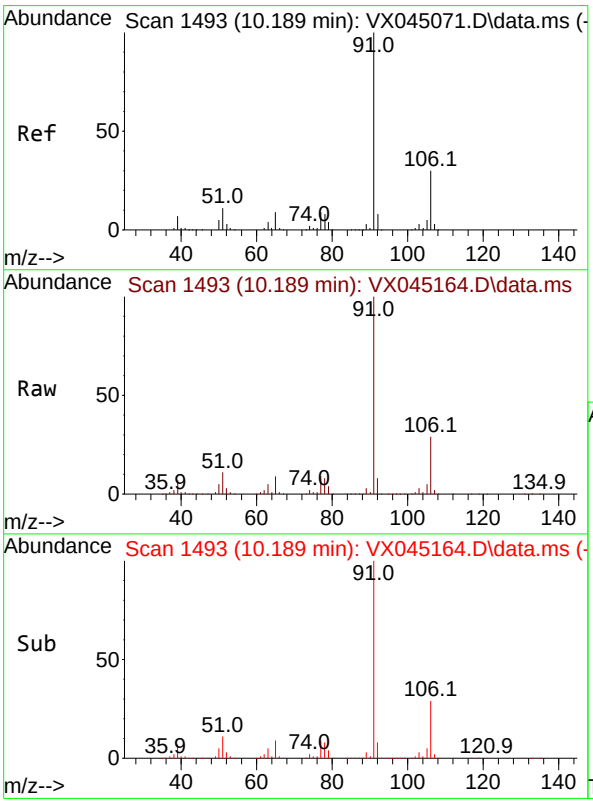
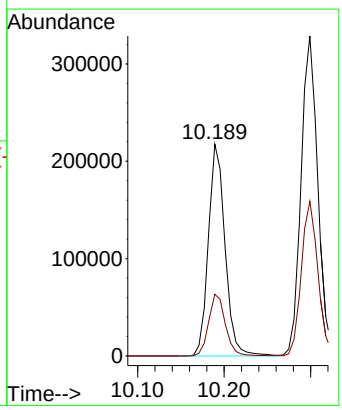


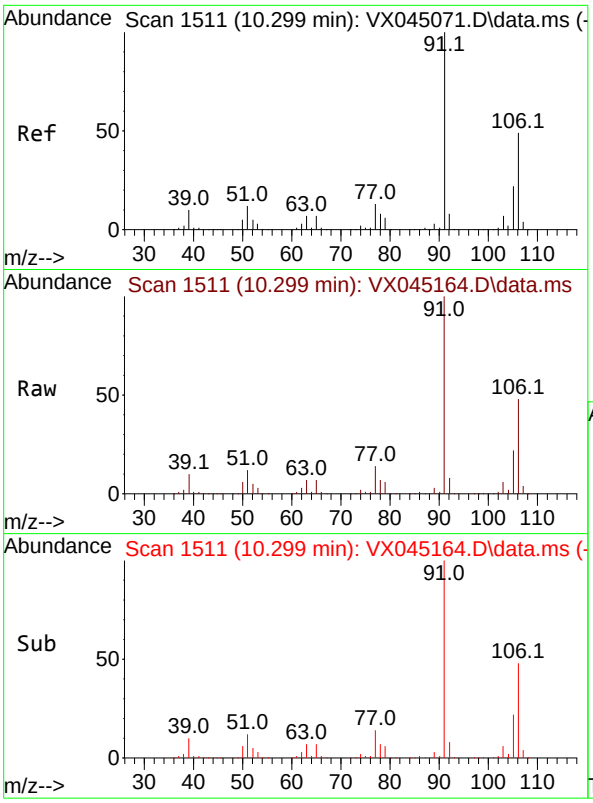




#67
Ethyl Benzene
Concen: 50.987 ug/l
RT: 10.189 min Scan# 1493
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 91 Resp: 291242

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 29.2 | 23.9 | 35.9 |

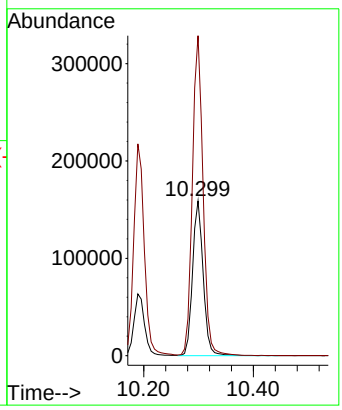





#68
m/p-Xylenes
Concen: 102.845 ug/l
RT: 10.299 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion:106 Resp: 21505

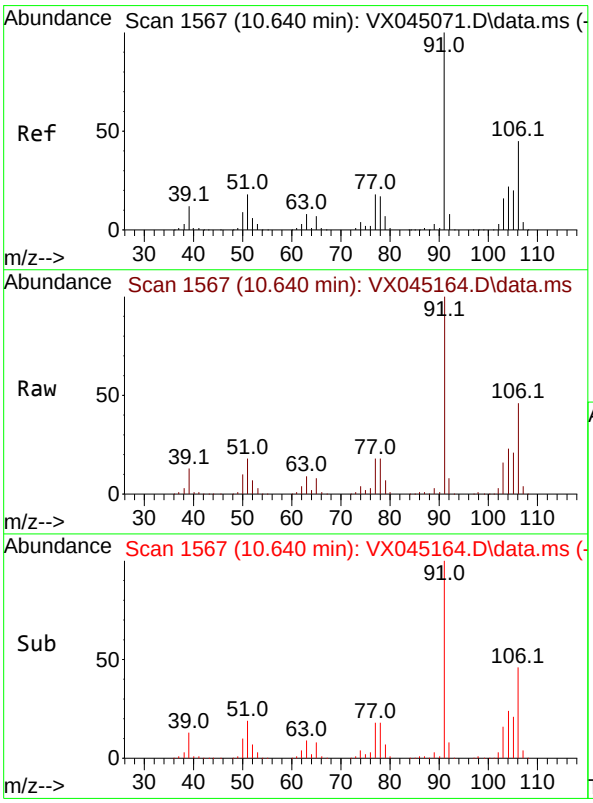
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 207.1 | 165.4 | 248.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
**APPROVED**

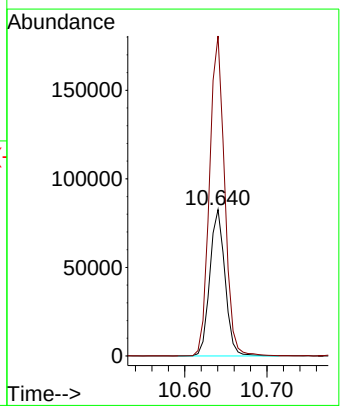
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

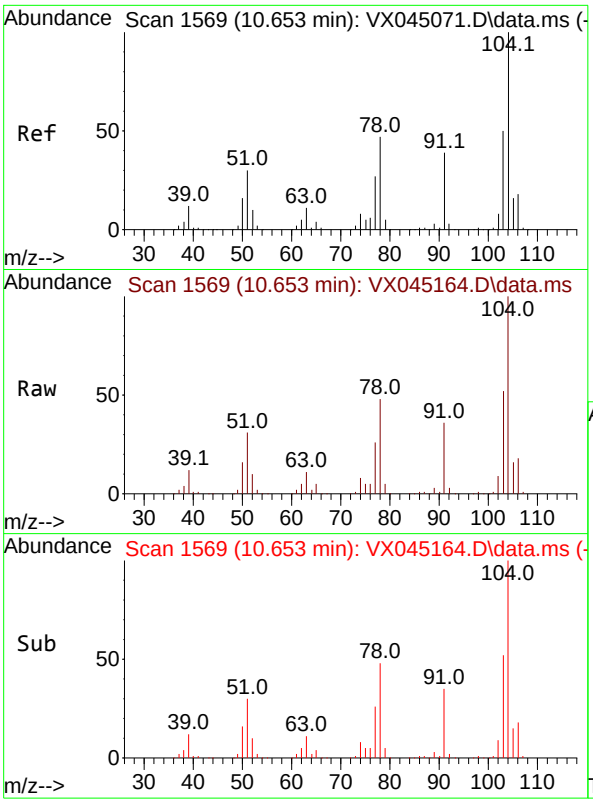



#69
o-Xylene
Concen: 50.296 ug/l
RT: 10.640 min Scan# 1567
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion:106 Resp: 106073

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 218.1 | 109.9 | 329.6 |

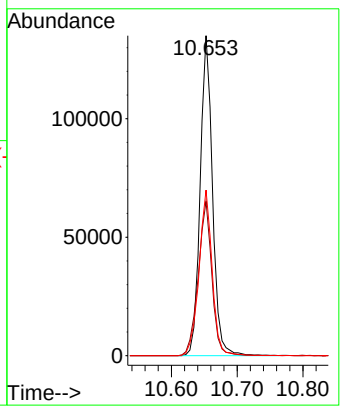





#70
Styrene
Concen: 51.549 ug/l
RT: 10.653 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion:104 Resp: 17590

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 53.5 | 42.2 | 63.4 |
| 103 | 55.4 | 43.8 | 65.8 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
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**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 03/10/2025
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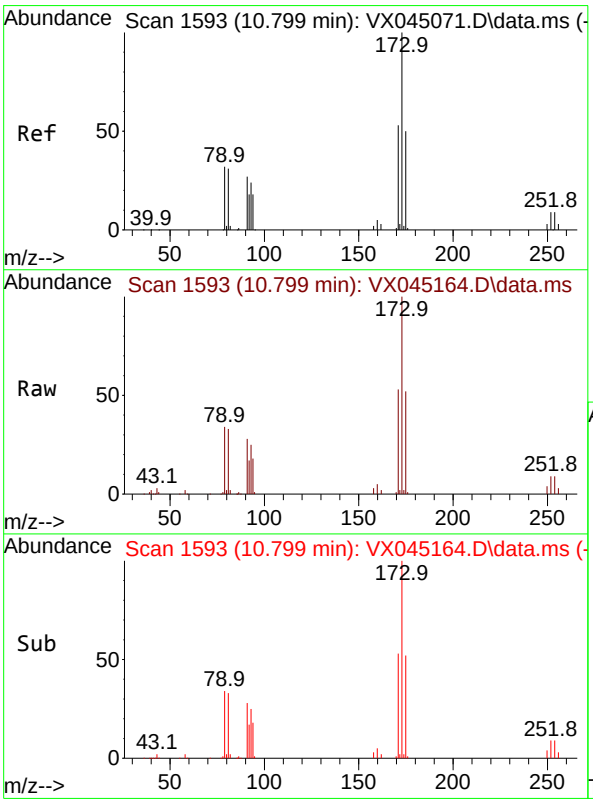
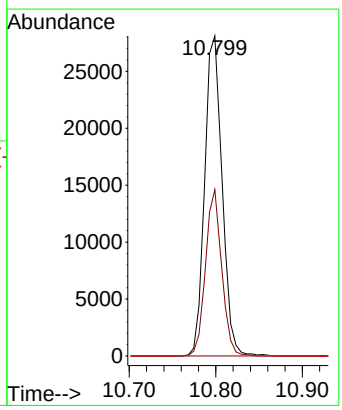
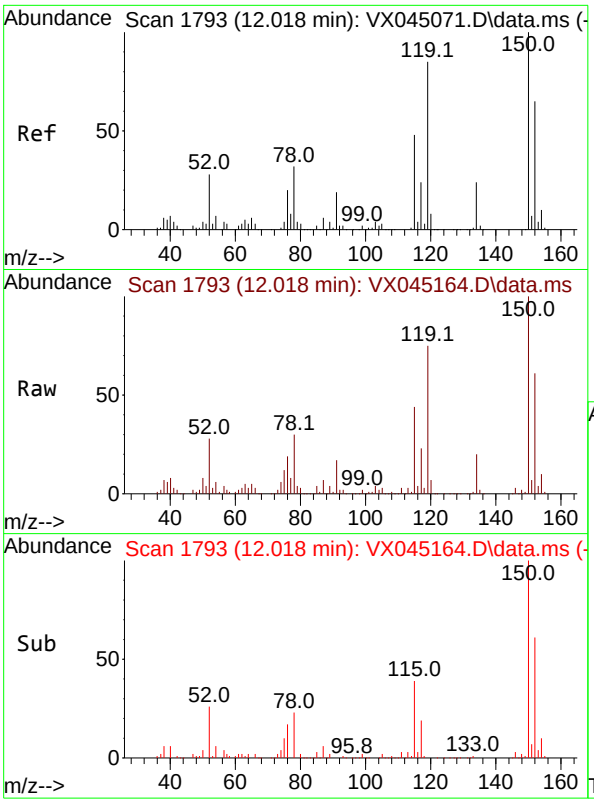



#71
Bromoform
Concen: 47.814 ug/l
RT: 10.799 min Scan# 1593
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion:173 Resp: 39363

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 48.2 | 24.6 | 73.6 |
| 254 | 0.0 | 0.0 | 0.0 |

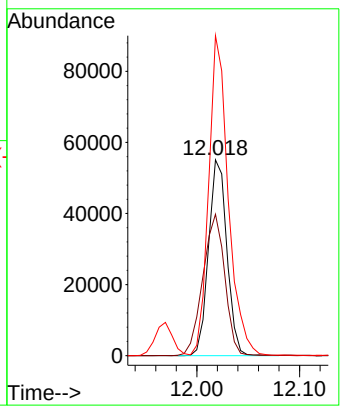





#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.018 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion:152 Resp: 6836

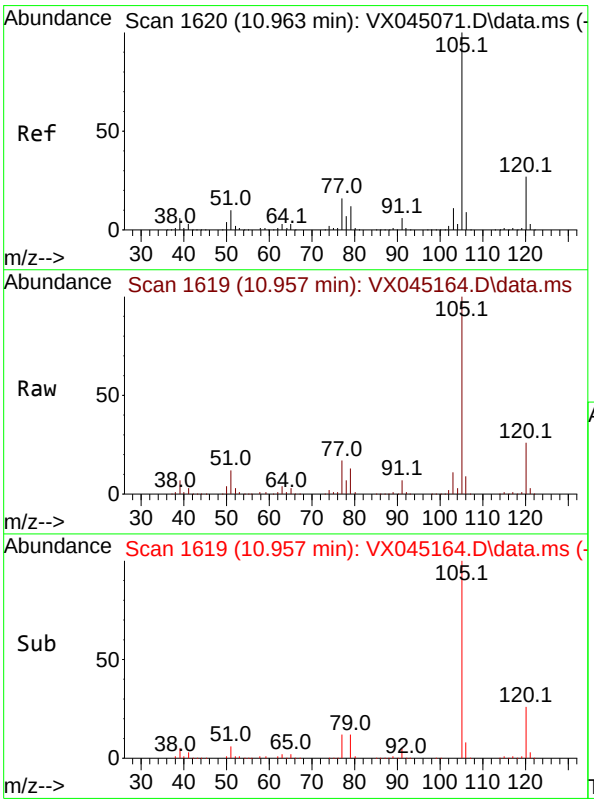
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 86.3 | 44.2 | 132.6 |
| 150 | 174.3 | 0.0 | 349.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
**APPROVED**

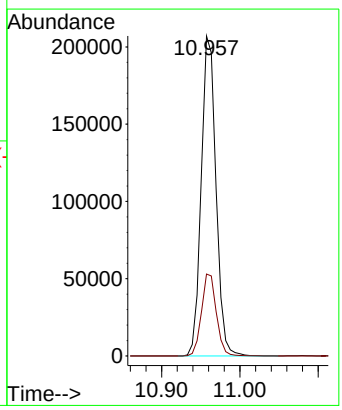
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

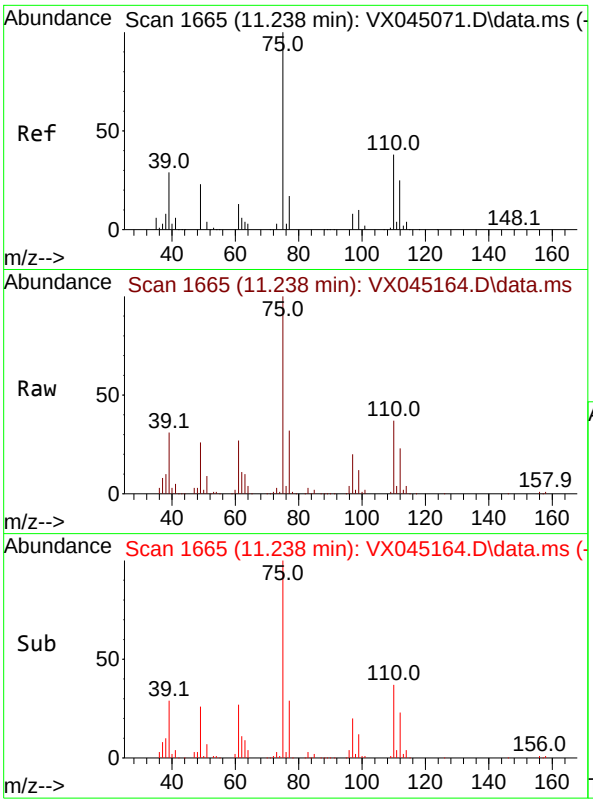



#73
Isopropylbenzene
Concen: 50.668 ug/l
RT: 10.957 min Scan# 1619
Delta R.T. -0.006 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion:105 Resp: 270349

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.8 | 13.2 | 39.5 |






#76
1,2,3-Trichloropropane
Concen: 46.175 ug/l m
RT: 11.238 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 75 Resp: 7346

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 41.7 | 20.7 | 62.1 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
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Reviewed By :John Carlone 03/10/2025
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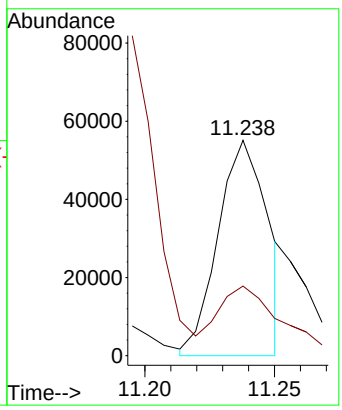
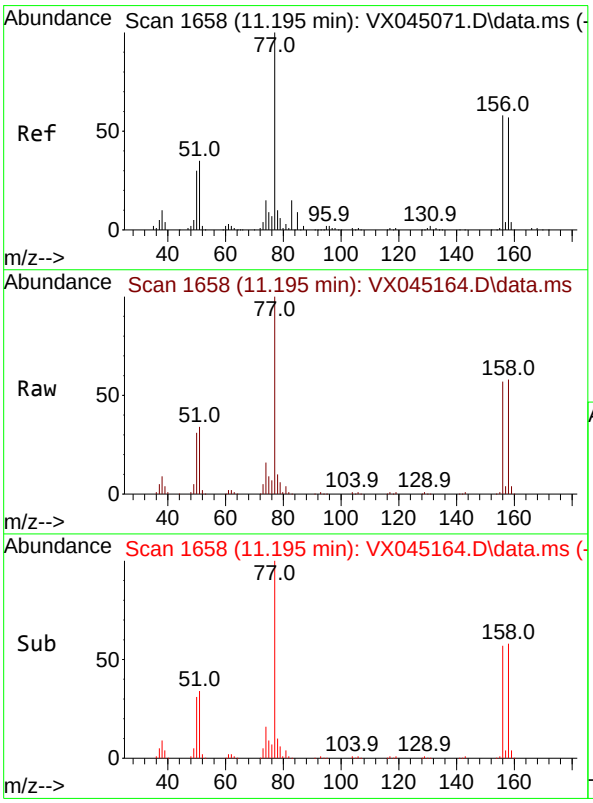
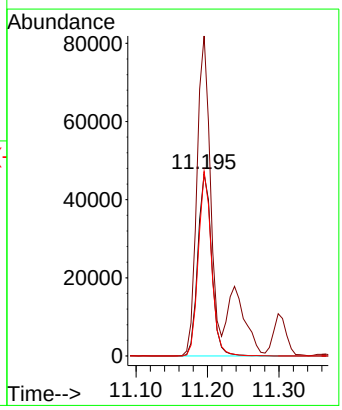


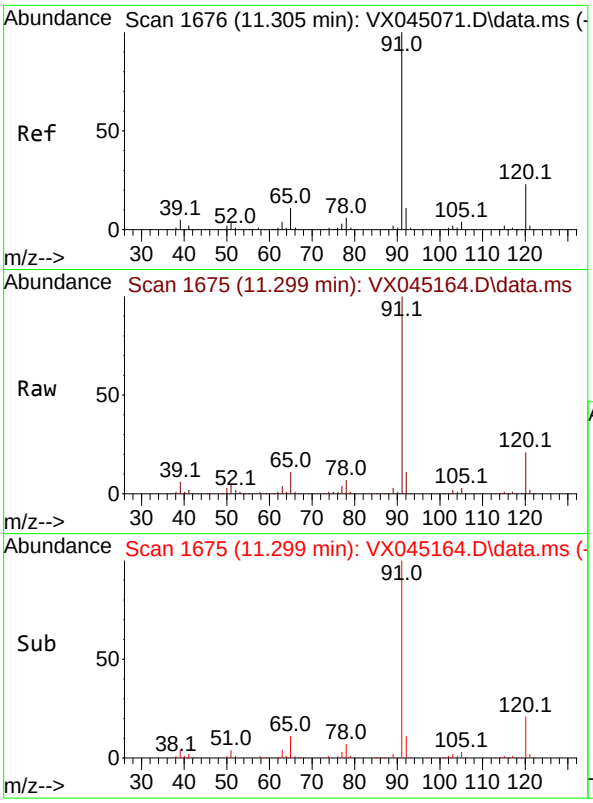




#77
Bromobenzene
Concen: 49.485 ug/l
RT: 11.195 min Scan# 1658
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion:156 Resp: 62298

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 172.0 | 85.8 | 257.4 |
| 158 | 96.9 | 48.4 | 145.2 |






#78
n-propylbenzene
Concen: 51.952 ug/l
RT: 11.299 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 91 Resp: 31313

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.1 | 11.2 | 33.6 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
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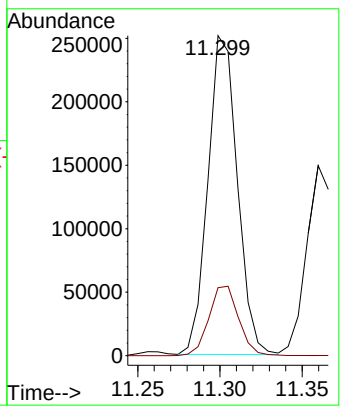
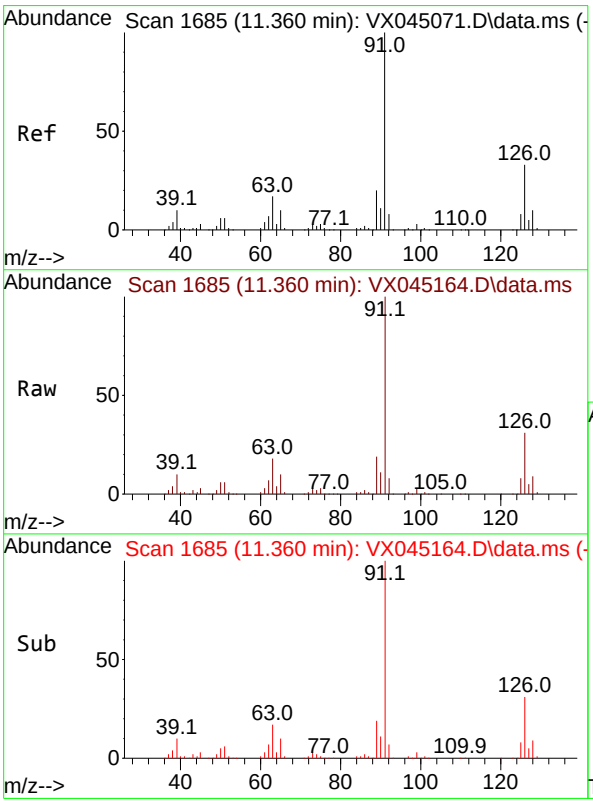
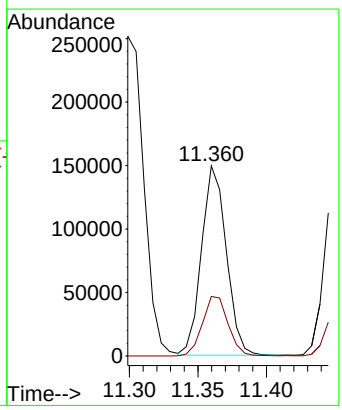


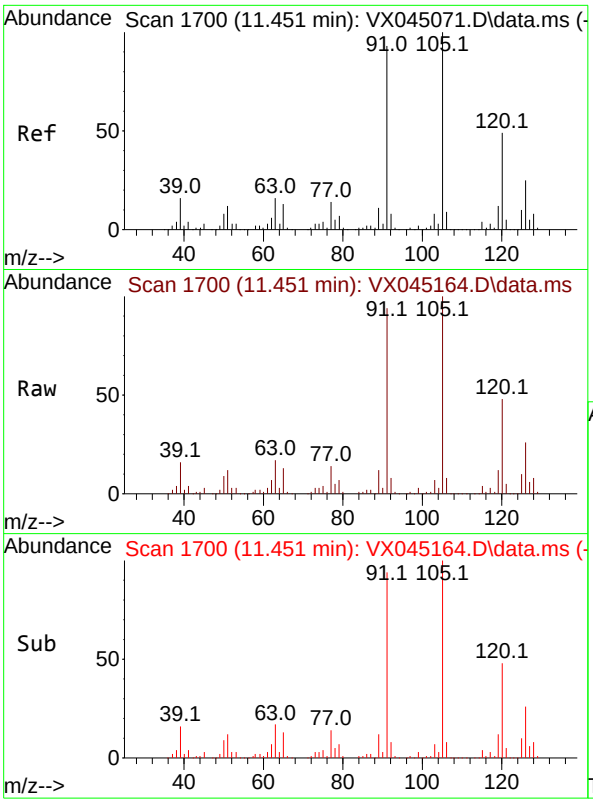




#79
2-Chlorotoluene
Concen: 48.816 ug/l
RT: 11.360 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 91 Resp: 187387

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 32.8 | 16.4 | 49.4 |






#80
1,3,5-Trimethylbenzene
Concen: 50.977 ug/l
RT: 11.451 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion:105 Resp: 21993

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 47.2 | 24.1 | 72.2 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
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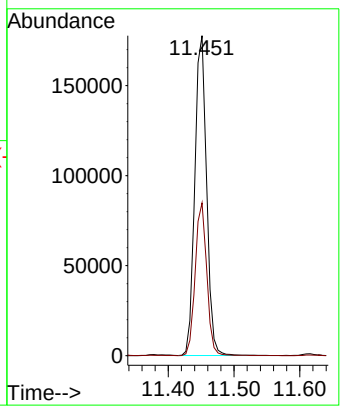
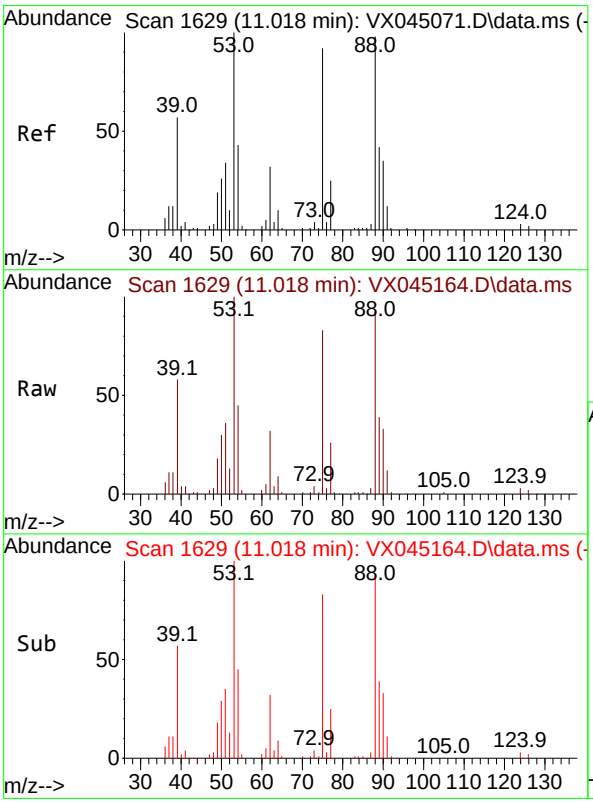
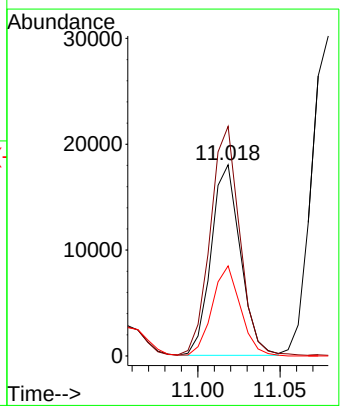


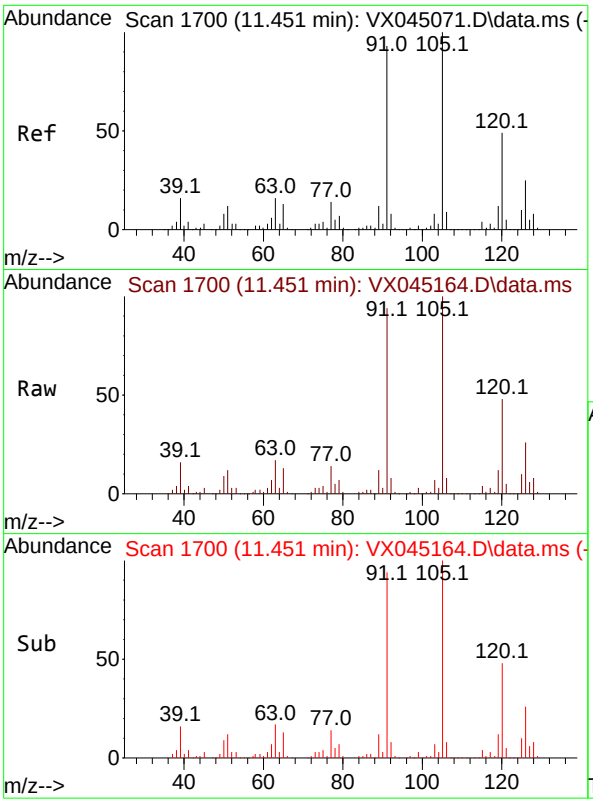




#81
trans-1,4-Dichloro-2-butene
Concen: 48.110 ug/l
RT: 11.018 min Scan# 1629
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 75 Resp: 22368

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 120.5 | 88.5 | 132.7 |
| 89 | 45.9 | 36.2 | 54.4 |

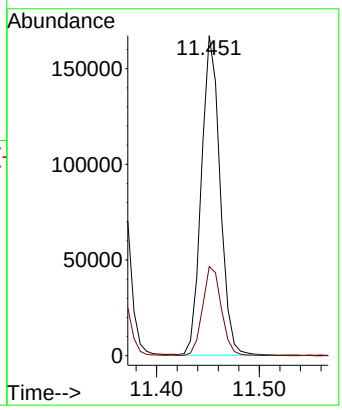





#82
4-Chlorotoluene
Concen: 50.418 ug/l
RT: 11.451 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 91 Resp: 21092

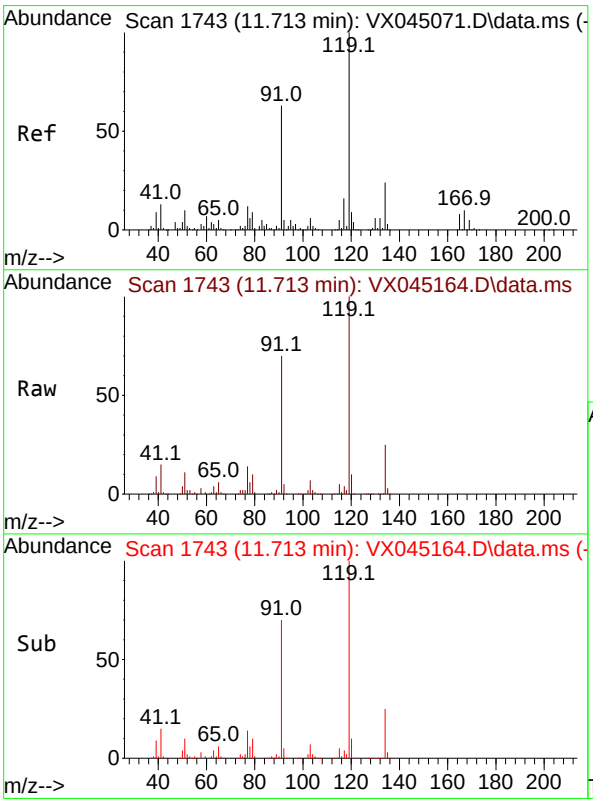
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 28.2 | 14.1 | 42.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
**APPROVED**

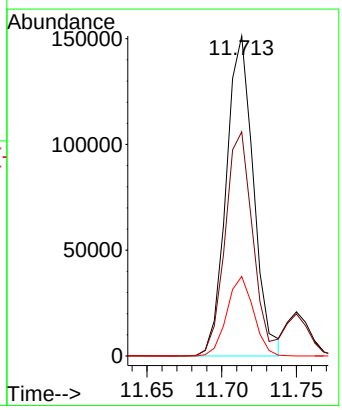
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

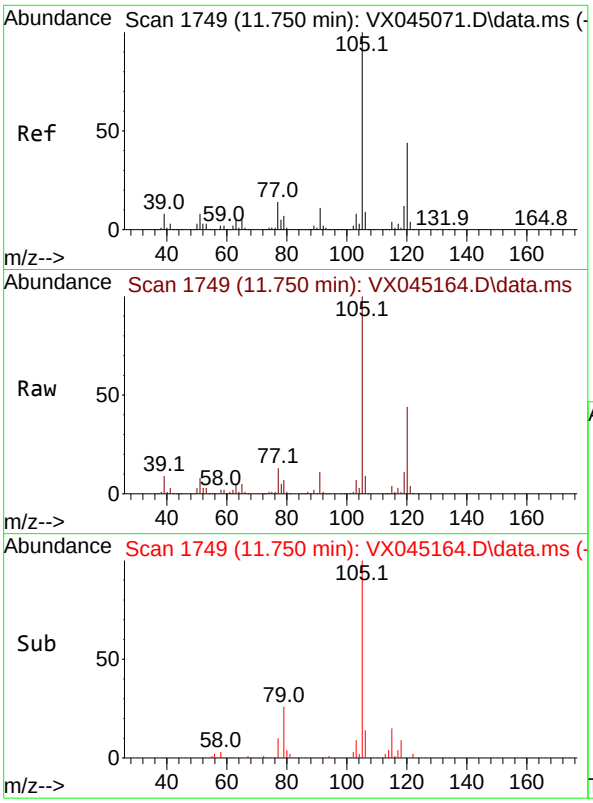



#83
tert-Butylbenzene
Concen: 43.186 ug/l
RT: 11.713 min Scan# 1743
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion:119 Resp: 191439

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 71.8 | 30.7 | 92.1 |
| 134 | 24.2 | 11.7 | 35.0 |

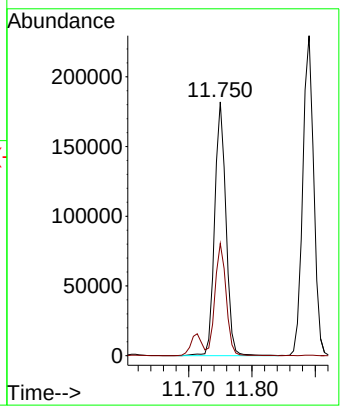





#84
1,2,4-Trimethylbenzene
Concen: 51.727 ug/l
RT: 11.750 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion:105 Resp: 22454

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 43.9 | 22.1 | 66.1 |




**Instrument :**
MSVOA_X
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BR-05-465-030525MSD

**Manual Integrations**
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Reviewed By :John Carlone 03/10/2025
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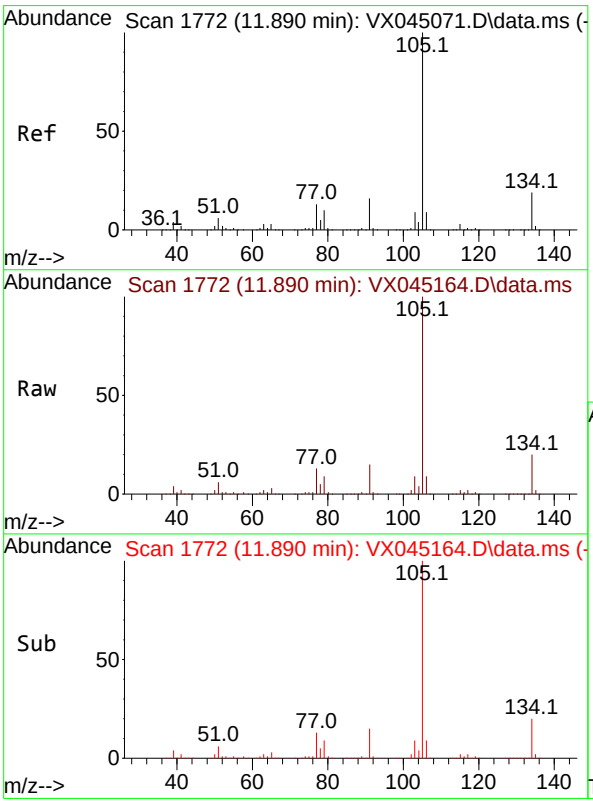
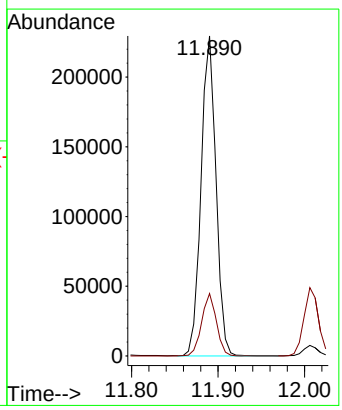
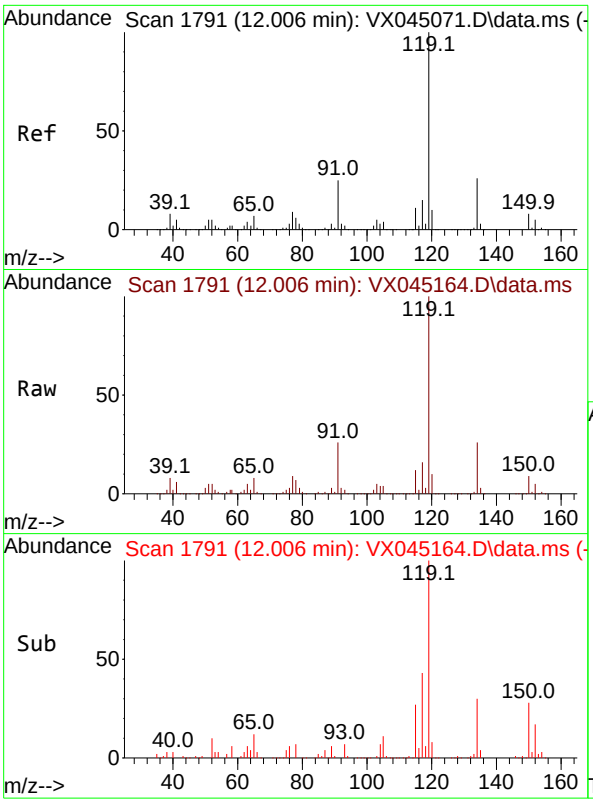



#85
sec-Butylbenzene
Concen: 51.789 ug/l
RT: 11.890 min Scan# 1772
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion:105 Resp: 274996

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.2 | 9.8 | 29.4 |






#86
p-Isopropyltoluene
Concen: 51.865 ug/l
RT: 12.006 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion:119 Resp: 22256

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.8 | 12.9 | 38.6 |
| 91 | 25.3 | 12.7 | 38.0 |

**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
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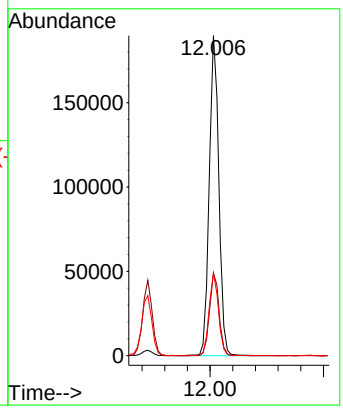
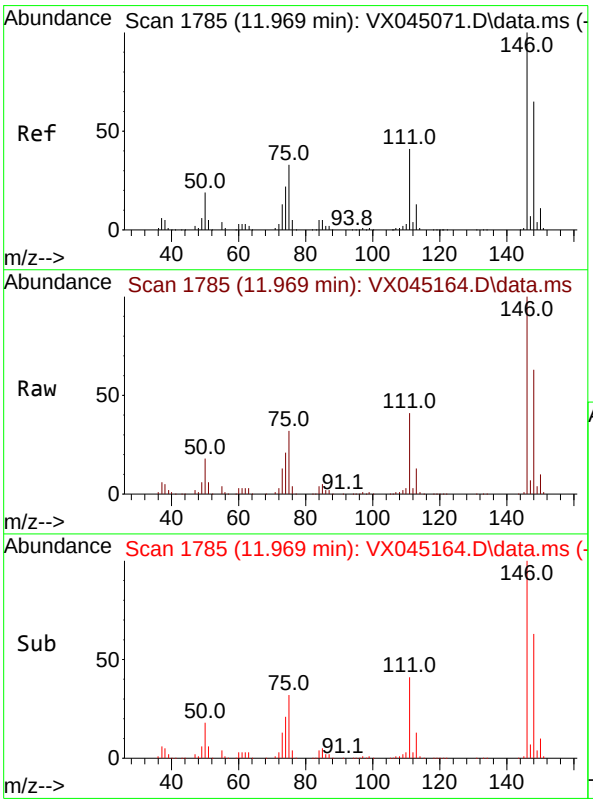
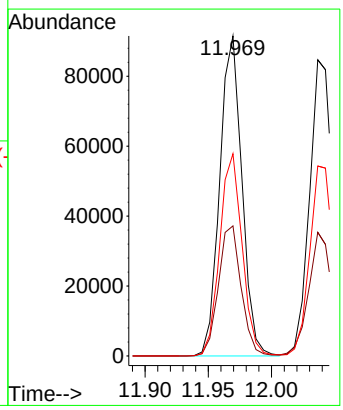


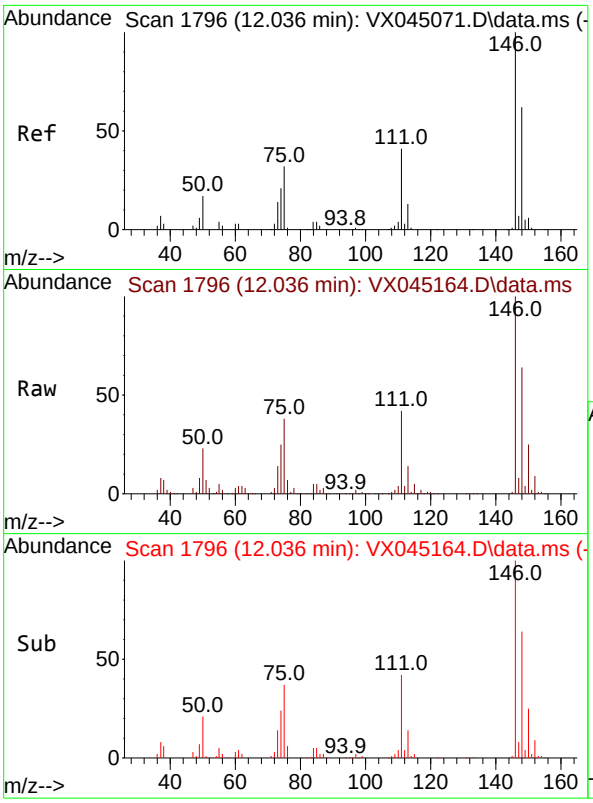




#87
1,3-Dichlorobenzene
Concen: 49.643 ug/l
RT: 11.969 min Scan# 1785
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion:146 Resp: 111489

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 41.8 | 21.1 | 63.4 |
| 148 | 63.8 | 31.9 | 95.7 |

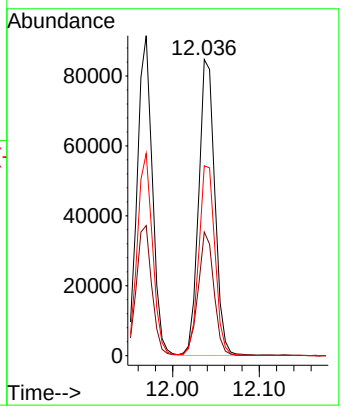





#88
1,4-Dichlorobenzene
Concen: 48.307 ug/l
RT: 12.036 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion:146 Resp: 10975

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 40.9 | 20.2 | 60.5 |
| 148 | 64.5 | 31.9 | 95.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations APPROVED**

Reviewed By :John Carlone 03/10/2025
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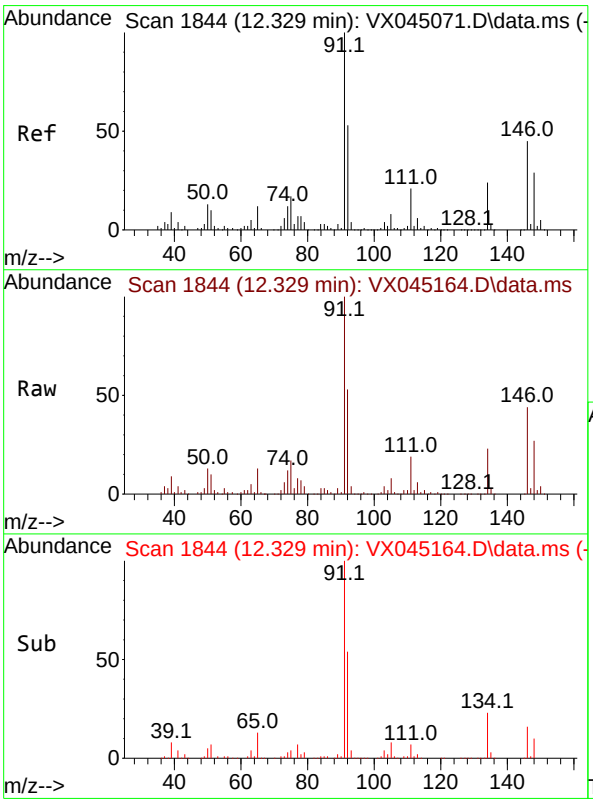
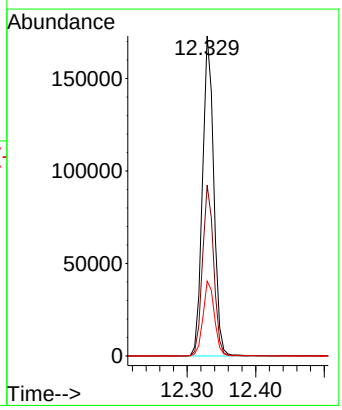
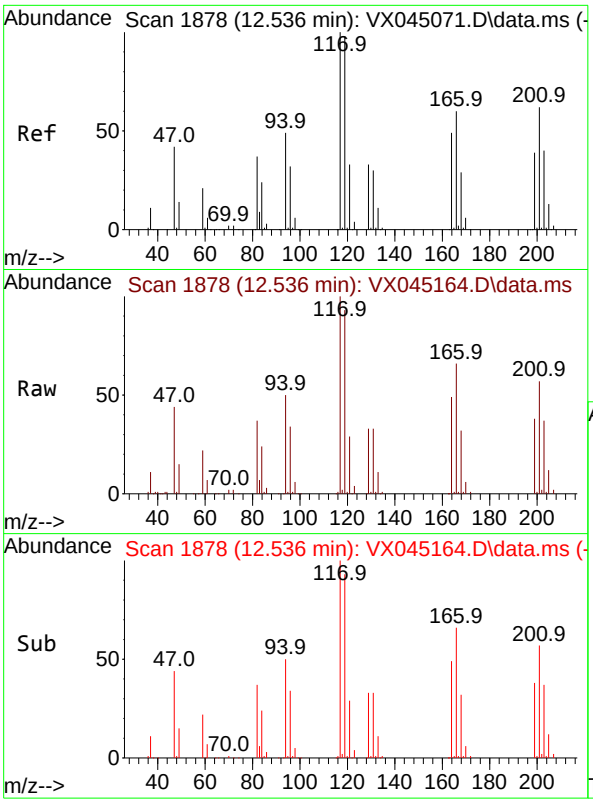



#89
n-Butylbenzene
Concen: 53.723 ug/l
RT: 12.329 min Scan# 1844
Delta R.T. -0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 91 Resp: 198557

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 53.1 | 26.7 | 80.0 |
| 134 | 23.6 | 12.2 | 36.6 |

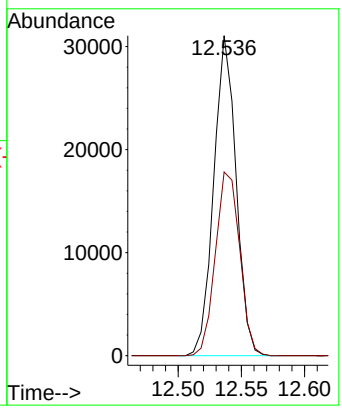





#90
Hexachloroethane
Concen: 49.070 ug/l
RT: 12.536 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion:117 Resp: 3808

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 62.5 | 31.9 | 95.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
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Reviewed By :John Carlone 03/10/2025
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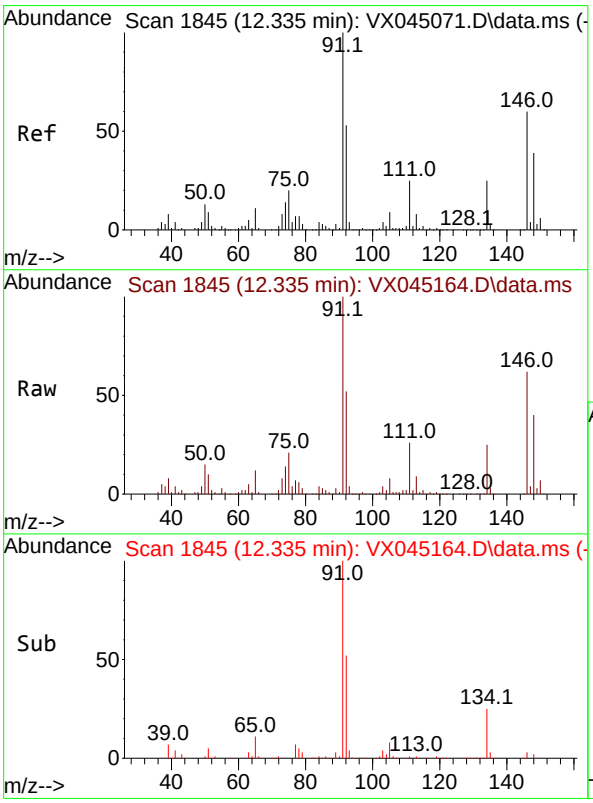
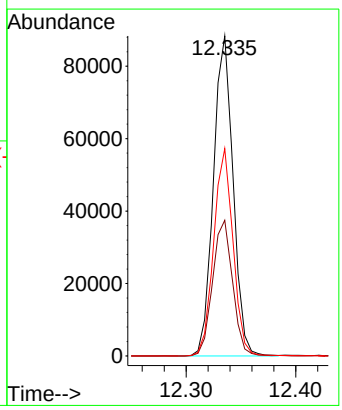
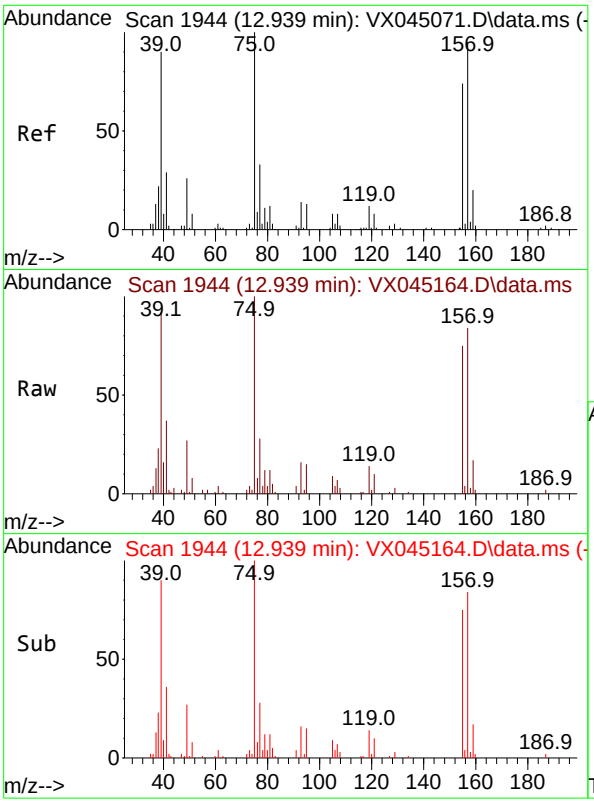



#91
1,2-Dichlorobenzene
Concen: 48.912 ug/l
RT: 12.335 min Scan# 1845
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion:146 Resp: 110193

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.2 | 21.6 | 65.0 |
| 148 | 63.9 | 31.9 | 95.9 |

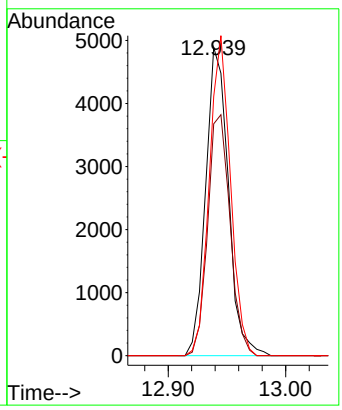





#92
1,2-Dibromo-3-Chloropropane
Concen: 17.187 ug/l
RT: 12.939 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion: 75 Resp: 655

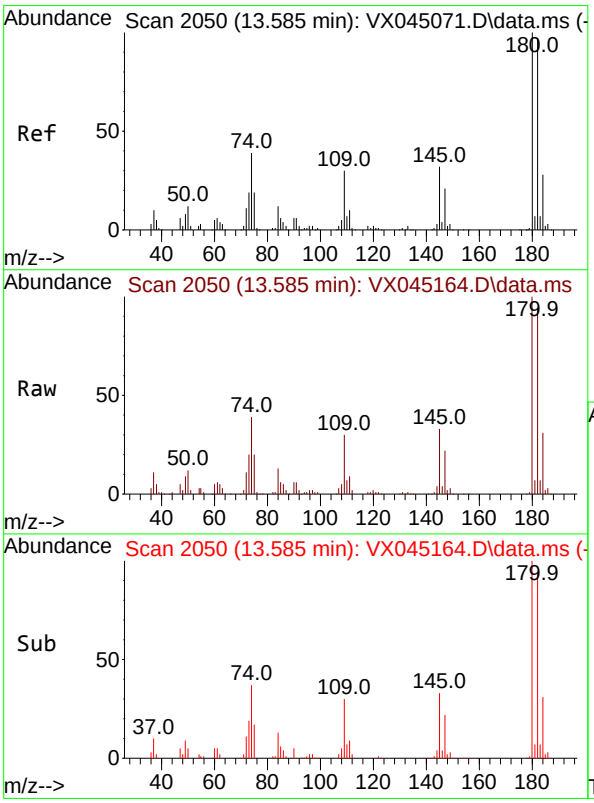
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 77.0 | 39.6 | 118.7 |
| 157 | 96.5 | 51.1 | 153.4 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
**APPROVED**

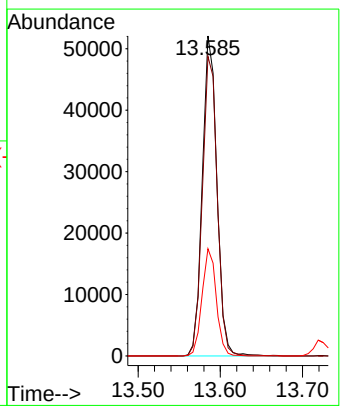
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

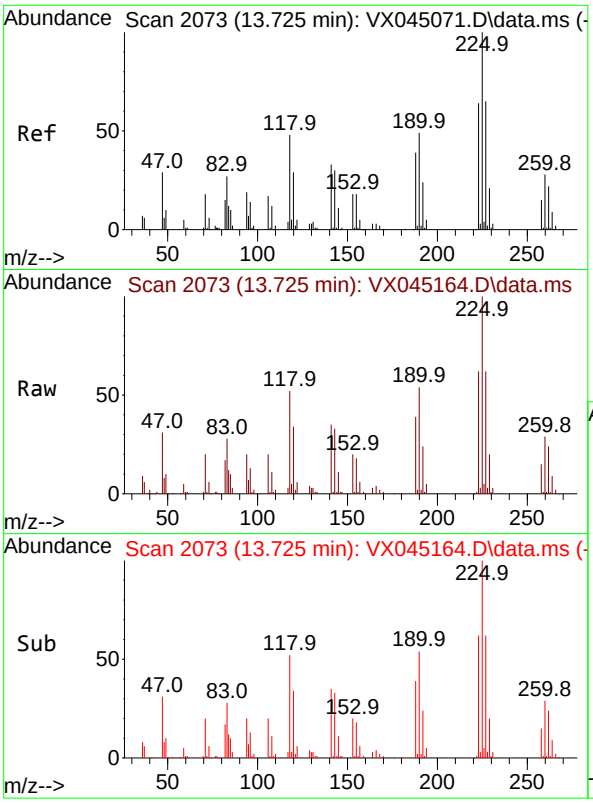



#93
1,2,4-Trichlorobenzene
Concen: 49.957 ug/l
RT: 13.585 min Scan# 2050
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion:180 Resp: 64085

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.3 | 47.3 | 141.9 |
| 145 | 32.7 | 16.3 | 48.9 |

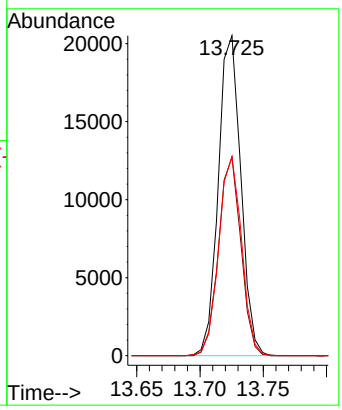





#94
Hexachlorobutadiene
Concen: 48.257 ug/l
RT: 13.725 min Scan# 2
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion:225 Resp: 2538

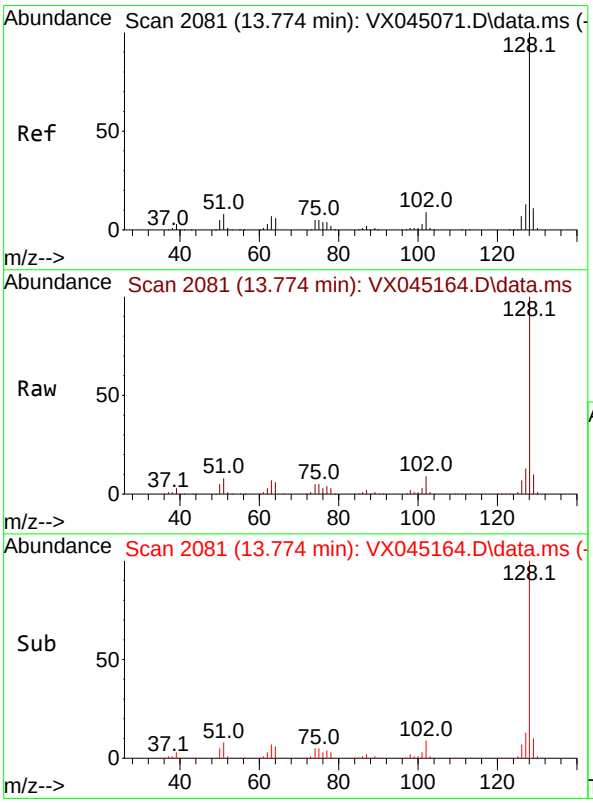
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 61.6 | 31.9 | 95.7 |
| 227 | 63.0 | 31.4 | 94.0 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
**APPROVED**

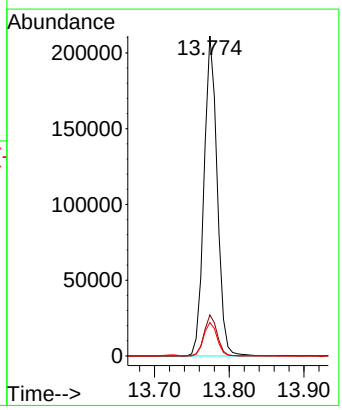
Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

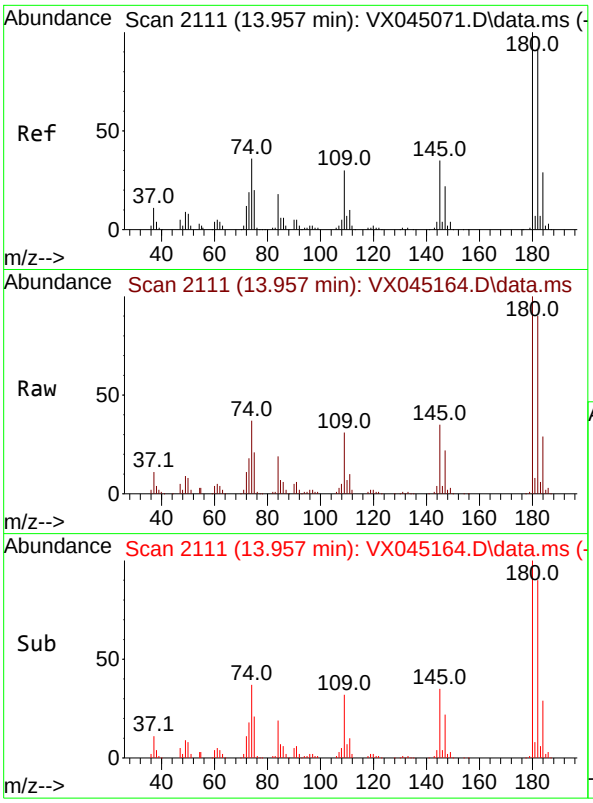



#95
Naphthalene
Concen: 52.481 ug/l
RT: 13.774 min Scan# 2081
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion:128 Resp: 258663

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.7 | 10.3 | 15.5 |
| 129 | 10.7 | 8.7 | 13.1 |

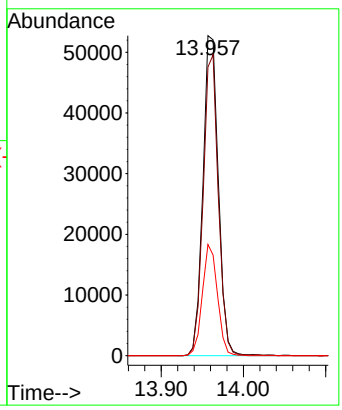





#96
1,2,3-Trichlorobenzene
Concen: 50.923 ug/l
RT: 13.957 min Scan# 2
Delta R.T. 0.000 min
Lab File: VX045164.D
Acq: 06 Mar 2025 13:33

Tgt Ion:180 Resp: 6891

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 92.2 | 47.5 | 142.6 |
| 145 | 33.9 | 17.0 | 50.9 |




**Instrument :**
MSVOA_X
**ClientSampleId :**
BR-05-465-030525MSD

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 03/10/2025
Supervised By :Mahesh Dadoda 03/10/2025

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# Manual Integration Report

| Sequence: | VX022825 | Instrument | MSVOA_x |
|---|---|---|---|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|
| VSTDICC001 | VX045068.D | 1,2,3-Trichloropropane | JOHN | 2/28/2025 10:05:09 AM | MMDadoda | 2/28/2025 11:09:31 AM | Peak Integrated by Software |
| VSTDICC001 | VX045068.D | 1,4-Dichlorobenzene | JOHN | 2/28/2025 10:05:09 AM | MMDadoda | 2/28/2025 11:09:31 AM | Peak Integrated by Software |
| VSTDICC001 | VX045068.D | Carbon Tetrachloride | JOHN | 2/28/2025 10:05:09 AM | MMDadoda | 2/28/2025 11:09:31 AM | Peak Integrated by Software |
| VSTDICC001 | VX045068.D | Chloroethane | JOHN | 2/28/2025 10:05:09 AM | MMDadoda | 2/28/2025 11:09:31 AM | Peak Integrated by Software |
| VSTDICC001 | VX045068.D | Ethyl Acetate | JOHN | 2/28/2025 10:05:09 AM | MMDadoda | 2/28/2025 11:09:31 AM | Peak Integrated by Software |
| VSTDICC001 | VX045068.D | Methacrylonitrile | JOHN | 2/28/2025 10:05:09 AM | MMDadoda | 2/28/2025 11:09:31 AM | Peak Integrated by Software |
| VSTDICC001 | VX045068.D | Methyl methacrylate | JOHN | 2/28/2025 10:05:09 AM | MMDadoda | 2/28/2025 11:09:31 AM | Peak Integrated by Software |
| VSTDICC005 | VX045069.D | 1,2,3-Trichloropropane | JOHN | 2/28/2025 10:05:14 AM | MMDadoda | 2/28/2025 11:09:31 AM | Peak Integrated by Software |
| VSTDICC005 | VX045069.D | Tert butyl alcohol | JOHN | 2/28/2025 10:05:14 AM | MMDadoda | 2/28/2025 11:09:31 AM | Peak Integrated by Software |
| VSTDICC020 | VX045070.D | 1,2,3-Trichloropropane | JOHN | 2/28/2025 10:05:21 AM | MMDadoda | 2/28/2025 11:09:33 AM | Peak Integrated by Software |
| VSTDICCC050 | VX045071.D | 1,2,3-Trichloropropane | JOHN | 2/28/2025 10:05:25 AM | MMDadoda | 2/28/2025 11:09:35 AM | Peak Integrated by Software |
| VSTDICC100 | VX045072.D | 1,2,3-Trichloropropane | JOHN | 2/28/2025 10:05:30 AM | MMDadoda | 2/28/2025 11:09:37 AM | Peak Integrated by Software |
| VSTDICC150 | VX045073.D | 1,2,3-Trichloropropane | JOHN | 2/28/2025 10:05:33 AM | MMDadoda | 2/28/2025 11:09:42 AM | Peak Integrated by Software |

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# Manual Integration Report

| Sequence: | VX022825 | Instrument | MSVOA_x |
|---|---|---|---|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|
| VSTDICV050 | VX045075.D | 1,2,3-Trichloropropane | JOHN | 2/28/2025 10:05:38 AM | MMDadoda | 2/28/2025 11:09:44 AM | Peak Integrated by Software |
| VSTDCCC050 | VX045077.D | 1,2,3-Trichloropropane | JOHN | 3/3/2025 8:20:45 AM | MMDadoda | 3/3/2025 1:49:43 PM | Peak Integrated by Software |
| VSTDCCC050 | VX045077.D | Tert butyl alcohol | JOHN | 3/3/2025 8:20:45 AM | MMDadoda | 3/3/2025 1:49:43 PM | Peak Integrated by Software |
| VSTDCCC050 | VX045098.D | 1,2,3-Trichloropropane | JOHN | 3/3/2025 8:20:59 AM | MMDadoda | 3/3/2025 1:49:50 PM | Peak Integrated by Software |

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# Manual Integration Report

| Sequence: | VX030625 | Instrument | MSVOA_x |
|---|---|---|---|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|
| VSTDCCC050 | VX045155.D | 1,2,3-Trichloropropane | JOHN | 3/10/2025 9:41:16 AM | MMDadoda | 3/10/2025 2:26:53 PM | Peak Integrated by Software |
| VX0306WBS01 | VX045158.D | 1,2,3-Trichloropropane | JOHN | 3/10/2025 9:41:21 AM | MMDadoda | 3/10/2025 2:26:53 PM | Peak Integrated by Software |
| Q1501-05MS | VX045163.D | 1,2,3-Trichloropropane | JOHN | 3/10/2025 9:41:30 AM | MMDadoda | 3/10/2025 2:26:56 PM | Peak Integrated by Software |
| Q1501-06MSD | VX045164.D | 1,2,3-Trichloropropane | JOHN | 3/10/2025 9:41:34 AM | MMDadoda | 3/10/2025 2:26:57 PM | Peak Integrated by Software |
| VSTDCCC050 | VX045181.D | 1,2,3-Trichloropropane | JOHN | 3/10/2025 9:42:04 AM | MMDadoda | 3/10/2025 2:27:00 PM | Peak Integrated by Software |

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**Instrument ID: MSVOA_X**

## Daily Analysis Runlog For Sequence/QCBatch ID # VX022825

| | | | | | |
|---|---|---|---|---|---|
| Review By | Mahesh Dadoda | Review On | 2/28/2025 11:09:50 AM | | |
| Supervise By | Semsettin Yesilyurt | Supervise On | 2/28/2025 11:11:09 AM | | |
| SubDirectory | VX022825 | HP Acquire Method | | HP Processing Method | 82X022825W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP133187,VP133189 |
| Initial Calibration Stds | VP133194,VP133195,VP133196,VP133197,VP133198,VP133199 |
| CCC | VP133188,VP133190 |
| Internal Standard/PEM | |
| ICV/I.BLK | VP133200 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr # | SampleId | Data File Name | Date-Time | Operator | Status |
|---|---|---|---|---|---|
| 1 | BFB | VX045067.D | 28 Feb 2025 01:03 | JC/MD | Ok |
| 2 | VSTDICC001 | VX045068.D | 28 Feb 2025 01:27 | JC/MD | Ok,M |
| 3 | VSTDICC005 | VX045069.D | 28 Feb 2025 02:13 | JC/MD | Ok,M |
| 4 | VSTDICC020 | VX045070.D | 28 Feb 2025 02:37 | JC/MD | Ok,M |
| 5 | VSTDICCC050 | VX045071.D | 28 Feb 2025 03:00 | JC/MD | Ok,M |
| 6 | VSTDICC100 | VX045072.D | 28 Feb 2025 03:23 | JC/MD | Ok,M |
| 7 | VSTDICC150 | VX045073.D | 28 Feb 2025 03:47 | JC/MD | Ok,M |
| 8 | IBLK | VX045074.D | 28 Feb 2025 04:10 | JC/MD | Ok |
| 9 | VSTDICV050 | VX045075.D | 28 Feb 2025 04:33 | JC/MD | Ok,M |
| 10 | BFB | VX045076.D | 28 Feb 2025 10:03 | JC/MD | Ok |
| 11 | VSTDCCC050 | VX045077.D | 28 Feb 2025 10:32 | JC/MD | Ok,M |
| 12 | VX0228MBL01 | VX045078.D | 28 Feb 2025 11:00 | JC/MD | Ok |
| 13 | VX0228WBL01 | VX045079.D | 28 Feb 2025 11:23 | JC/MD | Ok |
| 14 | VX0228WBS01 | VX045080.D | 28 Feb 2025 11:46 | JC/MD | Ok,M |
| 15 | VX0228WBSD01 | VX045081.D | 28 Feb 2025 12:13 | JC/MD | Ok,M |
| 16 | Q1401-03 | VX045082.D | 28 Feb 2025 12:37 | JC/MD | Ok |
| 17 | Q1401-06 | VX045083.D | 28 Feb 2025 13:00 | JC/MD | Ok |
| 18 | Q1423-01 | VX045084.D | 28 Feb 2025 13:23 | JC/MD | Ok |
| 19 | Q1423-03 | VX045085.D | 28 Feb 2025 13:47 | JC/MD | Ok |
| 20 | Q1403-01 | VX045086.D | 28 Feb 2025 14:10 | JC/MD | Ok |
| 21 | Q1403-02 | VX045087.D | 28 Feb 2025 14:33 | JC/MD | Ok |

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**Instrument ID: MSVOA_X**

## Daily Analysis Runlog For Sequence/QCBatch ID # VX022825

| | | | | | |
|---|---|---|---|---|---|
| Review By | Mahesh Dadoda | Review On | 2/28/2025 11:09:50 AM | | |
| Supervise By | Semsettin Yesilyurt | Supervise On | 2/28/2025 11:11:09 AM | | |
| SubDirectory | VX022825 | HP Acquire Method | | HP Processing Method | 82X022825W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP133187,VP133189 |
| Initial Calibration Stds | VP133194,VP133195,VP133196,VP133197,VP133198,VP133199 |
| CCC | VP133188,VP133190 |
| Internal Standard/PEM | |
| ICV/I.BLK | VP133200 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| | | | | | |
|---|---|---|---|---|---|
| 22 | Q1435-01 | VX045088.D | 28 Feb 2025 14:57 | JC/MD | Ok |
| 23 | Q1403-04 | VX045089.D | 28 Feb 2025 15:20 | JC/MD | Ok |
| 24 | Q1462-02 | VX045090.D | 28 Feb 2025 15:44 | JC/MD | Ok |
| 25 | Q1469-01 | VX045091.D | 28 Feb 2025 16:07 | JC/MD | Ok |
| 26 | Q1469-02 | VX045092.D | 28 Feb 2025 16:31 | JC/MD | Ok |
| 27 | Q1469-03 | VX045093.D | 28 Feb 2025 16:54 | JC/MD | Ok |
| 28 | Q1469-04 | VX045094.D | 28 Feb 2025 17:17 | JC/MD | Ok |
| 29 | Q1403-03 | VX045095.D | 28 Feb 2025 17:41 | JC/MD | Ok |
| 30 | Q1462-01 | VX045096.D | 28 Feb 2025 18:04 | JC/MD | Ok,M |
| 31 | IBLK | VX045097.D | 28 Feb 2025 18:27 | JC/MD | Ok |
| 32 | VSTDCCC050 | VX045098.D | 28 Feb 2025 18:50 | JC/MD | Ok,M |

M : Manual Integration

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**Instrument ID: MSVOA_X**

## Daily Analysis Runlog For Sequence/QCBatch ID # VX030625

| | | | | | |
|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 3/10/2025 9:58:48 AM | | |
| Supervise By | Mahesh Dadoda | Supervise On | 3/10/2025 2:27:03 PM | | |
| SubDirectory | VX030625 | HP Acquire Method | | HP Processing Method | 82X022825W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP133226 |
| Initial Calibration Stds | |
| CCC | VP133227,VP133228 |
| Internal Standard/PEM | |
| ICV/I.BLK | |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr # | SampleId | Data File Name | Date-Time | Operator | Status |
|---|---|---|---|---|---|
| 1 | BFB | VX045154.D | 06 Mar 2025 09:09 | JC/MD | Ok |
| 2 | VSTDCCC050 | VX045155.D | 06 Mar 2025 09:56 | JC/MD | Ok,M |
| 3 | VX0306MBL01 | VX045156.D | 06 Mar 2025 10:23 | JC/MD | Ok |
| 4 | VX0306WBL01 | VX045157.D | 06 Mar 2025 10:46 | JC/MD | Ok |
| 5 | VX0306WBS01 | VX045158.D | 06 Mar 2025 11:10 | JC/MD | Ok,M |
| 6 | Q1501-01 | VX045159.D | 06 Mar 2025 11:36 | JC/MD | Ok |
| 7 | Q1501-02 | VX045160.D | 06 Mar 2025 12:00 | JC/MD | Ok |
| 8 | Q1488-14DL | VX045161.D | 06 Mar 2025 12:23 | JC/MD | Ok,M |
| 9 | Q1501-04 | VX045162.D | 06 Mar 2025 12:46 | JC/MD | ReRun |
| 10 | Q1501-05MS | VX045163.D | 06 Mar 2025 13:09 | JC/MD | Ok,M |
| 11 | Q1501-06MSD | VX045164.D | 06 Mar 2025 13:33 | JC/MD | Ok,M |
| 12 | Q1484-06 | VX045165.D | 06 Mar 2025 13:56 | JC/MD | Ok |
| 13 | Q1494-01 | VX045166.D | 06 Mar 2025 14:19 | JC/MD | Ok |
| 14 | Q1501-04RE | VX045167.D | 06 Mar 2025 14:43 | JC/MD | Confirms |
| 15 | PB166989TB | VX045168.D | 06 Mar 2025 15:06 | JC/MD | Ok |
| 16 | Q1481-02 | VX045169.D | 06 Mar 2025 15:29 | JC/MD | Ok,M |
| 17 | Q1488-02 | VX045170.D | 06 Mar 2025 15:52 | JC/MD | Ok |
| 18 | Q1488-04 | VX045171.D | 06 Mar 2025 16:16 | JC/MD | Ok |
| 19 | Q1488-06 | VX045172.D | 06 Mar 2025 16:39 | JC/MD | Ok |
| 20 | Q1488-08 | VX045173.D | 06 Mar 2025 17:02 | JC/MD | Ok |
| 21 | Q1488-10 | VX045174.D | 06 Mar 2025 17:25 | JC/MD | Ok |

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**Instrument ID: MSVOA_X**

## Daily Analysis Runlog For Sequence/QCBatch ID # VX030625

| | | | | | |
|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 3/10/2025 9:58:48 AM | | |
| Supervise By | Mahesh Dadoda | Supervise On | 3/10/2025 2:27:03 PM | | |
| SubDirectory | VX030625 | HP Acquire Method | | HP Processing Method | 82X022825W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP133226 |
| Initial Calibration Stds | |
| CCC | VP133227,VP133228 |
| Internal Standard/PEM | |
| ICV/I.BLK | |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| | | | | | |
|---|---|---|---|---|---|
| 22 | Q1488-12 | VX045175.D | 06 Mar 2025 17:49 | JC/MD | Ok |
| 23 | Q1490-02 | VX045176.D | 06 Mar 2025 18:12 | JC/MD | Ok |
| 24 | Q1494-04 | VX045177.D | 06 Mar 2025 18:35 | JC/MD | Ok |
| 25 | Q1494-06 | VX045178.D | 06 Mar 2025 18:59 | JC/MD | Ok |
| 26 | Q1494-08 | VX045179.D | 06 Mar 2025 19:22 | JC/MD | Ok |
| 27 | Q1478-15 | VX045180.D | 06 Mar 2025 19:45 | JC/MD | Ok |
| 28 | VSTDCCC050 | VX045181.D | 06 Mar 2025 20:09 | JC/MD | Ok,M |

M : Manual Integration

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Fax : 908 789 8922

**Instrument ID:** MSVOA_X

## Daily Analysis Runlog For Sequence/QCBatch ID # VX022825

| | | | | | |
|---|---|---|---|---|---|
| Review By | Mahesh Dadoda | Review On | 2/28/2025 11:09:50 AM | | |
| Supervise By | Semsettin Yesilyurt | Supervise On | 2/28/2025 11:11:09 AM | | |
| SubDirectory | VX022825 | HP Acquire Method | | HP Processing Method | 82X022825W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP133187,VP133189 |
| Initial Calibration Stds | VP133194,VP133195,VP133196,VP133197,VP133198,VP133199 |
| CCC | VP133188,VP133190 |
| Internal Standard/PEM | |
| ICV/I.BLK | VP133200 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr # | SampleId | ClientID | Data File Name | Date-Time | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | BFB | BFB | VX045067.D | 28 Feb 2025 01:03 | | JC/MD | Ok |
| 2 | VSTDICC001 | VSTDICC001 | VX045068.D | 28 Feb 2025 01:27 | | JC/MD | Ok,M |
| 3 | VSTDICC005 | VSTDICC005 | VX045069.D | 28 Feb 2025 02:13 | | JC/MD | Ok,M |
| 4 | VSTDICC020 | VSTDICC020 | VX045070.D | 28 Feb 2025 02:37 | | JC/MD | Ok,M |
| 5 | VSTDICCC050 | VSTDICCC050 | VX045071.D | 28 Feb 2025 03:00 | | JC/MD | Ok,M |
| 6 | VSTDICC100 | VSTDICC100 | VX045072.D | 28 Feb 2025 03:23 | | JC/MD | Ok,M |
| 7 | VSTDICC150 | VSTDICC150 | VX045073.D | 28 Feb 2025 03:47 | | JC/MD | Ok,M |
| 8 | IBLK | IBLK | VX045074.D | 28 Feb 2025 04:10 | | JC/MD | Ok |
| 9 | VSTDICV050 | ICVVX022825 | VX045075.D | 28 Feb 2025 04:33 | | JC/MD | Ok,M |
| 10 | BFB | BFB | VX045076.D | 28 Feb 2025 10:03 | | JC/MD | Ok |
| 11 | VSTDCCC050 | VSTDCCC050 | VX045077.D | 28 Feb 2025 10:32 | V12668 | JC/MD | Ok,M |
| 12 | VX0228MBL01 | VX0228MBL01 | VX045078.D | 28 Feb 2025 11:00 | | JC/MD | Ok |
| 13 | VX0228WBL01 | VX0228WBL01 | VX045079.D | 28 Feb 2025 11:23 | | JC/MD | Ok |
| 14 | VX0228WBS01 | VX0228WBS01 | VX045080.D | 28 Feb 2025 11:46 | | JC/MD | Ok,M |
| 15 | VX0228WBSD01 | VX0228WBSD01 | VX045081.D | 28 Feb 2025 12:13 | | JC/MD | Ok,M |
| 16 | Q1401-03 | BP-VPB-192-GW-840-8 | VX045082.D | 28 Feb 2025 12:37 | vial B pH<2 | JC/MD | Ok |
| 17 | Q1401-06 | BP-VPB-192-GW-900-9 | VX045083.D | 28 Feb 2025 13:00 | vial B pH<2 | JC/MD | Ok |
| 18 | Q1423-01 | BP-VPB-192-TB-20250 | VX045084.D | 28 Feb 2025 13:23 | vial B pH<2 TB | JC/MD | Ok |

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**Instrument ID:** MSVOA_X

## Daily Analysis Runlog For Sequence/QCBatch ID # VX022825

| | | | | | |
|---|---|---|---|---|---|
| Review By | Mahesh Dadoda | Review On | 2/28/2025 11:09:50 AM | | |
| Supervise By | Semsettin Yesilyurt | Supervise On | 2/28/2025 11:11:09 AM | | |
| SubDirectory | VX022825 | HP Acquire Method | | HP Processing Method | 82X022825W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP133187,VP133189 |
| Initial Calibration Stds | VP133194,VP133195,VP133196,VP133197,VP133198,VP133199 |
| CCC | VP133188,VP133190 |
| Internal Standard/PEM | |
| ICV/I.BLK | VP133200 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 19 | Q1423-03 | BP-VPB-192-EB-20250 | VX045085.D | 28 Feb 2025 13:47 | vial B pH<2 EB | JC/MD | Ok |
| 20 | Q1403-01 | Storage-Blank-SOIL-RE | VX045086.D | 28 Feb 2025 14:10 | vial B pH<2 | JC/MD | Ok |
| 21 | Q1403-02 | Storage-Blank-WATER- | VX045087.D | 28 Feb 2025 14:33 | vial B pH<2 | JC/MD | Ok |
| 22 | Q1435-01 | 286107 | VX045088.D | 28 Feb 2025 14:57 | vial A pH<2 | JC/MD | Ok |
| 23 | Q1403-04 | Storage-Blank-SAMPLE | VX045089.D | 28 Feb 2025 15:20 | vial B pH<2 | JC/MD | Ok |
| 24 | Q1462-02 | FB | VX045090.D | 28 Feb 2025 15:44 | vial A pH<2 FB | JC/MD | Ok |
| 25 | Q1469-01 | Storage-Blank-SOIL-RE | VX045091.D | 28 Feb 2025 16:07 | vial A pH<2 | JC/MD | Ok |
| 26 | Q1469-02 | Storage-Blank-WATER- | VX045092.D | 28 Feb 2025 16:31 | vial A pH<2 | JC/MD | Ok |
| 27 | Q1469-03 | Storage-Blank-WATER- | VX045093.D | 28 Feb 2025 16:54 | vial A pH<2 | JC/MD | Ok |
| 28 | Q1469-04 | Storage-Blank-SAMPLE | VX045094.D | 28 Feb 2025 17:17 | vial A pH<2 | JC/MD | Ok |
| 29 | Q1403-03 | Storage-Blank-WATER- | VX045095.D | 28 Feb 2025 17:41 | vial B pH<2 | JC/MD | Ok |
| 30 | Q1462-01 | MW2 | VX045096.D | 28 Feb 2025 18:04 | vial A pH<2 | JC/MD | Ok,M |
| 31 | IBLK | IBLK | VX045097.D | 28 Feb 2025 18:27 | | JC/MD | Ok |
| 32 | VSTDCCC050 | VSTDCCC050EC | VX045098.D | 28 Feb 2025 18:50 | | JC/MD | Ok,M |

M : Manual Integration

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**Instrument ID:** MSVOA_X

## Daily Analysis Runlog For Sequence/QCBatch ID # VX030625

| | | | | | |
|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 3/10/2025 9:58:48 AM | | |
| Supervise By | Mahesh Dadoda | Supervise On | 3/10/2025 2:27:03 PM | | |
| SubDirectory | VX030625 | HP Acquire Method | | HP Processing Method | 82X022825W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP133226 |
| Initial Calibration Stds | |
| CCC | VP133227,VP133228 |
| Internal Standard/PEM | |
| ICV/I.BLK | |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr # | SampleId | ClientID | Data File Name | Date-Time | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | BFB | BFB | VX045154.D | 06 Mar 2025 09:09 | | JC/MD | Ok |
| 2 | VSTDCCC050 | VSTDCCC050 | VX045155.D | 06 Mar 2025 09:56 | pH#Lot#V12668 | JC/MD | Ok,M |
| 3 | VX0306MBL01 | VX0306MBL01 | VX045156.D | 06 Mar 2025 10:23 | | JC/MD | Ok |
| 4 | VX0306WBL01 | VX0306WBL01 | VX045157.D | 06 Mar 2025 10:46 | | JC/MD | Ok |
| 5 | VX0306WBS01 | VX0306WBS01 | VX045158.D | 06 Mar 2025 11:10 | | JC/MD | Ok,M |
| 6 | Q1501-01 | MW-16B-87.5-030425 | VX045159.D | 06 Mar 2025 11:36 | vial A pH<2 | JC/MD | Ok |
| 7 | Q1501-02 | MW-16B-87.5-030425-I | VX045160.D | 06 Mar 2025 12:00 | vial A pH<2 | JC/MD | Ok |
| 8 | Q1488-14DL | ENV-104-GW01DL | VX045161.D | 06 Mar 2025 12:23 | vial B pH<2 | JC/MD | Ok,M |
| 9 | Q1501-04 | BR-05-465-030525 | VX045162.D | 06 Mar 2025 12:46 | vial A pH<2 Surrogate Fail | JC/MD | ReRun |
| 10 | Q1501-05MS | BR-05-465-030525MS | VX045163.D | 06 Mar 2025 13:09 | vial A pH<2 | JC/MD | Ok,M |
| 11 | Q1501-06MSD | BR-05-465-030525MSD | VX045164.D | 06 Mar 2025 13:33 | vial A pH<2 | JC/MD | Ok,M |
| 12 | Q1484-06 | TR-OTR-COMP-01 | VX045165.D | 06 Mar 2025 13:56 | vial A pH#5.0 | JC/MD | Ok |
| 13 | Q1494-01 | PURGE-WATER | VX045166.D | 06 Mar 2025 14:19 | vial B pH<2 | JC/MD | Ok |
| 14 | Q1501-04RE | BR-05-465-030525RE | VX045167.D | 06 Mar 2025 14:43 | vial B pH<2 Surrogate Fail | JC/MD | Confirms |
| 15 | PB166989TB | PB166989TB | VX045168.D | 06 Mar 2025 15:06 | | JC/MD | Ok |
| 16 | Q1481-02 | WC-K1311 | VX045169.D | 06 Mar 2025 15:29 | vial A pH#5.0 | JC/MD | Ok,M |
| 17 | Q1488-02 | ENV-101-SB01 | VX045170.D | 06 Mar 2025 15:52 | vial A pH#5.0 | JC/MD | Ok |
| 18 | Q1488-04 | ENV-101-SB02 | VX045171.D | 06 Mar 2025 16:16 | vial A pH#5.0 | JC/MD | Ok |

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**Instrument ID:** MSVOA_X

## Daily Analysis Runlog For Sequence/QCBatch ID # VX030625

| | | | | | |
|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 3/10/2025 9:58:48 AM | | |
| Supervise By | Mahesh Dadoda | Supervise On | 3/10/2025 2:27:03 PM | | |
| SubDirectory | VX030625 | HP Acquire Method | | HP Processing Method | 82X022825W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP133226 |
| Initial Calibration Stds | |
| CCC | VP133227,VP133228 |
| Internal Standard/PEM | |
| ICV/I.BLK | |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 19 | Q1488-06 | ENV-102-SB01 | VX045172.D | 06 Mar 2025 16:39 | vial A pH#5.0 | JC/MD | Ok |
| 20 | Q1488-08 | ENV-102-SB02 | VX045173.D | 06 Mar 2025 17:02 | vial A pH#5.0 | JC/MD | Ok |
| 21 | Q1488-10 | ENV-104-SB01 | VX045174.D | 06 Mar 2025 17:25 | vial A pH#5.0 | JC/MD | Ok |
| 22 | Q1488-12 | ENV-104-SB02 | VX045175.D | 06 Mar 2025 17:49 | vial A pH#5.0 | JC/MD | Ok |
| 23 | Q1490-02 | CLAY-SLUDGE-DRUM | VX045176.D | 06 Mar 2025 18:12 | vial A pH#5.0 | JC/MD | Ok |
| 24 | Q1494-04 | ASPHALT-SOIL | VX045177.D | 06 Mar 2025 18:35 | vial A pH#5.0 | JC/MD | Ok |
| 25 | Q1494-06 | SOIL | VX045178.D | 06 Mar 2025 18:59 | vial A pH#5.0 | JC/MD | Ok |
| 26 | Q1494-08 | SOIL-COMP | VX045179.D | 06 Mar 2025 19:22 | vial A pH#5.0 | JC/MD | Ok |
| 27 | Q1478-15 | IDW-SO-DRUM-582-02 | VX045180.D | 06 Mar 2025 19:45 | vial A pH#5.0 | JC/MD | Ok |
| 28 | VSTDCCC050 | VSTDCCC050EC | VX045181.D | 06 Mar 2025 20:09 | | JC/MD | Ok,M |

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**TCLP EXTRACTION LOGPAGE**

PB166989

**SOP ID :** M1311-TCLP-15

**SDG No :** N/A

**Weigh By :** JP

**Balance ID :** WC SC-7

**pH Meter ID :** WC PH METER-1

**Extraction By :** JP

**Filter By :** JP

**Pippete ID :** WC

**Tumbler ID :** ZHE-1 / ZHE-2

**TCLP Filter ID :** 50223706

**Start Prep Date :** 03/05/2025 **Time :** 16:30

**End Prep Date :** 03/06/2025 **Time :** 10:35

**Combination Ratio :** 20

**ZHE Cleaning Batch :** ~~N/A~~ VN030625

**Initial Room Temperature:** 24 °C

**Final Room Temperature:** 22 °C

**TCLP Technician Signature :** JP

**Supervisor By :** JP

| Standared Name | MLS USED | STD REF. # FROM LOG |
|---|---|---|
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |

| Chemical Used | ML/SAMPLE U | Lot Number |
|---|---|---|
| TCLP-FLUID-1 | N/A | WP110802 |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| 40ml VOA Vials | 23237 | N/A |

**Extraction Conformance/Non-Conformance Comments:**

Tumbler ZHE-1 /ZHE-2 checked,30 rpm. ALL ZHE samples are extracted and given as vial A & B. Leak checked after 10 minties of tumbling.

| Date / Time | Prepped Sample Relinquished By/Location | Received By/Location |
|---|---|---|
| 03106125 11:35 | JP TCLP ROOM | MD 100 Lab |
| | Preparation Group | Analysis Group |

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**TCLP EXTRACTION LOGPAGE**

PB166989

| Sample ID | ClientID | ZHE Vessel ID | Sample Wt (g) | Volume Extraction Fluid #1 (mL) | Multi phasic | Phase Miscible | Phases Combined | Final Leachate PH | Metals Leachate Adj. PH | Prep Pos |
|---|---|---|---|---|---|---|---|---|---|---|
| PB166989TB | LEB989 | 14 | N/A | 500 | N/A | N/A | N/A | N/A | N/A | ZHE-2 |
| Q1478-15 | IDW-SO-DRUM-582-022825 | 01 | 25.02 | 500 | N/A | N/A | N/A | N/A | N/A | ZHE-1 |
| Q1481-02 | WC-K1311 | 02 | 25.03 | 500 | N/A | N/A | N/A | N/A | N/A | ZHE-1 |
| Q1484-06 | TR-OTR-COMP-01 | 03 | 25.04 | 500 | N/A | N/A | N/A | N/A | N/A | ZHE-1 |
| Q1488-02 | ENV-101-SB01 | 04 | 25.02 | 500 | N/A | N/A | N/A | N/A | N/A | ZHE-1 |
| Q1488-04 | ENV-101-SB02 | 05 | 25.01 | 500 | N/A | N/A | N/A | N/A | N/A | ZHE-1 |
| Q1488-06 | ENV-102-SB01 | 06 | 25.02 | 500 | N/A | N/A | N/A | N/A | N/A | ZHE-1 |
| Q1488-08 | ENV-102-SB02 | 07 | 25.03 | 500 | N/A | N/A | N/A | N/A | N/A | ZHE-1 |
| Q1488-10 | ENV-104-SB01 | 08 | 25.04 | 500 | N/A | N/A | N/A | N/A | N/A | ZHE-1 |
| Q1488-12 | ENV-104-SB02 | 09 | 25.05 | 500 | N/A | N/A | N/A | N/A | N/A | ZHE-1 |
| Q1490-02 | CLAY-SLUDGE-DRUMS | 10 | 25.03 | 500 | N/A | N/A | N/A | N/A | N/A | ZHE-1 |
| Q1494-04 | ASPHALT-SOIL | 11 | 25.02 | 500 | N/A | N/A | N/A | N/A | N/A | ZHE-2 |
| Q1494-06 | SOIL | 12 | 25.01 | 500 | N/A | N/A | N/A | N/A | N/A | ZHE-2 |
| Q1494-08 | SOIL-COMP | 13 | 25.02 | 500 | N/A | N/A | N/A | N/A | N/A | ZHE-2 |

| SampleID | ClientID | Sample Weight (g) | Filter Weight (g) | Filtrate (mL) | Filter + Solid (After 100°C) | % solids | % Dry Solids |
|---|---|---|---|---|---|---|---|
| PB166989TB | LEB989 | N/A | N/A | N/A | N/A | N/A | N/A |
| Q1478-15 | IDW-SO-DRUM-582-022825 | N/A | N/A | N/A | N/A | 100 | N/A |
| Q1481-02 | WC-K1311 | N/A | N/A | N/A | N/A | 100 | N/A |
| Q1484-06 | TR-OTR-COMP-01 | N/A | N/A | N/A | N/A | 100 | N/A |
| Q1488-02 | ENV-101-SB01 | N/A | N/A | N/A | N/A | 100 | N/A |
| Q1488-04 | ENV-101-SB02 | N/A | N/A | N/A | N/A | 100 | N/A |
| Q1488-06 | ENV-102-SB01 | N/A | N/A | N/A | N/A | 100 | N/A |
| Q1488-08 | ENV-102-SB02 | N/A | N/A | N/A | N/A | 100 | N/A |
| Q1488-10 | ENV-104-SB01 | N/A | N/A | N/A | N/A | 100 | N/A |
| Q1488-12 | ENV-104-SB02 | N/A | N/A | N/A | N/A | 100 | N/A |
| Q1490-02 | CLAY-SLUDGE-DRUMS | N/A | N/A | N/A | N/A | 100 | N/A |
| Q1494-04 | ASPHALT-SOIL | N/A | N/A | N/A | N/A | 100 | N/A |
| Q1494-06 | SOIL | N/A | N/A | N/A | N/A | 100 | N/A |
| Q1494-08 | SOIL-COMP | N/A | N/A | N/A | N/A | 100 | N/A |

# WORKLIST(Hardcopy Internal Chain)

**WorkList Name :** TCLP ZHE Q1490 **WorkList ID :** 188041 **Department :** TCLP Extraction **Date :** 03-05-2025 12:45:26

| Sample | Customer Sample | Matrix | Test | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method |
|---|---|---|---|---|---|---|---|---|
| Q1478-15 | IDW-SO-DRUM-582-022825 | Solid | TCLP ZHE Extraction | Cool 4 deg C | JACO05 | H31 | 02/28/2025 | 1311 ZHE |
| Q1481-02 | WC-K1311 | Solid | TCLP ZHE Extraction | Cool 4 deg C | PSEG03 | H31 | 03/04/2025 | 1311 ZHE |
| Q1484-06 | TR-OTR-COMP-01 | Solid | TCLP ZHE Extraction | Cool 4 deg C | PSEG03 | H31 | 03/04/2025 | 1311 ZHE |
| Q1488-02 | ENV-101-SB01 | Solid | TCLP ZHE Extraction | Cool 4 deg C | PORT06 | H31 | 03/04/2025 | 1311 ZHE |
| Q1488-04 | ENV-101-SB02 | Solid | TCLP ZHE Extraction | Cool 4 deg C | PORT06 | H31 | 03/04/2025 | 1311 ZHE |
| Q1488-06 | ENV-102-SB01 | Solid | TCLP ZHE Extraction | Cool 4 deg C | PORT06 | H31 | 03/04/2025 | 1311 ZHE |
| Q1488-08 | ENV-102-SB02 | Solid | TCLP ZHE Extraction | Cool 4 deg C | PORT06 | H31 | 03/04/2025 | 1311 ZHE |
| Q1488-10 | ENV-104-SB01 | Solid | TCLP ZHE Extraction | Cool 4 deg C | PORT06 | H31 | 03/04/2025 | 1311 ZHE |
| Q1488-12 | ENV-104-SB02 | Solid | TCLP ZHE Extraction | Cool 4 deg C | PORT06 | H31 | 03/04/2025 | 1311 ZHE |
| Q1490-02 | CLAY-SLUDGE-DRUMS | Solid | TCLP ZHE Extraction | Cool 4 deg C | PORT06 | H31 | 03/04/2025 | 1311 ZHE |
| Q1494-04 | ASPHALT-SOIL | Solid | TCLP ZHE Extraction | Cool 4 deg C | PSEG03 | I21 | 03/05/2025 | 1311 ZHE |
| Q1494-06 | SOIL | Solid | TCLP ZHE Extraction | Cool 4 deg C | PSEG03 | I31 | 03/05/2025 | 1311 ZHE |
| Q1494-08 | SOIL-COMP | Solid | TCLP ZHE Extraction | Cool 4 deg C | PSEG03 | I31 | 03/05/2025 | 1311 ZHE |

**Date/Time** 03/05/25 15:30
**Raw Sample Received by:** JB AWC
**Raw Sample Relinquished by:**

**Date/Time** 03/05/25 17:30
**Raw Sample Received by:**
**Raw Sample Relinquished by:** JB AWC

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# Prep Standard - Chemical Standard Summary

**Order ID :** Q1478

**Test :** TCLP VOA

**Prepbatch ID :**

**Sequence ID/Qc Batch ID:** VX030625,

**Standard ID :**
VP131746,VP131767,VP132035,VP132096,VP133036,VP133174,VP133178,VP133226,VP133227,VP133228,

**Chemical ID :**
V13391,V13457,V13460,V13465,V13466,V13706,V14154,V14175,V14176,V14289,V14433,V14439,V14521,V14522,V14613,V14614,V14624,V14630,V14631,V14632,V14633,V14722,V14723,V14724,V14744,V14754,V14809,V14814,V14842,V14872,V14873,V14874,V14875,W3112,

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 247 | 8260 Internal Standard, 250PPM | VP131746 | 11/22/2024 | 05/18/2025 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 11/23/2024 |

**FROM** 0.50000ml of V14289 + 49.50000ml of V14154 = Final Quantity: 50.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 218 | BFB, 25PPM | VP131767 | 11/22/2024 | 05/18/2025 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 11/27/2024 |

**FROM** 0.50000ml of V13391 + 49.50000ml of V14154 = Final Quantity: 50.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1810 | 8260 Working Std(2-CVE)-800ppm | VP132035 | 12/10/2024 | 06/10/2025 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 12/12/2024 |

**FROM** 1.00000ml of V14630 + 1.00000ml of V14631 + 1.00000ml of V14632 + 1.00000ml of V14633 + 46.00000ml of V14614 = Final Quantity: 50.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 719 | 8260 Working STD (BCM)-First source, 400PPM | VP132096 | 12/12/2024 | 06/10/2025 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 12/19/2024 |

**FROM** 1.00000ml of V13465 + 1.00000ml of V13466 + 1.50000ml of V13457 + 1.50000ml of V13460 + 20.00000ml of V14614 = Final Quantity: 25.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 51 | 8260 Working STD (Acrolein) -first source, 800PPM | VP133036 | 02/14/2025 | 03/13/2025 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 02/18/2025 |

**FROM** 1.00000ml of V14872 + 1.00000ml of V14873 + 1.00000ml of V14874 + 1.00000ml of V14875 + 21.00000ml of V14624 = Final Quantity: 25.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 617 | 8260 Surrogate, 400PPM | VP133174 | 02/27/2025 | 08/27/2025 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 03/04/2025 |

**FROM** 0.40000ml of V13706 + 24.60000ml of V14613 = Final Quantity: 25.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 257 | 8260 Calibration Working STD Mix-First source, 160PPM | VP133178 | 02/27/2025 | 03/31/2025 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 03/04/2025 |

**FROM** 0.40000ml of V14842 + 1.00000ml of V14175 + 1.00000ml of V14176 + 1.00000ml of V14433 + 1.00000ml of V14439 + 1.00000ml of V14521 + 1.00000ml of V14522 + 1.00000ml of V14724 + 1.00000ml of V14744 + 1.00000ml of V14754 + 1.00000ml of V14809 + 1.00000ml of V14814 + 1.50000ml of V14722 + 1.50000ml of V14723 + 10.60000ml of V14613 = Final Quantity: 25.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 589 | BFB TUNE CHECK | VP133226 | 03/06/2025 | 03/07/2025 | John Carlone | None | None | Mahesh Dadoda 03/11/2025 |

**FROM** 39.98400ml of W3112 + 0.01600ml of VP131767 = Final Quantity: 40.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 620 | 50 PPB CCC, 8260-Water | VP133227 | 03/06/2025 | 03/07/2025 | John Carlone | None | None | Mahesh Dadoda 03/11/2025 |

**FROM** 39.94450ml of W3112 + 0.00500ml of VP132096 + 0.00500ml of VP133174 + 0.00800ml of VP131746 + 0.01250ml of VP132035 + 0.01250ml of VP133036 + 0.01250ml of VP133178 = Final Quantity: 40.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 620 | 50 PPB CCC, 8260-Water | VP133228 | 03/06/2025 | 03/07/2025 | John Carlone | None | None | Mahesh Dadoda 03/11/2025 |

**FROM** 39.94450ml of W3112 + 0.00500ml of VP132096 + 0.00500ml of VP133174 + 0.00800ml of VP131746 + 0.01250ml of VP132035 + 0.01250ml of VP133036 + 0.01250ml of VP133178 = Final Quantity: 40.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30067 / BFB tuneing solution | A0191805 | 11/22/2025 | 11/22/2024 / SAM | 01/13/2023 / SAM | V13391 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul | A0193071 | 06/12/2025 | 12/12/2024 / SAM | 01/27/2023 / SAM | V13457 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul | A0193071 | 06/12/2025 | 12/12/2024 / SAM | 01/27/2023 / SAM | V13460 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul | A0193071 | 06/12/2025 | 12/12/2024 / SAM | 01/27/2023 / SAM | V13465 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul | A0193071 | 06/12/2025 | 12/12/2024 / SAM | 01/27/2023 / SAM | V13466 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 555582 / Custom Mixture, 8260 A/B Surrogate Mix [CS 5179-2] | A0196865 | 02/27/2026 | 02/27/2025 / SAM | 04/12/2023 / SAM | V13706 |

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# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | BA9077-02 / Methanol, Purge/Trap (cs=6x1L) | 22L0562016 | 05/18/2025 | 11/18/2024 / pedro | 02/06/2024 / SAM | V14154 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 95317 / Universal VOA Mega Mix (Min order = 5) | 021624 | 07/10/2025 | 01/10/2025 / SAM | 02/20/2024 / SAM | V14175 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 95317 / Universal VOA Mega Mix (Min order = 5) | 021624 | 07/10/2025 | 01/10/2025 / SAM | 02/20/2024 / SAM | V14176 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 555581 / Custom Standard, 8260 Internal Std [CS 5179-1] | A0210184 | 11/22/2025 | 11/22/2024 / SAM | 04/15/2024 / SAM | V14289 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL | A0209618 | 07/10/2025 | 01/10/2025 / SAM | 08/15/2024 / SAM | V14433 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL | A0209618 | 07/10/2025 | 01/10/2025 / SAM | 08/15/2024 / SAM | V14439 |

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# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 95319 / Revised Additions Mix (Min = 5) | 091724 | 07/10/2025 | 01/10/2025 / SAM | 09/18/2024 / SAM | V14521 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 95319 / Revised Additions Mix (Min = 5) | 091724 | 07/10/2025 | 01/10/2025 / SAM | 09/18/2024 / SAM | V14522 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | BA9077-02 / Methanol, Purge/Trap (cs=6x1L) | 22L0562016 | 08/27/2025 | 02/27/2025 / SAM | 11/26/2024 / SAM | V14613 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | BA9077-02 / Methanol, Purge/Trap (cs=6x1L) | 22L0562016 | 06/10/2025 | 12/10/2024 / SAM | 11/26/2024 / SAM | V14614 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | BA9077-02 / Methanol, Purge/Trap (cs=6x1L) | 23I0762004 | 07/13/2025 | 01/13/2025 / SAM | 11/26/2024 / SAM | V14624 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | / 2-Chloroethyl vinyl ether | 120524 | 06/10/2025 | 12/10/2024 / SAM | 12/06/2024 / SAM | V14630 |

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# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | / 2-Chloroethyl vinyl ether | 120524 | 06/10/2025 | 12/10/2024 / SAM | 12/06/2024 / SAM | V14631 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | / 2-Chloroethyl vinyl ether | 120524 | 06/10/2025 | 12/10/2024 / SAM | 12/06/2024 / SAM | V14632 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | / 2-Chloroethyl vinyl ether | 120524 | 06/10/2025 | 12/10/2024 / SAM | 12/06/2024 / SAM | V14633 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml | A02110618 | 07/10/2025 | 01/10/2025 / SAM | 12/17/2024 / SAM | V14722 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml | A02110618 | 07/10/2025 | 01/10/2025 / SAM | 12/17/2024 / SAM | V14723 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml | A02110618 | 07/10/2025 | 01/10/2025 / SAM | 12/17/2024 / SAM | V14724 |

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# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30042 / VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml | A0216826 | 08/27/2025 | 02/27/2025 / SAM | 12/17/2024 / SAM | V14744 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30042 / VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml | A0216826 | 05/31/2031 | 01/10/2025 / SAM | 12/17/2024 / SAM | V14754 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE LOTS | A0220471 | 07/10/2025 | 01/10/2025 / SAM | 01/08/2025 / SAM | V14809 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE LOTS | A0220471 | 07/10/2025 | 01/10/2025 / SAM | 01/08/2025 / SAM | V14814 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30470 / VOA Stock Solution, tert-butanol std, 1mL, P&TM | A0217535 | 08/27/2025 | 02/27/2025 / SAM | 01/21/2025 / SAM | V14842 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 91980 / Acrolin Std (Min = 5) | 021325 | 03/13/2025 | 02/14/2025 / SAM | 02/14/2025 / SAM | V14872 |

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# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 91980 / Acrolin Std (Min = 5) | 021325 | 03/13/2025 | 02/14/2025 / SAM | 02/14/2025 / SAM | V14873 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 91980 / Acrolin Std (Min = 5) | 021325 | 03/13/2025 | 02/14/2025 / SAM | 02/14/2025 / SAM | V14874 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 91980 / Acrolin Std (Min = 5) | 021325 | 03/13/2025 | 02/14/2025 / SAM | 02/14/2025 / SAM | V14875 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | DIW / DI Water | Daily Lab-Certified | 07/03/2029 | 07/03/2024 / Iwona | 07/03/2024 / Iwona | W3112 |

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

avantor™ | J.T.Baker®

Material No.: 9077-02
Batch No.: 2310762004
Manufactured Date: 2023-08-11
Expiration Date: 2026-08-10
Revision No.: 0

# Certificate of Analysis

| Test | Specification | Result |
|---|---|---|
| Assay ($CH_3OH$) (by GC, corrected for water) | ≥ 99.9 % | 100.0 % |
| Residue after Evaporation | ≤ 1.0 ppm | 0.5 ppm |
| Titrable Acid (µeq/g) | ≤ 0.3 | 0.2 |
| Titrable Base (µeq/g) | ≤ 0.10 | 0.01 |
| Water (by KF, coulometric) | ≤ 0.08 % | < 0.01 % |
| Volatile Organic Trace Analysis – Below EPA 8260B CRQL | Conforms | Conforms |

For Laboratory,Research,or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Ken Koehnlein
Sr. Manager, Quality Assurance

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

12 Baxter

avantor™ | J.T.Baker®

Material No.: 9077-02
Batch No.: 22L0562016
Manufactured Date: 2022-10-26
Expiration Date: 2025-10-25
Revision No.: 0

# Certificate of Analysis

| Test | Specification | Result |
|---|---|---|
| Assay ($CH_3OH$) (by GC, corrected for water) | ≥ 99.9 % | 100.0 % |
| Residue after Evaporation | ≤ 1.0 ppm | 0.2 ppm |
| Titrable Acid (µeq/g) | ≤ 0.3 | 0.2 |
| Titrable Base (µeq/g) | ≤ 0.10 | 0.03 |
| Water (by KF, coulometric) | ≤ 0.08 % | < 0.01 % |
| Volatile Organic Trace Analysis – Below EPA 8260B CRQL | Conforms | Conforms |

For Laboratory,Research,or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

James Ethier
Jamie Ethier
Vice President Global Quality

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

12 Baxter

avantor™ | J.T.Baker®

Material No.: 9077-02
Batch No.: 22L0562016
Manufactured Date: 2022-10-26
Expiration Date: 2025-10-25
Revision No.: 0

# Certificate of Analysis

| Test | Specification | Result |
|---|---|---|
| Assay ($CH_3OH$) (by GC, corrected for water) | ≥ 99.9 % | 100.0 % |
| Residue after Evaporation | ≤ 1.0 ppm | 0.2 ppm |
| Titrable Acid (µeq/g) | ≤ 0.3 | 0.2 |
| Titrable Base (µeq/g) | ≤ 0.10 | 0.03 |
| Water (by KF, coulometric) | ≤ 0.08 % | < 0.01 % |
| Volatile Organic Trace Analysis – Below EPA 8260B CRQL | Conforms | Conforms |

For Laboratory,Research,or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

James Ethier
Jamie Ethier
Vice President Global Quality

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

**Certified Reference Material CRM**

5 V14

ANAB ISO 17034 Accredite
AR-1539 Certificate Number
https://Absolutestandards.cor

Exp 02/14/25

## CERTIFIED WEIGHT REPORT

**Part Number:** 91980
Lot Number: 021325
Description: Acrolein

Expiration Date: 031325
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

**Solvent(s):** **Lot#**
Water 072324Q

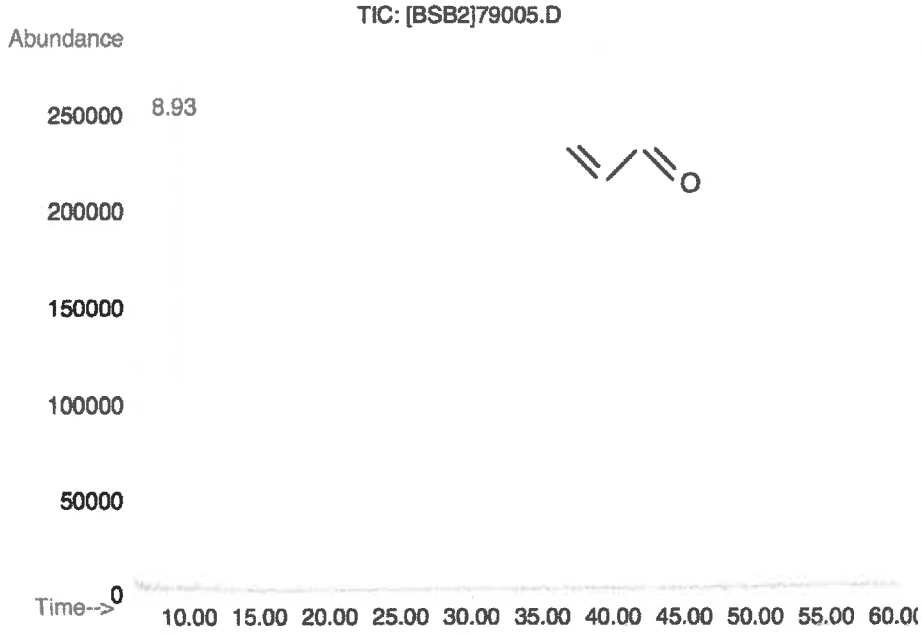
V14872 to
V14876

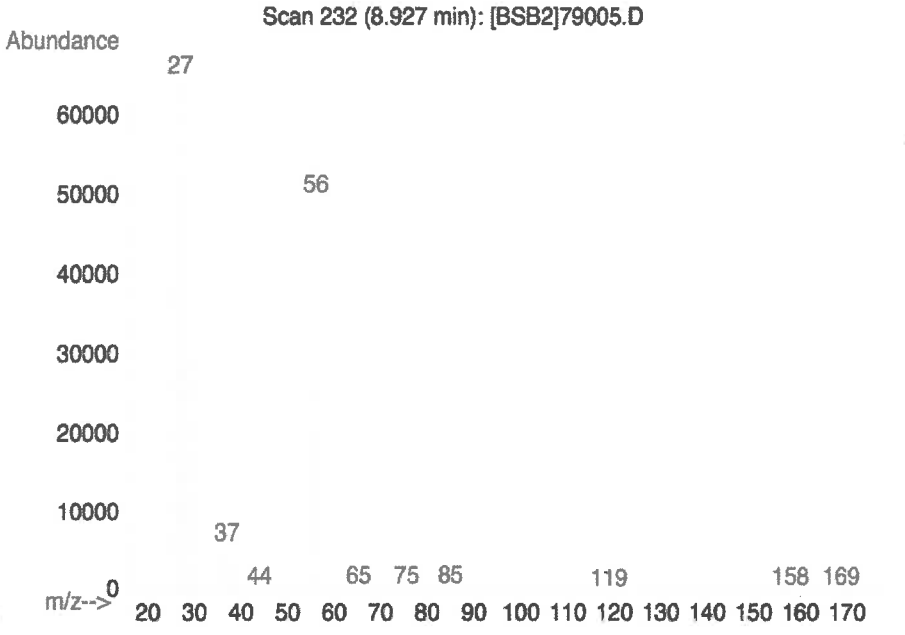
| | | |
|---|---|---|
| Formulated By: | Anthony Mahoney | 021325 DATE |
| Reviewed By: | Pedro L. Rentas | 021325 DATE |

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

| Compound | RM# | Lot Number | Nominal Conc (µg/mL) | Purity (%) | Uncertainty Purity | Target Weight(g) | Actual Weight(g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Acrolein | 5 | 103755V10F | 5000 | 97 | 0.5 | 0.05166 | 0.05178 | 5011.8 | 52.6 | 107-02-8 | 0.1 ppm | orl-rat 46mg/kg |

**Method:** GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C ( Time 2 = 8.75 min.) Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.




- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

**Absolute Standards Inc.**

PO Box 5585
Hamden, CT 06518-0585

Phone: 203-281-2917
FAX: 203-281-2922

**Safety Data Sheet (SDS)** GHS/OSHA Compliant

## Section I Product and Company Identification

**IDENTITY** **ANALYTICAL STANDARD DISSOLVED IN WATER**

| | | | |
|---|---|---|---|
| Manufacturer's Name | ABSOLUTE STANDARDS INC | Emergency Telephone USA & CANADA | **1-800-535-5053** |
| Address | 44 Rossotto Dr.<br>Hamden CT, 06514 | Emergency Telephone International | **1-352-323-3500** |
| | | Date Prepared/Revised | January 1, 2024 |

## Section II - Hazards Identification

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

| | | | |
|---|---|---|---|
| **P271** | **Use in ventilated area** | **H315** | **Causes skin and eye irritation.** |
| **P302,332** | **If on skin, wash with soap and water** | **P280** | **Use gloves, eye protection/face sheild** |
| | | **P305,351,338** | **If in eyes, remove contacts, rinse with water** |

**Signal Word: DANGER**

## Section III - Composition

| Components (Specific Chemical Identity; Common Name(s)) | | % (optional) |
|---|---|---|
| Water | CAS#: 7732-18-5 | > 97 |

**See Certified Weight Report For Other Analytes Present At Trace Quantities.**

**INTENDED USE: REFERENCE MATERIAL**

## Section IV. FIRST AID MEASURES

| | |
|---|---|
| **General advice** | Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area. |
| **If inhaled** | If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| **In case of skin contact** | Wash with soap and water. Consult a physician. |
| **In case of eye contact** | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. |
| **If swallowed** | Do NOT induce vomiting. Rinse mouth with water. Consult a physician. |

## Section V. FIREFIGHTING MEASURES

| | |
|---|---|
| **Suitable extinguishing media** | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| **Protective equipment for fire** | Wear self contained breathing apparatus for fire fighting if necessary. |
| **Hazardous Decomposition products** | Carbon oxides |

## Section VI. ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| Personal precautions | Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations. |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. Do not let product enter drains. |
| Clean up | Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13). |

## Section VII. HANDLING AND STORAGE

| | |
|---|---|
| Precautions for safe handling | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.<br>Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. |
| Storage Conditions | Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. |

## Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Water CAS#: 7732-18-5 TWA: 500 ppm

Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

## Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

| | | | |
|---|---|---|---|
| Boiling Point | 100°C | Specific Gravity (H2O = 1) | 1 |
| Vapor Pressure (mm Hg) | | Melting Point | |

| | | | |
|---|---|---|---|
| | NA | | 0°C |
| Vapor Density (AIR = 1) | NA | Evaporation rate (Butyl Acetate = 1) | NA |

Solubility in Water Completely miscible

Appearance and Odor CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.

## Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions NA
Conditions to avoid NA
Materials to avoid NA
Hazardous decomposition products - No data available

## Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat NA
LC50 Inhalation - Rat NA
LD50 Dermal - Guinea pig NA
Causes skin irritation.
Eye irritation

## Section XII. ECOLOGICAL INFORMATION

LC50 NA
EC50 NA

## Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

## Section XIV. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
Proper shipping name: Water

IATA
Not dangerous goods
Proper shipping name: Water

## Section XV. REGULATORY INFORMATION

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

## Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Material Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

**Absolute Standards, Inc.**
800-368-1131
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*Certified Reference Material CRM*

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ANAB ISO 17034 Accredite
AR-1539 Certificate Number
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Exp 02/14/25

## CERTIFIED WEIGHT REPORT

**Part Number:** 91980
Lot Number: 021325
Description: Acrolein

Expiration Date: 031325
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

**Solvent(s):** **Lot#**
Water 072324Q

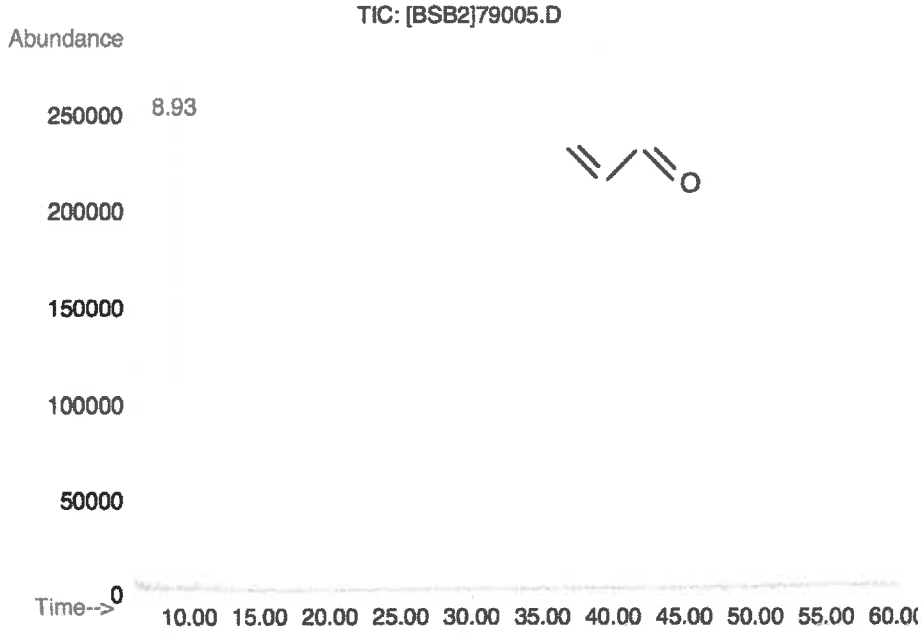
V14872 to
V14876

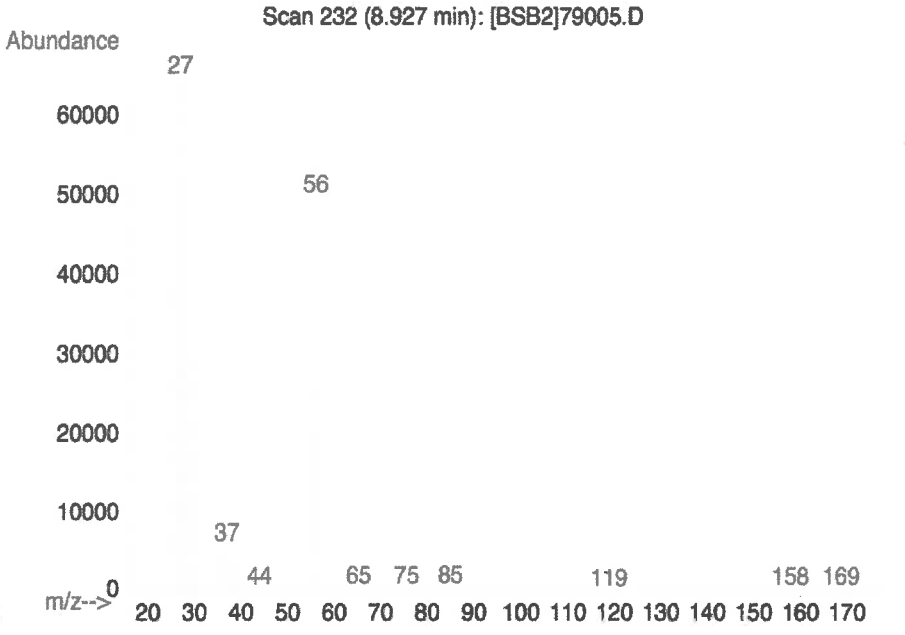
| | | |
|---|---|---|
| Formulated By: | Anthony Mahoney | 021325 DATE |
| Reviewed By: | Pedro L. Rentas | 021325 DATE |

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

| | Compound | RM# | Lot Number | Nominal Conc (µg/mL) | Purity (%) | Uncertainty Purity | Target Weight(g) | Actual Weight(g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | Acrolein | 5 | 103755V10F | 5000 | 97 | 0.5 | 0.05166 | 0.05178 | 5011.8 | 52.6 | 107-02-8 | 0.1 ppm | orl-rat 46mg/kg |

**Method:** GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C ( Time 2 = 8.75 min.) Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.




- **The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.**
- **Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).**
- **Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.**
- **All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.**
- **Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).**

**Absolute Standards Inc.**

PO Box 5585
Hamden, CT 06518-0585

Phone: 203-281-2917
FAX: 203-281-2922

**Safety Data Sheet (SDS)** GHS/OSHA Compliant

## Section I Product and Company Identification

**IDENTITY** **ANALYTICAL STANDARD DISSOLVED IN WATER**

| | | | |
|---|---|---|---|
| Manufacturer's Name | ABSOLUTE STANDARDS INC | Emergency Telephone USA & CANADA | **1-800-535-5053** |
| Address | 44 Rossotto Dr.<br>Hamden CT, 06514 | Emergency Telephone International | **1-352-323-3500** |
| | | Date Prepared/Revised | January 1, 2024 |

## Section II - Hazards Identification

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

| | | | |
|---|---|---|---|
| **P271** | **Use in ventilated area** | **H315** | **Causes skin and eye irritation.** |
| **P302,332** | **If on skin, wash with soap and water** | **P280** | **Use gloves, eye protection/face sheild** |
| | | **P305,351,338** | **If in eyes, remove contacts, rinse with water** |

**Signal Word: DANGER**

## Section III - Composition

| Components (Specific Chemical Identity; Common Name(s)) | | % (optional) |
|---|---|---|
| Water | CAS#: 7732-18-5 | > 97 |

**See Certified Weight Report For Other Analytes Present At Trace Quantities.**

**INTENDED USE: REFERENCE MATERIAL**

## Section IV. FIRST AID MEASURES

| | |
|---|---|
| **General advice** | Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area. |
| **If inhaled** | If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| **In case of skin contact** | Wash with soap and water. Consult a physician. |
| **In case of eye contact** | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. |
| **If swallowed** | Do NOT induce vomiting. Rinse mouth with water. Consult a physician. |

## Section V. FIREFIGHTING MEASURES

| | |
|---|---|
| **Suitable extinguishing media** | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| **Protective equipment for fire** | Wear self contained breathing apparatus for fire fighting if necessary. |
| **Hazardous Decomposition products** | Carbon oxides |

## Section VI. ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| Personal precautions | Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations. |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. Do not let product enter drains. |
| Clean up | Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13). |

## Section VII. HANDLING AND STORAGE

| | |
|---|---|
| Precautions for safe handling | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.<br>Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. |
| Storage Conditions | Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. |

## Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Water CAS#: 7732-18-5 TWA: 500 ppm

Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

## Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

| | | | |
|---|---|---|---|
| Boiling Point | 100°C | Specific Gravity (H2O = 1) | 1 |
| Vapor Pressure (mm Hg) | | Melting Point | |

| | | | |
|---|---|---|---|
| | NA | | 0°C |
| Vapor Density (AIR = 1) | NA | Evaporation rate (Butyl Acetate = 1) | NA |

Solubility in Water Completely miscible

Appearance and Odor CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.

## Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions NA
Conditions to avoid NA
Materials to avoid NA
Hazardous decomposition products - No data available

## Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat NA
LC50 Inhalation - Rat NA
LD50 Dermal - Guinea pig NA
Causes skin irritation.
Eye irritation

## Section XII. ECOLOGICAL INFORMATION

LC50 NA
EC50 NA

## Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

## Section XIV. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
Proper shipping name: Water

IATA
Not dangerous goods
Proper shipping name: Water

## Section XV. REGULATORY INFORMATION

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

## Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Material Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

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Exp 02/14/25

## CERTIFIED WEIGHT REPORT

**Part Number:** 91980
Lot Number: 021325
Description: Acrolein

Expiration Date: 031325
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

**Solvent(s):** **Lot#**
Water 072324Q

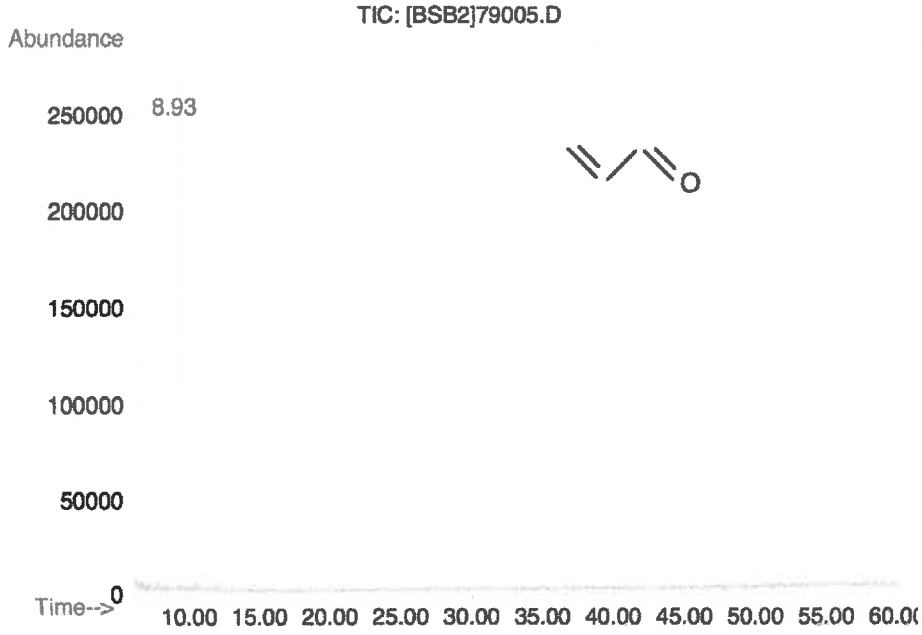
V14872 to
V14876

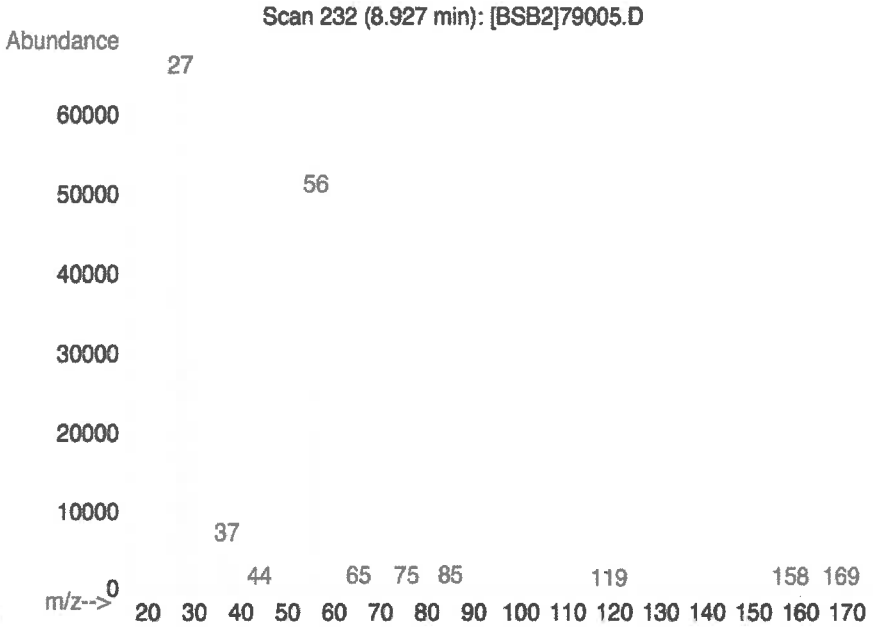
| | | |
|---|---|---|
| Formulated By: | Anthony Mahoney | 021325 DATE |
| Reviewed By: | Pedro L. Rentas | 021325 DATE |

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

| Compound | RM# | Lot Number | Nominal Conc (µg/mL) | Purity (%) | Uncertainty Purity | Target Weight(g) | Actual Weight(g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Acrolein | 5 | 103755V10F | 5000 | 97 | 0.5 | 0.05166 | 0.05178 | 5011.8 | 52.6 | 107-02-8 | 0.1 ppm | orl-rat 46mg/kg |

**Method:** GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C ( Time 2 = 8.75 min.) Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.

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**Safety Data Sheet (SDS)** GHS/OSHA Compliant

## Section I Product and Company Identification

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| | | | |
|---|---|---|---|
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| Address | 44 Rossotto Dr.<br>Hamden CT, 06514 | Emergency Telephone International | **1-352-323-3500** |
| | | Date Prepared/Revised | January 1, 2024 |

## Section II - Hazards Identification

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

| | | | |
|---|---|---|---|
| **P271** | **Use in ventilated area** | **H315** | **Causes skin and eye irritation.** |
| **P302,332** | **If on skin, wash with soap and water** | **P280** | **Use gloves, eye protection/face sheild** |
| | | **P305,351,338** | **If in eyes, remove contacts, rinse with water** |

**Signal Word: DANGER**

## Section III - Composition

| Components (Specific Chemical Identity; Common Name(s)) | | % (optional) |
|---|---|---|
| Water | CAS#: 7732-18-5 | > 97 |

**See Certified Weight Report For Other Analytes Present At Trace Quantities.**

**INTENDED USE: REFERENCE MATERIAL**

## Section IV. FIRST AID MEASURES

| | |
|---|---|
| **General advice** | Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area. |
| **If inhaled** | If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| **In case of skin contact** | Wash with soap and water. Consult a physician. |
| **In case of eye contact** | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. |
| **If swallowed** | Do NOT induce vomiting. Rinse mouth with water. Consult a physician. |

## Section V. FIREFIGHTING MEASURES

| | |
|---|---|
| **Suitable extinguishing media** | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| **Protective equipment for fire** | Wear self contained breathing apparatus for fire fighting if necessary. |
| **Hazardous Decomposition products** | Carbon oxides |

## Section VI. ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| Personal precautions | Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations. |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. Do not let product enter drains. |
| Clean up | Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13). |

## Section VII. HANDLING AND STORAGE

| | |
|---|---|
| Precautions for safe handling | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.<br>Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. |
| Storage Conditions | Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. |

## Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Water CAS#: 7732-18-5 TWA: 500 ppm

Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

## Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

| | | | |
|---|---|---|---|
| Boiling Point | 100°C | Specific Gravity (H2O = 1) | 1 |
| Vapor Pressure (mm Hg) | | Melting Point | |

| | | | |
|---|---|---|---|
| | NA | | 0°C |
| Vapor Density (AIR = 1) | NA | Evaporation rate (Butyl Acetate = 1) | NA |

Solubility in Water Completely miscible

Appearance and Odor CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.

## Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions NA
Conditions to avoid NA
Materials to avoid NA
Hazardous decomposition products - No data available

## Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat NA
LC50 Inhalation - Rat NA
LD50 Dermal - Guinea pig NA
Causes skin irritation.
Eye irritation

## Section XII. ECOLOGICAL INFORMATION

LC50 NA
EC50 NA

## Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

## Section XIV. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
Proper shipping name: Water

IATA
Not dangerous goods
Proper shipping name: Water

## Section XV. REGULATORY INFORMATION

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

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Exp 02/14/25

## CERTIFIED WEIGHT REPORT

**Part Number:** 91980
Lot Number: 021325
Description: Acrolein

Expiration Date: 031325
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

**Solvent(s):** **Lot#**
Water 072324Q

V14872 to
V14876

| | | |
|---|---|---|
| Formulated By: | Anthony Mahoney | 021325 DATE |
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5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

| Compound | RM# | Lot Number | Nominal Conc (µg/mL) | Purity (%) | Uncertainty Purity | Target Weight(g) | Actual Weight(g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
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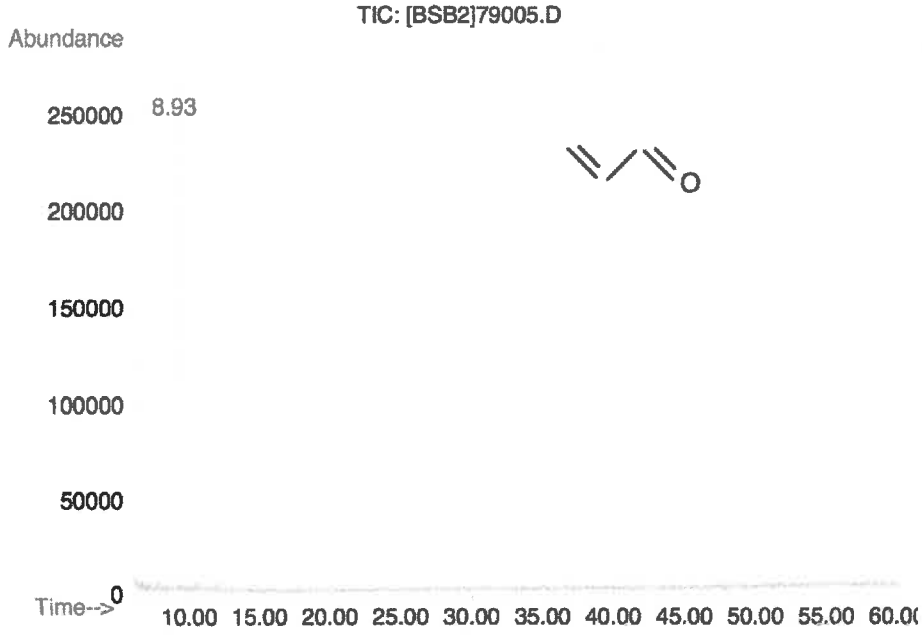
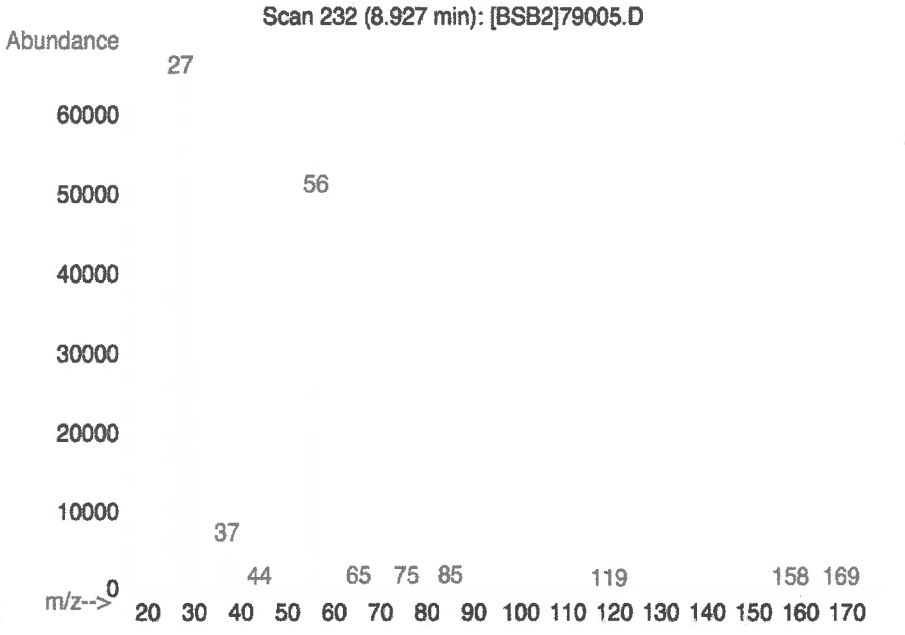
**Method:** GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C ( Time 2 = 8.75 min.) Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.

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**Safety Data Sheet (SDS)** GHS/OSHA Compliant

## Section I Product and Company Identification

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| | | | |
|---|---|---|---|
| Manufacturer's Name | ABSOLUTE STANDARDS INC | Emergency Telephone USA & CANADA | **1-800-535-5053** |
| Address | 44 Rossotto Dr.<br>Hamden CT, 06514 | Emergency Telephone International | **1-352-323-3500** |
| | | Date Prepared/Revised | January 1, 2024 |

## Section II - Hazards Identification

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

| | | | |
|---|---|---|---|
| **P271** | **Use in ventilated area** | **H315** | **Causes skin and eye irritation.** |
| **P302,332** | **If on skin, wash with soap and water** | **P280** | **Use gloves, eye protection/face sheild** |
| | | **P305,351,338** | **If in eyes, remove contacts, rinse with water** |

**Signal Word: DANGER**

## Section III - Composition

| Components (Specific Chemical Identity; Common Name(s)) | | % (optional) |
|---|---|---|
| Water | CAS#: 7732-18-5 | > 97 |

**See Certified Weight Report For Other Analytes Present At Trace Quantities.**

**INTENDED USE: REFERENCE MATERIAL**

## Section IV. FIRST AID MEASURES

| | |
|---|---|
| **General advice** | Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area. |
| **If inhaled** | If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| **In case of skin contact** | Wash with soap and water. Consult a physician. |
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| **If swallowed** | Do NOT induce vomiting. Rinse mouth with water. Consult a physician. |

## Section V. FIREFIGHTING MEASURES

| | |
|---|---|
| **Suitable extinguishing media** | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
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| **Hazardous Decomposition products** | Carbon oxides |

## Section VI. ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
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| Environmental precautions | Prevent further leakage or spillage if safe to do so. Do not let product enter drains. |
| Clean up | Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13). |

## Section VII. HANDLING AND STORAGE

| | |
|---|---|
| Precautions for safe handling | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.<br>Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. |
| Storage Conditions | Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. |

## Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Water CAS#: 7732-18-5 TWA: 500 ppm

Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

## Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

| | | | |
|---|---|---|---|
| Boiling Point | 100°C | Specific Gravity (H2O = 1) | 1 |
| Vapor Pressure (mm Hg) | | Melting Point | |

| | | | |
|---|---|---|---|
| | NA | | 0°C |
| Vapor Density (AIR = 1) | NA | Evaporation rate (Butyl Acetate = 1) | NA |

Solubility in Water Completely miscible

Appearance and Odor CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.

## Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions NA
Conditions to avoid NA
Materials to avoid NA
Hazardous decomposition products - No data available

## Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat NA
LC50 Inhalation - Rat NA
LD50 Dermal - Guinea pig NA
Causes skin irritation.
Eye irritation

## Section XII. ECOLOGICAL INFORMATION

LC50 NA
EC50 NA

## Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

## Section XIV. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
Proper shipping name: Water

IATA
Not dangerous goods
Proper shipping name: Water

## Section XV. REGULATORY INFORMATION

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

## Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Material Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

CERTIFIED WEIGHT REPORT

Part Number: 95317
Lot Number: 021624
Description: Universal VOA Megamix
69 components
Expiration Date: 021627
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 6UTB

Solvent(s): Methanol Lot# EG359-USQ12

Formulated By: Prashant Chauhan 021624 DATE

Reviewed By: Pedro L. Rentas 021624 DATE

| Weight(s) shown below were combined and diluted to (mL): | 100.0 | 0.021 | Flask Uncertainty |
|---|---|---|---|
| | | 5E-05 | Balance Uncertainty |

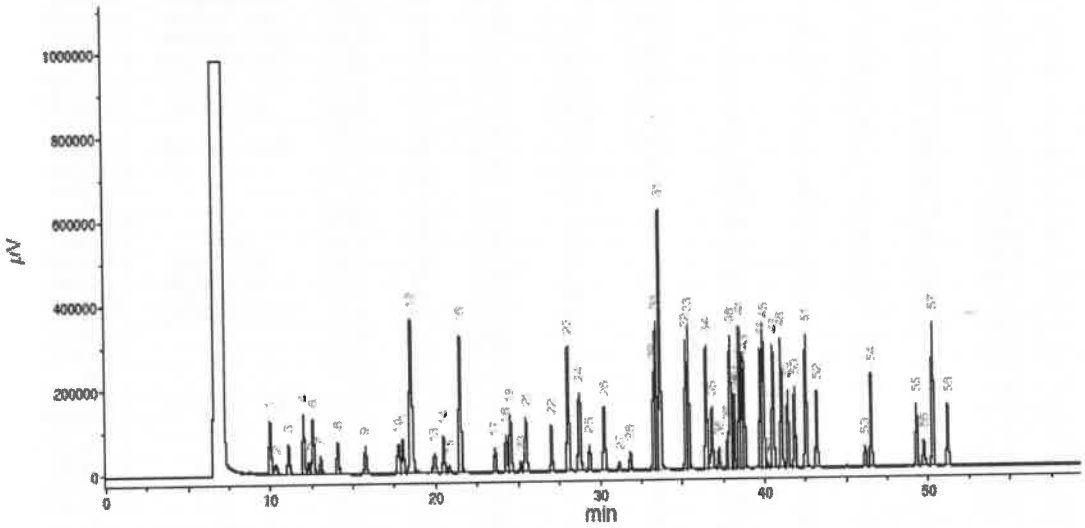
| Compound | (RM#) Part Number | Lot Number | Dil. Factor | Initial Vol. (mL) | Initial Conc.(ug/mL) | Nominal Conc (µg/mL) | Purity (%) | Purity Uncertainty | Uncertainty Pipette (mL) | Target Weight(g) | Actual Weight(g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Acetonitrile | (0324) | 021644 | NA | NA | NA | 2000 | 99.99 | 0.2 | NA | 0.20007 | 0.20020 | 2001.3 | 8.1 | 75-05-8 | 40 ppm (70mg/m3/8H) | orl-rat 2460mg/kg |
| 2. Allyl chloride (3-Chloropropene) | (0325) | 102396 | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20207 | 0.20221 | 2001.4 | 8.2 | 107-05-1 | 1 ppm (3mg/m3/8H) | orl-rat 700mg/kg |
| 3. Carbon disulphide | (0060) | MKCR8561 | NA | NA | NA | 2000 | 99.99 | 0.2 | NA | 0.20007 | 0.20023 | 2001.6 | 8.1 | 75-15-0 | 4 ppm (12mg/m3) (skin) | orl-rat 1200mg/kg |
| 4. cis-1,4-Dichloro-2-butene | (1196) | 14718EF | NA | NA | NA | 2000 | 95 | 0.2 | NA | 0.21058 | 0.21069 | 2001.1 | 8.5 | 1476-11-5 | N/A | N/A |
| 5. trans-1,4-Dichloro-2-butene | (0486) | MKBP6041V | NA | NA | NA | 2000 | 96.5 | 0.2 | NA | 0.20731 | 0.20748 | 2001.7 | 8.4 | 110-57-6 | N/A | N/A |
| 6. Diethyl ether | (0153) | IK18CAS0000 | NA | NA | NA | 2000 | 99.9 | 0.2 | NA | 0.20025 | 0.20040 | 2001.5 | 8.1 | 60-29-7 | N/A | N/A |
| 7. Ethyl methacrylate | (0361) | 06126PX | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20207 | 0.20230 | 2002.3 | 8.2 | 97-63-2 | N/A | orl-rat 14800mg/kg |
| 8. Iodomethane | (0489) | SHBF8718V | NA | NA | NA | 2000 | 99.5 | 0.2 | NA | 0.20106 | 0.20121 | 2001.5 | 8.2 | 74-88-4 | 5 ppm(28mg/m3/8H)(skin) | orl-rat 76mg/kg |
| 9. 2-Methyl-1-propanol | (0445) | 15241EB | NA | NA | NA | 2000 | 99.5 | 0.2 | NA | 0.20106 | 0.20120 | 2001.4 | 8.1 | 78-83-1 | 50 ppm (150mg/m3/8H) | orl-rat 2460mg/kg |
| 10. Methacrylonitrile | (0442) | 00427ET | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20207 | 0.20221 | 2001.4 | 8.2 | 126-98-7 | 1 ppm (3mg/m3/8H)(skin) | orl-rat 120mg/kg |
| 11. Methyl acrylate | (1075) | SHBK0679 | NA | NA | NA | 2000 | 99.9 | 0.2 | NA | 0.20025 | 0.20040 | 2001.5 | 8.1 | 96-33-3 | 10 ppm(35mg/m3/8H)(skin) | orl-rat 277mg/kg |
| 12. Methyl methacrylate | (0404) | MKBW5137V | NA | NA | NA | 2000 | 99.9 | 0.2 | NA | 0.20025 | 0.20041 | 2001.6 | 8.1 | 80-62-6 | 100 ppm (410mg/m3/8H) | orl-rat 7872mg/kg |
| 13. Nitrobenzene | (0228) | 01213TV | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20207 | 0.20220 | 2001.3 | 8.2 | 98-95-3 | 1 ppm (5mg/m3/8H)(skin) | orl-rat 780mg/kg |
| 14. 2-Nitropropane | (0461) | 14002JX | NA | NA | NA | 2000 | 97.3 | 0.2 | NA | 0.20560 | 0.20577 | 2001.6 | 8.3 | 79-46-9 | 10 ppm (35mg/m3/8H) | orl-rat 720mg/kg |
| 15. Pentachloroethane | (0450) | HGA01 | NA | NA | NA | 2000 | 98 | 0.2 | NA | 0.20413 | 0.20430 | 2001.6 | 8.3 | 76-01-7 | N/A | N/A |
| 16. 1,1,2-Trichlorotrifluoroethane | (0474) | 18930 | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20207 | 0.20225 | 2001.8 | 8.2 | 76-13-1 | 1000 ppm (7600mg/m3/8H) | orl-rat 43g/kg |
| 17. Bromodichloromethane | 35171 | 101623 | 0.05 | 5.00 | 40001.7 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 22.9 | 75-27-4 | N/A | orl-rat 916mg/kg |
| 18. Dibromochloromethane | 35171 | 101623 | 0.05 | 5.00 | 40002.1 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 23.0 | 124-48-1 | N/A | orl-rat 848mg/kg |
| 19. cis-1,2-Dichloroethene | 35171 | 101623 | 0.05 | 5.00 | 40003.1 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 156-59-2 | N/A | N/A |
| 20. trans-1,2-Dichloroethene | 35171 | 101623 | 0.05 | 5.00 | 40002.4 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 23.0 | 156-60-5 | N/A | orl-rat 1235mg/kg |
| 21. Methylene chloride | 35171 | 101623 | 0.05 | 5.00 | 40002.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 22.9 | 75-09-2 | 500 ppm | orl-rat 820mg/kg |
| 22. 1,1-Dichloroethene | 32251 | 102023 | 0.10 | 10.00 | 20001.6 | 2000 | NA | NA | 0.042 | NA | NA | 1999.7 | 20.4 | 75-35-4 | 1 ppm (4mg/m3/8H) | orl-rat 200mg/kg |
| 23. Bromoform | 95321 | 020724 | 0.10 | 10.00 | 20003.2 | 2000 | NA | NA | 0.042 | NA | NA | 1999.8 | 20.5 | 75-25-2 | 0.5 ppm (5mg/m3) (skin) | orl-rat 933mg/kg |
| 24. Carbon tetrachloride | 95321 | 020724 | 0.10 | 10.00 | 20003.4 | 2000 | NA | NA | 0.042 | NA | NA | 1999.8 | 20.4 | 56-23-5 | 2 ppm (12.6mg/m3/8H) | orl-rat 2350mg/kg |
| 25. Chloroform | 95321 | 020724 | 0.10 | 10.00 | 20024.0 | 2000 | NA | NA | 0.042 | NA | NA | 2001.9 | 20.5 | 67-66-3 | 50 ppm (240mg/m3) (CL) | orl-rat 908mg/kg |
| 26. Dibromomethane | 95321 | 020724 | 0.10 | 10.00 | 20002.9 | 2000 | NA | NA | 0.042 | NA | NA | 1999.8 | 20.5 | 74-95-3 | N/A | orl-rat 108mg/kg |
| 27. 1,1-Dichloroethane | 95321 | 020724 | 0.10 | 10.00 | 20003.4 | 2000 | NA | NA | 0.042 | NA | NA | 1999.8 | 20.5 | 75-34-3 | 100 ppm | orl-rat 725mg/kg |
| 28. 2,2-Dichloropropane | 95321 | 020724 | 0.10 | 10.00 | 20003.4 | 2000 | NA | NA | 0.042 | NA | NA | 1999.8 | 20.4 | 594-20-7 | N/A | N/A |
| 29. Tetrachloroethene | 95321 | 020724 | 0.10 | 10.00 | 20201.1 | 2000 | NA | NA | 0.042 | NA | NA | 2019.6 | 20.6 | 127-18-4 | 25 ppm (170mg/m3/8H)(final) | orl-rat 2629mg/kg |
| 30. 1,1,1-Trichloroethane | 95321 | 020724 | 0.10 | 10.00 | 20003.0 | 2000 | NA | NA | 0.042 | NA | NA | 1999.8 | 20.5 | 71-55-6 | 350 ppm (1900mg/m3/8H) | orl-rat 10300mg/kg |
| 31. 1,2-Dibromo-3-chloropropane | 35161 | 112322 | 0.05 | 5.00 | 40016.5 | 2000 | NA | NA | 0.017 | NA | NA | 2000.3 | 22.9 | 96-12-8 | 0.001 ppm | orl-rat 170mg/kg |
| 32. 1,2-Dibromoethane | 35161 | 112322 | 0.05 | 5.00 | 40024.8 | 2000 | NA | NA | 0.017 | NA | NA | 2000.7 | 22.9 | 106-93-4 | 20 ppm (8H) | orl-rat 108mg/kg |
| 33. 1,2-Dichloroethane | 35161 | 112322 | 0.05 | 5.00 | 40018.0 | 2000 | NA | NA | 0.017 | NA | NA | 2000.4 | 22.9 | 107-06-2 | 50 ppm (8H) | orl-rat 670mg/kg |
| 34. 1,2-Dichloropropane | 35161 | 112322 | 0.05 | 5.00 | 40051.0 | 2000 | NA | NA | 0.017 | NA | NA | 2002.0 | 22.9 | 78-87-5 | 75 ppm (350mg/m3/8H) | orl-rat 1947mg/kg |
| 35. 1,3-Dichloropropane | 35161 | 112322 | 0.05 | 5.00 | 40005.9 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 142-28-9 | N/A | unr-mus 3600mg/kg |
| 36. 1,1-Dichloropropene | 35161 | 112322 | 0.05 | 5.00 | 40012.1 | 2000 | NA | NA | 0.017 | NA | NA | 2000.1 | 29.7 | 563-58-6 | N/A | N/A |
| 37. cis-1,3-Dichloropropene | 35161 | 112322 | 0.05 | 5.00 | 40010.6 | 2000 | NA | NA | 0.017 | NA | NA | 2000.0 | 23.0 | 10061-01-5 | N/A | N/A |
| 38. trans-1,3-Dichloropropene | 35161 | 112322 | 0.05 | 5.00 | 40017.8 | 2000 | NA | NA | 0.017 | NA | NA | 2000.4 | 23.0 | 10061-02-6 | N/A | N/A |
| 39. Hexachloro-1,3-butadiene | 35161 | 112322 | 0.05 | 5.00 | 40021.9 | 2000 | NA | NA | 0.017 | NA | NA | 2000.6 | 29.7 | 87-68-3 | 0.02 ppm (0.24mg/m3/8H) | orl-rat 82mg/kg |
| 40. 1,1,1,2-Tetrachloroethane | 35161 | 112322 | 0.05 | 5.00 | 40011.9 | 2000 | NA | NA | 0.017 | NA | NA | 2000.1 | 22.9 | 630-20-6 | N/A | orl-rat 670mg/kg |
| 41. 1,1,2,2-Tetrachloroethane | 35161 | 112322 | 0.05 | 5.00 | 40007.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 22.9 | 79-34-5 | 5 ppm (35mg/m3/8H)(skin) | orl-rat 800mg/kg |
| 42. 1,1,2-Trichloroethane | 35161 | 112322 | 0.05 | 5.00 | 40006.6 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 23.0 | 79-00-5 | 10 ppm (46mg/m3/8H)(skin) | orl-rat 836mg/kg |
| 43. Trichloroethene | 35161 | 112322 | 0.05 | 5.00 | 40029.0 | 2000 | NA | NA | 0.017 | NA | NA | 2000.9 | 22.9 | 79-01-6 | 50 ppm (270mg/m3/8H) | orl-mus 2402mg/kg |
| 44. 1,2,3-Trichloropropane | 35161 | 112322 | 0.05 | 5.00 | 40007.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 22.9 | 96-18-4 | 10 ppm (60mg/m3/8H) | orl-rat 149.6mg/kg |
| 45. Benzene | 35162 | 050823 | 0.05 | 5.00 | 40005.0 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 71-43-2 | 1 ppm | orl-rat 4894mg/kg |
| 46. Bromobenzene | 35162 | 050823 | 0.05 | 5.00 | 40006.9 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 108-86-1 | N/A | orl-rat 2699mg/kg |
| 47. n-Butyl benzene | 35162 | 050823 | 0.05 | 5.00 | 40003.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 104-51-8 | N/A | N/A |
| 48. Ethyl benzene | 35162 | 050823 | 0.05 | 5.00 | 40004.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 100-41-4 | 100 ppm (435mg/m3/8H) | orl-rat >2000mg/kg |
| 49. p-Isopropyl toluene | 35162 | 050823 | 0.05 | 5.00 | 40005.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 99-87-6 | N/A | orl-rat 4750mg/kg |
| 50. Naphthalene | 35162 | 050823 | 0.05 | 5.00 | 40006.2 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 91-20-3 | 10 ppm (50mg/m3/8H) | orl-rat 490mg/kg |
| 51. Styrene | 35162 | 050823 | 0.05 | 5.00 | 40004.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 100-42-5 | 100 ppm | orl-rat 5000mg/kg |
| 52. Toluene | 35162 | 050823 | 0.05 | 5.00 | 40006.2 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 108-88-3 | 200 ppm | orl-rat 5000mg/kg |
| 53. 1,2,3-Trichlorobenzene | 35162 | 050823 | 0.05 | 5.00 | 40003.1 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 87-61-6 | N/A | ipr-mus 1390mg/kg |
| 54. 1,2,4-Trichlorobenzene | 35162 | 050823 | 0.05 | 5.00 | 40006.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 120-82-1 | 5 ppm (CL) (40mg/m3) | orl-rat 756mg/kg |
| 55. 1,2,4-Trimethylbenzene | 35162 | 050823 | 0.05 | 5.00 | 40001.6 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 23.0 | 95-63-6 | N/A | orl-rat 5g/kg |
| 56. 1,3,5-Trimethylbenzene | 35162 | 050823 | 0.05 | 5.00 | 40006.7 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 108-67-8 | N/A | orl-rat 5000mg/kg |
| 57. m-Xylene | 35162 | 050823 | 0.05 | 5.00 | 40005.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 108-38-3 | 100 ppm (435mg/m3/8H) | orl-rat 5g/kg |
| 58. tert-Butyl benzene | 35163 | 101923 | 0.05 | 5.00 | 40001.2 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 22.9 | 98-06-6 | N/A | N/A |
| 59. sec-Butyl benzene | 35163 | 101923 | 0.05 | 5.00 | 40002.4 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 22.9 | 135-98-8 | N/A | orl-rat 2240mg/kg |
| 60. Chlorobenzene | 35163 | 101923 | 0.05 | 5.00 | 40003.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 108-90-7 | 75 ppm (350mg/m3/8H) | orl-rat 2290mg/kg |
| 61. 2-Chlorotoluene | 35163 | 101923 | 0.05 | 5.00 | 40000.3 | 2000 | NA | NA | 0.017 | NA | NA | 1999.5 | 22.9 | 95-49-8 | 50 ppm (250mg/m3/8H) | orl-rat 3900mg/kg |
| 62. 4-Chlorotoluene | 35163 | 101923 | 0.05 | 5.00 | 40003.3 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 106-43-4 | N/A | orl-rat 2100mg/kg |
| 63. 1,2-Dichlorobenzene | 35163 | 101923 | 0.05 | 5.00 | 40003.6 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 95-50-1 | 50 ppm (300mg/m3) (CL) | orl-rat 500mg/kg |
| 64. 1,3-Dichlorobenzene | 35163 | 101923 | 0.05 | 5.00 | 40001.7 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 23.0 | 541-73-1 | N/A | ipr-mus 1062mg/kg |
| 65. 1,4-Dichlorobenzene | 35163 | 101923 | 0.05 | 5.00 | 40001.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 22.9 | 106-46-7 | 75 ppm (450mg/m3/8H) | orl-rat 500mg/kg |
| 66. Isopropylbenzene | 35163 | 101923 | 0.05 | 5.00 | 40000.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.5 | 22.9 | 98-82-8 | 50 ppm (245mg/m3/8H) | orl-rat 1400mg/kg |
| 67. n-Propylbenzene | 35163 | 101923 | 0.05 | 5.00 | 40003.4 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 23.0 | 103-65-1 | N/A | orl-rat 6040mg/kg |
| 68. o-Xylene | 35163 | 101923 | 0.05 | 5.00 | 40040.8 | 2000 | NA | NA | 0.017 | NA | NA | 2001.5 | 23.0 | 95-47-6 | 100 ppm (435mg/m3/8H) | ipr-mus 1364mg/kg |
| 69. p-Xylene | 35163 | 101923 | 0.05 | 5.00 | 40000.6 | 2000 | NA | NA | 0.017 | NA | NA | 1999.5 | 22.9 | 106-42-3 | 100 ppm (435mg/m3/8H) | orl-rat 5g/kg |

- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening sample, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty References: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

**Run 16, "P95317 L021624 [2000µg/mL in MeOH]"**

Run Length: 60.00 min, 35998 points at 10 points/second.
Created: Sat, Feb 17, 2024 at 8:56:46 AM.
Sampled: Sequence "021624-GC5M1", Method "GC5-M1".
Analyzed using Method "GC5-M1".

**Comments**
GC5-M1 Analysis by Candice Warren
Column ID SPB-Vocol 105 meter X 0.53mm X 3.0µm film thickness
Flow rates: Total flow=290mL/min., Helium (carrier)=10mL/min.,
Helium(make-up)=10mL/min., Hydogen(make-up)=40mL/min., Air(make-up)=230mL/min.
Oven Profile: Temp. 1=35°C (Time 1=10 min.), Temp 2=200°C (Time 2=8.75 min.),
Rate = 4°C/min., Total run time=60 min. Injector temp.=200°C, FID Temp.=200°C.
FID Signal = Edaq Channel 1
Standard injection = 0.5µL, Range=3




| Peak # | Name | FID RT (min.) |
|---|---|---|
| 1 | Ether | 9.97 |
| 2 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 10.33 |
| 3 | 1,1-Dichloroethene | 11.10 |
| 4 | Acetonitrile | 12.00 |
| 5 | Iodomethane | 12.31 |
| 6 | Allyl chloride | 12.56 |
| 7 | Carbon disulfide/Methylene chloride | 13.04 |
| 8 | trans-1,2-Dichloroethene | 14.07 |
| 9 | 1,1-Dichloroethane | 15.74 |
| 10 | 2,2-Dichloropropane | 17.74 |
| 11 | cis-1,2-Dichloroethene | 18.00 |
| 12 | Methacrylonitrile/Methyl acrylate/Chloroform | 18.46 |
| 13 | Isobutanol/1,1,1-Trichloroethane | 19.91 |
| 14 | 1,1-Dichloropropene | 20.46 |
| 15 | Carbon tetrachloride | 20.79 |
| 16 | Benzene/1,2-Dichloroethane | 21.49 |
| 17 | Trichloroethene | 23.58 |
| 18 | 1,2-Dichloropropane | 24.28 |
| 19 | Methyl methacrylate | 24.52 |
| 20 | Bromodichloromethane | 25.13 |
| 21 | Dibromomethane/2-Nitropropane | 25.46 |
| 22 | cis-1,3-Dichloropropene | 27.02 |
| 23 | Toluene | 28.05 |
| 24 | Ethyl methacrylate/trans-1,3-Dichloropropene | 28.73 |
| 25 | 1,1,2-Trichloroethane | 29.34 |
| 26 | Tetrachloroethene/1,3-Dichloropropane | 30.24 |
| 27 | Dibromochloromethane | 31.16 |
| 28 | 1,2-Dibromoethane | 31.84 |
| 29 | Chlorobenzene | 33.26 |
| 30 | Ethylbenzene/1,1,1,2-Tetrachloroethane | 33.40 |
| 31 | m-Xylene/p-Xylene | 33.86 |
| 32 | o-Xylene | 35.22 |
| 33 | Styrene | 35.38 |
| 34 | Isopropylbenzene/Bromoform | 36.18 |
| 35 | cis-1,4-Dichloro-2-Butene | 36.80 |
| 36 | 1,1,2,2-Tetrachloroethane | 37.23 |
| 37 | 1,2,3-Trichloropropane | 37.77 |
| 38 | n-Propylbenzene | 37.93 |
| 39 | trans-1,4-Dichloro-2-Butene | 38.05 |
| 40 | Bromobenzene | 38.14 |
| 41 | 1,3,5-Trimethylbenzene | 38.80 |
| 42 | 2-Chlorotoluene | 38.82 |
| 43 | 4-Chlorotoluene | 38.77 |
| 44 | tert-Butylbenzene | 39.76 |
| 45 | 1,2,4-Trimethylbenzene | 39.91 |
| 46 | Pentachloroethane | 40.17 |
| 47 | sec-Butylbenzene | 40.52 |
| 48 | p-Isopropyltoluene | 41.02 |
| 49 | 1,3-Dichlorobenzene | 41.42 |
| 50 | 1,4-Dichlorobenzene | 41.83 |
| 51 | n-Butylbenzene | 42.53 |
| 52 | 1,2-Dichlorobenzene | 43.18 |
| 53 | 1,2-Dibromo-3-chloropropane | 46.12 |
| 54 | Nitrobenzene | 46.48 |
| 55 | 1,2,4-Trichlorobenzene | 49.26 |
| 56 | Hexachlorobutadiene | 49.72 |
| 57 | Naphthalene | 50.26 |
| 58 | 1,2,3-Trichlorobenzene | 51.16 |

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Hamden, CT 06518-0585
Phone: 203-281-2917
FAX: 203-281-2922

**Safety Data Sheet (SDS)** GHS/OSHA Compliant

## Section I Product and Company Identification

**IDENTITY** **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

| | | | |
|---|---|---|---|
| Manufacturer's Name | ABSOLUTE STANDARDS INC | Emergency Telephone USA & CANADA | **1-800-535-5053** |
| Address | 44 Rossotto Dr. Hamden CT, 06514 | Emergency Telephone International | **1-352-323-3500** |
| | | Date Prepared/Revised | January 1, 2023 |

## Section II - Hazards Identification

**GHS Classification In accordance with 29 CFR 1910 (OSHA HCS)**

| | | | |
|---|---|---|---|
| **H225** | **Highly Flammable Liquid and Vapor** | **H301, 311, 331** | **Toxic if swallowed, skin contact, inhaled** |
| **H370** | **Cause damage to organs** | **H351** | **Suspected of causing cancer** |
| **P271** | **Use in ventilated area** | **P280** | **Use gloves, eye protection/face sheild** |
| **P302,332** | **If on skin, wash with soap and water** | **P305,351,338** | **If in eyes, remove contacts, rinse with water** |

**Signal Word: DANGER**

## Section III - Composition

| Components (Specific Chemical Identity; Common Name(s)) | | | % (optional) |
|---|---|---|---|
| Methanol | METHYL ALCOHOL | CAS#: 67-56-1 | > 97 |

**See Certified Weight Report For Other Analytes Present At Trace Quantities.**

**INTENDED USE: REFERENCE MATERIAL**

## Section IV. FIRST AID MEASURES

| | |
|---|---|
| **General advice** | Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area. |
| **If inhaled** | If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| **In case of skin contact** | Wash with soap and water. Consult a physician. |
| **In case of eye contact** | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. |
| **If swallowed** | Do NOT induce vomiting. Rinse mouth with water. Consult a physician. |

## Section V. FIREFIGHTING MEASURES

| | |
|---|---|
| **Flammability** | Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking. |
| **Suitable extinguishing media** | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| **Protective equipment for fire** | Wear self contained breathing apparatus for fire fighting if necessary. |

## Section VI. ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| Personal precautions | Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations. |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. Do not let product enter drains. |
| Clean up | Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13). |

## Section VII. HANDLING AND STORAGE

| | |
|---|---|
| Precautions for safe handling | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. |
| Storage Conditions | Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. |

## Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

## Section IX - Physical/Chemical Characteristics

| | | | |
|---|---|---|---|
| Boiling Point | 65°C | Specific Gravity (H2O = 1) | 0.79 |
| Vapor Pressure (mm Hg) | 96 | Melting Point | -98°C |
| Vapor Density (AIR = 1) | 1.11 | Evaporation rate (Butyl Acetate = 1) | 4.6 |

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

## Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions Vapours may form explosive mixture with air.
Conditions to avoid Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

## Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

## Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

| | |
|---|---|
| LC50 | 15,400 mg/l - 96 h |
| EC50 | 24,500.00 mg/l - 48 h |
| EC100 | 10,000.00 mg/l - 24 h |

## Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

## Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

## Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

## Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

## CERTIFIED WEIGHT REPORT

**Part Number:** 95317
**Lot Number:** 021624
**Description:** Universal VOA Megamix
69 components
**Expiration Date:** 021627
**Recommended Storage:** Freezer (0 °C)
**Nominal Concentration (µg/mL):** 2000
**NIST Test ID#:** 6UTB

**Solvent(s):** Methanol **Lot#** EG359-USQ12

Formulated By: Prashant Chauhan 021624 DATE

Reviewed By: Pedro L. Rentas 021624 DATE

Weight(s) shown below were combined and diluted to (mL): 100.0 5E-05 Balance Uncertainty 0.021 Flask Uncertainty

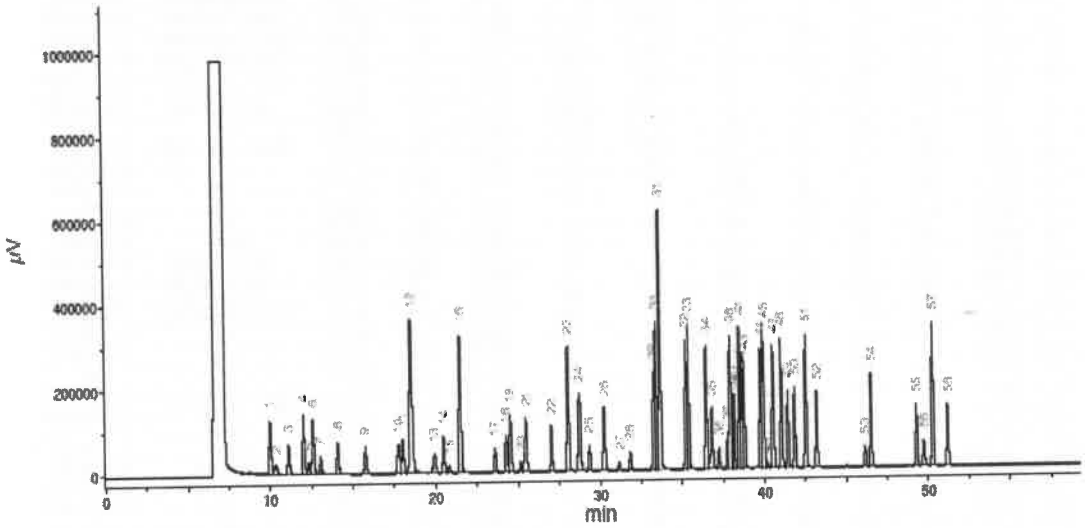
| Compound | (RM#) Part Number | Lot Number | Dil. Factor | Initial Vol. (mL) | Initial Conc.(µg/mL) | Nominal Conc (µg/mL) | Purity (%) | Purity Uncertainty | Uncertainty Pipette (mL) | Target Weight(g) | Actual Weight(g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Acetonitrile | (0324) | 021644 | NA | NA | NA | 2000 | 99.99 | 0.2 | NA | 0.20007 | 0.20020 | 2001.3 | 8.1 | 75-05-8 | 40 ppm (70mg/m3/8H) | orl-rat 2460mg/kg |
| 2. Allyl chloride (3-Chloropropene) | (0325) | 102396 | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20207 | 0.20221 | 2001.4 | 8.2 | 107-05-1 | 1 ppm (3mg/m3/8H) | orl-rat 700mg/kg |
| 3. Carbon disulphide | (0060) | MKCR8561 | NA | NA | NA | 2000 | 99.99 | 0.2 | NA | 0.20007 | 0.20023 | 2001.6 | 8.1 | 75-15-0 | 4 ppm (12mg/m3) (skin) | orl-rat 1200mg/kg |
| 4. cis-1,4-Dichloro-2-butene | (1196) | 14718EF | NA | NA | NA | 2000 | 95 | 0.2 | NA | 0.21058 | 0.21069 | 2001.1 | 8.5 | 1476-11-5 | N/A | N/A |
| 5. trans-1,4-Dichloro-2-butene | (0486) | MKBP6041V | NA | NA | NA | 2000 | 96.5 | 0.2 | NA | 0.20731 | 0.20748 | 2001.7 | 8.4 | 110-57-6 | N/A | N/A |
| 6. Diethyl ether | (0153) | IK18CAS0000 | NA | NA | NA | 2000 | 99.9 | 0.2 | NA | 0.20025 | 0.20040 | 2001.5 | 8.1 | 60-29-7 | N/A | N/A |
| 7. Ethyl methacrylate | (0361) | 06126PX | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20207 | 0.20230 | 2002.3 | 8.2 | 97-63-2 | N/A | orl-rat 14800mg/kg |
| 8. Iodomethane | (0489) | SHBF8718V | NA | NA | NA | 2000 | 99.5 | 0.2 | NA | 0.20106 | 0.20121 | 2001.5 | 8.2 | 74-88-4 | 5 ppm(28mg/m3/8H)(skin) | orl-rat 76mg/kg |
| 9. 2-Methyl-1-propanol | (0445) | 15241EB | NA | NA | NA | 2000 | 99.5 | 0.2 | NA | 0.20106 | 0.20120 | 2001.4 | 8.1 | 78-83-1 | 50 ppm (150mg/m3/8H) | orl-rat 2460mg/kg |
| 10. Methacrylonitrile | (0442) | 00427ET | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20207 | 0.20221 | 2001.4 | 8.2 | 126-98-7 | 1 ppm (3mg/m3/8H)(skin) | orl-rat 120mg/kg |
| 11. Methyl acrylate | (1075) | SHBK0679 | NA | NA | NA | 2000 | 99.9 | 0.2 | NA | 0.20025 | 0.20040 | 2001.5 | 8.1 | 96-33-3 | 10 ppm(35mg/m3/8H)(skin) | orl-rat 277mg/kg |
| 12. Methyl methacrylate | (0404) | MKBW5137V | NA | NA | NA | 2000 | 99.9 | 0.2 | NA | 0.20025 | 0.20041 | 2001.6 | 8.1 | 80-62-6 | 100 ppm (410mg/m3/8H) | orl-rat 7872mg/kg |
| 13. Nitrobenzene | (0228) | 01213TV | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20207 | 0.20220 | 2001.3 | 8.2 | 98-95-3 | 1 ppm (5mg/m3/8H)(skin) | orl-rat 780mg/kg |
| 14. 2-Nitropropane | (0461) | 14002JX | NA | NA | NA | 2000 | 97.3 | 0.2 | NA | 0.20560 | 0.20577 | 2001.6 | 8.3 | 79-46-9 | 10 ppm (35mg/m3/8H) | orl-rat 720mg/kg |
| 15. Pentachloroethane | (0450) | HGA01 | NA | NA | NA | 2000 | 98 | 0.2 | NA | 0.20413 | 0.20430 | 2001.6 | 8.3 | 76-01-7 | N/A | N/A |
| 16. 1,1,2-Trichlorotrifluoroethane | (0474) | 18930 | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20207 | 0.20225 | 2001.8 | 8.2 | 76-13-1 | 1000 ppm (7600mg/m3/8H) | orl-rat 43g/kg |
| 17. Bromodichloromethane | 35171 | 101623 | 0.05 | 5.00 | 40001.7 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 22.9 | 75-27-4 | N/A | orl-rat 916mg/kg |
| 18. Dibromochloromethane | 35171 | 101623 | 0.05 | 5.00 | 40002.1 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 23.0 | 124-48-1 | N/A | orl-rat 848mg/kg |
| 19. cis-1,2-Dichloroethene | 35171 | 101623 | 0.05 | 5.00 | 40003.1 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 156-59-2 | N/A | N/A |
| 20. trans-1,2-Dichloroethene | 35171 | 101623 | 0.05 | 5.00 | 40002.4 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 23.0 | 156-60-5 | N/A | orl-rat 1235mg/kg |
| 21. Methylene chloride | 35171 | 101623 | 0.05 | 5.00 | 40002.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 22.9 | 75-09-2 | 500 ppm | orl-rat 820mg/kg |
| 22. 1,1-Dichloroethene | 32251 | 102023 | 0.10 | 10.00 | 20001.6 | 2000 | NA | NA | 0.042 | NA | NA | 1999.7 | 20.4 | 75-35-4 | 1 ppm (4mg/m3/8H) | orl-rat 200mg/kg |
| 23. Bromoform | 95321 | 020724 | 0.10 | 10.00 | 20003.2 | 2000 | NA | NA | 0.042 | NA | NA | 1999.8 | 20.5 | 75-25-2 | 0.5 ppm (5mg/m3) (skin) | orl-rat 933mg/kg |
| 24. Carbon tetrachloride | 95321 | 020724 | 0.10 | 10.00 | 20003.4 | 2000 | NA | NA | 0.042 | NA | NA | 1999.8 | 20.4 | 56-23-5 | 2 ppm (12.6mg/m3/8H) | orl-rat 2350mg/kg |
| 25. Chloroform | 95321 | 020724 | 0.10 | 10.00 | 20024.0 | 2000 | NA | NA | 0.042 | NA | NA | 2001.9 | 20.5 | 67-66-3 | 50 ppm (240mg/m3) (CL) | orl-rat 908mg/kg |
| 26. Dibromomethane | 95321 | 020724 | 0.10 | 10.00 | 20002.9 | 2000 | NA | NA | 0.042 | NA | NA | 1999.8 | 20.5 | 74-95-3 | N/A | orl-rat 108mg/kg |
| 27. 1,1-Dichloroethane | 95321 | 020724 | 0.10 | 10.00 | 20003.4 | 2000 | NA | NA | 0.042 | NA | NA | 1999.8 | 20.5 | 75-34-3 | 100 ppm | orl-rat 725mg/kg |
| 28. 2,2-Dichloropropane | 95321 | 020724 | 0.10 | 10.00 | 20003.4 | 2000 | NA | NA | 0.042 | NA | NA | 1999.8 | 20.4 | 594-20-7 | N/A | N/A |
| 29. Tetrachloroethene | 95321 | 020724 | 0.10 | 10.00 | 20201.1 | 2000 | NA | NA | 0.042 | NA | NA | 2019.6 | 20.6 | 127-18-4 | 25 ppm (170mg/m3/8H)(final) | orl-rat 2629mg/kg |
| 30. 1,1,1-Trichloroethane | 95321 | 020724 | 0.10 | 10.00 | 20003.0 | 2000 | NA | NA | 0.042 | NA | NA | 1999.8 | 20.5 | 71-55-6 | 350 ppm (1900mg/m3/8H) | orl-rat 10300mg/kg |
| 31. 1,2-Dibromo-3-chloropropane | 35161 | 112322 | 0.05 | 5.00 | 40016.5 | 2000 | NA | NA | 0.017 | NA | NA | 2000.3 | 22.9 | 96-12-8 | 0.001 ppm | orl-rat 170mg/kg |
| 32. 1,2-Dibromoethane | 35161 | 112322 | 0.05 | 5.00 | 40024.8 | 2000 | NA | NA | 0.017 | NA | NA | 2000.7 | 22.9 | 106-93-4 | 20 ppm (8H) | orl-rat 108mg/kg |
| 33. 1,2-Dichloroethane | 35161 | 112322 | 0.05 | 5.00 | 40018.0 | 2000 | NA | NA | 0.017 | NA | NA | 2000.4 | 22.9 | 107-06-2 | 50 ppm (8H) | orl-rat 670mg/kg |
| 34. 1,2-Dichloropropane | 35161 | 112322 | 0.05 | 5.00 | 40051.0 | 2000 | NA | NA | 0.017 | NA | NA | 2002.0 | 22.9 | 78-87-5 | 75 ppm (350mg/m3/8H) | orl-rat 1947mg/kg |
| 35. 1,3-Dichloropropane | 35161 | 112322 | 0.05 | 5.00 | 40005.9 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 142-28-9 | N/A | unr-mus 3600mg/kg |
| 36. 1,1-Dichloropropene | 35161 | 112322 | 0.05 | 5.00 | 40012.1 | 2000 | NA | NA | 0.017 | NA | NA | 2000.1 | 29.7 | 563-58-6 | N/A | N/A |
| 37. cis-1,3-Dichloropropene | 35161 | 112322 | 0.05 | 5.00 | 40010.6 | 2000 | NA | NA | 0.017 | NA | NA | 2000.0 | 23.0 | 10061-01-5 | N/A | N/A |
| 38. trans-1,3-Dichloropropene | 35161 | 112322 | 0.05 | 5.00 | 40017.8 | 2000 | NA | NA | 0.017 | NA | NA | 2000.4 | 23.0 | 10061-02-6 | N/A | N/A |
| 39. Hexachloro-1,3-butadiene | 35161 | 112322 | 0.05 | 5.00 | 40021.9 | 2000 | NA | NA | 0.017 | NA | NA | 2000.6 | 29.7 | 87-68-3 | 0.02 ppm (0.24mg/m3/8H) | orl-rat 82mg/kg |
| 40. 1,1,1,2-Tetrachloroethane | 35161 | 112322 | 0.05 | 5.00 | 40011.9 | 2000 | NA | NA | 0.017 | NA | NA | 2000.1 | 22.9 | 630-20-6 | N/A | orl-rat 670mg/kg |
| 41. 1,1,2,2-Tetrachloroethane | 35161 | 112322 | 0.05 | 5.00 | 40007.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 22.9 | 79-34-5 | 5 ppm (35mg/m3/8H)(skin) | orl-rat 800mg/kg |
| 42. 1,1,2-Trichloroethane | 35161 | 112322 | 0.05 | 5.00 | 40006.6 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 23.0 | 79-00-5 | 10 ppm (46mg/m3/8H)(skin) | orl-rat 836mg/kg |
| 43. Trichloroethene | 35161 | 112322 | 0.05 | 5.00 | 40029.0 | 2000 | NA | NA | 0.017 | NA | NA | 2000.9 | 22.9 | 79-01-6 | 50 ppm (270mg/m3/8H) | orl-mus 2402mg/kg |
| 44. 1,2,3-Trichloropropane | 35161 | 112322 | 0.05 | 5.00 | 40007.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 22.9 | 96-18-4 | 10 ppm (60mg/m3/8H) | orl-rat 149.6mg/kg |
| 45. Benzene | 35162 | 050823 | 0.05 | 5.00 | 40005.0 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 71-43-2 | 1 ppm | orl-rat 4894mg/kg |
| 46. Bromobenzene | 35162 | 050823 | 0.05 | 5.00 | 40006.9 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 108-86-1 | N/A | orl-rat 2699mg/kg |
| 47. n-Butyl benzene | 35162 | 050823 | 0.05 | 5.00 | 40003.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 104-51-8 | N/A | N/A |
| 48. Ethyl benzene | 35162 | 050823 | 0.05 | 5.00 | 40004.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 100-41-4 | 100 ppm (435mg/m3/8H) | orl-rat >2000mg/kg |
| 49. p-Isopropyl toluene | 35162 | 050823 | 0.05 | 5.00 | 40005.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 99-87-6 | N/A | orl-rat 4750mg/kg |
| 50. Naphthalene | 35162 | 050823 | 0.05 | 5.00 | 40006.2 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 91-20-3 | 10 ppm (50mg/m3/8H) | orl-rat 490mg/kg |
| 51. Styrene | 35162 | 050823 | 0.05 | 5.00 | 40004.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 100-42-5 | 100 ppm | orl-rat 5000mg/kg |
| 52. Toluene | 35162 | 050823 | 0.05 | 5.00 | 40006.2 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 108-88-3 | 200 ppm | orl-rat 5000mg/kg |
| 53. 1,2,3-Trichlorobenzene | 35162 | 050823 | 0.05 | 5.00 | 40003.1 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 87-61-6 | N/A | ipr-mus 1390mg/kg |
| 54. 1,2,4-Trichlorobenzene | 35162 | 050823 | 0.05 | 5.00 | 40006.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 120-82-1 | 5 ppm (CL) (40mg/m3) | orl-rat 756mg/kg |
| 55. 1,2,4-Trimethylbenzene | 35162 | 050823 | 0.05 | 5.00 | 40001.6 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 23.0 | 95-63-6 | N/A | orl-rat 5g/kg |
| 56. 1,3,5-Trimethylbenzene | 35162 | 050823 | 0.05 | 5.00 | 40006.7 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 108-67-8 | N/A | orl-rat 5000mg/kg |
| 57. m-Xylene | 35162 | 050823 | 0.05 | 5.00 | 40005.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 108-38-3 | 100 ppm (435mg/m3/8H) | orl-rat 5g/kg |
| 58. tert-Butyl benzene | 35163 | 101923 | 0.05 | 5.00 | 40001.2 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 22.9 | 98-06-6 | N/A | N/A |
| 59. sec-Butyl benzene | 35163 | 101923 | 0.05 | 5.00 | 40002.4 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 22.9 | 135-98-8 | N/A | orl-rat 2240mg/kg |
| 60. Chlorobenzene | 35163 | 101923 | 0.05 | 5.00 | 40003.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 108-90-7 | 75 ppm (350mg/m3/8H) | orl-rat 2290mg/kg |
| 61. 2-Chlorotoluene | 35163 | 101923 | 0.05 | 5.00 | 40000.3 | 2000 | NA | NA | 0.017 | NA | NA | 1999.5 | 22.9 | 95-49-8 | 50 ppm (250mg/m3/8H) | orl-rat 3900mg/kg |
| 62. 4-Chlorotoluene | 35163 | 101923 | 0.05 | 5.00 | 40003.3 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 106-43-4 | N/A | orl-rat 2100mg/kg |
| 63. 1,2-Dichlorobenzene | 35163 | 101923 | 0.05 | 5.00 | 40003.6 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 95-50-1 | 50 ppm (300mg/m3) (CL) | orl-rat 500mg/kg |
| 64. 1,3-Dichlorobenzene | 35163 | 101923 | 0.05 | 5.00 | 40001.7 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 23.0 | 541-73-1 | N/A | ipr-mus 1062mg/kg |
| 65. 1,4-Dichlorobenzene | 35163 | 101923 | 0.05 | 5.00 | 40001.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 22.9 | 106-46-7 | 75 ppm (450mg/m3/8H) | orl-rat 500mg/kg |
| 66. Isopropylbenzene | 35163 | 101923 | 0.05 | 5.00 | 40000.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.5 | 22.9 | 98-82-8 | 50 ppm (245mg/m3/8H) | orl-rat 1400mg/kg |
| 67. n-Propylbenzene | 35163 | 101923 | 0.05 | 5.00 | 40003.4 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 23.0 | 103-65-1 | N/A | orl-rat 6040mg/kg |
| 68. o-Xylene | 35163 | 101923 | 0.05 | 5.00 | 40040.8 | 2000 | NA | NA | 0.017 | NA | NA | 2001.5 | 23.0 | 95-47-6 | 100 ppm (435mg/m3/8H) | ipr-mus 1364mg/kg |
| 69. p-Xylene | 35163 | 101923 | 0.05 | 5.00 | 40000.6 | 2000 | NA | NA | 0.017 | NA | NA | 1999.5 | 22.9 | 106-42-3 | 100 ppm (435mg/m3/8H) | orl-rat 5g/kg |

- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening sample, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty References: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

**Run 16, "P95317 L021624 [2000µg/mL in MeOH]"**

Run Length: 60.00 min, 35998 points at 10 points/second.
Created: Sat, Feb 17, 2024 at 8:56:46 AM.
Sampled: Sequence "021624-GC5M1", Method "GC5-M1".
Analyzed using Method "GC5-M1".

**Comments**
GC5-M1 Analysis by Candice Warren
Column ID SPB-Vocol 105 meter X 0.53mm X 3.0µm film thickness
Flow rates: Total flow=290mL/min., Helium (carrier)=10mL/min.,
Helium(make-up)=10mL/min., Hydogen(make-up)=40mL/min., Air(make-up)=230mL/min.
Oven Profile: Temp. 1=35°C (Time 1=10 min.), Temp 2=200°C (Time 2=8.75 min.),
Rate = 4°C/min., Total run time=60 min. Injector temp.=200°C, FID Temp.=200°C.
FID Signal = Edaq Channel 1
Standard injection = 0.5µL, Range=3




| Peak # | Name | FID RT (min.) |
|---|---|---|
| 1 | Ether | 9.97 |
| 2 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 10.33 |
| 3 | 1,1-Dichloroethene | 11.10 |
| 4 | Acetonitrile | 12.00 |
| 5 | Iodomethane | 12.31 |
| 6 | Allyl chloride | 12.56 |
| 7 | Carbon disulfide/Methylene chloride | 13.04 |
| 8 | trans-1,2-Dichloroethene | 14.07 |
| 9 | 1,1-Dichloroethane | 15.74 |
| 10 | 2,2-Dichloropropane | 17.74 |
| 11 | cis-1,2-Dichloroethene | 18.00 |
| 12 | Methacrylonitrile/Methyl acrylate/Chloroform | 18.46 |
| 13 | Isobutanol/1,1,1-Trichloroethane | 19.91 |
| 14 | 1,1-Dichloropropene | 20.46 |
| 15 | Carbon tetrachloride | 20.79 |
| 16 | Benzene/1,2-Dichloroethane | 21.49 |
| 17 | Trichloroethene | 23.58 |
| 18 | 1,2-Dichloropropane | 24.28 |
| 19 | Methyl methacrylate | 24.52 |
| 20 | Bromodichloromethane | 25.13 |
| 21 | Dibromomethane/2-Nitropropane | 25.46 |
| 22 | cis-1,3-Dichloropropene | 27.02 |
| 23 | Toluene | 28.05 |
| 24 | Ethyl methacrylate/trans-1,3-Dichloropropene | 28.73 |
| 25 | 1,1,2-Trichloroethane | 29.34 |
| 26 | Tetrachloroethene/1,3-Dichloropropane | 30.24 |
| 27 | Dibromochloromethane | 31.16 |
| 28 | 1,2-Dibromoethane | 31.84 |
| 29 | Chlorobenzene | 33.26 |
| 30 | Ethylbenzene/1,1,1,2-Tetrachloroethane | 33.40 |
| 31 | m-Xylene/p-Xylene | 33.86 |
| 32 | o-Xylene | 35.22 |
| 33 | Styrene | 35.38 |
| 34 | Isopropylbenzene/Bromoform | 36.18 |
| 35 | cis-1,4-Dichloro-2-Butene | 36.80 |
| 36 | 1,1,2,2-Tetrachloroethane | 37.23 |
| 37 | 1,2,3-Trichloropropane | 37.77 |
| 38 | n-Propylbenzene | 37.93 |
| 39 | trans-1,4-Dichloro-2-Butene | 38.05 |
| 40 | Bromobenzene | 38.14 |
| 41 | 1,3,5-Trimethylbenzene | 38.80 |
| 42 | 2-Chlorotoluene | 38.82 |
| 43 | 4-Chlorotoluene | 38.77 |
| 44 | tert-Butylbenzene | 39.76 |
| 45 | 1,2,4-Trimethylbenzene | 39.91 |
| 46 | Pentachloroethane | 40.17 |
| 47 | sec-Butylbenzene | 40.52 |
| 48 | p-Isopropyltoluene | 41.02 |
| 49 | 1,3-Dichlorobenzene | 41.42 |
| 50 | 1,4-Dichlorobenzene | 41.83 |
| 51 | n-Butylbenzene | 42.53 |
| 52 | 1,2-Dichlorobenzene | 43.18 |
| 53 | 1,2-Dibromo-3-chloropropane | 46.12 |
| 54 | Nitrobenzene | 46.48 |
| 55 | 1,2,4-Trichlorobenzene | 49.26 |
| 56 | Hexachlorobutadiene | 49.72 |
| 57 | Naphthalene | 50.26 |
| 58 | 1,2,3-Trichlorobenzene | 51.16 |

Absolute Standards Inc.
PO Box 5585
Hamden, CT 06518-0585
Phone: 203-281-2917
FAX: 203-281-2922

**Safety Data Sheet (SDS)** GHS/OSHA Compliant

## Section I Product and Company Identification

**IDENTITY** **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

| | | | |
|---|---|---|---|
| Manufacturer's Name | ABSOLUTE STANDARDS INC | Emergency Telephone USA & CANADA | **1-800-535-5053** |
| Address | 44 Rossotto Dr. Hamden CT, 06514 | Emergency Telephone International | **1-352-323-3500** |
| | | Date Prepared/Revised | January 1, 2023 |

## Section II - Hazards Identification

**GHS Classification In accordance with 29 CFR 1910 (OSHA HCS)**

| | | | |
|---|---|---|---|
| **H225** | **Highly Flammable Liquid and Vapor** | **H301, 311, 331** | **Toxic if swallowed, skin contact, inhaled** |
| **H370** | **Cause damage to organs** | **H351** | **Suspected of causing cancer** |
| **P271** | **Use in ventilated area** | **P280** | **Use gloves, eye protection/face sheild** |
| **P302,332** | **If on skin, wash with soap and water** | **P305,351,338** | **If in eyes, remove contacts, rinse with water** |

**Signal Word: DANGER**

## Section III - Composition

| Components (Specific Chemical Identity; Common Name(s)) | | | % (optional) |
|---|---|---|---|
| Methanol | METHYL ALCOHOL | CAS#: 67-56-1 | > 97 |

**See Certified Weight Report For Other Analytes Present At Trace Quantities.**

**INTENDED USE: REFERENCE MATERIAL**

## Section IV. FIRST AID MEASURES

| | |
|---|---|
| **General advice** | Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area. |
| **If inhaled** | If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| **In case of skin contact** | Wash with soap and water. Consult a physician. |
| **In case of eye contact** | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. |
| **If swallowed** | Do NOT induce vomiting. Rinse mouth with water. Consult a physician. |

## Section V. FIREFIGHTING MEASURES

| | |
|---|---|
| **Flammability** | Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking. |
| **Suitable extinguishing media** | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| **Protective equipment for fire** | Wear self contained breathing apparatus for fire fighting if necessary. |

## Section VI. ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| Personal precautions | Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations. |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. Do not let product enter drains. |
| Clean up | Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13). |

## Section VII. HANDLING AND STORAGE

| | |
|---|---|
| Precautions for safe handling | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. |
| Storage Conditions | Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. |

## Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

## Section IX - Physical/Chemical Characteristics

| | | | |
|---|---|---|---|
| Boiling Point | 65°C | Specific Gravity (H2O = 1) | 0.79 |
| Vapor Pressure (mm Hg) | 96 | Melting Point | -98°C |
| Vapor Density (AIR = 1) | 1.11 | Evaporation rate (Butyl Acetate = 1) | 4.6 |

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

## Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions Vapours may form explosive mixture with air.
Conditions to avoid Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

## Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

## Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

| | |
|---|---|
| LC50 | 15,400 mg/l - 96 h |
| EC50 | 24,500.00 mg/l - 48 h |
| EC100 | 10,000.00 mg/l - 24 h |

## Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

## Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

## Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

## Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

**Certified Reference Material CRM**

Rec 09/16/24 2 Vials

ANAB ISO 17034 Accredited
AR-1539 Certificate Numb
https://Absolutestandards.co...

## CERTIFIED WEIGHT REPORT

**Part Number:** 91980
**Lot Number:** 091424
**Description:** Acrolein

**Solvent(s):** Water **Lot#** 072324Q

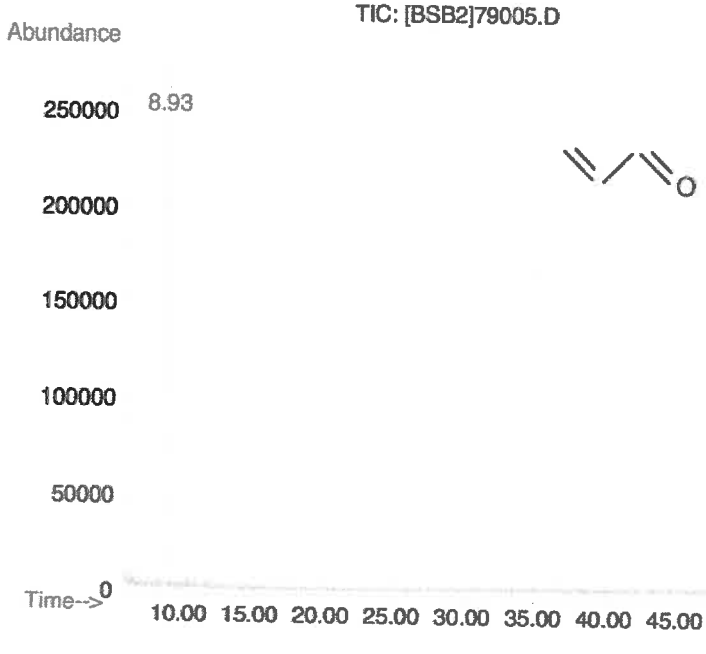
Expiration Date: 101424
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

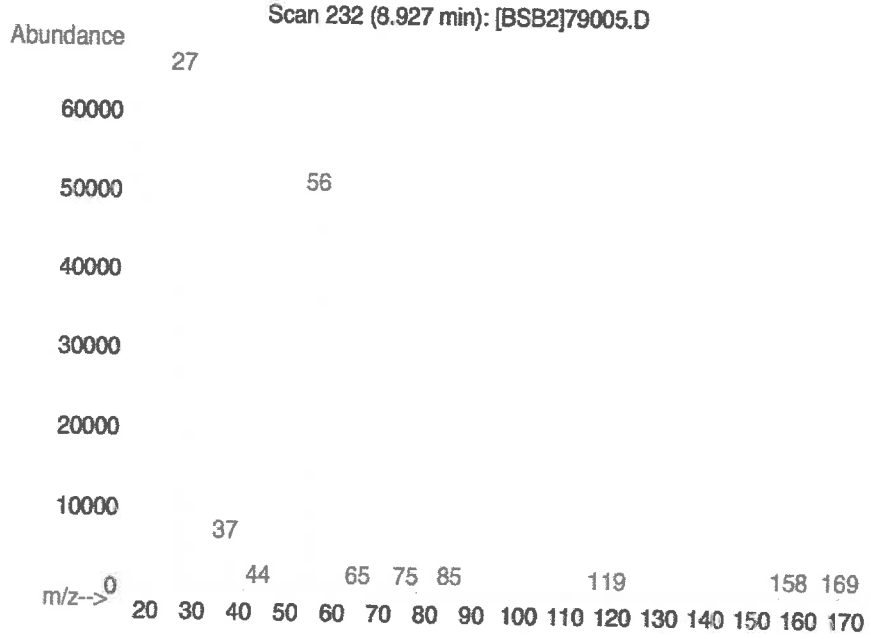
Weight(s) shown below were combined and diluted to (mL): 10.0 | 5E-05 Balance Uncertainty | 0.001 Flask Uncertainty

| | |
|---|---|
| Justin Dippold | 091424 |
| Formulated By: Justin Dippold | DATE |
| Pedro Rentas | 091424 |
| Reviewed By: Pedro L. Rentas | DATE |

| Compound | RM# | Lot Number | Nominal Conc (µg/mL) | Purity (%) | Uncertainty Purity | Target Weight(g) | Actual Weight(g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Acrolein | 5 | 103755V10F | 5000 | 97 | 0.5 | 0.05166 | 0.05175 | 5008.9 | 52.5 | 107-02-8 | 0.1 ppm | orl-rat 46mg/kg |

**Method:** GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C ( Time 2 = 8.75 min.), Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.




- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

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800-368-1131
www.absolutestandards.com

**Certified Reference Material CRM**

Rec 09/16/24 2 Vials

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

## CERTIFIED WEIGHT REPORT

**Part Number:** 91980
Lot Number: 091424
Description: Acrolein

Expiration Date: 101424
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

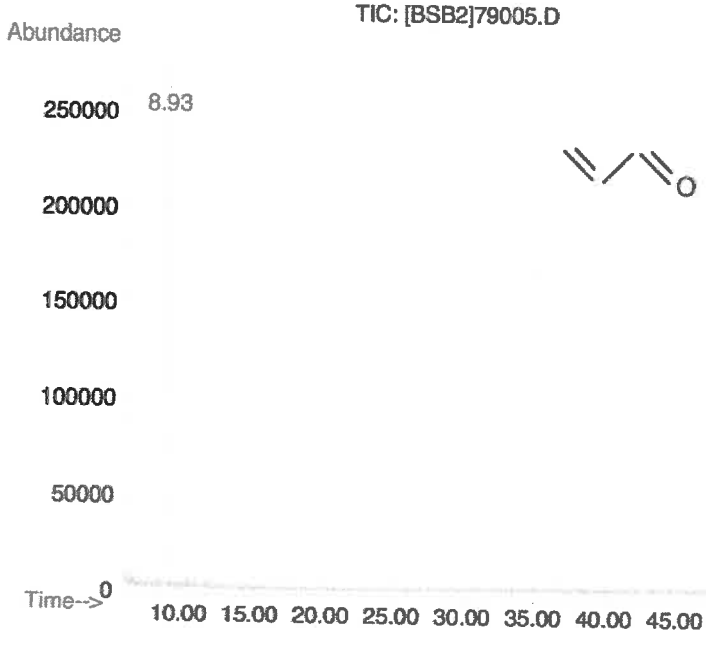
**Solvent(s):** Water **Lot#** 072324Q

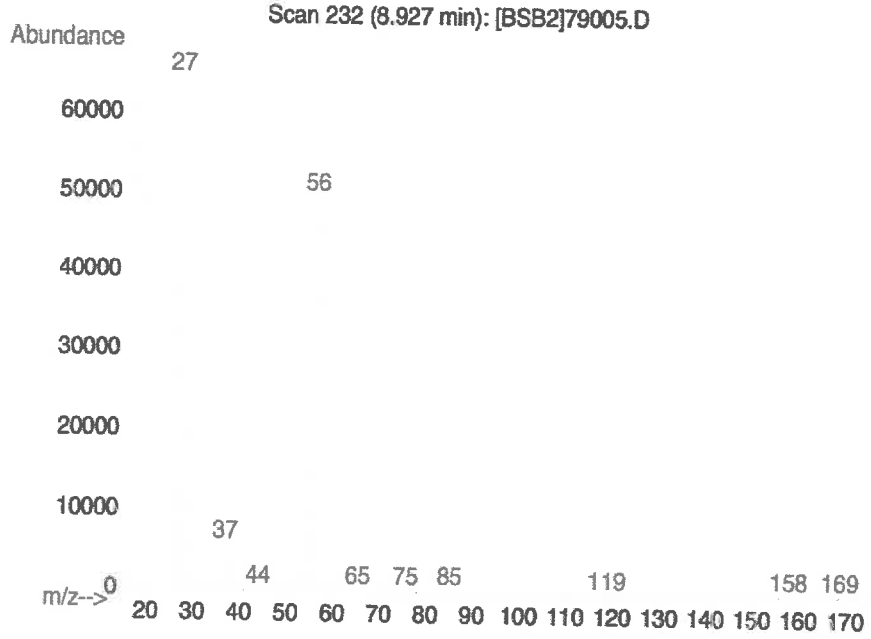
Weight(s) shown below were combined and diluted to (mL): 10.0 | 5E-05 Balance Uncertainty | 0.001 Flask Uncertainty

| | |
|---|---|
| Justin Dippold | 091424 |
| Formulated By: Justin Dippold | DATE |
| Pedro Rentas | 091424 |
| Reviewed By: Pedro L. Rentas | DATE |

| Compound | RM# | Lot Number | Nominal Conc (µg/mL) | Purity (%) | Uncertainty Purity | Target Weight(g) | Actual Weight(g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Acrolein | 5 | 103755V10F | 5000 | 97 | 0.5 | 0.05166 | 0.05175 | 5008.9 | 52.5 | 107-02-8 | 0.1 ppm | orl-rat 46mg/kg |

**Method:** GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C ( Time 2 = 8.75 min.), Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.




- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

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***Certified Reference Material CRM***

Rec 12/6/24
20 vial
V14630 to
V14649

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

## CERTIFIED WEIGHT REPORT

**Part Number:** 95318
**Lot Number:** 120524
**Description:** 2-Chloroethyl vinyl ether

**Expiration Date:** 120527
**Recommended Storage:** Refrigerate (4 °C)
**Nominal Concentration (µg/mL):** 10000
**NIST Test ID#:** 6UTB

**Solvent(s):** Methanol **Lot#** EJ143-US

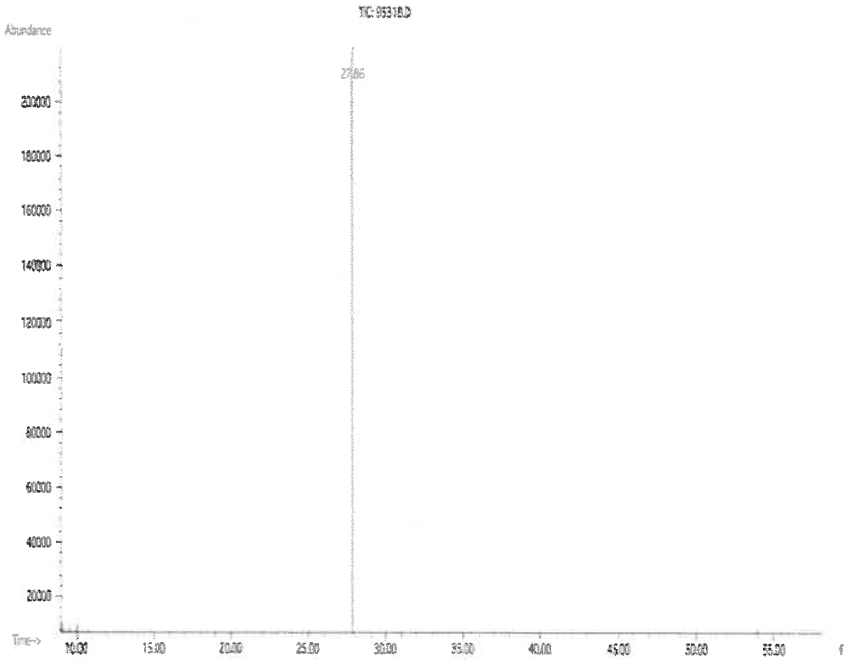
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

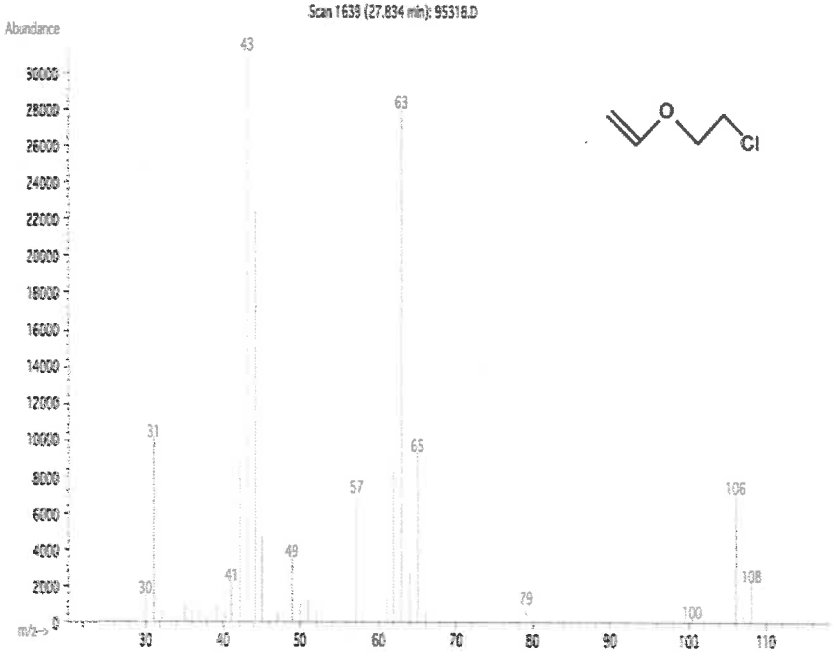
Weight(s) shown below were combined and diluted to (mL): 50.0

| | |
|---|---|
| Prashant Chauhan | 120524 |
| Formulated By: Prashant Chauhan | DATE |
| Pedro L. Rentas | 120524 |
| Reviewed By: Pedro L. Rentas | DATE |

| Compound | RM# | Lot Number | Nominal Conc (µg/mL) | Purity (%) | Uncertainty Purity | Target Weight (g) | Actual Weight (g) | Actual Conc(µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. 2-Chloroethyl vinyl ether | 74 | MKCD0033 | 10000 | 99 | 0.2 | 0.50536 | 0.50550 | 10002.9 | 40.5 | 110-75-8 | N/A | ori-rat 250mg/kg |

**Method:** GC6MSD-1.M. **Detector:** MSD. **Column:** (60m X 0.25mm X 1.5 µm). **Oven Profile:** Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp.= 200°C, Detector B Temp. = 220°C. **Analyst:** Candice Warren.







- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Absolute Standards Inc.
PO Box 5585
Hamden, CT 06518-0585
Phone: 203-281-2917
FAX: 203-281-2922

**Safety Data Sheet (SDS)** GHS/OSHA Compliant

## Section I Product and Company Identification

**IDENTITY** **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

| | | | |
|---|---|---|---|
| Manufacturer's Name | ABSOLUTE STANDARDS INC | Emergency Telephone USA & CANADA | **1-800-535-5053** |
| Address | 44 Rossotto Dr.<br>Hamden CT, 06514 | Emergency Telephone International<br>Date Prepared/Revised | **1-352-323-3500**<br>January 1, 2024 |

## Section II - Hazards Identification

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

| | | | |
|---|---|---|---|
| **H225** | **Highly Flammable Liquid and Vapor** | **H301, 311, 331** | **Toxic if swallowed, skin contact, inhaled** |
| **H370** | **Cause damage to organs** | **H351** | **Suspected of causing cancer** |
| **P271** | **Use in ventilated area** | **P280** | **Use gloves, eye protection/face sheild** |
| **P302,332** | **If on skin, wash with soap and water** | **P305,351,338** | **If in eyes, remove contacts, rinse with water** |

**Signal Word: DANGER**

## Section III - Composition

| Components (Specific Chemical Identity; Common Name(s)) | | | % (optional) |
|---|---|---|---|
| Methanol | METHYL ALCOHOL | CAS#: 67-56-1 | > 97 |

**See Certified Weight Report For Other Analytes Present At Trace Quantities.**

**INTENDED USE: REFERENCE MATERIAL**

## Section IV. FIRST AID MEASURES

| | |
|---|---|
| **General advice** | Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area. |
| **If inhaled** | If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| **In case of skin contact** | Wash with soap and water. Consult a physician. |
| **In case of eye contact** | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. |
| **If swallowed** | Do NOT induce vomiting. Rinse mouth with water. Consult a physician. |

## Section V. FIREFIGHTING MEASURES

| | |
|---|---|
| **Flammability** | Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking. |
| **Suitable extinguishing media** | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| **Protective equipment for fire** | Wear self contained breathing apparatus for fire fighting if necessary. |

## Section VI. ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| Personal precautions | Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations. |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. Do not let product enter drains. |
| Clean up | Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13). |

## Section VII. HANDLING AND STORAGE

| | |
|---|---|
| Precautions for safe handling | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.<br>Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. |
| Storage Conditions | Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. |

## Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

## Section IX - Physical/Chemical Characteristics

| | | | |
|---|---|---|---|
| Boiling Point | 65°C | Specific Gravity (H2O = 1) | 0.79 |
| Vapor Pressure (mm Hg) | 96 | Melting Point | -98°C |
| Vapor Density (AIR = 1) | 1.11 | Evaporation rate (Butyl Acetate = 1) | 4.6 |

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

## Section X. STABILITY AND REACTIVITY

Chemical stability — Stable under recommended storage conditions.
Possibility of hazardous reactions — Vapours may form explosive mixture with air.
Conditions to avoid — Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid — Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

## Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

## Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

| | |
|---|---|
| LC50 | 15,400 mg/l - 96 h |
| EC50 | 24,500.00 mg/l - 48 h |
| EC100 | 10,000.00 mg/l - 24 h |

## Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

## Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

## Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

## Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

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***Certified Reference Material CRM***

Rec 12/6/24
20 vial
V14630 to
V14649

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
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## CERTIFIED WEIGHT REPORT

**Part Number:** 95318
**Lot Number:** 120524
**Description:** 2-Chloroethyl vinyl ether

**Expiration Date:** 120527
**Recommended Storage:** Refrigerate (4 °C)
**Nominal Concentration (µg/mL):** 10000
**NIST Test ID#:** 6UTB

**Solvent(s):** Methanol **Lot#** EJ143-US

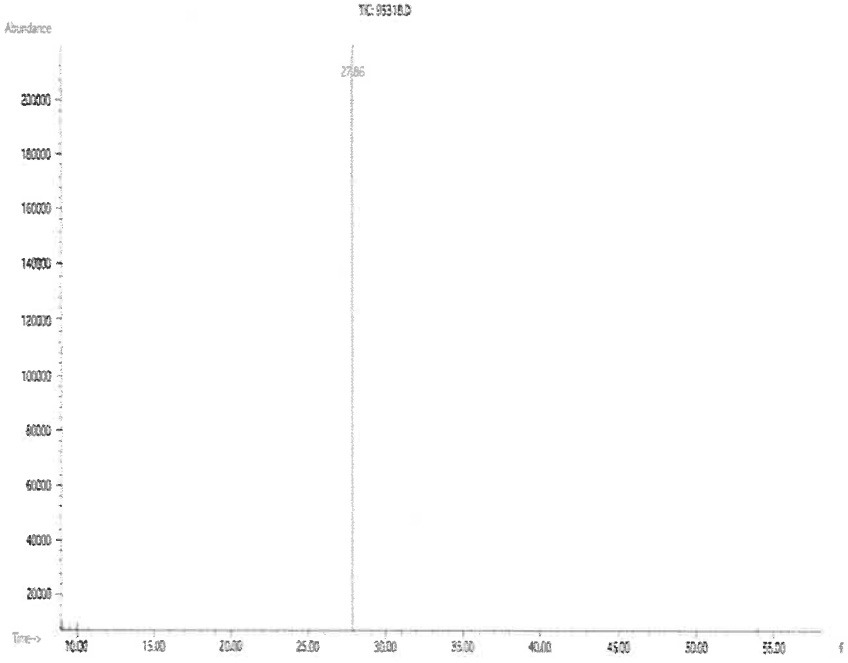
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

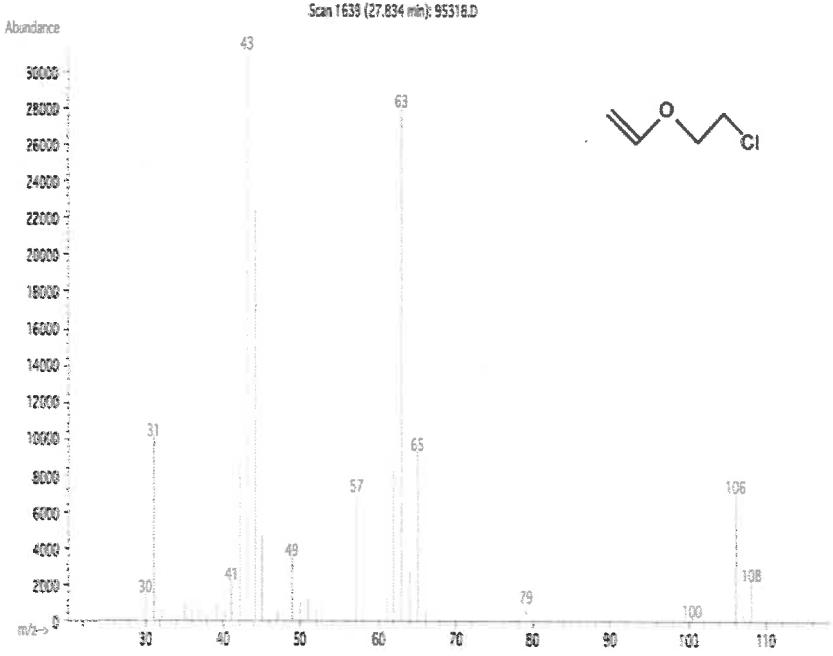
Weight(s) shown below were combined and diluted to (mL): 50.0

| | | |
|---|---|---|
| Prashant Chauhan | 120524 | |
| Formulated By: | Prashant Chauhan | DATE |
| Pedro Rentas | 120524 | |
| Reviewed By: | Pedro L. Rentas | DATE |

| Compound | RM# | Lot Number | Nominal Conc (µg/mL) | Purity (%) | Uncertainty Purity | Target Weight (g) | Actual Weight (g) | Actual Conc(µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. 2-Chloroethyl vinyl ether | 74 | MKCD0033 | 10000 | 99 | 0.2 | 0.50536 | 0.50550 | 10002.9 | 40.5 | 110-75-8 | N/A | ori-rat 250mg/kg |

**Method:** GC6MSD-1.M. **Detector:** MSD. **Column:** (60m X 0.25mm X 1.5 µm). **Oven Profile:** Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp.= 200°C, Detector B Temp. = 220°C. **Analyst:** Candice Warren.







- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Absolute Standards Inc.
PO Box 5585
Hamden, CT 06518-0585
Phone: 203-281-2917
FAX: 203-281-2922

**Safety Data Sheet (SDS)** GHS/OSHA Compliant

## Section I Product and Company Identification

**IDENTITY** **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

| | | | |
|---|---|---|---|
| Manufacturer's Name | ABSOLUTE STANDARDS INC | Emergency Telephone USA & CANADA | **1-800-535-5053** |
| Address | 44 Rossotto Dr.<br>Hamden CT, 06514 | Emergency Telephone International<br>Date Prepared/Revised | **1-352-323-3500**<br>January 1, 2024 |

## Section II - Hazards Identification

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

| | | | |
|---|---|---|---|
| **H225** | **Highly Flammable Liquid and Vapor** | **H301, 311, 331** | **Toxic if swallowed, skin contact, inhaled** |
| **H370** | **Cause damage to organs** | **H351** | **Suspected of causing cancer** |
| **P271** | **Use in ventilated area** | **P280** | **Use gloves, eye protection/face sheild** |
| **P302,332** | **If on skin, wash with soap and water** | **P305,351,338** | **If in eyes, remove contacts, rinse with water** |

**Signal Word: DANGER**

## Section III - Composition

| Components (Specific Chemical Identity; Common Name(s)) | | | % (optional) |
|---|---|---|---|
| Methanol | METHYL ALCOHOL | CAS#: 67-56-1 | > 97 |

**See Certified Weight Report For Other Analytes Present At Trace Quantities.**

**INTENDED USE: REFERENCE MATERIAL**

## Section IV. FIRST AID MEASURES

| | |
|---|---|
| **General advice** | Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area. |
| **If inhaled** | If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| **In case of skin contact** | Wash with soap and water. Consult a physician. |
| **In case of eye contact** | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. |
| **If swallowed** | Do NOT induce vomiting. Rinse mouth with water. Consult a physician. |

## Section V. FIREFIGHTING MEASURES

| | |
|---|---|
| **Flammability** | Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking. |
| **Suitable extinguishing media** | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| **Protective equipment for fire** | Wear self contained breathing apparatus for fire fighting if necessary. |

## Section VI. ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| Personal precautions | Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations. |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. Do not let product enter drains. |
| Clean up | Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13). |

## Section VII. HANDLING AND STORAGE

| | |
|---|---|
| Precautions for safe handling | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.<br>Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. |
| Storage Conditions | Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. |

## Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

## Section IX - Physical/Chemical Characteristics

| | | | |
|---|---|---|---|
| Boiling Point | 65°C | Specific Gravity (H2O = 1) | 0.79 |
| Vapor Pressure (mm Hg) | 96 | Melting Point | -98°C |
| Vapor Density (AIR = 1) | 1.11 | Evaporation rate (Butyl Acetate = 1) | 4.6 |

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

## Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions Vapours may form explosive mixture with air.
Conditions to avoid Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

## Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

## Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

| | |
|---|---|
| LC50 | 15,400 mg/l - 96 h |
| EC50 | 24,500.00 mg/l - 48 h |
| EC100 | 10,000.00 mg/l - 24 h |

## Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

## Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

## Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

## Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

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## CERTIFIED WEIGHT REPORT

**Part Number:** 95318
**Lot Number:** 120524
**Description:** 2-Chloroethyl vinyl ether

**Expiration Date:** 120527
**Recommended Storage:** Refrigerate (4 °C)
**Nominal Concentration (µg/mL):** 10000
**NIST Test ID#:** 6UTB

**Solvent(s):** Methanol **Lot#** EJ143-US

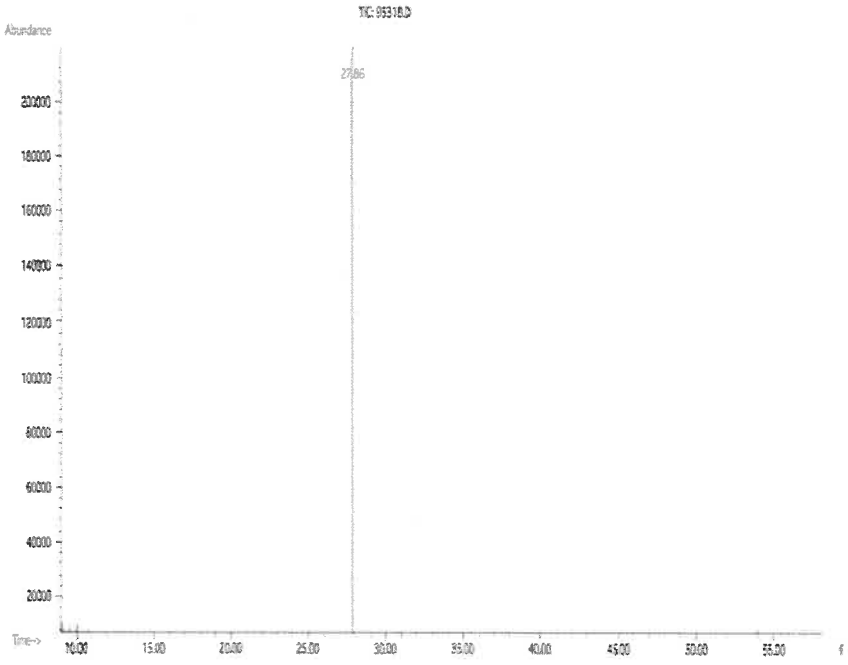
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

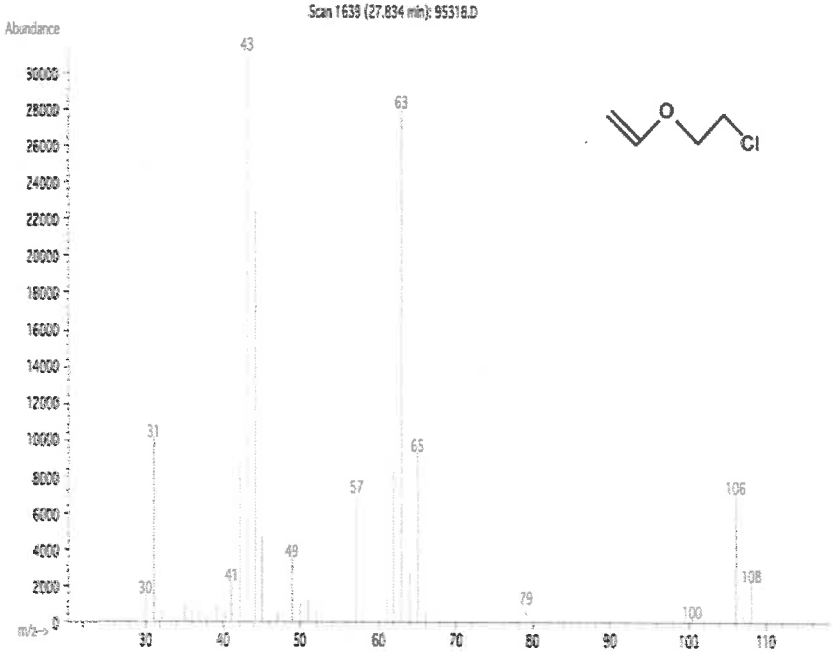
Weight(s) shown below were combined and diluted to (mL): 50.0

| | | |
|---|---|---|
| Prashant Chauhan | 120524 | |
| Formulated By: | Prashant Chauhan | DATE |
| Pedro Rentas | 120524 | |
| Reviewed By: | Pedro L. Rentas | DATE |

| Compound | RM# | Lot Number | Nominal Conc (µg/mL) | Purity (%) | Uncertainty Purity | Target Weight (g) | Actual Weight (g) | Actual Conc(µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. 2-Chloroethyl vinyl ether | 74 | MKCD0033 | 10000 | 99 | 0.2 | 0.50536 | 0.50550 | 10002.9 | 40.5 | 110-75-8 | N/A | ori-rat 250mg/kg |

**Method:** GC6MSD-1.M. **Detector:** MSD. **Column:** (60m X 0.25mm X 1.5 µm). **Oven Profile:** Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp.= 200°C, Detector B Temp. = 220°C. **Analyst:** Candice Warren.







- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

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FAX: 203-281-2922

**Safety Data Sheet (SDS)** GHS/OSHA Compliant

## Section I Product and Company Identification

**IDENTITY** **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

| | | | |
|---|---|---|---|
| Manufacturer's Name | ABSOLUTE STANDARDS INC | Emergency Telephone USA & CANADA | **1-800-535-5053** |
| Address | 44 Rossotto Dr.<br>Hamden CT, 06514 | Emergency Telephone International<br>Date Prepared/Revised | **1-352-323-3500**<br>January 1, 2024 |

## Section II - Hazards Identification

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

| | | | |
|---|---|---|---|
| **H225** | **Highly Flammable Liquid and Vapor** | **H301, 311, 331** | **Toxic if swallowed, skin contact, inhaled** |
| **H370** | **Cause damage to organs** | **H351** | **Suspected of causing cancer** |
| **P271** | **Use in ventilated area** | **P280** | **Use gloves, eye protection/face sheild** |
| **P302,332** | **If on skin, wash with soap and water** | **P305,351,338** | **If in eyes, remove contacts, rinse with water** |

**Signal Word: DANGER**

## Section III - Composition

| Components (Specific Chemical Identity; Common Name(s)) | | | % (optional) |
|---|---|---|---|
| Methanol | METHYL ALCOHOL | CAS#: 67-56-1 | > 97 |

**See Certified Weight Report For Other Analytes Present At Trace Quantities.**

**INTENDED USE: REFERENCE MATERIAL**

## Section IV. FIRST AID MEASURES

| | |
|---|---|
| **General advice** | Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area. |
| **If inhaled** | If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| **In case of skin contact** | Wash with soap and water. Consult a physician. |
| **In case of eye contact** | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. |
| **If swallowed** | Do NOT induce vomiting. Rinse mouth with water. Consult a physician. |

## Section V. FIREFIGHTING MEASURES

| | |
|---|---|
| **Flammability** | Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking. |
| **Suitable extinguishing media** | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| **Protective equipment for fire** | Wear self contained breathing apparatus for fire fighting if necessary. |

## Section VI. ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| Personal precautions | Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations. |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. Do not let product enter drains. |
| Clean up | Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13). |

## Section VII. HANDLING AND STORAGE

| | |
|---|---|
| Precautions for safe handling | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.<br>Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. |
| Storage Conditions | Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. |

## Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

## Section IX - Physical/Chemical Characteristics

| | | | |
|---|---|---|---|
| Boiling Point | 65°C | Specific Gravity (H2O = 1) | 0.79 |
| Vapor Pressure (mm Hg) | 96 | Melting Point | -98°C |
| Vapor Density (AIR = 1) | 1.11 | Evaporation rate (Butyl Acetate = 1) | 4.6 |

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

## Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions Vapours may form explosive mixture with air.
Conditions to avoid Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

## Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

## Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

| | |
|---|---|
| LC50 | 15,400 mg/l - 96 h |
| EC50 | 24,500.00 mg/l - 48 h |
| EC100 | 10,000.00 mg/l - 24 h |

## Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

## Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

## Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

## Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

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***Certified Reference Material CRM***

Rec 12/6/24
20 vial
V14630 to
V14649

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

## CERTIFIED WEIGHT REPORT

**Part Number:** 95318
**Lot Number:** 120524
**Description:** 2-Chloroethyl vinyl ether

**Expiration Date:** 120527
**Recommended Storage:** Refrigerate (4 °C)
**Nominal Concentration (µg/mL):** 10000
**NIST Test ID#:** 6UTB

**Solvent(s):** Methanol **Lot#** EJ143-US

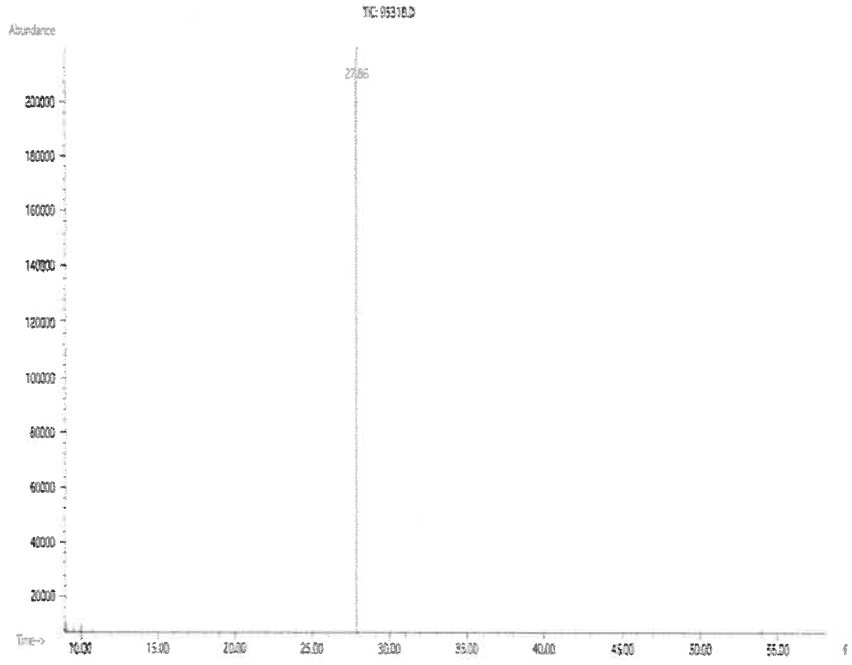
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

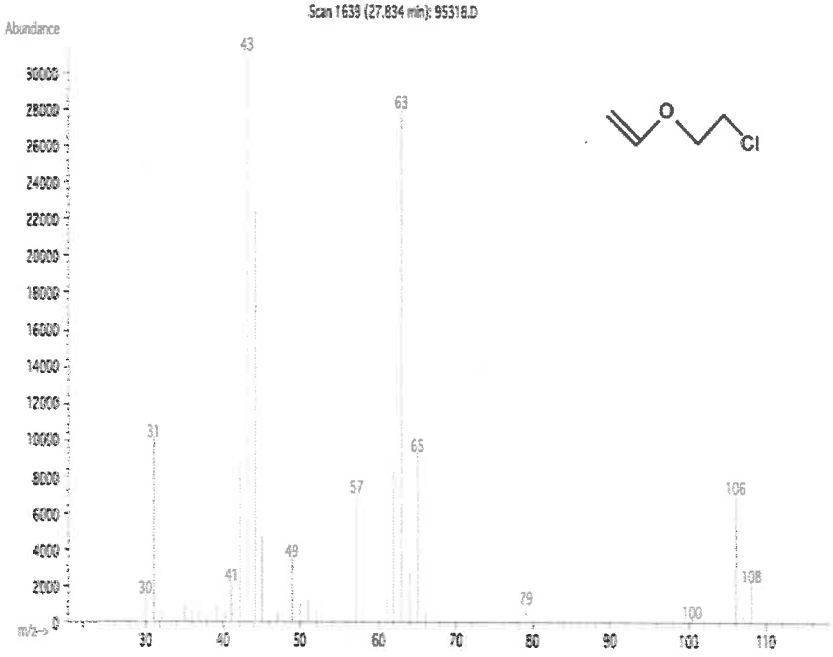
Weight(s) shown below were combined and diluted to (mL): 50.0

| | | |
|---|---|---|
| Prashant Chauhan | | 120524 |
| Formulated By: | Prashant Chauhan | DATE |
| Pedro Rentas | | 120524 |
| Reviewed By: | Pedro L. Rentas | DATE |

| Compound | RM# | Lot Number | Nominal Conc (µg/mL) | Purity (%) | Uncertainty Purity | Target Weight (g) | Actual Weight (g) | Actual Conc(µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. 2-Chloroethyl vinyl ether | 74 | MKCD0033 | 10000 | 99 | 0.2 | 0.50536 | 0.50550 | 10002.9 | 40.5 | 110-75-8 | N/A | ori-rat 250mg/kg |

**Method:** GC6MSD-1.M. **Detector:** MSD. **Column:** (60m X 0.25mm X 1.5 µm). **Oven Profile:** Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp.= 200°C, Detector B Temp. = 220°C. **Analyst:** Candice Warren.







- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
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**Safety Data Sheet (SDS)** GHS/OSHA Compliant

## Section I Product and Company Identification

**IDENTITY** **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

| | | | |
|---|---|---|---|
| Manufacturer's Name | ABSOLUTE STANDARDS INC | Emergency Telephone USA & CANADA | **1-800-535-5053** |
| Address | 44 Rossotto Dr.<br>Hamden CT, 06514 | Emergency Telephone International<br>Date Prepared/Revised | **1-352-323-3500**<br>January 1, 2024 |

## Section II - Hazards Identification

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

| | | | |
|---|---|---|---|
| **H225** | **Highly Flammable Liquid and Vapor** | **H301, 311, 331** | **Toxic if swallowed, skin contact, inhaled** |
| **H370** | **Cause damage to organs** | **H351** | **Suspected of causing cancer** |
| **P271** | **Use in ventilated area** | **P280** | **Use gloves, eye protection/face sheild** |
| **P302,332** | **If on skin, wash with soap and water** | **P305,351,338** | **If in eyes, remove contacts, rinse with water** |

**Signal Word: DANGER**

## Section III - Composition

| Components (Specific Chemical Identity; Common Name(s)) | | | % (optional) |
|---|---|---|---|
| Methanol | METHYL ALCOHOL | CAS#: 67-56-1 | > 97 |

**See Certified Weight Report For Other Analytes Present At Trace Quantities.**

**INTENDED USE: REFERENCE MATERIAL**

## Section IV. FIRST AID MEASURES

| | |
|---|---|
| **General advice** | Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area. |
| **If inhaled** | If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| **In case of skin contact** | Wash with soap and water. Consult a physician. |
| **In case of eye contact** | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. |
| **If swallowed** | Do NOT induce vomiting. Rinse mouth with water. Consult a physician. |

## Section V. FIREFIGHTING MEASURES

| | |
|---|---|
| **Flammability** | Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking. |
| **Suitable extinguishing media** | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| **Protective equipment for fire** | Wear self contained breathing apparatus for fire fighting if necessary. |

## Section VI. ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| Personal precautions | Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations. |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. Do not let product enter drains. |
| Clean up | Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13). |

## Section VII. HANDLING AND STORAGE

| | |
|---|---|
| Precautions for safe handling | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.<br>Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. |
| Storage Conditions | Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. |

## Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

## Section IX - Physical/Chemical Characteristics

| | | | |
|---|---|---|---|
| Boiling Point | 65°C | Specific Gravity (H2O = 1) | 0.79 |
| Vapor Pressure (mm Hg) | 96 | Melting Point | -98°C |
| Vapor Density (AIR = 1) | 1.11 | Evaporation rate (Butyl Acetate = 1) | 4.6 |

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

## Section X. STABILITY AND REACTIVITY

Chemical stability — Stable under recommended storage conditions.
Possibility of hazardous reactions — Vapours may form explosive mixture with air.
Conditions to avoid — Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid — Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

## Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

## Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

| | |
|---|---|
| LC50 | 15,400 mg/l - 96 h |
| EC50 | 24,500.00 mg/l - 48 h |
| EC100 | 10,000.00 mg/l - 24 h |

## Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

## Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

## Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

## Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

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CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

*chromatographic plus*

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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**Catalog No. :** 30067 **Lot No.:** A0191805

**Description :** 4-Bromofluorobenzene Standard

4-Bromofluorobenzene Standard 2,500µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** November 30, 2027 **Storage:** 0°C or colder

**Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 1-Bromo-4-fluorobenzene (BFB) | 460-00-4 | 184975 | 99% | 2,483.9 µg/mL | +/- 139.5488 |

* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

# Quality Confirmation Test

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

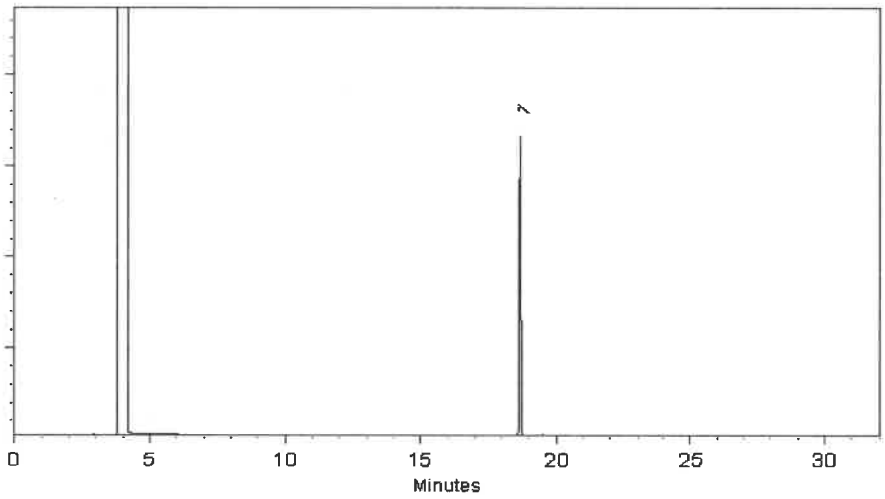
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl

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Alicia Leathers - Operation Technician I  **Date Mixed:** 17-Nov-2022  **Balance Serial #** B251644995

Jennifer Pollino - Operations Tech III - ARM QC  **Date Passed:** 21-Nov-2022

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

## General Certified Reference Material Notes

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  $k$ is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

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**Catalog No. :** 30225 **Lot No.:** A0193071

**Description :** Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** December 31, 2027 **Storage:** 0°C or colder

**Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Bromochloromethane | 74-97-5 | 00008541 | 99% | 2,018.0 µg/mL | +/- 113.3890 |

* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

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Rtx-502.2 (cat.#10910)

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hydrogen-constant pressure 11.0 psi.

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@ 8°C/min. (hold 5 min.)

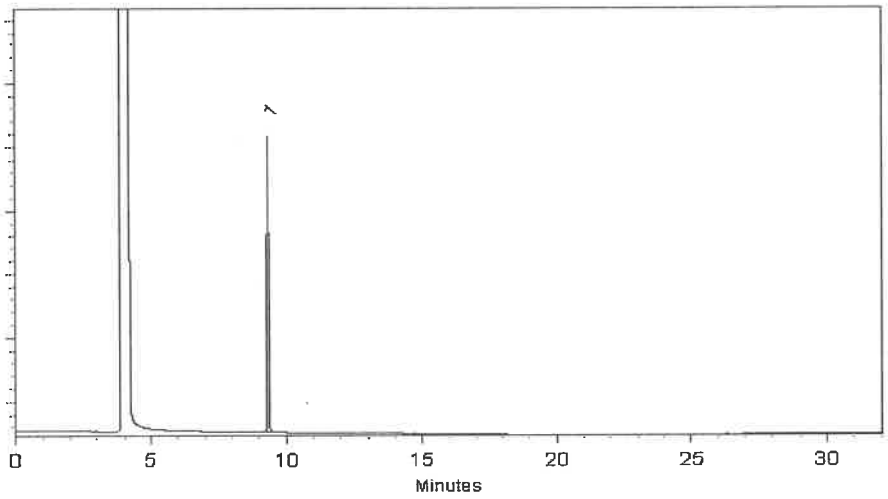
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl

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Tom Suckar - Mix Technician

**Date Mixed:** 29-Dec-2022 **Balance Serial #** B707717271

Christie Mills - Operations Tech II - ARM QC

**Date Passed:** 03-Jan-2023

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

## General Certified Reference Material Notes

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**Description :** Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** December 31, 2027 **Storage:** 0°C or colder

**Ship:** Ambient

CERTIFIED VALUES

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**Det. Temp:**
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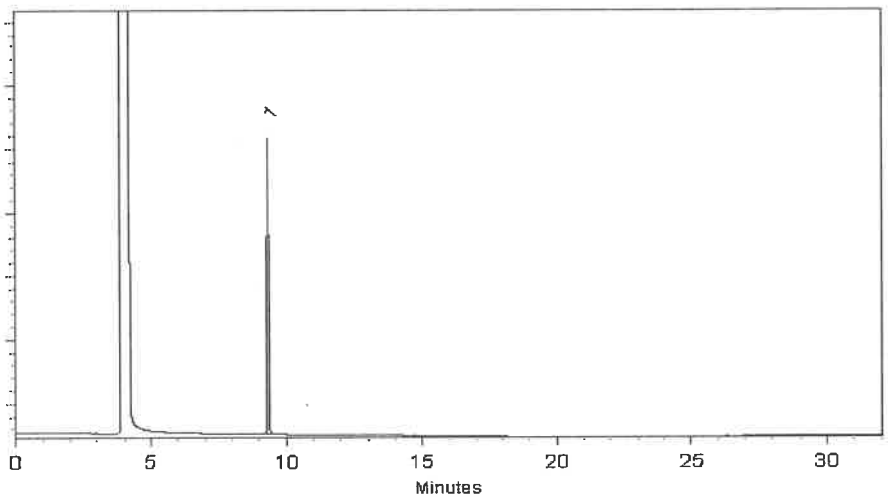
**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl

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Tom Suckar - Mix Technician

**Date Mixed:** 29-Dec-2022 **Balance Serial #** B707717271

Christie Mills - Operations Tech II - ARM QC

**Date Passed:** 03-Jan-2023

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

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**Description :** Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** December 31, 2027 **Storage:** 0°C or colder

**Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
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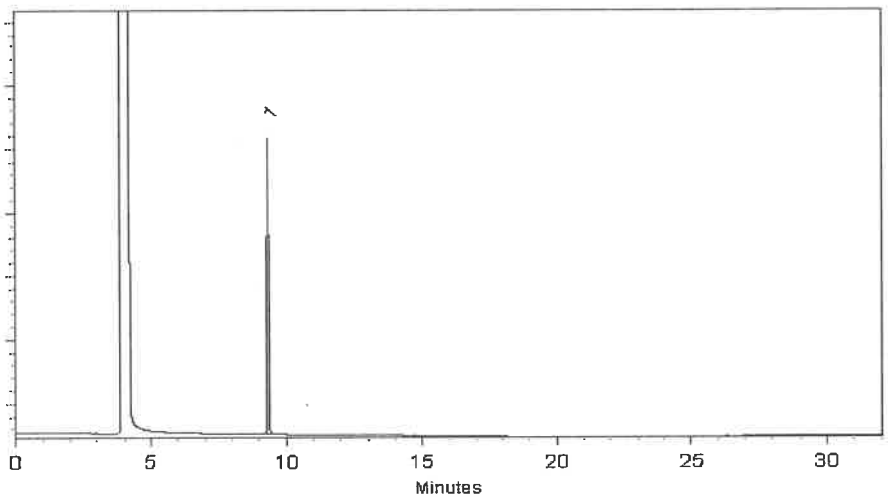
**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl

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Tom Suckar - Mix Technician

**Date Mixed:** 29-Dec-2022 **Balance Serial #** B707717271

Christie Mills - Operations Tech II - ARM QC

**Date Passed:** 03-Jan-2023

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

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**Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
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**Solvent:** P&T Methanol
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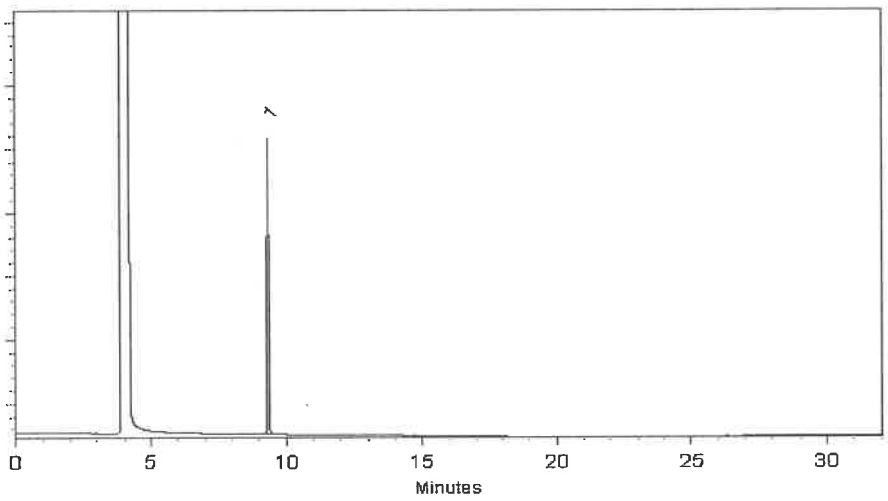
**Inj. Vol**
1µl

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Tom Suckar - Mix Technician

**Date Mixed:** 29-Dec-2022 **Balance Serial #** B707717271

Christie Mills - Operations Tech II - ARM QC

**Date Passed:** 03-Jan-2023

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  $k$ is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

*gravimetric*

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 555582 **Lot No.:** A0196865

**Description :** Custom 8260A/B Surrogate Mix

Custom 8260A/B Surrogate Mix 25,000µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** April 30, 2026 **Storage:** 10°C or colder

**Ship:** Ambient

CERTIFIED VALUES

| Component # | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 1,2-Dichloroethane-d4 | 17060-07-0 | PR-32845 | 99% | 25,036.0 µg/mL | +/- 1,417.9179 |
| 2 | 1-Bromo-4-fluorobenzene (BFB) | 460-00-4 | 184975 | 99% | 25,132.0 µg/mL | +/- 1,423.3549 |
| 3 | Dibromofluoromethane | 1868-53-7 | 022013 | 99% | 25,040.0 µg/mL | +/- 1,418.1445 |
| 4 | Toluene-d8 | 2037-26-5 | PR-33397 | 99% | 25,028.0 µg/mL | +/- 1,417.4648 |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

Russ Bookhamer - Operations Technician I

**Date Mixed:** 11-Apr-2023 **Balance:** 1127510105

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  $k$ is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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CERTIFIED REFERENCE MATERIAL

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

# Certificate of Analysis

*chromatographic plus*

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 30489 **Lot No.:** A0209618

**Description :** 8260B Acetates Mix

8260B Acetates Mix 2,000 µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** September 30, 2025 **Storage:** -20°C or colder

**Handling:** This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Methyl acetate | 79-20-9 | SHBP3100 | 99% | 2,019.3 µg/mL | +/- 69.7974 |
| 2 | Vinyl acetate | 108-05-4 | RP231030CTH | 98% | 2,016.8 µg/mL | +/- 69.7112 |
| 3 | Ethyl acetate | 141-78-6 | SHBQ9682 | 99% | 2,010.7 µg/mL | +/- 69.4979 |
| 4 | Isopropyl acetate | 108-21-4 | BCCG7069 | 99% | 2,016.0 µg/mL | +/- 69.6822 |
| 5 | Propyl acetate | 109-60-4 | P8XLN | 99% | 2,008.0 µg/mL | +/- 69.4057 |
| 6 | Butyl acetate | 123-86-4 | SHBP6314 | 99% | 2,007.3 µg/mL | +/- 69.3826 |
| 7 | Amyl acetate | 628-63-7 | 41325/1 | 97% | 2,004.7 µg/mL | +/- 69.2905 |

* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Tech Tips:**

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this

reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

## Quality Confirmation Test

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

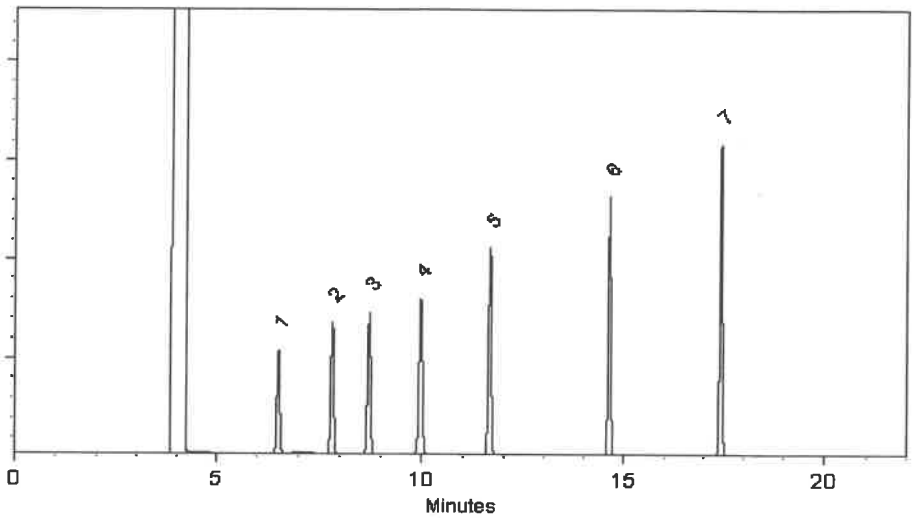
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Sam Moodler - Operations Tech I

**Date Mixed:** 28-Mar-2024 **Balance Serial #** B707717271

Dillan Murphy - Operations Technician I

**Date Passed:** 01-Apr-2024

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

# General Certified Reference Material Notes

## Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

## Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

## Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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  $k$ is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

## Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

## Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

*chromatographic plus*

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 30489 **Lot No.:** A0209618

**Description :** 8260B Acetates Mix

8260B Acetates Mix 2,000 µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** September 30, 2025 **Storage:** -20°C or colder

**Handling:** This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Methyl acetate | 79-20-9 | SHBP3100 | 99% | 2,019.3 µg/mL | +/- 69.7974 |
| 2 | Vinyl acetate | 108-05-4 | RP231030CTH | 98% | 2,016.8 µg/mL | +/- 69.7112 |
| 3 | Ethyl acetate | 141-78-6 | SHBQ9682 | 99% | 2,010.7 µg/mL | +/- 69.4979 |
| 4 | Isopropyl acetate | 108-21-4 | BCCG7069 | 99% | 2,016.0 µg/mL | +/- 69.6822 |
| 5 | Propyl acetate | 109-60-4 | P8XLN | 99% | 2,008.0 µg/mL | +/- 69.4057 |
| 6 | Butyl acetate | 123-86-4 | SHBP6314 | 99% | 2,007.3 µg/mL | +/- 69.3826 |
| 7 | Amyl acetate | 628-63-7 | 41325/1 | 97% | 2,004.7 µg/mL | +/- 69.2905 |

* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Tech Tips:**

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this

reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

## Quality Confirmation Test

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

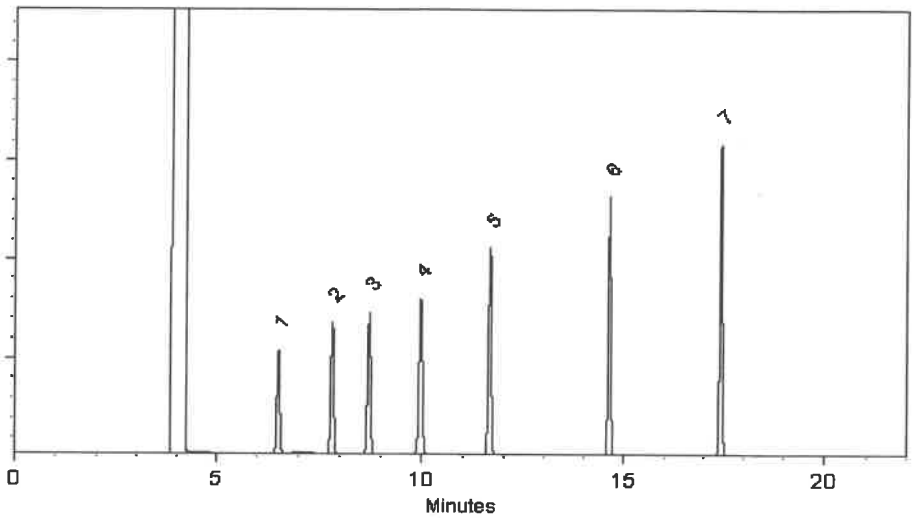
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Sam Moodler - Operations Tech I

**Date Mixed:** 28-Mar-2024 **Balance Serial #** B707717271

Dillan Murphy - Operations Technician I

**Date Passed:** 01-Apr-2024

**Manufactured under Restek's ISO 9001:2015**
**Registered Quality System**
**Certificate #FM 80397**

# General Certified Reference Material Notes

## Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

## Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

## Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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  $k$ is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

## Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

## Handling Notes:

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## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

***gravimetric***

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 555581 **Lot No.:** A0210184

**Description :** Custom 8260 Internal Standard Mix

Custom 8260 Internal Standard Mix 25,000µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** April 30, 2027 **Storage:** 10°C or colder

**Ship:** Ambient

CERTIFIED VALUES

| Component # | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 1,4-Dichlorobenzene-d4 | 3855-82-1 | PR-30447 | 99% | 25,212.0 µg/mL | +/- 1,427.8857 |
| 2 | 1,4-Difluorobenzene | 540-36-3 | MKCS8657 | 99% | 25,220.0 µg/mL | +/- 1,428.3388 |
| 3 | Chlorobenzene-d5 | 3114-55-4 | PR-31132 | 99% | 25,116.0 µg/mL | +/- 1,422.4487 |
| 4 | Pentafluorobenzene | 363-72-4 | MKCR9383 | 99% | 25,180.0 µg/mL | +/- 1,426.0734 |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

John Friedline - Operations Technician I

**Date Mixed:** 11-Apr-2024 **Balance:** 1127510105

REVIEWED

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  $k$ is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

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Rec 12/17/24

CERTIFIED REFERENCE MATERIAL

30 V.4

# Certificate of Analysis

*chromatographic plus*

V14697-to-14726

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 30006 **Lot No.:** A0210618

**Description :** VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** July 31, 2027 **Storage:** 0°C or colder

**Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Acetone | 67-64-1 | SHBQ8504 | 99% | 5,014.8 µg/mL | +/- 173.2883 |
| 2 | 2-Butanone (MEK) | 78-93-3 | SHBQ4704 | 99% | 5,012.4 µg/mL | +/- 173.2054 |
| 3 | 4-Methyl-2-pentanone (MIBK) | 108-10-1 | SHBP9200 | 99% | 5,011.6 µg/mL | +/- 173.1777 |
| 4 | 2-Hexanone | 591-78-6 | MKCQ6663 | 99% | 5,013.0 µg/mL | +/- 173.2261 |

* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** P&T Methanol/Water (90:10)
**CAS #** 67-56-1/7732-18-5
**Purity** 99%

# Quality Confirmation Test

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

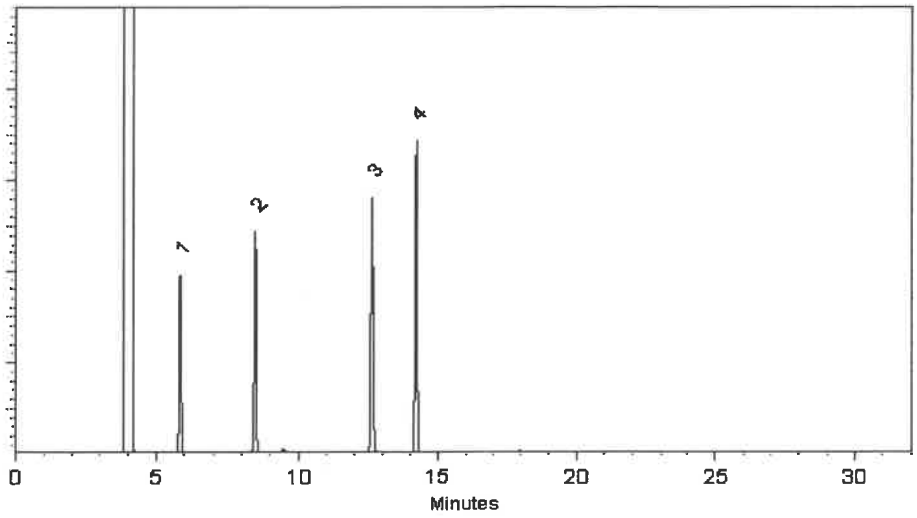
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dakota Parson - Operations Technician I

**Date Mixed:** 22-Apr-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 24-Apr-2024

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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  $k$ is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Rec 12/17/24

CERTIFIED REFERENCE MATERIAL

30 V.4

# Certificate of Analysis

***chromatographic plus***

V14697-to-14726

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 30006 **Lot No.:** A0210618

**Description :** VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** July 31, 2027 **Storage:** 0°C or colder

**Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Acetone | 67-64-1 | SHBQ8504 | 99% | 5,014.8 µg/mL | +/- 173.2883 |
| 2 | 2-Butanone (MEK) | 78-93-3 | SHBQ4704 | 99% | 5,012.4 µg/mL | +/- 173.2054 |
| 3 | 4-Methyl-2-pentanone (MIBK) | 108-10-1 | SHBP9200 | 99% | 5,011.6 µg/mL | +/- 173.1777 |
| 4 | 2-Hexanone | 591-78-6 | MKCQ6663 | 99% | 5,013.0 µg/mL | +/- 173.2261 |

* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** P&T Methanol/Water (90:10)
**CAS #** 67-56-1/7732-18-5
**Purity** 99%

# Quality Confirmation Test

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

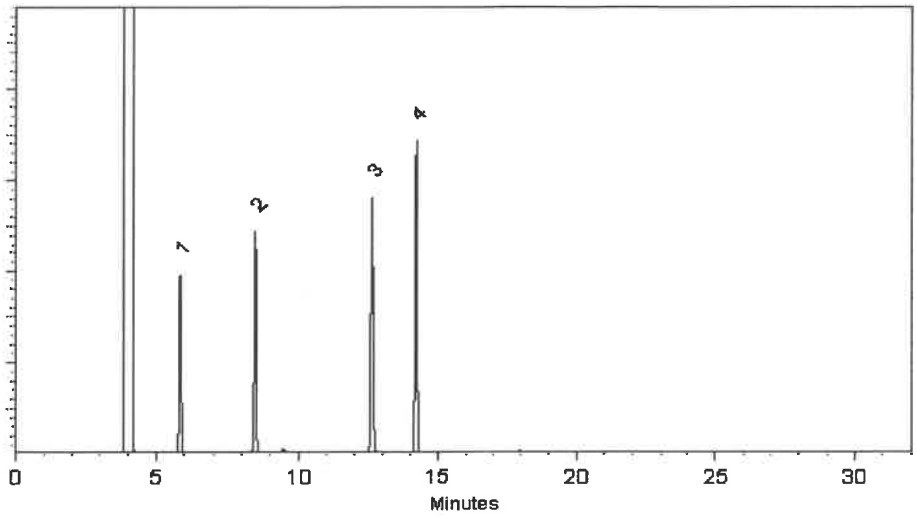
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dakota Parson - Operations Technician I

**Date Mixed:** 22-Apr-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 24-Apr-2024

**Manufactured under Restek's ISO 9001:2015**
**Registered Quality System**
**Certificate #FM 80397**

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  $k$ is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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CERTIFIED REFERENCE MATERIAL

30 V.4

# Certificate of Analysis

***chromatographic plus***

V14697-to-14726

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 30006 **Lot No.:** A0210618

**Description :** VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** July 31, 2027 **Storage:** 0°C or colder

**Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Acetone | 67-64-1 | SHBQ8504 | 99% | 5,014.8 µg/mL | +/- 173.2883 |
| 2 | 2-Butanone (MEK) | 78-93-3 | SHBQ4704 | 99% | 5,012.4 µg/mL | +/- 173.2054 |
| 3 | 4-Methyl-2-pentanone (MIBK) | 108-10-1 | SHBP9200 | 99% | 5,011.6 µg/mL | +/- 173.1777 |
| 4 | 2-Hexanone | 591-78-6 | MKCQ6663 | 99% | 5,013.0 µg/mL | +/- 173.2261 |

* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** P&T Methanol/Water (90:10)
**CAS #** 67-56-1/7732-18-5
**Purity** 99%

# Quality Confirmation Test

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

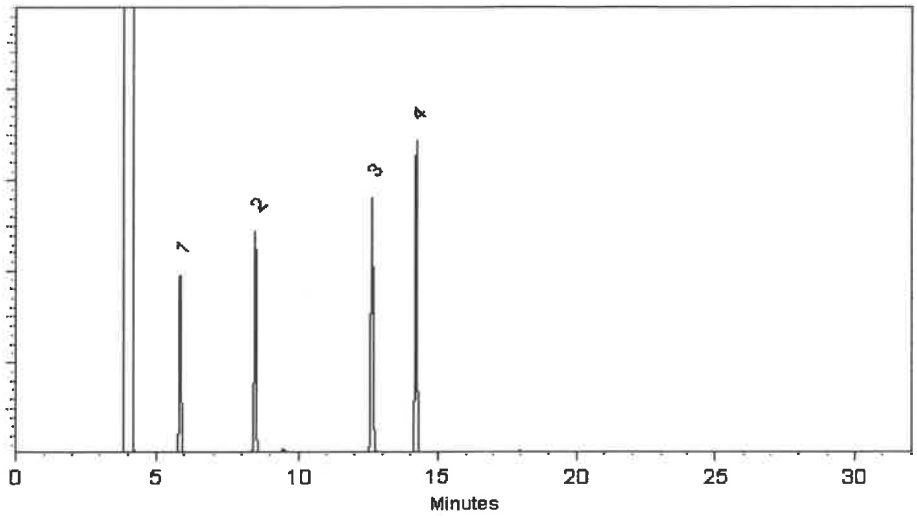
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dakota Parson - Operations Technician I

**Date Mixed:** 22-Apr-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 24-Apr-2024

**Manufactured under Restek's ISO 9001:2015**
**Registered Quality System**
**Certificate #FM 80397**

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  $k$ is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Rec 12/17/24

CERTIFIED REFERENCE MATERIAL

30 Vial

# Certificate of Analysis

*chromatographic plus*

V14727 to V14756

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 30042 **Lot No.:** A0216826

**Description :** 502.2 Calibration Mix #1

502.2 Calibration Mix #1 2,000µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** May 31, 2031 **Storage:** 0°C or colder

**Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Dichlorodifluoromethane (CFC-12) | 75-71-8 | 00022922 | 99% | 2,000.9 µg/mL | +/- 112.4144 |
| 2 | Chloromethane (methyl chloride) | 74-87-3 | 00022694 | 99% | 2,000.7 µg/mL | +/- 112.3998 |
| 3 | Vinyl chloride | 75-01-4 | 00015559 | 99% | 2,000.3 µg/mL | +/- 112.3779 |
| 4 | Bromomethane (methyl bromide) | 74-83-9 | 00017022 | 99% | 2,001.8 µg/mL | +/- 112.4650 |
| 5 | Chloroethane (ethyl chloride) | 75-00-3 | 107-401039114-1 | 99% | 2,000.1 µg/mL | +/- 112.3700 |
| 6 | Trichlorofluoromethane (CFC-11) | 75-69-4 | MKCJ8658 | 99% | 2,000.7 µg/mL | +/- 112.3992 |

* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

# Quality Confirmation Test

**Column:**
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

**Carrier Gas:**
helium-constant flow 2.0 mL/min.

**Temp. Program:**
40°C (hold 6 min.) to 100°C
@ 6°C/min.

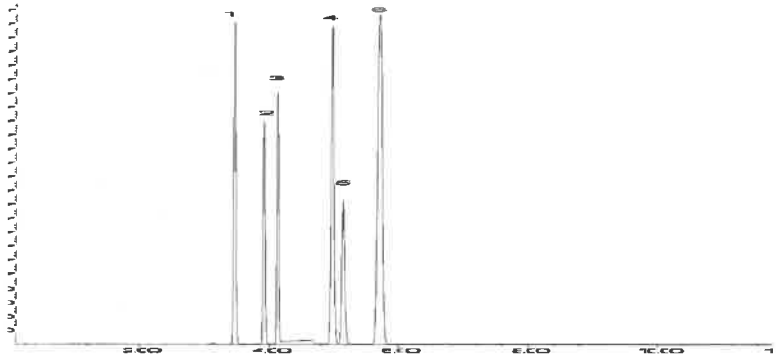
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
MSD

**Split Vent:**
Split ratio 10:1

**Inj. Vol**
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

**Date Mixed:** 23-Sep-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 04-Oct-2024

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  $k$ is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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# CERTIFIED REFERENCE MATERIAL

30 Vial

# Certificate of Analysis

## *chromatographic plus*

V14727 to V14756

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 30042 **Lot No.:** A0216826

**Description :** 502.2 Calibration Mix #1

502.2 Calibration Mix #1 2,000µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** May 31, 2031 **Storage:** 0°C or colder

**Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Dichlorodifluoromethane (CFC-12) | 75-71-8 | 00022922 | 99% | 2,000.9 µg/mL | +/- 112.4144 |
| 2 | Chloromethane (methyl chloride) | 74-87-3 | 00022694 | 99% | 2,000.7 µg/mL | +/- 112.3998 |
| 3 | Vinyl chloride | 75-01-4 | 00015559 | 99% | 2,000.3 µg/mL | +/- 112.3779 |
| 4 | Bromomethane (methyl bromide) | 74-83-9 | 00017022 | 99% | 2,001.8 µg/mL | +/- 112.4650 |
| 5 | Chloroethane (ethyl chloride) | 75-00-3 | 107-401039114-1 | 99% | 2,000.1 µg/mL | +/- 112.3700 |
| 6 | Trichlorofluoromethane (CFC-11) | 75-69-4 | MKCJ8658 | 99% | 2,000.7 µg/mL | +/- 112.3992 |

* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

# Quality Confirmation Test

**Column:**
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

**Carrier Gas:**
helium-constant flow 2.0 mL/min.

**Temp. Program:**
40°C (hold 6 min.) to 100°C
@ 6°C/min.

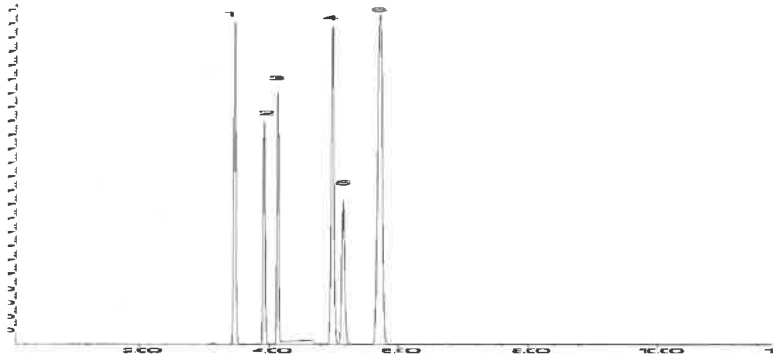
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
MSD

**Split Vent:**
Split ratio 10:1

**Inj. Vol**
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

**Date Mixed:** 23-Sep-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 04-Oct-2024

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  $k$ is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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CERTIFIED REFERENCE MATERIAL

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Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

# Certificate of Analysis

***chromatographic plus***

J14842 to 14846

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 30470 **Lot No.:** A0217535

**Description :** tert-Butanol Standard

tert-Butanol Std 50,000µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** October 31, 2027 **Storage:** 0°C or colder

**Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | tert-Butanol (TBA) | 75-65-0 | SHBQ8002-1 | 99% | 50,007.5 µg/mL | +/- 717.6137 |

* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

# Quality Confirmation Test

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

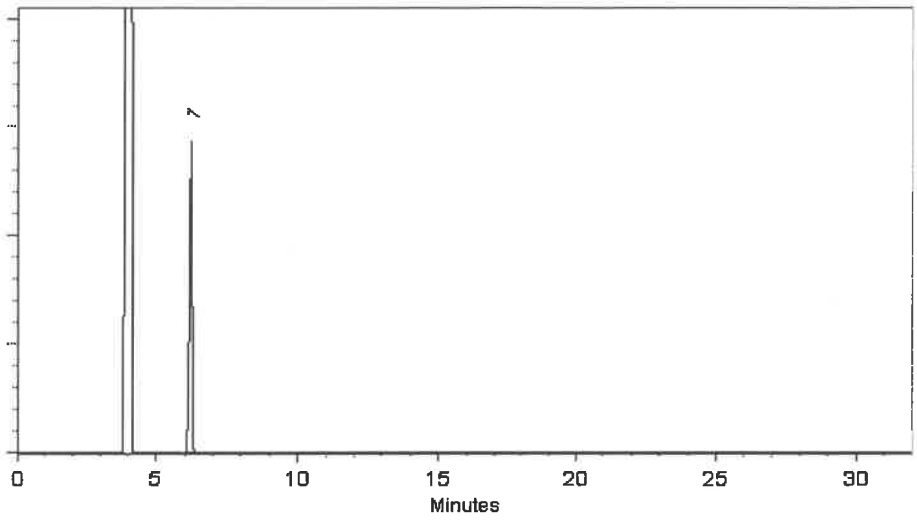
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Aaron Enyart - Operations Tech I

**Date Mixed:** 07-Oct-2024 **Balance Serial #** B251644995

Brittany Federinko - Operations Tech I

**Date Passed:** 09-Oct-2024

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  $k$ is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Zoey Rec 01/08/21

RESTEK

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

## CERTIFIED REFERENCE MATERIAL

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

# Certificate of Analysis

*chromatographic*

V14803 - V14822

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 555408-SL **Lot No.:** A0220471

**Description :** Custom Vinyl Acetate Standard

Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** June 30, 2026 **Storage:** -20°C or colder

**Handling:** This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Vinyl acetate | 108-05-4 | RD240423RSR | 99% | 8,066.0 µg/mL | +/- 278.7979 |

* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Tech Tips:**

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

# Quality Confirmation Test

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

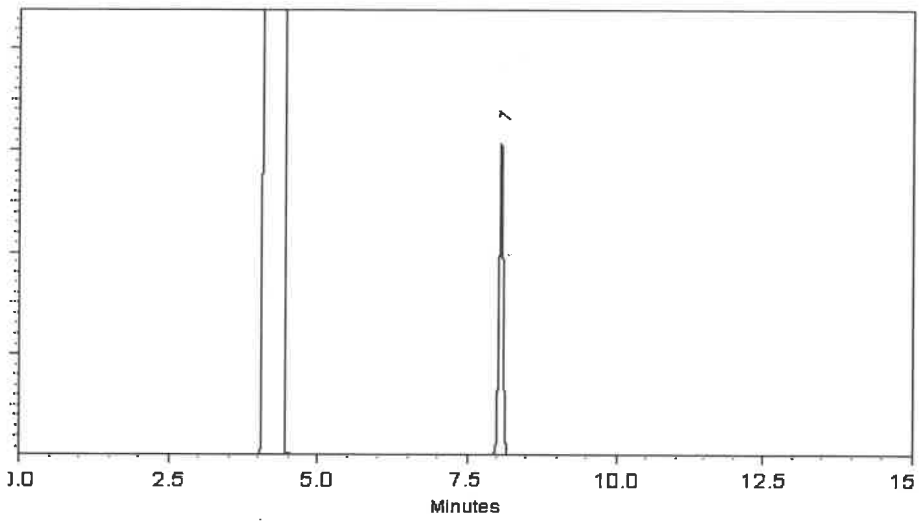
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Ethan Winiarski - Operations Tech I

**Date Mixed:** 24-Dec-2024 **Balance Serial #** 1127510105

Dillan Murphy - Operations Technician I

**Date Passed:** 02-Jan-2025

REVIEWED

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  $k$ is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Zoviy Rec 01/08/21

RESTEK

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

*chromatographic*

V14803 - V14822

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 555408-SL **Lot No.:** A0220471

**Description :** Custom Vinyl Acetate Standard

Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** June 30, 2026 **Storage:** -20°C or colder

**Handling:** This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Vinyl acetate | 108-05-4 | RD240423RSR | 99% | 8,066.0 µg/mL | +/- 278.7979 |

* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Tech Tips:**

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

# Quality Confirmation Test

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

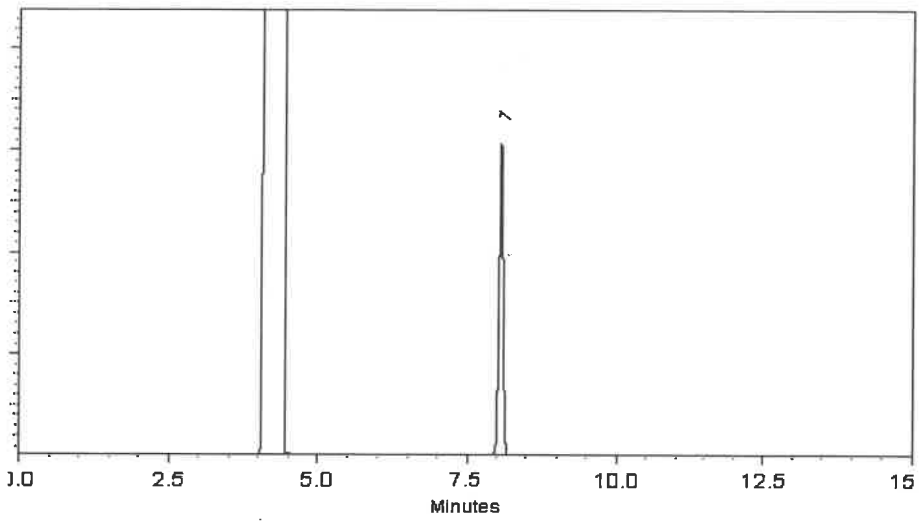
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Ethan Winiarski - Operations Tech I

**Date Mixed:** 24-Dec-2024 **Balance Serial #** 1127510105

Dillan Murphy - Operations Technician I

**Date Passed:** 02-Jan-2025

REVIEWED

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

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- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  $k$ is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

avantor™ | J.T.Baker®

Material No.: 9077-02
Batch No.: 22L0562016
Manufactured Date: 2022-10-26
Expiration Date: 2025-10-25
Revision No.: 0

# Certificate of Analysis

| Test | Specification | Result |
|---|---|---|
| Assay ($CH_3OH$) (by GC, corrected for water) | ≥ 99.9 % | 100.0 % |
| Residue after Evaporation | ≤ 1.0 ppm | 0.2 ppm |
| Titrable Acid (µeq/g) | ≤ 0.3 | 0.2 |
| Titrable Base (µeq/g) | ≤ 0.10 | 0.03 |
| Water (by KF, coulometric) | ≤ 0.08 % | < 0.01 % |
| Volatile Organic Trace Analysis - Below EPA 8260B CRQL | Conforms | Conforms |

For Laboratory,Research,or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

James T Ethier
Jamie Ethier
Vice President Global Quality

# SHIPPING DOCUMENTS

Alliance TECHNICAL GROUP

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 · Fax (908) 789-8922
www.chemtech.net

ALLIANCE PROJECT NO.
QUOTE NO. Q1478
COC Number 2045803

## CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Jacobs
ADDRESS: 412 Mt Kemble Ave Suite #100
CITY Morristown STATE: NJ ZIP: 07960
ATTENTION: John Vafiadis
PHONE: (281) 414-1719 FAX:

## CLIENT PROJECT INFORMATION

PROJECT NAME: STC PTC
PROJECT NO.: D3868221 LOCATION: Princeton Junction
PROJECT MANAGER: Mary Murphy
e-mail: Mary.Murphy@Jacobs.com
PHONE: FAX:

## CLIENT BILLING INFORMATION

BILL TO: Mary Murphy PO#:
ADDRESS:
CITY STATE: ZIP:
ATTENTION: PHONE:

## DATA TURNAROUND INFORMATION

FAX (RUSH) STANDARD TAT DAYS*
HARDCOPY (DATA PACKAGE): DAYS*
EDD: DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

## DATA DELIVERABLE INFORMATION

- ☐ Level 1 (Results Only)
- ☐ Level 2 (Results + QC)
- ☒ Level 3 (Results + QC + Raw Data)
- ☐ Level 4 (QC + Full Raw Data)
- ☐ NJ Reduced
- ☐ NYS ASP A
- ☐ NYS ASP B
- ☐ Other
- ☐ EDD FORMAT

## ANALYSIS

1. VOCs (8260B)
2. SVOCs (8270C)
3. TPH DRO – TPH-DRO (8015B)
4. Metals (6010B + 7471A)
5. PCBs (8082)
6. Ignitability (1030)
7. Corrosivity (9045C)
8. TPH GRO (8015B)
9.

| ALLIANCE SAMPLE ID | PROJECT SAMPLE IDENTIFICATION | SAMPLE MATRIX | SAMPLE TYPE COMP | SAMPLE TYPE GRAB | SAMPLE COLLECTION DATE | SAMPLE COLLECTION TIME | # OF BOTTLES | PRESERVATIVES 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | A/E | E | E | B/E | E | E | E | E | | ← Specify Preservatives A-HCl D-NaOH B-HN03 E-ICE C-H2SO4 F-OTHER |
| 1. | IDW-AQ-MW-19B-COMP-022825 | AQ | X | | 2-28-25 | 1110 | 5 | | X | X | X | X | X | X | | | |
| 2. | IDW-AQ-DRUM-610-022825 | AQ | | X | 2-28-25 | 1115 | 3 | X | | X | | | | | X | | |
| 3. | IDW-AQ-IW-01-COMP-022825 | AQ | X | | 2-28-25 | 1120 | 5 | | X | X | X | X | X | X | | | |
| 4. | IDW-AQ-DRUM-616-022825 | AQ | | X | 2-28-25 | 1125 | 3 | X | | X | | | | | X | | |
| 5. | IDW-AQ-IW-02-COMP-022825 | AQ | X | | 2-28-25 | 1130 | 4 | | X | X | X | X | X | X | | | |
| 6. | IDW-AQ-DRUM-614-022825 | AQ | | X | 2-28-25 | 1135 | 3 | X | | X | | | | | X | | |
| 7. | IDW-AQ-IW-03-COMP-022825 | AQ | X | | 2-28-25 | 1140 | 4 | ~~X~~ | X | X | X | X | X | X | | | |
| 8. | IDW-AQ-DRUM-612-022825 | AQ | | X | 2-28-25 | 1145 | 3 | X | | X | | | | | X | | |
| 9. | ~~IDW-SO-COMP-022825~~ (TA) | ~~SO~~ | X | | 2-28-25 | 1230 | 5 | | X | X | X | X | X | X | | | |
| 10. | ~~IDW-SO-DRUM-582-022825~~ (TA) | ~~SO~~ | | X | 2-28-25 | | 1 | | | | | | | | | | |

## SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

| RELINQUISHED BY SAMPLER: | DATE/TIME: | RECEIVED BY: |
|---|---|---|
| 1. | 2-28-25 1720 | 1. 2-28-25 1720 |
| 2. | | 2. |
| 3. | | 3. |

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☒ COOLER TEMP 2.1 °C
Comments:

Page 1 of 2

CLIENT: ☐ Hand Delivered ☐ Other

Shipment Complete ☐ YES ☐ NO

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Alliance TECHNICAL GROUP

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

ALLIANCE PROJECT NO.
QUOTE NO. Q1478
COC Number 2045804

## CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: Jacobs
ADDRESS: 412 Mt Kemble Ave Suite #1 100
CITY Morristown STATE: NJ ZIP: 07960
ATTENTION: John Yafante
PHONE: (281)414-1719 FAX:

## CLIENT PROJECT INFORMATION

PROJECT NAME: STC PTC
PROJECT NO.: D3868221 LOCATION: Princeton Junction
PROJECT MANAGER: Mary Murphy
e-mail: Mary.Murphy@Jacobs.com
PHONE: FAX:

## CLIENT BILLING INFORMATION

BILL TO: Mary Murphy PO#:
ADDRESS:
CITY STATE: ZIP:
ATTENTION: PHONE:

## DATA TURNAROUND INFORMATION

FAX (RUSH) STANDARD TAT DAYS*
HARDCOPY (DATA PACKAGE): DAYS*
EDD: DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

## DATA DELIVERABLE INFORMATION

- ❑ Level 1 (Results Only)
- ❑ Level 2 (Results + QC)
- ❑ Level 3 (Results + QC + Raw Data)
- ❑ Level 4 (QC + Full Raw Data)
- ❑ NJ Reduced ❑ US EPA CLP
- ❑ NYS ASP A ❑ NYS ASP B
- ❑ Other
- ❑ EDD FORMAT

## ANALYSIS

1. TCLP SVOCs (1311/8270C)
2. TCLP VOCs (1311/8260C)
3. TPH GRO / TPH DRO (8015)
4. TCLP Metals (1311/6010)
5. PCBs (8082)
6. Ignitability (1030)
7. Corrosivity (9040C)
8. TPH DRO (8015-B)
9.

## PRESERVATIVES

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|
| E | E | E | E | E | E | E | E | |

## COMMENTS

← Specify Preservatives
A-HCl D-NaOH
B-HN03 E-ICE
C-H2SO4 F-OTHER

| ALLIANCE SAMPLE ID | PROJECT SAMPLE IDENTIFICATION | SAMPLE MATRIX | SAMPLE TYPE COMP | SAMPLE TYPE GRAB | SAMPLE COLLECTION DATE | SAMPLE COLLECTION TIME | # OF BOTTLES | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | IDW-SO-COMP-022825 | SO | X | | 2-28-25 | 1230 | 5 | X | X | X | X | X | X | X | X | |
| 2. | IDW-SO-DRUM-582-022825 | SO | | X | 2-28-25 | 1225 | 1 | | X | X | | | | | | |
| 3. | | | | | | | | | | | | | | | | |
| 4. | | | | | | | | | | | | | | | | |
| 5. | | | | | | | | | | | | | | | | |
| 6. | | | | | | | | | | | | | | | | |
| 7. | | | | | | | | | | | | | | | | |
| 8. | | | | | | | | | | | | | | | | |
| 9. | | | | | | | | | | | | | | | | |
| 10. | | | | | | | | | | | | | | | | |

## SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

| RELINQUISHED BY SAMPLER: | DATE/TIME: | RECEIVED BY: |
|---|---|---|
| 1. | 2-28-25 1820 | 1. 2.28.2025 1720 |
| 2. | | 2. |
| 3. | | 3. |

Conditions of bottles or coolers at receipt: ❑ COMPLIANT ❑ NON COMPLIANT X COOLER TEMP 2.0 °C
Comments:

Page 2 of 2

CLIENT: ❑ Hand Delivered ❑ Other

Shipment Complete ❑ YES ❑ NO

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284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

# Laboratory Certification

| Certified By | License No. |
|---|---|
| | |
| CAS EPA CLP Contract | 68HERH20D0011 |
| | |
| Connecticut | PH-0830 |
| | |
| DOD ELAP (ANAB) | L2219 |
| | |
| Maine | 2024021 |
| | |
| Maryland | 296 |
| | |
| New Hampshire | 255424 Rev 1 |
| | |
| New Jersey | 20012 |
| | |
| New York | 11376 |
| | |
| Pennsylvania | 68-00548 |
| | |
| Soil Permit | 525-24-234-08441 |
| | |
| Texas | T104704488 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# LOGIN REPORT/SAMPLE TRANSFER

**Order ID :** Q1478 JACO05
**Client Name :** JACOBS Engineering Grou
**Client Contact :** John Ynfante
**Invoice Name :** JACOBS Engineering Grou
**Invoice Contact :** John Ynfante

**Order Date :** 3/3/2025 10:28:22 AM
**Project Name :** Former Schlumberger Site I
**Receive DateTime :** 2/28/2025 5:20:00 PM
**Purchase Order :**

**Project Mgr :**
**Report Type :** Level 4
**EDD Type :** CH2MHILL
**Hard Copy Date :**
**Date Signoff :**

| LAB ID | CLIENT ID | MATRIX | SAMPLE DATE | SAMPLE TIME | TEST | TEST GROUP | METHOD | FAX DATE | DUE DATES |
|---|---|---|---|---|---|---|---|---|---|
| Q1478-02 | IDW-AQ-DRUM-610-022825 | Water | 02/28/2025 | 11:15 | | | | | |
| | | | | | VOC-TCLVOA-10 | | 8260-Low | | 10 Bus. Days |
| Q1478-04 | IDW-AQ-DRUM-616-022825 | Water | 02/28/2025 | 11:25 | | | | | |
| | | | | | VOC-TCLVOA-10 | | 8260-Low | | 10 Bus. Days |
| Q1478-06 | IDW-AQ-DRUM-614-022825 | Water | 02/28/2025 | 11:35 | | | | | |
| | | | | | VOC-TCLVOA-10 | | 8260-Low | | 10 Bus. Days |
| Q1478-08 | IDW-AQ-DRUM-612-022825 | Water | 02/28/2025 | 11:45 | | | | | |
| | | | | | VOC-TCLVOA-10 | | 8260-Low | | 10 Bus. Days |

**Relinguished By :**
**Date / Time :** 3-3-25 1200

**Received By :**
**Date / Time :** 3/3/25 1200

**Storage Area :** VOA Refridgerator Room