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

# DATA PACKAGE

## VOLATILE ORGANICS

**PROJECT NAME : NYCDDC SANTWOBR BROOKLYN BRIDGE BBMCR**

**RU2 ENGINEERING, LLC**

**2 Melinda Drive**

**Monroe Township, NJ - 08831**

**Phone No: 732-261-2236**

**ORDER ID : Q1241**

**ATTENTION : Rutu Manani**

**Laboratory Certification ID # 20012**

Table Of Contents for Q1241


1) TCLP VOLATILES DATA 2

2) Signature Page 4

3) Case Narrative 5

4) Qualifier Page 7

5) Conformance/Non Conformance 8

6) QA Checklist 10

7) Chronicle 11

8) Hit Summary 12

9) QC Data Summary For TCLP VOA 13

- 9.1) Deuterated Monitoring Compound Summary 14
- 9.2) LCS/LCSD Summary 16
- 9.3) Method Blank Summary 19
- 9.4) GS/MS Tune Summary 21
- 9.5) Internal Standard Area and RT Summary 24

10) Sample Data 28

- 10.1) JPP-3.5-013025 29
- 10.2) JPP-5.3-013025 38
- 10.3) JPP-5.2-013025 47
- 10.4) JPP-5.4-013025 56
- 10.5) JPP-51.4-013025 65

11) Calibration Data Summary 74

- 11.1) Initial Calibration Data 75
  - 11.1.1) VN011425 75
- 11.2) Continued Calibration Data 444
  - 11.2.1) VN085617.D 444
  - 11.2.2) VN085645.D 503

12) QC Sample Data 562

- 12.1) Tune Raw Data 563
- 12.2) Method Blank Data 566
- 12.3) LCS Data 580
- 12.4) LCSD Data 686

13) Manual Integration 739

14) Analytical Runlogs 743

15) Extraction Logs 752

- 15.1) PB166424.pdf 752

15.2) PB166424IC.pdf 755
16) Standard Prep Logs 756
17) Shipping Document 855
17.1) Chain Of Custody 856
17.2) Lab Certificate 857
17.3) Internal COC 858

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

# Cover Page

**Order ID :** Q1241

**Project ID :** NYCDDC SANTWOBR Brooklyn Bridge BBMCR

**Client :** RU2 Engineering, LLC

| Lab Sample Number | Client Sample Number |
|---|---|
| Q1241-01 | JPP-3.5-013025 |
| Q1241-02 | JPP-3.5-013025 |
| Q1241-03 | JPP-3.5-013025 |
| Q1241-04 | JPP-3.5-013025 |
| Q1241-05 | JPP-5.3-013025 |
| Q1241-06 | JPP-5.3-013025 |
| Q1241-07 | JPP-5.3-013025 |
| Q1241-08 | JPP-5.3-013025 |
| Q1241-09 | JPP-5.2-013025 |
| Q1241-10 | JPP-5.2-013025 |
| Q1241-11 | JPP-5.2-013025 |
| Q1241-12 | JPP-5.2-013025 |
| Q1241-13 | JPP-5.4-013025 |
| Q1241-14 | JPP-5.4-013025 |
| Q1241-15 | JPP-5.4-013025 |
| Q1241-16 | JPP-5.4-013025 |
| Q1241-17 | JPP-51.4-013025 |
| Q1241-18 | JPP-51.4-013025 |
| Q1241-19 | JPP-51.4-013025 |
| Q1241-20 | JPP-51.4-013025 |

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 11:05 am, Feb 14, 2025*

Date: 2/7/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

284 Sheffield Street, Mountainside, NJ 07092
Phone: 908 789 8900 Fax: 908 789 8922

# CASE NARRATIVE

**RU2 Engineering, LLC**
**Project Name: NYCDDC SANTWOBR Brooklyn Bridge BBMCR**
**Project # N/A**
**Chemtech Project # Q1241**
**Test Name: TCLP VOA**

**A. Number of Samples and Date of Receipt:**
20 Solid samples were received on 01/30/2025.

**B. Parameters**
According to the Chain of Custody document, the following analyses were requested: Corrosivity, Diesel Range Organics, Gasoline Range Organics, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, Paint Filter, PCB, Pesticide-TCL, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL and VOCMS Group1. This data package contains results for TCLP VOA.

**C. Analytical Techniques:**
The analysis performed on instrument MSVOA_N were done using GC column Rxi-624SIL MS 30m, 0.25mm, 1.4 um, Cat. #13868.The 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.
The Internal Standards Areas met the acceptable requirements.
The Retention Times were acceptable for all samples.
The RPD met criteria .

The Blank Spike for {VN0204WBS02} with File ID: VN085651.D met requirements for all samples except for Vinyl chloride[126%]failing high but no positive hit in associated sample therefore no corrective action taken.

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 File ID VN085645.D met the requirements except for Vinyl Chloride failing high but no positive hit in associated sample therefore no corrective action taken.

284 Sheffield Street, Mountainside, NJ 07092
Phone: 908 789 8900 Fax: 908 789 8922

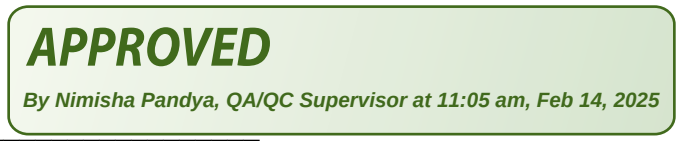
The Tuning criteria met requirements.

**E. Additional Comments:**
Samples for MS/MSD for VOC analysis were not provided with this set of samples. The Blank Spike Duplicate is reported with the data.
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 

284 Sheffield Street, Mountainside NJ 07092 Tel. 908-789-8900 Fax: 908-789-8922

# 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 |

# ALLIANCE 284 Sheffield Street, Mountainside New Jersey 07092

NEW JERSEY LAB ID#: 20012: NEW YORK LAB ID#: 11376

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

CHEMTECH PROJECT NUMBER: Q1241 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.<br><br>The Continuous Calibration File ID VN085645.D met the requirements except for Vinyl Chloride failing high but no positive hit in associated sample therefore no corrective action taken. | | ✓ | |
| 6. | Blank Contamination - If yes, list compounds and concentrations in each blank: | | ✓ | |
| 7. | Surrogate Recoveries Meet Criteria<br><br>If not met, list those compounds and their recoveries which fall outside the acceptable ranges. | | | ✓ |
| 8. | Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria<br><br>If not met, list those compounds and their recoveries which fall outside the acceptable range.<br><br>The Blank Spike for {VN0204WBS02} with File ID: VN085651.D met requirements for all samples except for Vinyl chloride[126%]failing high but no positive hit in associated sample therefore no corrective action taken.<br><br>The Blank Spike Duplicate met requirements for all samples . | | ✓ | |
| 9. | Internal Standard Area/Retention Time Shift Meet Criteria<br><br>Comments: | | | ✓ |
| 10. | Analysis Holding Time Met<br><br>If not met, list number of days exceeded for each sample: | | | ✓ |

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

NA NO YES

ADDITIONAL COMMENTS:

Samples for MS/MSD for VOC analysis were not provided with this set of samples. The Blank Spike Duplicate is reported with the data.

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.

QA REVIEW

**REVIEWED**
*By Sohil Jodhani, QA/QC Director at 10:28 am, Feb 14, 2025*

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

## APPENDIX A

## QA REVIEW GENERAL DOCUMENTATION

**Project #:** Q1241

| | 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:** 02/07/2025

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

# LAB CHRONICLE

| | | | |
|---|---|---|---|
| **OrderID:** | Q1241 | **OrderDate:** | 1/30/2025 2:58:00 PM |
| **Client:** | RU2 Engineering, LLC | **Project:** | NYCDDC SANTWOBR Brooklyn Bridge BBMCR |
| **Contact:** | Rutu Manani | **Location:** | E11,VOA Ref. #2 Soil |

| LabID | ClientID | Matrix | Test | Method | Sample Date | Prep Date | Anal Date | Received |
|---|---|---|---|---|---|---|---|---|
| **Q1241-02** | **JPP-3.5-013025** | **TCLP** | | | **01/30/25** | | | **01/30/25** |
| | | | TCLP VOA | 8260D | | | 02/04/25 | |
| **Q1241-06** | **JPP-5.3-013025** | **TCLP** | | | **01/30/25** | | | **01/30/25** |
| | | | TCLP VOA | 8260D | | | 02/03/25 | |
| **Q1241-10** | **JPP-5.2-013025** | **TCLP** | | | **01/30/25** | | | **01/30/25** |
| | | | TCLP VOA | 8260D | | | 02/03/25 | |
| **Q1241-14** | **JPP-5.4-013025** | **TCLP** | | | **01/30/25** | | | **01/30/25** |
| | | | TCLP VOA | 8260D | | | 02/03/25 | |
| **Q1241-18** | **JPP-51.4-013025** | **TCLP** | | | **01/30/25** | | | **01/30/25** |
| | | | TCLP VOA | 8260D | | | 02/03/25 | |

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

# Hit Summary Sheet
**SW-846**

**SDG No.:** Q1241

**Client:** RU2 Engineering, LLC

| Sample ID | Client ID | Matrix | Parameter | Concentration | C | MDL | RDL | Units |
|---|---|---|---|---|---|---|---|---|
| **Client ID:** | | | | | | | | |
| | | | | 0 | | | | |

**Total Voc :**

**Total Concentration:**

# QC SUMMARY

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

# Surrogate Summary

**SDG No.:** Q1241

**Client:** RU2 Engineering, LLC

**Analytical Method:** SW8260D

| Lab Sample ID | Client ID | Parameter | Spike | Result | RecoveryQual | Limits Low | Limits High |
|---|---|---|---|---|---|---|---|
| Q1241-02 | JPP-3.5-013025 | 1,2-Dichloroethane-d4 | 50 | 49.2 | 98 | 74 | 125 |
| | | Dibromofluoromethane | 50 | 48.7 | 97 | 75 | 124 |
| | | Toluene-d8 | 50 | 51.1 | 102 | 86 | 113 |
| | | 4-Bromofluorobenzene | 50 | 44.1 | 88 | 77 | 121 |
| Q1241-06 | JPP-5.3-013025 | 1,2-Dichloroethane-d4 | 50 | 53.6 | 107 | 74 | 125 |
| | | Dibromofluoromethane | 50 | 50.1 | 100 | 75 | 124 |
| | | Toluene-d8 | 50 | 53.0 | 106 | 86 | 113 |
| | | 4-Bromofluorobenzene | 50 | 45.3 | 91 | 77 | 121 |
| Q1241-10 | JPP-5.2-013025 | 1,2-Dichloroethane-d4 | 50 | 54.9 | 110 | 74 | 125 |
| | | Dibromofluoromethane | 50 | 49.5 | 99 | 75 | 124 |
| | | Toluene-d8 | 50 | 53.5 | 107 | 86 | 113 |
| | | 4-Bromofluorobenzene | 50 | 47.0 | 94 | 77 | 121 |
| Q1241-14 | JPP-5.4-013025 | 1,2-Dichloroethane-d4 | 50 | 54.5 | 109 | 74 | 125 |
| | | Dibromofluoromethane | 50 | 49.9 | 100 | 75 | 124 |
| | | Toluene-d8 | 50 | 53.8 | 108 | 86 | 113 |
| | | 4-Bromofluorobenzene | 50 | 45.6 | 91 | 77 | 121 |
| Q1241-18 | JPP-51.4-013025 | 1,2-Dichloroethane-d4 | 50 | 54.1 | 108 | 74 | 125 |
| | | Dibromofluoromethane | 50 | 49.9 | 100 | 75 | 124 |
| | | Toluene-d8 | 50 | 52.5 | 105 | 86 | 113 |
| | | 4-Bromofluorobenzene | 50 | 45.1 | 90 | 77 | 121 |
| VN0203WBL01 | VN0203WBL01 | 1,2-Dichloroethane-d4 | 50 | 50.4 | 101 | 74 | 125 |
| | | Dibromofluoromethane | 50 | 50.6 | 101 | 75 | 124 |
| | | Toluene-d8 | 50 | 50.1 | 100 | 86 | 113 |
| | | 4-Bromofluorobenzene | 50 | 42.6 | 85 | 77 | 121 |
| VN0203WBS01 | VN0203WBS01 | 1,2-Dichloroethane-d4 | 50 | 47.8 | 96 | 74 | 125 |
| | | Dibromofluoromethane | 50 | 52.2 | 104 | 75 | 124 |
| | | Toluene-d8 | 50 | 54.6 | 109 | 86 | 113 |
| | | 4-Bromofluorobenzene | 50 | 51.1 | 102 | 77 | 121 |
| VN0203WBSD0 | VN0203WBSD01 | 1,2-Dichloroethane-d4 | 50 | 48.0 | 96 | 74 | 125 |
| | | Dibromofluoromethane | 50 | 51.0 | 102 | 75 | 124 |
| | | Toluene-d8 | 50 | 51.7 | 103 | 86 | 113 |
| | | 4-Bromofluorobenzene | 50 | 48.8 | 98 | 77 | 121 |

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

# Surrogate Summary

**SDG No.:** Q1241

**Client:** RU2 Engineering, LLC

**Analytical Method:** SW8260-Low

| Lab Sample ID | Client ID | Parameter | Spike | Result | RecoveryQual | Limits Low | Limits High |
|---|---|---|---|---|---|---|---|
| VN0204WBL01 | VN0204WBL01 | 1,2-Dichloroethane-d4 | 50 | 49.9 | 100 | 74 | 125 |
| | | Dibromofluoromethane | 50 | 50.3 | 101 | 75 | 124 |
| | | Toluene-d8 | 50 | 49.2 | 98 | 86 | 113 |
| | | 4-Bromofluorobenzene | 50 | 44.2 | 88 | 77 | 121 |
| VN0204WBS02 | VN0204WBS02 | 1,2-Dichloroethane-d4 | 50 | 45.2 | 90 | 74 | 125 |
| | | Dibromofluoromethane | 50 | 48.7 | 97 | 75 | 124 |
| | | Toluene-d8 | 50 | 49.8 | 100 | 86 | 113 |
| | | 4-Bromofluorobenzene | 50 | 47.8 | 96 | 77 | 121 |

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

## Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

**SW-846**

**SDG No.:** Q1241

**Client:** RU2 Engineering, LLC

**Analytical Method:** SW8260D **Datafile :** VN085619.D

| Lab Sample ID | Parameter | Spike | Result | Unit | Rec | RPD | Qual | Limits Low | Limits High | RPD |
|---|---|---|---|---|---|---|---|---|---|---|
| VN0203WBS01 | Vinyl chloride | 20 | 18.0 | ug/L | 90 | | | 65 | 117 | |
| | 1,1-Dichloroethene | 20 | 17.3 | ug/L | 86 | | | 74 | 110 | |
| | 2-Butanone | 100 | 88.6 | ug/L | 89 | | | 65 | 122 | |
| | Carbon Tetrachloride | 20 | 17.5 | ug/L | 88 | | | 77 | 113 | |
| | Chloroform | 20 | 19.0 | ug/L | 95 | | | 79 | 113 | |
| | Benzene | 20 | 18.6 | ug/L | 93 | | | 82 | 109 | |
| | 1,2-Dichloroethane | 20 | 17.2 | ug/L | 86 | | | 80 | 115 | |
| | Trichloroethene | 20 | 18.4 | ug/L | 92 | | | 77 | 113 | |
| | Tetrachloroethene | 20 | 19.2 | ug/L | 96 | | | 67 | 123 | |
| | Chlorobenzene | 20 | 19.0 | ug/L | 95 | | | 82 | 109 | |

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

## Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

**SW-846**

**SDG No.:** Q1241

**Client:** RU2 Engineering, LLC

**Analytical Method:** SW8260D **Datafile :** VN085620.D

| Lab Sample ID | Parameter | Spike | Result | Unit | Rec | RPD | Qual | Limits Low | Limits High | RPD |
|---|---|---|---|---|---|---|---|---|---|---|
| VN0203WBSD01 | Vinyl chloride | 20 | 18.9 | ug/L | 95 | 5 | | 65 | 117 | 20 |
| | 1,1-Dichloroethene | 20 | 18.1 | ug/L | 91 | 6 | | 74 | 110 | 20 |
| | 2-Butanone | 100 | 94.6 | ug/L | 95 | 7 | | 65 | 122 | 20 |
| | Carbon Tetrachloride | 20 | 17.8 | ug/L | 89 | 1 | | 77 | 113 | 20 |
| | Chloroform | 20 | 19.8 | ug/L | 99 | 4 | | 79 | 113 | 20 |
| | Benzene | 20 | 18.8 | ug/L | 94 | 1 | | 82 | 109 | 20 |
| | 1,2-Dichloroethane | 20 | 17.5 | ug/L | 88 | 2 | | 80 | 115 | 20 |
| | Trichloroethene | 20 | 18.2 | ug/L | 91 | 1 | | 77 | 113 | 20 |
| | Tetrachloroethene | 20 | 19.1 | ug/L | 96 | 0 | | 67 | 123 | 20 |
| | Chlorobenzene | 20 | 19.6 | ug/L | 98 | 3 | | 82 | 109 | 20 |

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

## Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

**SW-846**

**SDG No.:** Q1241

**Client:** RU2 Engineering, LLC

**Analytical Method:** SW8260-Low **Datafile :** VN085651.D

| Lab Sample ID | Parameter | Spike | Result | Unit | Rec | RPD | Qual | Limits Low | Limits High | RPD |
|---|---|---|---|---|---|---|---|---|---|---|
| VN0204WBS02 | Vinyl chloride | 20 | 25.2 | ug/L | 126 | | * | 65 | 117 | |
| | 1,1-Dichloroethene | 20 | 21.6 | ug/L | 108 | | | 74 | 110 | |
| | 2-Butanone | 100 | 99.4 | ug/L | 99 | | | 65 | 122 | |
| | Carbon Tetrachloride | 20 | 19.1 | ug/L | 96 | | | 77 | 113 | |
| | Chloroform | 20 | 20.1 | ug/L | 101 | | | 79 | 113 | |
| | Benzene | 20 | 20.6 | ug/L | 103 | | | 82 | 109 | |
| | 1,2-Dichloroethane | 20 | 18.2 | ug/L | 91 | | | 80 | 115 | |
| | Trichloroethene | 20 | 19.8 | ug/L | 99 | | | 77 | 113 | |
| | Tetrachloroethene | 20 | 21.2 | ug/L | 106 | | | 67 | 123 | |
| | Chlorobenzene | 20 | 20.7 | ug/L | 104 | | | 82 | 109 | |

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

# VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VN0203WBL01

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG NO.: Q1241

Lab File ID: VN085618.D Lab Sample ID: VN0203WBL01

Date Analyzed: 02/03/2025 Time Analyzed: 13:34

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

Instrument ID: MSVOA_N

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

| EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED |
|---|---|---|---|
| VN0203WBS01 | VN0203WBS01 | VN085619.D | 02/03/2025 |
| VN0203WBSD01 | VN0203WBSD01 | VN085620.D | 02/03/2025 |
| JPP-5.3-013025 | Q1241-06 | VN085636.D | 02/03/2025 |
| JPP-5.2-013025 | Q1241-10 | VN085637.D | 02/03/2025 |
| JPP-5.4-013025 | Q1241-14 | VN085638.D | 02/03/2025 |
| JPP-51.4-013025 | Q1241-18 | VN085639.D | 02/03/2025 |

COMMENTS:

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

# VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VN0204WBL01

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG NO.: Q1241

Lab File ID: VN085647.D Lab Sample ID: VN0204WBL01

Date Analyzed: 02/04/2025 Time Analyzed: 12:31

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

Instrument ID: MSVOA_N

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

| EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED |
|---|---|---|---|
| JPP-3.5-013025 | Q1241-02 | VN085650.D | 02/04/2025 |
| VN0204WBS02 | VN0204WBS02 | VN085651.D | 02/04/2025 |

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: RUTW01

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG NO.: Q1241

Lab File ID: VN085437.D BFB Injection Date: 01/14/2025

Instrument ID: MSVOA_N BFB Injection Time: 14:22

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N N

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 50 | 15.0 - 40.0% of mass 95 | 22.3 |
| 75 | 30.0 - 60.0% of mass 95 | 58 |
| 95 | Base Peak, 100% relative abundance | 100 |
| 96 | 5.0 - 9.0% of mass 95 | 7.8 |
| 173 | Less than 2.0% of mass 174 | 1.4 ( 1.8 ) 1 |
| 174 | 50.0 - 100.0% of mass 95 | 76 |
| 175 | 5.0 - 9.0% of mass 174 | 5.4 ( 7.1 ) 1 |
| 176 | 95.0 - 101.0% of mass 174 | 74.1 ( 97.4 ) 1 |
| 177 | 5.0 - 9.0% of mass 176 | 4.9 ( 6.7 ) 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 |
|---|---|---|---|---|
| VSTDICC100 | VSTDICC100 | VN085438.D | 01/14/2025 | 14:56 |
| VSTDICCC050 | VSTDICCC050 | VN085439.D | 01/14/2025 | 15:19 |
| VSTDICC020 | VSTDICC020 | VN085440.D | 01/14/2025 | 15:43 |
| VSTDICC010 | VSTDICC010 | VN085441.D | 01/14/2025 | 16:07 |
| VSTDICC005 | VSTDICC005 | VN085442.D | 01/14/2025 | 16:31 |
| VSTDICC001 | VSTDICC001 | VN085443.D | 01/14/2025 | 17:19 |

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: RUTW01

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG NO.: Q1241

Lab File ID: VN085616.D BFB Injection Date: 02/03/2025

Instrument ID: MSVOA_N BFB Injection Time: 12:23

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N N

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 50 | 15.0 - 40.0% of mass 95 | 20.2 |
| 75 | 30.0 - 60.0% of mass 95 | 54.4 |
| 95 | Base Peak, 100% relative abundance | 100 |
| 96 | 5.0 - 9.0% of mass 95 | 6.8 |
| 173 | Less than 2.0% of mass 174 | 1.4 ( 1.9 ) 1 |
| 174 | 50.0 - 100.0% of mass 95 | 76.2 |
| 175 | 5.0 - 9.0% of mass 174 | 5.5 ( 7.2 ) 1 |
| 176 | 95.0 - 101.0% of mass 174 | 75 ( 98.4 ) 1 |
| 177 | 5.0 - 9.0% of mass 176 | 5.1 ( 6.8 ) 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 | VN085617.D | 02/03/2025 | 12:56 |
| VN0203WBL01 | VN0203WBL01 | VN085618.D | 02/03/2025 | 13:34 |
| VN0203WBS01 | VN0203WBS01 | VN085619.D | 02/03/2025 | 13:58 |
| VN0203WBSD01 | VN0203WBSD01 | VN085620.D | 02/03/2025 | 14:22 |
| JPP-5.3-013025 | Q1241-06 | VN085636.D | 02/03/2025 | 20:49 |
| JPP-5.2-013025 | Q1241-10 | VN085637.D | 02/03/2025 | 21:13 |
| JPP-5.4-013025 | Q1241-14 | VN085638.D | 02/03/2025 | 21:37 |
| JPP-51.4-013025 | Q1241-18 | VN085639.D | 02/03/2025 | 22:01 |

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: RUTW01

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG NO.: Q1241

Lab File ID: VN085644.D BFB Injection Date: 02/04/2025

Instrument ID: MSVOA_N BFB Injection Time: 09:55

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N N

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 50 | 15.0 - 40.0% of mass 95 | 19.4 |
| 75 | 30.0 - 60.0% of mass 95 | 51.3 |
| 95 | Base Peak, 100% relative abundance | 100 |
| 96 | 5.0 - 9.0% of mass 95 | 6.3 |
| 173 | Less than 2.0% of mass 174 | 1.2 ( 1.4 ) 1 |
| 174 | 50.0 - 100.0% of mass 95 | 80.1 |
| 175 | 5.0 - 9.0% of mass 174 | 5.8 ( 7.2 ) 1 |
| 176 | 95.0 - 101.0% of mass 174 | 77.2 ( 96.3 ) 1 |
| 177 | 5.0 - 9.0% of mass 176 | 4.4 ( 5.7 ) 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 | VN085645.D | 02/04/2025 | 11:05 |
| VN0204WBL01 | VN0204WBL01 | VN085647.D | 02/04/2025 | 12:31 |
| JPP-3.5-013025 | Q1241-02 | VN085650.D | 02/04/2025 | 14:27 |
| VN0204WBS02 | VN0204WBS02 | VN085651.D | 02/04/2025 | 14:51 |

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

## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG NO.: Q1241

Lab File ID: VN085617.D Date Analyzed: 02/03/2025

Instrument ID: MSVOA_N Time Analyzed: 12:56

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

| | IS1 AREA # | RT # | IS2 AREA # | RT # | IS3 AREA # | RT # |
|---|---|---|---|---|---|---|
| 12 HOUR STD | 193909 | 8.22 | 331362 | 9.10 | 301323 | 11.87 |
| UPPER LIMIT | 387818 | 8.718 | 662724 | 9.6 | 602646 | 12.365 |
| LOWER LIMIT | 96954.5 | 7.718 | 165681 | 8.6 | 150662 | 11.365 |
| EPA SAMPLE NO. | | | | | | |
| JPP-5.3-013025 | 164691 | 8.22 | 346323 | 9.10 | 326963 | 11.87 |
| JPP-5.2-013025 | 157669 | 8.22 | 330403 | 9.10 | 315638 | 11.87 |
| JPP-5.4-013025 | 163991 | 8.22 | 343832 | 9.10 | 330622 | 11.87 |
| JPP-51.4-013025 | 168419 | 8.22 | 349686 | 9.10 | 332324 | 11.87 |
| VN0203WBL01 | 183958 | 8.22 | 354826 | 9.10 | 307130 | 11.87 |
| VN0203WBS01 | 188870 | 8.22 | 327054 | 9.10 | 287245 | 11.87 |
| VN0203WBSD01 | 177381 | 8.22 | 316818 | 9.10 | 277592 | 11.87 |

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.

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

## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG NO.: Q1241

Lab File ID: VN085617.D Date Analyzed: 02/03/2025

Instrument ID: MSVOA_N Time Analyzed: 12:56

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

| | IS4 AREA # | RT # | | | | |
|---|---|---|---|---|---|---|
| 12 HOUR STD | 152662 | 13.788 | | | | |
| UPPER LIMIT | 305324 | 14.288 | | | | |
| LOWER LIMIT | 76331 | 13.288 | | | | |
| EPA SAMPLE NO. | | | | | | |
| JPP-5.3-013025 | 116207 | 13.79 | | | | |
| JPP-5.2-013025 | 114334 | 13.79 | | | | |
| JPP-5.4-013025 | 116237 | 13.79 | | | | |
| JPP-51.4-013025 | 119364 | 13.79 | | | | |
| VN0203WBL01 | 111992 | 13.79 | | | | |
| VN0203WBS01 | 141185 | 13.79 | | | | |
| VN0203WBSD01 | 132351 | 13.79 | | | | |

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.

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

## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG NO.: Q1241

Lab File ID: VN085645.D Date Analyzed: 02/04/2025

Instrument ID: MSVOA_N Time Analyzed: 11:05

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

| | IS1 AREA # | RT # | IS2 AREA # | RT # | IS3 AREA # | RT # |
|---|---|---|---|---|---|---|
| 12 HOUR STD | 200704 | 8.22 | 345148 | 9.10 | 309053 | 11.87 |
| UPPER LIMIT | 401408 | 8.724 | 690296 | 9.6 | 618106 | 12.365 |
| LOWER LIMIT | 100352 | 7.724 | 172574 | 8.6 | 154527 | 11.365 |
| EPA SAMPLE NO. | | | | | | |
| JPP-3.5-013025 | 192282 | 8.22 | 373073 | 9.10 | 340715 | 11.87 |
| VN0204WBL01 | 197983 | 8.22 | 379434 | 9.10 | 328690 | 11.87 |
| VN0204WBS02 | 206401 | 8.22 | 367320 | 9.10 | 317764 | 11.87 |

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.

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

# VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG NO.: Q1241

Lab File ID: VN085645.D Date Analyzed: 02/04/2025

Instrument ID: MSVOA_N Time Analyzed: 11:05

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

| | IS4 AREA # | RT # | | | | |
|---|---|---|---|---|---|---|
| 12 HOUR STD | 157058 | 13.788 | | | | |
| UPPER LIMIT | 314116 | 14.288 | | | | |
| LOWER LIMIT | 78529 | 13.288 | | | | |
| EPA SAMPLE NO. | | | | | | |
| JPP-3.5-013025 | 119994 | 13.79 | | | | |
| VN0204WBL01 | 132287 | 13.79 | | | | |
| VN0204WBS02 | 150317 | 13.79 | | | | |

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | RU2 Engineering, LLC | Date Collected: | 01/30/25 |
| Project: | NYCDDC SANTWOBR Brooklyn Bridge BBMCR | Date Received: | 01/30/25 |
| Client Sample ID: | JPP-3.5-013025 | SDG No.: | Q1241 |
| Lab Sample ID: | Q1241-02 | 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: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | SW5035 | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN085650.D | 1 | | 02/04/25 14:27 | VN020425 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-01-4 | Vinyl Chloride | 5.00 | UQ | 0.34 | 5.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 5.00 | U | 0.26 | 5.00 | ug/L |
| 78-93-3 | 2-Butanone | 25.0 | U | 1.30 | 25.0 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 5.00 | U | 0.25 | 5.00 | ug/L |
| 67-66-3 | Chloroform | 5.00 | U | 0.26 | 5.00 | ug/L |
| 71-43-2 | Benzene | 5.00 | U | 0.16 | 5.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 5.00 | U | 0.24 | 5.00 | ug/L |
| 79-01-6 | Trichloroethene | 5.00 | U | 0.32 | 5.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 5.00 | U | 0.25 | 5.00 | ug/L |
| 108-90-7 | Chlorobenzene | 5.00 | U | 0.13 | 5.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 49.2 | | 74 - 125 | 98% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 48.7 | | 75 - 124 | 97% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 51.1 | | 86 - 113 | 102% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 44.1 | | 77 - 121 | 88% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 192000 | 8.224 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 373000 | 9.1 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 341000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 120000 | 13.794 | | | |

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_N\Data\VN020425\
Data File : VN085650.D
Acq On : 04 Feb 2025 14:27
Operator : JC\MD
Sample : Q1241-02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-3.5-013025

Quant Time: Feb 05 01:04:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

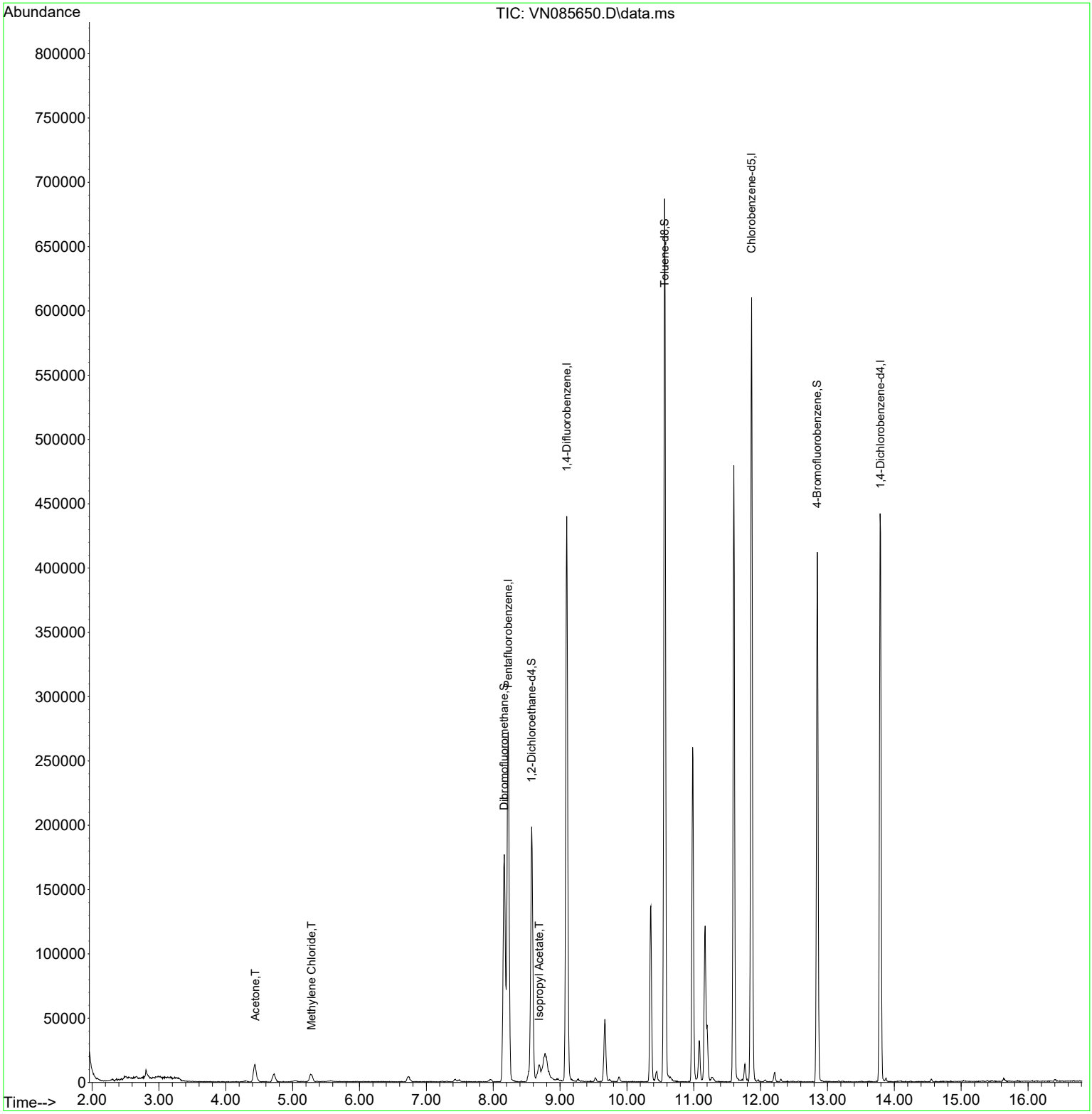
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 192282 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 373073 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 340715 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.794 | 152 | 119994 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.577 | 65 | 152796 | 49.228 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 98.460% | | | |
| 35) Dibromofluoromethane | 8.165 | 113 | 126064 | 48.707 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 97.420% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 469617 | 51.068 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 102.140% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 138593 | 44.058 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 88.120% | | | |
| Target Compounds | | | | | | Qvalue |
| 16) Acetone | 4.441 | 43 | 26678 | 26.602 | ug/l | 91 |
| 20) Methylene Chloride | 5.283 | 84 | 5252 | 2.115 | ug/l # | 74 |
| 43) Isopropyl Acetate | 8.688 | 43 | 17288 | 2.943 | ug/l # | 72 |

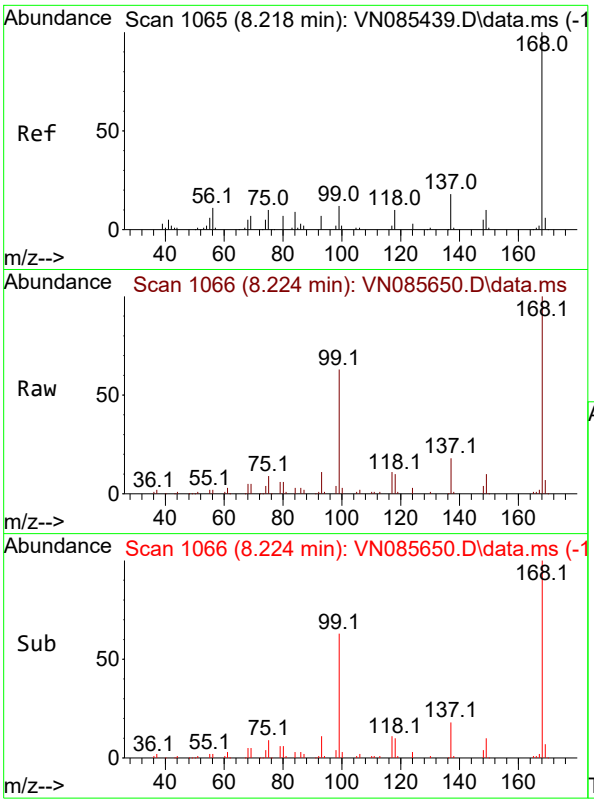
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085650.D
Acq On : 04 Feb 2025 14:27
Operator : JC\MD
Sample : Q1241-02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-3.5-013025

Quant Time: Feb 05 01:04:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration



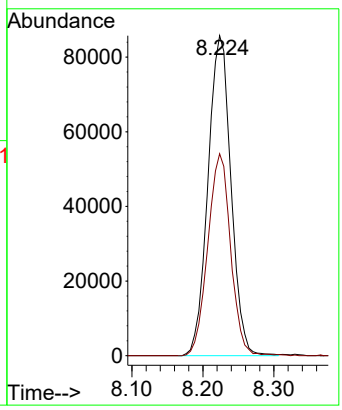


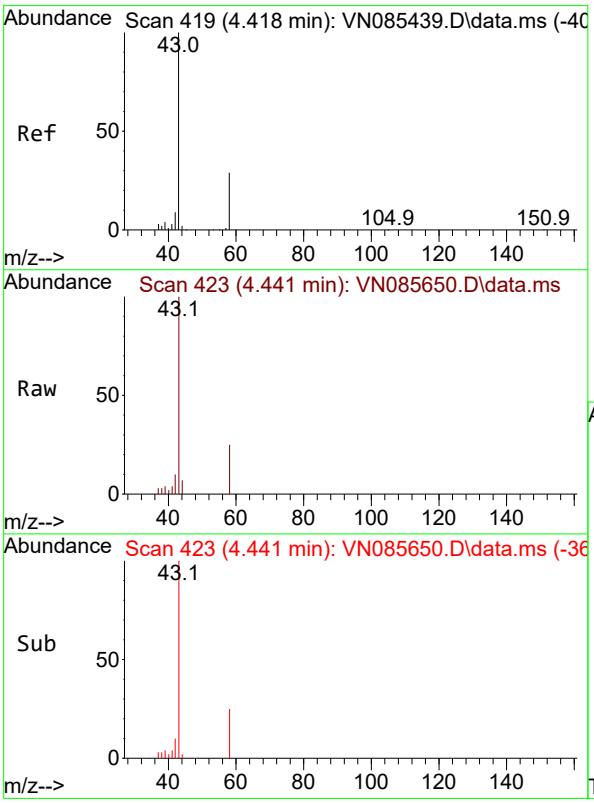

#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085650.D
Acq: 04 Feb 2025 14:27

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-3.5-013025

Tgt Ion:168 Resp: 192282

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 63.1 | 53.6 | 80.4 |

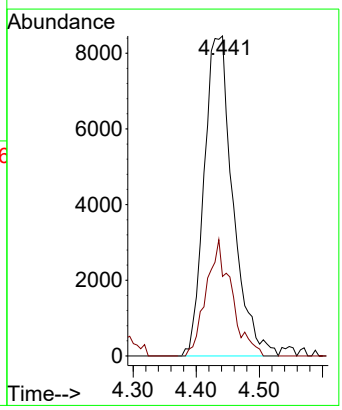


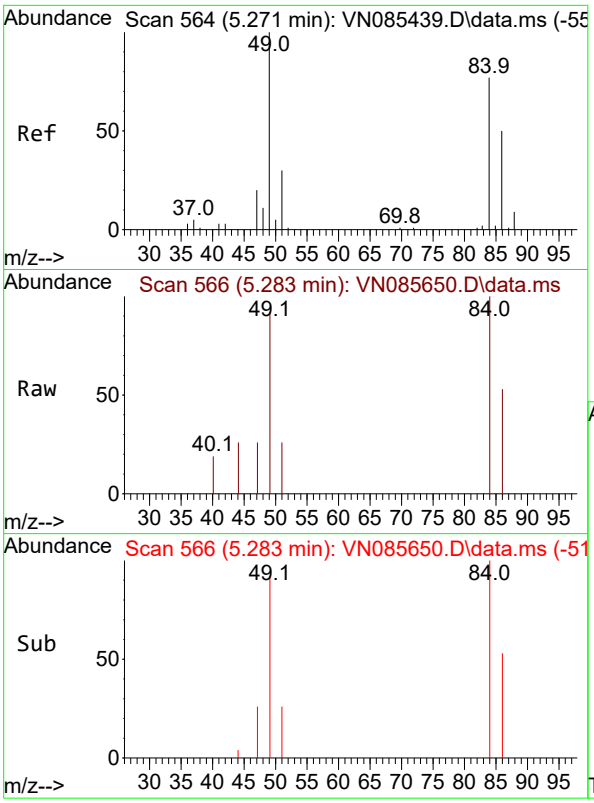




#16
Acetone
Concen: 26.602 ug/l
RT: 4.441 min Scan# 423
Delta R.T. 0.023 min
Lab File: VN085650.D
Acq: 04 Feb 2025 14:27

Tgt Ion: 43 Resp: 26678

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 24.8 | 23.8 | 35.6 |



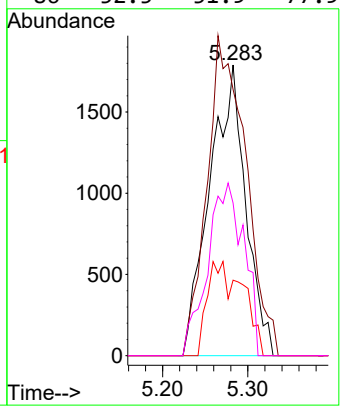


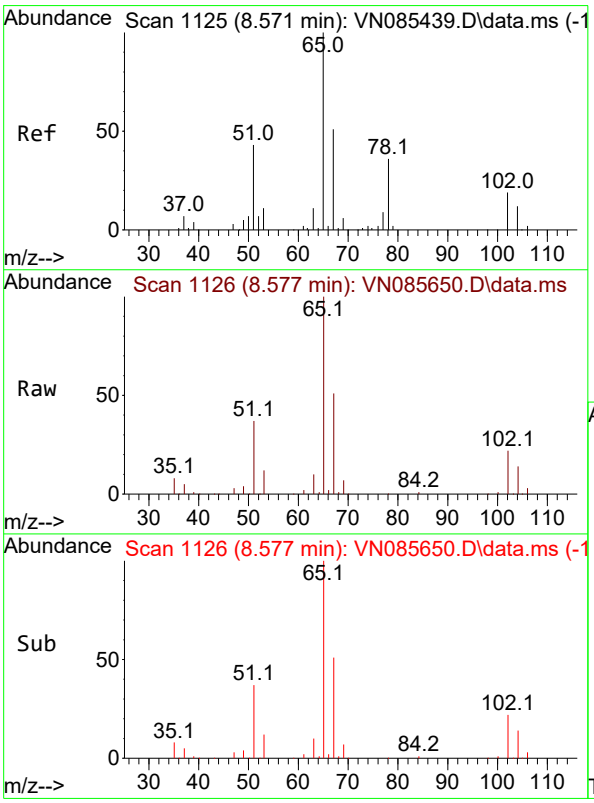

#20
Methylene Chloride
Concen: 2.115 ug/l
RT: 5.283 min Scan# 5
Delta R.T. 0.012 min
Lab File: VN085650.D
Acq: 04 Feb 2025 14:27

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-3.5-013025

Tgt Ion: 84 Resp: 5252

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 91.6 | 104.1 | 156.1# |
| 51 | 26.0 | 31.0 | 46.4# |
| 86 | 52.5 | 51.9 | 77.9 |

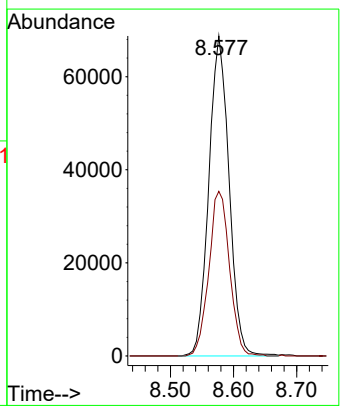


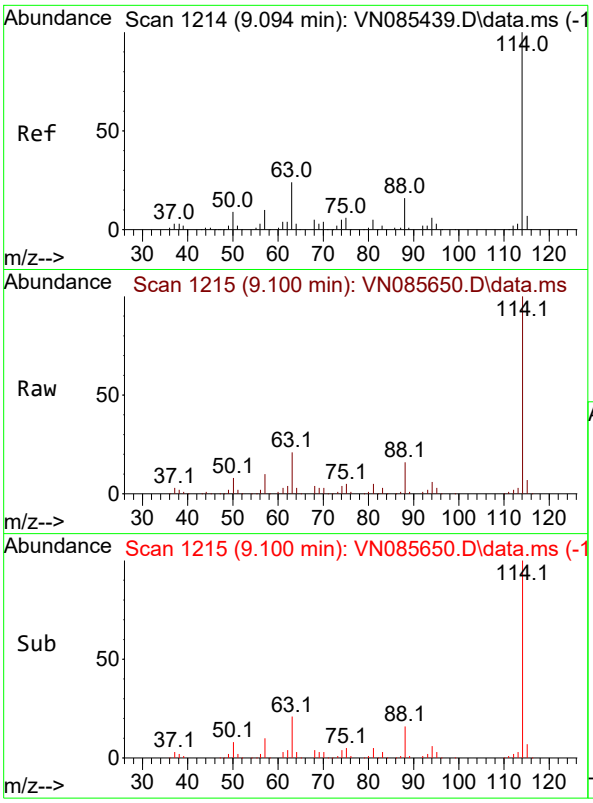




#33
1,2-Dichloroethane-d4
Concen: 49.228 ug/l
RT: 8.577 min Scan# 1126
Delta R.T. 0.006 min
Lab File: VN085650.D
Acq: 04 Feb 2025 14:27

Tgt Ion: 65 Resp: 152796

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 52.7 | 0.0 | 101.6 |



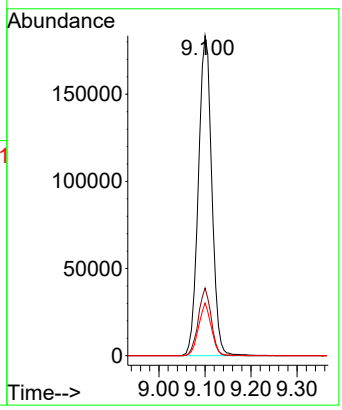


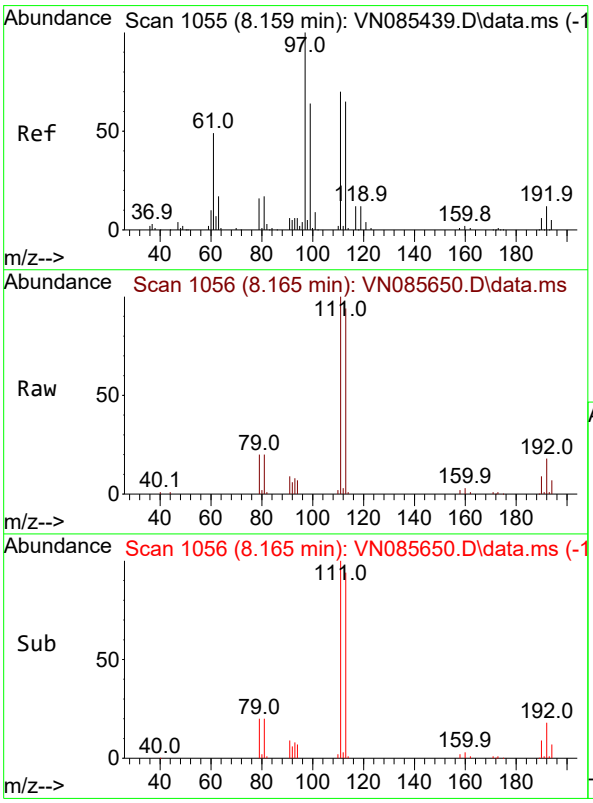

#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085650.D
Acq: 04 Feb 2025 14:27

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-3.5-013025

Tgt Ion:114 Resp: 373073

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 21.2 | 0.0 | 47.6 |
| 88 | 16.4 | 0.0 | 32.6 |

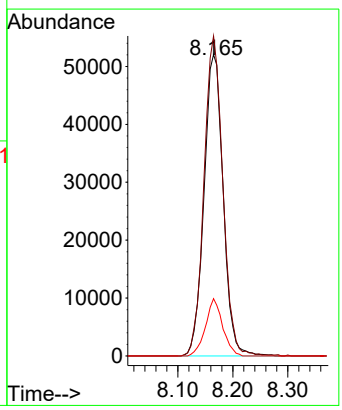


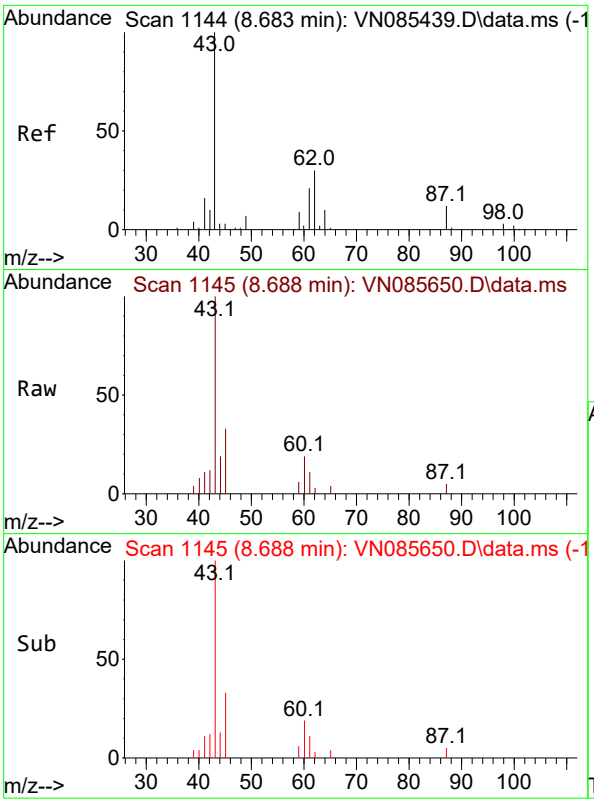




#35
Dibromofluoromethane
Concen: 48.707 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.006 min
Lab File: VN085650.D
Acq: 04 Feb 2025 14:27

Tgt Ion:113 Resp: 126064

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 104.1 | 82.7 | 124.1 |
| 192 | 17.0 | 14.3 | 21.5 |



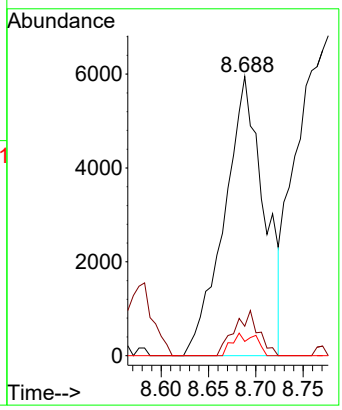


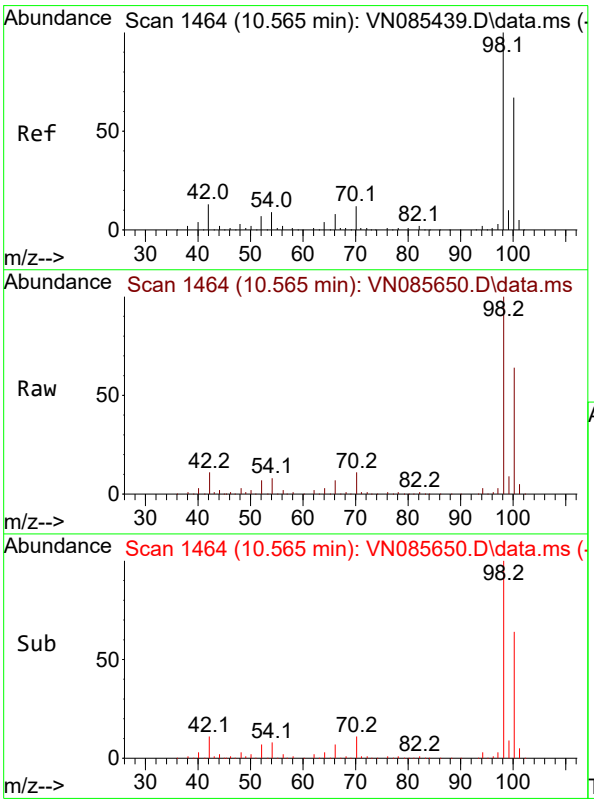

#43
Isopropyl Acetate
Concen: 2.943 ug/l
RT: 8.688 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085650.D
Acq: 04 Feb 2025 14:27

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-3.5-013025

Tgt Ion: 43 Resp: 17288

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 9.9 | 20.7 | 31.1# |
| 87 | 4.8 | 9.8 | 14.8# |

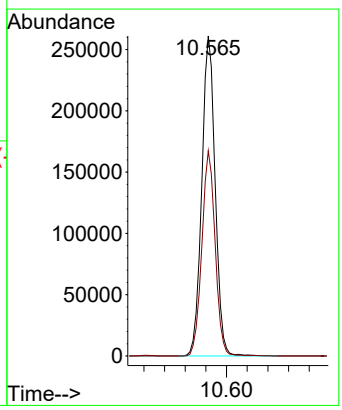


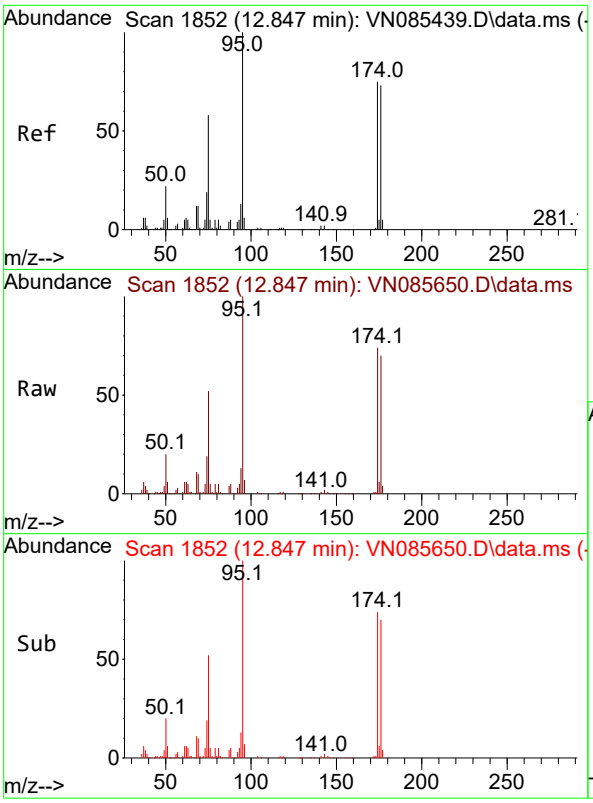




#50
Toluene-d8
Concen: 51.068 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN085650.D
Acq: 04 Feb 2025 14:27

Tgt Ion: 98 Resp: 469617

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 63.7 | 52.2 | 78.4 |



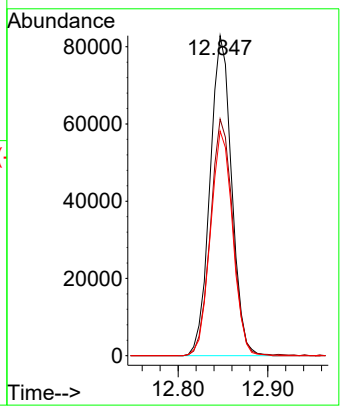


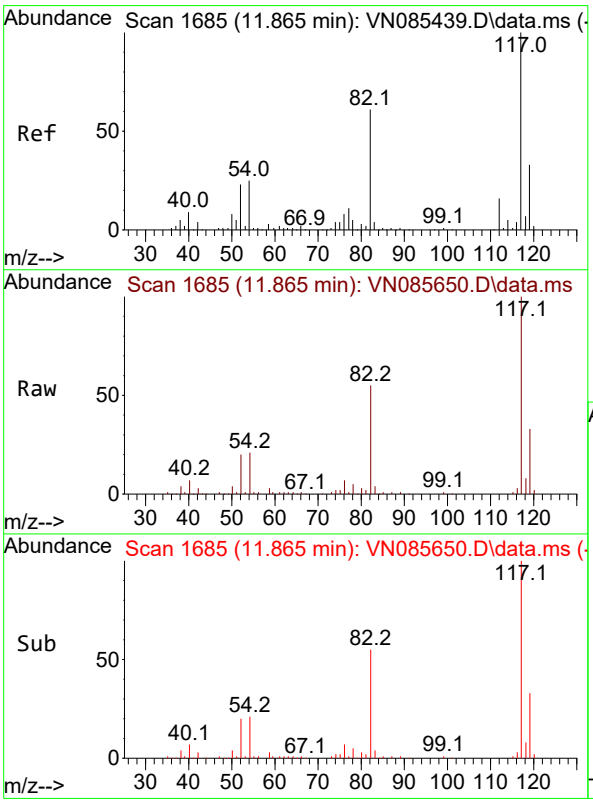

#62
4-Bromofluorobenzene
Concen: 44.058 ug/l
RT: 12.847 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085650.D
Acq: 04 Feb 2025 14:27

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-3.5-013025

Tgt Ion: 95 Resp: 138593

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 76.4 | 0.0 | 145.0 |
| 176 | 72.0 | 0.0 | 142.4 |

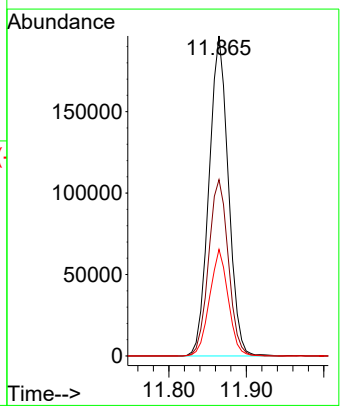


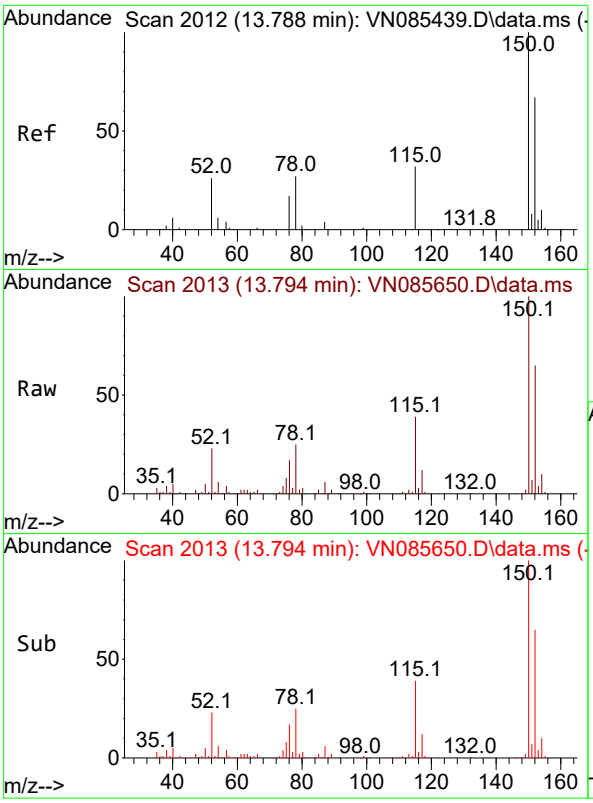




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. -0.000 min
Lab File: VN085650.D
Acq: 04 Feb 2025 14:27

Tgt Ion:117 Resp: 340715

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 55.1 | 48.6 | 72.8 |
| 119 | 33.3 | 26.6 | 39.8 |



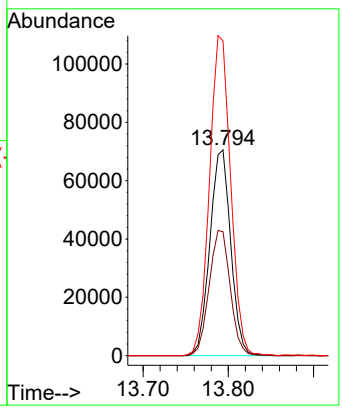



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN085650.D
Acq: 04 Feb 2025 14:27

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-3.5-013025

Tgt Ion:152 Resp: 119994

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 61.5 | 31.1 | 93.3 |
| 150 | 157.7 | 0.0 | 343.6 |



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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | RU2 Engineering, LLC | Date Collected: | 01/30/25 |
| Project: | NYCDDC SANTWOBR Brooklyn Bridge BBMCR | Date Received: | 01/30/25 |
| Client Sample ID: | JPP-5.3-013025 | SDG No.: | Q1241 |
| Lab Sample ID: | Q1241-06 | 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: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | SW5035 | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN085636.D | 1 | | 02/03/25 20:49 | VN020325 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-01-4 | Vinyl Chloride | 5.00 | U | 0.34 | 5.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 5.00 | U | 0.26 | 5.00 | ug/L |
| 78-93-3 | 2-Butanone | 25.0 | U | 1.30 | 25.0 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 5.00 | U | 0.25 | 5.00 | ug/L |
| 67-66-3 | Chloroform | 5.00 | U | 0.26 | 5.00 | ug/L |
| 71-43-2 | Benzene | 5.00 | U | 0.16 | 5.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 5.00 | U | 0.24 | 5.00 | ug/L |
| 79-01-6 | Trichloroethene | 5.00 | U | 0.32 | 5.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 5.00 | U | 0.25 | 5.00 | ug/L |
| 108-90-7 | Chlorobenzene | 5.00 | U | 0.13 | 5.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 53.6 | | 74 - 125 | 107% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 50.1 | | 75 - 124 | 100% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 53.0 | | 86 - 113 | 106% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 45.3 | | 77 - 121 | 91% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 165000 | 8.224 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 346000 | 9.1 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 327000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 116000 | 13.788 | | | |

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_N\Data\VN020325\
Data File : VN085636.D
Acq On : 03 Feb 2025 20:49
Operator : JC\MD
Sample : Q1241-06
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 21 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-5.3-013025

Quant Time: Feb 04 01:00:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

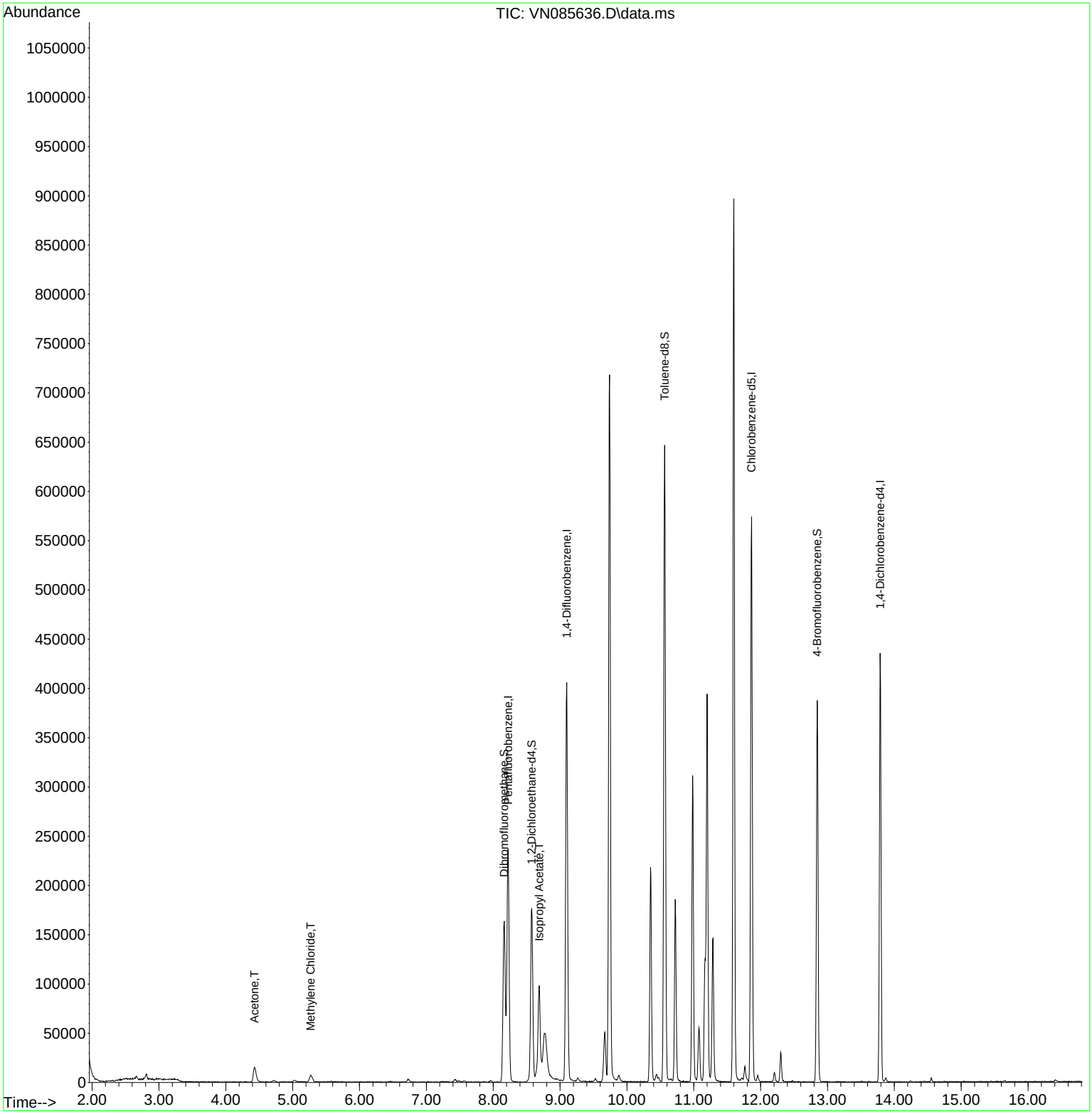
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 164691 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 346323 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 326963 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 116207 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.577 | 65 | 142506 | 53.605 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 107.200% | | | |
| 35) Dibromofluoromethane | 8.165 | 113 | 120416 | 50.118 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 100.240% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 452786 | 53.041 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 106.080% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 132300 | 45.306 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 90.620% | | | |
| Target Compounds | | | | | | Qvalue |
| 16) Acetone | 4.430 | 43 | 29731 | 34.612 | ug/l | 98 |
| 20) Methylene Chloride | 5.271 | 84 | 5377 | 2.529 | ug/l | 94 |
| 43) Isopropyl Acetate | 8.688 | 43 | 113601 | 20.830 | ug/l # | 87 |

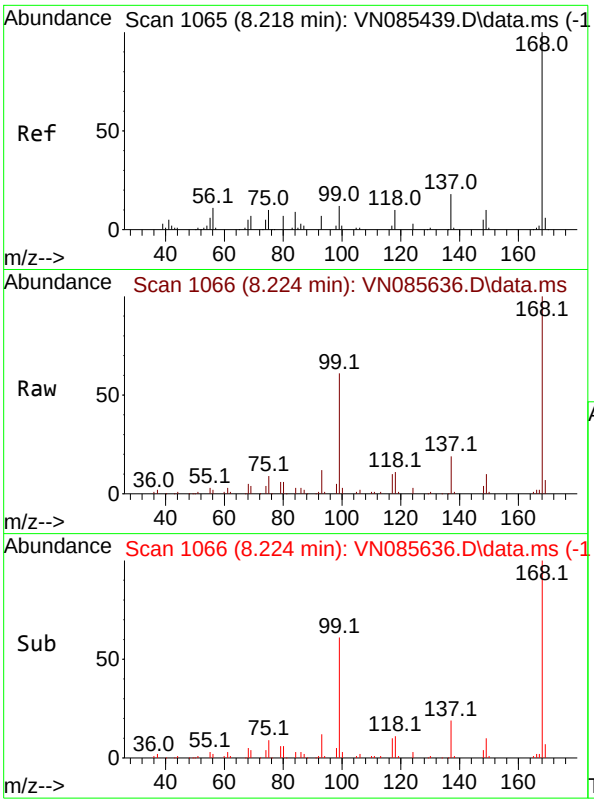
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085636.D
Acq On : 03 Feb 2025 20:49
Operator : JC\MD
Sample : Q1241-06
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 21 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-5.3-013025

Quant Time: Feb 04 01:00:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration



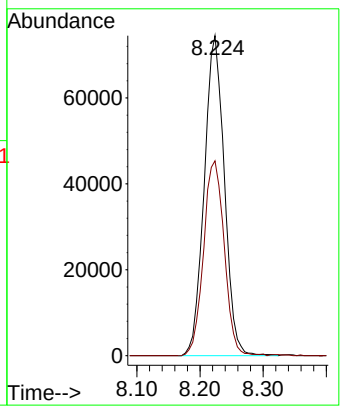


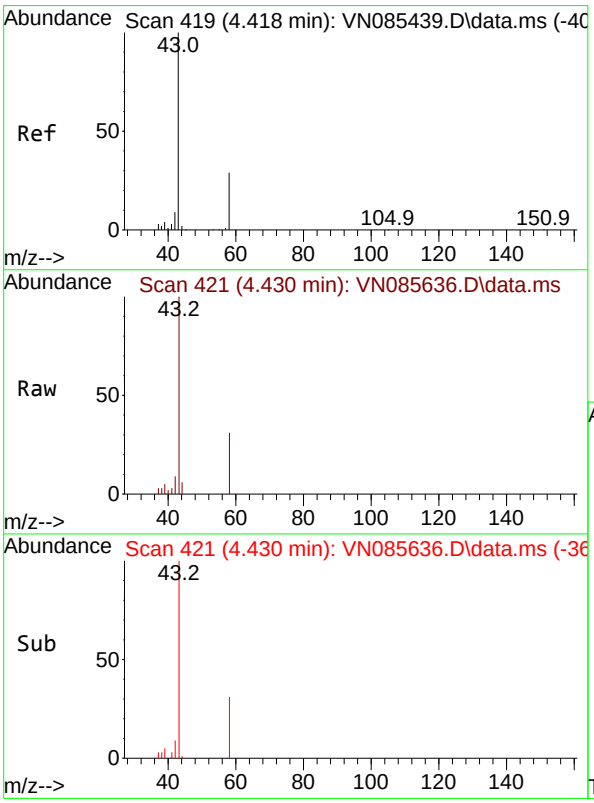

#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085636.D
Acq: 03 Feb 2025 20:49

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-5.3-013025

Tgt Ion:168 Resp: 164691

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 60.9 | 53.6 | 80.4 |

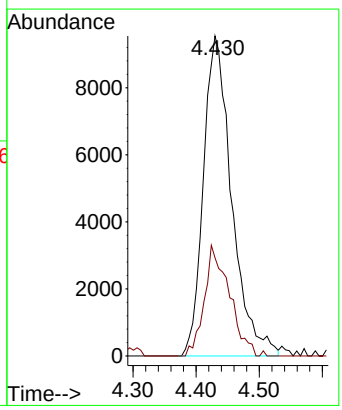


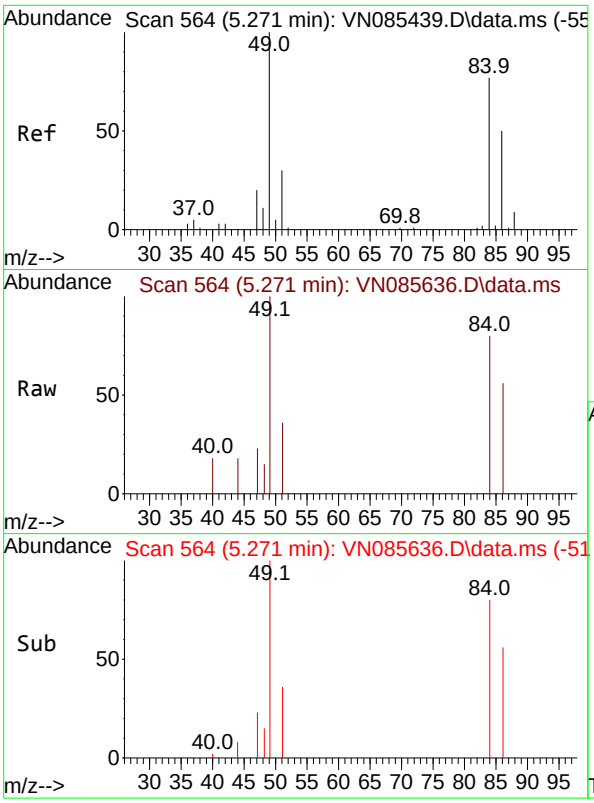




#16
Acetone
Concen: 34.612 ug/l
RT: 4.430 min Scan# 421
Delta R.T. 0.012 min
Lab File: VN085636.D
Acq: 03 Feb 2025 20:49

Tgt Ion: 43 Resp: 29731

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 30.7 | 23.8 | 35.6 |



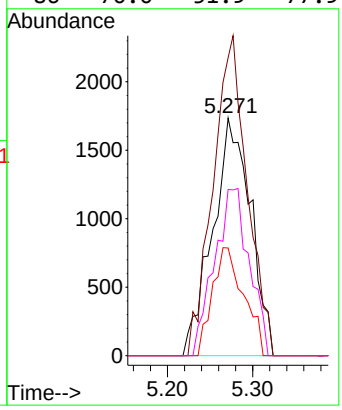


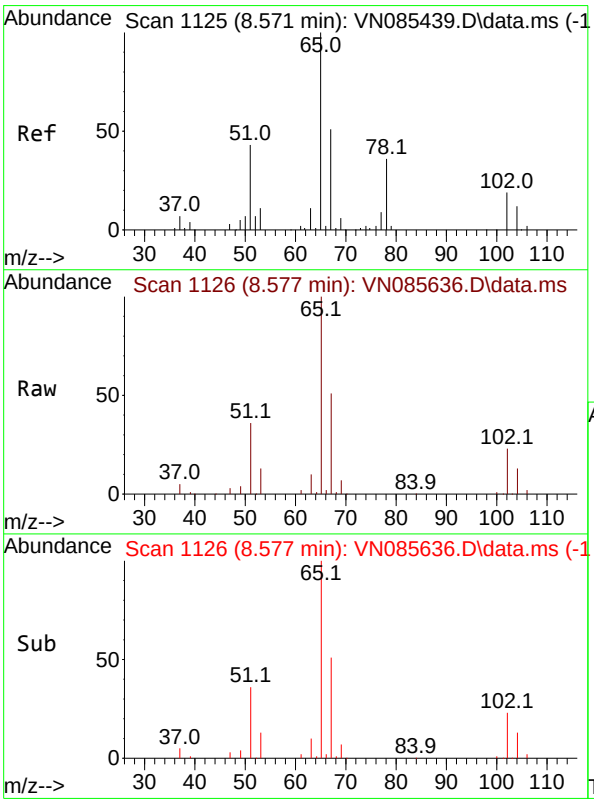

#20
Methylene Chloride
Concen: 2.529 ug/l
RT: 5.271 min Scan# 5
Delta R.T. 0.000 min
Lab File: VN085636.D
Acq: 03 Feb 2025 20:49

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-5.3-013025

Tgt Ion: 84 Resp: 5377

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 125.4 | 104.1 | 156.1 |
| 51 | 45.4 | 31.0 | 46.4 |
| 86 | 70.0 | 51.9 | 77.9 |

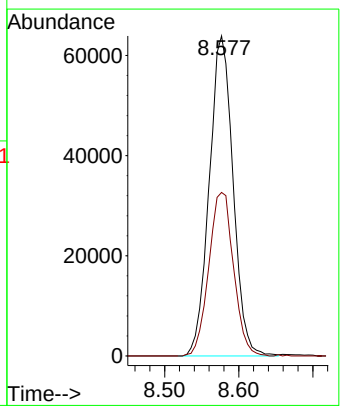


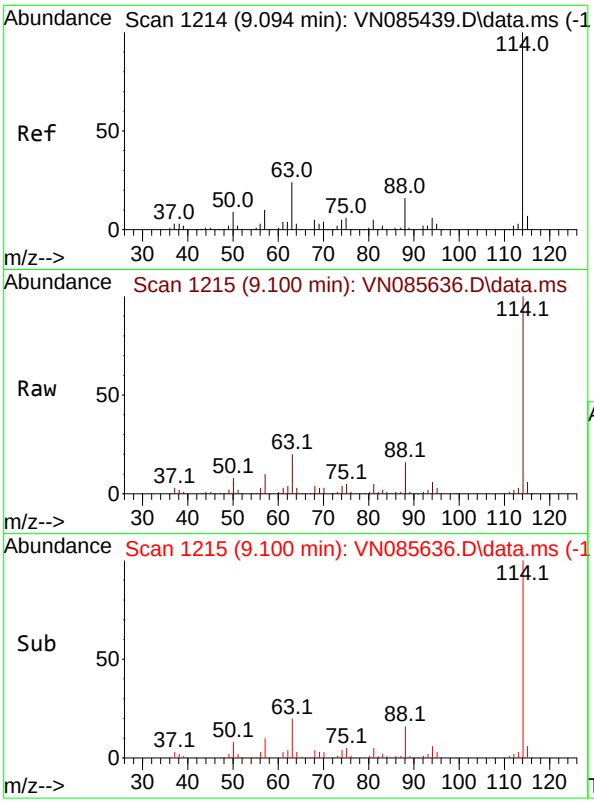




#33
1,2-Dichloroethane-d4
Concen: 53.605 ug/l
RT: 8.577 min Scan# 1126
Delta R.T. 0.006 min
Lab File: VN085636.D
Acq: 03 Feb 2025 20:49

Tgt Ion: 65 Resp: 142506

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 53.2 | 0.0 | 101.6 |



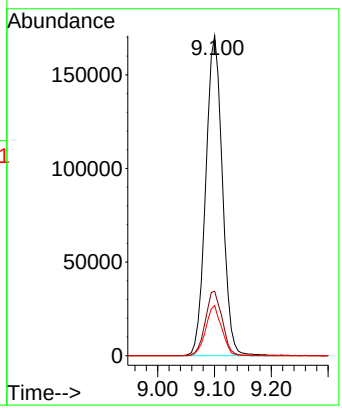


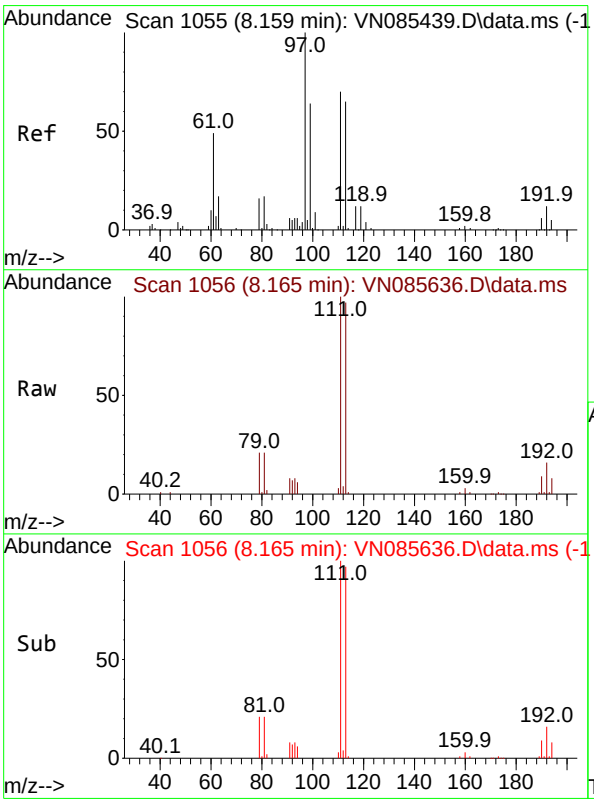

#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085636.D
Acq: 03 Feb 2025 20:49

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-5.3-013025

Tgt Ion:114 Resp: 346323

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 20.1 | 0.0 | 47.6 |
| 88 | 15.6 | 0.0 | 32.6 |

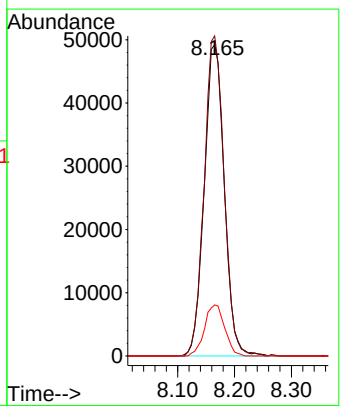


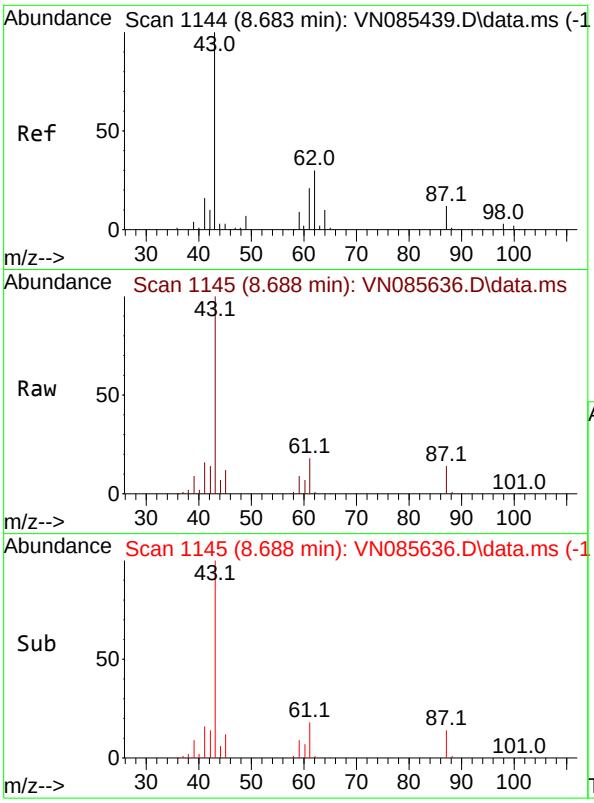




#35
Dibromofluoromethane
Concen: 50.118 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.006 min
Lab File: VN085636.D
Acq: 03 Feb 2025 20:49

Tgt Ion:113 Resp: 120416

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 102.4 | 82.7 | 124.1 |
| 192 | 16.5 | 14.3 | 21.5 |



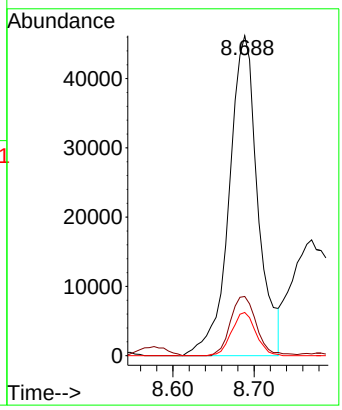


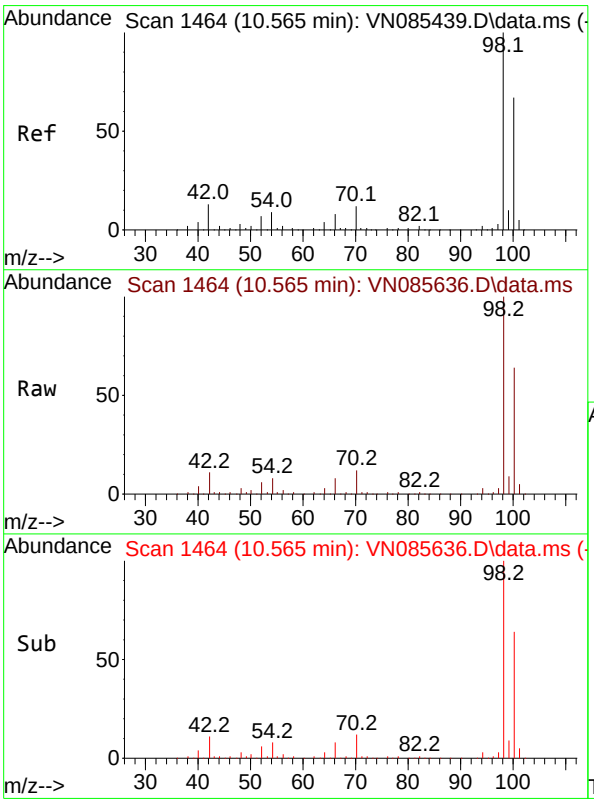

#43
Isopropyl Acetate
Concen: 20.830 ug/l
RT: 8.688 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085636.D
Acq: 03 Feb 2025 20:49

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-5.3-013025

Tgt Ion: 43 Resp: 113601

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 16.8 | 20.7 | 31.1# |
| 87 | 11.4 | 9.8 | 14.8 |

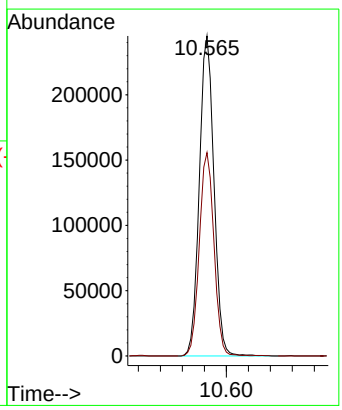


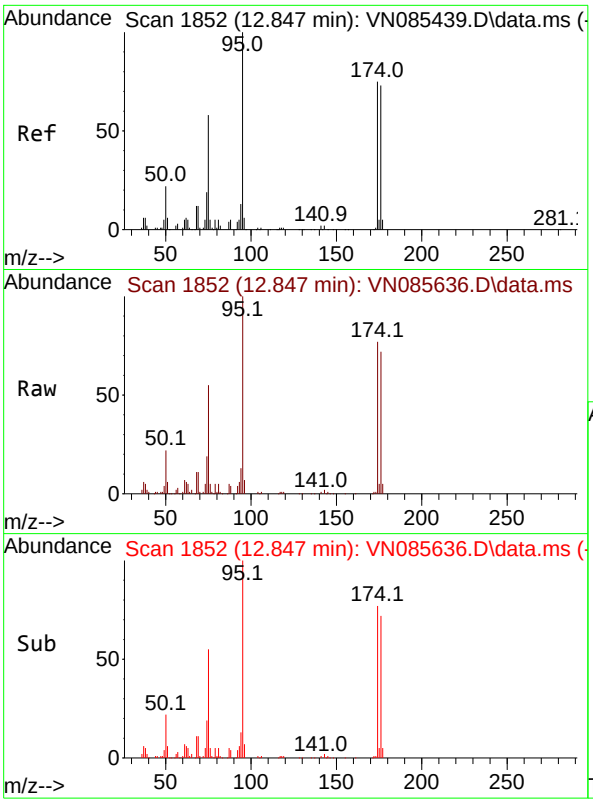




#50
Toluene-d8
Concen: 53.041 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN085636.D
Acq: 03 Feb 2025 20:49

Tgt Ion: 98 Resp: 452786

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 63.6 | 52.2 | 78.4 |



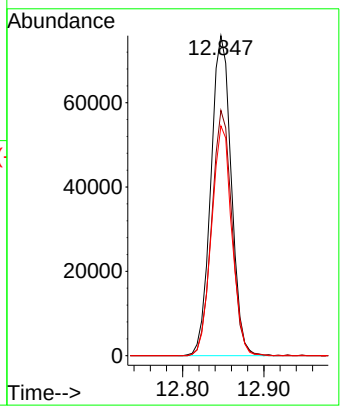


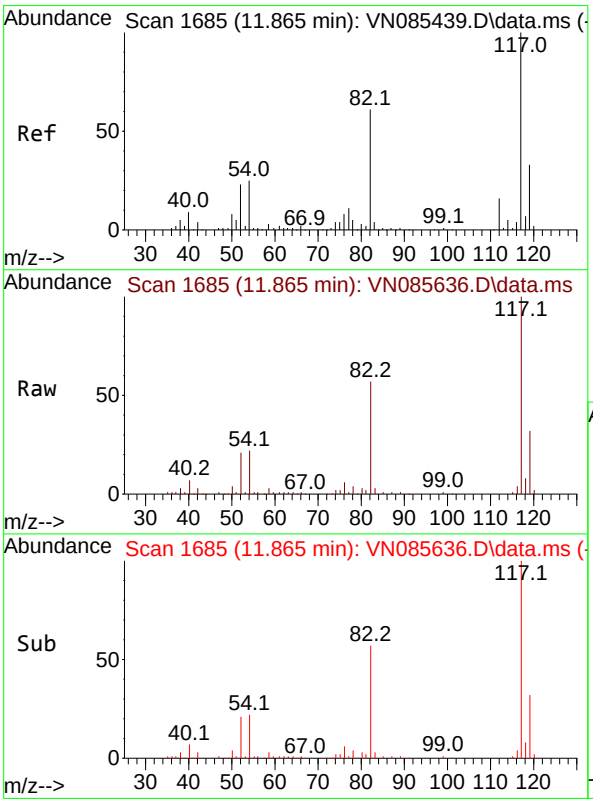

#62
4-Bromofluorobenzene
Concen: 45.306 ug/l
RT: 12.847 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085636.D
Acq: 03 Feb 2025 20:49

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-5.3-013025

Tgt Ion: 95 Resp: 132300

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 75.8 | 0.0 | 145.0 |
| 176 | 71.6 | 0.0 | 142.4 |

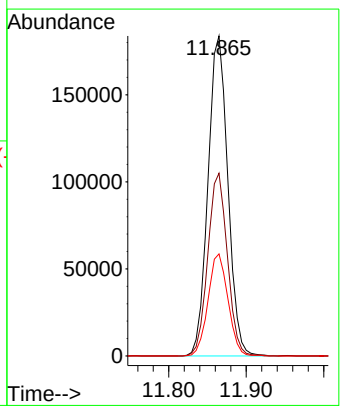


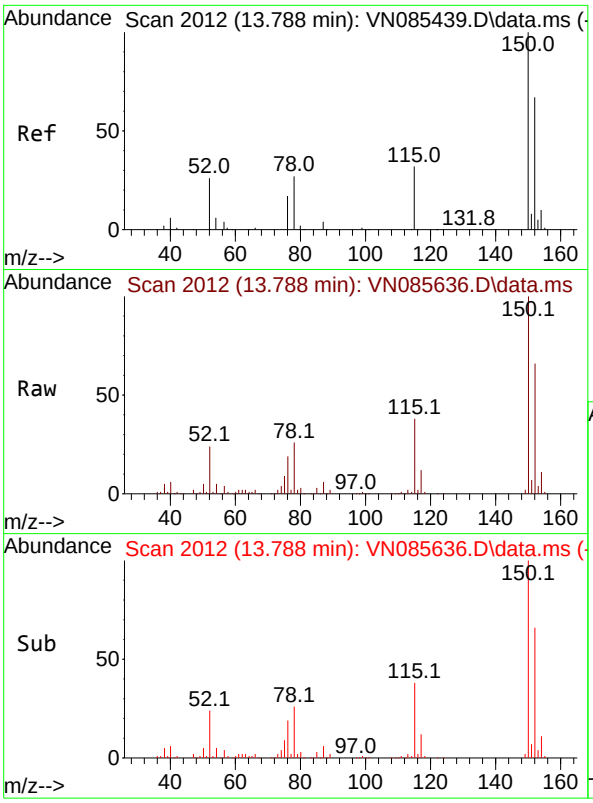




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VN085636.D
Acq: 03 Feb 2025 20:49

Tgt Ion:117 Resp: 326963

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 57.1 | 48.6 | 72.8 |
| 119 | 31.9 | 26.6 | 39.8 |



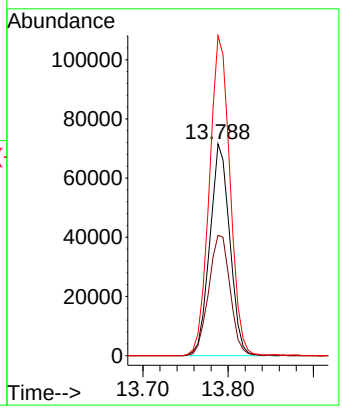



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN085636.D
Acq: 03 Feb 2025 20:49

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-5.3-013025

Tgt Ion:152 Resp: 116207

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 61.2 | 31.1 | 93.3 |
| 150 | 155.9 | 0.0 | 343.6 |



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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | RU2 Engineering, LLC | Date Collected: | 01/30/25 |
| Project: | NYCDDC SANTWOBR Brooklyn Bridge BBMCR | Date Received: | 01/30/25 |
| Client Sample ID: | JPP-5.2-013025 | SDG No.: | Q1241 |
| Lab Sample ID: | Q1241-10 | 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: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | SW5035 | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN085637.D | 1 | | 02/03/25 21:13 | VN020325 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-01-4 | Vinyl Chloride | 5.00 | U | 0.34 | 5.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 5.00 | U | 0.26 | 5.00 | ug/L |
| 78-93-3 | 2-Butanone | 25.0 | U | 1.30 | 25.0 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 5.00 | U | 0.25 | 5.00 | ug/L |
| 67-66-3 | Chloroform | 5.00 | U | 0.26 | 5.00 | ug/L |
| 71-43-2 | Benzene | 5.00 | U | 0.16 | 5.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 5.00 | U | 0.24 | 5.00 | ug/L |
| 79-01-6 | Trichloroethene | 5.00 | U | 0.32 | 5.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 5.00 | U | 0.25 | 5.00 | ug/L |
| 108-90-7 | Chlorobenzene | 5.00 | U | 0.13 | 5.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 54.9 | | 74 - 125 | 110% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 49.5 | | 75 - 124 | 99% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 53.5 | | 86 - 113 | 107% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 46.9 | | 77 - 121 | 94% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 158000 | 8.224 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 330000 | 9.1 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 316000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 114000 | 13.788 | | | |

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_N\Data\VN020325\
Data File : VN085637.D
Acq On : 03 Feb 2025 21:13
Operator : JC\MD
Sample : Q1241-10
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-5.2-013025

Quant Time: Feb 04 01:01:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

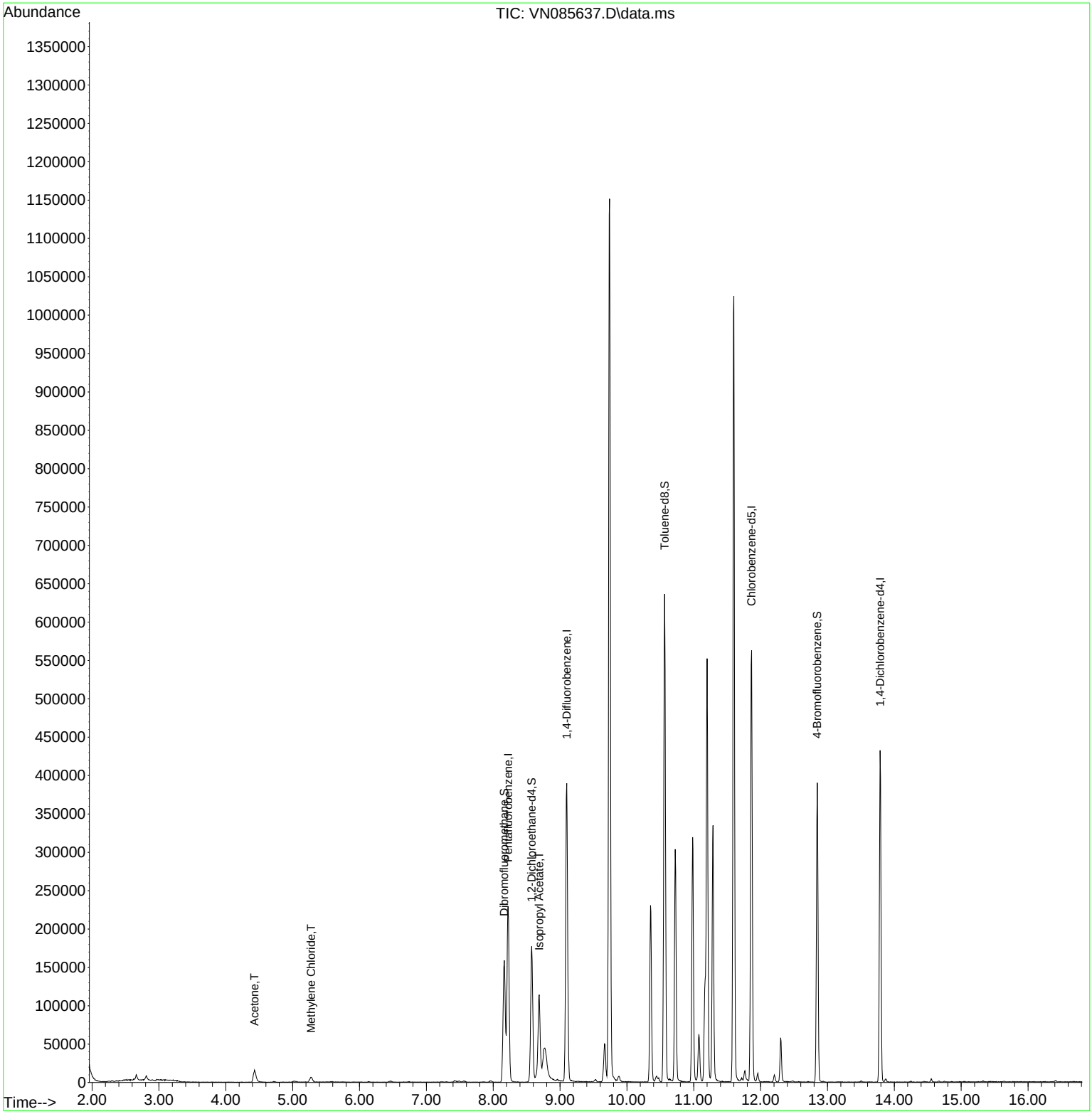
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 157669 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 330403 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 315638 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 114334 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.577 | 65 | 139635 | 54.864 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 109.720% | | | |
| 35) Dibromofluoromethane | 8.165 | 113 | 113349 | 49.450 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 98.900% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 435589 | 53.485 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 106.980% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 130787 | 46.946 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 93.900% | | | |
| Target Compounds | | | | | | Qvalue |
| 16) Acetone | 4.430 | 43 | 29252 | 35.571 | ug/l | 99 |
| 20) Methylene Chloride | 5.277 | 84 | 5204 | 2.556 | ug/l # | 75 |
| 43) Isopropyl Acetate | 8.688 | 43 | 130809 | 25.141 | ug/l # | 88 |

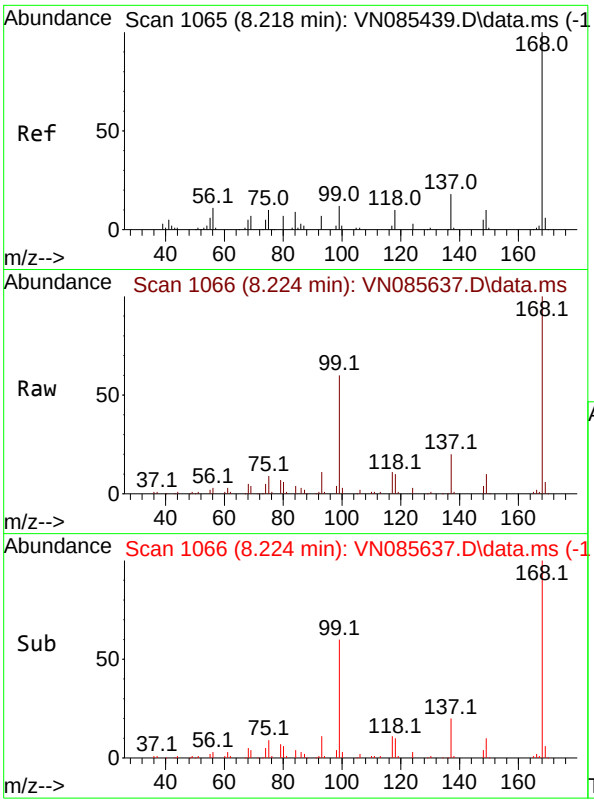
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085637.D
Acq On : 03 Feb 2025 21:13
Operator : JC\MD
Sample : Q1241-10
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-5.2-013025

Quant Time: Feb 04 01:01:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration



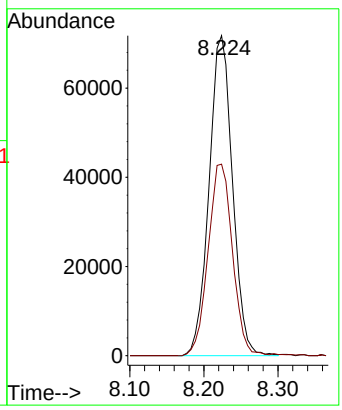


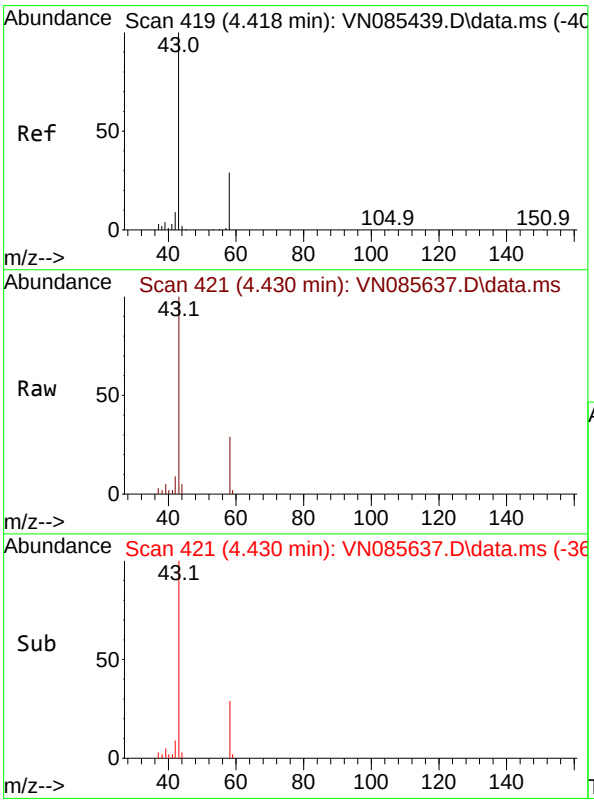

#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085637.D
Acq: 03 Feb 2025 21:13

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-5.2-013025

Tgt Ion:168 Resp: 157669

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 59.9 | 53.6 | 80.4 |

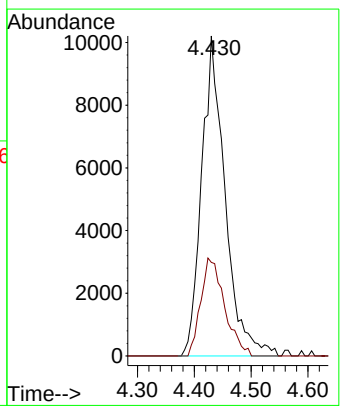


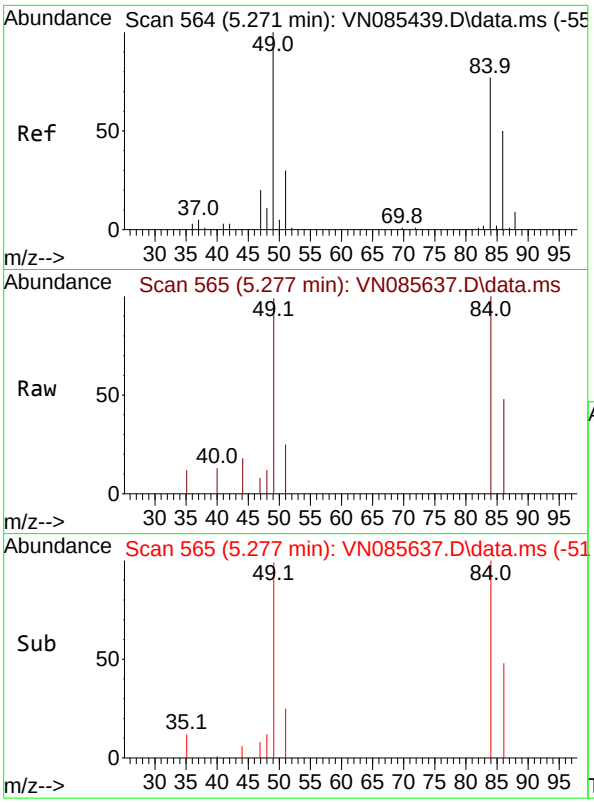




#16
Acetone
Concen: 35.571 ug/l
RT: 4.430 min Scan# 421
Delta R.T. 0.012 min
Lab File: VN085637.D
Acq: 03 Feb 2025 21:13

Tgt Ion: 43 Resp: 29252

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 29.3 | 23.8 | 35.6 |



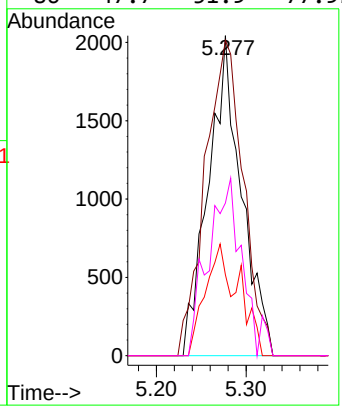


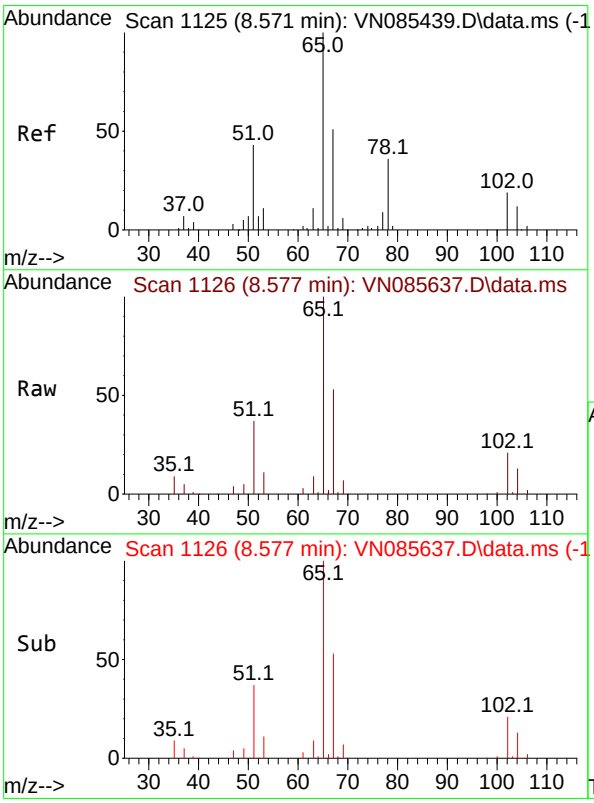

#20
Methylene Chloride
Concen: 2.556 ug/l
RT: 5.277 min Scan# 5
Delta R.T. 0.006 min
Lab File: VN085637.D
Acq: 03 Feb 2025 21:13

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-5.2-013025

Tgt Ion: 84 Resp: 5204

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 98.5 | 104.1 | 156.1# |
| 51 | 25.3 | 31.0 | 46.4# |
| 86 | 47.7 | 51.9 | 77.9# |

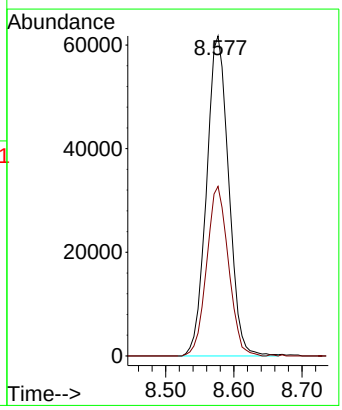


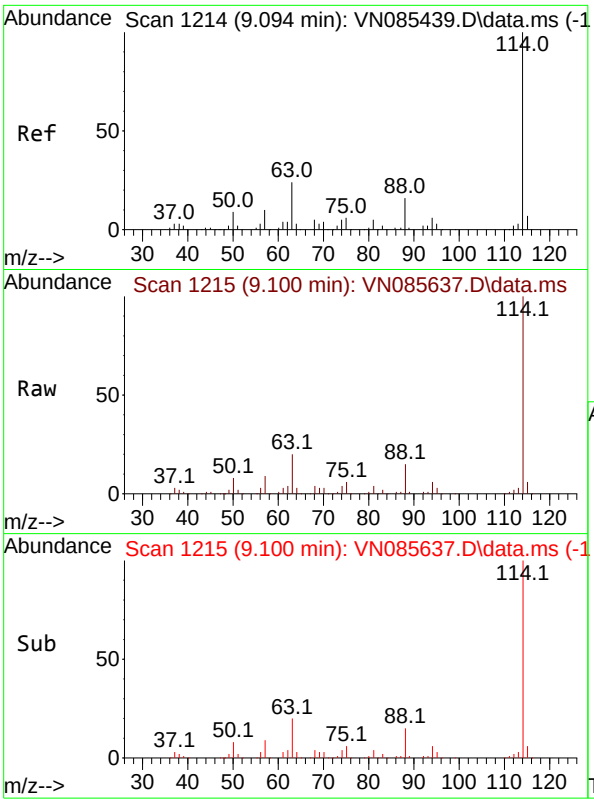




#33
1,2-Dichloroethane-d4
Concen: 54.864 ug/l
RT: 8.577 min Scan# 1126
Delta R.T. 0.006 min
Lab File: VN085637.D
Acq: 03 Feb 2025 21:13

Tgt Ion: 65 Resp: 139635

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 52.2 | 0.0 | 101.6 |



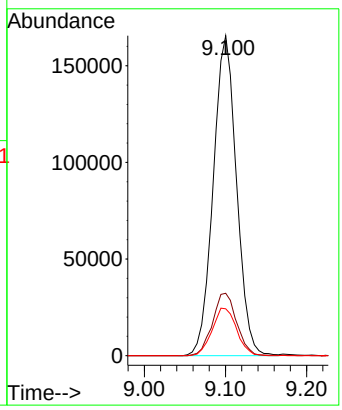


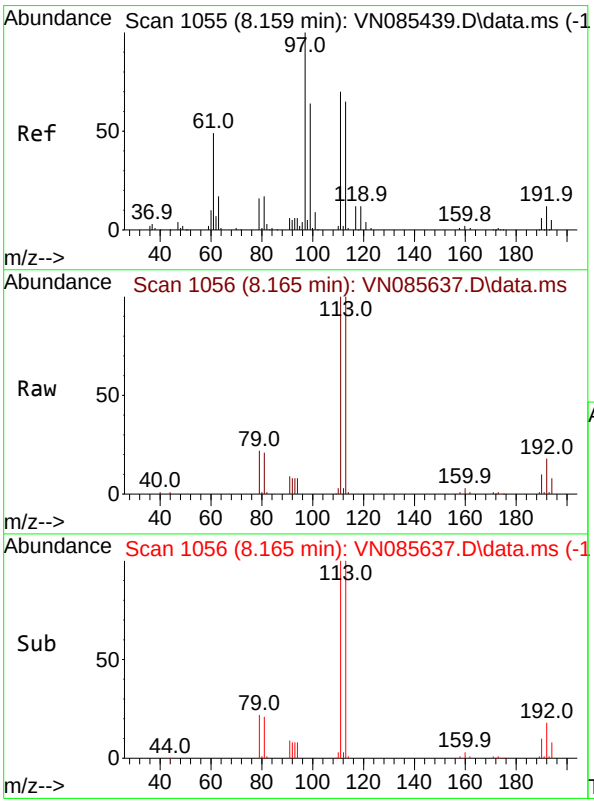

#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085637.D
Acq: 03 Feb 2025 21:13

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-5.2-013025

Tgt Ion:114 Resp: 330403

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 19.5 | 0.0 | 47.6 |
| 88 | 14.7 | 0.0 | 32.6 |

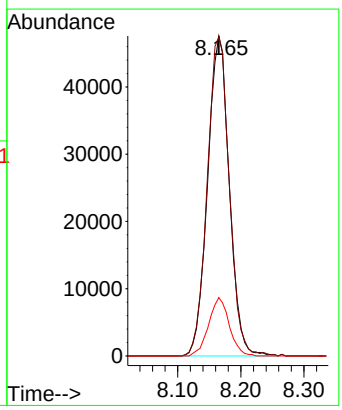


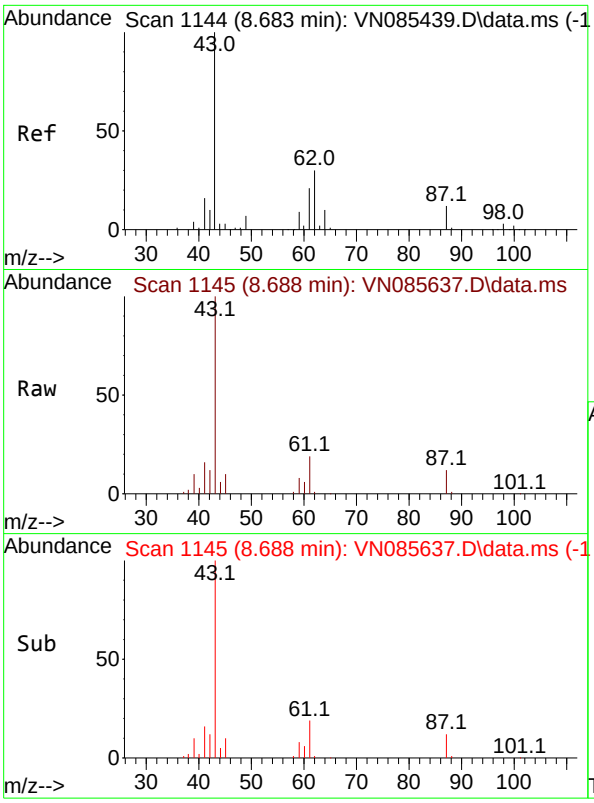




#35
Dibromofluoromethane
Concen: 49.450 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.006 min
Lab File: VN085637.D
Acq: 03 Feb 2025 21:13

Tgt Ion:113 Resp: 113349

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 101.6 | 82.7 | 124.1 |
| 192 | 17.4 | 14.3 | 21.5 |



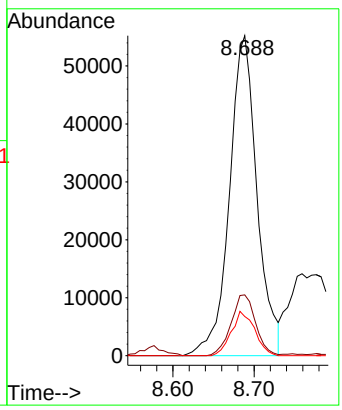


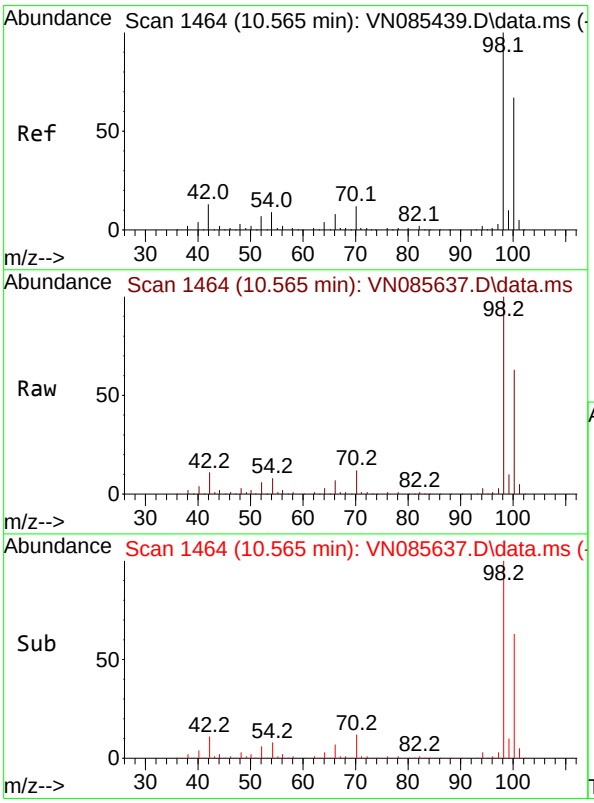

#43
Isopropyl Acetate
Concen: 25.141 ug/l
RT: 8.688 min Scan# 11
Delta R.T. 0.006 min
Lab File: VN085637.D
Acq: 03 Feb 2025 21:13

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-5.2-013025

Tgt Ion: 43 Resp: 130809

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 17.0 | 20.7 | 31.1# |
| 87 | 11.7 | 9.8 | 14.8 |

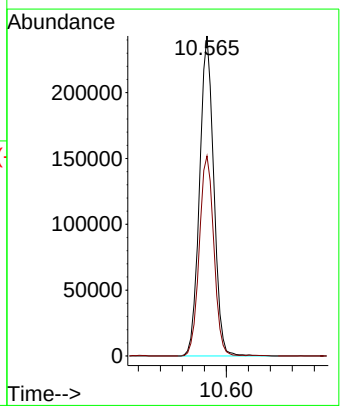


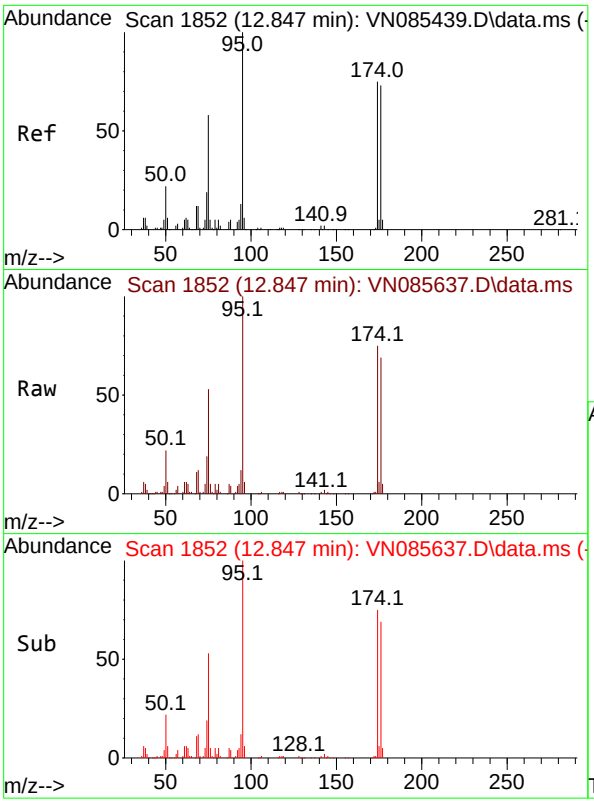




#50
Toluene-d8
Concen: 53.485 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN085637.D
Acq: 03 Feb 2025 21:13

Tgt Ion: 98 Resp: 435589

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.1 | 52.2 | 78.4 |



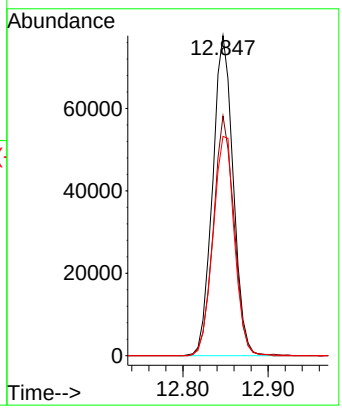


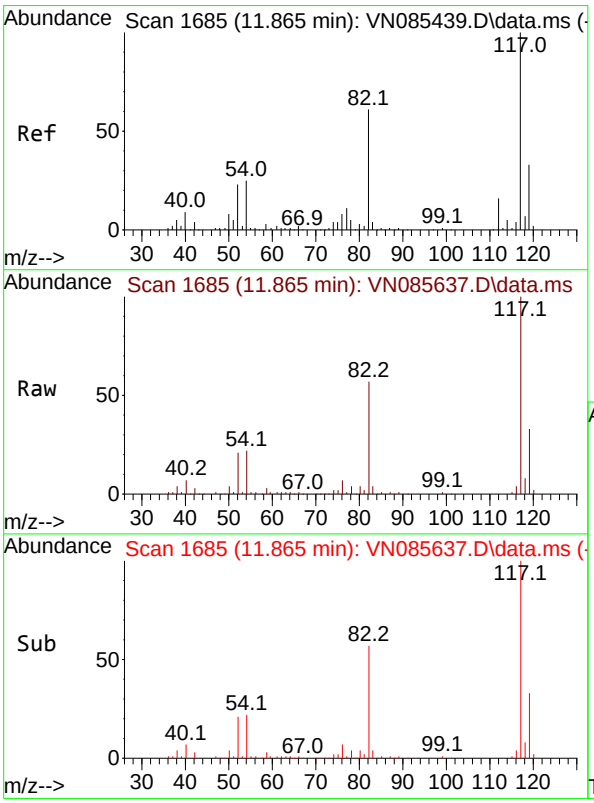

#62
4-Bromofluorobenzene
Concen: 46.946 ug/l
RT: 12.847 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085637.D
Acq: 03 Feb 2025 21:13

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-5.2-013025

Tgt Ion: 95 Resp: 130787

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 75.0 | 0.0 | 145.0 |
| 176 | 71.4 | 0.0 | 142.4 |

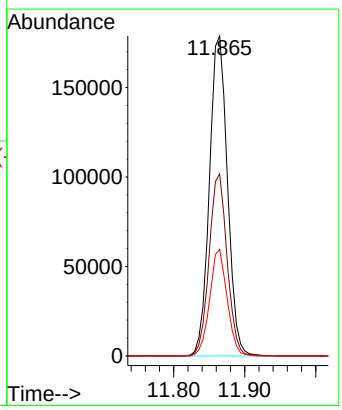


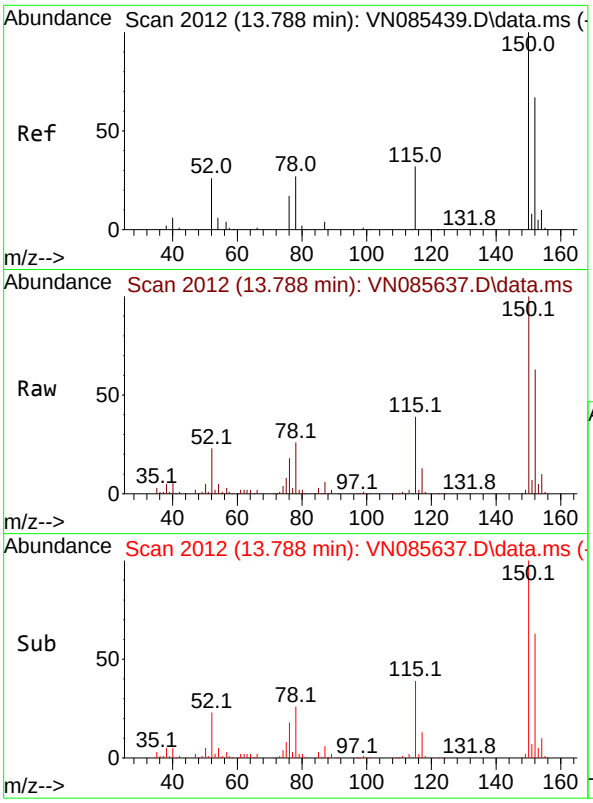




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VN085637.D
Acq: 03 Feb 2025 21:13

Tgt Ion:117 Resp: 315638

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 56.9 | 48.6 | 72.8 |
| 119 | 33.3 | 26.6 | 39.8 |



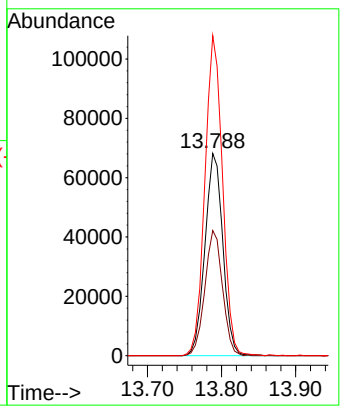



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN085637.D
Acq: 03 Feb 2025 21:13

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-5.2-013025

Tgt Ion:152 Resp: 114334

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 61.0 | 31.1 | 93.3 |
| 150 | 155.3 | 0.0 | 343.6 |



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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | RU2 Engineering, LLC | Date Collected: | 01/30/25 |
| Project: | NYCDDC SANTWOBR Brooklyn Bridge BBMCR | Date Received: | 01/30/25 |
| Client Sample ID: | JPP-5.4-013025 | SDG No.: | Q1241 |
| Lab Sample ID: | Q1241-14 | 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: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | SW5035 | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN085638.D | 1 | | 02/03/25 21:37 | VN020325 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-01-4 | Vinyl Chloride | 5.00 | U | 0.34 | 5.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 5.00 | U | 0.26 | 5.00 | ug/L |
| 78-93-3 | 2-Butanone | 25.0 | U | 1.30 | 25.0 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 5.00 | U | 0.25 | 5.00 | ug/L |
| 67-66-3 | Chloroform | 5.00 | U | 0.26 | 5.00 | ug/L |
| 71-43-2 | Benzene | 5.00 | U | 0.16 | 5.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 5.00 | U | 0.24 | 5.00 | ug/L |
| 79-01-6 | Trichloroethene | 5.00 | U | 0.32 | 5.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 5.00 | U | 0.25 | 5.00 | ug/L |
| 108-90-7 | Chlorobenzene | 5.00 | U | 0.13 | 5.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 54.5 | | 74 - 125 | 109% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 49.9 | | 75 - 124 | 100% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 53.8 | | 86 - 113 | 108% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 45.6 | | 77 - 121 | 91% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 164000 | 8.224 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 344000 | 9.1 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 331000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 116000 | 13.788 | | | |

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_N\Data\VN020325\
Data File : VN085638.D
Acq On : 03 Feb 2025 21:37
Operator : JC\MD
Sample : Q1241-14
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 23 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-5.4-013025

Quant Time: Feb 04 01:01:09 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

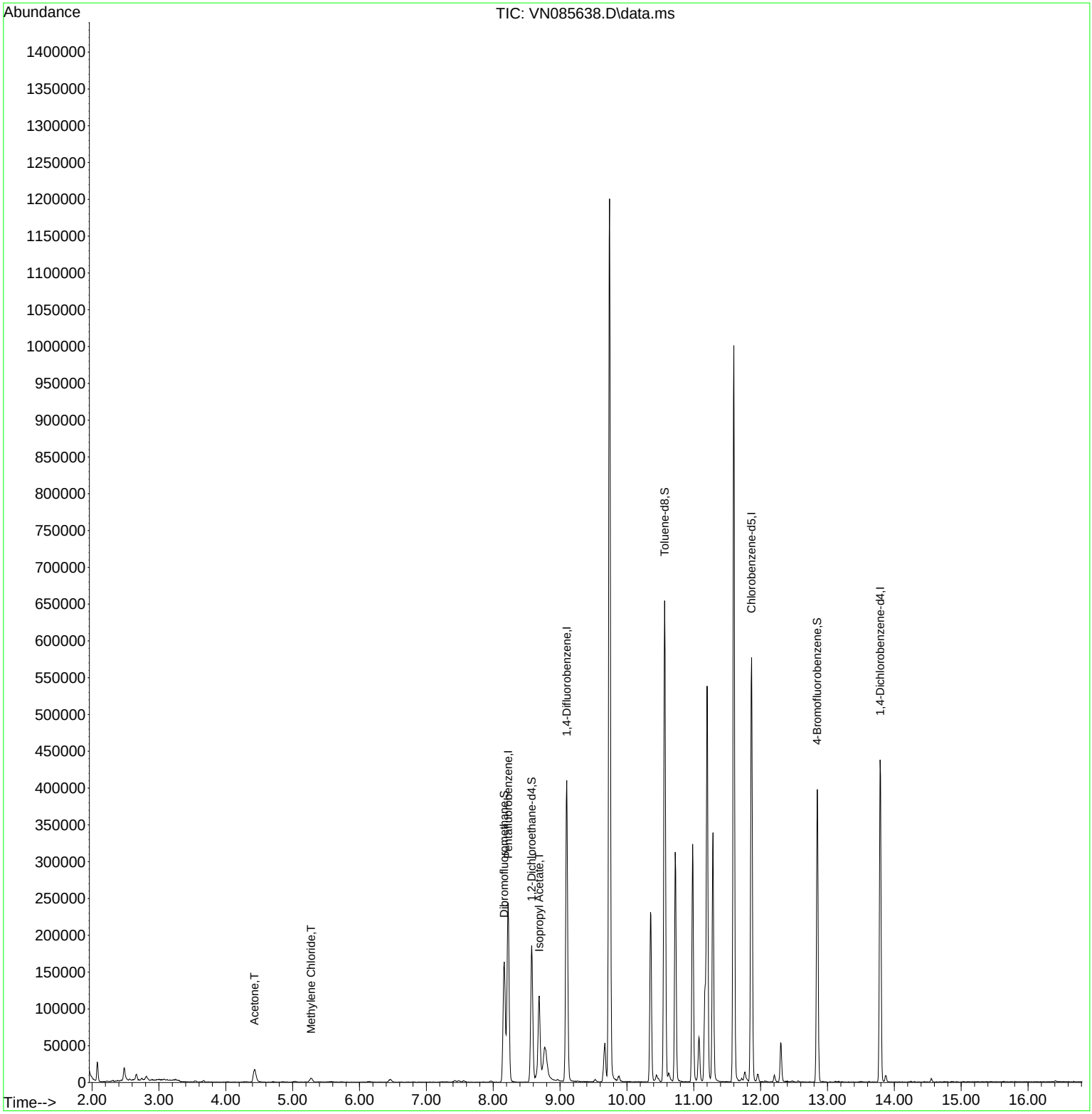
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 163991 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 343832 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 330622 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 116237 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.577 | 65 | 144365 | 54.536 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 109.080% | | | |
| 35) Dibromofluoromethane | 8.165 | 113 | 119058 | 49.912 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 99.820% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 455608 | 53.758 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 107.520% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 132098 | 45.565 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 91.120% | | | |
| Target Compounds | | | | | | Qvalue |
| 16) Acetone | 4.430 | 43 | 33701 | 39.402 | ug/l | 98 |
| 20) Methylene Chloride | 5.277 | 84 | 4200 | 1.984 | ug/l # | 85 |
| 43) Isopropyl Acetate | 8.688 | 43 | 130603 | 24.121 | ug/l # | 89 |

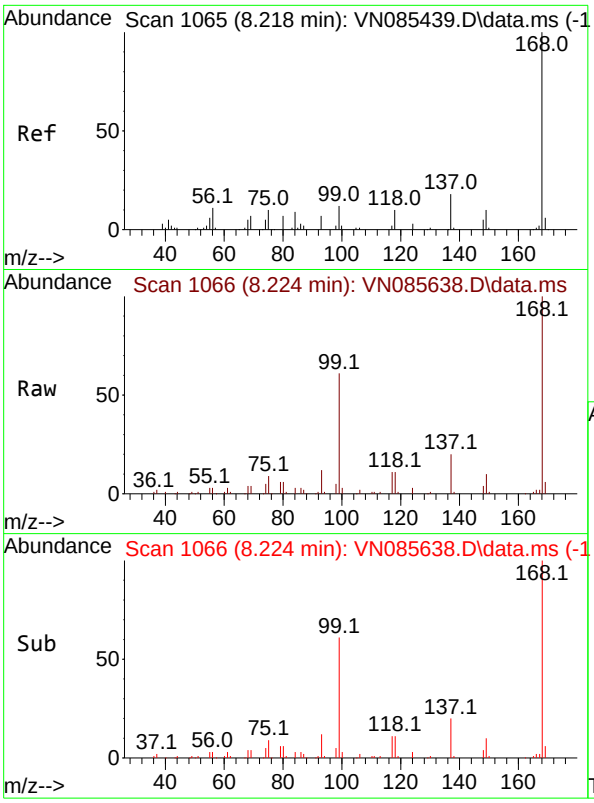
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085638.D
Acq On : 03 Feb 2025 21:37
Operator : JC\MD
Sample : Q1241-14
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 23 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-5.4-013025

Quant Time: Feb 04 01:01:09 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration



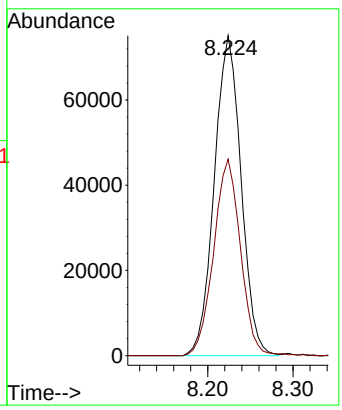


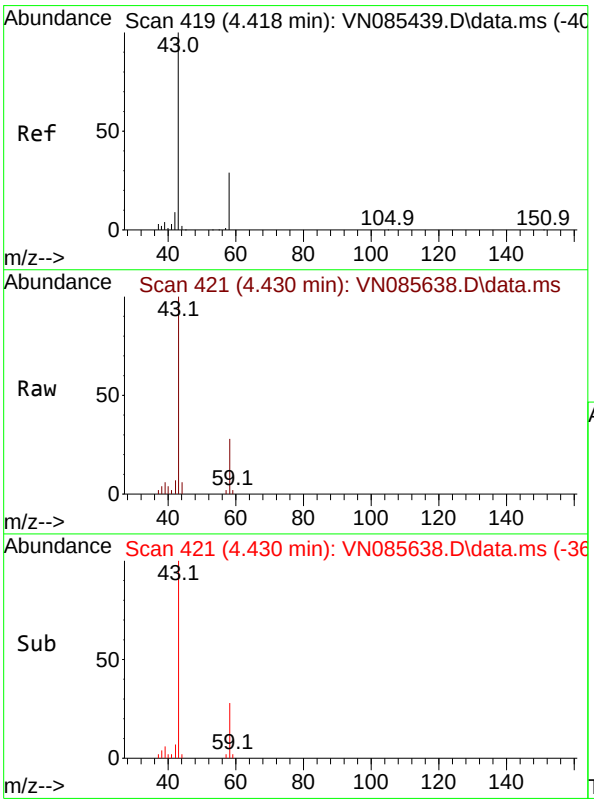

#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085638.D
Acq: 03 Feb 2025 21:37

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-5.4-013025

Tgt Ion:168 Resp: 163991

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 61.4 | 53.6 | 80.4 |

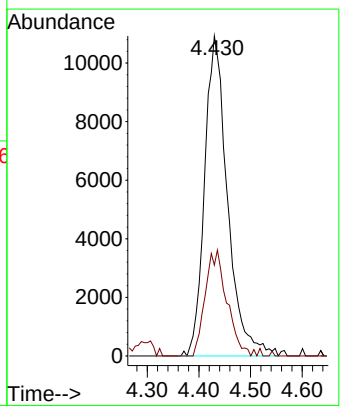


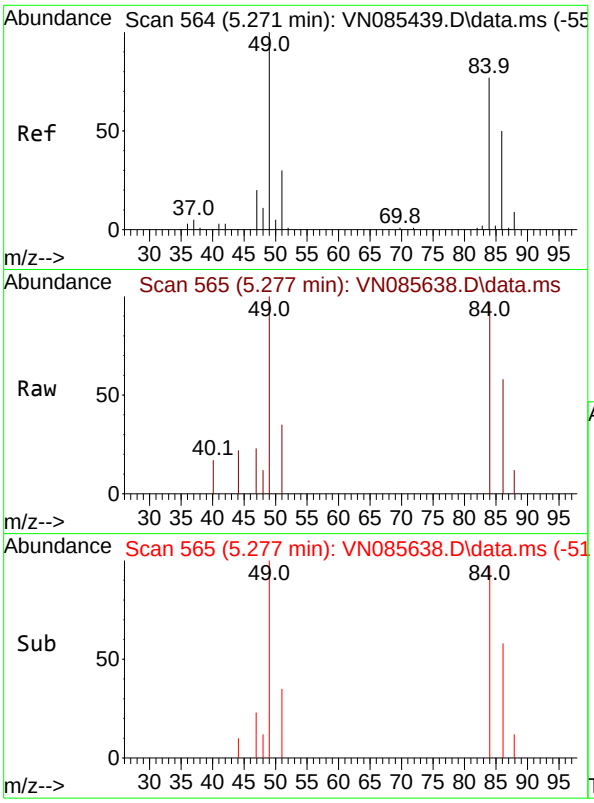




#16
Acetone
Concen: 39.402 ug/l
RT: 4.430 min Scan# 421
Delta R.T. 0.012 min
Lab File: VN085638.D
Acq: 03 Feb 2025 21:37

Tgt Ion: 43 Resp: 33701

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 28.4 | 23.8 | 35.6 |



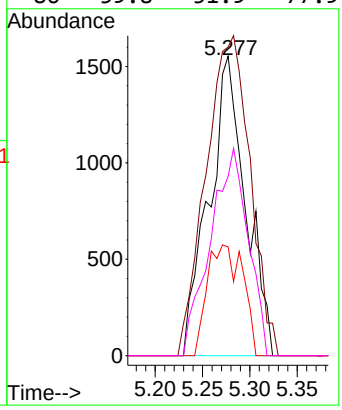


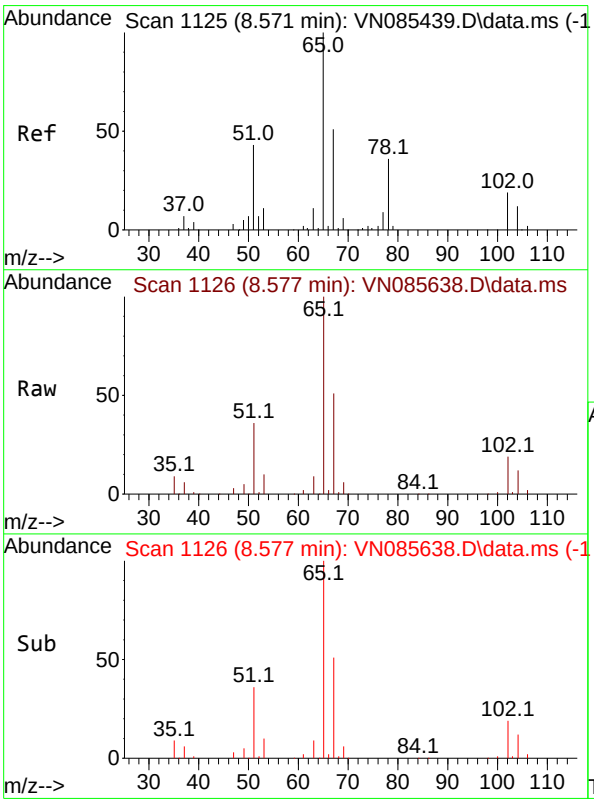

#20
Methylene Chloride
Concen: 1.984 ug/l
RT: 5.277 min Scan# 5
Delta R.T. 0.006 min
Lab File: VN085638.D
Acq: 03 Feb 2025 21:37

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-5.4-013025

Tgt Ion: 84 Resp: 4200

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 103.0 | 104.1 | 156.1# |
| 51 | 36.3 | 31.0 | 46.4 |
| 86 | 59.8 | 51.9 | 77.9 |

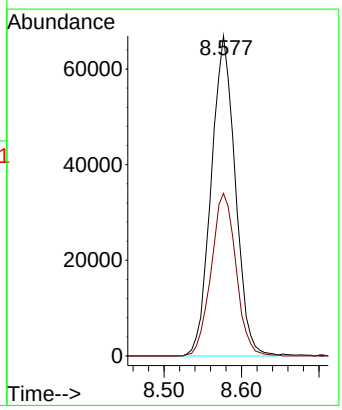


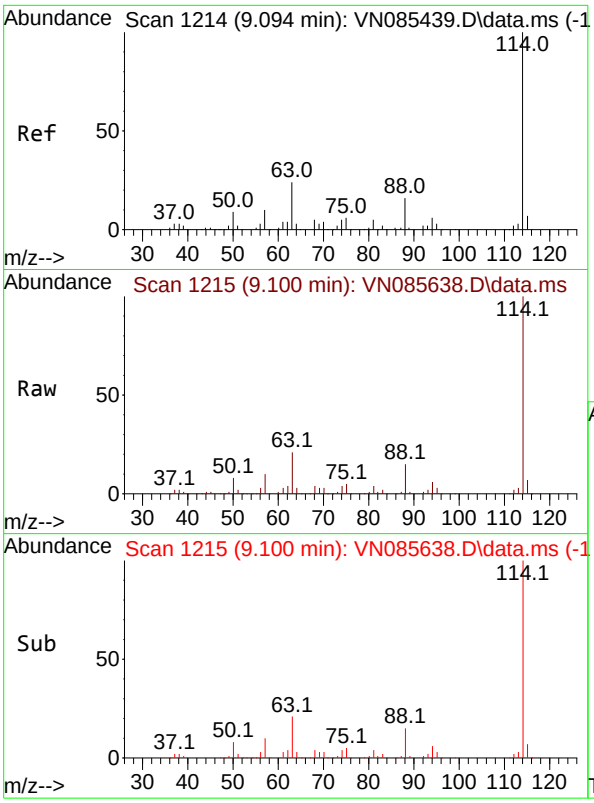




#33
1,2-Dichloroethane-d4
Concen: 54.536 ug/l
RT: 8.577 min Scan# 1126
Delta R.T. 0.006 min
Lab File: VN085638.D
Acq: 03 Feb 2025 21:37

Tgt Ion: 65 Resp: 144365

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 52.4 | 0.0 | 101.6 |



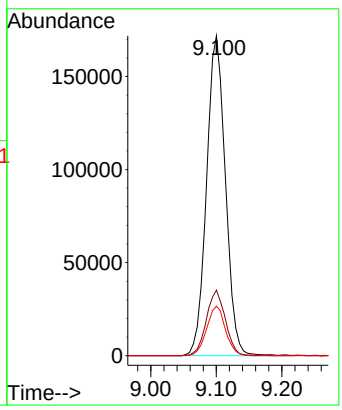


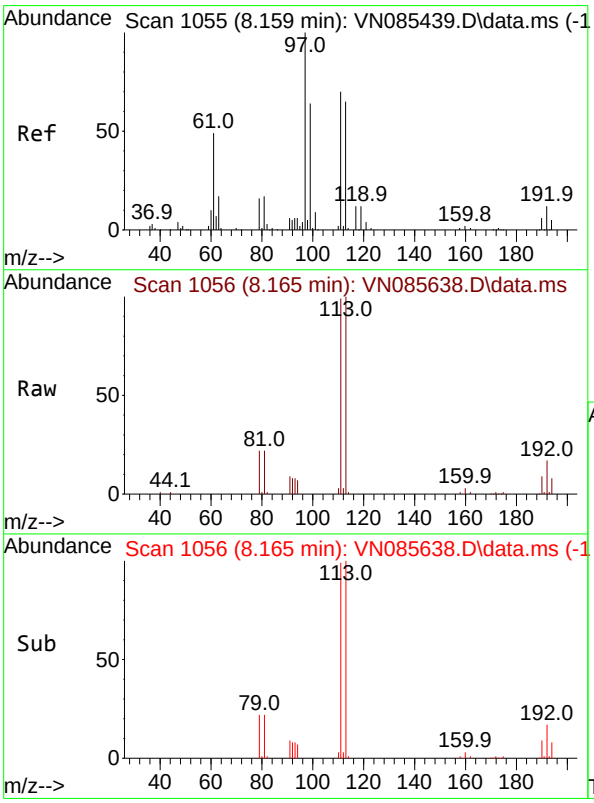

#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085638.D
Acq: 03 Feb 2025 21:37

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-5.4-013025

Tgt Ion:114 Resp: 343832

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 20.5 | 0.0 | 47.6 |
| 88 | 15.5 | 0.0 | 32.6 |

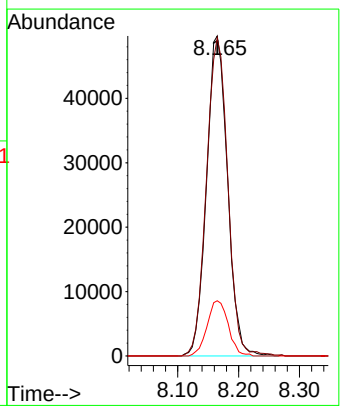


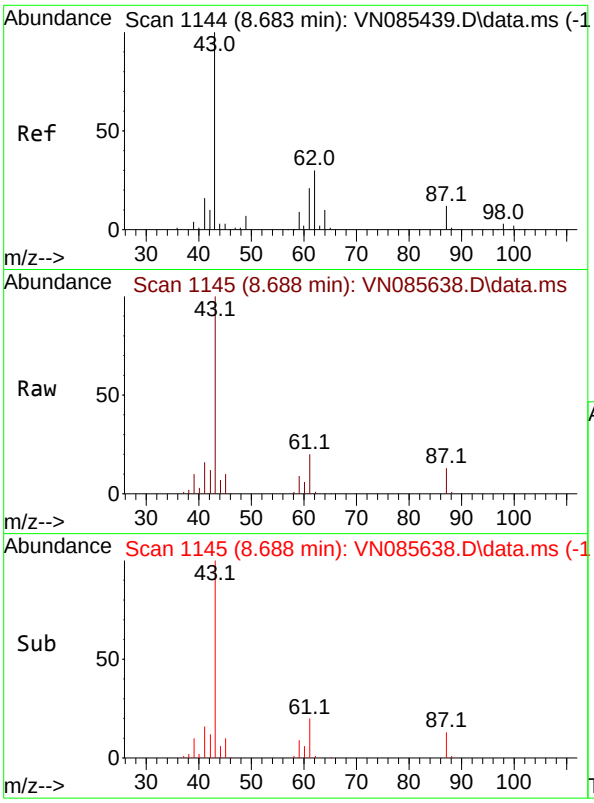




#35
Dibromofluoromethane
Concen: 49.912 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.006 min
Lab File: VN085638.D
Acq: 03 Feb 2025 21:37

Tgt Ion:113 Resp: 119058

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 101.1 | 82.7 | 124.1 |
| 192 | 17.3 | 14.3 | 21.5 |



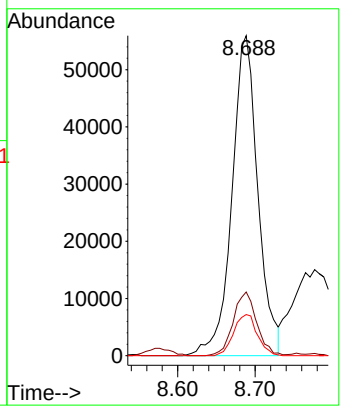


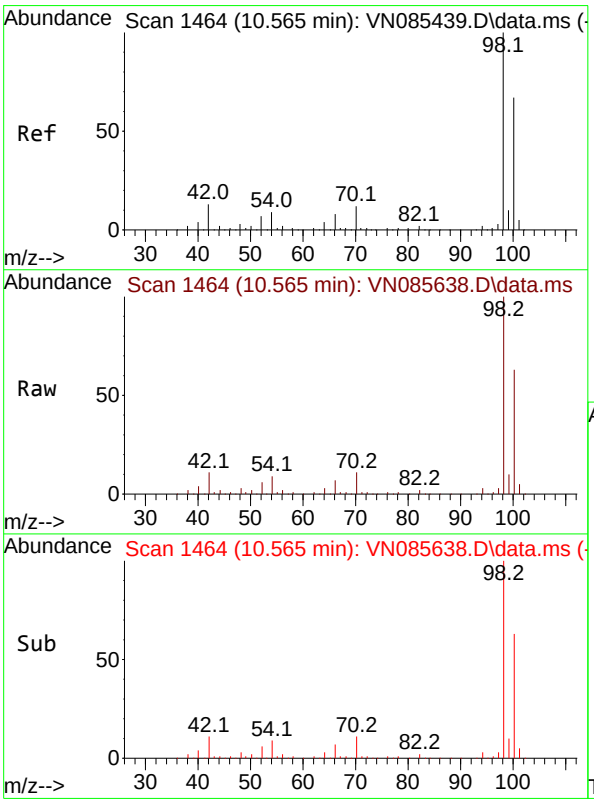

#43
Isopropyl Acetate
Concen: 24.121 ug/l
RT: 8.688 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085638.D
Acq: 03 Feb 2025 21:37

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-5.4-013025

Tgt Ion: 43 Resp: 130603

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 18.0 | 20.7 | 31.1# |
| 87 | 11.7 | 9.8 | 14.8 |

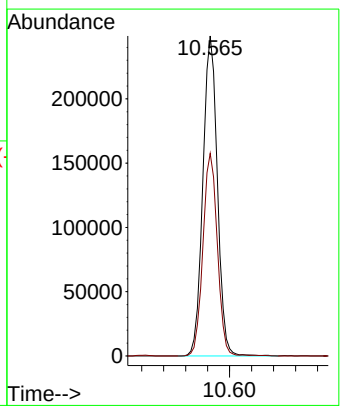


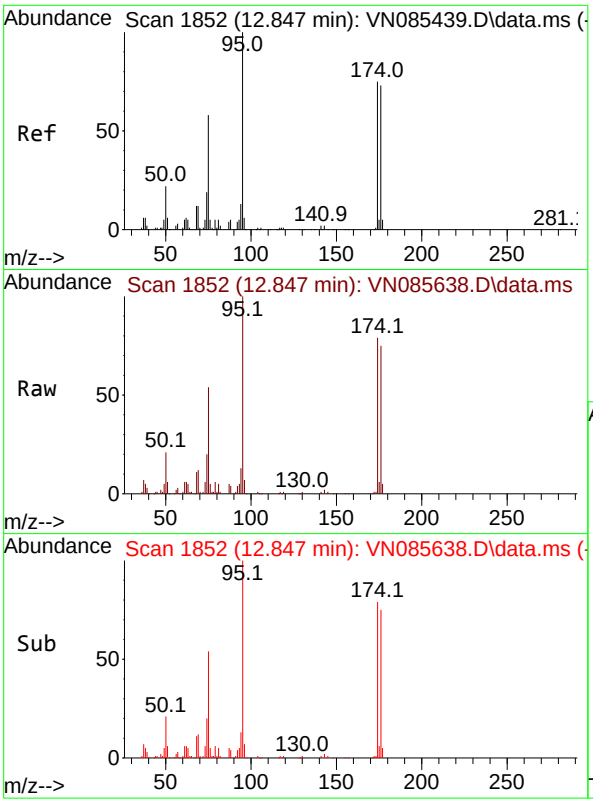




#50
Toluene-d8
Concen: 53.758 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN085638.D
Acq: 03 Feb 2025 21:37

Tgt Ion: 98 Resp: 455608

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 63.0 | 52.2 | 78.4 |



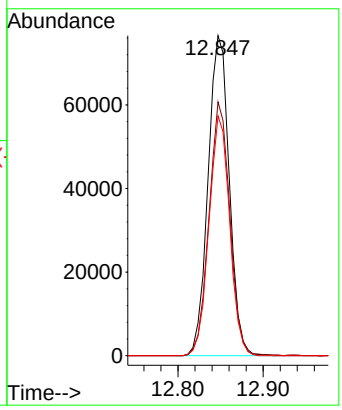


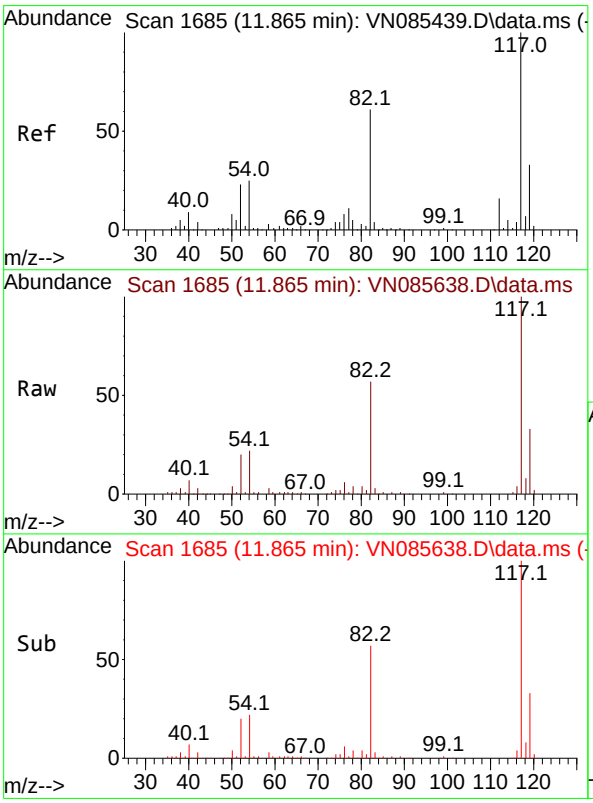

#62
4-Bromofluorobenzene
Concen: 45.565 ug/l
RT: 12.847 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085638.D
Acq: 03 Feb 2025 21:37

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-5.4-013025

Tgt Ion: 95 Resp: 132098

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 78.2 | 0.0 | 145.0 |
| 176 | 73.1 | 0.0 | 142.4 |

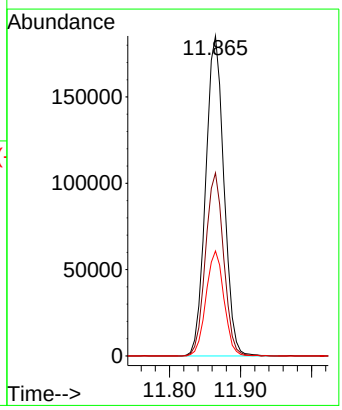


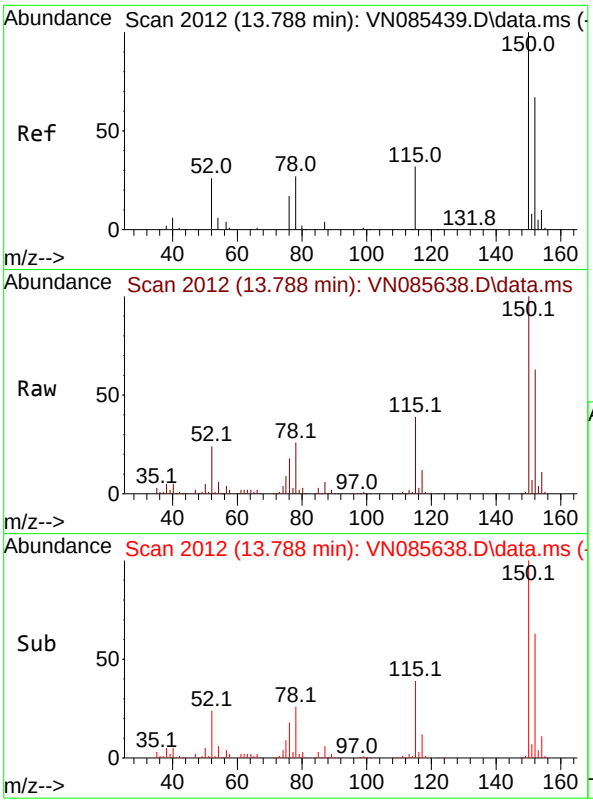




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VN085638.D
Acq: 03 Feb 2025 21:37

Tgt Ion:117 Resp: 330622

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 57.2 | 48.6 | 72.8 |
| 119 | 32.8 | 26.6 | 39.8 |



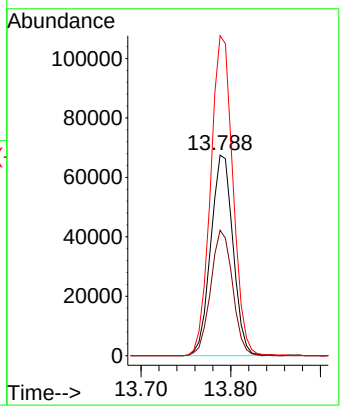



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN085638.D
Acq: 03 Feb 2025 21:37

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-5.4-013025

Tgt Ion:152 Resp: 116237

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 61.5 | 31.1 | 93.3 |
| 150 | 160.0 | 0.0 | 343.6 |



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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | RU2 Engineering, LLC | Date Collected: | 01/30/25 |
| Project: | NYCDDC SANTWOBR Brooklyn Bridge BBMCR | Date Received: | 01/30/25 |
| Client Sample ID: | JPP-51.4-013025 | SDG No.: | Q1241 |
| Lab Sample ID: | Q1241-18 | 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: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | SW5035 | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN085639.D | 1 | | 02/03/25 22:01 | VN020325 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-01-4 | Vinyl Chloride | 5.00 | U | 0.34 | 5.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 5.00 | U | 0.26 | 5.00 | ug/L |
| 78-93-3 | 2-Butanone | 25.0 | U | 1.30 | 25.0 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 5.00 | U | 0.25 | 5.00 | ug/L |
| 67-66-3 | Chloroform | 5.00 | U | 0.26 | 5.00 | ug/L |
| 71-43-2 | Benzene | 5.00 | U | 0.16 | 5.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 5.00 | U | 0.24 | 5.00 | ug/L |
| 79-01-6 | Trichloroethene | 5.00 | U | 0.32 | 5.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 5.00 | U | 0.25 | 5.00 | ug/L |
| 108-90-7 | Chlorobenzene | 5.00 | U | 0.13 | 5.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 54.1 | | 74 - 125 | 108% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 49.9 | | 75 - 124 | 100% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 52.5 | | 86 - 113 | 105% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 45.1 | | 77 - 121 | 90% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 168000 | 8.224 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 350000 | 9.1 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 332000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 119000 | 13.788 | | | |

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_N\Data\VN020325\
Data File : VN085639.D
Acq On : 03 Feb 2025 22:01
Operator : JC\MD
Sample : Q1241-18
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 24 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-51.4-013025

Quant Time: Feb 04 01:01:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

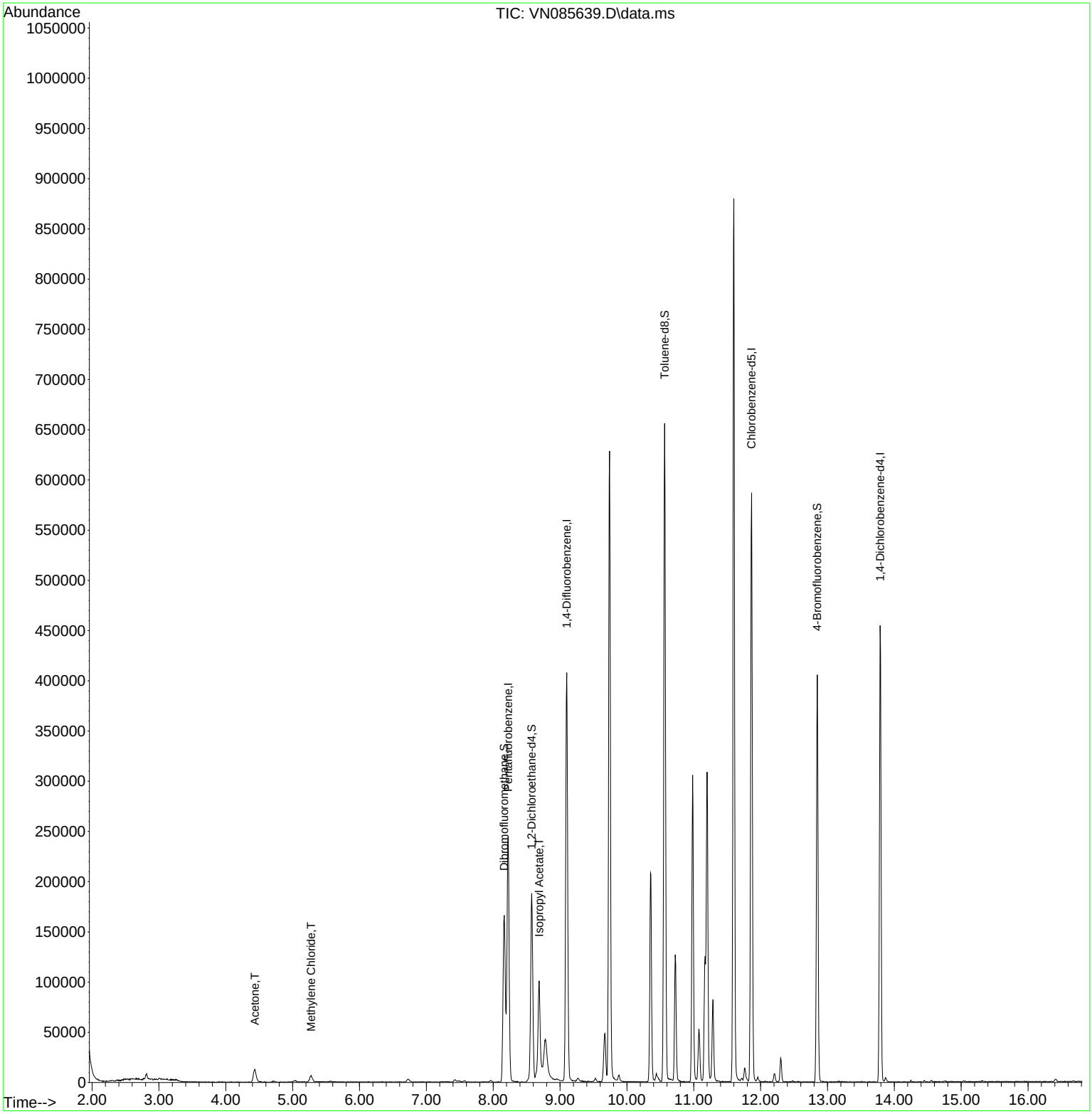
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 168419 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 349686 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 332324 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 119364 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.577 | 65 | 147102 | 54.109 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 108.220% | | | |
| 35) Dibromofluoromethane | 8.165 | 113 | 121025 | 49.887 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 99.780% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 452380 | 52.484 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 104.960% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 132884 | 45.069 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 90.140% | | | |
| Target Compounds | | | | | | Qvalue |
| 16) Acetone | 4.436 | 43 | 24974 | 28.431 | ug/l | 96 |
| 20) Methylene Chloride | 5.277 | 84 | 4678 | 2.151 | ug/l | 93 |
| 43) Isopropyl Acetate | 8.688 | 43 | 113800 | 20.666 | ug/l # | 87 |

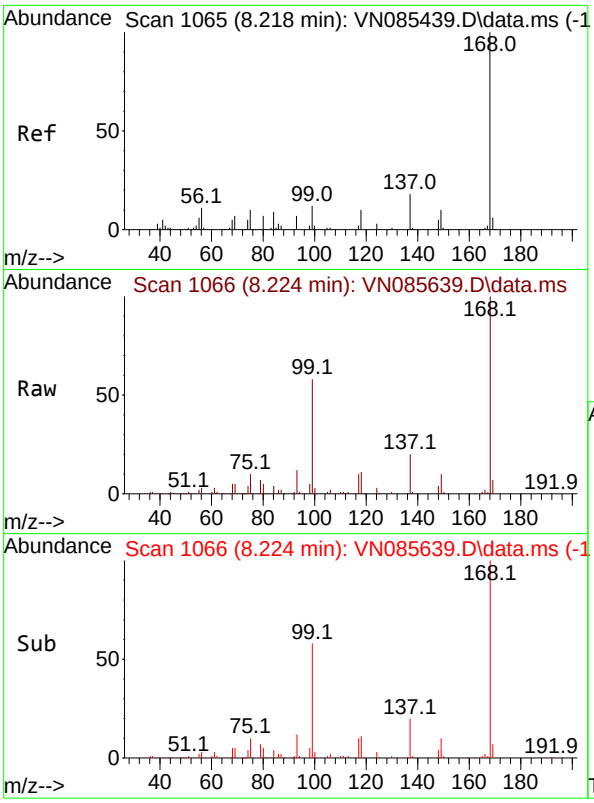
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085639.D
Acq On : 03 Feb 2025 22:01
Operator : JC\MD
Sample : Q1241-18
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 24 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-51.4-013025

Quant Time: Feb 04 01:01:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration



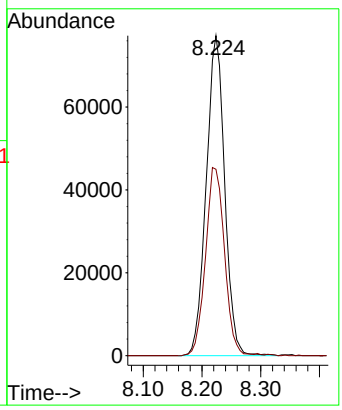


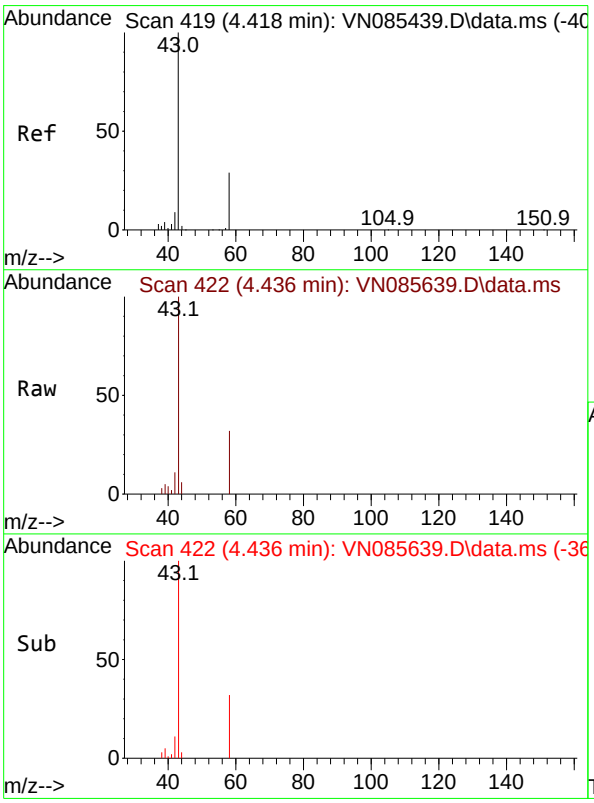

#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085639.D
Acq: 03 Feb 2025 22:01

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-51.4-013025

Tgt Ion:168 Resp: 168419

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 58.2 | 53.6 | 80.4 |

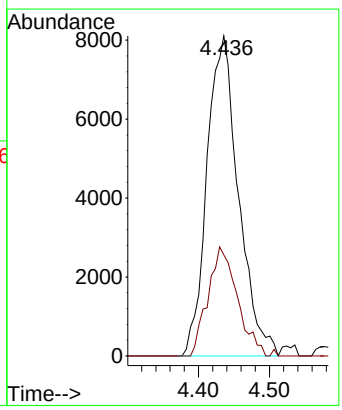


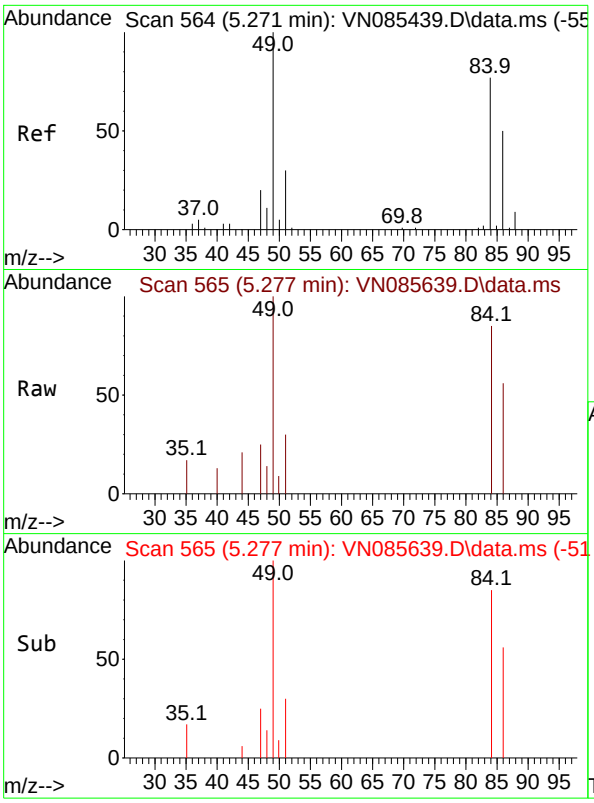




#16
Acetone
Concen: 28.431 ug/l
RT: 4.436 min Scan# 422
Delta R.T. 0.018 min
Lab File: VN085639.D
Acq: 03 Feb 2025 22:01

Tgt Ion: 43 Resp: 24974

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 31.6 | 23.8 | 35.6 |



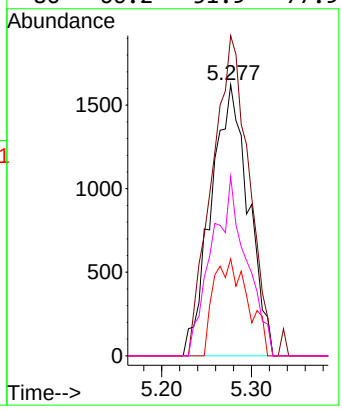


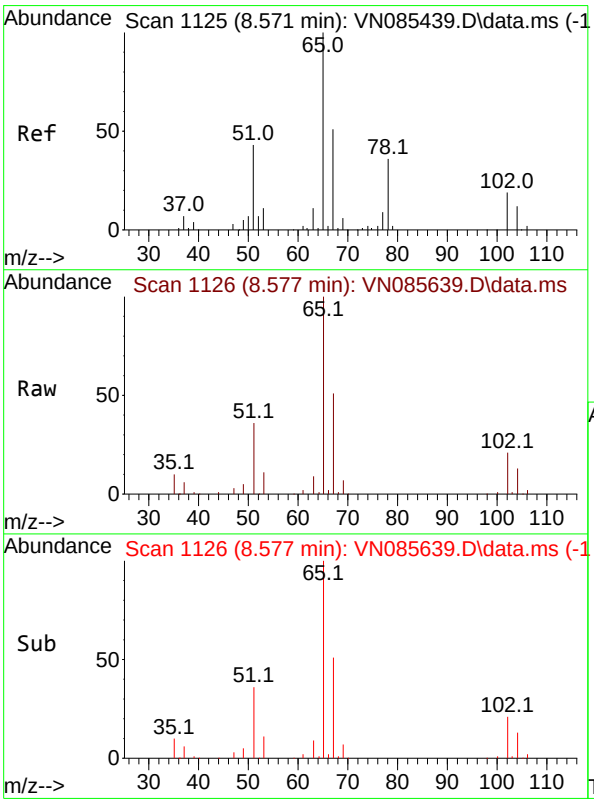

#20
Methylene Chloride
Concen: 2.151 ug/l
RT: 5.277 min Scan# 5
Delta R.T. 0.006 min
Lab File: VN085639.D
Acq: 03 Feb 2025 22:01

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-51.4-013025

Tgt Ion: 84 Resp: 4678

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 118.1 | 104.1 | 156.1 |
| 51 | 35.8 | 31.0 | 46.4 |
| 86 | 66.2 | 51.9 | 77.9 |

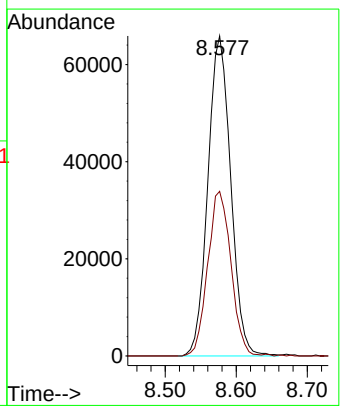


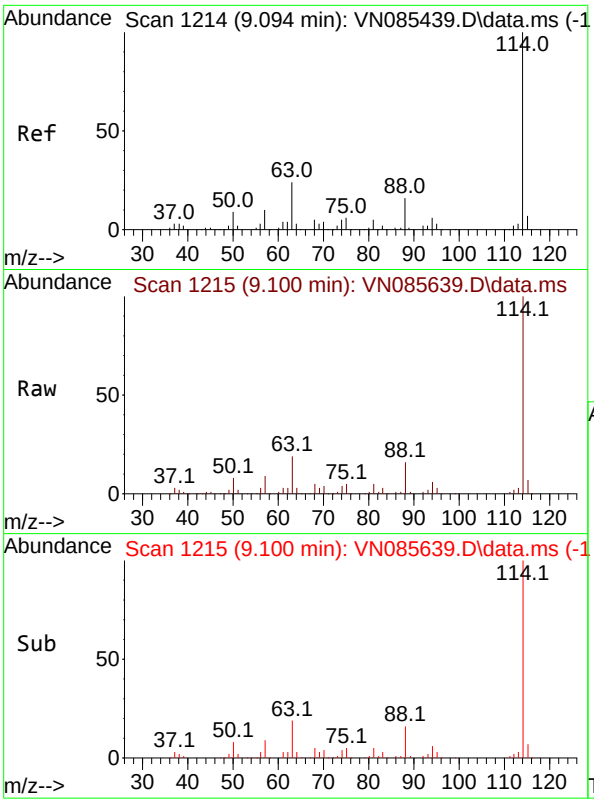




#33
1,2-Dichloroethane-d4
Concen: 54.109 ug/l
RT: 8.577 min Scan# 1126
Delta R.T. 0.006 min
Lab File: VN085639.D
Acq: 03 Feb 2025 22:01

Tgt Ion: 65 Resp: 147102

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 52.2 | 0.0 | 101.6 |



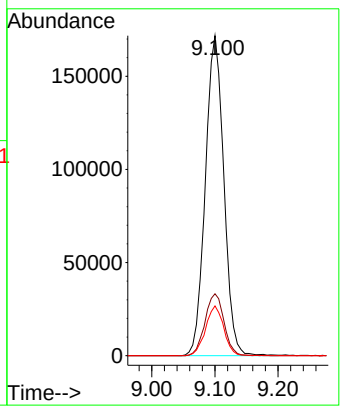


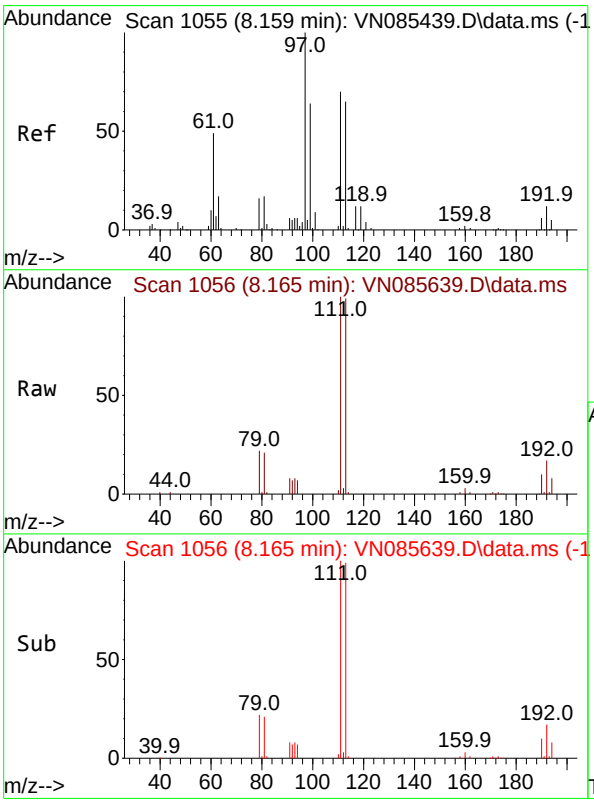

#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085639.D
Acq: 03 Feb 2025 22:01

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-51.4-013025

Tgt Ion:114 Resp: 349686

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 19.3 | 0.0 | 47.6 |
| 88 | 15.5 | 0.0 | 32.6 |

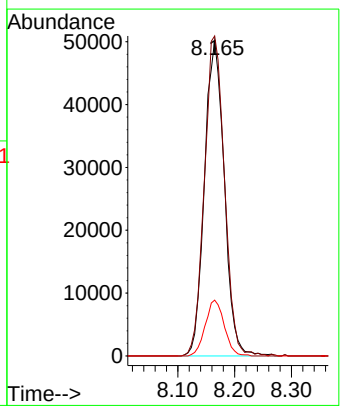


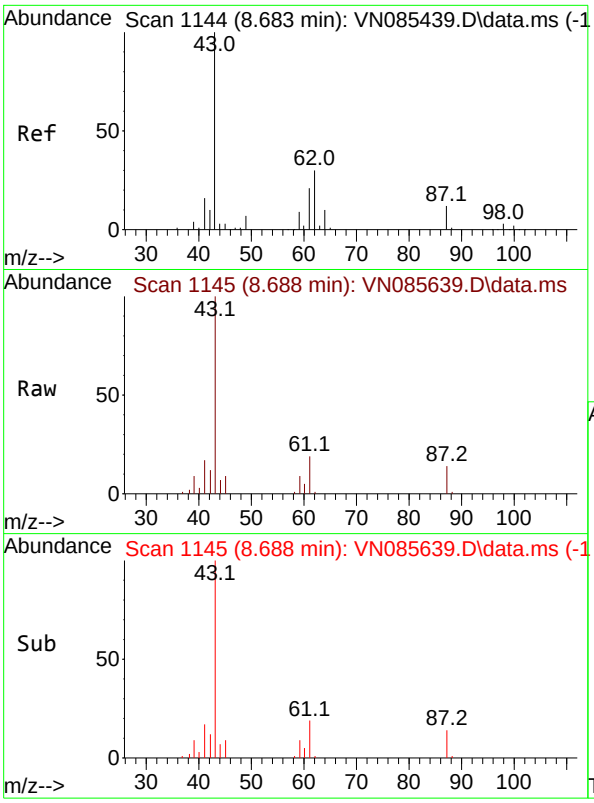




#35
Dibromofluoromethane
Concen: 49.887 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.006 min
Lab File: VN085639.D
Acq: 03 Feb 2025 22:01

Tgt Ion:113 Resp: 121025

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 103.1 | 82.7 | 124.1 |
| 192 | 17.0 | 14.3 | 21.5 |



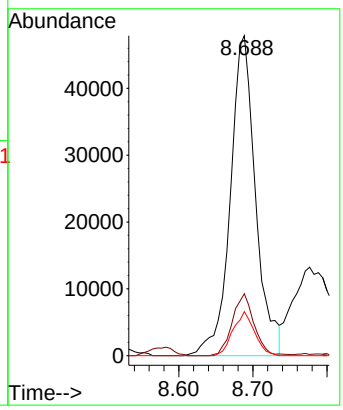


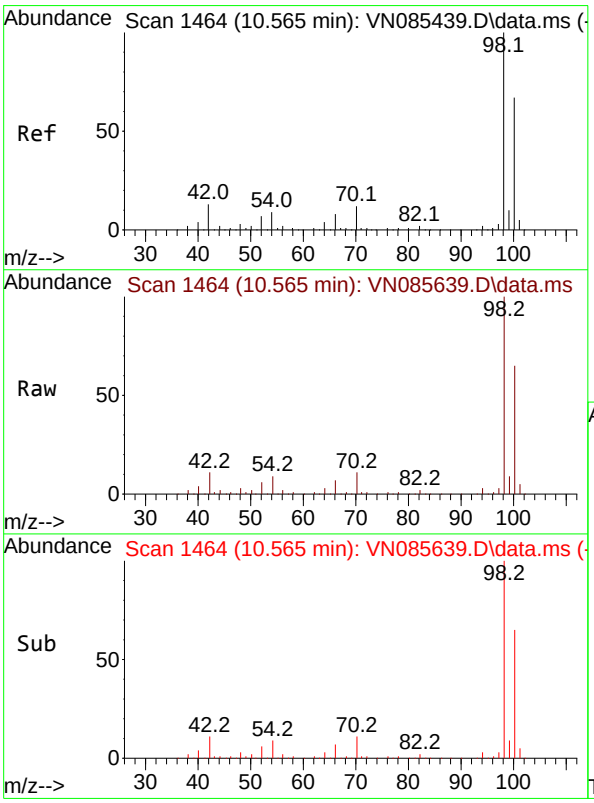

#43
Isopropyl Acetate
Concen: 20.666 ug/l
RT: 8.688 min Scan# 11
Delta R.T. 0.006 min
Lab File: VN085639.D
Acq: 03 Feb 2025 22:01

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-51.4-013025

Tgt Ion: 43 Resp: 113800

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 16.7 | 20.7 | 31.1# |
| 87 | 11.6 | 9.8 | 14.8 |

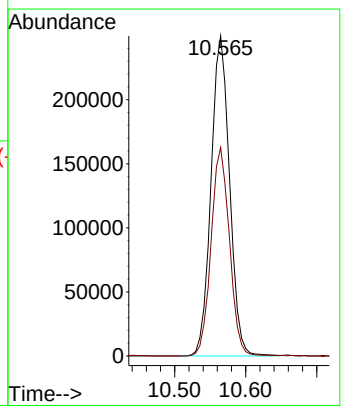


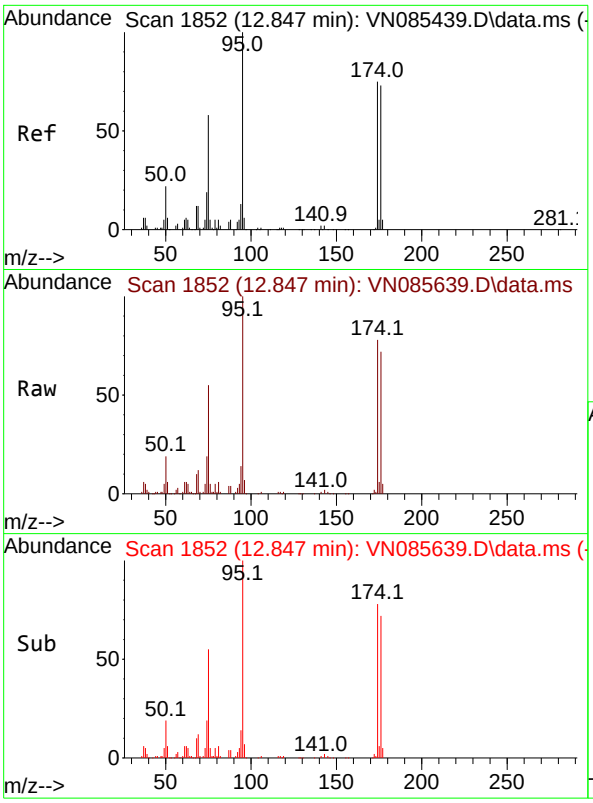




#50
Toluene-d8
Concen: 52.484 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN085639.D
Acq: 03 Feb 2025 22:01

Tgt Ion: 98 Resp: 452380

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.6 | 52.2 | 78.4 |



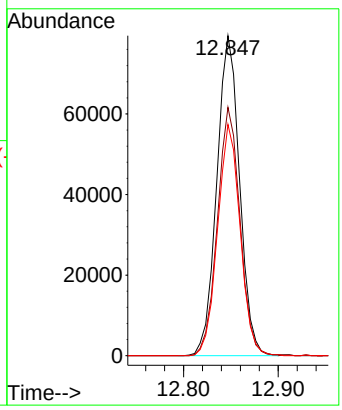


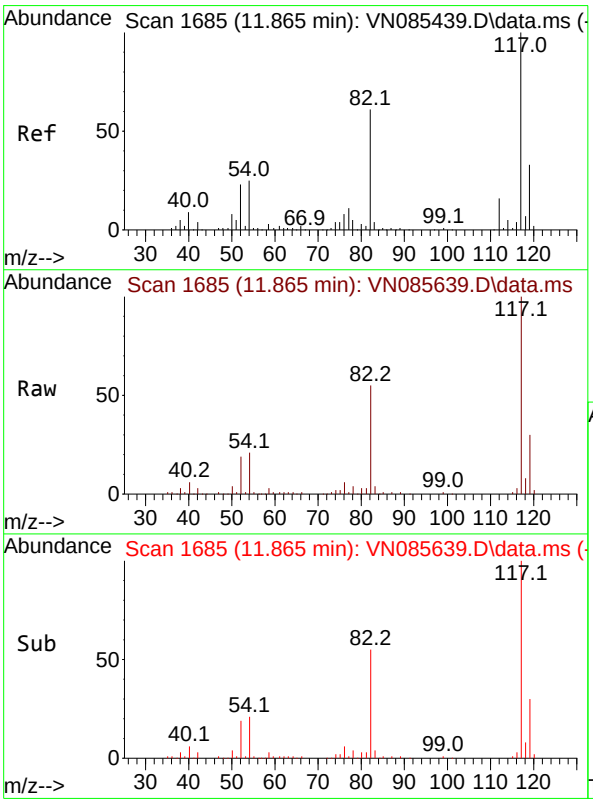

#62
4-Bromofluorobenzene
Concen: 45.069 ug/l
RT: 12.847 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085639.D
Acq: 03 Feb 2025 22:01

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-51.4-013025

Tgt Ion: 95 Resp: 132884

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 76.9 | 0.0 | 145.0 |
| 176 | 71.4 | 0.0 | 142.4 |

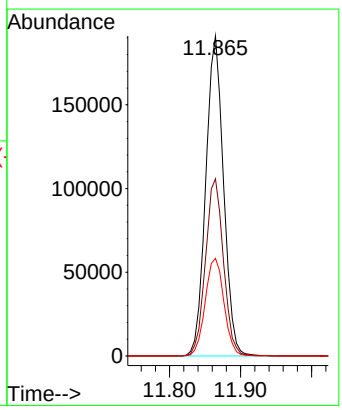


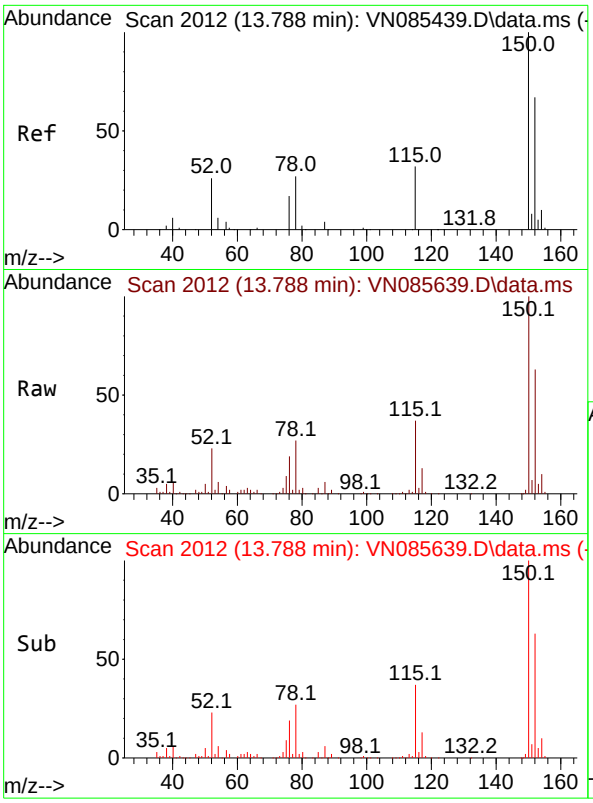




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. -0.000 min
Lab File: VN085639.D
Acq: 03 Feb 2025 22:01

Tgt Ion:117 Resp: 332324

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 55.4 | 48.6 | 72.8 |
| 119 | 30.5 | 26.6 | 39.8 |



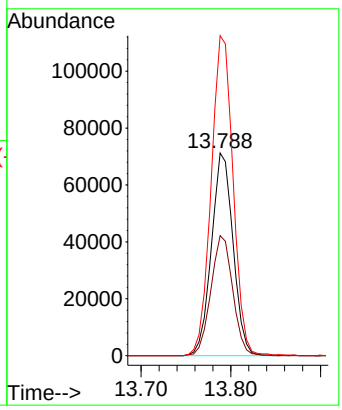



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN085639.D
Acq: 03 Feb 2025 22:01

**Instrument :**
MSVOA_N
**ClientSampleId :**
JPP-51.4-013025

Tgt Ion:152 Resp: 119364

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 59.7 | 31.1 | 93.3 |
| 150 | 159.9 | 0.0 | 343.6 |



# 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: RUTW01

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG No.: Q1241

Instrument ID: MSVOA_N Calibration Date(s): 01/14/2025 01/14/2025

Heated Purge: (Y/N) N Calibration Time(s): 14:56 17:19

GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID: RRF100 = VN085438.D RRF050 = VN085439.D RRF020 = VN085440.D
RRF010 = VN085441.D RRF005 = VN085442.D RRF001 = VN085443.D

| COMPOUND | RRF100 | RRF050 | RRF020 | RRF010 | RRF005 | RRF001 | $\overline{RRF}$ | % RSD |
|---|---|---|---|---|---|---|---|---|
| Vinyl Chloride | 0.697 | 0.686 | 0.727 | 0.711 | 0.781 | 0.819 | 0.737 | 7.1 |
| 1,1-Dichloroethene | 0.548 | 0.533 | 0.556 | 0.526 | 0.559 | 0.497 | 0.537 | 4.3 |
| 2-Butanone | 0.378 | 0.390 | 0.398 | 0.363 | 0.387 | 0.386 | 0.384 | 3.1 |
| Carbon Tetrachloride | 0.574 | 0.530 | 0.579 | 0.529 | 0.565 | 0.567 | 0.557 | 4 |
| Chloroform | 1.197 | 1.175 | 1.241 | 1.169 | 1.253 | 1.273 | 1.218 | 3.6 |
| Benzene | 1.551 | 1.449 | 1.527 | 1.376 | 1.474 | 1.400 | 1.463 | 4.7 |
| 1,2-Dichloroethane | 0.569 | 0.547 | 0.575 | 0.522 | 0.574 | 0.517 | 0.551 | 4.8 |
| Trichloroethene | 0.362 | 0.324 | 0.352 | 0.310 | 0.343 | 0.352 | 0.341 | 5.8 |
| Tetrachloroethene | 0.351 | 0.322 | 0.365 | 0.338 | 0.346 | 0.323 | 0.341 | 4.9 |
| Chlorobenzene | 1.133 | 1.076 | 1.154 | 1.047 | 1.110 | 1.051 | 1.095 | 4 |
| 1,2-Dichloroethane-d4 | 0.774 | 0.831 | 0.754 | 0.762 | 0.914 | | 0.807 | 8.3 |
| Dibromofluoromethane | 0.359 | 0.358 | 0.335 | 0.310 | 0.373 | | 0.347 | 7.1 |
| Toluene-d8 | 1.339 | 1.267 | 1.207 | 1.076 | 1.274 | | 1.232 | 8.1 |
| 4-Bromofluorobenzene | 0.475 | 0.449 | 0.410 | 0.357 | 0.417 | | 0.422 | 10.6 |

* 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_N_NEW

Method Path : Z:\voasrv\HPCHEM1\MSVOA_N\methods\
Method File : 82N011425W.M
Title : SW846 8260
Last Update : Wed Jan 15 02:16:08 2025
Response Via : Initial Calibration

Calibration Files
1 =VN085443.D 5 =VN085442.D 10 =VN085441.D 20 =VN085440.D 50 =VN085439.D 100 =VN085438.D

| | | Compound | 1 | 5 | 10 | 20 | 50 | 100 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|
| 1) | I | Pentafluorobenzene | ----------ISTD---------- | | | | | | | |
| 2) | T | Dichlorodifluo... | 0.714 | 0.708 | 0.667 | 0.681 | 0.629 | 0.664 | 0.677 | 4.59 |
| 3) | P | Chloromethane | 0.839 | 0.779 | 0.693 | 0.727 | 0.680 | 0.680 | 0.733 | 8.77 |
| 4) | C | Vinyl Chloride | 0.819 | 0.781 | 0.711 | 0.727 | 0.686 | 0.697 | 0.737 | 7.06# |
| 5) | T | Bromomethane | | 0.525 | 0.437 | 0.454 | 0.417 | 0.392 | 0.445 | 11.26 |
| 6) | T | Chloroethane | 0.542 | 0.505 | 0.429 | 0.468 | 0.424 | 0.435 | 0.467 | 10.27 |
| 7) | T | Trichlorofluor... | 1.157 | 1.077 | 1.040 | 1.097 | 0.997 | 1.046 | 1.069 | 5.14 |
| 8) | T | Diethyl Ether | 0.457 | 0.357 | 0.317 | 0.363 | 0.360 | 0.362 | 0.369 | 12.59 |
| 9) | T | 1,1,2-Trichlor... | 0.646 | 0.639 | 0.587 | 0.609 | 0.542 | 0.590 | 0.602 | 6.35 |
| 10) | T | Methyl Iodide | | 0.661 | 0.640 | 0.704 | 0.719 | 0.723 | 0.690 | 5.35 |
| 11) | T | Tert butyl alc... | | 0.097 | 0.092 | 0.095 | 0.093 | 0.085 | 0.092 | 4.80 |
| 12) | CM | 1,1-Dichloroet... | 0.497 | 0.559 | 0.526 | 0.556 | 0.533 | 0.548 | 0.537 | 4.31# |
| 13) | T | Acrolein | | 0.101 | 0.131 | 0.124 | 0.140 | 0.136 | 0.126 | 12.09 |
| 14) | T | Allyl chloride | 0.952 | 0.897 | 0.823 | 0.843 | 0.846 | 0.863 | 0.871 | 5.42 |
| 15) | T | Acrylonitrile | 0.298 | 0.299 | 0.275 | 0.303 | 0.298 | 0.289 | 0.294 | 3.39 |
| 16) | T | Acetone | 0.306 | 0.269 | 0.247 | 0.252 | 0.252 | 0.238 | 0.261 | 9.28 |
| 17) | T | Carbon Disulfide | 1.978 | 1.719 | 1.537 | 1.647 | 1.477 | 1.555 | 1.652 | 10.95 |
| 18) | T | Methyl Acetate | 0.871 | 0.810 | 0.779 | 0.758 | 0.790 | 0.751 | 0.793 | 5.54 |
| 19) | T | Methyl tert-bu... | 1.545 | 1.685 | 1.664 | 1.853 | 1.873 | 1.834 | 1.742 | 7.53 |
| 20) | T | Methylene Chlo... | 0.656 | 0.696 | 0.606 | 0.658 | 0.629 | 0.629 | 0.646 | 4.86 |
| 21) | T | trans-1,2-Dich... | 0.632 | 0.569 | 0.539 | 0.574 | 0.555 | 0.571 | 0.573 | 5.50 |
| 22) | T | Diisopropyl ether | 1.705 | 1.918 | 1.834 | 2.076 | 2.037 | 2.026 | 1.933 | 7.38 |
| 23) | T | Vinyl Acetate | 1.110 | 1.270 | 1.279 | 1.466 | 1.495 | 1.495 | 1.353 | 11.67 |
| 24) | P | 1,1-Dichloroet... | 1.204 | 1.226 | 1.100 | 1.206 | 1.170 | 1.164 | 1.178 | 3.81 |
| 25) | T | 2-Butanone | 0.386 | 0.387 | 0.363 | 0.398 | 0.390 | 0.378 | 0.384 | 3.12 |
| 26) | T | 2,2-Dichloropr... | 0.930 | 0.986 | 0.922 | 0.985 | 0.936 | 0.958 | 0.953 | 2.96 |
| 27) | T | cis-1,2-Dichlo... | 0.655 | 0.669 | 0.639 | 0.715 | 0.683 | 0.691 | 0.675 | 4.02 |
| 28) | T | Bromochloromet... | 0.624 | 0.595 | 0.486 | 0.513 | 0.542 | 0.530 | 0.548 | 9.44 |
| 29) | T | Tetrahydrofuran | 0.221 | 0.236 | 0.233 | 0.261 | 0.260 | 0.248 | 0.243 | 6.58 |
| 30) | C | Chloroform | 1.273 | 1.253 | 1.169 | 1.241 | 1.175 | 1.197 | 1.218 | 3.59# |
| 31) | T | Cyclohexane | | 1.198 | 1.026 | 1.033 | 0.881 | 0.984 | 1.024 | 11.18 |
| 32) | T | 1,1,1-Trichlor... | 1.102 | 1.148 | 1.000 | 1.091 | 1.016 | 1.053 | 1.068 | 5.24 |
| 33) | S | 1,2-Dichloroet... | | 0.914 | 0.762 | 0.754 | 0.831 | 0.774 | 0.807 | 8.28 |
| 34) | I | 1,4-Difluorobenzene | ----------ISTD---------- | | | | | | | |
| 35) | S | Dibromofluorom... | | 0.373 | 0.310 | 0.335 | 0.358 | 0.359 | 0.347 | 7.10 |
| 36) | T | 1,1-Dichloropr... | 0.509 | 0.490 | 0.441 | 0.499 | 0.462 | 0.521 | 0.487 | 6.17 |
| 37) | T | Ethyl Acetate | 0.504 | 0.520 | 0.452 | 0.488 | 0.488 | 0.496 | 0.491 | 4.66 |
| 38) | T | Carbon Tetrach... | 0.567 | 0.565 | 0.529 | 0.579 | 0.530 | 0.574 | 0.557 | 3.96 |
| 39) | T | Methylcyclohexane | 0.397 | 0.437 | 0.407 | 0.477 | 0.463 | 0.564 | 0.457 | 13.29 |
| 40) | TM | Benzene | 1.400 | 1.474 | 1.376 | 1.527 | 1.449 | 1.551 | 1.463 | 4.70 |
| 41) | T | Methacrylonitrile | 0.241 | 0.227 | 0.248 | 0.268 | 0.270 | 0.280 | 0.256 | 7.89 |
| 42) | TM | 1,2-Dichloroet... | 0.517 | 0.574 | 0.522 | 0.575 | 0.547 | 0.569 | 0.551 | 4.78 |
| 43) | T | Isopropyl Acetate | 0.793 | 0.764 | 0.719 | 0.801 | 0.813 | 0.835 | 0.787 | 5.20 |
| 44) | TM | Trichloroethene | 0.352 | 0.343 | 0.310 | 0.352 | 0.324 | 0.362 | 0.341 | 5.79 |
| 45) | C | 1,2-Dichloropr... | 0.371 | 0.388 | 0.334 | 0.388 | 0.371 | 0.390 | 0.374 | 5.69# |
| 46) | T | Dibromomethane | 0.292 | 0.254 | 0.254 | 0.277 | 0.267 | 0.275 | 0.270 | 5.50 |
| 47) | T | Bromodichlorom... | 0.484 | 0.569 | 0.514 | 0.579 | 0.559 | 0.590 | 0.549 | 7.48 |
| 48) | T | Methyl methacr... | 0.311 | 0.326 | 0.321 | 0.369 | 0.392 | 0.406 | 0.354 | 11.37 |
| 49) | T | 1,4-Dioxane | 0.006 | 0.006 | 0.006 | 0.006 | 0.006 | 0.006 | 0.006 | 6.72 |
| 50) | S | Toluene-d8 | | 1.274 | 1.076 | 1.207 | 1.267 | 1.339 | 1.232 | 8.07 |
| 51) | T | 4-Methyl-2-Pen... | 0.380 | 0.443 | 0.432 | 0.495 | 0.492 | 0.499 | 0.457 | 10.33 |
| 52) | CM | Toluene | 0.690 | 0.835 | 0.808 | 0.919 | 0.870 | 0.964 | 0.848 | 11.27# |
| 53) | T | t-1,3-Dichloro... | 0.416 | 0.527 | 0.481 | 0.544 | 0.551 | 0.594 | 0.519 | 11.98 |
| 54) | T | cis-1,3-Dichlo... | 0.450 | 0.538 | 0.527 | 0.601 | 0.588 | 0.623 | 0.554 | 11.40 |
| 55) | T | 1,1,2-Trichlor... | 0.314 | 0.349 | 0.309 | 0.353 | 0.340 | 0.348 | 0.335 | 5.67 |

Method Path : Z:\voasrv\HPCHEM1\MSVOA_N\methods\
Method File : 82N011425W.M

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 56) | T | Ethyl methacry... | 0.317 | 0.434 | 0.418 | 0.521 | 0.544 | 0.582 | 0.469 | 20.85 |
| 57) | T | 1,3-Dichloropr... | 0.514 | 0.584 | 0.555 | 0.618 | 0.602 | 0.627 | 0.583 | 7.31 |
| 58) | T | 2-Chloroethyl ... | 0.163 | 0.205 | 0.185 | 0.226 | 0.241 | 0.258 | 0.213 | 16.67 |
| 59) | T | 2-Hexanone | 0.261 | 0.302 | 0.298 | 0.353 | 0.357 | 0.358 | 0.321 | 12.60 |
| 60) | T | Dibromochlorom... | 0.386 | 0.420 | 0.368 | 0.412 | 0.414 | 0.430 | 0.405 | 5.79 |
| 61) | T | 1,2-Dibromoethane | 0.334 | 0.321 | 0.309 | 0.356 | 0.334 | 0.349 | 0.334 | 5.16 |
| 62) | S | 4-Bromofluorob... | | 0.417 | 0.357 | 0.410 | 0.449 | 0.475 | 0.422 | 10.57 |
| 63) | I | Chlorobenzene-d5 | ----------ISTD---------- | | | | | | | |
| 64) | T | Tetrachloroethene | 0.323 | 0.346 | 0.338 | 0.365 | 0.322 | 0.351 | 0.341 | 4.87 |
| 65) | PM | Chlorobenzene | 1.051 | 1.110 | 1.047 | 1.154 | 1.076 | 1.133 | 1.095 | 4.03 |
| 66) | T | 1,1,1,2-Tetrac... | 0.425 | 0.412 | 0.371 | 0.408 | 0.392 | 0.404 | 0.402 | 4.65 |
| 67) | C | Ethyl Benzene | 1.430 | 1.709 | 1.685 | 1.940 | 1.867 | 2.072 | 1.784 | 12.67# |
| 68) | T | m/p-Xylenes | 0.492 | 0.616 | 0.615 | 0.750 | 0.707 | 0.775 | 0.659 | 16.01 |
| 69) | T | o-Xylene | 0.482 | 0.582 | 0.584 | 0.713 | 0.681 | 0.738 | 0.630 | 15.47 |
| 70) | T | Styrene | 0.742 | 0.929 | 0.956 | 1.186 | 1.173 | 1.271 | 1.043 | 19.21 |
| 71) | P | Bromoform | 0.235 | 0.284 | 0.273 | 0.312 | 0.311 | 0.311 | 0.288 | 10.61 |
| 72) | I | 1,4-Dichlorobenzen... | ----------ISTD---------- | | | | | | | |
| 73) | T | Isopropylbenzene | 2.766 | 3.157 | 3.272 | 3.681 | 3.448 | 3.922 | 3.375 | 12.06 |
| 74) | T | N-amyl acetate | 1.364 | 1.394 | 1.405 | 1.642 | 1.622 | 1.673 | 1.517 | 9.43 |
| 75) | P | 1,1,2,2-Tetrac... | 1.314 | 1.228 | 1.157 | 1.187 | 1.145 | 1.121 | 1.192 | 5.89 |
| 76) | T | 1,2,3-Trichlor... | 1.104 | 0.965 | 0.957 | 1.118 | 0.893 | 1.061 | 1.016 | 8.96 |
| 77) | T | Bromobenzene | 0.871 | 0.880 | 0.857 | 0.906 | 0.858 | 0.919 | 0.882 | 2.90 |
| 78) | T | n-propylbenzene | 3.227 | 3.605 | 3.846 | 4.400 | 4.154 | 4.738 | 3.995 | 13.74 |
| 79) | T | 2-Chlorotoluene | 2.252 | 2.533 | 2.571 | 2.761 | 2.585 | 2.812 | 2.586 | 7.67 |
| 80) | T | 1,3,5-Trimethy... | 2.160 | 2.529 | 2.695 | 3.140 | 2.940 | 3.260 | 2.787 | 14.69 |
| 81) | T | trans-1,4-Dich... | | 0.335 | 0.347 | 0.386 | 0.390 | 0.419 | 0.376 | 9.04 |
| 82) | T | 4-Chlorotoluene | 2.144 | 2.536 | 2.512 | 2.820 | 2.588 | 2.847 | 2.574 | 9.91 |
| 83) | T | tert-Butylbenzene | 1.885 | 2.189 | 2.236 | 2.570 | 2.439 | 2.726 | 2.341 | 12.85 |
| 84) | T | 1,2,4-Trimethy... | 1.888 | 2.542 | 2.710 | 3.190 | 3.016 | 3.323 | 2.778 | 18.89 |
| 85) | T | sec-Butylbenzene | 2.318 | 3.026 | 3.147 | 3.643 | 3.421 | 3.912 | 3.244 | 17.17 |
| 86) | T | p-Isopropyltol... | 1.777 | 2.368 | 2.541 | 2.942 | 2.872 | 3.286 | 2.631 | 20.04 |
| 87) | T | 1,3-Dichlorobe... | 1.526 | 1.656 | 1.574 | 1.701 | 1.565 | 1.720 | 1.624 | 4.91 |
| 88) | T | 1,4-Dichlorobe... | 1.767 | 1.743 | 1.607 | 1.713 | 1.562 | 1.706 | 1.683 | 4.78 |
| 89) | T | n-Butylbenzene | 1.772 | 2.176 | 2.168 | 2.485 | 2.483 | 2.881 | 2.327 | 16.22 |
| 90) | T | Hexachloroethane | 0.681 | 0.616 | 0.574 | 0.613 | 0.577 | 0.645 | 0.618 | 6.59 |
| 91) | T | 1,2-Dichlorobe... | 1.766 | 1.600 | 1.532 | 1.654 | 1.555 | 1.611 | 1.620 | 5.15 |
| 92) | T | 1,2-Dibromo-3-... | 0.202 | 0.228 | 0.212 | 0.224 | 0.222 | 0.218 | 0.218 | 4.31 |
| 93) | T | 1,2,4-Trichlor... | 0.658 | 0.717 | 0.704 | 0.799 | 0.781 | 0.858 | 0.753 | 9.69 |
| 94) | T | Hexachlorobuta... | 0.413 | 0.441 | 0.395 | 0.396 | 0.367 | 0.386 | 0.400 | 6.31 |
| 95) | T | Naphthalene | 2.115 | 1.987 | 1.958 | 2.348 | 2.482 | 2.588 | 2.246 | 11.79 |
| 96) | T | 1,2,3-Trichlor... | 0.750 | 0.693 | 0.732 | 0.792 | 0.786 | 0.817 | 0.762 | 5.96 |

(#) = Out of Range

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085438.D
Acq On : 14 Jan 2025 14:56
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 15 01:41:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) Pentafluorobenzene | 8.218 | 168 | 202613 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.094 | 114 | 329363 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 298938 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 146196 | 50.000 | ug/l | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.571 | 65 | 313645 | 95.899 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 191.800%# | | | |
| 35) Dibromofluoromethane | 8.159 | 113 | 236159 | 103.353 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 206.700%# | | | |
| 50) Toluene-d8 | 10.565 | 98 | 881956 | 108.636 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 217.280%# | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 313161 | 112.765 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 225.520%# | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 269023 | 98.065 | ug/l | 99 |
| 3) Chloromethane | 2.359 | 50 | 275415 | 92.724 | ug/l | 98 |
| 4) Vinyl Chloride | 2.512 | 62 | 282361 | 94.576 | ug/l | 99 |
| 5) Bromomethane | 2.942 | 94 | 158888 | 88.105 | ug/l | 98 |
| 6) Chloroethane | 3.112 | 64 | 176111 | 93.043 | ug/l | 99 |
| 7) Trichlorofluoromethane | 3.494 | 101 | 423967 | 97.870 | ug/l | 100 |
| 8) Diethyl Ether | 3.953 | 74 | 146889 | 98.154 | ug/l | 98 |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 239104 | 97.997 | ug/l | 99 |
| 10) Methyl Iodide | 4.589 | 142 | 292983 | 104.856 | ug/l | 95 |
| 11) Tert butyl alcohol | 5.512 | 59 | 173044 | 462.061 | ug/l | 99 |
| 12) 1,1-Dichloroethene | 4.336 | 96 | 222117 | 102.146 | ug/l | 99 |
| 13) Acrolein | 4.171 | 56 | 275350 | 538.600 | ug/l | 99 |
| 14) Allyl chloride | 5.018 | 41 | 349717 | 99.111 | ug/l | 98 |
| 15) Acrylonitrile | 5.712 | 53 | 585370 | 492.095 | ug/l | 99 |
| 16) Acetone | 4.418 | 43 | 483221 | 457.268 | ug/l | 96 |
| 17) Carbon Disulfide | 4.712 | 76 | 630294 | 94.140 | ug/l | 100 |
| 18) Methyl Acetate | 5.012 | 43 | 304226 | 94.674 | ug/l | 99 |
| 19) Methyl tert-butyl Ether | 5.788 | 73 | 743008 | 105.230 | ug/l | 100 |
| 20) Methylene Chloride | 5.271 | 84 | 254912 | 97.440 | ug/l | 98 |
| 21) trans-1,2-Dichloroethene | 5.783 | 96 | 231503 | 99.618 | ug/l | 97 |
| 22) Diisopropyl ether | 6.665 | 45 | 820871 | 104.812 | ug/l | 99 |
| 23) Vinyl Acetate | 6.594 | 43 | 3029568 | 550.850 | ug/l | 99 |
| 24) 1,1-Dichloroethane | 6.565 | 63 | 471831 | 98.803 | ug/l | 99 |
| 25) 2-Butanone | 7.477 | 43 | 764979 | 491.912 | ug/l | 98 |
| 26) 2,2-Dichloropropane | 7.482 | 77 | 388140 | 100.530 | ug/l | 100 |
| 27) cis-1,2-Dichloroethene | 7.482 | 96 | 280197 | 102.367 | ug/l | 99 |
| 28) Bromochloromethane | 7.806 | 49 | 214796 | 96.679 | ug/l | 100 |
| 29) Tetrahydrofuran | 7.830 | 42 | 503459 | 510.635 | ug/l | 99 |
| 30) Chloroform | 7.959 | 83 | 484941 | 98.253 | ug/l | 100 |
| 31) Cyclohexane | 8.253 | 56 | 398641 | 96.041 | ug/l | 96 |
| 32) 1,1,1-Trichloroethane | 8.165 | 97 | 426782 | 98.578 | ug/l | 98 |
| 36) 1,1-Dichloropropene | 8.365 | 75 | 342961 | 106.945 | ug/l | 100 |
| 37) Ethyl Acetate | 7.553 | 43 | 326802 | 100.961 | ug/l | 97 |
| 38) Carbon Tetrachloride | 8.359 | 117 | 378390 | 103.065 | ug/l | 97 |
| 39) Methylcyclohexane | 9.594 | 83 | 371734 | 123.354 | ug/l | 99 |
| 40) Benzene | 8.600 | 78 | 1021393 | 106.001 | ug/l | 100 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085438.D
Acq On : 14 Jan 2025 14:56
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 15 01:41:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

| Compound | R.T. | QIon | Response | Conc Units | | Dev(Min) |
|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.777 | 41 | 184326 | 109.454 ug/l | | 96 |
| 42) 1,2-Dichloroethane | 8.665 | 62 | 374938 | 103.314 ug/l | | 100 |
| 43) Isopropyl Acetate | 8.682 | 43 | 549969 | 106.035 ug/l | | 100 |
| 44) Trichloroethene | 9.347 | 130 | 238296 | 106.242 ug/l | | 96 |
| 45) 1,2-Dichloropropane | 9.618 | 63 | 256964 | 104.405 ug/l | | 97 |
| 46) Dibromomethane | 9.706 | 93 | 180990 | 101.913 ug/l | | 99 |
| 47) Bromodichloromethane | 9.882 | 83 | 388499 | 107.377 ug/l | | 98 |
| 48) Methyl methacrylate | 9.676 | 41 | 267689 | 114.685 ug/l | | 99 |
| 49) 1,4-Dioxane | 9.688 | 88 | 83879 | 2133.992 ug/l | | 97 |
| 51) 4-Methyl-2-Pentanone | 10.441 | 43 | 1643800 | 546.159 ug/l | | 100 |
| 52) Toluene | 10.623 | 92 | 634743 | 113.689 ug/l | | 99 |
| 53) t-1,3-Dichloropropene | 10.829 | 75 | 391238 | 114.424 ug/l | | 97 |
| 54) cis-1,3-Dichloropropene | 10.306 | 75 | 410403 | 112.369 ug/l | | 99 |
| 55) 1,1,2-Trichloroethane | 11.012 | 97 | 229522 | 103.879 ug/l | | 98 |
| 56) Ethyl methacrylate | 10.870 | 69 | 383663 | 101.029 ug/l | | 99 |
| 57) 1,3-Dichloropropane | 11.159 | 76 | 412886 | 107.469 ug/l | | 100 |
| 58) 2-Chloroethyl Vinyl ether | 10.153 | 63 | 848636 | 605.243 ug/l | | 100 |
| 59) 2-Hexanone | 11.194 | 43 | 1178831 | 556.643 ug/l | | 99 |
| 60) Dibromochloromethane | 11.353 | 129 | 283361 | 106.227 ug/l | | 99 |
| 61) 1,2-Dibromoethane | 11.465 | 107 | 230104 | 104.623 ug/l | | 98 |
| 64) Tetrachloroethene | 11.100 | 164 | 209870 | 102.980 ug/l | | 98 |
| 65) Chlorobenzene | 11.888 | 112 | 677679 | 103.482 ug/l | | 98 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 241593 | 100.517 ug/l | | 99 |
| 67) Ethyl Benzene | 11.959 | 91 | 1239080 | 116.169 ug/l | | 99 |
| 68) m/p-Xylenes | 12.070 | 106 | 927244 | 235.219 ug/l | | 99 |
| 69) o-Xylene | 12.394 | 106 | 441279 | 117.135 ug/l | | 100 |
| 70) Styrene | 12.406 | 104 | 760136 | 121.919 ug/l | | 99 |
| 71) Bromoform | 12.576 | 173 | 186124 | 108.227 ug/l | # | 99 |
| 73) Isopropylbenzene | 12.694 | 105 | 1146752 | 116.221 ug/l | | 100 |
| 74) N-amyl acetate | 12.488 | 43 | 489217 | 110.308 ug/l | | 99 |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 327767 | 94.039 ug/l | | 100 |
| 76) 1,2,3-Trichloropropane | 12.988 | 75 | 310115m | 104.530 ug/l | | |
| 77) Bromobenzene | 12.976 | 156 | 268616 | 104.200 ug/l | | 97 |
| 78) n-propylbenzene | 13.029 | 91 | 1385353 | 118.600 ug/l | | 100 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 822258 | 108.767 ug/l | | 99 |
| 80) 1,3,5-Trimethylbenzene | 13.170 | 105 | 953066 | 116.938 ug/l | | 100 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 122508 | 111.544 ug/l | | 87 |
| 82) 4-Chlorotoluene | 13.217 | 91 | 832317 | 110.574 ug/l | | 99 |
| 83) tert-Butylbenzene | 13.435 | 119 | 797069 | 116.457 ug/l | | 98 |
| 84) 1,2,4-Trimethylbenzene | 13.476 | 105 | 971729 | 119.625 ug/l | | 100 |
| 85) sec-Butylbenzene | 13.611 | 105 | 1143885 | 120.587 ug/l | | 100 |
| 86) p-Isopropyltoluene | 13.723 | 119 | 960747 | 100.111 ug/l | | 100 |
| 87) 1,3-Dichlorobenzene | 13.729 | 146 | 502960 | 105.943 ug/l | | 99 |
| 88) 1,4-Dichlorobenzene | 13.811 | 146 | 498709 | 101.341 ug/l | | 97 |
| 89) n-Butylbenzene | 14.053 | 91 | 842368 | 123.781 ug/l | | 98 |
| 90) Hexachloroethane | 14.329 | 117 | 188541 | 104.405 ug/l | | 100 |
| 91) 1,2-Dichlorobenzene | 14.100 | 146 | 470919 | 99.445 ug/l | | 99 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75 | 63846 | 100.313 ug/l | | 98 |
| 93) 1,2,4-Trichlorobenzene | 15.388 | 180 | 250787 | 113.946 ug/l | | 99 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 112899 | 96.619 ug/l | | 99 |
| 95) Naphthalene | 15.635 | 128 | 756816 | 115.234 ug/l | | 99 |
| 96) 1,2,3-Trichlorobenzene | 15.835 | 180 | 238860 | 107.256 ug/l | | 100 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085438.D
Acq On : 14 Jan 2025 14:56
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Quant Time: Jan 15 01:41:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

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

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

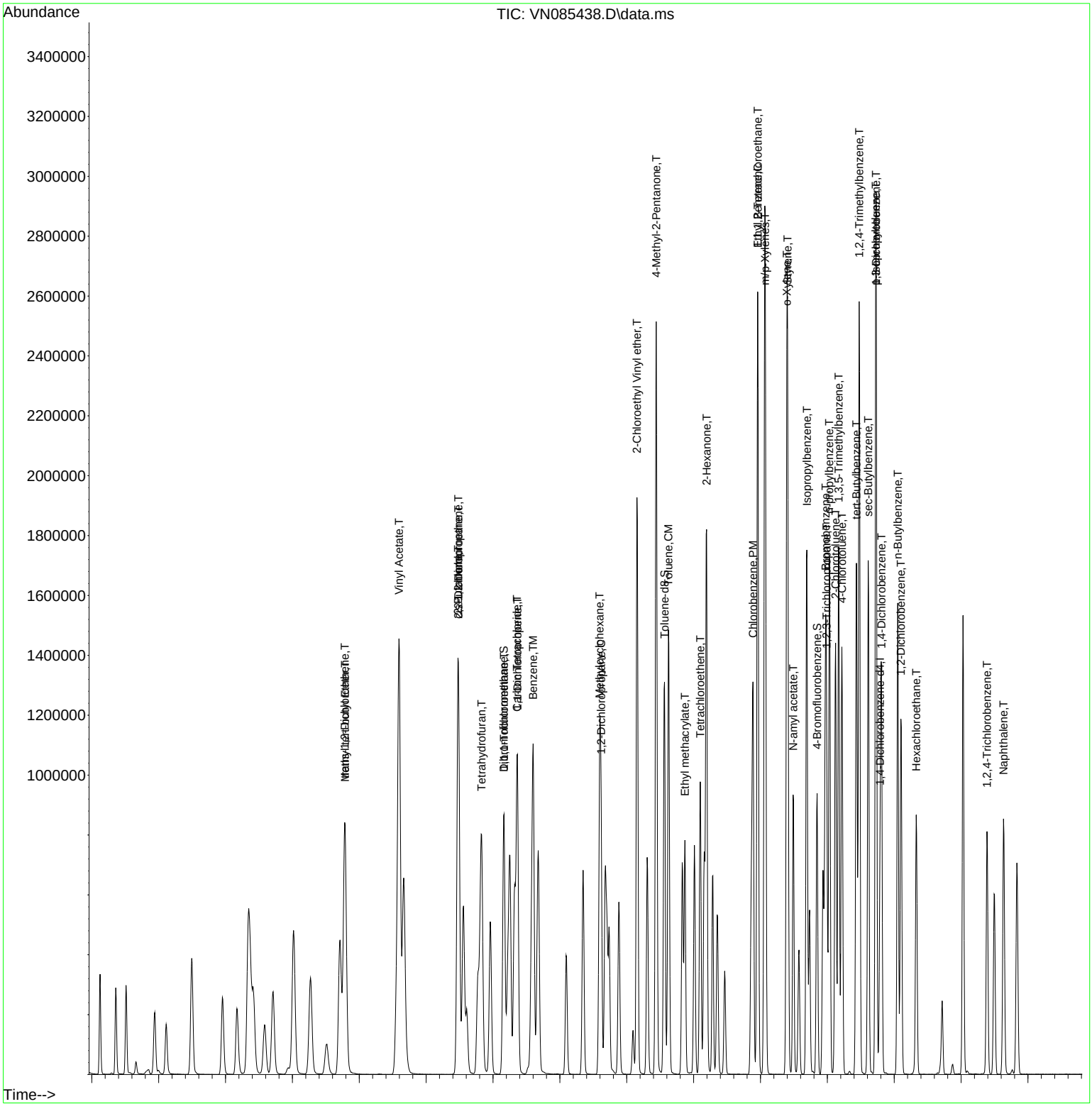
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085438.D
Acq On : 14 Jan 2025 14:56
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

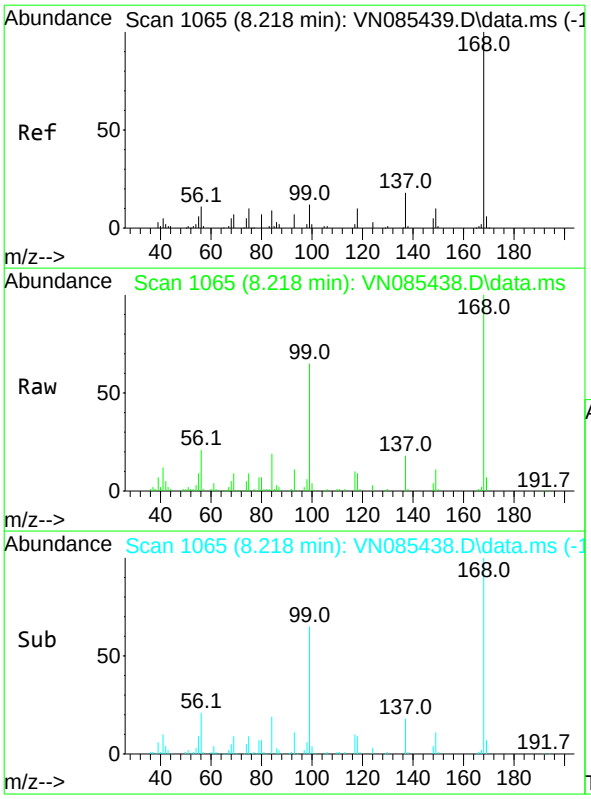
Quant Time: Jan 15 01:41:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

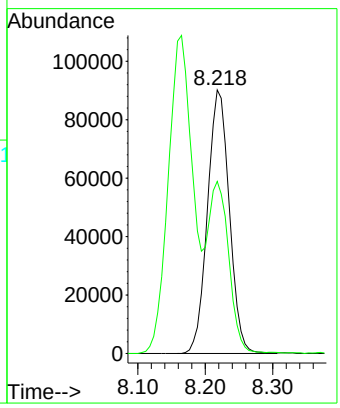





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.218 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:168 Resp: 202613

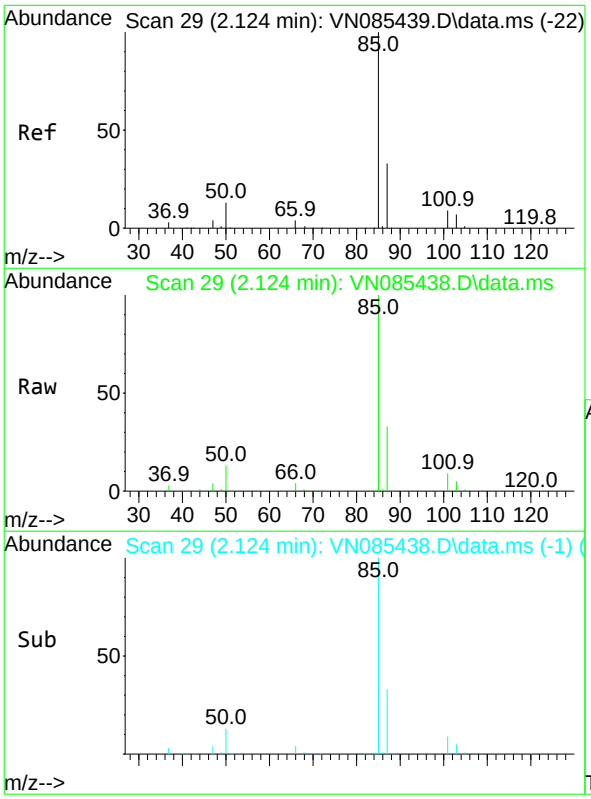
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 64.9 | 53.6 | 80.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

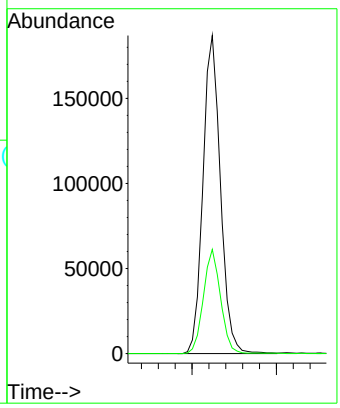
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

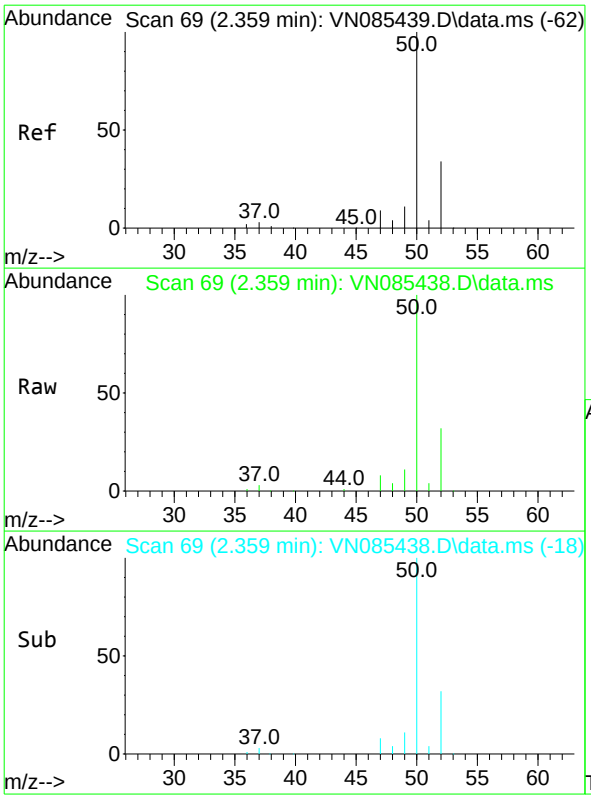



#2
Dichlorodifluoromethane
Concen: 98.065 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 85 Resp: 269023

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.7 | 16.7 | 50.1 |

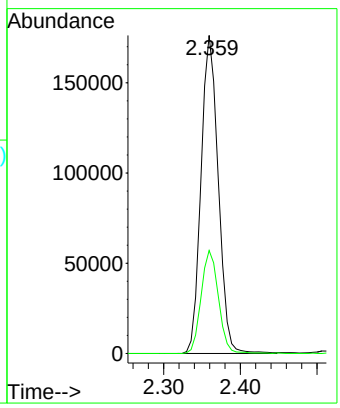





#3
Chloromethane
Concen: 92.724 ug/l
RT: 2.359 min Scan# 69
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 50 Resp: 275415

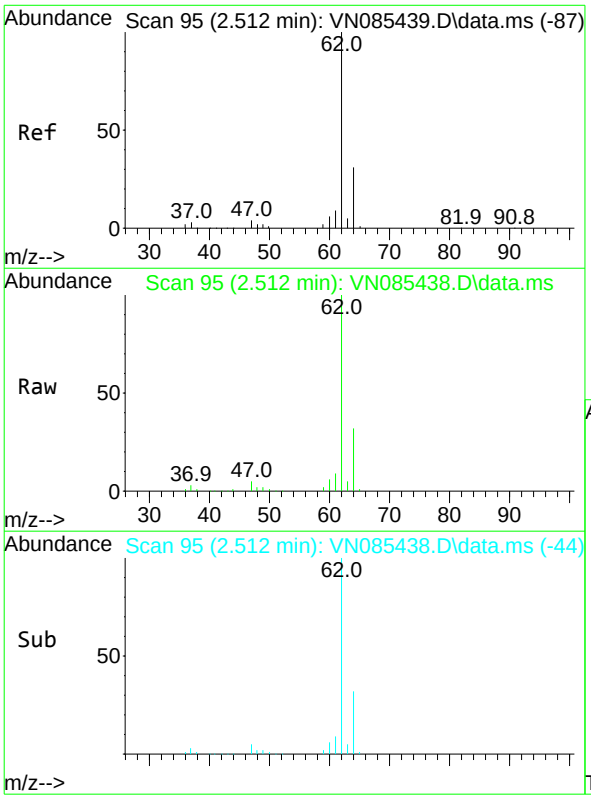
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 32.4 | 27.0 | 40.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

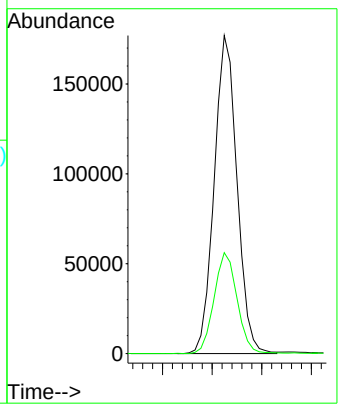
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

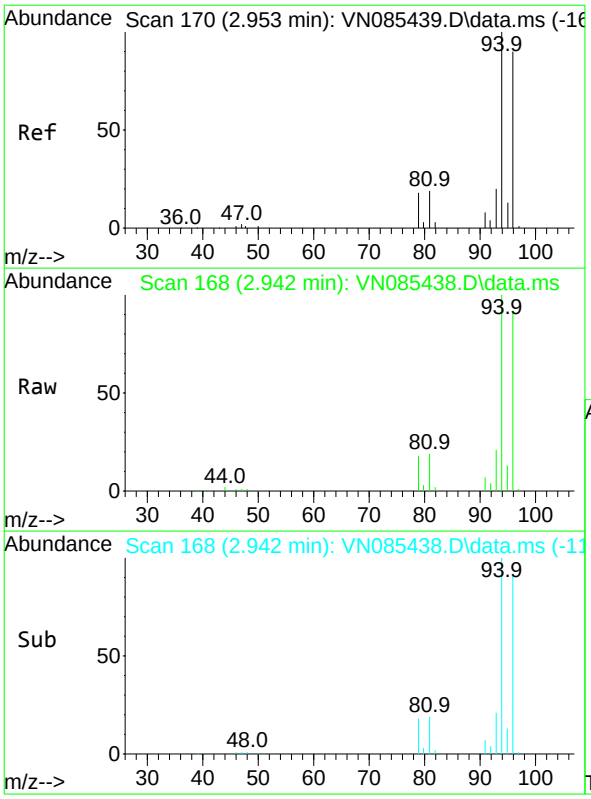



#4
Vinyl Chloride
Concen: 94.576 ug/l
RT: 2.512 min Scan# 95
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 62 Resp: 282361

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 31.6 | 24.8 | 37.2 |

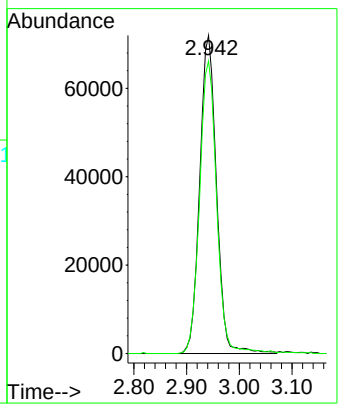





#5
Bromomethane
Concen: 88.105 ug/l
RT: 2.942 min Scan# 16
Delta R.T. -0.012 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 94 Resp: 158888

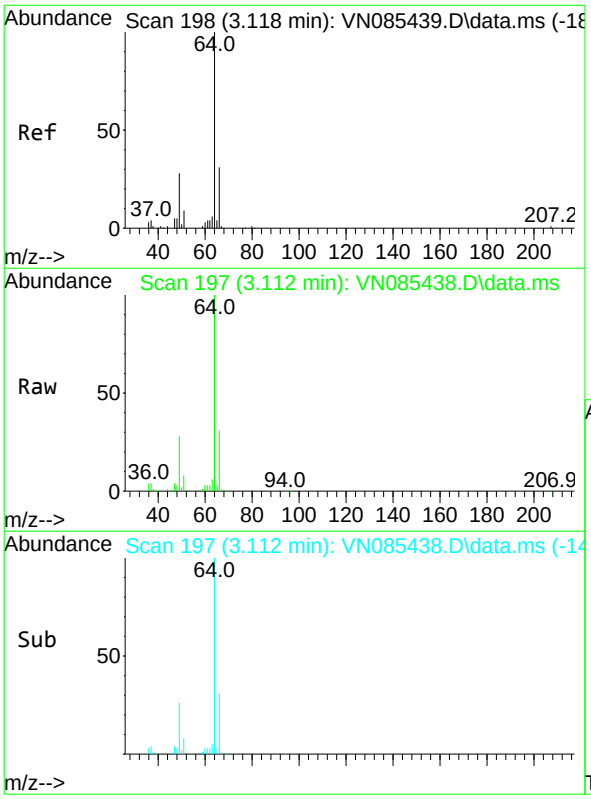
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 91.9 | 71.8 | 107.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

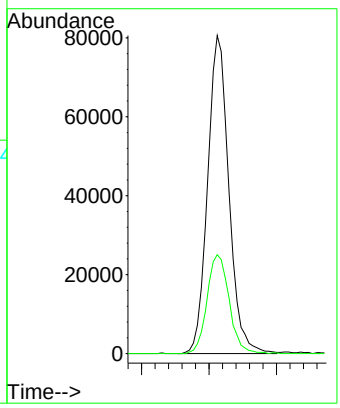
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

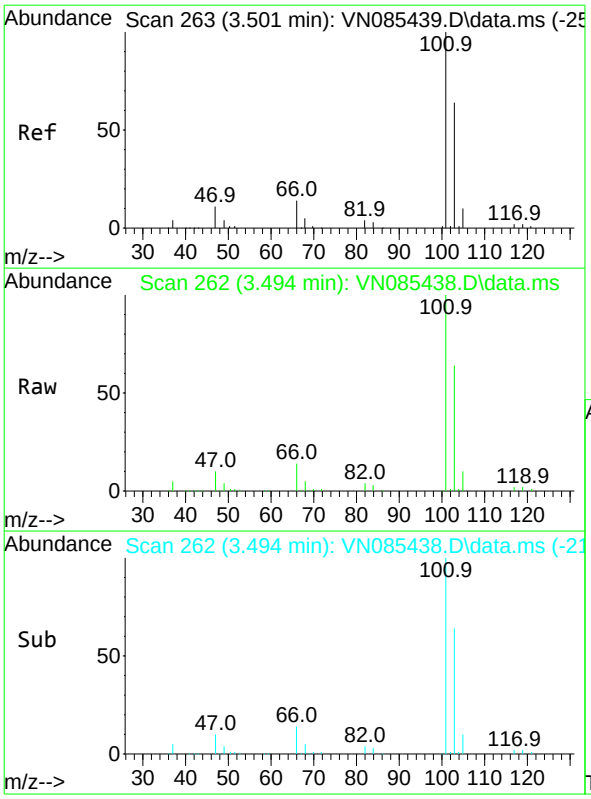



#6
Chloroethane
Concen: 93.043 ug/l
RT: 3.112 min Scan# 197
Delta R.T. -0.006 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 64 Resp: 176111

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 31.1 | 24.6 | 36.8 |

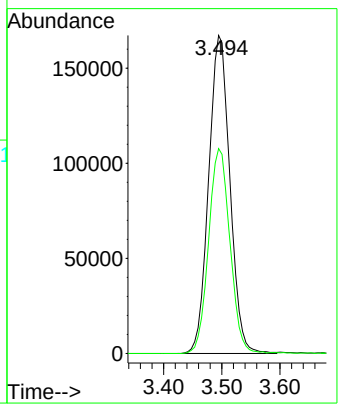





#7
Trichlorofluoromethane
Concen: 97.870 ug/l
RT: 3.494 min Scan# 26
Delta R.T. -0.006 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:101 Resp: 423967

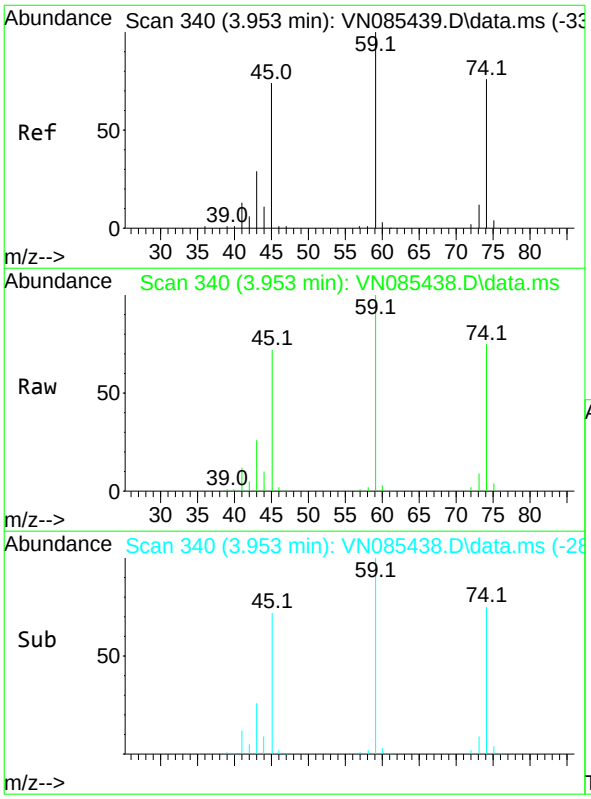
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 64.4 | 51.4 | 77.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

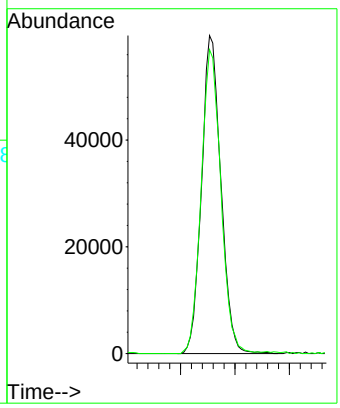
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

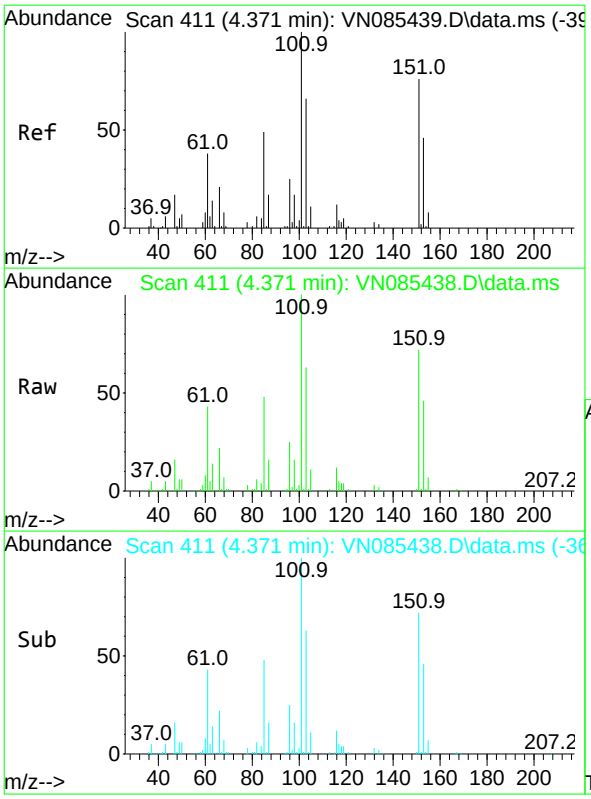



#8
Diethyl Ether
Concen: 98.154 ug/l
RT: 3.953 min Scan# 340
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 74 Resp: 146889

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 97.4 | 49.7 | 149.1 |






#9
1,1,2-Trichlorotrifluoroethane
Concen: 97.997 ug/l
RT: 4.371 min Scan# 41
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

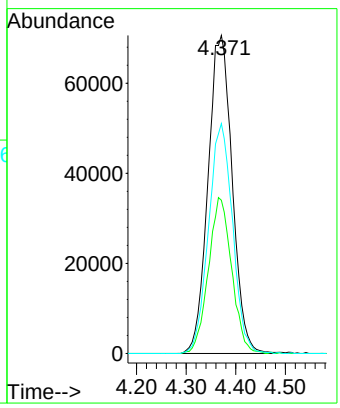
Tgt Ion:101 Resp: 239104

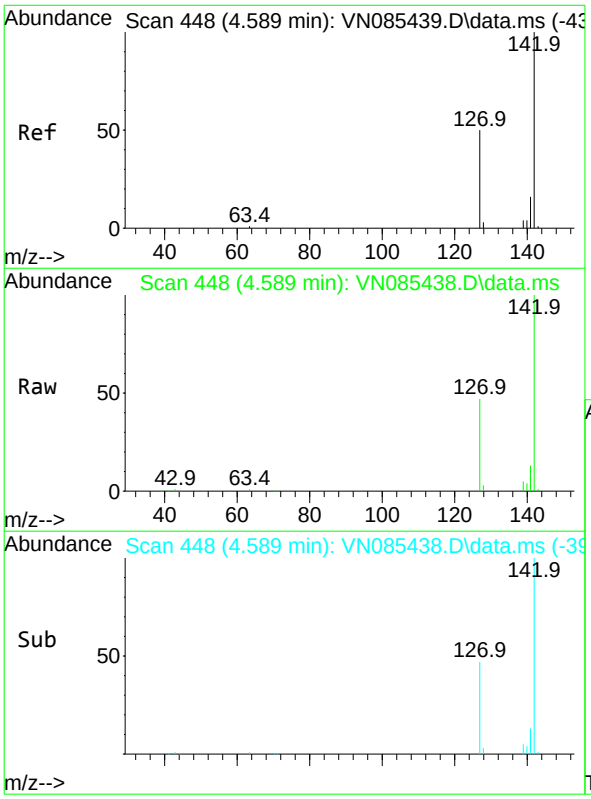
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 47.1 | 37.8 | 56.8 |
| 151 | 71.8 | 58.8 | 88.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

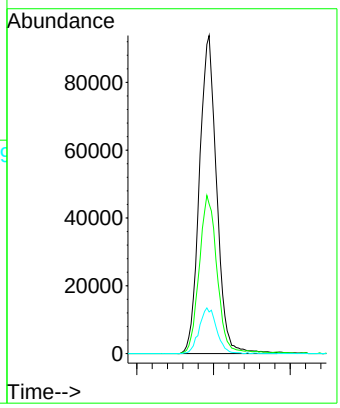


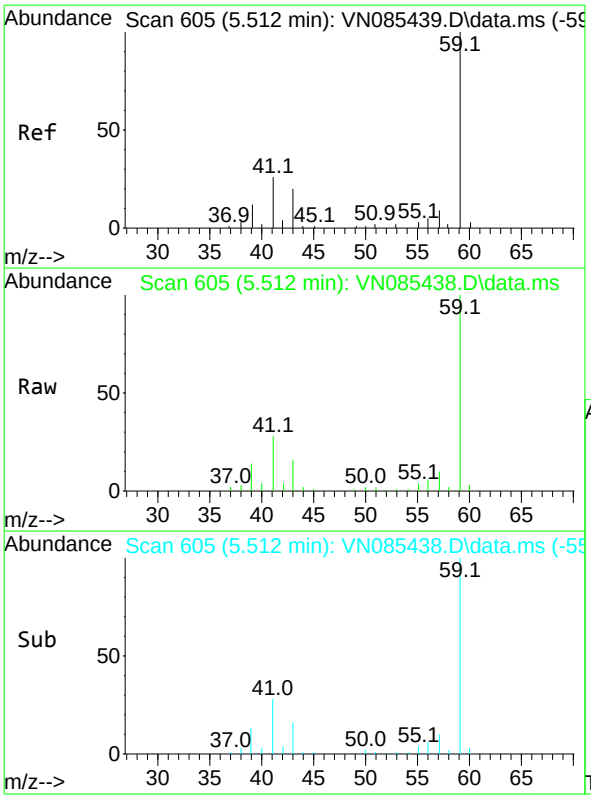




#10
Methyl Iodide
Concen: 104.856 ug/l
RT: 4.589 min Scan# 448
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:142 Resp: 292983

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 47.1 | 40.3 | 60.5 |
| 141 | 13.1 | 12.8 | 19.2 |

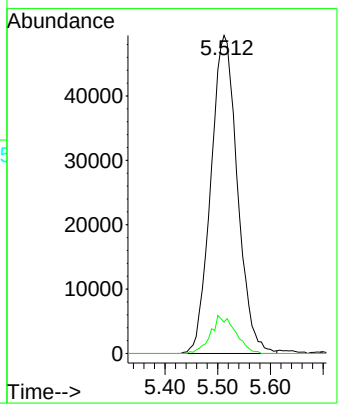





#11
Tert butyl alcohol
Concen: 462.061 ug/l
RT: 5.512 min Scan# 60
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 59 Resp: 173044

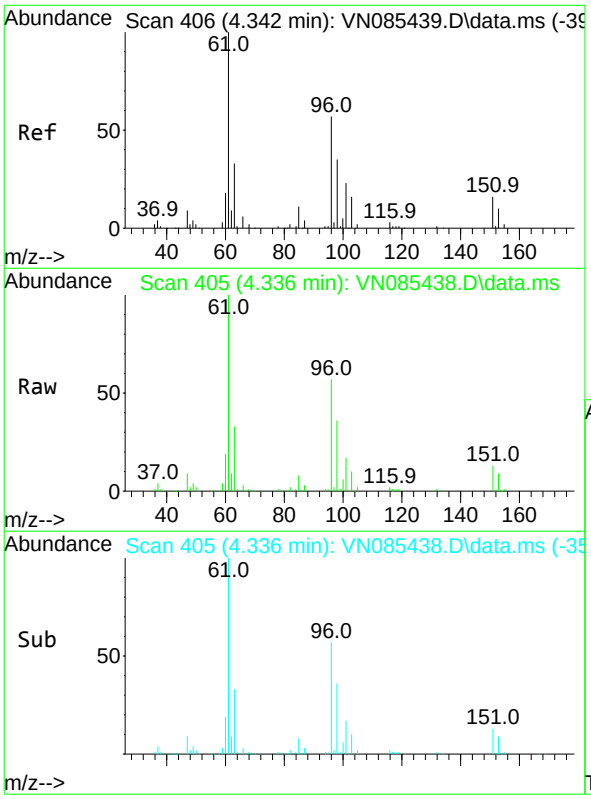
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 11.1 | 8.6 | 13.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

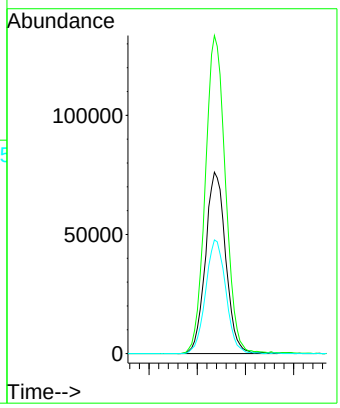
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

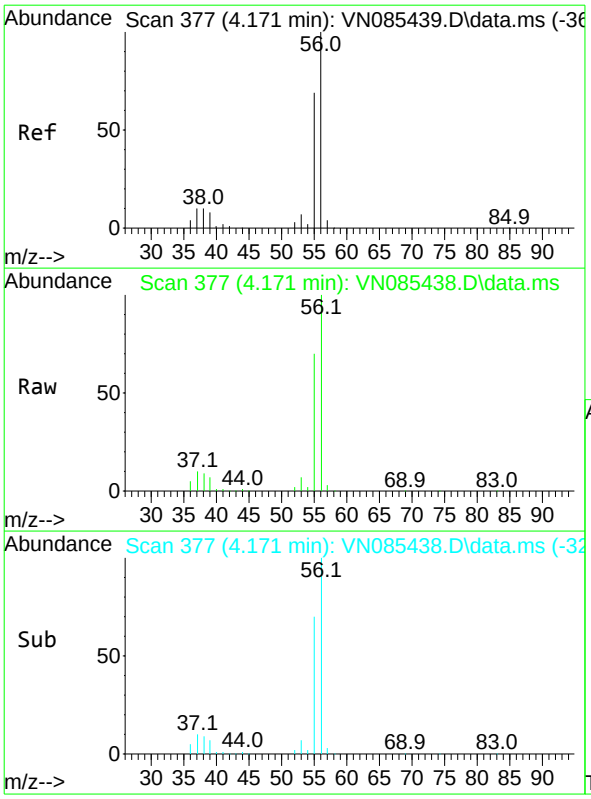



#12
1,1-Dichloroethene
Concen: 102.146 ug/l
RT: 4.336 min Scan# 405
Delta R.T. -0.006 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 96 Resp: 222117

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 175.3 | 141.0 | 211.4 |
| 98 | 62.7 | 49.0 | 73.6 |

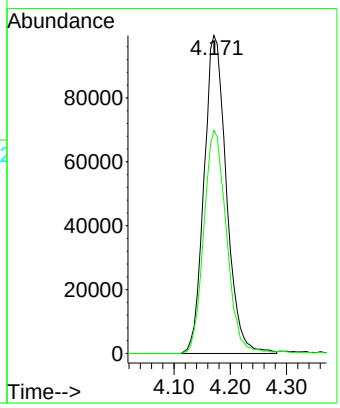





#13
Acrolein
Concen: 538.600 ug/l
RT: 4.171 min Scan# 37
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 56 Resp: 275350

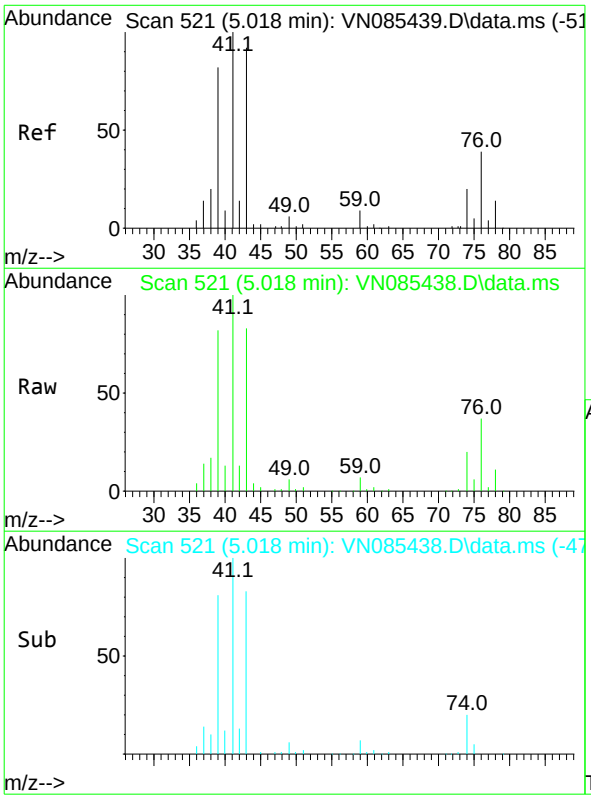
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 71.1 | 56.3 | 84.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

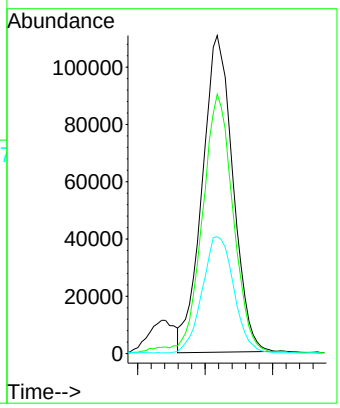
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

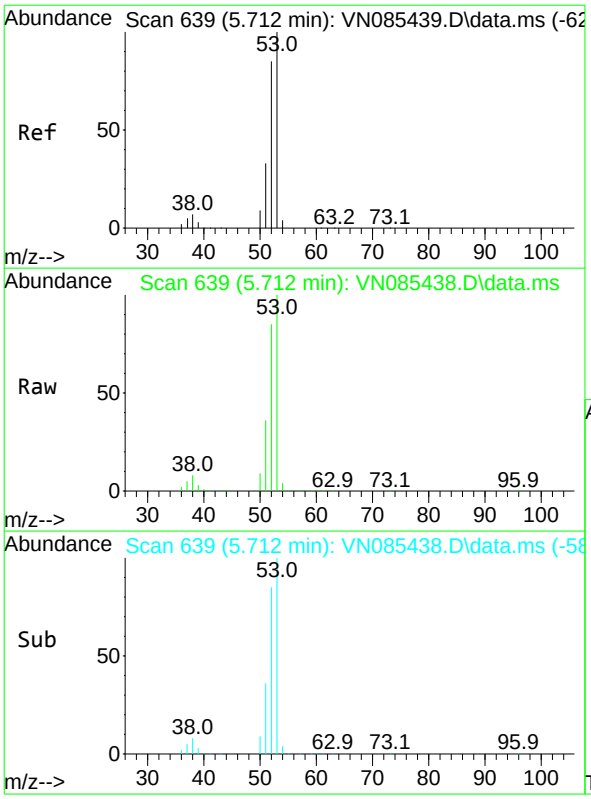



#14
Allyl chloride
Concen: 99.111 ug/l
RT: 5.018 min Scan# 521
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 41 Resp: 349717

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 83.3 | 64.4 | 96.6 |
| 76 | 37.9 | 30.5 | 45.7 |

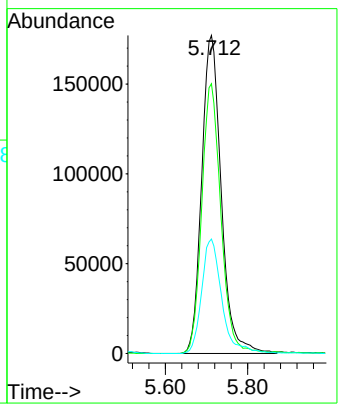





#15
Acrylonitrile
Concen: 492.095 ug/l
RT: 5.712 min Scan# 63
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 53 Resp: 585370

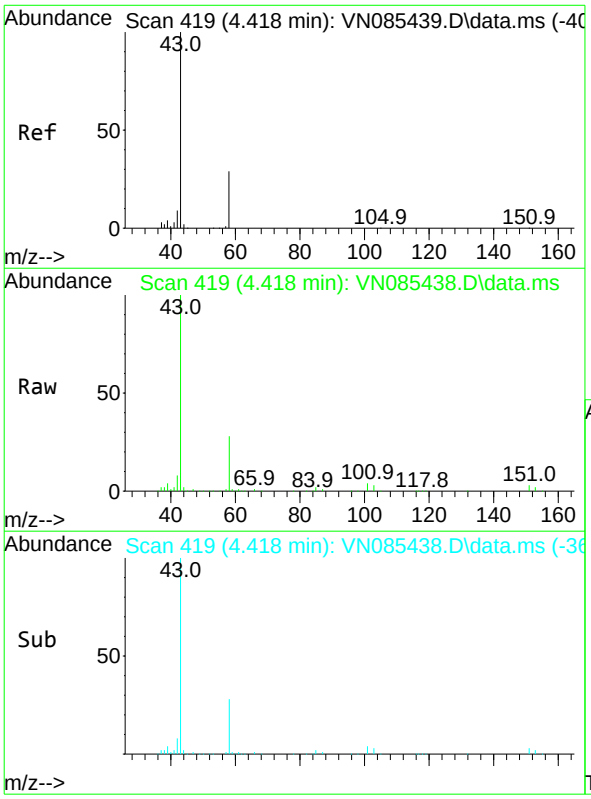
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 83.0 | 65.5 | 98.3 |
| 51 | 37.1 | 29.8 | 44.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

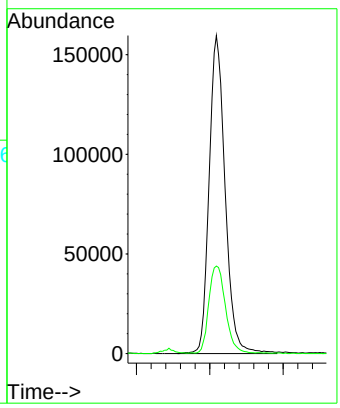
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

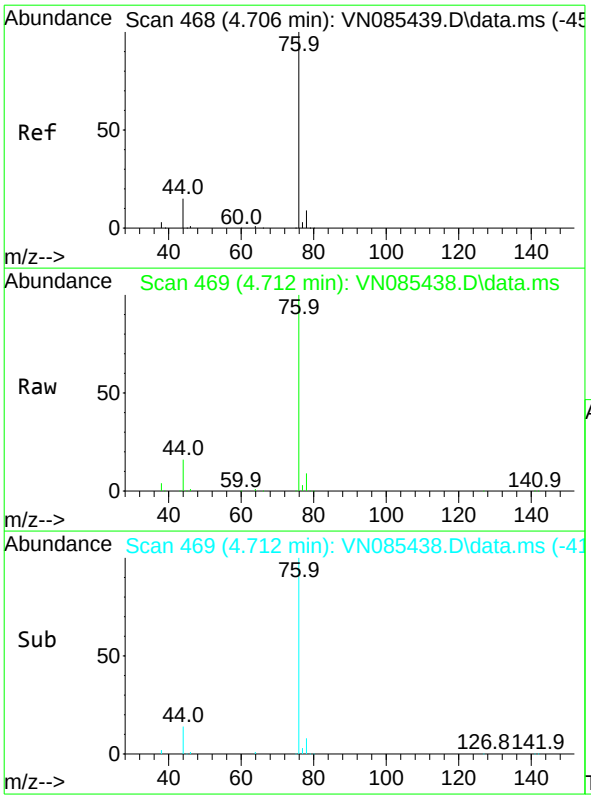



#16
Acetone
Concen: 457.268 ug/l
RT: 4.418 min Scan# 419
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 43 Resp: 483221

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 27.3 | 23.8 | 35.6 |

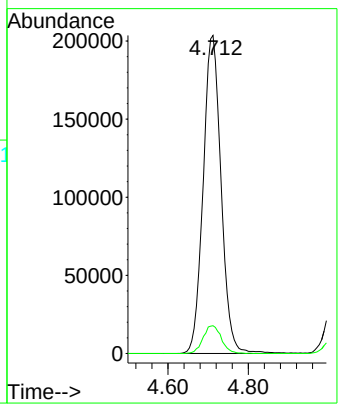





#17
Carbon Disulfide
Concen: 94.140 ug/l
RT: 4.712 min Scan# 46
Delta R.T. 0.006 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 76 Resp: 630294

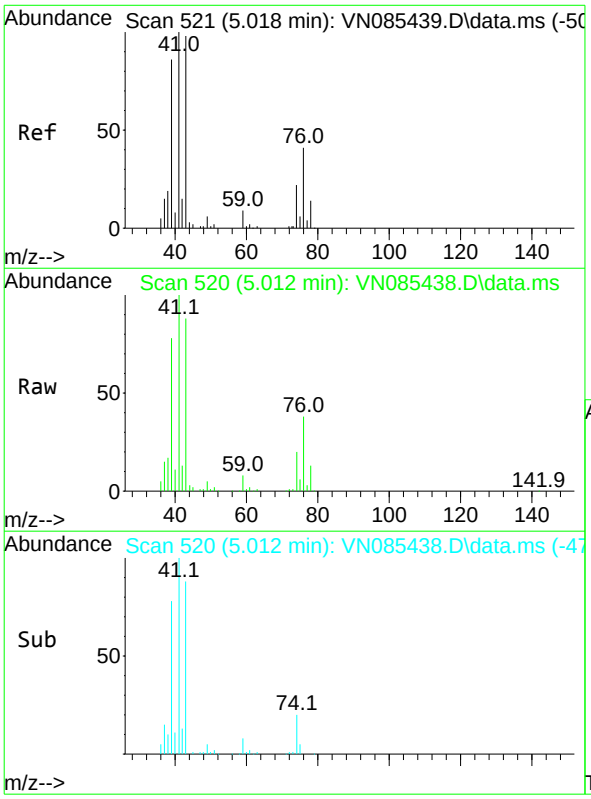
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 8.7 | 6.9 | 10.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

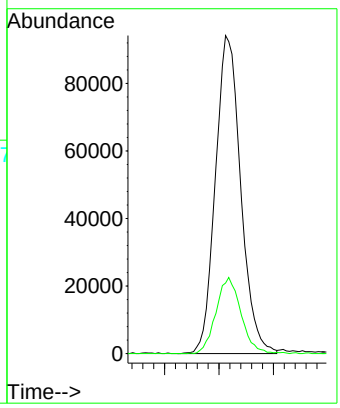
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

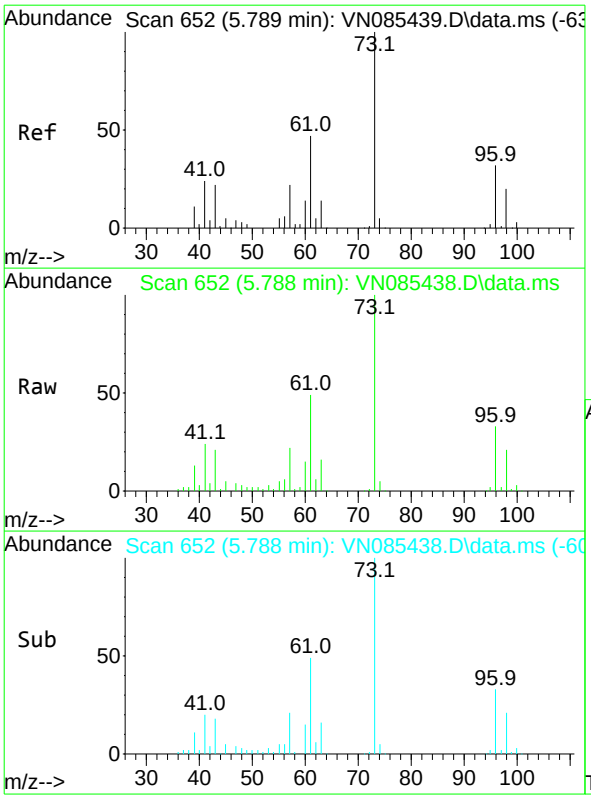



#18
Methyl Acetate
Concen: 94.674 ug/l
RT: 5.012 min Scan# 520
Delta R.T. -0.006 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 43 Resp: 304226

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 23.6 | 18.6 | 28.0 |

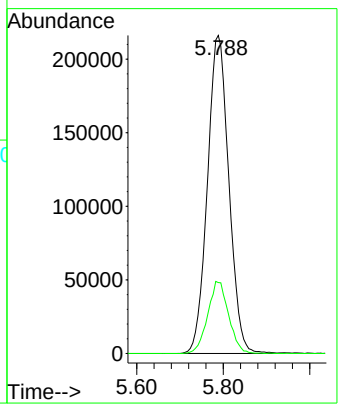





#19
Methyl tert-butyl Ether
Concen: 105.230 ug/l
RT: 5.788 min Scan# 65
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 73 Resp: 743008

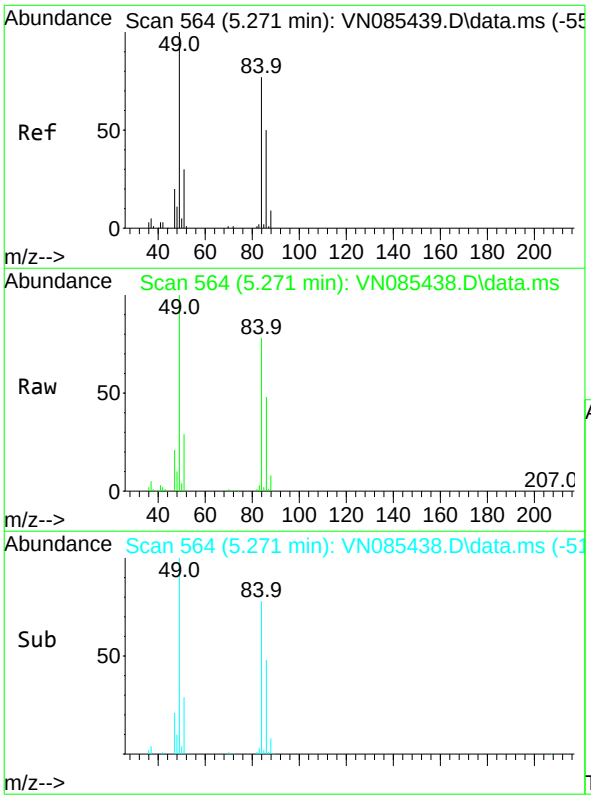
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 22.3 | 17.8 | 26.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

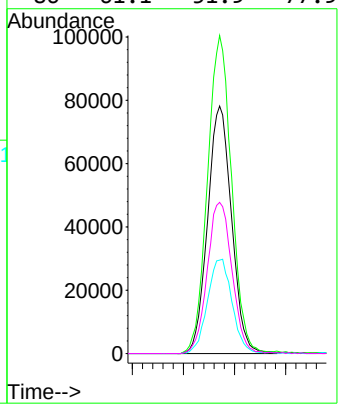
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

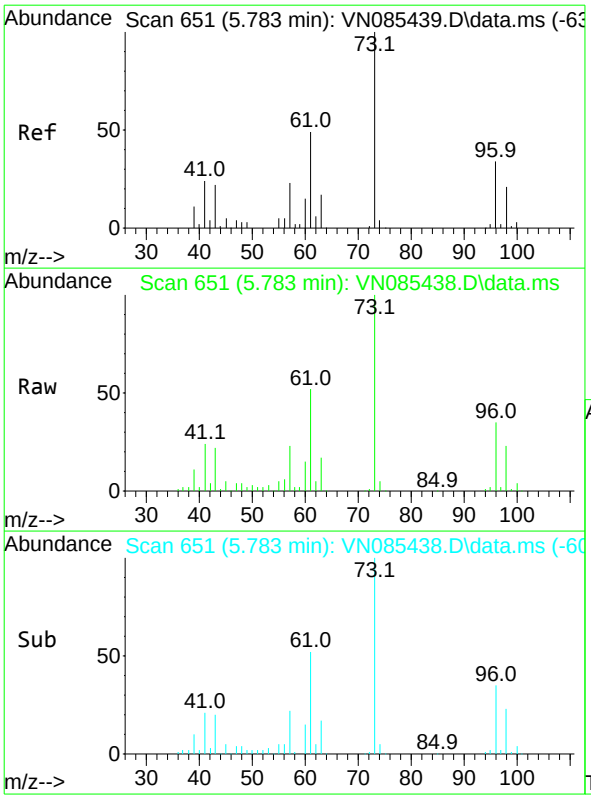



#20
Methylene Chloride
Concen: 97.440 ug/l
RT: 5.271 min Scan# 564
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 84 Resp: 254912

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 128.5 | 104.1 | 156.1 |
| 51 | 37.8 | 31.0 | 46.4 |
| 86 | 61.1 | 51.9 | 77.9 |

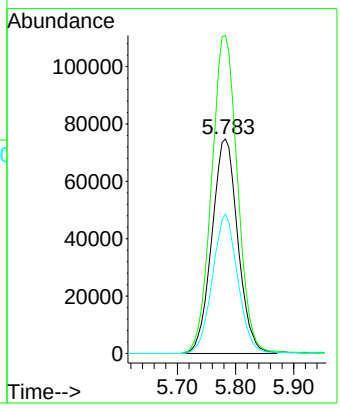





#21
trans-1,2-Dichloroethene
Concen: 99.618 ug/l
RT: 5.783 min Scan# 65
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 96 Resp: 231503

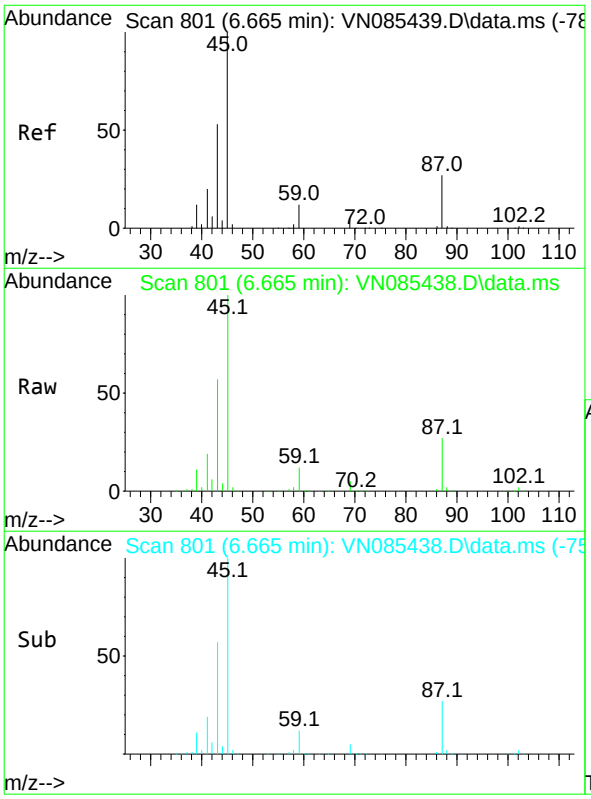
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 148.3 | 115.7 | 173.5 |
| 98 | 65.0 | 49.8 | 74.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

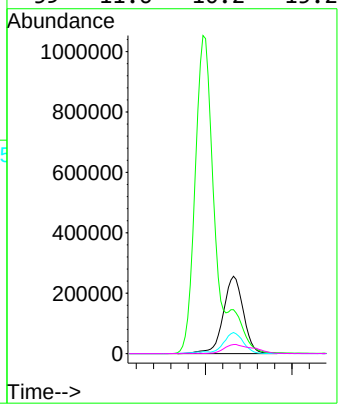
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

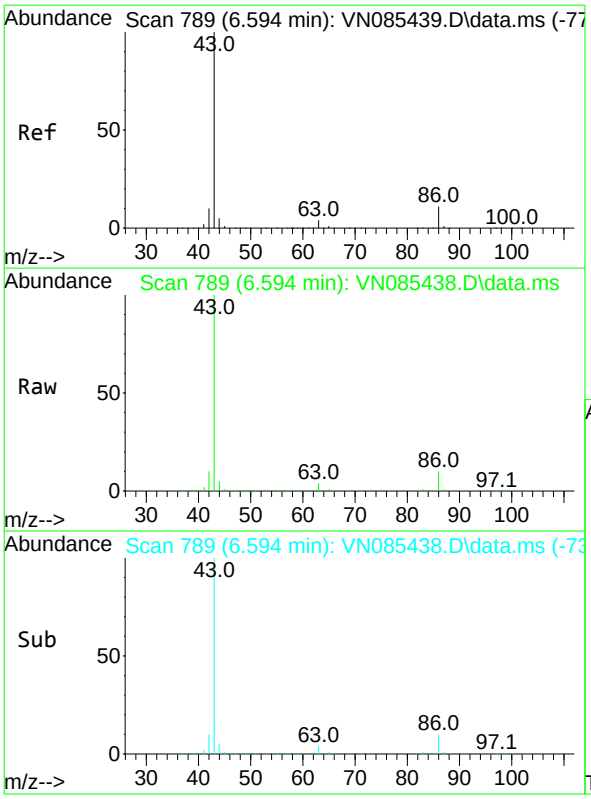



#22
Diisopropyl ether
Concen: 104.812 ug/l
RT: 6.665 min Scan# 801
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 45 Resp: 820871

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 55.7 | 45.0 | 67.6 |
| 87 | 27.2 | 21.8 | 32.8 |
| 59 | 11.6 | 10.2 | 15.2 |

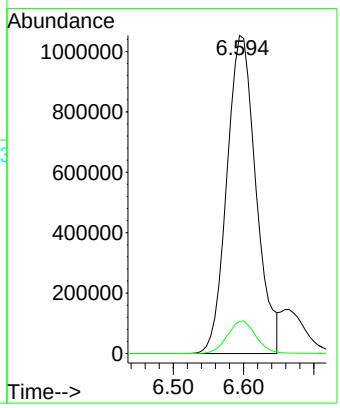





#23
Vinyl Acetate
Concen: 550.850 ug/l
RT: 6.594 min Scan# 78
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 43 Resp: 3029568

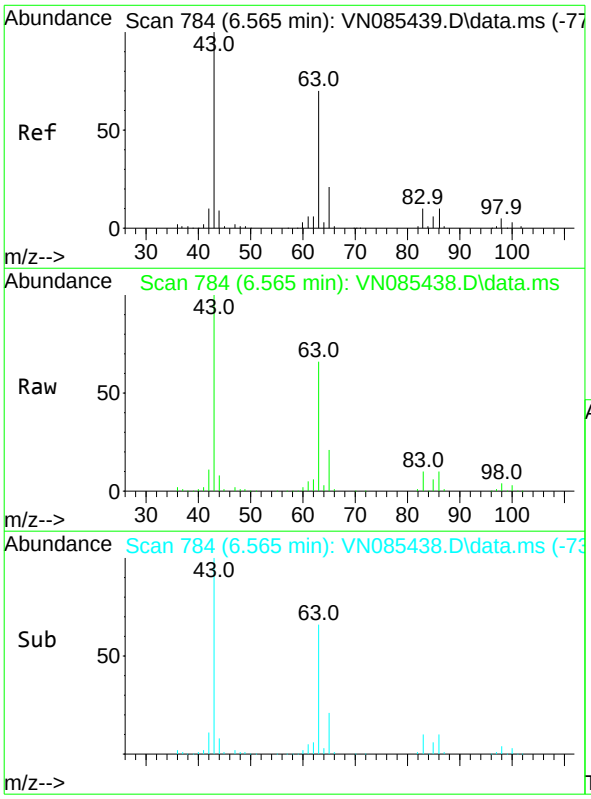
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 10.1 | 8.4 | 12.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

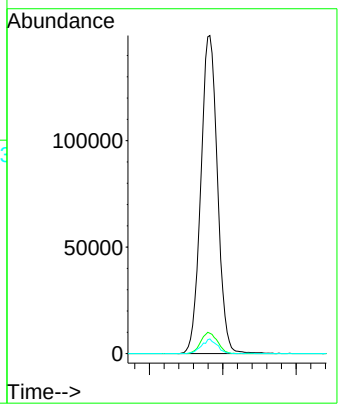
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

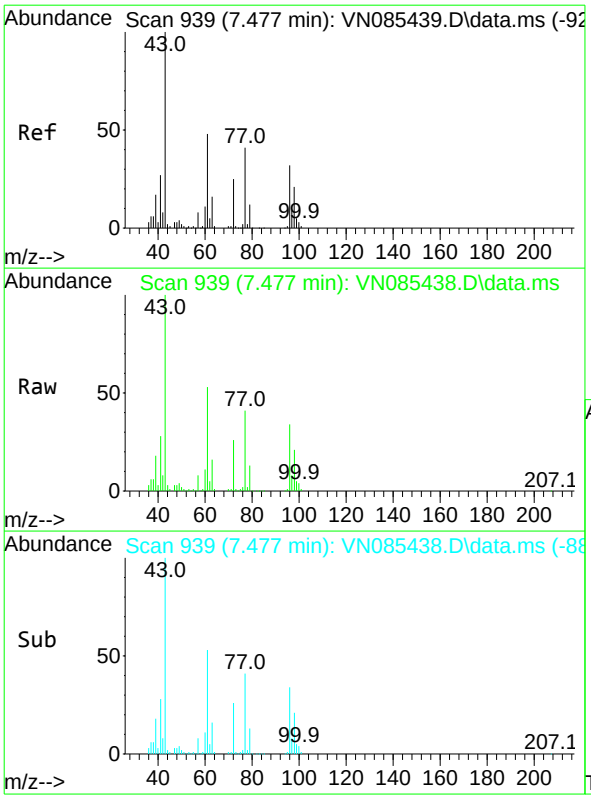



#24
1,1-Dichloroethane
Concen: 98.803 ug/l
RT: 6.565 min Scan# 784
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 63 Resp: 471831

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 6.4 | 3.3 | 9.8 |
| 100 | 4.6 | 2.0 | 6.0 |

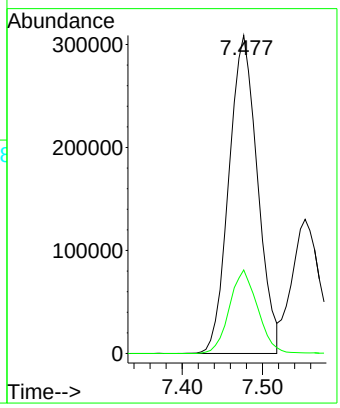





#25
2-Butanone
Concen: 491.912 ug/l
RT: 7.477 min Scan# 93
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 43 Resp: 764979

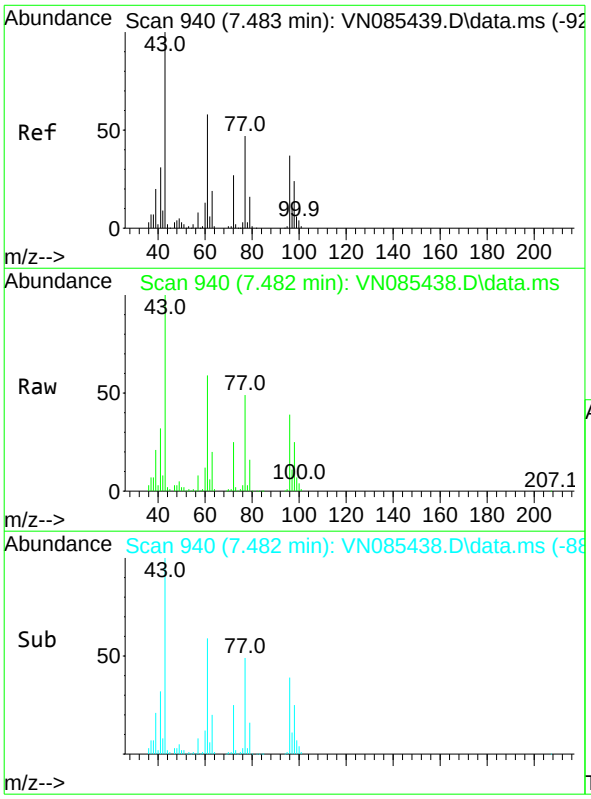
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 26.3 | 20.2 | 30.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

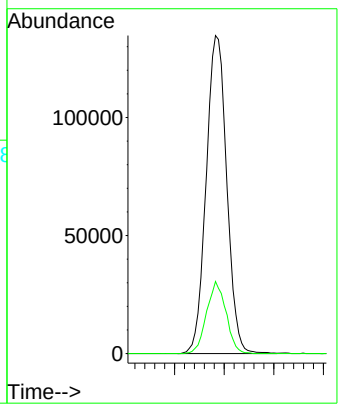
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

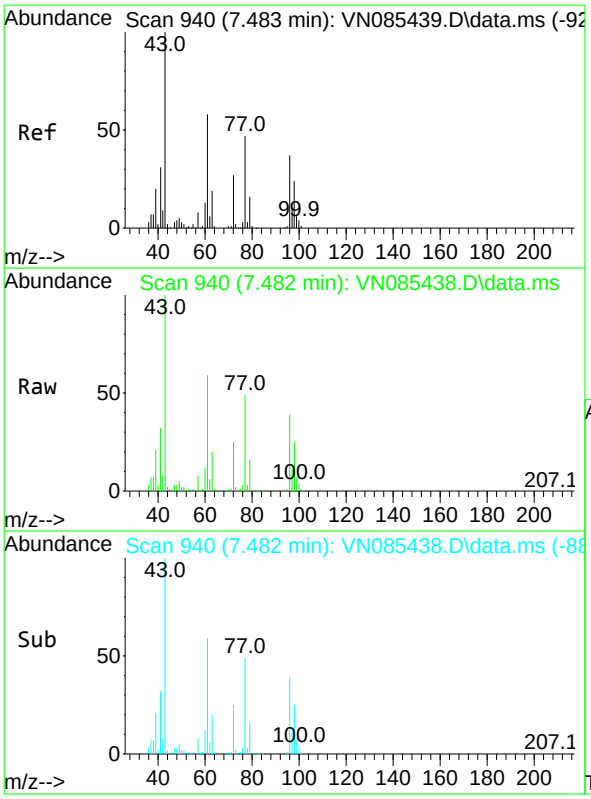



#26
2,2-Dichloropropane
Concen: 100.530 ug/l
RT: 7.482 min Scan# 940
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 77 Resp: 388140

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 21.4 | 10.7 | 32.1 |

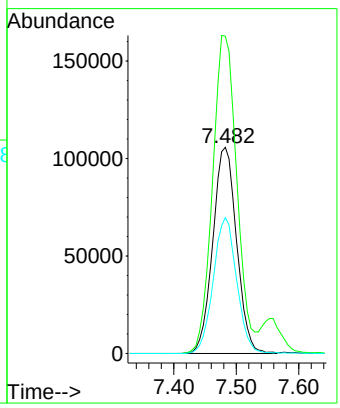





#27
cis-1,2-Dichloroethene
Concen: 102.367 ug/l
RT: 7.482 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 96 Resp: 280197

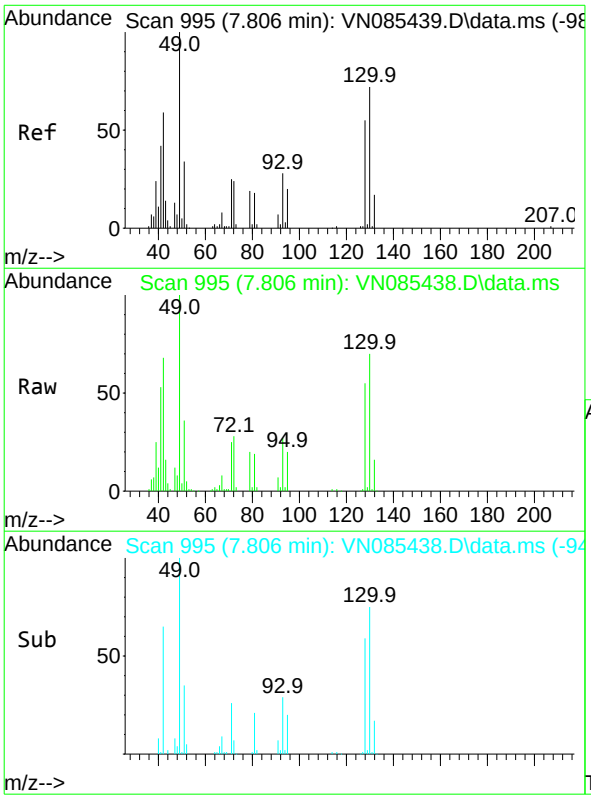
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 156.8 | 0.0 | 311.8 |
| 98 | 65.0 | 0.0 | 126.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

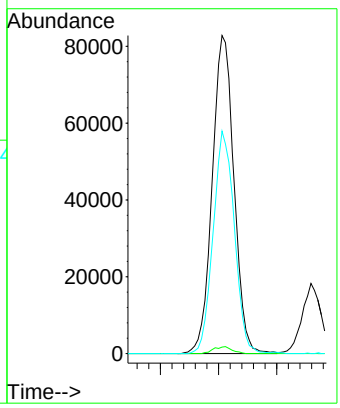
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

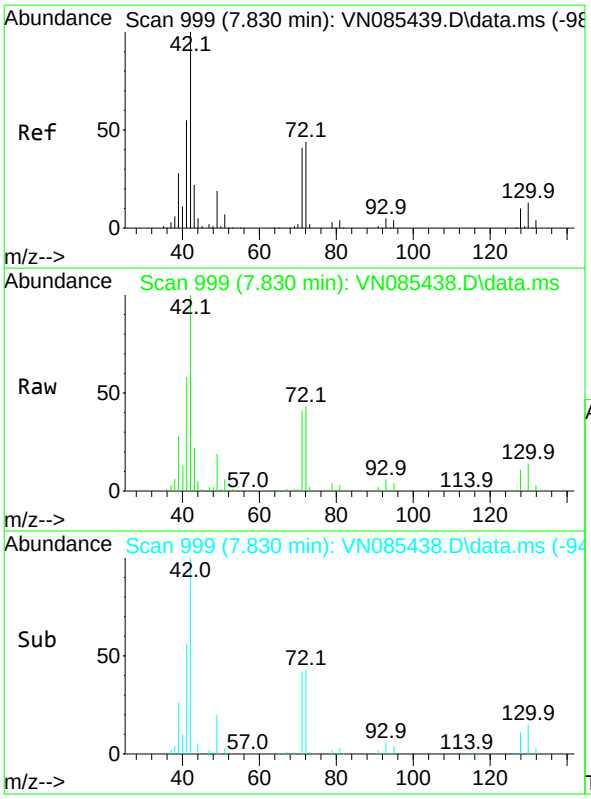



#28
Bromochloromethane
Concen: 96.679 ug/l
RT: 7.806 min Scan# 995
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 49 Resp: 214796

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.9 | 0.0 | 4.4 |
| 130 | 68.4 | 55.0 | 82.4 |

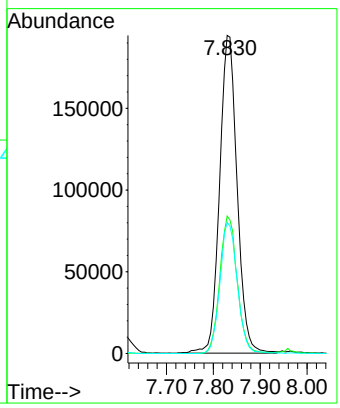





#29
Tetrahydrofuran
Concen: 510.635 ug/l
RT: 7.830 min Scan# 99
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 42 Resp: 503459

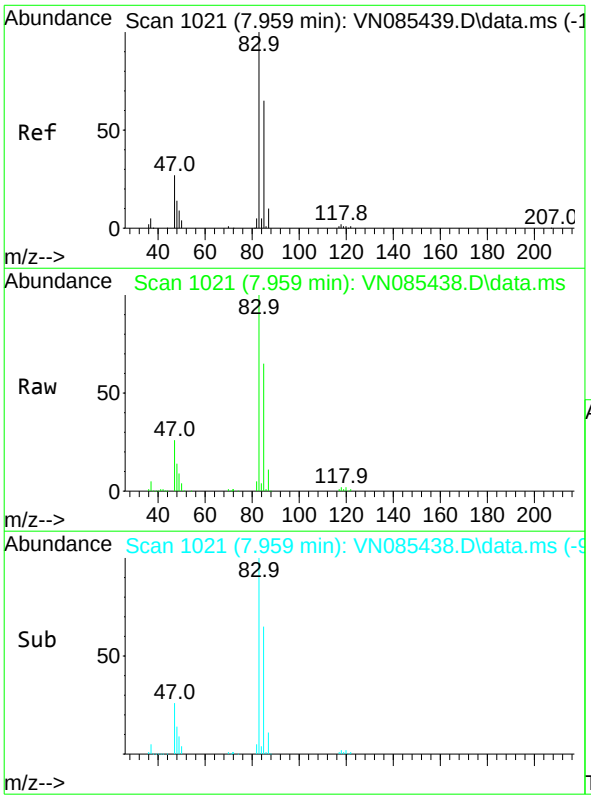
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 43.1 | 34.2 | 51.2 |
| 71 | 40.9 | 32.5 | 48.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

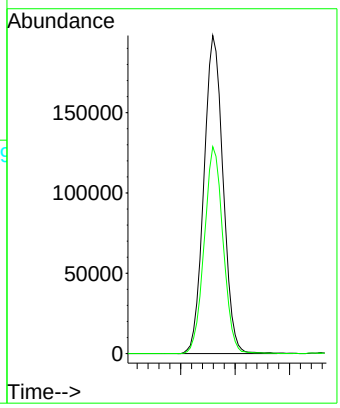
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

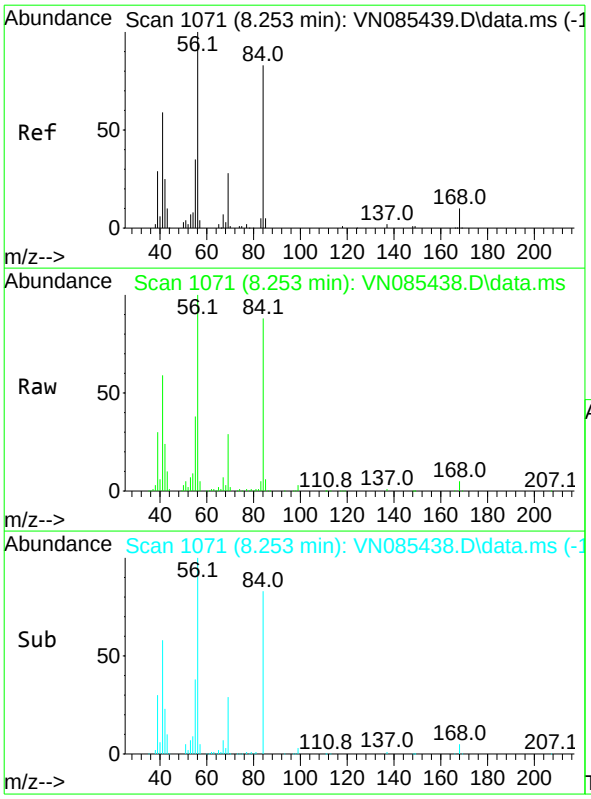



#30
Chloroform
Concen: 98.253 ug/l
RT: 7.959 min Scan# 1021
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 83 Resp: 484941

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 65.0 | 51.8 | 77.6 |

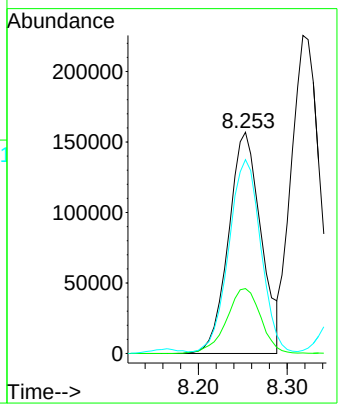





#31
Cyclohexane
Concen: 96.041 ug/l
RT: 8.253 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 56 Resp: 398641

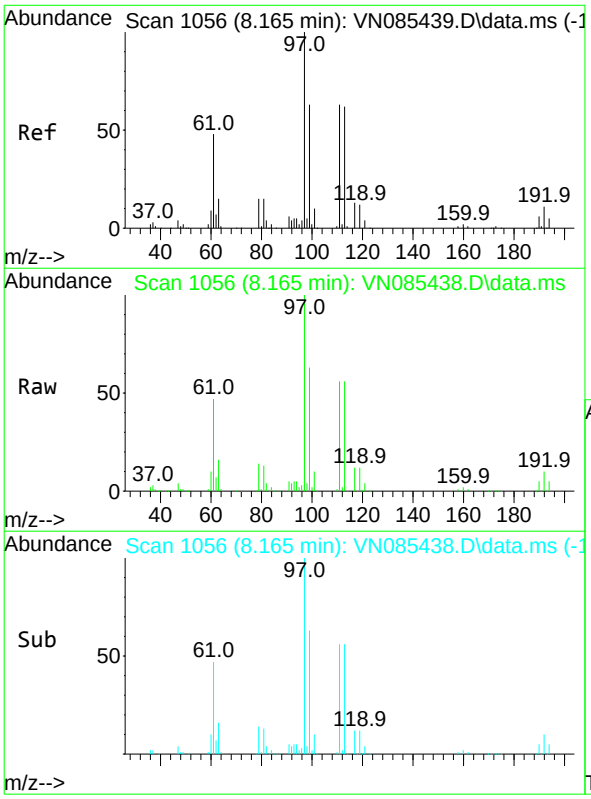
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 29.2 | 22.2 | 33.4 |
| 84 | 86.4 | 66.4 | 99.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

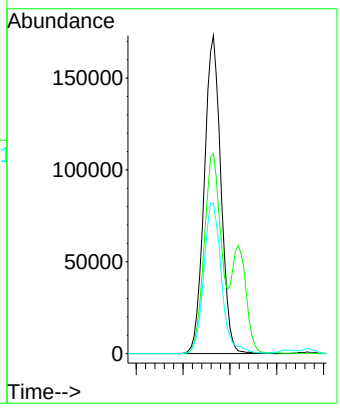
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

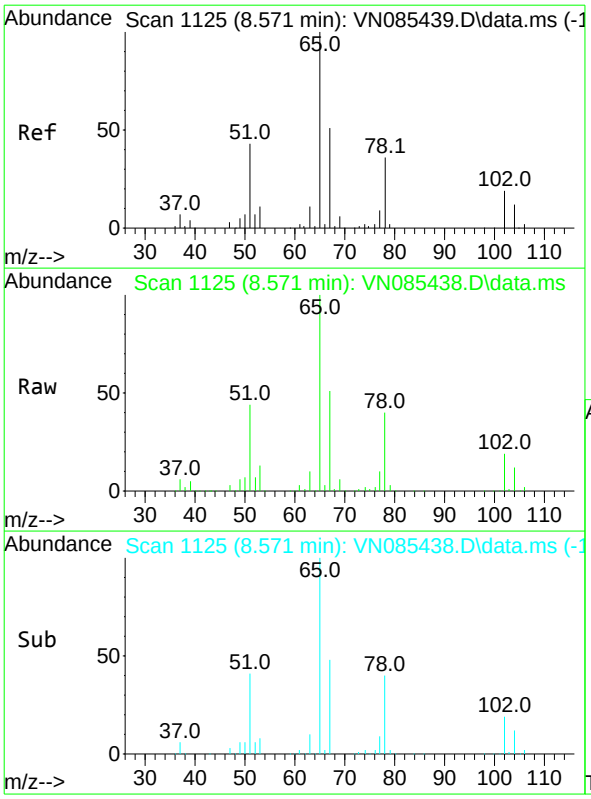



#32
1,1,1-Trichloroethane
Concen: 98.578 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 97 Resp: 426782

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 64.2 | 49.8 | 74.6 |
| 61 | 50.6 | 41.4 | 62.2 |

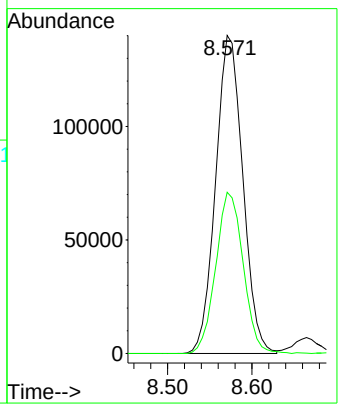





#33
1,2-Dichloroethane-d4
Concen: 95.899 ug/l
RT: 8.571 min Scan# 11
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 65 Resp: 313645

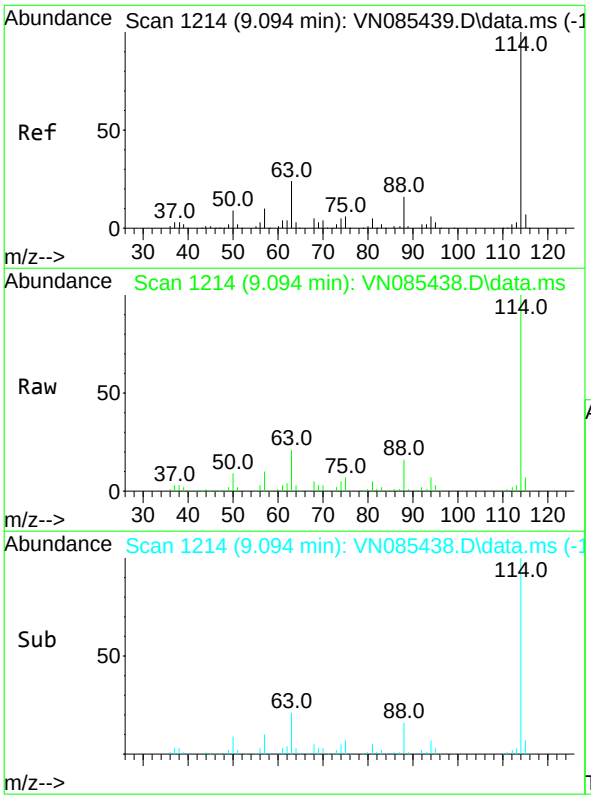
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 51.1 | 0.0 | 101.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

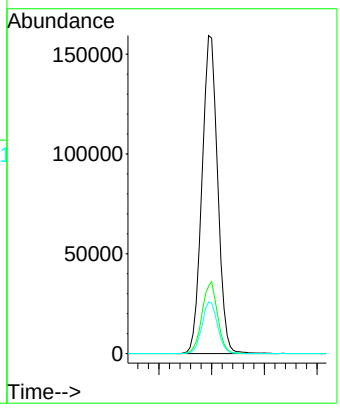
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

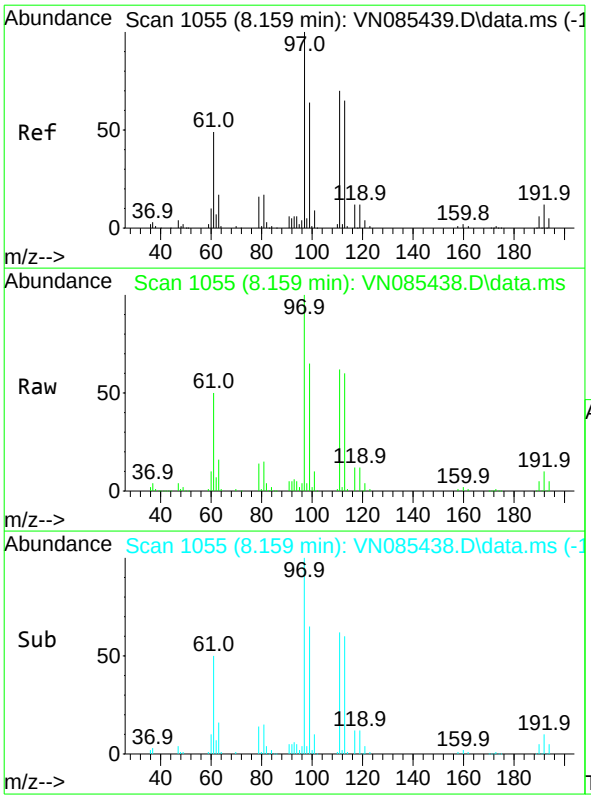



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.094 min Scan# 1214
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:114 Resp: 329363

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 21.2 | 0.0 | 47.6 |
| 88 | 16.2 | 0.0 | 32.6 |

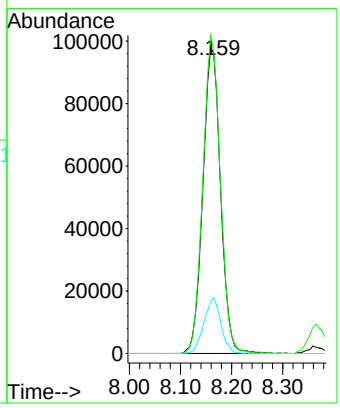





#35
Dibromofluoromethane
Concen: 103.353 ug/l
RT: 8.159 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:113 Resp: 236159

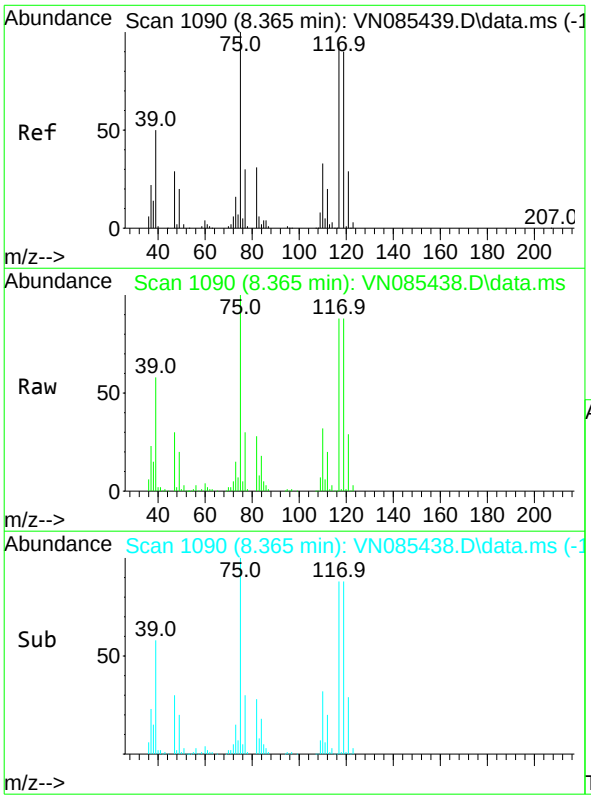
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 102.3 | 82.7 | 124.1 |
| 192 | 17.4 | 14.3 | 21.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

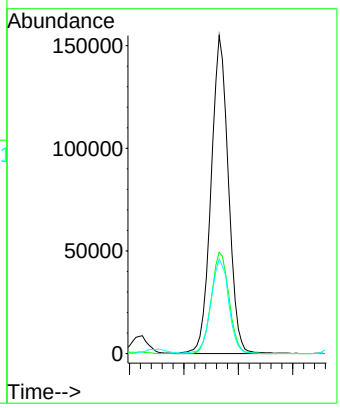
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

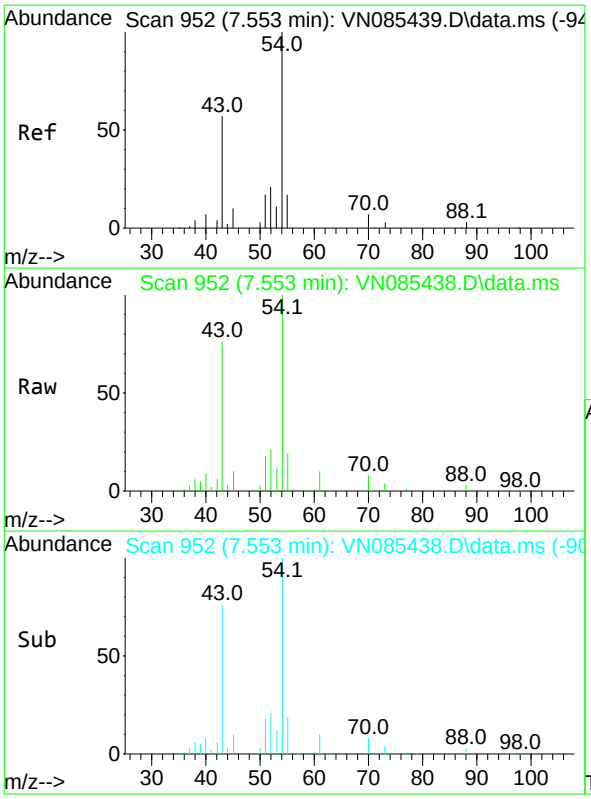



#36
1,1-Dichloropropene
Concen: 106.945 ug/l
RT: 8.365 min Scan# 1090
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 75 Resp: 342961

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 32.6 | 16.5 | 49.5 |
| 77 | 30.6 | 24.4 | 36.6 |






#37
Ethyl Acetate
Concen: 100.961 ug/l
RT: 7.553 min Scan# 95
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

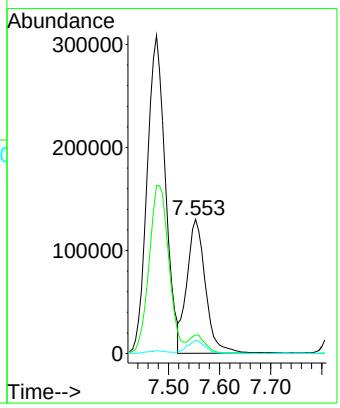
Tgt Ion: 43 Resp: 326802

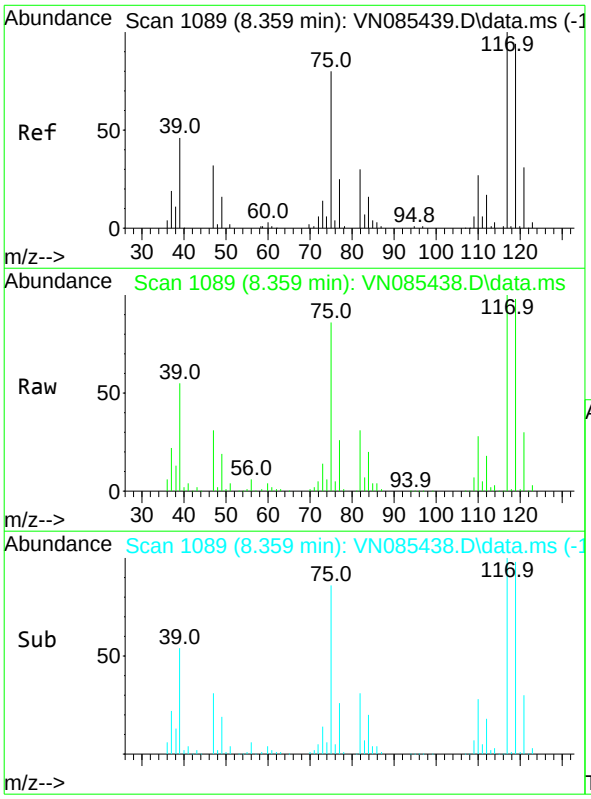
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 12.0 | 10.9 | 16.3 |
| 70 | 9.6 | 7.5 | 11.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

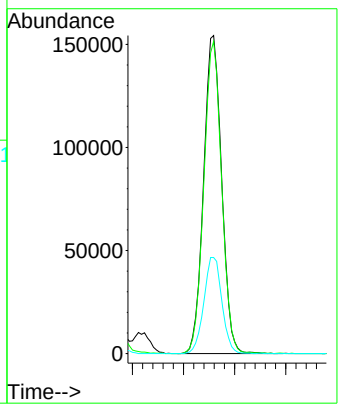


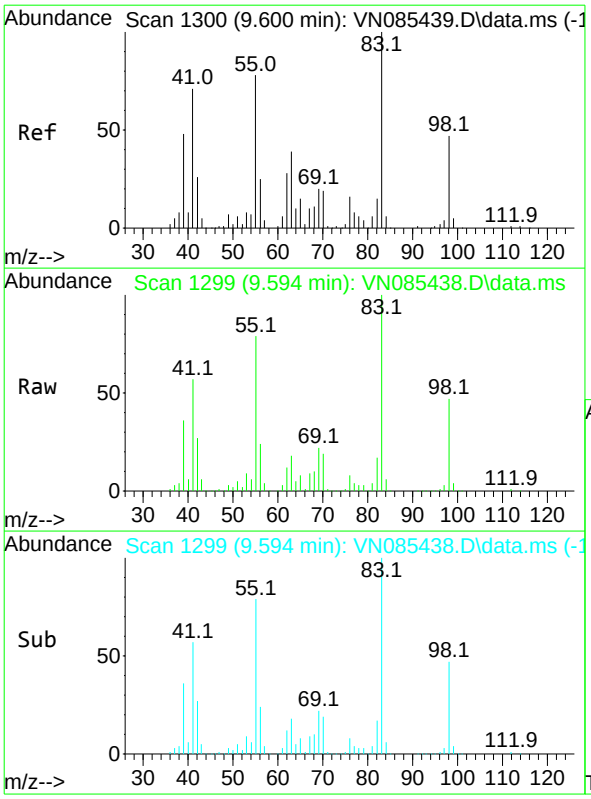




#38
Carbon Tetrachloride
Concen: 103.065 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:117 Resp: 378390

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 98.1 | 75.4 | 113.2 |
| 121 | 30.2 | 24.6 | 37.0 |

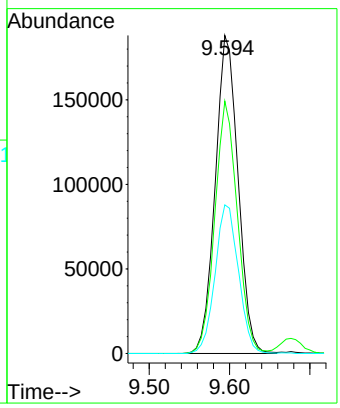





#39
Methylcyclohexane
Concen: 123.354 ug/l
RT: 9.594 min Scan# 12
Delta R.T. -0.006 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 83 Resp: 371734

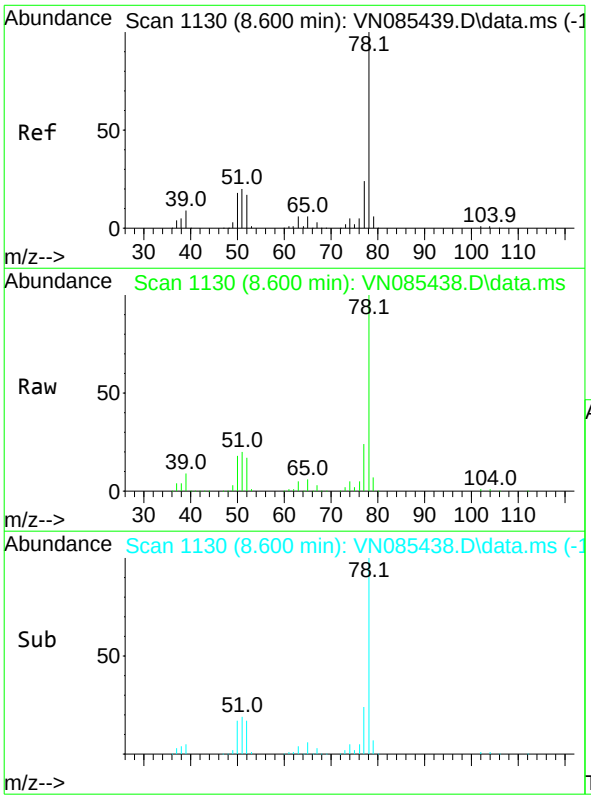
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 79.3 | 62.6 | 94.0 |
| 98 | 46.7 | 37.7 | 56.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
**APPROVED**

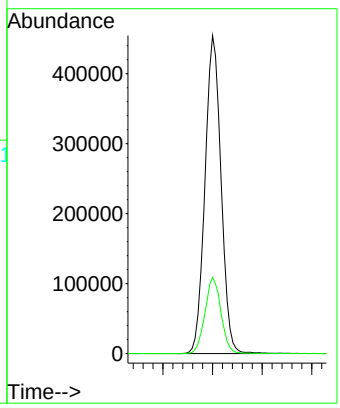
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

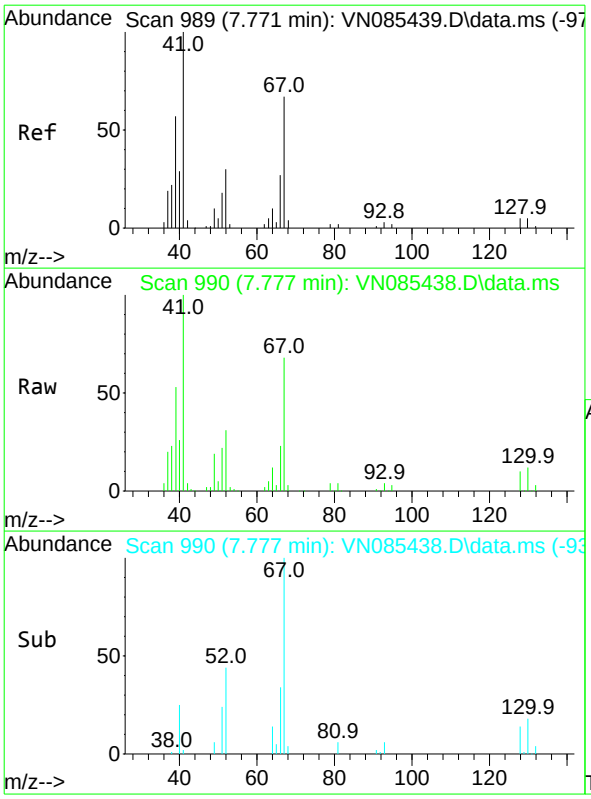



#40
Benzene
Concen: 106.001 ug/l
RT: 8.600 min Scan# 1130
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 78 Resp: 1021393

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.9 | 19.0 | 28.6 |

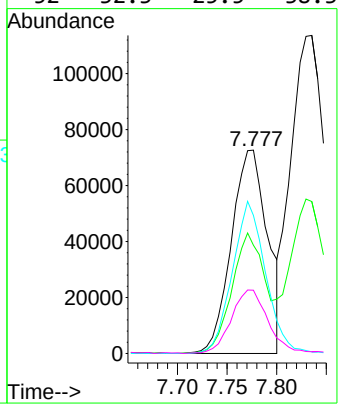





#41
Methacrylonitrile
Concen: 109.454 ug/l
RT: 7.777 min Scan# 99
Delta R.T. 0.006 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 41 Resp: 184326

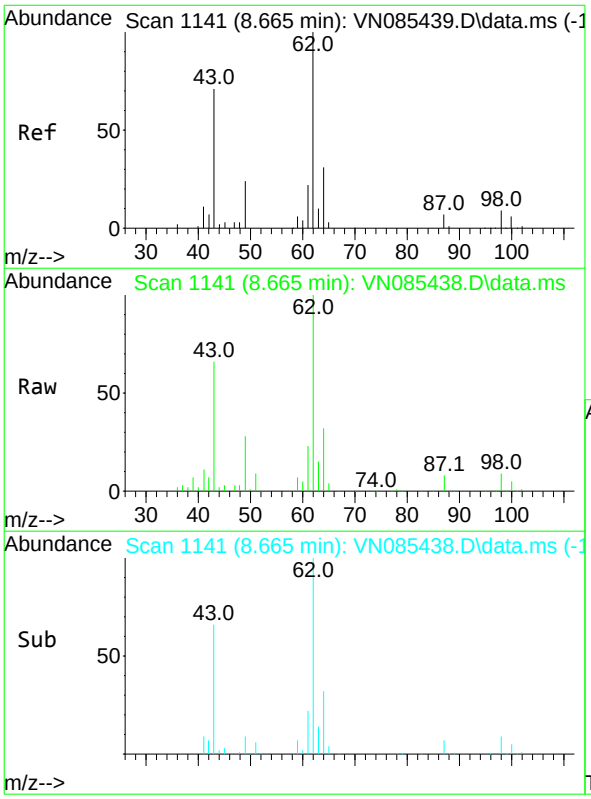
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 52.8 | 46.0 | 69.0 |
| 67 | 68.8 | 57.4 | 86.2 |
| 52 | 32.3 | 25.5 | 38.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

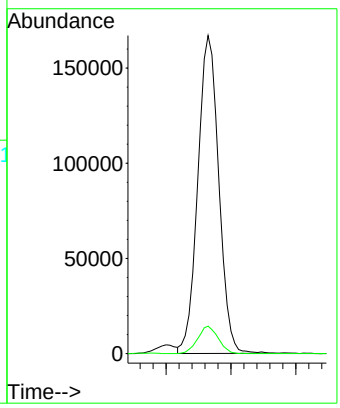
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

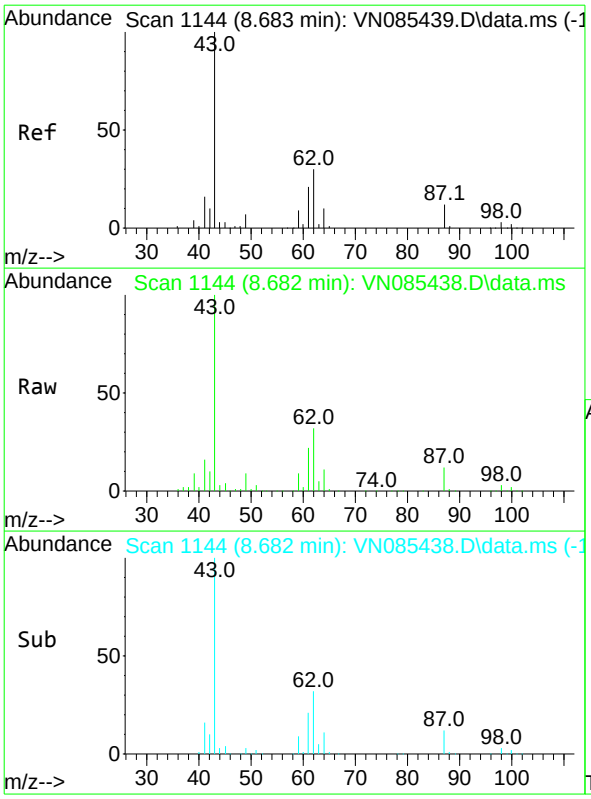



#42
1,2-Dichloroethane
Concen: 103.314 ug/l
RT: 8.665 min Scan# 1141
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 62 Resp: 374938

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 8.4 | 0.0 | 17.0 |

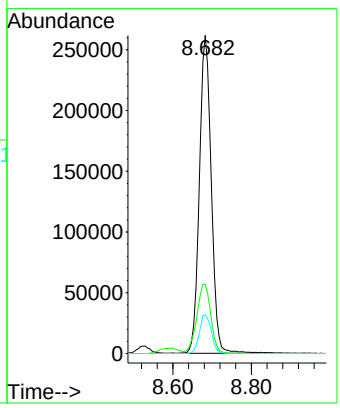





#43
Isopropyl Acetate
Concen: 106.035 ug/l
RT: 8.682 min Scan# 11
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 43 Resp: 549969

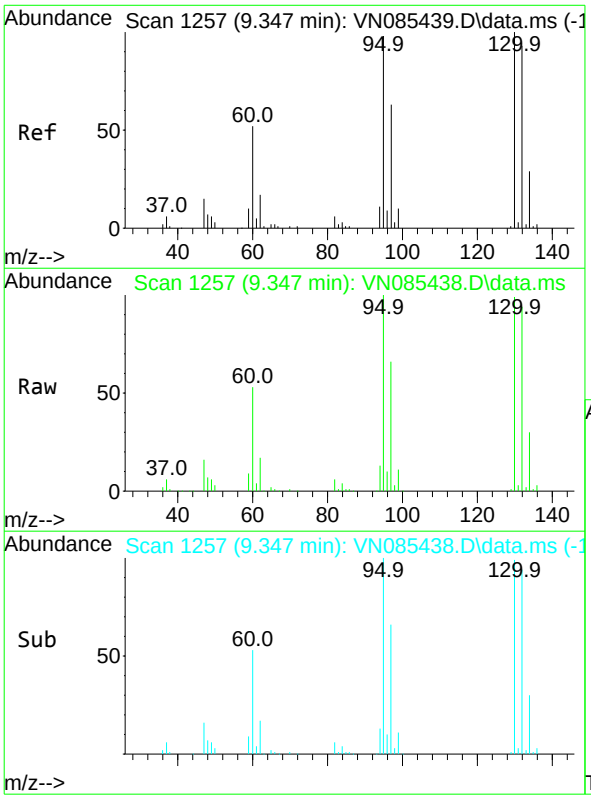
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 25.7 | 20.7 | 31.1 |
| 87 | 12.2 | 9.8 | 14.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

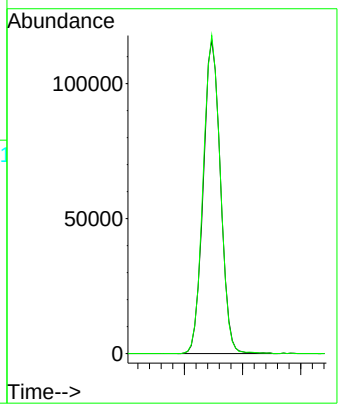
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

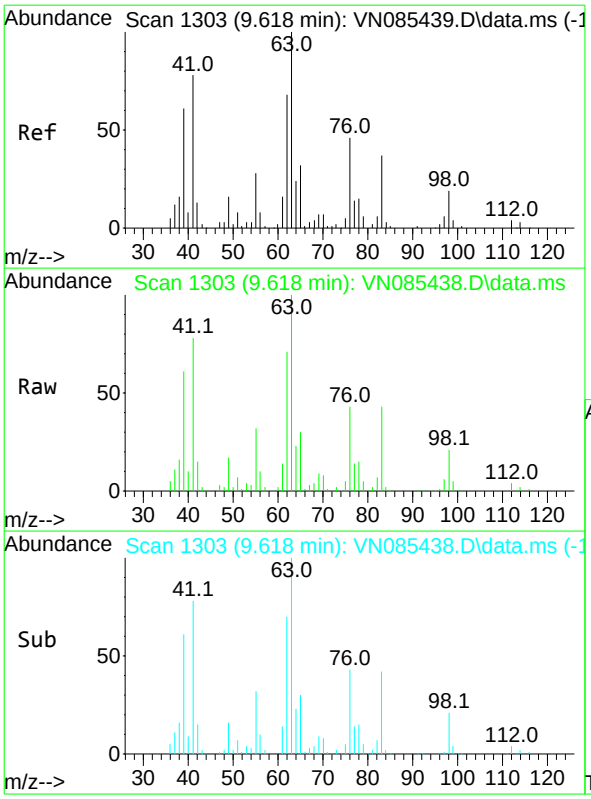



#44
Trichloroethene
Concen: 106.242 ug/l
RT: 9.347 min Scan# 1257
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:130 Resp: 238296

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 101.5 | 0.0 | 195.8 |

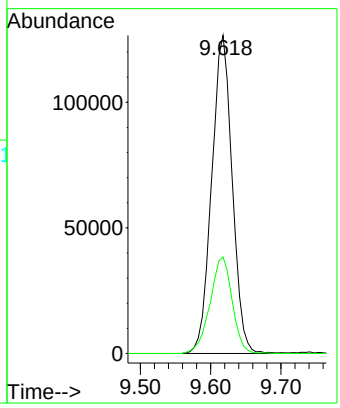





#45
1,2-Dichloropropane
Concen: 104.405 ug/l
RT: 9.618 min Scan# 13
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 63 Resp: 256964

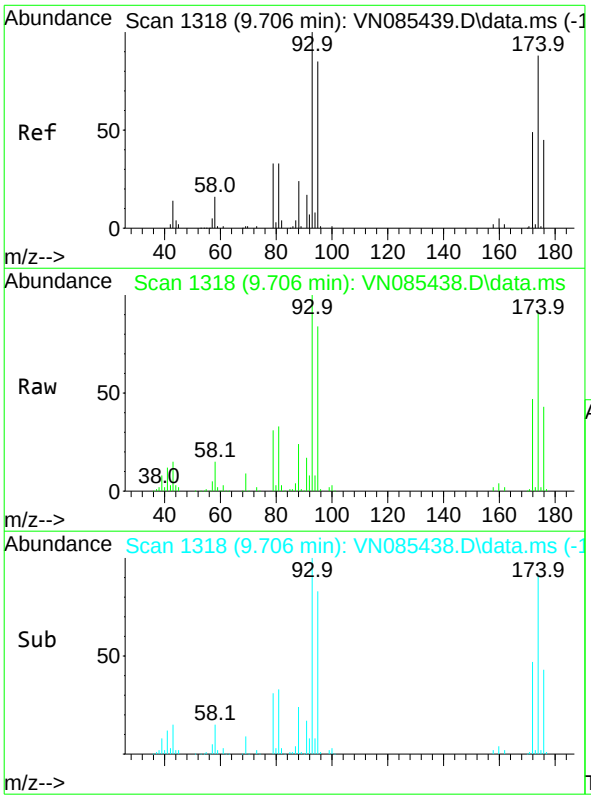
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 30.3 | 25.6 | 38.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

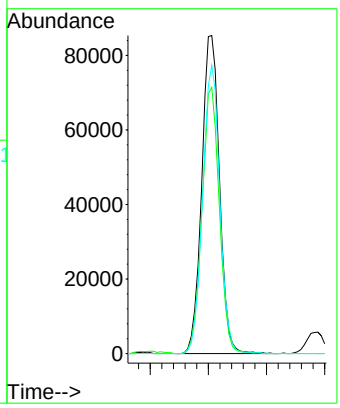
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

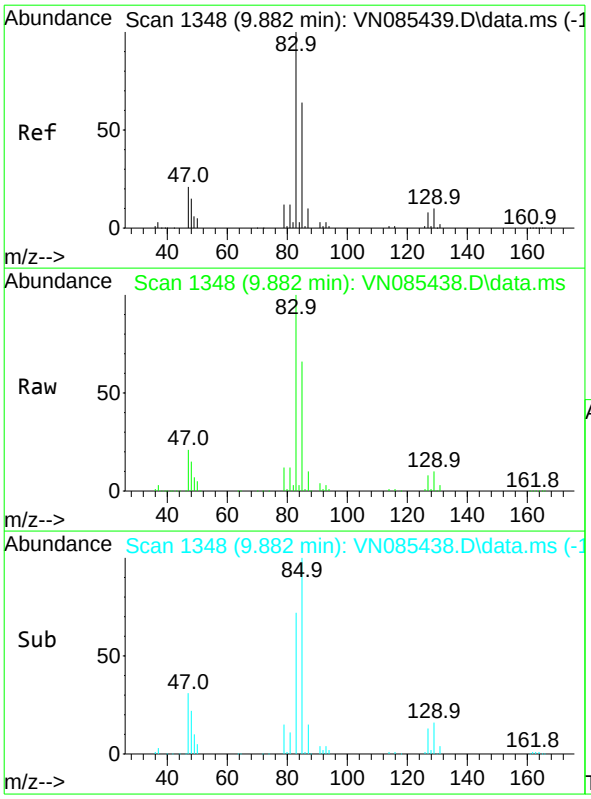



#46
Dibromomethane
Concen: 101.913 ug/l
RT: 9.706 min Scan# 1318
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 93 Resp: 180990

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 81.6 | 64.7 | 97.1 |
| 174 | 87.5 | 69.0 | 103.4 |

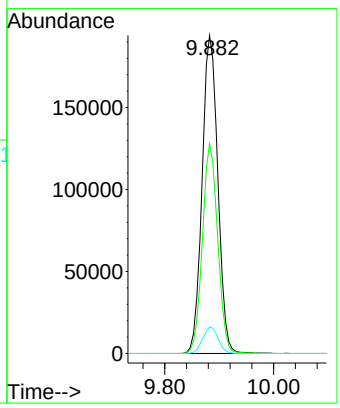





#47
Bromodichloromethane
Concen: 107.377 ug/l
RT: 9.882 min Scan# 13
Delta R.T. 0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 83 Resp: 388499

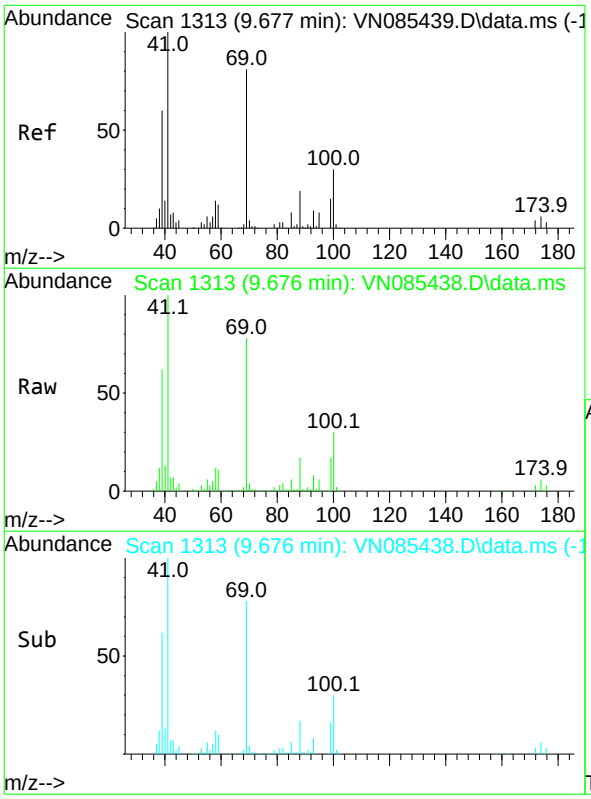
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 65.9 | 51.2 | 76.8 |
| 127 | 8.4 | 6.5 | 9.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

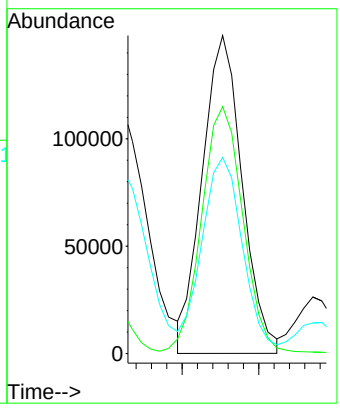
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

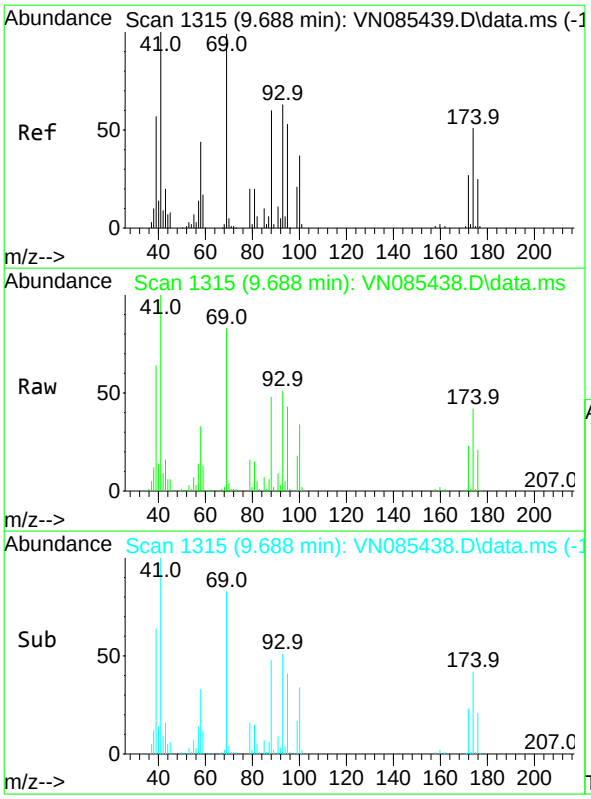



#48
Methyl methacrylate
Concen: 114.685 ug/l
RT: 9.676 min Scan# 1313
Delta R.T. -0.001 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 41 Resp: 267689

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 80.9 | 64.7 | 97.1 |
| 39 | 63.1 | 49.0 | 73.6 |

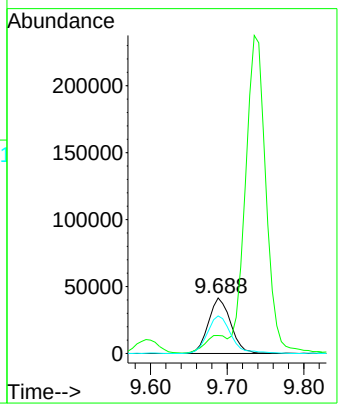





#49
1,4-Dioxane
Concen: 2133.992 ug/l
RT: 9.688 min Scan# 13
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 88 Resp: 83879

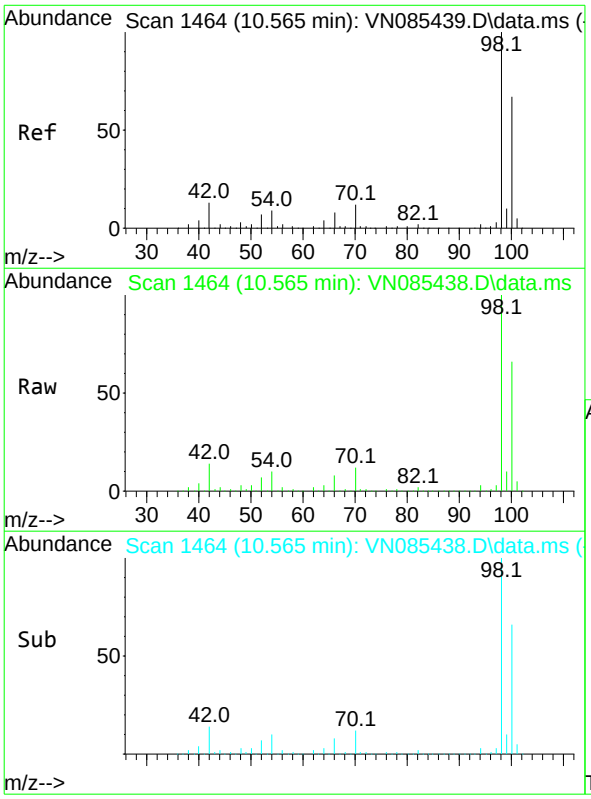
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 31.3 | 26.6 | 39.8 |
| 58 | 72.1 | 59.5 | 89.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

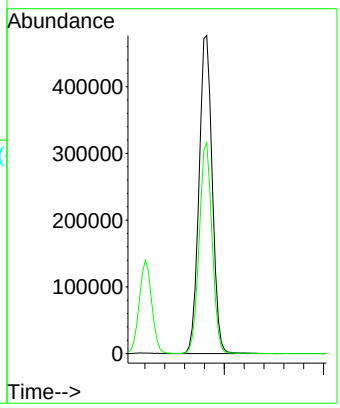
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

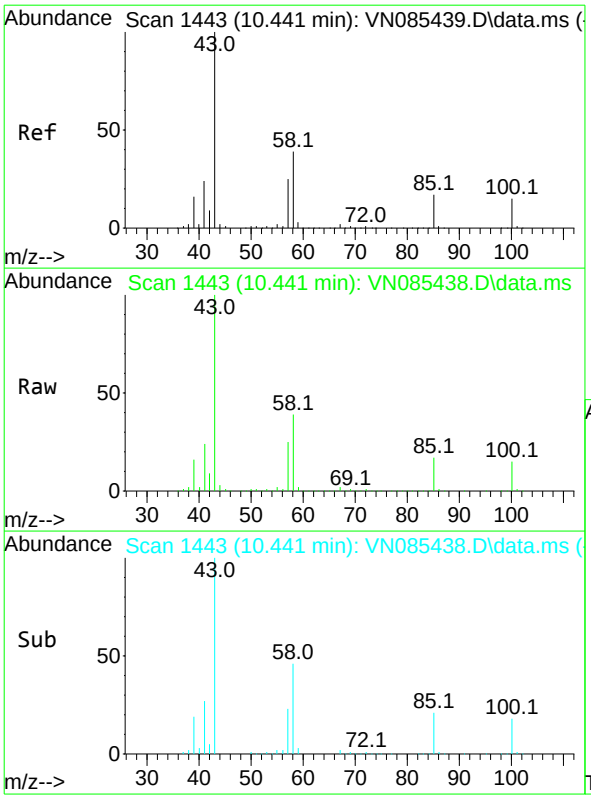



#50
Toluene-d8
Concen: 108.636 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 98 Resp: 881956

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.5 | 52.2 | 78.4 |

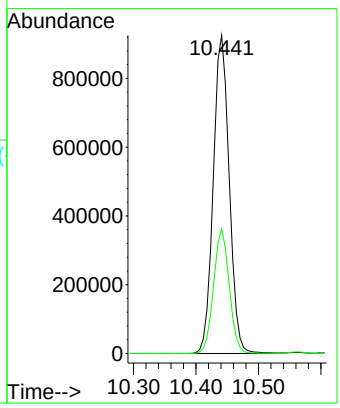





#51
4-Methyl-2-Pentanone
Concen: 546.159 ug/l
RT: 10.441 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 43 Resp: 1643800

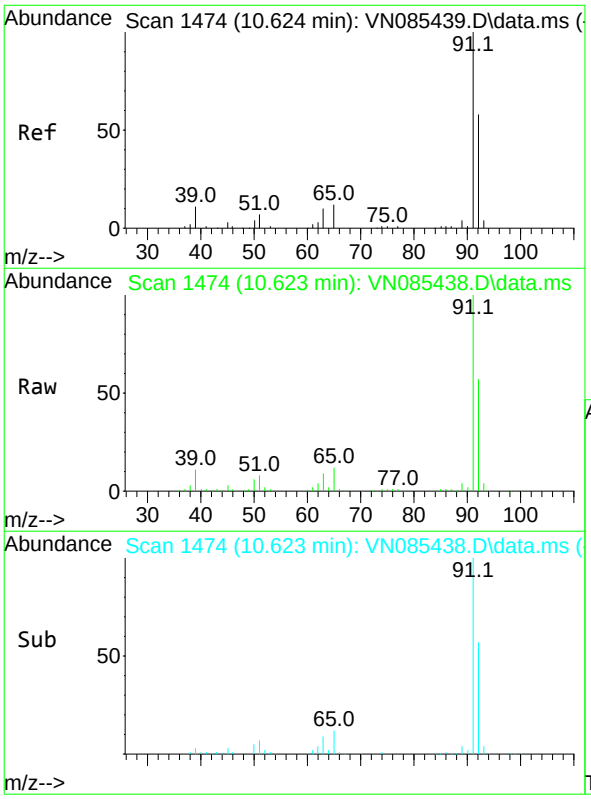
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 38.4 | 30.5 | 45.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

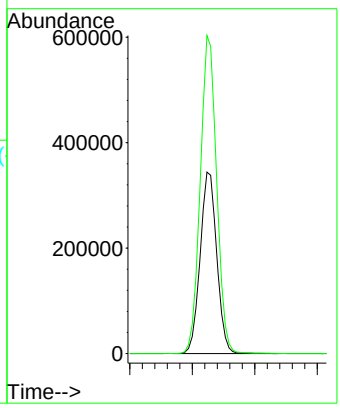
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

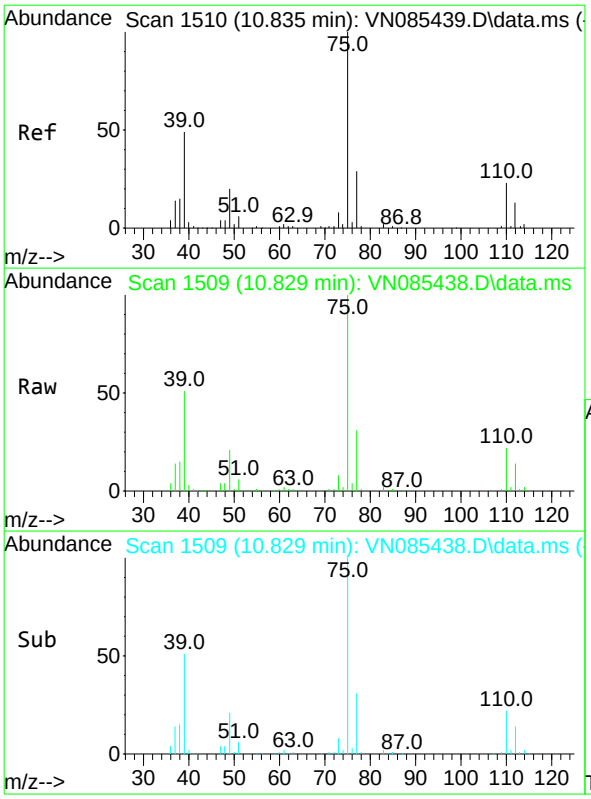



#52
Toluene
Concen: 113.689 ug/l
RT: 10.623 min Scan# 1474
Delta R.T. -0.001 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 92 Resp: 634743

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 173.1 | 139.2 | 208.8 |

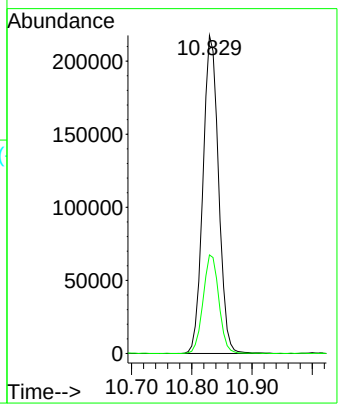





#53
t-1,3-Dichloropropene
Concen: 114.424 ug/l
RT: 10.829 min Scan# 15
Delta R.T. -0.006 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 75 Resp: 391238

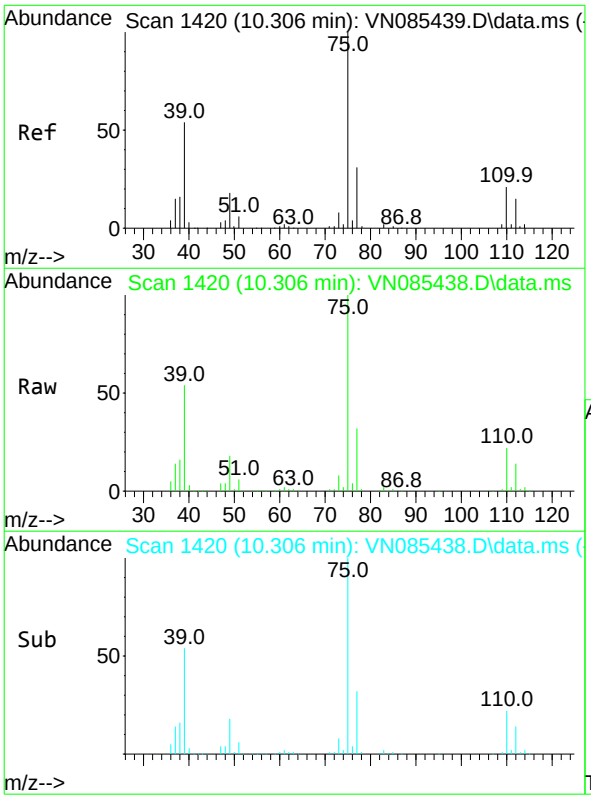
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.0 | 23.5 | 35.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

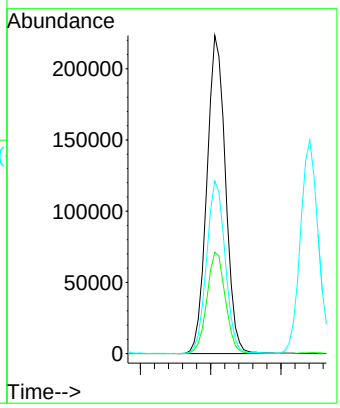
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

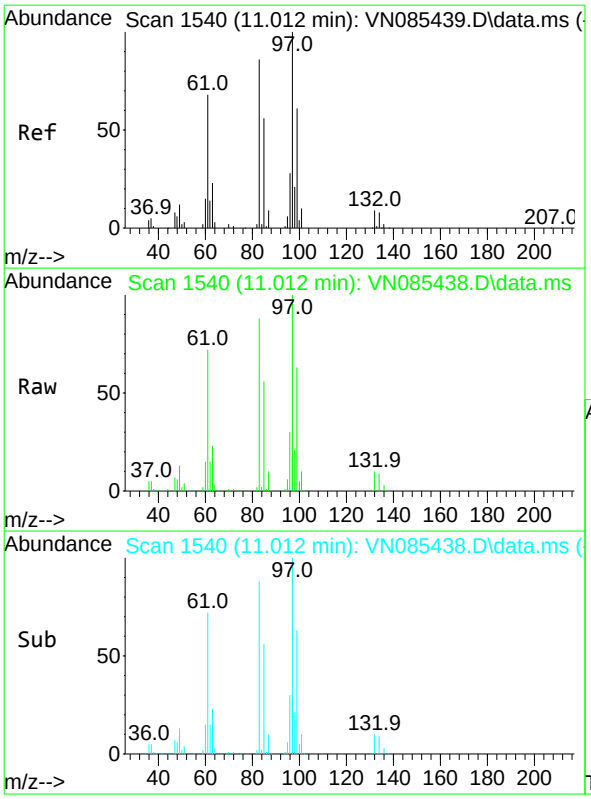



#54
cis-1,3-Dichloropropene
Concen: 112.369 ug/l
RT: 10.306 min Scan# 1420
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 75 Resp: 410403

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.9 | 25.0 | 37.4 |
| 39 | 54.3 | 43.1 | 64.7 |

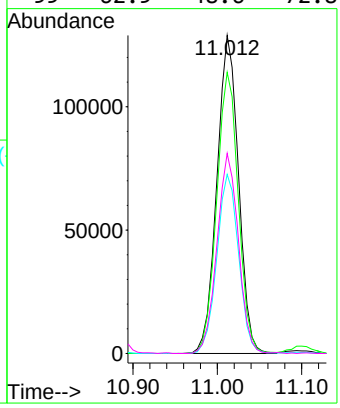





#55
1,1,2-Trichloroethane
Concen: 103.879 ug/l
RT: 11.012 min Scan# 15
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 97 Resp: 229522

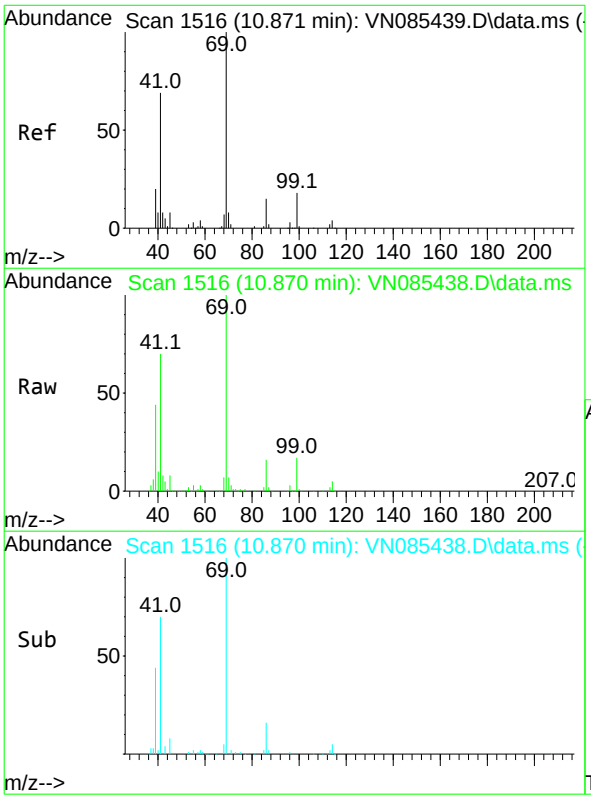
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 88.4 | 69.0 | 103.6 |
| 85 | 56.3 | 44.6 | 66.8 |
| 99 | 62.9 | 48.6 | 72.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

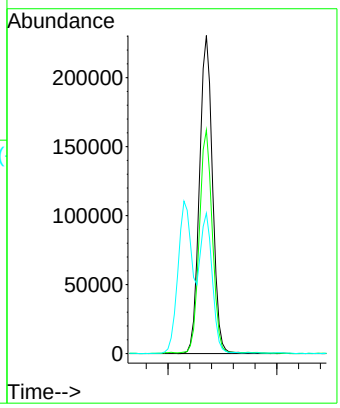
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

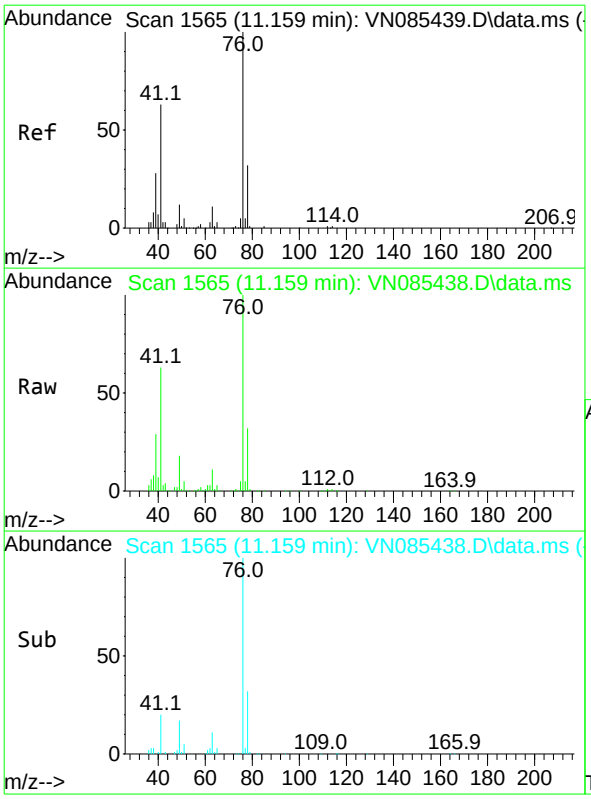



#56
Ethyl methacrylate
Concen: 101.029 ug/l
RT: 10.870 min Scan# 1516
Delta R.T. -0.001 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 69 Resp: 383663

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 69.1 | 54.6 | 82.0 |
| 39 | 40.1 | 32.4 | 48.6 |

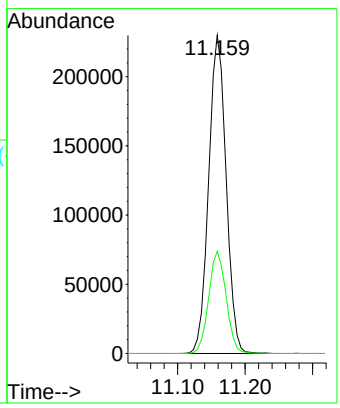





#57
1,3-Dichloropropane
Concen: 107.469 ug/l
RT: 11.159 min Scan# 15
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 76 Resp: 412886

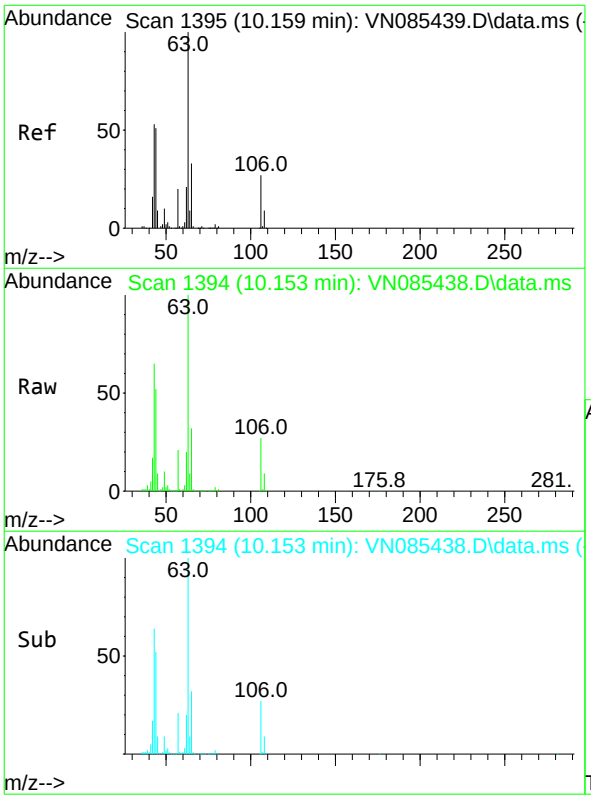
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.2 | 25.6 | 38.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

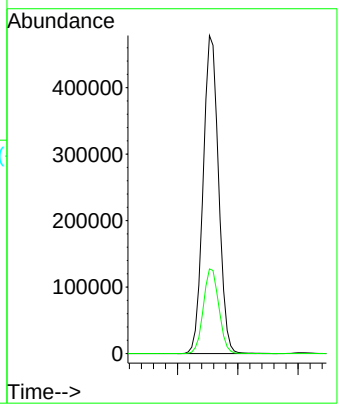
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

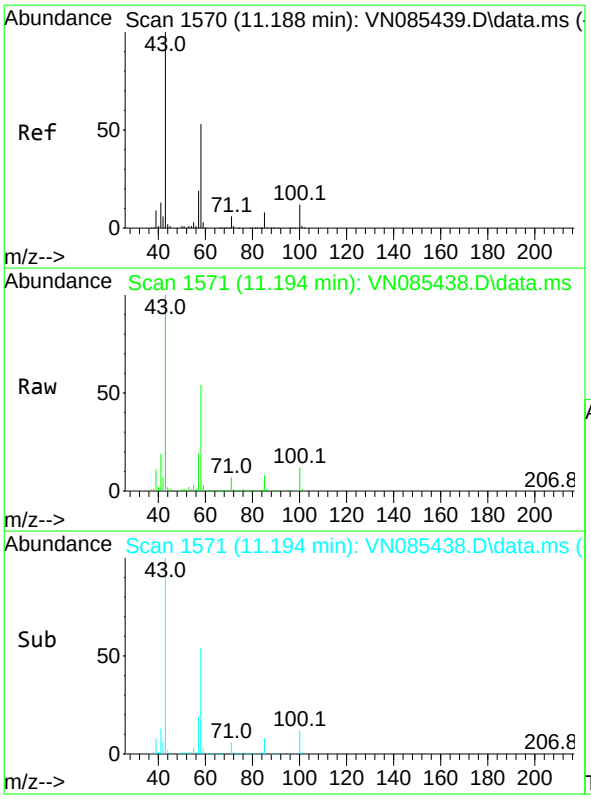



#58
2-Chloroethyl Vinyl ether
Concen: 605.243 ug/l
RT: 10.153 min Scan# 1394
Delta R.T. -0.006 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 63 Resp: 848636

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 26.8 | 21.6 | 32.4 |

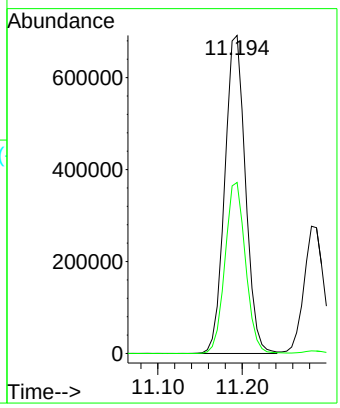





#59
2-Hexanone
Concen: 556.643 ug/l
RT: 11.194 min Scan# 15
Delta R.T. 0.006 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 43 Resp: 1178831

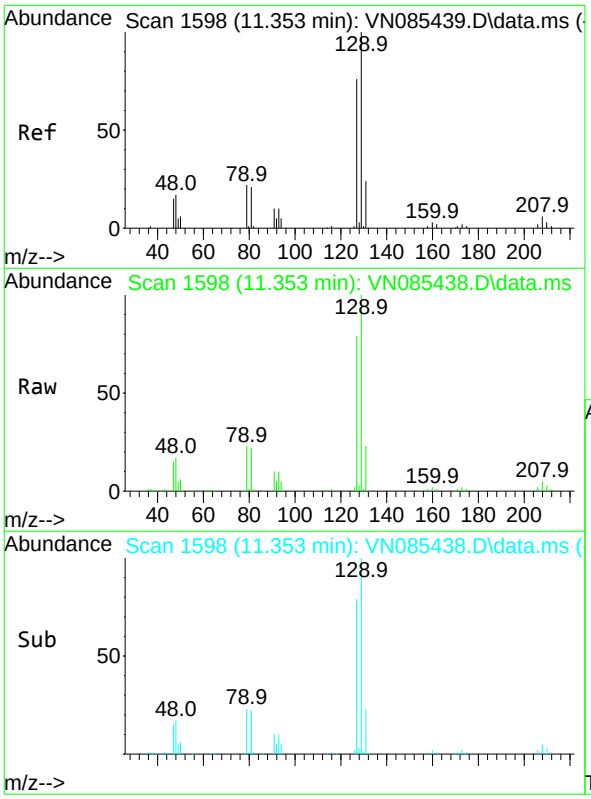
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 53.2 | 26.2 | 78.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

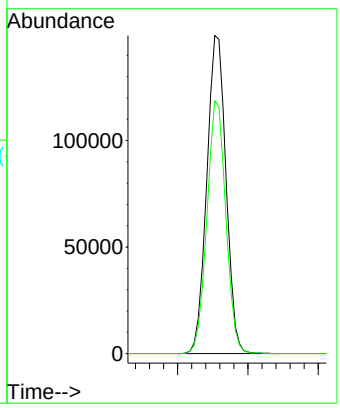
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

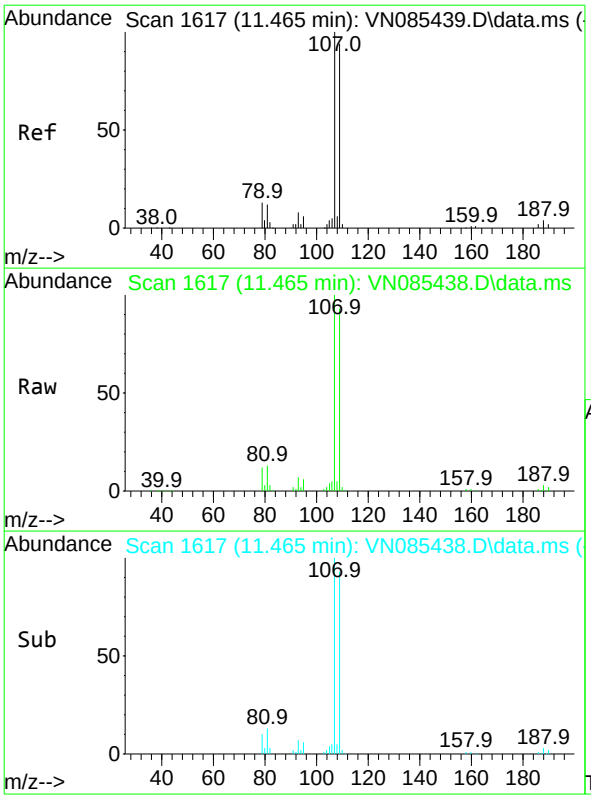



#60
Dibromochloromethane
Concen: 106.227 ug/l
RT: 11.353 min Scan# 1598
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:129 Resp: 283361

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 78.1 | 38.6 | 115.8 |

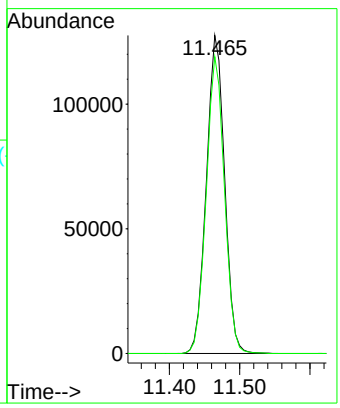





#61
1,2-Dibromoethane
Concen: 104.623 ug/l
RT: 11.465 min Scan# 16
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:107 Resp: 230104

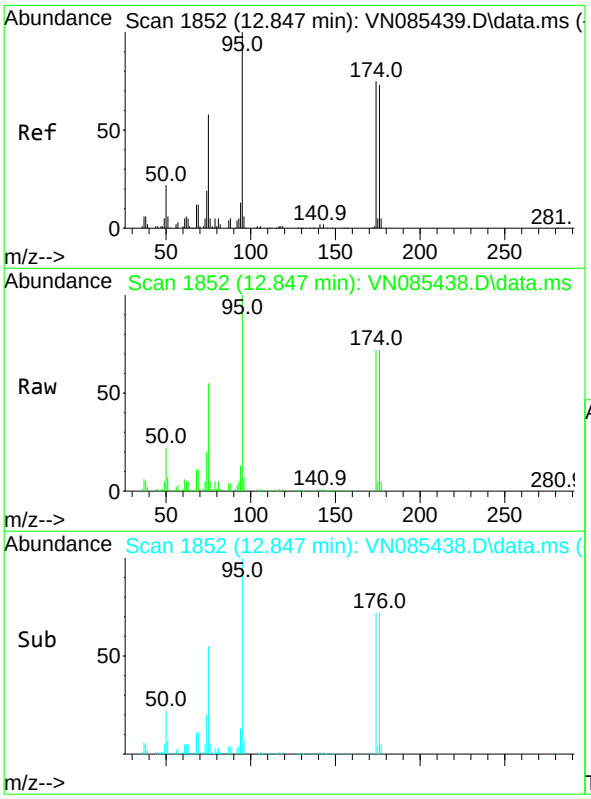
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 93.1 | 75.9 | 113.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

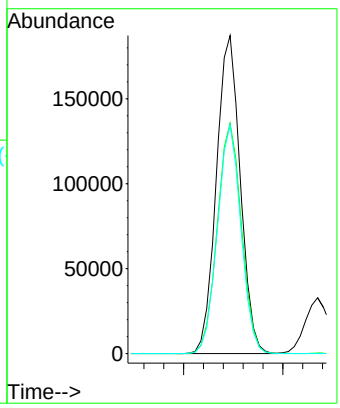
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

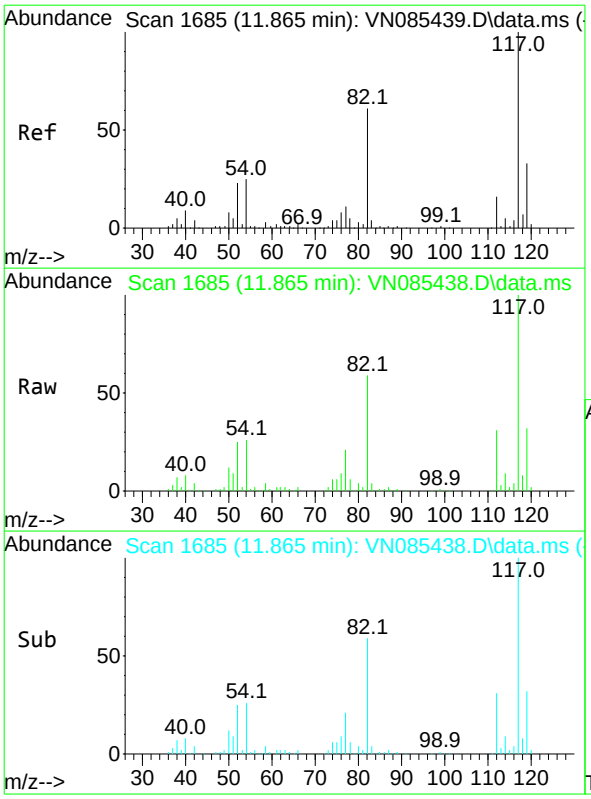



#62
4-Bromofluorobenzene
Concen: 112.765 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 95 Resp: 313161

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 73.4 | 0.0 | 145.0 |
| 176 | 70.5 | 0.0 | 142.4 |

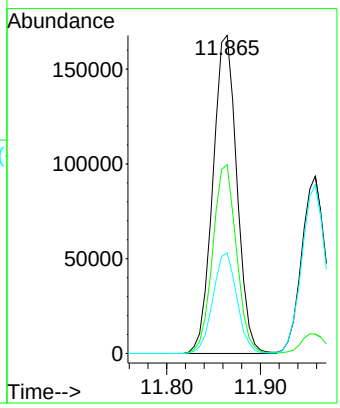





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 16
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:117 Resp: 298938

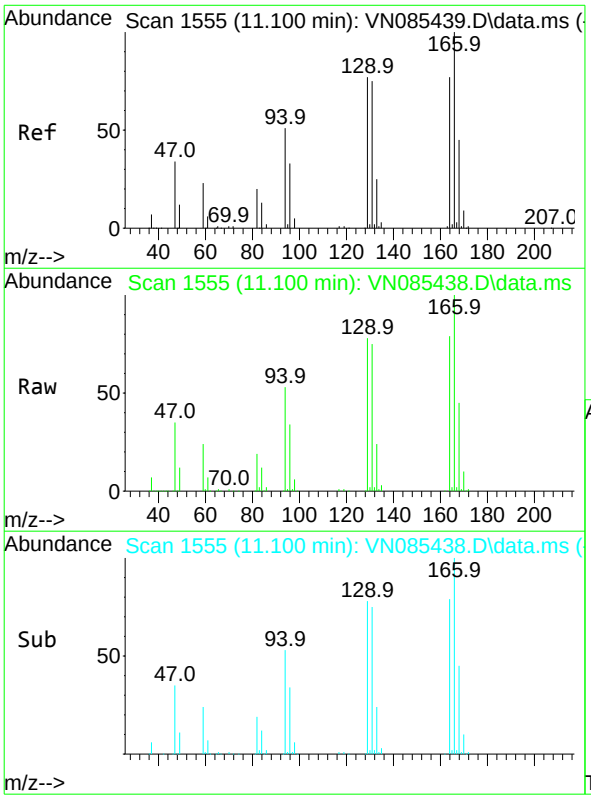
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 59.3 | 48.6 | 72.8 |
| 119 | 31.6 | 26.6 | 39.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
**APPROVED**

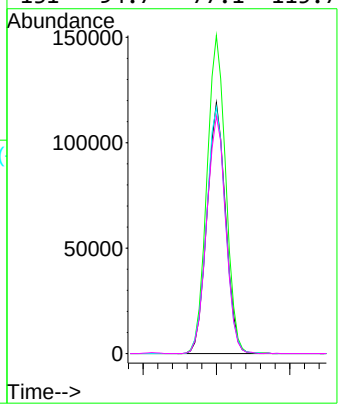
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

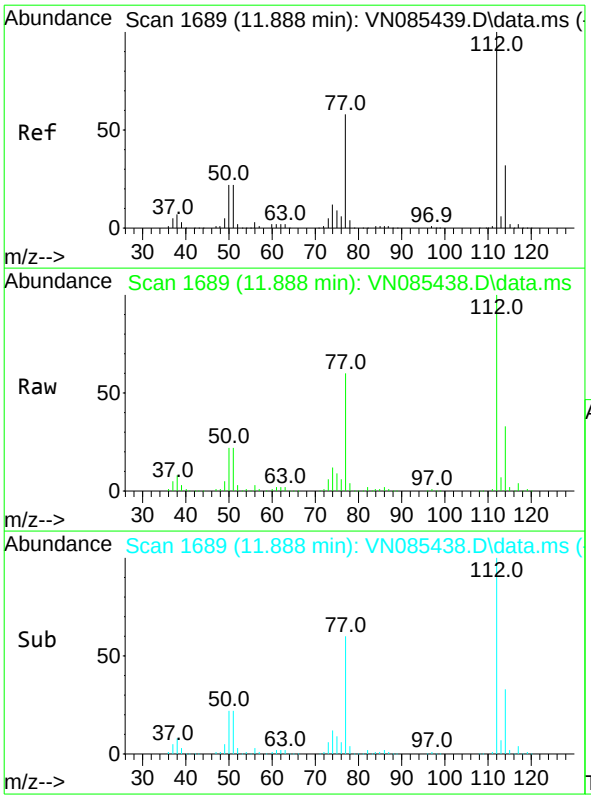



#64
Tetrachloroethene
Concen: 102.980 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:164 Resp: 209870

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 126.8 | 103.4 | 155.2 |
| 129 | 98.3 | 79.2 | 118.8 |
| 131 | 94.7 | 77.1 | 115.7 |

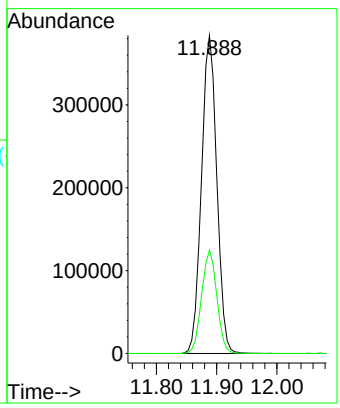





#65
Chlorobenzene
Concen: 103.482 ug/l
RT: 11.888 min Scan# 16
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:112 Resp: 677679

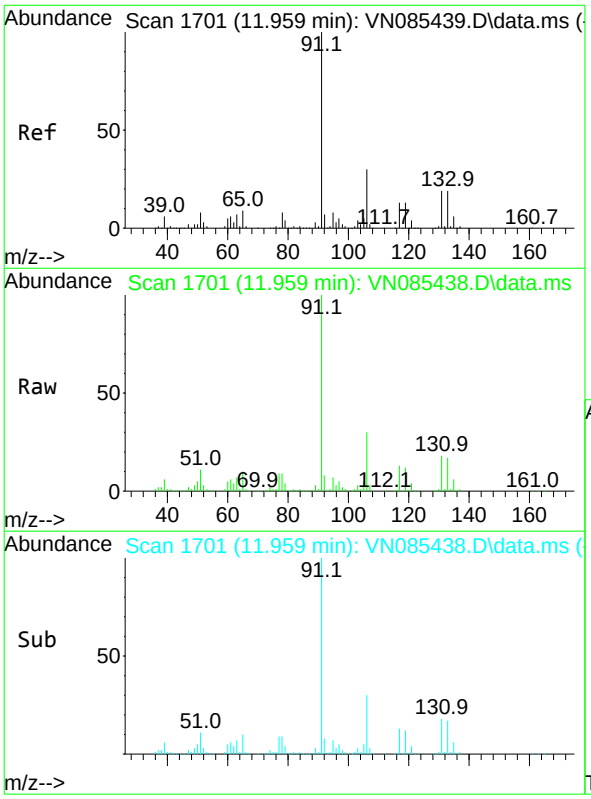
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 32.5 | 25.3 | 37.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

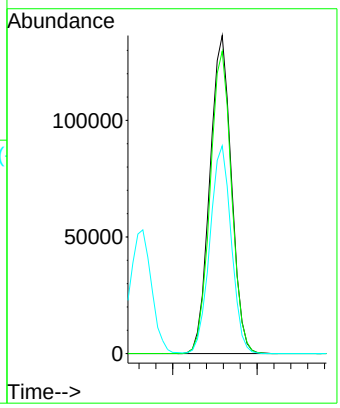
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

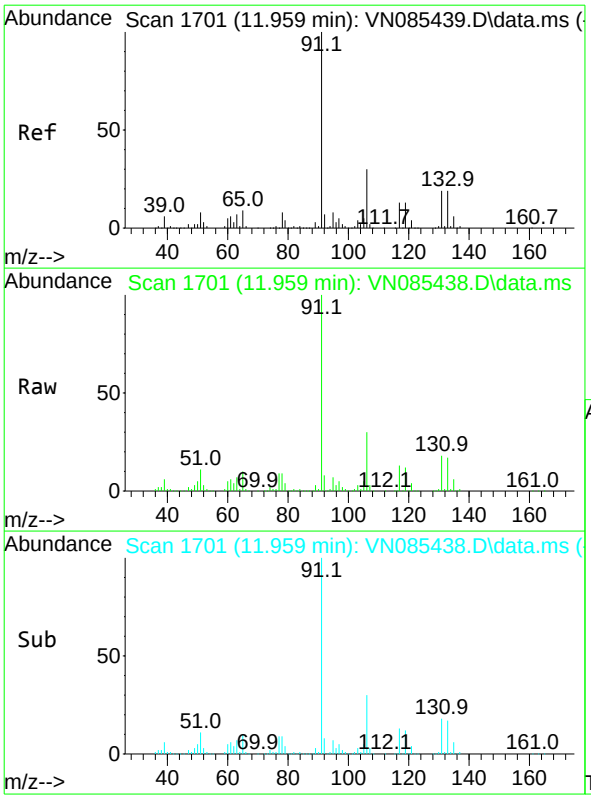



#66
1,1,1,2-Tetrachloroethane
Concen: 100.517 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:131 Resp: 241593

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 94.3 | 47.4 | 142.3 |
| 119 | 64.9 | 33.1 | 99.5 |

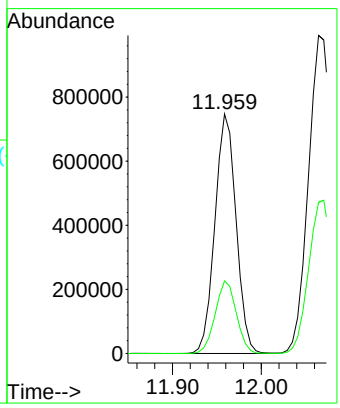





#67
Ethyl Benzene
Concen: 116.169 ug/l
RT: 11.959 min Scan# 17
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 91 Resp: 1239080

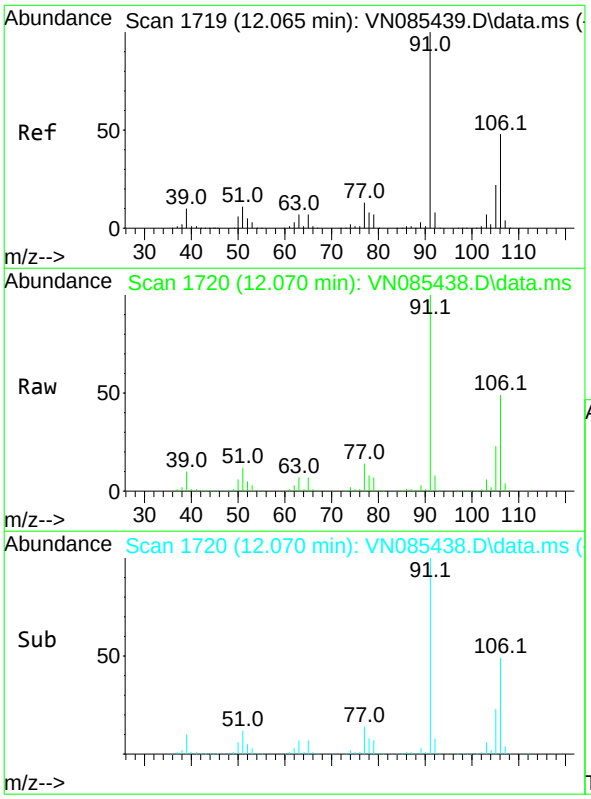
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 30.3 | 23.8 | 35.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

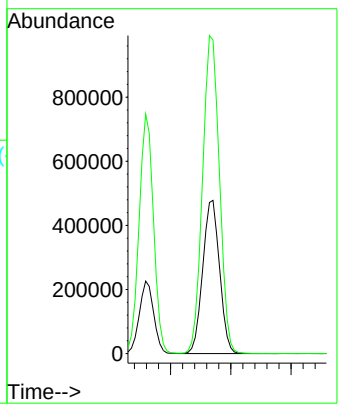
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

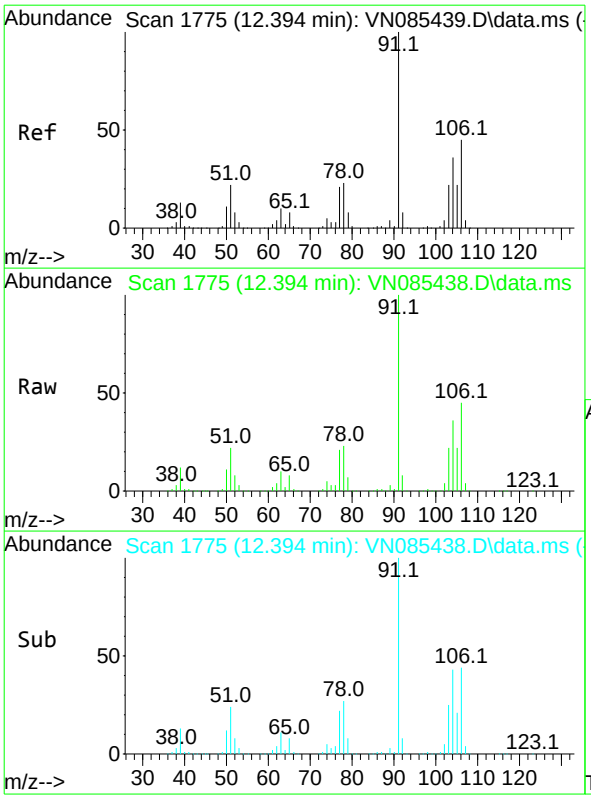



#68
m/p-Xylenes
Concen: 235.219 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. 0.006 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:106 Resp: 927244

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 208.0 | 167.7 | 251.5 |

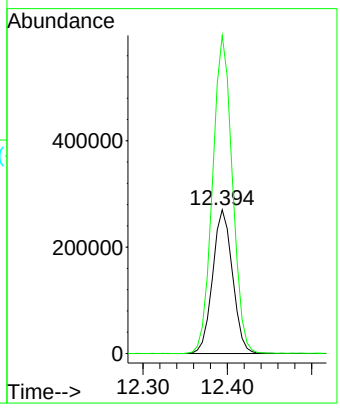





#69
o-Xylene
Concen: 117.135 ug/l
RT: 12.394 min Scan# 17
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:106 Resp: 441279

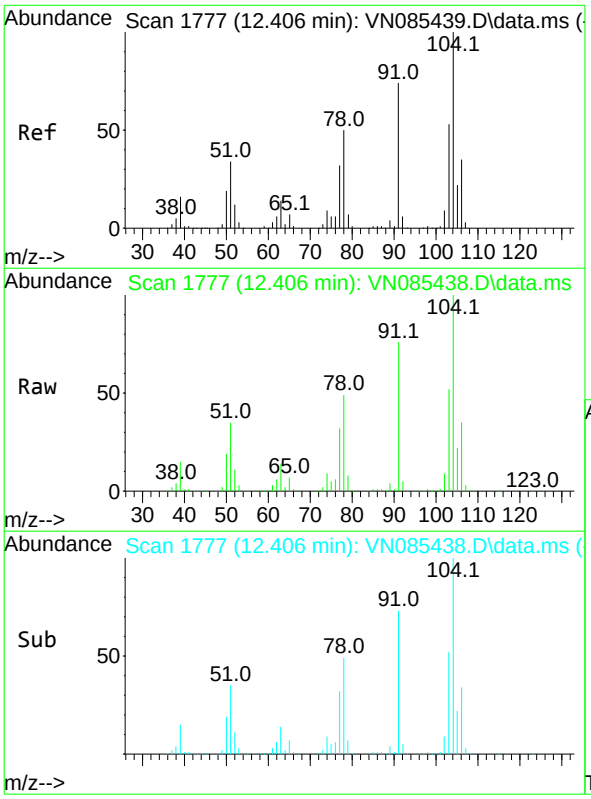
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 221.3 | 110.4 | 331.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

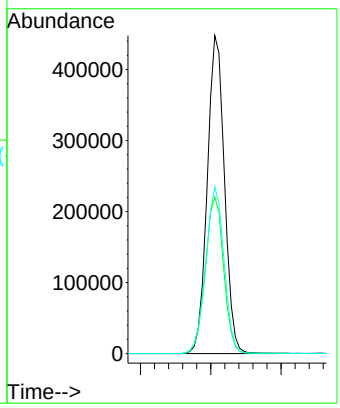
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

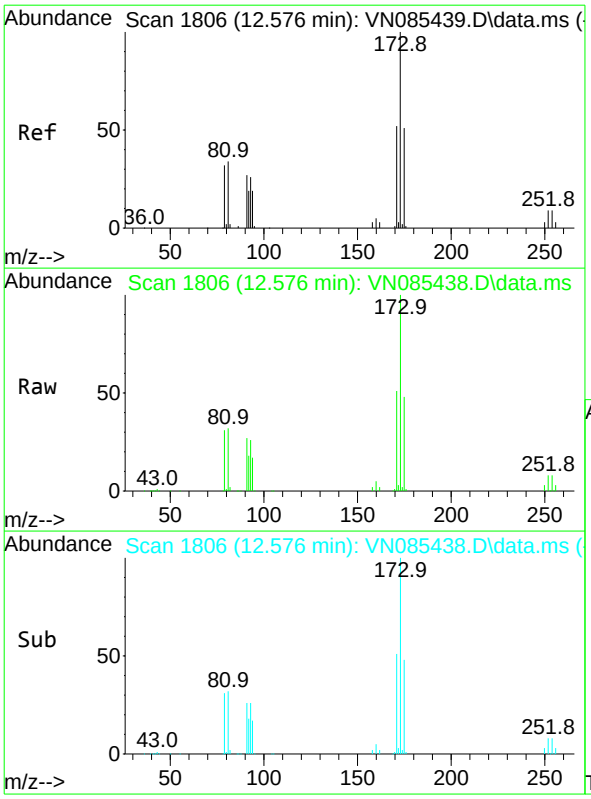



#70
Styrene
Concen: 121.919 ug/l
RT: 12.406 min Scan# 1777
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:104 Resp: 760136

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 52.8 | 42.5 | 63.7 |
| 103 | 55.3 | 43.8 | 65.8 |

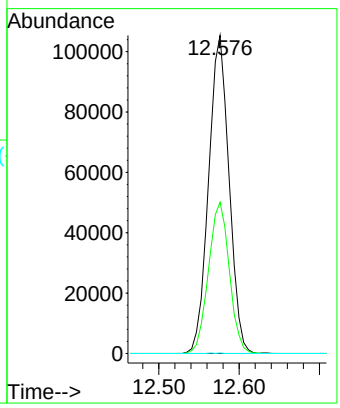





#71
Bromoform
Concen: 108.227 ug/l
RT: 12.576 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:173 Resp: 186124

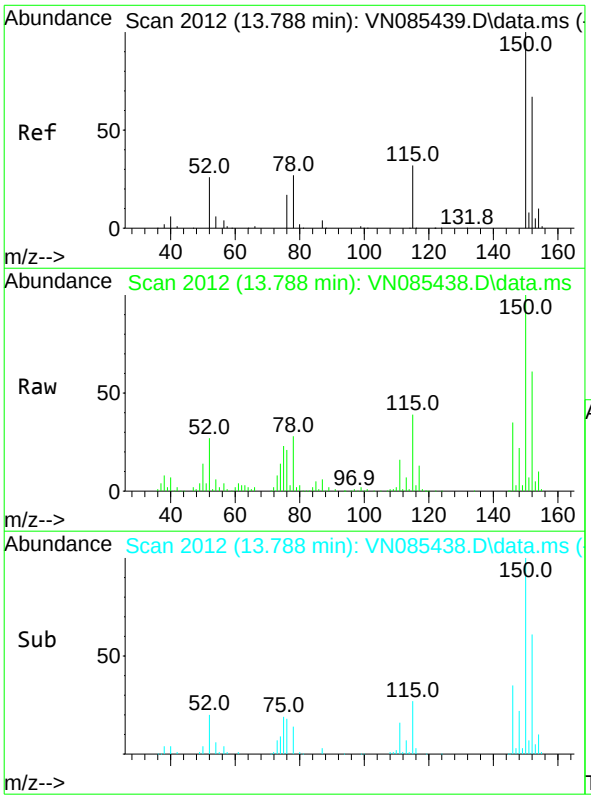
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 48.4 | 24.4 | 73.2 |
| 254 | 0.1 | 0.0 | 0.0# |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

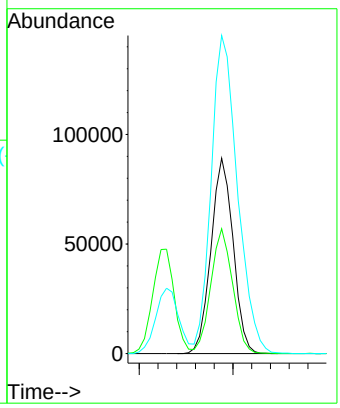
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

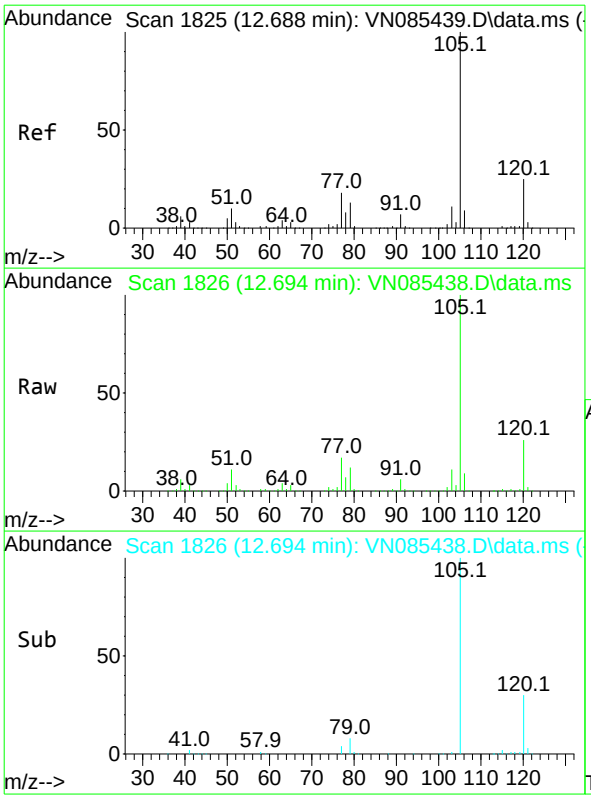



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:152 Resp: 146196

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 62.7 | 31.1 | 93.3 |
| 150 | 193.1 | 0.0 | 343.6 |

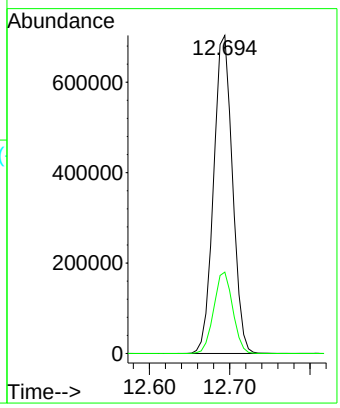





#73
Isopropylbenzene
Concen: 116.221 ug/l
RT: 12.694 min Scan# 18
Delta R.T. 0.006 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:105 Resp: 1146752

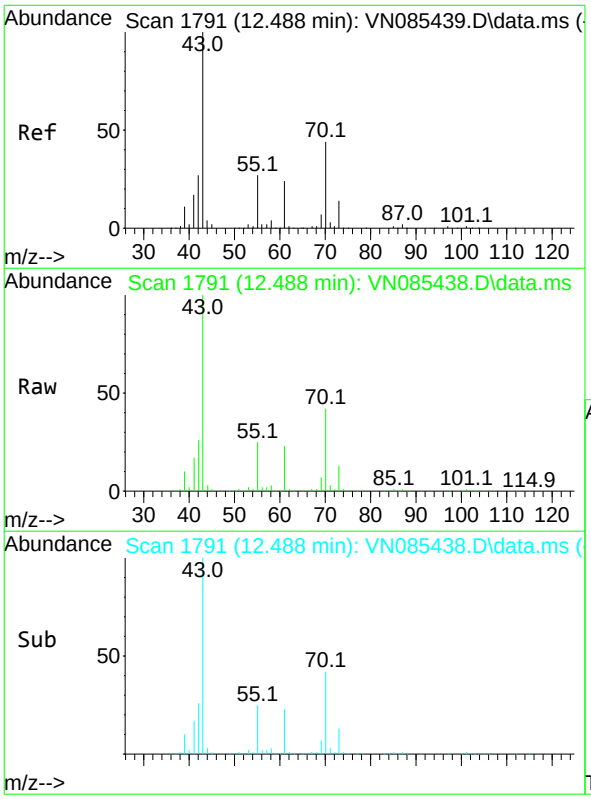
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.7 | 12.8 | 38.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

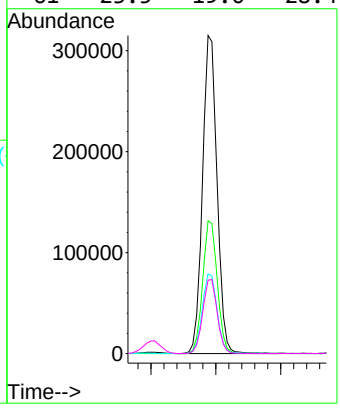
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

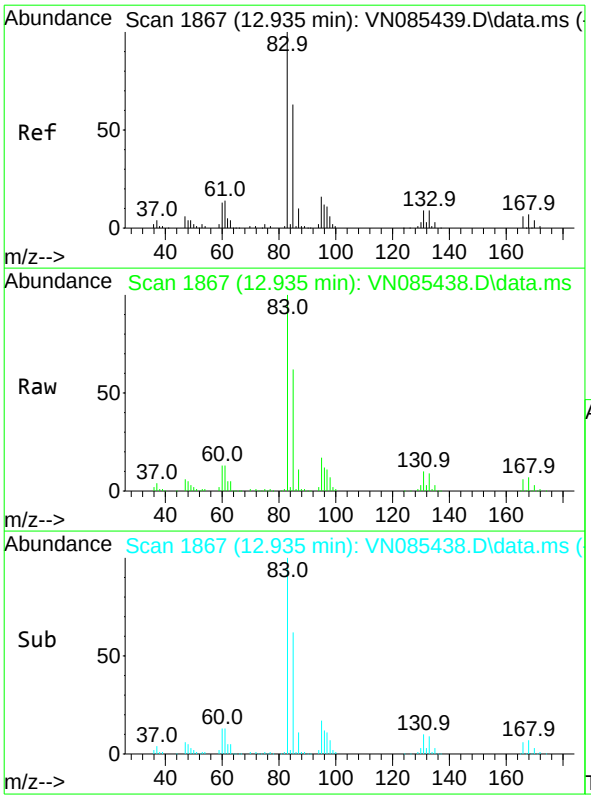



#74
N-amyl acetate
Concen: 110.308 ug/l
RT: 12.488 min Scan# 1791
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 43 Resp: 489217

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 41.9 | 34.0 | 51.0 |
| 55 | 25.7 | 21.4 | 32.2 |
| 61 | 23.5 | 19.0 | 28.4 |

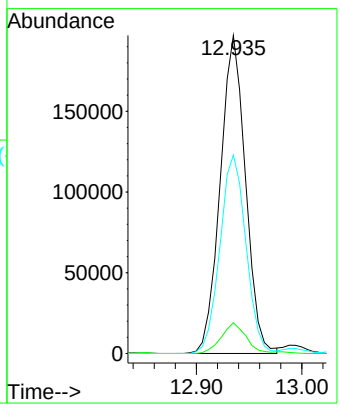





#75
1,1,2,2-Tetrachloroethane
Concen: 94.039 ug/l
RT: 12.935 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 83 Resp: 327767

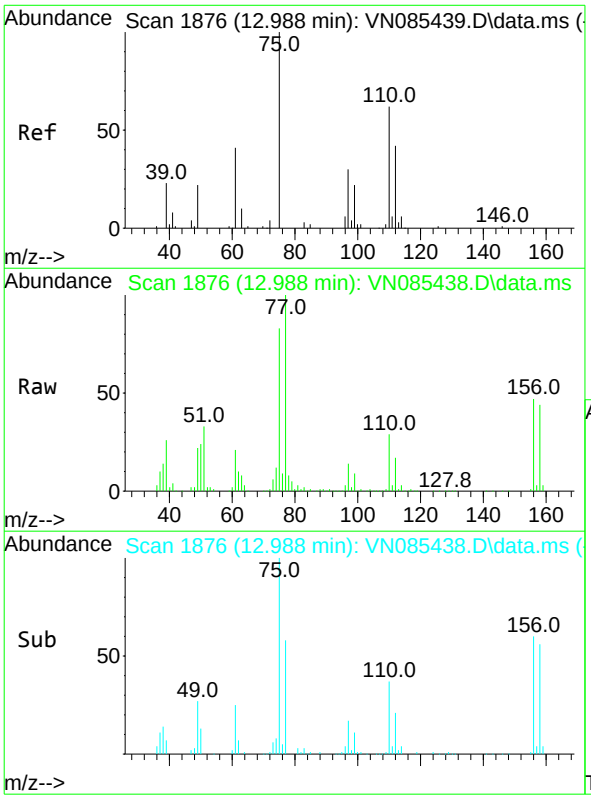
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 9.8 | 4.8 | 14.4 |
| 85 | 64.1 | 32.2 | 96.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

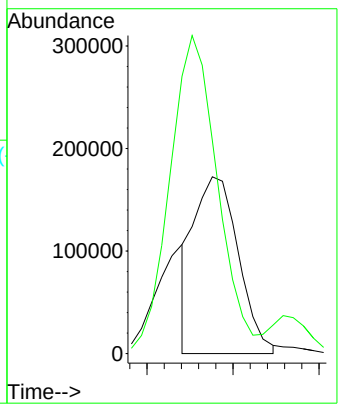
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

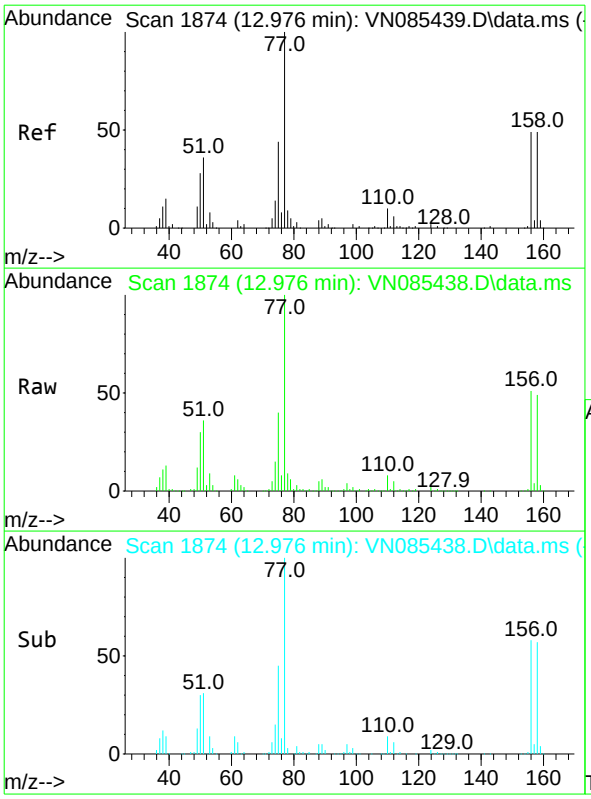



#76
1,2,3-Trichloropropane
Concen: 104.530 ug/l m
RT: 12.988 min Scan# 1876
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 75 Resp: 310115

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 192.6 | 109.7 | 329.2 |

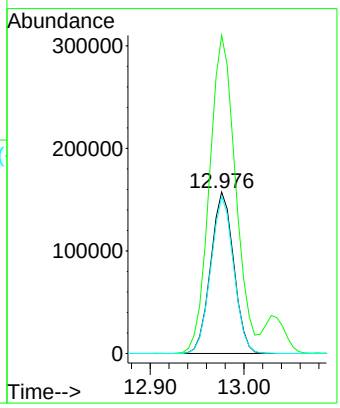





#77
Bromobenzene
Concen: 104.200 ug/l
RT: 12.976 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:156 Resp: 268616

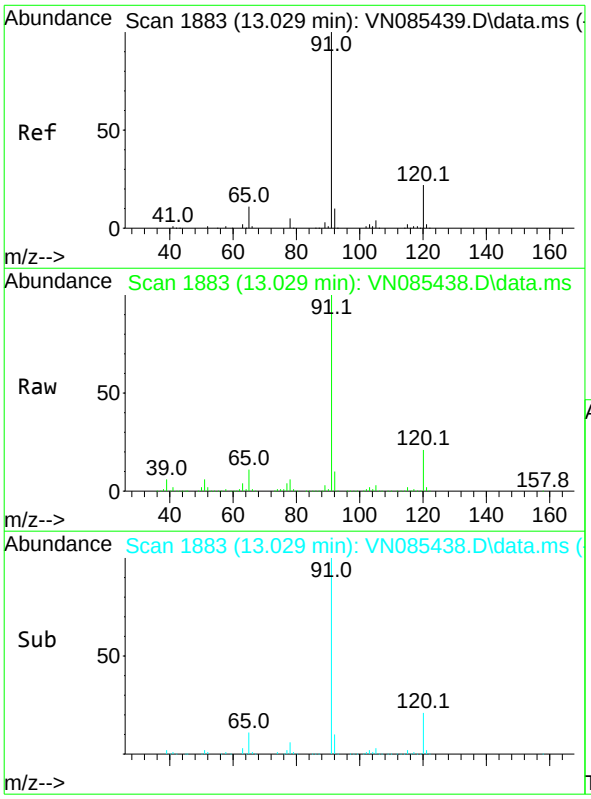
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 222.4 | 114.1 | 342.4 |
| 158 | 96.3 | 48.9 | 146.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

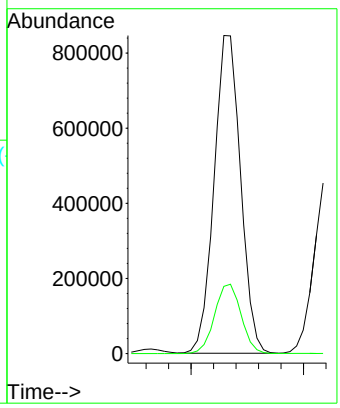
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

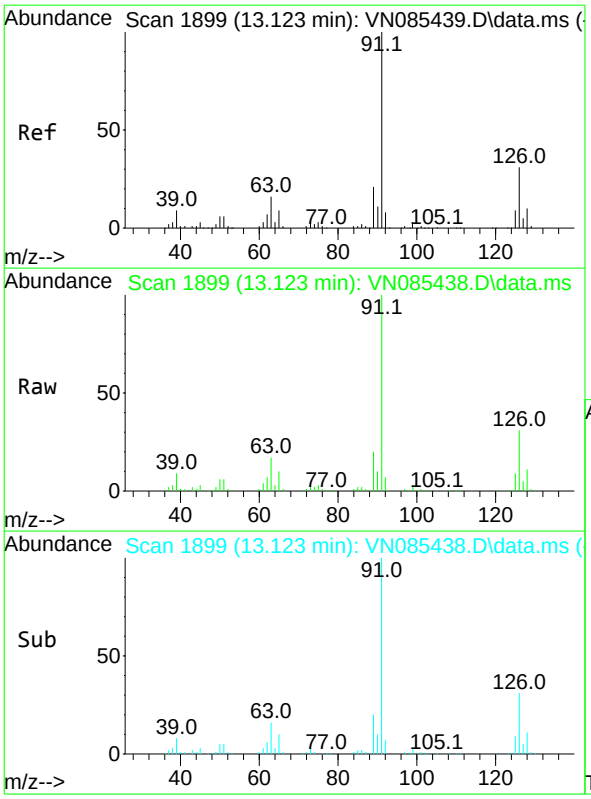



#78
n-propylbenzene
Concen: 118.600 ug/l
RT: 13.029 min Scan# 1883
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 91 Resp: 1385353

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 21.8 | 10.9 | 32.6 |

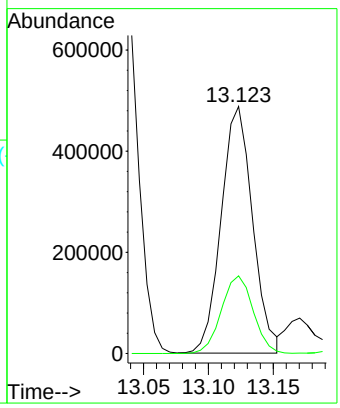





#79
2-Chlorotoluene
Concen: 108.767 ug/l
RT: 13.123 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 91 Resp: 822258

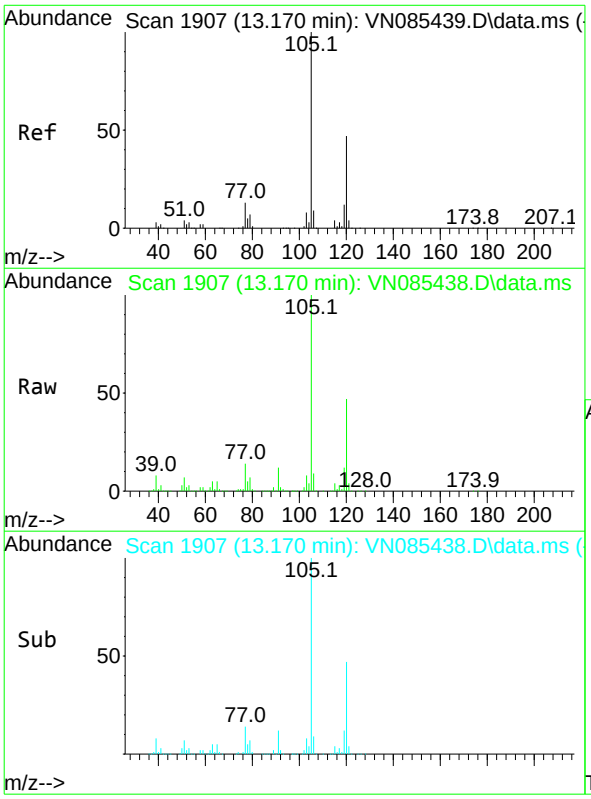
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 31.8 | 15.7 | 47.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
**APPROVED**

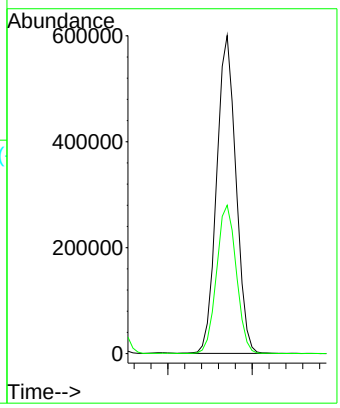
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

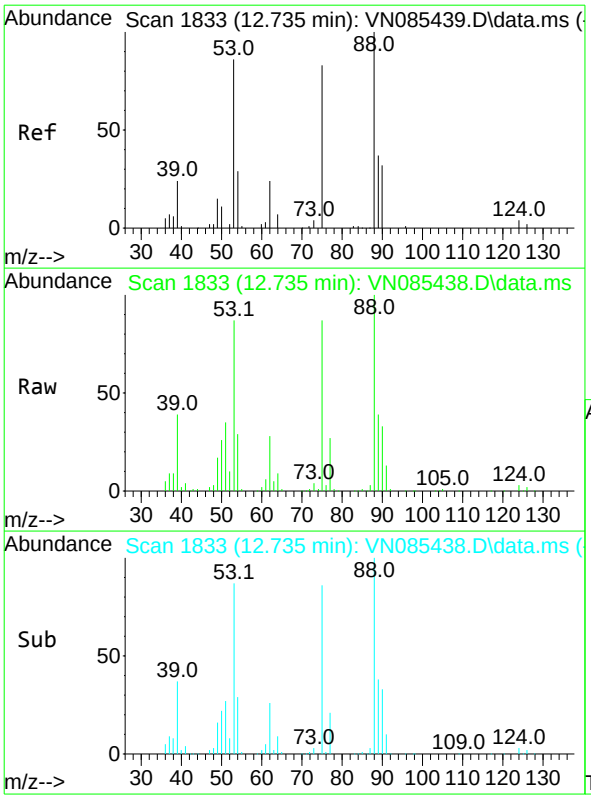



#80
1,3,5-Trimethylbenzene
Concen: 116.938 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:105 Resp: 953066

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 47.8 | 23.9 | 71.7 |

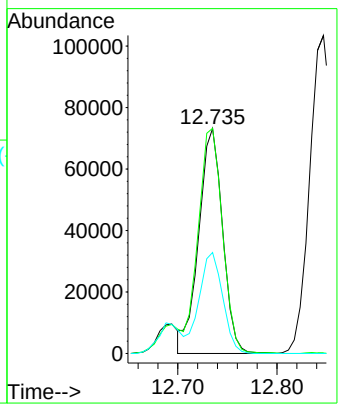





#81
trans-1,4-Dichloro-2-butene
Concen: 111.544 ug/l
RT: 12.735 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 75 Resp: 122508

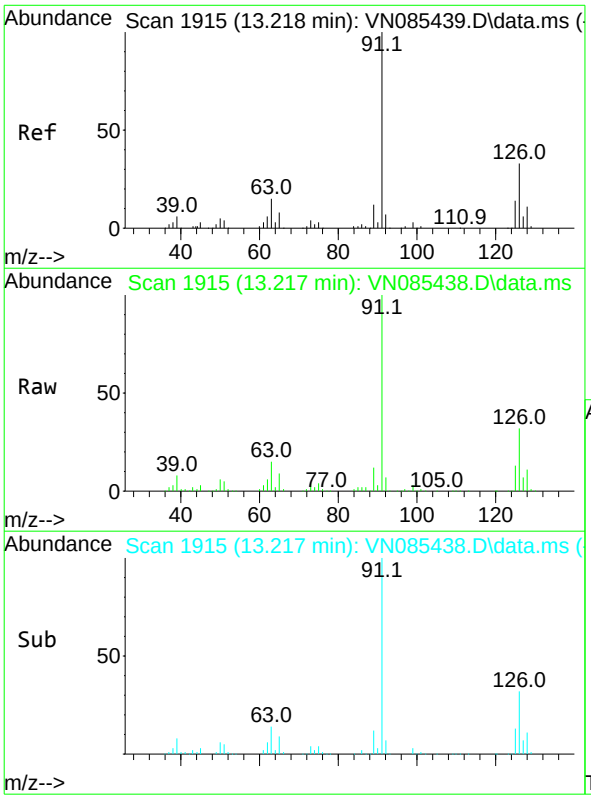
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 100.9 | 95.6 | 143.4 |
| 89 | 44.4 | 37.0 | 55.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

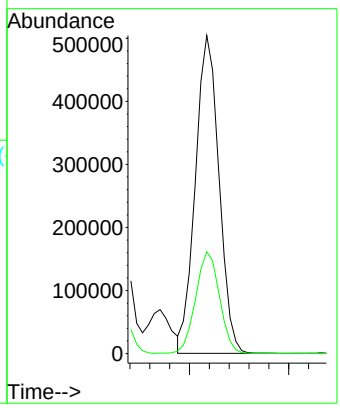
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

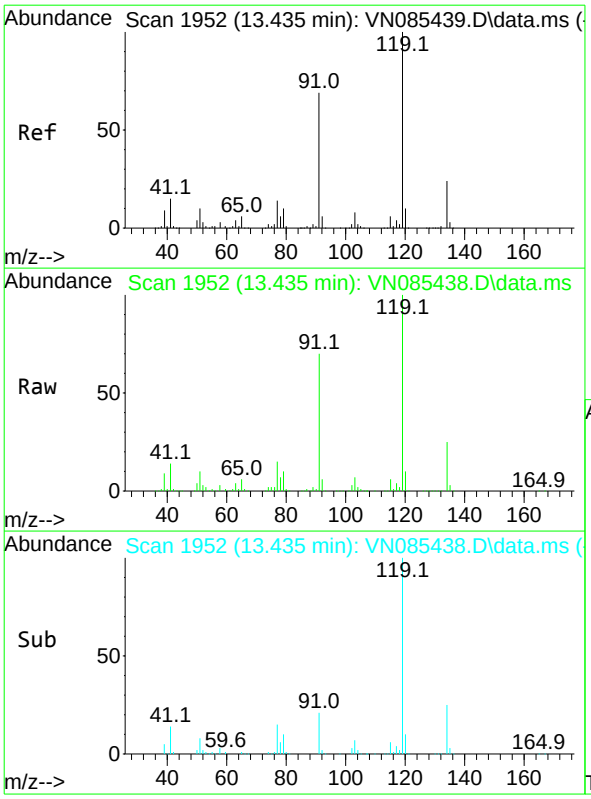



#82
4-Chlorotoluene
Concen: 110.574 ug/l
RT: 13.217 min Scan# 1915
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 91 Resp: 832317

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 32.5 | 15.9 | 47.7 |

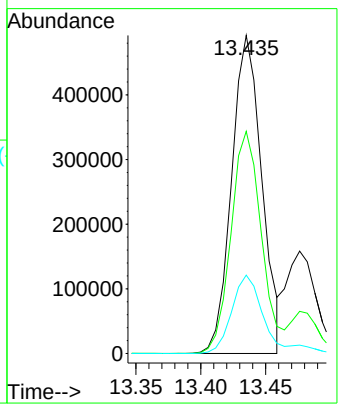





#83
tert-Butylbenzene
Concen: 116.457 ug/l
RT: 13.435 min Scan# 19
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:119 Resp: 797069

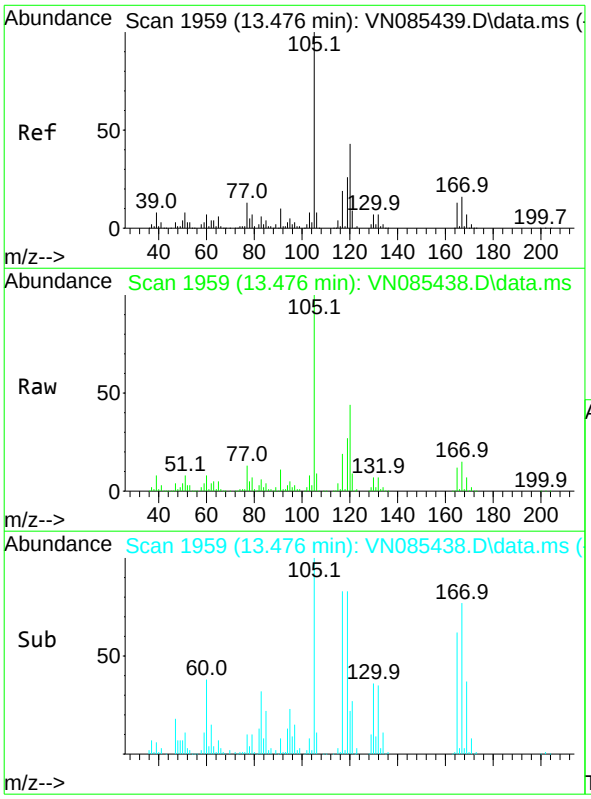
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 70.7 | 35.1 | 105.3 |
| 134 | 26.6 | 12.0 | 36.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

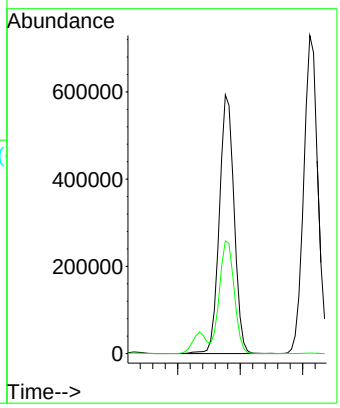
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

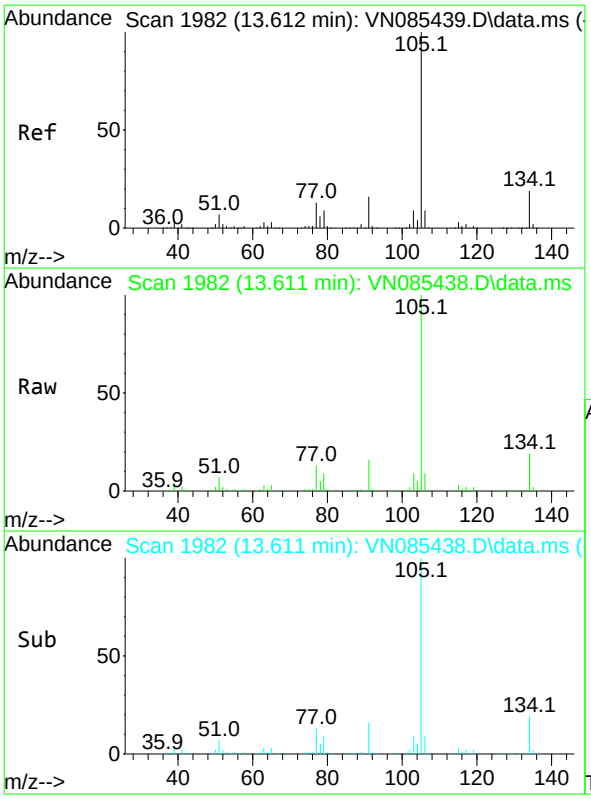



#84
1,2,4-Trimethylbenzene
Concen: 119.625 ug/l
RT: 13.476 min Scan# 1959
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:105 Resp: 971729

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 43.4 | 21.6 | 65.0 |

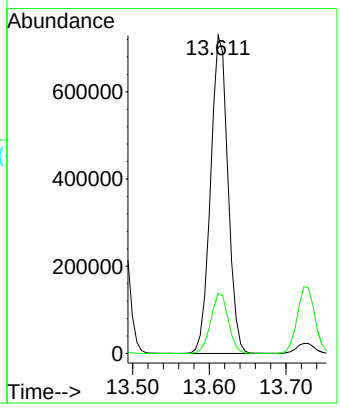





#85
sec-Butylbenzene
Concen: 120.587 ug/l
RT: 13.611 min Scan# 19
Delta R.T. -0.001 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:105 Resp: 1143885

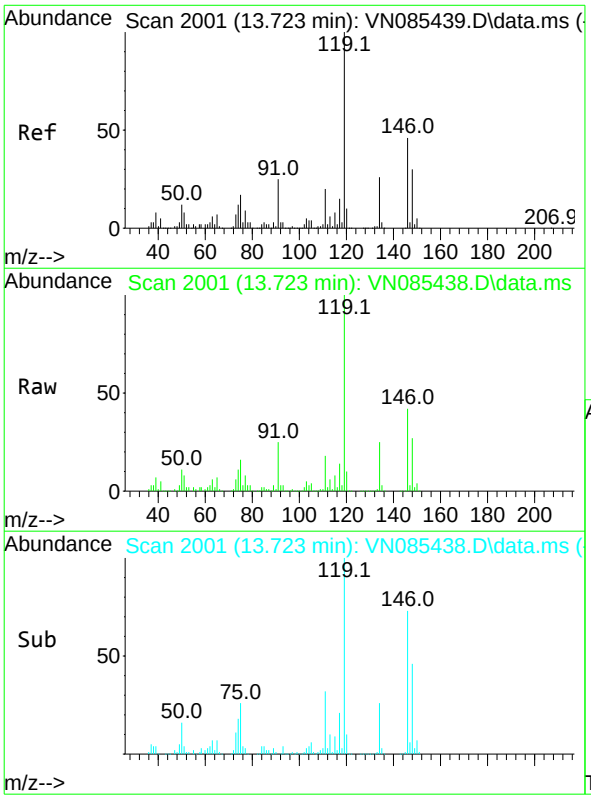
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.2 | 9.7 | 28.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

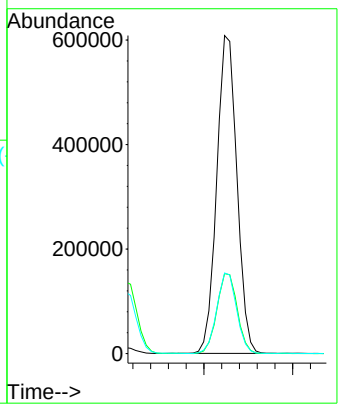
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

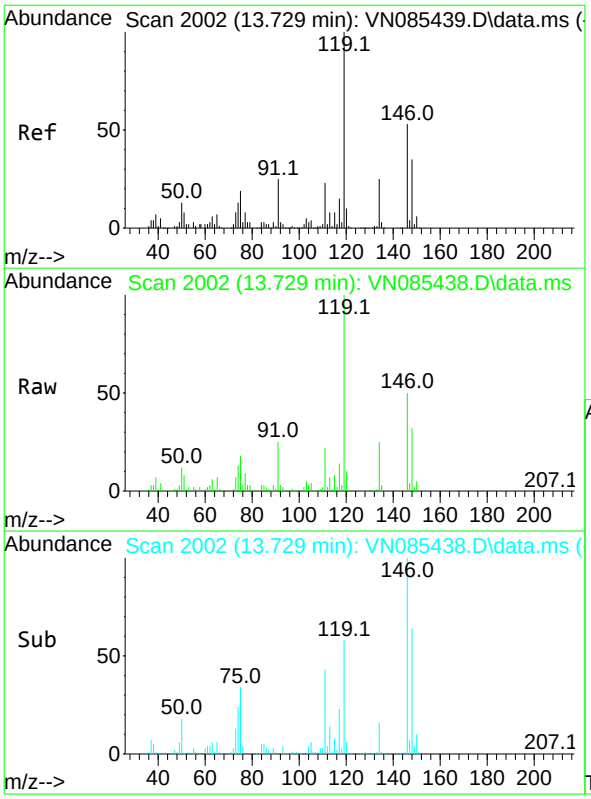



#86
p-Isopropyltoluene
Concen: 100.111 ug/l
RT: 13.723 min Scan# 2001
Delta R.T. 0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:119 Resp: 960747

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.3 | 12.7 | 38.0 |
| 91 | 25.0 | 12.7 | 38.1 |

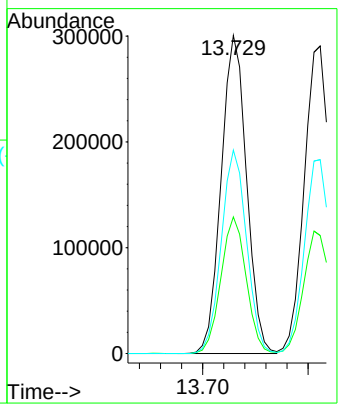





#87
1,3-Dichlorobenzene
Concen: 105.943 ug/l
RT: 13.729 min Scan# 20
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:146 Resp: 502960

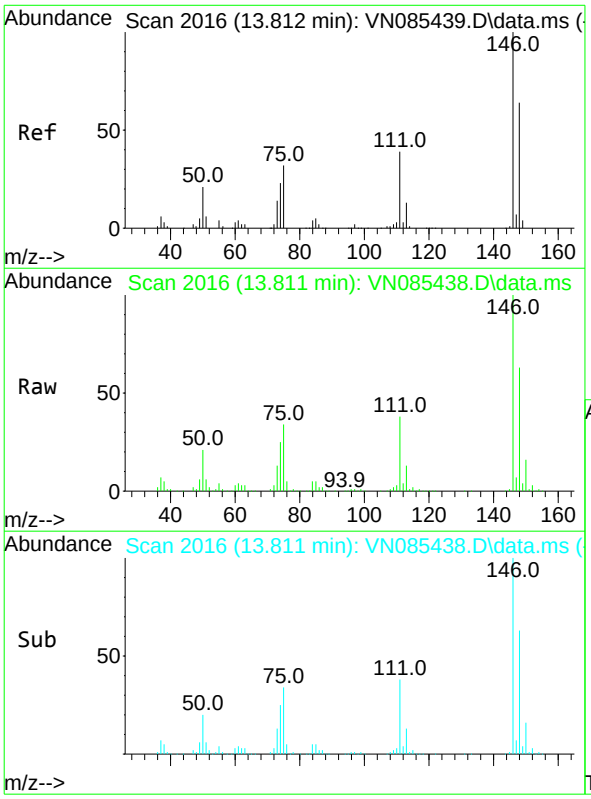
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.8 | 21.4 | 64.3 |
| 148 | 63.6 | 32.3 | 96.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

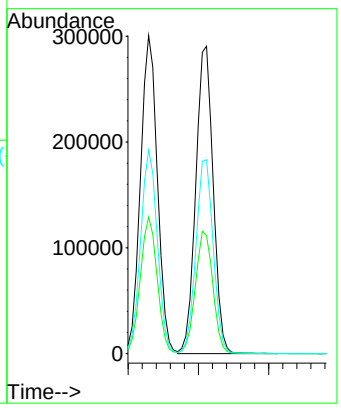
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

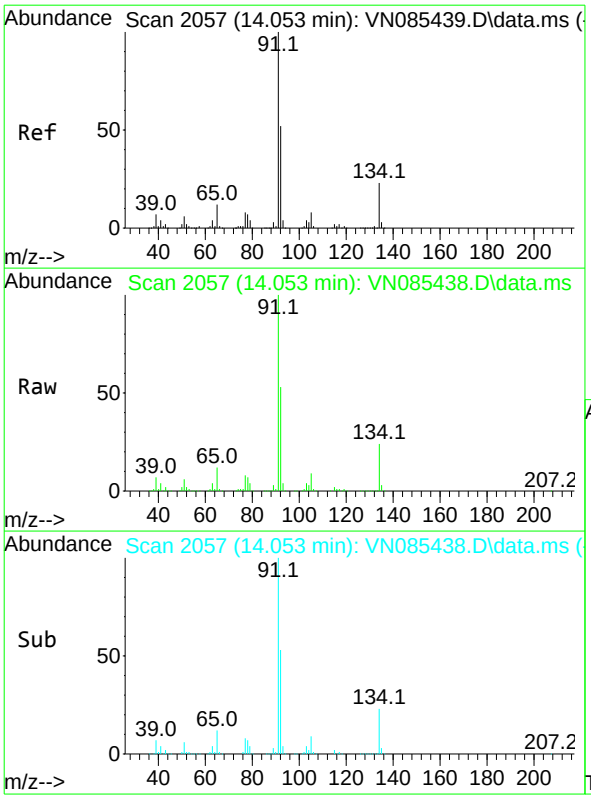



#88
1,4-Dichlorobenzene
Concen: 101.341 ug/l
RT: 13.811 min Scan# 2016
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:146 Resp: 498709

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 40.1 | 21.3 | 63.7 |
| 148 | 63.1 | 32.4 | 97.0 |

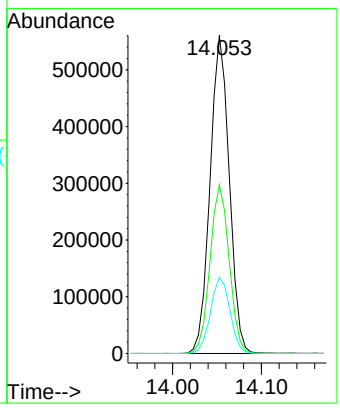





#89
n-Butylbenzene
Concen: 123.781 ug/l
RT: 14.053 min Scan# 20
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 91 Resp: 842368

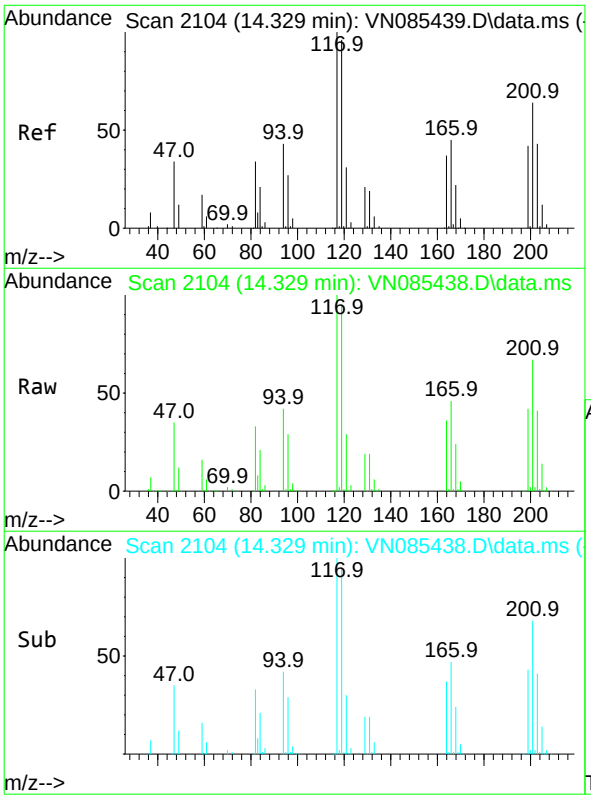
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 52.8 | 25.8 | 77.3 |
| 134 | 24.3 | 11.7 | 35.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

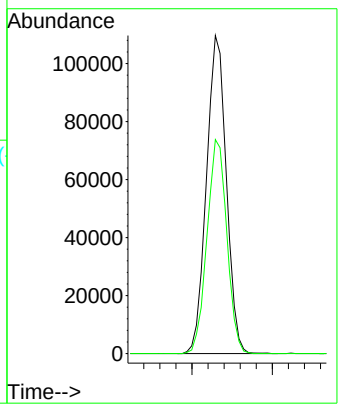
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

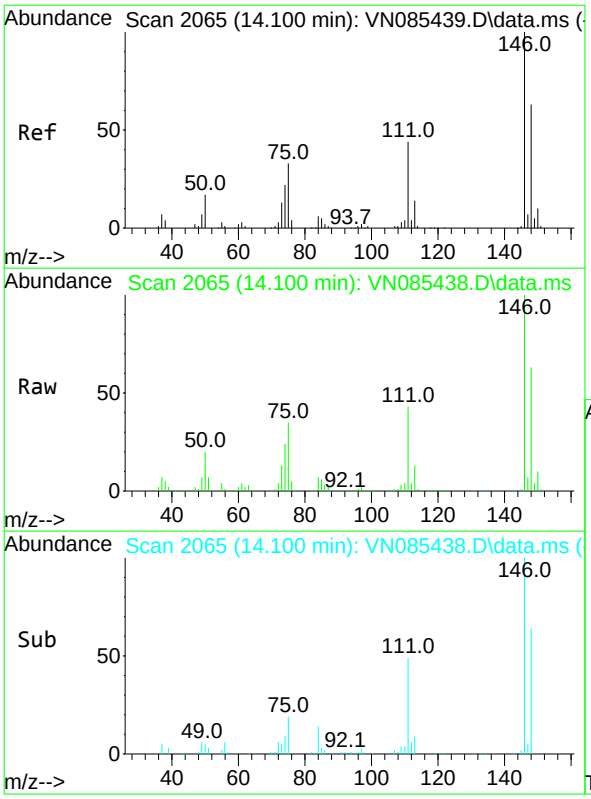



#90
Hexachloroethane
Concen: 104.405 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:117 Resp: 188541

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 67.2 | 33.7 | 101.0 |

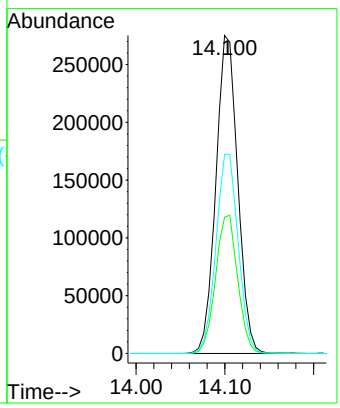





#91
1,2-Dichlorobenzene
Concen: 99.445 ug/l
RT: 14.100 min Scan# 20
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:146 Resp: 470919

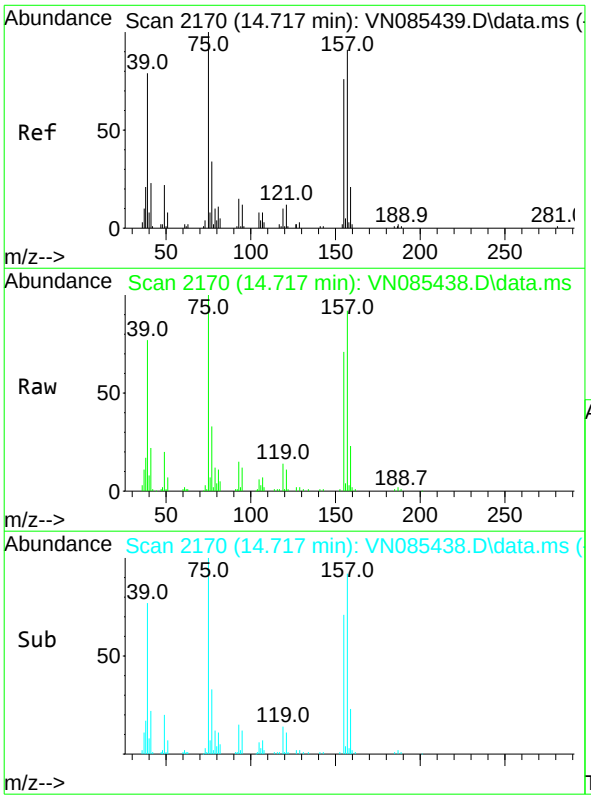
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.9 | 21.7 | 65.1 |
| 148 | 64.0 | 31.4 | 94.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
**APPROVED**

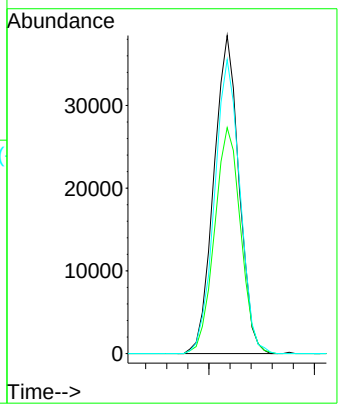
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

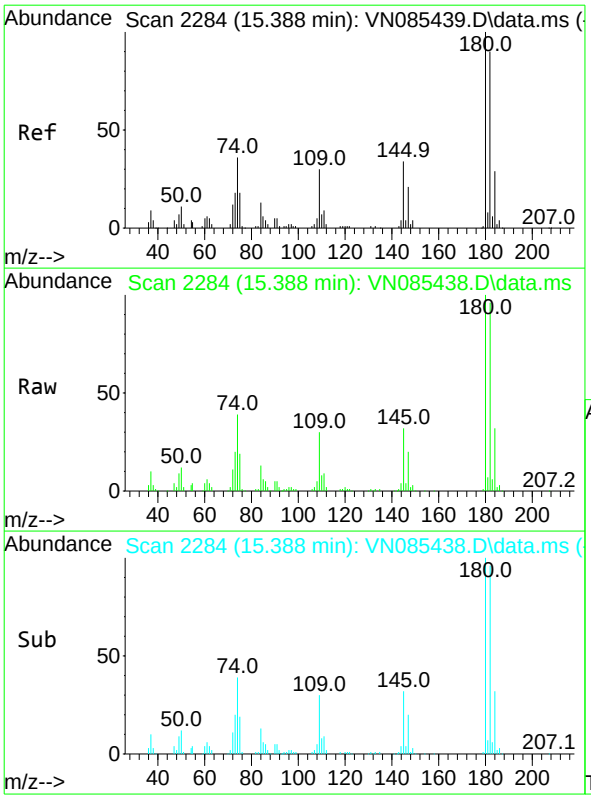



#92
1,2-Dibromo-3-Chloropropane
Concen: 100.313 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 75 Resp: 63846

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 73.5 | 36.4 | 109.2 |
| 157 | 93.0 | 45.4 | 136.1 |

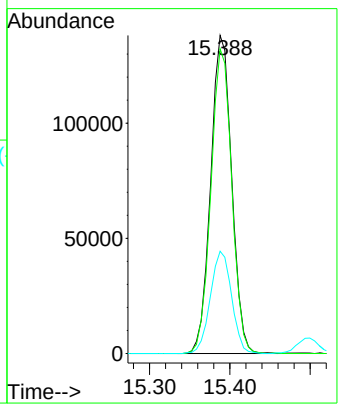





#93
1,2,4-Trichlorobenzene
Concen: 113.946 ug/l
RT: 15.388 min Scan# 22
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:180 Resp: 250787

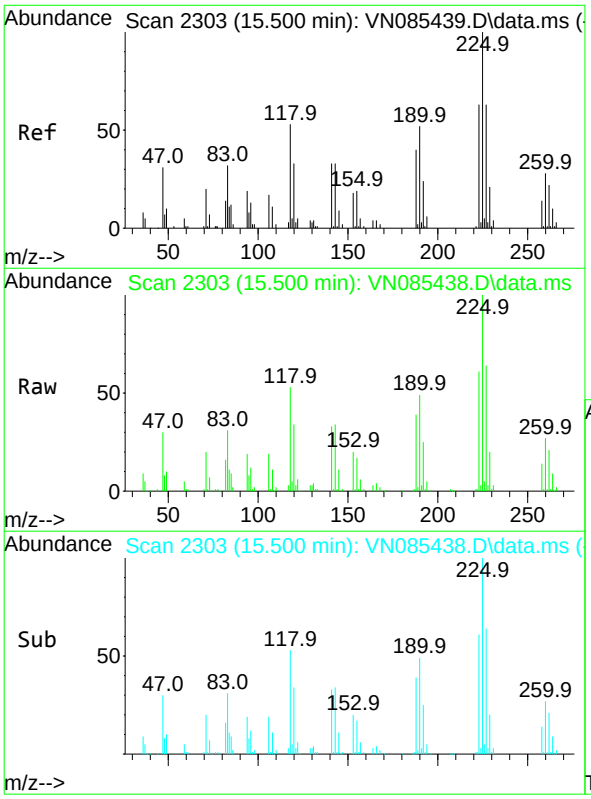
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 94.9 | 46.8 | 140.3 |
| 145 | 32.6 | 16.0 | 48.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

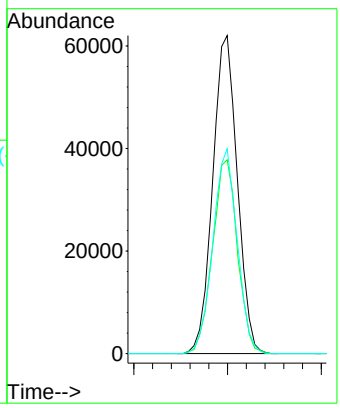
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

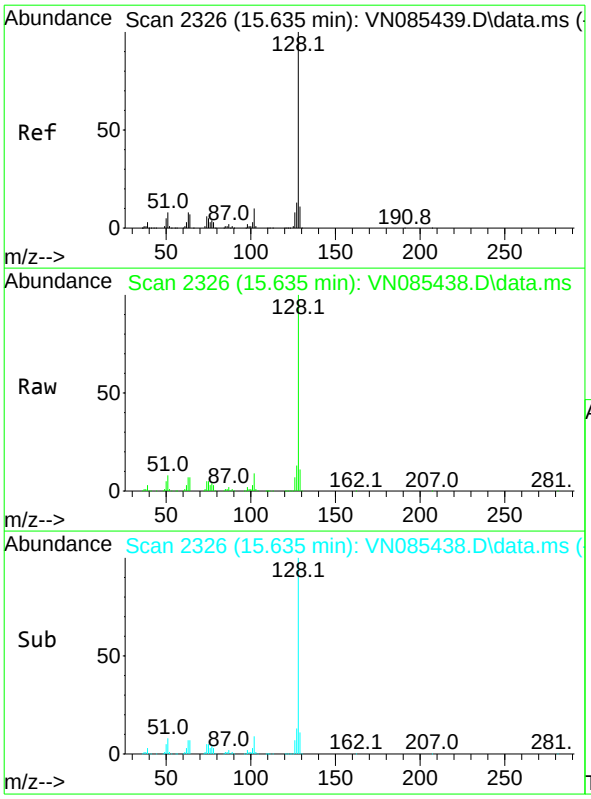



#94
Hexachlorobutadiene
Concen: 96.619 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:225 Resp: 112899

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 61.8 | 30.7 | 92.1 |
| 227 | 63.6 | 30.9 | 92.5 |

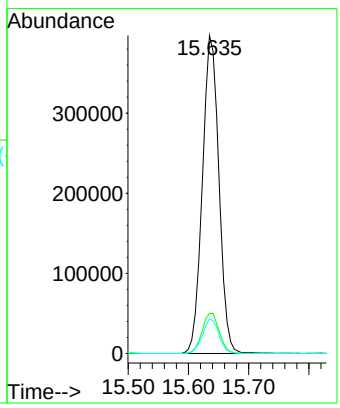





#95
Naphthalene
Concen: 115.234 ug/l
RT: 15.635 min Scan# 23
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:128 Resp: 756816

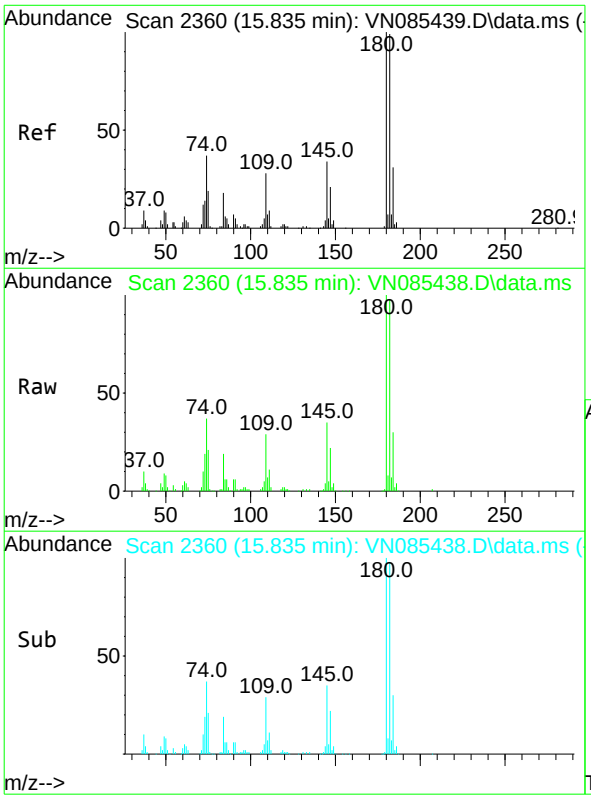
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 13.1 | 10.6 | 16.0 |
| 129 | 10.8 | 8.8 | 13.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

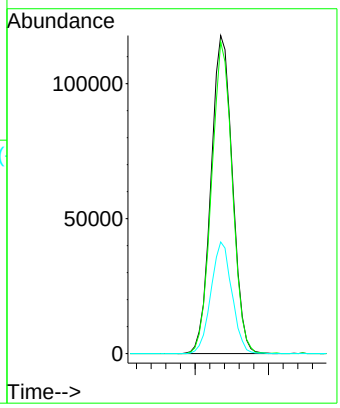
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025




#96
1,2,3-Trichlorobenzene
Concen: 107.256 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:180 Resp: 238860

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.0 | 47.4 | 142.2 |
| 145 | 34.3 | 16.9 | 50.7 |



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085439.D
Acq On : 14 Jan 2025 15:19
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 15 01:42:13 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) Pentafluorobenzene | 8.218 | 168 | 199403 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.094 | 114 | 339872 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 297366 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 146624 | 50.000 | ug/l | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.571 | 65 | 165768 | 51.500 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 103.000% | | | |
| 35) Dibromofluoromethane | 8.159 | 113 | 121554 | 51.552 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 103.100% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 430698 | 51.411 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 102.820% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 152568 | 53.239 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 106.480% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 125504 | 46.486 | ug/l | 100 |
| 3) Chloromethane | 2.359 | 50 | 135631 | 46.398 | ug/l | 100 |
| 4) Vinyl Chloride | 2.512 | 62 | 136831 | 46.569 | ug/l | 100 |
| 5) Bromomethane | 2.953 | 94 | 83199 | 46.877 | ug/l | 100 |
| 6) Chloroethane | 3.118 | 64 | 84517 | 45.371 | ug/l | 100 |
| 7) Trichlorofluoromethane | 3.501 | 101 | 198726 | 46.613 | ug/l | 100 |
| 8) Diethyl Ether | 3.953 | 74 | 71764 | 48.726 | ug/l | 100 |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 108081 | 45.010 | ug/l | 100 |
| 10) Methyl Iodide | 4.589 | 142 | 143383 | 52.142 | ug/l | 100 |
| 11) Tert butyl alcohol | 5.512 | 59 | 92841 | 251.894 | ug/l | 100 |
| 12) 1,1-Dichloroethene | 4.342 | 96 | 106247 | 49.647 | ug/l | 100 |
| 13) Acrolein | 4.171 | 56 | 139234 | 276.734 | ug/l | 100 |
| 14) Allyl chloride | 5.018 | 41 | 168654 | 48.567 | ug/l | 100 |
| 15) Acrylonitrile | 5.712 | 53 | 296781 | 253.507 | ug/l | 100 |
| 16) Acetone | 4.418 | 43 | 251271 | 241.603 | ug/l | 100 |
| 17) Carbon Disulfide | 4.706 | 76 | 294604 | 44.710 | ug/l | 100 |
| 18) Methyl Acetate | 5.018 | 43 | 157485 | 49.798 | ug/l | 100 |
| 19) Methyl tert-butyl Ether | 5.789 | 73 | 373561 | 53.758 | ug/l | 100 |
| 20) Methylene Chloride | 5.271 | 84 | 125508 | 48.748 | ug/l | 100 |
| 21) trans-1,2-Dichloroethene | 5.783 | 96 | 110684 | 48.395 | ug/l | 100 |
| 22) Diisopropyl ether | 6.665 | 45 | 406253 | 52.707 | ug/l | 100 |
| 23) Vinyl Acetate | 6.594 | 43 | 1491031 | 275.471 | ug/l | 100 |
| 24) 1,1-Dichloroethane | 6.565 | 63 | 233336 | 49.648 | ug/l | 100 |
| 25) 2-Butanone | 7.477 | 43 | 388457 | 253.815 | ug/l | 100 |
| 26) 2,2-Dichloropropane | 7.483 | 77 | 186591 | 49.106 | ug/l | 100 |
| 27) cis-1,2-Dichloroethene | 7.483 | 96 | 136229 | 50.571 | ug/l | 100 |
| 28) Bromochloromethane | 7.806 | 49 | 108148 | 49.461 | ug/l | 100 |
| 29) Tetrahydrofuran | 7.830 | 42 | 259683 | 267.624 | ug/l | 100 |
| 30) Chloroform | 7.959 | 83 | 234271 | 48.229 | ug/l | 100 |
| 31) Cyclohexane | 8.253 | 56 | 175588 | 42.984 | ug/l | 100 |
| 32) 1,1,1-Trichloroethane | 8.165 | 97 | 202590 | 47.547 | ug/l | 100 |
| 36) 1,1-Dichloropropene | 8.365 | 75 | 157031 | 47.453 | ug/l | 100 |
| 37) Ethyl Acetate | 7.553 | 43 | 165866 | 49.658 | ug/l | 100 |
| 38) Carbon Tetrachloride | 8.359 | 117 | 180199 | 47.564 | ug/l | 100 |
| 39) Methylcyclohexane | 9.600 | 83 | 157234 | 50.562 | ug/l | 100 |
| 40) Benzene | 8.600 | 78 | 492606 | 49.542 | ug/l | 100 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085439.D
Acq On : 14 Jan 2025 15:19
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Quant Time: Jan 15 01:42:13 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.771 | 41 | 91711 | 52.775 | ug/l | | 100 |
| 42) 1,2-Dichloroethane | 8.665 | 62 | 186065 | 49.685 | ug/l | | 100 |
| 43) Isopropyl Acetate | 8.683 | 43 | 276228 | 51.611 | ug/l | | 100 |
| 44) Trichloroethene | 9.347 | 130 | 109953 | 47.506 | ug/l | | 100 |
| 45) 1,2-Dichloropropane | 9.618 | 63 | 126084 | 49.644 | ug/l | | 100 |
| 46) Dibromomethane | 9.706 | 93 | 90670 | 49.476 | ug/l | | 100 |
| 47) Bromodichloromethane | 9.882 | 83 | 189915 | 50.867 | ug/l | | 100 |
| 48) Methyl methacrylate | 9.677 | 41 | 133399 | 55.385 | ug/l | | 100 |
| 49) 1,4-Dioxane | 9.688 | 88 | 43048 | 1061.334 | ug/l | | 100 |
| 51) 4-Methyl-2-Pentanone | 10.441 | 43 | 836707 | 269.403 | ug/l | | 100 |
| 52) Toluene | 10.624 | 92 | 295792 | 51.341 | ug/l | | 100 |
| 53) t-1,3-Dichloropropene | 10.835 | 75 | 187439 | 53.125 | ug/l | | 100 |
| 54) cis-1,3-Dichloropropene | 10.306 | 75 | 199771 | 53.006 | ug/l | | 100 |
| 55) 1,1,2-Trichloroethane | 11.012 | 97 | 115462 | 50.641 | ug/l | | 100 |
| 56) Ethyl methacrylate | 10.871 | 69 | 184775 | 48.182 | ug/l | | 100 |
| 57) 1,3-Dichloropropane | 11.159 | 76 | 204590 | 51.606 | ug/l | | 100 |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63 | 409594 | 283.088 | ug/l | | 100 |
| 59) 2-Hexanone | 11.188 | 43 | 606740 | 277.643 | ug/l | | 100 |
| 60) Dibromochloromethane | 11.353 | 129 | 140704 | 51.116 | ug/l | | 100 |
| 61) 1,2-Dibromoethane | 11.465 | 107 | 113541 | 50.028 | ug/l | | 100 |
| 64) Tetrachloroethene | 11.100 | 164 | 95879 | 47.295 | ug/l | | 100 |
| 65) Chlorobenzene | 11.888 | 112 | 319992 | 49.121 | ug/l | | 100 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 116488 | 48.722 | ug/l | | 100 |
| 67) Ethyl Benzene | 11.959 | 91 | 555322 | 52.339 | ug/l | | 100 |
| 68) m/p-Xylenes | 12.065 | 106 | 420702 | 107.286 | ug/l | | 100 |
| 69) o-Xylene | 12.394 | 106 | 202597 | 54.062 | ug/l | | 100 |
| 70) Styrene | 12.406 | 104 | 348720 | 56.227 | ug/l | | 100 |
| 71) Bromoform | 12.576 | 173 | 92366 | 53.993 | ug/l | # | 100 |
| 73) Isopropylbenzene | 12.688 | 105 | 505619 | 51.094 | ug/l | | 100 |
| 74) N-amyl acetate | 12.488 | 43 | 237870 | 53.478 | ug/l | | 100 |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 167856 | 48.019 | ug/l | | 100 |
| 76) 1,2,3-Trichloropropane | 12.988 | 75 | 130866m | 43.982 | ug/l | | |
| 77) Bromobenzene | 12.976 | 156 | 125800 | 48.657 | ug/l | | 100 |
| 78) n-propylbenzene | 13.029 | 91 | 609022 | 51.986 | ug/l | | 100 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 378981 | 49.985 | ug/l | | 100 |
| 80) 1,3,5-Trimethylbenzene | 13.170 | 105 | 431021 | 52.730 | ug/l | | 100 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 57184 | 51.914 | ug/l | | 100 |
| 82) 4-Chlorotoluene | 13.218 | 91 | 379524 | 50.273 | ug/l | | 100 |
| 83) tert-Butylbenzene | 13.435 | 119 | 357563 | 52.090 | ug/l | | 100 |
| 84) 1,2,4-Trimethylbenzene | 13.476 | 105 | 442175 | 54.275 | ug/l | | 100 |
| 85) sec-Butylbenzene | 13.612 | 105 | 501561 | 52.719 | ug/l | | 100 |
| 86) p-Isopropyltoluene | 13.723 | 119 | 421052 | 49.240 | ug/l | | 100 |
| 87) 1,3-Dichlorobenzene | 13.729 | 146 | 229518 | 48.204 | ug/l | | 100 |
| 88) 1,4-Dichlorobenzene | 13.812 | 146 | 229084 | 46.416 | ug/l | | 100 |
| 89) n-Butylbenzene | 14.053 | 91 | 364111 | 53.348 | ug/l | | 100 |
| 90) Hexachloroethane | 14.329 | 117 | 84602 | 46.712 | ug/l | | 100 |
| 91) 1,2-Dichlorobenzene | 14.100 | 146 | 228024 | 48.012 | ug/l | | 100 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75 | 32536 | 50.971 | ug/l | | 100 |
| 93) 1,2,4-Trichlorobenzene | 15.388 | 180 | 114468 | 51.857 | ug/l | | 100 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 53846 | 45.947 | ug/l | | 100 |
| 95) Naphthalene | 15.635 | 128 | 363882 | 55.243 | ug/l | | 100 |
| 96) 1,2,3-Trichlorobenzene | 15.835 | 180 | 115251 | 51.601 | ug/l | | 100 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085439.D
Acq On : 14 Jan 2025 15:19
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 15 01:42:13 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

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

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

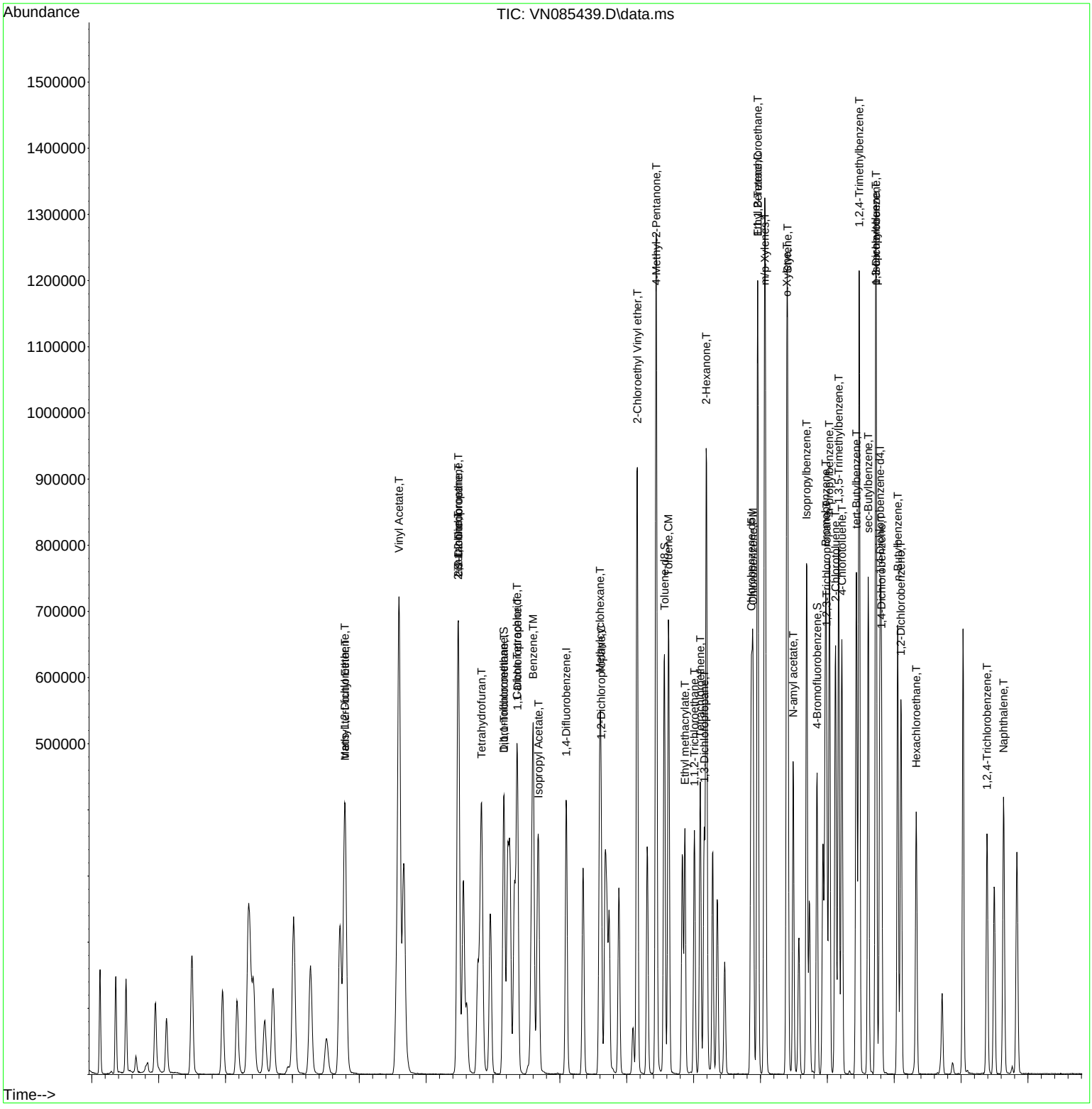
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085439.D
Acq On : 14 Jan 2025 15:19
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

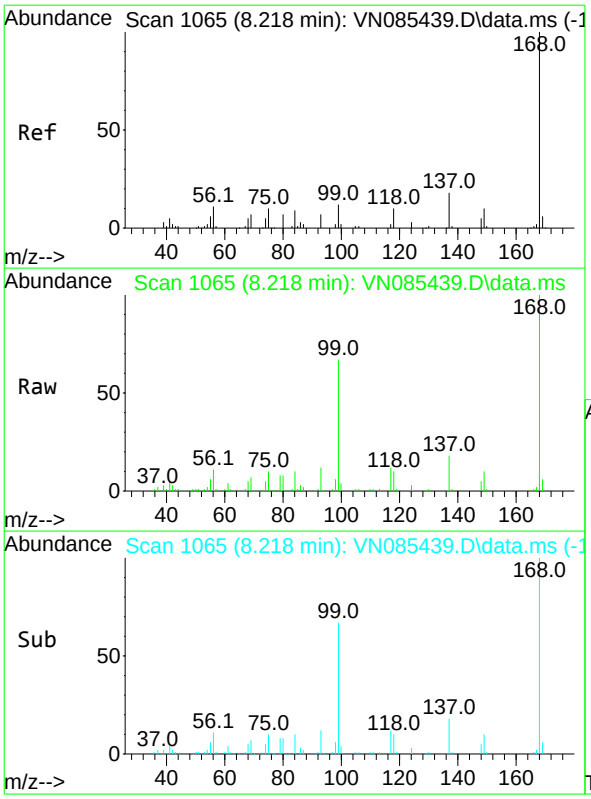
Quant Time: Jan 15 01:42:13 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

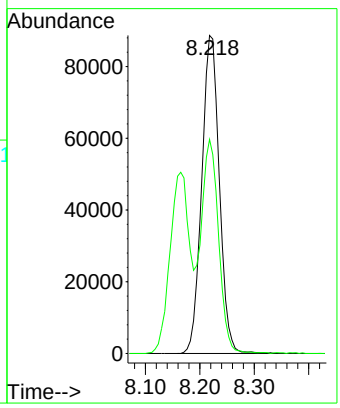





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.218 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:168 Resp: 199403

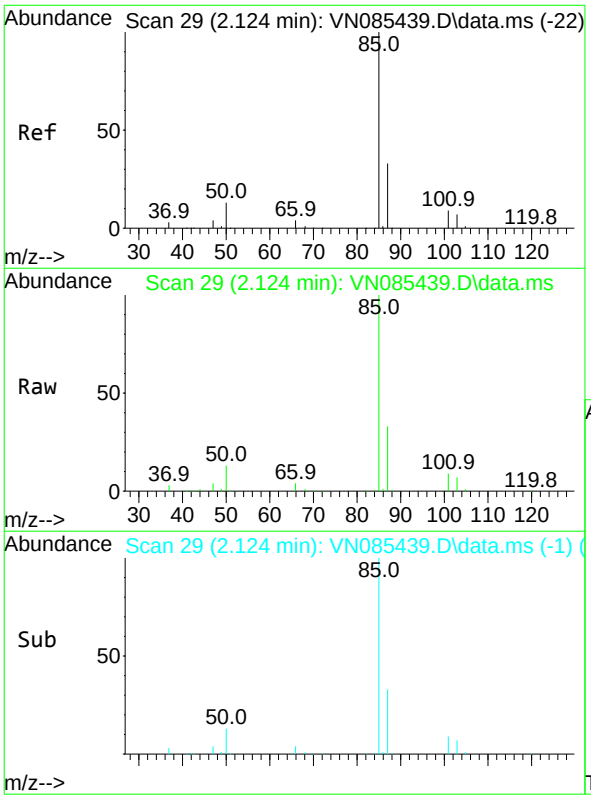
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 67.0 | 53.6 | 80.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

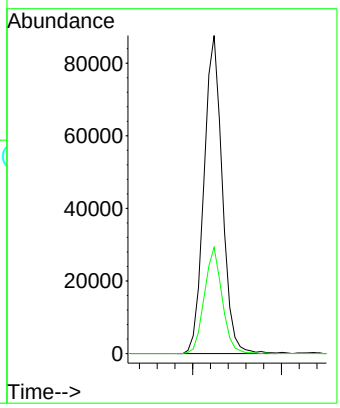
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

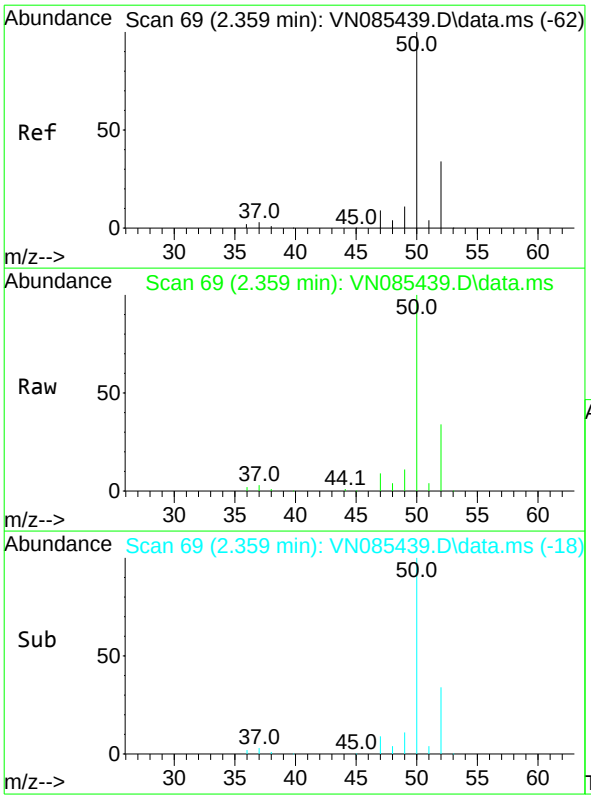



#2
Dichlorodifluoromethane
Concen: 46.486 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 85 Resp: 125504

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 33.4 | 16.7 | 50.1 |

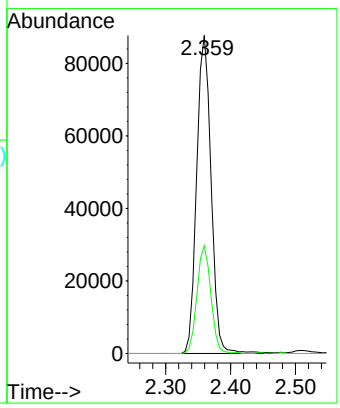





#3
Chloromethane
Concen: 46.398 ug/l
RT: 2.359 min Scan# 69
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 50 Resp: 135631

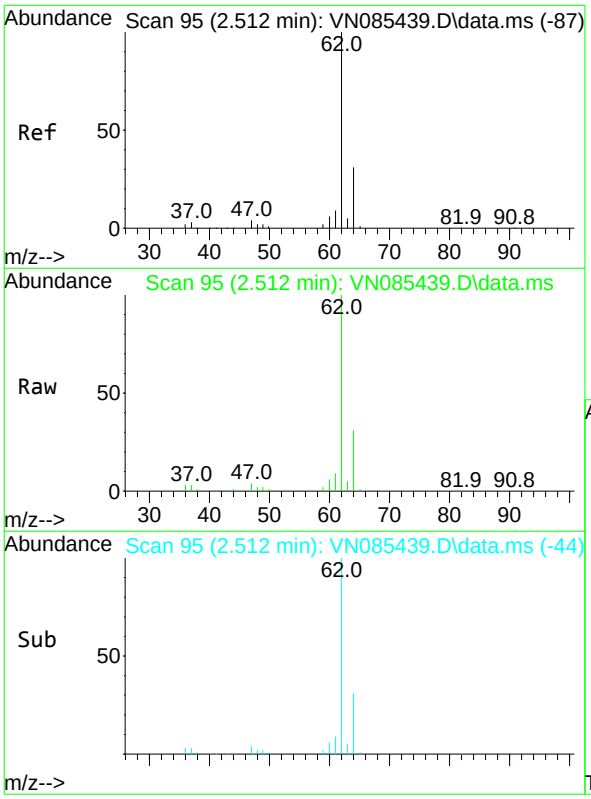
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 33.8 | 27.0 | 40.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

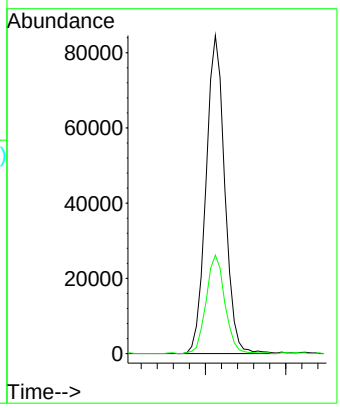
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

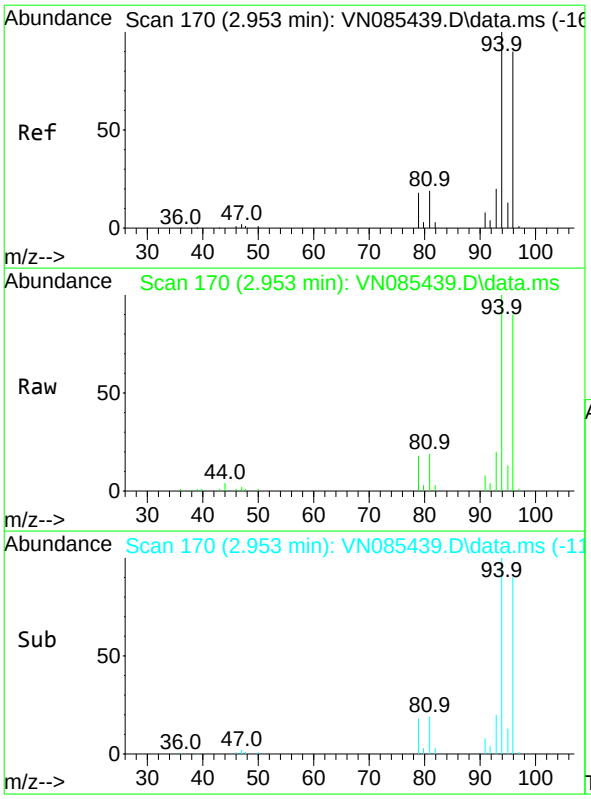



#4
Vinyl Chloride
Concen: 46.569 ug/l
RT: 2.512 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 62 Resp: 136831

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 31.0 | 24.8 | 37.2 |

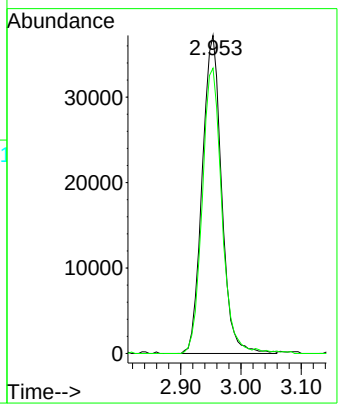





#5
Bromomethane
Concen: 46.877 ug/l
RT: 2.953 min Scan# 17
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 94 Resp: 83199

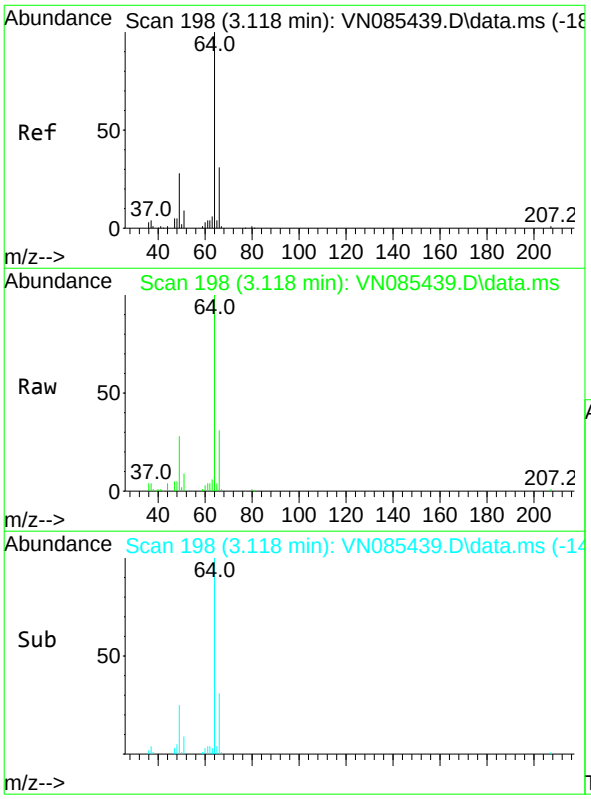
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 89.7 | 71.8 | 107.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

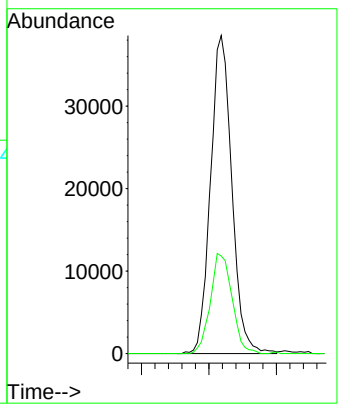
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

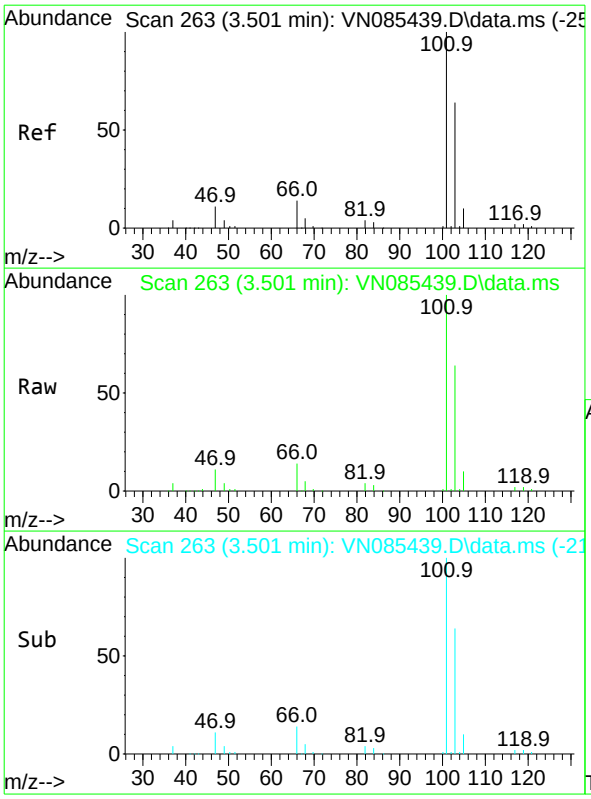



#6
Chloroethane
Concen: 45.371 ug/l
RT: 3.118 min Scan# 198
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 64 Resp: 84517

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 30.7 | 24.6 | 36.8 |

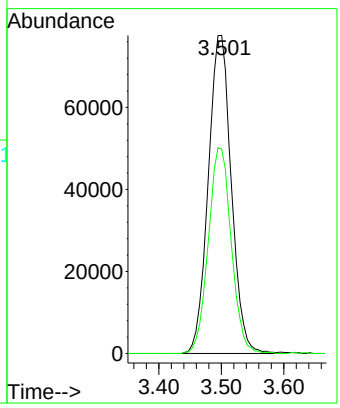





#7
Trichlorofluoromethane
Concen: 46.613 ug/l
RT: 3.501 min Scan# 26
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:101 Resp: 198726

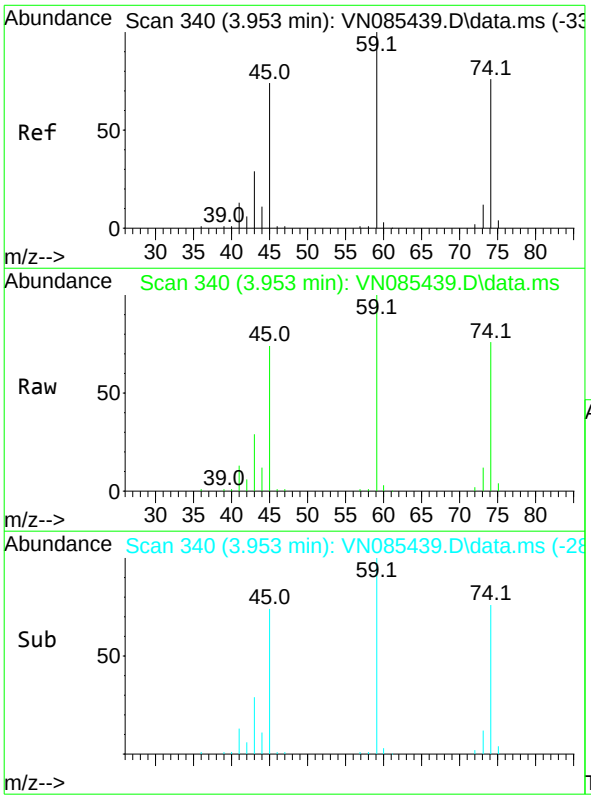
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 64.3 | 51.4 | 77.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

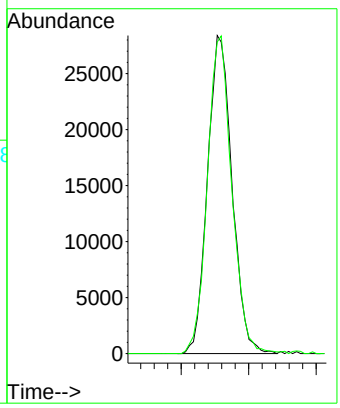
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

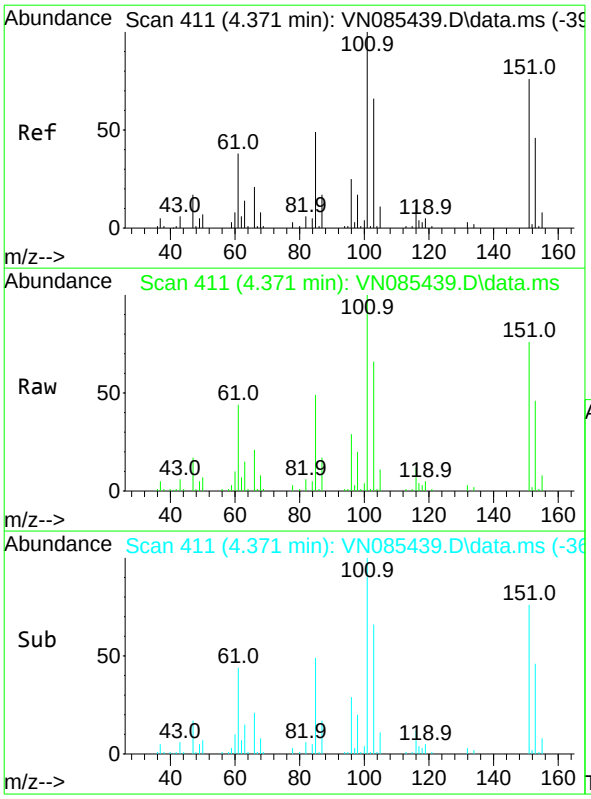



#8
Diethyl Ether
Concen: 48.726 ug/l
RT: 3.953 min Scan# 340
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 74 Resp: 71764

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 99.4 | 49.7 | 149.1 |

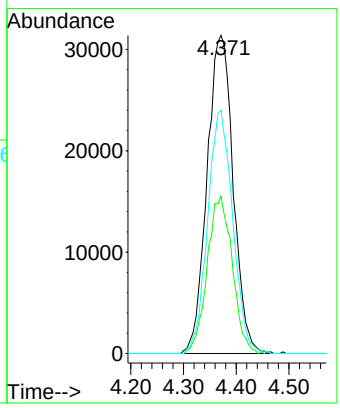





#9
1,1,2-Trichlorotrifluoroethane
Concen: 45.010 ug/l
RT: 4.371 min Scan# 41
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:101 Resp: 108081

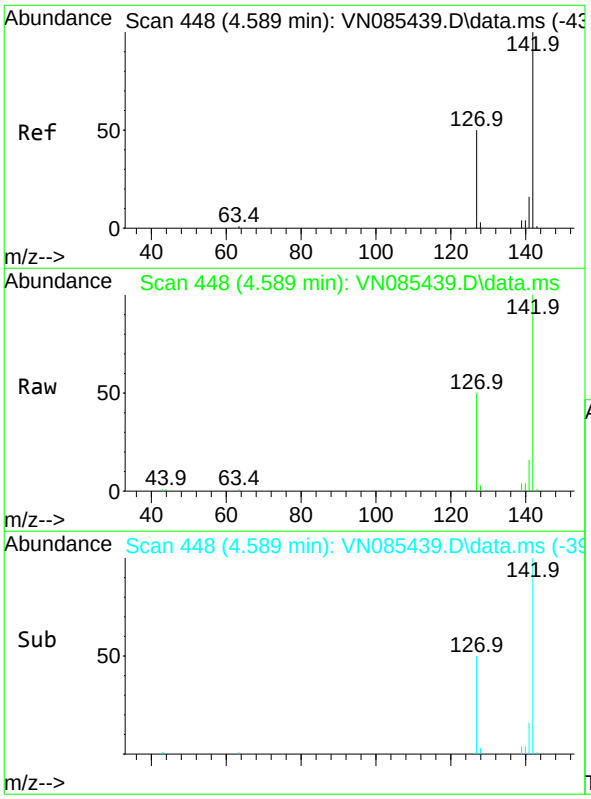
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 47.3 | 37.8 | 56.8 |
| 151 | 73.5 | 58.8 | 88.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

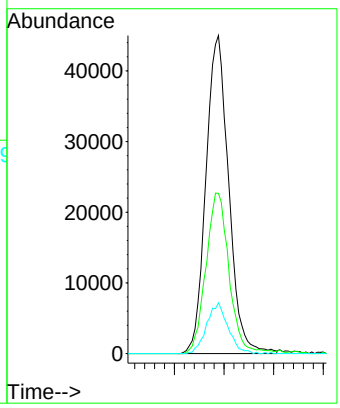
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

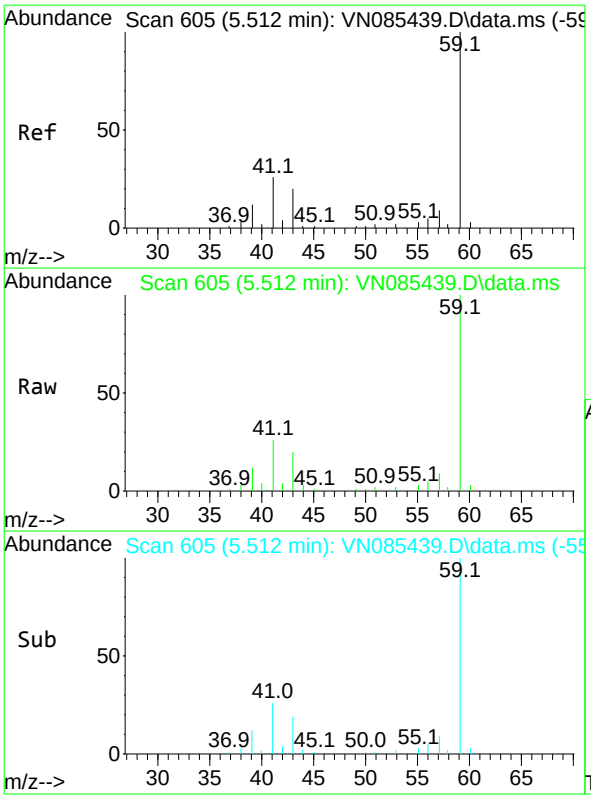



#10
Methyl Iodide
Concen: 52.142 ug/l
RT: 4.589 min Scan# 448
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:142 Resp: 143383

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 50.4 | 40.3 | 60.5 |
| 141 | 16.0 | 12.8 | 19.2 |

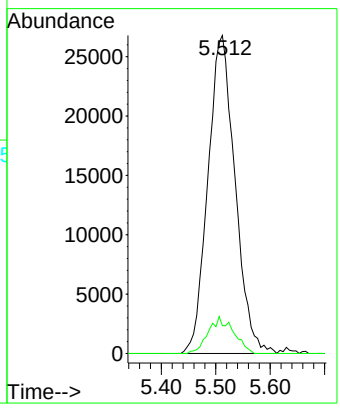





#11
Tert butyl alcohol
Concen: 251.894 ug/l
RT: 5.512 min Scan# 60
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 59 Resp: 92841

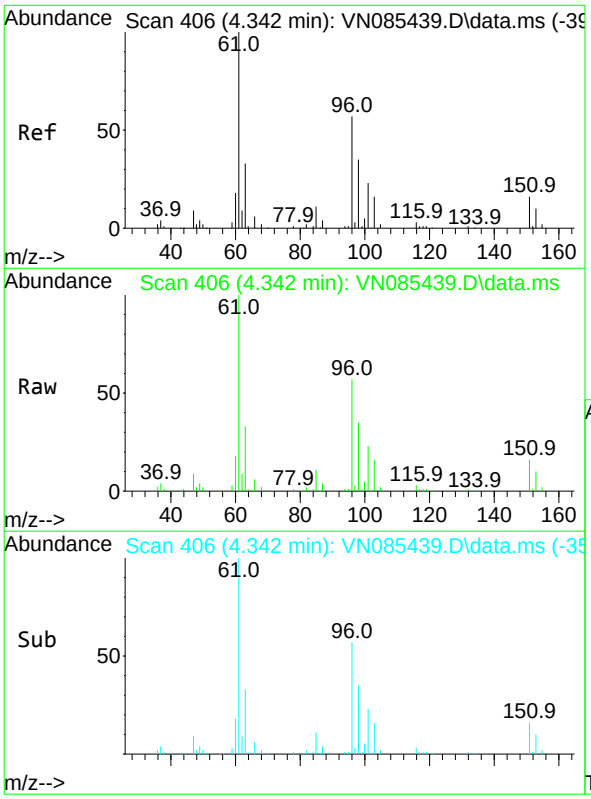
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 10.8 | 8.6 | 13.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

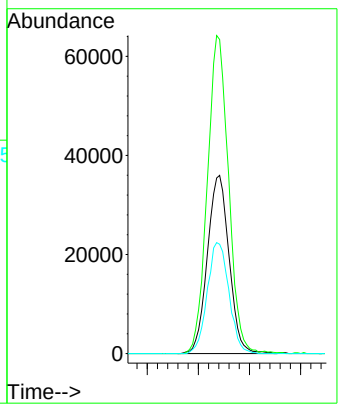
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

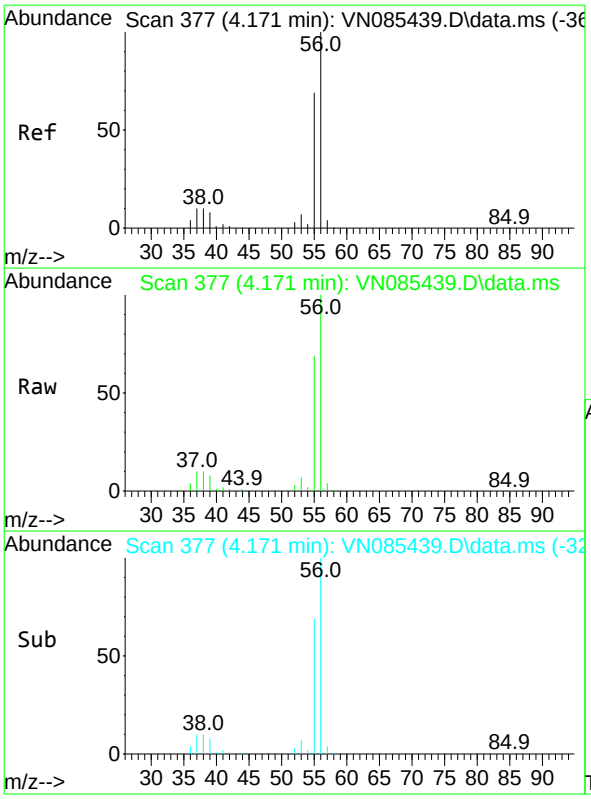



#12
1,1-Dichloroethene
Concen: 49.647 ug/l
RT: 4.342 min Scan# 406
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 96 Resp: 106247

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 176.2 | 141.0 | 211.4 |
| 98 | 61.3 | 49.0 | 73.6 |

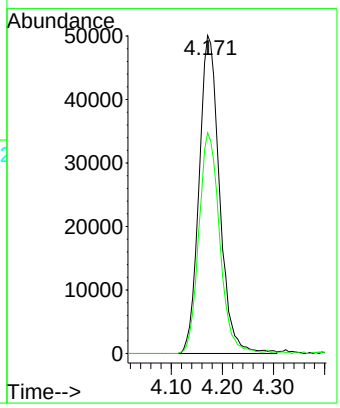





#13
Acrolein
Concen: 276.734 ug/l
RT: 4.171 min Scan# 37
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 56 Resp: 139234

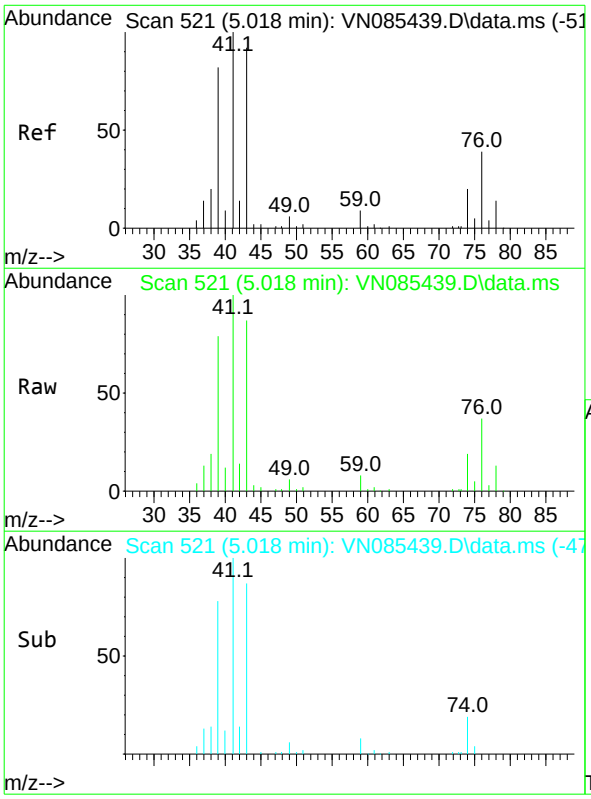
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 70.4 | 56.3 | 84.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

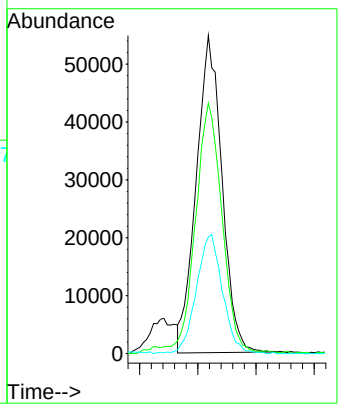
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

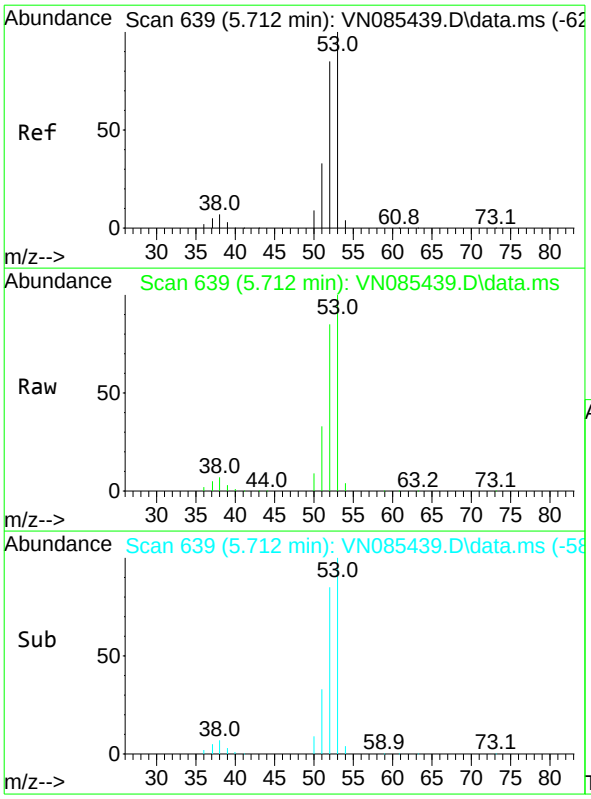



#14
Allyl chloride
Concen: 48.567 ug/l
RT: 5.018 min Scan# 521
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 41 Resp: 168654

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 80.5 | 64.4 | 96.6 |
| 76 | 38.1 | 30.5 | 45.7 |

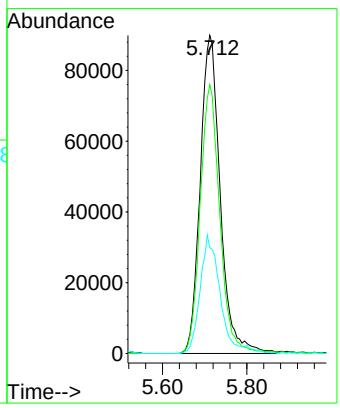





#15
Acrylonitrile
Concen: 253.507 ug/l
RT: 5.712 min Scan# 63
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 53 Resp: 296781

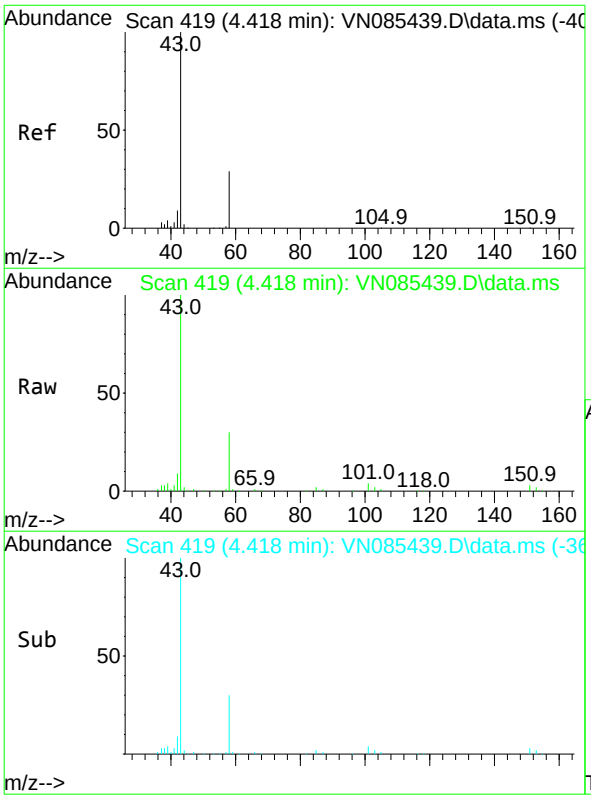
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 81.9 | 65.5 | 98.3 |
| 51 | 37.3 | 29.8 | 44.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

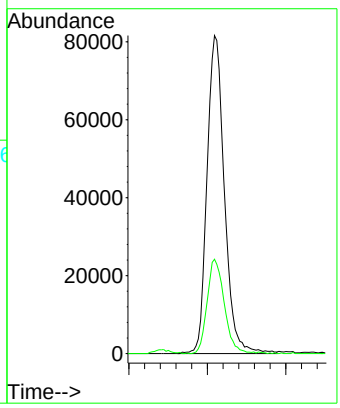
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

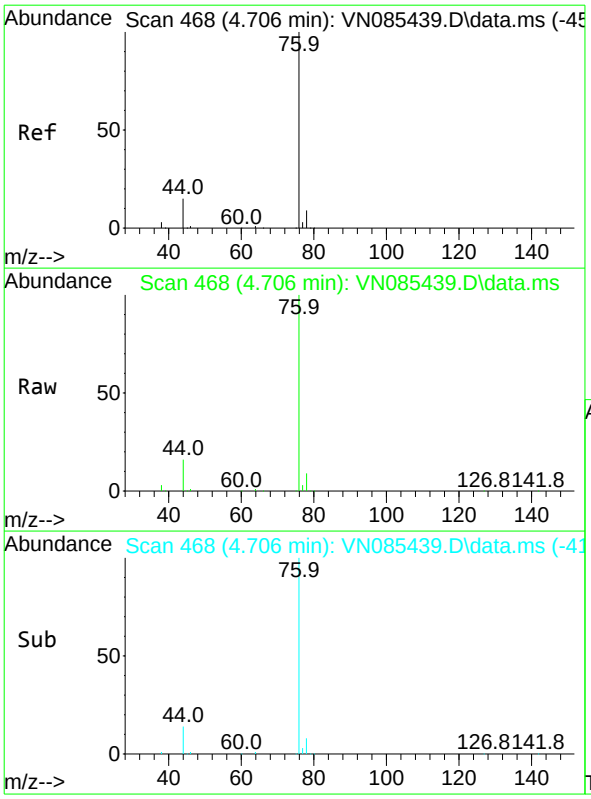



#16
Acetone
Concen: 241.603 ug/l
RT: 4.418 min Scan# 419
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 43 Resp: 251271

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 29.7 | 23.8 | 35.6 |

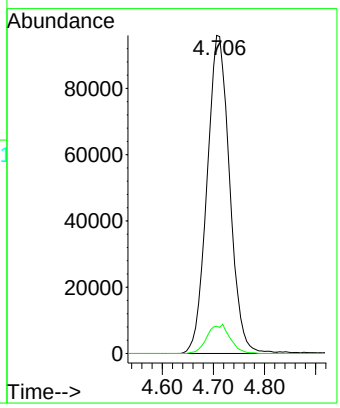





#17
Carbon Disulfide
Concen: 44.710 ug/l
RT: 4.706 min Scan# 46
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 76 Resp: 294604

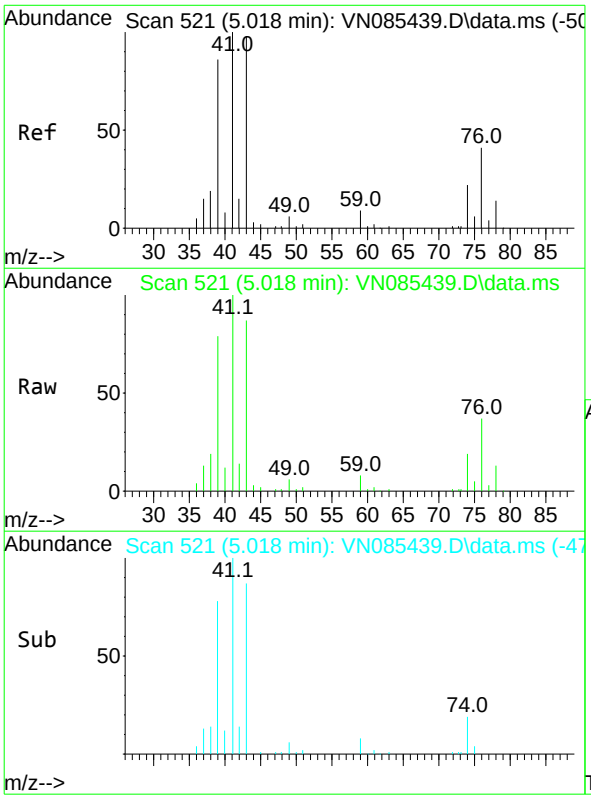
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 8.6 | 6.9 | 10.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

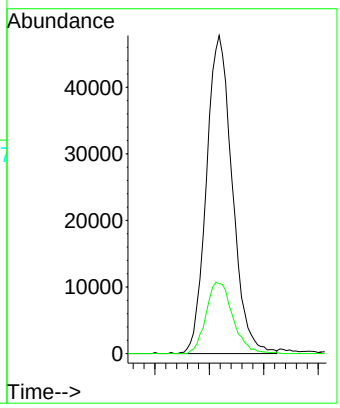
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

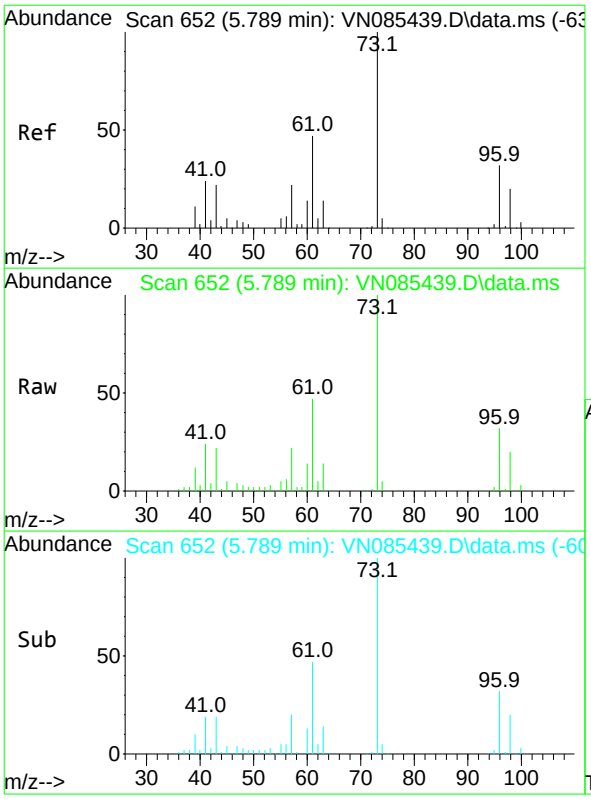



#18
Methyl Acetate
Concen: 49.798 ug/l
RT: 5.018 min Scan# 521
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 43 Resp: 157485

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 23.3 | 18.6 | 28.0 |

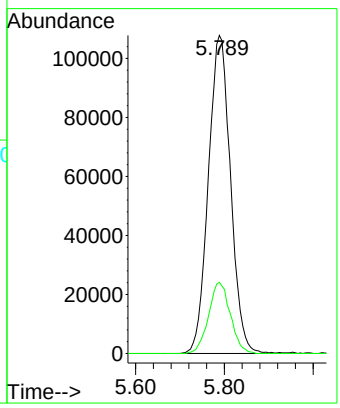





#19
Methyl tert-butyl Ether
Concen: 53.758 ug/l
RT: 5.789 min Scan# 65
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 73 Resp: 373561

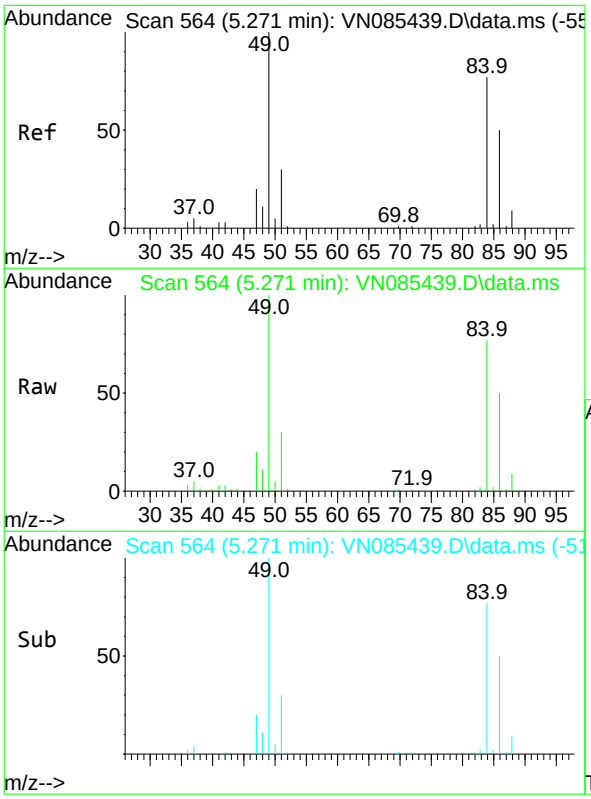
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 22.3 | 17.8 | 26.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

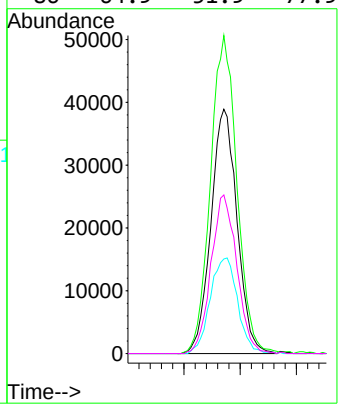
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

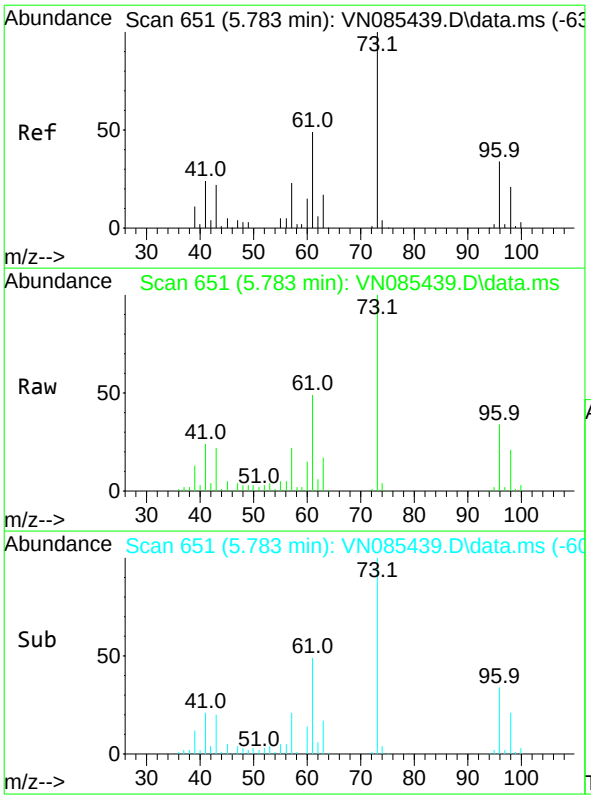



#20
Methylene Chloride
Concen: 48.748 ug/l
RT: 5.271 min Scan# 564
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 84 Resp: 125508

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 130.1 | 104.1 | 156.1 |
| 51 | 38.7 | 31.0 | 46.4 |
| 86 | 64.9 | 51.9 | 77.9 |

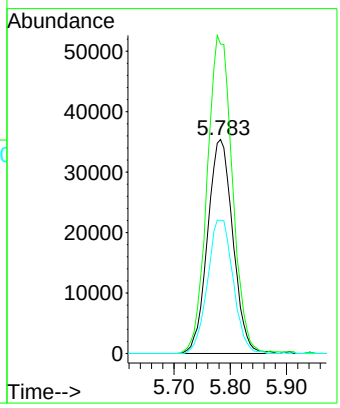





#21
trans-1,2-Dichloroethene
Concen: 48.395 ug/l
RT: 5.783 min Scan# 65
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 96 Resp: 110684

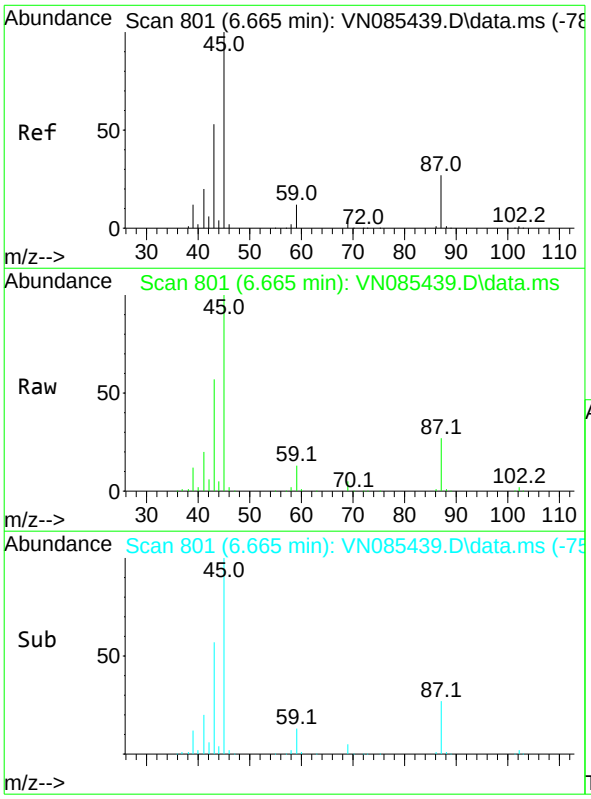
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 144.6 | 115.7 | 173.5 |
| 98 | 62.3 | 49.8 | 74.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

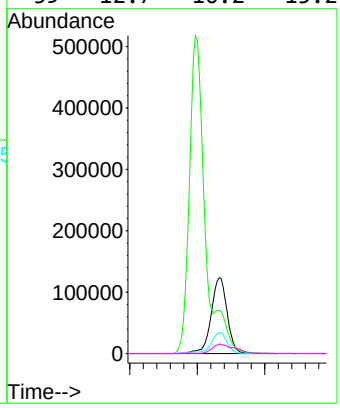
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

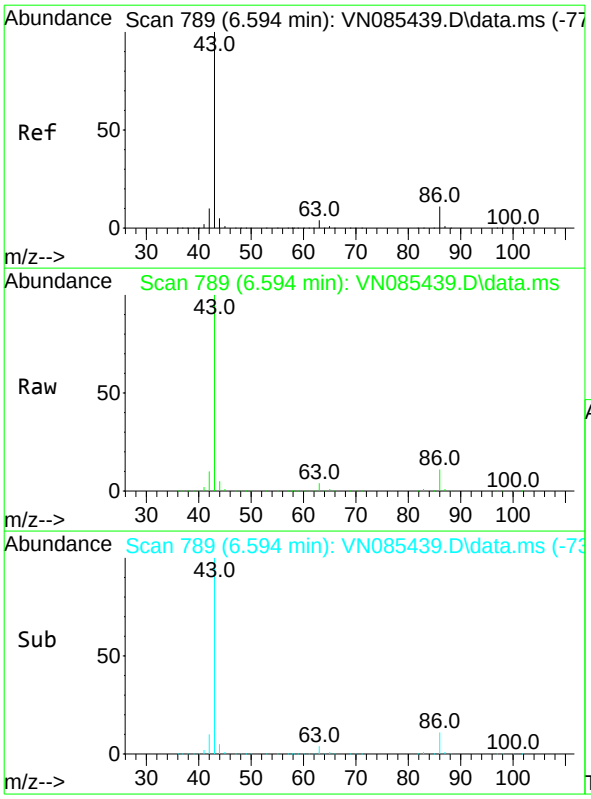



#22
Diisopropyl ether
Concen: 52.707 ug/l
RT: 6.665 min Scan# 801
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 45 Resp: 406253

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 56.3 | 45.0 | 67.6 |
| 87 | 27.3 | 21.8 | 32.8 |
| 59 | 12.7 | 10.2 | 15.2 |

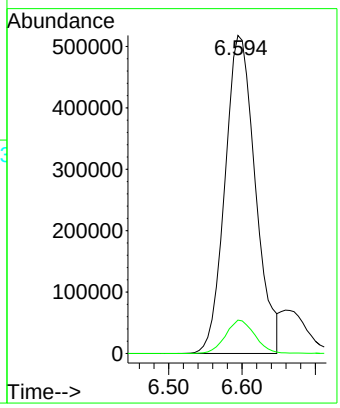





#23
Vinyl Acetate
Concen: 275.471 ug/l
RT: 6.594 min Scan# 78
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 43 Resp: 1491031

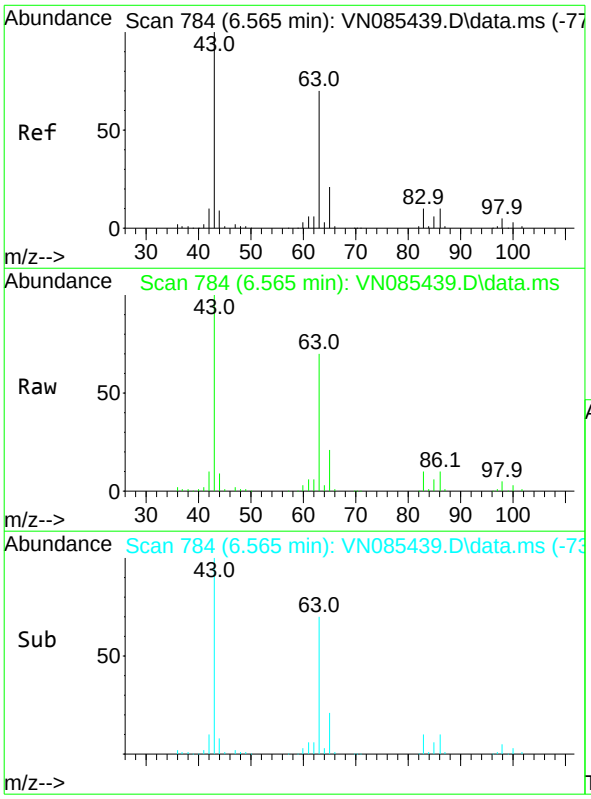
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 10.5 | 8.4 | 12.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

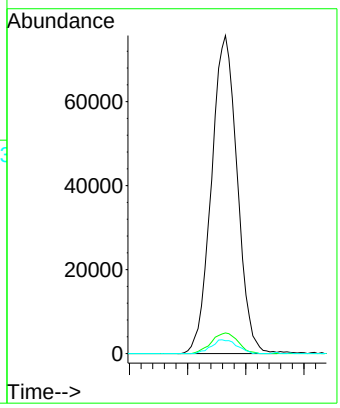
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

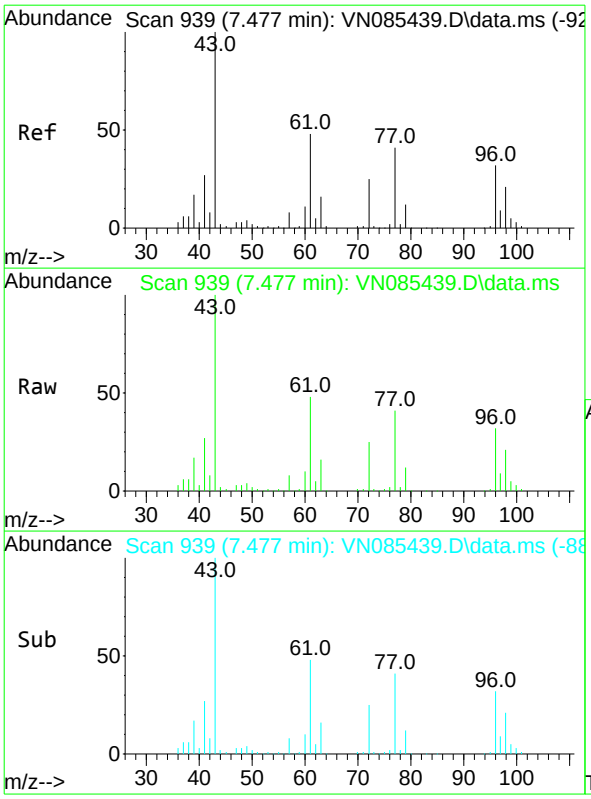



#24
1,1-Dichloroethane
Concen: 49.648 ug/l
RT: 6.565 min Scan# 784
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 63 Resp: 233336

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 6.5 | 3.3 | 9.8 |
| 100 | 4.0 | 2.0 | 6.0 |

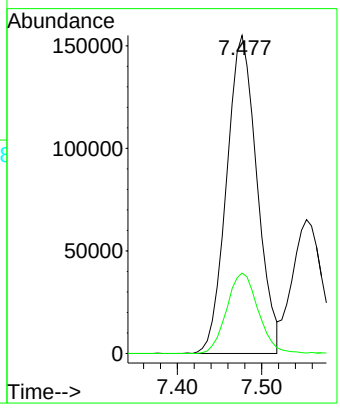





#25
2-Butanone
Concen: 253.815 ug/l
RT: 7.477 min Scan# 93
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 43 Resp: 388457

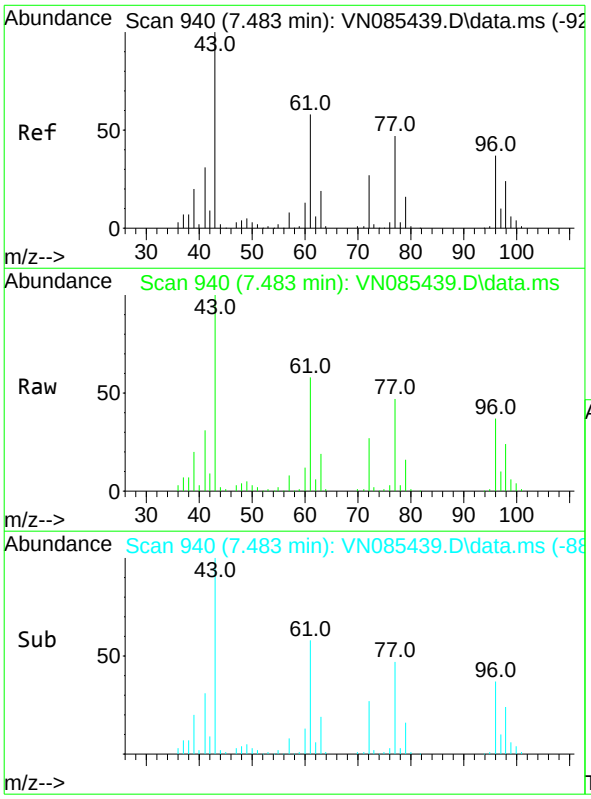
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 25.3 | 20.2 | 30.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

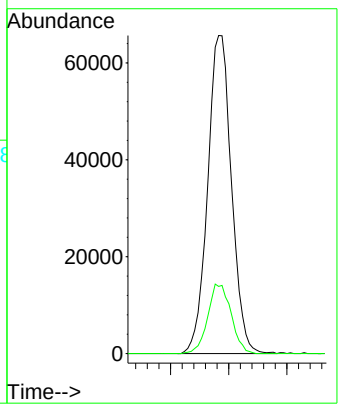
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

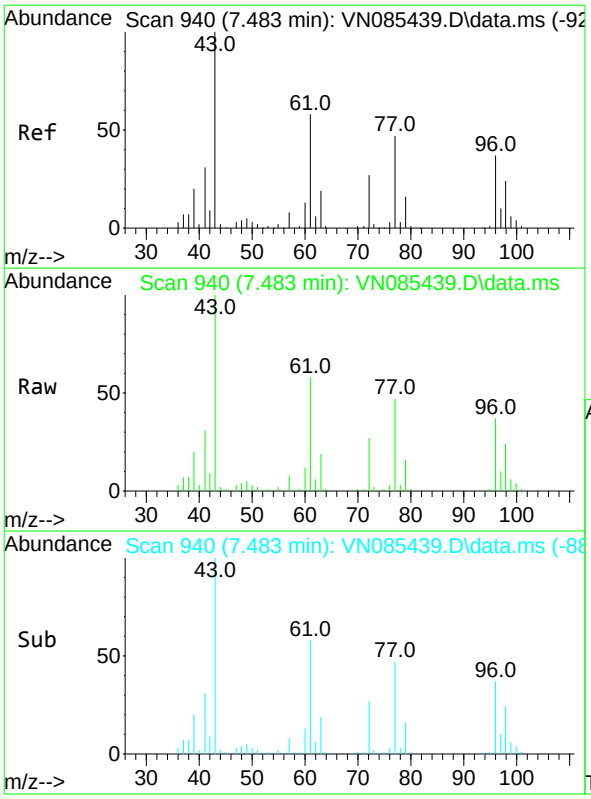



#26
2,2-Dichloropropane
Concen: 49.106 ug/l
RT: 7.483 min Scan# 940
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 77 Resp: 186591

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 21.4 | 10.7 | 32.1 |

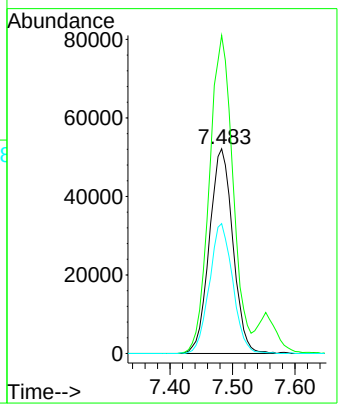





#27
cis-1,2-Dichloroethene
Concen: 50.571 ug/l
RT: 7.483 min Scan# 94
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 96 Resp: 136229

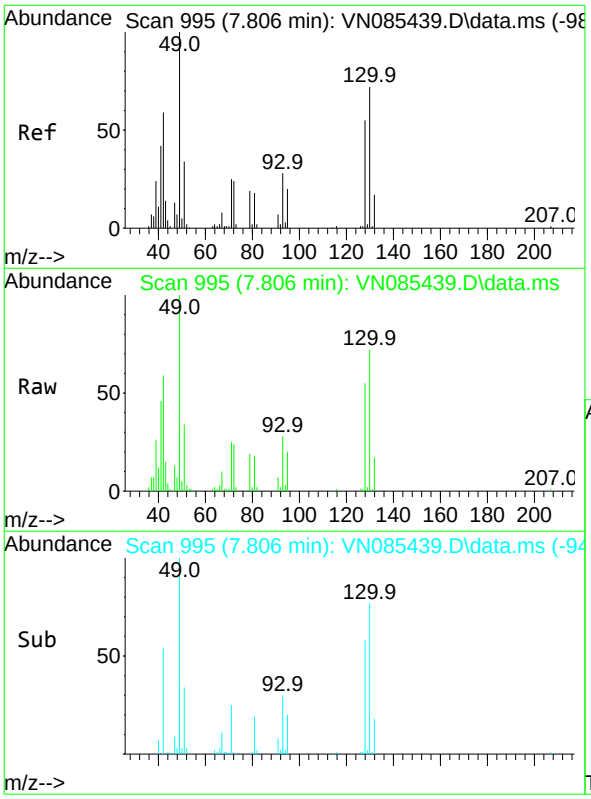
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 155.9 | 0.0 | 311.8 |
| 98 | 63.0 | 0.0 | 126.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

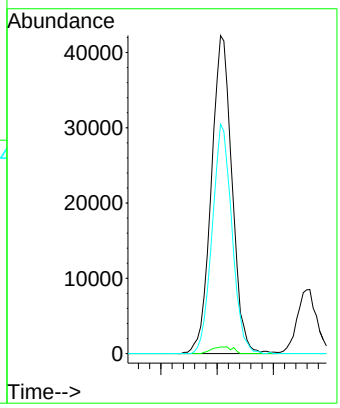
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

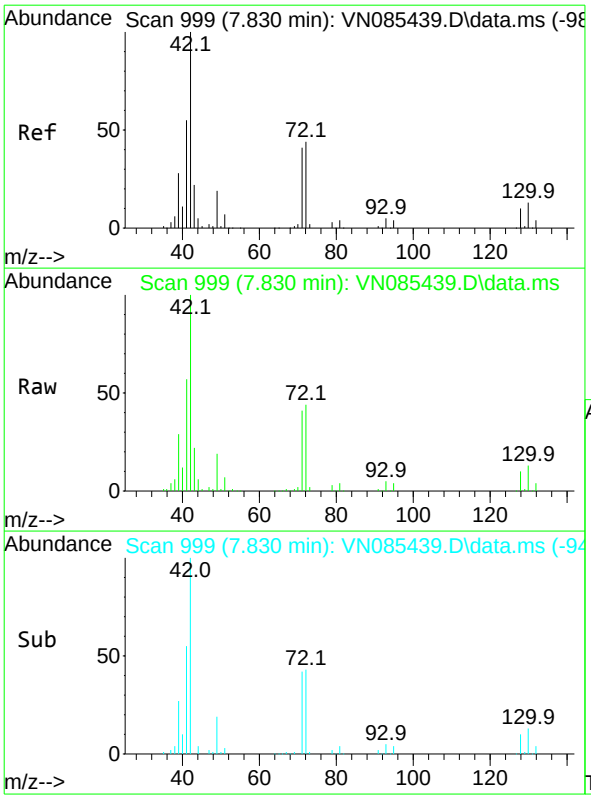



#28
Bromochloromethane
Concen: 49.461 ug/l
RT: 7.806 min Scan# 995
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 49 Resp: 108148

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 2.2 | 0.0 | 4.4 |
| 130 | 68.7 | 55.0 | 82.4 |

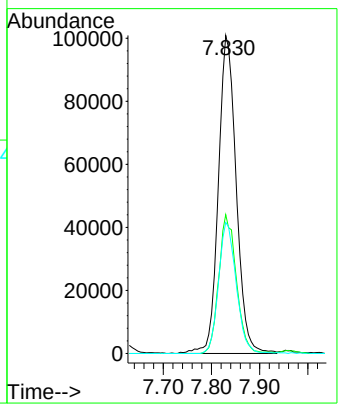





#29
Tetrahydrofuran
Concen: 267.624 ug/l
RT: 7.830 min Scan# 99
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 42 Resp: 259683

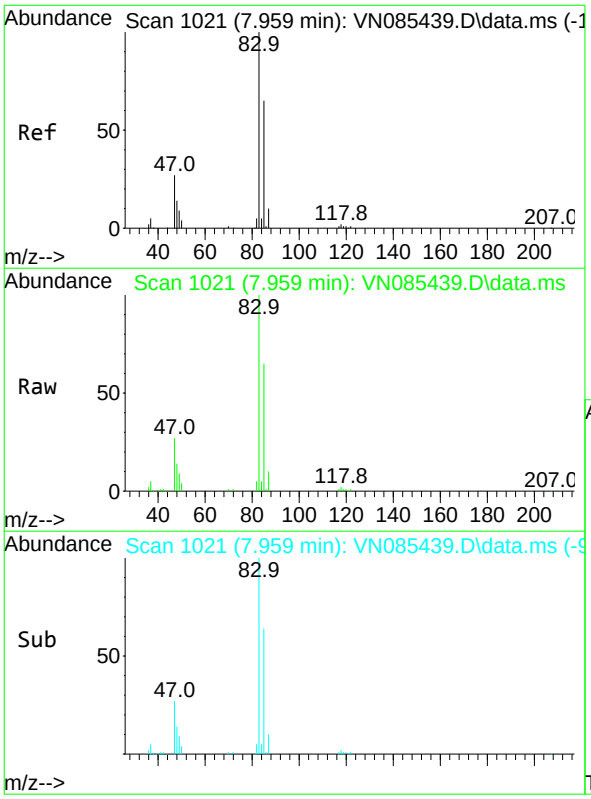
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 42.7 | 34.2 | 51.2 |
| 71 | 40.6 | 32.5 | 48.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

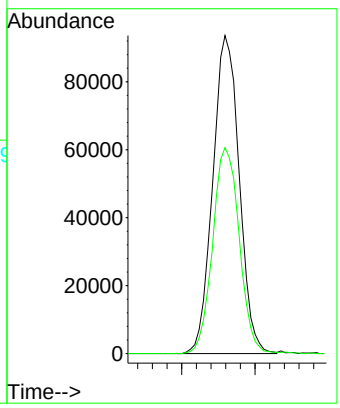
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

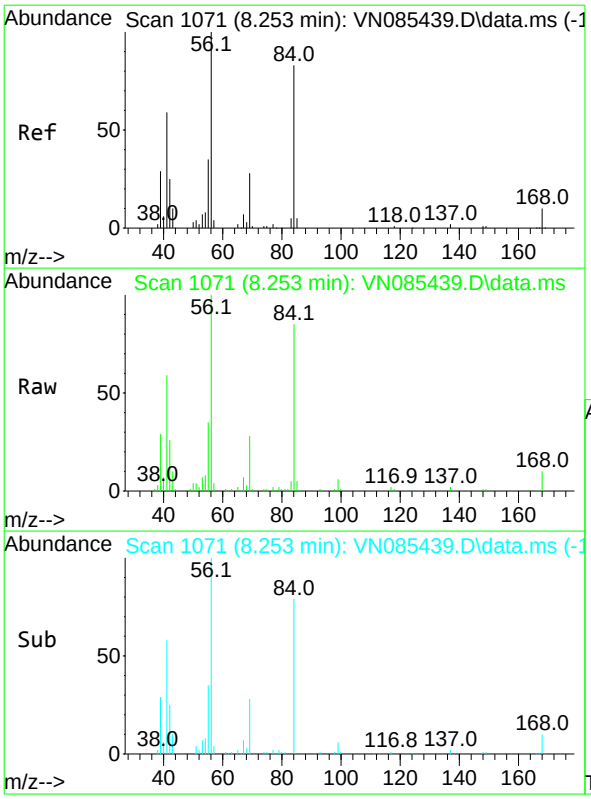



#30
Chloroform
Concen: 48.229 ug/l
RT: 7.959 min Scan# 1021
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 83 Resp: 234271

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.7 | 51.8 | 77.6 |

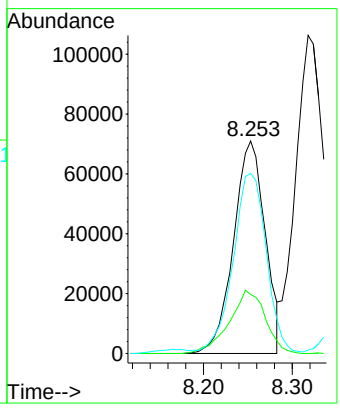





#31
Cyclohexane
Concen: 42.984 ug/l
RT: 8.253 min Scan# 10
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 56 Resp: 175588

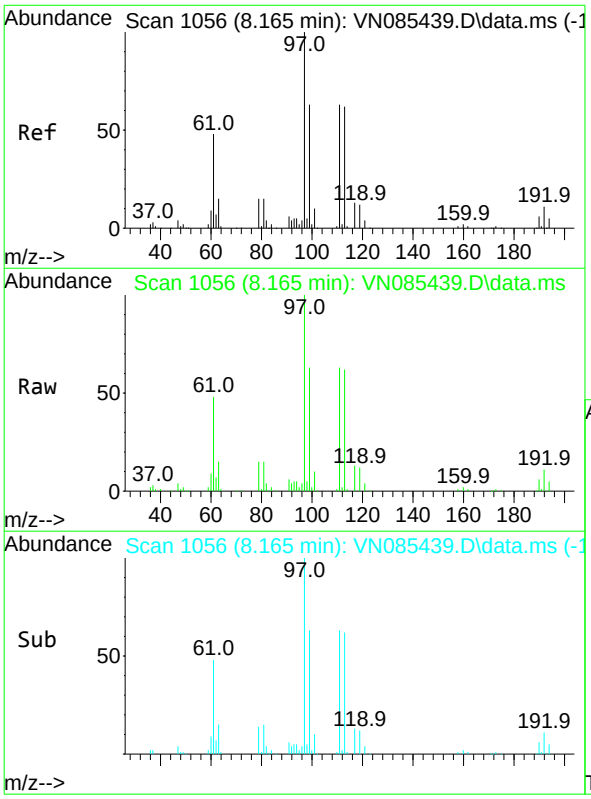
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 27.8 | 22.2 | 33.4 |
| 84 | 83.0 | 66.4 | 99.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

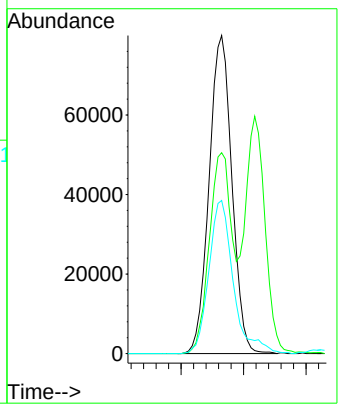
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

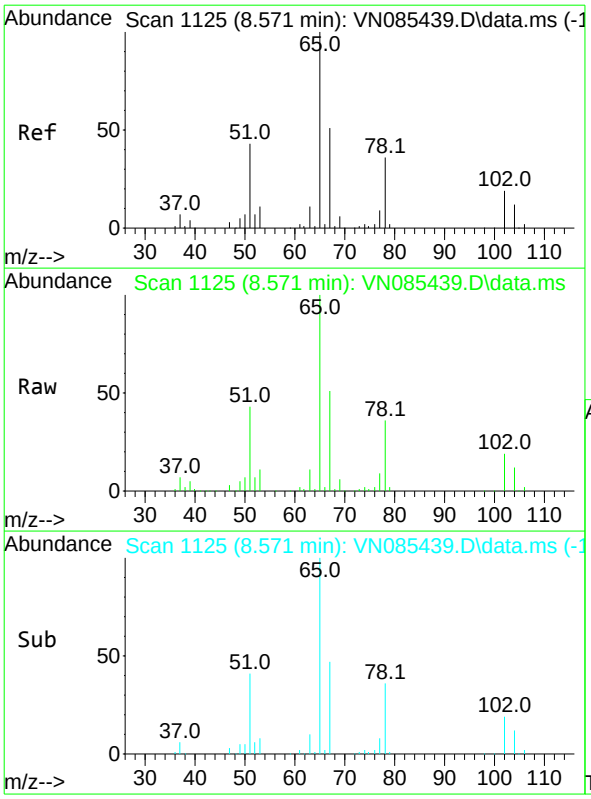



#32
1,1,1-Trichloroethane
Concen: 47.547 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 97 Resp: 202590

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 62.2 | 49.8 | 74.6 |
| 61 | 51.8 | 41.4 | 62.2 |

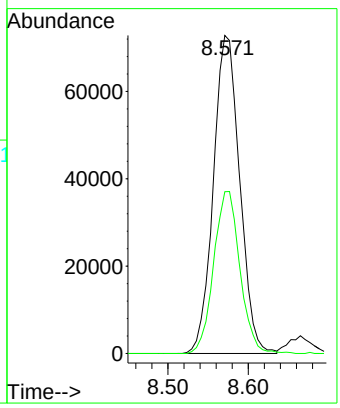





#33
1,2-Dichloroethane-d4
Concen: 51.500 ug/l
RT: 8.571 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 65 Resp: 165768

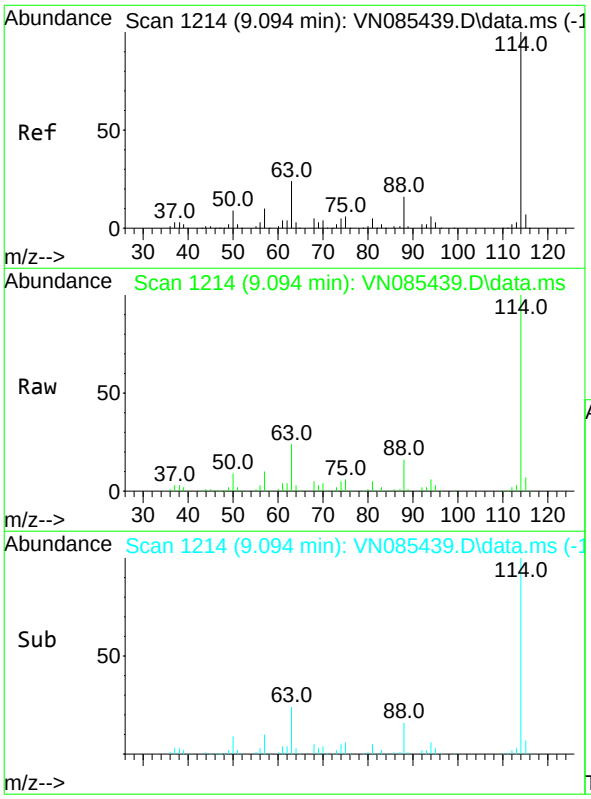
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.8 | 0.0 | 101.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

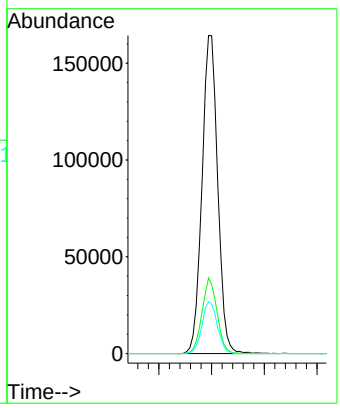
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

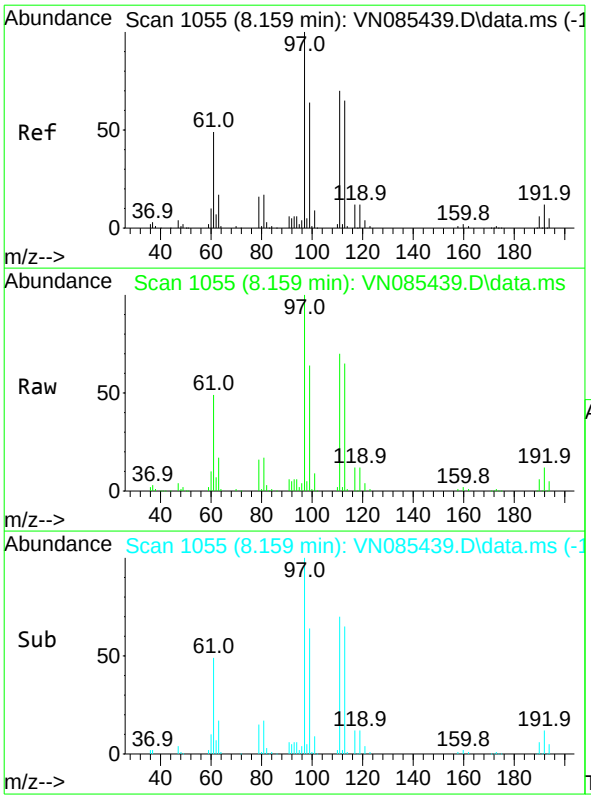



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.094 min Scan# 1214
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:114 Resp: 339872

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 23.8 | 0.0 | 47.6 |
| 88 | 16.3 | 0.0 | 32.6 |

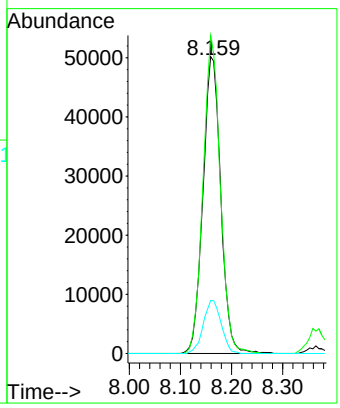





#35
Dibromofluoromethane
Concen: 51.552 ug/l
RT: 8.159 min Scan# 10
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:113 Resp: 121554

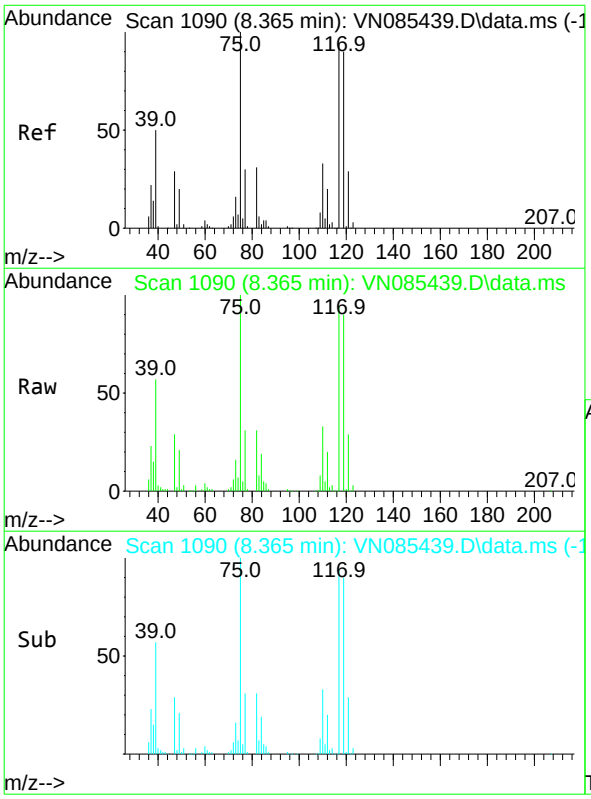
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 103.4 | 82.7 | 124.1 |
| 192 | 17.9 | 14.3 | 21.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

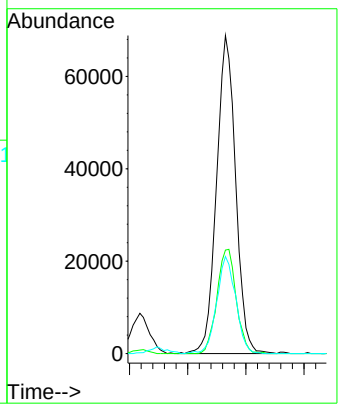
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

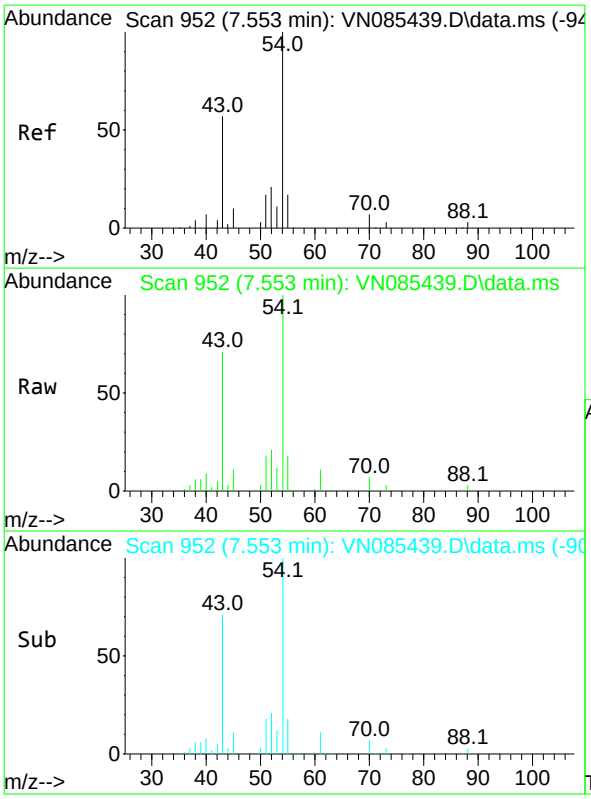



#36
1,1-Dichloropropene
Concen: 47.453 ug/l
RT: 8.365 min Scan# 1090
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 75 Resp: 157031

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 33.0 | 16.5 | 49.5 |
| 77 | 30.5 | 24.4 | 36.6 |

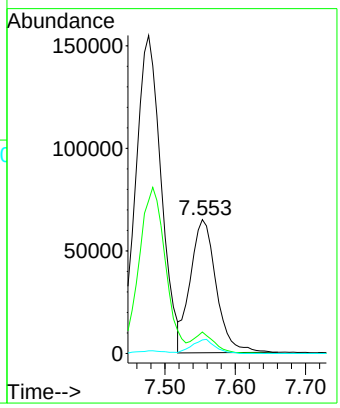





#37
Ethyl Acetate
Concen: 49.658 ug/l
RT: 7.553 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 43 Resp: 165866

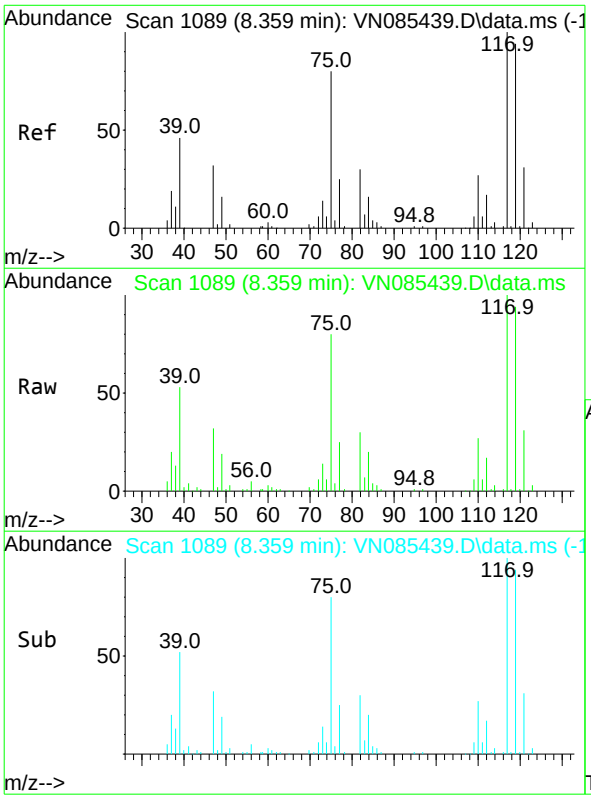
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 13.6 | 10.9 | 16.3 |
| 70 | 9.4 | 7.5 | 11.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

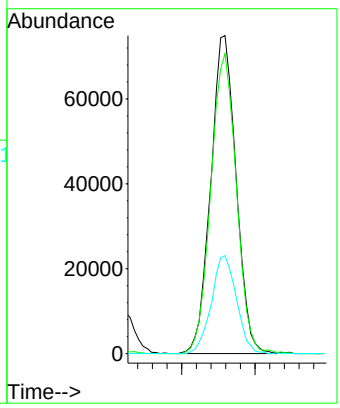
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

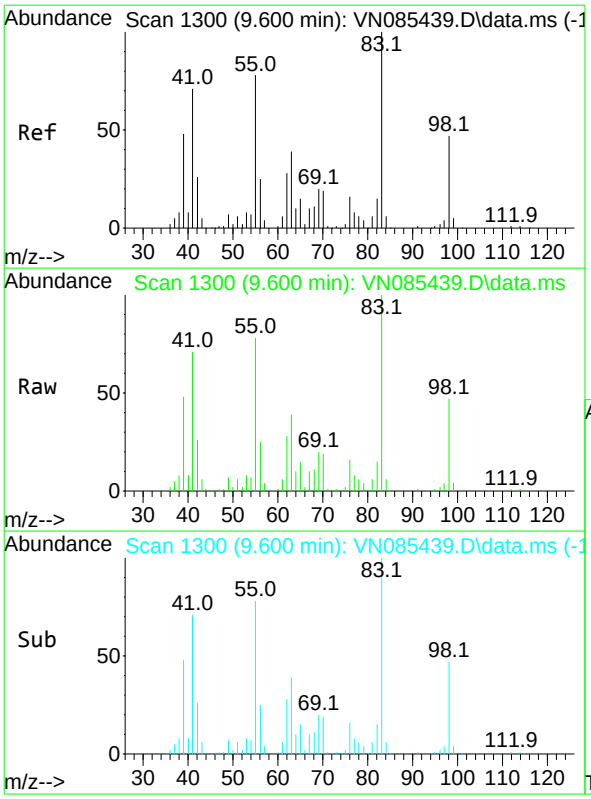



#38
Carbon Tetrachloride
Concen: 47.564 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:117 Resp: 180199

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 94.3 | 75.4 | 113.2 |
| 121 | 30.8 | 24.6 | 37.0 |

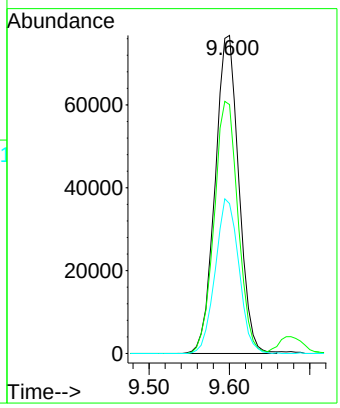





#39
Methylcyclohexane
Concen: 50.562 ug/l
RT: 9.600 min Scan# 13
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 83 Resp: 157234

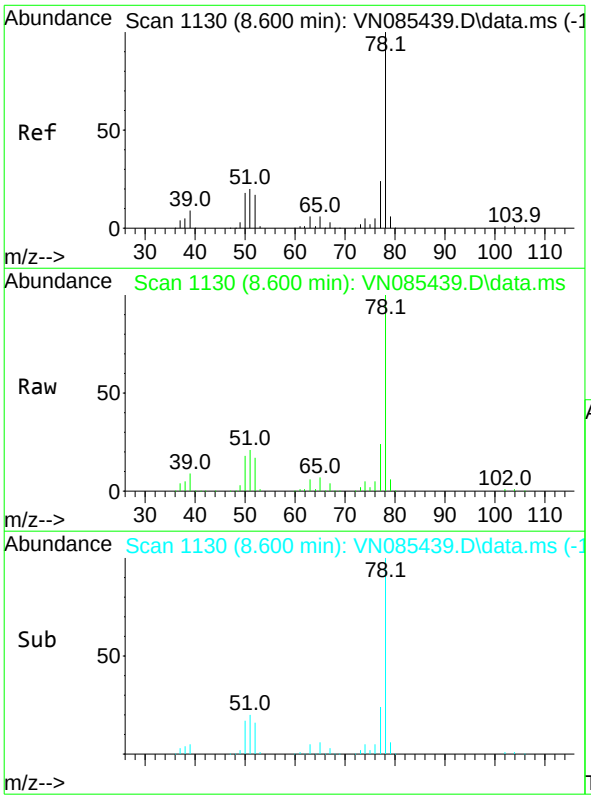
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 78.3 | 62.6 | 94.0 |
| 98 | 47.1 | 37.7 | 56.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

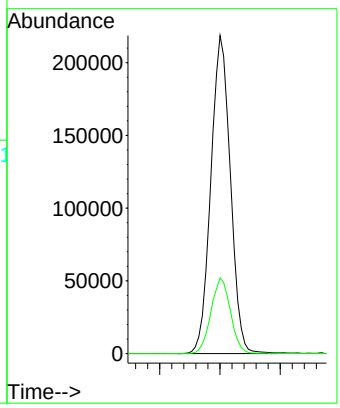
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

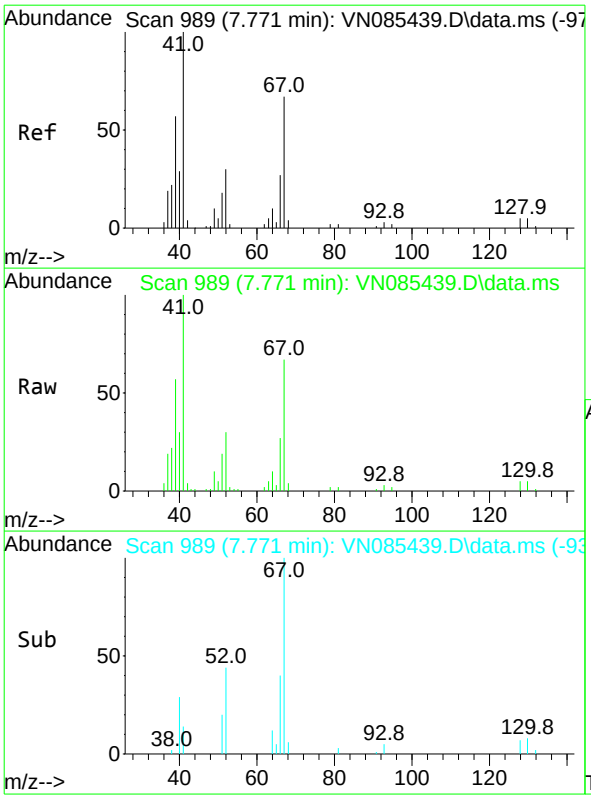



#40
Benzene
Concen: 49.542 ug/l
RT: 8.600 min Scan# 1130
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 78 Resp: 492606

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.8 | 19.0 | 28.6 |

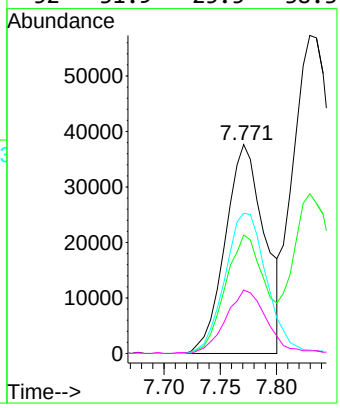





#41
Methacrylonitrile
Concen: 52.775 ug/l
RT: 7.771 min Scan# 98
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 41 Resp: 91711

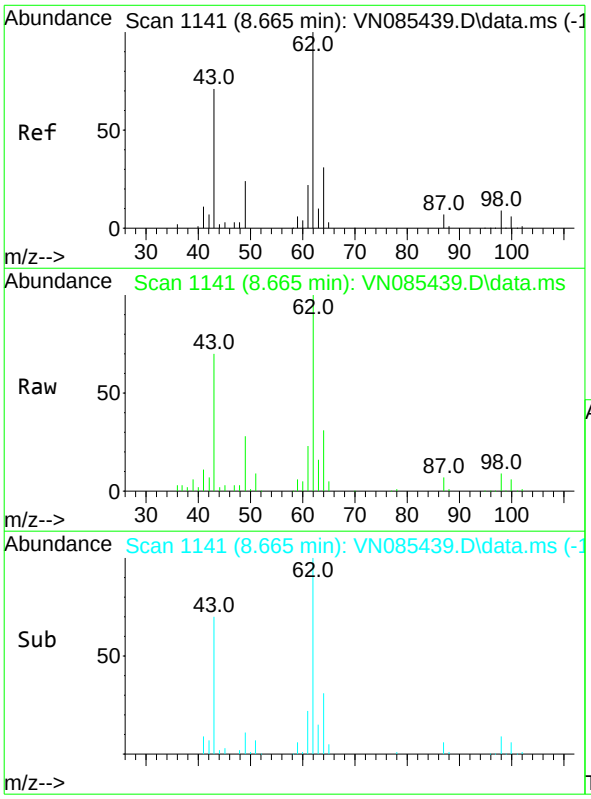
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 57.5 | 46.0 | 69.0 |
| 67 | 71.8 | 57.4 | 86.2 |
| 52 | 31.9 | 25.5 | 38.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

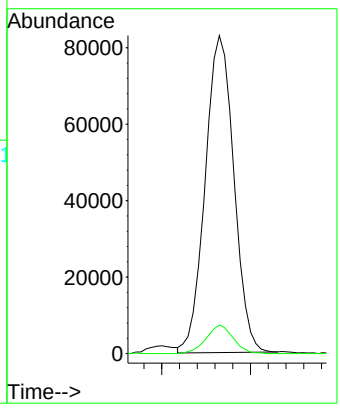
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

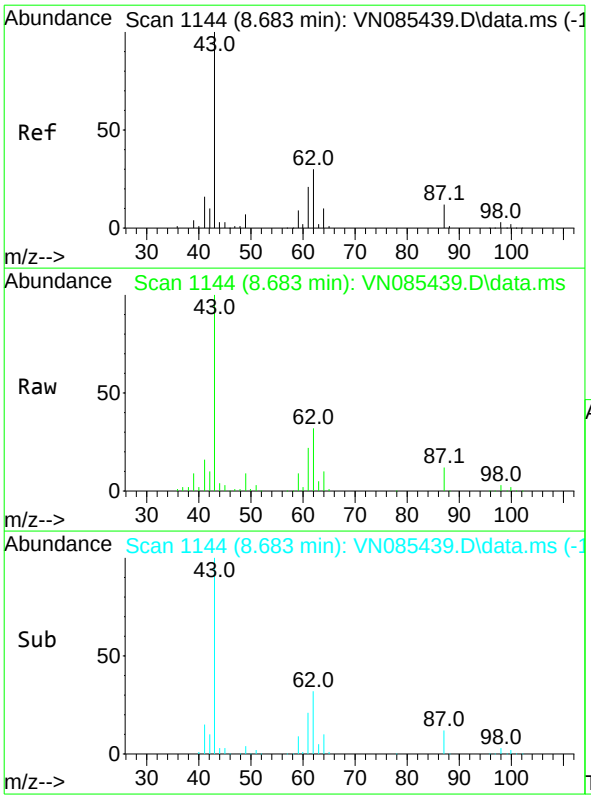



#42
1,2-Dichloroethane
Concen: 49.685 ug/l
RT: 8.665 min Scan# 1141
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 62 Resp: 186065

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 8.5 | 0.0 | 17.0 |

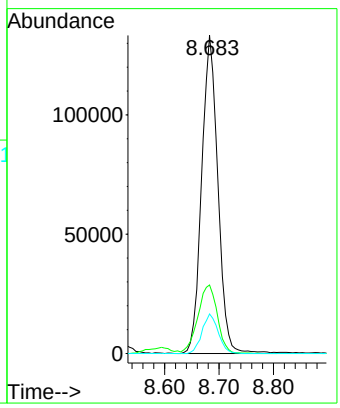





#43
Isopropyl Acetate
Concen: 51.611 ug/l
RT: 8.683 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 43 Resp: 276228

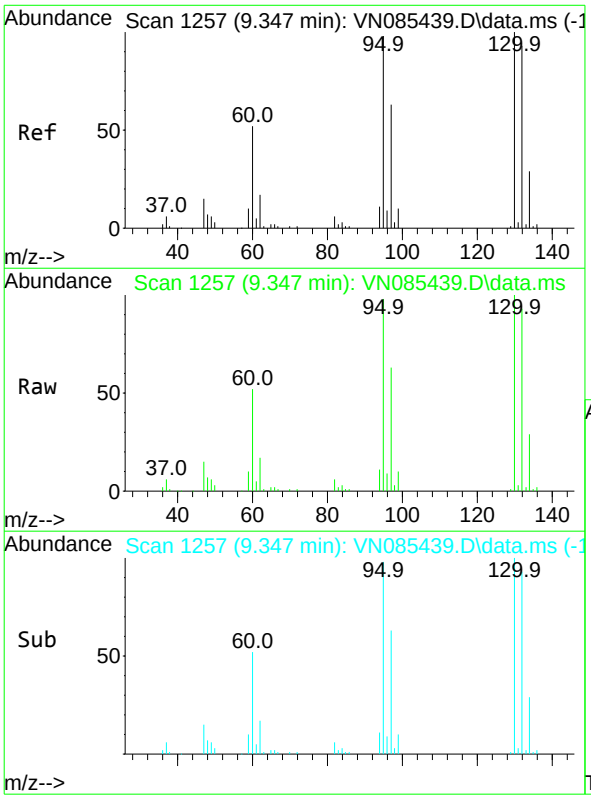
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 25.9 | 20.7 | 31.1 |
| 87 | 12.3 | 9.8 | 14.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

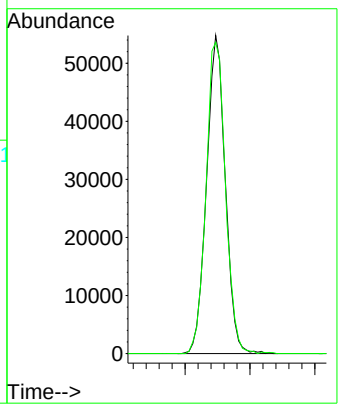
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

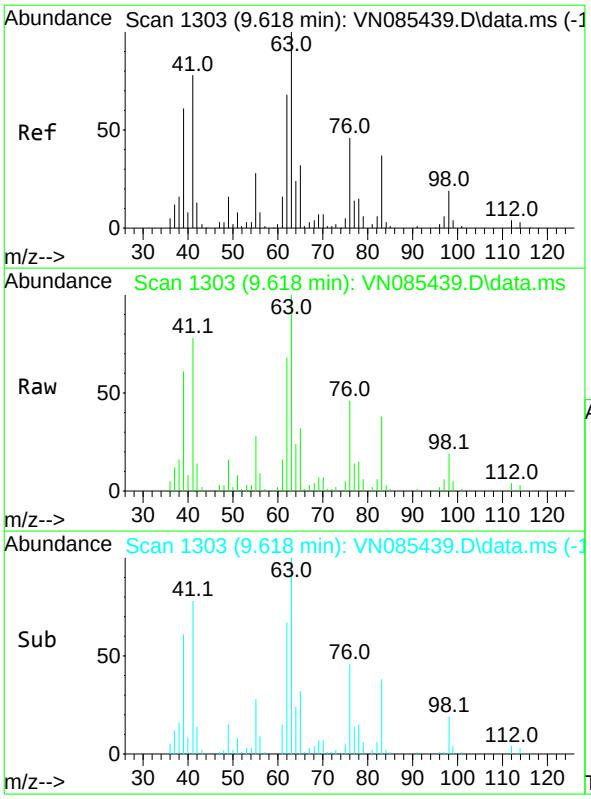



#44
Trichloroethene
Concen: 47.506 ug/l
RT: 9.347 min Scan# 1257
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:130 Resp: 109953

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 97.9 | 0.0 | 195.8 |

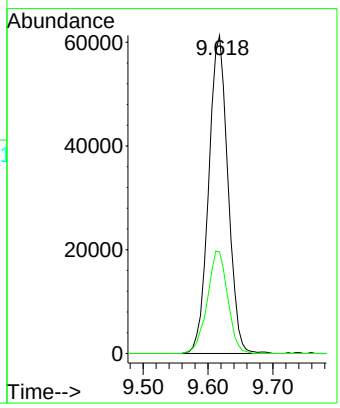





#45
1,2-Dichloropropane
Concen: 49.644 ug/l
RT: 9.618 min Scan# 13
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 63 Resp: 126084

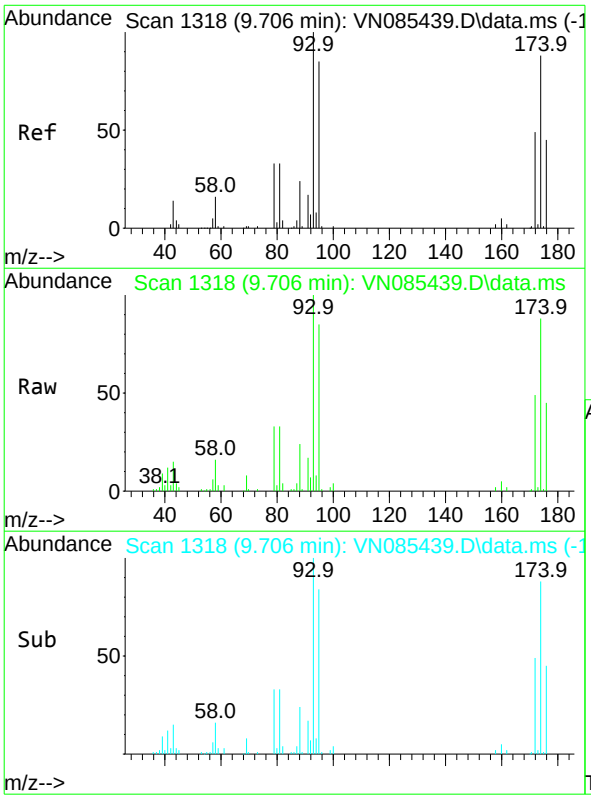
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 32.0 | 25.6 | 38.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

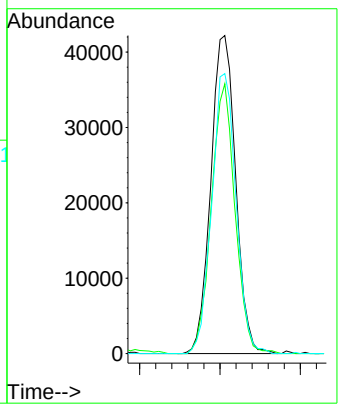
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

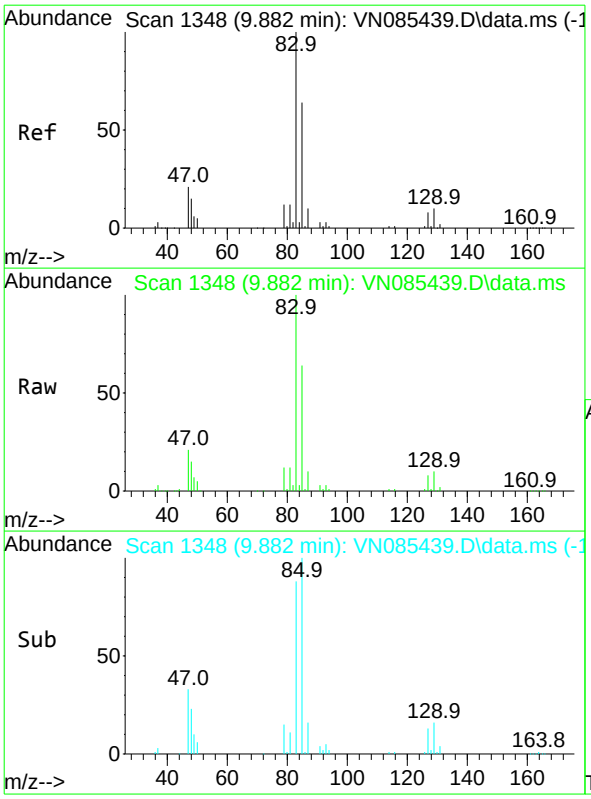



#46
Dibromomethane
Concen: 49.476 ug/l
RT: 9.706 min Scan# 1318
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 93 Resp: 90670

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 80.9 | 64.7 | 97.1 |
| 174 | 86.2 | 69.0 | 103.4 |

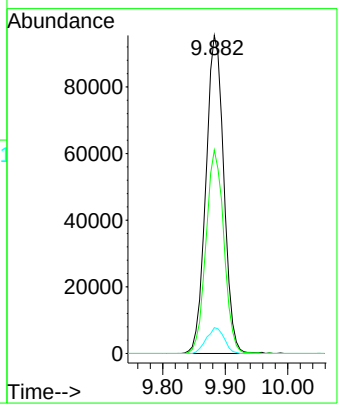





#47
Bromodichloromethane
Concen: 50.867 ug/l
RT: 9.882 min Scan# 13
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 83 Resp: 189915

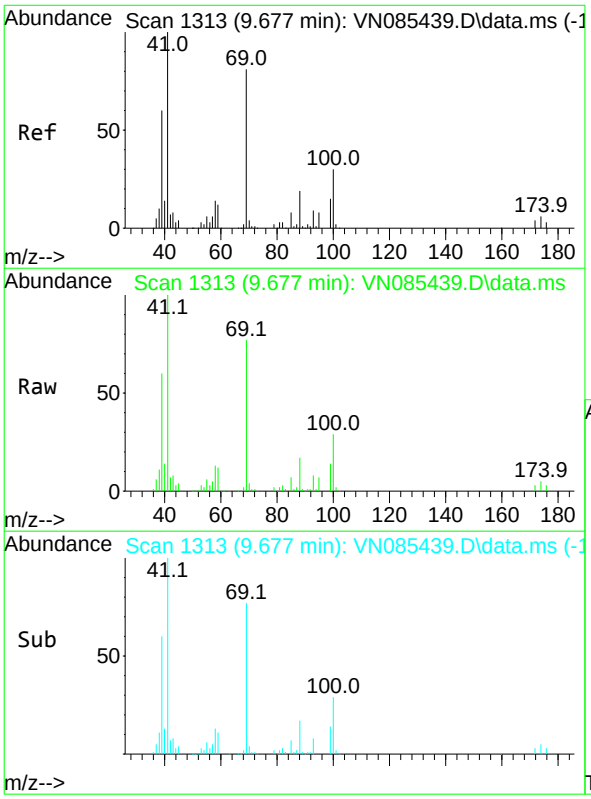
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.0 | 51.2 | 76.8 |
| 127 | 8.1 | 6.5 | 9.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

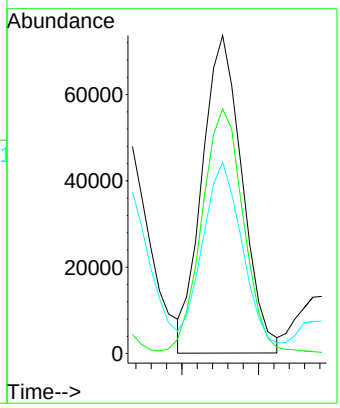
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

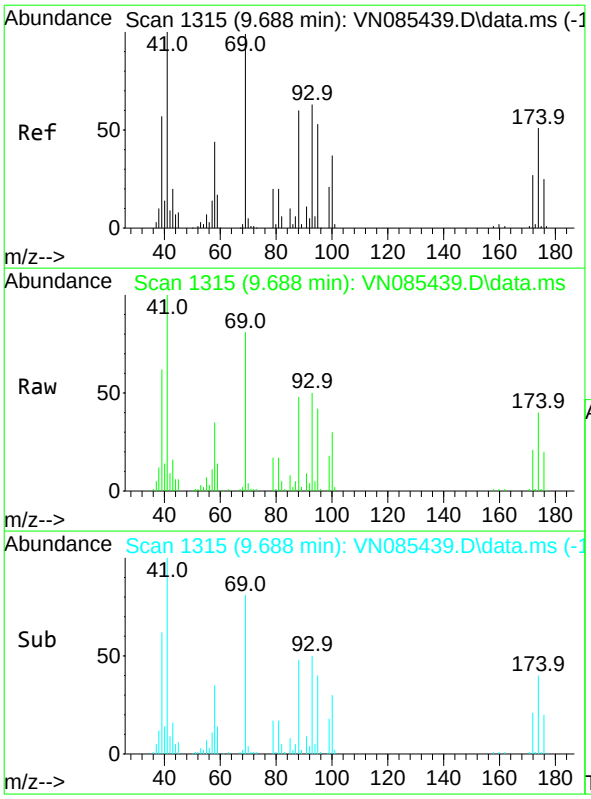



#48
Methyl methacrylate
Concen: 55.385 ug/l
RT: 9.677 min Scan# 1313
Delta R.T. -0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 41 Resp: 133399

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 80.9 | 64.7 | 97.1 |
| 39 | 61.3 | 49.0 | 73.6 |

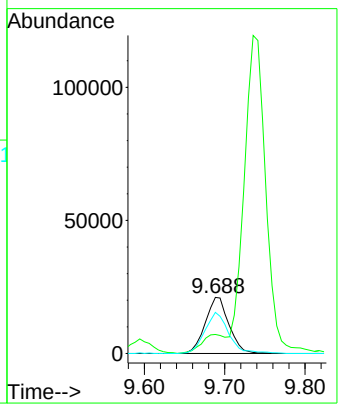





#49
1,4-Dioxane
Concen: 1061.334 ug/l
RT: 9.688 min Scan# 13
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 88 Resp: 43048

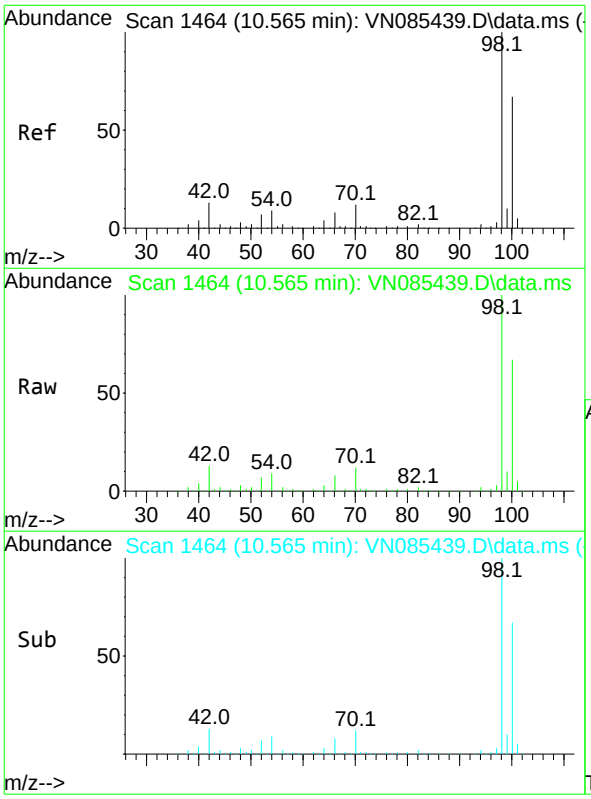
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 33.2 | 26.6 | 39.8 |
| 58 | 74.4 | 59.5 | 89.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

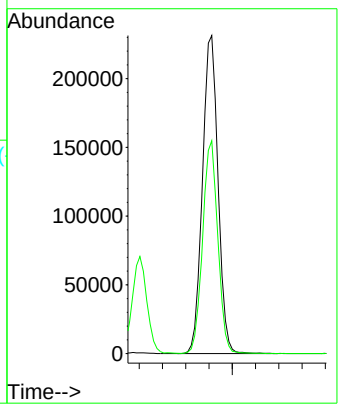
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

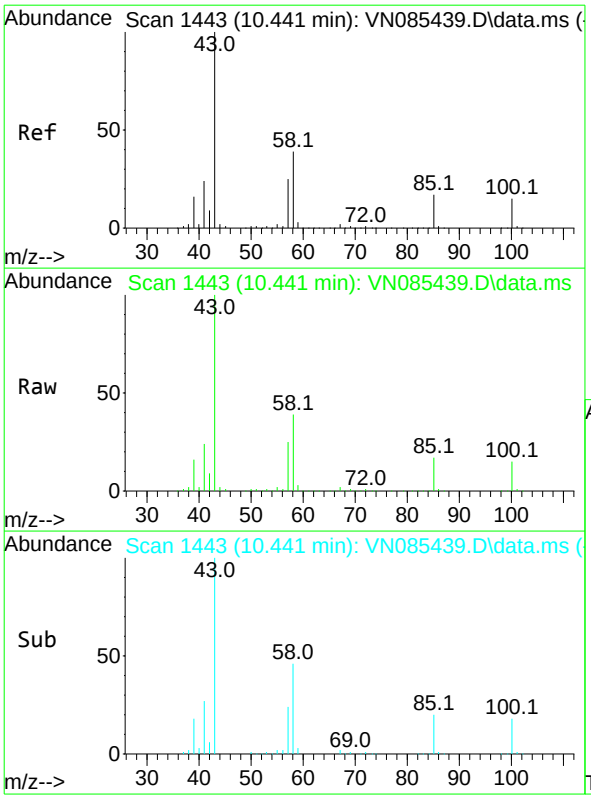



#50
Toluene-d8
Concen: 51.411 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 98 Resp: 430698

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.3 | 52.2 | 78.4 |

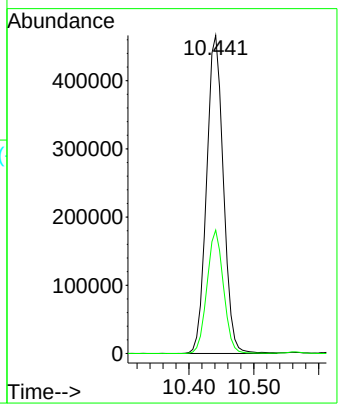





#51
4-Methyl-2-Pentanone
Concen: 269.403 ug/l
RT: 10.441 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 43 Resp: 836707

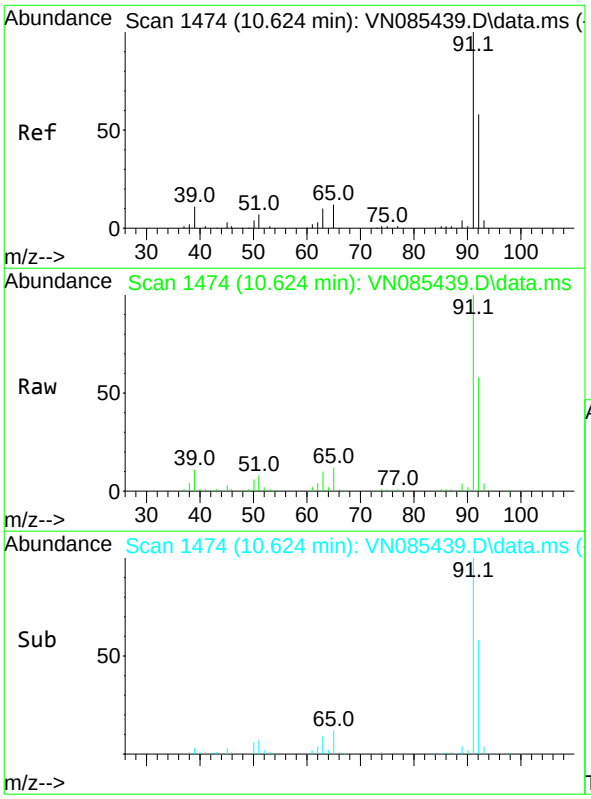
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 38.1 | 30.5 | 45.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

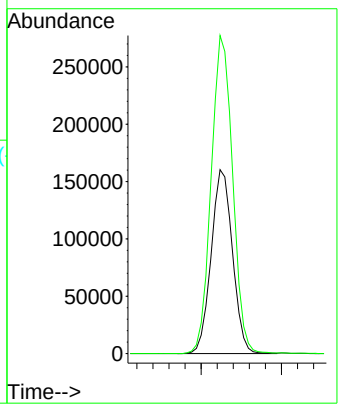
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

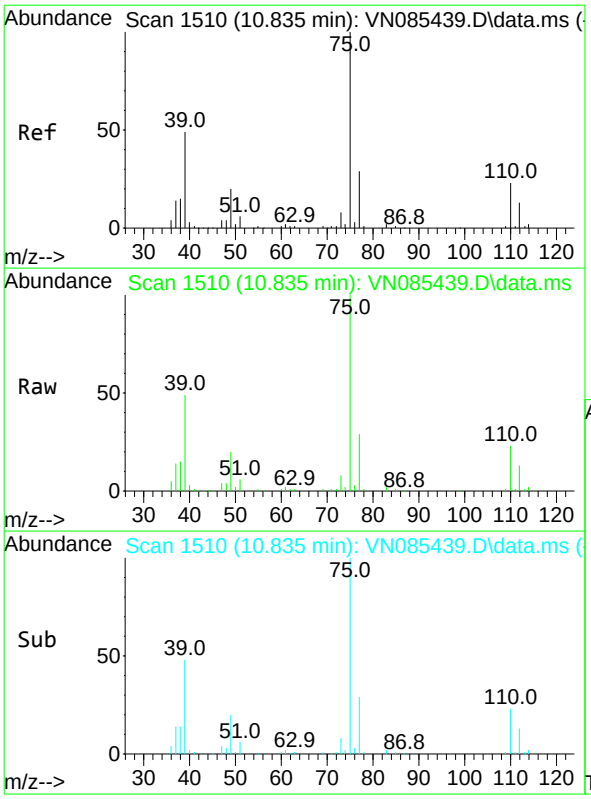



#52
Toluene
Concen: 51.341 ug/l
RT: 10.624 min Scan# 1474
Delta R.T. -0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 92 Resp: 295792

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 174.0 | 139.2 | 208.8 |

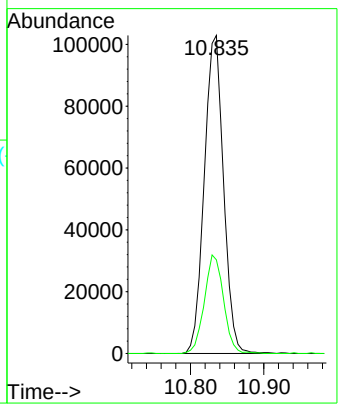





#53
t-1,3-Dichloropropene
Concen: 53.125 ug/l
RT: 10.835 min Scan# 15
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 75 Resp: 187439

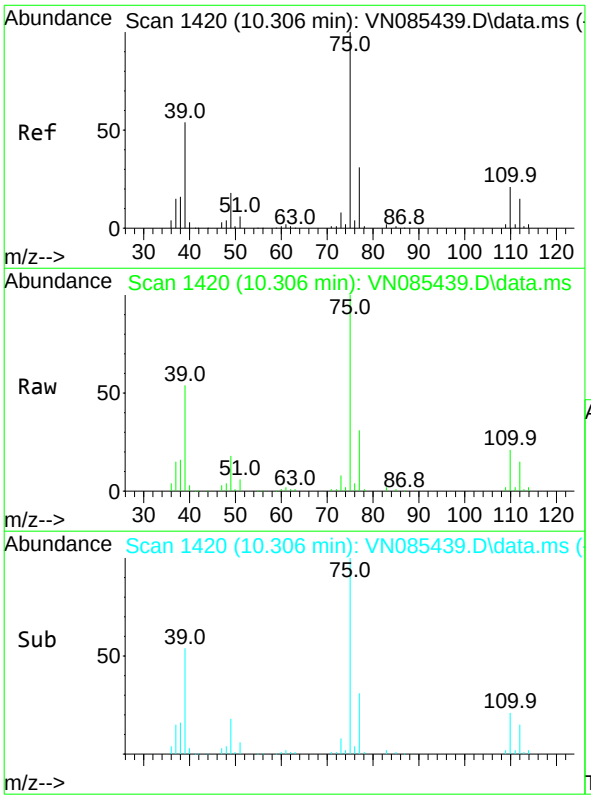
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 29.4 | 23.5 | 35.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

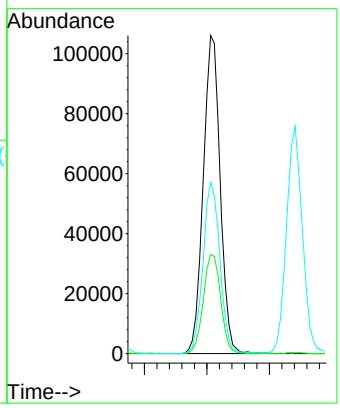
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

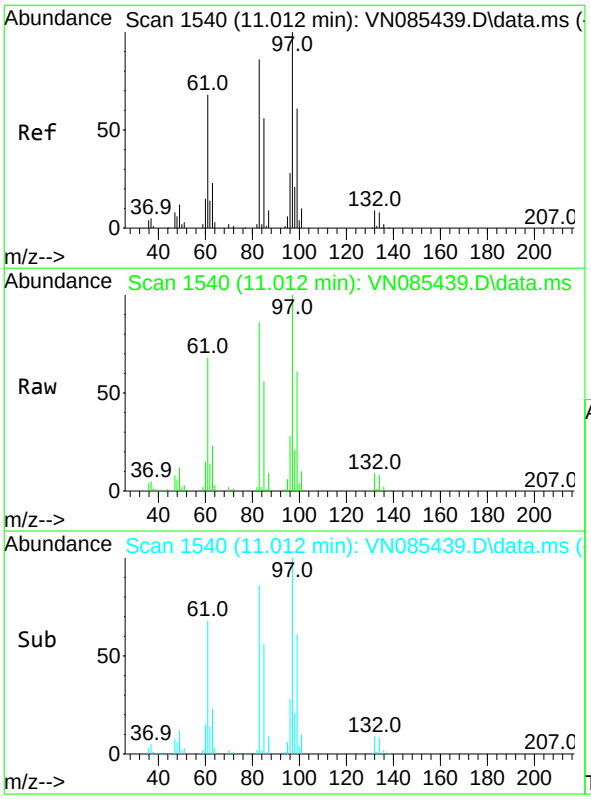



#54
cis-1,3-Dichloropropene
Concen: 53.006 ug/l
RT: 10.306 min Scan# 1420
Delta R.T. -0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 75 Resp: 199771

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.2 | 25.0 | 37.4 |
| 39 | 53.9 | 43.1 | 64.7 |

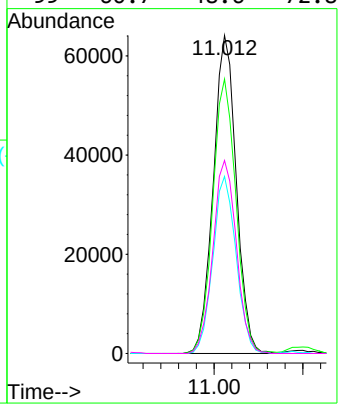





#55
1,1,2-Trichloroethane
Concen: 50.641 ug/l
RT: 11.012 min Scan# 15
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 97 Resp: 115462

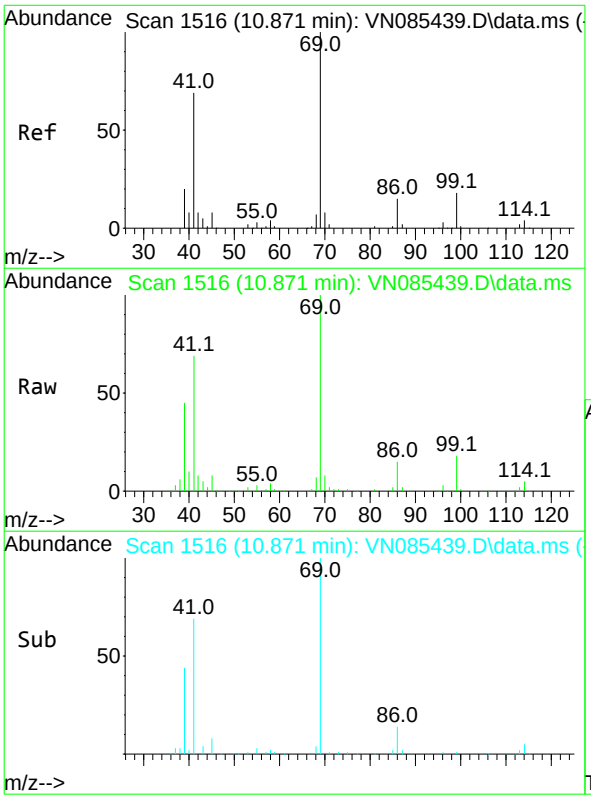
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 86.3 | 69.0 | 103.6 |
| 85 | 55.7 | 44.6 | 66.8 |
| 99 | 60.7 | 48.6 | 72.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

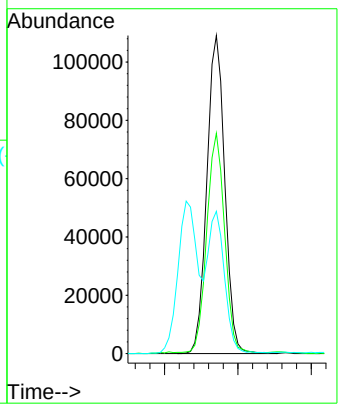
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

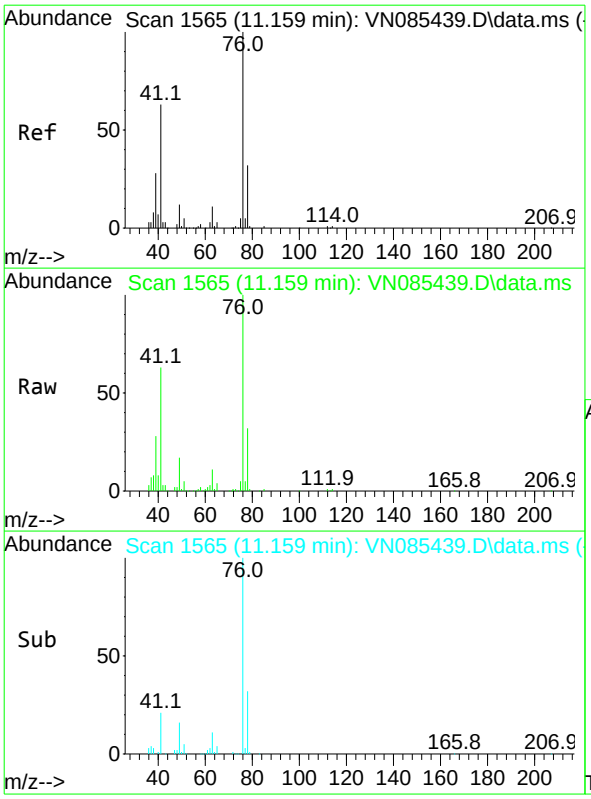



#56
Ethyl methacrylate
Concen: 48.182 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 69 Resp: 184775

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 68.3 | 54.6 | 82.0 |
| 39 | 40.5 | 32.4 | 48.6 |

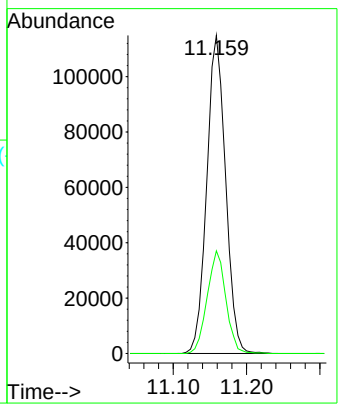





#57
1,3-Dichloropropane
Concen: 51.606 ug/l
RT: 11.159 min Scan# 15
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 76 Resp: 204590

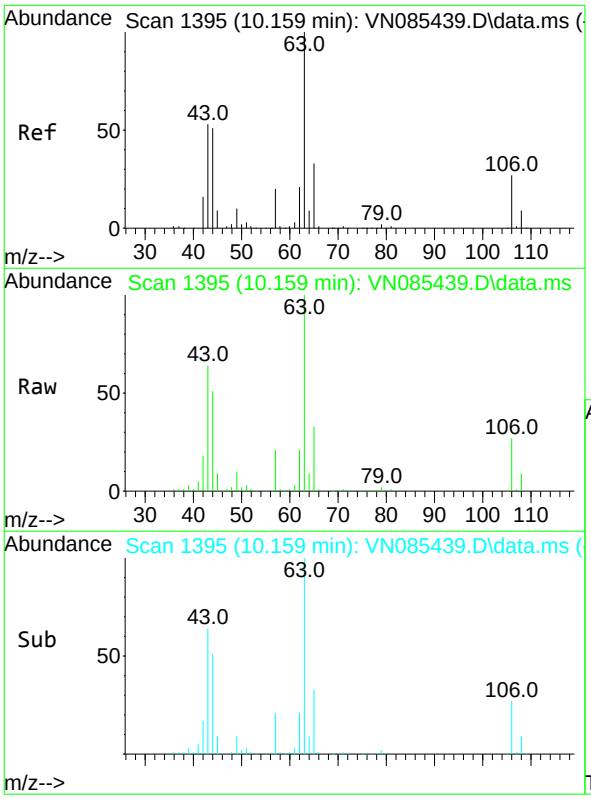
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.0 | 25.6 | 38.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

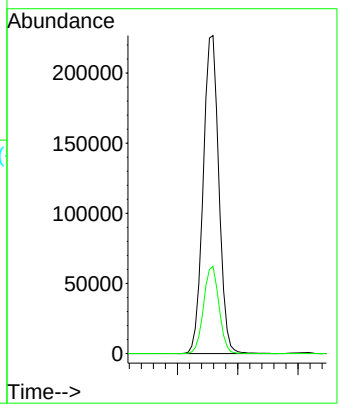
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

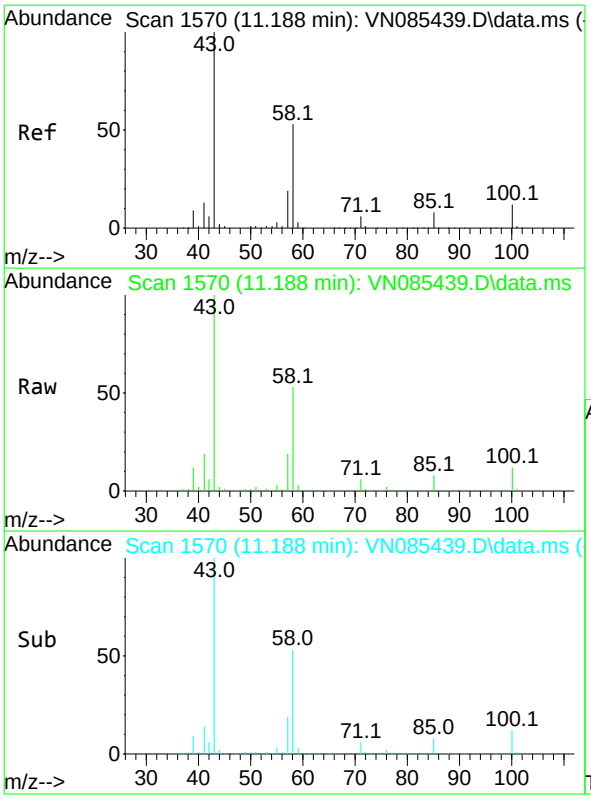



#58
2-Chloroethyl Vinyl ether
Concen: 283.088 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 63 Resp: 409594

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 27.0 | 21.6 | 32.4 |

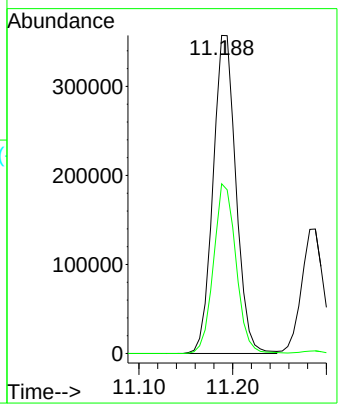





#59
2-Hexanone
Concen: 277.643 ug/l
RT: 11.188 min Scan# 15
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 43 Resp: 606740

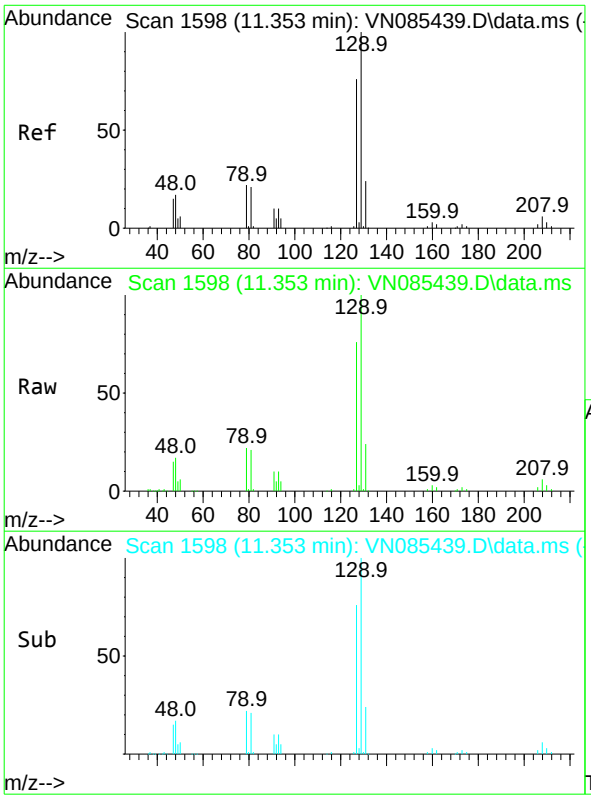
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 52.4 | 26.2 | 78.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

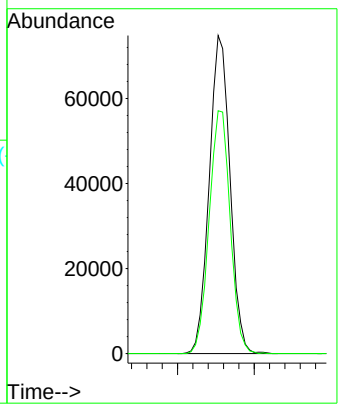
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

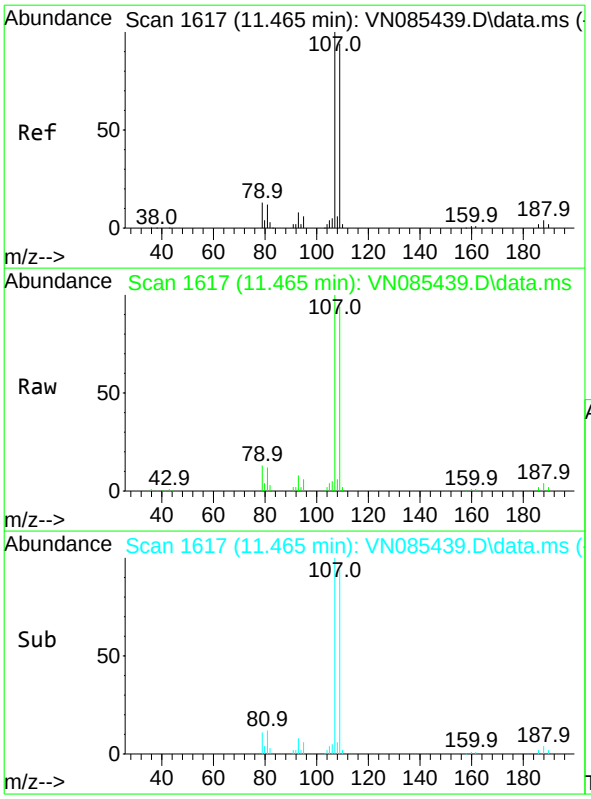



#60
Dibromochloromethane
Concen: 51.116 ug/l
RT: 11.353 min Scan# 1598
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:129 Resp: 140704

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 77.2 | 38.6 | 115.8 |

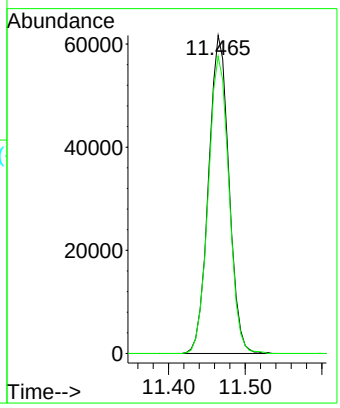





#61
1,2-Dibromoethane
Concen: 50.028 ug/l
RT: 11.465 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:107 Resp: 113541

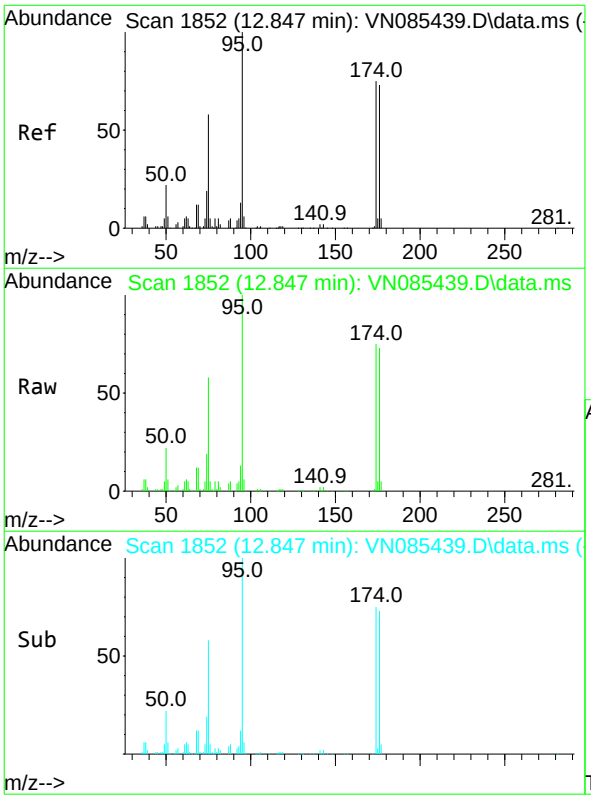
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 94.9 | 75.9 | 113.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

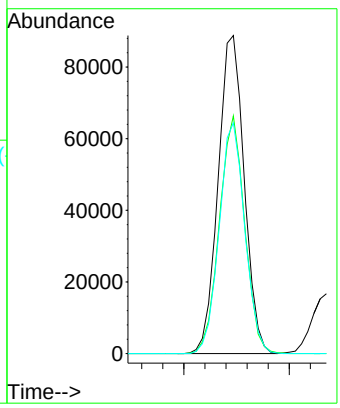
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

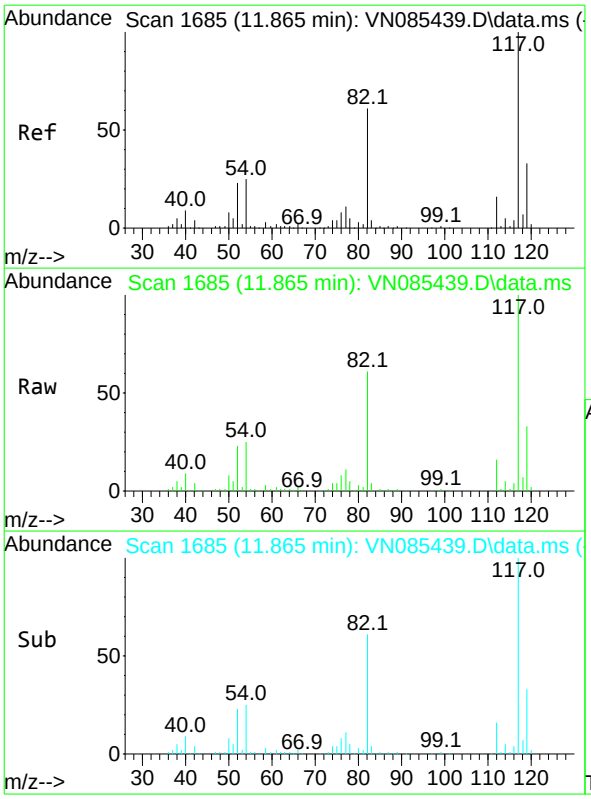



#62
4-Bromofluorobenzene
Concen: 53.239 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 95 Resp: 152568

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 72.5 | 0.0 | 145.0 |
| 176 | 71.2 | 0.0 | 142.4 |

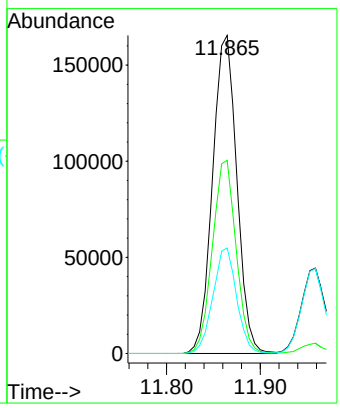





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:117 Resp: 297366

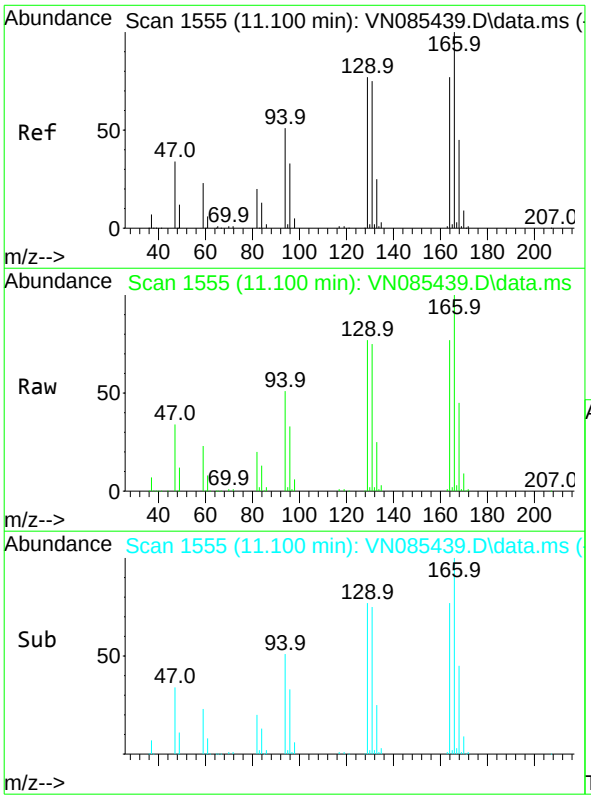
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 60.7 | 48.6 | 72.8 |
| 119 | 33.2 | 26.6 | 39.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

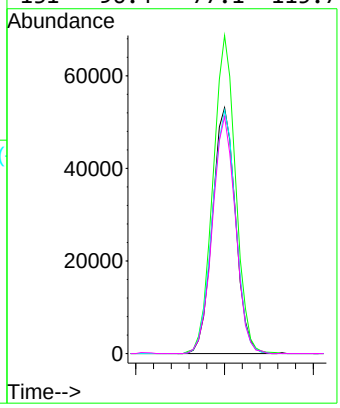
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

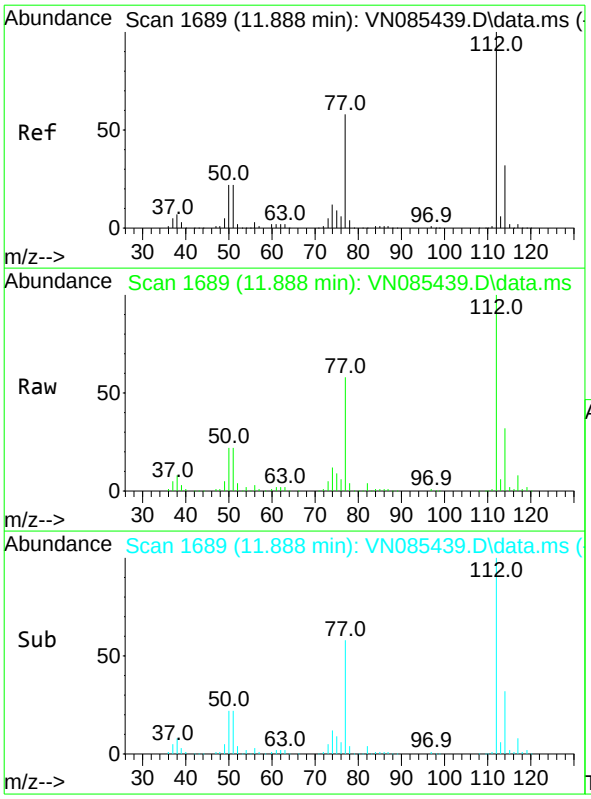



#64
Tetrachloroethene
Concen: 47.295 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:164 Resp: 95879

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 129.3 | 103.4 | 155.2 |
| 129 | 99.0 | 79.2 | 118.8 |
| 131 | 96.4 | 77.1 | 115.7 |

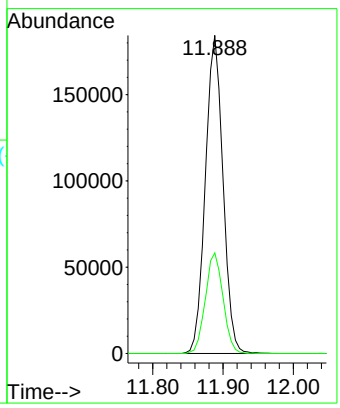





#65
Chlorobenzene
Concen: 49.121 ug/l
RT: 11.888 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:112 Resp: 319992

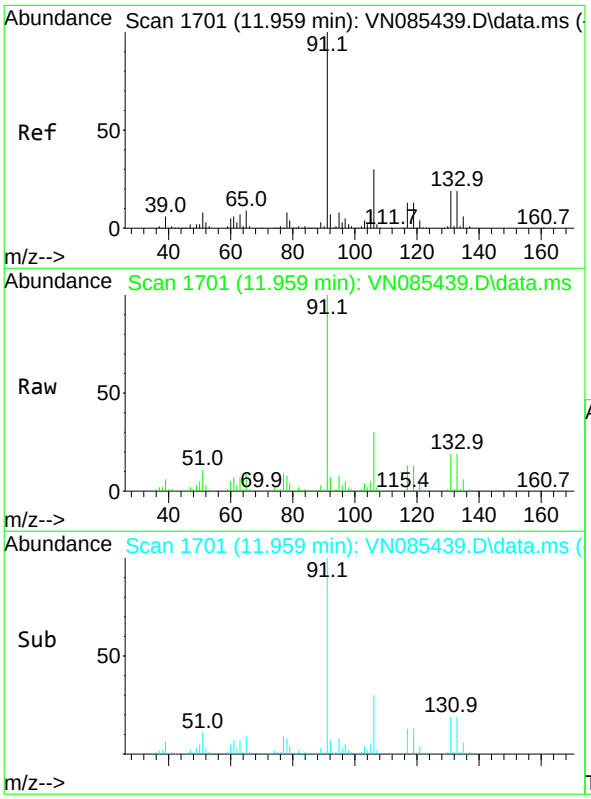
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 31.6 | 25.3 | 37.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

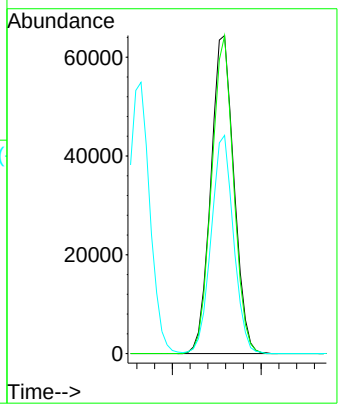
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

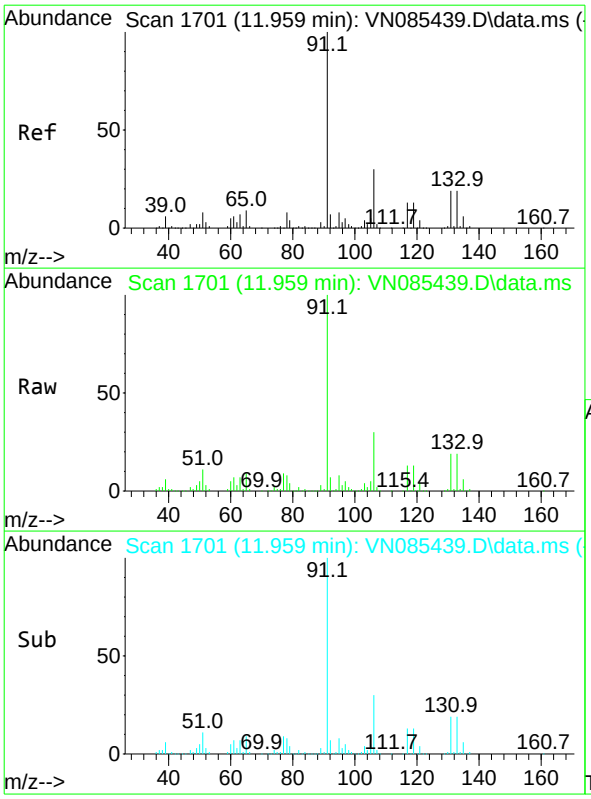



#66
1,1,1,2-Tetrachloroethane
Concen: 48.722 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:131 Resp: 116488

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 94.9 | 47.4 | 142.3 |
| 119 | 66.3 | 33.1 | 99.5 |

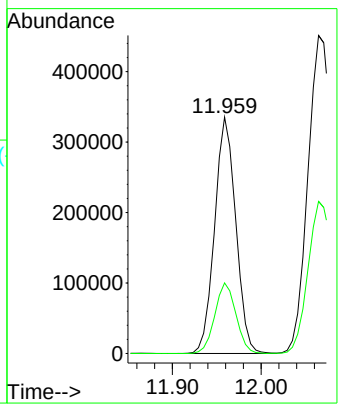





#67
Ethyl Benzene
Concen: 52.339 ug/l
RT: 11.959 min Scan# 17
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 91 Resp: 555322

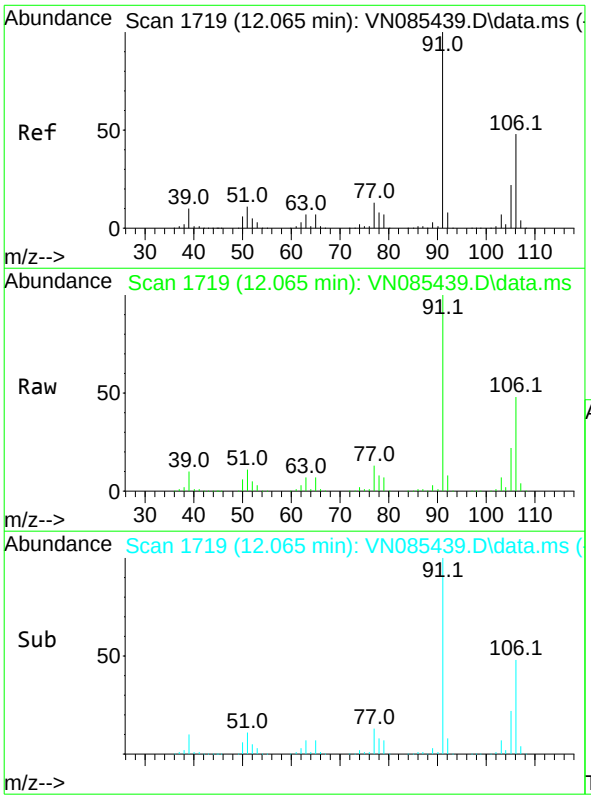
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 29.8 | 23.8 | 35.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

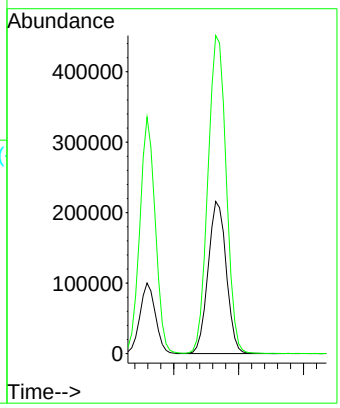
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

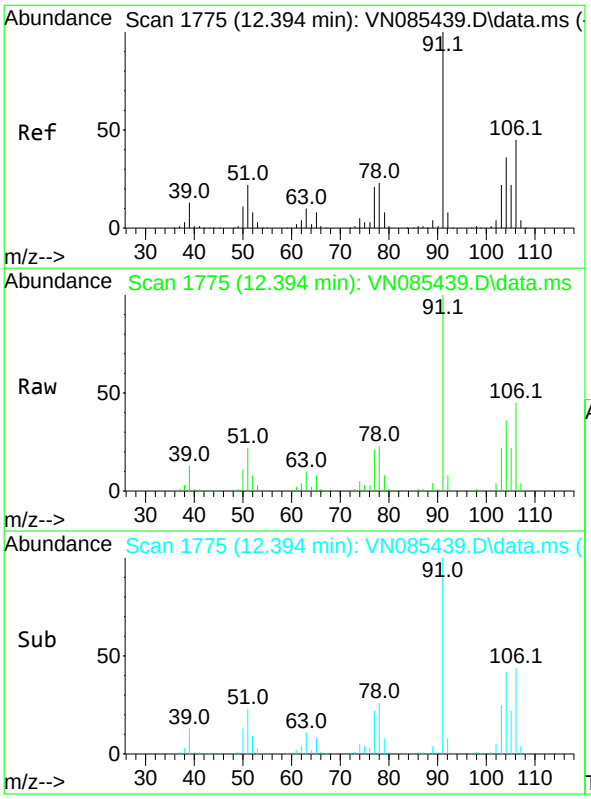



#68
m/p-Xylenes
Concen: 107.286 ug/l
RT: 12.065 min Scan# 1719
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:106 Resp: 420702

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 209.6 | 167.7 | 251.5 |

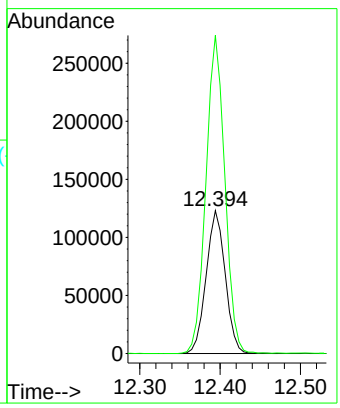





#69
o-Xylene
Concen: 54.062 ug/l
RT: 12.394 min Scan# 17
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:106 Resp: 202597

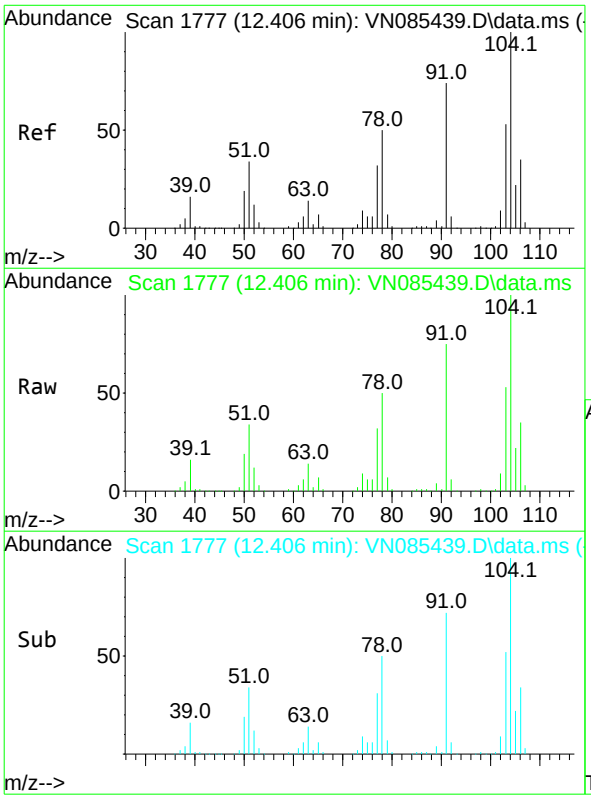
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 220.8 | 110.4 | 331.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

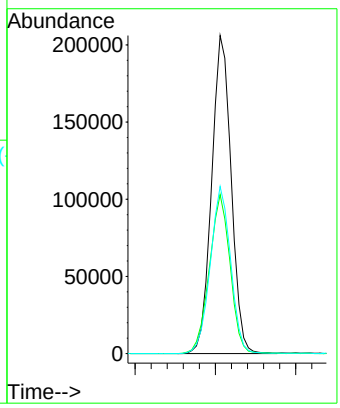
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

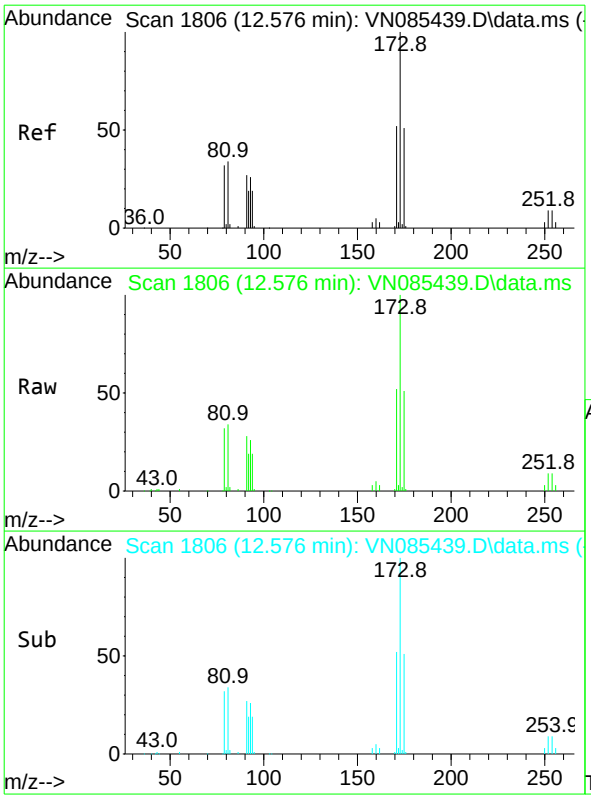



#70
Styrene
Concen: 56.227 ug/l
RT: 12.406 min Scan# 1777
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:104 Resp: 348720

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 53.1 | 42.5 | 63.7 |
| 103 | 54.8 | 43.8 | 65.8 |

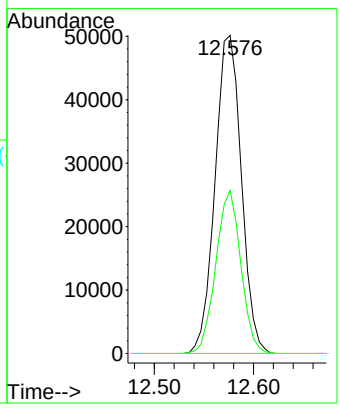





#71
Bromoform
Concen: 53.993 ug/l
RT: 12.576 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:173 Resp: 92366

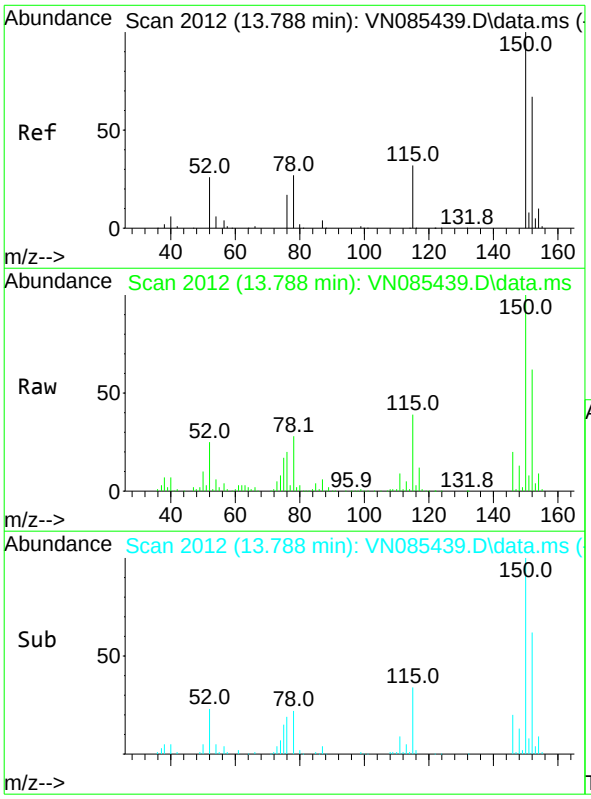
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 48.8 | 24.4 | 73.2 |
| 254 | 0.0 | 0.0 | 0.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

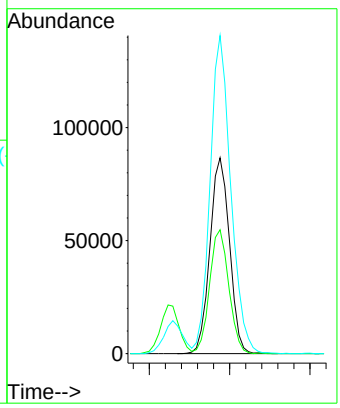
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

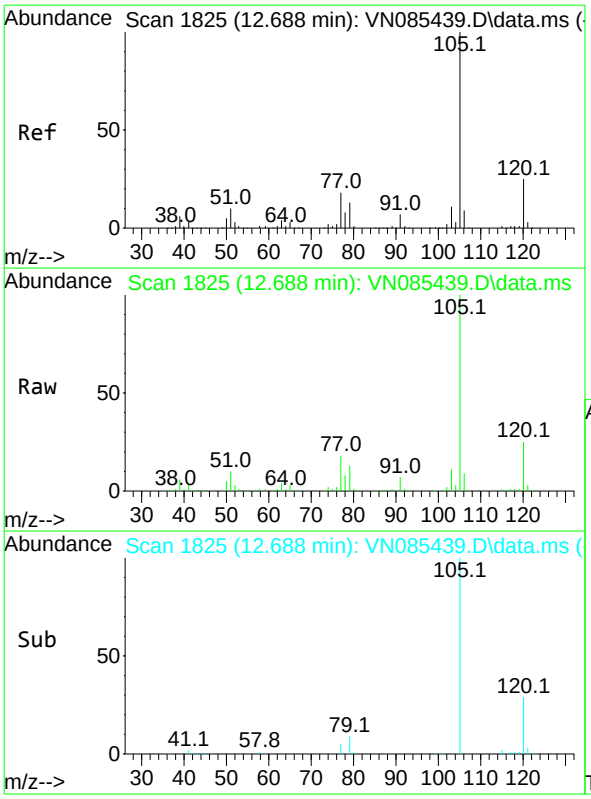



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:152 Resp: 146624

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 62.2 | 31.1 | 93.3 |
| 150 | 171.8 | 0.0 | 343.6 |

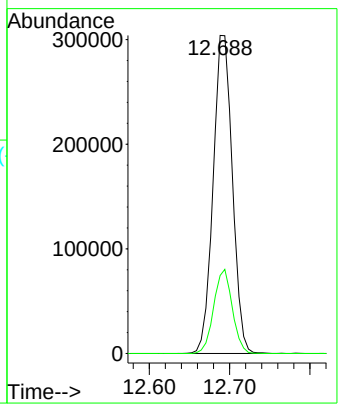





#73
Isopropylbenzene
Concen: 51.094 ug/l
RT: 12.688 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:105 Resp: 505619

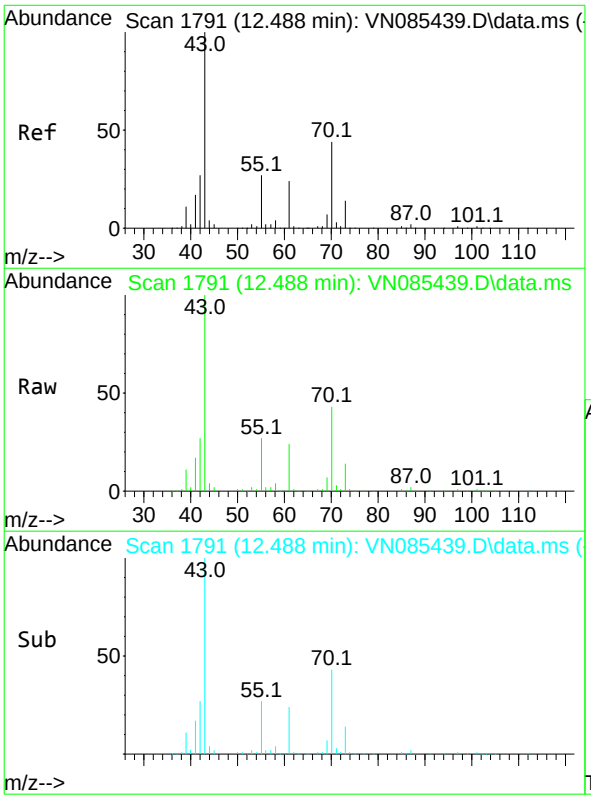
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.5 | 12.8 | 38.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

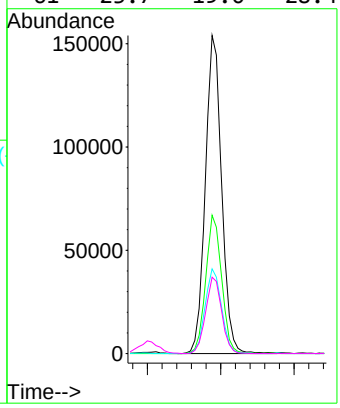
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

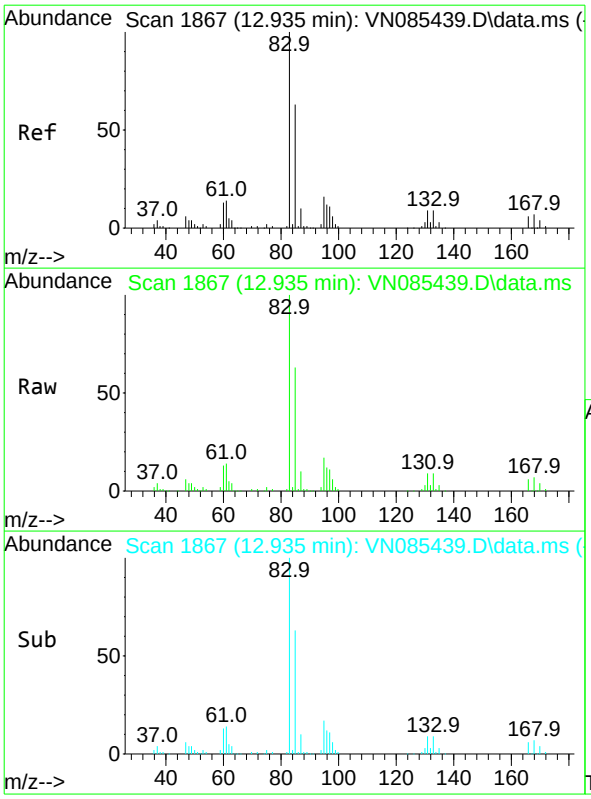



#74
N-amyl acetate
Concen: 53.478 ug/l
RT: 12.488 min Scan# 1791
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 43 Resp: 237870

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 42.5 | 34.0 | 51.0 |
| 55 | 26.8 | 21.4 | 32.2 |
| 61 | 23.7 | 19.0 | 28.4 |

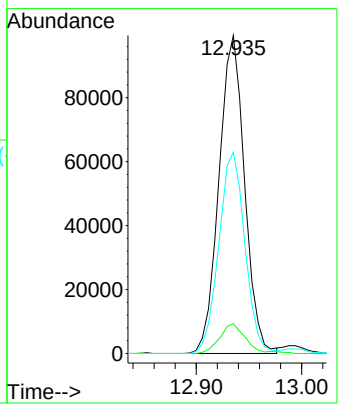





#75
1,1,2,2-Tetrachloroethane
Concen: 48.019 ug/l
RT: 12.935 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 83 Resp: 167856

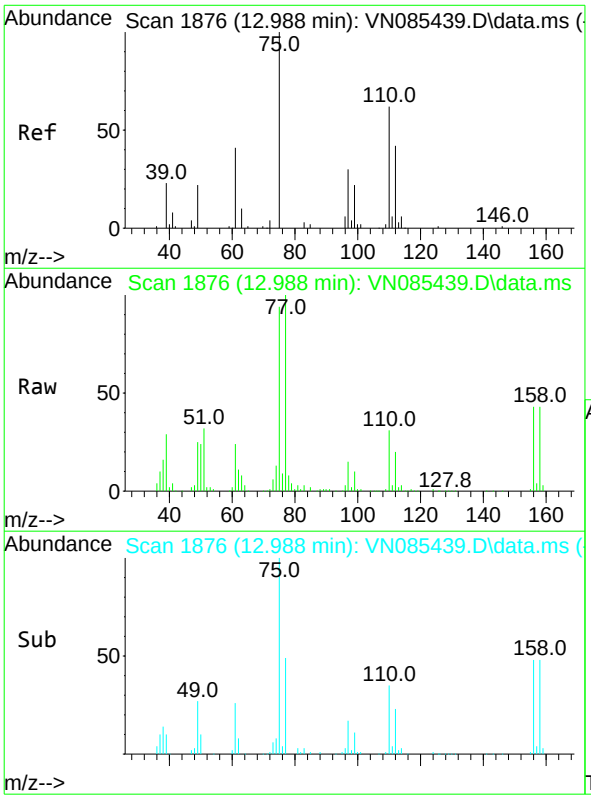
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 9.6 | 4.8 | 14.4 |
| 85 | 64.4 | 32.2 | 96.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

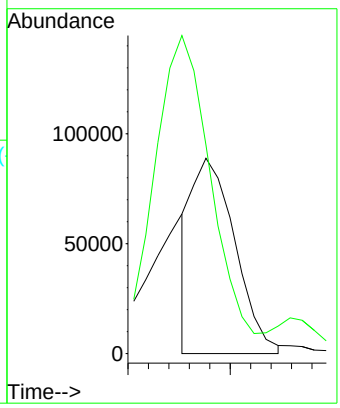
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

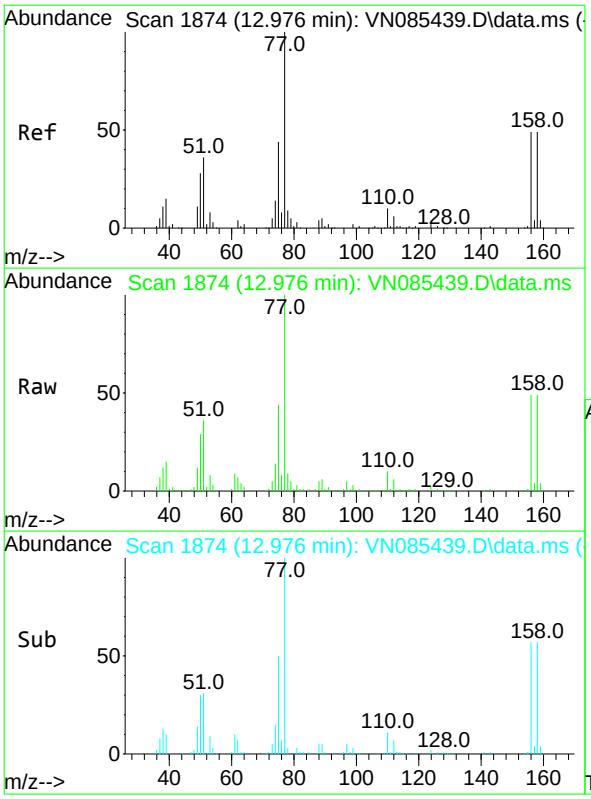



#76
1,2,3-Trichloropropane
Concen: 43.982 ug/l m
RT: 12.988 min Scan# 1876
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 75 Resp: 130866

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 219.5 | 109.7 | 329.2 |

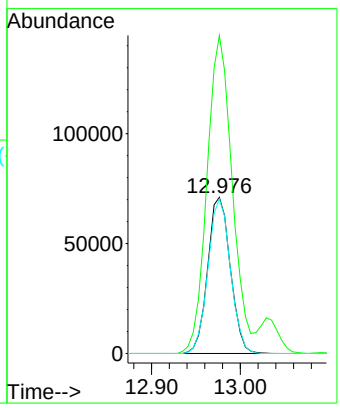





#77
Bromobenzene
Concen: 48.657 ug/l
RT: 12.976 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:156 Resp: 125800

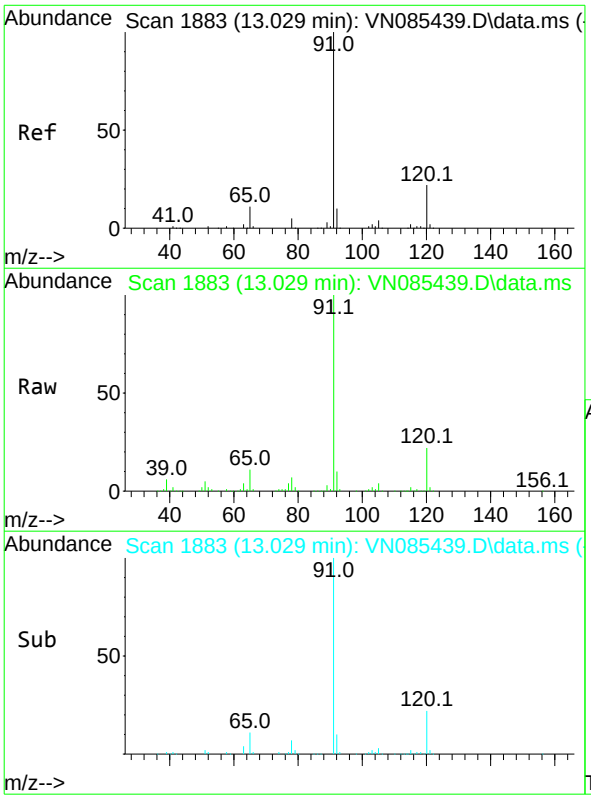
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 228.3 | 114.1 | 342.4 |
| 158 | 97.9 | 48.9 | 146.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

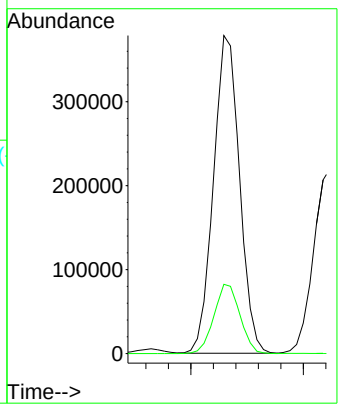
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

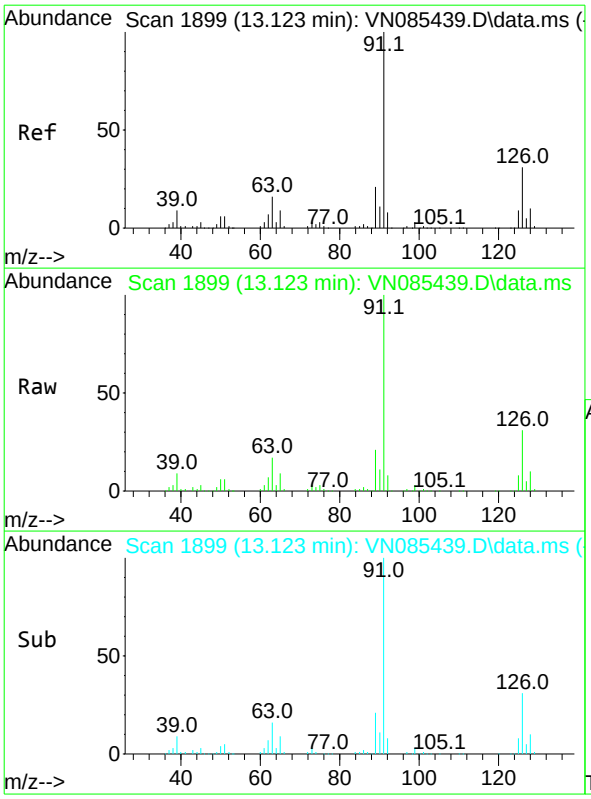



#78
n-propylbenzene
Concen: 51.986 ug/l
RT: 13.029 min Scan# 1883
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 91 Resp: 609022

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 21.7 | 10.9 | 32.6 |

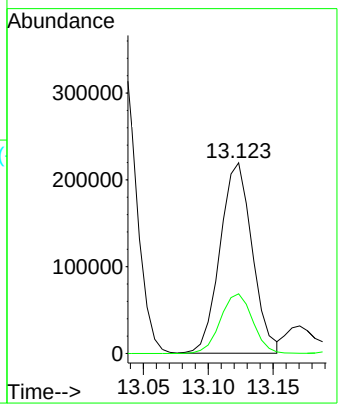





#79
2-Chlorotoluene
Concen: 49.985 ug/l
RT: 13.123 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 91 Resp: 378981

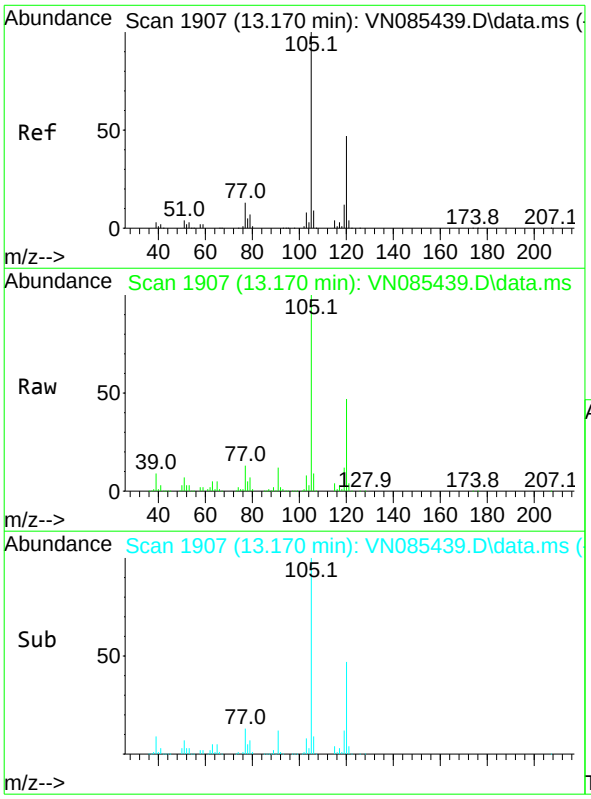
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 31.4 | 15.7 | 47.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

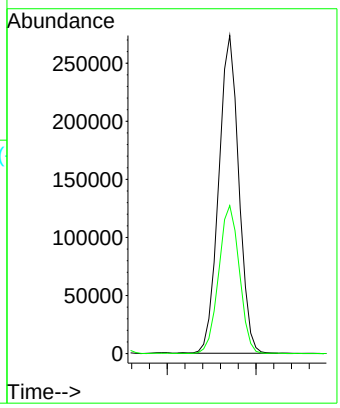
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

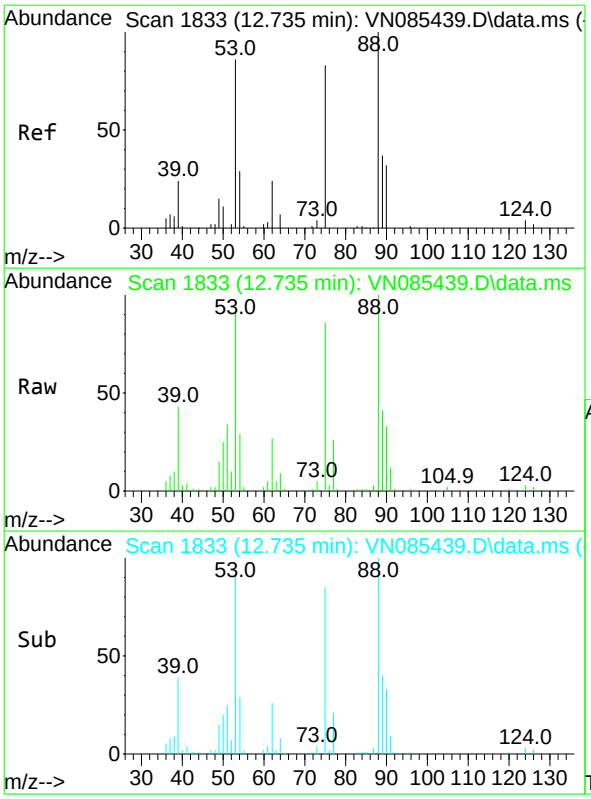



#80
1,3,5-Trimethylbenzene
Concen: 52.730 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:105 Resp: 431021

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 47.8 | 23.9 | 71.7 |

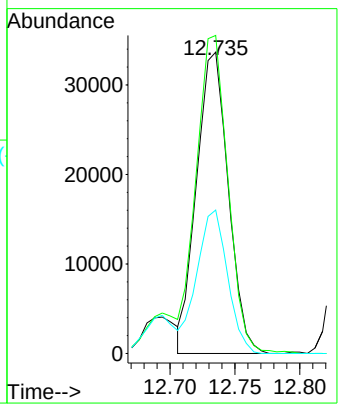





#81
trans-1,4-Dichloro-2-butene
Concen: 51.914 ug/l
RT: 12.735 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 75 Resp: 57184

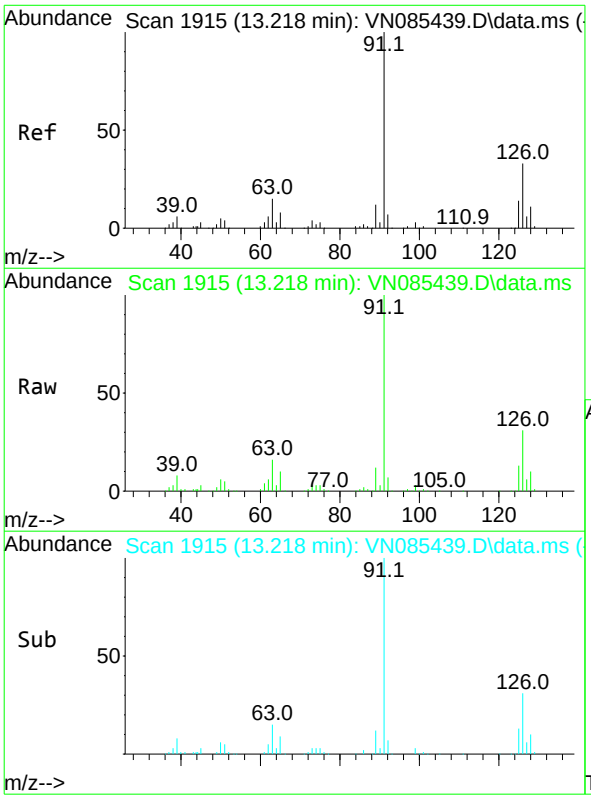
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 119.5 | 95.6 | 143.4 |
| 89 | 46.3 | 37.0 | 55.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

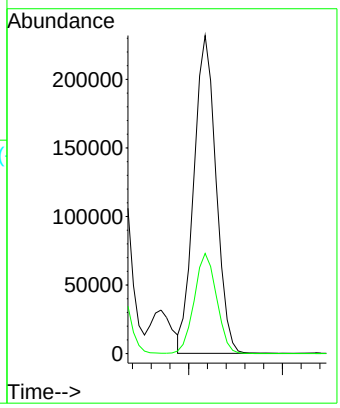
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

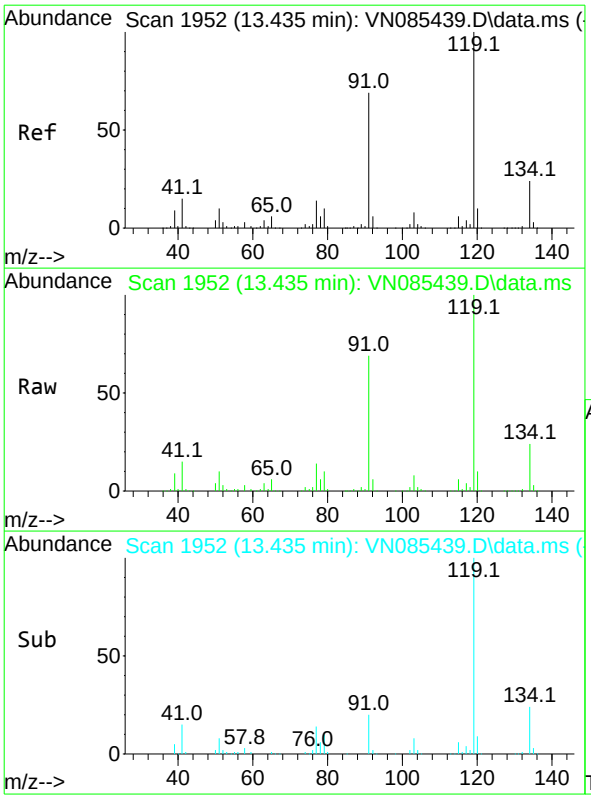



#82
4-Chlorotoluene
Concen: 50.273 ug/l
RT: 13.218 min Scan# 1915
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 91 Resp: 379524

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 31.8 | 15.9 | 47.7 |

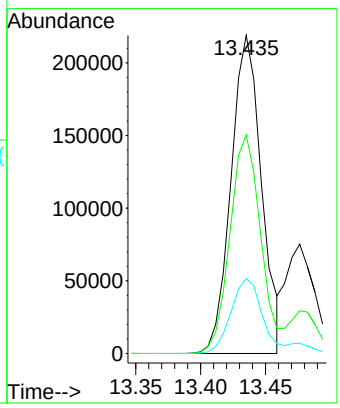





#83
tert-Butylbenzene
Concen: 52.090 ug/l
RT: 13.435 min Scan# 19
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:119 Resp: 357563

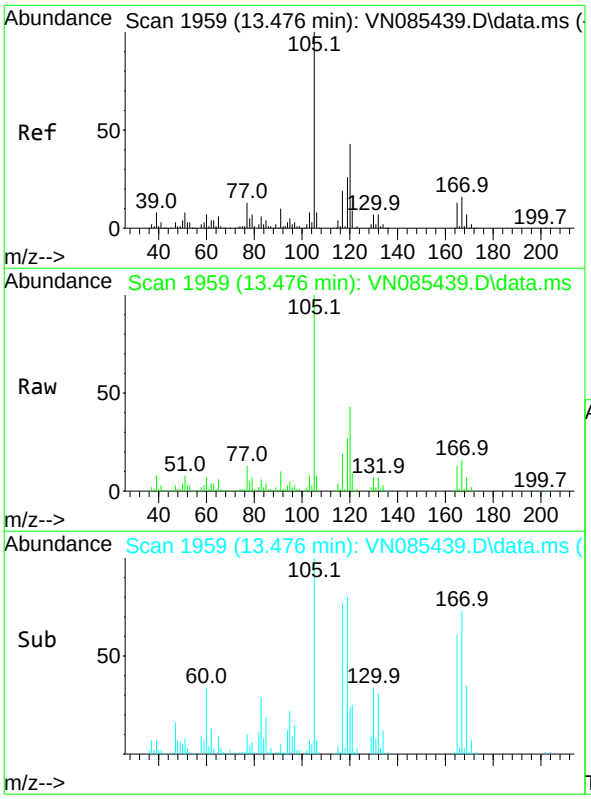
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 70.2 | 35.1 | 105.3 |
| 134 | 24.1 | 12.0 | 36.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

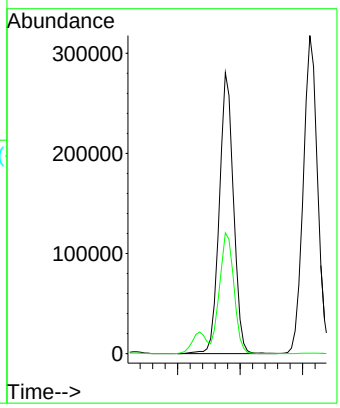
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

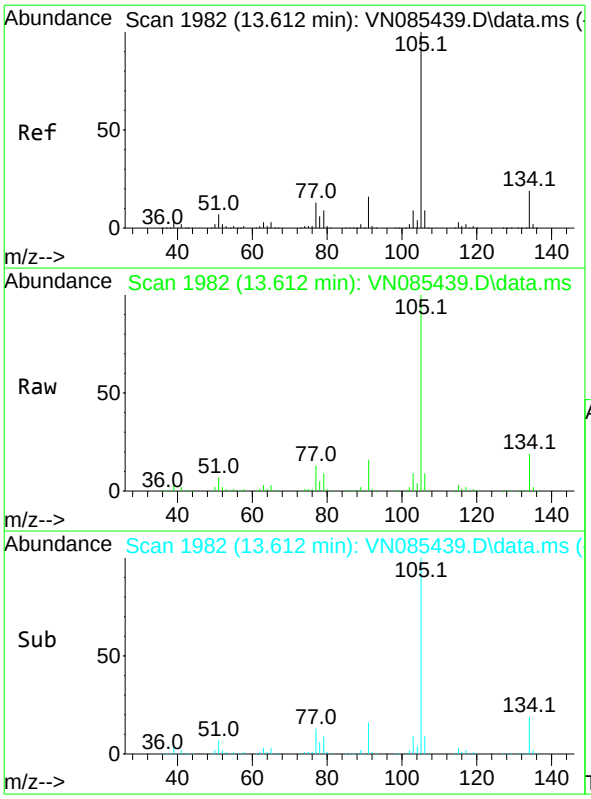



#84
1,2,4-Trimethylbenzene
Concen: 54.275 ug/l
RT: 13.476 min Scan# 1959
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:105 Resp: 442175

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 43.3 | 21.6 | 65.0 |

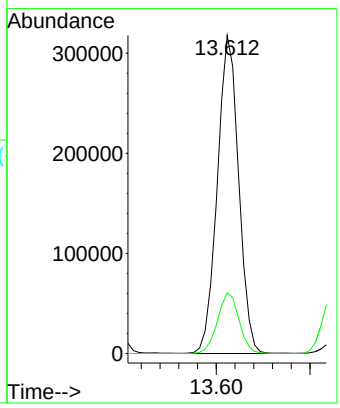





#85
sec-Butylbenzene
Concen: 52.719 ug/l
RT: 13.612 min Scan# 19
Delta R.T. -0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:105 Resp: 501561

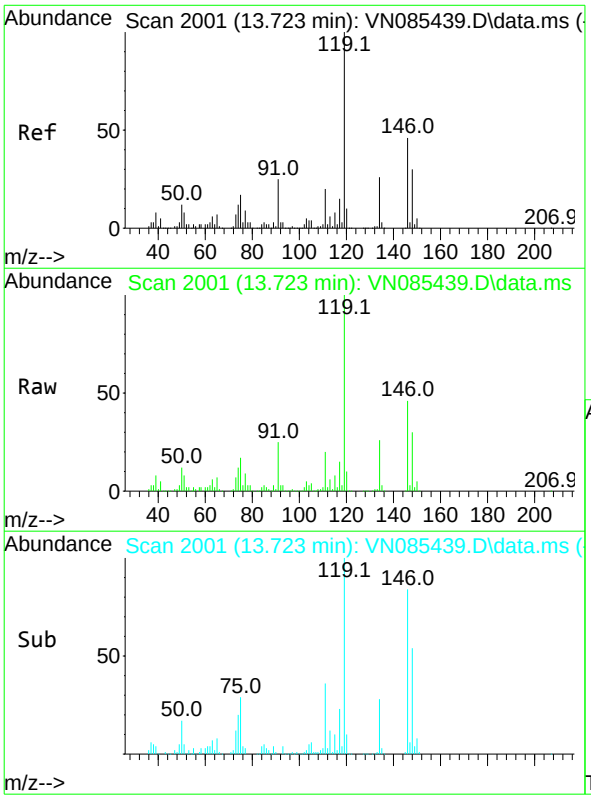
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.3 | 9.7 | 28.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

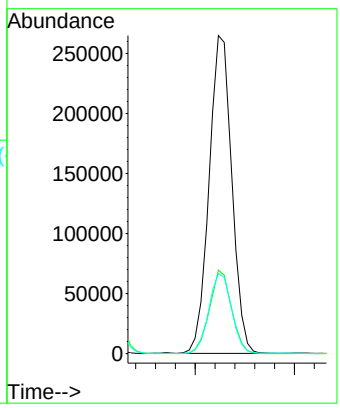
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

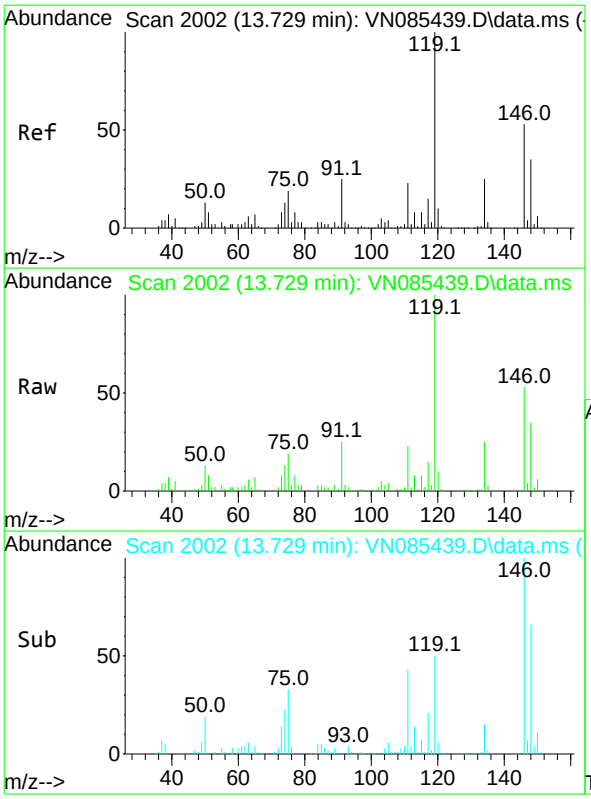



#86
p-Isopropyltoluene
Concen: 49.240 ug/l
RT: 13.723 min Scan# 2001
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:119 Resp: 421052

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.3 | 12.7 | 38.0 |
| 91 | 25.4 | 12.7 | 38.1 |

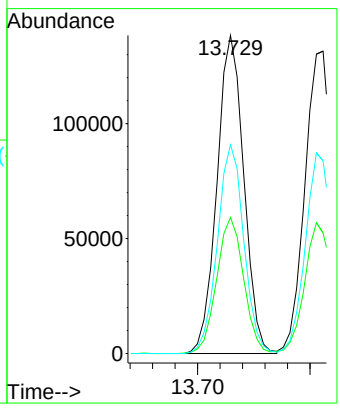





#87
1,3-Dichlorobenzene
Concen: 48.204 ug/l
RT: 13.729 min Scan# 20
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:146 Resp: 229518

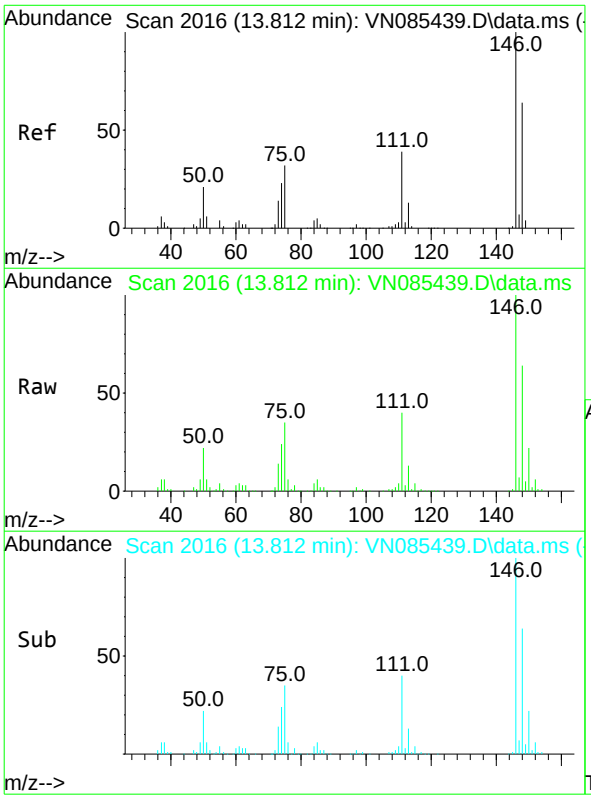
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.9 | 21.4 | 64.3 |
| 148 | 64.6 | 32.3 | 96.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
**APPROVED**

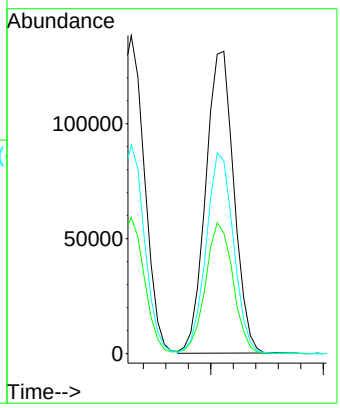
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

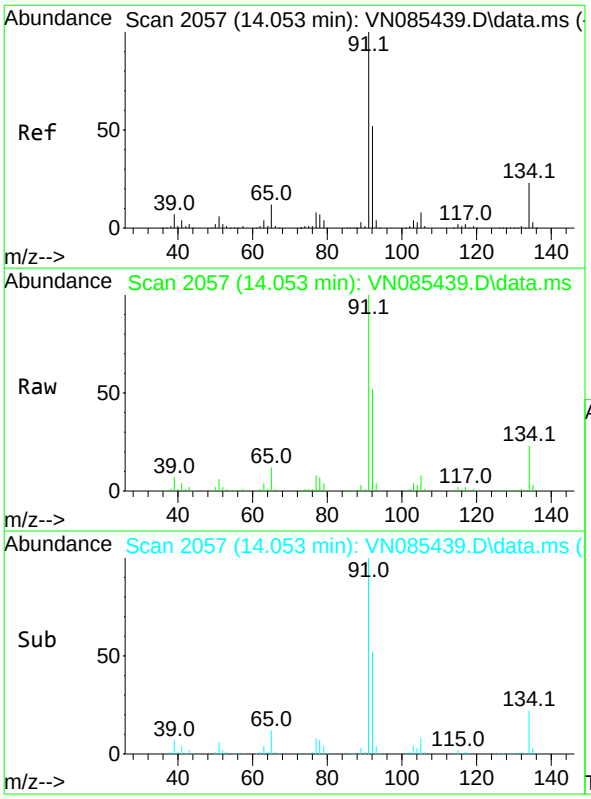



#88
1,4-Dichlorobenzene
Concen: 46.416 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:146 Resp: 229084

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.5 | 21.3 | 63.7 |
| 148 | 64.7 | 32.4 | 97.0 |

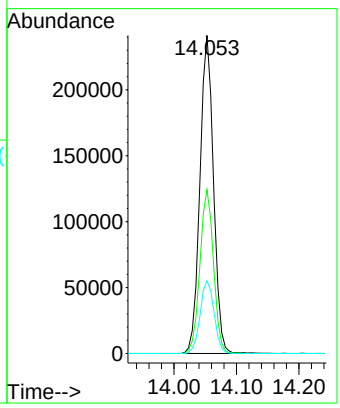





#89
n-Butylbenzene
Concen: 53.348 ug/l
RT: 14.053 min Scan# 20
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 91 Resp: 364111

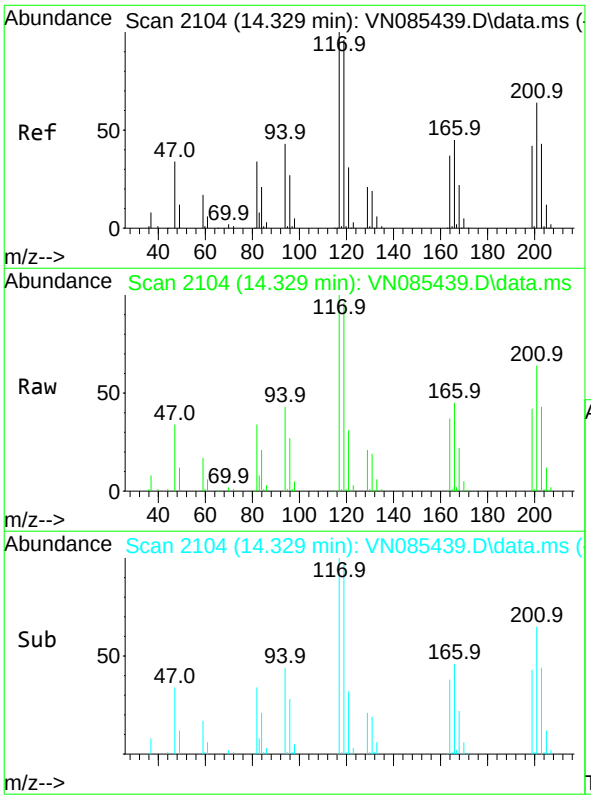
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 51.5 | 25.8 | 77.3 |
| 134 | 23.4 | 11.7 | 35.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

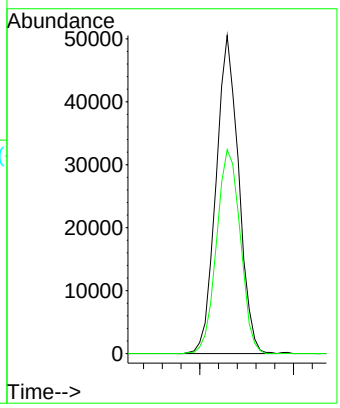
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

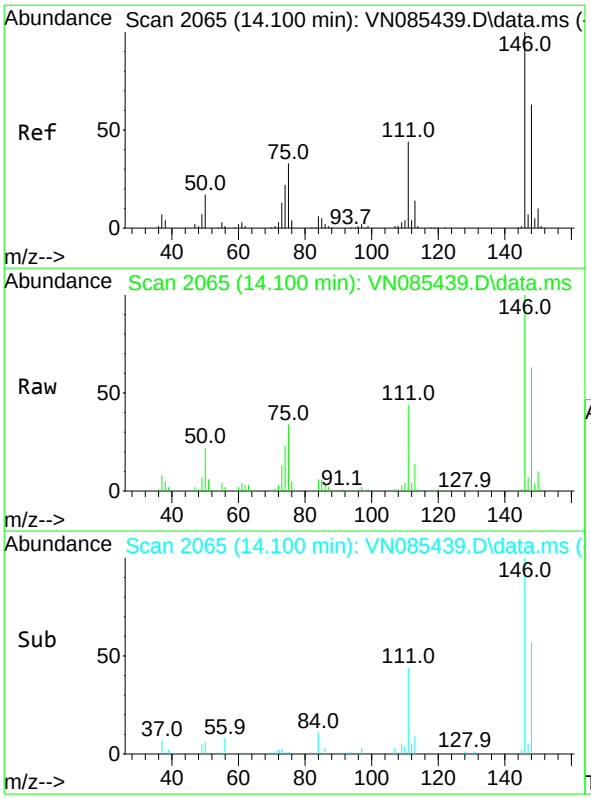



#90
Hexachloroethane
Concen: 46.712 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:117 Resp: 84602

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 67.3 | 33.7 | 101.0 |

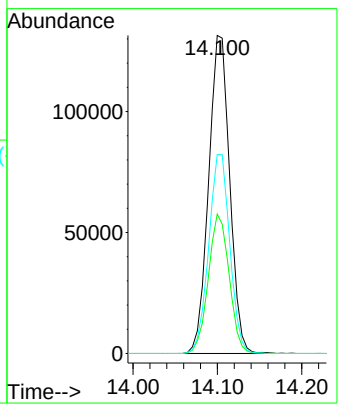





#91
1,2-Dichlorobenzene
Concen: 48.012 ug/l
RT: 14.100 min Scan# 20
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:146 Resp: 228024

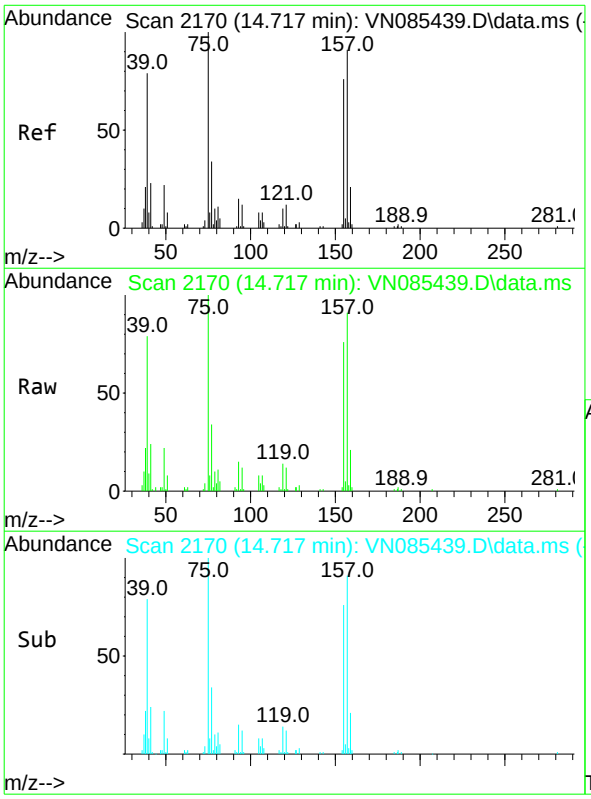
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.4 | 21.7 | 65.1 |
| 148 | 62.8 | 31.4 | 94.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

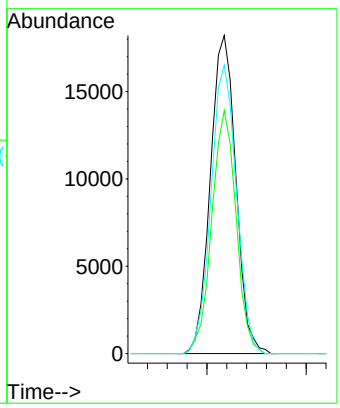
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

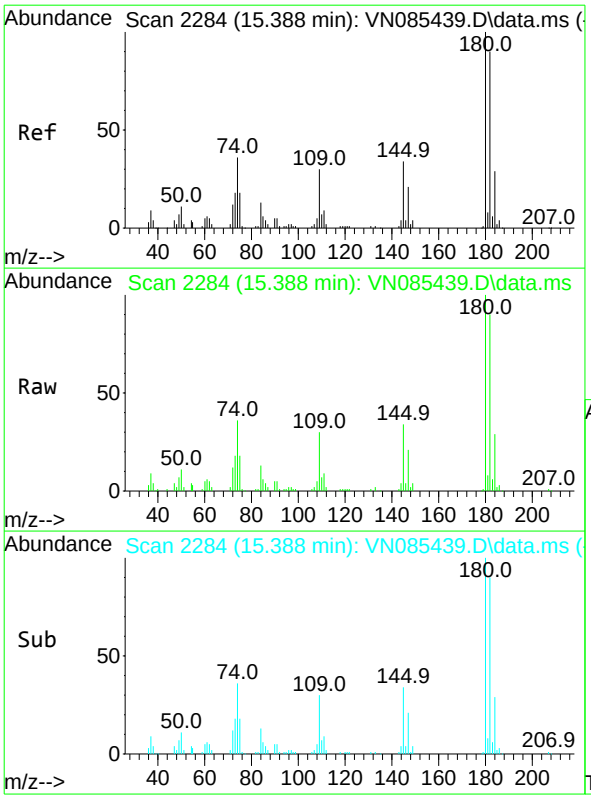



#92
1,2-Dibromo-3-Chloropropane
Concen: 50.971 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 75 Resp: 32536

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 72.8 | 36.4 | 109.2 |
| 157 | 90.7 | 45.4 | 136.1 |

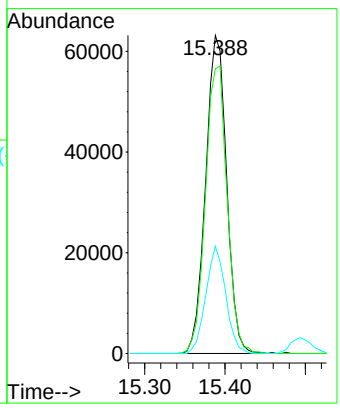





#93
1,2,4-Trichlorobenzene
Concen: 51.857 ug/l
RT: 15.388 min Scan# 22
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:180 Resp: 114468

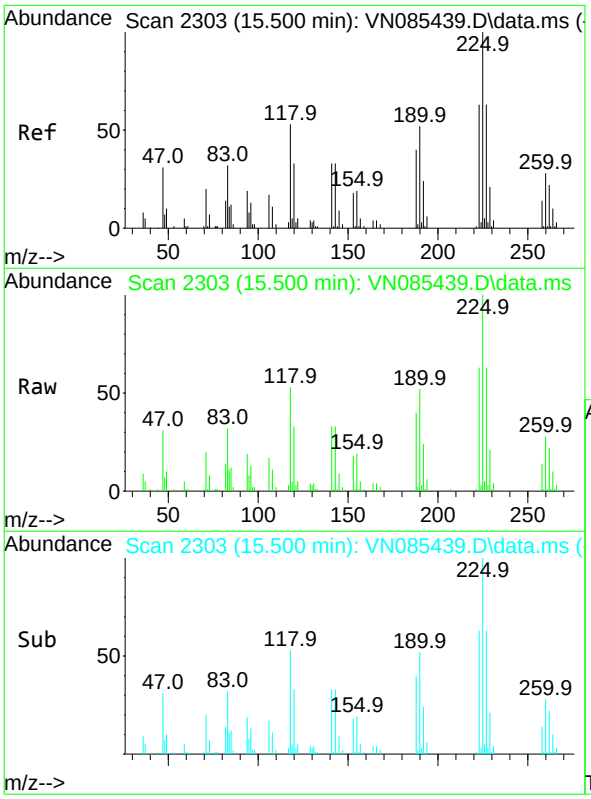
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 93.5 | 46.8 | 140.3 |
| 145 | 32.0 | 16.0 | 48.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

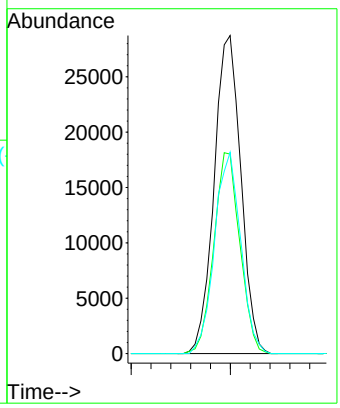
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

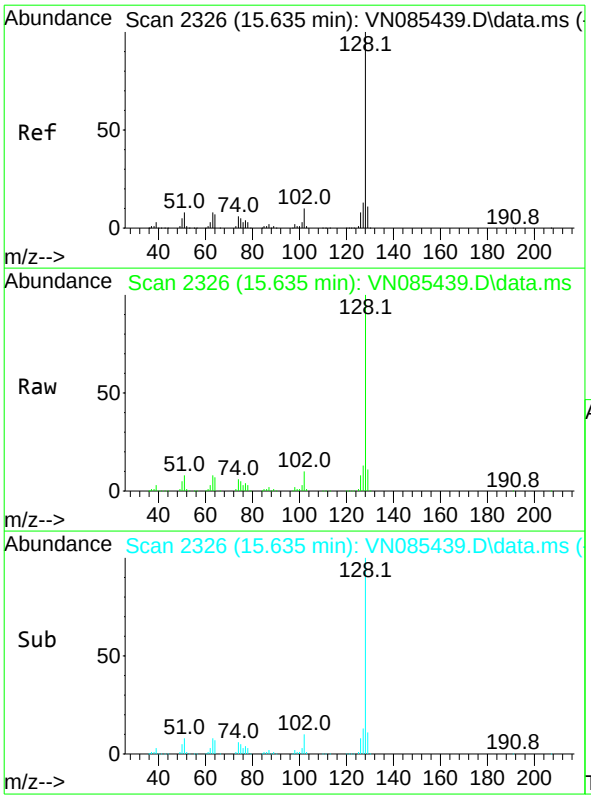



#94
Hexachlorobutadiene
Concen: 45.947 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:225 Resp: 53846

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 61.4 | 30.7 | 92.1 |
| 227 | 61.7 | 30.9 | 92.5 |

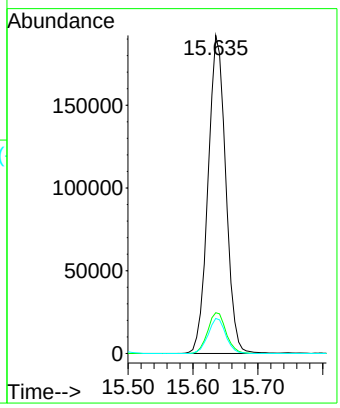





#95
Naphthalene
Concen: 55.243 ug/l
RT: 15.635 min Scan# 23
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:128 Resp: 363882

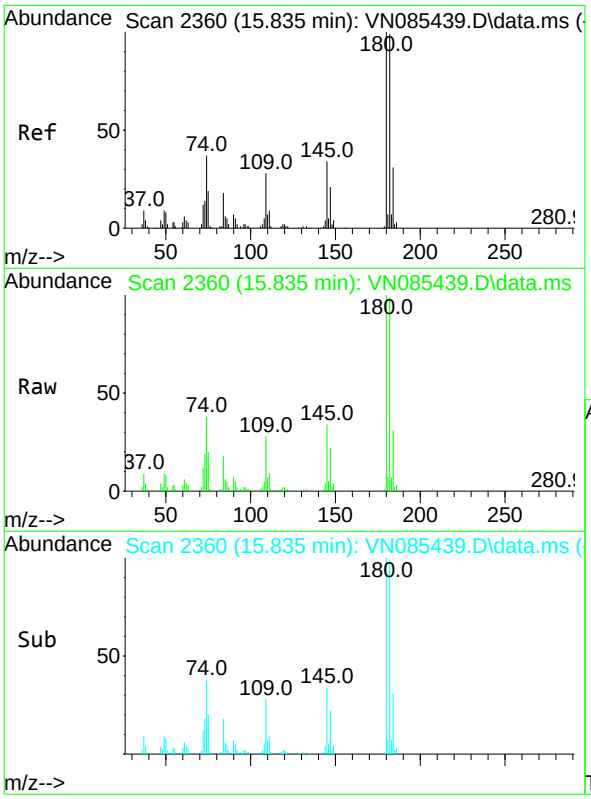
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 13.3 | 10.6 | 16.0 |
| 129 | 11.0 | 8.8 | 13.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

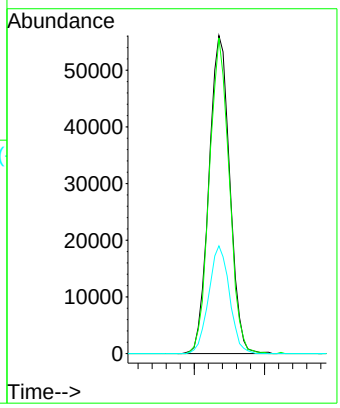
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025




#96
1,2,3-Trichlorobenzene
Concen: 51.601 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:180 Resp: 115251

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 94.8 | 47.4 | 142.2 |
| 145 | 33.8 | 16.9 | 50.7 |



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085440.D
Acq On : 14 Jan 2025 15:43
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 15 01:43:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 200796 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.094 | 114 | 340593 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 296298 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 143526 | 50.000 | ug/l | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.571 | 65 | 60593 | 18.694 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 37.380%# | | | |
| 35) Dibromofluoromethane | 8.165 | 113 | 45655 | 19.322 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 38.640%# | | | |
| 50) Toluene-d8 | 10.559 | 98 | 164391 | 19.581 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 39.160%# | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 55798 | 19.430 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 38.860%# | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 54666 | 20.107 | ug/l | 98 |
| 3) Chloromethane | 2.359 | 50 | 58426 | 19.848 | ug/l | 100 |
| 4) Vinyl Chloride | 2.512 | 62 | 58403 | 19.739 | ug/l | 99 |
| 5) Bromomethane | 2.954 | 94 | 36440 | 20.389 | ug/l | 94 |
| 6) Chloroethane | 3.118 | 64 | 37594 | 20.041 | ug/l | 93 |
| 7) Trichlorofluoromethane | 3.501 | 101 | 88121 | 20.526 | ug/l | 99 |
| 8) Diethyl Ether | 3.965 | 74 | 29138 | 19.647 | ug/l | 98 |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 48933 | 20.237 | ug/l | 99 |
| 10) Methyl Iodide | 4.589 | 142 | 56567 | 20.428 | ug/l | 93 |
| 11) Tert butyl alcohol | 5.506 | 59 | 37984 | 102.342 | ug/l | 100 |
| 12) 1,1-Dichloroethene | 4.342 | 96 | 44670 | 20.728 | ug/l | 95 |
| 13) Acrolein | 4.171 | 56 | 49649 | 97.995 | ug/l | 99 |
| 14) Allyl chloride | 5.024 | 41 | 67705 | 19.362 | ug/l | 96 |
| 15) Acrylonitrile | 5.712 | 53 | 121626 | 103.171 | ug/l | 99 |
| 16) Acetone | 4.424 | 43 | 101065 | 96.502 | ug/l | 96 |
| 17) Carbon Disulfide | 4.712 | 76 | 132300 | 19.939 | ug/l | 98 |
| 18) Methyl Acetate | 5.018 | 43 | 60873 | 19.115 | ug/l | 99 |
| 19) Methyl tert-butyl Ether | 5.795 | 73 | 148847 | 21.272 | ug/l | 100 |
| 20) Methylene Chloride | 5.271 | 84 | 52813 | 20.370 | ug/l | 97 |
| 21) trans-1,2-Dichloroethene | 5.789 | 96 | 46115 | 20.023 | ug/l | 98 |
| 22) Diisopropyl ether | 6.671 | 45 | 166719 | 21.480 | ug/l | 97 |
| 23) Vinyl Acetate | 6.594 | 43 | 588567m | 107.984 | ug/l | |
| 24) 1,1-Dichloroethane | 6.565 | 63 | 96875 | 20.469 | ug/l # | 96 |
| 25) 2-Butanone | 7.477 | 43 | 159952 | 103.786 | ug/l | 98 |
| 26) 2,2-Dichloropropane | 7.483 | 77 | 79145 | 20.684 | ug/l | 99 |
| 27) cis-1,2-Dichloroethene | 7.483 | 96 | 57454 | 21.180 | ug/l | 98 |
| 28) Bromochloromethane | 7.812 | 49 | 41181 | 18.703 | ug/l | 99 |
| 29) Tetrahydrofuran | 7.836 | 42 | 104792 | 107.247 | ug/l | 99 |
| 30) Chloroform | 7.959 | 83 | 99655 | 20.374 | ug/l | 99 |
| 31) Cyclohexane | 8.253 | 56 | 82980 | 20.173 | ug/l | 97 |
| 32) 1,1,1-Trichloroethane | 8.165 | 97 | 87659 | 20.431 | ug/l | 98 |
| 36) 1,1-Dichloropropene | 8.371 | 75 | 67949 | 20.490 | ug/l | 98 |
| 37) Ethyl Acetate | 7.553 | 43 | 66443 | 19.850 | ug/l | 96 |
| 38) Carbon Tetrachloride | 8.359 | 117 | 78842 | 20.767 | ug/l | 96 |
| 39) Methylcyclohexane | 9.594 | 83 | 65012 | 20.862 | ug/l | 96 |
| 40) Benzene | 8.600 | 78 | 207985 | 20.873 | ug/l | 99 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085440.D
Acq On : 14 Jan 2025 15:43
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 15 01:43:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.771 | 41 | 36578 | 21.004 | ug/l | | 99 |
| 42) 1,2-Dichloroethane | 8.665 | 62 | 78402 | 20.891 | ug/l | | 99 |
| 43) Isopropyl Acetate | 8.683 | 43 | 109131 | 20.347 | ug/l | | 98 |
| 44) Trichloroethene | 9.347 | 130 | 48009 | 20.699 | ug/l | | 96 |
| 45) 1,2-Dichloropropane | 9.618 | 63 | 52833 | 20.758 | ug/l | | 93 |
| 46) Dibromomethane | 9.700 | 93 | 37721 | 20.540 | ug/l | | 98 |
| 47) Bromodichloromethane | 9.882 | 83 | 78918 | 21.093 | ug/l | | 96 |
| 48) Methyl methacrylate | 9.677 | 41 | 50224 | 20.808 | ug/l | | 96 |
| 49) 1,4-Dioxane | 9.688 | 88 | 17140 | 421.686 | ug/l | | 95 |
| 51) 4-Methyl-2-Pentanone | 10.441 | 43 | 336911 | 108.249 | ug/l | | 100 |
| 52) Toluene | 10.630 | 92 | 125172 | 21.680 | ug/l | | 99 |
| 53) t-1,3-Dichloropropene | 10.835 | 75 | 74129 | 20.965 | ug/l | | 96 |
| 54) cis-1,3-Dichloropropene | 10.306 | 75 | 81897 | 21.684 | ug/l | | 99 |
| 55) 1,1,2-Trichloroethane | 11.012 | 97 | 48039 | 21.025 | ug/l | | 97 |
| 56) Ethyl methacrylate | 10.871 | 69 | 70934 | 19.649 | ug/l | | 99 |
| 57) 1,3-Dichloropropane | 11.159 | 76 | 84210 | 21.196 | ug/l | | 99 |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63 | 153681 | 105.991 | ug/l | | 100 |
| 59) 2-Hexanone | 11.194 | 43 | 240595 | 109.863 | ug/l | | 98 |
| 60) Dibromochloromethane | 11.353 | 129 | 56069 | 20.326 | ug/l | | 96 |
| 61) 1,2-Dibromoethane | 11.465 | 107 | 48465 | 21.309 | ug/l | | 96 |
| 64) Tetrachloroethene | 11.100 | 164 | 43243 | 21.408 | ug/l | | 96 |
| 65) Chlorobenzene | 11.888 | 112 | 136809 | 21.077 | ug/l | | 98 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 48370 | 20.304 | ug/l | | 98 |
| 67) Ethyl Benzene | 11.959 | 91 | 229978 | 21.753 | ug/l | | 98 |
| 68) m/p-Xylenes | 12.071 | 106 | 177755 | 45.494 | ug/l | | 100 |
| 69) o-Xylene | 12.394 | 106 | 84548 | 22.643 | ug/l | | 98 |
| 70) Styrene | 12.412 | 104 | 140581 | 22.749 | ug/l | | 99 |
| 71) Bromoform | 12.576 | 173 | 36961 | 21.683 | ug/l | # | 96 |
| 73) Isopropylbenzene | 12.694 | 105 | 211354 | 21.819 | ug/l | | 100 |
| 74) N-amyl acetate | 12.494 | 43 | 94292 | 21.656 | ug/l | | 98 |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 68151 | 19.917 | ug/l | | 99 |
| 76) 1,2,3-Trichloropropane | 12.988 | 75 | 64180m | 22.036 | ug/l | | |
| 77) Bromobenzene | 12.976 | 156 | 52022 | 20.556 | ug/l | | 99 |
| 78) n-propylbenzene | 13.035 | 91 | 252610 | 22.028 | ug/l | | 100 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 158511 | 21.358 | ug/l | | 100 |
| 80) 1,3,5-Trimethylbenzene | 13.171 | 105 | 180294 | 22.533 | ug/l | | 100 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 22178m | 20.569 | ug/l | | |
| 82) 4-Chlorotoluene | 13.218 | 91 | 161880 | 21.906 | ug/l | | 100 |
| 83) tert-Butylbenzene | 13.435 | 119 | 147541 | 21.958 | ug/l | | 99 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 183144 | 22.965 | ug/l | | 99 |
| 85) sec-Butylbenzene | 13.612 | 105 | 209133 | 22.457 | ug/l | | 100 |
| 86) p-Isopropyltoluene | 13.729 | 119 | 168888 | 21.661 | ug/l | | 99 |
| 87) 1,3-Dichlorobenzene | 13.729 | 146 | 97652 | 20.952 | ug/l | | 100 |
| 88) 1,4-Dichlorobenzene | 13.806 | 146 | 98321 | 20.351 | ug/l | | 99 |
| 89) n-Butylbenzene | 14.053 | 91 | 142673 | 21.355 | ug/l | | 99 |
| 90) Hexachloroethane | 14.329 | 117 | 35205 | 19.858 | ug/l | | 98 |
| 91) 1,2-Dichlorobenzene | 14.100 | 146 | 94954 | 20.425 | ug/l | | 99 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75 | 12859 | 20.580 | ug/l | | 100 |
| 93) 1,2,4-Trichlorobenzene | 15.388 | 180 | 45878 | 21.233 | ug/l | | 99 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 22719 | 19.805 | ug/l | | 95 |
| 95) Naphthalene | 15.635 | 128 | 134793 | 20.906 | ug/l | | 99 |
| 96) 1,2,3-Trichlorobenzene | 15.835 | 180 | 45468 | 20.797 | ug/l | | 97 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085440.D
Acq On : 14 Jan 2025 15:43
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Quant Time: Jan 15 01:43:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

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

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

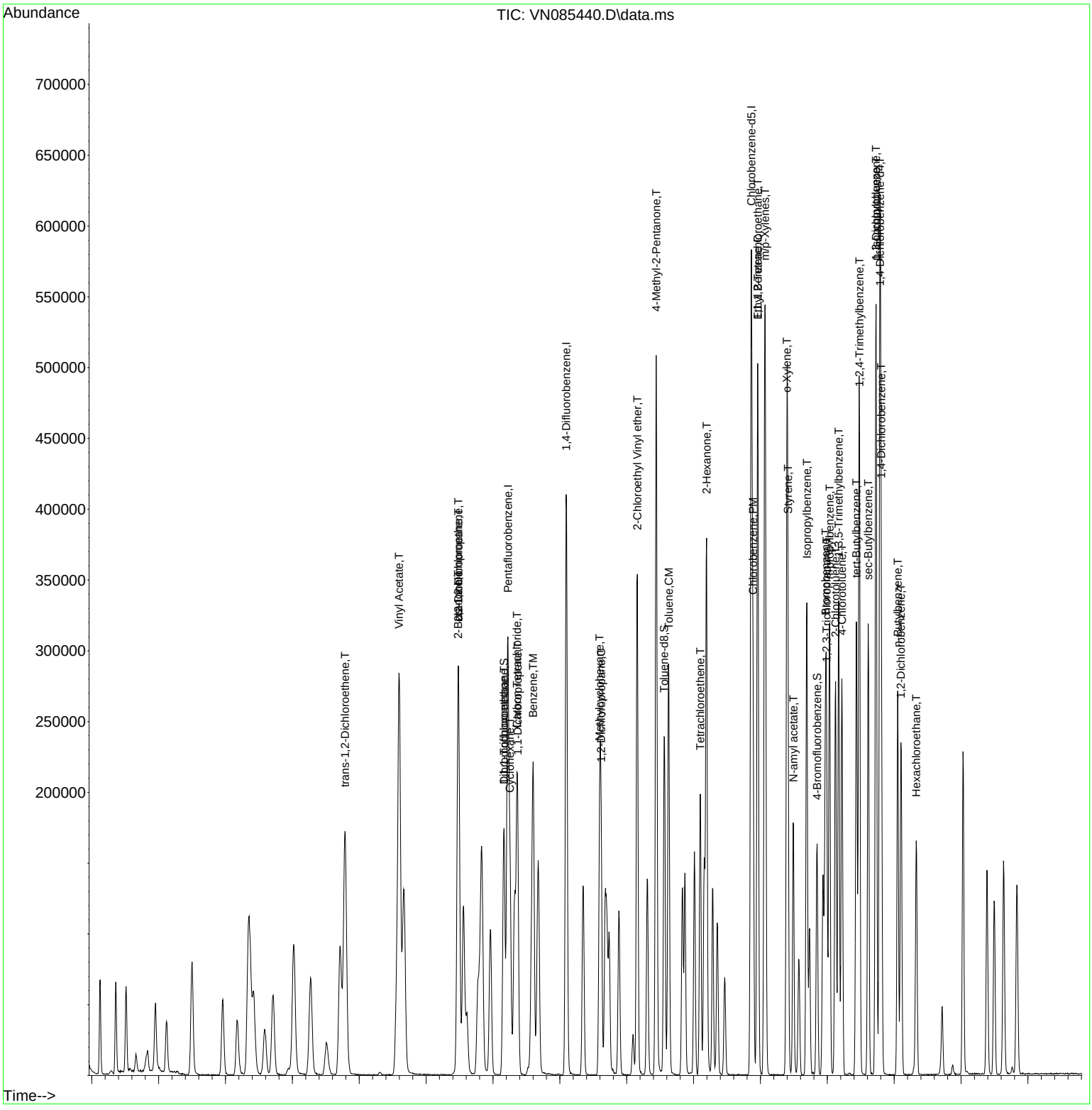
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085440.D
Acq On : 14 Jan 2025 15:43
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

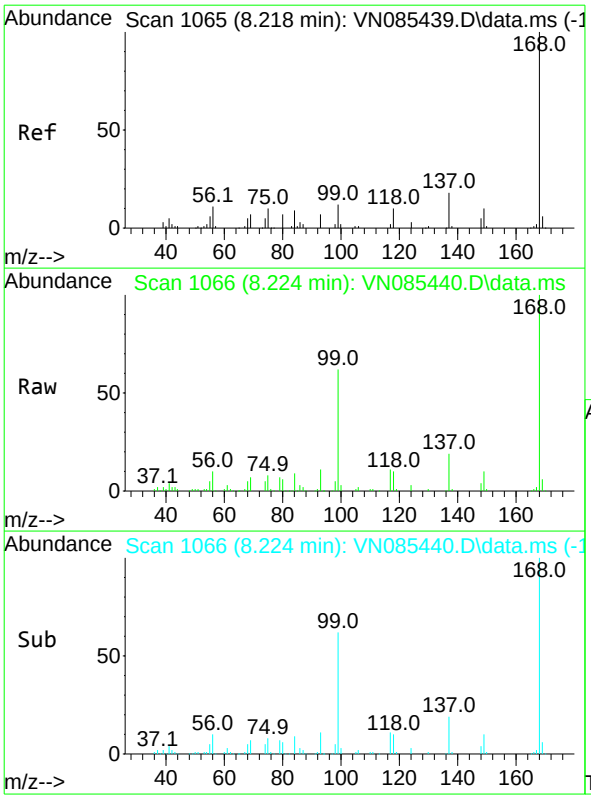
Quant Time: Jan 15 01:43:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

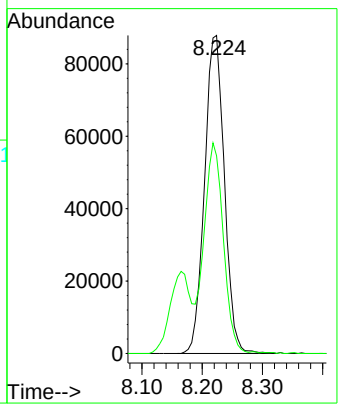





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:168 Resp: 200796

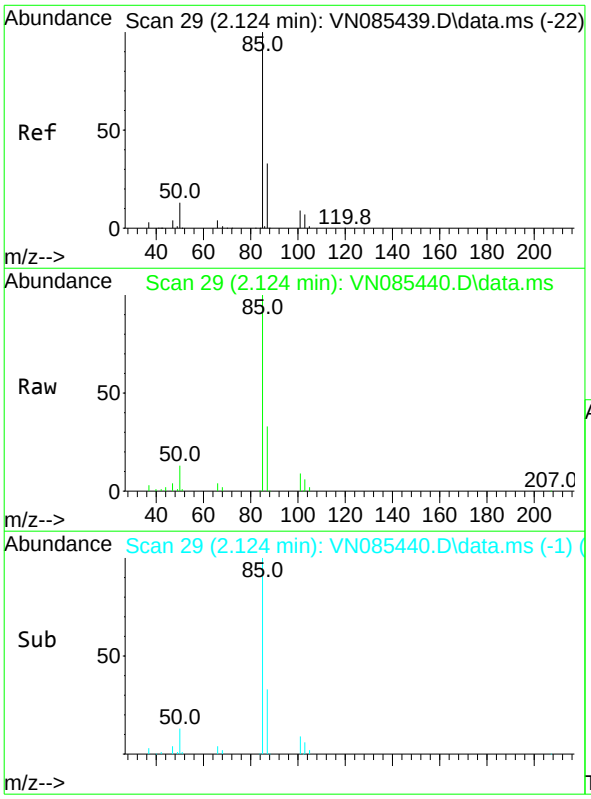
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 62.2 | 53.6 | 80.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

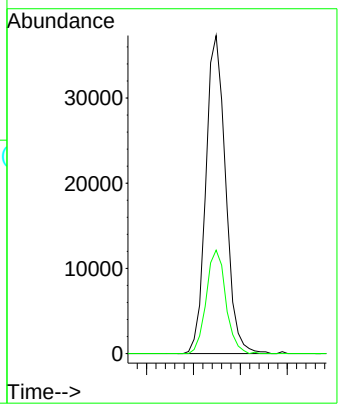
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

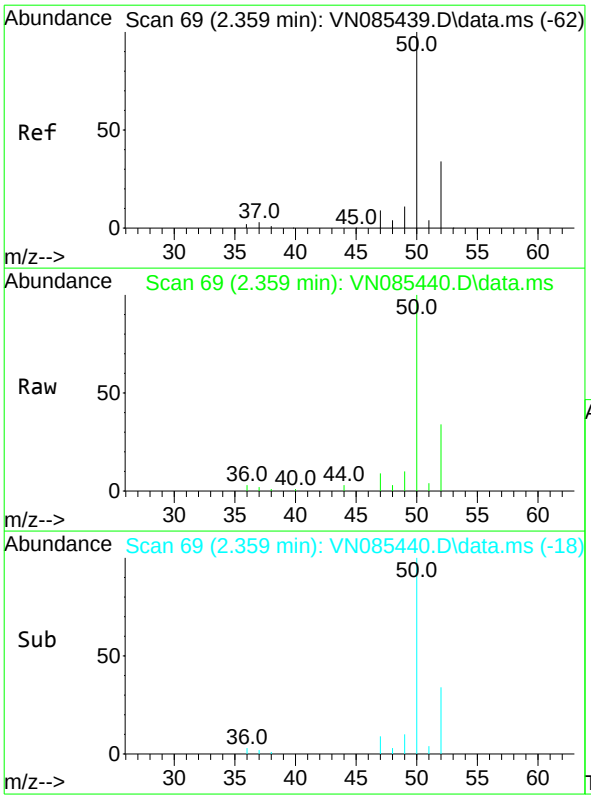



#2
Dichlorodifluoromethane
Concen: 20.107 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 85 Resp: 54666

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.5 | 16.7 | 50.1 |

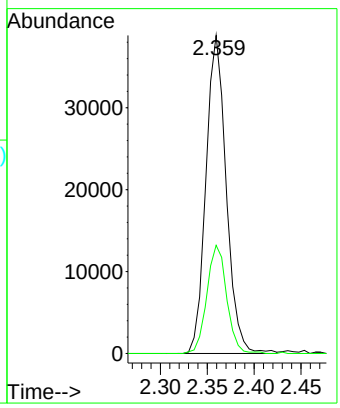





#3
Chloromethane
Concen: 19.848 ug/l
RT: 2.359 min Scan# 69
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 50 Resp: 58426

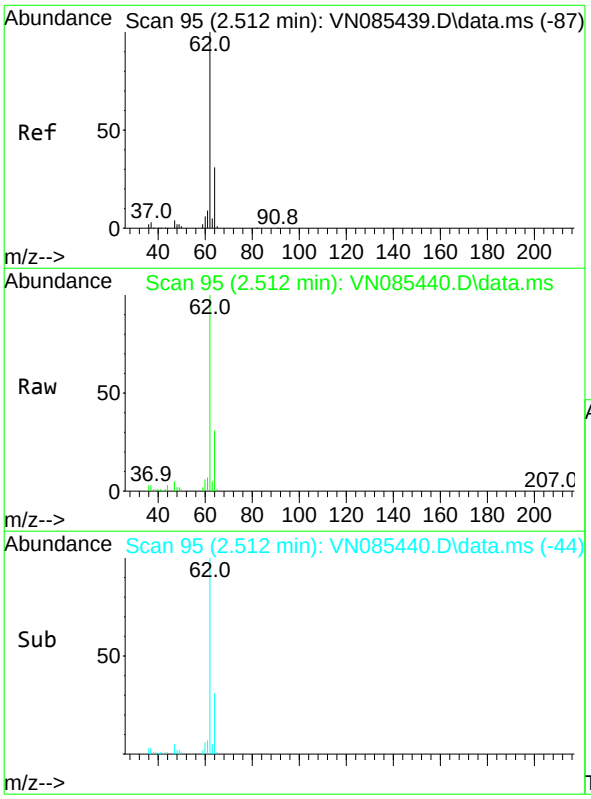
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 34.0 | 27.0 | 40.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

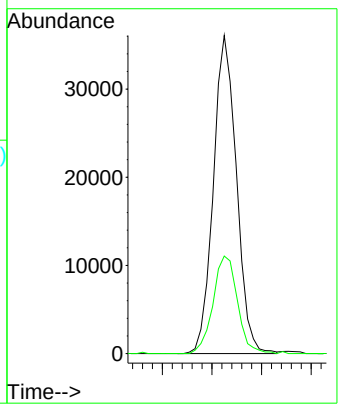
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

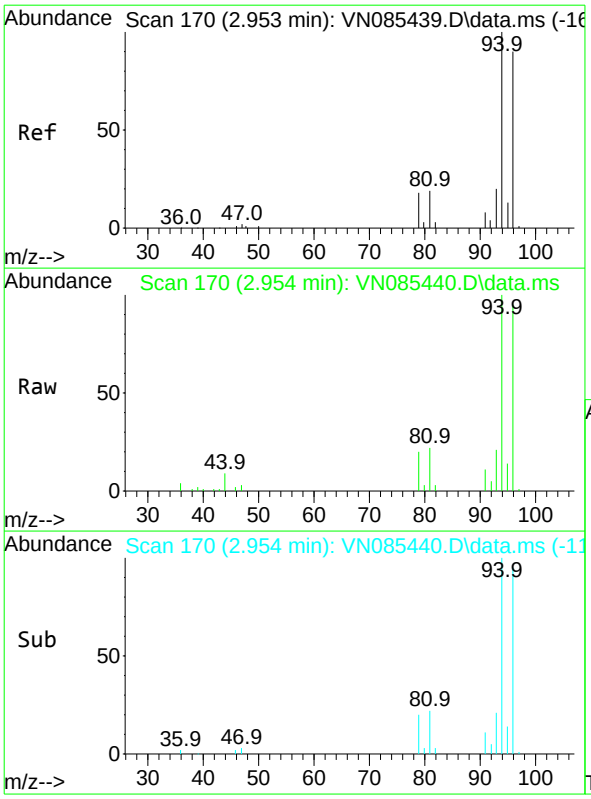



#4
Vinyl Chloride
Concen: 19.739 ug/l
RT: 2.512 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 62 Resp: 58403

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 30.7 | 24.8 | 37.2 |

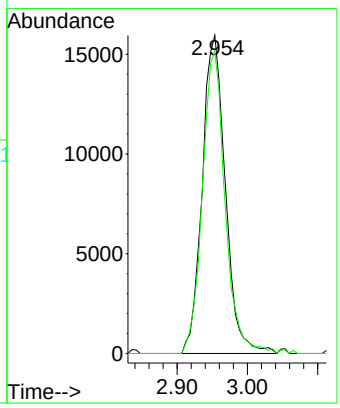





#5
Bromomethane
Concen: 20.389 ug/l
RT: 2.954 min Scan# 17
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 94 Resp: 36440

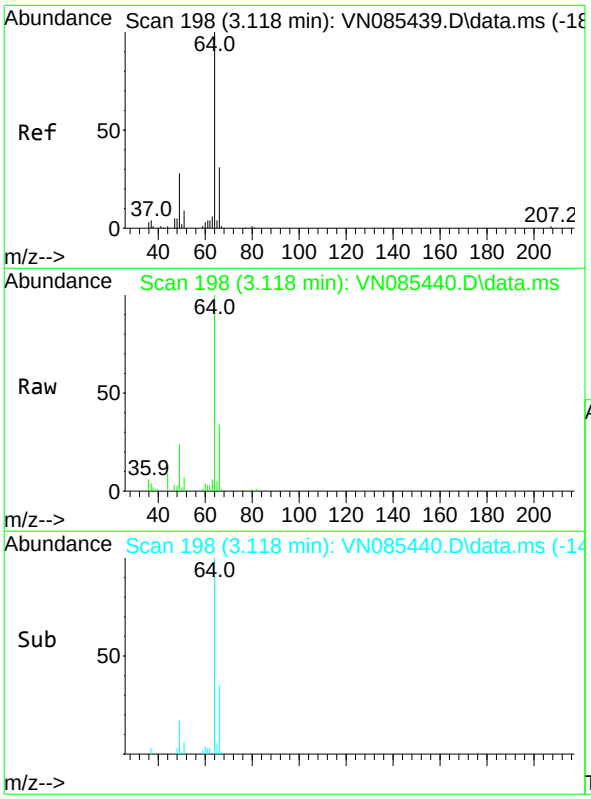
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 94.9 | 71.8 | 107.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

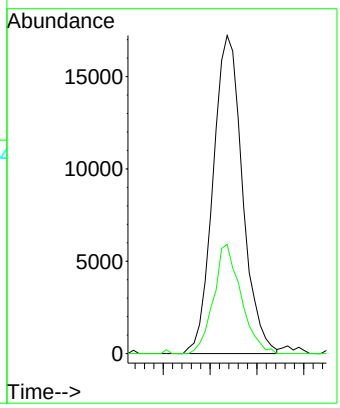
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

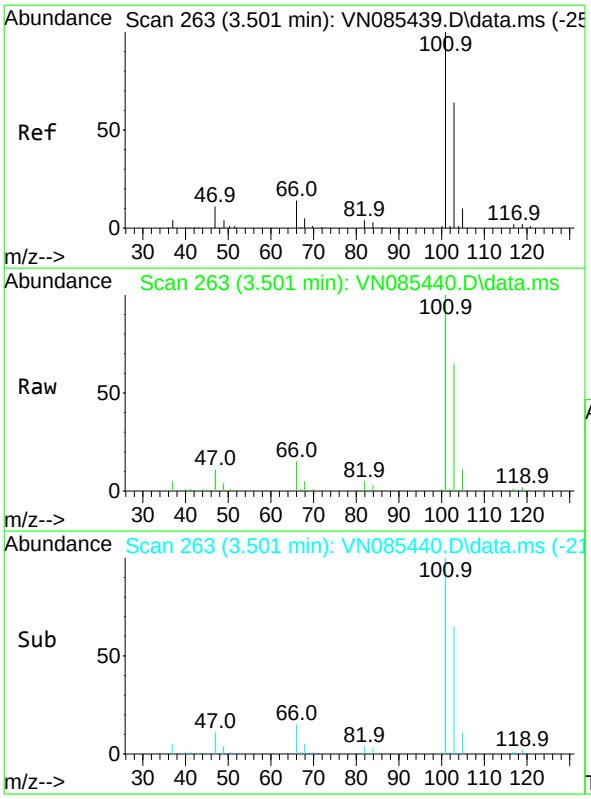



#6
Chloroethane
Concen: 20.041 ug/l
RT: 3.118 min Scan# 198
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 64 Resp: 37594

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 34.3 | 24.6 | 36.8 |

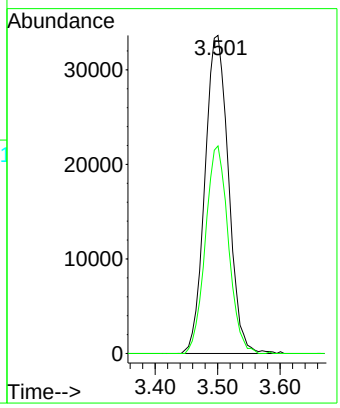





#7
Trichlorofluoromethane
Concen: 20.526 ug/l
RT: 3.501 min Scan# 26
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:101 Resp: 88121

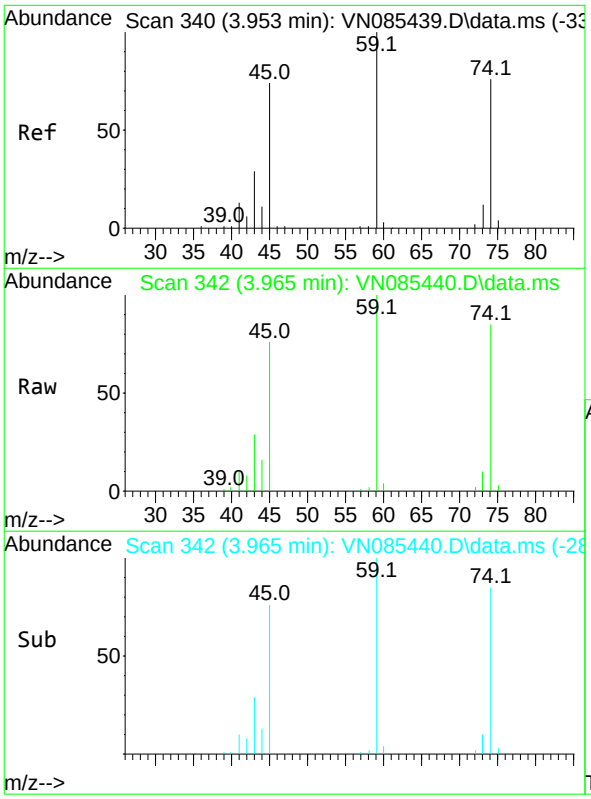
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 65.3 | 51.4 | 77.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

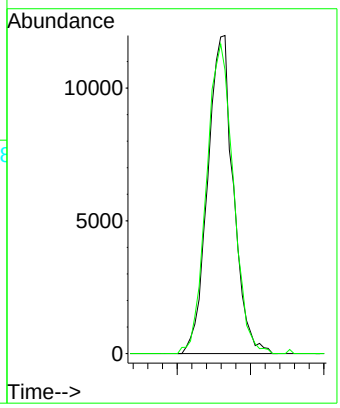
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

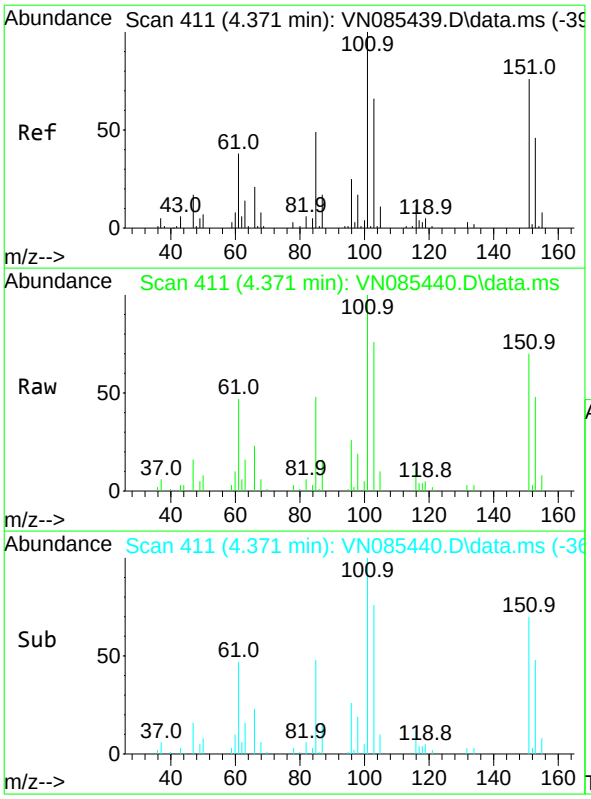



#8
Diethyl Ether
Concen: 19.647 ug/l
RT: 3.965 min Scan# 342
Delta R.T. 0.012 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 74 Resp: 29138

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 101.8 | 49.7 | 149.1 |






#9
1,1,2-Trichlorotrifluoroethane
Concen: 20.237 ug/l
RT: 4.371 min Scan# 41
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

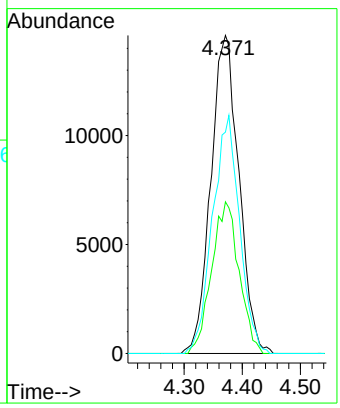
Tgt Ion:101 Resp: 48933

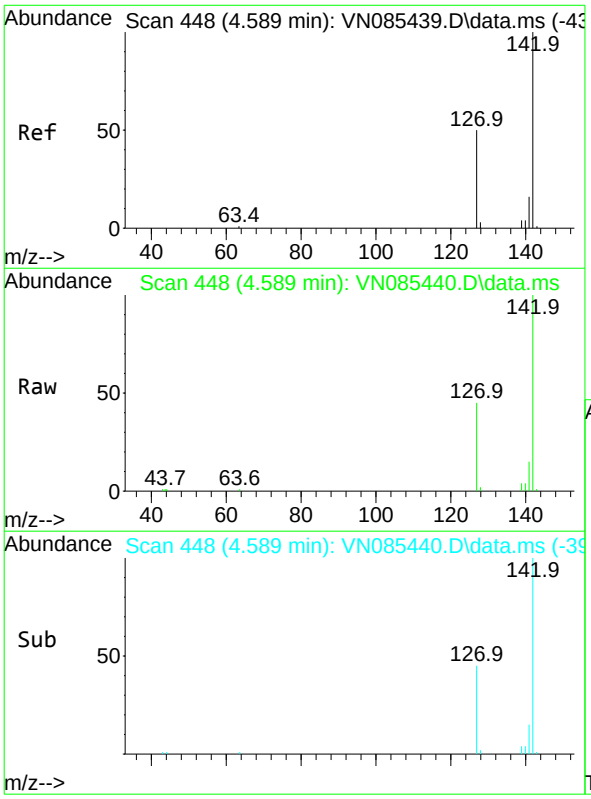
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 46.6 | 37.8 | 56.8 |
| 151 | 72.1 | 58.8 | 88.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

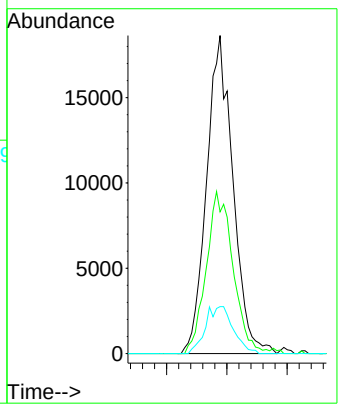


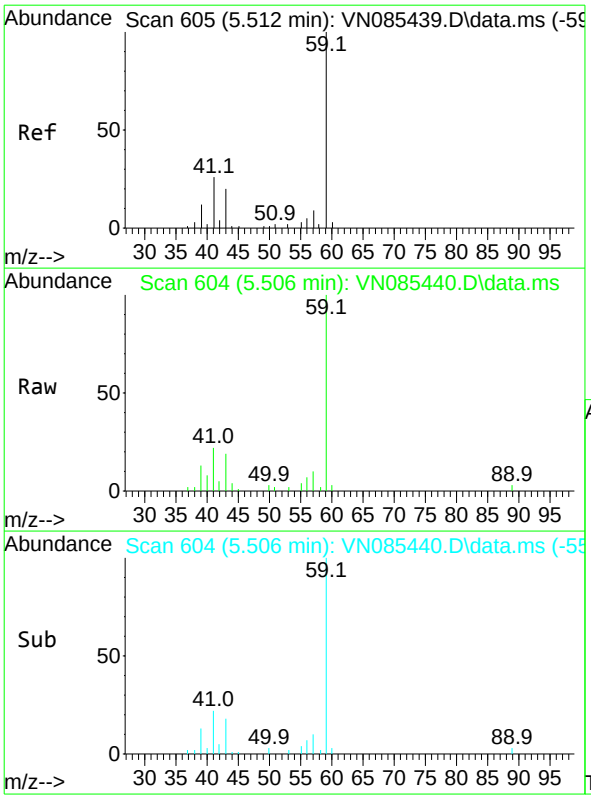




#10
Methyl Iodide
Concen: 20.428 ug/l
RT: 4.589 min Scan# 448
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:142 Resp: 56567

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 44.6 | 40.3 | 60.5 |
| 141 | 14.8 | 12.8 | 19.2 |

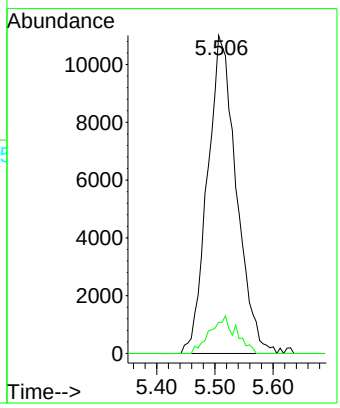





#11
Tert butyl alcohol
Concen: 102.342 ug/l
RT: 5.506 min Scan# 60
Delta R.T. -0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 59 Resp: 37984

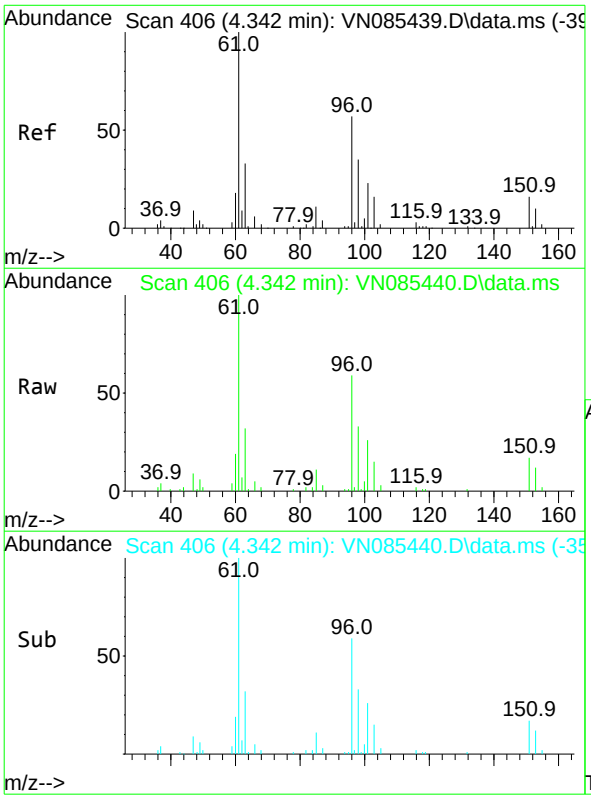
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 10.7 | 8.6 | 13.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

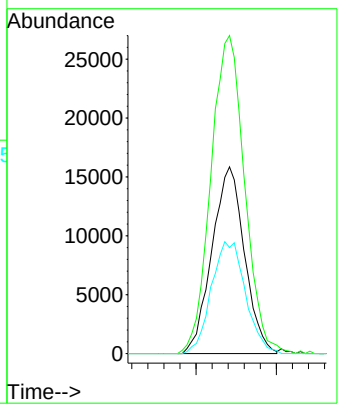
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

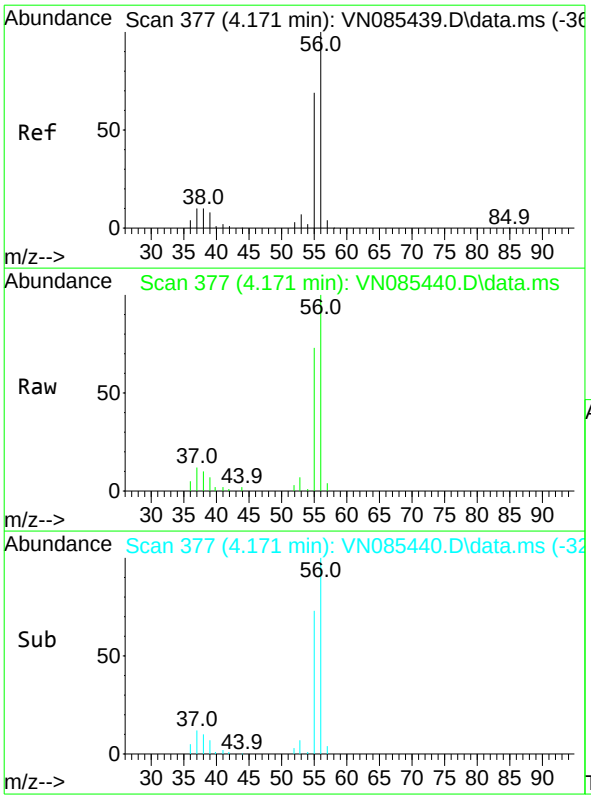



#12
1,1-Dichloroethene
Concen: 20.728 ug/l
RT: 4.342 min Scan# 406
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 96 Resp: 44670

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 170.3 | 141.0 | 211.4 |
| 98 | 56.8 | 49.0 | 73.6 |

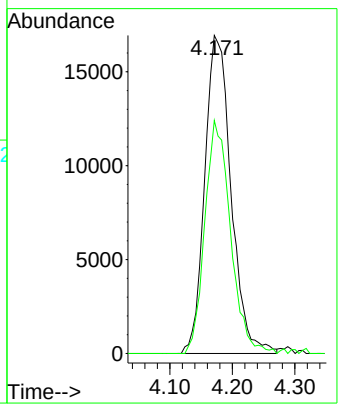





#13
Acrolein
Concen: 97.995 ug/l
RT: 4.171 min Scan# 37
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 56 Resp: 49649

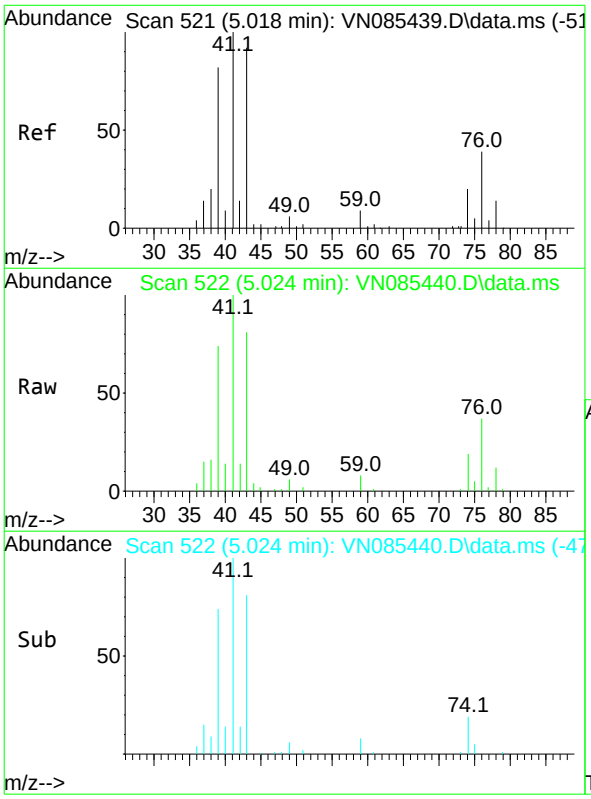
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 71.4 | 56.3 | 84.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

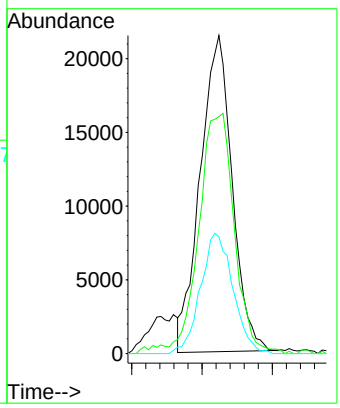
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

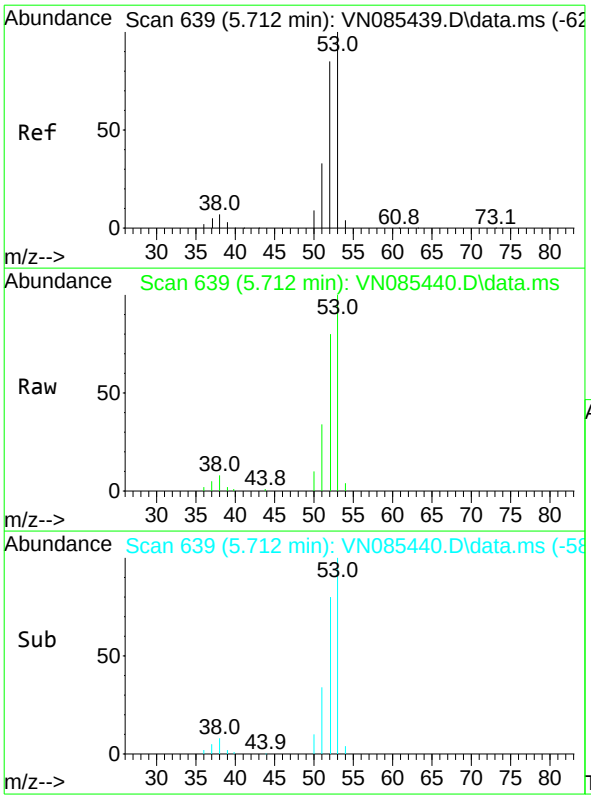



#14
Allyl chloride
Concen: 19.362 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 41 Resp: 67705

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 85.0 | 64.4 | 96.6 |
| 76 | 38.6 | 30.5 | 45.7 |

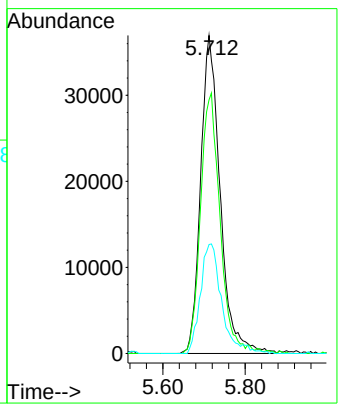





#15
Acrylonitrile
Concen: 103.171 ug/l
RT: 5.712 min Scan# 63
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 53 Resp: 121626

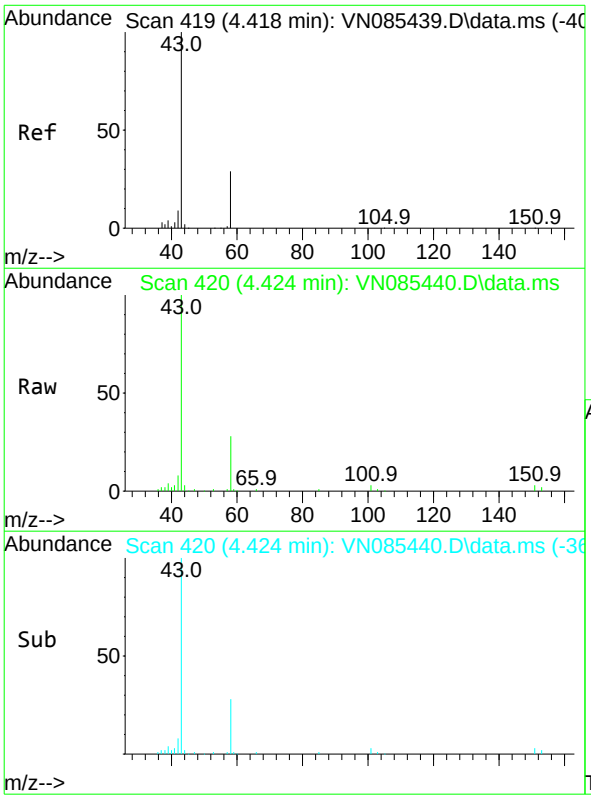
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 81.1 | 65.5 | 98.3 |
| 51 | 36.1 | 29.8 | 44.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

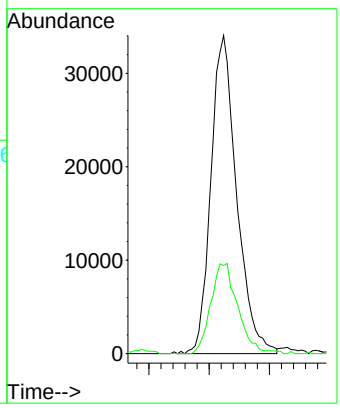
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

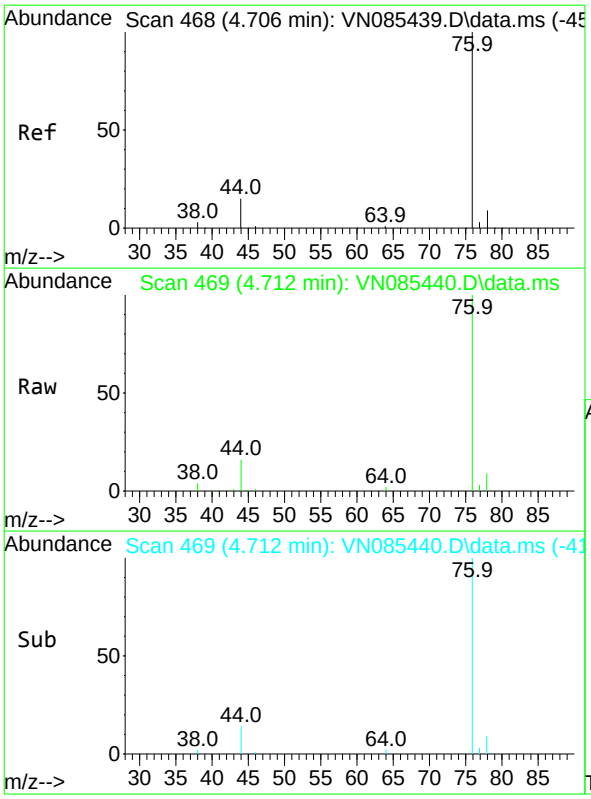



#16
Acetone
Concen: 96.502 ug/l
RT: 4.424 min Scan# 420
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 43 Resp: 101065

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 27.7 | 23.8 | 35.6 |

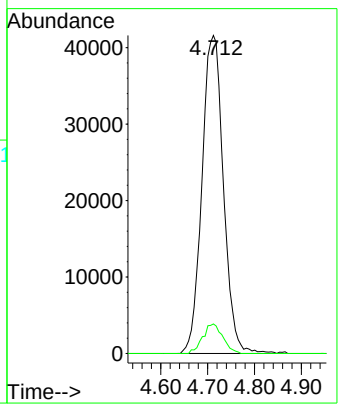





#17
Carbon Disulfide
Concen: 19.939 ug/l
RT: 4.712 min Scan# 46
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 76 Resp: 132300

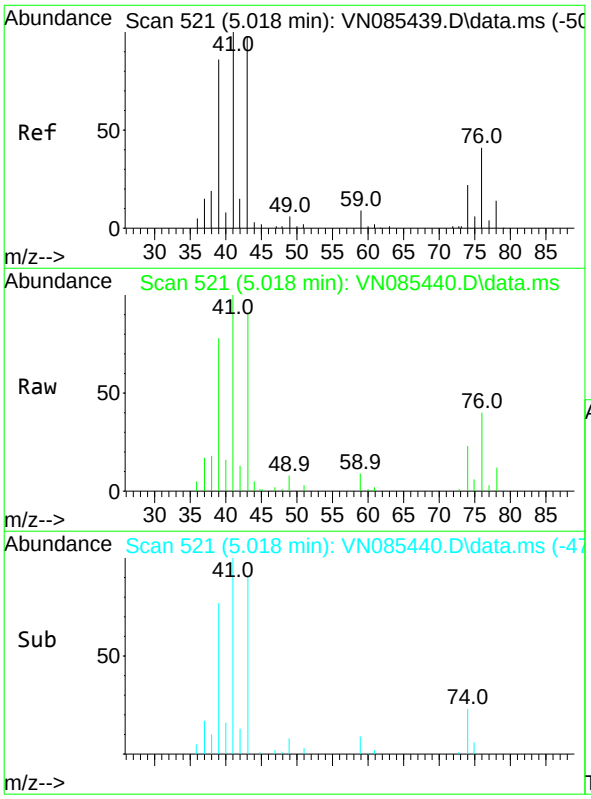
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.3 | 6.9 | 10.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

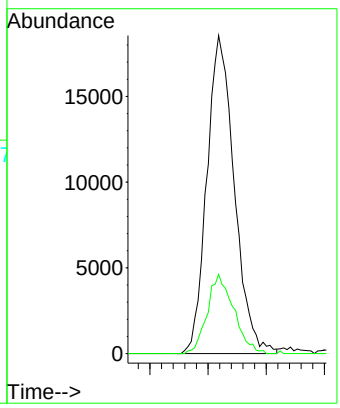
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

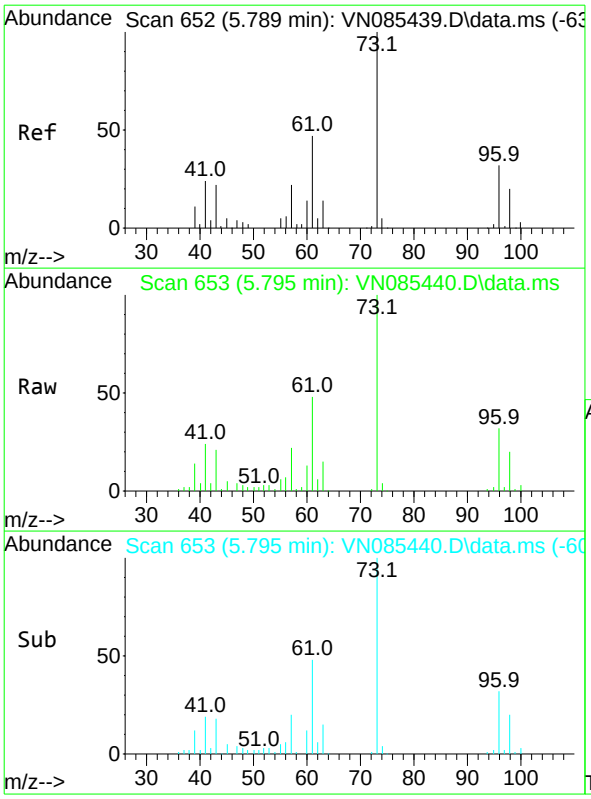



#18
Methyl Acetate
Concen: 19.115 ug/l
RT: 5.018 min Scan# 521
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 43 Resp: 60873

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 24.0 | 18.6 | 28.0 |

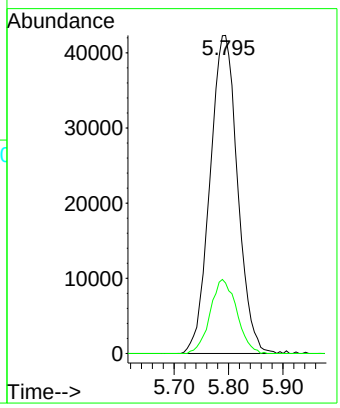





#19
Methyl tert-butyl Ether
Concen: 21.272 ug/l
RT: 5.795 min Scan# 65
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 73 Resp: 148847

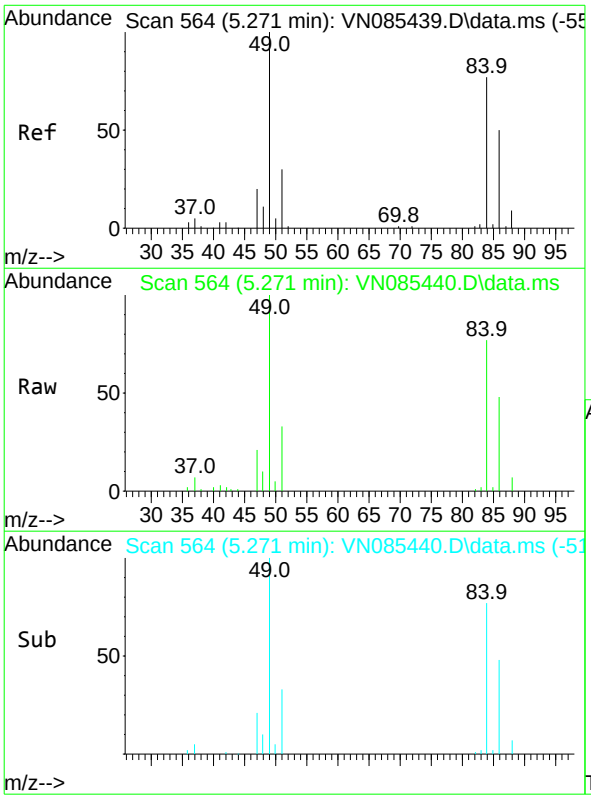
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 22.1 | 17.8 | 26.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

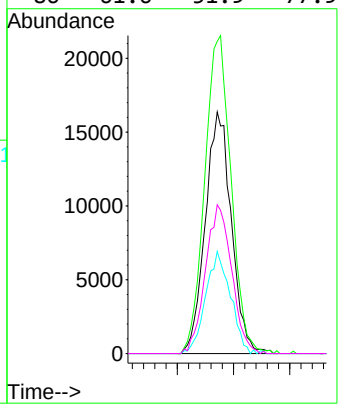
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

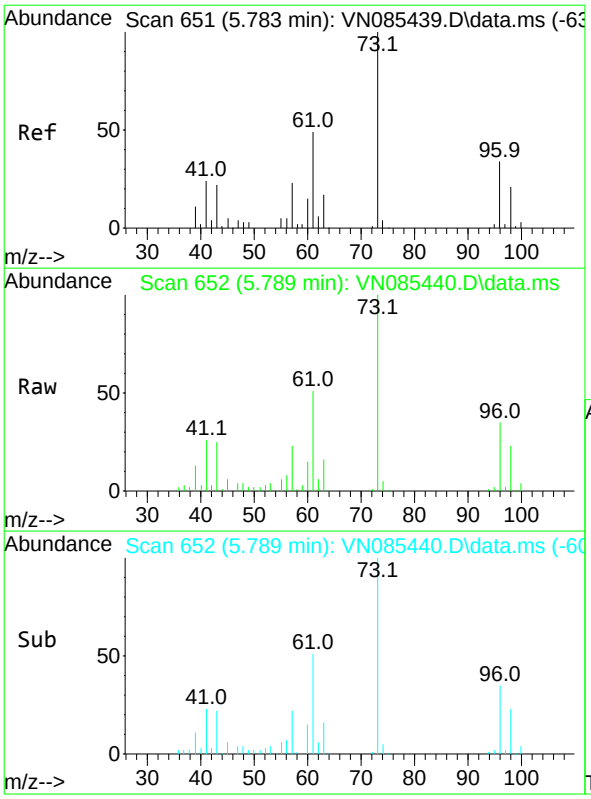



#20
Methylene Chloride
Concen: 20.370 ug/l
RT: 5.271 min Scan# 564
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 84 Resp: 52813

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 129.2 | 104.1 | 156.1 |
| 51 | 42.2 | 31.0 | 46.4 |
| 86 | 61.6 | 51.9 | 77.9 |

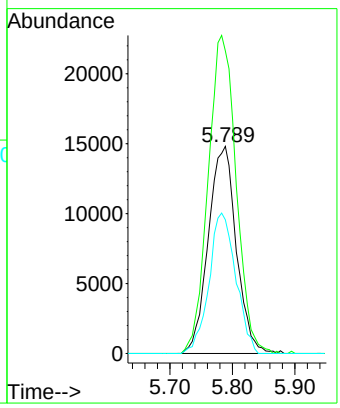





#21
trans-1,2-Dichloroethene
Concen: 20.023 ug/l
RT: 5.789 min Scan# 65
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 96 Resp: 46115

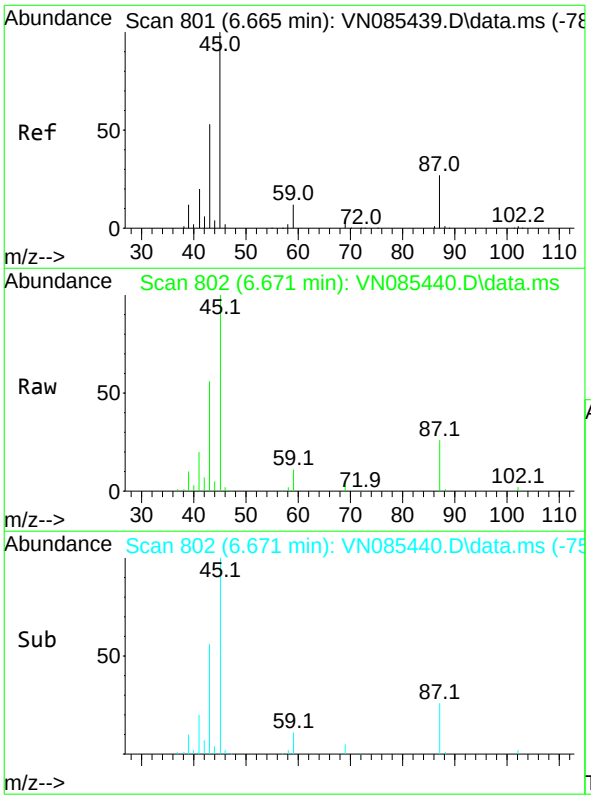
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 146.1 | 115.7 | 173.5 |
| 98 | 64.5 | 49.8 | 74.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

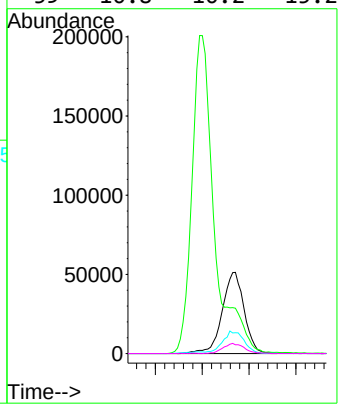
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

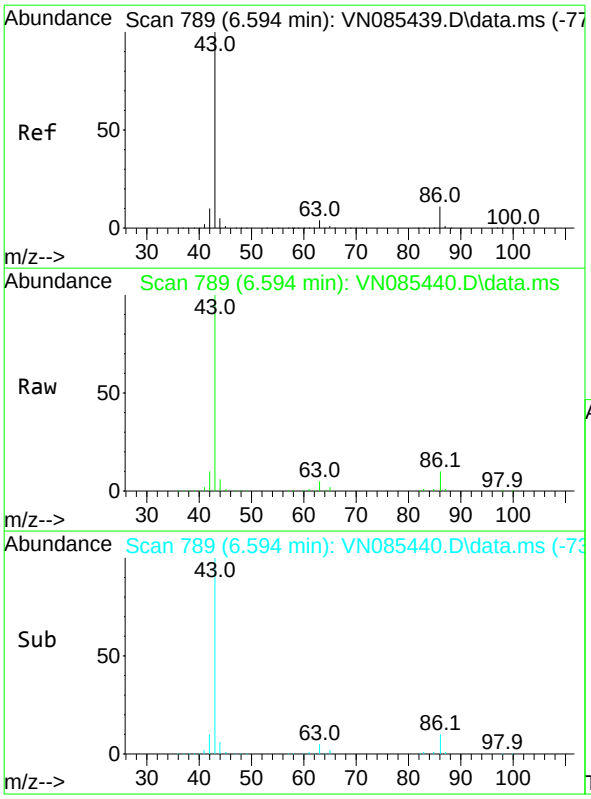



#22
Diisopropyl ether
Concen: 21.480 ug/l
RT: 6.671 min Scan# 802
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 45 Resp: 166719

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 54.3 | 45.0 | 67.6 |
| 87 | 25.3 | 21.8 | 32.8 |
| 59 | 10.8 | 10.2 | 15.2 |

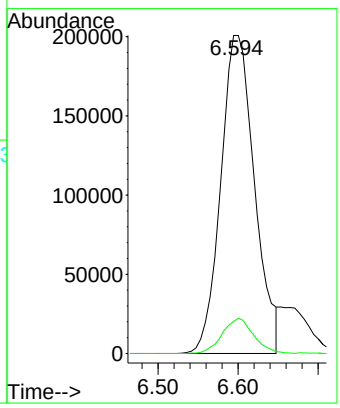





#23
Vinyl Acetate
Concen: 107.984 ug/l m
RT: 6.594 min Scan# 78
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 43 Resp: 588567

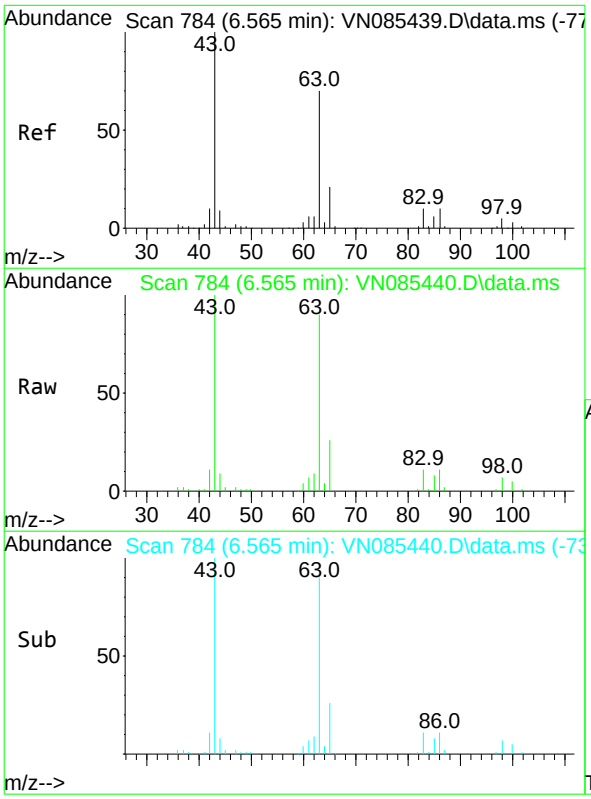
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 10.1 | 8.4 | 12.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

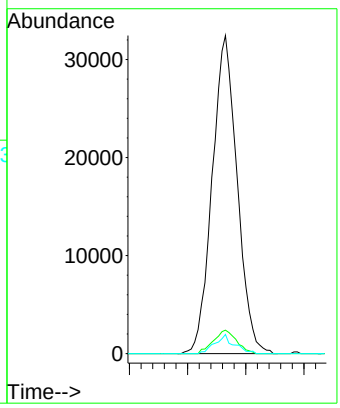
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

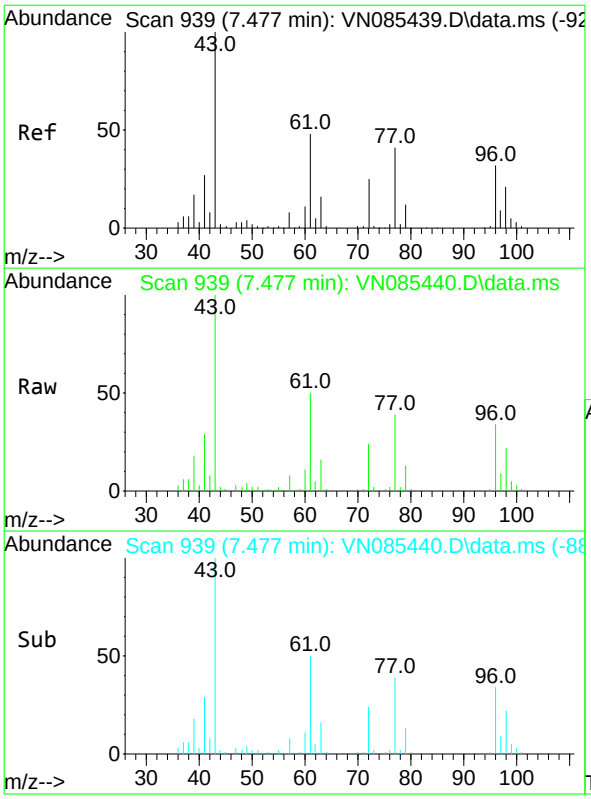



#24
1,1-Dichloroethane
Concen: 20.469 ug/l
RT: 6.565 min Scan# 784
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 63 Resp: 96875

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 7.4 | 3.3 | 9.8 |
| 100 | 6.0 | 2.0 | 6.0# |

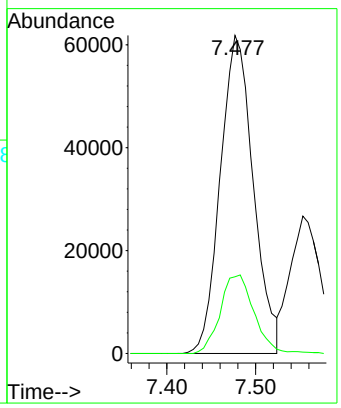





#25
2-Butanone
Concen: 103.786 ug/l
RT: 7.477 min Scan# 93
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 43 Resp: 159952

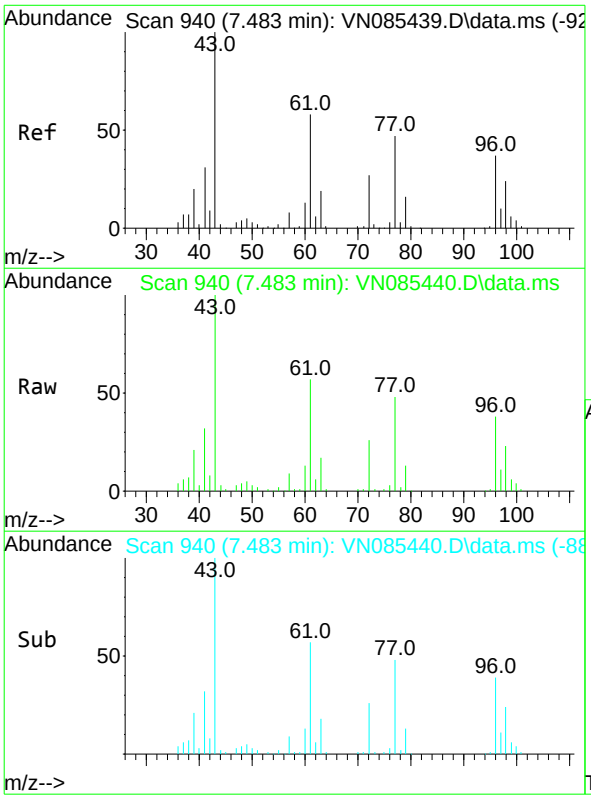
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 24.1 | 20.2 | 30.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

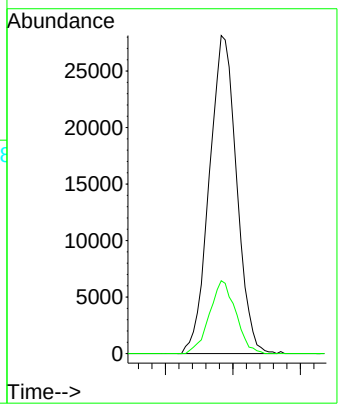
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

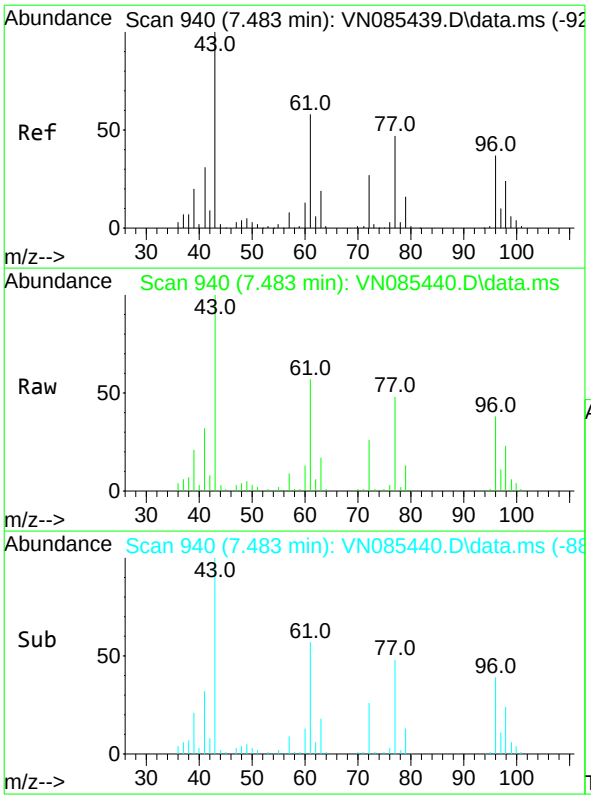



#26
2,2-Dichloropropane
Concen: 20.684 ug/l
RT: 7.483 min Scan# 940
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 77 Resp: 79145

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 22.0 | 10.7 | 32.1 |

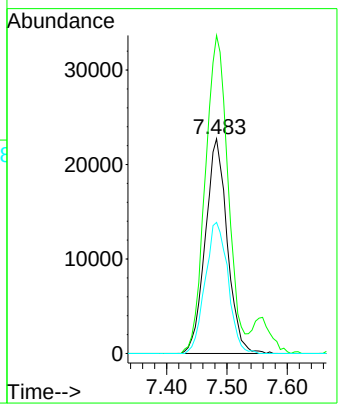





#27
cis-1,2-Dichloroethene
Concen: 21.180 ug/l
RT: 7.483 min Scan# 94
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 96 Resp: 57454

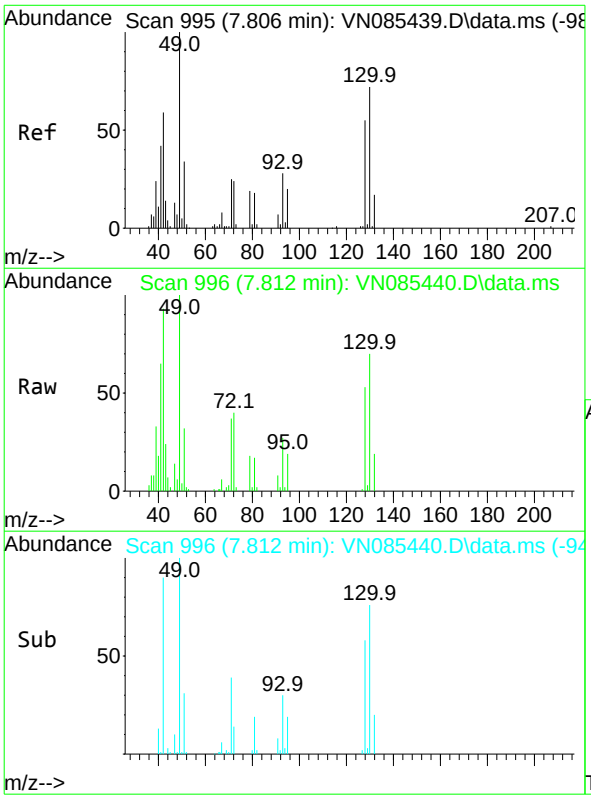
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 153.0 | 0.0 | 311.8 |
| 98 | 63.7 | 0.0 | 126.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

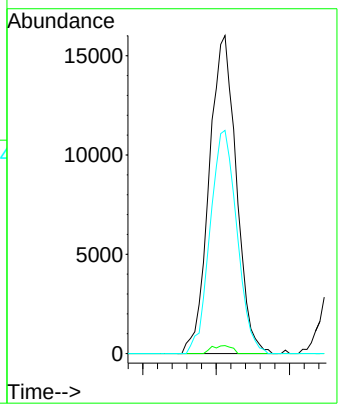
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

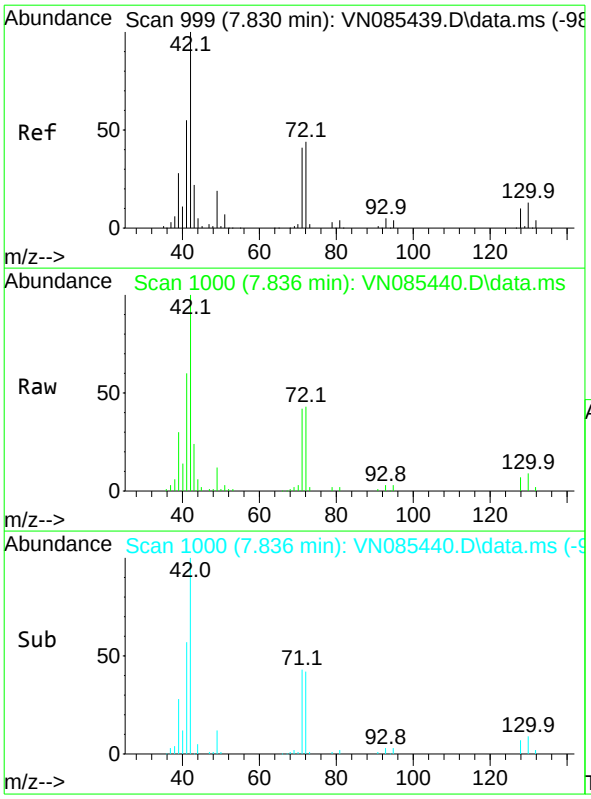



#28
Bromochloromethane
Concen: 18.703 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 49 Resp: 41181

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.9 | 0.0 | 4.4 |
| 130 | 69.3 | 55.0 | 82.4 |

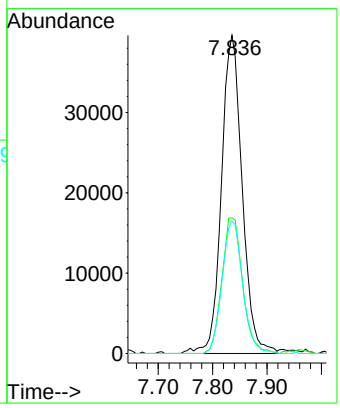





#29
Tetrahydrofuran
Concen: 107.247 ug/l
RT: 7.836 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 42 Resp: 104792

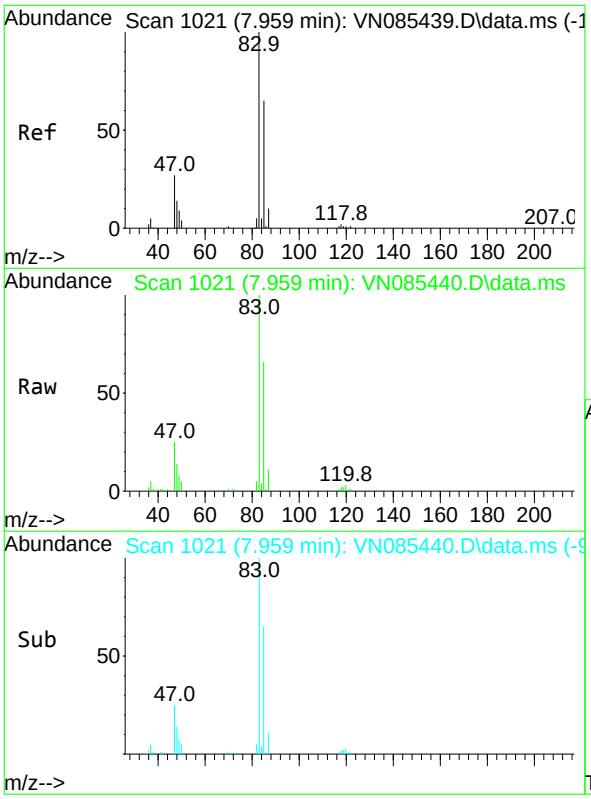
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 42.6 | 34.2 | 51.2 |
| 71 | 41.4 | 32.5 | 48.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

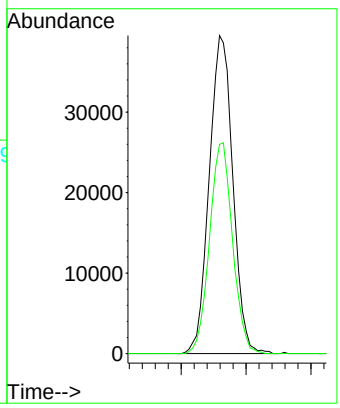
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

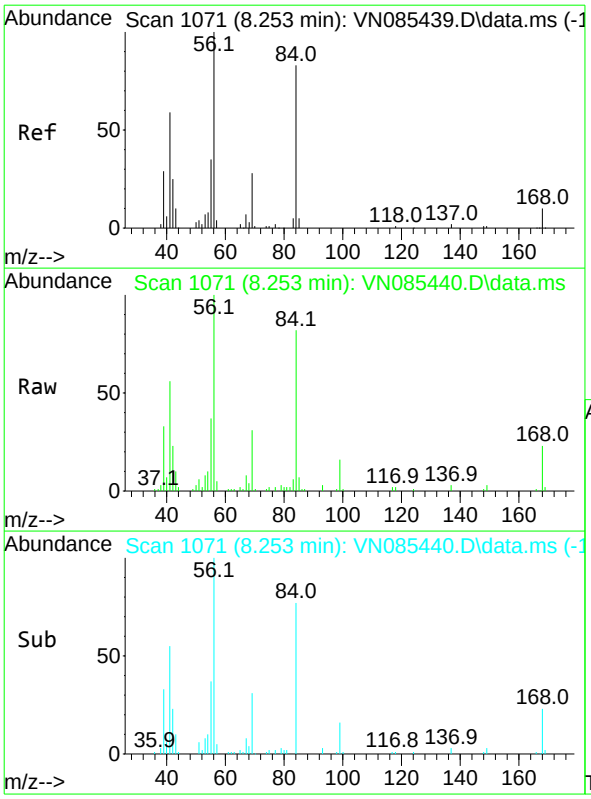



#30
Chloroform
Concen: 20.374 ug/l
RT: 7.959 min Scan# 1021
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 83 Resp: 99655

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 65.8 | 51.8 | 77.6 |

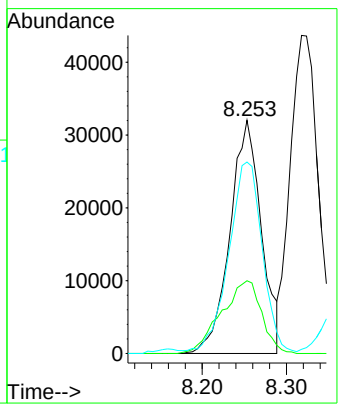





#31
Cyclohexane
Concen: 20.173 ug/l
RT: 8.253 min Scan# 10
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 56 Resp: 82980

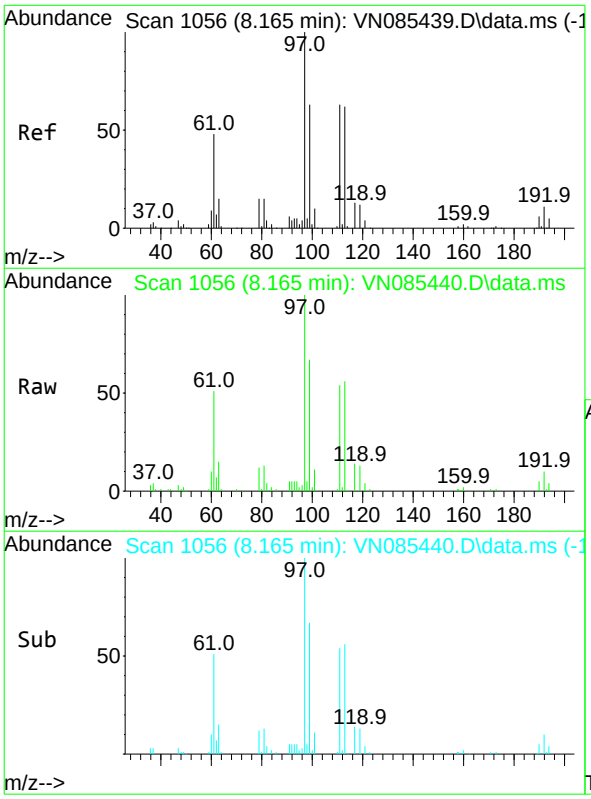
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 31.2 | 22.2 | 33.4 |
| 84 | 80.8 | 66.4 | 99.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

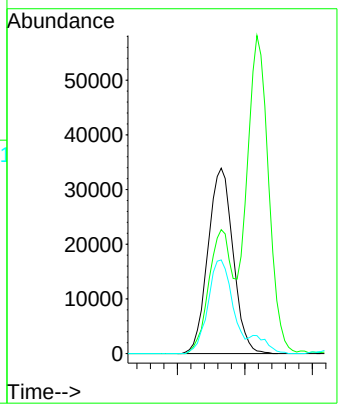
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

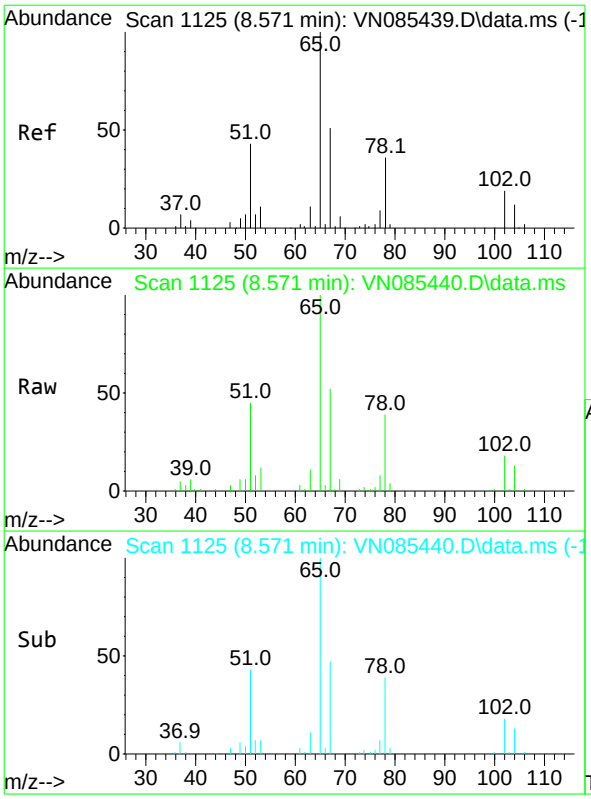



#32
1,1,1-Trichloroethane
Concen: 20.431 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 97 Resp: 87659

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 64.2 | 49.8 | 74.6 |
| 61 | 50.3 | 41.4 | 62.2 |

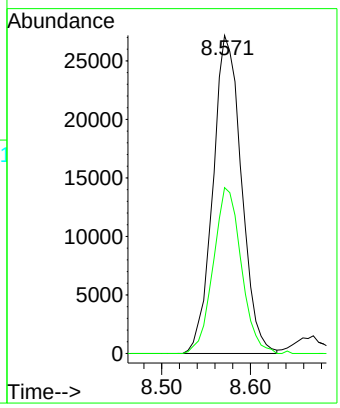





#33
1,2-Dichloroethane-d4
Concen: 18.694 ug/l
RT: 8.571 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 65 Resp: 60593

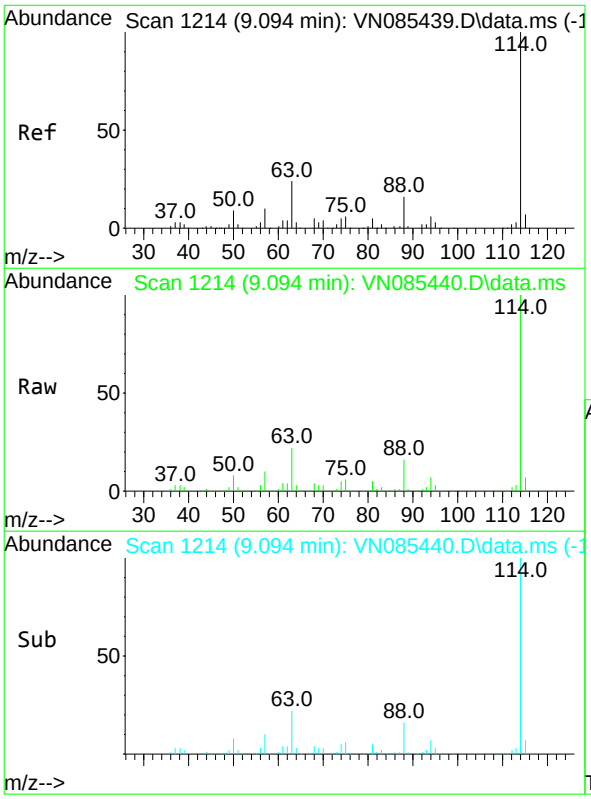
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 51.2 | 0.0 | 101.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

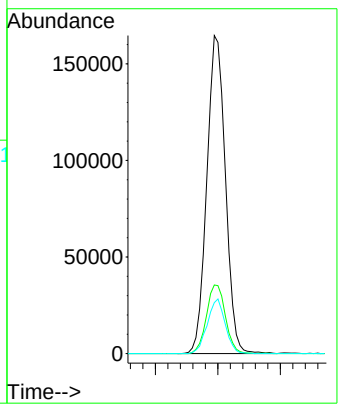
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

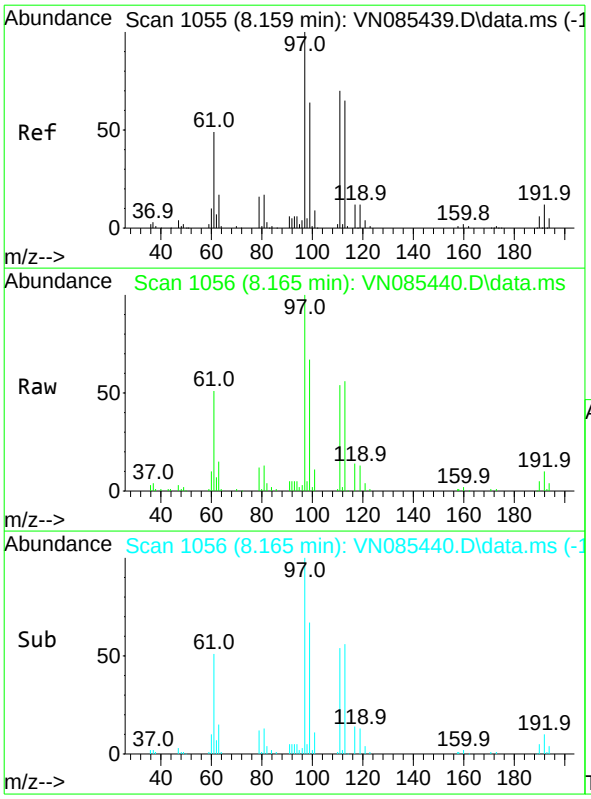



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.094 min Scan# 1214
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:114 Resp: 340593

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 21.6 | 0.0 | 47.6 |
| 88 | 16.0 | 0.0 | 32.6 |

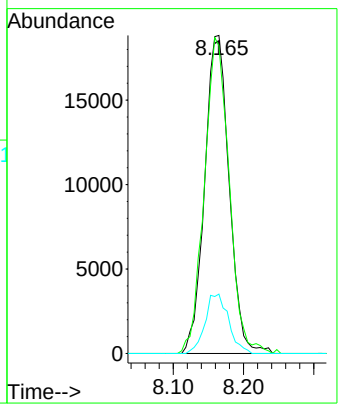





#35
Dibromofluoromethane
Concen: 19.322 ug/l
RT: 8.165 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:113 Resp: 45655

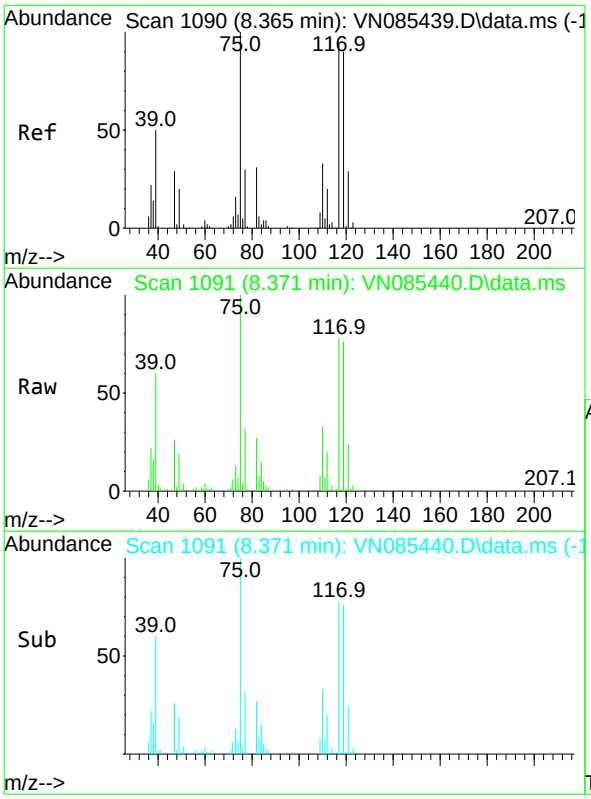
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 100.6 | 82.7 | 124.1 |
| 192 | 17.9 | 14.3 | 21.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

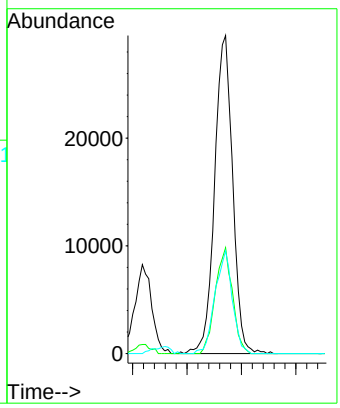
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

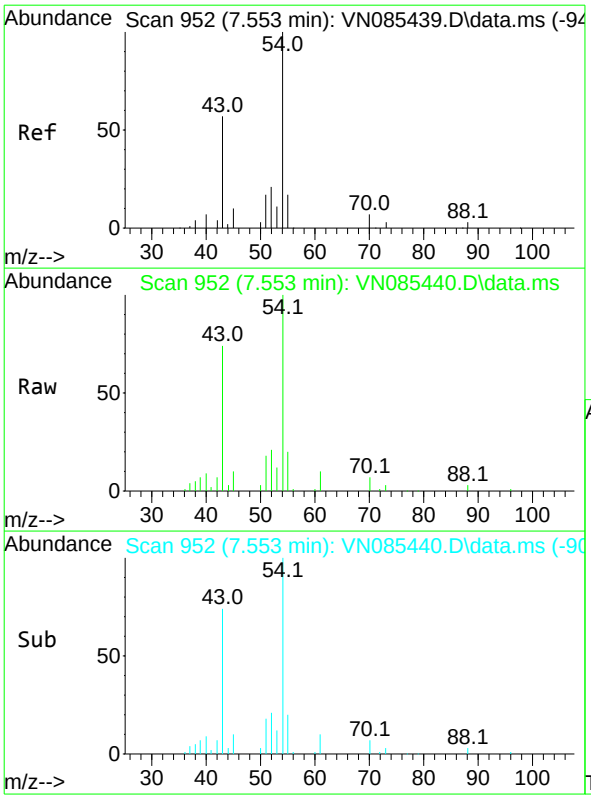



#36
1,1-Dichloropropene
Concen: 20.490 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 75 Resp: 67949

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 31.8 | 16.5 | 49.5 |
| 77 | 31.1 | 24.4 | 36.6 |

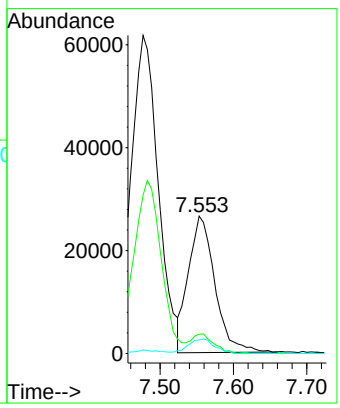





#37
Ethyl Acetate
Concen: 19.850 ug/l
RT: 7.553 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 43 Resp: 66443

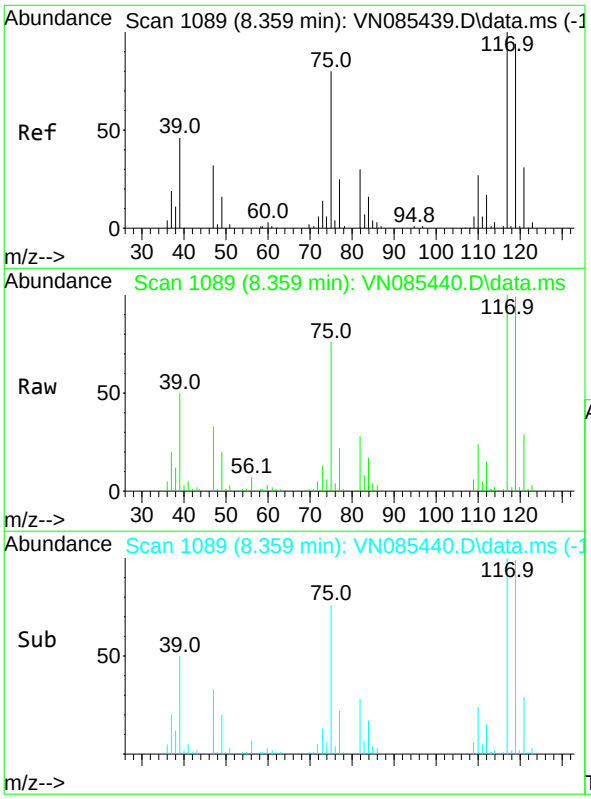
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 11.9 | 10.9 | 16.3 |
| 70 | 10.6 | 7.5 | 11.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

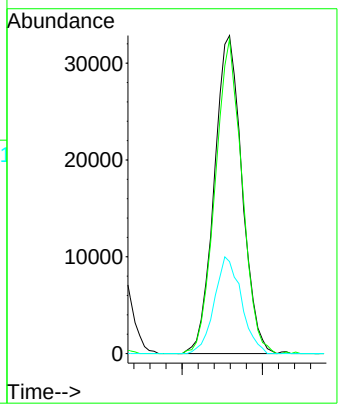
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

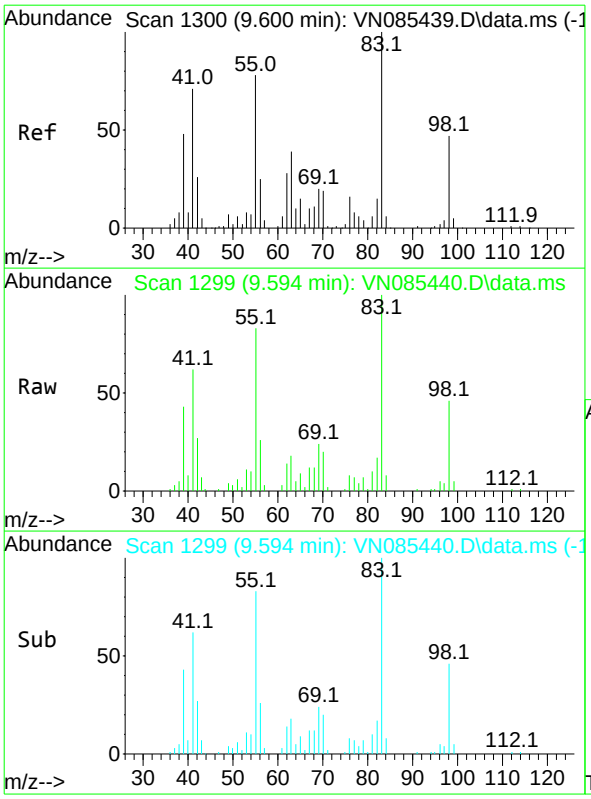



#38
Carbon Tetrachloride
Concen: 20.767 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:117 Resp: 78842

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 98.9 | 75.4 | 113.2 |
| 121 | 28.9 | 24.6 | 37.0 |

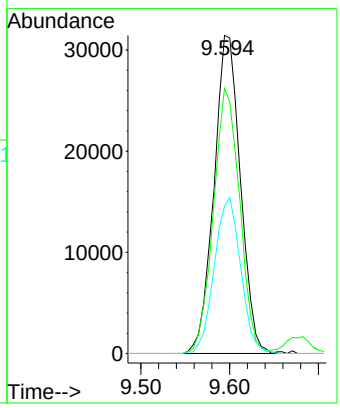





#39
Methylcyclohexane
Concen: 20.862 ug/l
RT: 9.594 min Scan# 12
Delta R.T. -0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 83 Resp: 65012

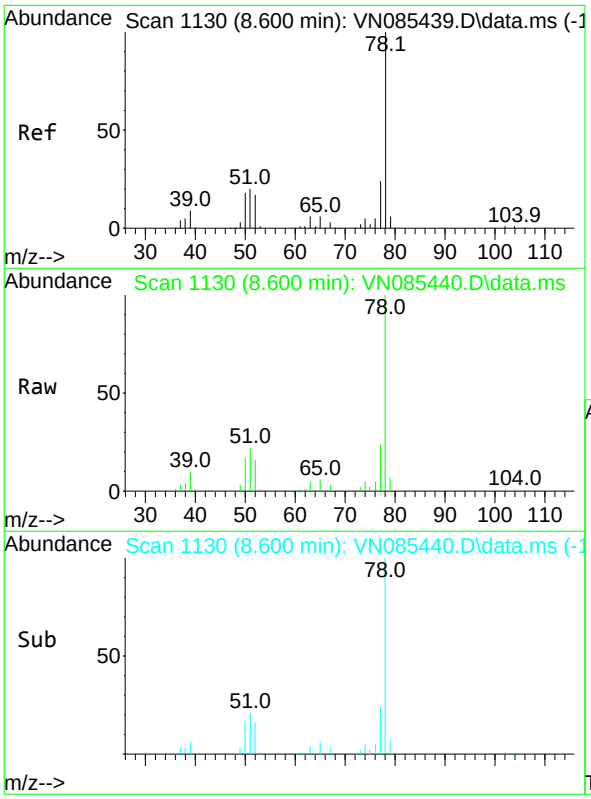
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 83.4 | 62.6 | 94.0 |
| 98 | 46.4 | 37.7 | 56.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

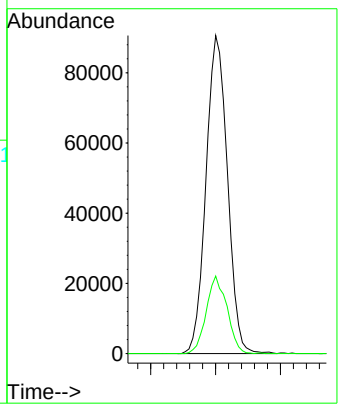
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

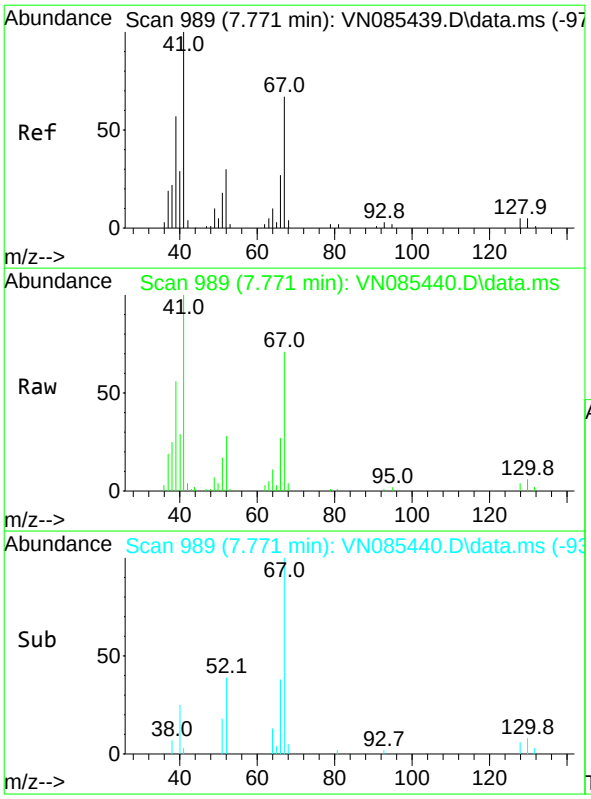



#40
Benzene
Concen: 20.873 ug/l
RT: 8.600 min Scan# 1130
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 78 Resp: 207985

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 24.4 | 19.0 | 28.6 |

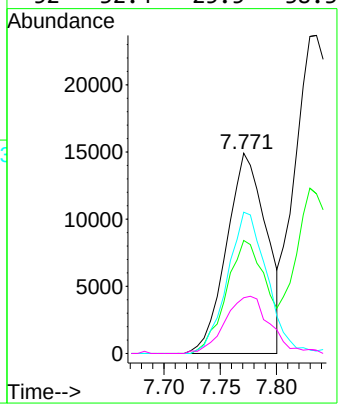





#41
Methacrylonitrile
Concen: 21.004 ug/l
RT: 7.771 min Scan# 98
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 41 Resp: 36578

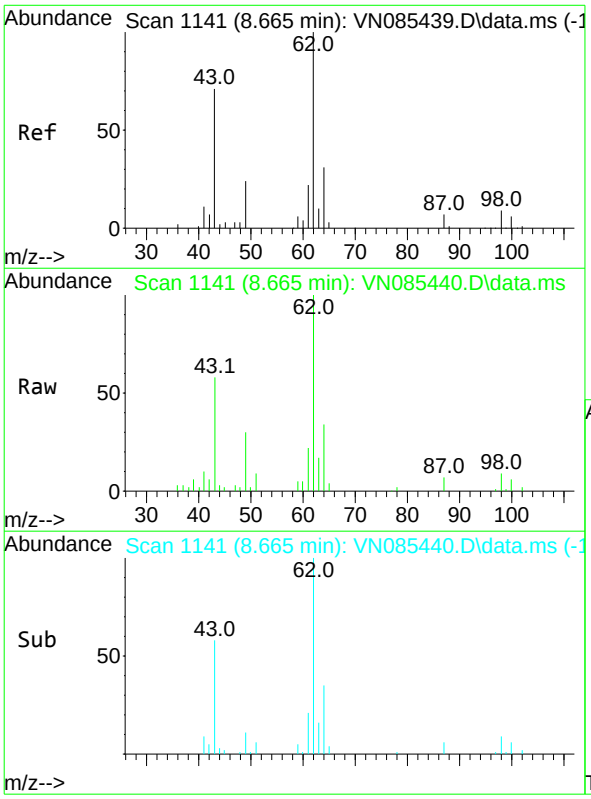
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 56.6 | 46.0 | 69.0 |
| 67 | 70.3 | 57.4 | 86.2 |
| 52 | 32.4 | 25.5 | 38.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

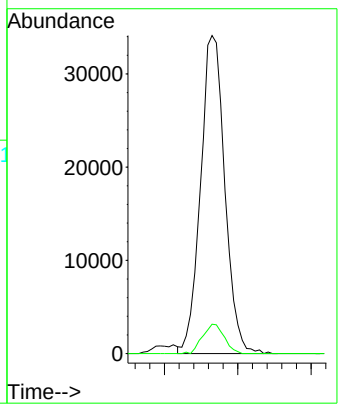
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

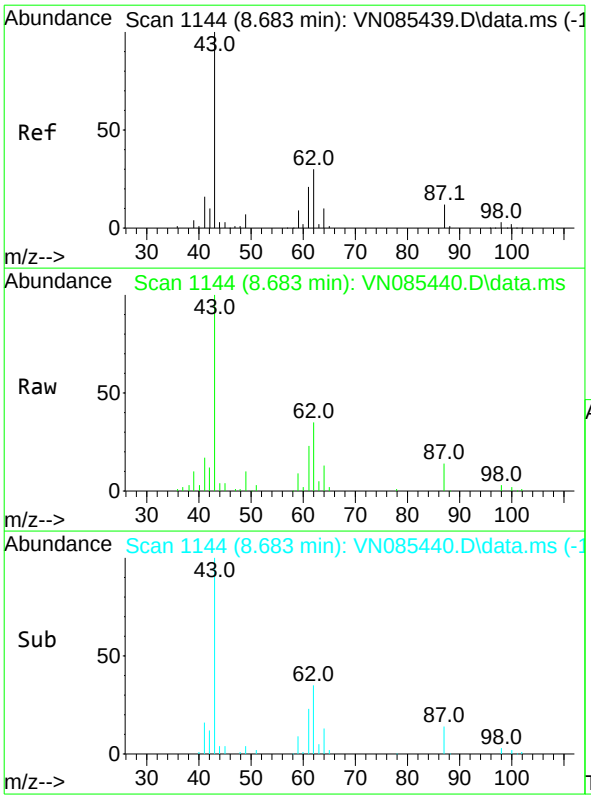



#42
1,2-Dichloroethane
Concen: 20.891 ug/l
RT: 8.665 min Scan# 1141
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 62 Resp: 78402

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 8.3 | 0.0 | 17.0 |

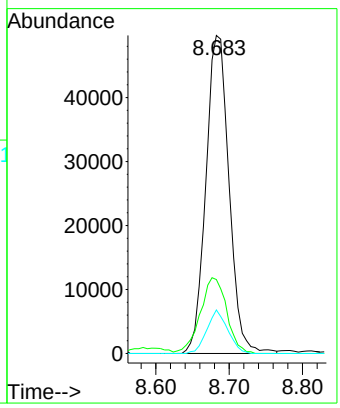





#43
Isopropyl Acetate
Concen: 20.347 ug/l
RT: 8.683 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 43 Resp: 109131

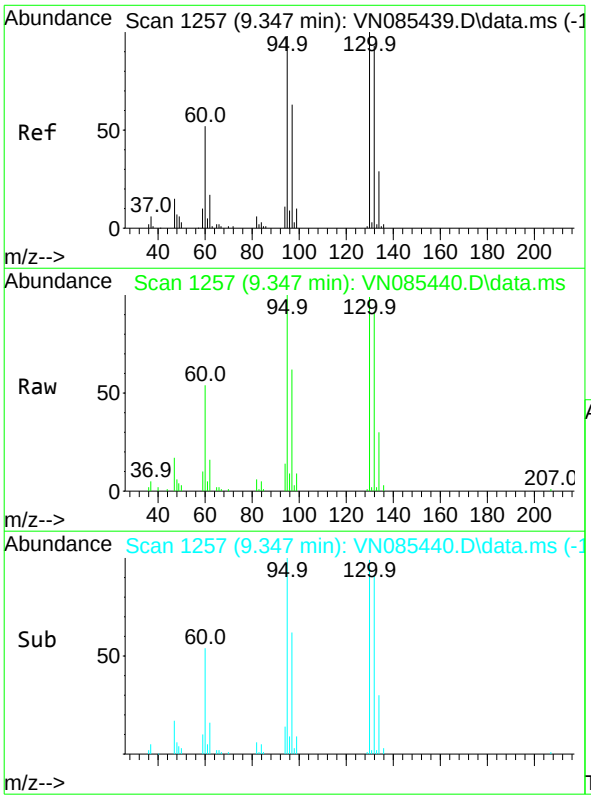
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 27.2 | 20.7 | 31.1 |
| 87 | 12.3 | 9.8 | 14.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

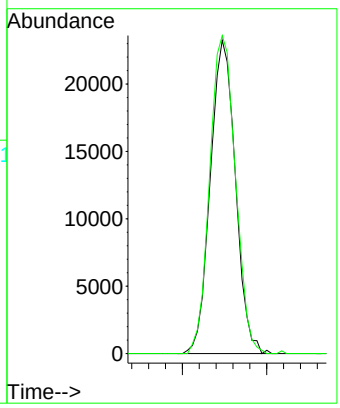
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

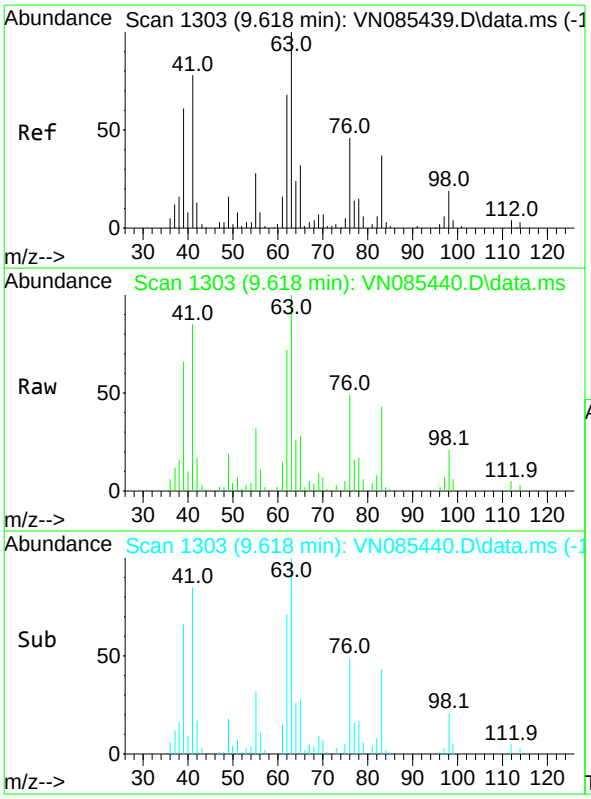



#44
Trichloroethene
Concen: 20.699 ug/l
RT: 9.347 min Scan# 1257
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:130 Resp: 48009

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 101.5 | 0.0 | 195.8 |

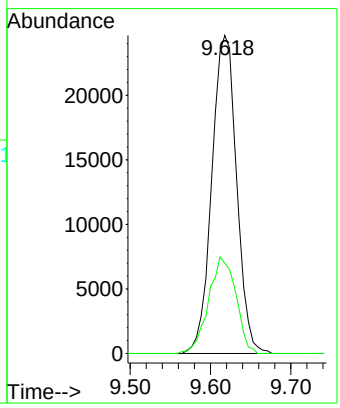





#45
1,2-Dichloropropane
Concen: 20.758 ug/l
RT: 9.618 min Scan# 13
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 63 Resp: 52833

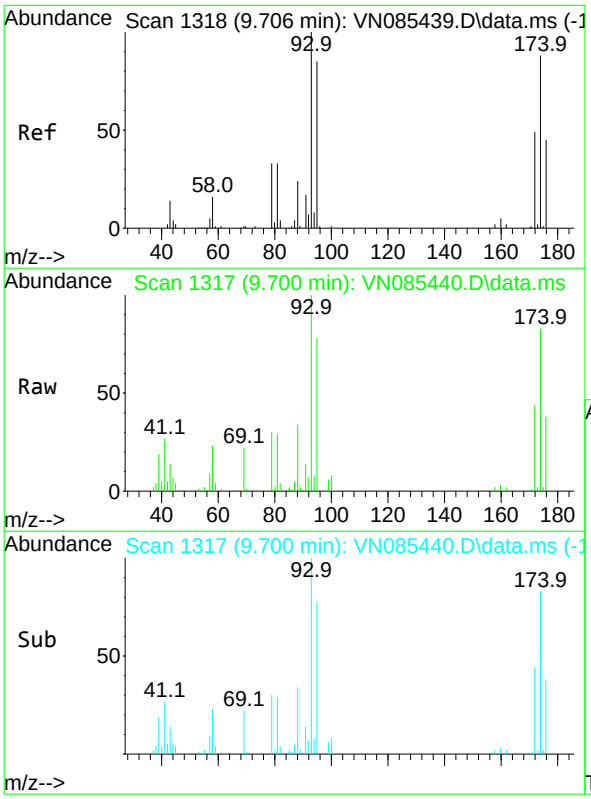
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 28.3 | 25.6 | 38.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

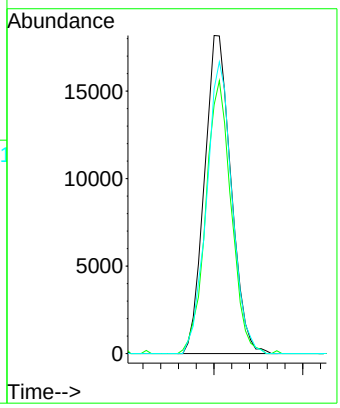
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

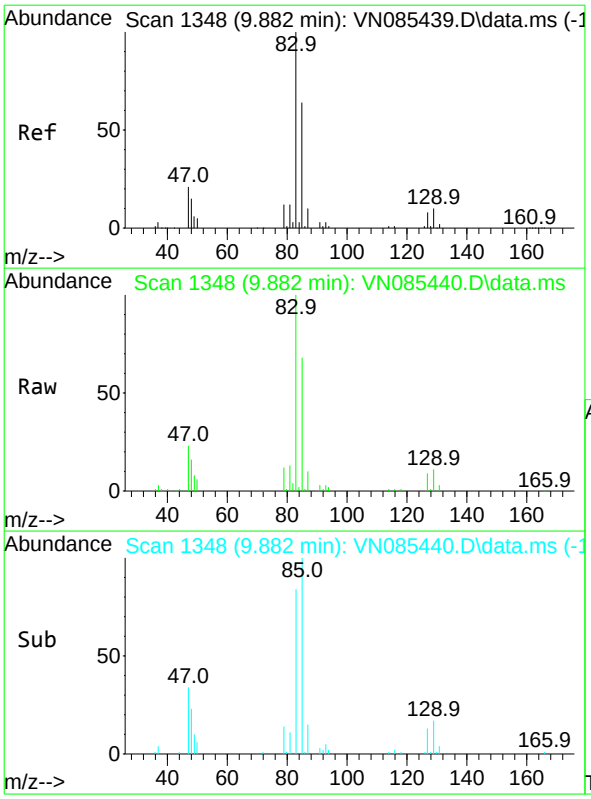



#46
Dibromomethane
Concen: 20.540 ug/l
RT: 9.700 min Scan# 1317
Delta R.T. -0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 93 Resp: 37721

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 82.0 | 64.7 | 97.1 |
| 174 | 88.4 | 69.0 | 103.4 |

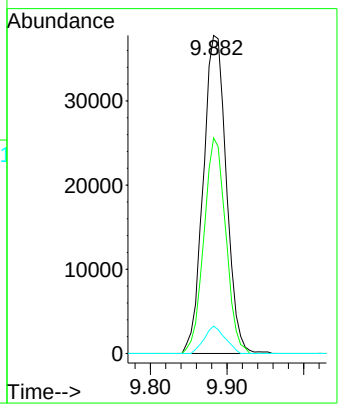





#47
Bromodichloromethane
Concen: 21.093 ug/l
RT: 9.882 min Scan# 13
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 83 Resp: 78918

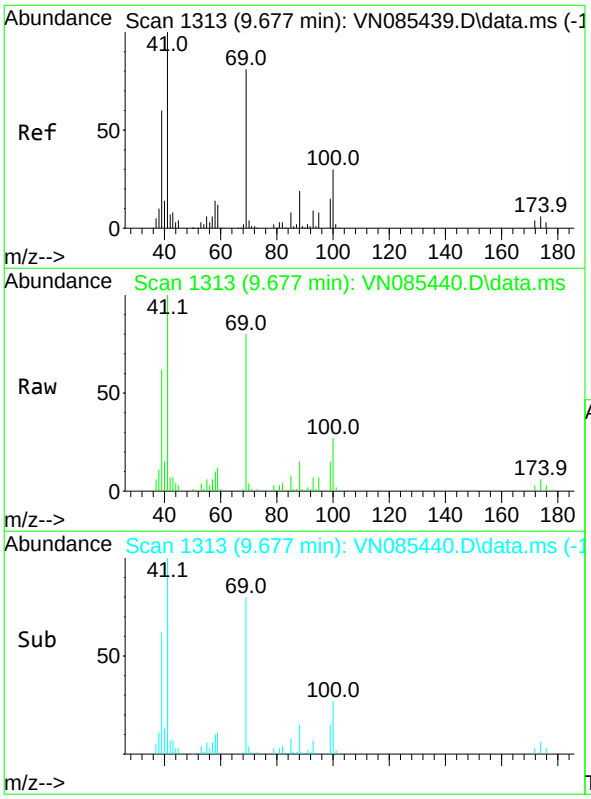
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 67.8 | 51.2 | 76.8 |
| 127 | 8.6 | 6.5 | 9.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

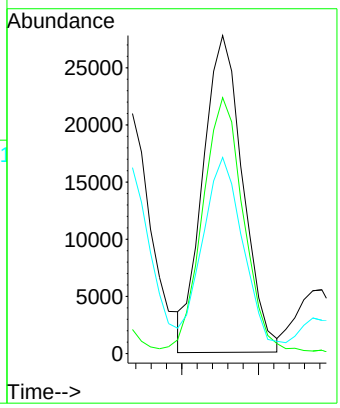
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

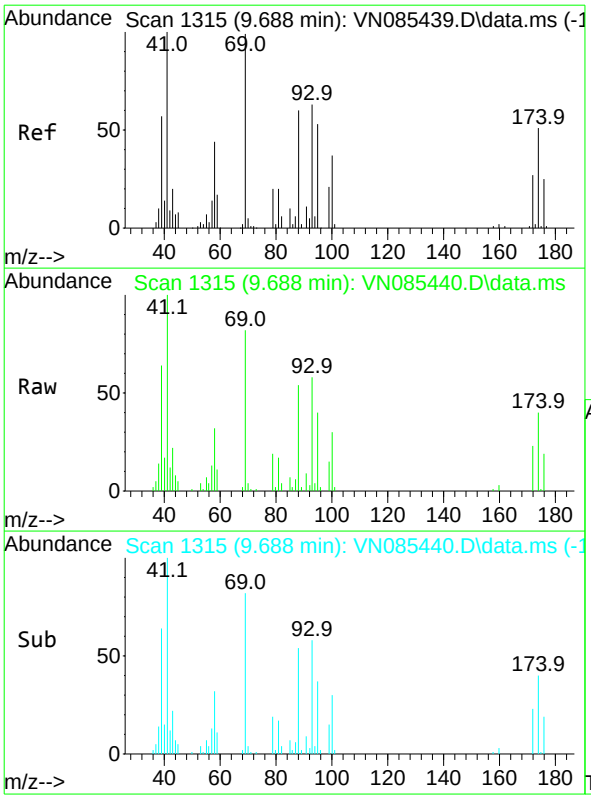



#48
Methyl methacrylate
Concen: 20.808 ug/l
RT: 9.677 min Scan# 1313
Delta R.T. -0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 41 Resp: 50224

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 84.3 | 64.7 | 97.1 |
| 39 | 64.2 | 49.0 | 73.6 |

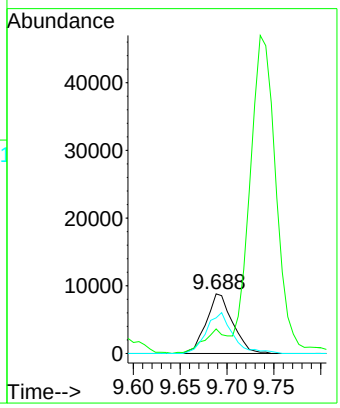





#49
1,4-Dioxane
Concen: 421.686 ug/l
RT: 9.688 min Scan# 13
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 88 Resp: 17140

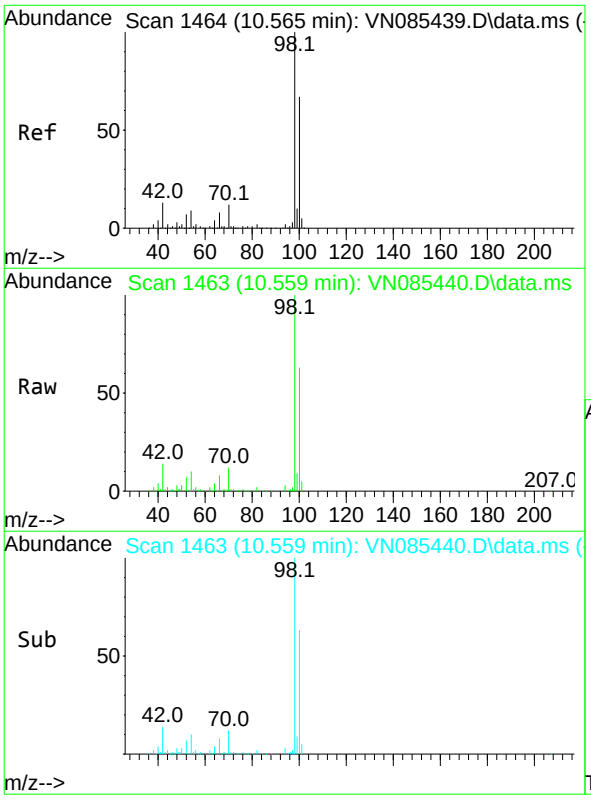
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 34.9 | 26.6 | 39.8 |
| 58 | 69.0 | 59.5 | 89.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

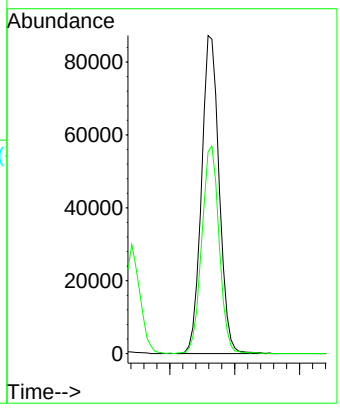
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

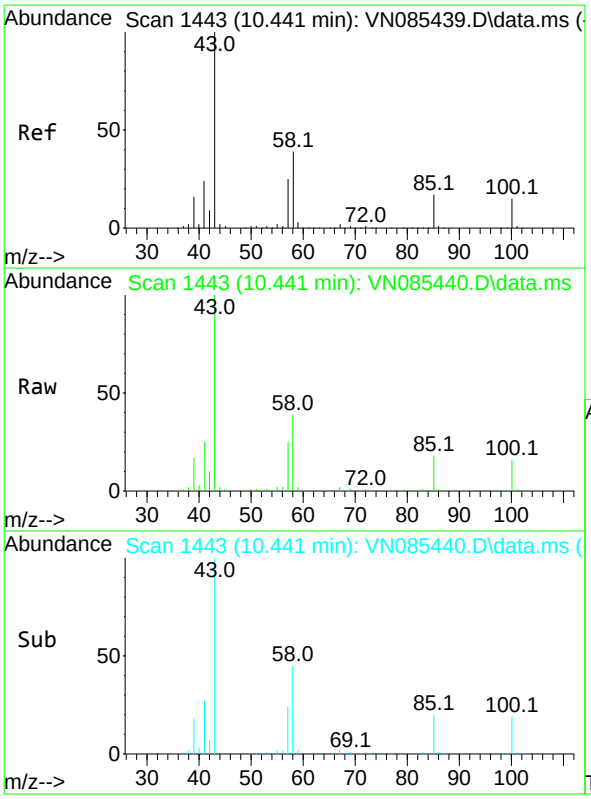



#50
Toluene-d8
Concen: 19.581 ug/l
RT: 10.559 min Scan# 1463
Delta R.T. -0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 98 Resp: 164391

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.4 | 52.2 | 78.4 |

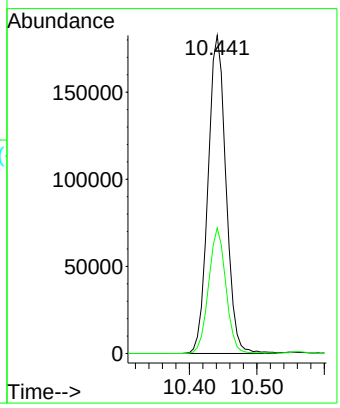





#51
4-Methyl-2-Pentanone
Concen: 108.249 ug/l
RT: 10.441 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 43 Resp: 336911

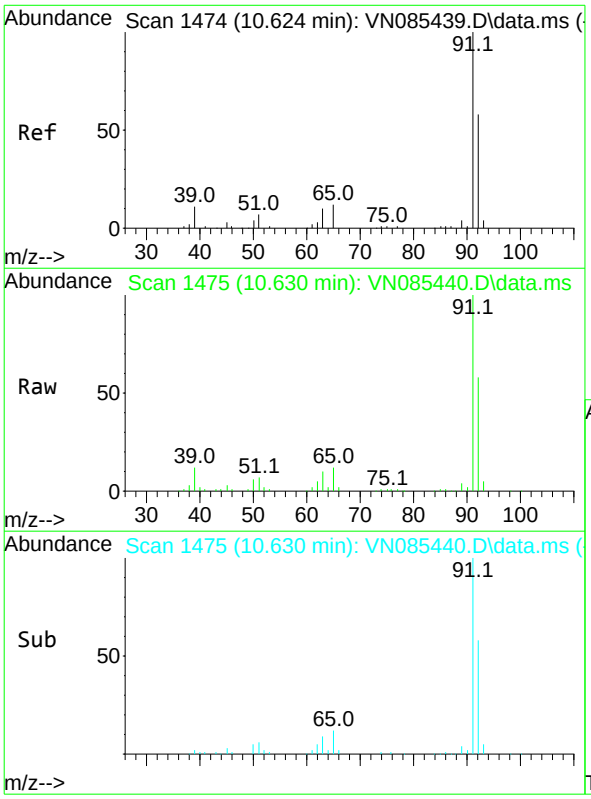
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 38.1 | 30.5 | 45.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

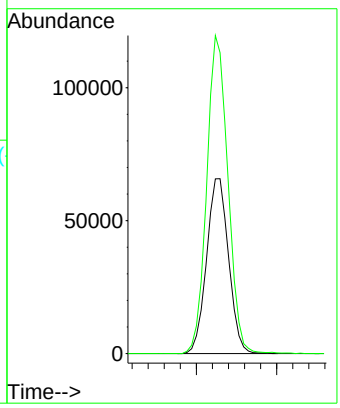
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

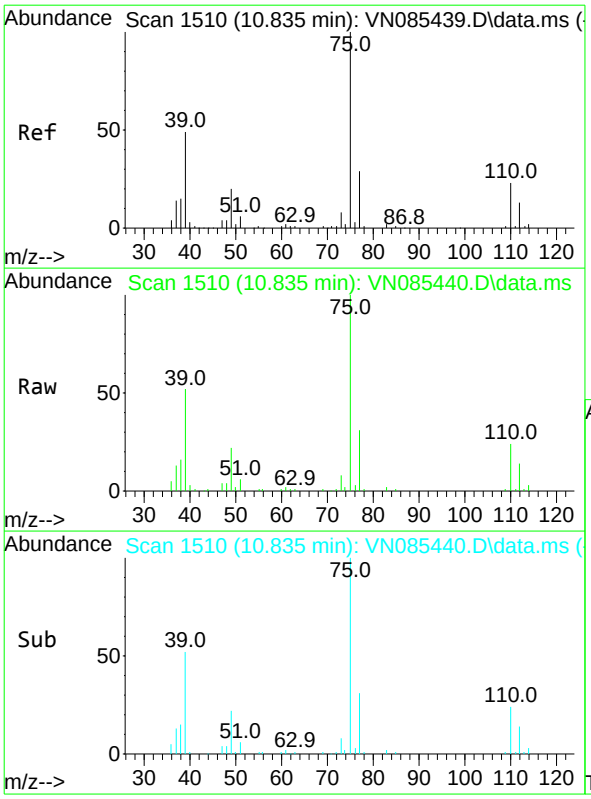



#52
Toluene
Concen: 21.680 ug/l
RT: 10.630 min Scan# 1475
Delta R.T. 0.005 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 92 Resp: 125172

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 175.1 | 139.2 | 208.8 |

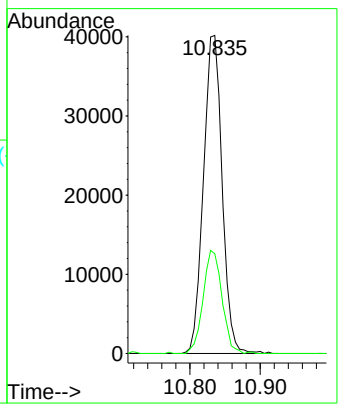





#53
t-1,3-Dichloropropene
Concen: 20.965 ug/l
RT: 10.835 min Scan# 15
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 75 Resp: 74129

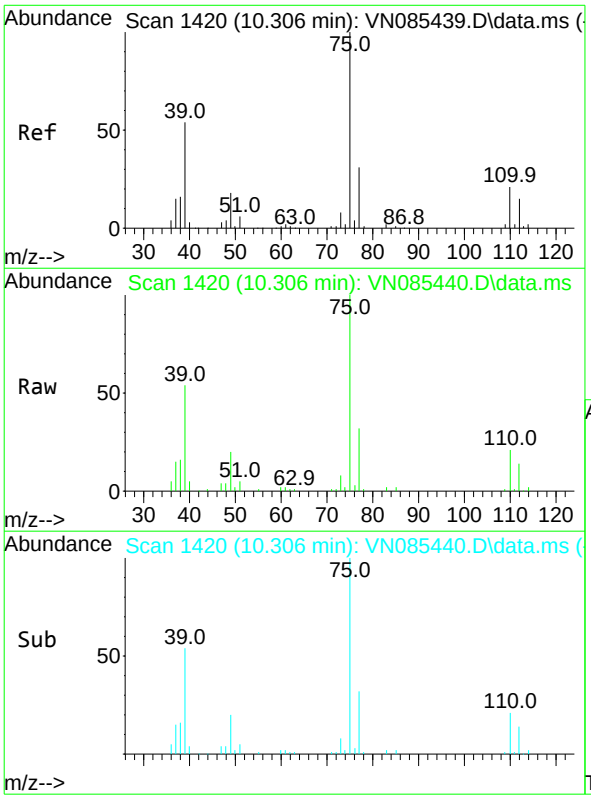
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.4 | 23.5 | 35.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

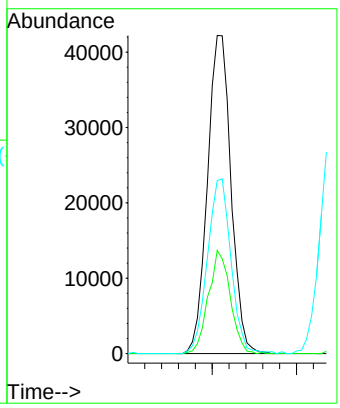
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

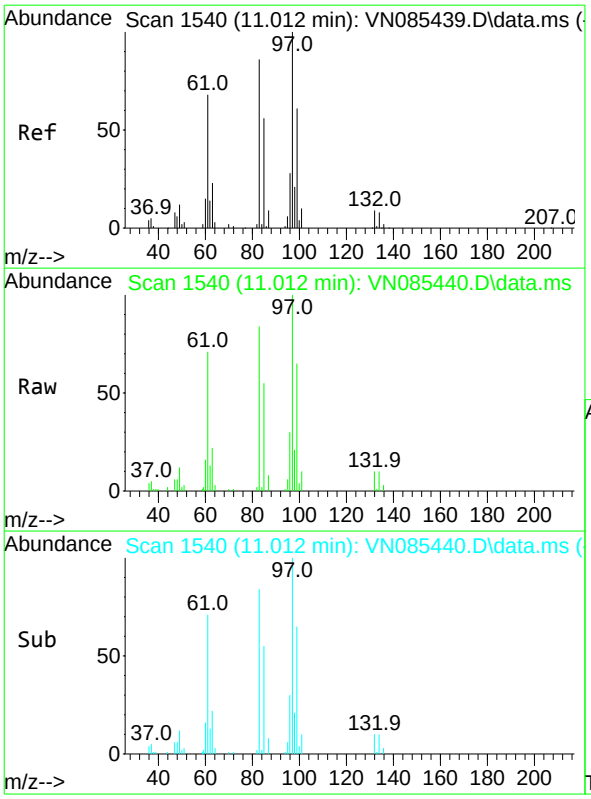



#54
cis-1,3-Dichloropropene
Concen: 21.684 ug/l
RT: 10.306 min Scan# 1420
Delta R.T. -0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 75 Resp: 81897

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.4 | 25.0 | 37.4 |
| 39 | 54.4 | 43.1 | 64.7 |

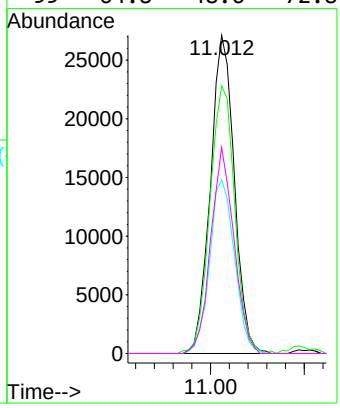





#55
1,1,2-Trichloroethane
Concen: 21.025 ug/l
RT: 11.012 min Scan# 15
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 97 Resp: 48039

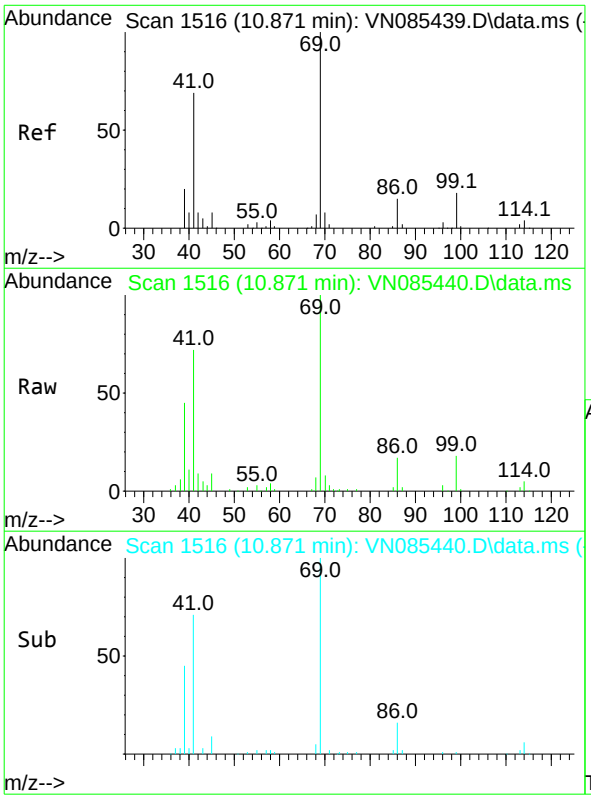
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 84.1 | 69.0 | 103.6 |
| 85 | 54.6 | 44.6 | 66.8 |
| 99 | 64.8 | 48.6 | 72.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

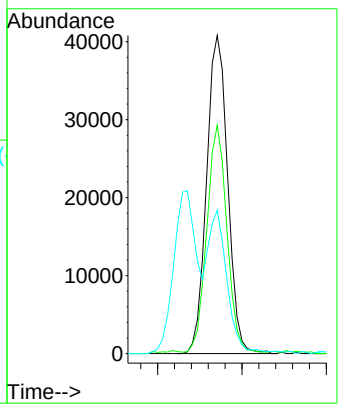
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

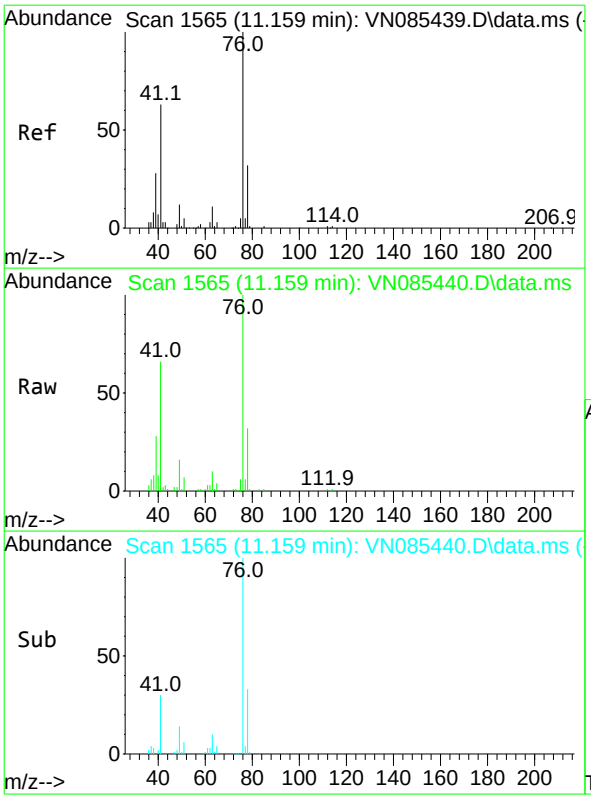



#56
Ethyl methacrylate
Concen: 19.649 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 69 Resp: 70934

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 67.6 | 54.6 | 82.0 |
| 39 | 41.7 | 32.4 | 48.6 |

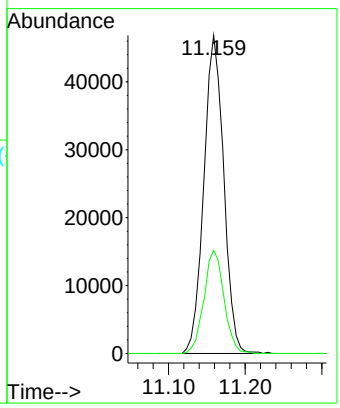





#57
1,3-Dichloropropane
Concen: 21.196 ug/l
RT: 11.159 min Scan# 15
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 76 Resp: 84210

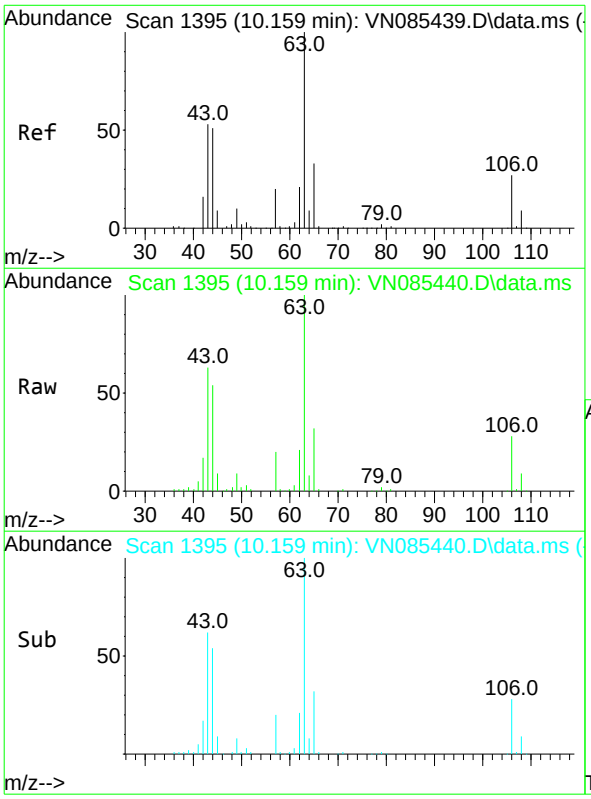
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.7 | 25.6 | 38.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

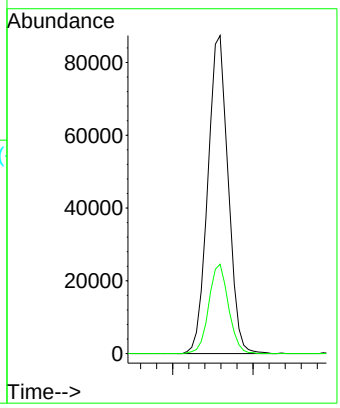
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

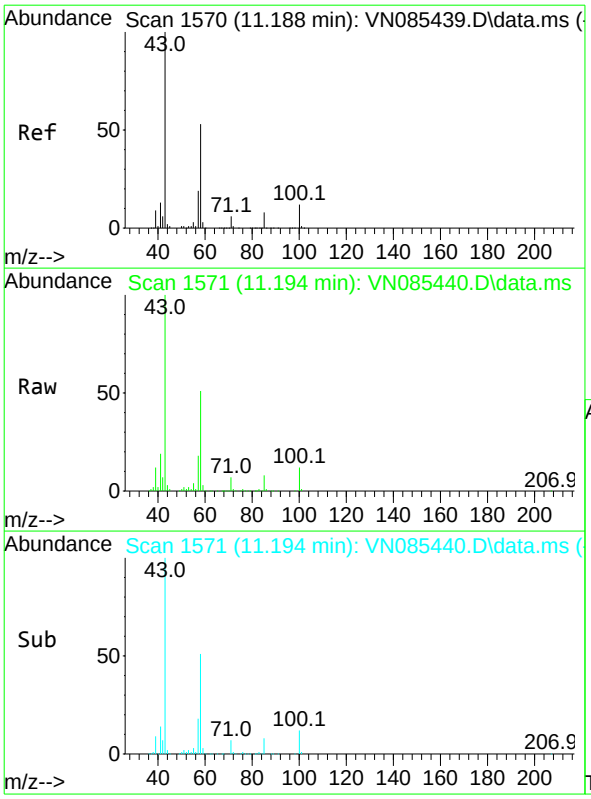



#58
2-Chloroethyl Vinyl ether
Concen: 105.991 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 63 Resp: 153681

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 27.2 | 21.6 | 32.4 |

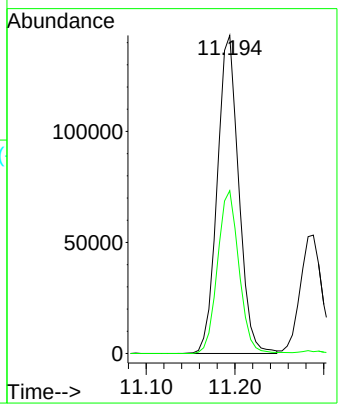





#59
2-Hexanone
Concen: 109.863 ug/l
RT: 11.194 min Scan# 15
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 43 Resp: 240595

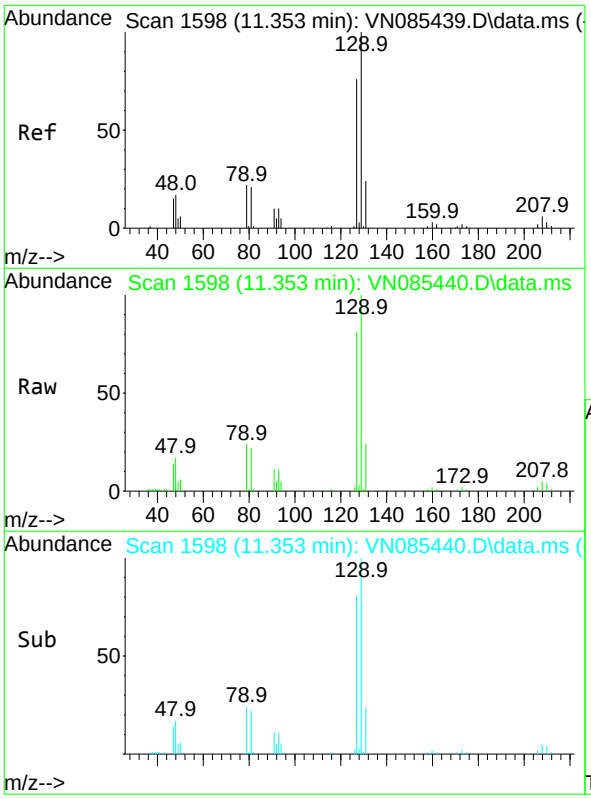
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 51.1 | 26.2 | 78.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

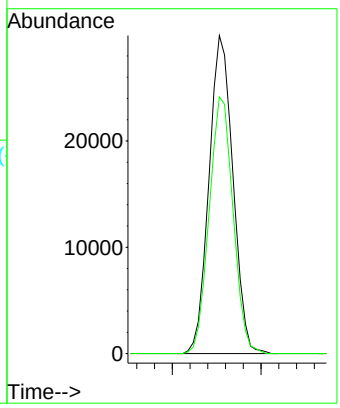
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

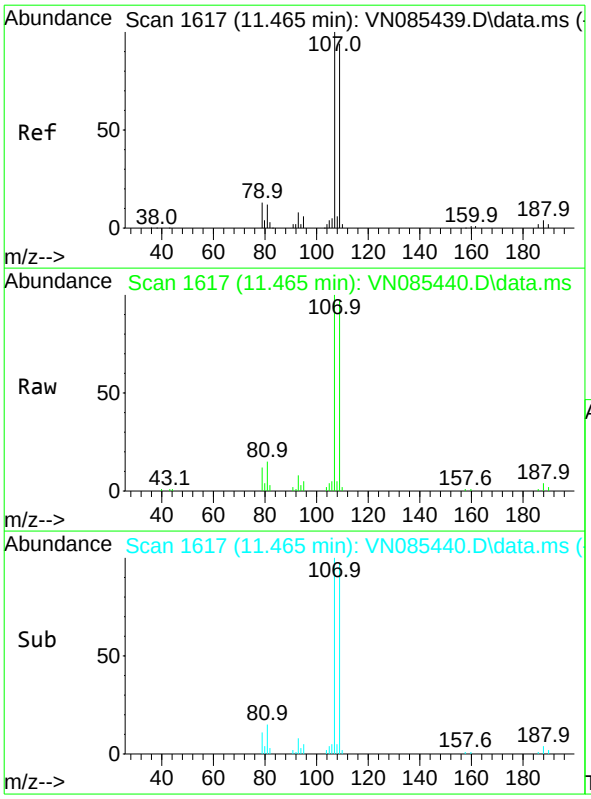



#60
Dibromochloromethane
Concen: 20.326 ug/l
RT: 11.353 min Scan# 1598
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:129 Resp: 56069

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 80.4 | 38.6 | 115.8 |

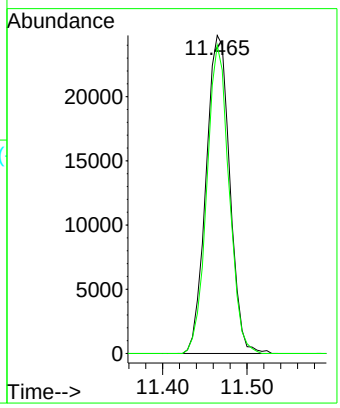





#61
1,2-Dibromoethane
Concen: 21.309 ug/l
RT: 11.465 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:107 Resp: 48465

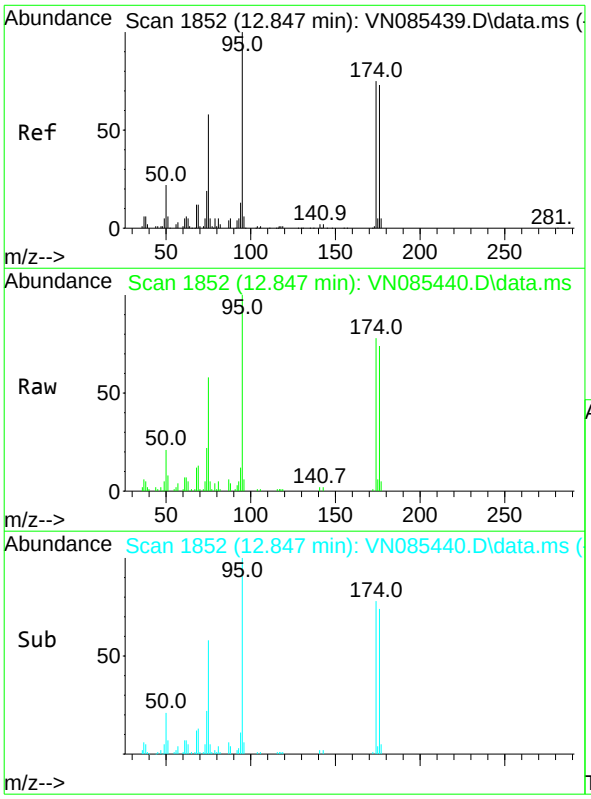
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 90.6 | 75.9 | 113.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

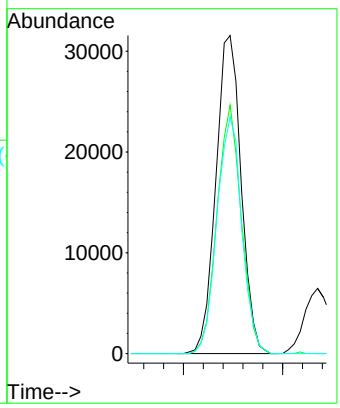
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

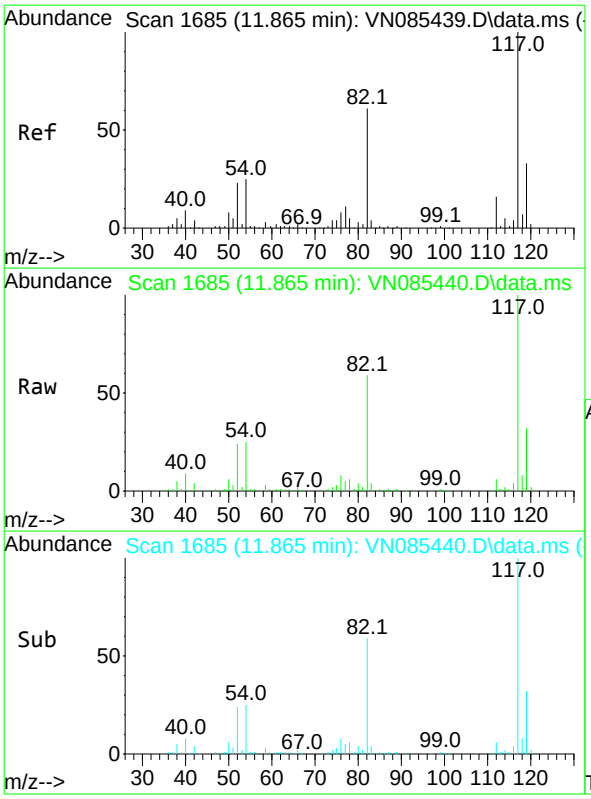



#62
4-Bromofluorobenzene
Concen: 19.430 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 95 Resp: 55798

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 75.2 | 0.0 | 145.0 |
| 176 | 73.2 | 0.0 | 142.4 |

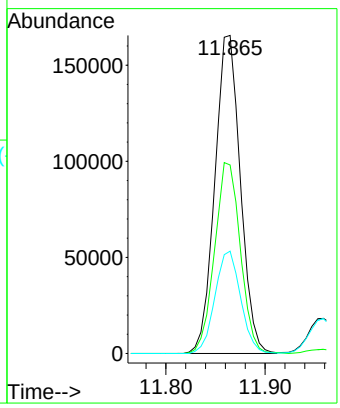





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:117 Resp: 296298

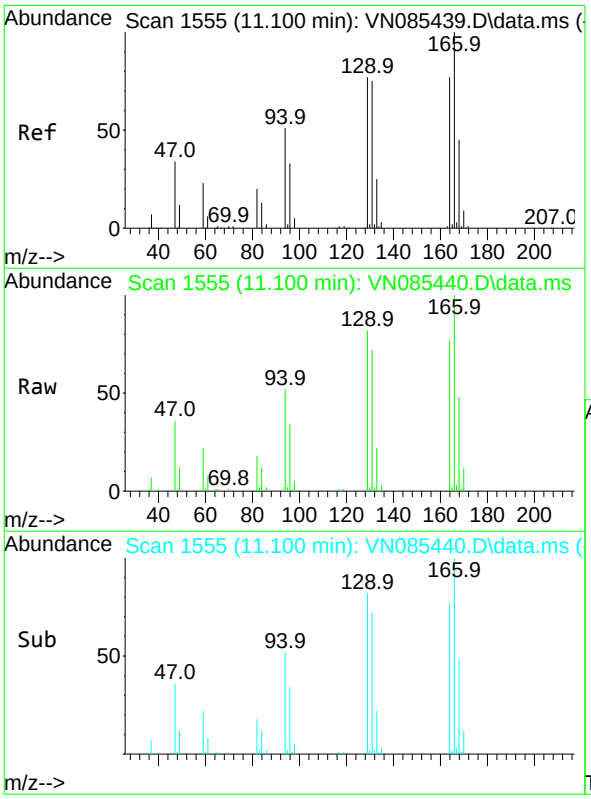
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 59.3 | 48.6 | 72.8 |
| 119 | 32.2 | 26.6 | 39.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

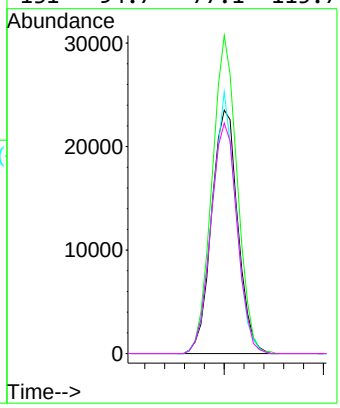
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

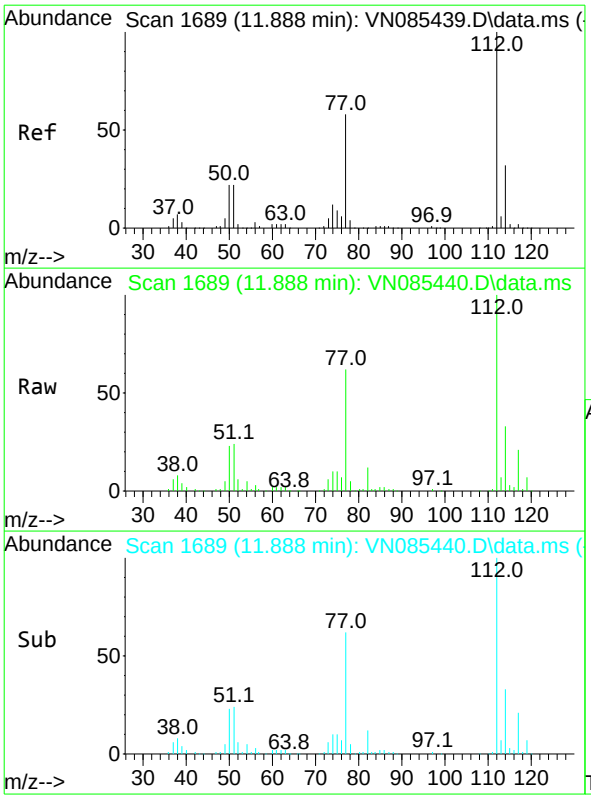



#64
Tetrachloroethene
Concen: 21.408 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:164 Resp: 43243

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 130.6 | 103.4 | 155.2 |
| 129 | 107.4 | 79.2 | 118.8 |
| 131 | 94.7 | 77.1 | 115.7 |

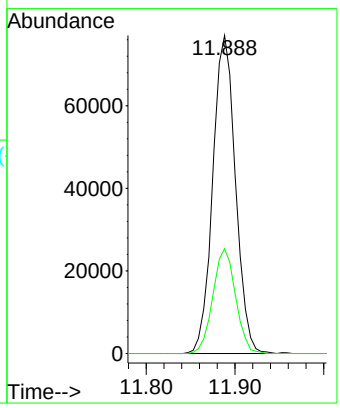





#65
Chlorobenzene
Concen: 21.077 ug/l
RT: 11.888 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:112 Resp: 136809

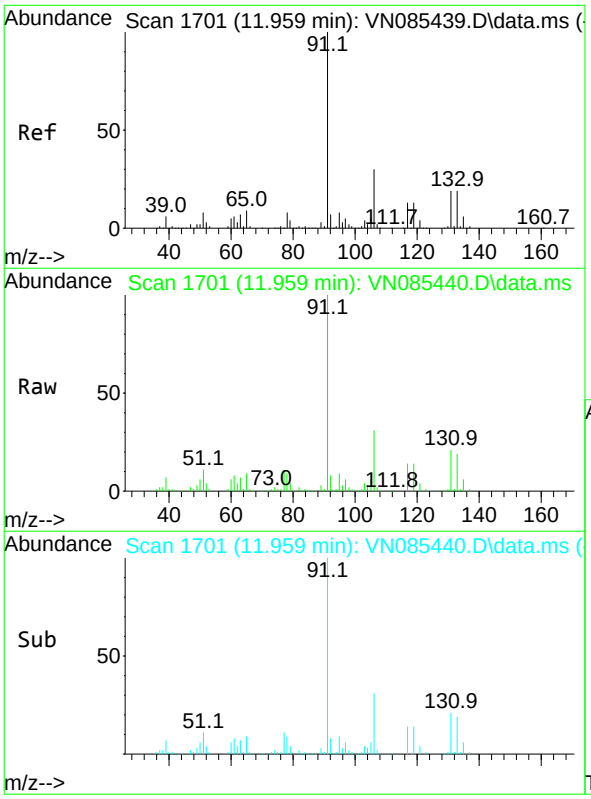
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 32.9 | 25.3 | 37.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

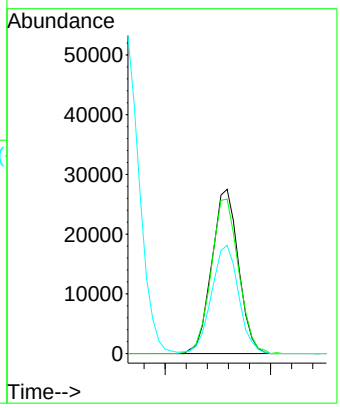
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

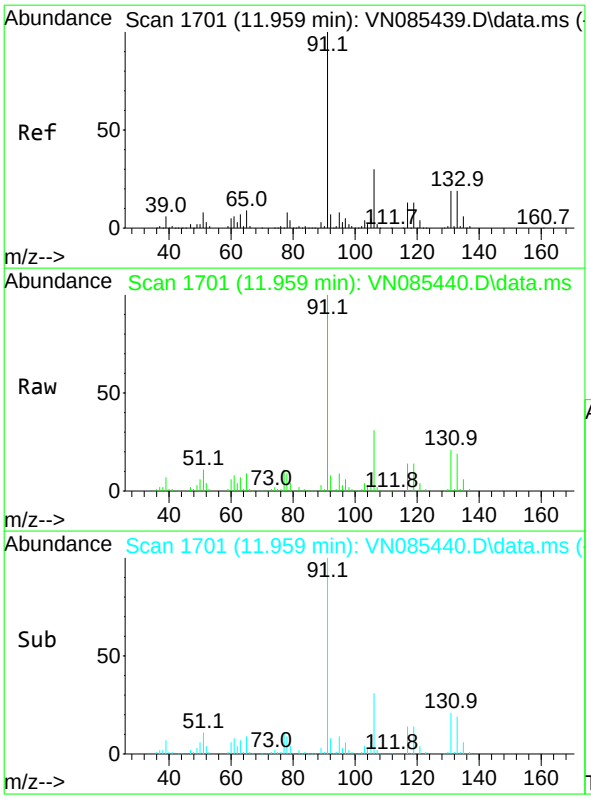



#66
1,1,1,2-Tetrachloroethane
Concen: 20.304 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:131 Resp: 48370

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 96.9 | 47.4 | 142.3 |
| 119 | 67.2 | 33.1 | 99.5 |

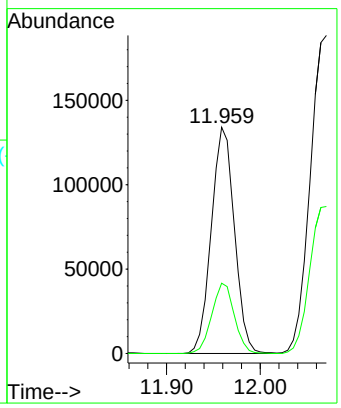





#67
Ethyl Benzene
Concen: 21.753 ug/l
RT: 11.959 min Scan# 17
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 91 Resp: 229978

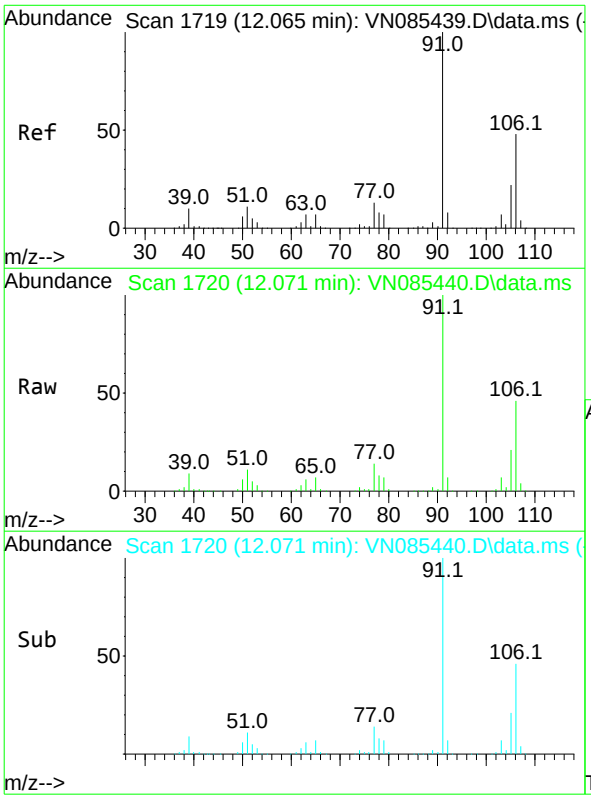
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 31.1 | 23.8 | 35.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

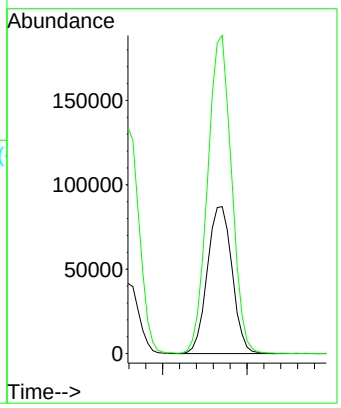
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

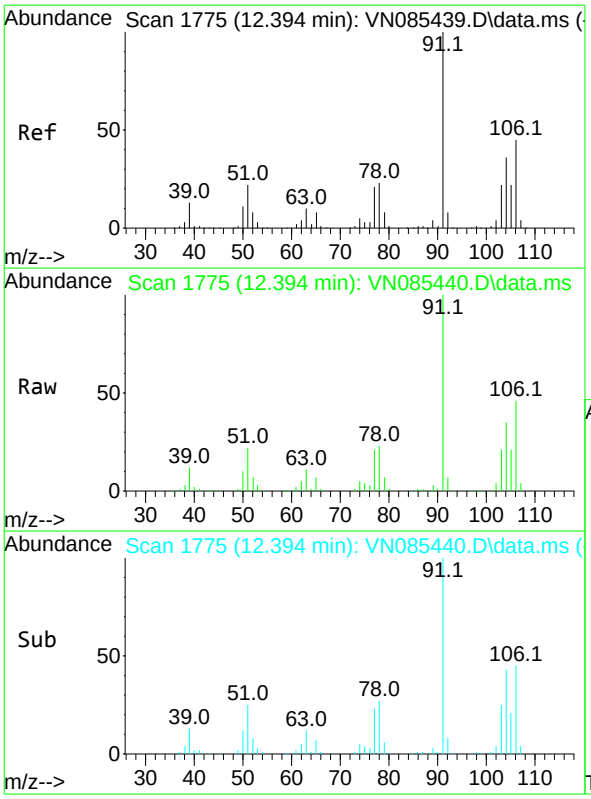



#68
m/p-Xylenes
Concen: 45.494 ug/l
RT: 12.071 min Scan# 1720
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:106 Resp: 177755

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 209.3 | 167.7 | 251.5 |

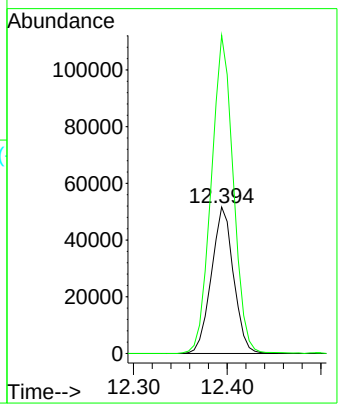





#69
o-Xylene
Concen: 22.643 ug/l
RT: 12.394 min Scan# 17
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:106 Resp: 84548

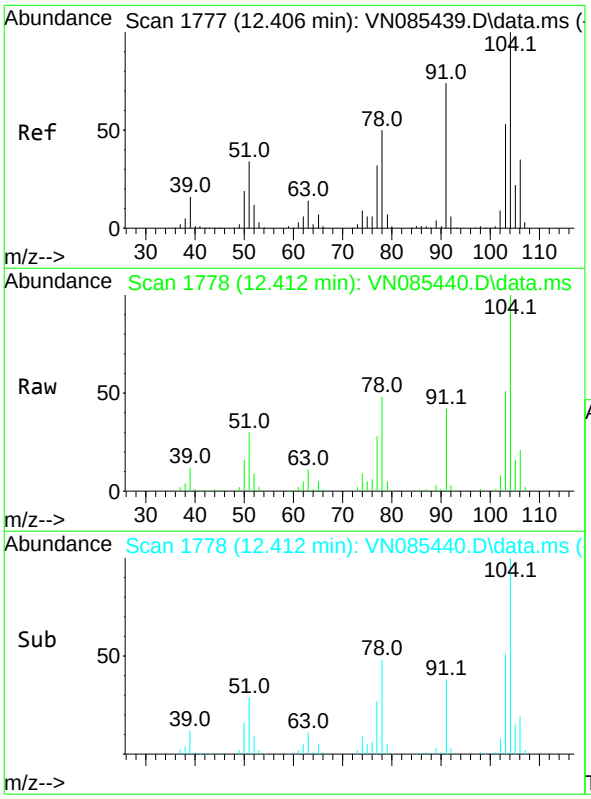
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 217.0 | 110.4 | 331.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

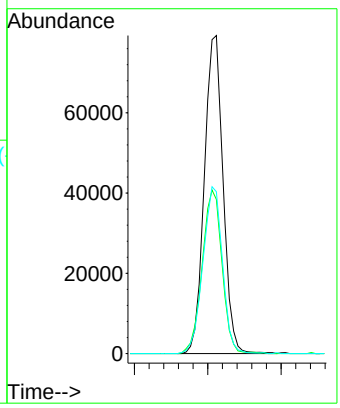
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

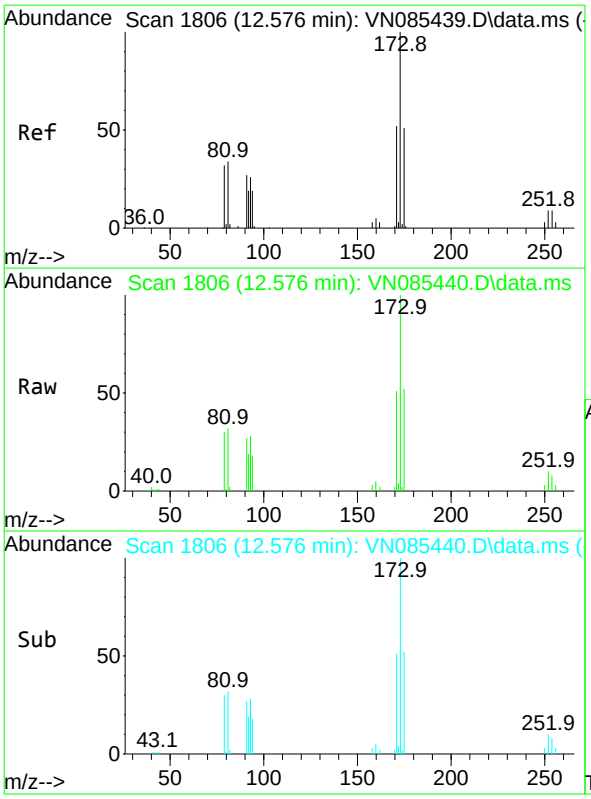



#70
Styrene
Concen: 22.749 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:104 Resp: 140581

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 54.4 | 42.5 | 63.7 |
| 103 | 54.8 | 43.8 | 65.8 |

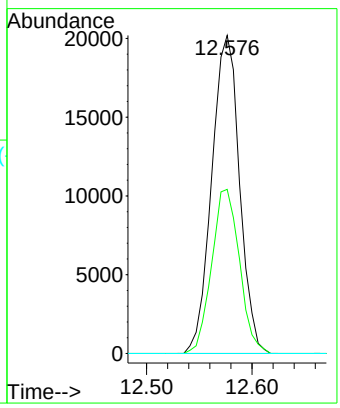





#71
Bromoform
Concen: 21.683 ug/l
RT: 12.576 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:173 Resp: 36961

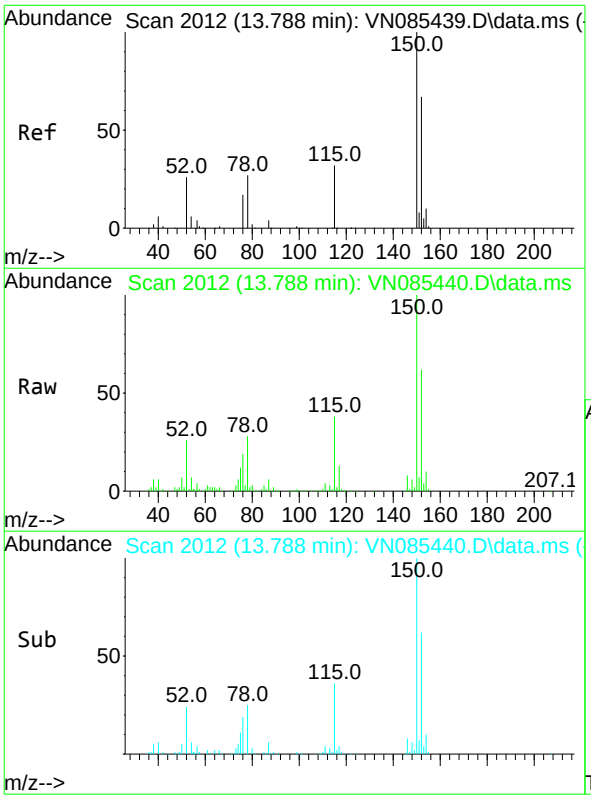
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 51.7 | 24.4 | 73.2 |
| 254 | 0.0 | 0.0 | 0.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

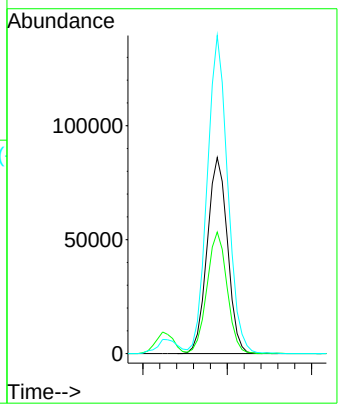
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

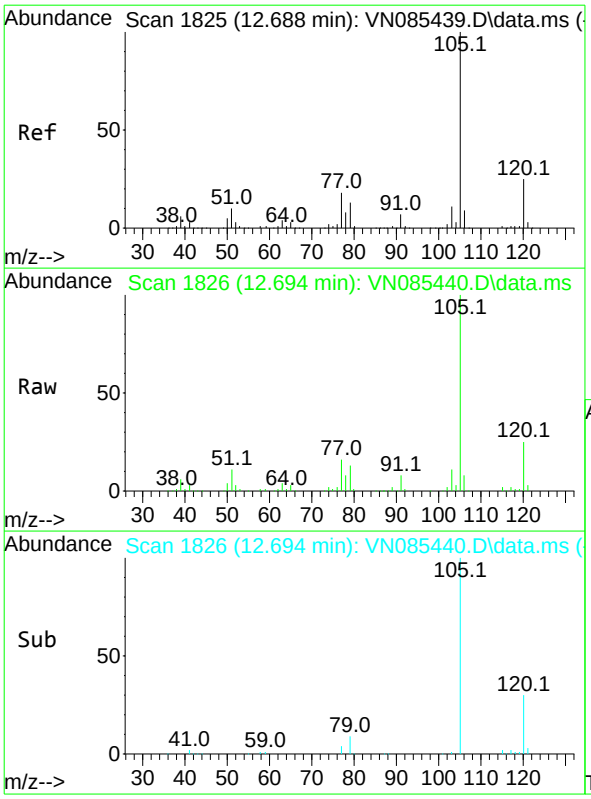



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:152 Resp: 143526

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 61.4 | 31.1 | 93.3 |
| 150 | 163.9 | 0.0 | 343.6 |

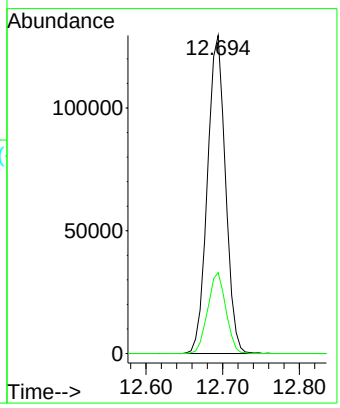





#73
Isopropylbenzene
Concen: 21.819 ug/l
RT: 12.694 min Scan# 18
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:105 Resp: 211354

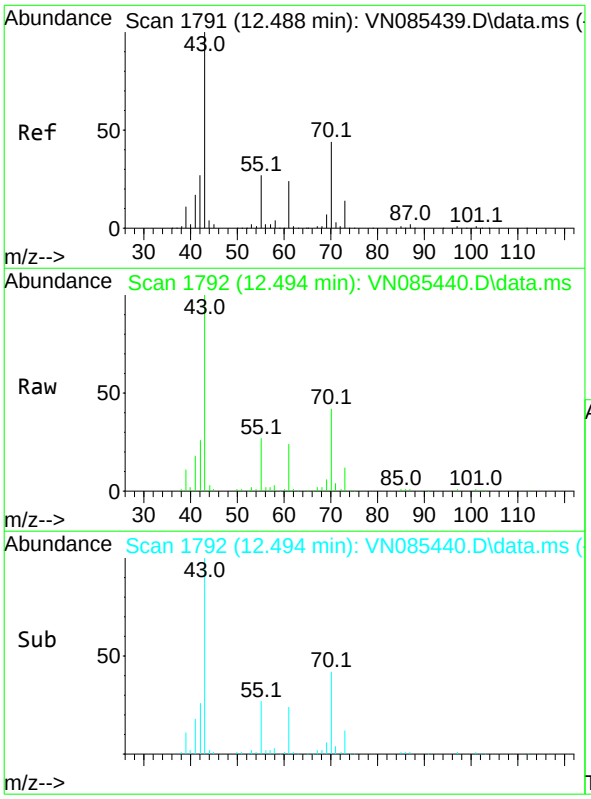
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.5 | 12.8 | 38.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

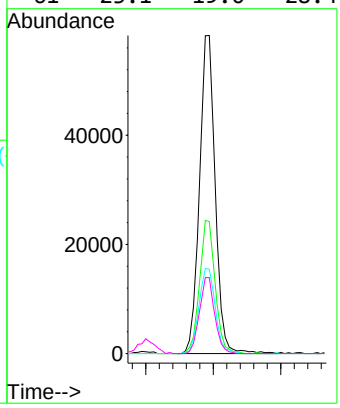
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

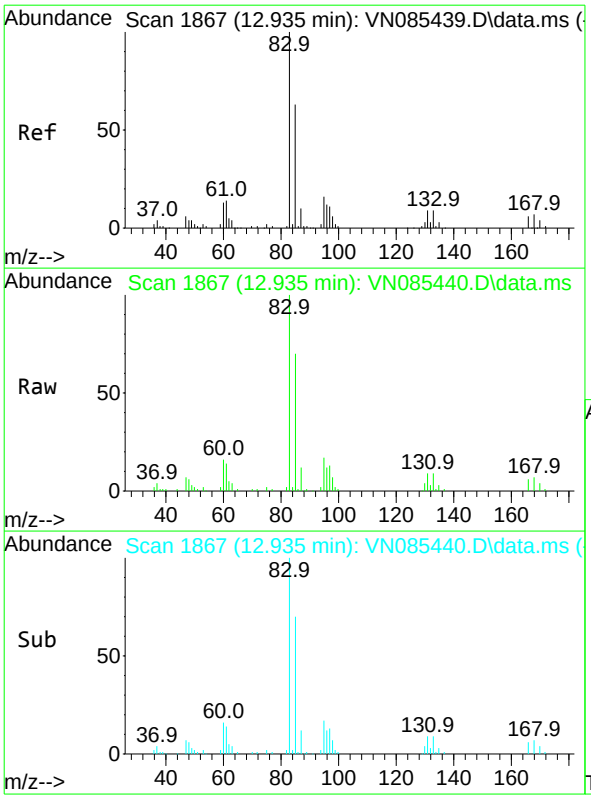



#74
N-amyl acetate
Concen: 21.656 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 43 Resp: 94292

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 41.4 | 34.0 | 51.0 |
| 55 | 27.9 | 21.4 | 32.2 |
| 61 | 23.1 | 19.0 | 28.4 |

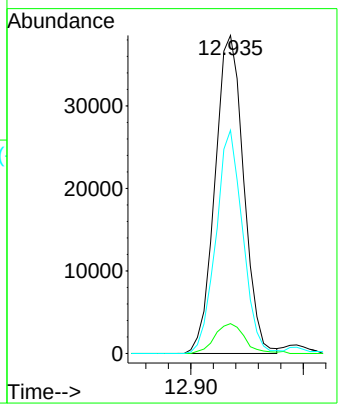





#75
1,1,2,2-Tetrachloroethane
Concen: 19.917 ug/l
RT: 12.935 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 83 Resp: 68151

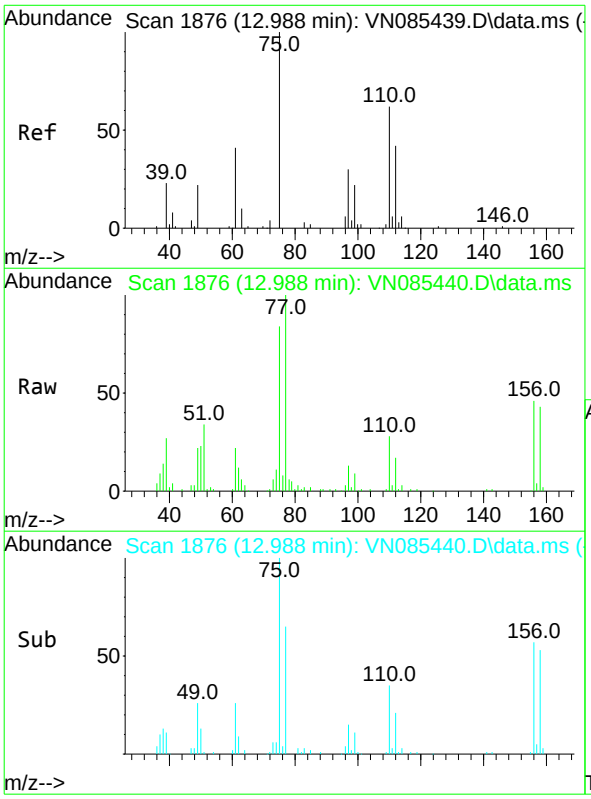
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 9.9 | 4.8 | 14.4 |
| 85 | 65.5 | 32.2 | 96.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

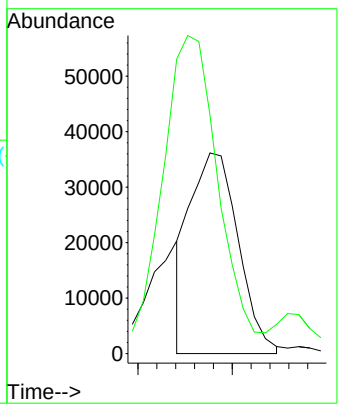
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

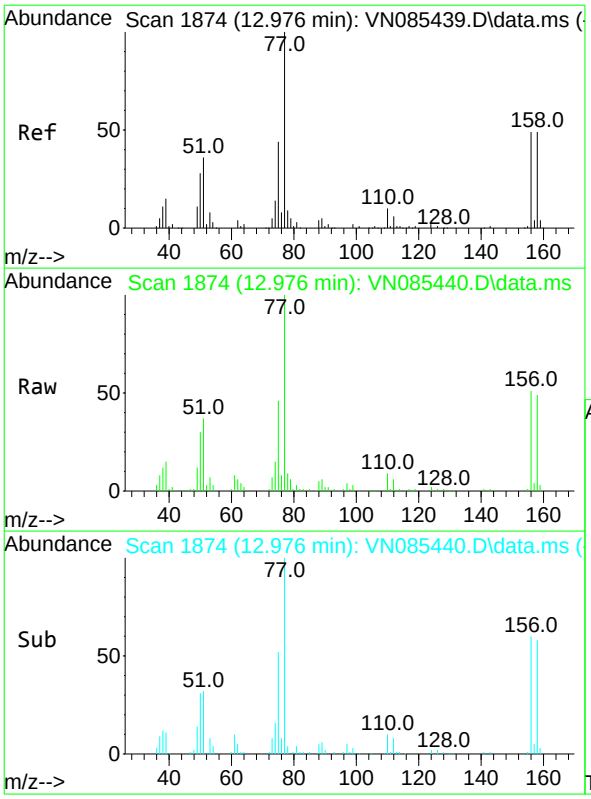



#76
1,2,3-Trichloropropane
Concen: 22.036 ug/l m
RT: 12.988 min Scan# 1876
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 75 Resp: 64180

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 186.8 | 109.7 | 329.2 |

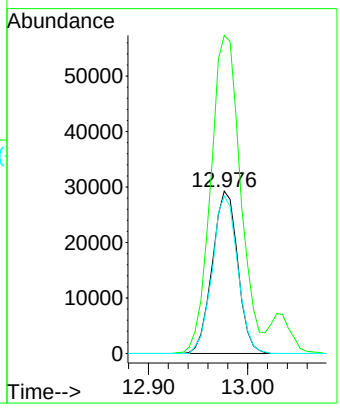





#77
Bromobenzene
Concen: 20.556 ug/l
RT: 12.976 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:156 Resp: 52022

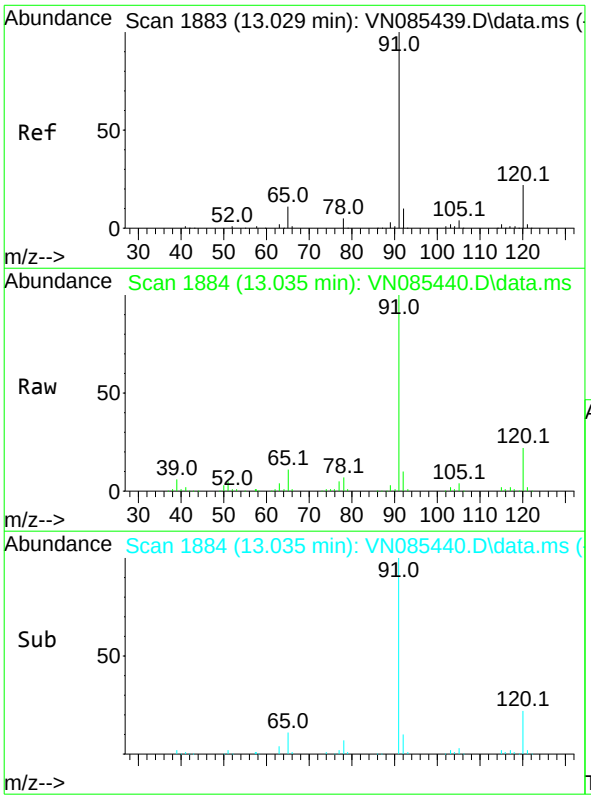
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 230.4 | 114.1 | 342.4 |
| 158 | 97.0 | 48.9 | 146.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

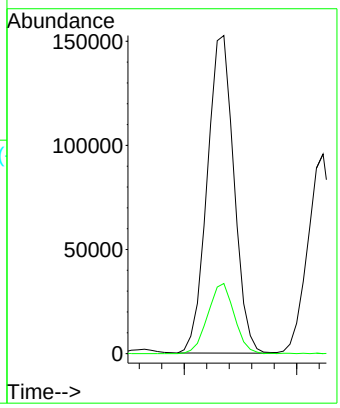
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

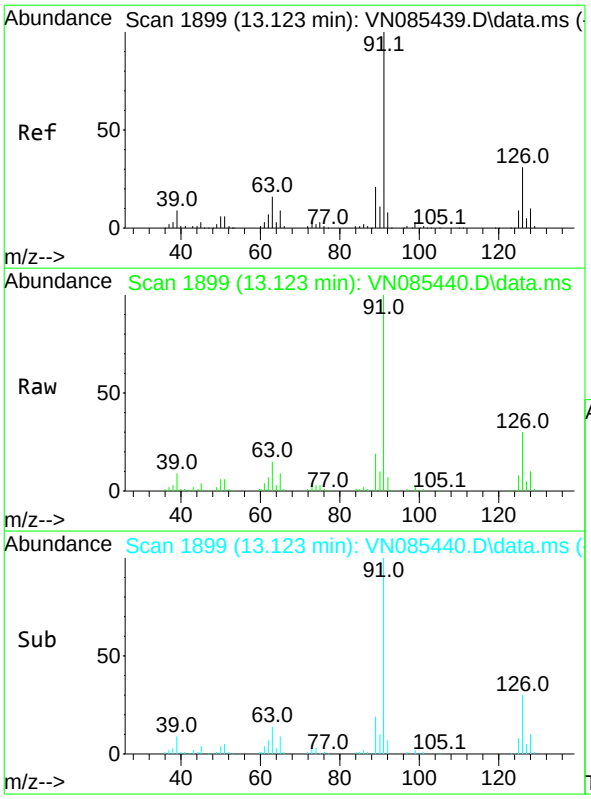



#78
n-propylbenzene
Concen: 22.028 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 91 Resp: 252610

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 21.8 | 10.9 | 32.6 |

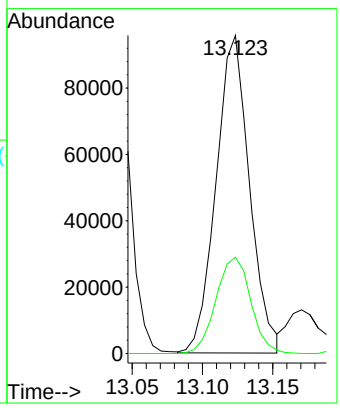





#79
2-Chlorotoluene
Concen: 21.358 ug/l
RT: 13.123 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 91 Resp: 158511

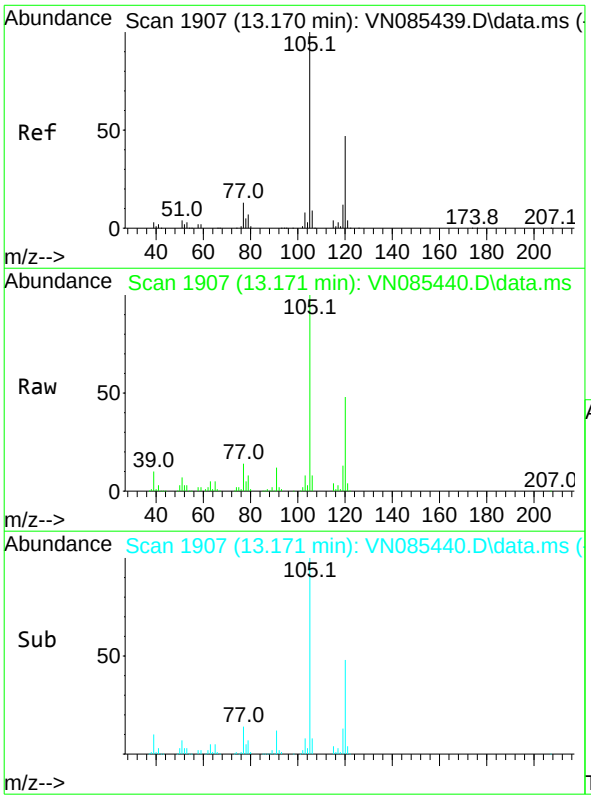
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 31.5 | 15.7 | 47.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

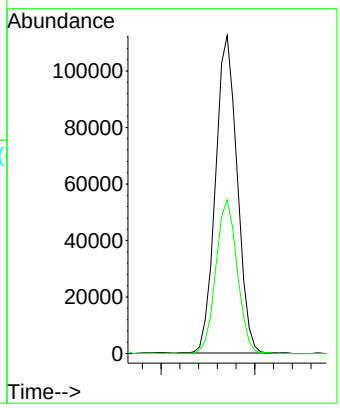
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

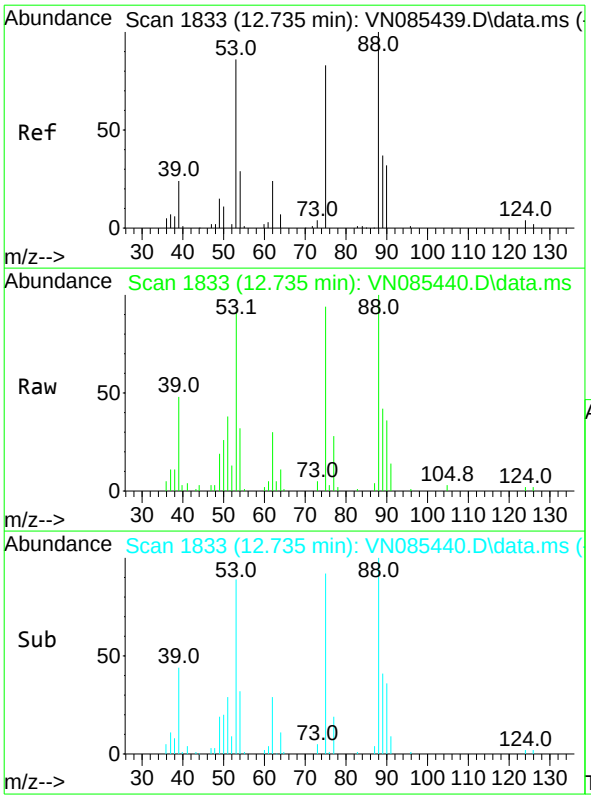



#80
1,3,5-Trimethylbenzene
Concen: 22.533 ug/l
RT: 13.171 min Scan# 1907
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:105 Resp: 180294

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 47.9 | 23.9 | 71.7 |

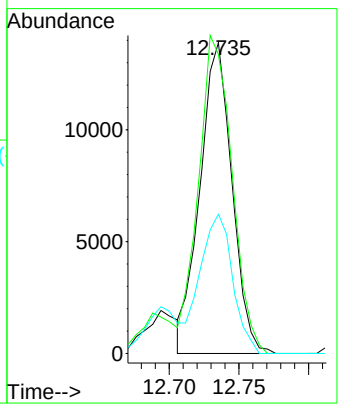





#81
trans-1,4-Dichloro-2-butene
Concen: 20.569 ug/l m
RT: 12.735 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 75 Resp: 22178

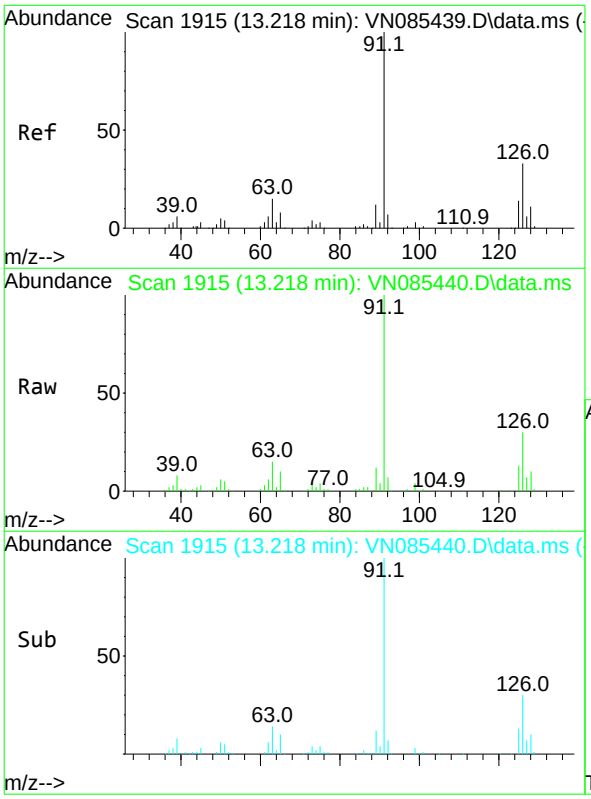
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 107.2 | 95.6 | 143.4 |
| 89 | 46.9 | 37.0 | 55.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

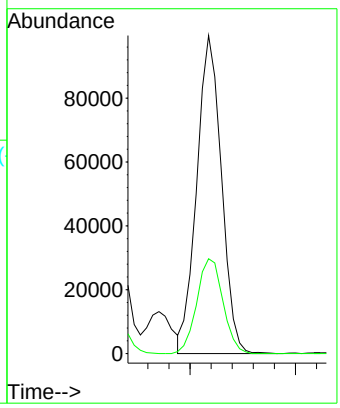
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

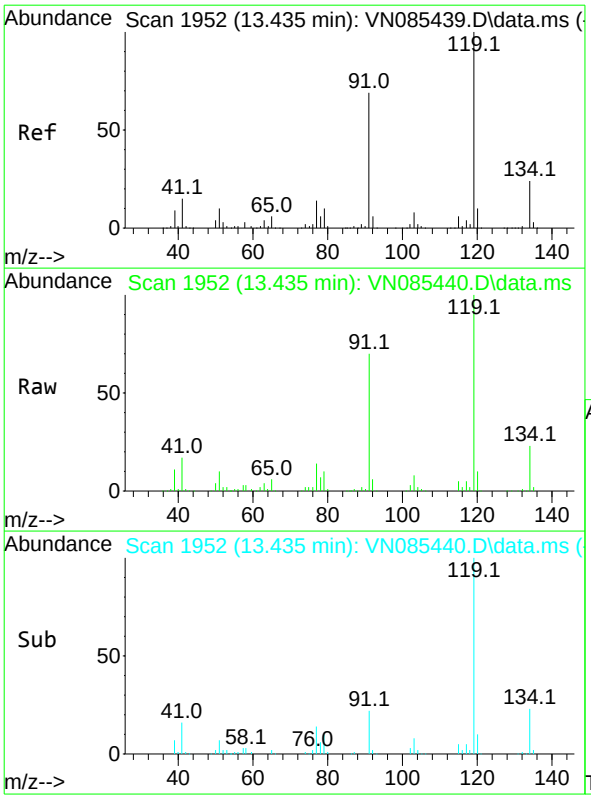



#82
4-Chlorotoluene
Concen: 21.906 ug/l
RT: 13.218 min Scan# 1915
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 91 Resp: 161880

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 31.6 | 15.9 | 47.7 |

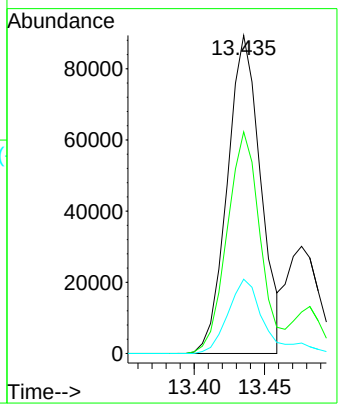





#83
tert-Butylbenzene
Concen: 21.958 ug/l
RT: 13.435 min Scan# 19
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:119 Resp: 147541

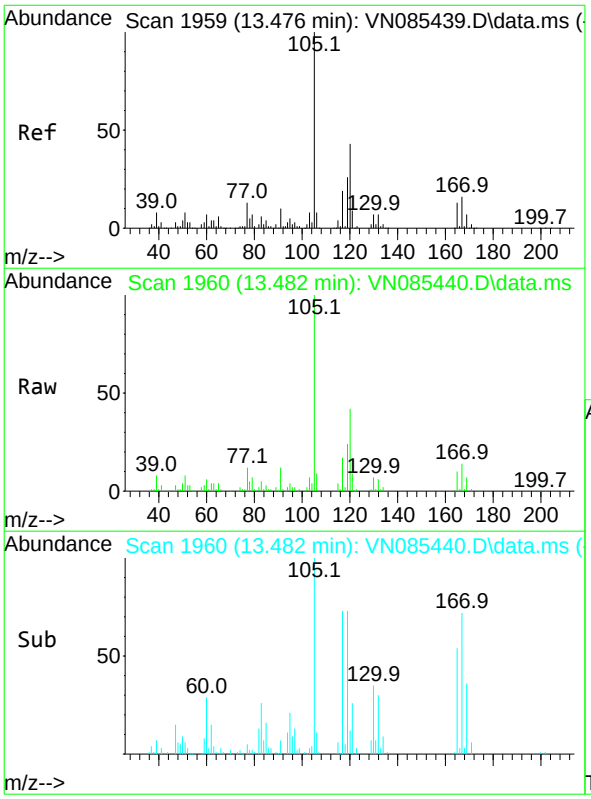
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 69.5 | 35.1 | 105.3 |
| 134 | 25.5 | 12.0 | 36.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

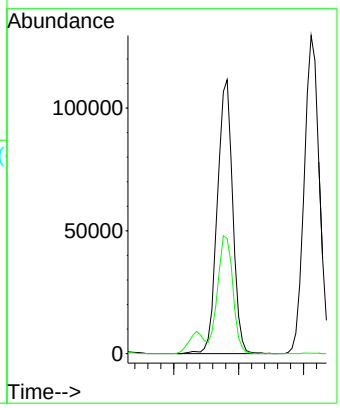
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

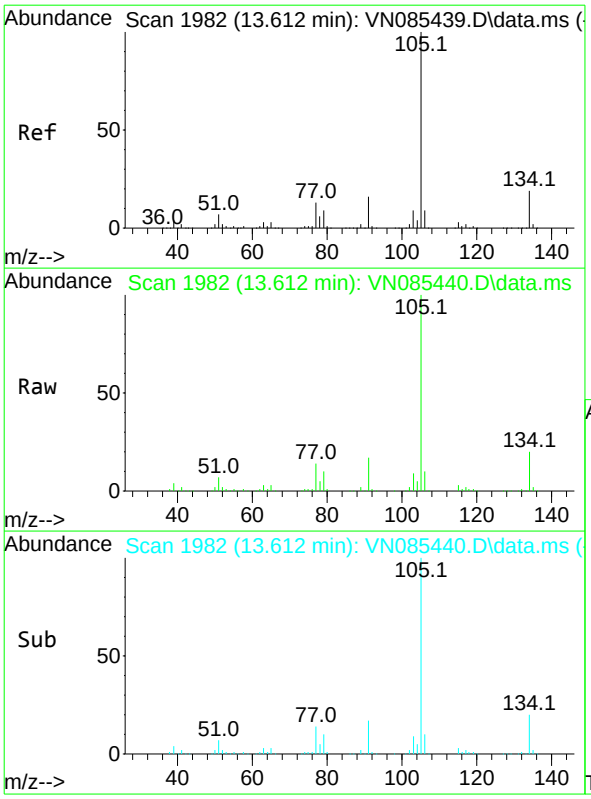



#84
1,2,4-Trimethylbenzene
Concen: 22.965 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:105 Resp: 183144

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 42.8 | 21.6 | 65.0 |

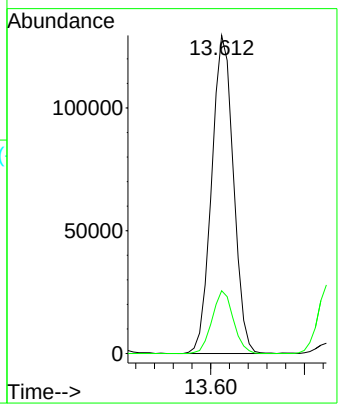





#85
sec-Butylbenzene
Concen: 22.457 ug/l
RT: 13.612 min Scan# 19
Delta R.T. -0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:105 Resp: 209133

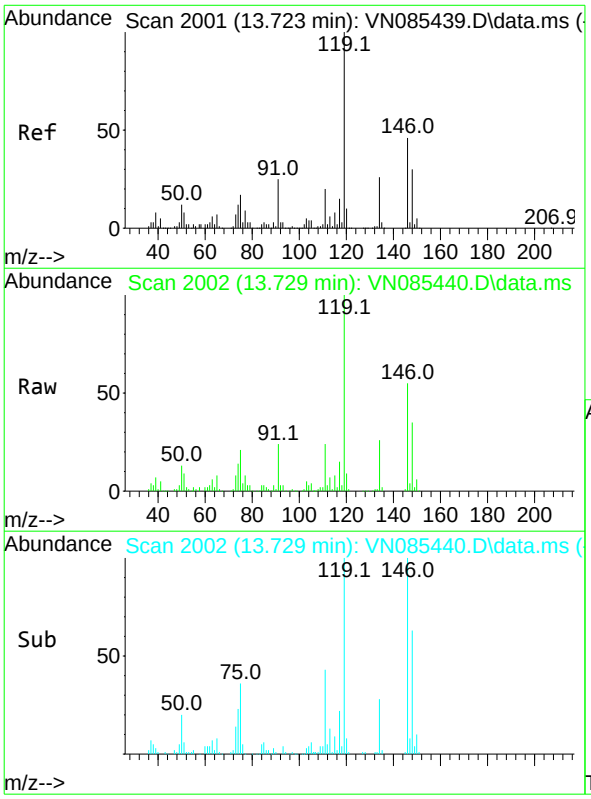
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.2 | 9.7 | 28.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

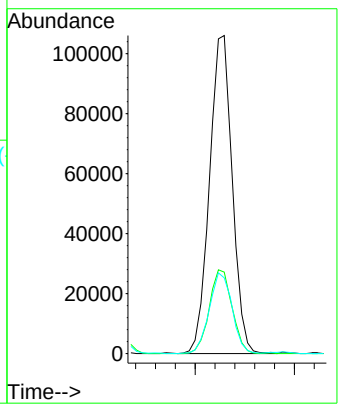
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

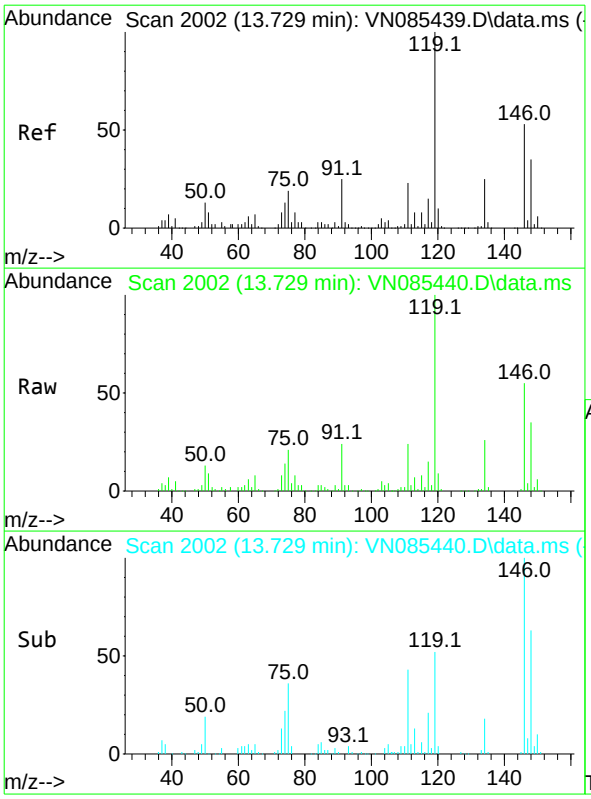



#86
p-Isopropyltoluene
Concen: 21.661 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:119 Resp: 168888

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 26.4 | 12.7 | 38.0 |
| 91 | 25.5 | 12.7 | 38.1 |

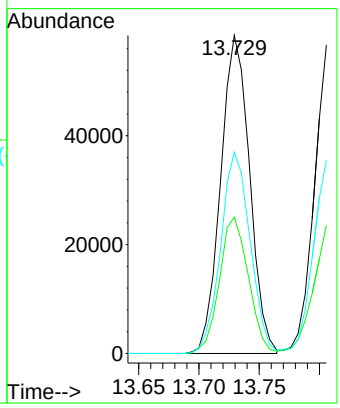





#87
1,3-Dichlorobenzene
Concen: 20.952 ug/l
RT: 13.729 min Scan# 20
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:146 Resp: 97652

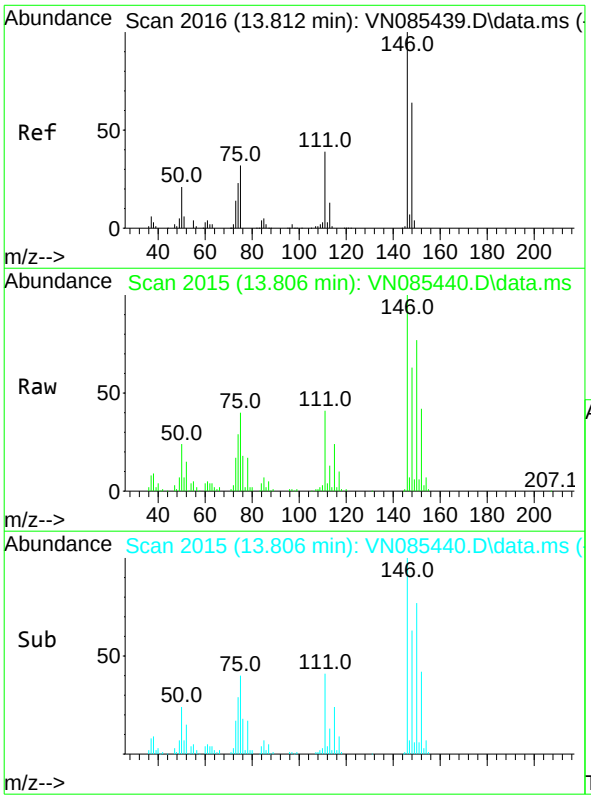
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.9 | 21.4 | 64.3 |
| 148 | 64.3 | 32.3 | 96.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

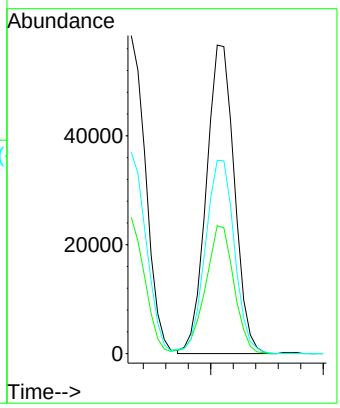
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

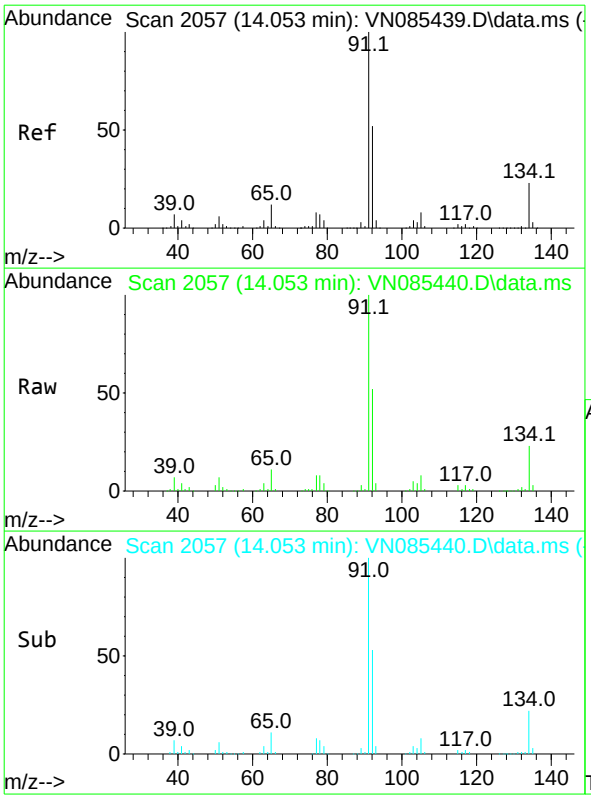



#88
1,4-Dichlorobenzene
Concen: 20.351 ug/l
RT: 13.806 min Scan# 2015
Delta R.T. -0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:146 Resp: 98321

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.2 | 21.3 | 63.7 |
| 148 | 65.1 | 32.4 | 97.0 |

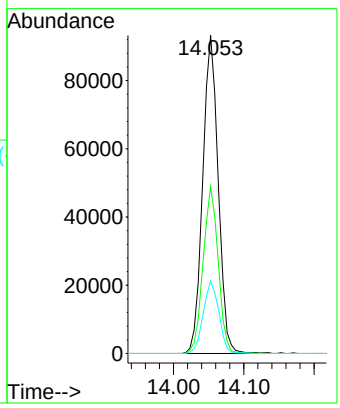





#89
n-Butylbenzene
Concen: 21.355 ug/l
RT: 14.053 min Scan# 20
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 91 Resp: 142673

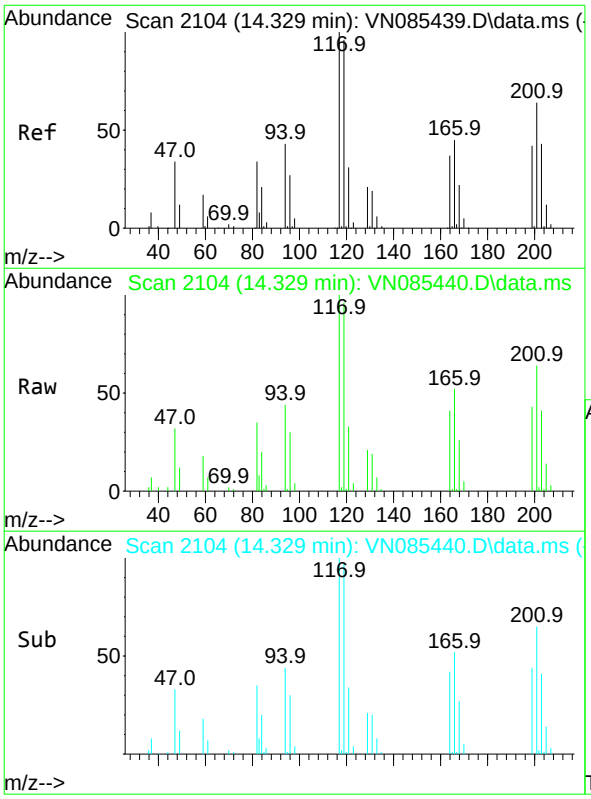
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 51.0 | 25.8 | 77.3 |
| 134 | 23.0 | 11.7 | 35.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

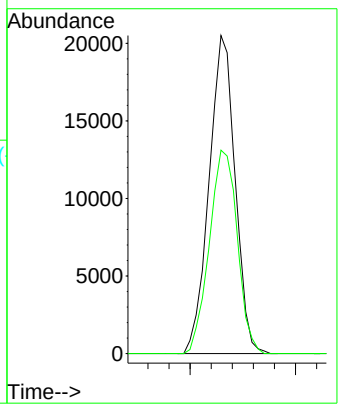
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

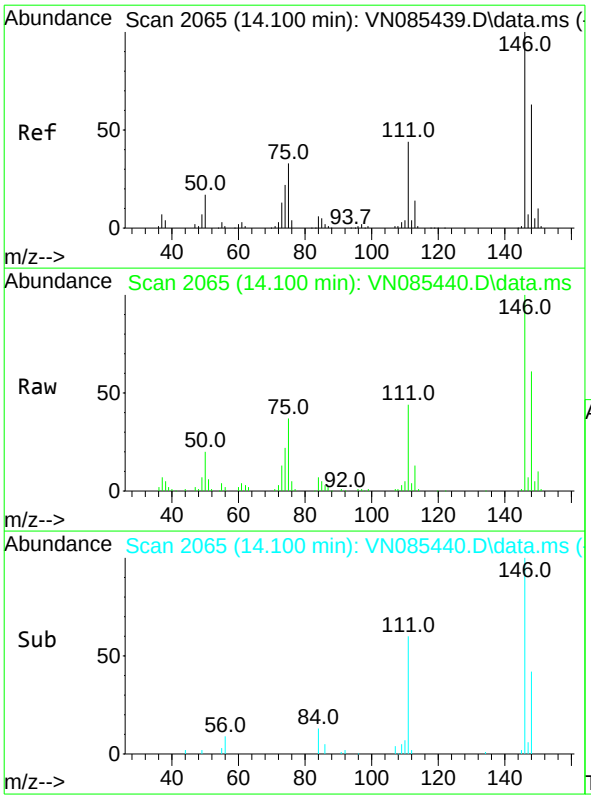



#90
Hexachloroethane
Concen: 19.858 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:117 Resp: 35205

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 68.8 | 33.7 | 101.0 |

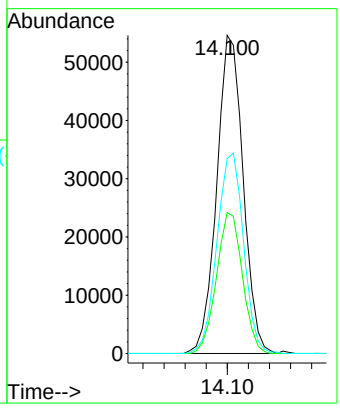





#91
1,2-Dichlorobenzene
Concen: 20.425 ug/l
RT: 14.100 min Scan# 20
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:146 Resp: 94954

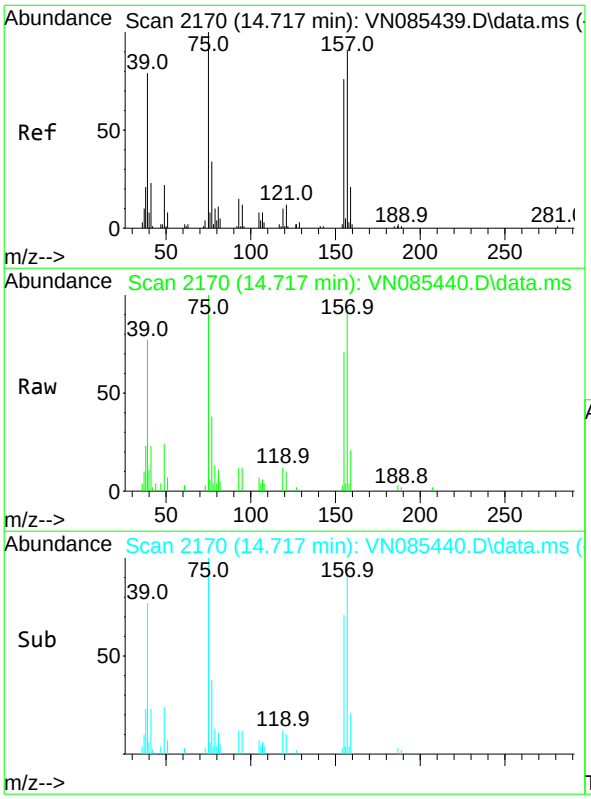
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.5 | 21.7 | 65.1 |
| 148 | 63.5 | 31.4 | 94.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

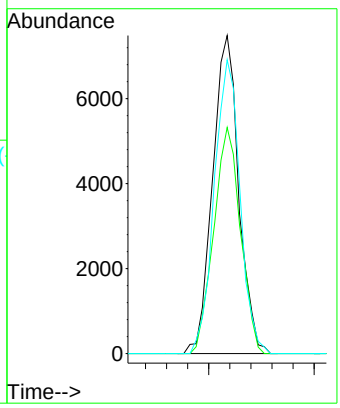
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

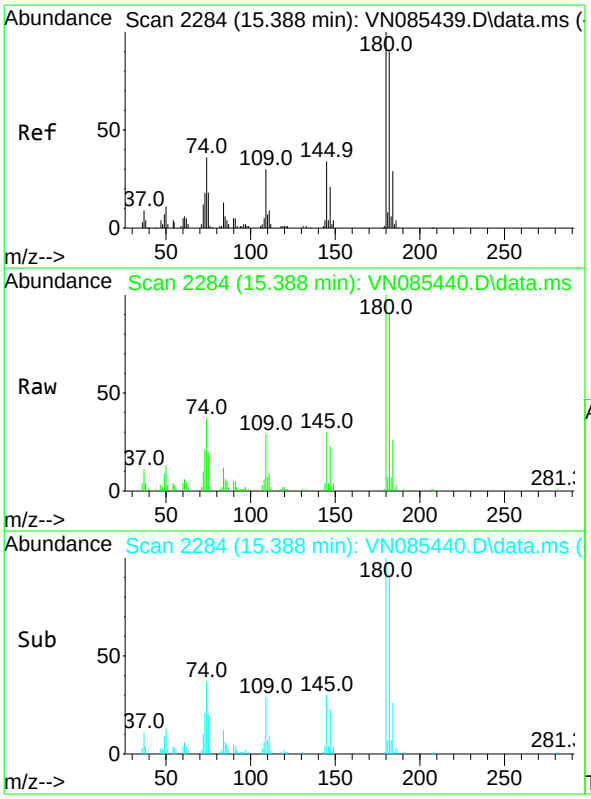



#92
1,2-Dibromo-3-Chloropropane
Concen: 20.580 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 75 Resp: 12859

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 72.7 | 36.4 | 109.2 |
| 157 | 90.9 | 45.4 | 136.1 |

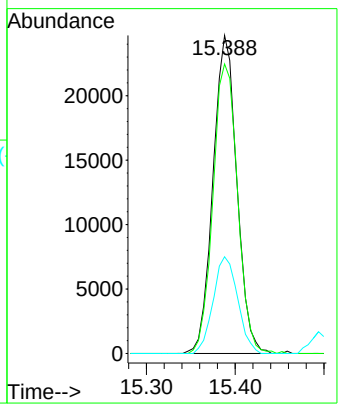





#93
1,2,4-Trichlorobenzene
Concen: 21.233 ug/l
RT: 15.388 min Scan# 22
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:180 Resp: 45878

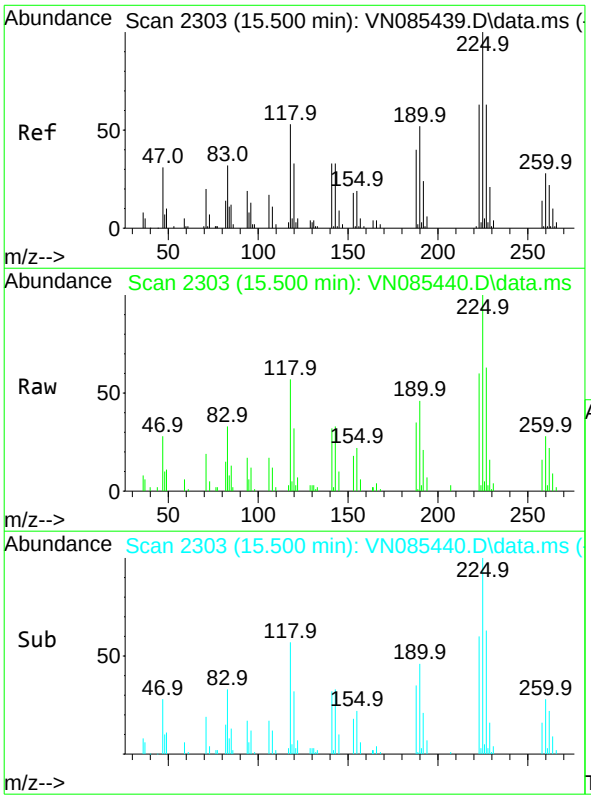
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 94.2 | 46.8 | 140.3 |
| 145 | 31.4 | 16.0 | 48.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

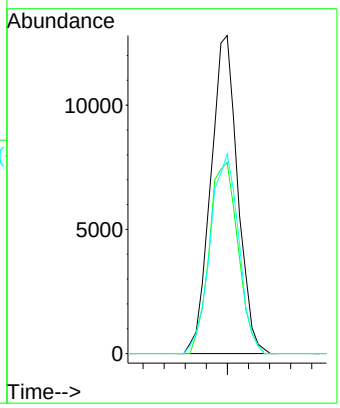
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

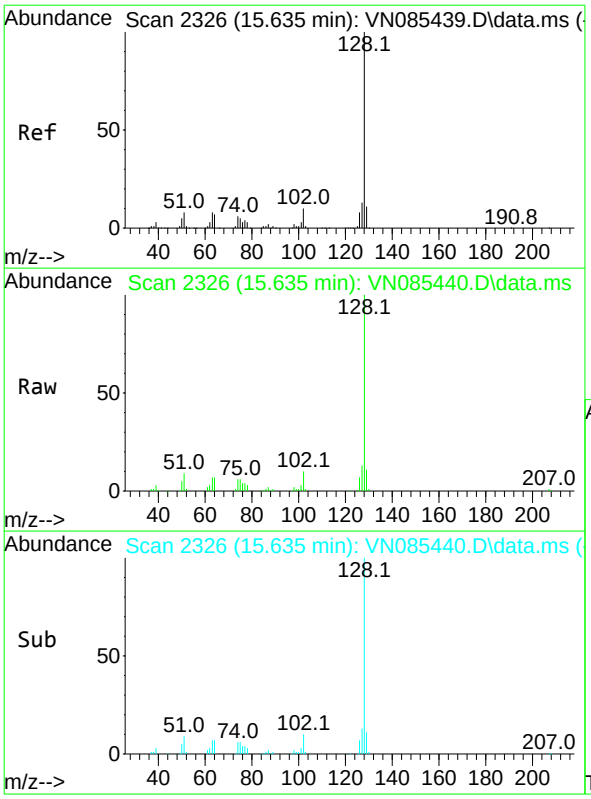



#94
Hexachlorobutadiene
Concen: 19.805 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:225 Resp: 22719

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 64.3 | 30.7 | 92.1 |
| 227 | 66.3 | 30.9 | 92.5 |

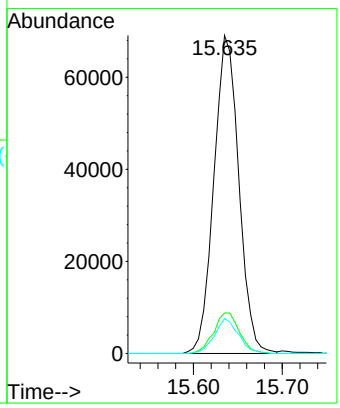





#95
Naphthalene
Concen: 20.906 ug/l
RT: 15.635 min Scan# 23
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:128 Resp: 134793

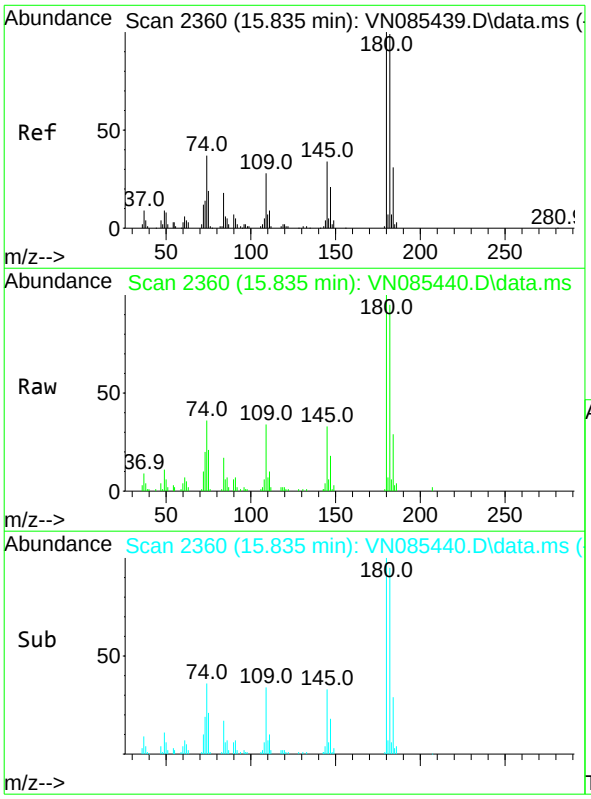
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 13.3 | 10.6 | 16.0 |
| 129 | 10.6 | 8.8 | 13.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

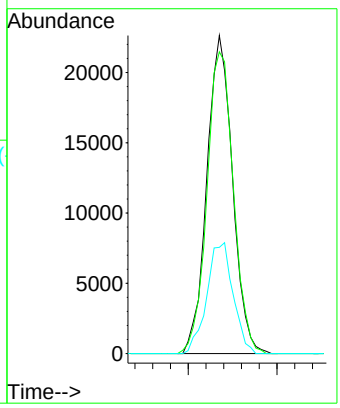
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025




#96
1,2,3-Trichlorobenzene
Concen: 20.797 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:180 Resp: 45468

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 97.9 | 47.4 | 142.2 |
| 145 | 35.7 | 16.9 | 50.7 |



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085441.D
Acq On : 14 Jan 2025 16:07
Operator : JC\MD
Sample : VSTDICC010
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 15 01:44:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 195889 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 340403 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 294508 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 132934 | 50.000 | ug/l | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.571 | 65 | 29856 | 9.442 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 18.880%# | | | |
| 35) Dibromofluoromethane | 8.165 | 113 | 21110 | 8.939 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 17.880%# | | | |
| 50) Toluene-d8 | 10.565 | 98 | 73223 | 8.727 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 17.460%# | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 24327 | 8.476 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 16.960%# | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 26124 | 9.850 | ug/l | 96 |
| 3) Chloromethane | 2.359 | 50 | 27143 | 9.452 | ug/l | 99 |
| 4) Vinyl Chloride | 2.512 | 62 | 27862 | 9.653 | ug/l | 100 |
| 5) Bromomethane | 2.965 | 94 | 17139 | 9.830 | ug/l | 87 |
| 6) Chloroethane | 3.130 | 64 | 16791 | 9.175 | ug/l | 96 |
| 7) Trichlorofluoromethane | 3.501 | 101 | 40755 | 9.731 | ug/l | 98 |
| 8) Diethyl Ether | 3.953 | 74 | 12415 | 8.581 | ug/l | 94 |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 22982 | 9.742 | ug/l | 98 |
| 10) Methyl Iodide | 4.589 | 142 | 25085 | 9.286 | ug/l | 99 |
| 11) Tert butyl alcohol | 5.512 | 59 | 17962 | 49.608 | ug/l | 97 |
| 12) 1,1-Dichloroethene | 4.342 | 96 | 20615 | 9.806 | ug/l | 99 |
| 13) Acrolein | 4.177 | 56 | 25568 | 51.729 | ug/l | 99 |
| 14) Allyl chloride | 5.018 | 41 | 32240 | 9.451 | ug/l | 97 |
| 15) Acrylonitrile | 5.712 | 53 | 53959 | 46.918 | ug/l | 98 |
| 16) Acetone | 4.424 | 43 | 48475 | 47.446 | ug/l | 98 |
| 17) Carbon Disulfide | 4.712 | 76 | 60201 | 9.300 | ug/l # | 94 |
| 18) Methyl Acetate | 5.030 | 43 | 30500 | 9.817 | ug/l | 98 |
| 19) Methyl tert-butyl Ether | 5.789 | 73 | 65207 | 9.552 | ug/l | 91 |
| 20) Methylene Chloride | 5.277 | 84 | 23723 | 9.379 | ug/l | 96 |
| 21) trans-1,2-Dichloroethene | 5.783 | 96 | 21127 | 9.403 | ug/l | 97 |
| 22) Diisopropyl ether | 6.671 | 45 | 71857 | 9.490 | ug/l | 97 |
| 23) Vinyl Acetate | 6.600 | 43 | 250575 | 47.125 | ug/l | 98 |
| 24) 1,1-Dichloroethane | 6.565 | 63 | 43099 | 9.335 | ug/l | 95 |
| 25) 2-Butanone | 7.477 | 43 | 71191 | 47.350 | ug/l | 99 |
| 26) 2,2-Dichloropropane | 7.483 | 77 | 36105 | 9.672 | ug/l | 99 |
| 27) cis-1,2-Dichloroethene | 7.489 | 96 | 25049 | 9.466 | ug/l | 97 |
| 28) Bromochloromethane | 7.806 | 49 | 19037 | 8.863 | ug/l | 97 |
| 29) Tetrahydrofuran | 7.836 | 42 | 45641 | 47.881 | ug/l | 98 |
| 30) Chloroform | 7.965 | 83 | 45792 | 9.596 | ug/l | 100 |
| 31) Cyclohexane | 8.253 | 56 | 40211 | 10.020 | ug/l # | 93 |
| 32) 1,1,1-Trichloroethane | 8.165 | 97 | 39170 | 9.358 | ug/l | 99 |
| 36) 1,1-Dichloropropene | 8.371 | 75 | 30015 | 9.056 | ug/l | 97 |
| 37) Ethyl Acetate | 7.559 | 43 | 30760 | 9.195 | ug/l | 97 |
| 38) Carbon Tetrachloride | 8.359 | 117 | 36015 | 9.492 | ug/l | 94 |
| 39) Methylcyclohexane | 9.594 | 83 | 27721 | 8.900 | ug/l | 95 |
| 40) Benzene | 8.600 | 78 | 93680 | 9.407 | ug/l | 96 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085441.D
Acq On : 14 Jan 2025 16:07
Operator : JC\MD
Sample : VSTDICC010
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 15 01:44:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.777 | 41 | 16859 | 9.686 | ug/l | | 96 |
| 42) 1,2-Dichloroethane | 8.665 | 62 | 35569 | 9.483 | ug/l | | 99 |
| 43) Isopropyl Acetate | 8.683 | 43 | 48926 | 9.127 | ug/l | | 99 |
| 44) Trichloroethene | 9.347 | 130 | 21113 | 9.108 | ug/l | | 95 |
| 45) 1,2-Dichloropropane | 9.618 | 63 | 22747 | 8.942 | ug/l | | 97 |
| 46) Dibromomethane | 9.706 | 93 | 17260 | 9.404 | ug/l | | 99 |
| 47) Bromodichloromethane | 9.883 | 83 | 35020 | 9.365 | ug/l | | 98 |
| 48) Methyl methacrylate | 9.677 | 41 | 21873 | 9.067 | ug/l | | 97 |
| 49) 1,4-Dioxane | 9.694 | 88 | 7734 | 190.382 | ug/l | | 98 |
| 51) 4-Methyl-2-Pentanone | 10.441 | 43 | 146990 | 47.254 | ug/l | | 98 |
| 52) Toluene | 10.630 | 92 | 54976 | 9.527 | ug/l | | 100 |
| 53) t-1,3-Dichloropropene | 10.835 | 75 | 32780 | 9.276 | ug/l | | 96 |
| 54) cis-1,3-Dichloropropene | 10.312 | 75 | 35904 | 9.512 | ug/l | | 98 |
| 55) 1,1,2-Trichloroethane | 11.012 | 97 | 21060 | 9.222 | ug/l | | 98 |
| 56) Ethyl methacrylate | 10.871 | 69 | 28454 | 9.042 | ug/l | | 95 |
| 57) 1,3-Dichloropropane | 11.159 | 76 | 37768 | 9.512 | ug/l | | 98 |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63 | 63110 | 43.550 | ug/l | | 98 |
| 59) 2-Hexanone | 11.194 | 43 | 101318 | 46.291 | ug/l | | 98 |
| 60) Dibromochloromethane | 11.353 | 129 | 25029 | 9.079 | ug/l | | 98 |
| 61) 1,2-Dibromoethane | 11.465 | 107 | 21055 | 9.263 | ug/l | | 100 |
| 64) Tetrachloroethene | 11.100 | 164 | 19934 | 9.928 | ug/l | | 97 |
| 65) Chlorobenzene | 11.888 | 112 | 61680 | 9.560 | ug/l | | 93 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 21853 | 9.229 | ug/l | | 98 |
| 67) Ethyl Benzene | 11.959 | 91 | 99248 | 9.445 | ug/l | | 97 |
| 68) m/p-Xylenes | 12.065 | 106 | 72431 | 18.650 | ug/l | | 99 |
| 69) o-Xylene | 12.394 | 106 | 34382 | 9.264 | ug/l | | 99 |
| 70) Styrene | 12.406 | 104 | 56285 | 9.163 | ug/l | | 98 |
| 71) Bromoform | 12.576 | 173 | 16071 | 9.485 | ug/l | # | 98 |
| 73) Isopropylbenzene | 12.694 | 105 | 87003 | 9.697 | ug/l | | 99 |
| 74) N-amyl acetate | 12.494 | 43 | 37343 | 9.260 | ug/l | | 97 |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 30770 | 9.709 | ug/l | | 99 |
| 76) 1,2,3-Trichloropropane | 12.994 | 75 | 25443m | 9.432 | ug/l | | |
| 77) Bromobenzene | 12.976 | 156 | 22784 | 9.720 | ug/l | | 97 |
| 78) n-propylbenzene | 13.035 | 91 | 102262 | 9.628 | ug/l | | 98 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 68346 | 9.943 | ug/l | | 100 |
| 80) 1,3,5-Trimethylbenzene | 13.171 | 105 | 71656 | 9.669 | ug/l | | 99 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 9236 | 9.248 | ug/l | | 100 |
| 82) 4-Chlorotoluene | 13.218 | 91 | 66773 | 9.756 | ug/l | | 97 |
| 83) tert-Butylbenzene | 13.435 | 119 | 59455 | 9.553 | ug/l | | 98 |
| 84) 1,2,4-Trimethylbenzene | 13.476 | 105 | 72046 | 9.754 | ug/l | | 99 |
| 85) sec-Butylbenzene | 13.612 | 105 | 83662 | 9.699 | ug/l | | 99 |
| 86) p-Isopropyltoluene | 13.729 | 119 | 67556 | 9.674 | ug/l | | 99 |
| 87) 1,3-Dichlorobenzene | 13.729 | 146 | 41843 | 9.693 | ug/l | | 99 |
| 88) 1,4-Dichlorobenzene | 13.812 | 146 | 42728 | 9.549 | ug/l | | 99 |
| 89) n-Butylbenzene | 14.053 | 91 | 57632 | 9.314 | ug/l | | 97 |
| 90) Hexachloroethane | 14.329 | 117 | 15261 | 9.294 | ug/l | | 97 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 40726 | 9.458 | ug/l | | 100 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75 | 5639 | 9.744 | ug/l | | 95 |
| 93) 1,2,4-Trichlorobenzene | 15.388 | 180 | 18720 | 9.354 | ug/l | | 99 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 10491 | 9.874 | ug/l | | 98 |
| 95) Naphthalene | 15.635 | 128 | 52054 | 8.717 | ug/l | | 99 |
| 96) 1,2,3-Trichlorobenzene | 15.835 | 180 | 19450 | 9.605 | ug/l | | 96 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085441.D
Acq On : 14 Jan 2025 16:07
Operator : JC\MD
Sample : VSTDICC010
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 15 01:44:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

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

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

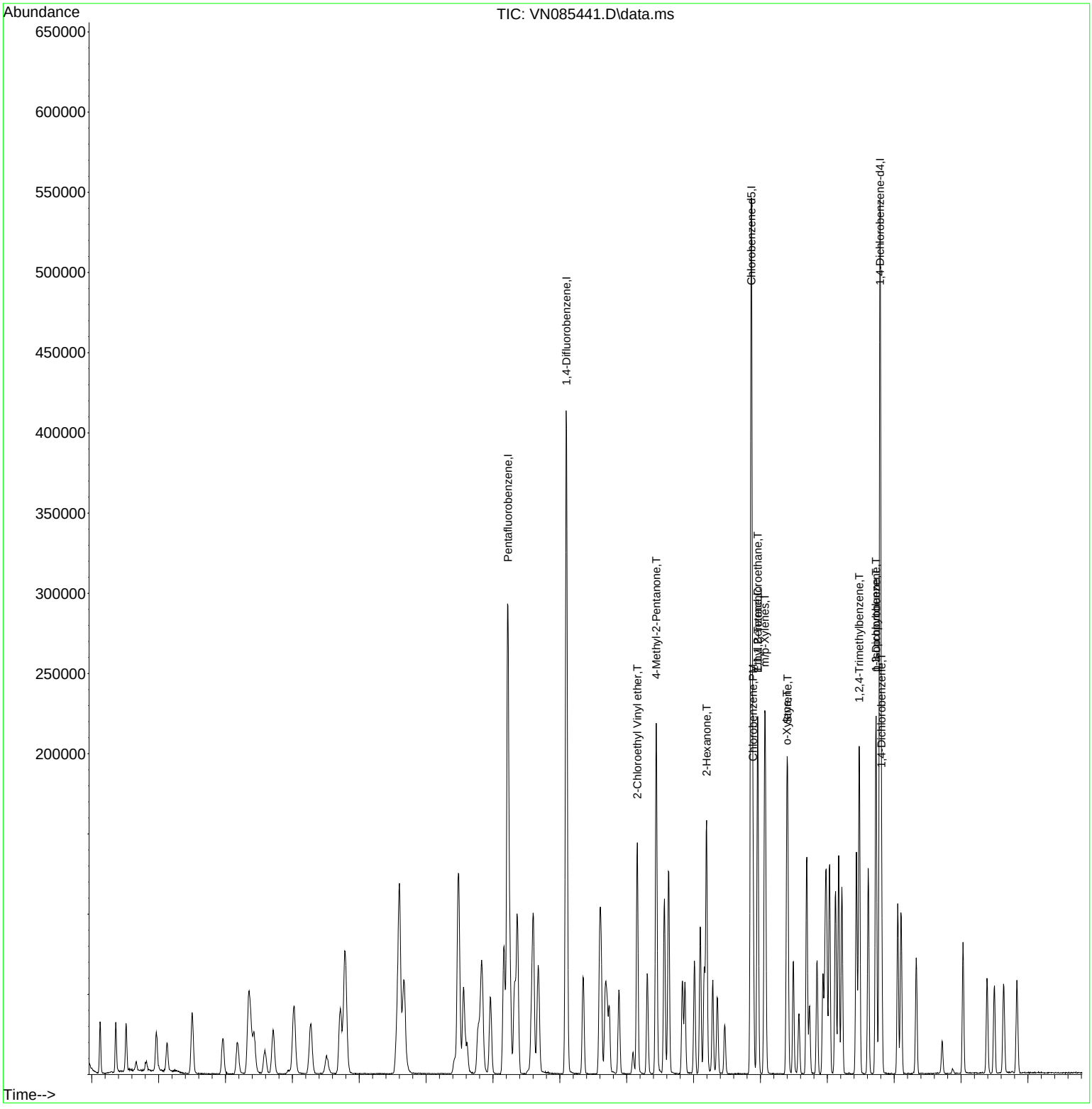
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085441.D
Acq On : 14 Jan 2025 16:07
Operator : JC\MD
Sample : VSTDICC010
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

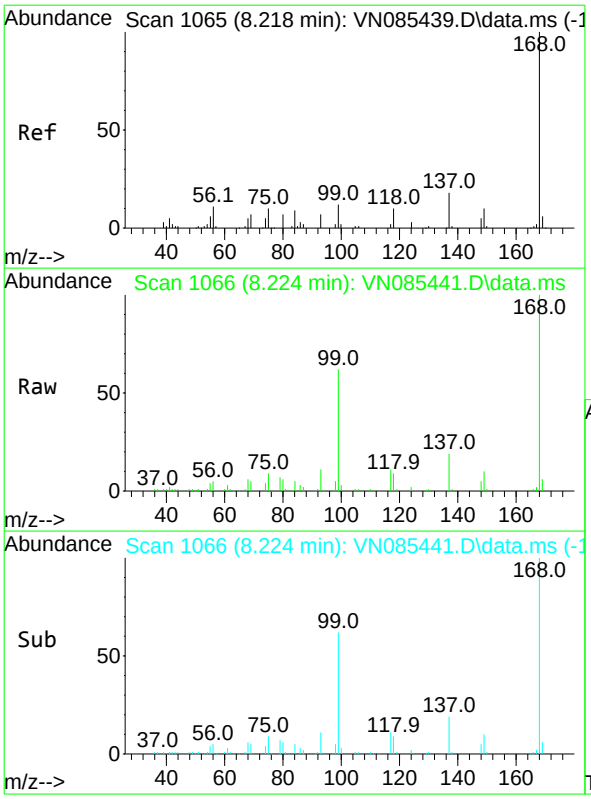
Quant Time: Jan 15 01:44:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

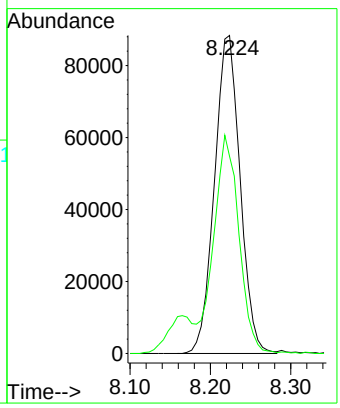





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:168 Resp: 195889

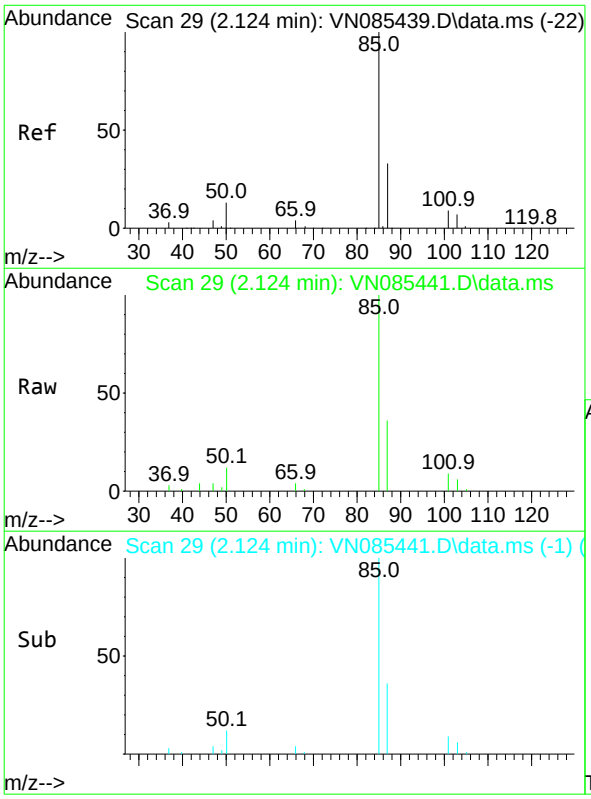
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 61.7 | 53.6 | 80.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

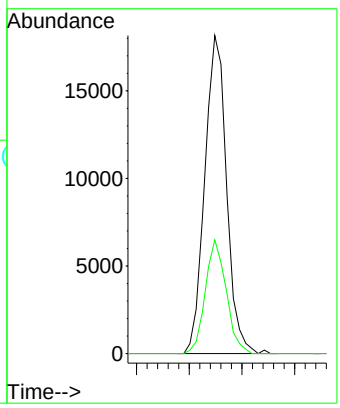
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

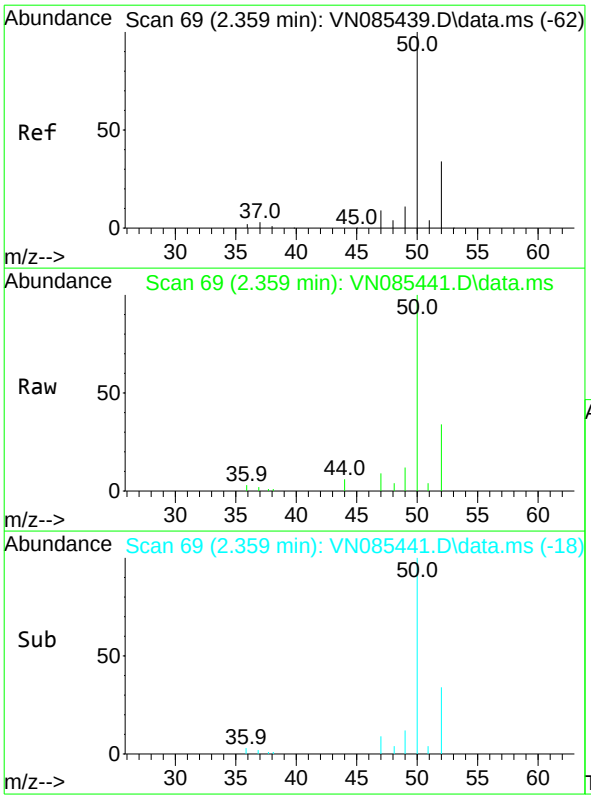



#2
Dichlorodifluoromethane
Concen: 9.850 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 85 Resp: 26124

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 35.8 | 16.7 | 50.1 |

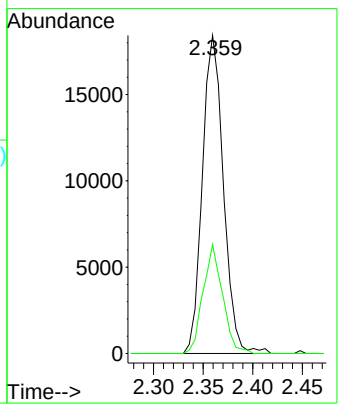





#3
Chloromethane
Concen: 9.452 ug/l
RT: 2.359 min Scan# 69
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 50 Resp: 27143

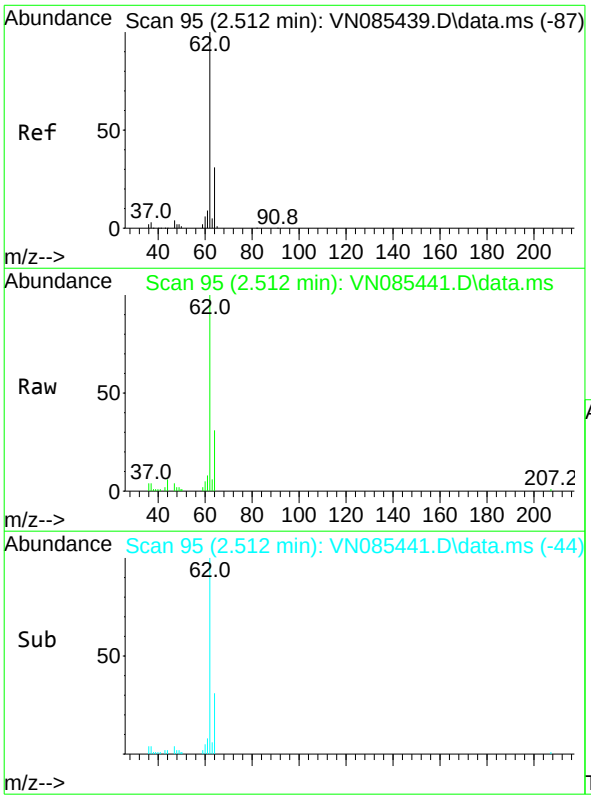
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 34.3 | 27.0 | 40.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

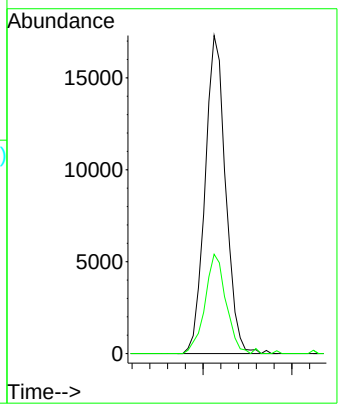
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

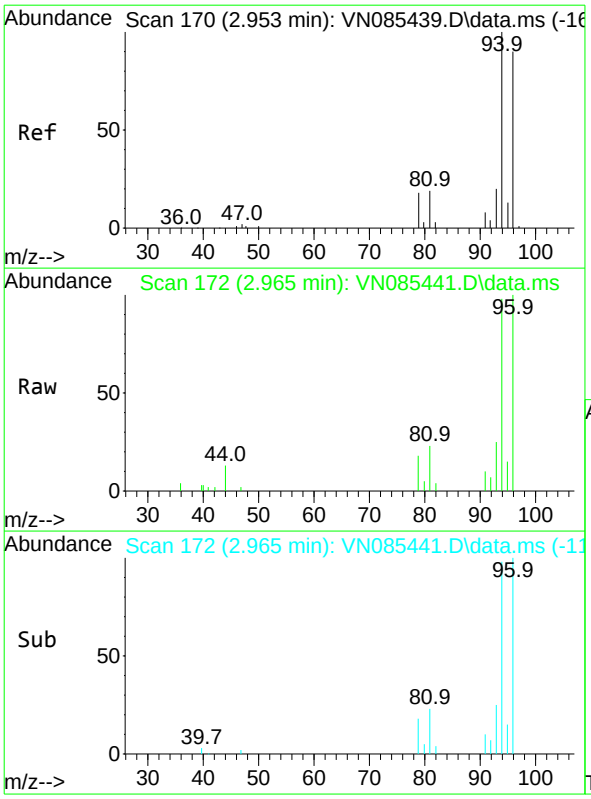



#4
Vinyl Chloride
Concen: 9.653 ug/l
RT: 2.512 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 62 Resp: 27862

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 31.2 | 24.8 | 37.2 |

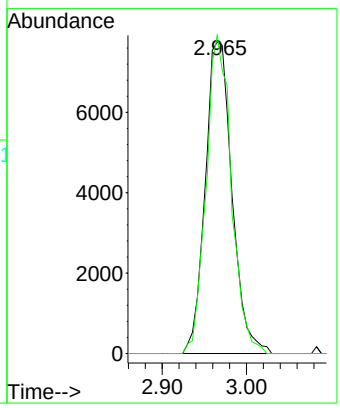





#5
Bromomethane
Concen: 9.830 ug/l
RT: 2.965 min Scan# 17
Delta R.T. 0.012 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 94 Resp: 17139

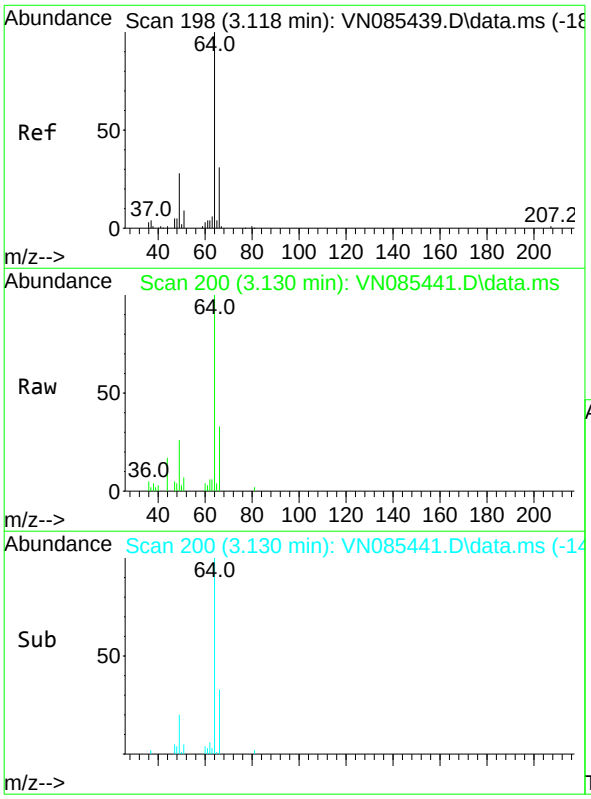
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 102.1 | 71.8 | 107.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

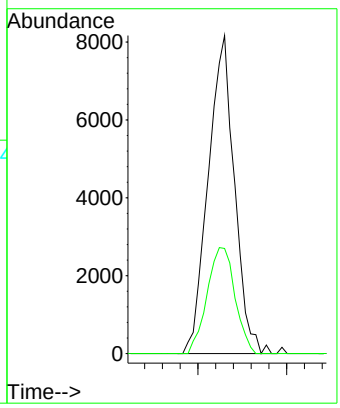
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

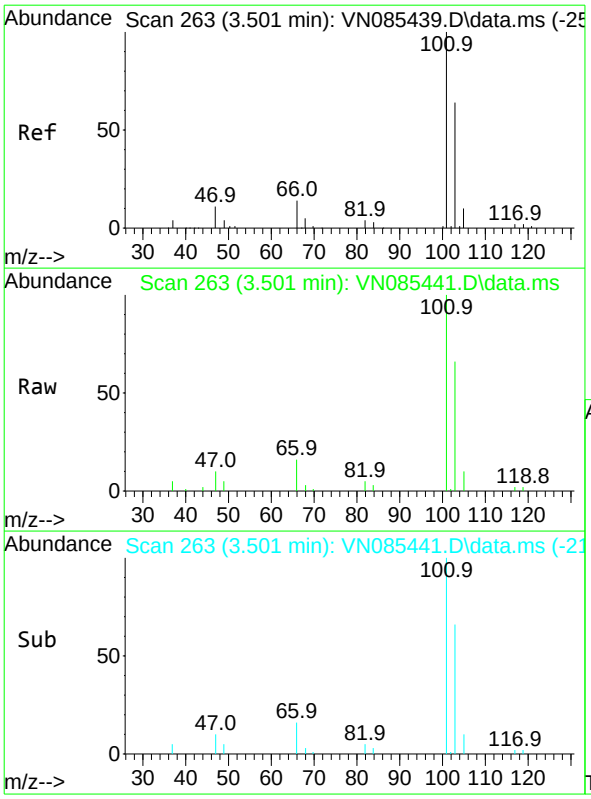



#6
Chloroethane
Concen: 9.175 ug/l
RT: 3.130 min Scan# 200
Delta R.T. 0.012 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 64 Resp: 16791

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 33.1 | 24.6 | 36.8 |

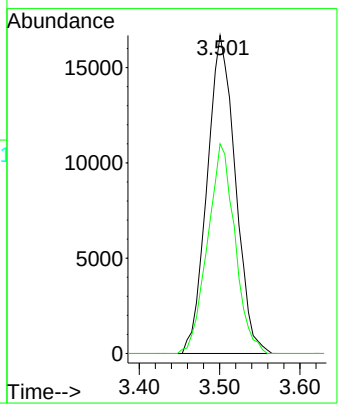





#7
Trichlorofluoromethane
Concen: 9.731 ug/l
RT: 3.501 min Scan# 26
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:101 Resp: 40755

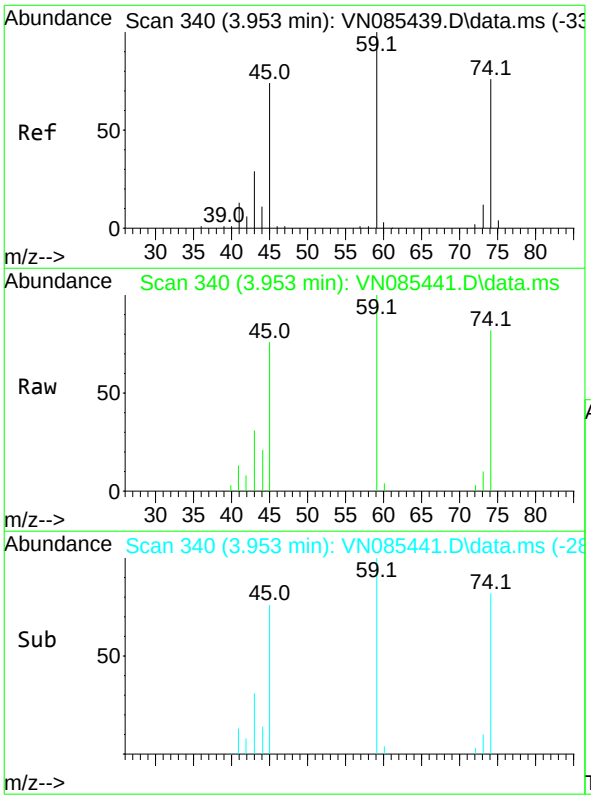
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 65.9 | 51.4 | 77.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

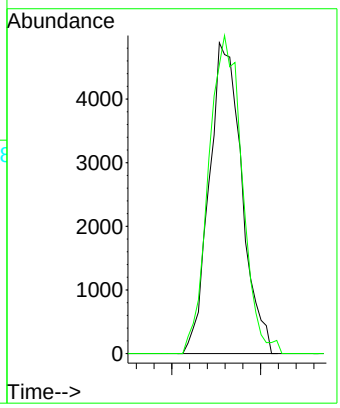
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

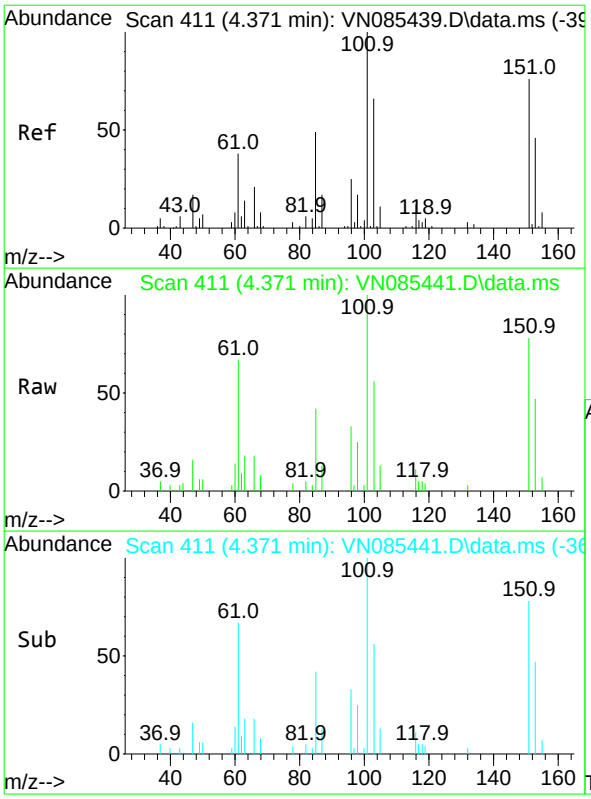



#8
Diethyl Ether
Concen: 8.581 ug/l
RT: 3.953 min Scan# 340
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 74 Resp: 12415

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 105.3 | 49.7 | 149.1 |

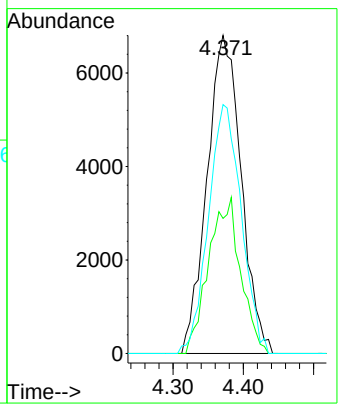





#9
1,1,2-Trichlorotrifluoroethane
Concen: 9.742 ug/l
RT: 4.371 min Scan# 41
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:101 Resp: 22982

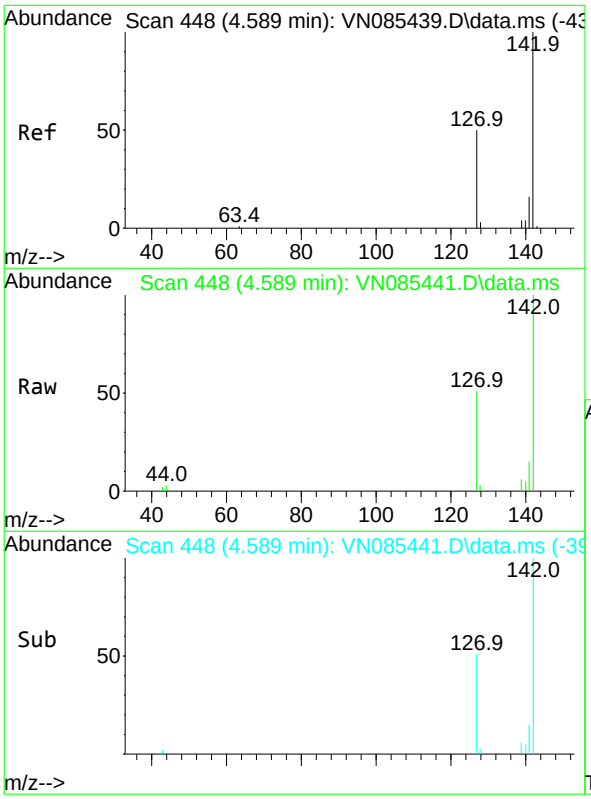
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 45.8 | 37.8 | 56.8 |
| 151 | 75.2 | 58.8 | 88.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

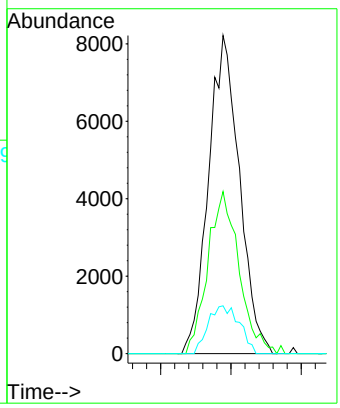
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

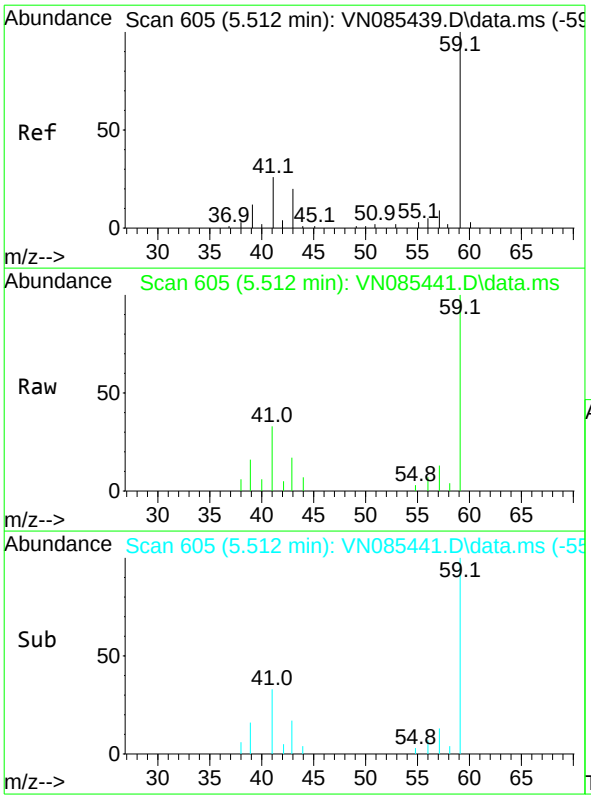



#10
Methyl Iodide
Concen: 9.286 ug/l
RT: 4.589 min Scan# 448
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:142 Resp: 25085

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 50.9 | 40.3 | 60.5 |
| 141 | 15.0 | 12.8 | 19.2 |

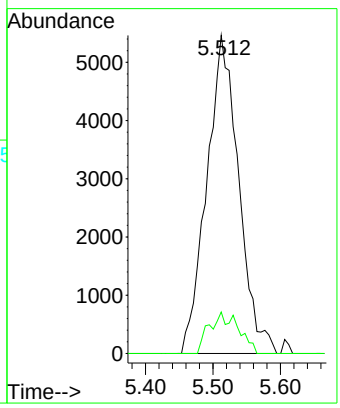





#11
Tert butyl alcohol
Concen: 49.608 ug/l
RT: 5.512 min Scan# 60
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 59 Resp: 17962

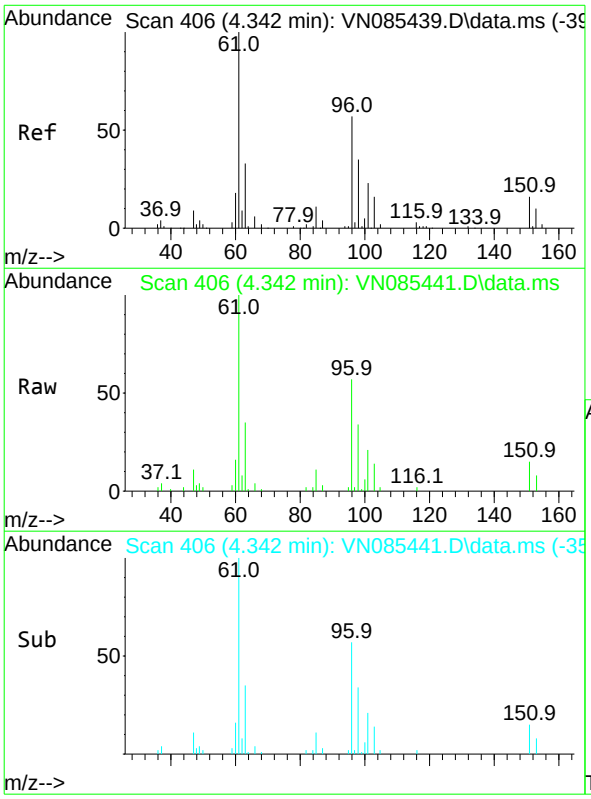
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 11.9 | 8.6 | 13.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

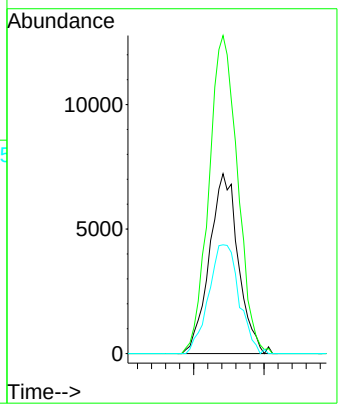
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

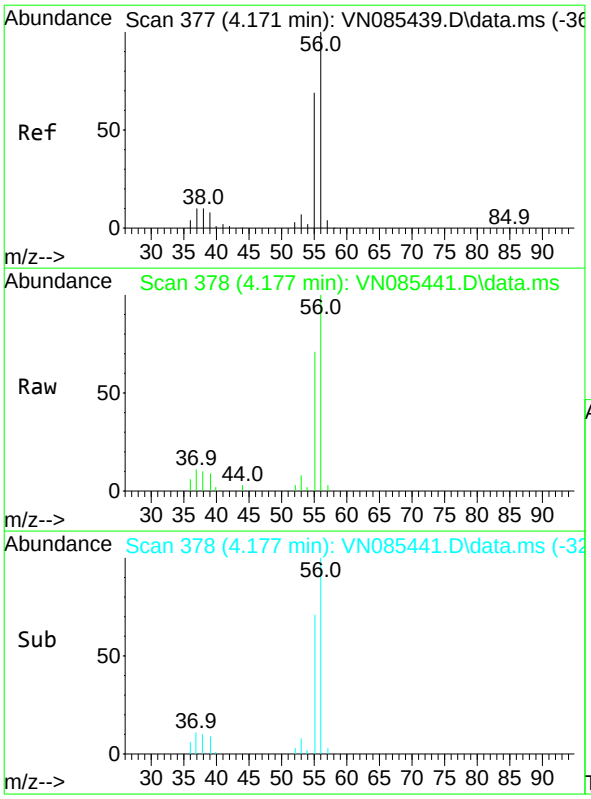



#12
1,1-Dichloroethene
Concen: 9.806 ug/l
RT: 4.342 min Scan# 406
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 96 Resp: 20615

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 176.8 | 141.0 | 211.4 |
| 98 | 60.5 | 49.0 | 73.6 |

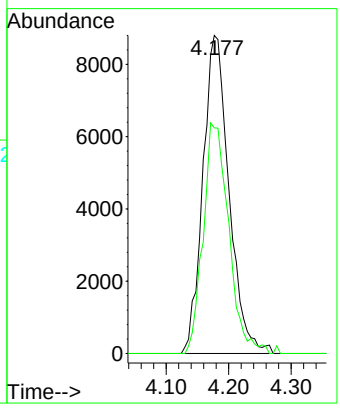





#13
Acrolein
Concen: 51.729 ug/l
RT: 4.177 min Scan# 37
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 56 Resp: 25568

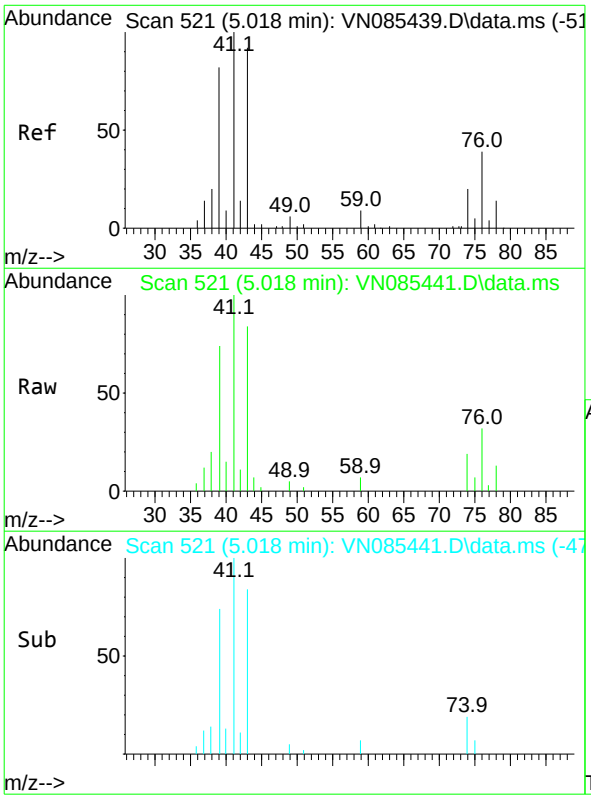
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 70.9 | 56.3 | 84.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

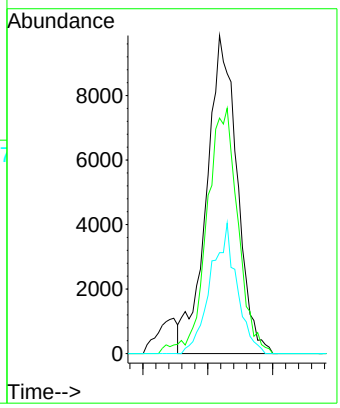
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

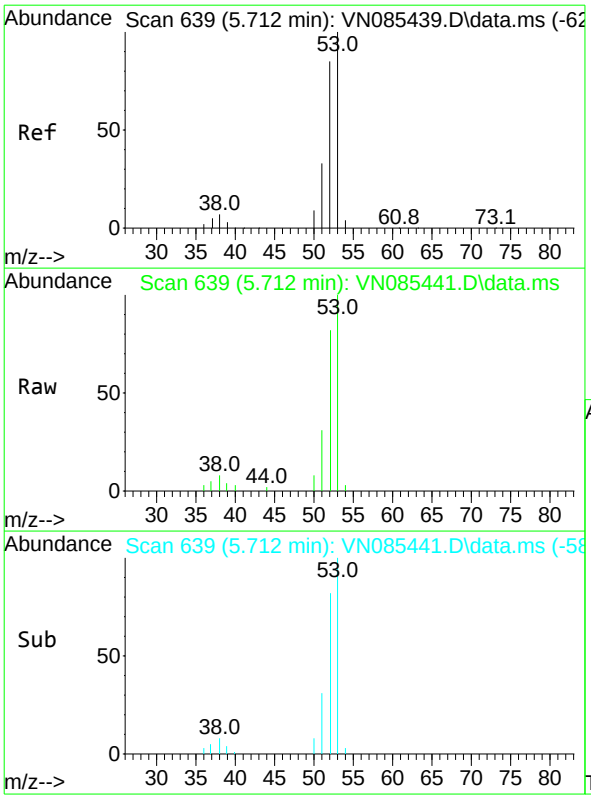



#14
Allyl chloride
Concen: 9.451 ug/l
RT: 5.018 min Scan# 521
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 41 Resp: 32240

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 78.3 | 64.4 | 96.6 |
| 76 | 35.1 | 30.5 | 45.7 |

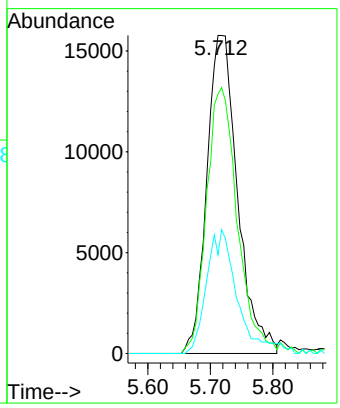





#15
Acrylonitrile
Concen: 46.918 ug/l
RT: 5.712 min Scan# 63
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 53 Resp: 53959

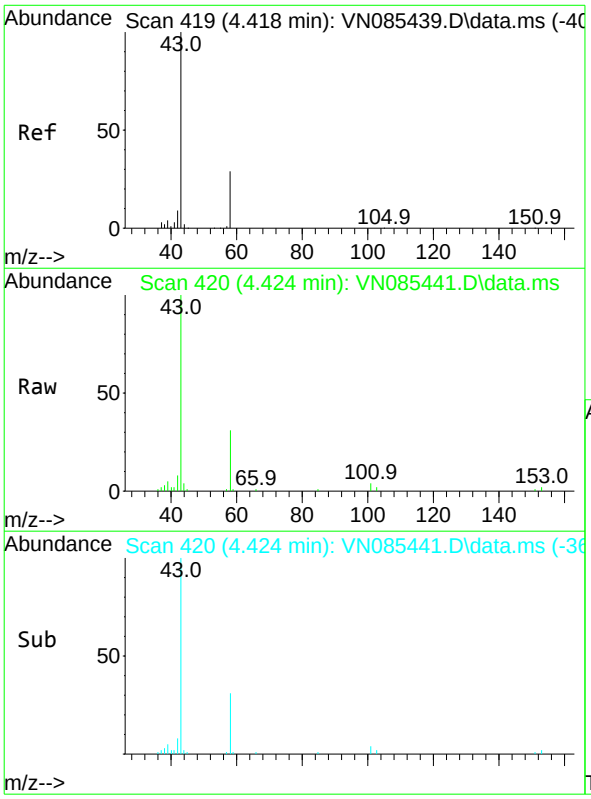
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 83.3 | 65.5 | 98.3 |
| 51 | 38.8 | 29.8 | 44.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

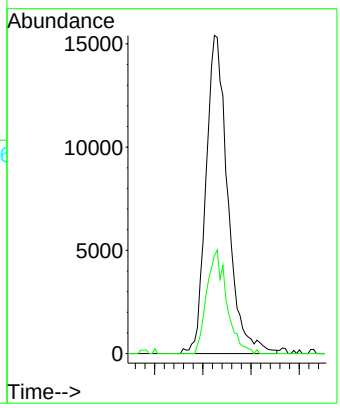
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

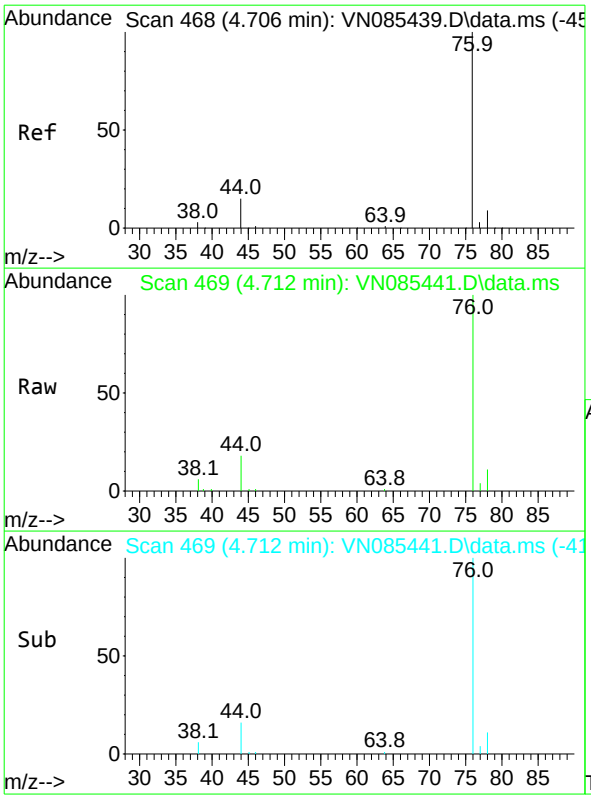



#16
Acetone
Concen: 47.446 ug/l
RT: 4.424 min Scan# 420
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 43 Resp: 48475

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 30.8 | 23.8 | 35.6 |

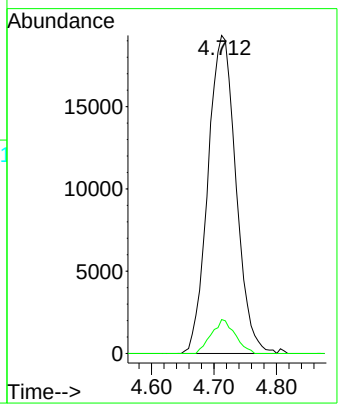





#17
Carbon Disulfide
Concen: 9.300 ug/l
RT: 4.712 min Scan# 46
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 76 Resp: 60201

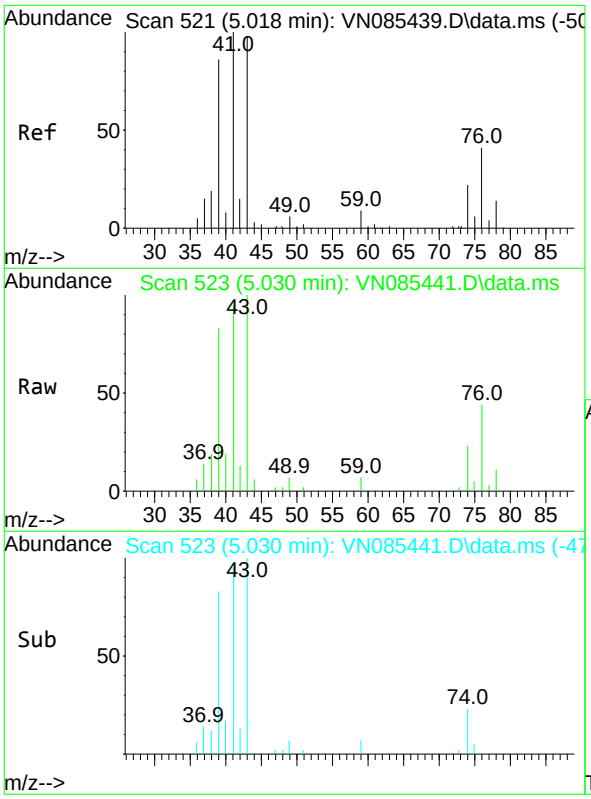
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 10.7 | 6.9 | 10.3# |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

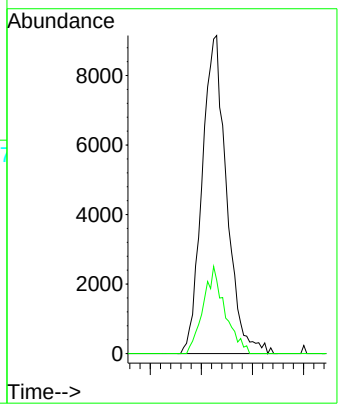
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

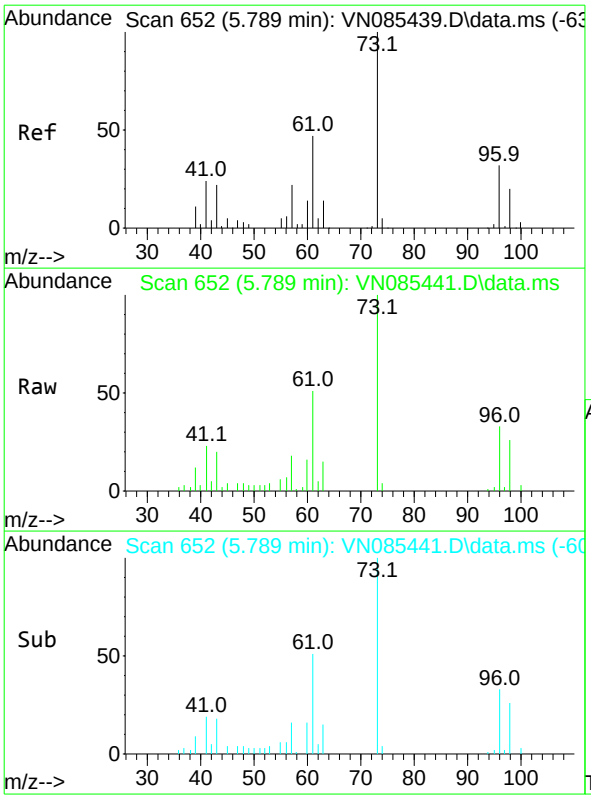



#18
Methyl Acetate
Concen: 9.817 ug/l
RT: 5.030 min Scan# 523
Delta R.T. 0.012 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 43 Resp: 30500

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 24.3 | 18.6 | 28.0 |

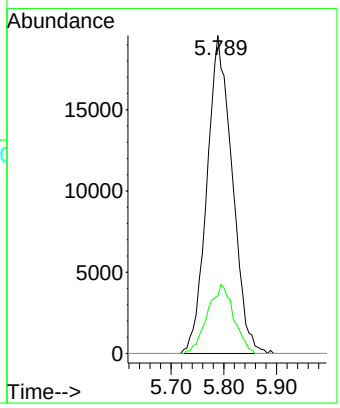





#19
Methyl tert-butyl Ether
Concen: 9.552 ug/l
RT: 5.789 min Scan# 65
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 73 Resp: 65207

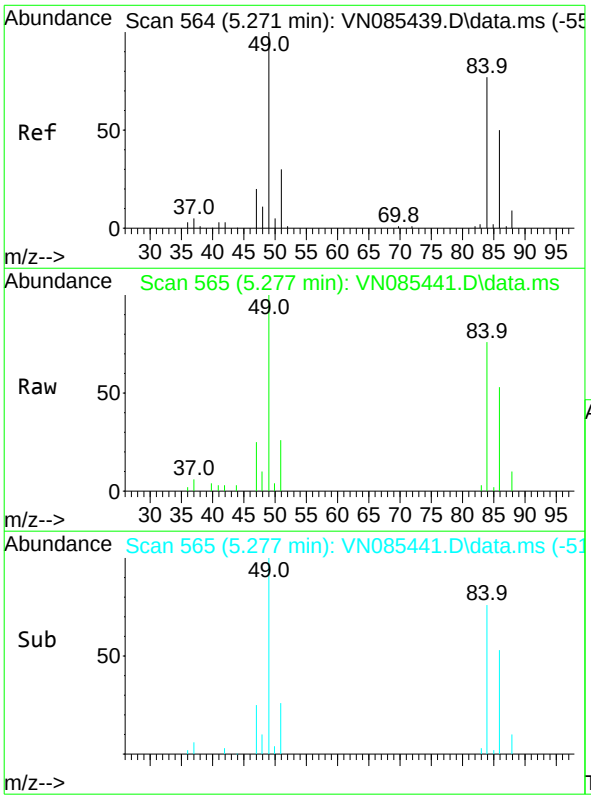
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 18.1 | 17.8 | 26.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

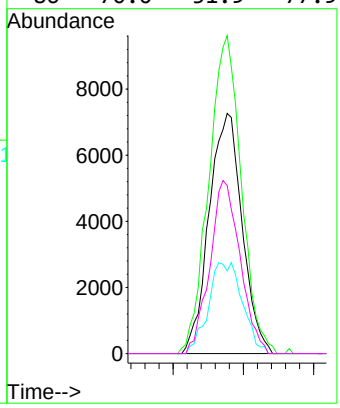
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

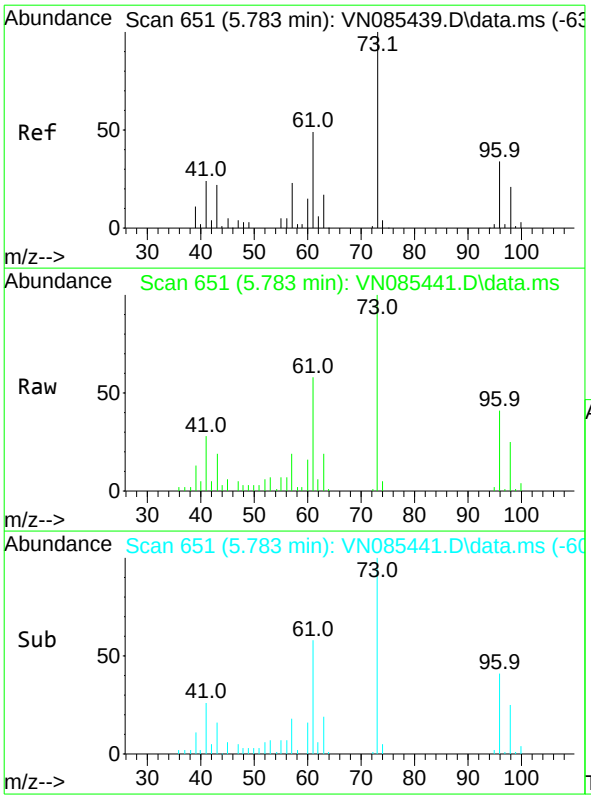



#20
Methylene Chloride
Concen: 9.379 ug/l
RT: 5.277 min Scan# 565
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 84 Resp: 23723

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 132.4 | 104.1 | 156.1 |
| 51 | 34.4 | 31.0 | 46.4 |
| 86 | 70.0 | 51.9 | 77.9 |

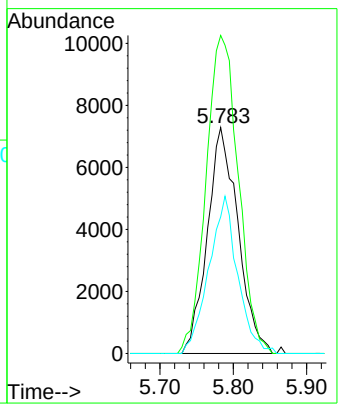





#21
trans-1,2-Dichloroethene
Concen: 9.403 ug/l
RT: 5.783 min Scan# 65
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 96 Resp: 21127

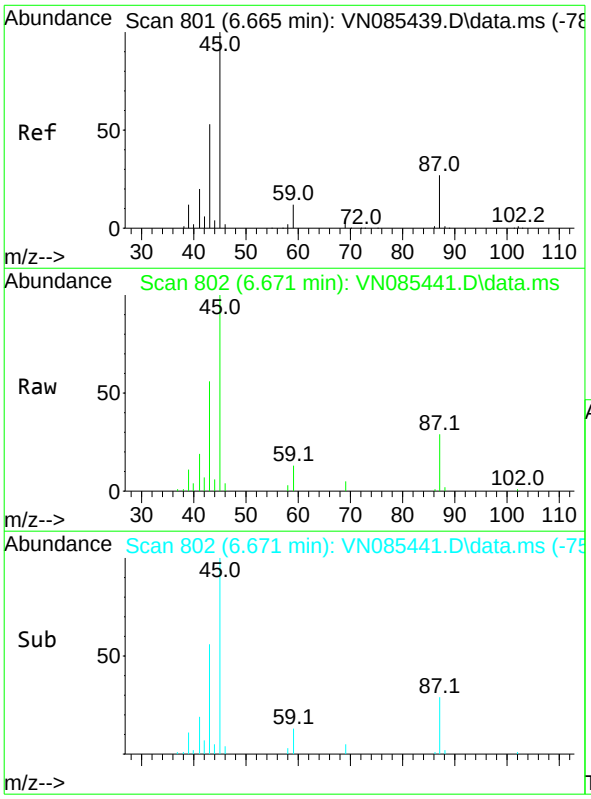
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 140.8 | 115.7 | 173.5 |
| 98 | 60.5 | 49.8 | 74.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

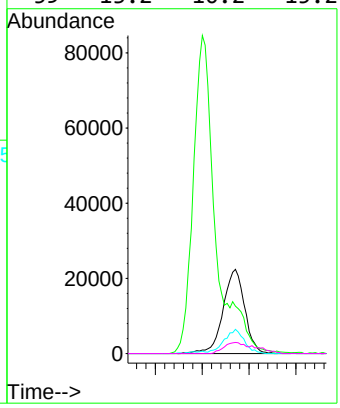
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

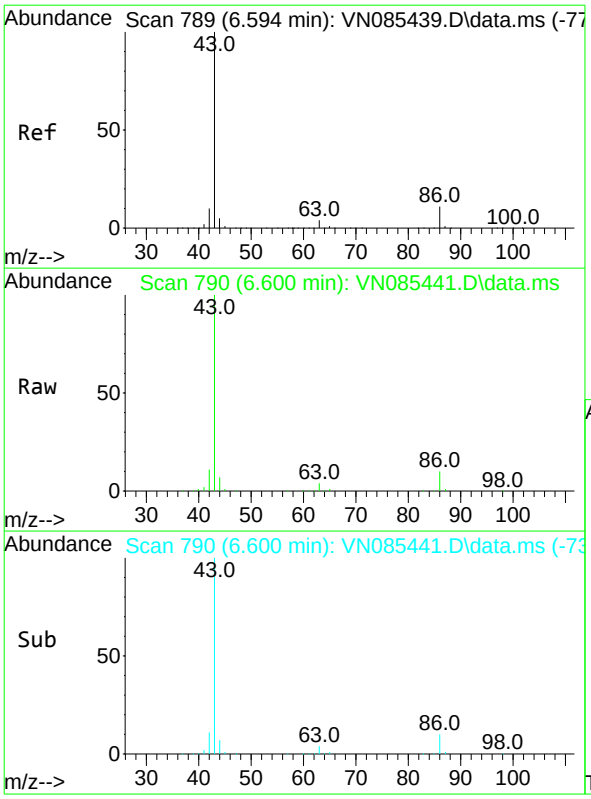



#22
Diisopropyl ether
Concen: 9.490 ug/l
RT: 6.671 min Scan# 802
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 45 Resp: 71857

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 53.2 | 45.0 | 67.6 |
| 87 | 28.8 | 21.8 | 32.8 |
| 59 | 13.2 | 10.2 | 15.2 |

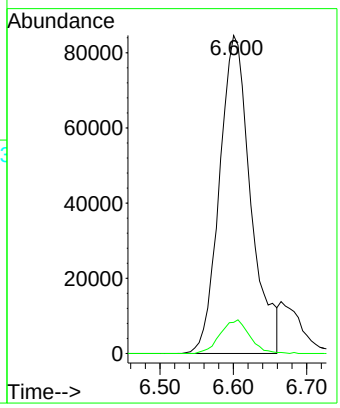





#23
Vinyl Acetate
Concen: 47.125 ug/l
RT: 6.600 min Scan# 79
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 43 Resp: 250575

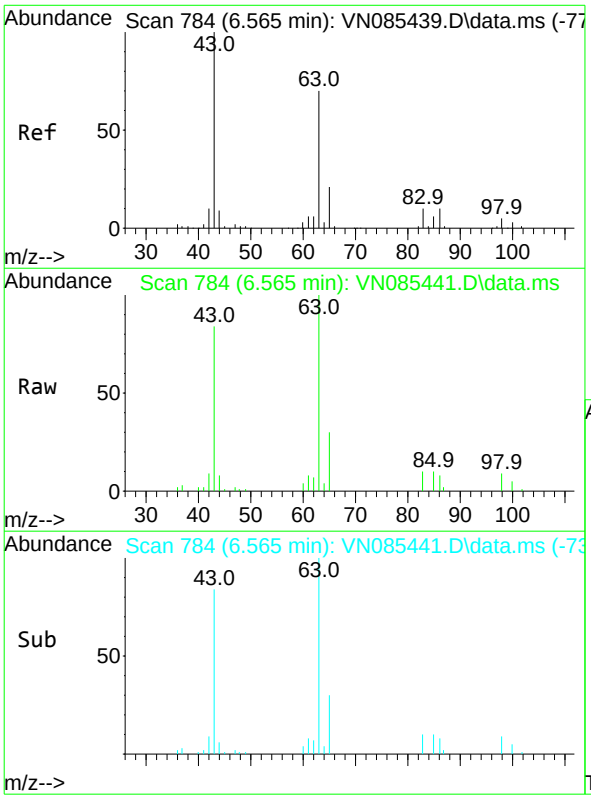
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 9.8 | 8.4 | 12.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

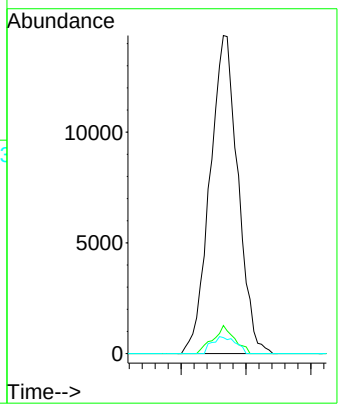
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

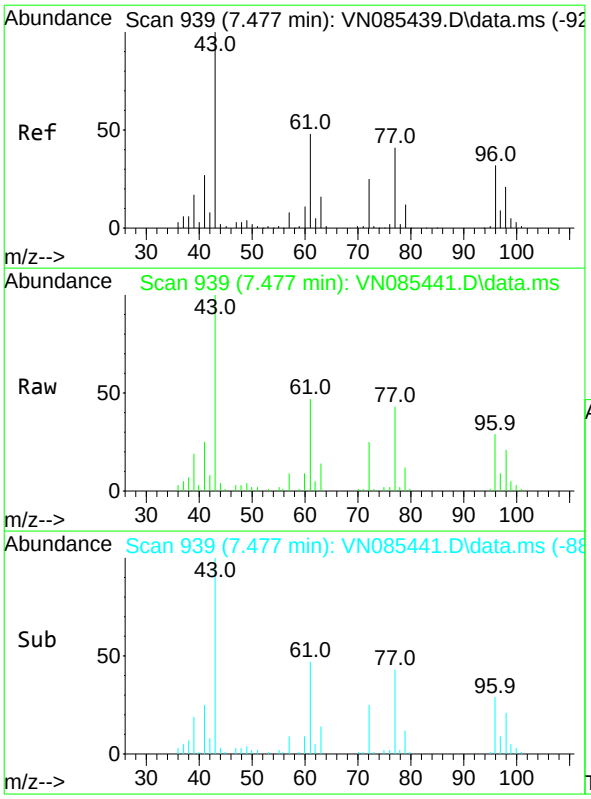



#24
1,1-Dichloroethane
Concen: 9.335 ug/l
RT: 6.565 min Scan# 784
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 63 Resp: 43099

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 8.8 | 3.3 | 9.8 |
| 100 | 5.0 | 2.0 | 6.0 |

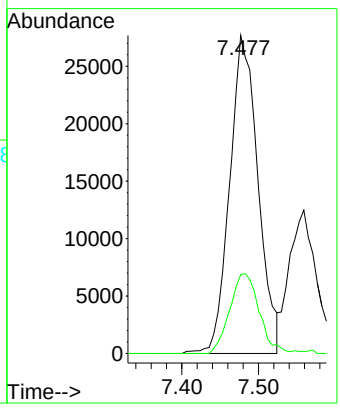





#25
2-Butanone
Concen: 47.350 ug/l
RT: 7.477 min Scan# 93
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 43 Resp: 71191

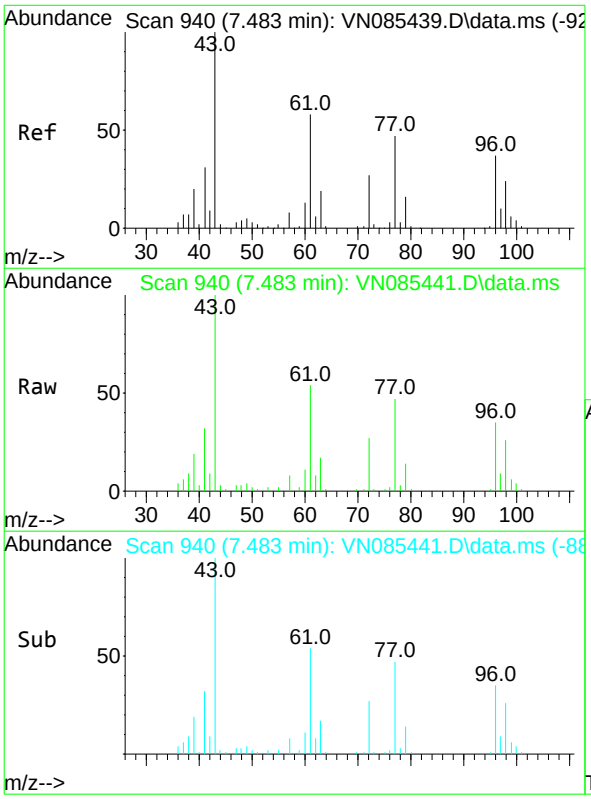
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 24.8 | 20.2 | 30.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

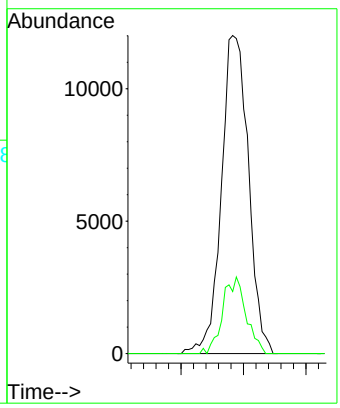
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

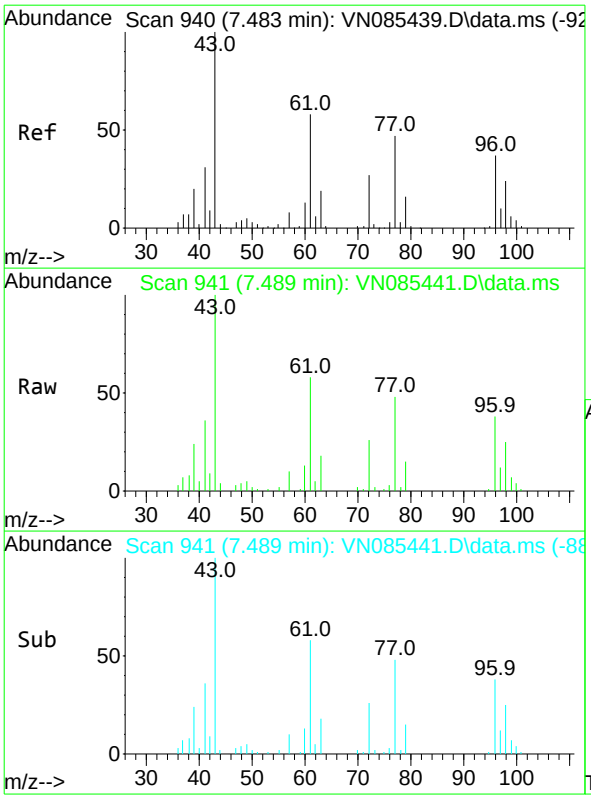



#26
2,2-Dichloropropane
Concen: 9.672 ug/l
RT: 7.483 min Scan# 940
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 77 Resp: 36105

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 20.8 | 10.7 | 32.1 |

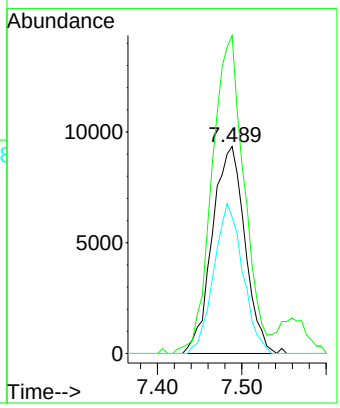





#27
cis-1,2-Dichloroethene
Concen: 9.466 ug/l
RT: 7.489 min Scan# 94
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 96 Resp: 25049

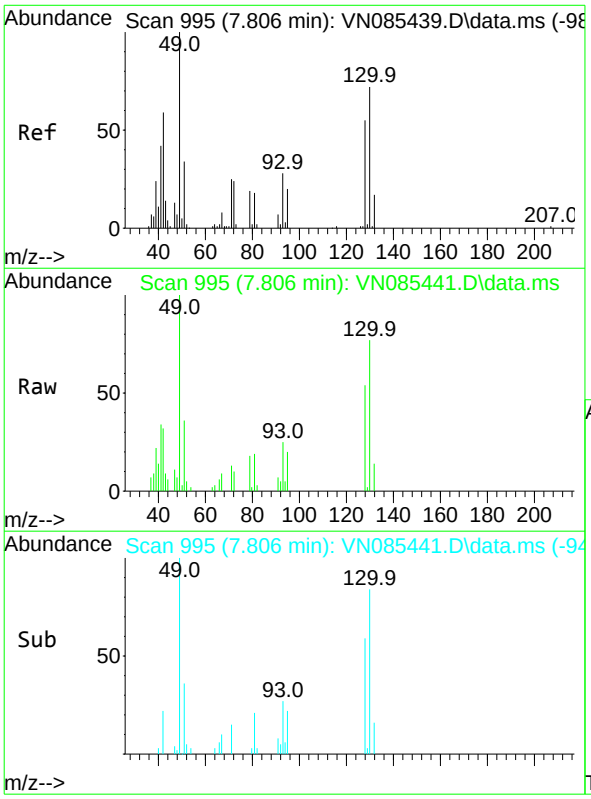
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 151.8 | 0.0 | 311.8 |
| 98 | 64.7 | 0.0 | 126.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

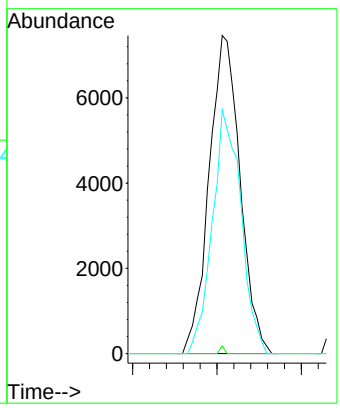
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

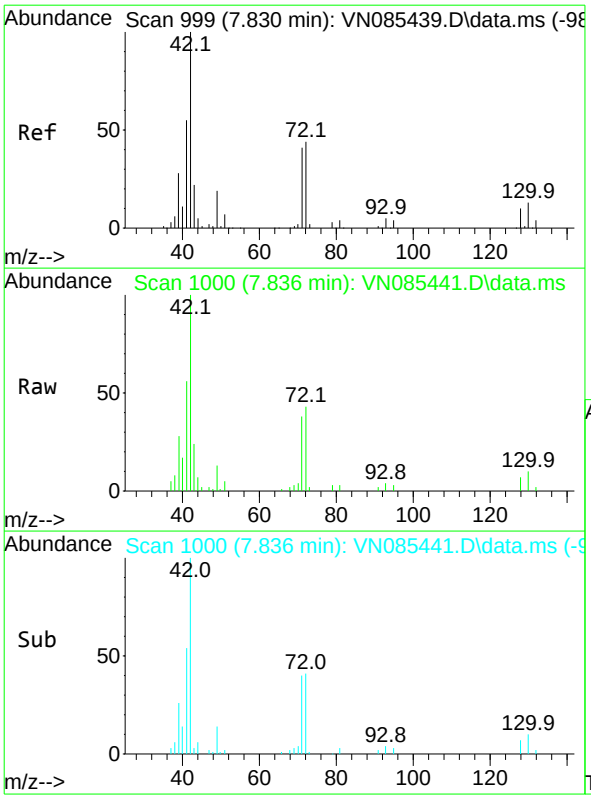



#28
Bromochloromethane
Concen: 8.863 ug/l
RT: 7.806 min Scan# 995
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 49 Resp: 19037

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 0.3 | 0.0 | 4.4 |
| 130 | 70.8 | 55.0 | 82.4 |

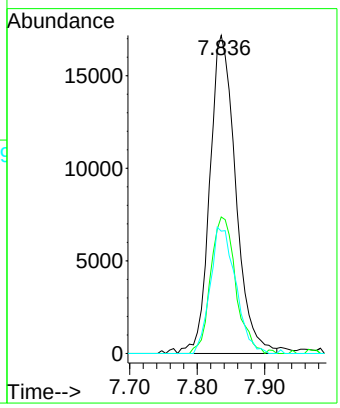





#29
Tetrahydrofuran
Concen: 47.881 ug/l
RT: 7.836 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 42 Resp: 45641

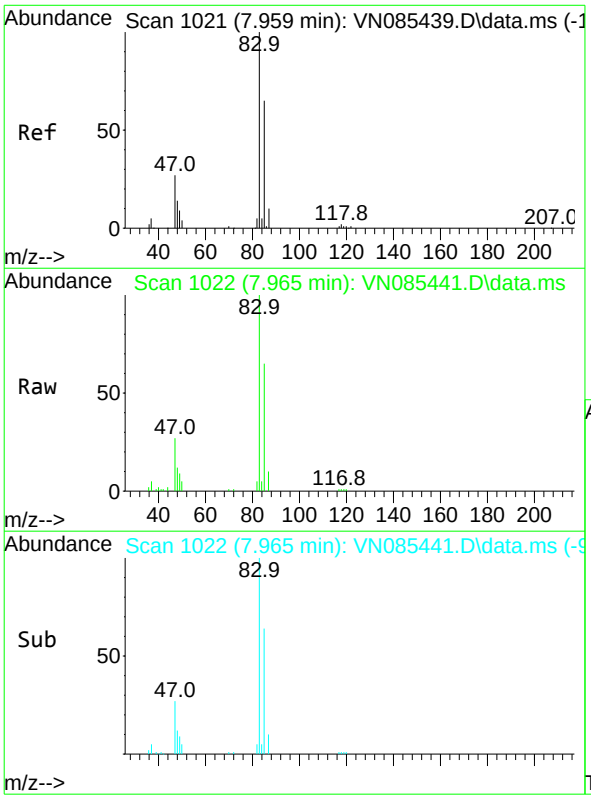
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 41.6 | 34.2 | 51.2 |
| 71 | 39.2 | 32.5 | 48.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

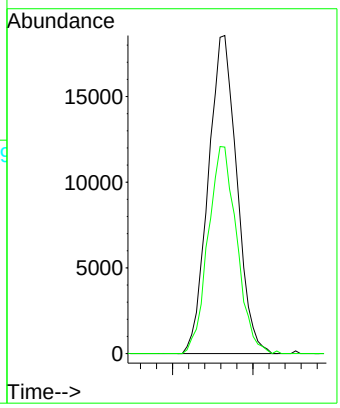
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

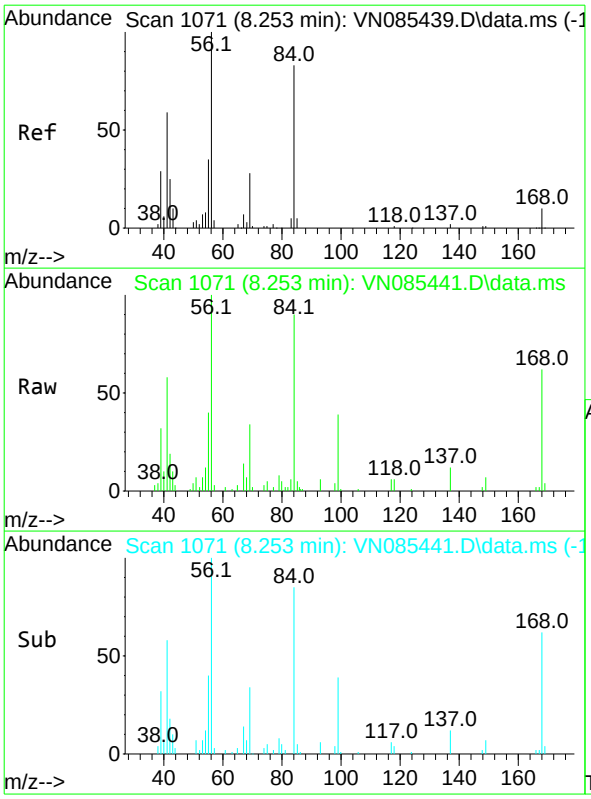



#30
Chloroform
Concen: 9.596 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 83 Resp: 45792

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.9 | 51.8 | 77.6 |

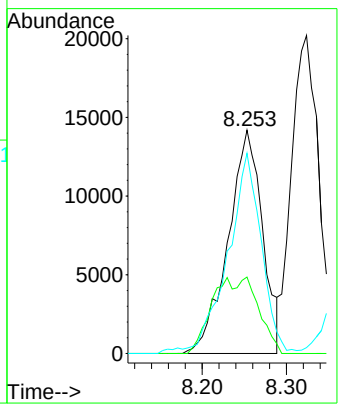





#31
Cyclohexane
Concen: 10.020 ug/l
RT: 8.253 min Scan# 10
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 56 Resp: 40211

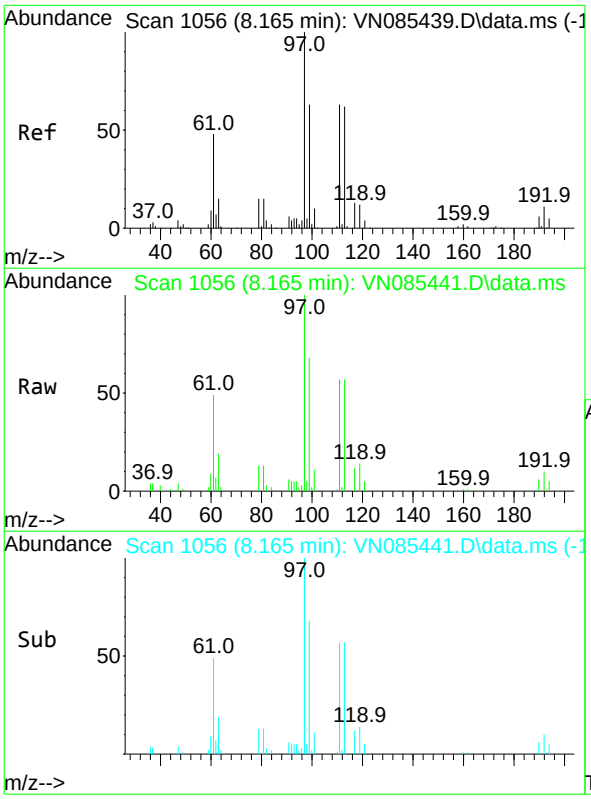
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 34.2 | 22.2 | 33.4# |
| 84 | 87.2 | 66.4 | 99.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

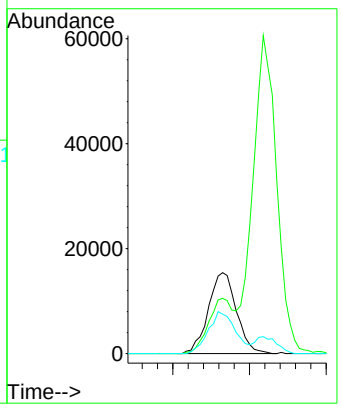
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

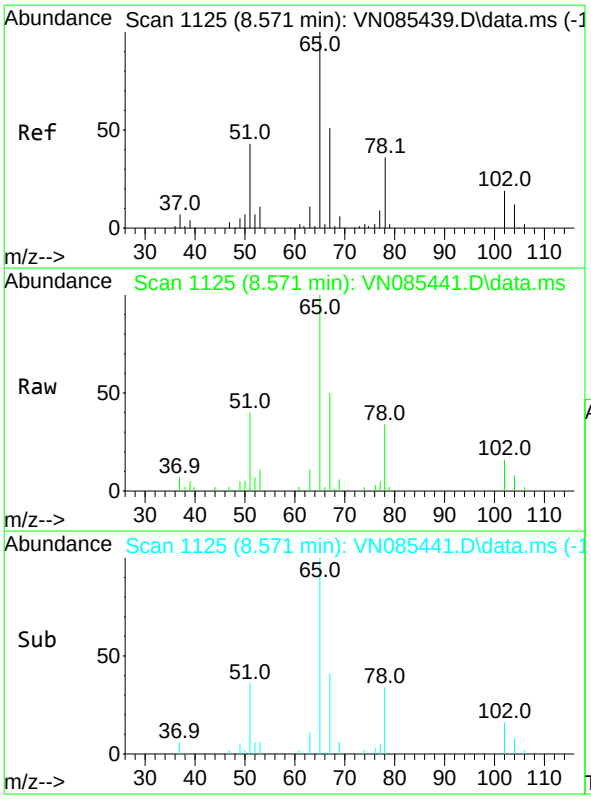



#32
1,1,1-Trichloroethane
Concen: 9.358 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 97 Resp: 39170

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 62.6 | 49.8 | 74.6 |
| 61 | 50.2 | 41.4 | 62.2 |

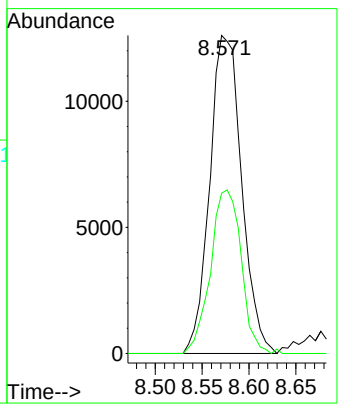





#33
1,2-Dichloroethane-d4
Concen: 9.442 ug/l
RT: 8.571 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 65 Resp: 29856

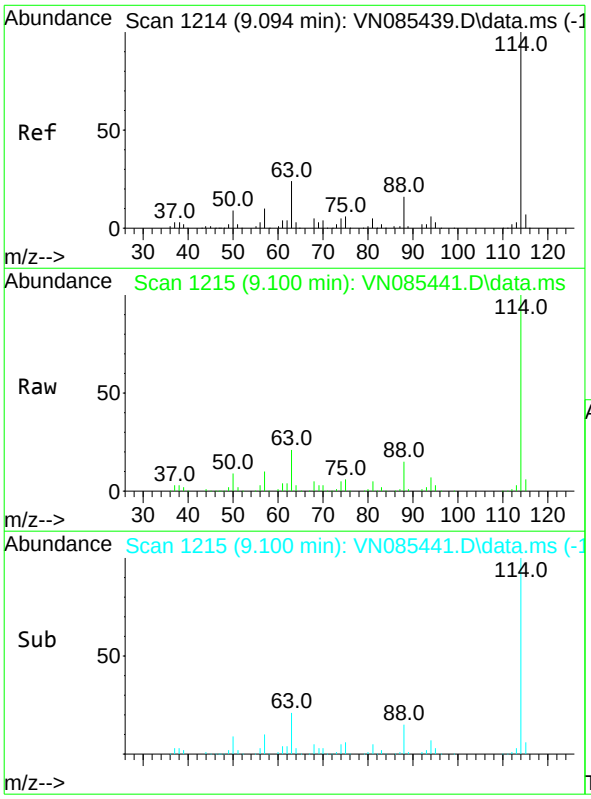
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 49.5 | 0.0 | 101.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

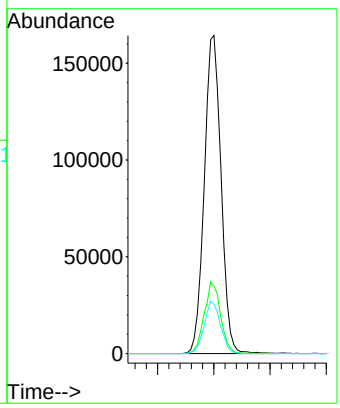
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

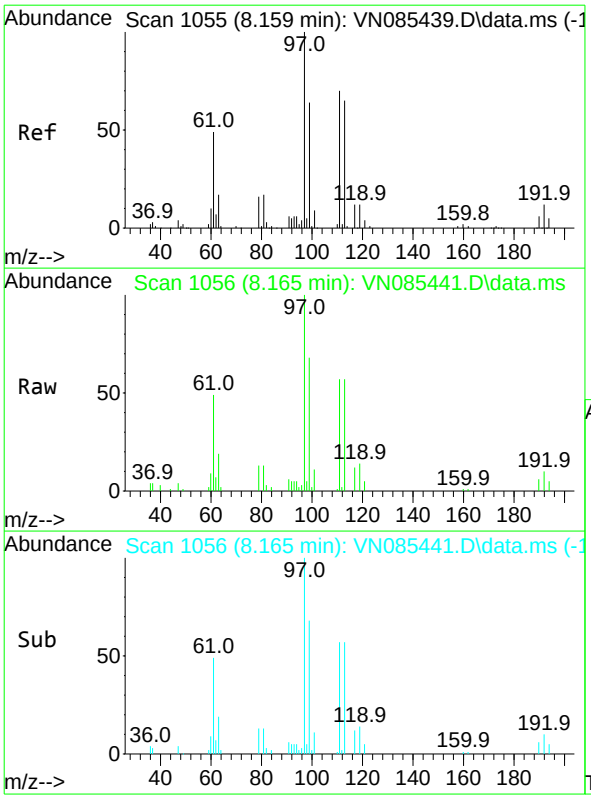



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:114 Resp: 340403

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 21.1 | 0.0 | 47.6 |
| 88 | 15.5 | 0.0 | 32.6 |

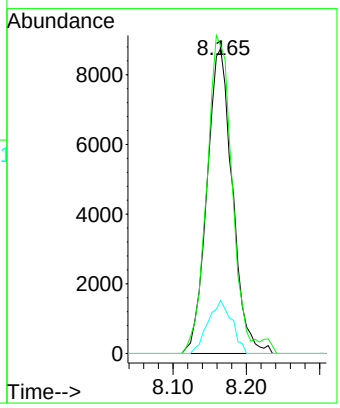





#35
Dibromofluoromethane
Concen: 8.939 ug/l
RT: 8.165 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:113 Resp: 21110

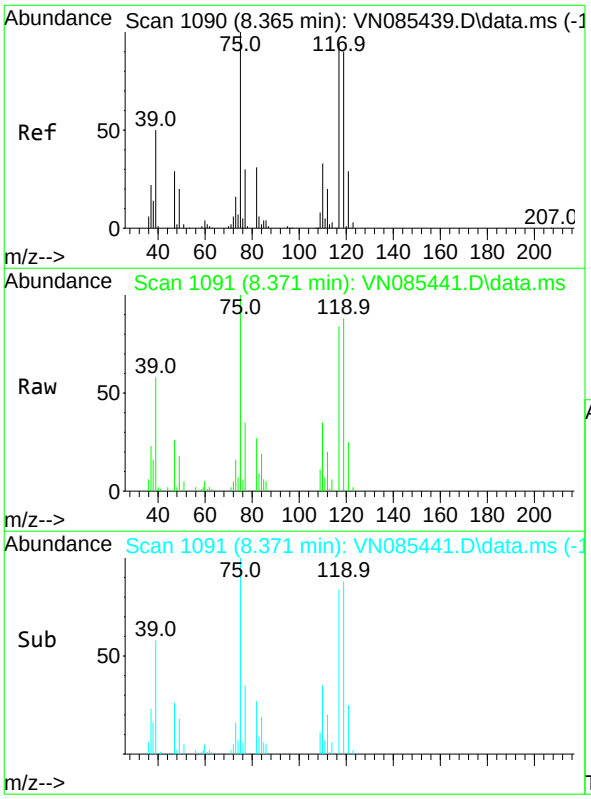
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 103.4 | 82.7 | 124.1 |
| 192 | 16.4 | 14.3 | 21.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

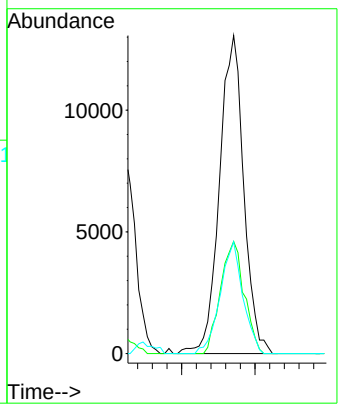
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

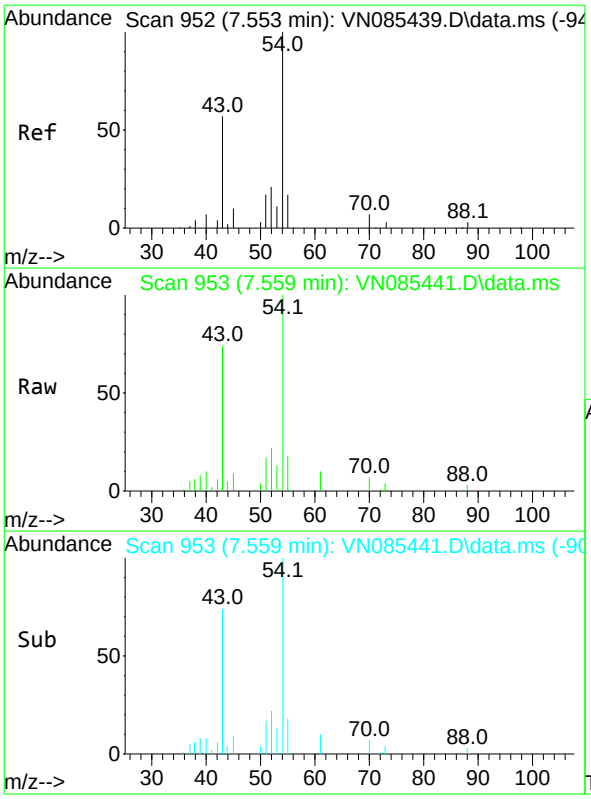



#36
1,1-Dichloropropene
Concen: 9.056 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 75 Resp: 30015

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 34.3 | 16.5 | 49.5 |
| 77 | 32.9 | 24.4 | 36.6 |

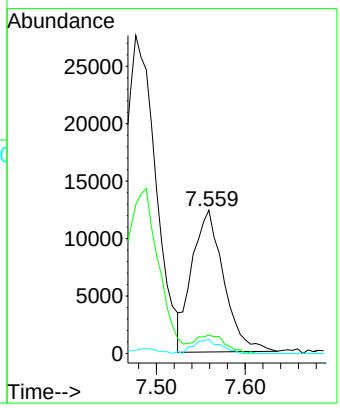





#37
Ethyl Acetate
Concen: 9.195 ug/l
RT: 7.559 min Scan# 95
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 43 Resp: 30760

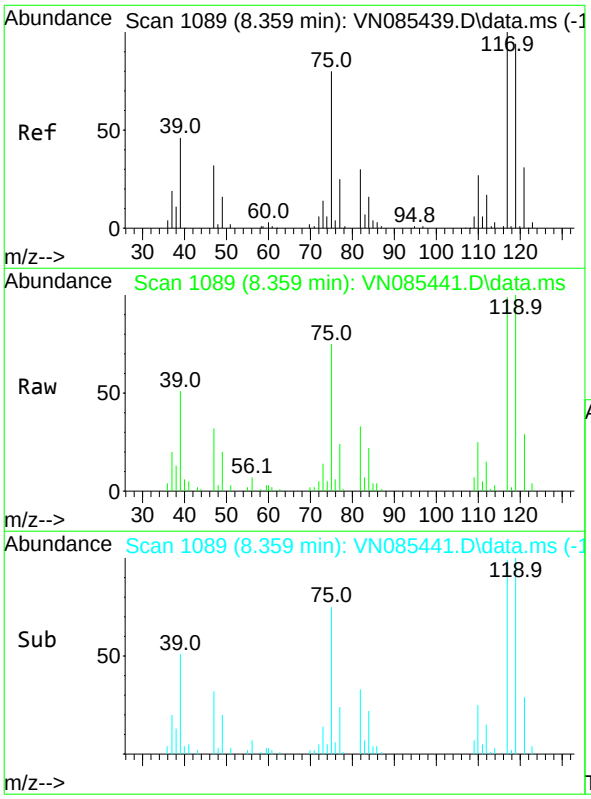
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 12.2 | 10.9 | 16.3 |
| 70 | 8.4 | 7.5 | 11.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

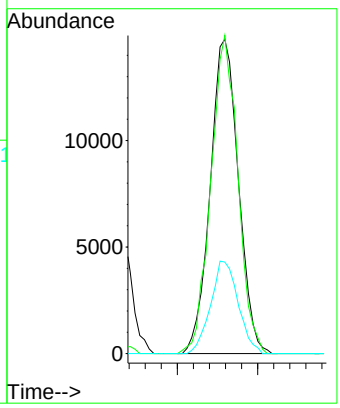
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

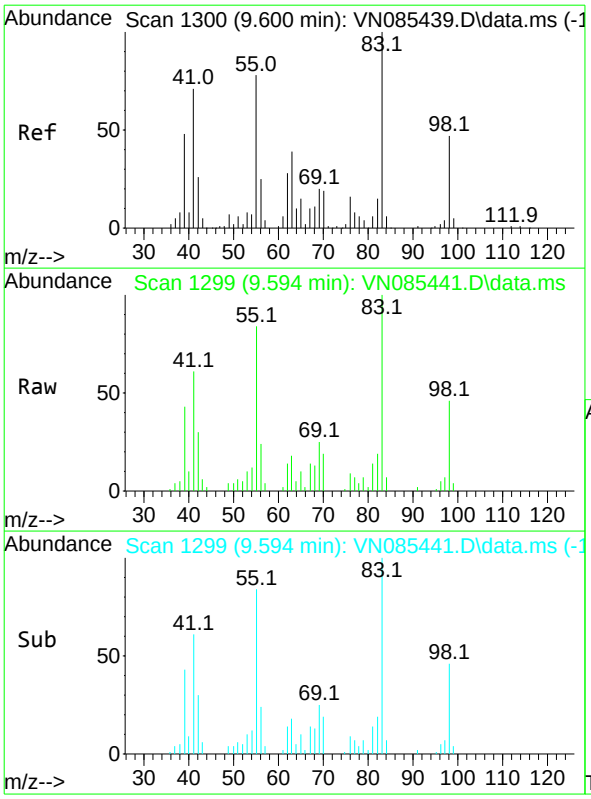



#38
Carbon Tetrachloride
Concen: 9.492 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:117 Resp: 36015

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 101.2 | 75.4 | 113.2 |
| 121 | 29.1 | 24.6 | 37.0 |

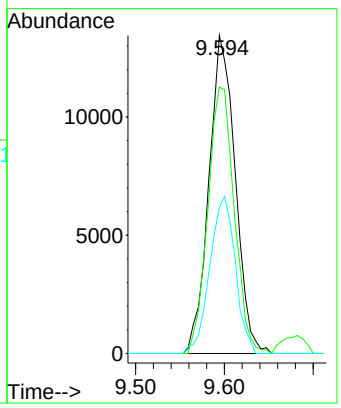





#39
Methylcyclohexane
Concen: 8.900 ug/l
RT: 9.594 min Scan# 12
Delta R.T. -0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 83 Resp: 27721

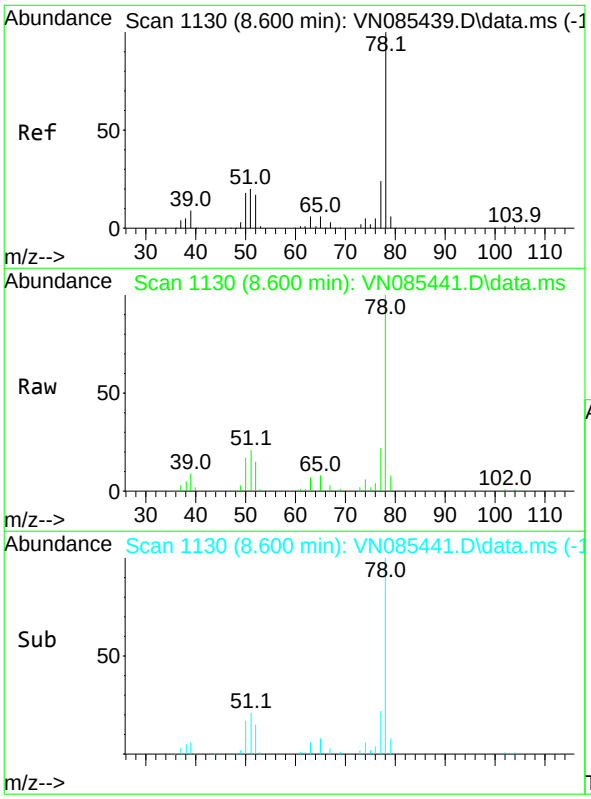
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 83.8 | 62.6 | 94.0 |
| 98 | 45.8 | 37.7 | 56.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

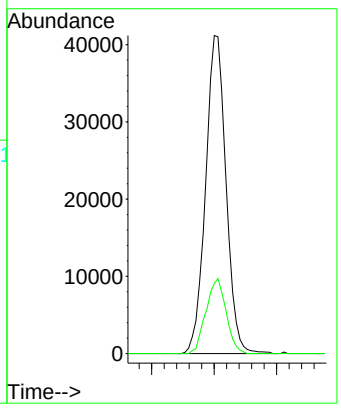
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

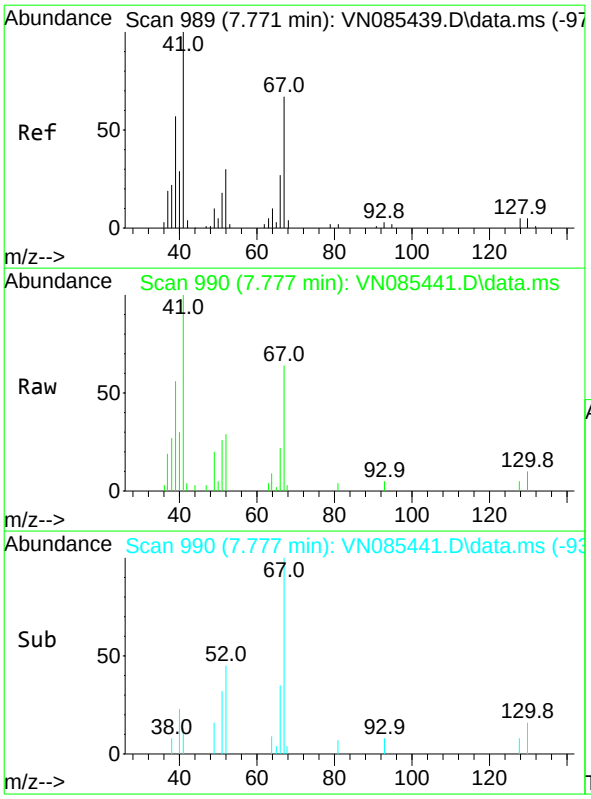



#40
Benzene
Concen: 9.407 ug/l
RT: 8.600 min Scan# 1130
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 78 Resp: 93680

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 22.0 | 19.0 | 28.6 |

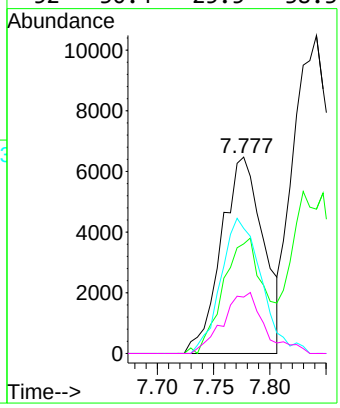





#41
Methacrylonitrile
Concen: 9.686 ug/l
RT: 7.777 min Scan# 99
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 41 Resp: 16859

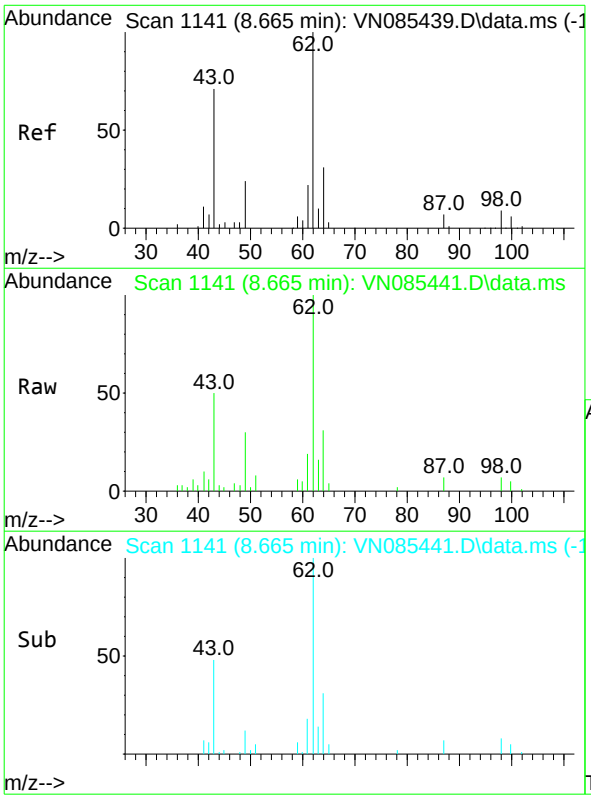
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 57.3 | 46.0 | 69.0 |
| 67 | 66.2 | 57.4 | 86.2 |
| 52 | 30.4 | 25.5 | 38.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

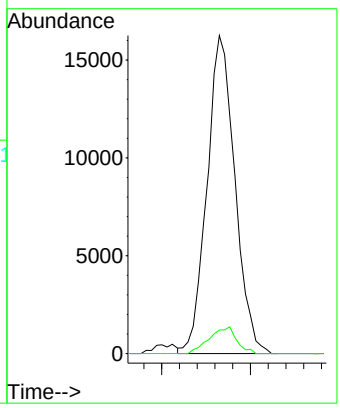
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

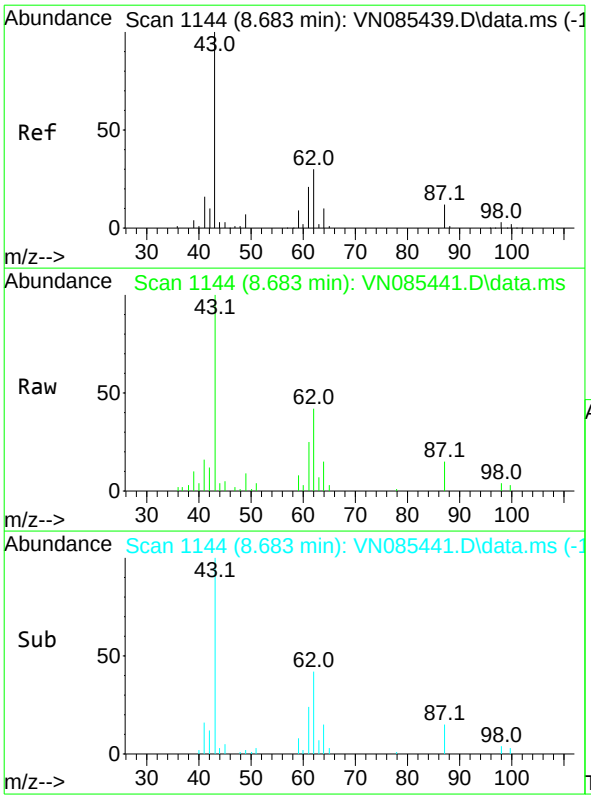



#42
1,2-Dichloroethane
Concen: 9.483 ug/l
RT: 8.665 min Scan# 1141
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 62 Resp: 35569

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 8.2 | 0.0 | 17.0 |

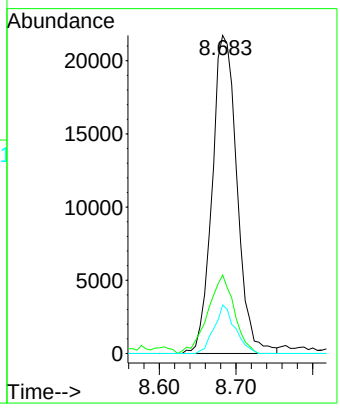





#43
Isopropyl Acetate
Concen: 9.127 ug/l
RT: 8.683 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 43 Resp: 48926

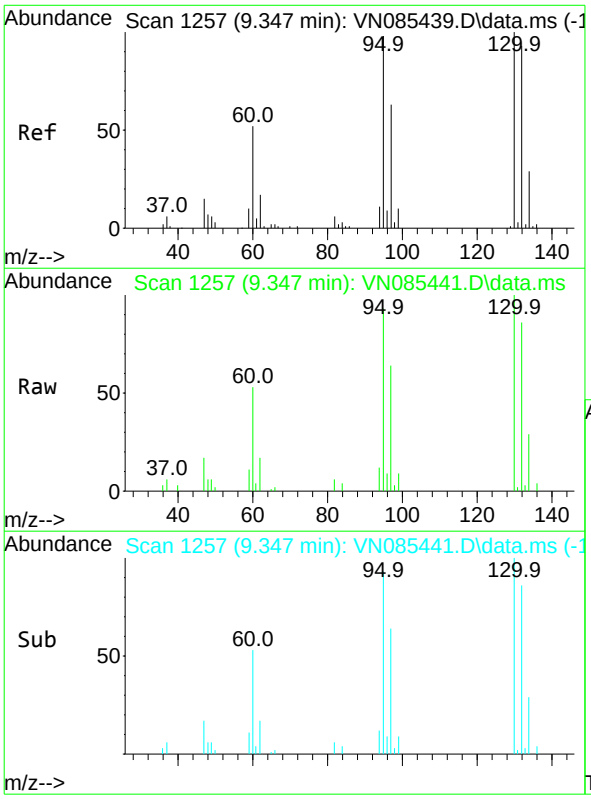
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 26.2 | 20.7 | 31.1 |
| 87 | 12.8 | 9.8 | 14.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

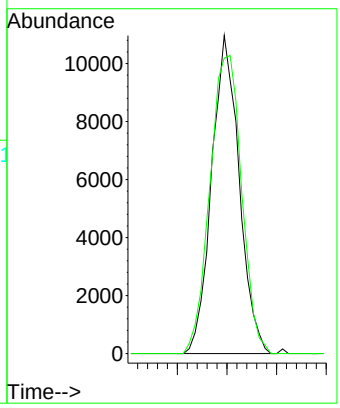
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

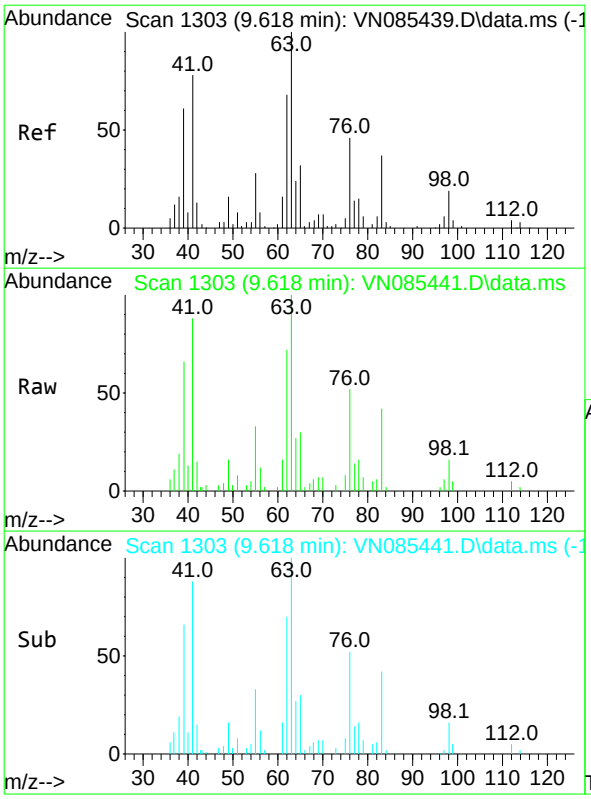



#44
Trichloroethene
Concen: 9.108 ug/l
RT: 9.347 min Scan# 1257
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:130 Resp: 21113

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 92.9 | 0.0 | 195.8 |

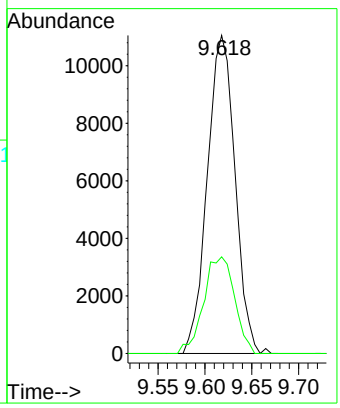





#45
1,2-Dichloropropane
Concen: 8.942 ug/l
RT: 9.618 min Scan# 13
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 63 Resp: 22747

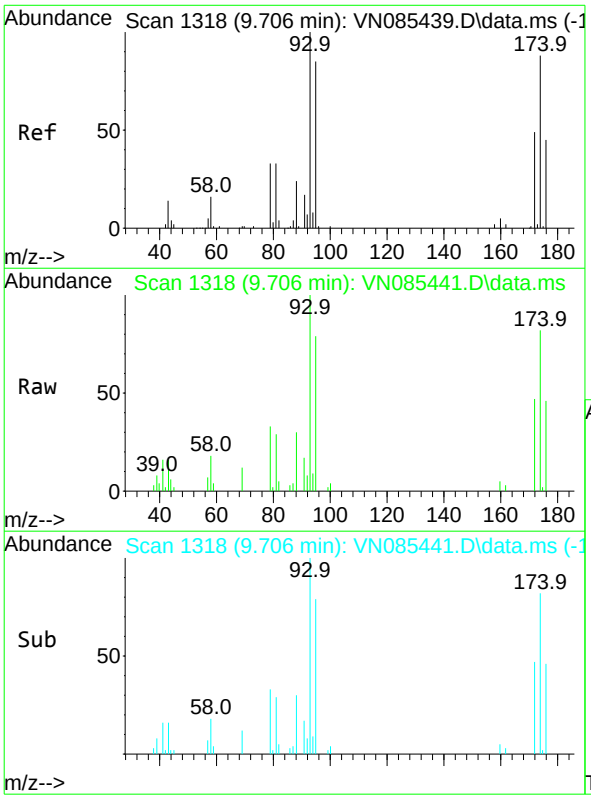
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 30.4 | 25.6 | 38.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

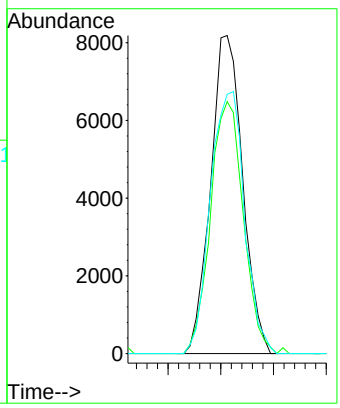
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

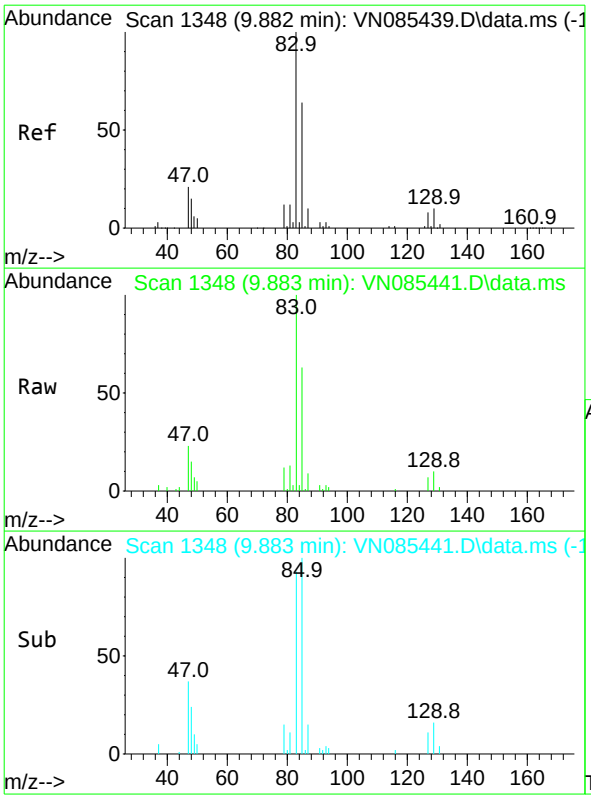



#46
Dibromomethane
Concen: 9.404 ug/l
RT: 9.706 min Scan# 1318
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 93 Resp: 17260

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 81.5 | 64.7 | 97.1 |
| 174 | 87.8 | 69.0 | 103.4 |

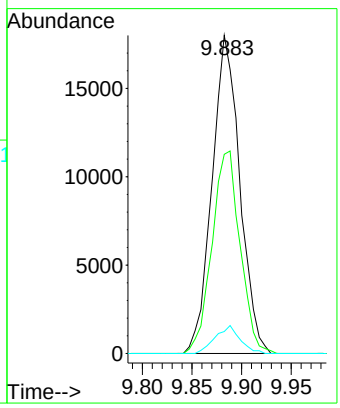





#47
Bromodichloromethane
Concen: 9.365 ug/l
RT: 9.883 min Scan# 13
Delta R.T. 0.001 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 83 Resp: 35020

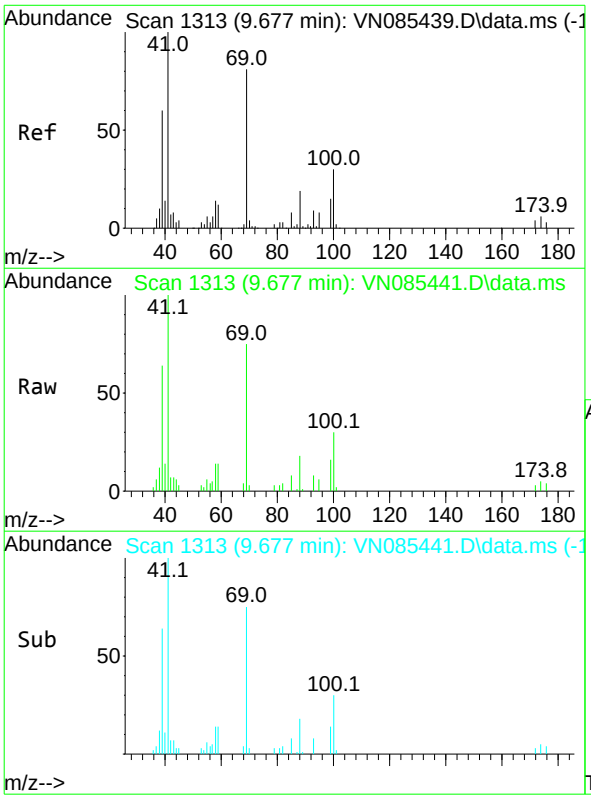
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 62.6 | 51.2 | 76.8 |
| 127 | 6.9 | 6.5 | 9.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

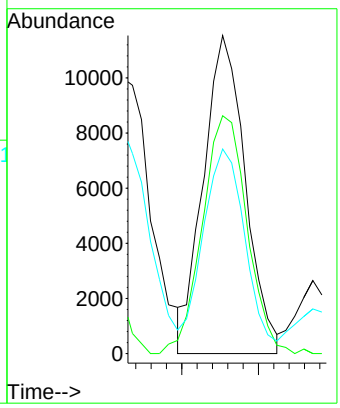
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

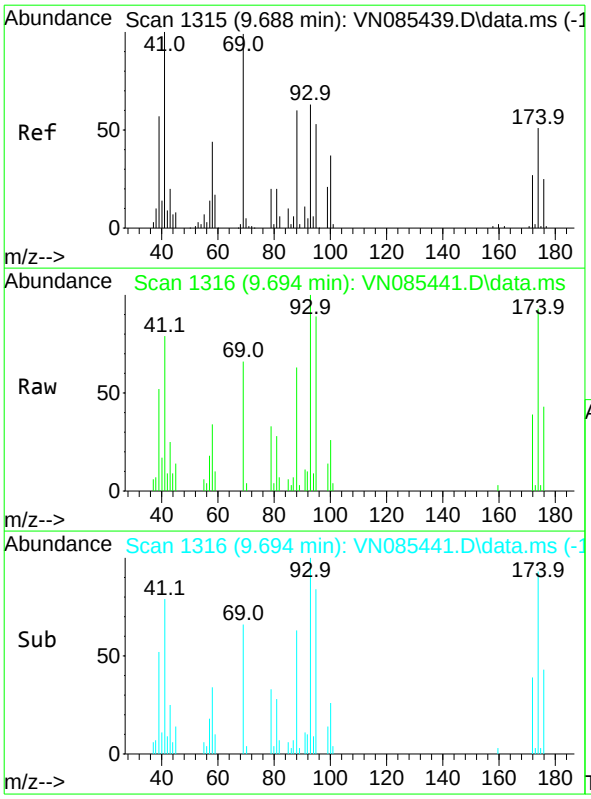



#48
Methyl methacrylate
Concen: 9.067 ug/l
RT: 9.677 min Scan# 1313
Delta R.T. -0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 41 Resp: 21873

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 80.0 | 64.7 | 97.1 |
| 39 | 65.2 | 49.0 | 73.6 |

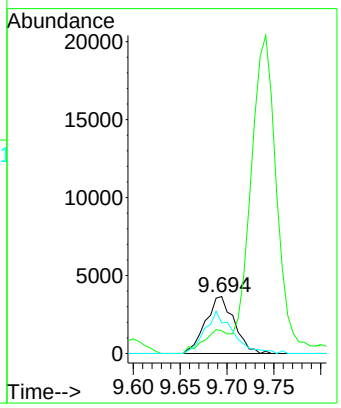





#49
1,4-Dioxane
Concen: 190.382 ug/l
RT: 9.694 min Scan# 13
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 88 Resp: 7734

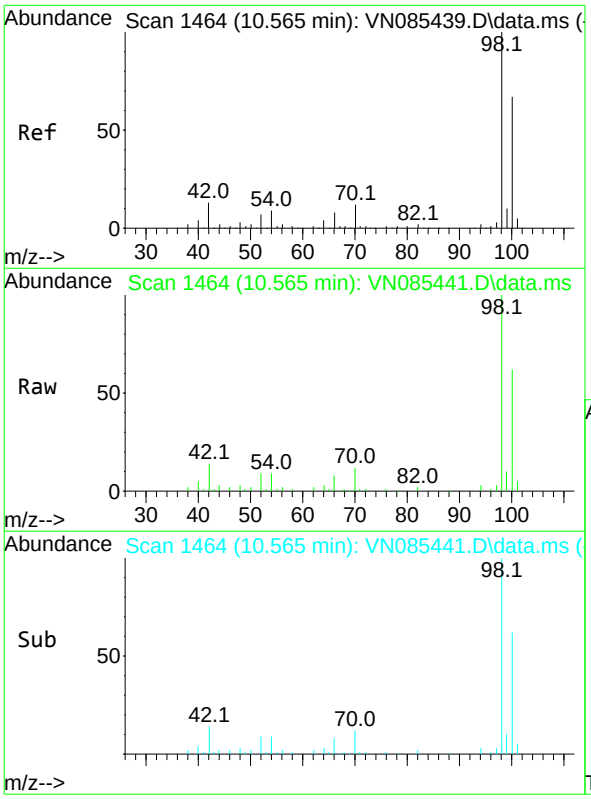
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 35.2 | 26.6 | 39.8 |
| 58 | 73.3 | 59.5 | 89.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

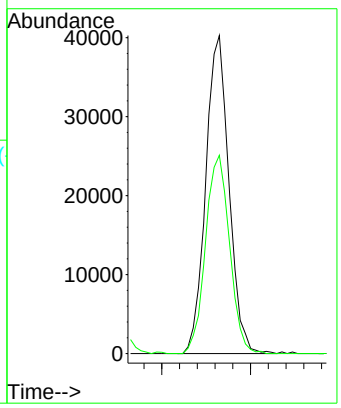
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

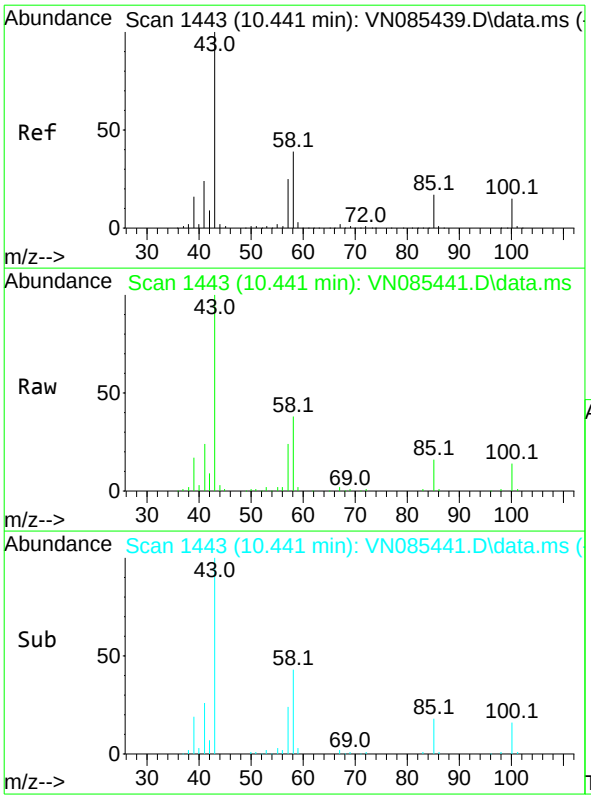



#50
Toluene-d8
Concen: 8.727 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 98 Resp: 73223

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.5 | 52.2 | 78.4 |

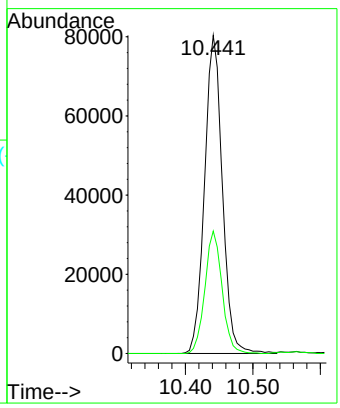





#51
4-Methyl-2-Pentanone
Concen: 47.254 ug/l
RT: 10.441 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 43 Resp: 146990

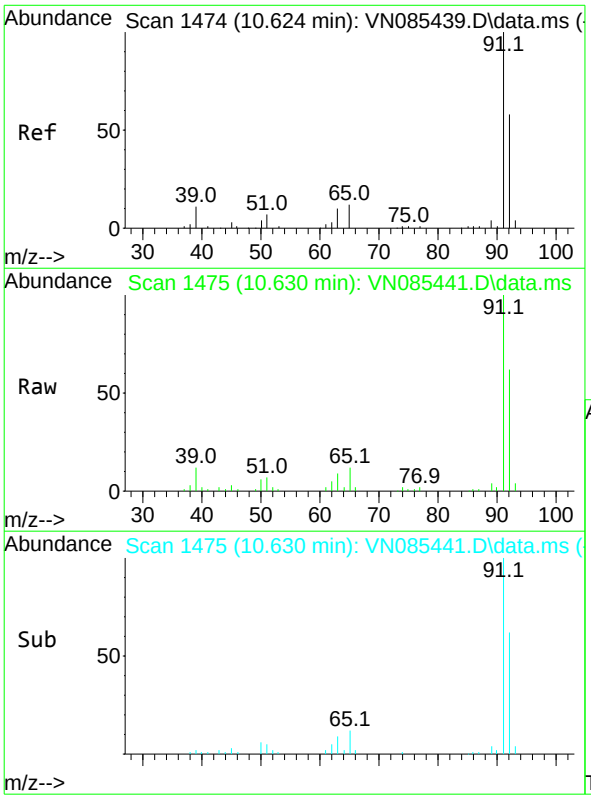
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 37.1 | 30.5 | 45.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

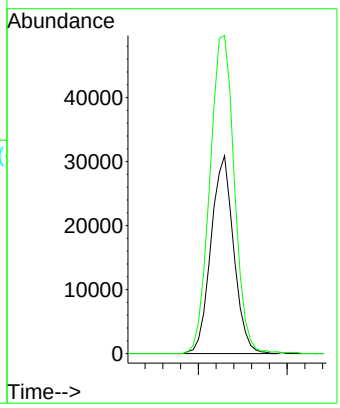
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

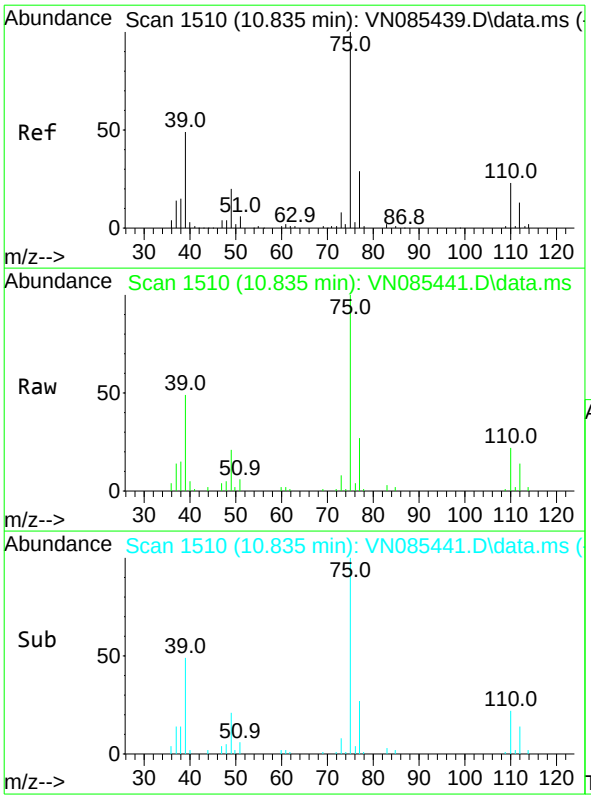



#52
Toluene
Concen: 9.527 ug/l
RT: 10.630 min Scan# 1475
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 92 Resp: 54976

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 173.7 | 139.2 | 208.8 |

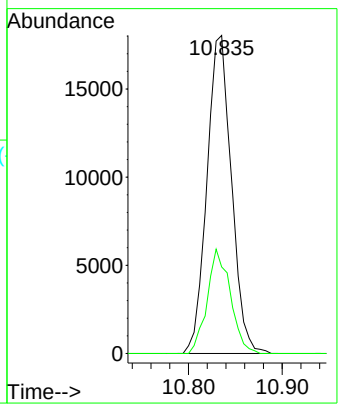





#53
t-1,3-Dichloropropene
Concen: 9.276 ug/l
RT: 10.835 min Scan# 15
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 75 Resp: 32780

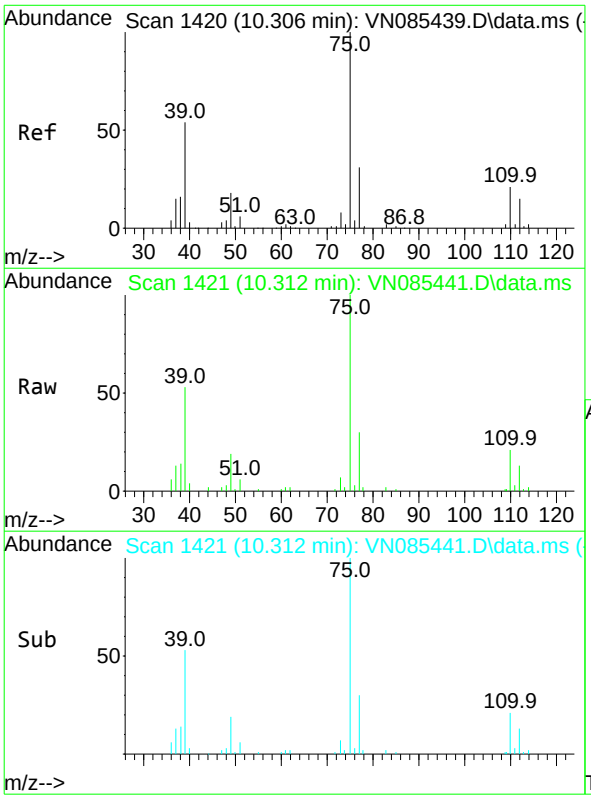
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 27.2 | 23.5 | 35.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

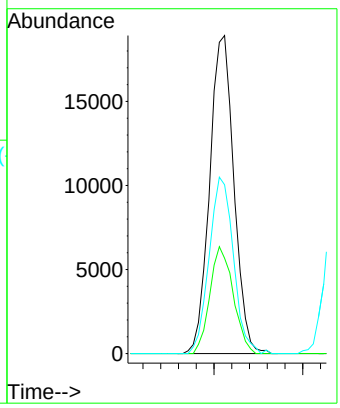
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

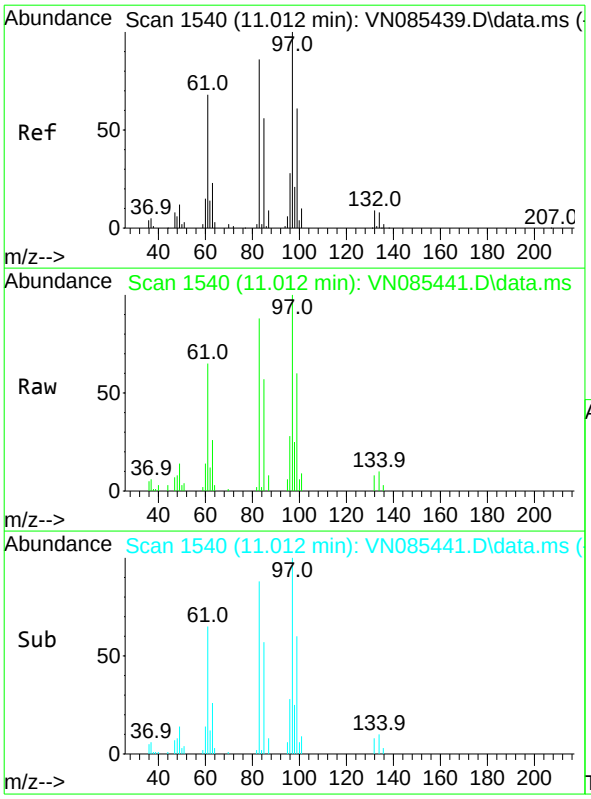



#54
cis-1,3-Dichloropropene
Concen: 9.512 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 75 Resp: 35904

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 30.0 | 25.0 | 37.4 |
| 39 | 53.1 | 43.1 | 64.7 |

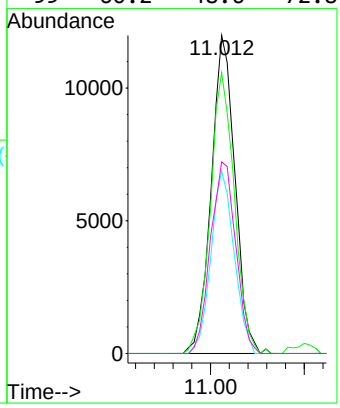





#55
1,1,2-Trichloroethane
Concen: 9.222 ug/l
RT: 11.012 min Scan# 15
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 97 Resp: 21060

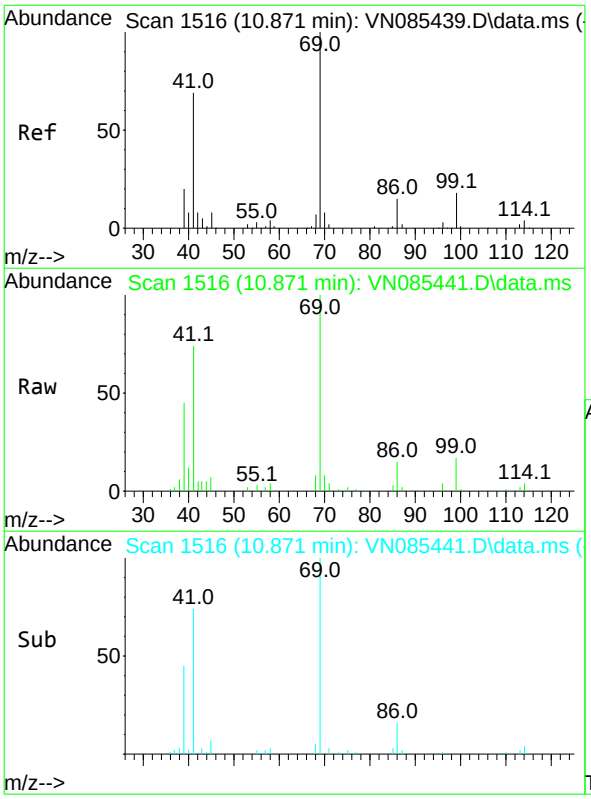
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 88.3 | 69.0 | 103.6 |
| 85 | 57.3 | 44.6 | 66.8 |
| 99 | 60.2 | 48.6 | 72.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

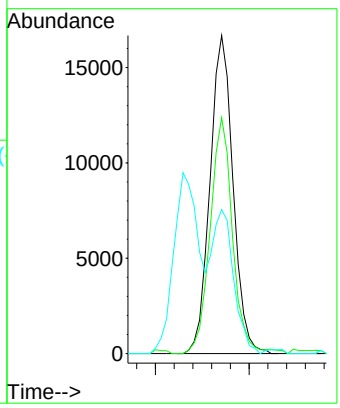
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

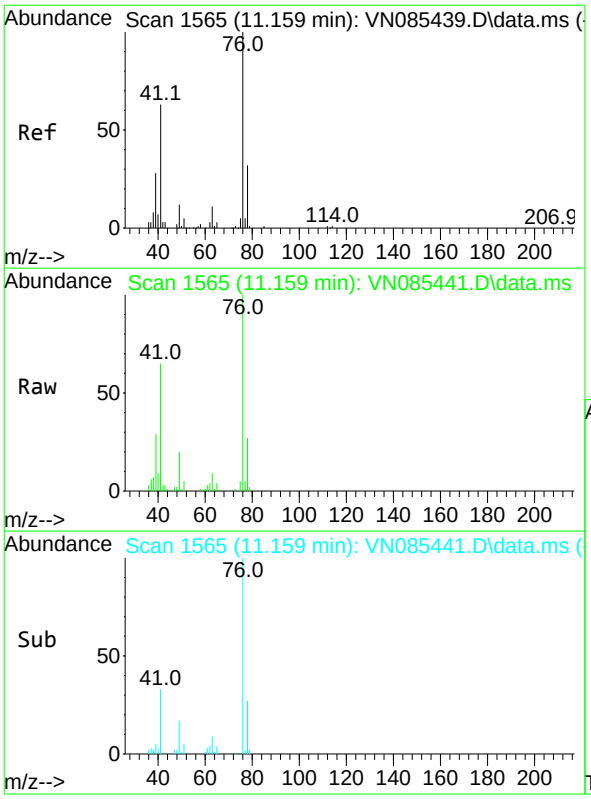



#56
Ethyl methacrylate
Concen: 9.042 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 69 Resp: 28454

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 72.1 | 54.6 | 82.0 |
| 39 | 43.4 | 32.4 | 48.6 |

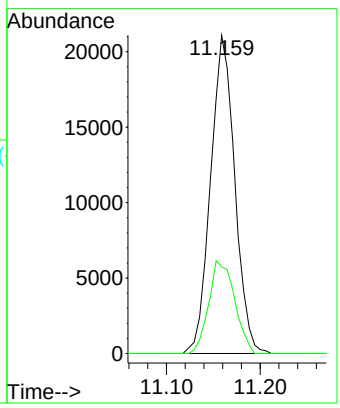





#57
1,3-Dichloropropane
Concen: 9.512 ug/l
RT: 11.159 min Scan# 15
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 76 Resp: 37768

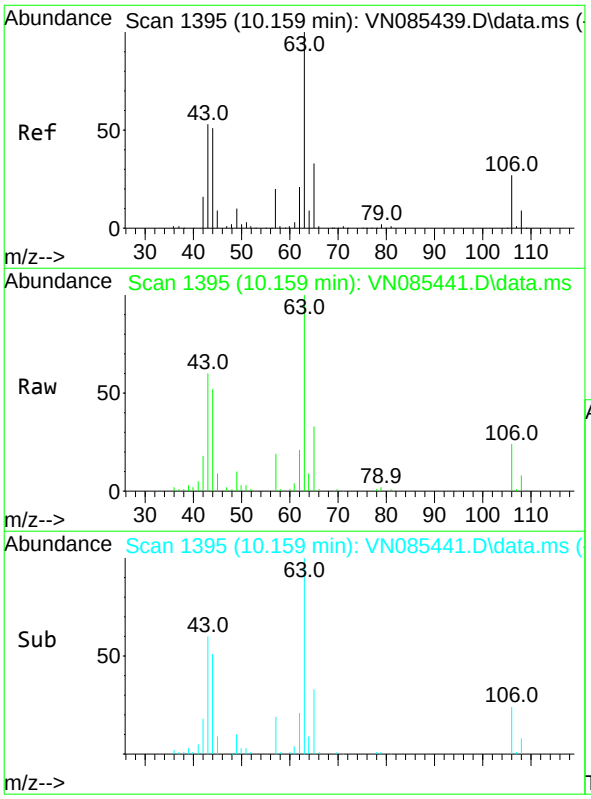
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 31.1 | 25.6 | 38.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

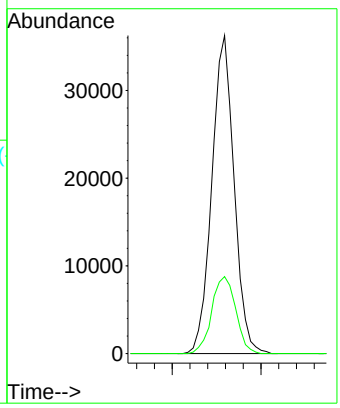
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

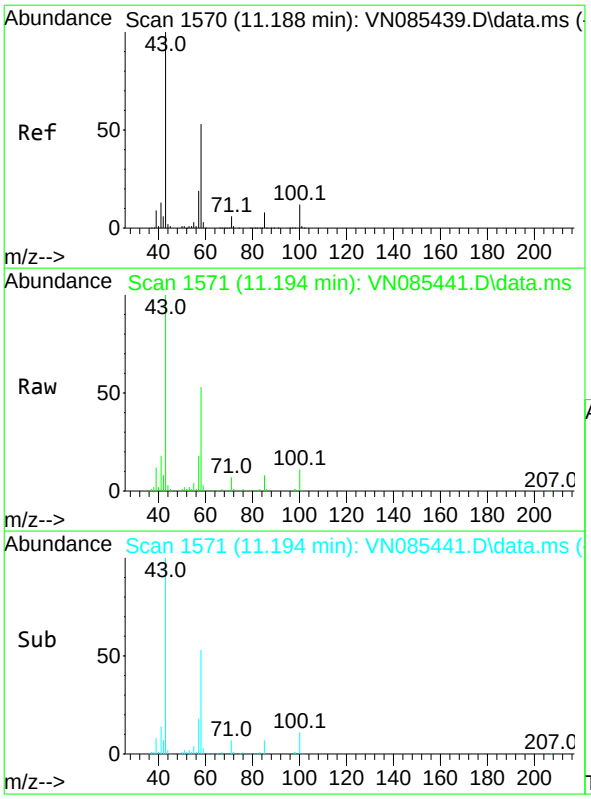



#58
2-Chloroethyl Vinyl ether
Concen: 43.550 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 63 Resp: 63110

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 26.1 | 21.6 | 32.4 |

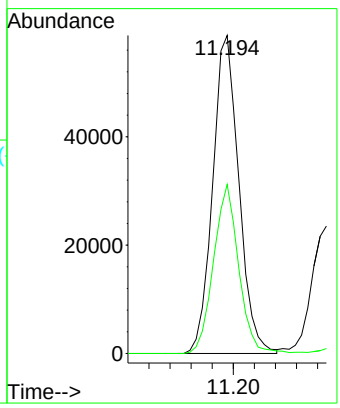





#59
2-Hexanone
Concen: 46.291 ug/l
RT: 11.194 min Scan# 15
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 43 Resp: 101318

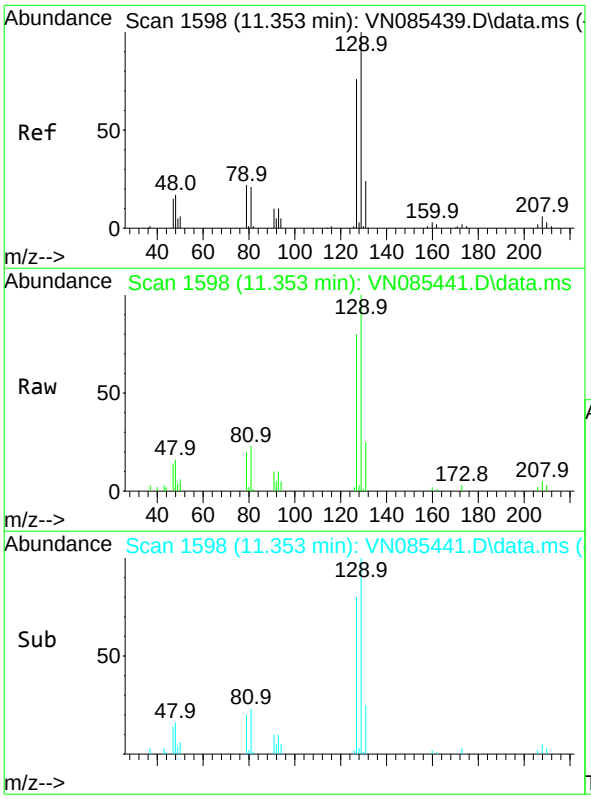
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 50.9 | 26.2 | 78.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

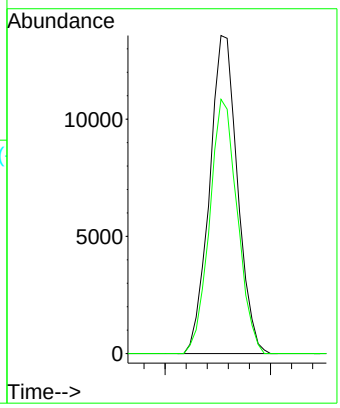
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

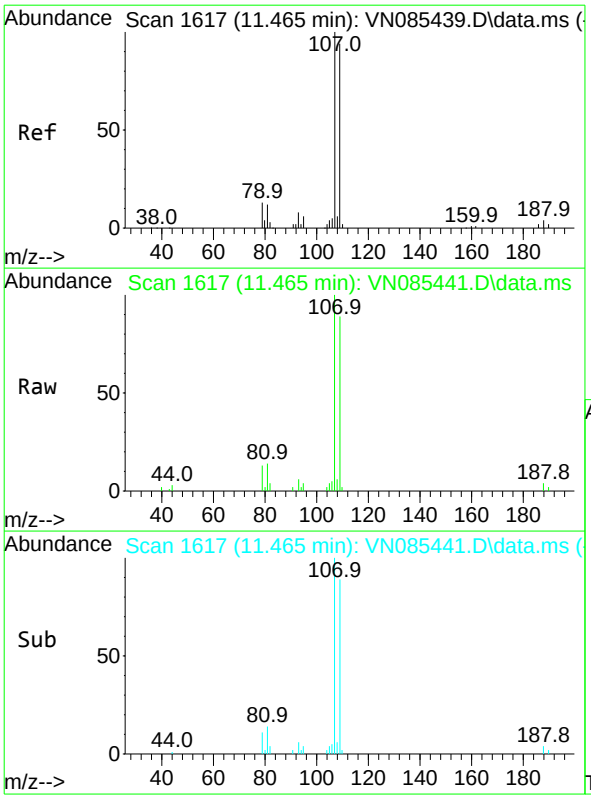



#60
Dibromochloromethane
Concen: 9.079 ug/l
RT: 11.353 min Scan# 1598
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:129 Resp: 25029

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 79.1 | 38.6 | 115.8 |

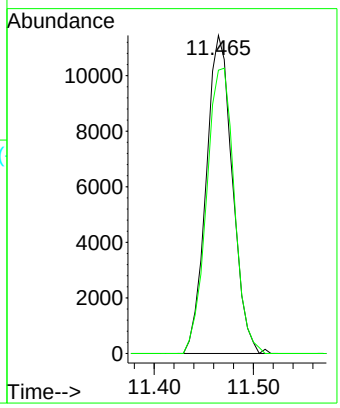





#61
1,2-Dibromoethane
Concen: 9.263 ug/l
RT: 11.465 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:107 Resp: 21055

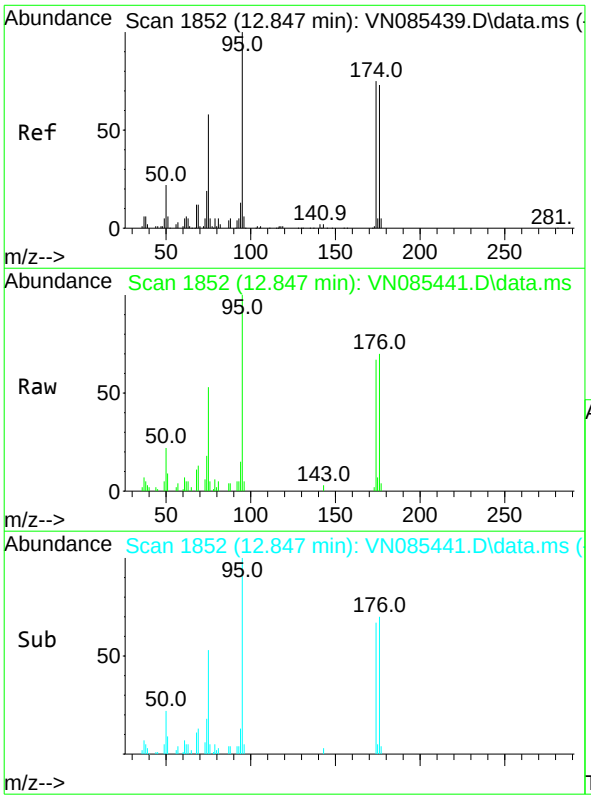
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 94.6 | 75.9 | 113.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

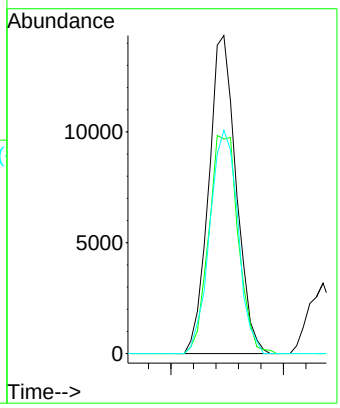
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

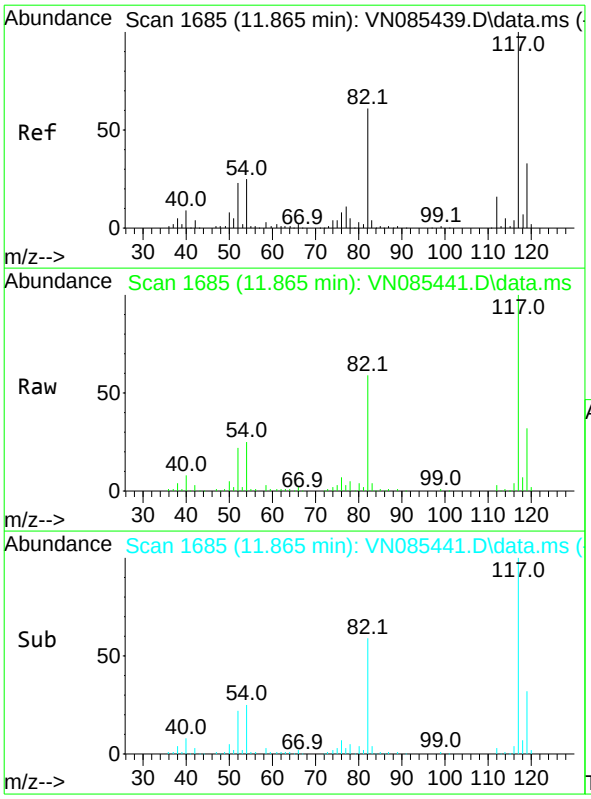



#62
4-Bromofluorobenzene
Concen: 8.476 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 95 Resp: 24327

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 73.9 | 0.0 | 145.0 |
| 176 | 72.1 | 0.0 | 142.4 |

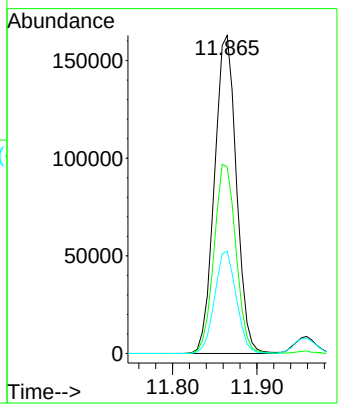





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:117 Resp: 294508

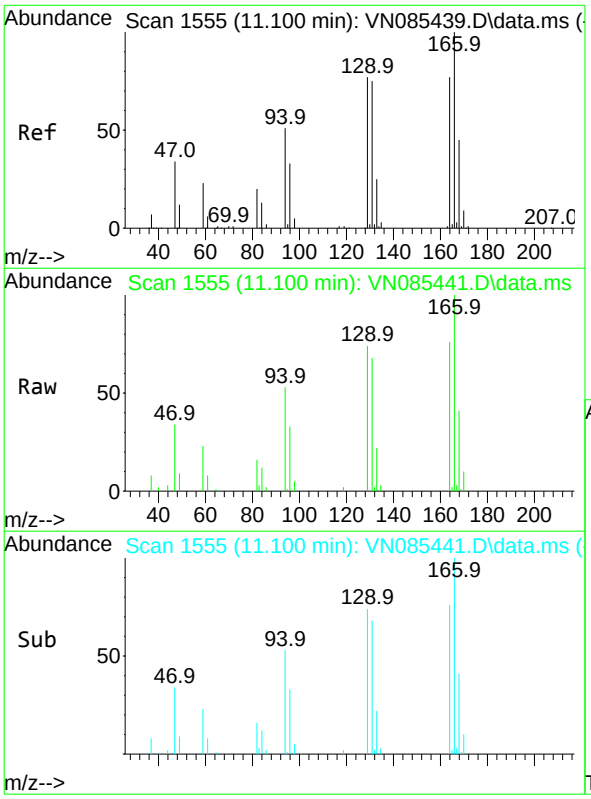
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 58.7 | 48.6 | 72.8 |
| 119 | 32.2 | 26.6 | 39.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

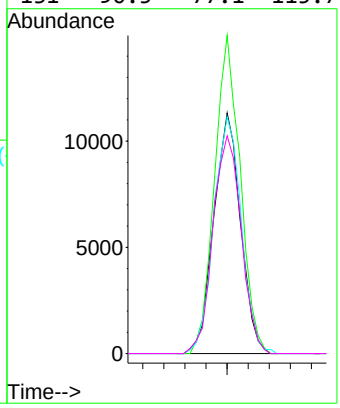
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

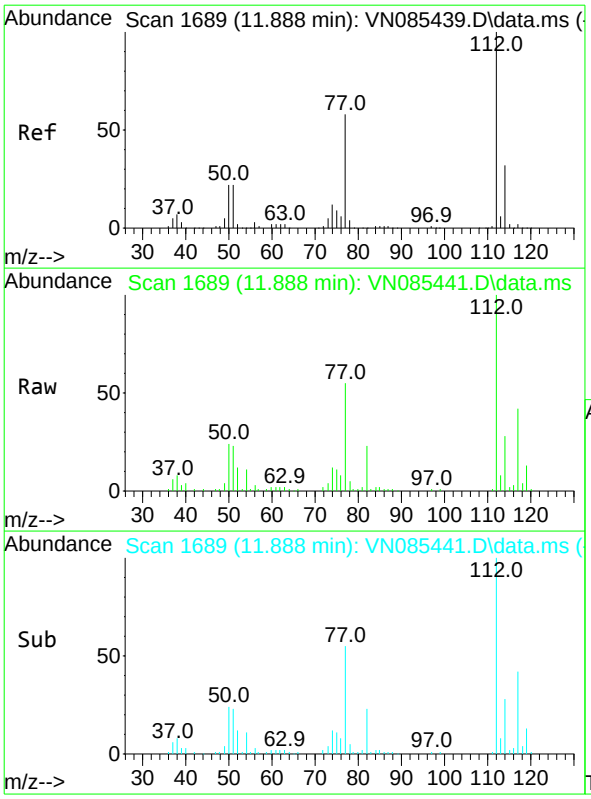



#64
Tetrachloroethene
Concen: 9.928 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:164 Resp: 19934

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 132.2 | 103.4 | 155.2 |
| 129 | 98.3 | 79.2 | 118.8 |
| 131 | 90.5 | 77.1 | 115.7 |

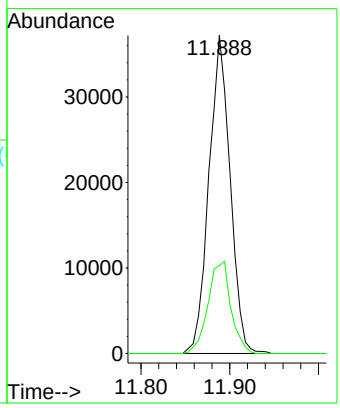





#65
Chlorobenzene
Concen: 9.560 ug/l
RT: 11.888 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:112 Resp: 61680

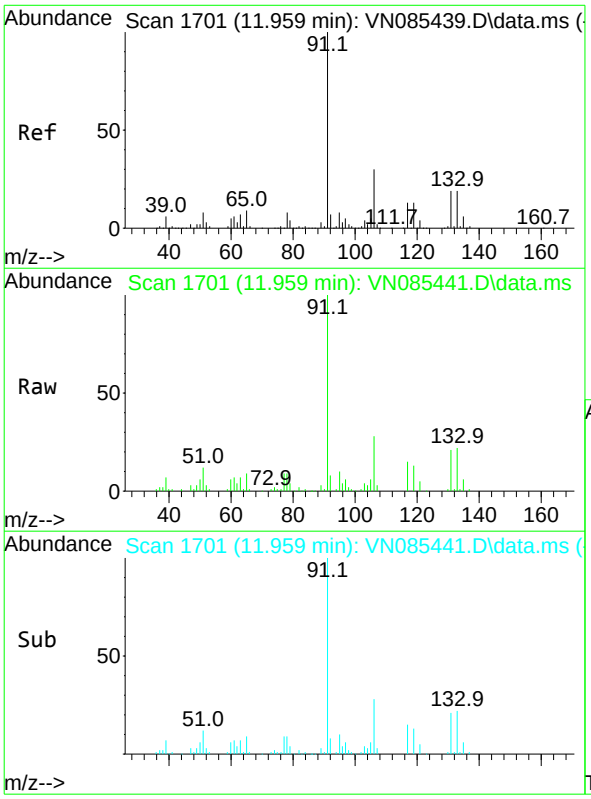
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 27.6 | 25.3 | 37.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

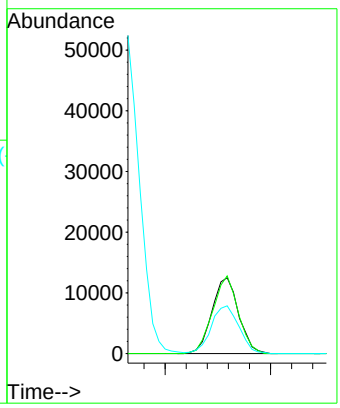
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

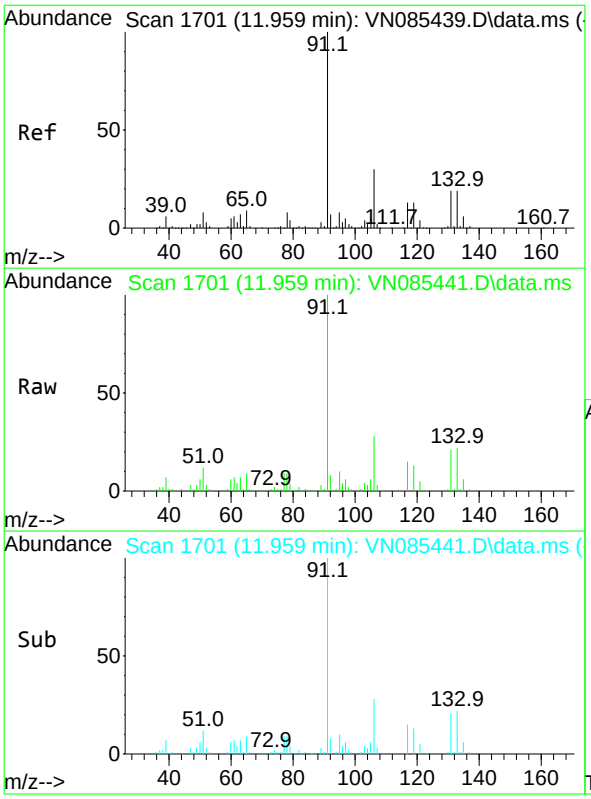



#66
1,1,1,2-Tetrachloroethane
Concen: 9.229 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:131 Resp: 21853

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 98.5 | 47.4 | 142.3 |
| 119 | 66.0 | 33.1 | 99.5 |

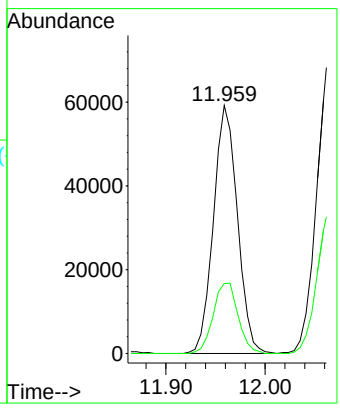





#67
Ethyl Benzene
Concen: 9.445 ug/l
RT: 11.959 min Scan# 17
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 91 Resp: 99248

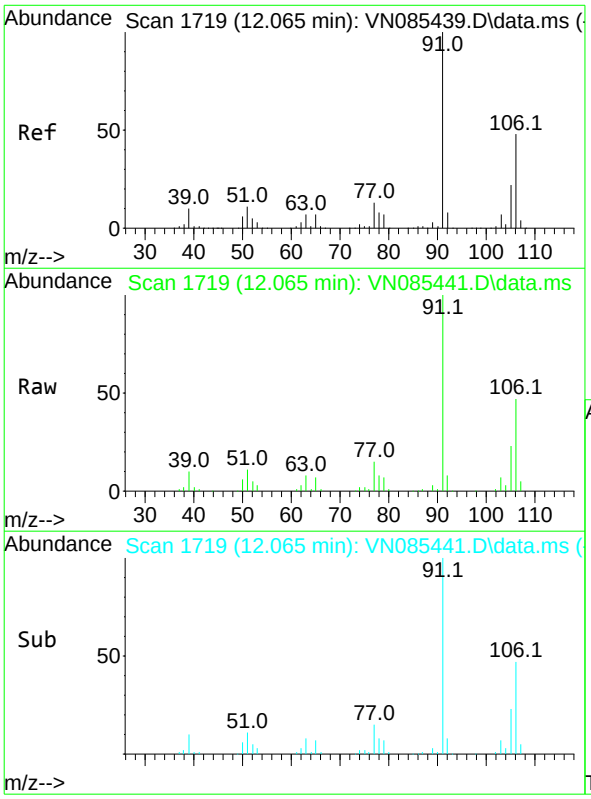
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 28.2 | 23.8 | 35.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

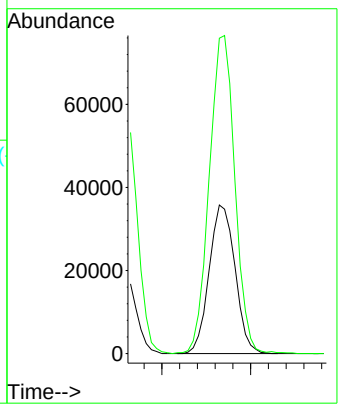
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

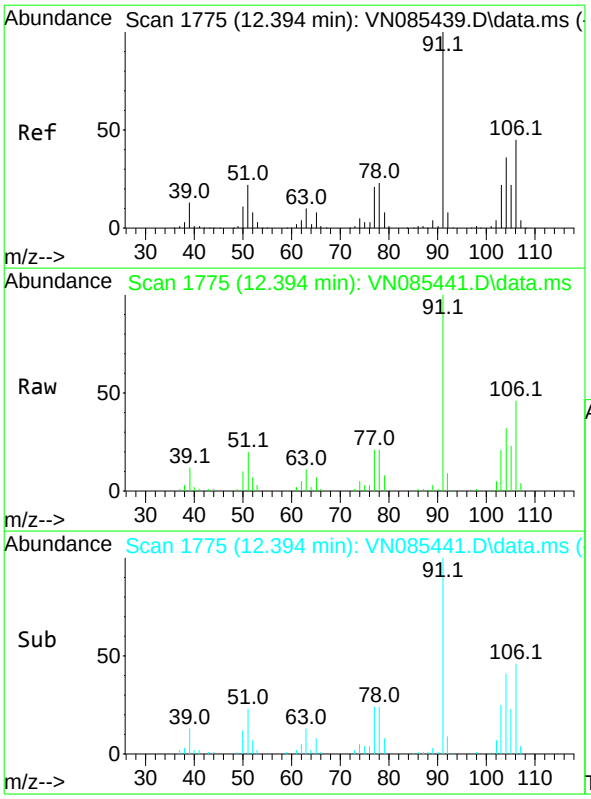



#68
m/p-Xylenes
Concen: 18.650 ug/l
RT: 12.065 min Scan# 1719
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:106 Resp: 72431

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 211.7 | 167.7 | 251.5 |

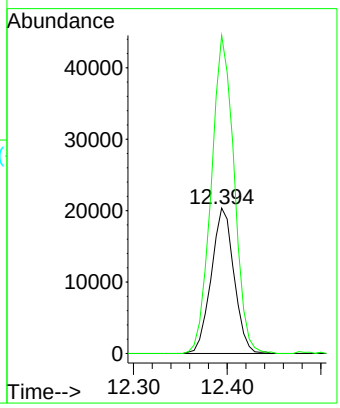





#69
o-Xylene
Concen: 9.264 ug/l
RT: 12.394 min Scan# 17
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:106 Resp: 34382

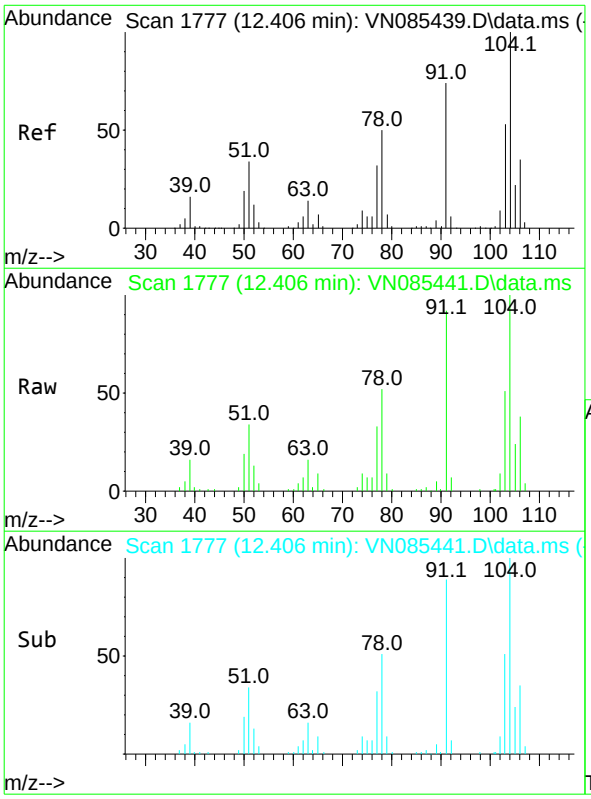
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 219.5 | 110.4 | 331.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

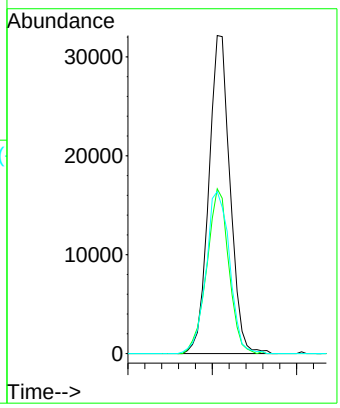
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

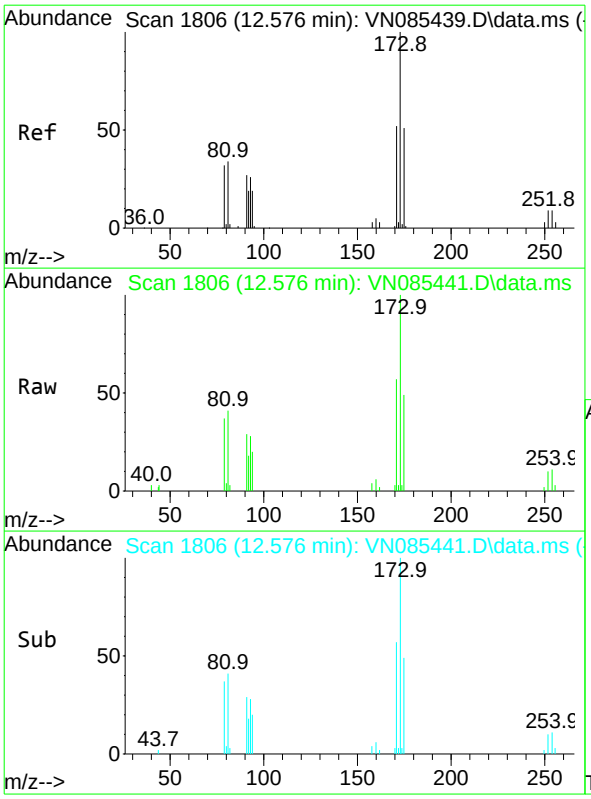



#70
Styrene
Concen: 9.163 ug/l
RT: 12.406 min Scan# 1777
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:104 Resp: 56285

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 53.8 | 42.5 | 63.7 |
| 103 | 56.8 | 43.8 | 65.8 |

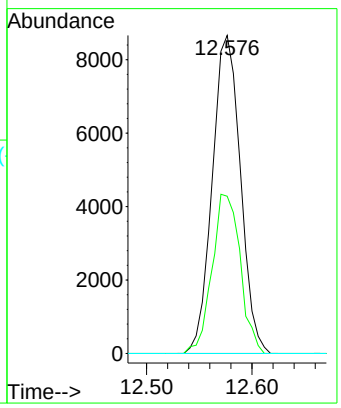





#71
Bromoform
Concen: 9.485 ug/l
RT: 12.576 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:173 Resp: 16071

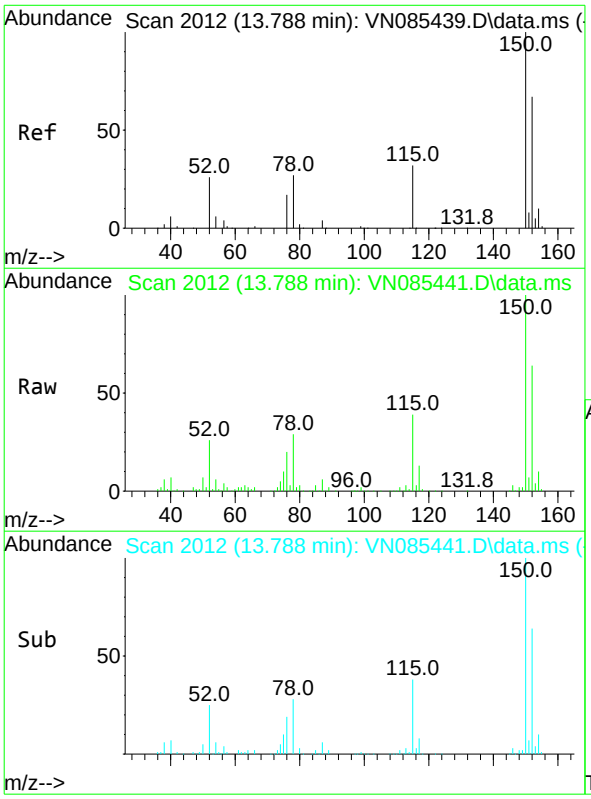
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 50.0 | 24.4 | 73.2 |
| 254 | 0.0 | 0.0 | 0.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

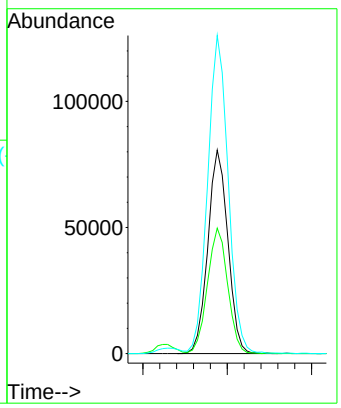
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

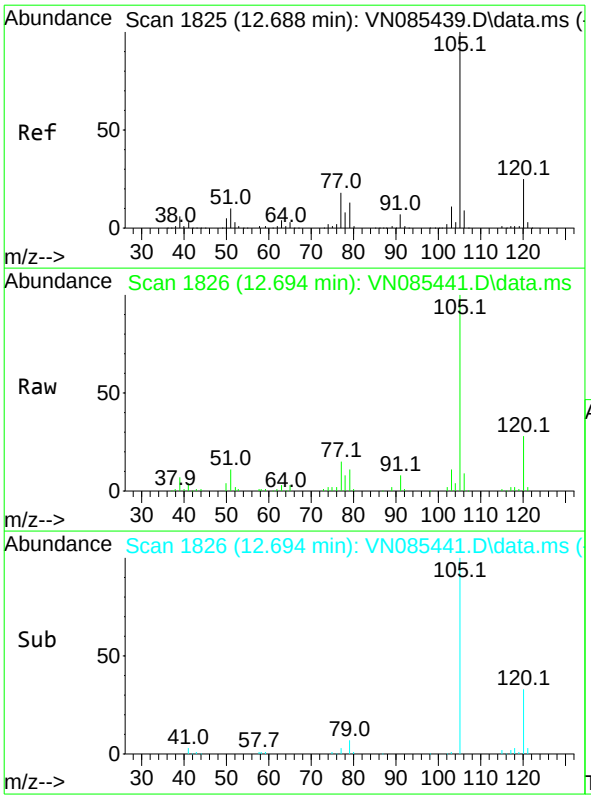



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:152 Resp: 132934

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 62.3 | 31.1 | 93.3 |
| 150 | 159.8 | 0.0 | 343.6 |

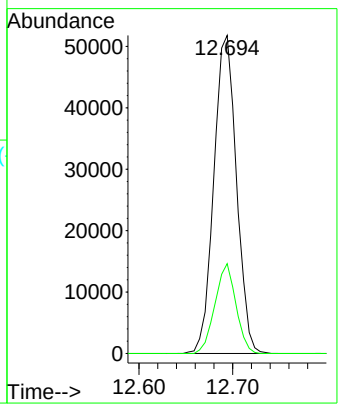





#73
Isopropylbenzene
Concen: 9.697 ug/l
RT: 12.694 min Scan# 18
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:105 Resp: 87003

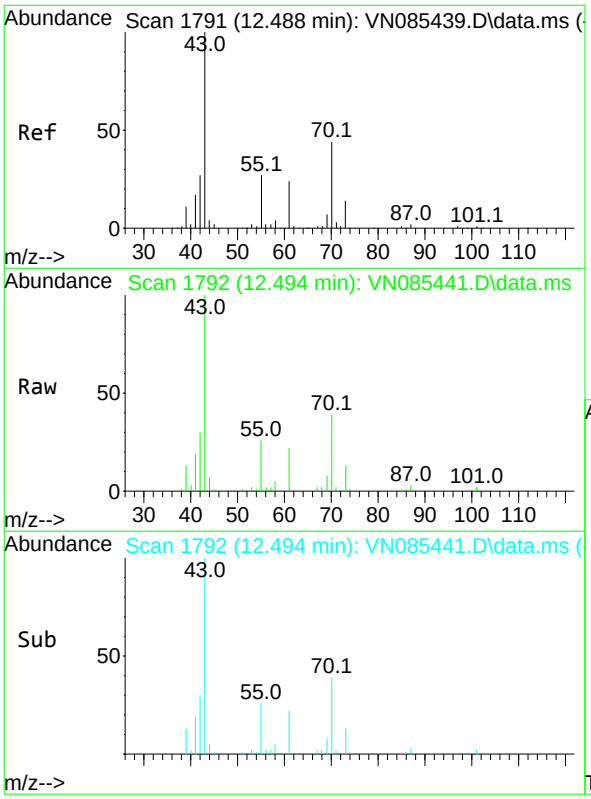
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.1 | 12.8 | 38.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

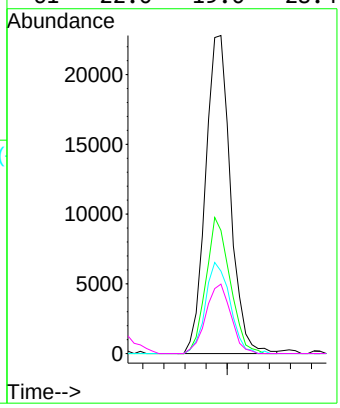
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

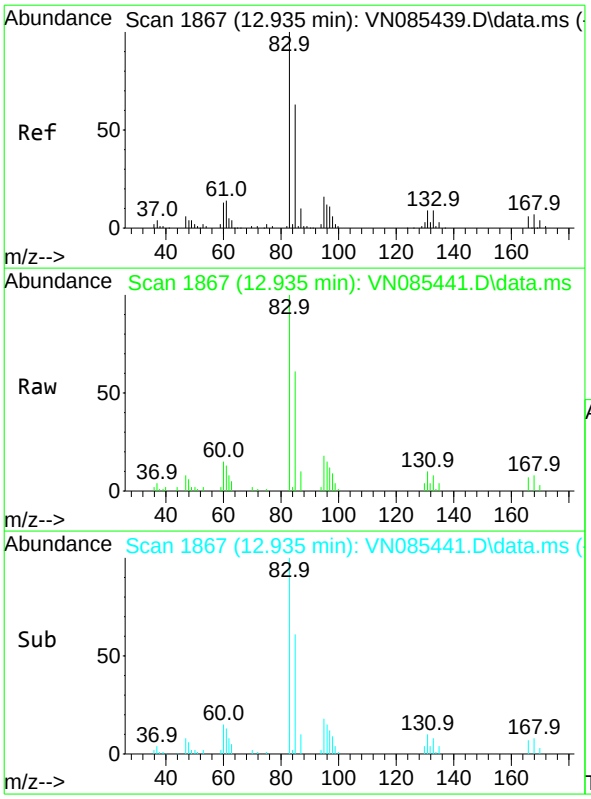



#74
N-amyl acetate
Concen: 9.260 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 43 Resp: 37343

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 41.4 | 34.0 | 51.0 |
| 55 | 28.5 | 21.4 | 32.2 |
| 61 | 22.0 | 19.0 | 28.4 |

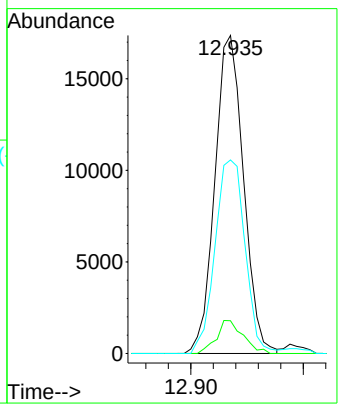





#75
1,1,2,2-Tetrachloroethane
Concen: 9.709 ug/l
RT: 12.935 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 83 Resp: 30770

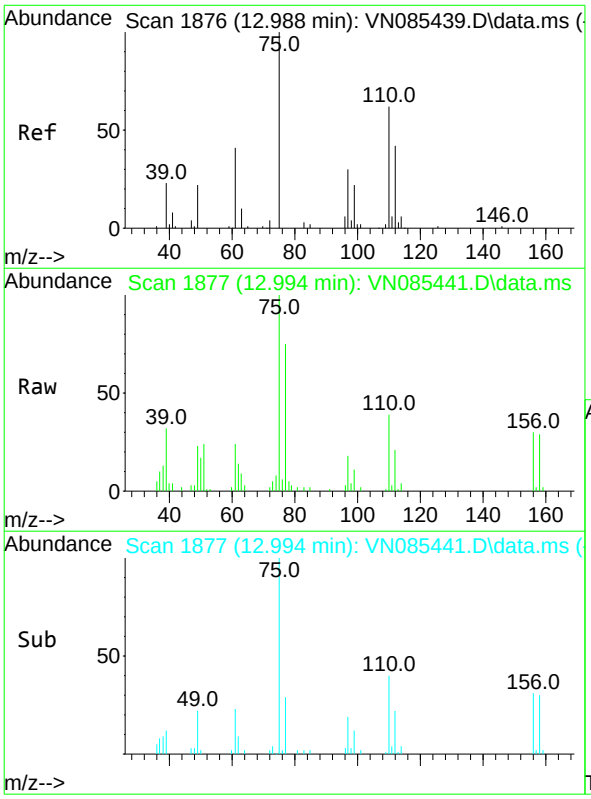
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 9.6 | 4.8 | 14.4 |
| 85 | 63.6 | 32.2 | 96.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

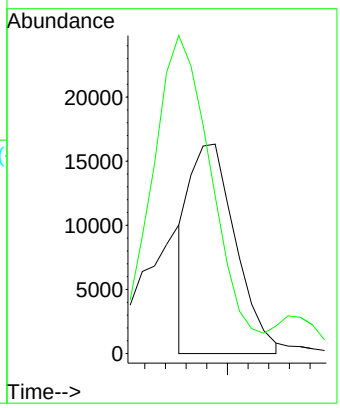
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

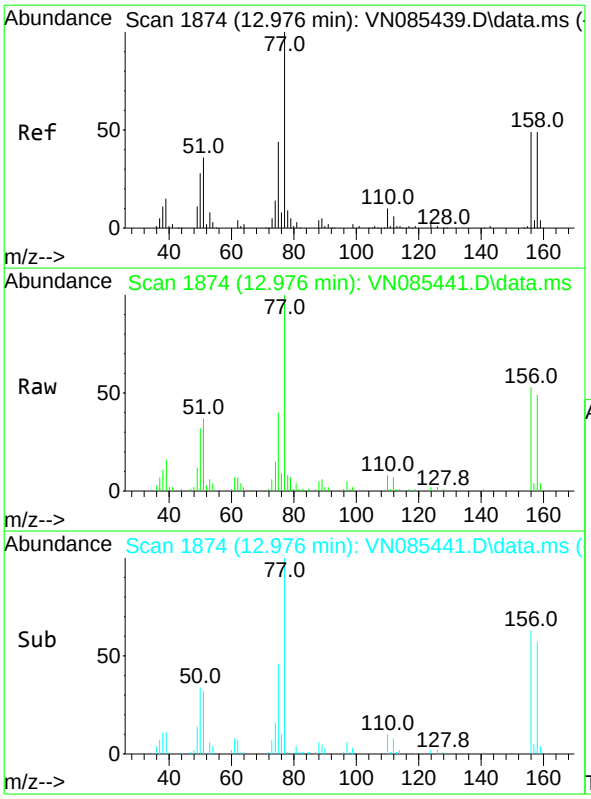



#76
1,2,3-Trichloropropane
Concen: 9.432 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 75 Resp: 25443

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 198.5 | 109.7 | 329.2 |

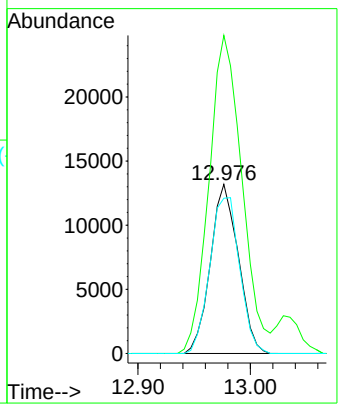





#77
Bromobenzene
Concen: 9.720 ug/l
RT: 12.976 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:156 Resp: 22784

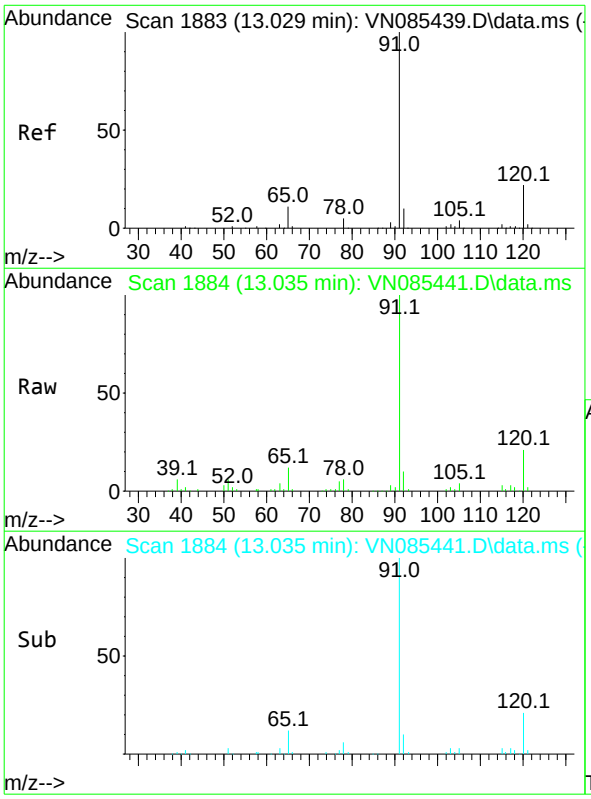
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 221.6 | 114.1 | 342.4 |
| 158 | 98.7 | 48.9 | 146.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

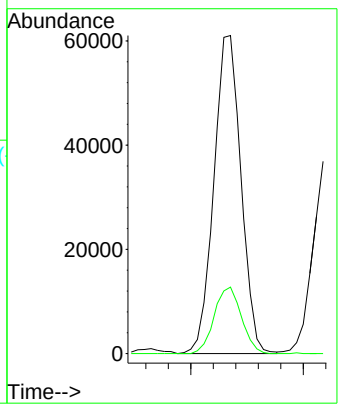
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

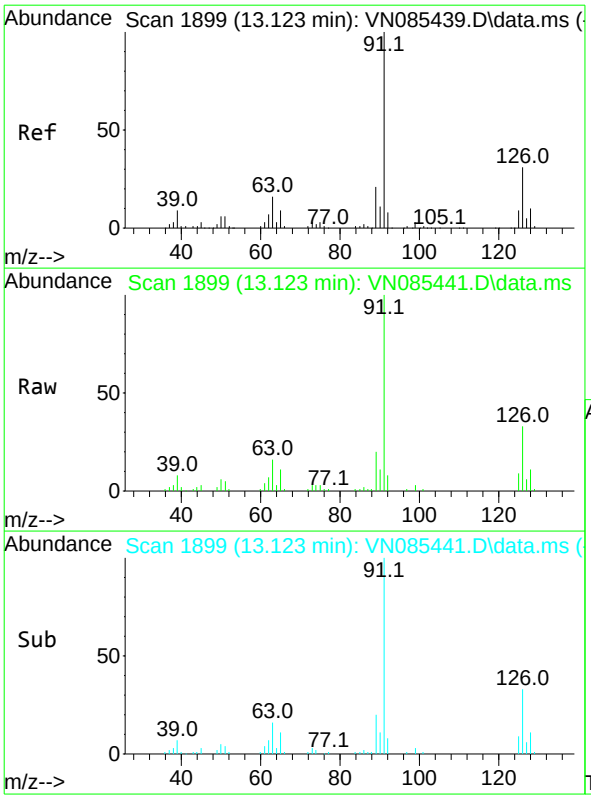



#78
n-propylbenzene
Concen: 9.628 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 91 Resp: 102262

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 20.9 | 10.9 | 32.6 |

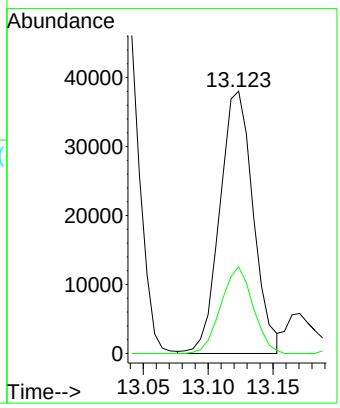





#79
2-Chlorotoluene
Concen: 9.943 ug/l
RT: 13.123 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 91 Resp: 68346

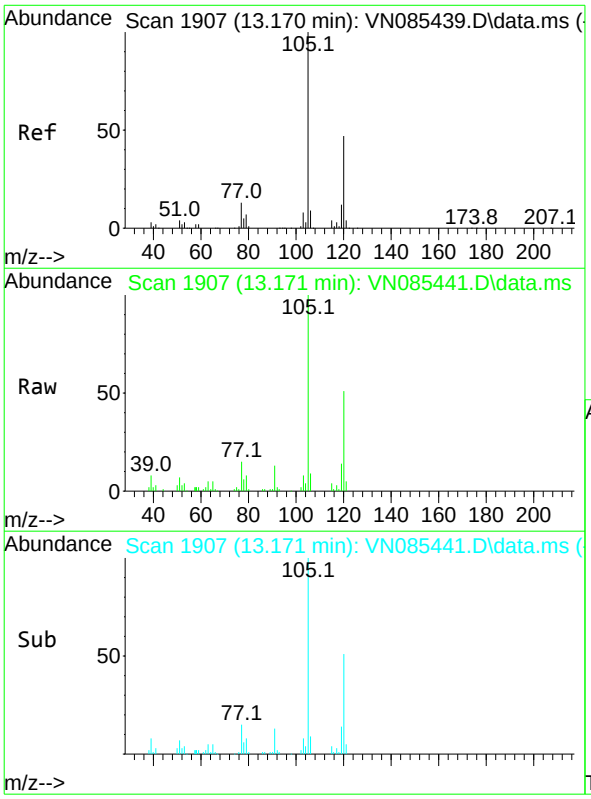
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 31.5 | 15.7 | 47.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

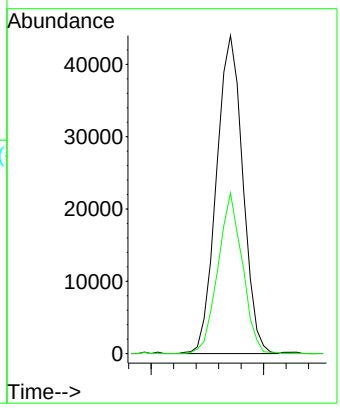
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

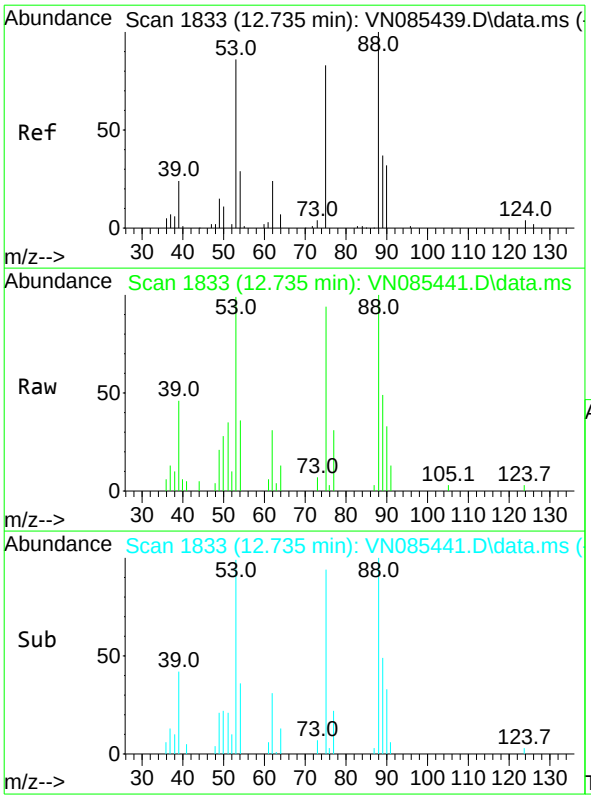



#80
1,3,5-Trimethylbenzene
Concen: 9.669 ug/l
RT: 13.171 min Scan# 1907
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:105 Resp: 71656

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 46.8 | 23.9 | 71.7 |

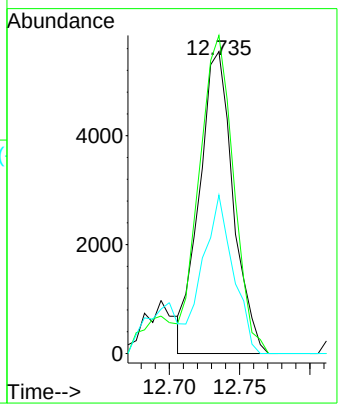





#81
trans-1,4-Dichloro-2-butene
Concen: 9.248 ug/l
RT: 12.735 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 75 Resp: 9236

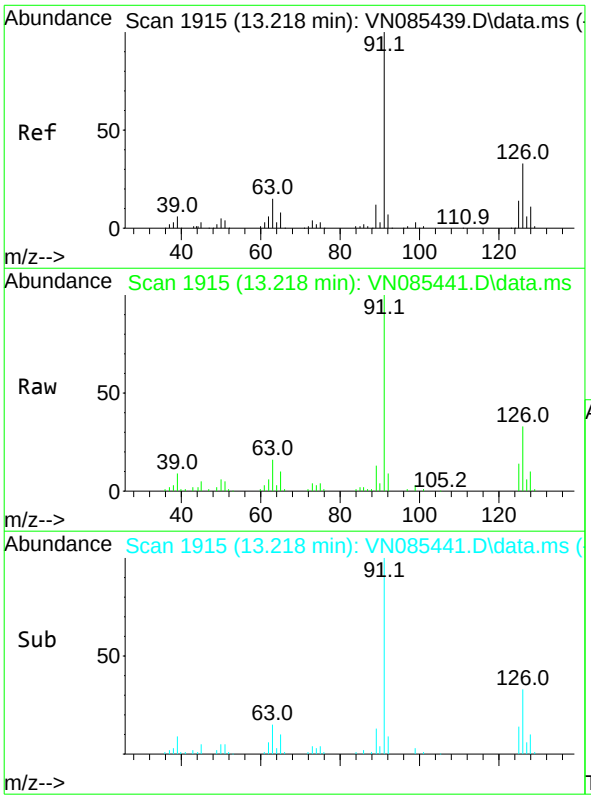
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 119.6 | 95.6 | 143.4 |
| 89 | 46.6 | 37.0 | 55.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

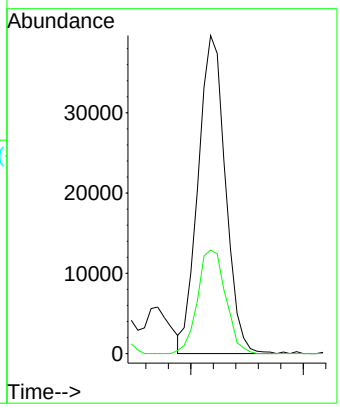
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

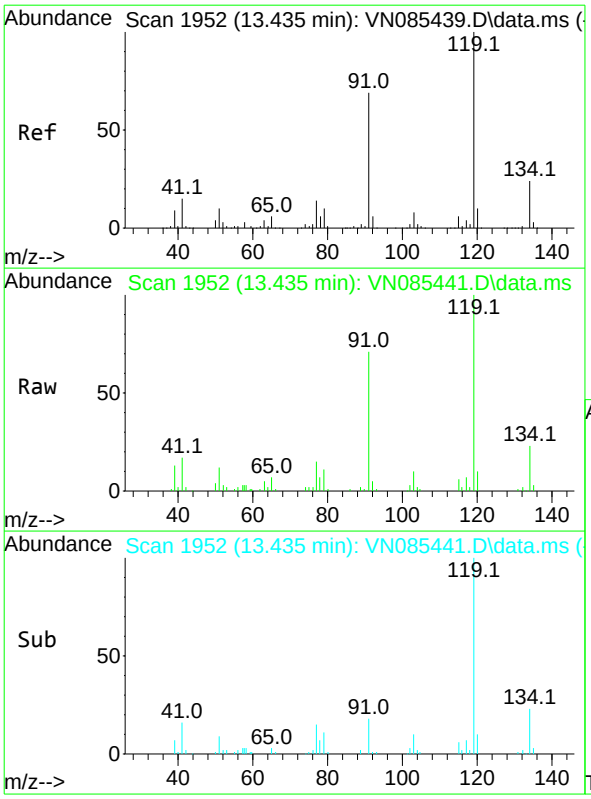



#82
4-Chlorotoluene
Concen: 9.756 ug/l
RT: 13.218 min Scan# 1915
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 91 Resp: 66773

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 33.6 | 15.9 | 47.7 |

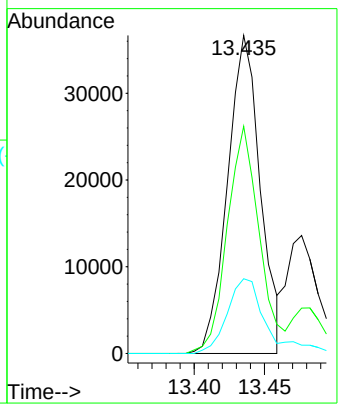





#83
tert-Butylbenzene
Concen: 9.553 ug/l
RT: 13.435 min Scan# 19
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:119 Resp: 59455

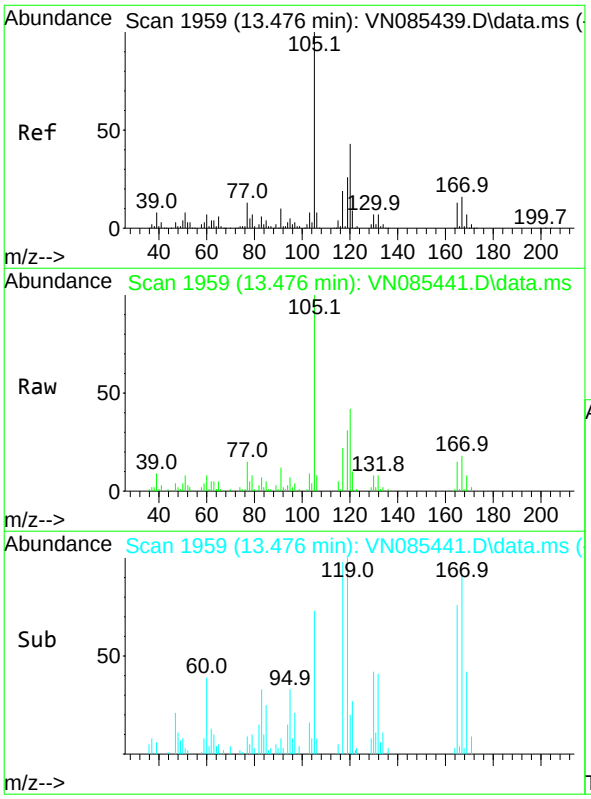
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 70.0 | 35.1 | 105.3 |
| 134 | 27.8 | 12.0 | 36.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

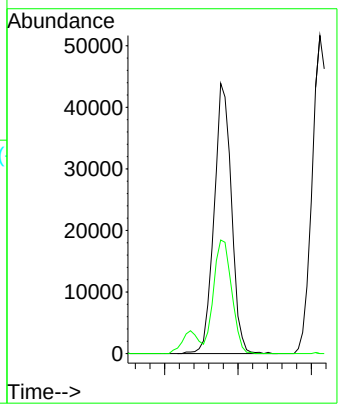
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

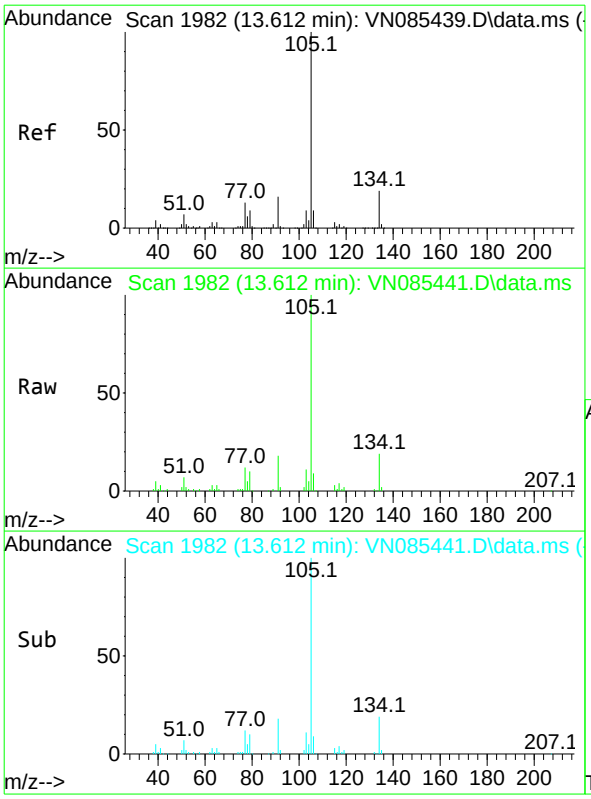



#84
1,2,4-Trimethylbenzene
Concen: 9.754 ug/l
RT: 13.476 min Scan# 1959
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:105 Resp: 72046

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 43.8 | 21.6 | 65.0 |

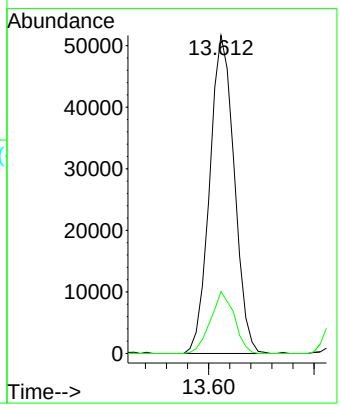





#85
sec-Butylbenzene
Concen: 9.699 ug/l
RT: 13.612 min Scan# 19
Delta R.T. -0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:105 Resp: 83662

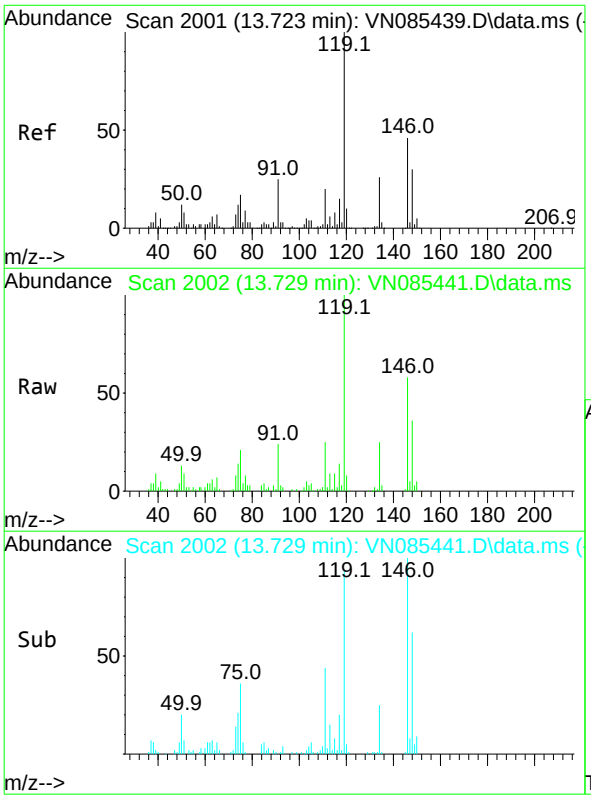
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 18.9 | 9.7 | 28.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

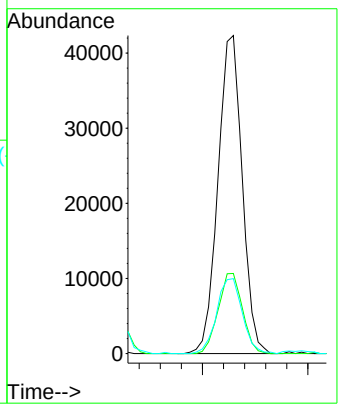
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

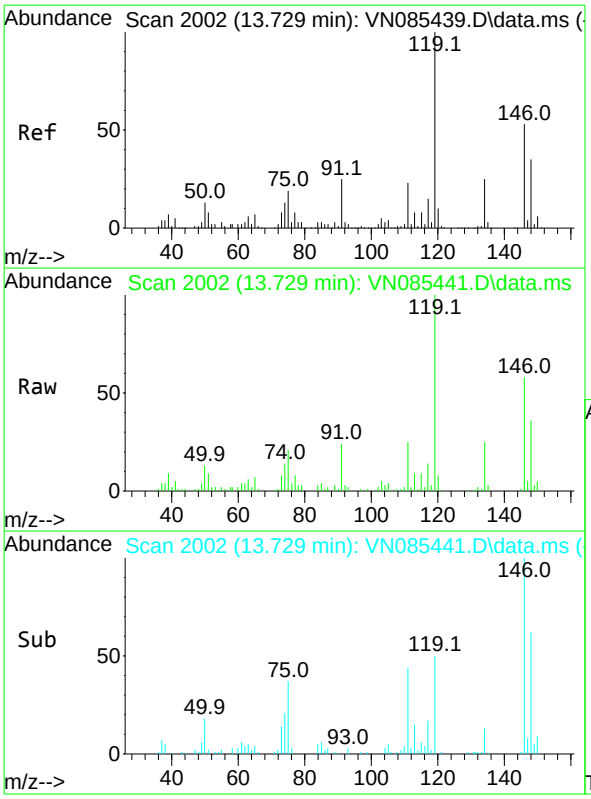



#86
p-Isopropyltoluene
Concen: 9.674 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:119 Resp: 67556

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.2 | 12.7 | 38.0 |
| 91 | 25.0 | 12.7 | 38.1 |

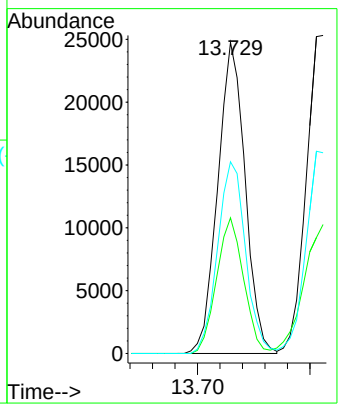





#87
1,3-Dichlorobenzene
Concen: 9.693 ug/l
RT: 13.729 min Scan# 20
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:146 Resp: 41843

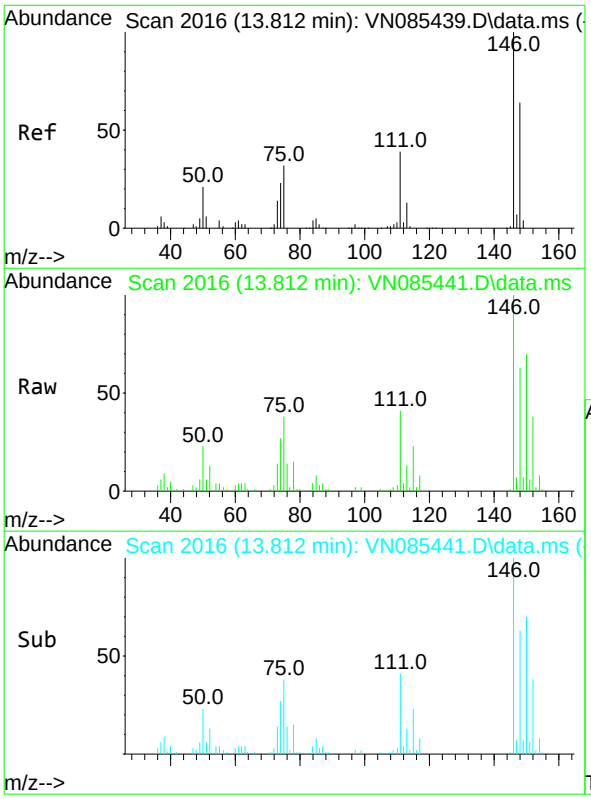
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.1 | 21.4 | 64.3 |
| 148 | 63.0 | 32.3 | 96.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

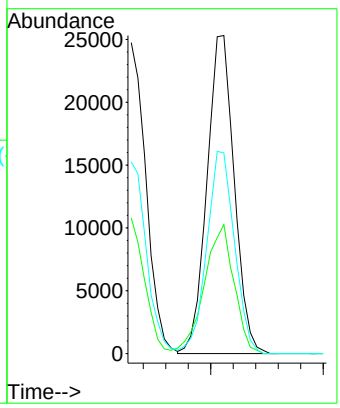
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

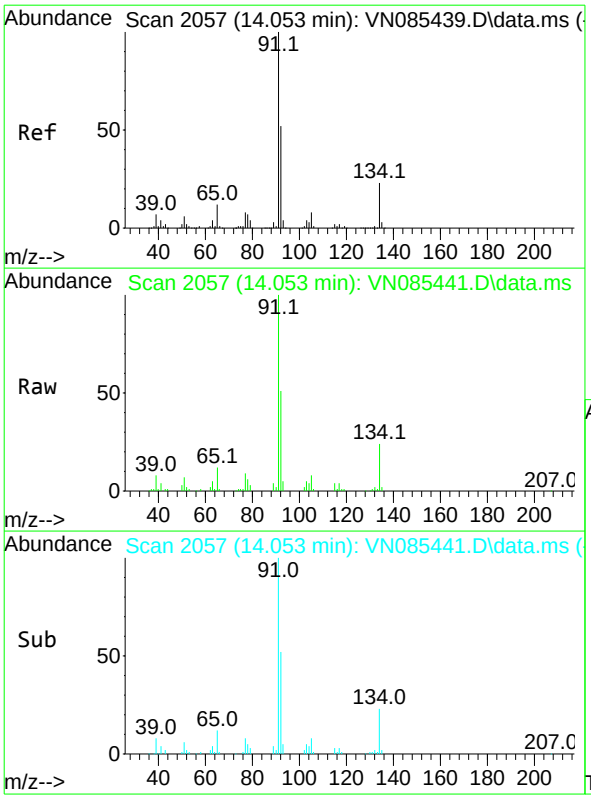



#88
1,4-Dichlorobenzene
Concen: 9.549 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:146 Resp: 42728

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 44.0 | 21.3 | 63.7 |
| 148 | 64.6 | 32.4 | 97.0 |

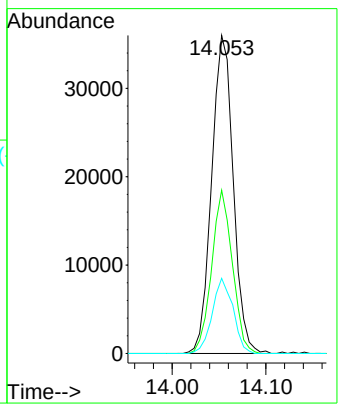





#89
n-Butylbenzene
Concen: 9.314 ug/l
RT: 14.053 min Scan# 20
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 91 Resp: 57632

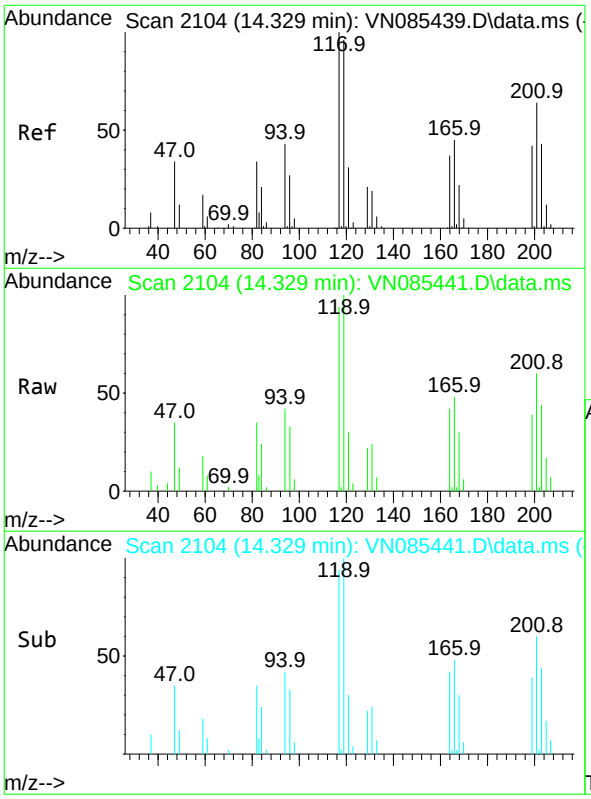
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 49.2 | 25.8 | 77.3 |
| 134 | 22.8 | 11.7 | 35.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

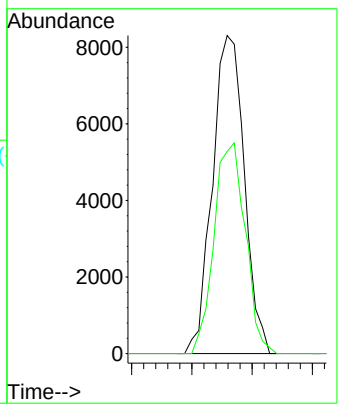
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

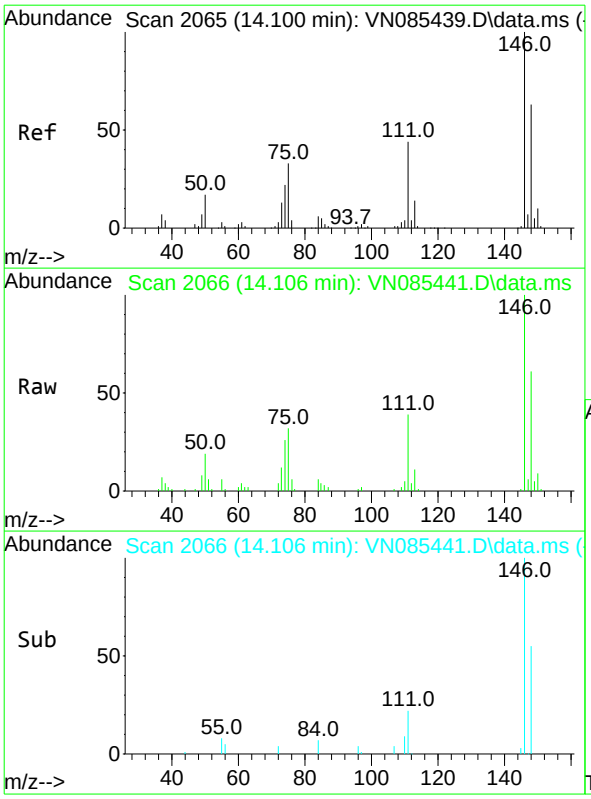



#90
Hexachloroethane
Concen: 9.294 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:117 Resp: 15261

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 65.0 | 33.7 | 101.0 |

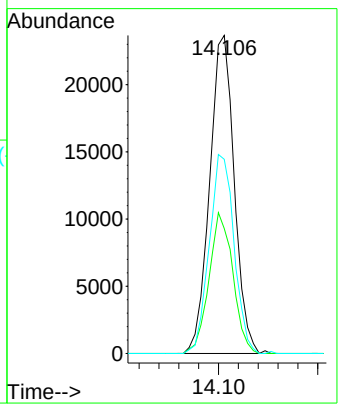





#91
1,2-Dichlorobenzene
Concen: 9.458 ug/l
RT: 14.106 min Scan# 20
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:146 Resp: 40726

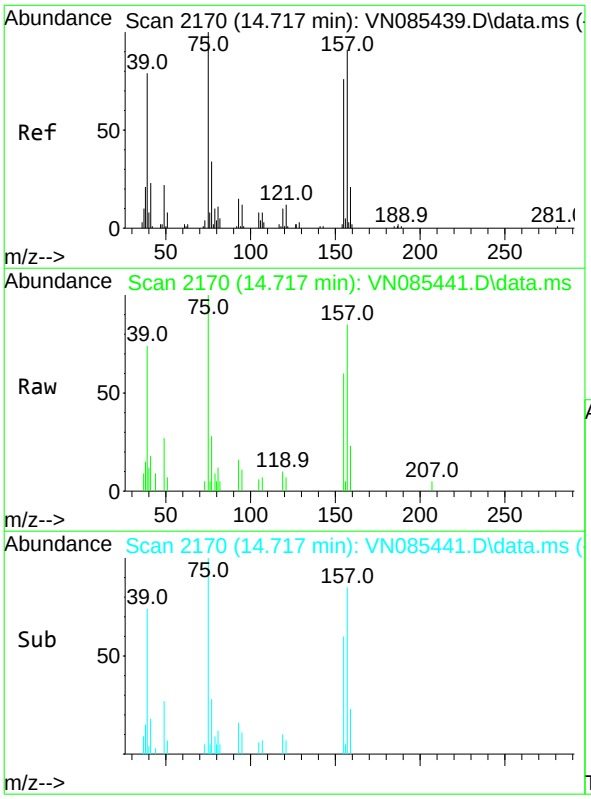
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.9 | 21.7 | 65.1 |
| 148 | 62.9 | 31.4 | 94.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

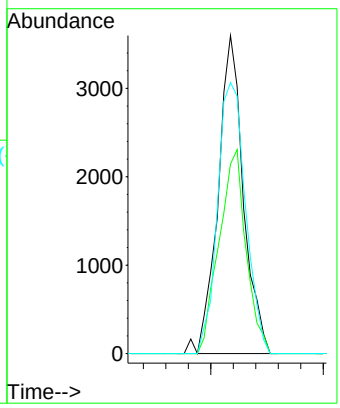
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

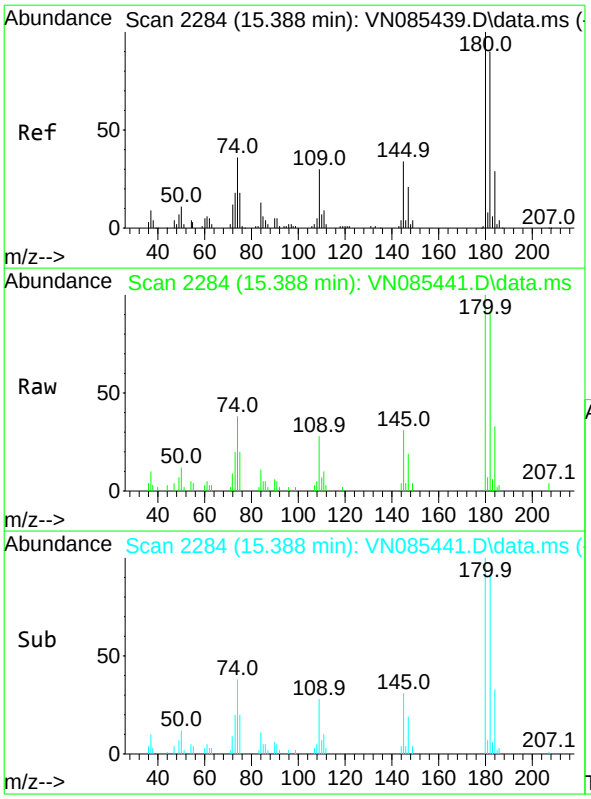



#92
1,2-Dibromo-3-Chloropropane
Concen: 9.744 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 75 Resp: 5639

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 67.9 | 36.4 | 109.2 |
| 157 | 94.1 | 45.4 | 136.1 |

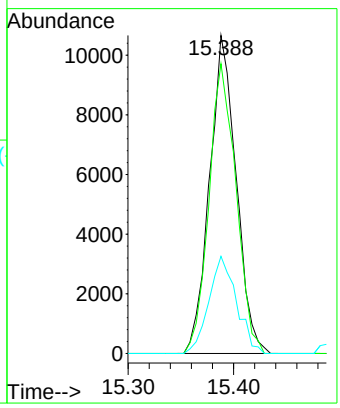





#93
1,2,4-Trichlorobenzene
Concen: 9.354 ug/l
RT: 15.388 min Scan# 22
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:180 Resp: 18720

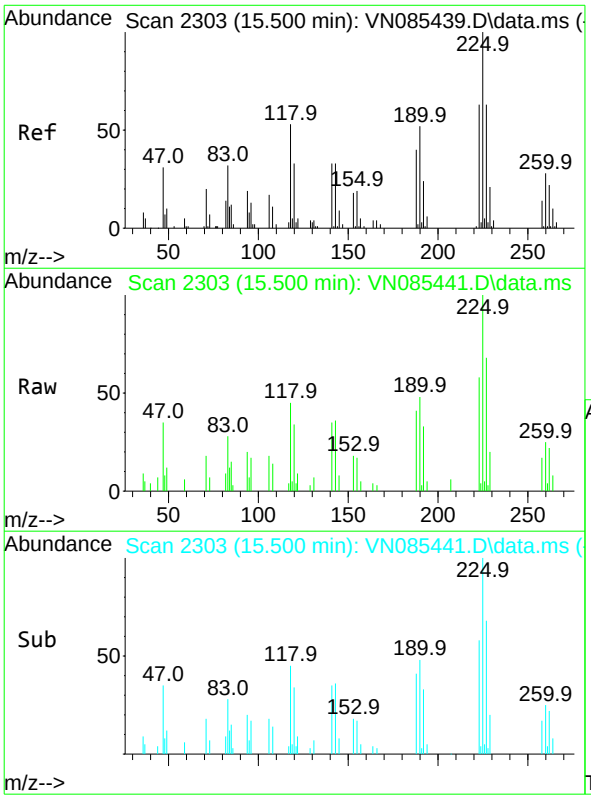
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 92.4 | 46.8 | 140.3 |
| 145 | 31.7 | 16.0 | 48.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

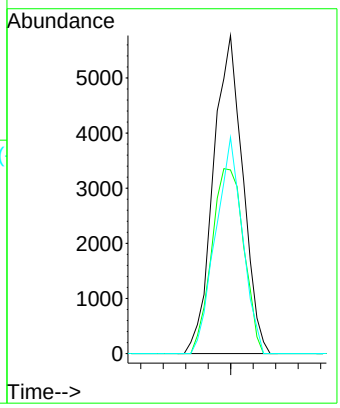
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

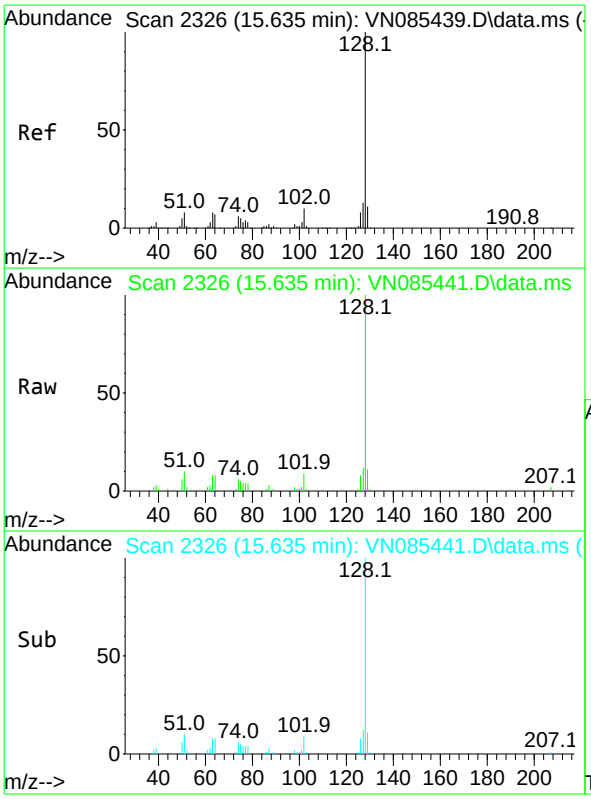



#94
Hexachlorobutadiene
Concen: 9.874 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:225 Resp: 10491

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 63.3 | 30.7 | 92.1 |
| 227 | 62.1 | 30.9 | 92.5 |

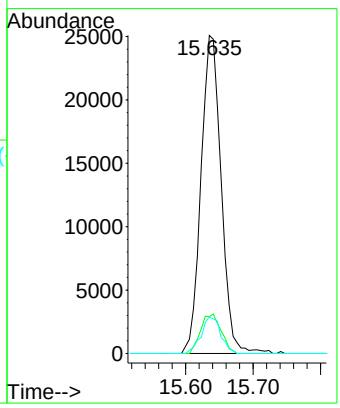





#95
Naphthalene
Concen: 8.717 ug/l
RT: 15.635 min Scan# 23
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:128 Resp: 52054

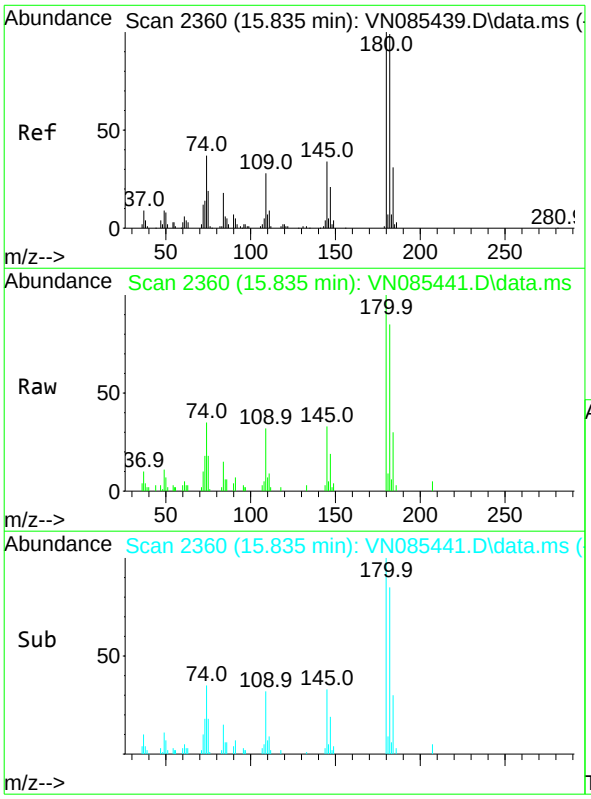
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.6 | 10.6 | 16.0 |
| 129 | 11.2 | 8.8 | 13.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

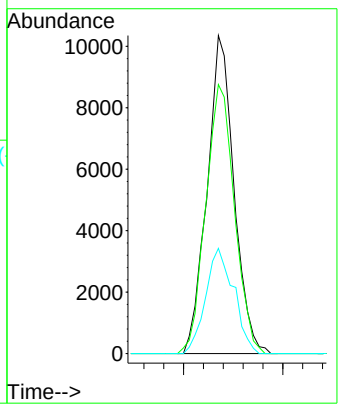
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025




#96
1,2,3-Trichlorobenzene
Concen: 9.605 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:180 Resp: 19450

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 90.3 | 47.4 | 142.2 |
| 145 | 34.7 | 16.9 | 50.7 |



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085442.D
Acq On : 14 Jan 2025 16:31
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 15 01:45:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | | |
| 1) Pentafluorobenzene | 8.218 | 168 | 186556 | 50.000 | ug/l | | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 324413 | 50.000 | ug/l | | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 282203 | 50.000 | ug/l | | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 126086 | 50.000 | ug/l | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.577 | 65 | 17046 | 5.660 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 11.320%# | | | | |
| 35) Dibromofluoromethane | 8.165 | 113 | 12102 | 5.377 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 10.760%# | | | | |
| 50) Toluene-d8 | 10.565 | 98 | 41328 | 5.168 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 10.340%# | | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 13520 | 4.943 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 9.880%# | | | | |
| **Target Compounds** | | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 13199 | 5.225 | ug/l | | 97 |
| 3) Chloromethane | 2.359 | 50 | 14526 | 5.311 | ug/l | | 96 |
| 4) Vinyl Chloride | 2.512 | 62 | 14564 | 5.298 | ug/l | | 98 |
| 5) Bromomethane | 2.953 | 94 | 9788 | 5.895 | ug/l | | 98 |
| 6) Chloroethane | 3.124 | 64 | 9430 | 5.411 | ug/l | | 99 |
| 7) Trichlorofluoromethane | 3.501 | 101 | 20098 | 5.039 | ug/l | | 92 |
| 8) Diethyl Ether | 3.959 | 74 | 6652 | 4.828 | ug/l | | 100 |
| 9) 1,1,2-Trichlorotrifluo... | 4.365 | 101 | 11917 | 5.305 | ug/l | | 97 |
| 10) Methyl Iodide | 4.583 | 142 | 12331 | 4.793 | ug/l | | 99 |
| 11) Tert butyl alcohol | 5.518 | 59 | 9075 | 26.318 | ug/l | # | 94 |
| 12) 1,1-Dichloroethene | 4.342 | 96 | 10429 | 5.209 | ug/l | | 96 |
| 13) Acrolein | 4.171 | 56 | 9430 | 20.033 | ug/l | | 97 |
| 14) Allyl chloride | 5.030 | 41 | 16741 | 5.153 | ug/l | | 97 |
| 15) Acrylonitrile | 5.718 | 53 | 27869 | 25.445 | ug/l | | 97 |
| 16) Acetone | 4.430 | 43 | 25122 | 25.819 | ug/l | | 97 |
| 17) Carbon Disulfide | 4.706 | 76 | 32068 | 5.202 | ug/l | | 96 |
| 18) Methyl Acetate | 5.024 | 43 | 15106 | 5.106 | ug/l | | 97 |
| 19) Methyl tert-butyl Ether | 5.800 | 73 | 31439 | 4.836 | ug/l | | 94 |
| 20) Methylene Chloride | 5.271 | 84 | 12981 | 5.389 | ug/l | # | 83 |
| 21) trans-1,2-Dichloroethene | 5.783 | 96 | 10614 | 4.960 | ug/l | # | 78 |
| 22) Diisopropyl ether | 6.665 | 45 | 35785 | 4.962 | ug/l | # | 96 |
| 23) Vinyl Acetate | 6.600 | 43 | 118439m | 23.389 | ug/l | | |
| 24) 1,1-Dichloroethane | 6.565 | 63 | 22865 | 5.200 | ug/l | | 99 |
| 25) 2-Butanone | 7.483 | 43 | 36127 | 25.231 | ug/l | | 99 |
| 26) 2,2-Dichloropropane | 7.488 | 77 | 18398 | 5.175 | ug/l | | 100 |
| 27) cis-1,2-Dichloroethene | 7.488 | 96 | 12477 | 4.951 | ug/l | | 99 |
| 28) Bromochloromethane | 7.806 | 49 | 11096 | 5.424 | ug/l | | 99 |
| 29) Tetrahydrofuran | 7.841 | 42 | 21983 | 24.215 | ug/l | | 99 |
| 30) Chloroform | 7.959 | 83 | 23384 | 5.146 | ug/l | | 98 |
| 31) Cyclohexane | 8.247 | 56 | 22343 | 5.846 | ug/l | # | 92 |
| 32) 1,1,1-Trichloroethane | 8.159 | 97 | 21416 | 5.372 | ug/l | | 91 |
| 36) 1,1-Dichloropropene | 8.371 | 75 | 15886 | 5.029 | ug/l | | 96 |
| 37) Ethyl Acetate | 7.553 | 43 | 16879m | 5.294 | ug/l | | |
| 38) Carbon Tetrachloride | 8.359 | 117 | 18317 | 5.065 | ug/l | | 96 |
| 39) Methylcyclohexane | 9.600 | 83 | 14175 | 4.776 | ug/l | | 98 |
| 40) Benzene | 8.600 | 78 | 47833 | 5.040 | ug/l | | 99 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085442.D
Acq On : 14 Jan 2025 16:31
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 15 01:45:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.777 | 41 | 7380 | 4.449 ug/l | 96 |
| 42) 1,2-Dichloroethane | 8.671 | 62 | 18628 | 5.211 ug/l | 98 |
| 43) Isopropyl Acetate | 8.688 | 43 | 24792 | 4.853 ug/l | 98 |
| 44) Trichloroethene | 9.347 | 130 | 11133 | 5.039 ug/l | 86 |
| 45) 1,2-Dichloropropane | 9.618 | 63 | 12591 | 5.194 ug/l | 92 |
| 46) Dibromomethane | 9.700 | 93 | 8230 | 4.705 ug/l | 91 |
| 47) Bromodichloromethane | 9.888 | 83 | 18456 | 5.179 ug/l # | 96 |
| 48) Methyl methacrylate | 9.677 | 41 | 10574 | 4.599 ug/l | 95 |
| 49) 1,4-Dioxane | 9.694 | 88 | 3619 | 93.477 ug/l | 97 |
| 51) 4-Methyl-2-Pentanone | 10.441 | 43 | 71889 | 24.250 ug/l | 98 |
| 52) Toluene | 10.629 | 92 | 27098 | 4.928 ug/l | 98 |
| 53) t-1,3-Dichloropropene | 10.829 | 75 | 17099 | 5.077 ug/l | 95 |
| 54) cis-1,3-Dichloropropene | 10.306 | 75 | 17440 | 4.848 ug/l | 97 |
| 55) 1,1,2-Trichloroethane | 11.012 | 97 | 11311 | 5.197 ug/l | 96 |
| 56) Ethyl methacrylate | 10.871 | 69 | 14094 | 5.627 ug/l | 94 |
| 57) 1,3-Dichloropropane | 11.159 | 76 | 18945 | 5.006 ug/l | 100 |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63 | 33210 | 24.047 ug/l | 97 |
| 59) 2-Hexanone | 11.194 | 43 | 49021 | 23.501 ug/l | 94 |
| 60) Dibromochloromethane | 11.353 | 129 | 13635 | 5.190 ug/l | 96 |
| 61) 1,2-Dibromoethane | 11.471 | 107 | 10419 | 4.810 ug/l | 98 |
| 64) Tetrachloroethene | 11.100 | 164 | 9756 | 5.071 ug/l | 91 |
| 65) Chlorobenzene | 11.888 | 112 | 31312 | 5.065 ug/l | 98 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 11620 | 5.121 ug/l | 98 |
| 67) Ethyl Benzene | 11.965 | 91 | 48216 | 4.789 ug/l | 98 |
| 68) m/p-Xylenes | 12.065 | 106 | 34771 | 9.344 ug/l | 99 |
| 69) o-Xylene | 12.394 | 106 | 16419 | 4.617 ug/l | 98 |
| 70) Styrene | 12.412 | 104 | 26218 | 4.454 ug/l | 99 |
| 71) Bromoform | 12.576 | 173 | 8017 | 4.938 ug/l # | 99 |
| 73) Isopropylbenzene | 12.694 | 105 | 39811 | 4.678 ug/l | 99 |
| 74) N-amyl acetate | 12.488 | 43 | 17577 | 4.595 ug/l | 95 |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 15483 | 5.151 ug/l | 97 |
| 76) 1,2,3-Trichloropropane | 12.994 | 75 | 12173m | 4.758 ug/l | |
| 77) Bromobenzene | 12.982 | 156 | 11091 | 4.989 ug/l | 99 |
| 78) n-propylbenzene | 13.035 | 91 | 45450 | 4.512 ug/l | 99 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 31932 | 4.898 ug/l | 98 |
| 80) 1,3,5-Trimethylbenzene | 13.170 | 105 | 31891 | 4.537 ug/l | 100 |
| 81) trans-1,4-Dichloro-2-b... | 12.729 | 75 | 4229 | 4.465 ug/l | 90 |
| 82) 4-Chlorotoluene | 13.218 | 91 | 31976 | 4.926 ug/l | 100 |
| 83) tert-Butylbenzene | 13.435 | 119 | 27597 | 4.675 ug/l | 99 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 32054 | 4.575 ug/l | 98 |
| 85) sec-Butylbenzene | 13.612 | 105 | 38148 | 4.663 ug/l | 98 |
| 86) p-Isopropyltoluene | 13.723 | 119 | 29856 | 4.584 ug/l | 98 |
| 87) 1,3-Dichlorobenzene | 13.729 | 146 | 20876 | 5.099 ug/l | 98 |
| 88) 1,4-Dichlorobenzene | 13.812 | 146 | 21982 | 5.179 ug/l | 97 |
| 89) n-Butylbenzene | 14.053 | 91 | 27437 | 4.675 ug/l | 96 |
| 90) Hexachloroethane | 14.329 | 117 | 7767 | 4.987 ug/l | 100 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 20177 | 4.940 ug/l | 100 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.729 | 75 | 2872 | 5.232 ug/l | 90 |
| 93) 1,2,4-Trichlorobenzene | 15.388 | 180 | 9037 | 4.761 ug/l | 94 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 5563 | 5.520 ug/l | 98 |
| 95) Naphthalene | 15.641 | 128 | 25047 | 4.422 ug/l | 96 |
| 96) 1,2,3-Trichlorobenzene | 15.841 | 180 | 8737 | 4.549 ug/l | 99 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085442.D
Acq On : 14 Jan 2025 16:31
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Quant Time: Jan 15 01:45:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

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

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

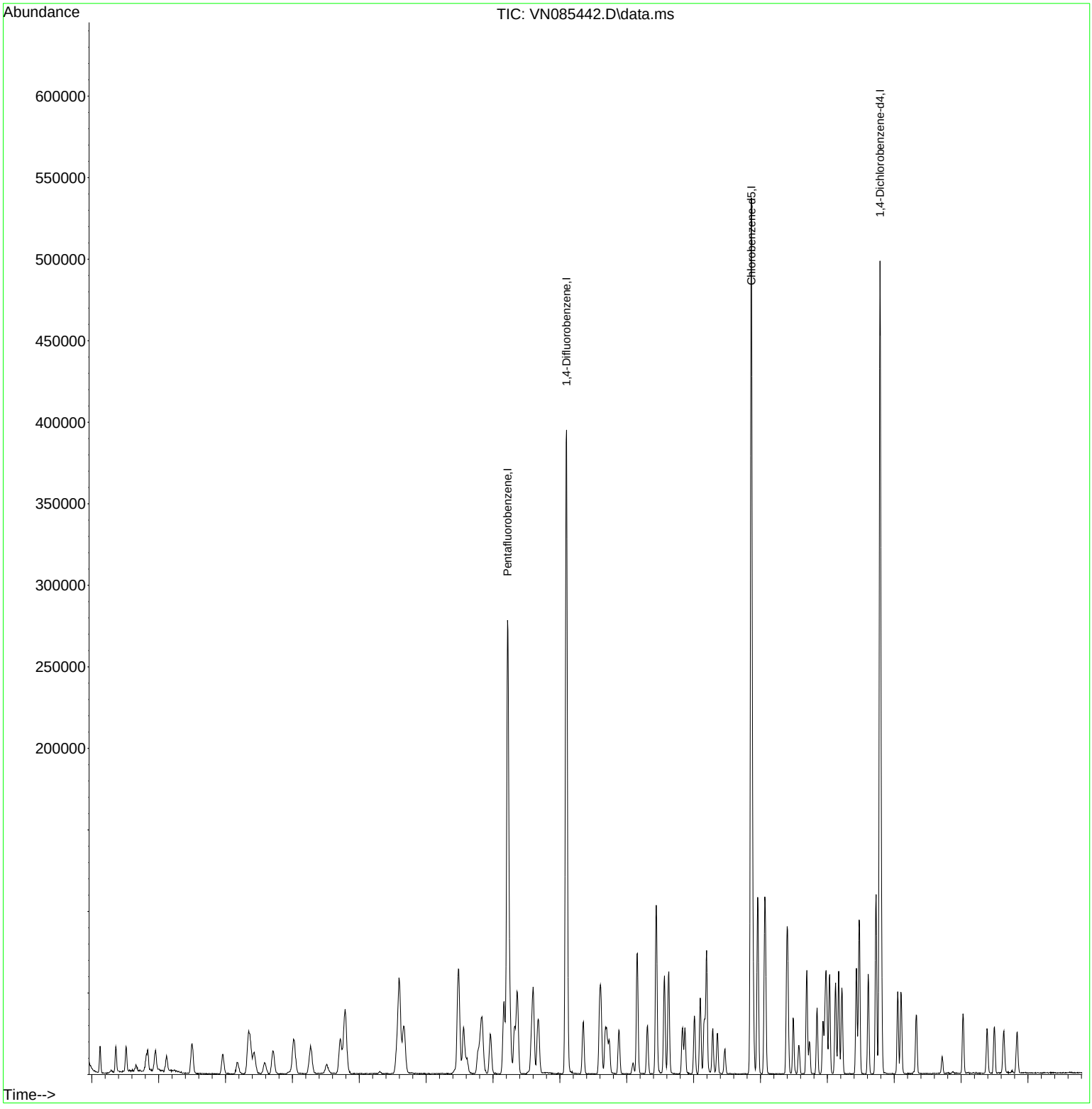
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085442.D
Acq On : 14 Jan 2025 16:31
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

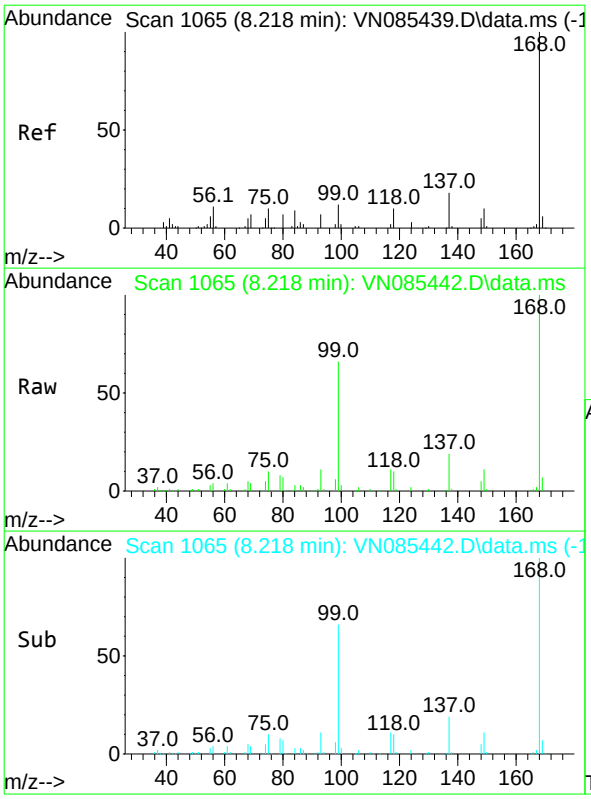
Quant Time: Jan 15 01:45:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

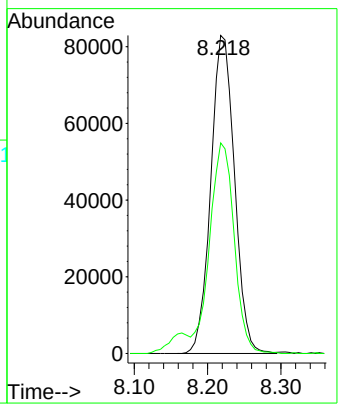





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.218 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:168 Resp: 186556

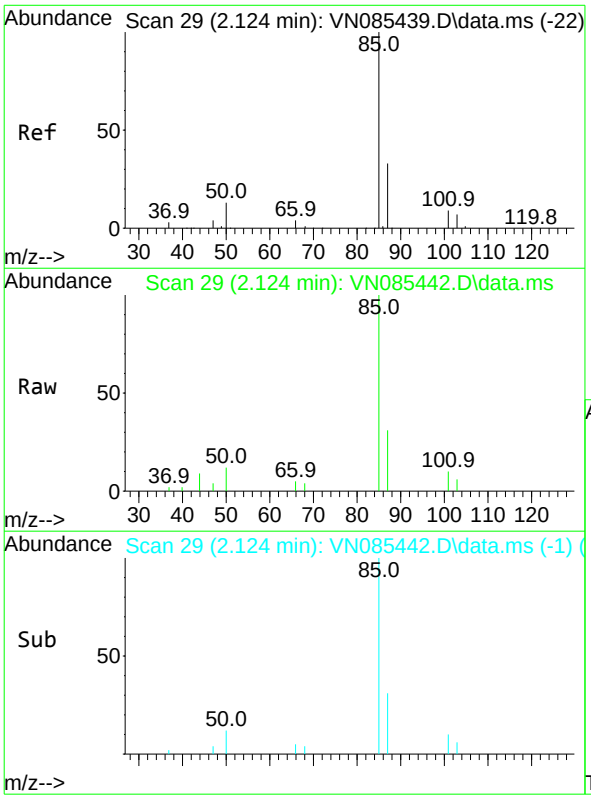
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 65.9 | 53.6 | 80.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

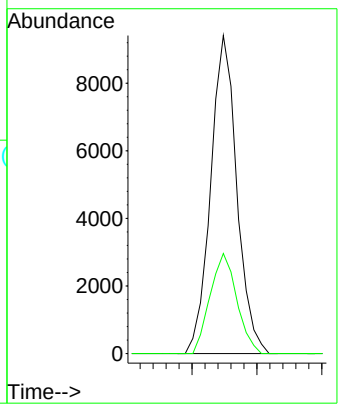
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

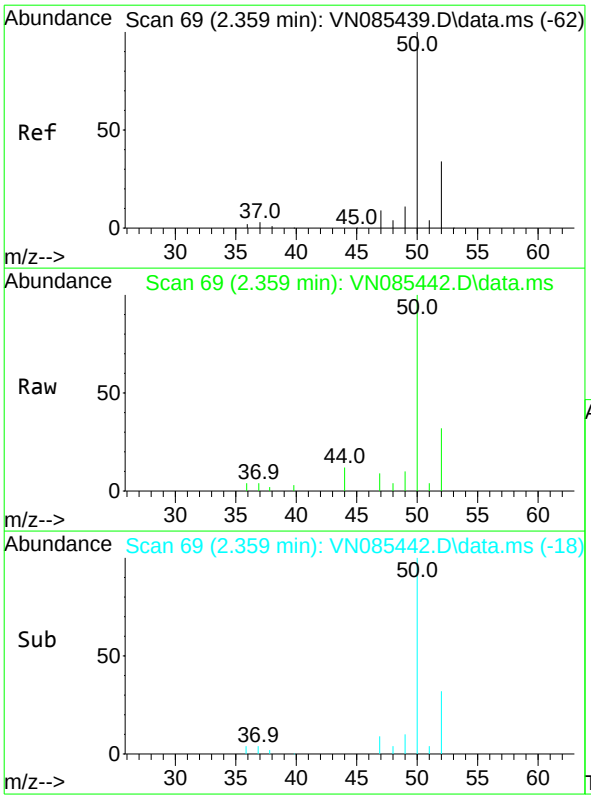



#2
Dichlorodifluoromethane
Concen: 5.225 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 85 Resp: 13199

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 31.5 | 16.7 | 50.1 |

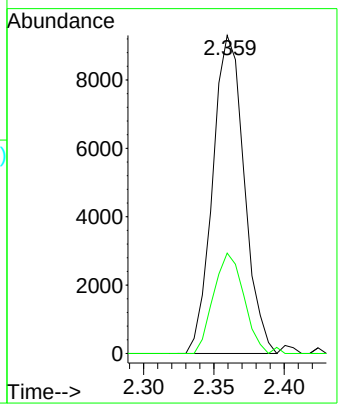





#3
Chloromethane
Concen: 5.311 ug/l
RT: 2.359 min Scan# 69
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 50 Resp: 14526

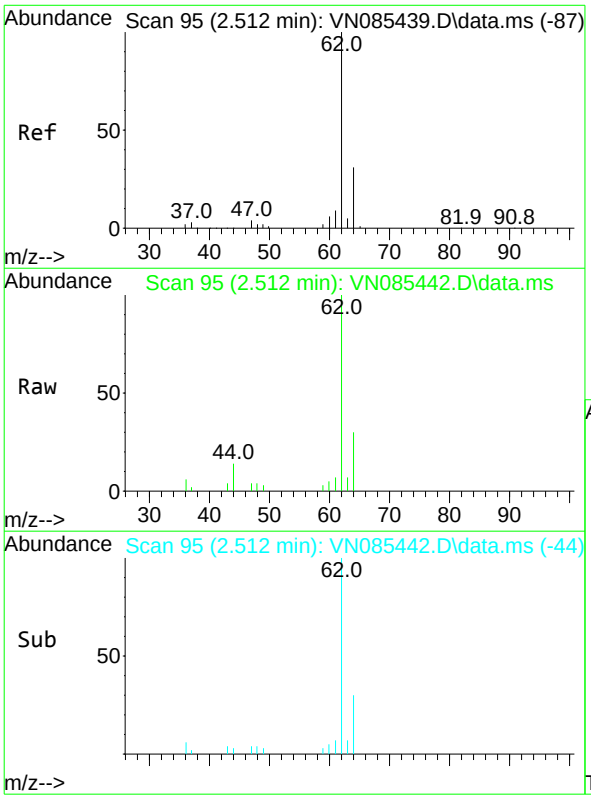
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 31.6 | 27.0 | 40.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

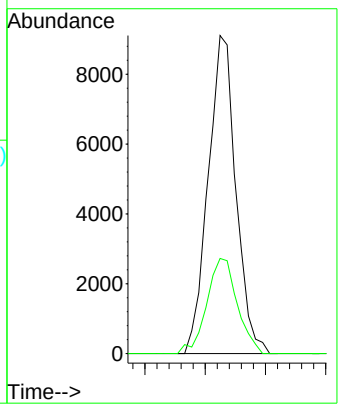
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

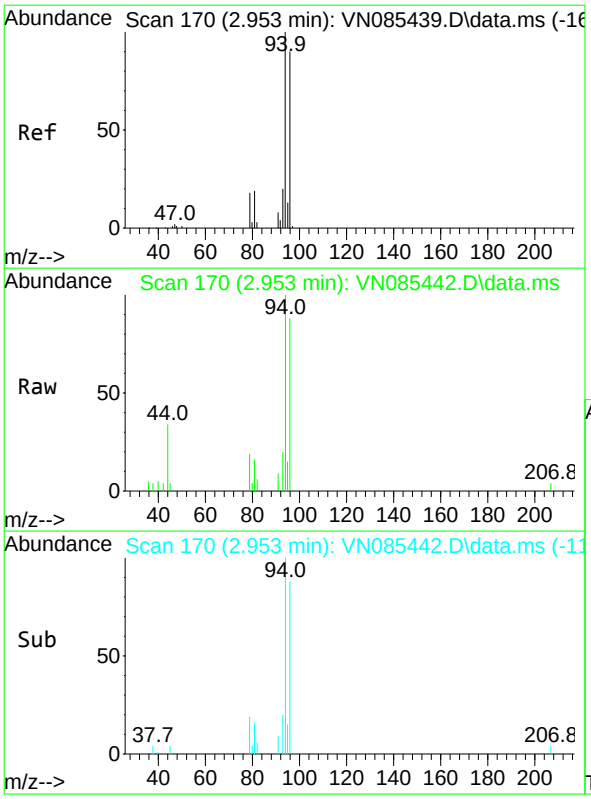



#4
Vinyl Chloride
Concen: 5.298 ug/l
RT: 2.512 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 62 Resp: 14564

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 29.9 | 24.8 | 37.2 |

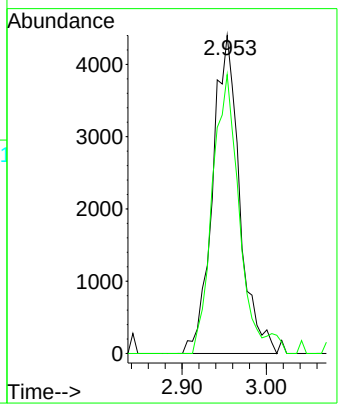





#5
Bromomethane
Concen: 5.895 ug/l
RT: 2.953 min Scan# 17
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 94 Resp: 9788

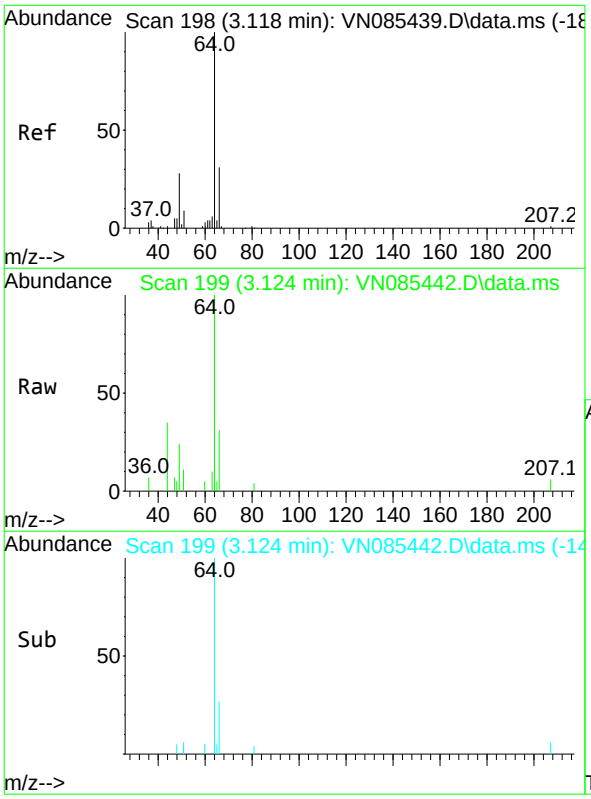
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 87.7 | 71.8 | 107.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

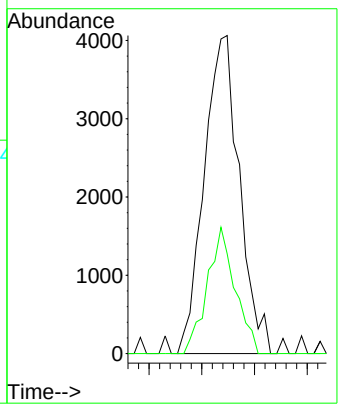
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

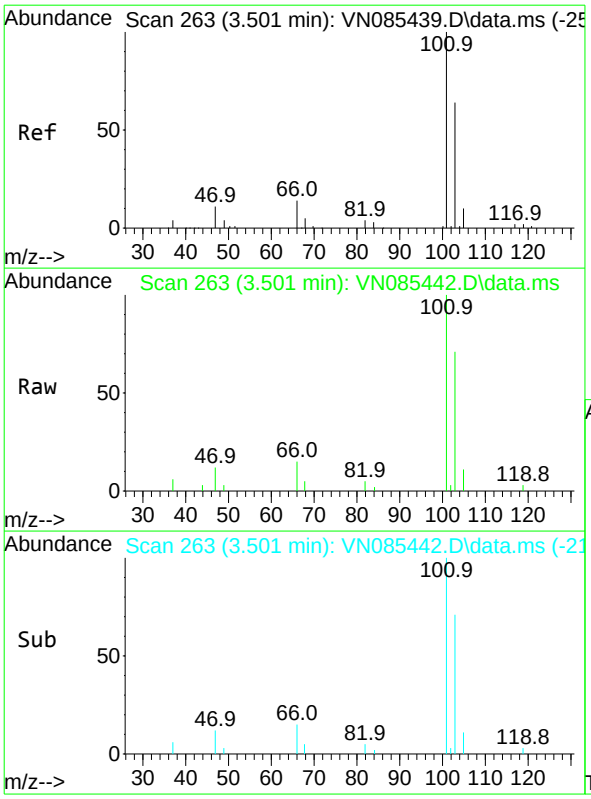



#6
Chloroethane
Concen: 5.411 ug/l
RT: 3.124 min Scan# 199
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 64 Resp: 9430

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 31.4 | 24.6 | 36.8 |

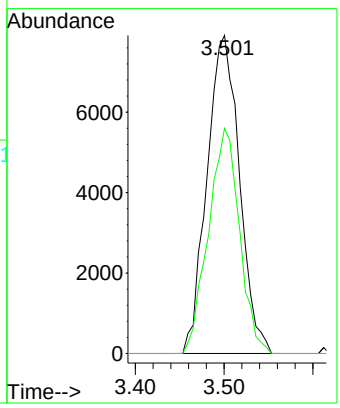





#7
Trichlorofluoromethane
Concen: 5.039 ug/l
RT: 3.501 min Scan# 26
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:101 Resp: 20098

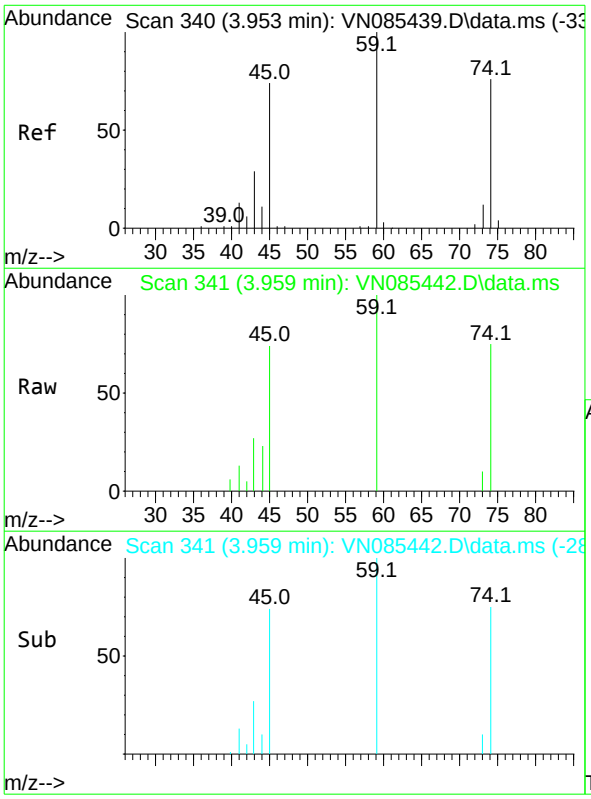
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 70.8 | 51.4 | 77.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

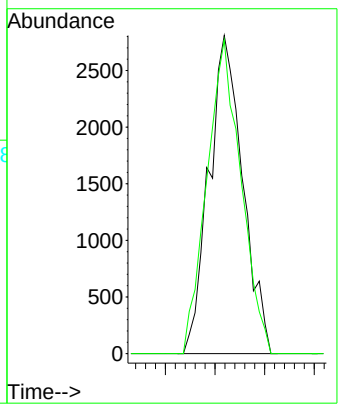
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

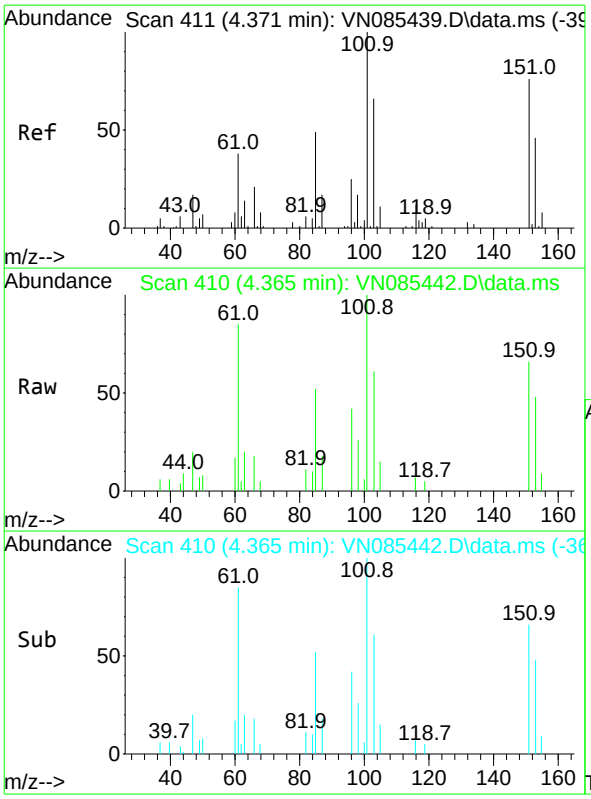



#8
Diethyl Ether
Concen: 4.828 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 74 Resp: 6652

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 99.5 | 49.7 | 149.1 |






#9
1,1,2-Trichlorotrifluoroethane
Concen: 5.305 ug/l
RT: 4.365 min Scan# 41
Delta R.T. -0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

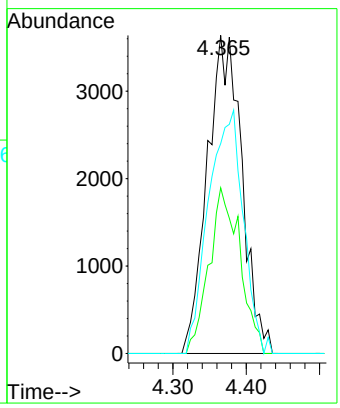
Tgt Ion:101 Resp: 11917

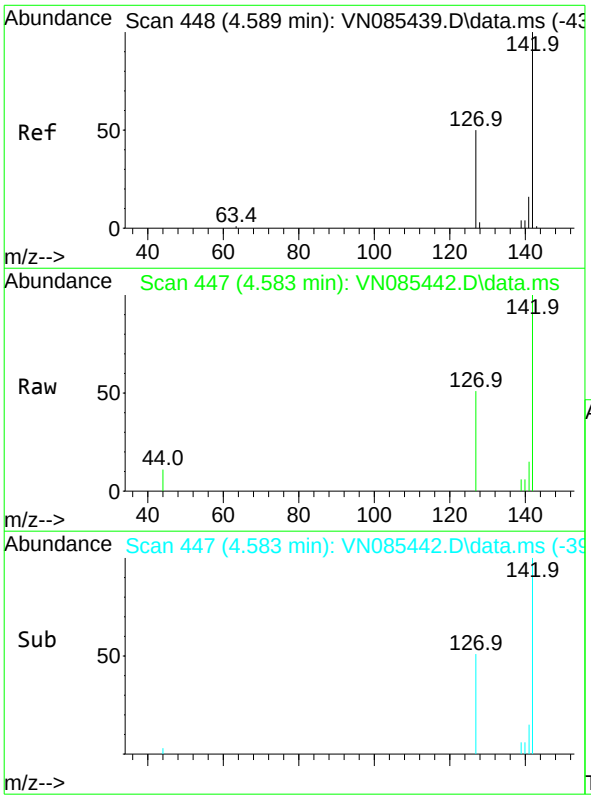
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 46.5 | 37.8 | 56.8 |
| 151 | 76.7 | 58.8 | 88.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

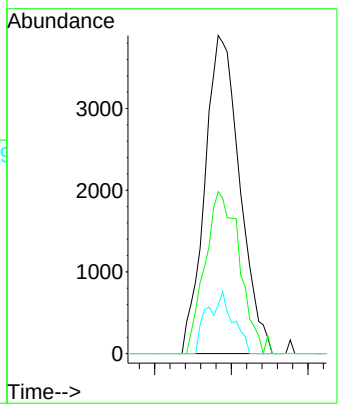


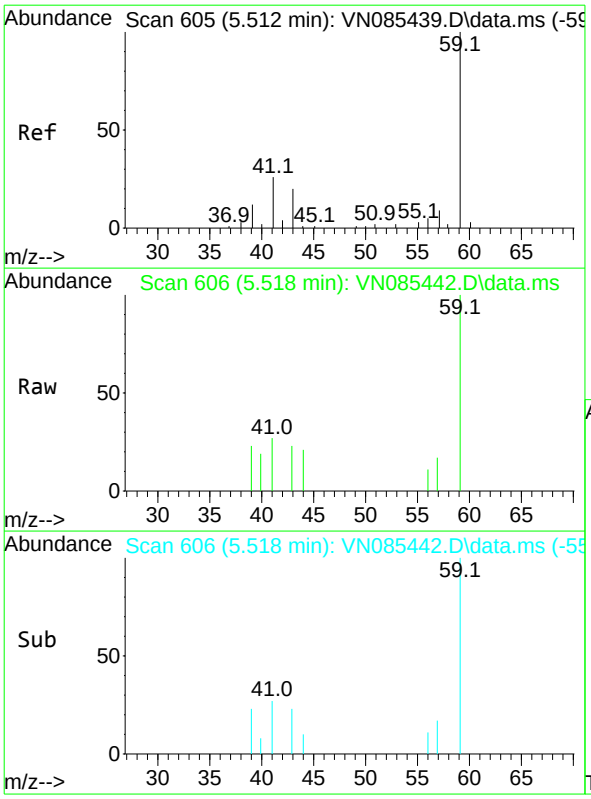




#10
Methyl Iodide
Concen: 4.793 ug/l
RT: 4.583 min Scan# 447
Delta R.T. -0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:142 Resp: 12331

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 50.9 | 40.3 | 60.5 |
| 141 | 15.0 | 12.8 | 19.2 |

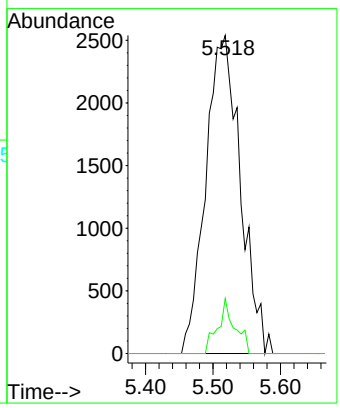





#11
Tert butyl alcohol
Concen: 26.318 ug/l
RT: 5.518 min Scan# 60
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 59 Resp: 9075

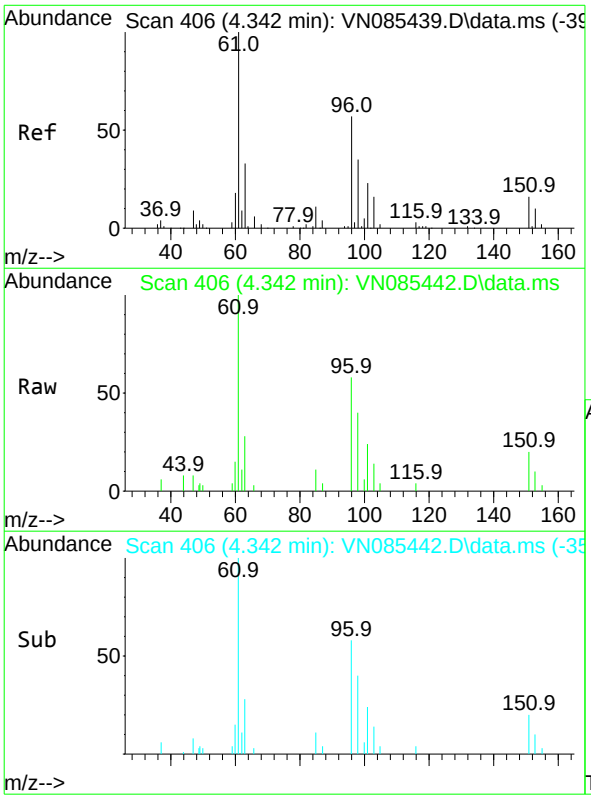
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 8.5 | 8.6 | 13.0# |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

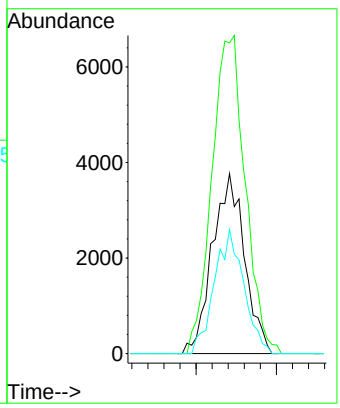
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

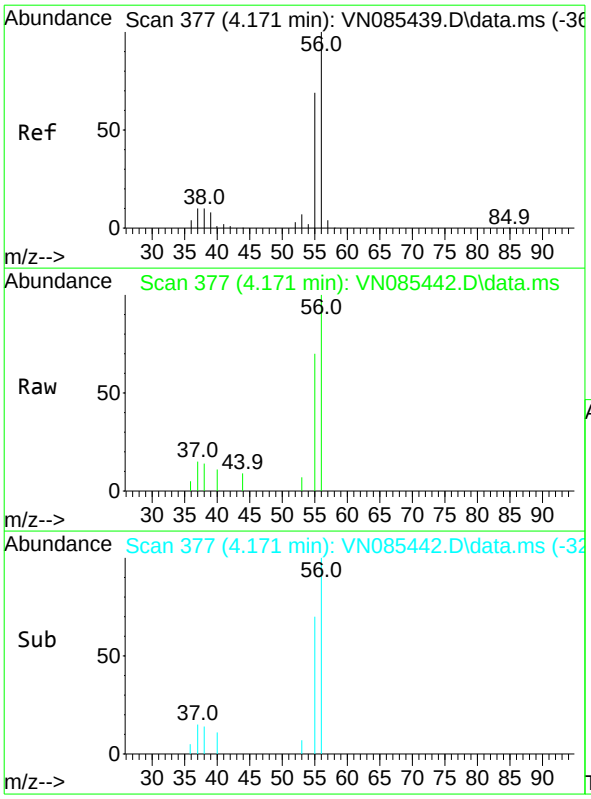



#12
1,1-Dichloroethene
Concen: 5.209 ug/l
RT: 4.342 min Scan# 406
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 96 Resp: 10429

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 172.7 | 141.0 | 211.4 |
| 98 | 69.0 | 49.0 | 73.6 |

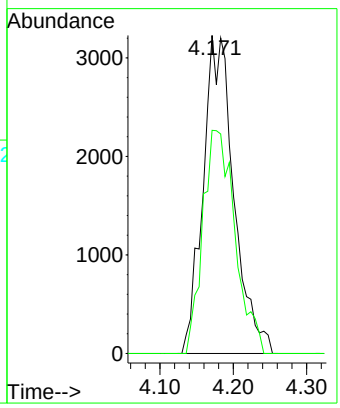





#13
Acrolein
Concen: 20.033 ug/l
RT: 4.171 min Scan# 37
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 56 Resp: 9430

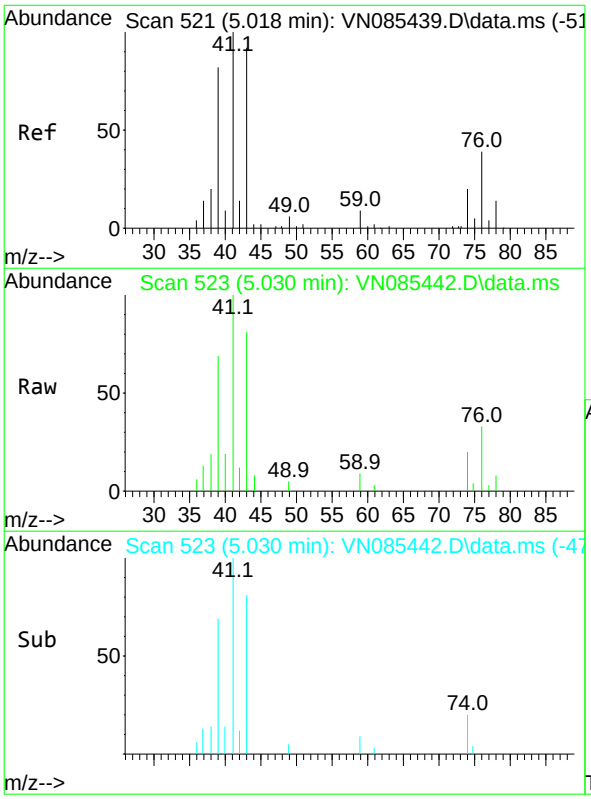
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 73.2 | 56.3 | 84.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

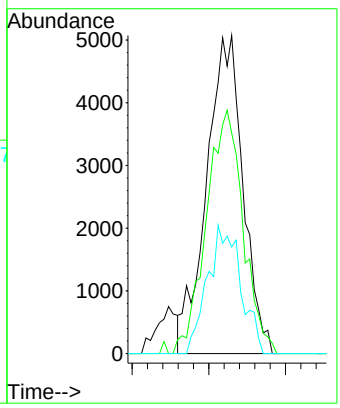
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

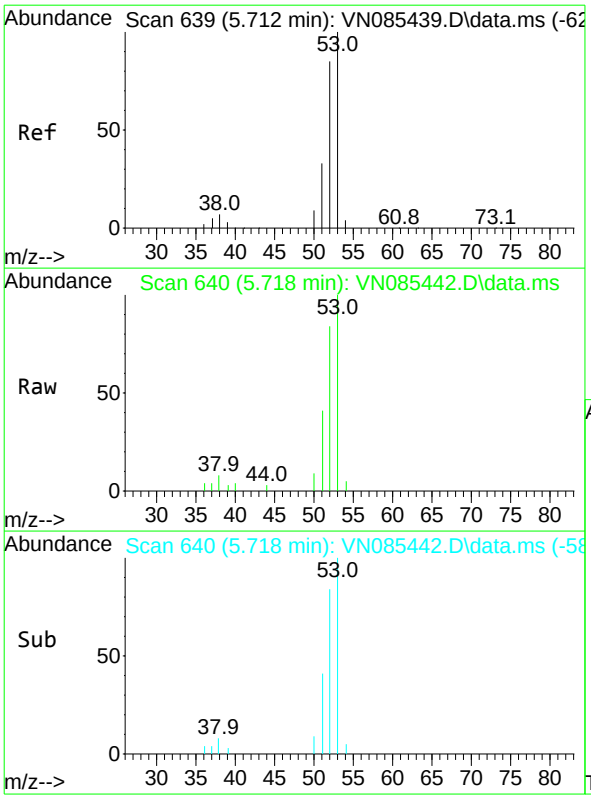



#14
Allyl chloride
Concen: 5.153 ug/l
RT: 5.030 min Scan# 523
Delta R.T. 0.012 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 41 Resp: 16741

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 77.4 | 64.4 | 96.6 |
| 76 | 36.6 | 30.5 | 45.7 |

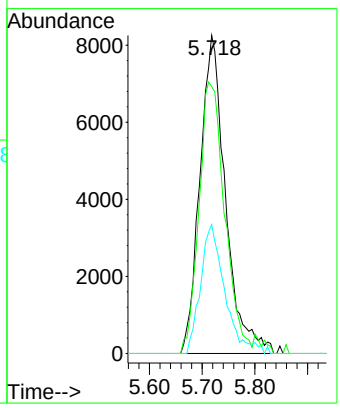





#15
Acrylonitrile
Concen: 25.445 ug/l
RT: 5.718 min Scan# 64
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 53 Resp: 27869

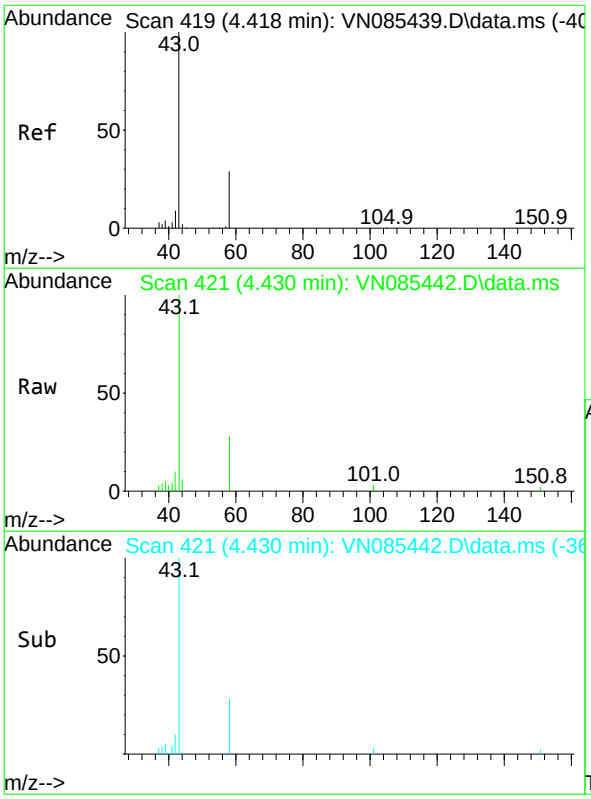
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 85.5 | 65.5 | 98.3 |
| 51 | 38.5 | 29.8 | 44.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

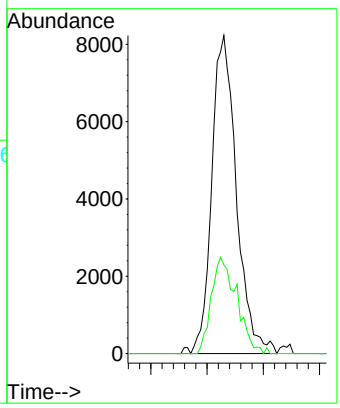
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

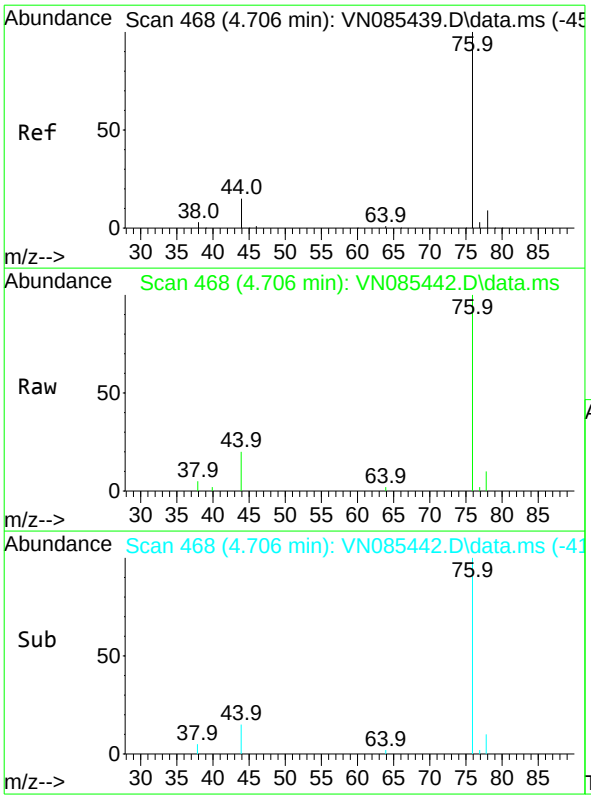



#16
Acetone
Concen: 25.819 ug/l
RT: 4.430 min Scan# 421
Delta R.T. 0.012 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 43 Resp: 25122

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 27.9 | 23.8 | 35.6 |

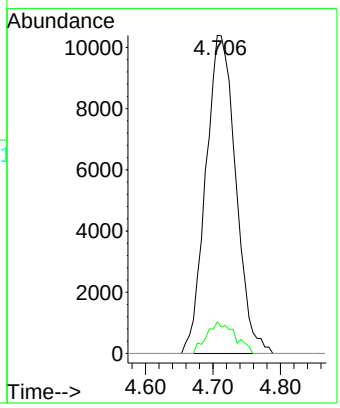





#17
Carbon Disulfide
Concen: 5.202 ug/l
RT: 4.706 min Scan# 46
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 76 Resp: 32068

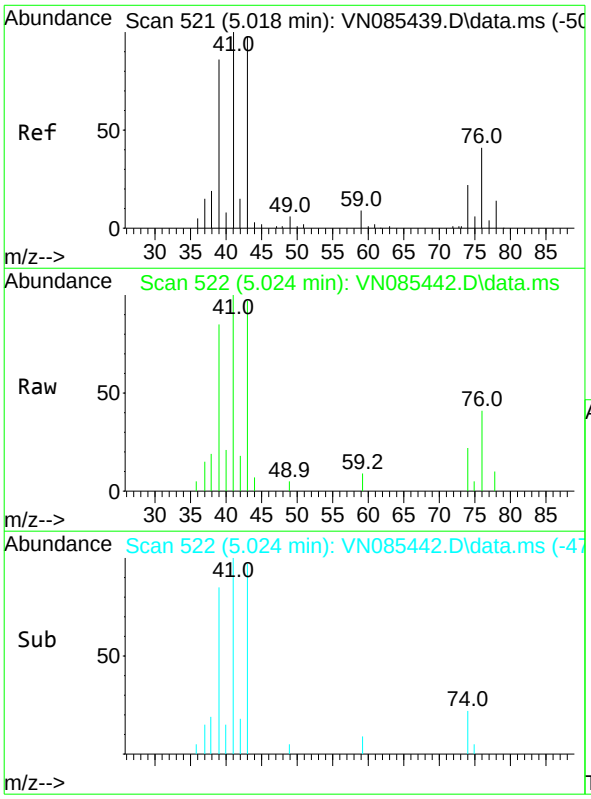
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.9 | 6.9 | 10.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

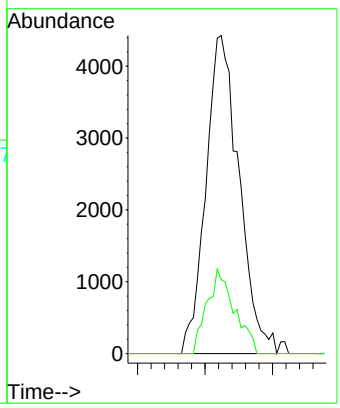
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

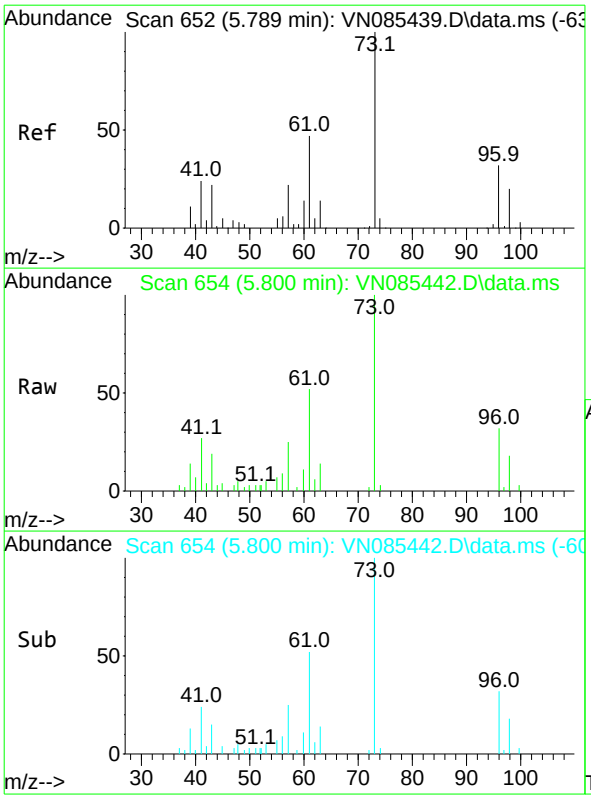



#18
Methyl Acetate
Concen: 5.106 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 43 Resp: 15106

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 22.0 | 18.6 | 28.0 |

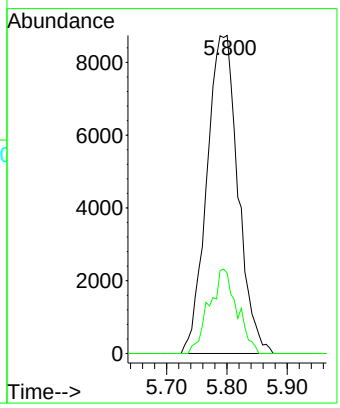





#19
Methyl tert-butyl Ether
Concen: 4.836 ug/l
RT: 5.800 min Scan# 65
Delta R.T. 0.012 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 73 Resp: 31439

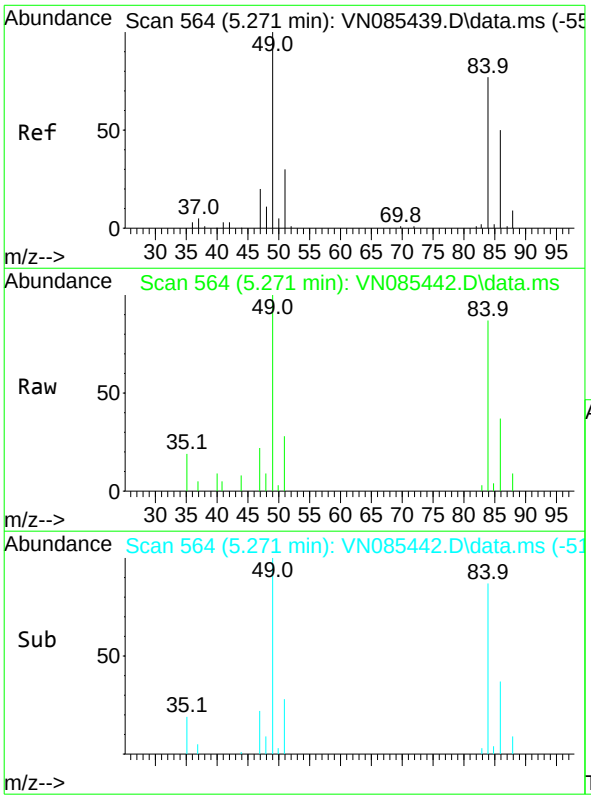
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 25.2 | 17.8 | 26.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

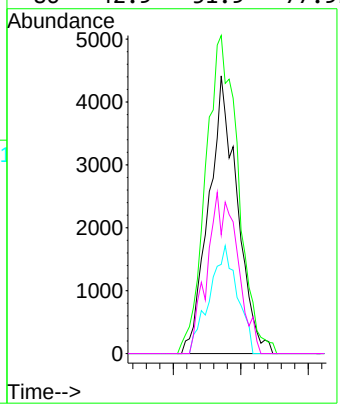
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

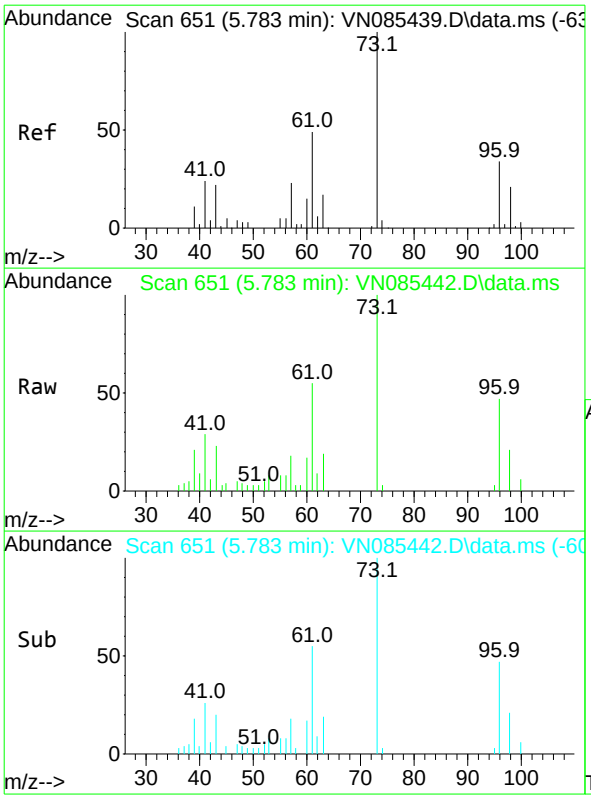



#20
Methylene Chloride
Concen: 5.389 ug/l
RT: 5.271 min Scan# 564
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 84 Resp: 12981

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 114.5 | 104.1 | 156.1 |
| 51 | 32.1 | 31.0 | 46.4 |
| 86 | 42.9 | 51.9 | 77.9# |

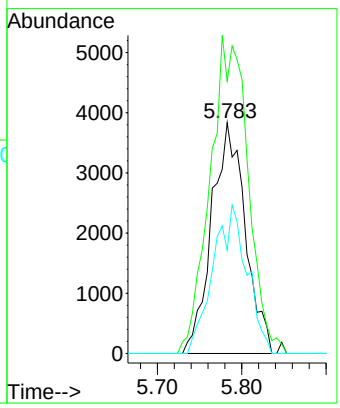





#21
trans-1,2-Dichloroethene
Concen: 4.960 ug/l
RT: 5.783 min Scan# 65
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 96 Resp: 10614

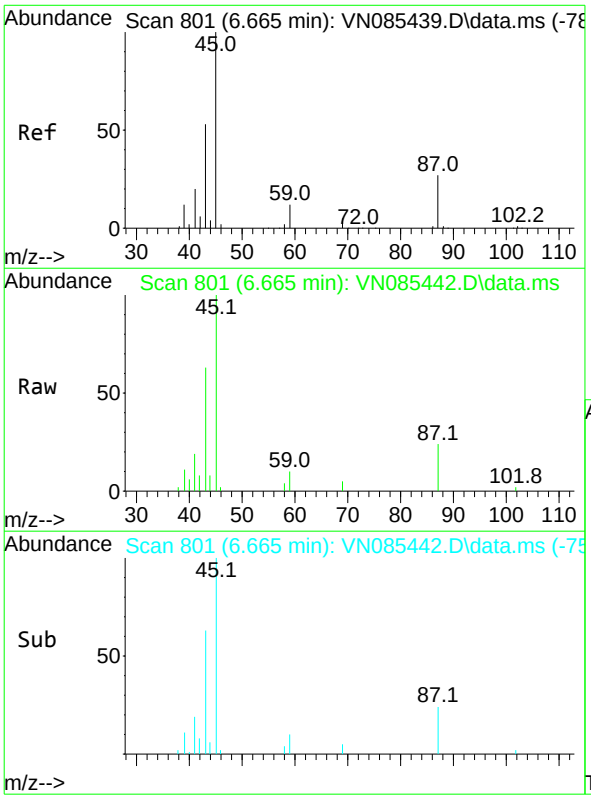
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 118.1 | 115.7 | 173.5 |
| 98 | 44.7 | 49.8 | 74.8# |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

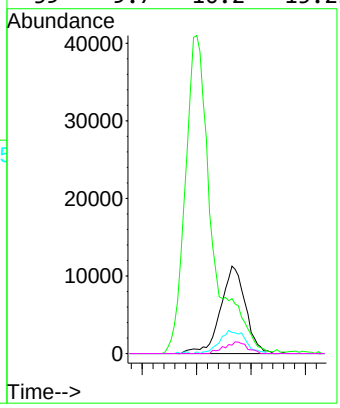
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

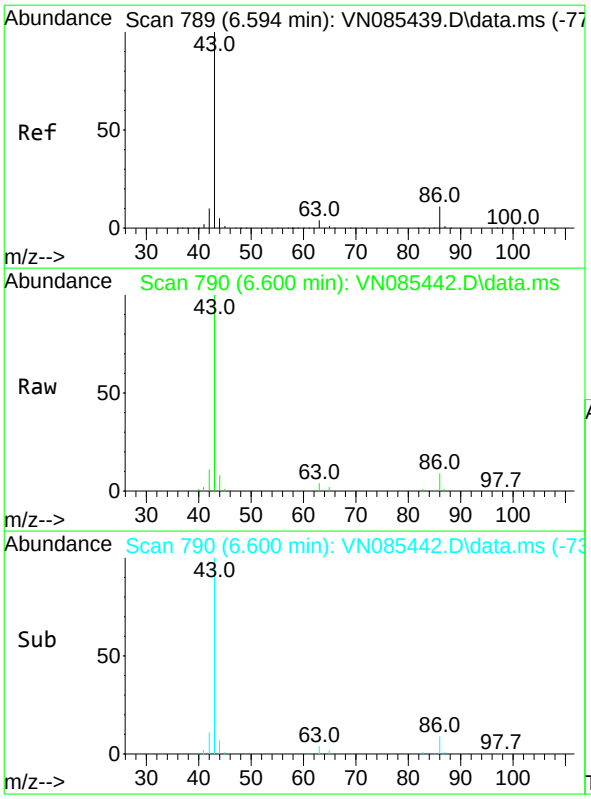



#22
Diisopropyl ether
Concen: 4.962 ug/l
RT: 6.665 min Scan# 801
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 45 Resp: 35785

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 58.3 | 45.0 | 67.6 |
| 87 | 24.2 | 21.8 | 32.8 |
| 59 | 9.7 | 10.2 | 15.2# |

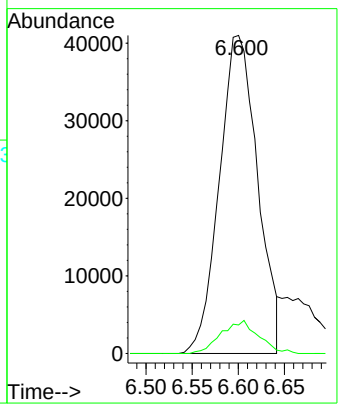





#23
Vinyl Acetate
Concen: 23.389 ug/l m
RT: 6.600 min Scan# 79
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 43 Resp: 118439

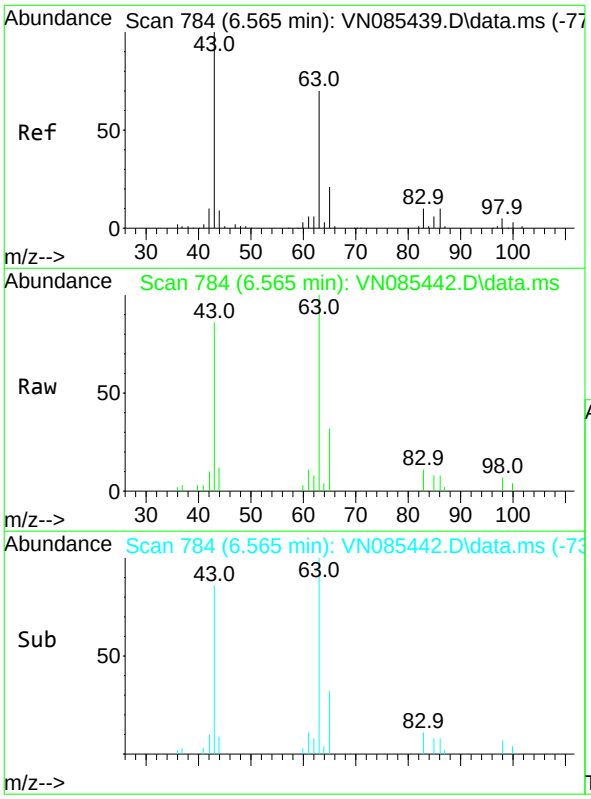
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 9.0 | 8.4 | 12.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

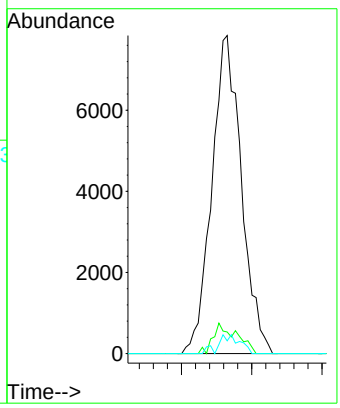
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

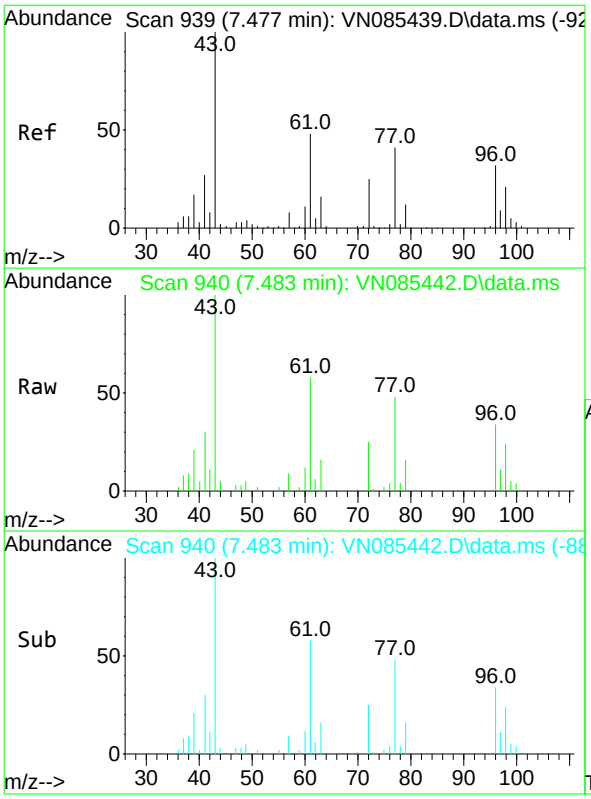



#24
1,1-Dichloroethane
Concen: 5.200 ug/l
RT: 6.565 min Scan# 784
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 63 Resp: 22865

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 6.8 | 3.3 | 9.8 |
| 100 | 4.0 | 2.0 | 6.0 |

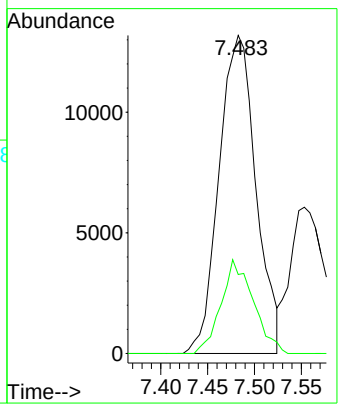





#25
2-Butanone
Concen: 25.231 ug/l
RT: 7.483 min Scan# 94
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 43 Resp: 36127

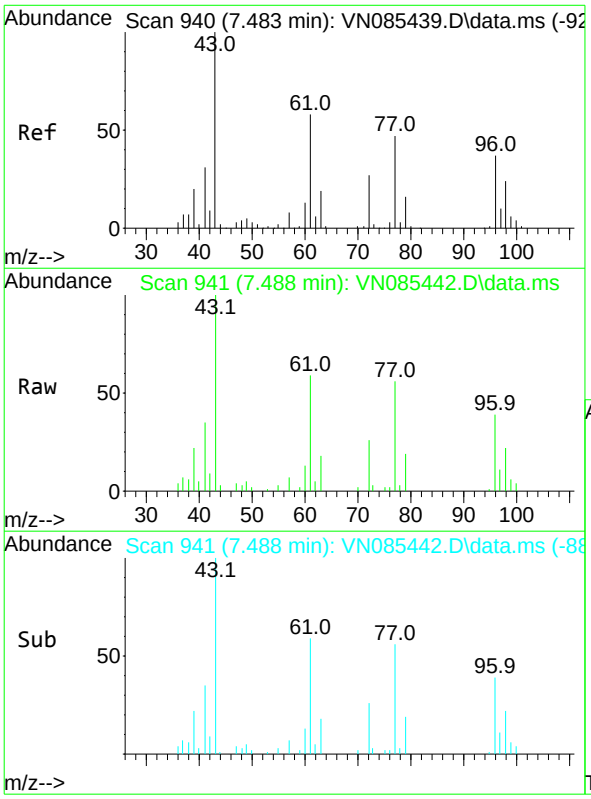
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 24.9 | 20.2 | 30.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

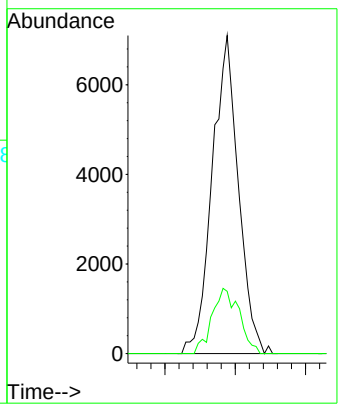
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

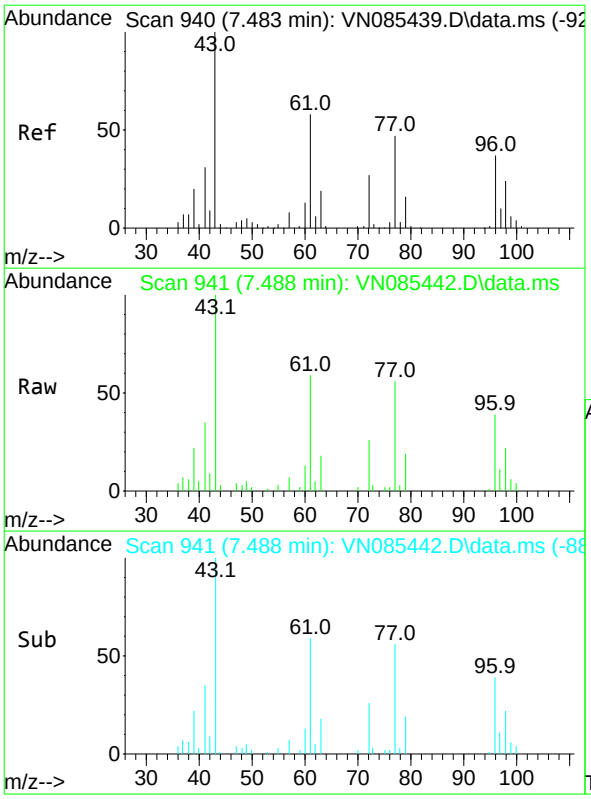



#26
2,2-Dichloropropane
Concen: 5.175 ug/l
RT: 7.488 min Scan# 941
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 77 Resp: 18398

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 21.2 | 10.7 | 32.1 |

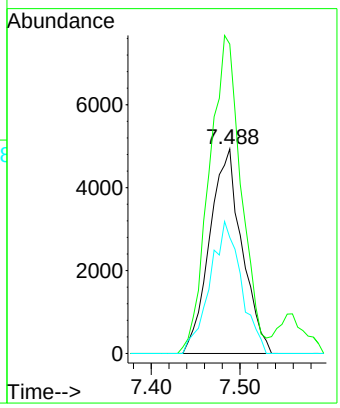





#27
cis-1,2-Dichloroethene
Concen: 4.951 ug/l
RT: 7.488 min Scan# 94
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 96 Resp: 12477

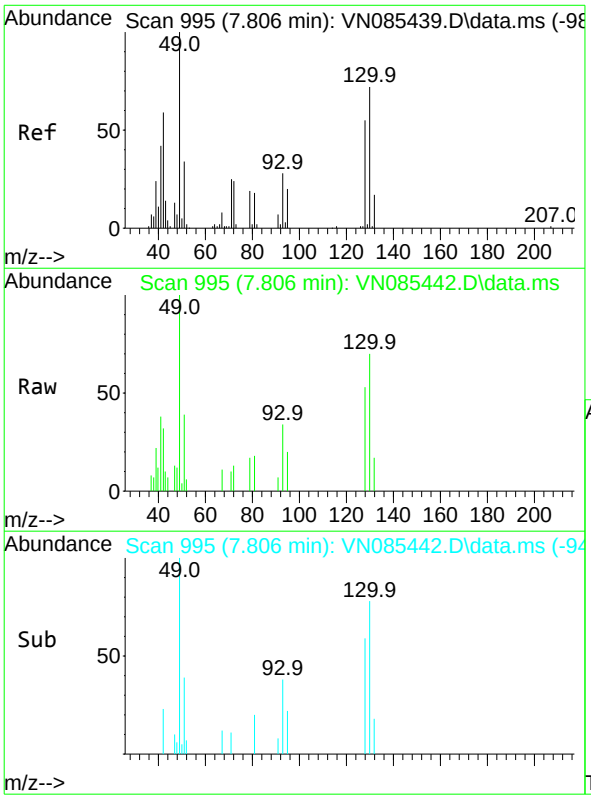
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 154.5 | 0.0 | 311.8 |
| 98 | 62.8 | 0.0 | 126.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

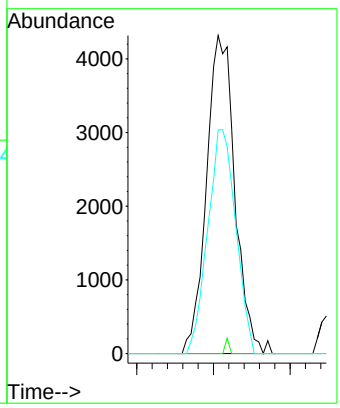
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

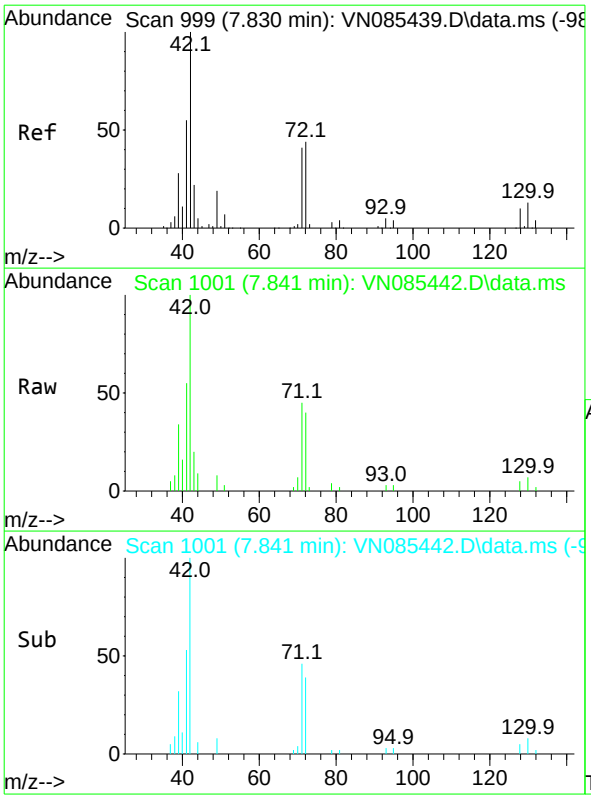



#28
Bromochloromethane
Concen: 5.424 ug/l
RT: 7.806 min Scan# 995
Delta R.T. -0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 49 Resp: 11096

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 0.7 | 0.0 | 4.4 |
| 130 | 69.5 | 55.0 | 82.4 |

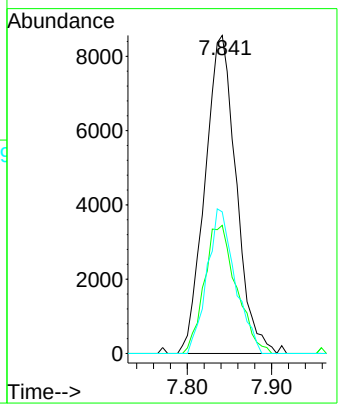





#29
Tetrahydrofuran
Concen: 24.215 ug/l
RT: 7.841 min Scan# 10
Delta R.T. 0.012 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 42 Resp: 21983

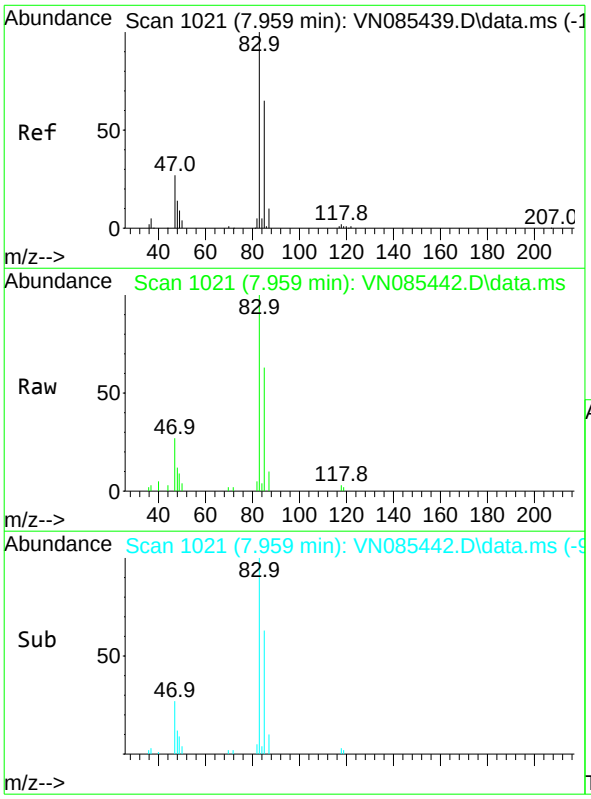
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 41.5 | 34.2 | 51.2 |
| 71 | 41.0 | 32.5 | 48.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

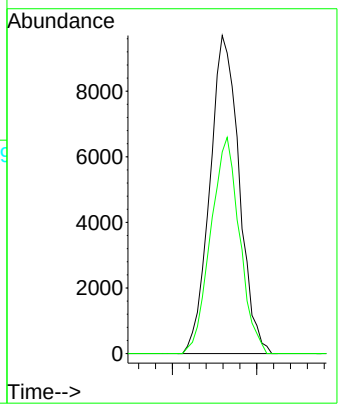
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

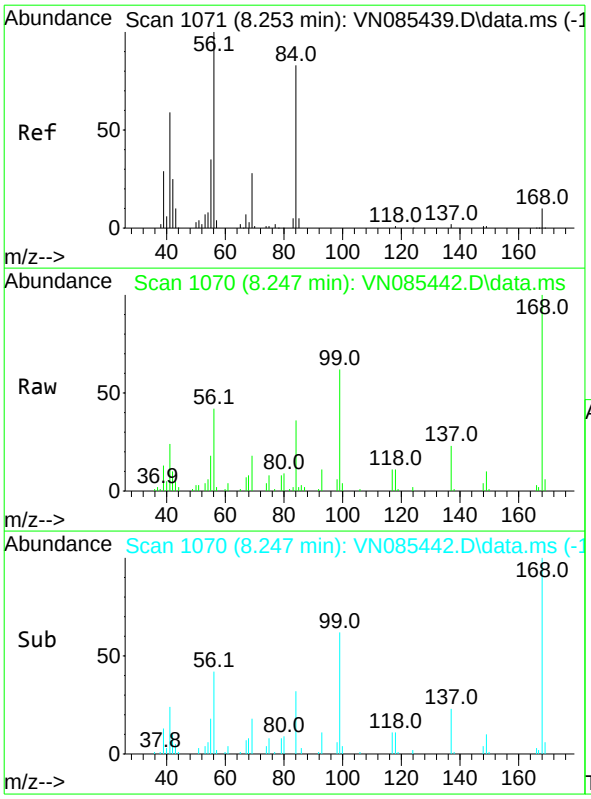



#30
Chloroform
Concen: 5.146 ug/l
RT: 7.959 min Scan# 1021
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 83 Resp: 23384

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 63.4 | 51.8 | 77.6 |

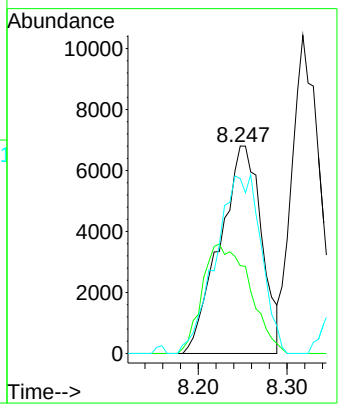





#31
Cyclohexane
Concen: 5.846 ug/l
RT: 8.247 min Scan# 10
Delta R.T. -0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 56 Resp: 22343

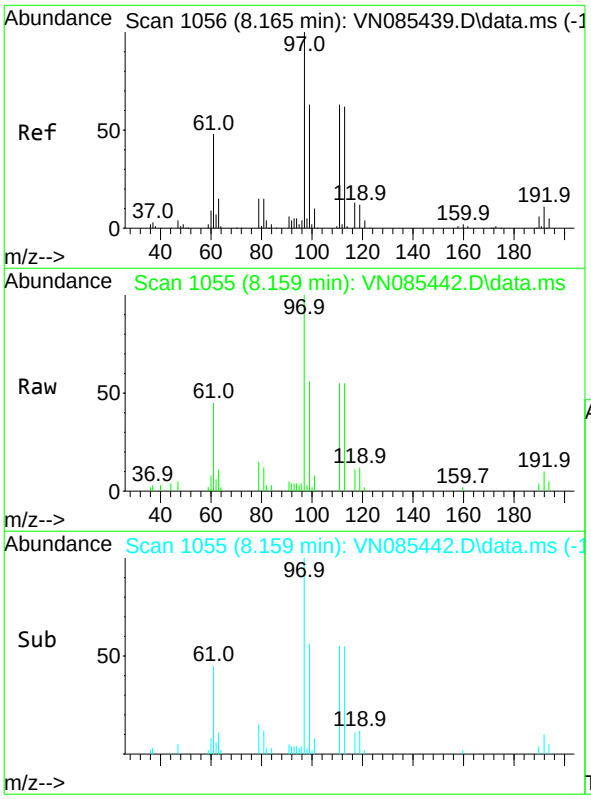
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 42.3 | 22.2 | 33.4# |
| 84 | 84.3 | 66.4 | 99.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

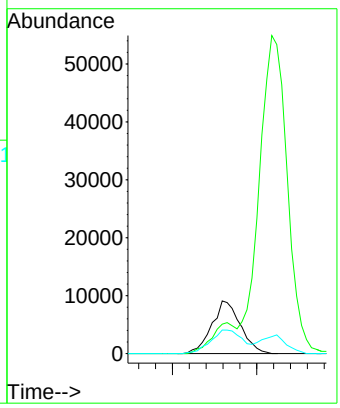
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

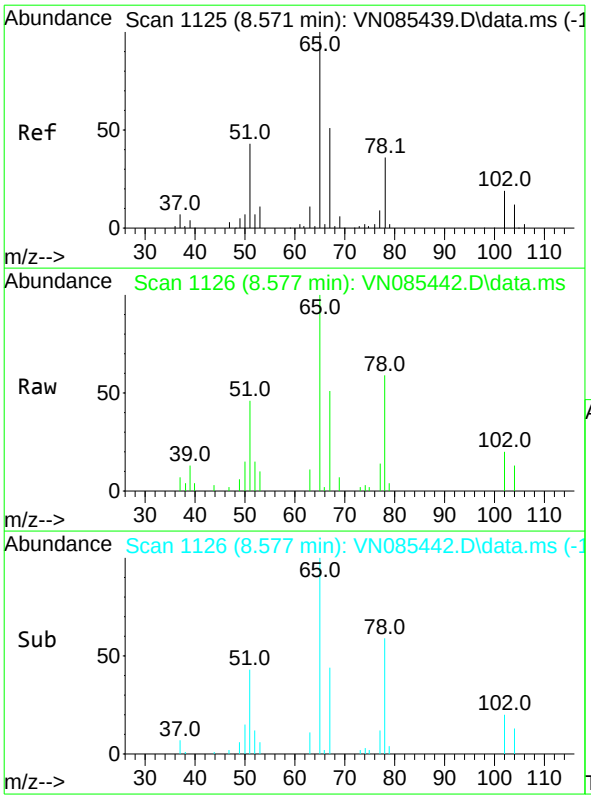



#32
1,1,1-Trichloroethane
Concen: 5.372 ug/l
RT: 8.159 min Scan# 1055
Delta R.T. -0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 97 Resp: 21416

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 50.5 | 49.8 | 74.6 |
| 61 | 50.1 | 41.4 | 62.2 |

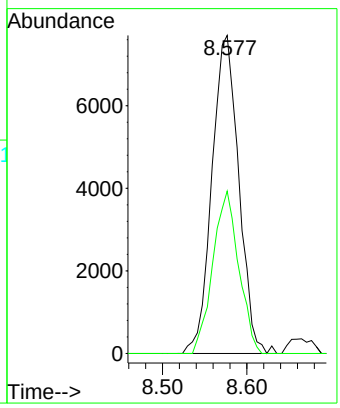





#33
1,2-Dichloroethane-d4
Concen: 5.660 ug/l
RT: 8.577 min Scan# 11
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 65 Resp: 17046

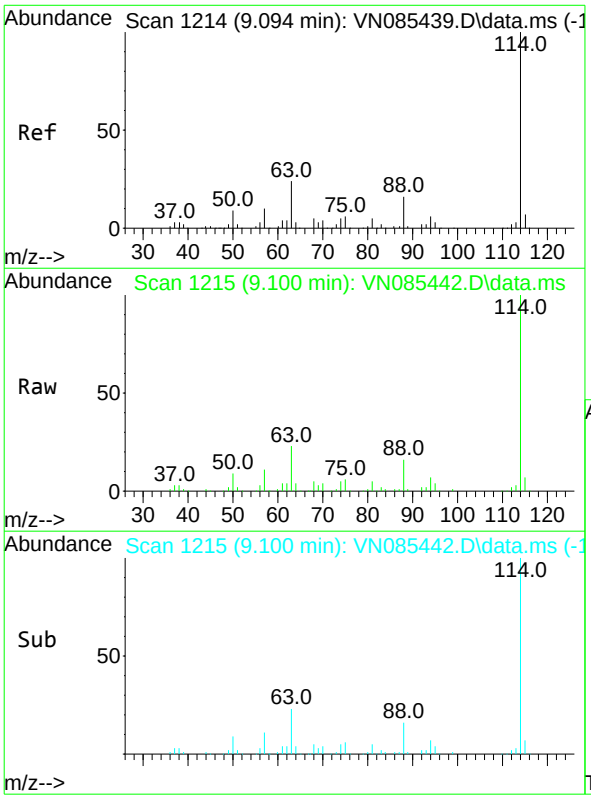
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 49.2 | 0.0 | 101.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

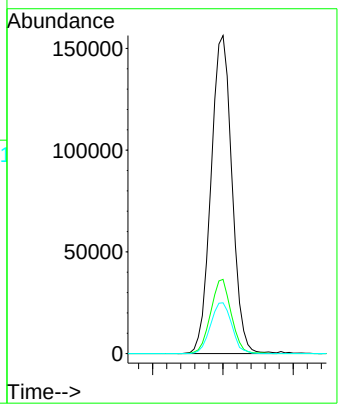
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

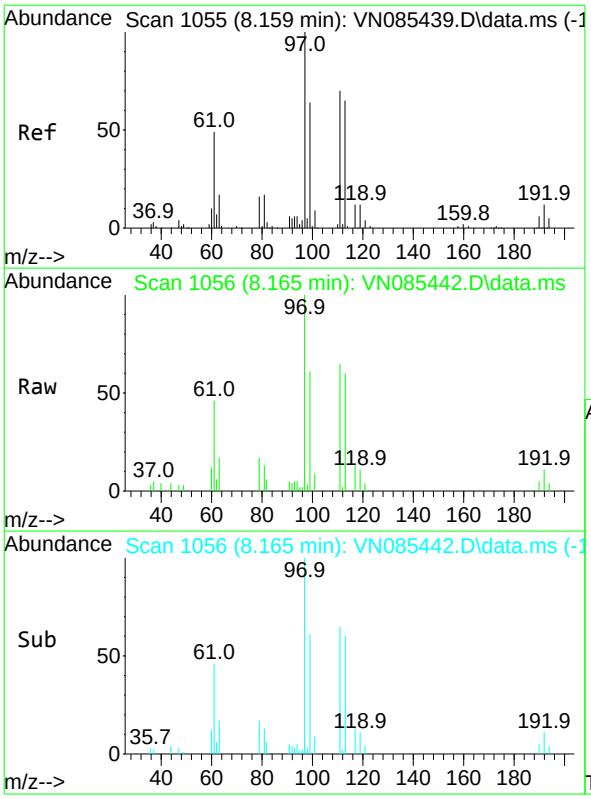



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:114 Resp: 324413

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 23.3 | 0.0 | 47.6 |
| 88 | 16.0 | 0.0 | 32.6 |

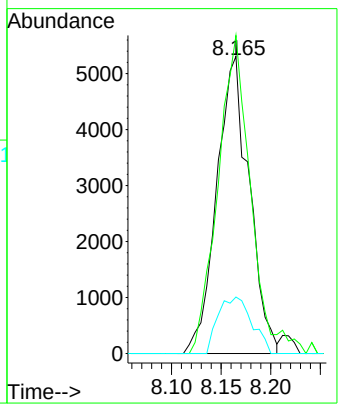





#35
Dibromofluoromethane
Concen: 5.377 ug/l
RT: 8.165 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:113 Resp: 12102

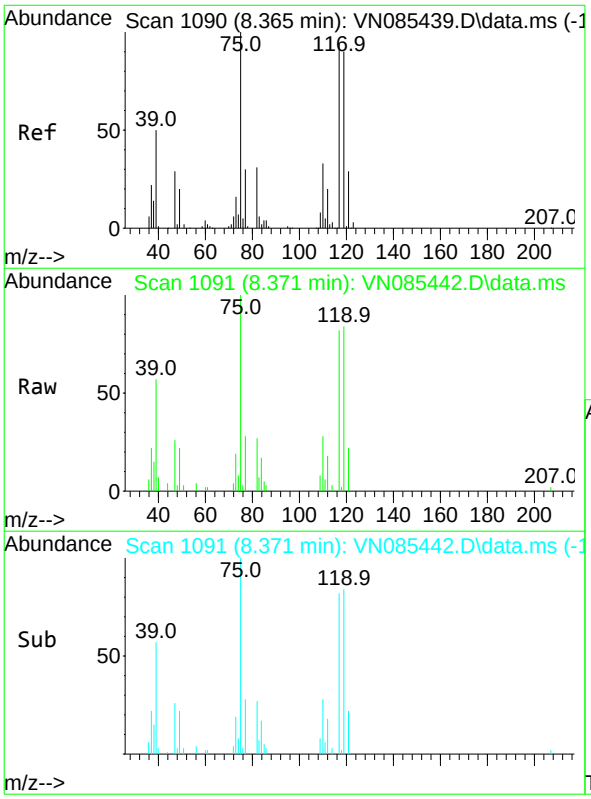
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 107.4 | 82.7 | 124.1 |
| 192 | 19.7 | 14.3 | 21.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

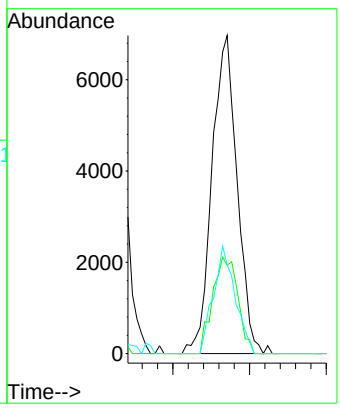
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

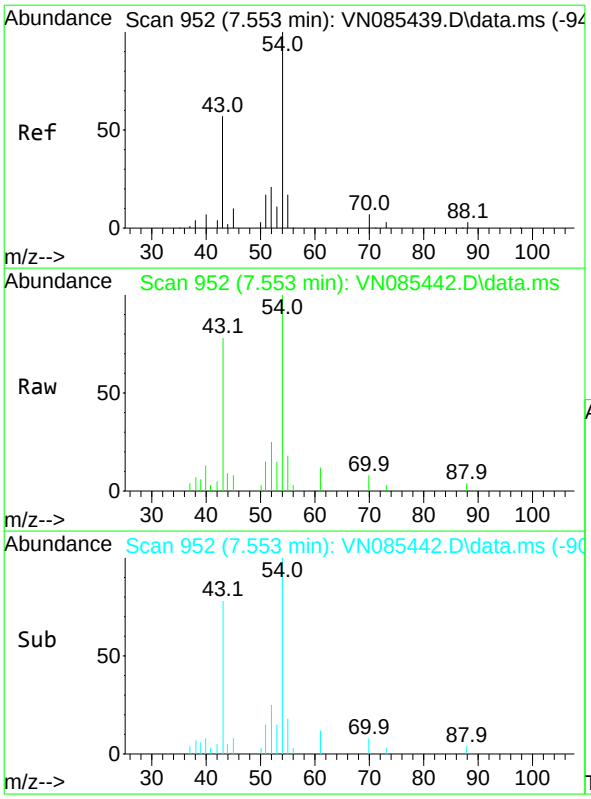



#36
1,1-Dichloropropene
Concen: 5.029 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 75 Resp: 15886

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 30.3 | 16.5 | 49.5 |
| 77 | 29.2 | 24.4 | 36.6 |

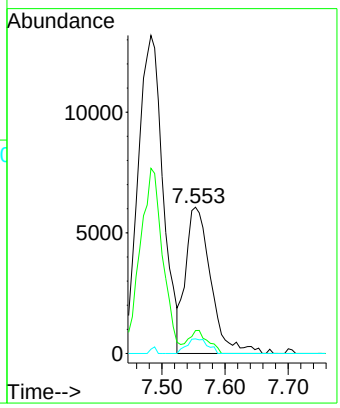





#37
Ethyl Acetate
Concen: 5.294 ug/l m
RT: 7.553 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 43 Resp: 16879

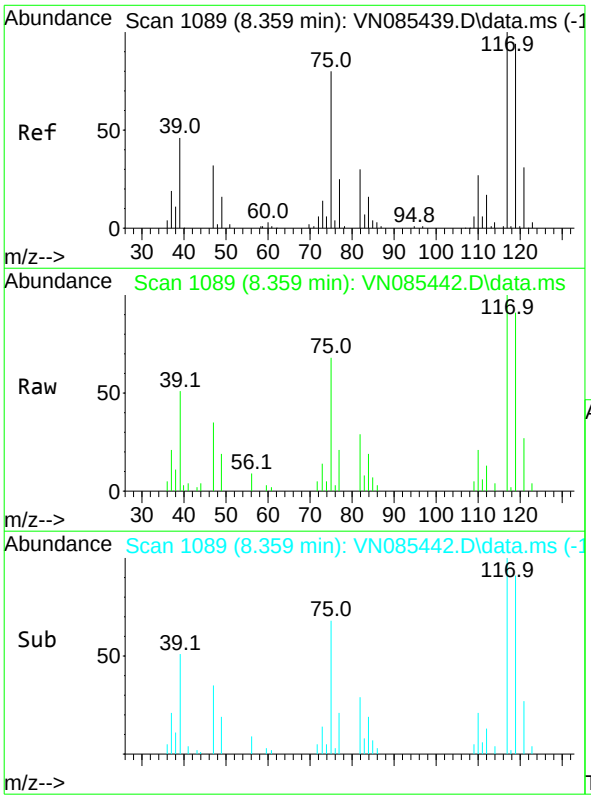
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 12.3 | 10.9 | 16.3 |
| 70 | 8.4 | 7.5 | 11.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

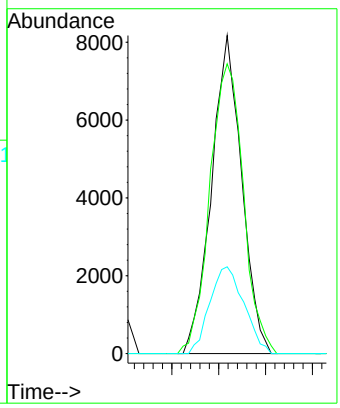
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

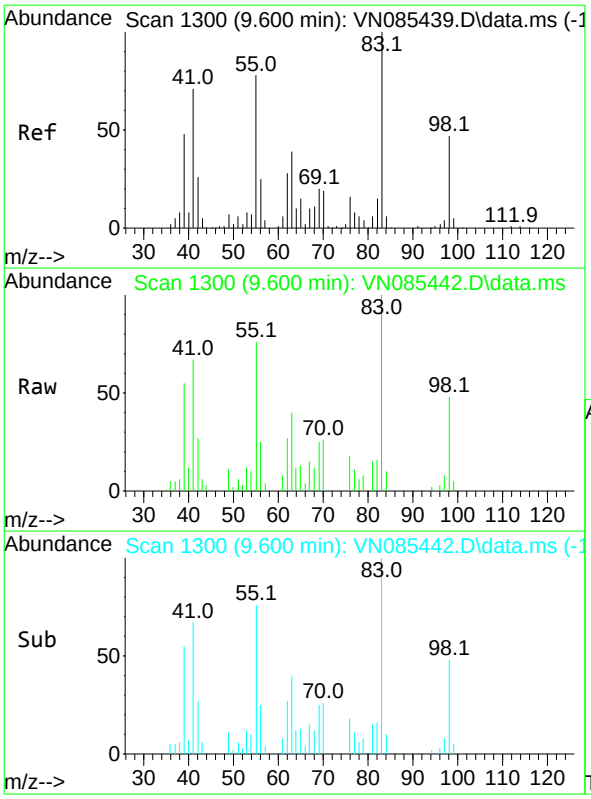



#38
Carbon Tetrachloride
Concen: 5.065 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:117 Resp: 18317

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 91.1 | 75.4 | 113.2 |
| 121 | 27.3 | 24.6 | 37.0 |






#39
Methylcyclohexane
Concen: 4.776 ug/l
RT: 9.600 min Scan# 13
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

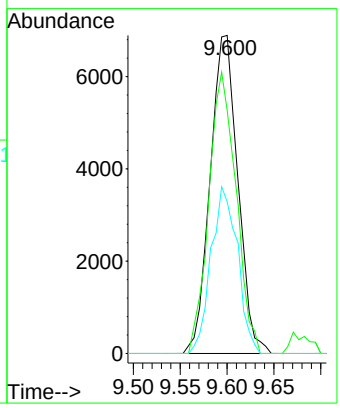
Tgt Ion: 83 Resp: 14175

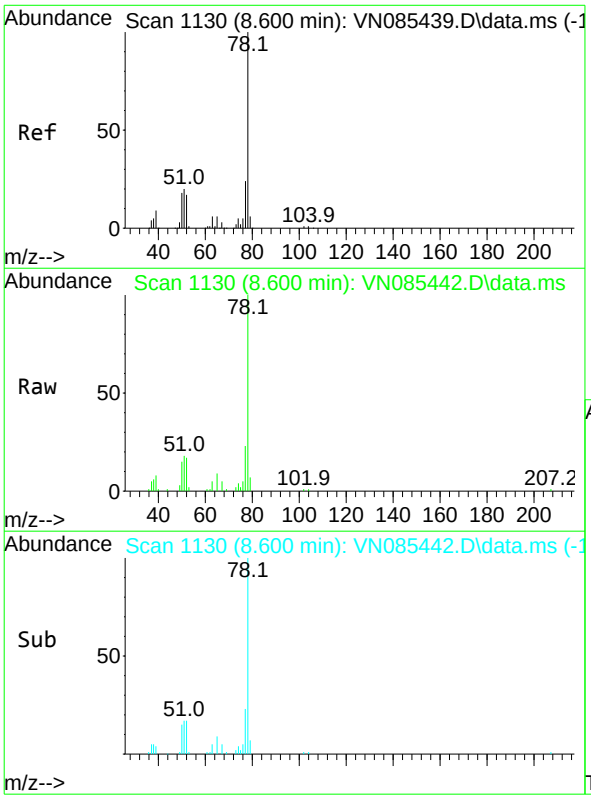
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 76.5 | 62.6 | 94.0 |
| 98 | 47.7 | 37.7 | 56.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

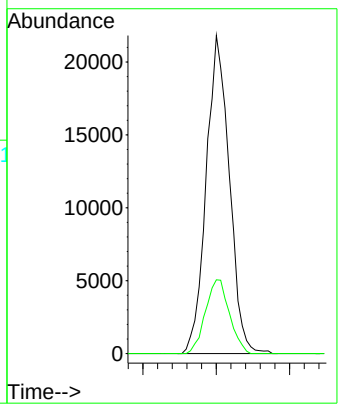


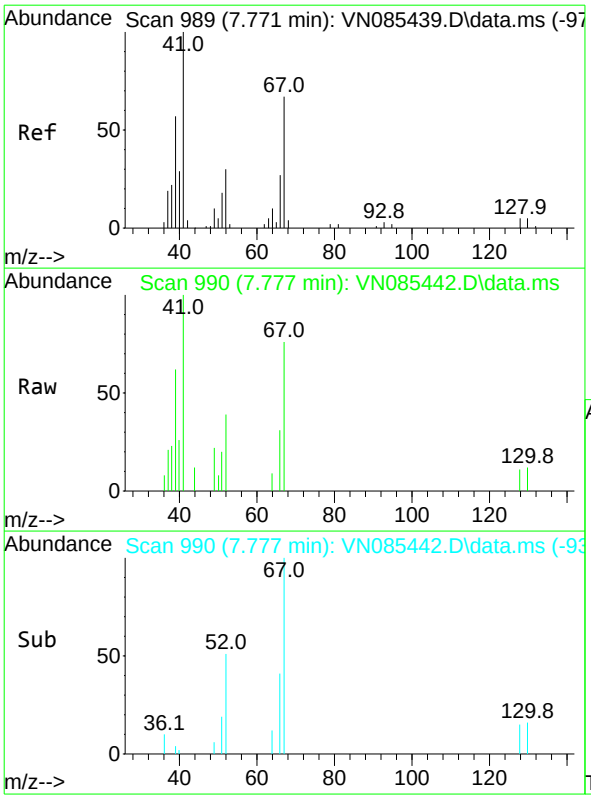




#40
Benzene
Concen: 5.040 ug/l
RT: 8.600 min Scan# 1130
Delta R.T. -0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 78 Resp: 47833

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.2 | 19.0 | 28.6 |

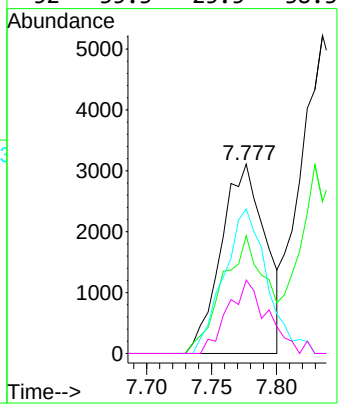





#41
Methacrylonitrile
Concen: 4.449 ug/l
RT: 7.777 min Scan# 99
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 41 Resp: 7380

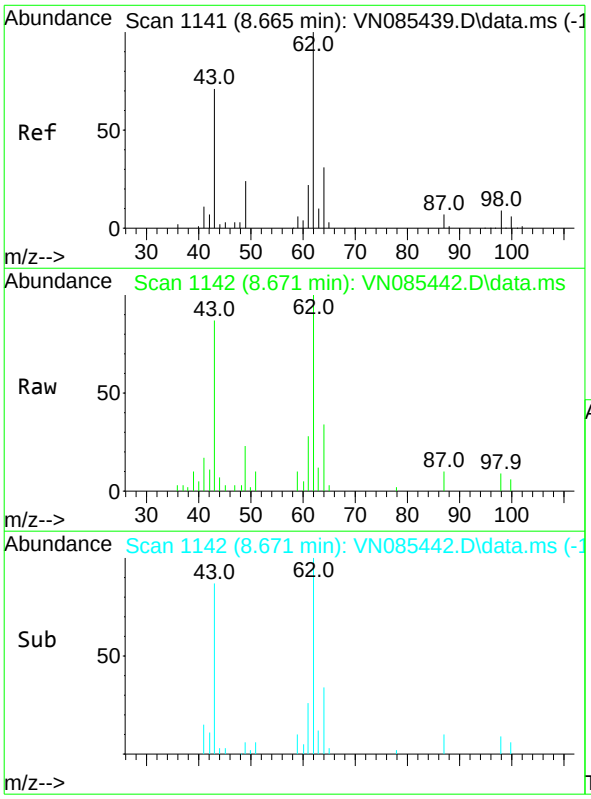
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 60.5 | 46.0 | 69.0 |
| 67 | 74.6 | 57.4 | 86.2 |
| 52 | 35.3 | 25.5 | 38.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

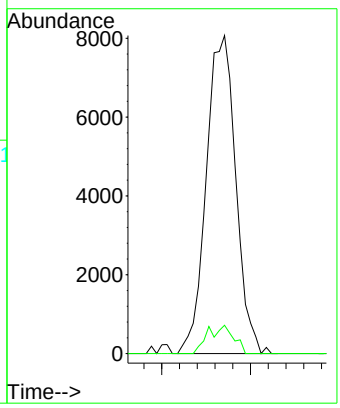
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

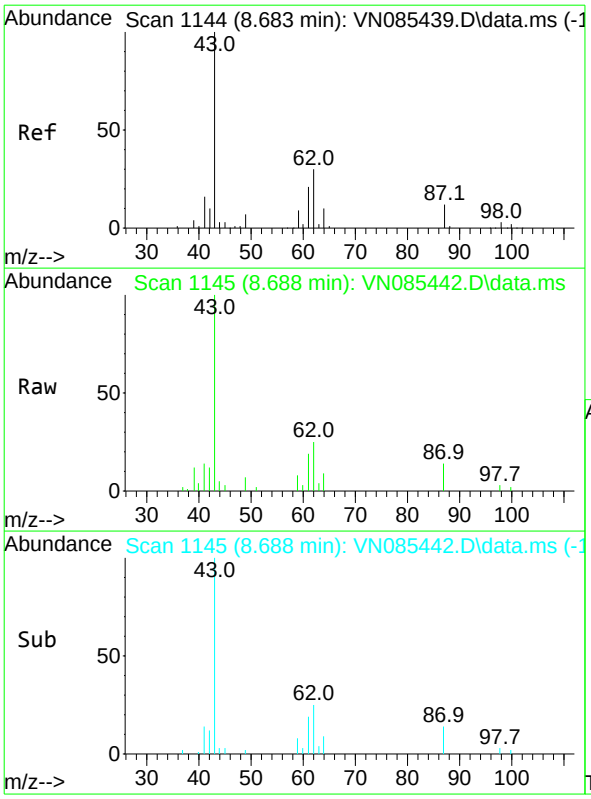



#42
1,2-Dichloroethane
Concen: 5.211 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 62 Resp: 18628

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 7.8 | 0.0 | 17.0 |

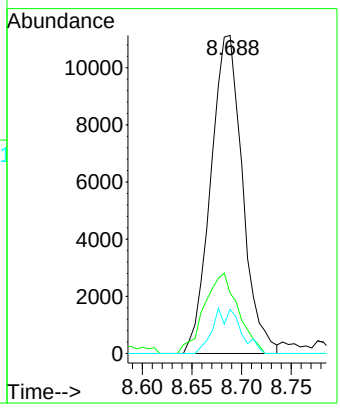





#43
Isopropyl Acetate
Concen: 4.853 ug/l
RT: 8.688 min Scan# 11
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 43 Resp: 24792

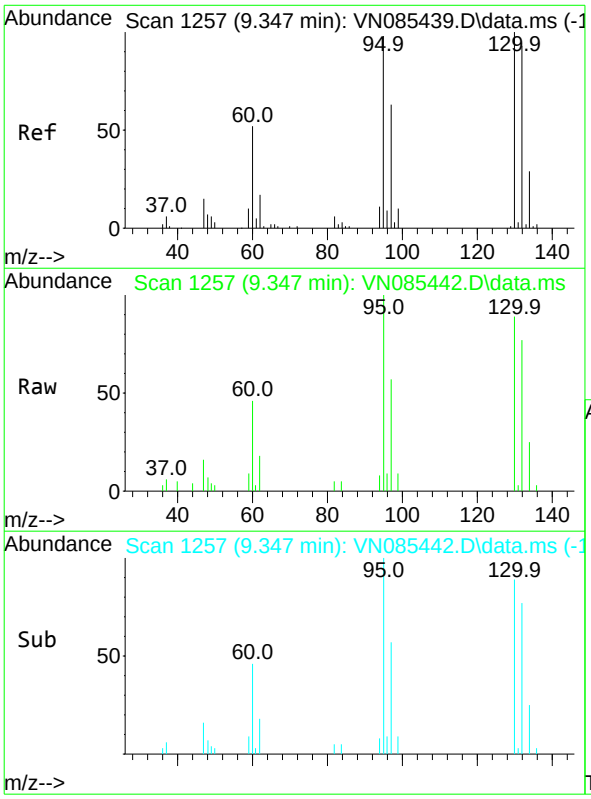
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 27.0 | 20.7 | 31.1 |
| 87 | 12.3 | 9.8 | 14.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

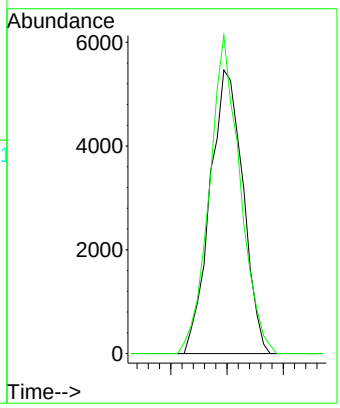
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

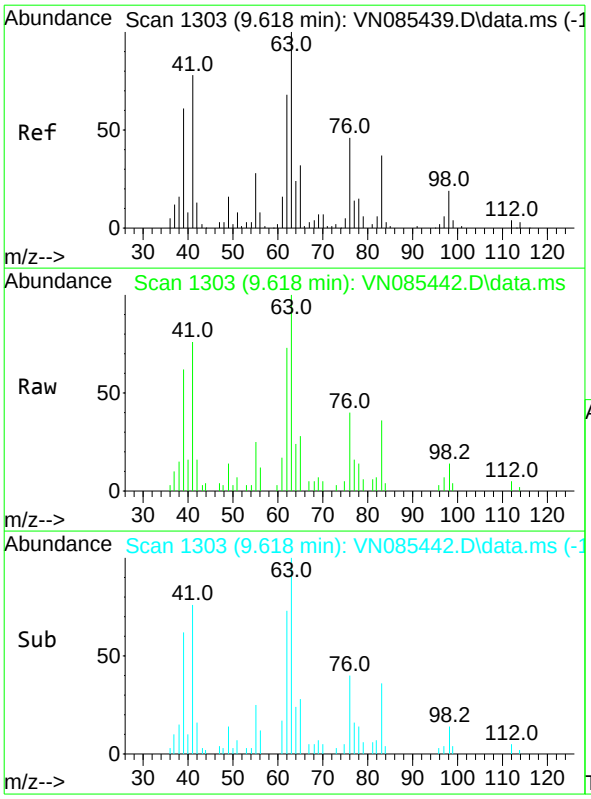



#44
Trichloroethene
Concen: 5.039 ug/l
RT: 9.347 min Scan# 1257
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:130 Resp: 11133

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 112.2 | 0.0 | 195.8 |

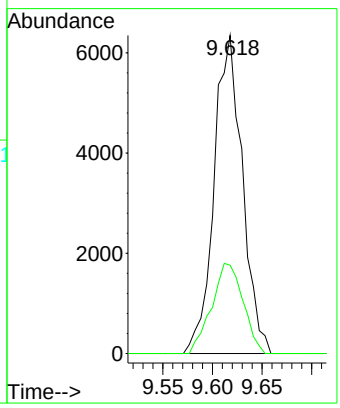





#45
1,2-Dichloropropane
Concen: 5.194 ug/l
RT: 9.618 min Scan# 13
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 63 Resp: 12591

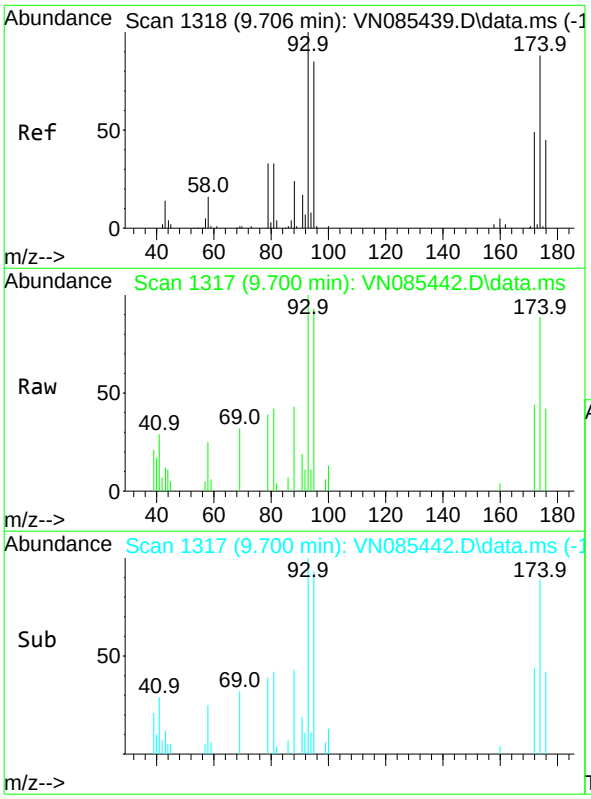
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 27.8 | 25.6 | 38.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

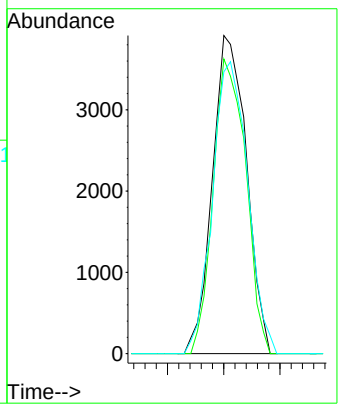
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

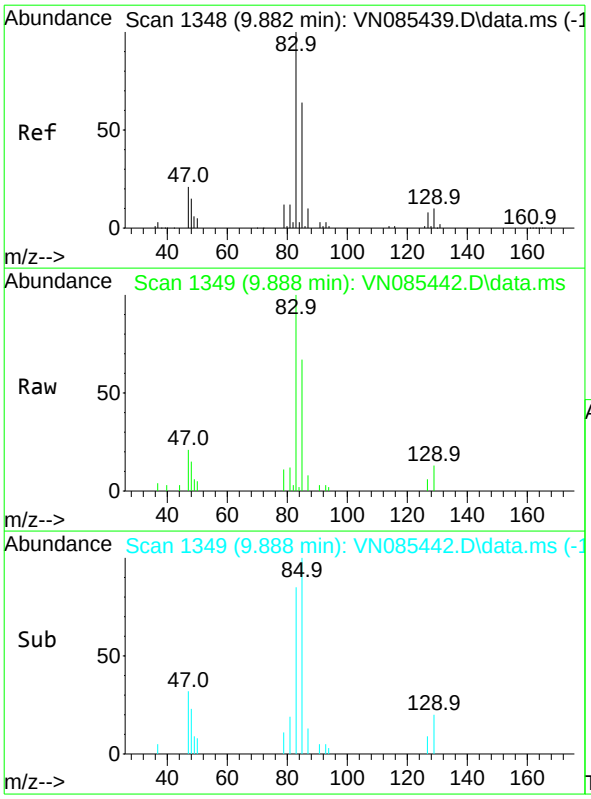



#46
Dibromomethane
Concen: 4.705 ug/l
RT: 9.700 min Scan# 1317
Delta R.T. -0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 93 Resp: 8230

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 88.7 | 64.7 | 97.1 |
| 174 | 95.0 | 69.0 | 103.4 |

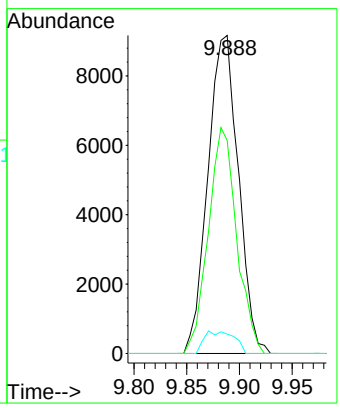





#47
Bromodichloromethane
Concen: 5.179 ug/l
RT: 9.888 min Scan# 13
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 83 Resp: 18456

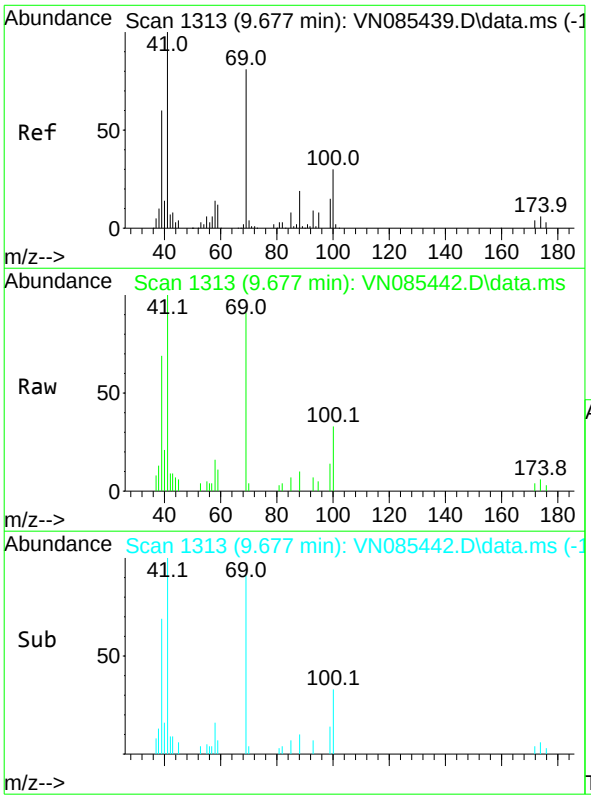
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 67.0 | 51.2 | 76.8 |
| 127 | 6.1 | 6.5 | 9.7# |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

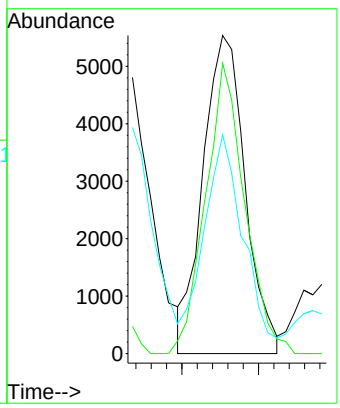
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

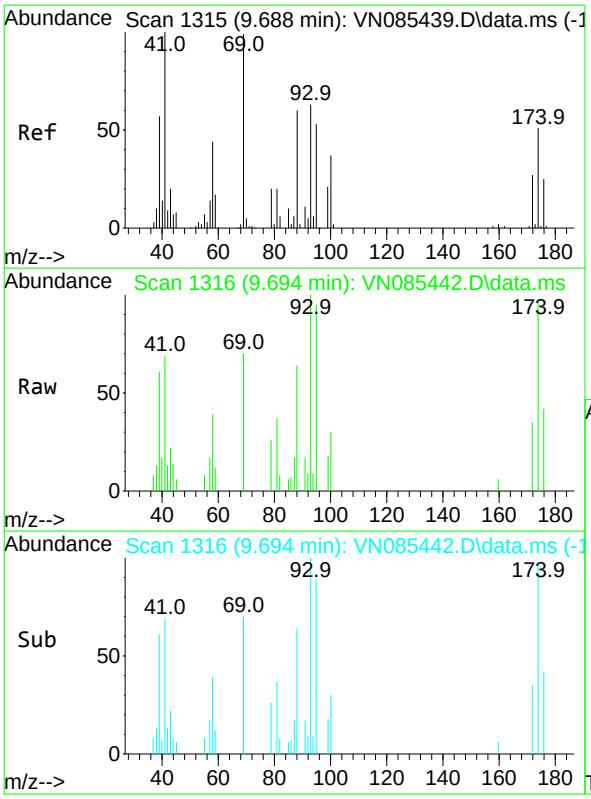



#48
Methyl methacrylate
Concen: 4.599 ug/l
RT: 9.677 min Scan# 1313
Delta R.T. -0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 41 Resp: 10574

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 84.9 | 64.7 | 97.1 |
| 39 | 65.3 | 49.0 | 73.6 |

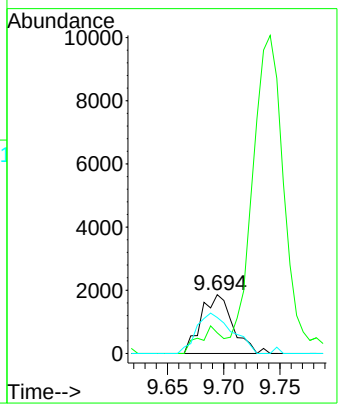





#49
1,4-Dioxane
Concen: 93.477 ug/l
RT: 9.694 min Scan# 13
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 88 Resp: 3619

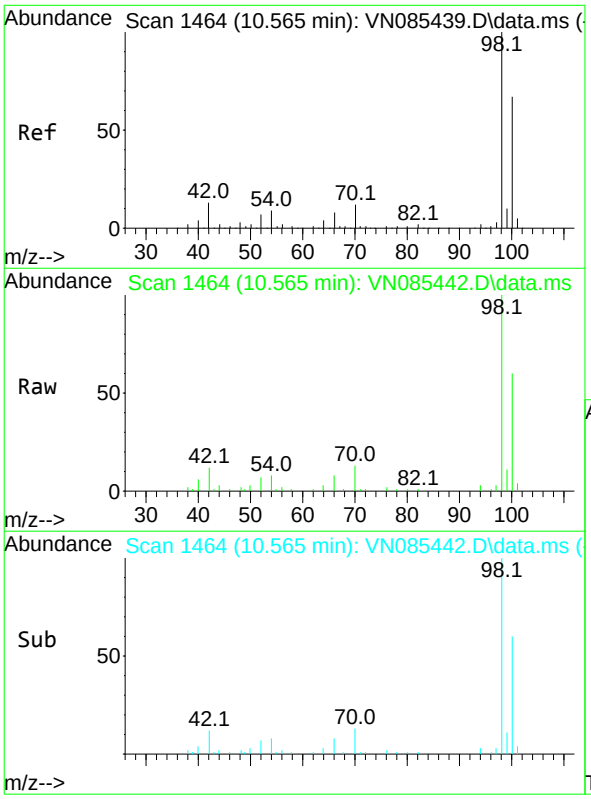
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 32.3 | 26.6 | 39.8 |
| 58 | 77.9 | 59.5 | 89.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

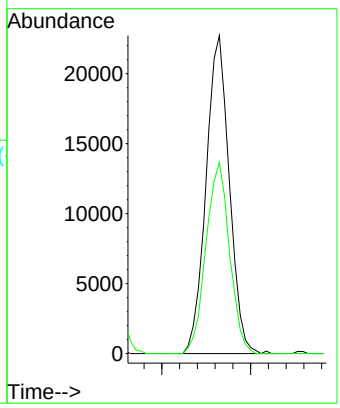
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

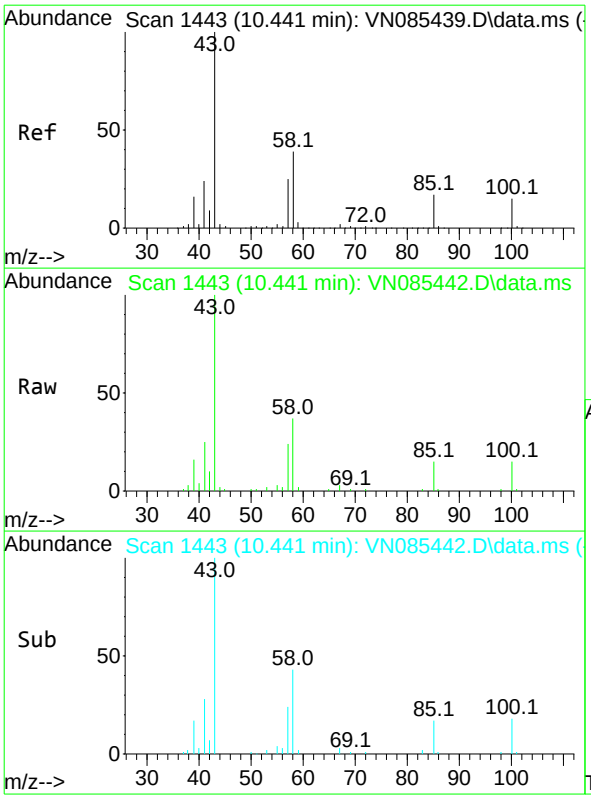



#50
Toluene-d8
Concen: 5.168 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 98 Resp: 41328

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 60.9 | 52.2 | 78.4 |

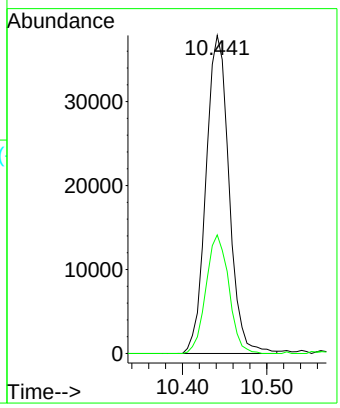





#51
4-Methyl-2-Pentanone
Concen: 24.250 ug/l
RT: 10.441 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 43 Resp: 71889

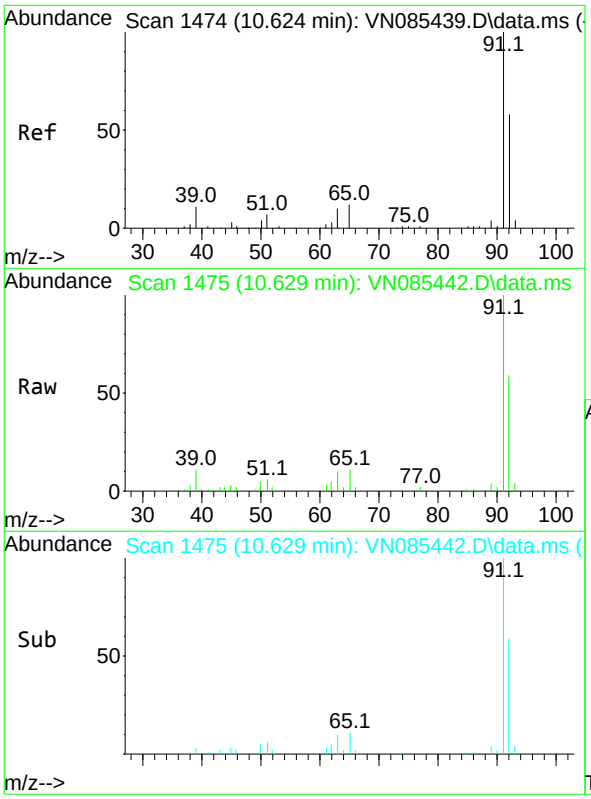
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 36.9 | 30.5 | 45.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

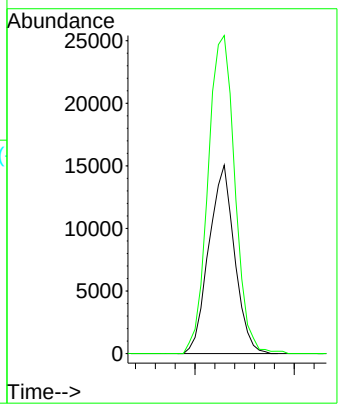
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

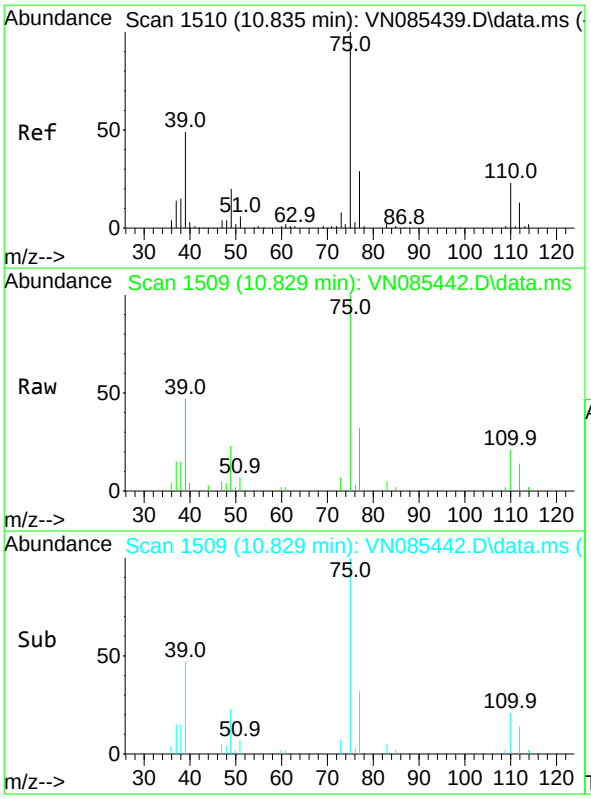



#52
Toluene
Concen: 4.928 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. 0.005 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 92 Resp: 27098

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 176.4 | 139.2 | 208.8 |

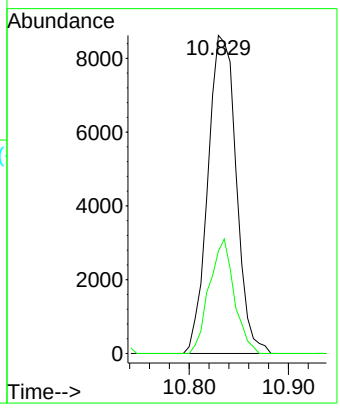





#53
t-1,3-Dichloropropene
Concen: 5.077 ug/l
RT: 10.829 min Scan# 15
Delta R.T. -0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 75 Resp: 17099

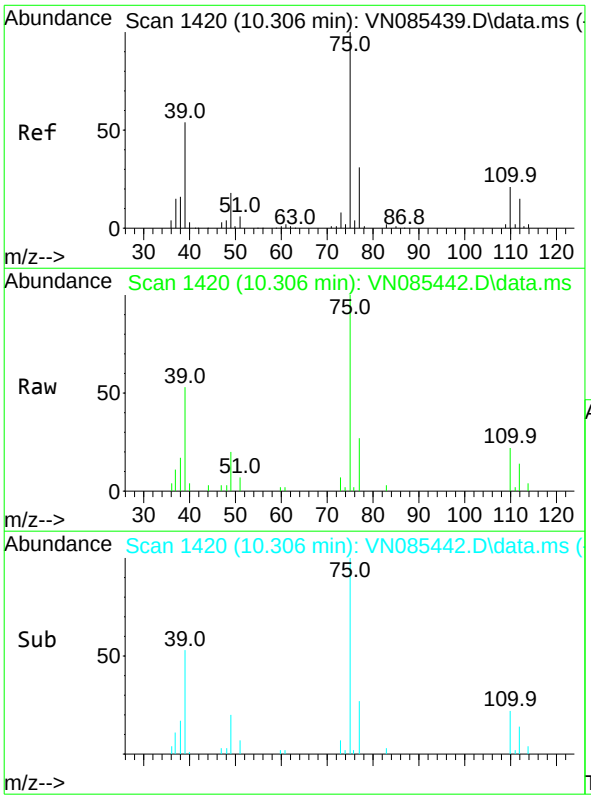
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.2 | 23.5 | 35.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

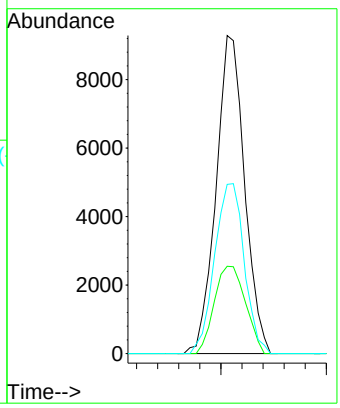
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

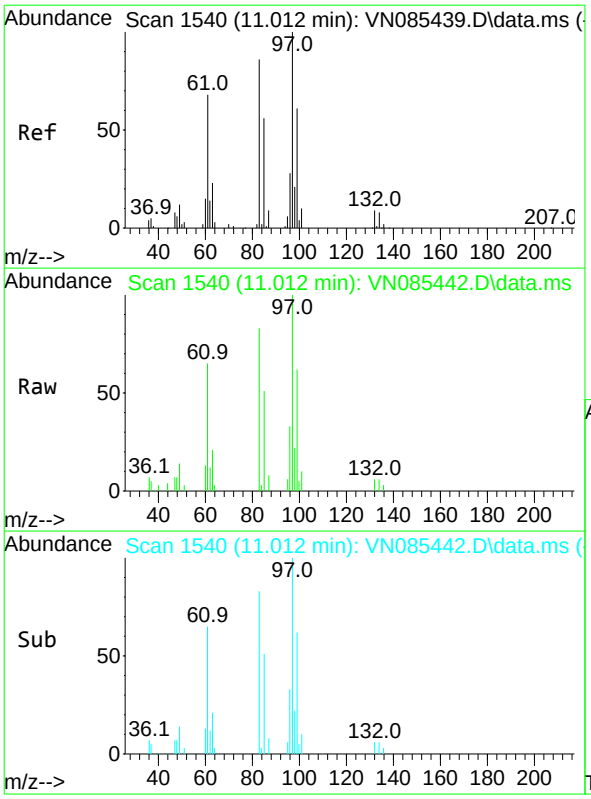



#54
cis-1,3-Dichloropropene
Concen: 4.848 ug/l
RT: 10.306 min Scan# 1420
Delta R.T. -0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 75 Resp: 17440

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 27.5 | 25.0 | 37.4 |
| 39 | 53.2 | 43.1 | 64.7 |

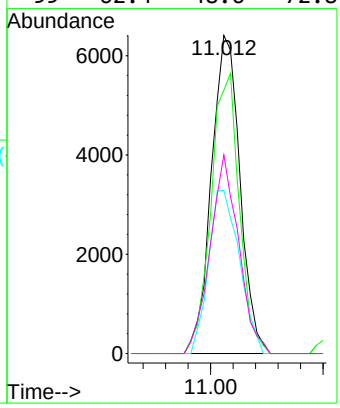





#55
1,1,2-Trichloroethane
Concen: 5.197 ug/l
RT: 11.012 min Scan# 15
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 97 Resp: 11311

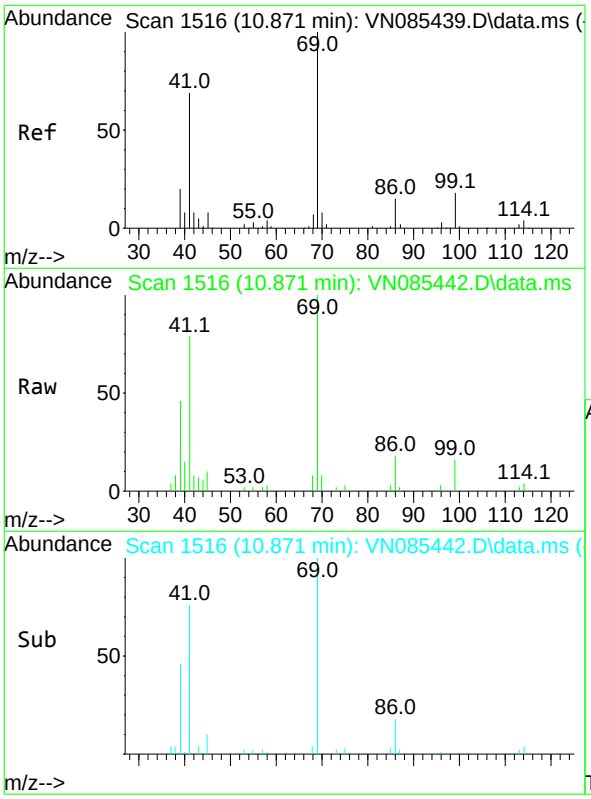
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 82.7 | 69.0 | 103.6 |
| 85 | 51.3 | 44.6 | 66.8 |
| 99 | 62.4 | 48.6 | 72.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

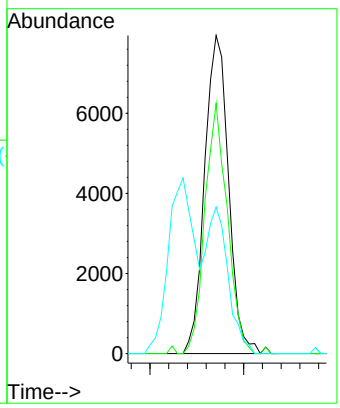
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

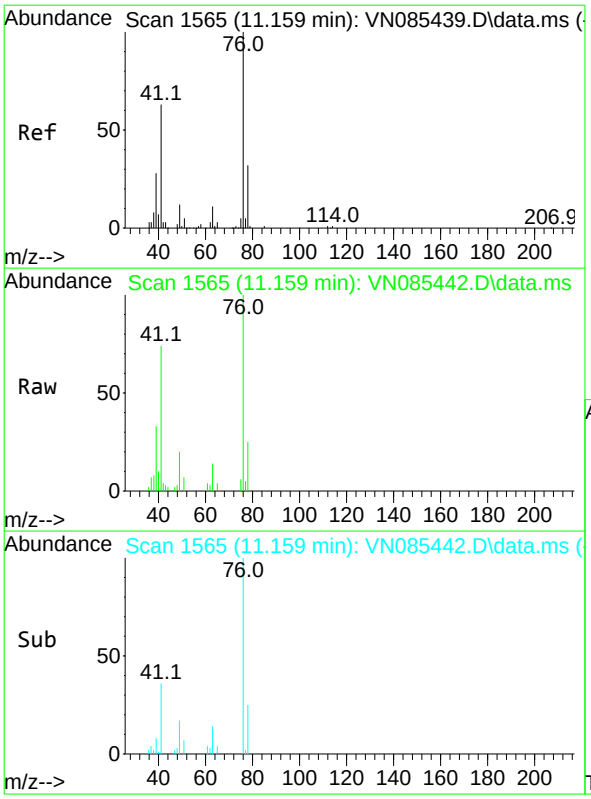



#56
Ethyl methacrylate
Concen: 5.627 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 69 Resp: 14094

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 73.8 | 54.6 | 82.0 |
| 39 | 42.6 | 32.4 | 48.6 |

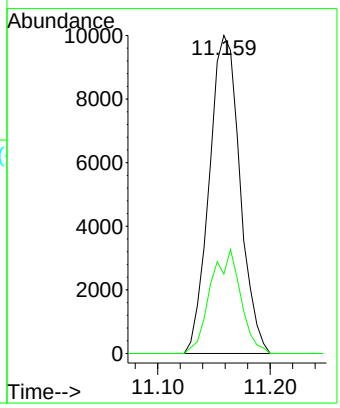





#57
1,3-Dichloropropane
Concen: 5.006 ug/l
RT: 11.159 min Scan# 15
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 76 Resp: 18945

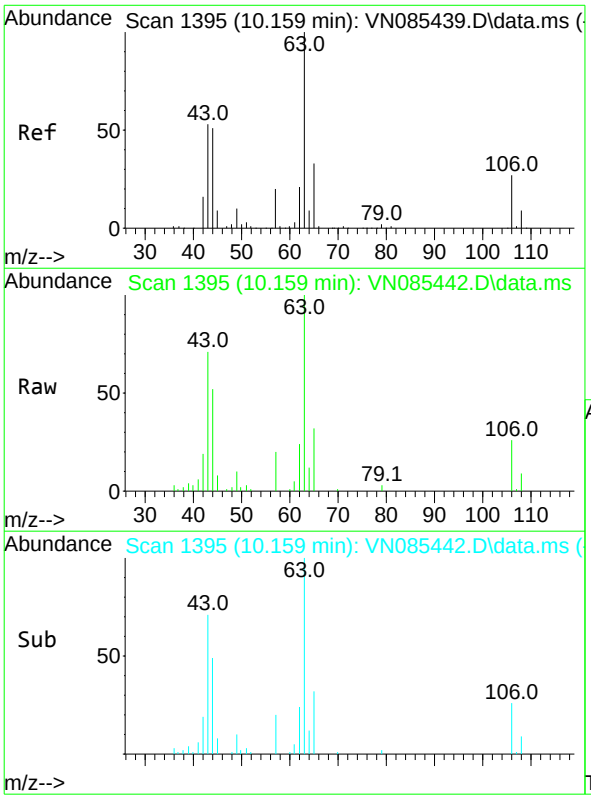
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.2 | 25.6 | 38.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

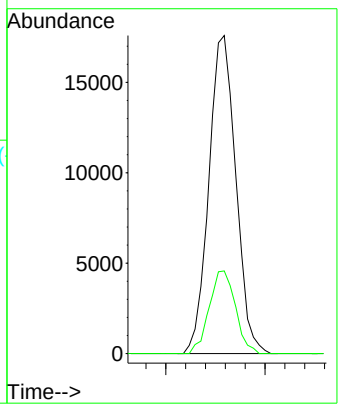
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

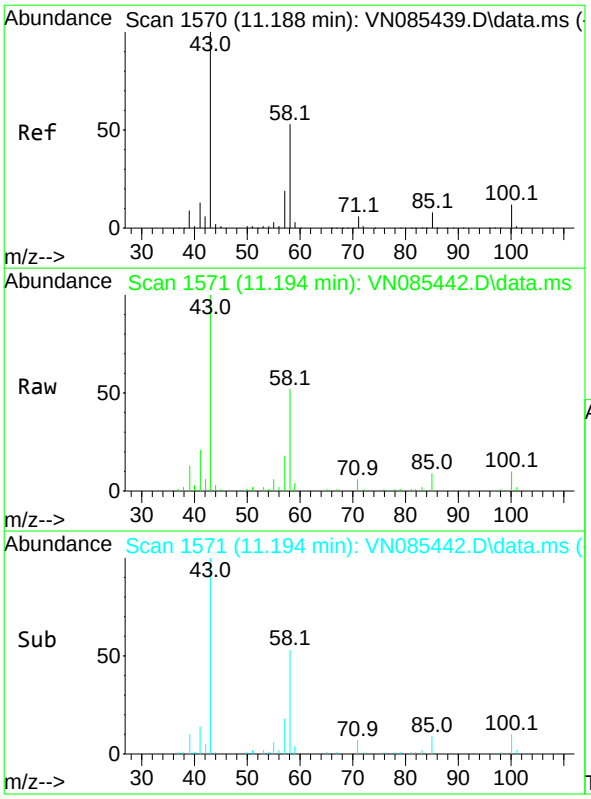



#58
2-Chloroethyl Vinyl ether
Concen: 24.047 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 63 Resp: 33210

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 25.2 | 21.6 | 32.4 |

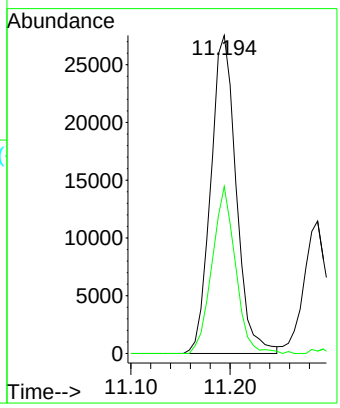





#59
2-Hexanone
Concen: 23.501 ug/l
RT: 11.194 min Scan# 15
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 43 Resp: 49021

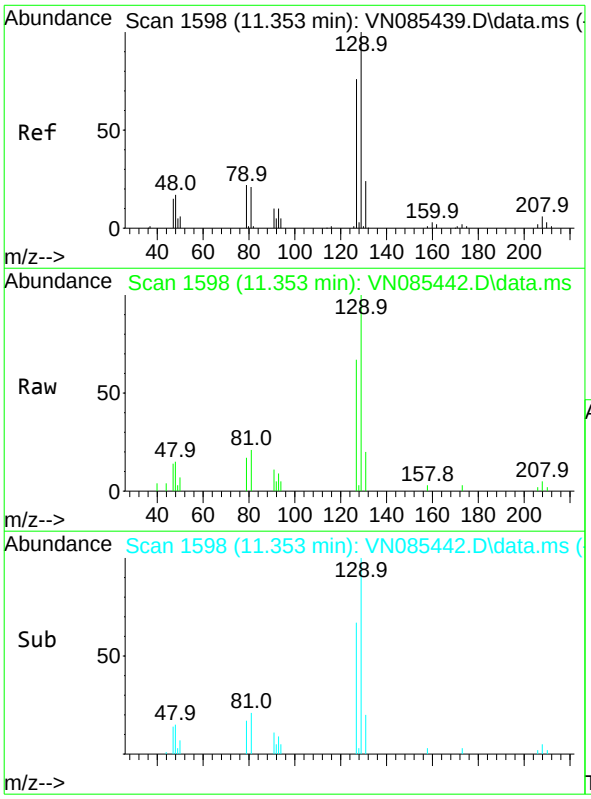
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 48.3 | 26.2 | 78.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

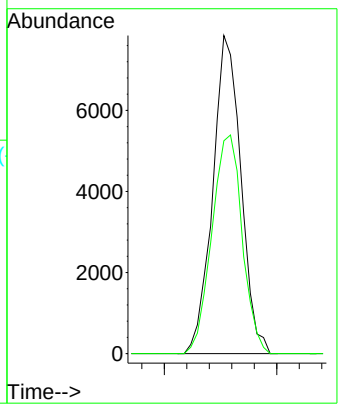
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

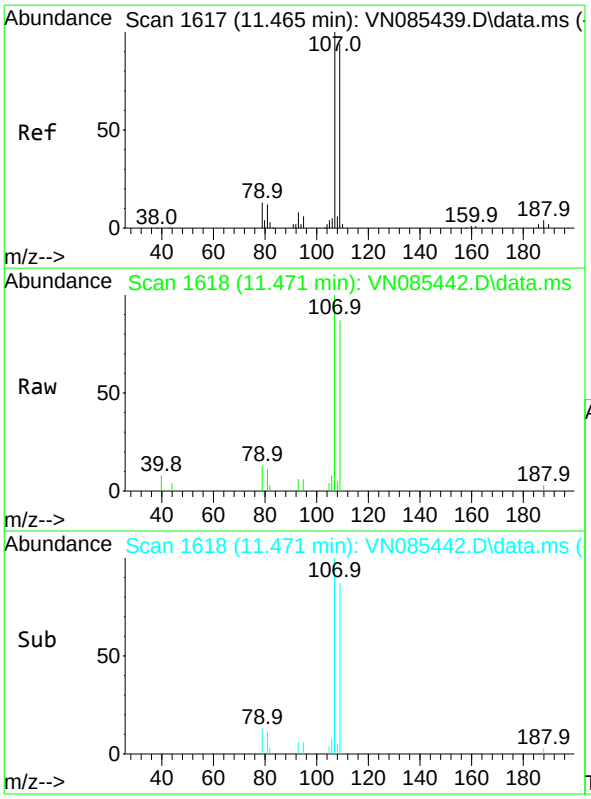



#60
Dibromochloromethane
Concen: 5.190 ug/l
RT: 11.353 min Scan# 1598
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:129 Resp: 13635

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 73.9 | 38.6 | 115.8 |

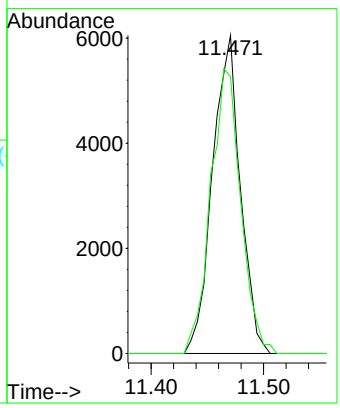





#61
1,2-Dibromoethane
Concen: 4.810 ug/l
RT: 11.471 min Scan# 16
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:107 Resp: 10419

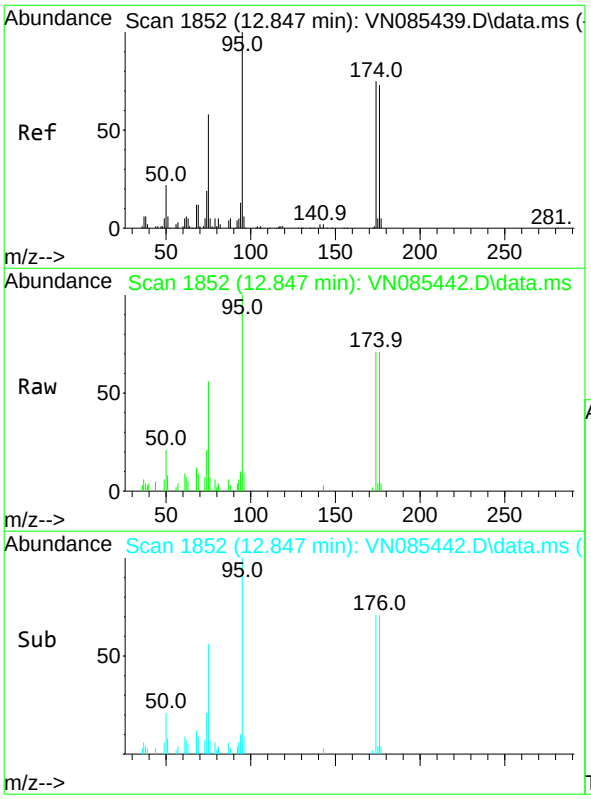
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 96.8 | 75.9 | 113.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

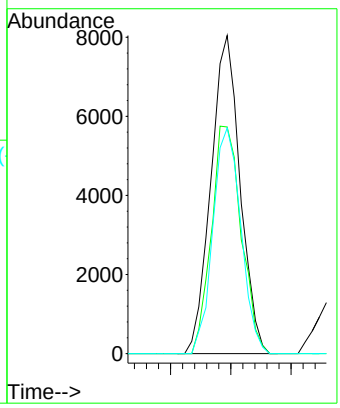
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

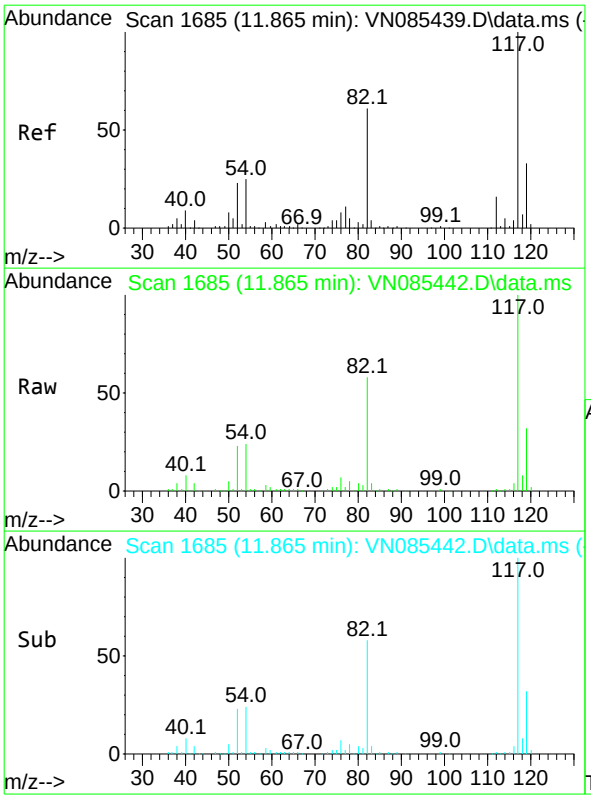



#62
4-Bromofluorobenzene
Concen: 4.943 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 95 Resp: 13520

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 73.2 | 0.0 | 145.0 |
| 176 | 68.0 | 0.0 | 142.4 |

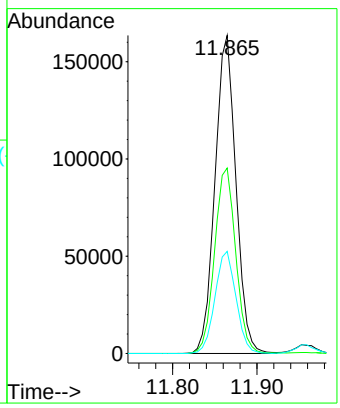





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:117 Resp: 282203

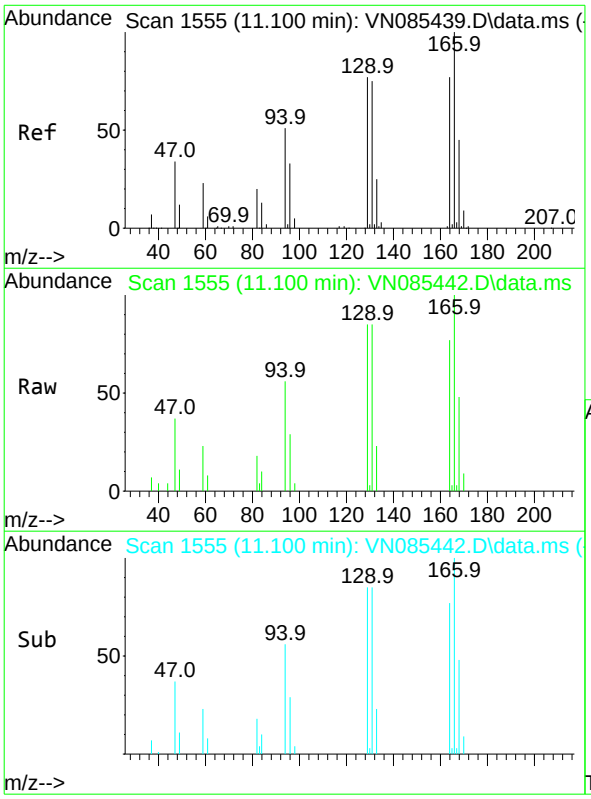
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 58.3 | 48.6 | 72.8 |
| 119 | 32.1 | 26.6 | 39.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

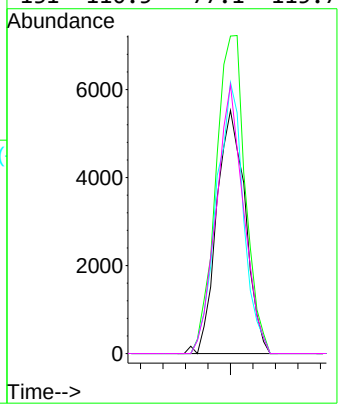
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

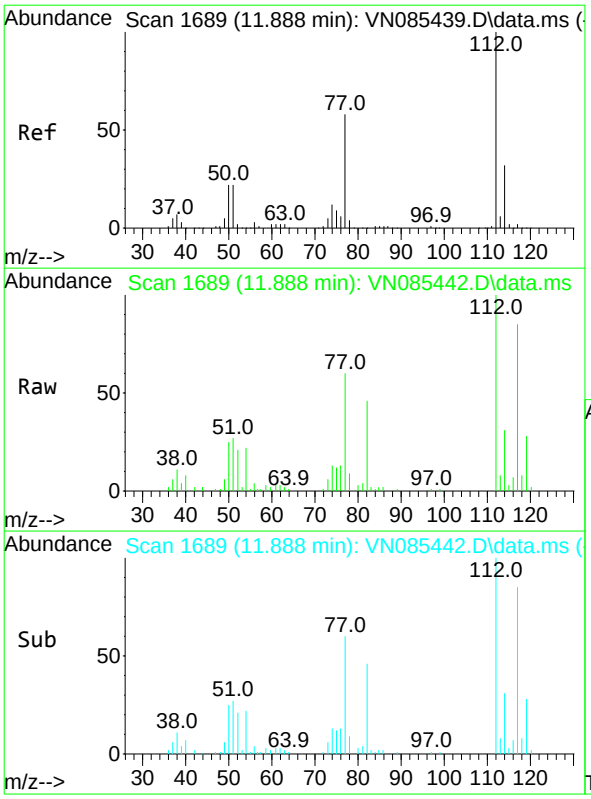



#64
Tetrachloroethene
Concen: 5.071 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:164 Resp: 9756

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 130.6 | 103.4 | 155.2 |
| 129 | 111.5 | 79.2 | 118.8 |
| 131 | 110.5 | 77.1 | 115.7 |

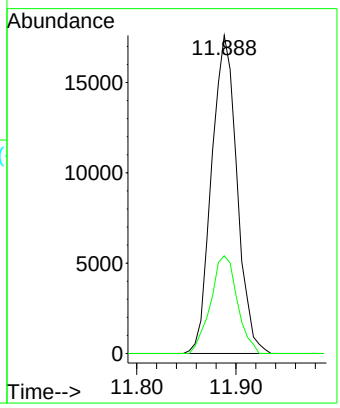





#65
Chlorobenzene
Concen: 5.065 ug/l
RT: 11.888 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:112 Resp: 31312

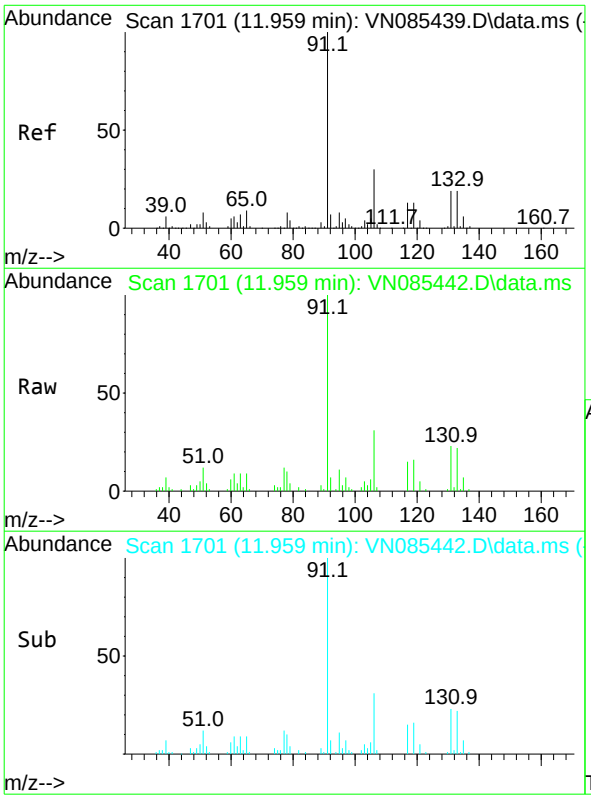
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 30.7 | 25.3 | 37.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

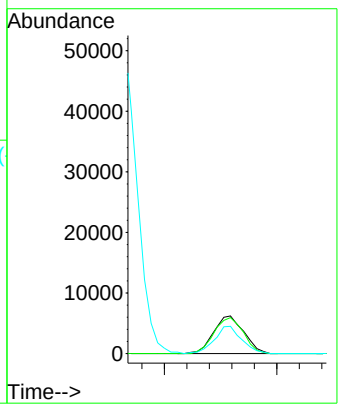
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

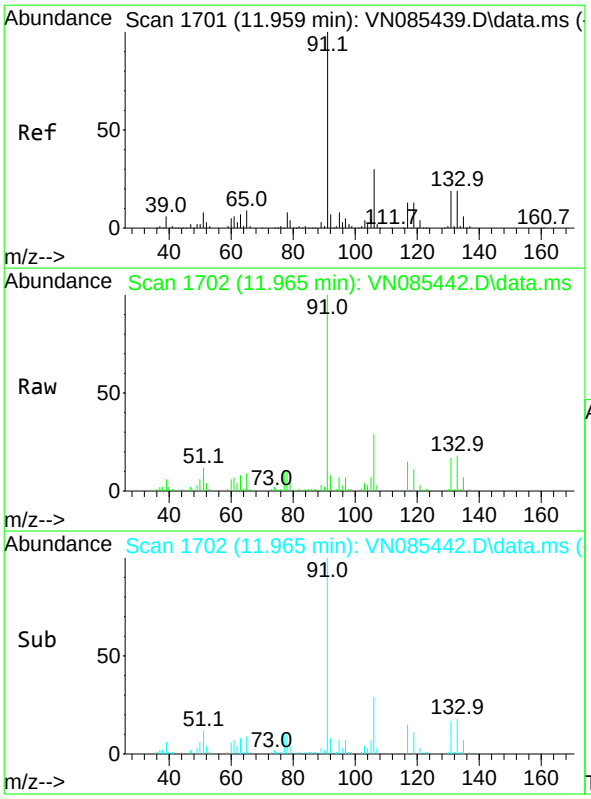



#66
1,1,1,2-Tetrachloroethane
Concen: 5.121 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:131 Resp: 11620

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 92.7 | 47.4 | 142.3 |
| 119 | 65.0 | 33.1 | 99.5 |

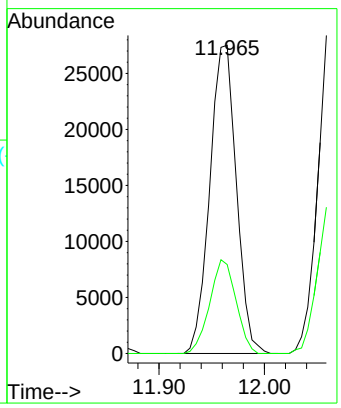





#67
Ethyl Benzene
Concen: 4.789 ug/l
RT: 11.965 min Scan# 17
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 91 Resp: 48216

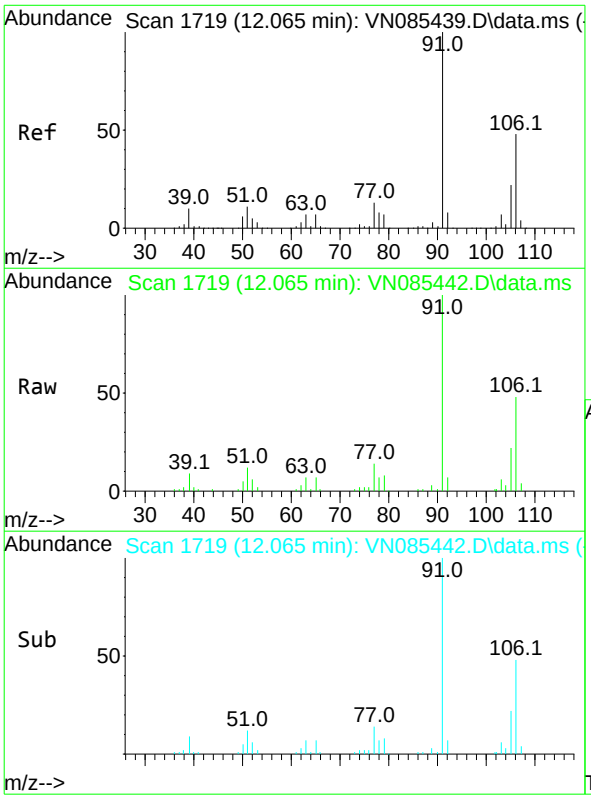
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 28.9 | 23.8 | 35.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

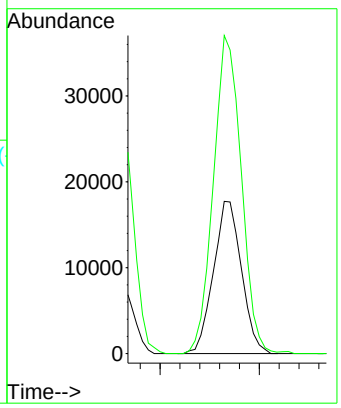
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

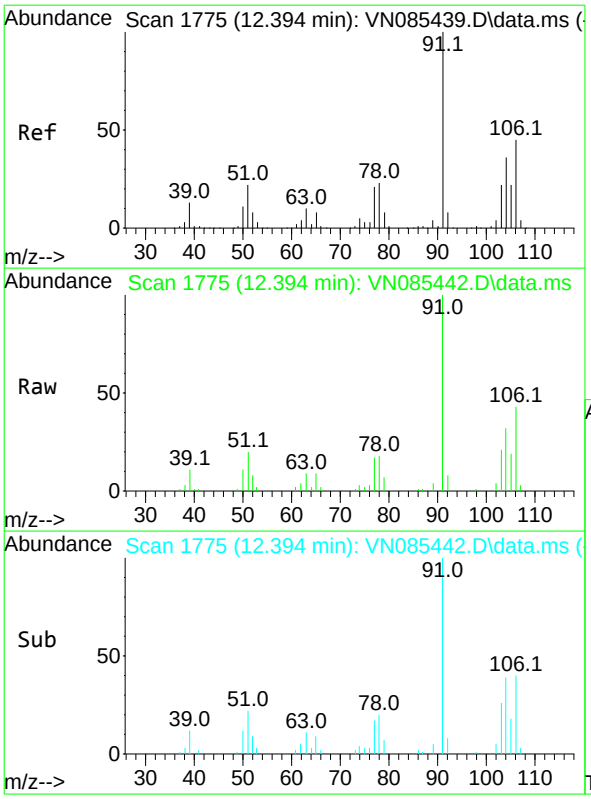



#68
m/p-Xylenes
Concen: 9.344 ug/l
RT: 12.065 min Scan# 1719
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:106 Resp: 34771

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 207.9 | 167.7 | 251.5 |

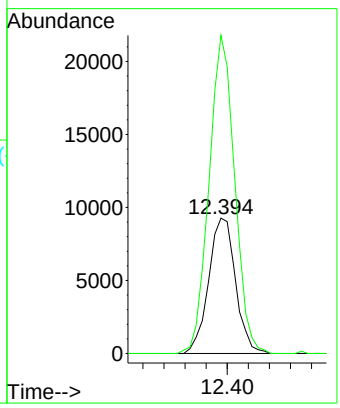





#69
o-Xylene
Concen: 4.617 ug/l
RT: 12.394 min Scan# 17
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:106 Resp: 16419

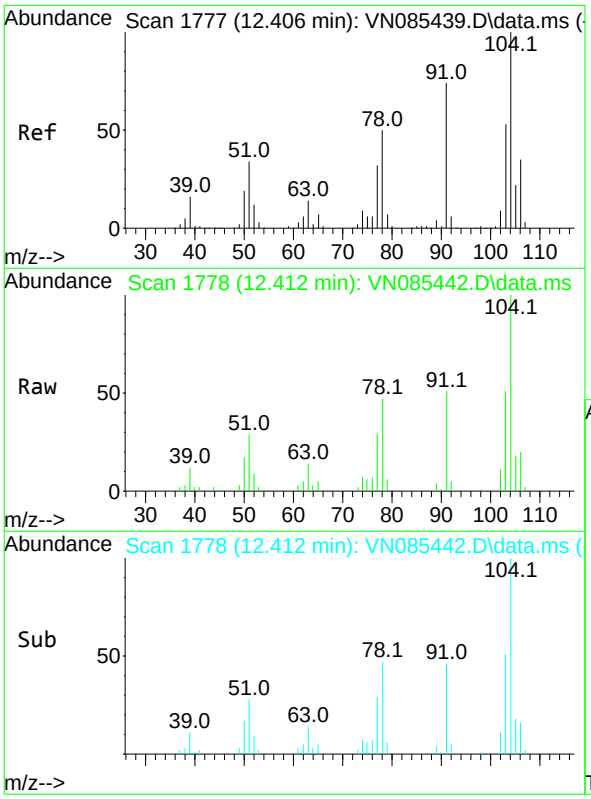
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 224.0 | 110.4 | 331.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

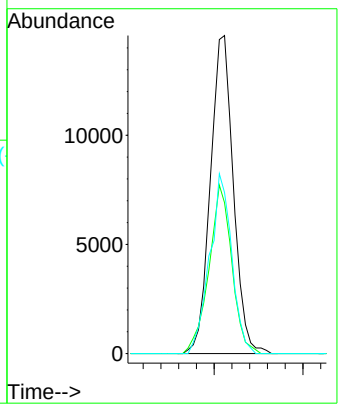
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

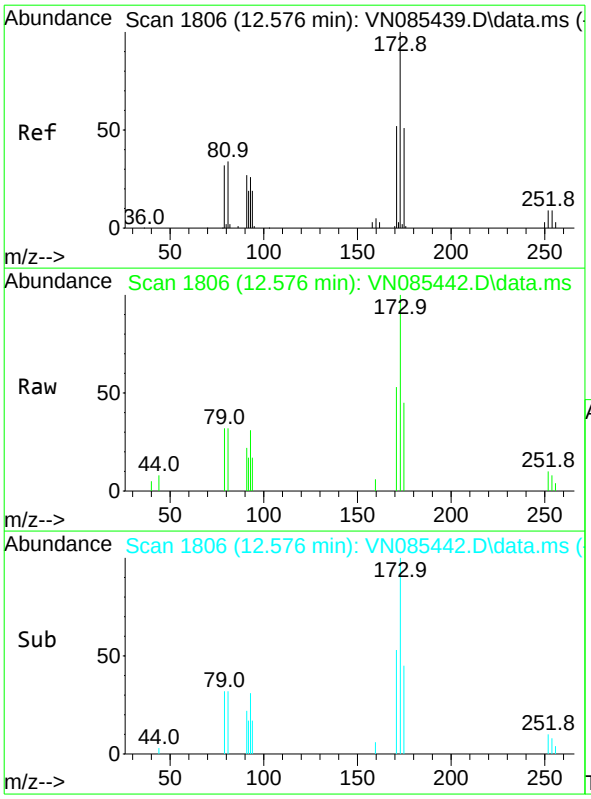



#70
Styrene
Concen: 4.454 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:104 Resp: 26218

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 52.6 | 42.5 | 63.7 |
| 103 | 54.2 | 43.8 | 65.8 |

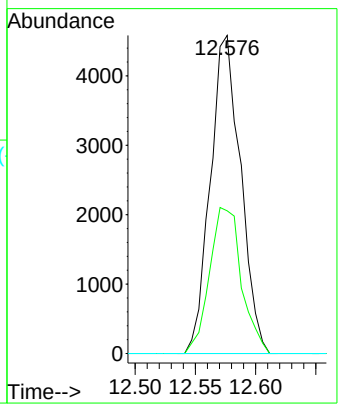





#71
Bromoform
Concen: 4.938 ug/l
RT: 12.576 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:173 Resp: 8017

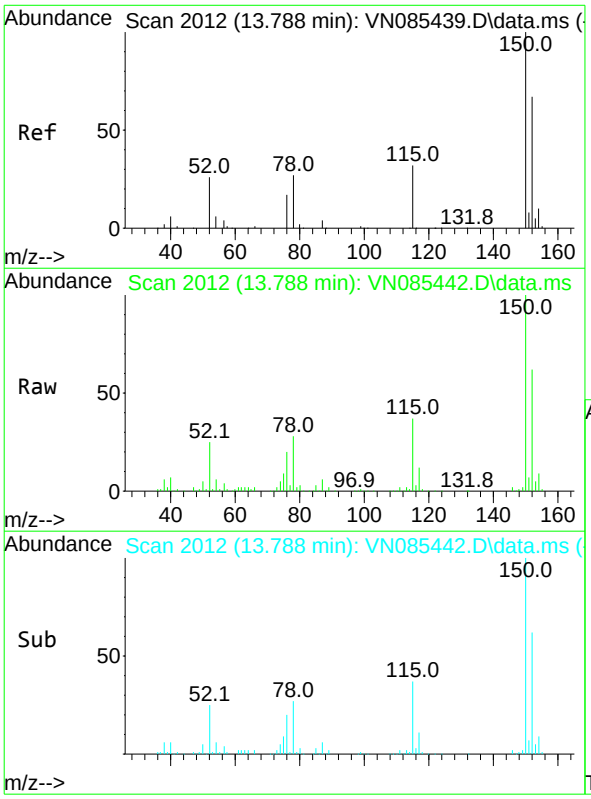
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 48.3 | 24.4 | 73.2 |
| 254 | 0.0 | 0.0 | 0.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

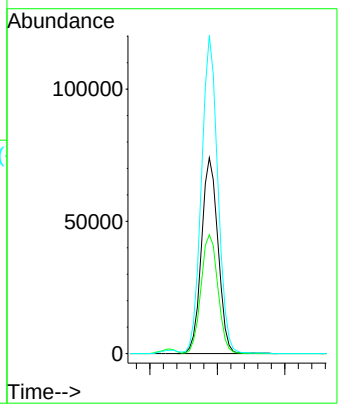
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

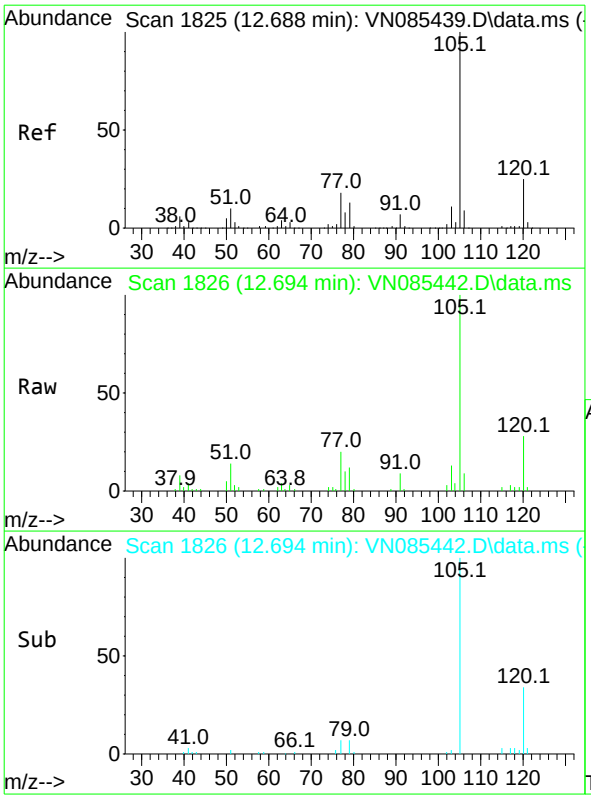



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:152 Resp: 126086

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 62.0 | 31.1 | 93.3 |
| 150 | 160.7 | 0.0 | 343.6 |

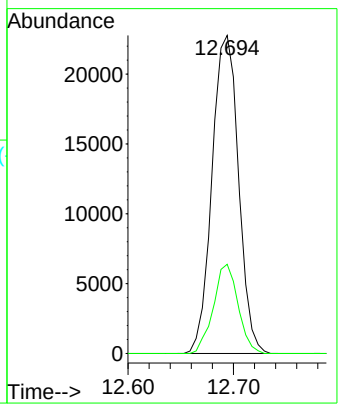





#73
Isopropylbenzene
Concen: 4.678 ug/l
RT: 12.694 min Scan# 18
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:105 Resp: 39811

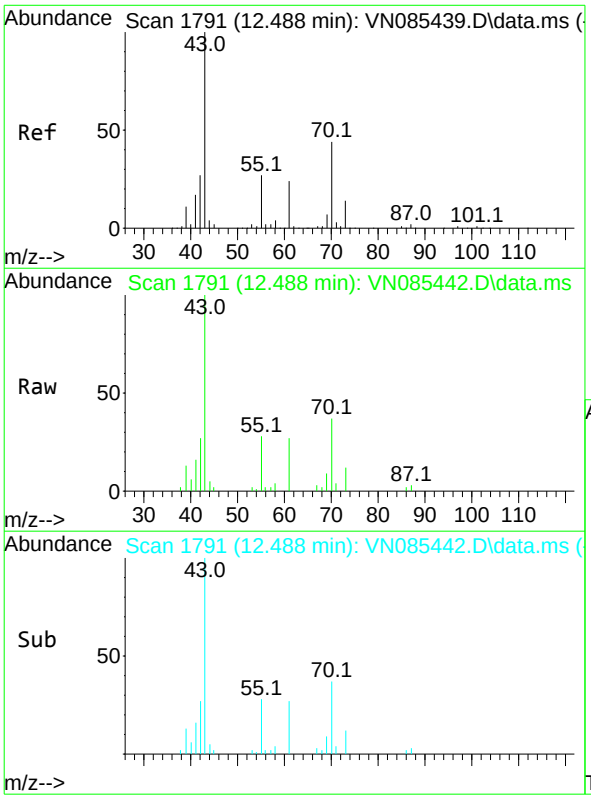
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.1 | 12.8 | 38.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

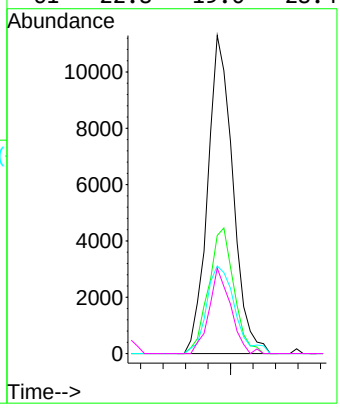
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

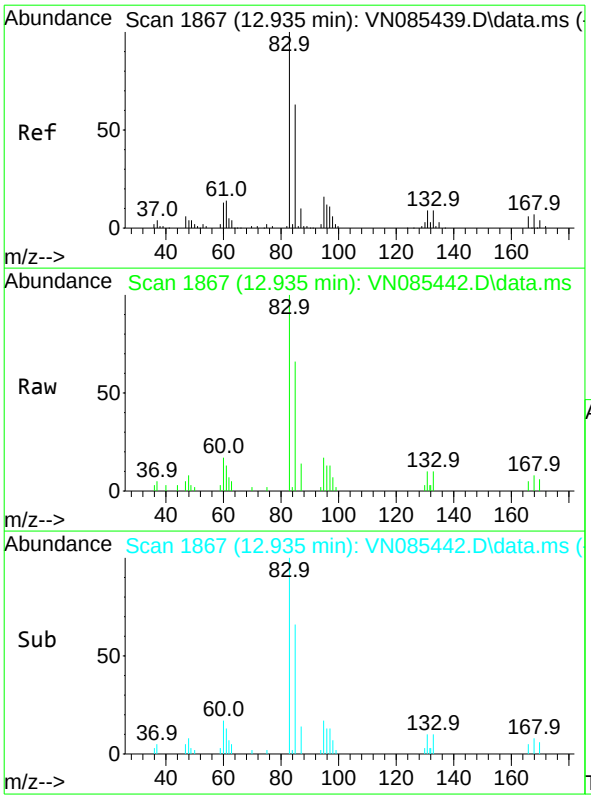



#74
N-amyl acetate
Concen: 4.595 ug/l
RT: 12.488 min Scan# 1791
Delta R.T. -0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 43 Resp: 17577

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 39.5 | 34.0 | 51.0 |
| 55 | 30.8 | 21.4 | 32.2 |
| 61 | 22.8 | 19.0 | 28.4 |

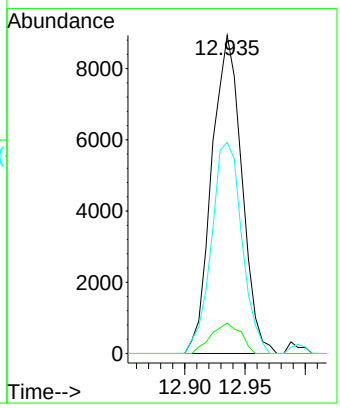





#75
1,1,2,2-Tetrachloroethane
Concen: 5.151 ug/l
RT: 12.935 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 83 Resp: 15483

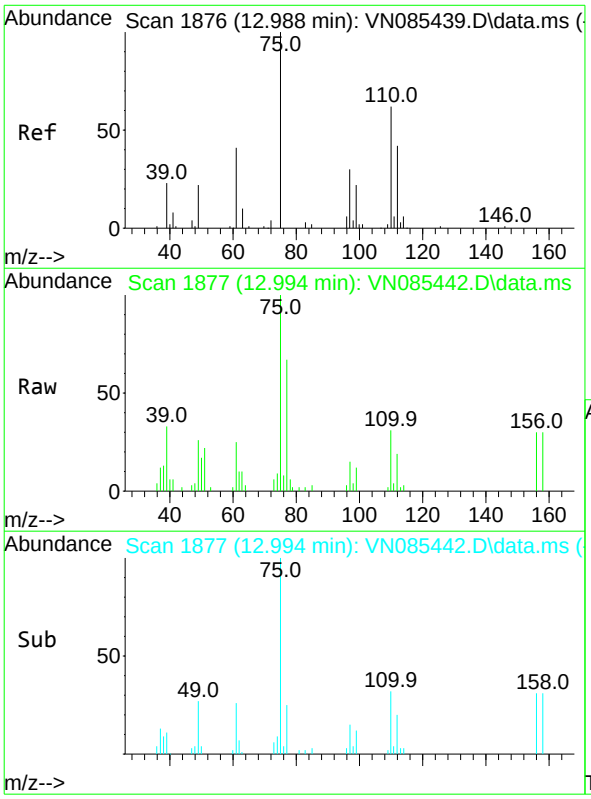
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 9.5 | 4.8 | 14.4 |
| 85 | 67.5 | 32.2 | 96.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

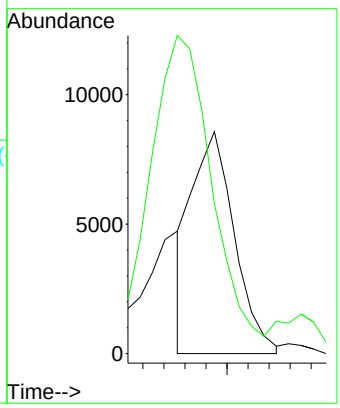
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

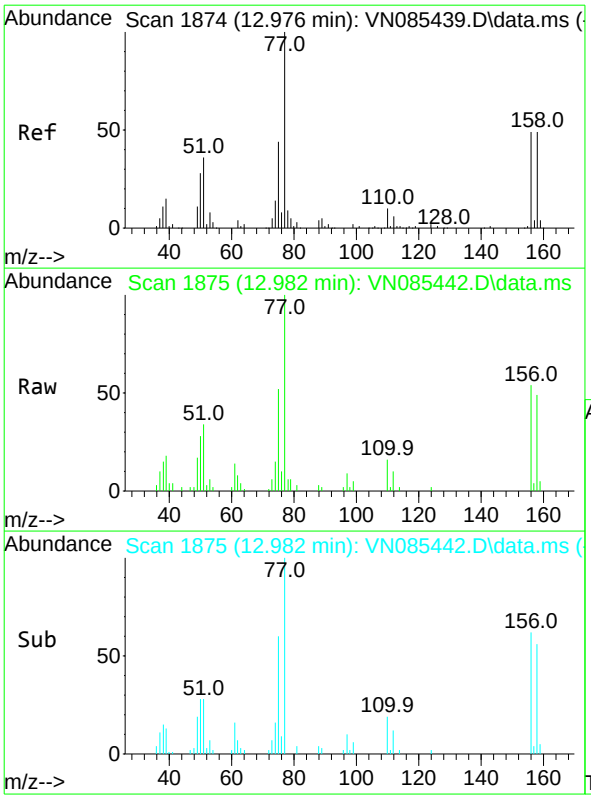



#76
1,2,3-Trichloropropane
Concen: 4.758 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 75 Resp: 12173

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 209.1 | 109.7 | 329.2 |

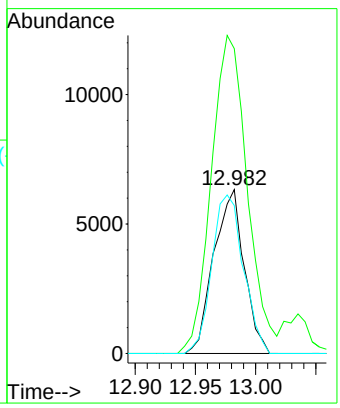





#77
Bromobenzene
Concen: 4.989 ug/l
RT: 12.982 min Scan# 18
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:156 Resp: 11091

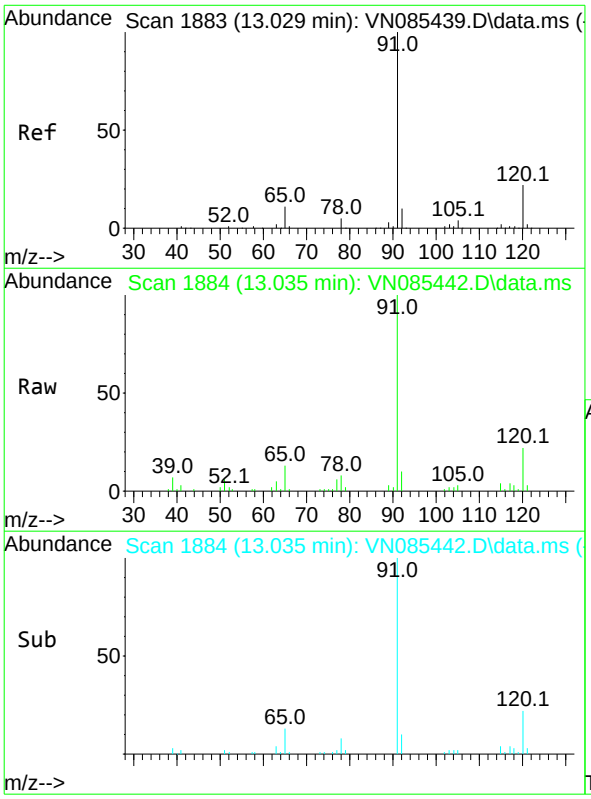
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 229.5 | 114.1 | 342.4 |
| 158 | 100.8 | 48.9 | 146.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

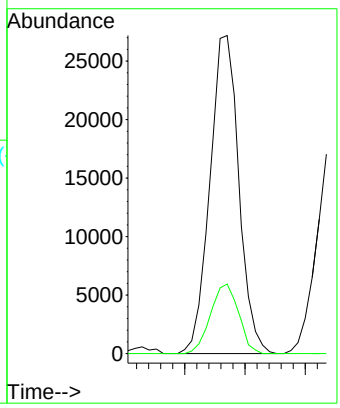
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

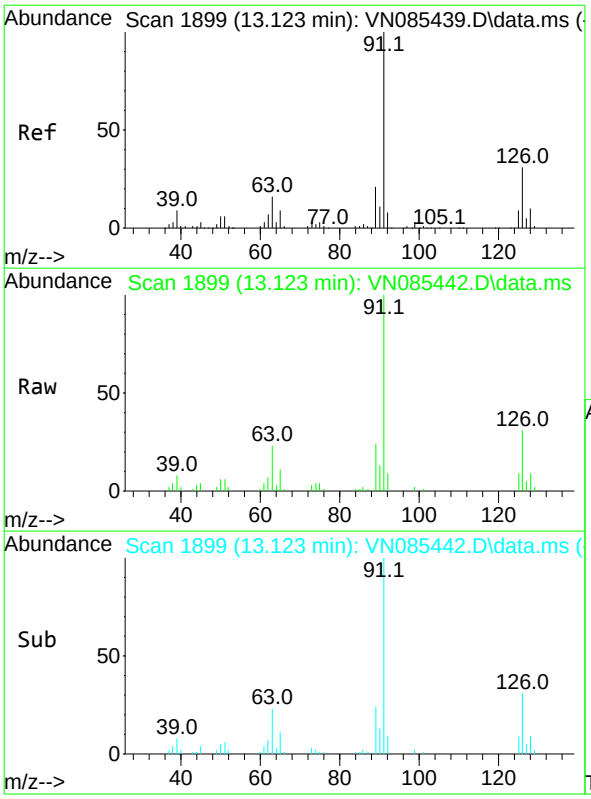



#78
n-propylbenzene
Concen: 4.512 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 91 Resp: 45450

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 21.1 | 10.9 | 32.6 |






#79
2-Chlorotoluene
Concen: 4.898 ug/l
RT: 13.123 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

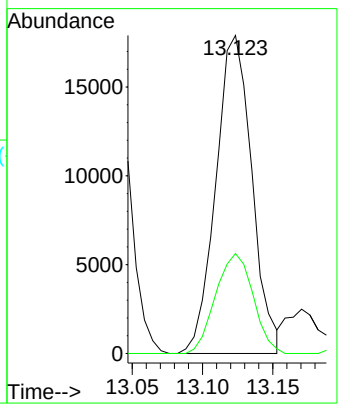
Tgt Ion: 91 Resp: 31932

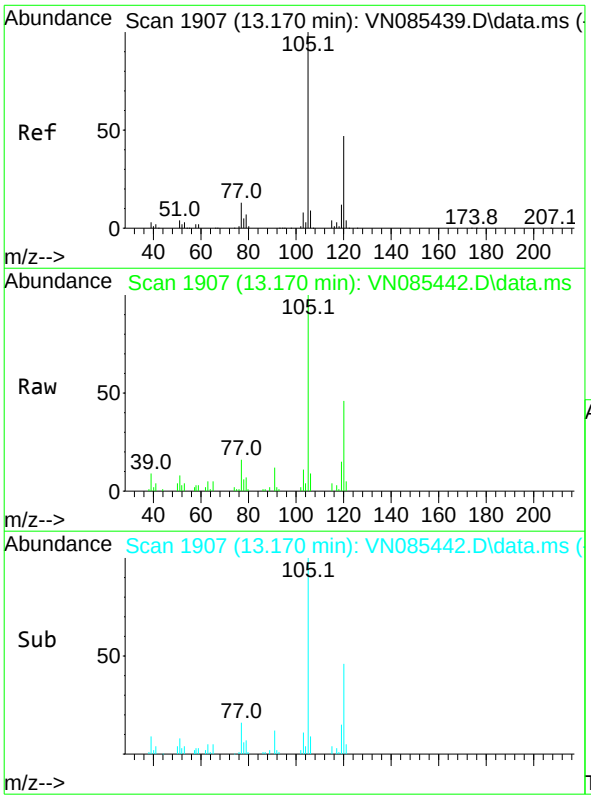
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 32.6 | 15.7 | 47.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

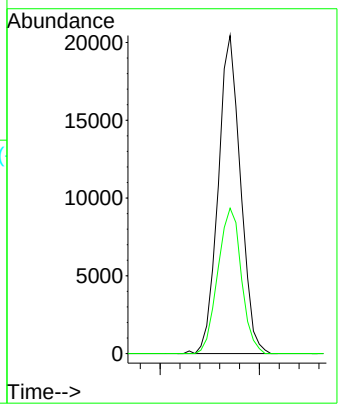


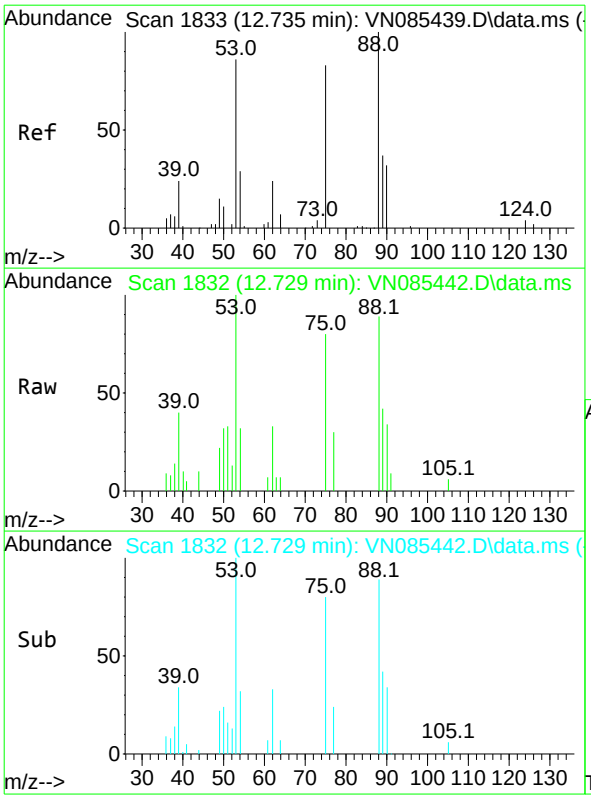




#80
1,3,5-Trimethylbenzene
Concen: 4.537 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:105 Resp: 31891

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 48.1 | 23.9 | 71.7 |

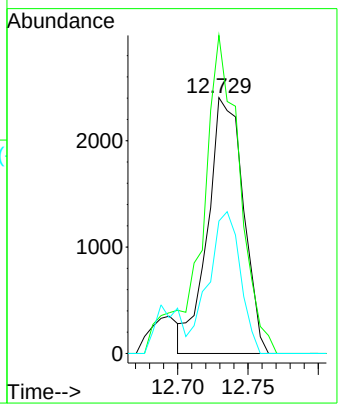





#81
trans-1,4-Dichloro-2-butene
Concen: 4.465 ug/l
RT: 12.729 min Scan# 18
Delta R.T. -0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 75 Resp: 4229

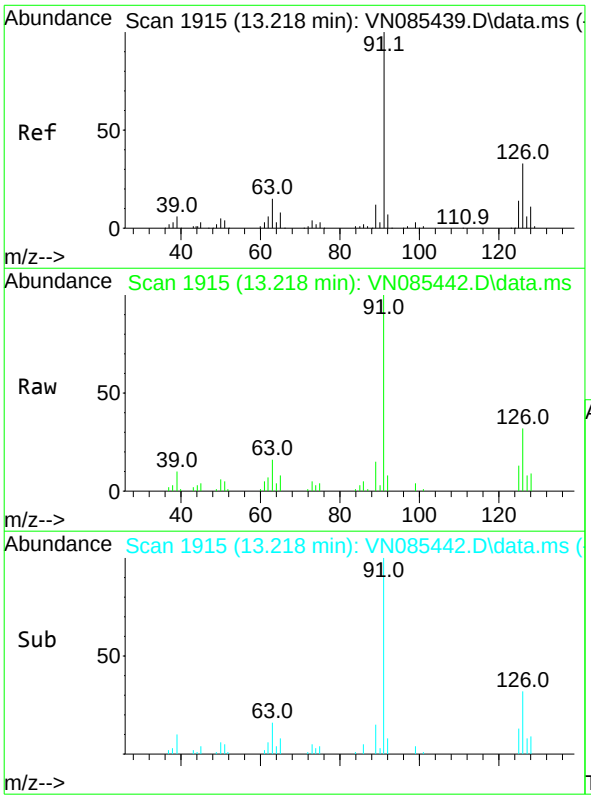
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 132.6 | 95.6 | 143.4 |
| 89 | 49.7 | 37.0 | 55.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

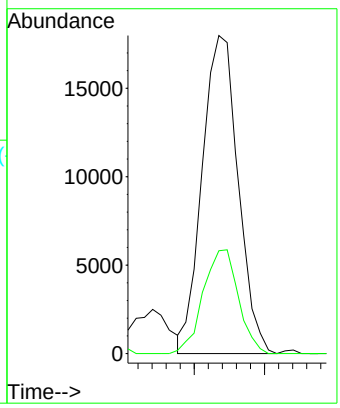
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

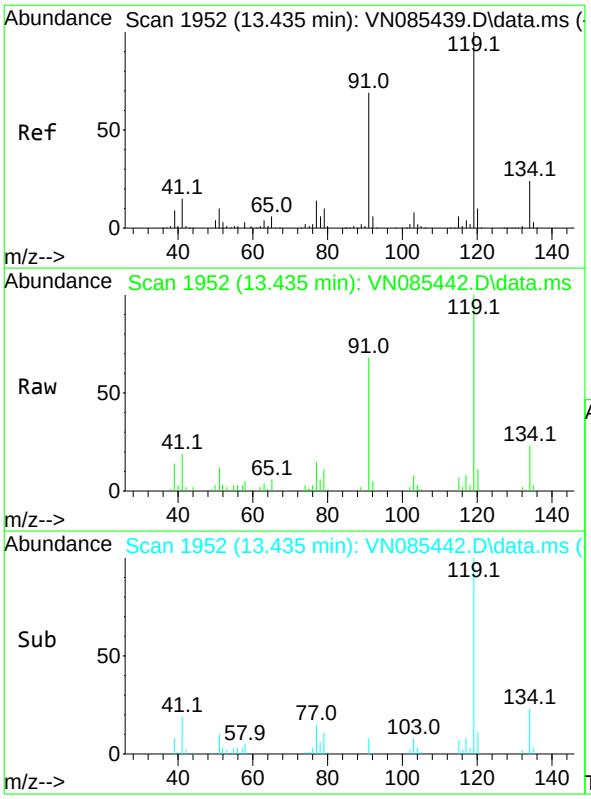



#82
4-Chlorotoluene
Concen: 4.926 ug/l
RT: 13.218 min Scan# 1915
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 91 Resp: 31976

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 31.9 | 15.9 | 47.7 |

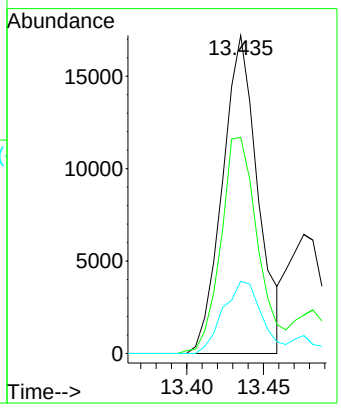





#83
tert-Butylbenzene
Concen: 4.675 ug/l
RT: 13.435 min Scan# 19
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:119 Resp: 27597

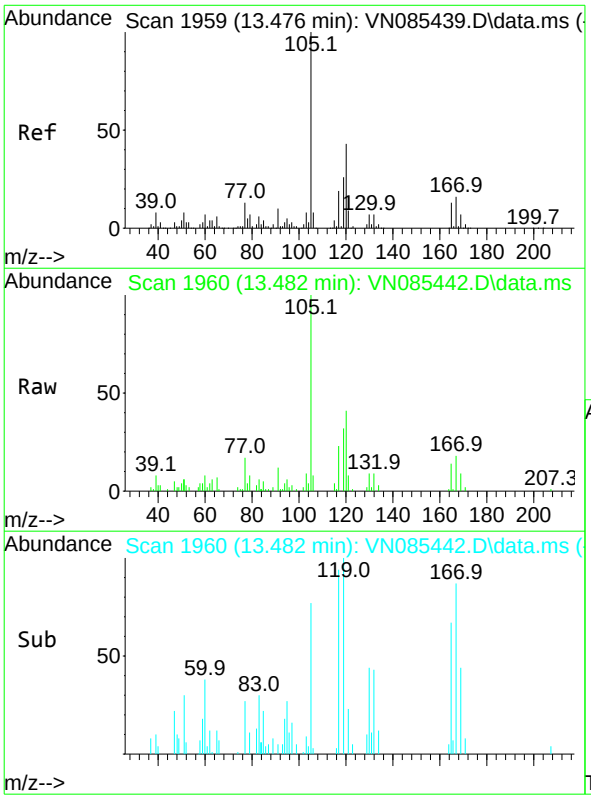
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 71.1 | 35.1 | 105.3 |
| 134 | 24.8 | 12.0 | 36.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

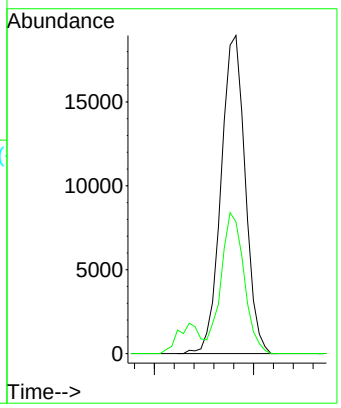
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

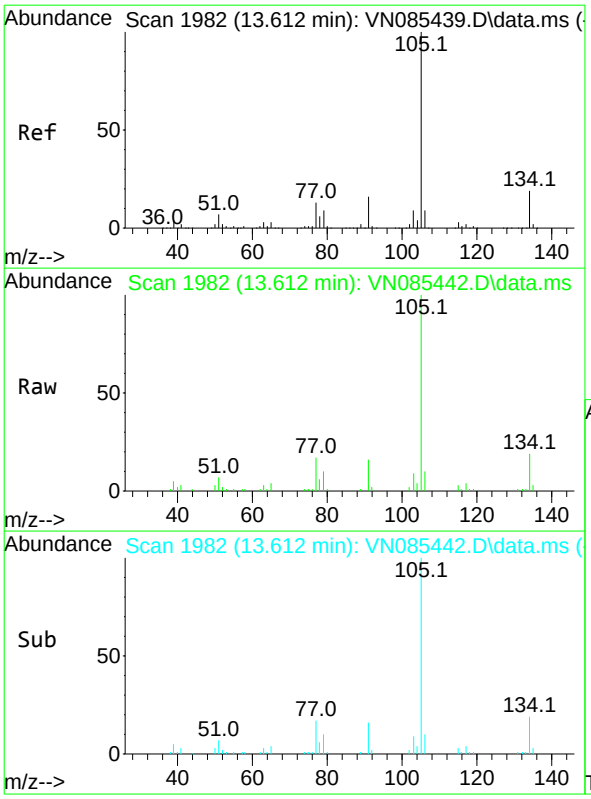



#84
1,2,4-Trimethylbenzene
Concen: 4.575 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:105 Resp: 32054

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 42.0 | 21.6 | 65.0 |

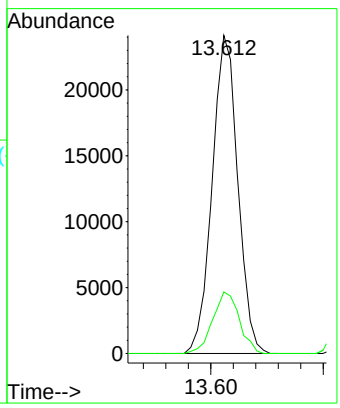





#85
sec-Butylbenzene
Concen: 4.663 ug/l
RT: 13.612 min Scan# 19
Delta R.T. -0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:105 Resp: 38148

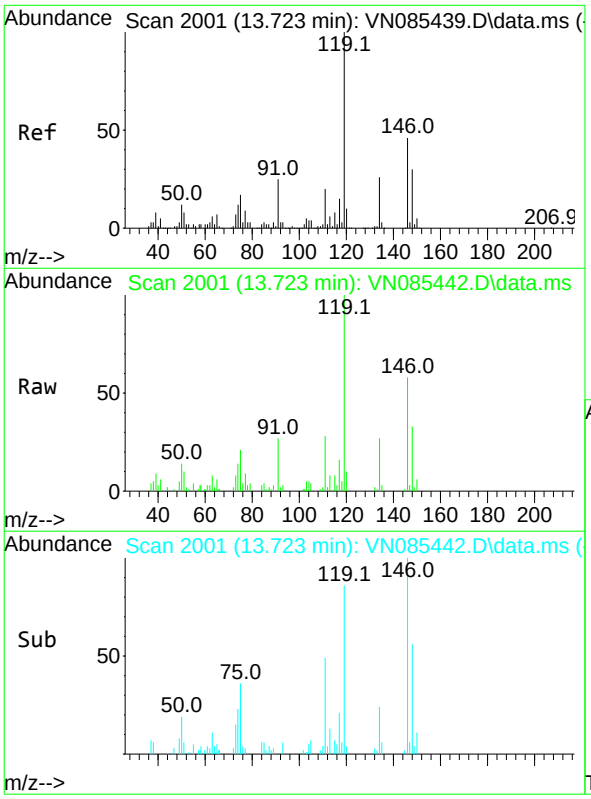
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 20.1 | 9.7 | 28.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

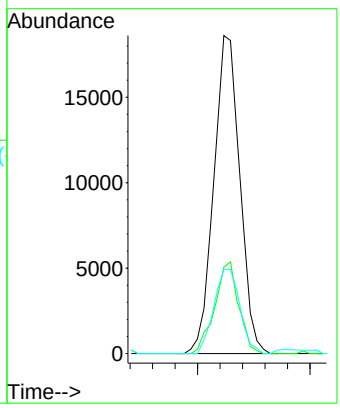
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

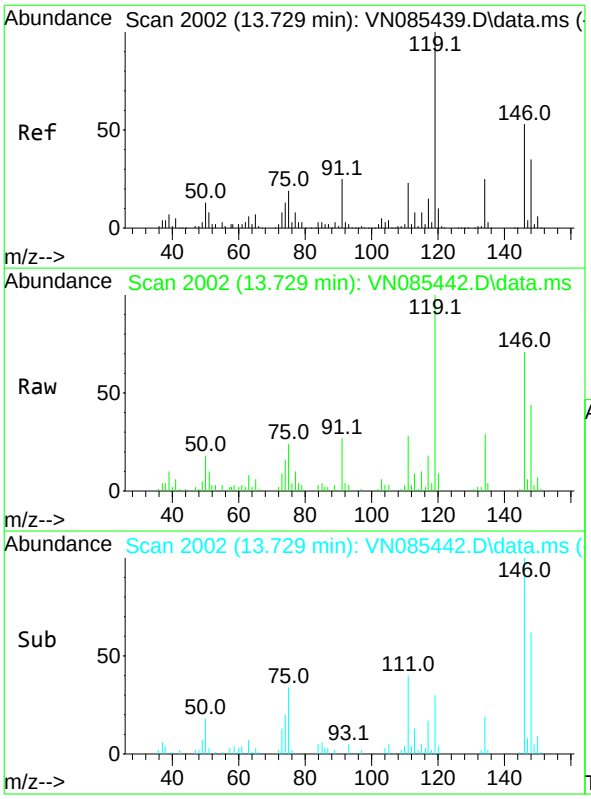



#86
p-Isopropyltoluene
Concen: 4.584 ug/l
RT: 13.723 min Scan# 2001
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:119 Resp: 29856

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 26.5 | 12.7 | 38.0 |
| 91 | 26.5 | 12.7 | 38.1 |

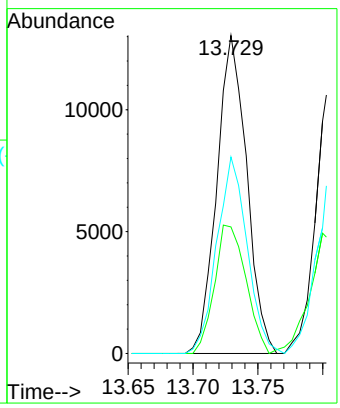





#87
1,3-Dichlorobenzene
Concen: 5.099 ug/l
RT: 13.729 min Scan# 20
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:146 Resp: 20876

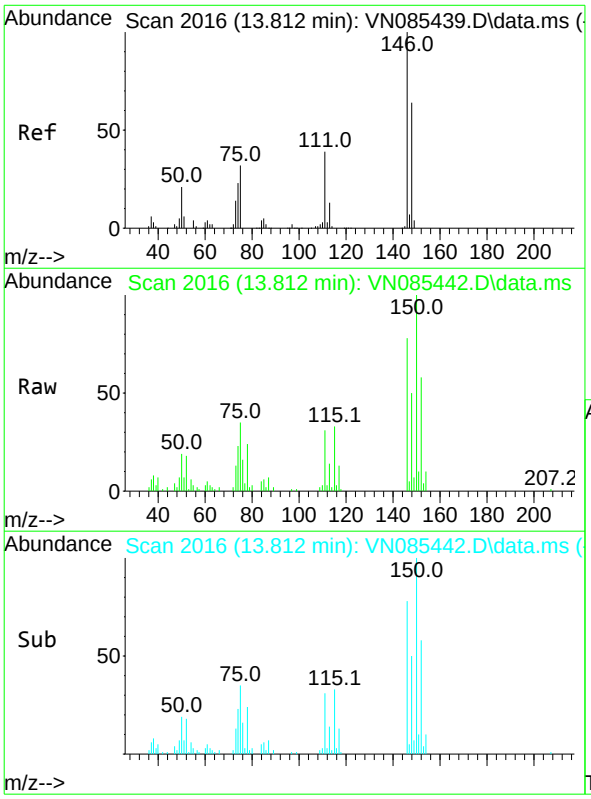
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.3 | 21.4 | 64.3 |
| 148 | 62.7 | 32.3 | 96.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

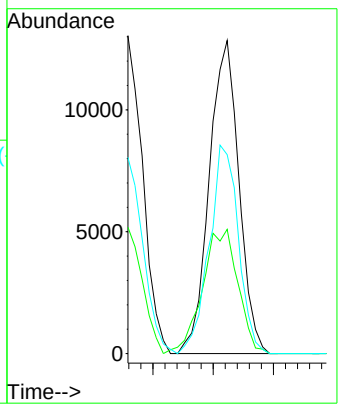
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

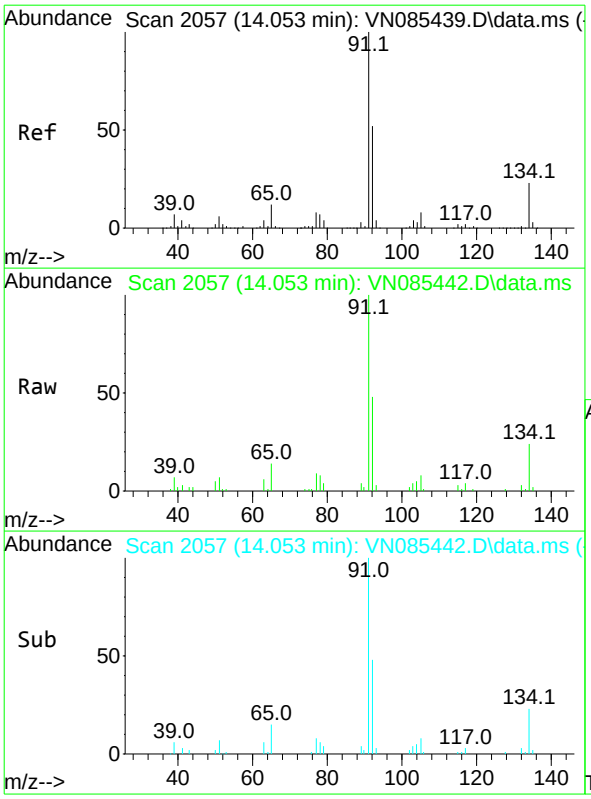



#88
1,4-Dichlorobenzene
Concen: 5.179 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:146 Resp: 21982

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 47.1 | 21.3 | 63.7 |
| 148 | 65.5 | 32.4 | 97.0 |

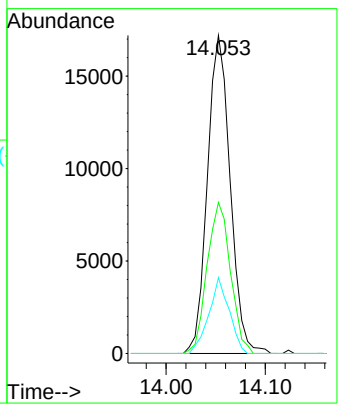





#89
n-Butylbenzene
Concen: 4.675 ug/l
RT: 14.053 min Scan# 20
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 91 Resp: 27437

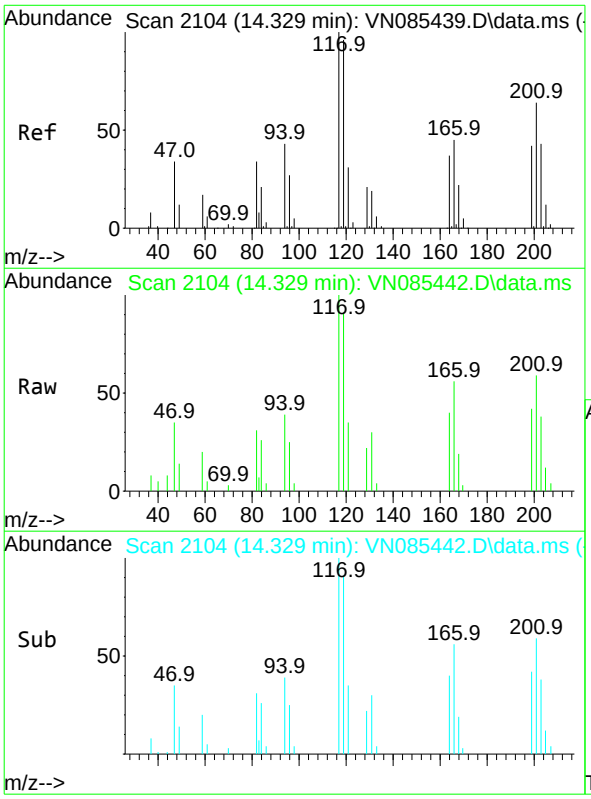
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 48.7 | 25.8 | 77.3 |
| 134 | 21.4 | 11.7 | 35.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

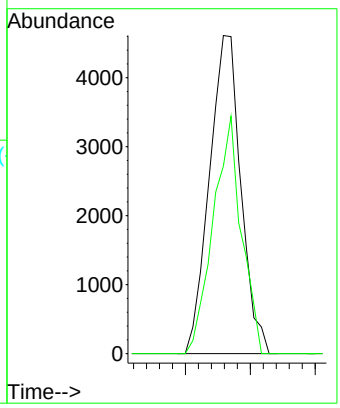
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

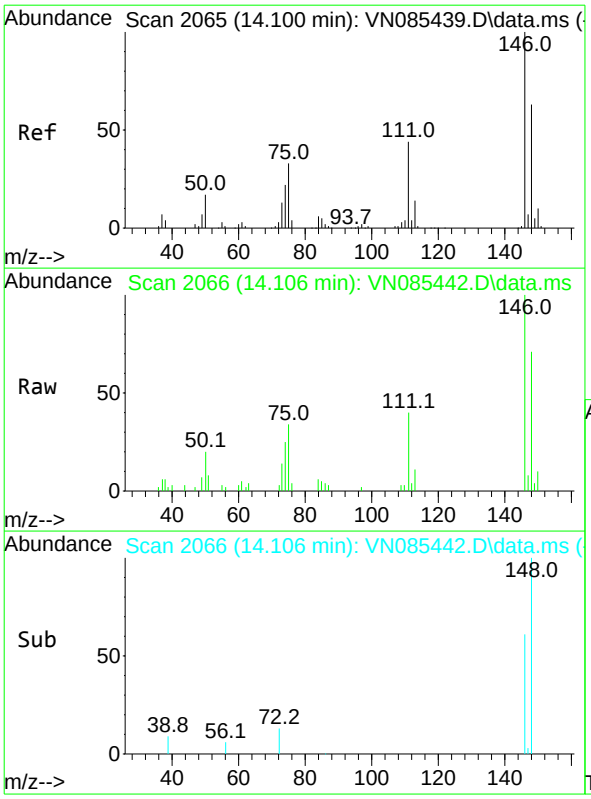



#90
Hexachloroethane
Concen: 4.987 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:117 Resp: 7767

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 66.9 | 33.7 | 101.0 |

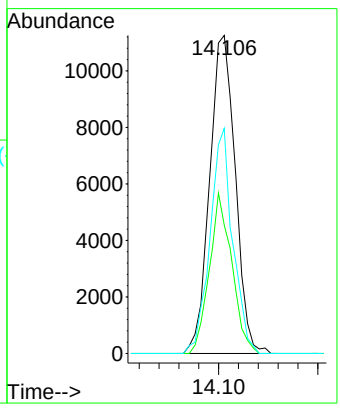





#91
1,2-Dichlorobenzene
Concen: 4.940 ug/l
RT: 14.106 min Scan# 20
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:146 Resp: 20177

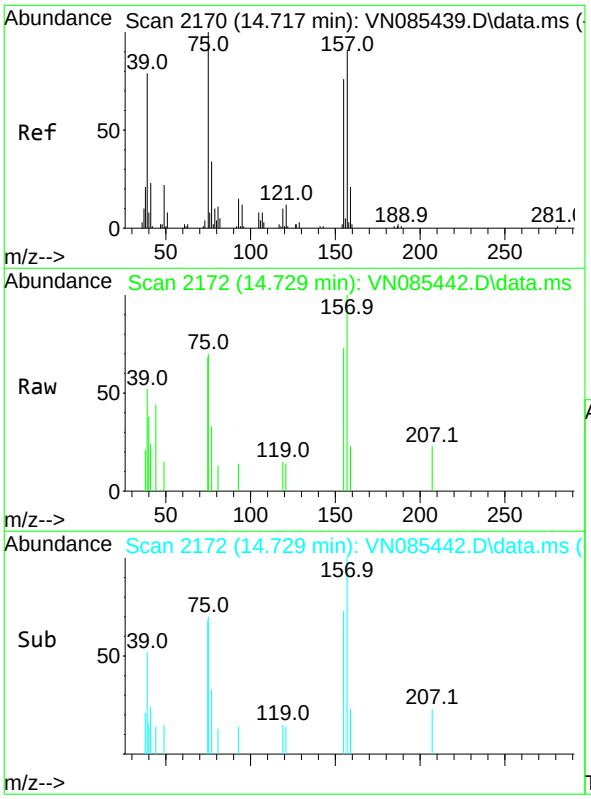
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 44.0 | 21.7 | 65.1 |
| 148 | 62.8 | 31.4 | 94.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

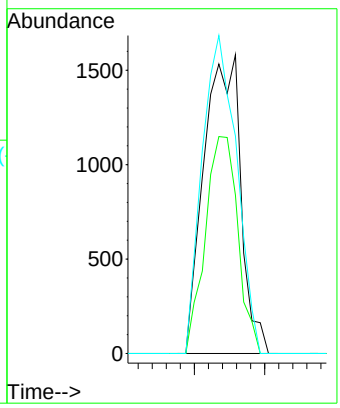
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

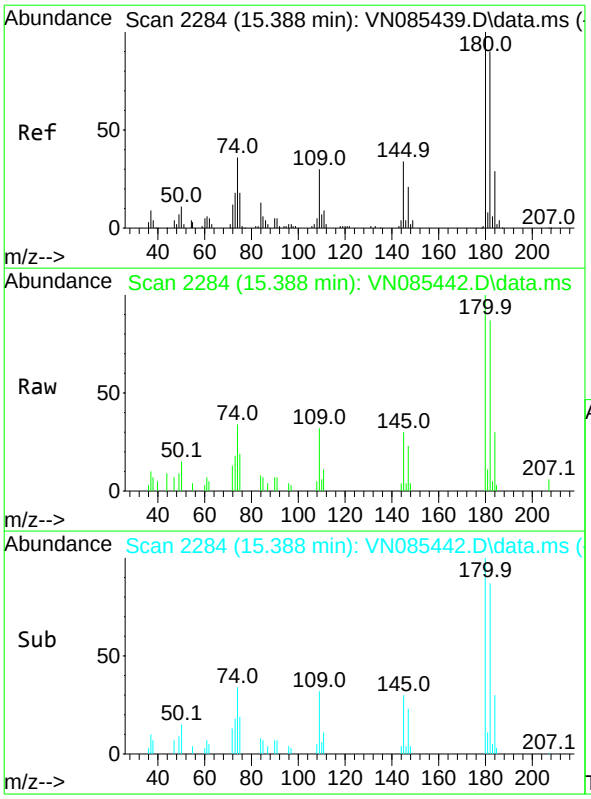



#92
1,2-Dibromo-3-Chloropropane
Concen: 5.232 ug/l
RT: 14.729 min Scan# 2172
Delta R.T. 0.012 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 75 Resp: 2872

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 64.2 | 36.4 | 109.2 |
| 157 | 99.8 | 45.4 | 136.1 |

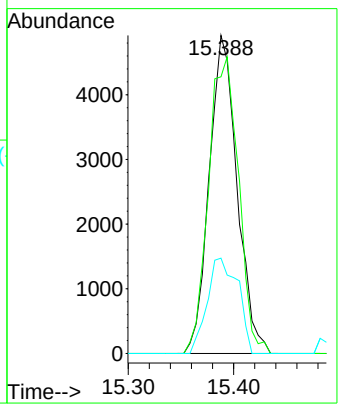





#93
1,2,4-Trichlorobenzene
Concen: 4.761 ug/l
RT: 15.388 min Scan# 22
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:180 Resp: 9037

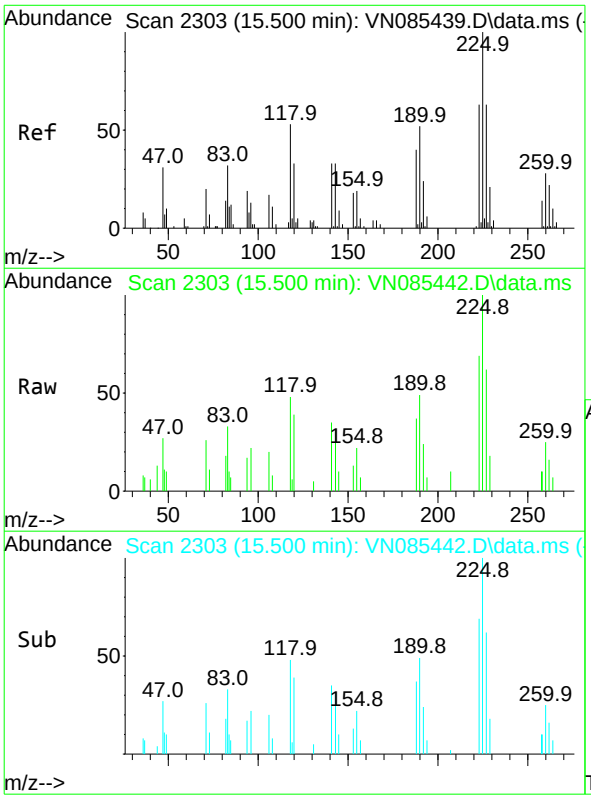
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 100.5 | 46.8 | 140.3 |
| 145 | 33.0 | 16.0 | 48.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

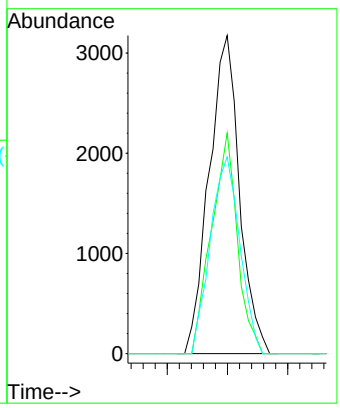
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

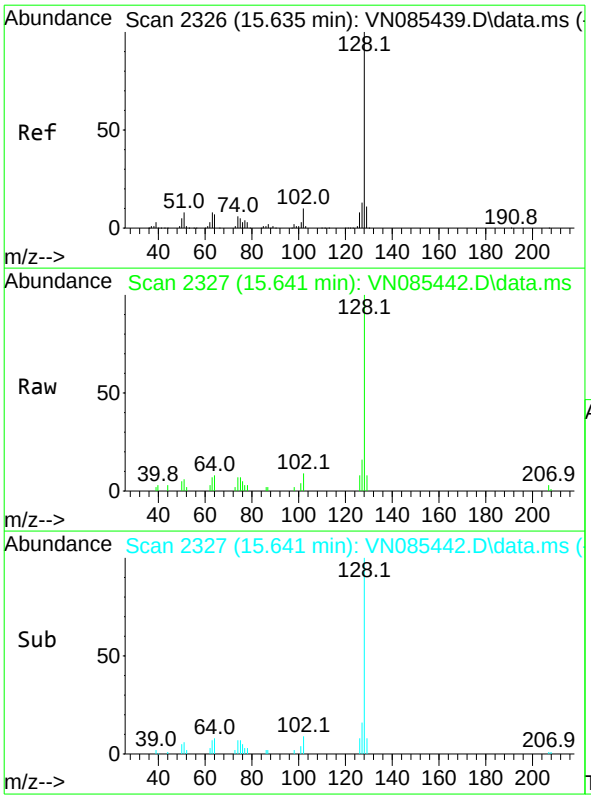



#94
Hexachlorobutadiene
Concen: 5.520 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:225 Resp: 5563

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 59.2 | 30.7 | 92.1 |
| 227 | 60.1 | 30.9 | 92.5 |

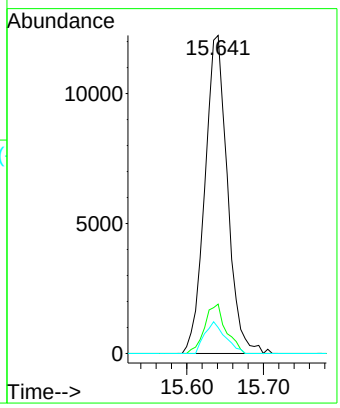





#95
Naphthalene
Concen: 4.422 ug/l
RT: 15.641 min Scan# 23
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:128 Resp: 25047

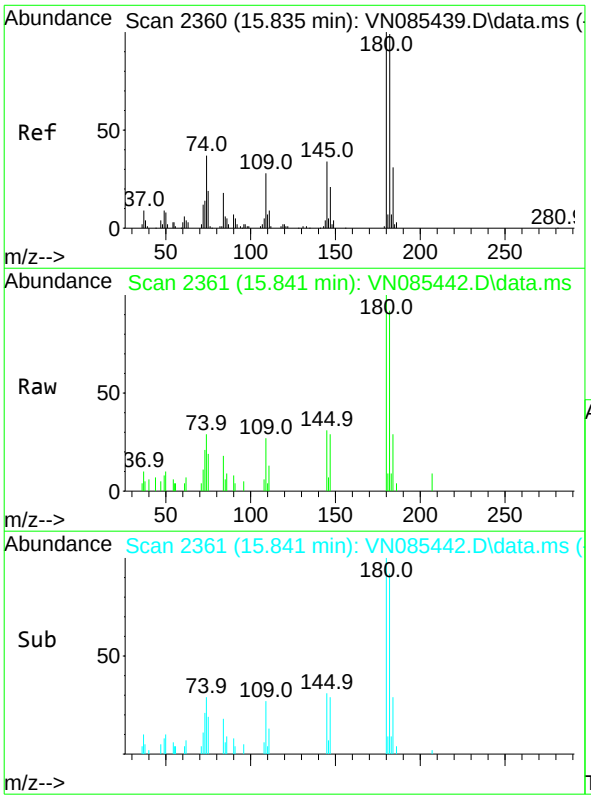
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 14.7 | 10.6 | 16.0 |
| 129 | 9.1 | 8.8 | 13.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

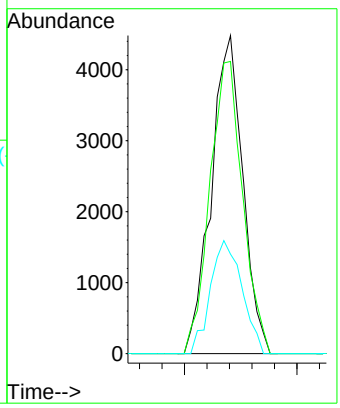
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025




#96
1,2,3-Trichlorobenzene
Concen: 4.549 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:180 Resp: 8737

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.6 | 47.4 | 142.2 |
| 145 | 35.5 | 16.9 | 50.7 |



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085443.D
Acq On : 14 Jan 2025 17:19
Operator : JC\MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 15 01:46:03 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 166880 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 302938 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 256851 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 99539 | 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 | 2.124 | 85 | 2382 | 1.054 | ug/l | 91 |
| 3) Chloromethane | 2.359 | 50 | 2801 | 1.145 | ug/l | 93 |
| 4) Vinyl Chloride | 2.512 | 62 | 2732 | 1.111 | ug/l # | 81 |
| 6) Chloroethane | 3.124 | 64 | 1809 | 1.160 | ug/l | 94 |
| 7) Trichlorofluoromethane | 3.512 | 101 | 3860 | 1.082 | ug/l | 88 |
| 8) Diethyl Ether | 3.953 | 74 | 1526 | 1.238 | ug/l | 81 |
| 9) 1,1,2-Trichlorotrifluo... | 4.359 | 101 | 2156m | 1.073 | ug/l | |
| 12) 1,1-Dichloroethene | 4.330 | 96 | 1660 | 0.927 | ug/l # | 67 |
| 14) Allyl chloride | 5.024 | 41 | 3179 | 1.094 | ug/l # | 85 |
| 15) Acrylonitrile | 5.718 | 53 | 4967 | 5.070 | ug/l # | 70 |
| 16) Acetone | 4.436 | 43 | 5102 | 5.862 | ug/l | 92 |
| 17) Carbon Disulfide | 4.706 | 76 | 6601 | 1.197 | ug/l # | 87 |
| 18) Methyl Acetate | 5.030 | 43 | 2908 | 1.099 | ug/l # | 80 |
| 19) Methyl tert-butyl Ether | 5.789 | 73 | 5156 | 0.887 | ug/l # | 87 |
| 20) Methylene Chloride | 5.265 | 84 | 2190 | 1.016 | ug/l # | 87 |
| 21) trans-1,2-Dichloroethene | 5.794 | 96 | 2110 | 1.102 | ug/l # | 66 |
| 22) Diisopropyl ether | 6.677 | 45 | 5691 | 0.882 | ug/l # | 88 |
| 23) Vinyl Acetate | 6.606 | 43 | 18526m | 4.090 | ug/l | |
| 24) 1,1-Dichloroethane | 6.583 | 63 | 4020m | 1.022 | ug/l | |
| 25) 2-Butanone | 7.483 | 43 | 6448m | 5.034 | ug/l | |
| 26) 2,2-Dichloropropane | 7.488 | 77 | 3104 | 0.976 | ug/l | 92 |
| 27) cis-1,2-Dichloroethene | 7.477 | 96 | 2185 | 0.969 | ug/l | 92 |
| 28) Bromochloromethane | 7.812 | 49 | 2082 | 1.138 | ug/l # | 89 |
| 29) Tetrahydrofuran | 7.835 | 42 | 3693 | 4.548 | ug/l | 98 |
| 30) Chloroform | 7.965 | 83 | 4250 | 1.045 | ug/l # | 80 |
| 32) 1,1,1-Trichloroethane | 8.165 | 97 | 3678 | 1.031 | ug/l # | 56 |
| 36) 1,1-Dichloropropene | 8.371 | 75 | 3084 | 1.046 | ug/l # | 84 |
| 37) Ethyl Acetate | 7.577 | 43 | 3056m | 1.026 | ug/l | |
| 38) Carbon Tetrachloride | 8.359 | 117 | 3436 | 1.018 | ug/l | 90 |
| 39) Methylcyclohexane | 9.600 | 83 | 2403 | 0.867 | ug/l # | 87 |
| 40) Benzene | 8.606 | 78 | 8480 | 0.957 | ug/l | 91 |
| 41) Methacrylonitrile | 7.771 | 41 | 1458 | 0.941 | ug/l # | 76 |
| 42) 1,2-Dichloroethane | 8.665 | 62 | 3131 | 0.938 | ug/l | 91 |
| 43) Isopropyl Acetate | 8.682 | 43 | 4803 | 1.007 | ug/l # | 87 |
| 44) Trichloroethene | 9.347 | 130 | 2133 | 1.034 | ug/l | 71 |
| 45) 1,2-Dichloropropane | 9.618 | 63 | 2246 | 0.992 | ug/l | 99 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085443.D
Acq On : 14 Jan 2025 17:19
Operator : JC\MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Quant Time: Jan 15 01:46:03 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | | Dev(Min) |
|---|---|---|---|---|---|---|
| 46) Dibromomethane | 9.706 | 93 | 1769 | 1.083 ug/l | | 92 |
| 47) Bromodichloromethane | 9.882 | 83 | 2935 | 0.882 ug/l | | 90 |
| 48) Methyl methacrylate | 9.677 | 41 | 1886 | 0.878 ug/l | | 96 |
| 49) 1,4-Dioxane | 9.688 | 88 | 673 | 18.616 ug/l | # | 47 |
| 51) 4-Methyl-2-Pentanone | 10.441 | 43 | 11523 | 4.163 ug/l | | 93 |
| 52) Toluene | 10.618 | 92 | 4180 | 0.814 ug/l | | 93 |
| 53) t-1,3-Dichloropropene | 10.835 | 75 | 2522 | 0.802 ug/l | | 92 |
| 54) cis-1,3-Dichloropropene | 10.312 | 75 | 2725 | 0.811 ug/l | # | 83 |
| 55) 1,1,2-Trichloroethane | 11.018 | 97 | 1901 | 0.935 ug/l | | 91 |
| 56) Ethyl methacrylate | 10.871 | 69 | 1923 | 2.471 ug/l | # | 88 |
| 57) 1,3-Dichloropropane | 11.165 | 76 | 3113 | 0.881 ug/l | | 95 |
| 58) 2-Chloroethyl Vinyl ether | 10.153 | 63 | 4929 | 3.822 ug/l | | 91 |
| 59) 2-Hexanone | 11.194 | 43 | 7905 | 4.058 ug/l | | 87 |
| 60) Dibromochloromethane | 11.359 | 129 | 2339 | 0.953 ug/l | | 98 |
| 61) 1,2-Dibromoethane | 11.465 | 107 | 2022 | 1.000 ug/l | | 90 |
| 64) Tetrachloroethene | 11.106 | 164 | 1658 | 0.947 ug/l | # | 83 |
| 65) Chlorobenzene | 11.888 | 112 | 5401 | 0.960 ug/l | | 93 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 2185 | 1.058 ug/l | # | 64 |
| 67) Ethyl Benzene | 11.959 | 91 | 7347 | 0.802 ug/l | | 94 |
| 68) m/p-Xylenes | 12.070 | 106 | 5059 | 1.494 ug/l | | 100 |
| 69) o-Xylene | 12.394 | 106 | 2478 | 0.766 ug/l | | 97 |
| 70) Styrene | 12.406 | 104 | 3812 | 0.712 ug/l | | 99 |
| 71) Bromoform | 12.582 | 173 | 1208 | 0.818 ug/l | # | 88 |
| 73) Isopropylbenzene | 12.688 | 105 | 5506 | 0.820 ug/l | | 98 |
| 74) N-amyl acetate | 12.494 | 43 | 2716 | 0.899 ug/l | # | 87 |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 2616 | 1.102 ug/l | # | 96 |
| 76) 1,2,3-Trichloropropane | 12.982 | 75 | 2198m | 1.088 ug/l | | |
| 77) Bromobenzene | 12.976 | 156 | 1733 | 0.987 ug/l | | 97 |
| 78) n-propylbenzene | 13.029 | 91 | 6424 | 0.808 ug/l | | 93 |
| 79) 2-Chlorotoluene | 13.117 | 91 | 4483 | 0.871 ug/l | | 97 |
| 80) 1,3,5-Trimethylbenzene | 13.165 | 105 | 4301 | 0.775 ug/l | | 90 |
| 82) 4-Chlorotoluene | 13.223 | 91 | 4268 | 0.833 ug/l | | 99 |
| 83) tert-Butylbenzene | 13.435 | 119 | 3753 | 0.805 ug/l | | 96 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 3758 | 0.679 ug/l | | 93 |
| 85) sec-Butylbenzene | 13.612 | 105 | 4614 | 0.714 ug/l | | 99 |
| 86) p-Isopropyltoluene | 13.723 | 119 | 3538 | 0.716 ug/l | | 98 |
| 87) 1,3-Dichlorobenzene | 13.723 | 146 | 3038 | 0.940 ug/l | | 95 |
| 88) 1,4-Dichlorobenzene | 13.806 | 146 | 3517m | 1.050 ug/l | | |
| 89) n-Butylbenzene | 14.053 | 91 | 3527 | 0.761 ug/l | | 93 |
| 90) Hexachloroethane | 14.341 | 117 | 1355 | 1.102 ug/l | | 99 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 3515 | 1.090 ug/l | | 96 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.711 | 75 | 402 | 0.928 ug/l | | 74 |
| 93) 1,2,4-Trichlorobenzene | 15.394 | 180 | 1310 | 0.874 ug/l | # | 80 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 822 | 1.033 ug/l | | 89 |
| 95) Naphthalene | 15.641 | 128 | 4210 | 0.941 ug/l | # | 90 |
| 96) 1,2,3-Trichlorobenzene | 15.835 | 180 | 1494 | 0.985 ug/l | # | 86 |

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

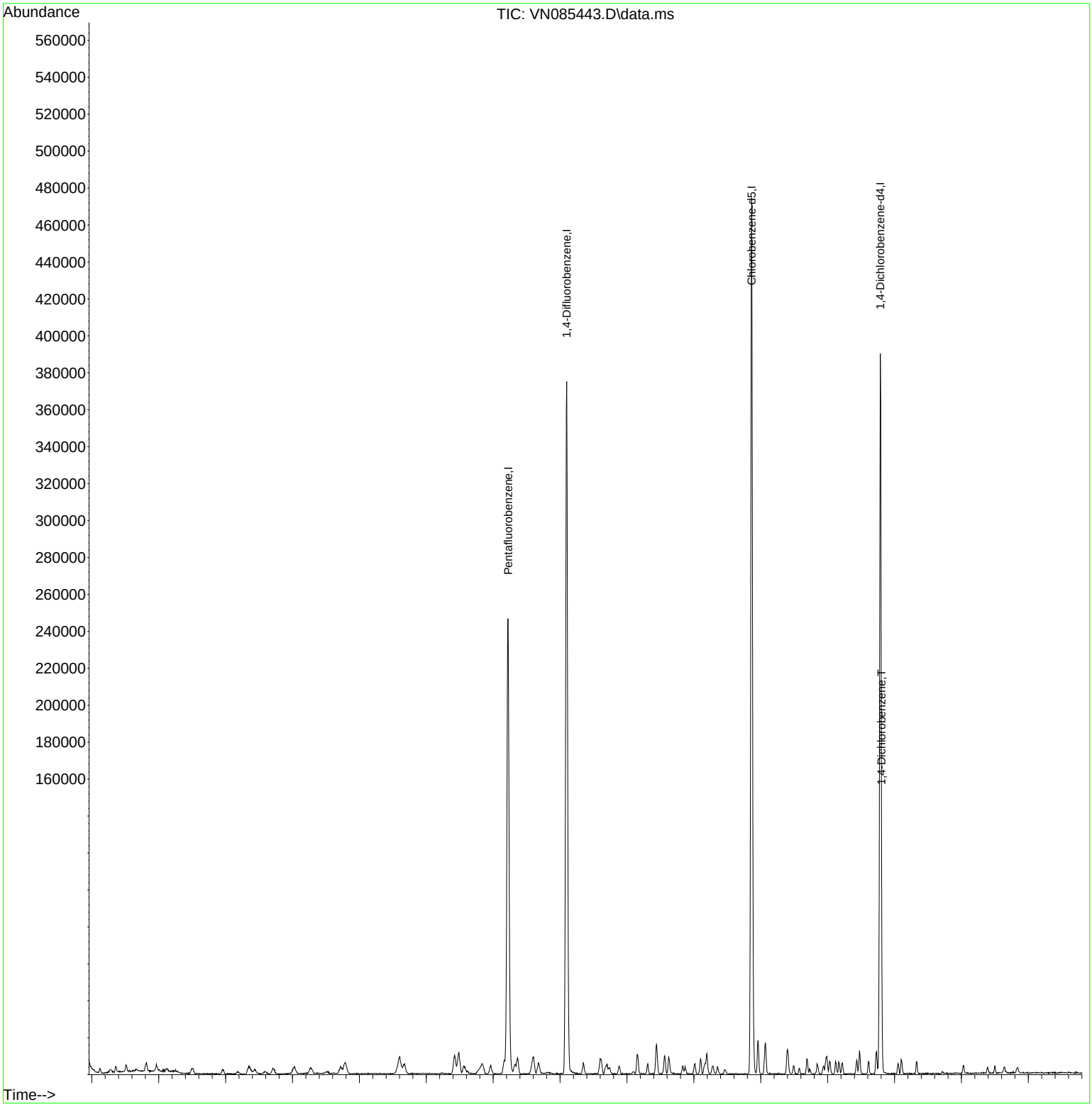
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085443.D
Acq On : 14 Jan 2025 17:19
Operator : JC\MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

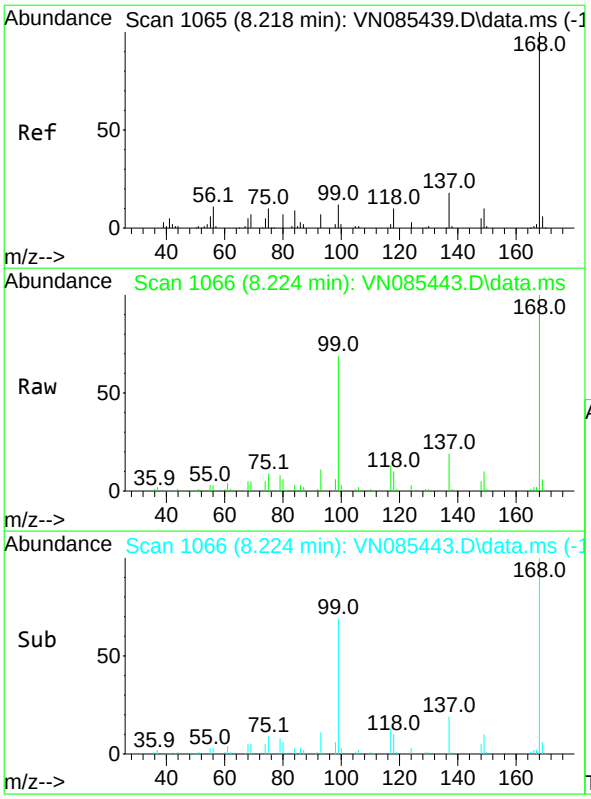
Quant Time: Jan 15 01:46:03 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

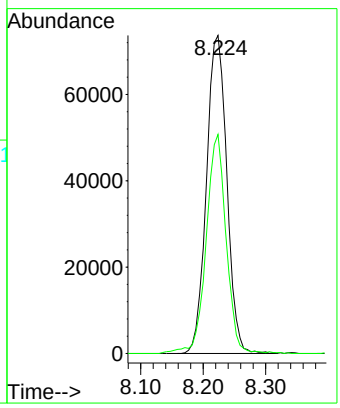





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:168 Resp: 166880

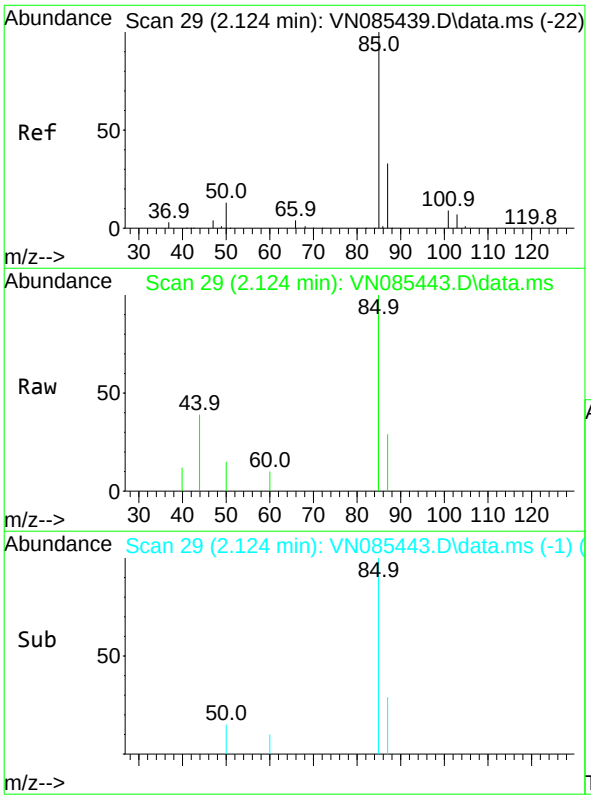
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 68.6 | 53.6 | 80.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

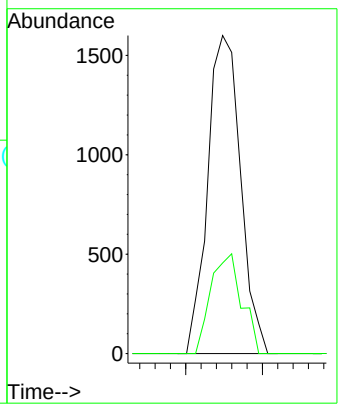
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

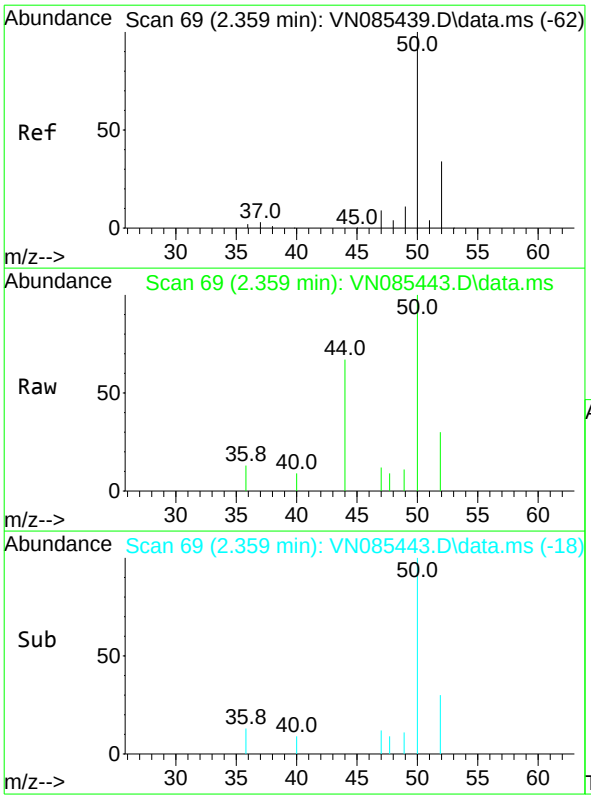



#2
Dichlorodifluoromethane
Concen: 1.054 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 85 Resp: 2382

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 28.5 | 16.7 | 50.1 |

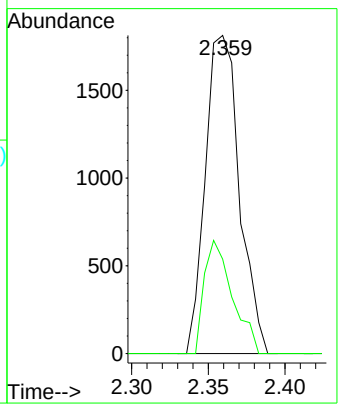





#3
Chloromethane
Concen: 1.145 ug/l
RT: 2.359 min Scan# 69
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 50 Resp: 2801

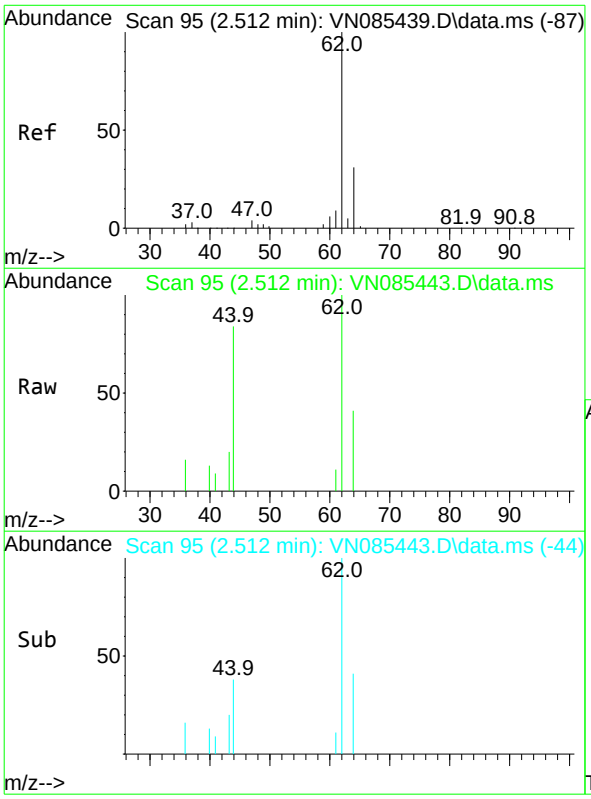
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 29.7 | 27.0 | 40.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

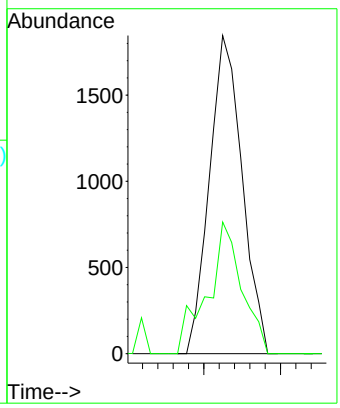
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

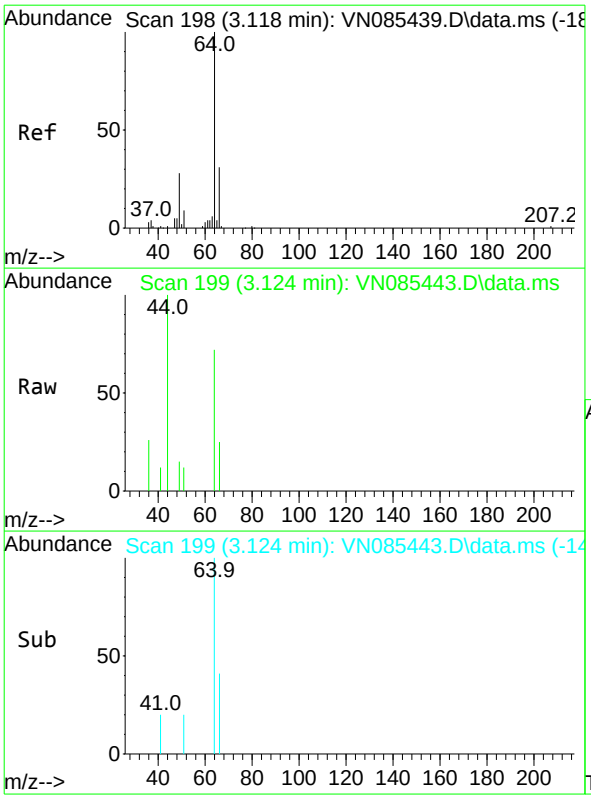



#4
Vinyl Chloride
Concen: 1.111 ug/l
RT: 2.512 min Scan# 95
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 62 Resp: 2732

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 41.4 | 24.8 | 37.2# |

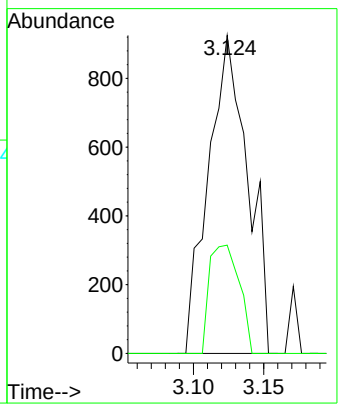





#6
Chloroethane
Concen: 1.160 ug/l
RT: 3.124 min Scan# 19
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 64 Resp: 1809

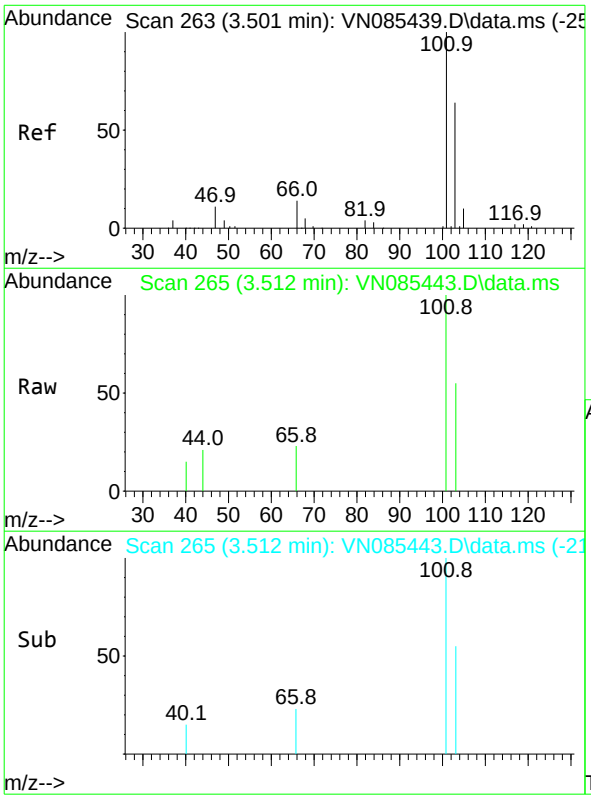
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 34.1 | 24.6 | 36.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

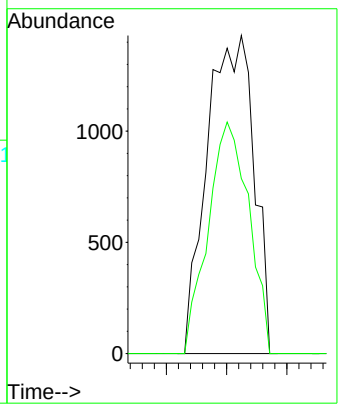
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

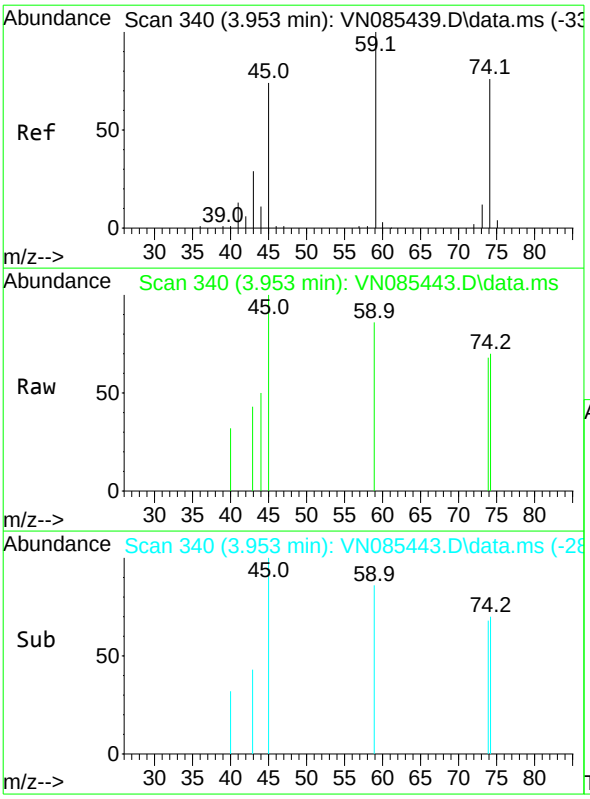



#7
Trichlorofluoromethane
Concen: 1.082 ug/l
RT: 3.512 min Scan# 265
Delta R.T. 0.012 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:101 Resp: 3860

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 55.0 | 51.4 | 77.2 |






#8
Diethyl Ether
Concen: 1.238 ug/l
RT: 3.953 min Scan# 34
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

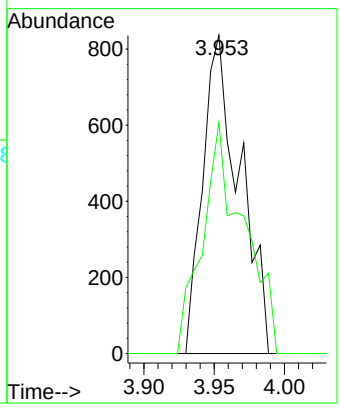
Tgt Ion: 74 Resp: 1526

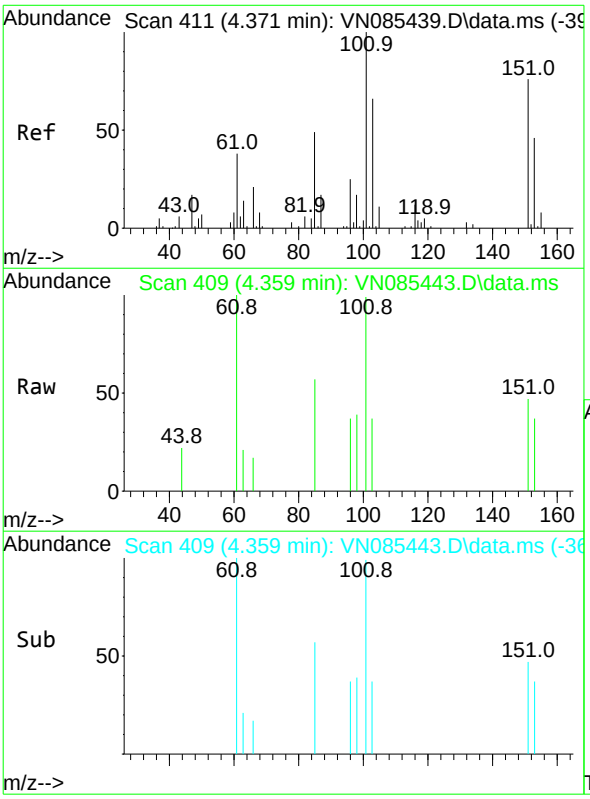
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 80.9 | 49.7 | 149.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

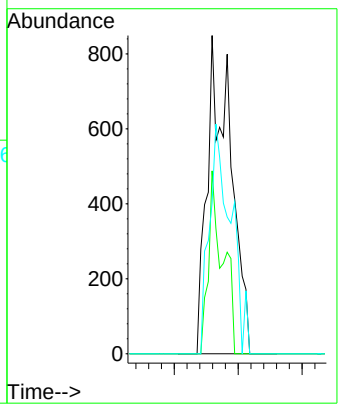


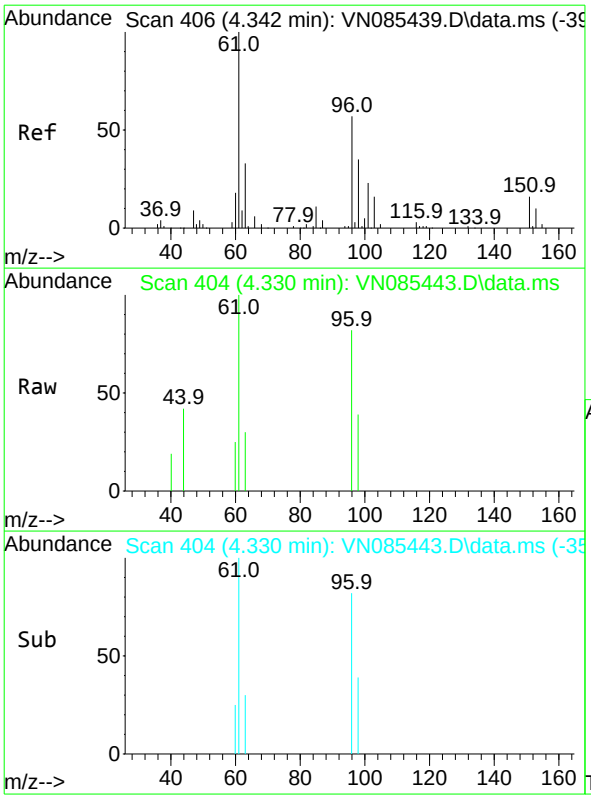




#9
1,1,2-Trichlorotrifluoroethane
Concen: 1.073 ug/l m
RT: 4.359 min Scan# 409
Delta R.T. -0.012 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:101 Resp: 2156

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 35.3 | 37.8 | 56.8# |
| 151 | 66.4 | 58.8 | 88.2 |

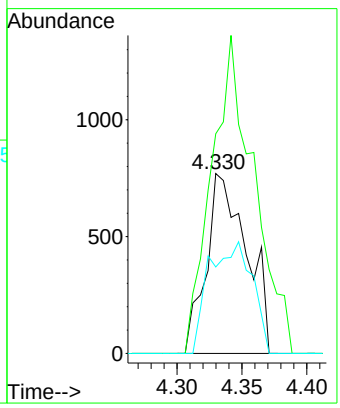





#12
1,1-Dichloroethene
Concen: 0.927 ug/l
RT: 4.330 min Scan# 40
Delta R.T. -0.012 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 96 Resp: 1660

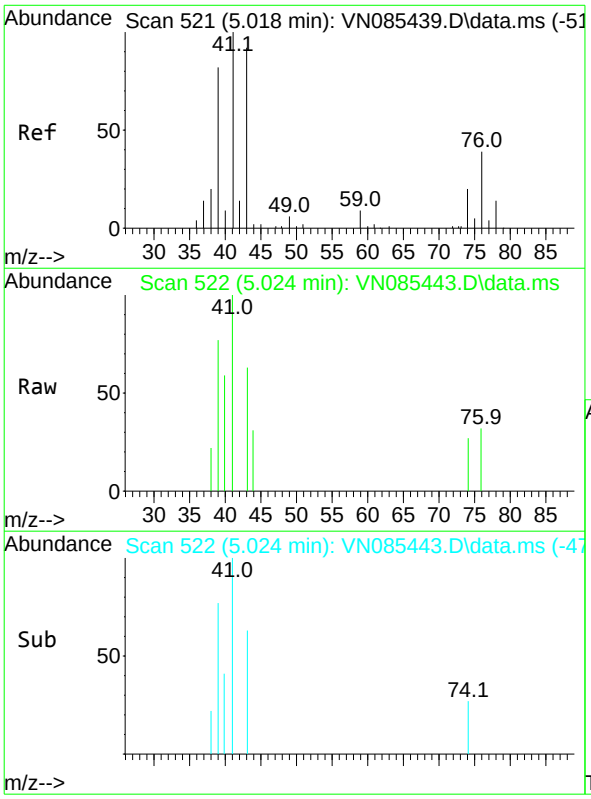
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 122.1 | 141.0 | 211.4# |
| 98 | 48.1 | 49.0 | 73.6# |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

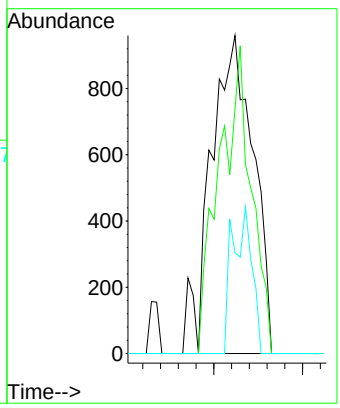
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

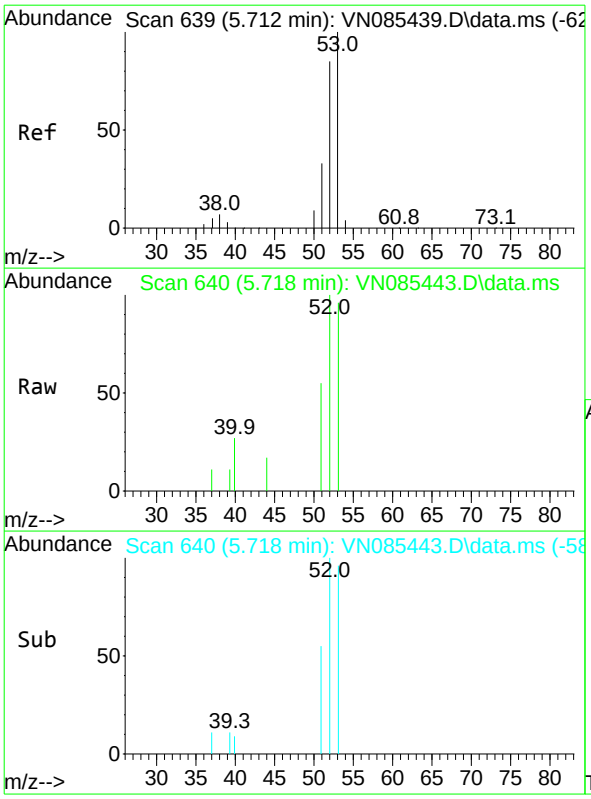



#14
Allyl chloride
Concen: 1.094 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 41 Resp: 3179

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 73.1 | 64.4 | 96.6 |
| 76 | 21.4 | 30.5 | 45.7# |

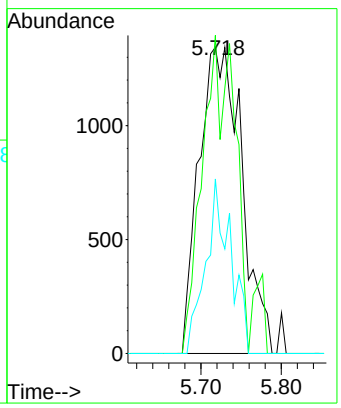





#15
Acrylonitrile
Concen: 5.070 ug/l
RT: 5.718 min Scan# 64
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 53 Resp: 4967

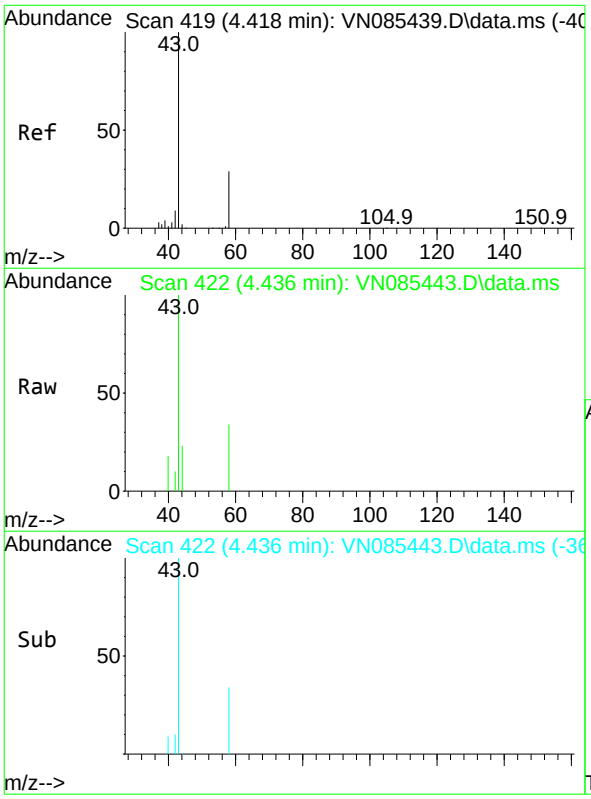
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 45.1 | 65.5 | 98.3# |
| 51 | 33.3 | 29.8 | 44.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

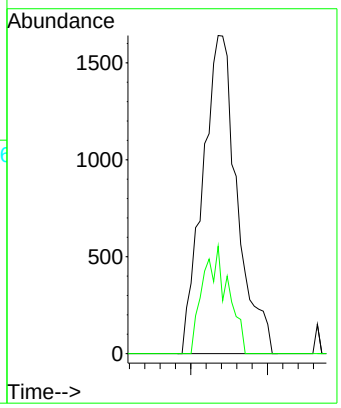
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

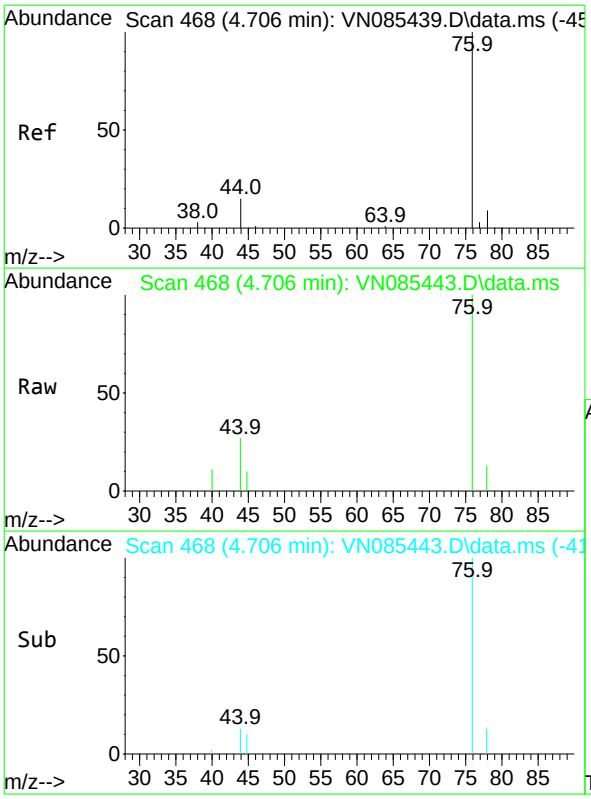



#16
Acetone
Concen: 5.862 ug/l
RT: 4.436 min Scan# 422
Delta R.T. 0.018 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 43 Resp: 5102

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 33.8 | 23.8 | 35.6 |






#17
Carbon Disulfide
Concen: 1.197 ug/l
RT: 4.706 min Scan# 46
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

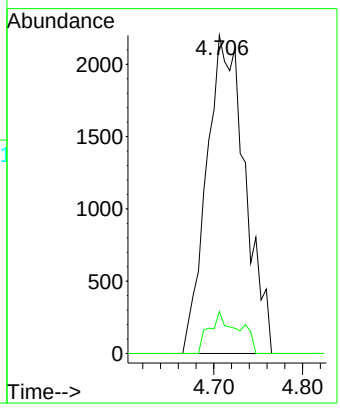
Tgt Ion: 76 Resp: 6601

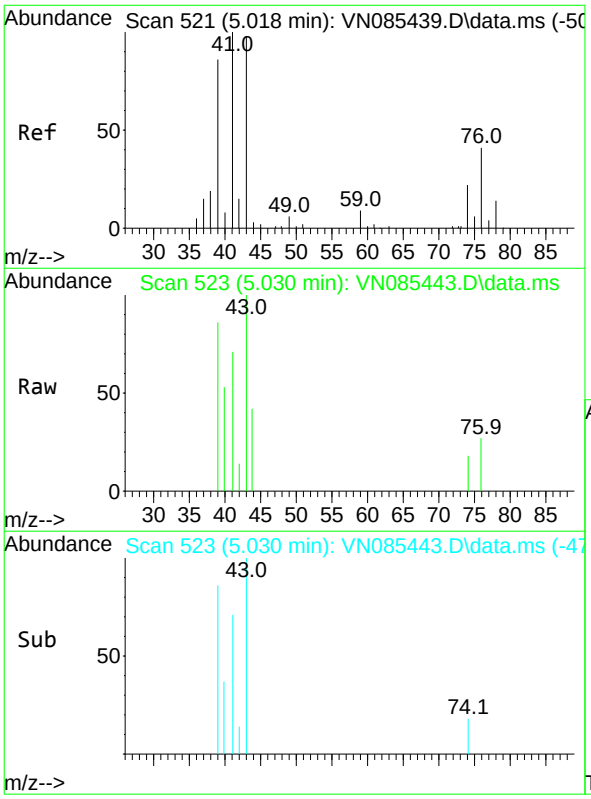
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 13.2 | 6.9 | 10.3# |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

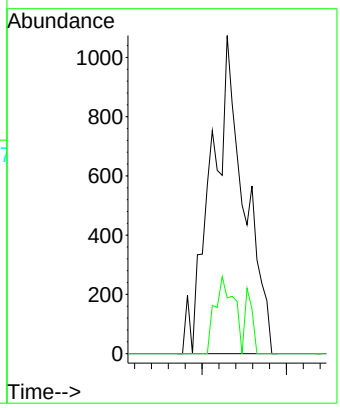


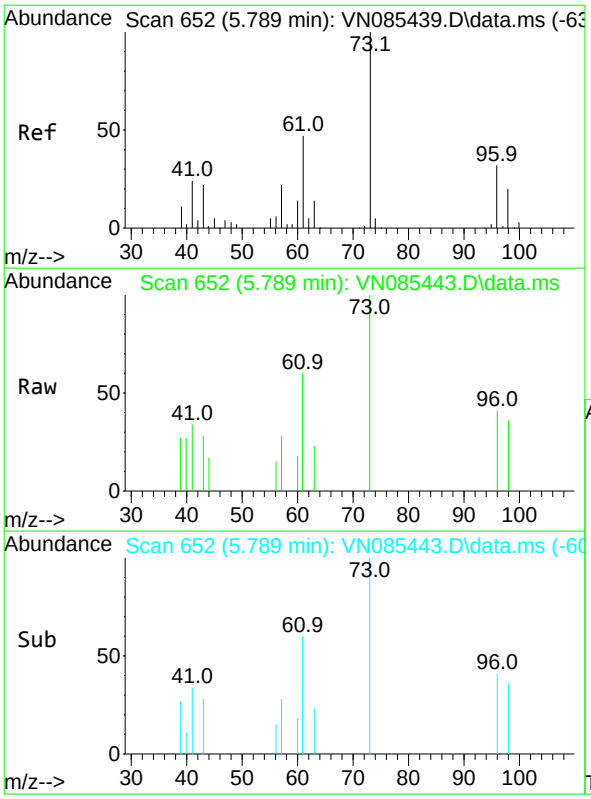




#18
Methyl Acetate
Concen: 1.099 ug/l
RT: 5.030 min Scan# 523
Delta R.T. 0.012 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 43 Resp: 2908

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 13.8 | 18.6 | 28.0# |






#19
Methyl tert-butyl Ether
Concen: 0.887 ug/l
RT: 5.789 min Scan# 65
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

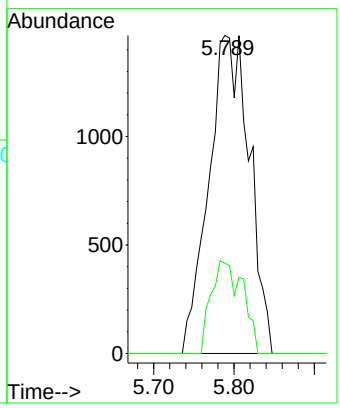
Tgt Ion: 73 Resp: 5156

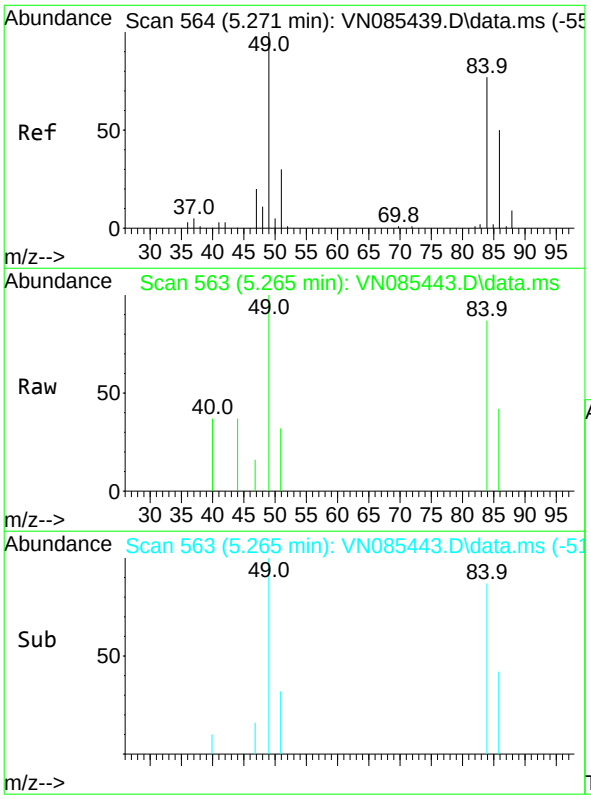
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 28.4 | 17.8 | 26.8# |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

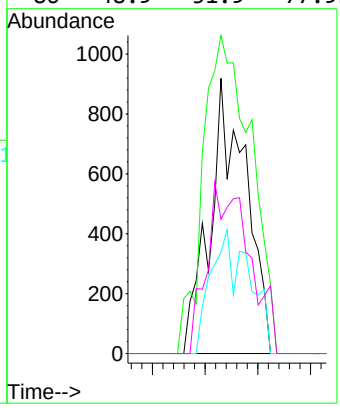


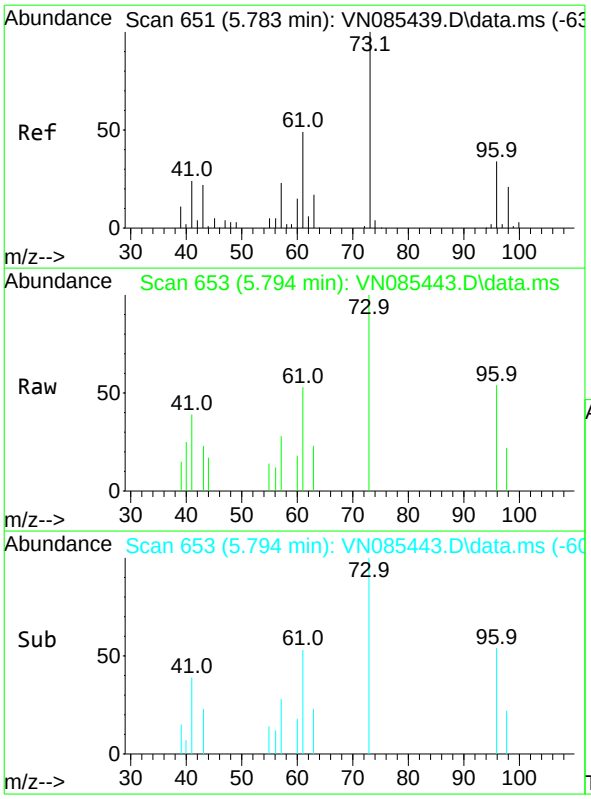




#20
Methylene Chloride
Concen: 1.016 ug/l
RT: 5.265 min Scan# 563
Delta R.T. -0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 84 Resp: 2190

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 115.6 | 104.1 | 156.1 |
| 51 | 36.9 | 31.0 | 46.4 |
| 86 | 48.9 | 51.9 | 77.9# |

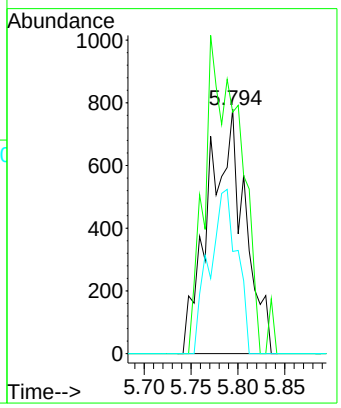





#21
trans-1,2-Dichloroethene
Concen: 1.102 ug/l
RT: 5.794 min Scan# 65
Delta R.T. 0.012 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 96 Resp: 2110

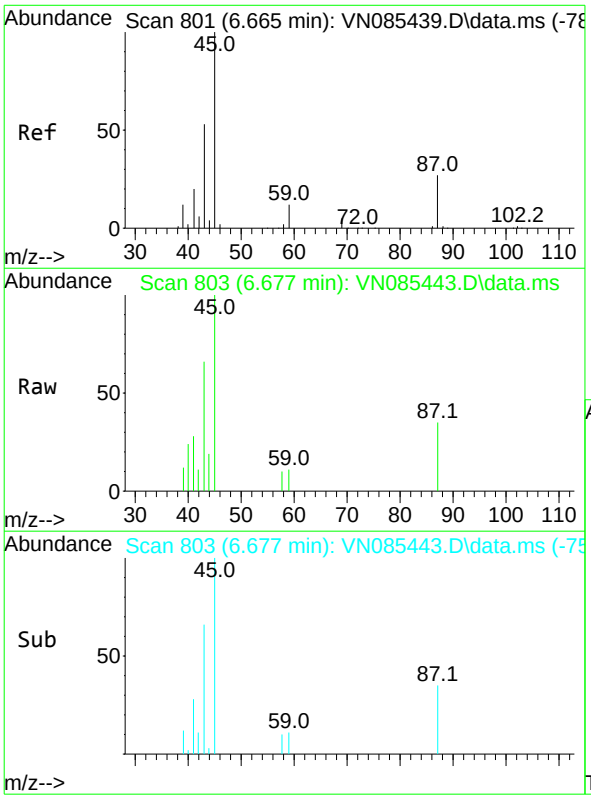
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 98.7 | 115.7 | 173.5# |
| 98 | 41.8 | 49.8 | 74.8# |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

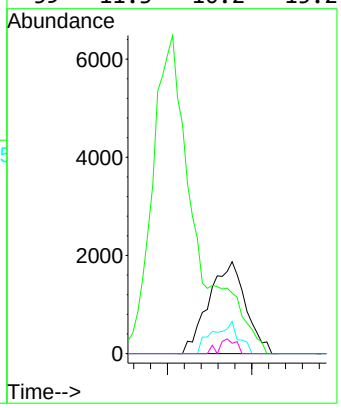
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

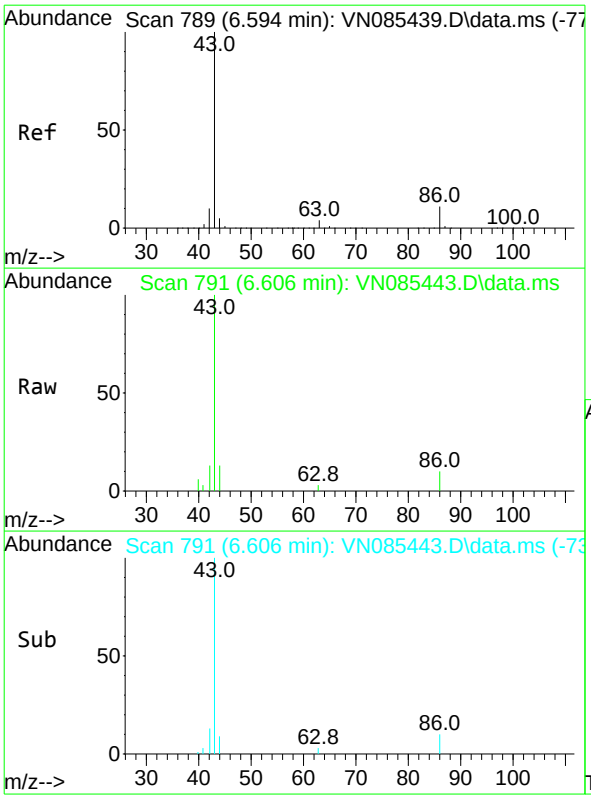



#22
Diisopropyl ether
Concen: 0.882 ug/l
RT: 6.677 min Scan# 803
Delta R.T. 0.012 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 45 Resp: 5691

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 65.9 | 45.0 | 67.6 |
| 87 | 35.0 | 21.8 | 32.8# |
| 59 | 11.3 | 10.2 | 15.2 |

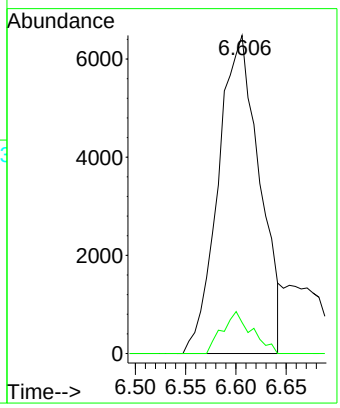





#23
Vinyl Acetate
Concen: 4.090 ug/l m
RT: 6.606 min Scan# 79
Delta R.T. 0.012 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 43 Resp: 18526

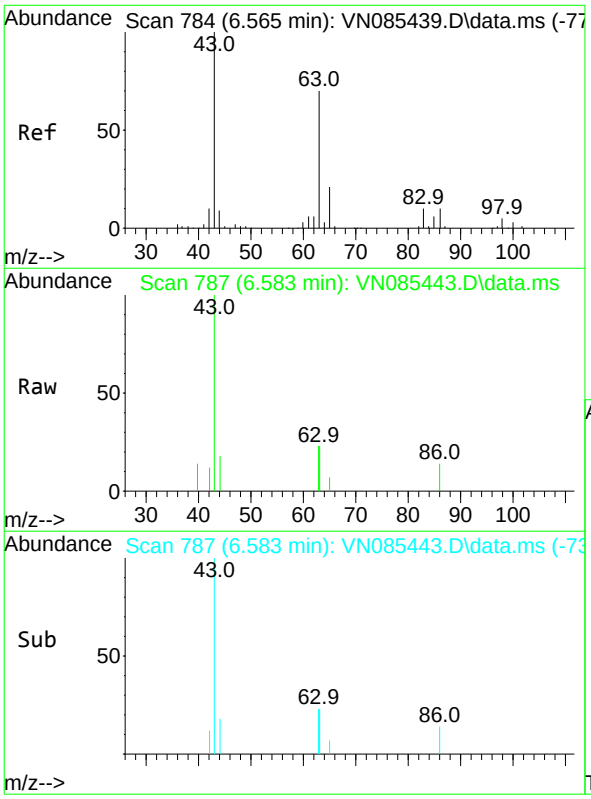
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 9.8 | 8.4 | 12.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

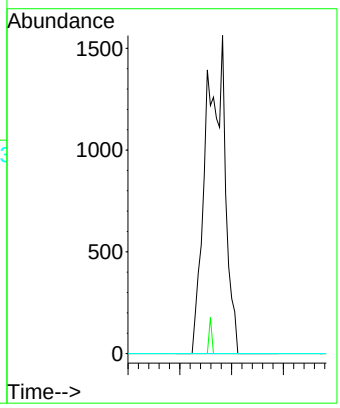
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

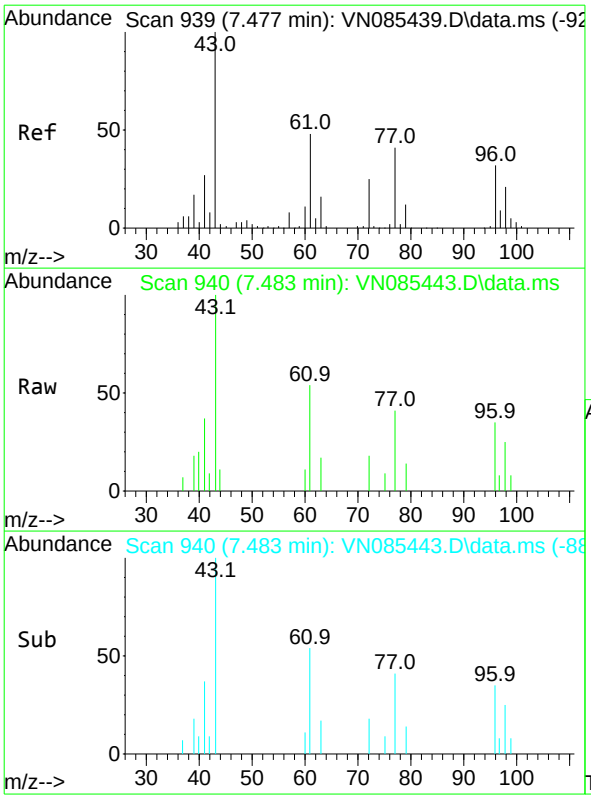



#24
1,1-Dichloroethane
Concen: 1.022 ug/l m
RT: 6.583 min Scan# 787
Delta R.T. 0.018 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 63 Resp: 4020

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 0.0 | 3.3 | 9.8# |
| 100 | 0.0 | 2.0 | 6.0# |

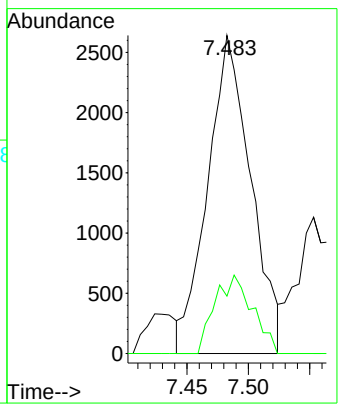





#25
2-Butanone
Concen: 5.034 ug/l m
RT: 7.483 min Scan# 94
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 43 Resp: 6448

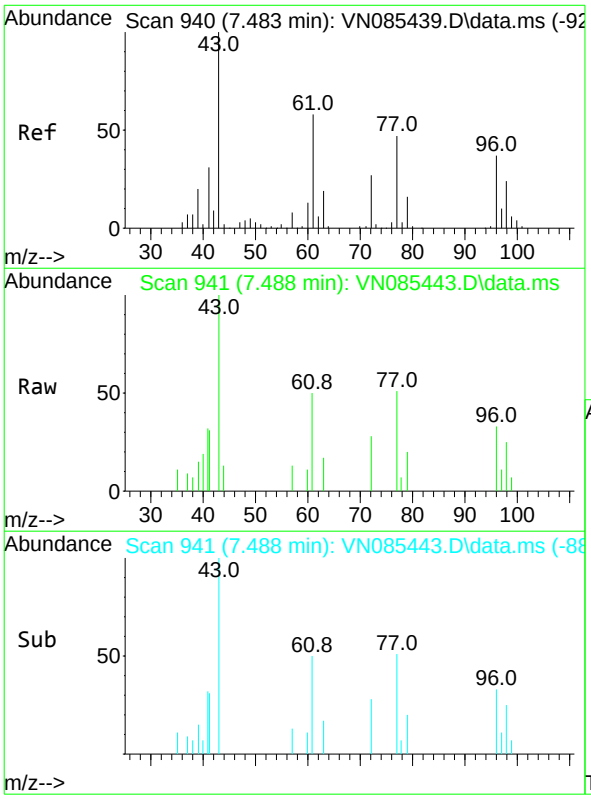
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 18.0 | 20.2 | 30.4# |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

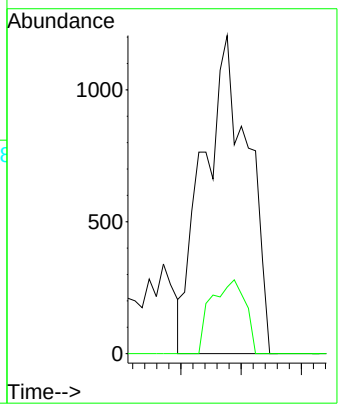
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

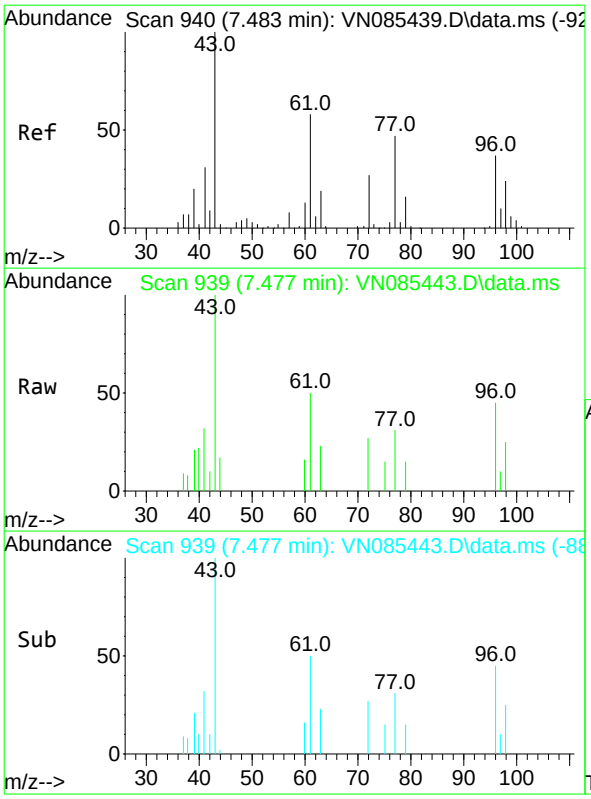



#26
2,2-Dichloropropane
Concen: 0.976 ug/l
RT: 7.488 min Scan# 941
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 77 Resp: 3104

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 17.7 | 10.7 | 32.1 |

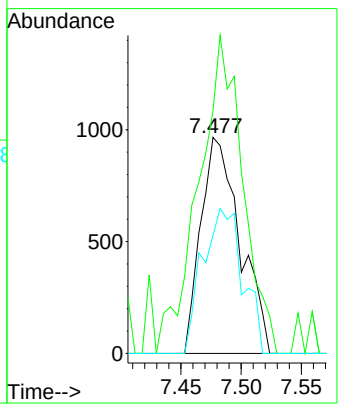





#27
cis-1,2-Dichloroethene
Concen: 0.969 ug/l
RT: 7.477 min Scan# 93
Delta R.T. -0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 96 Resp: 2185

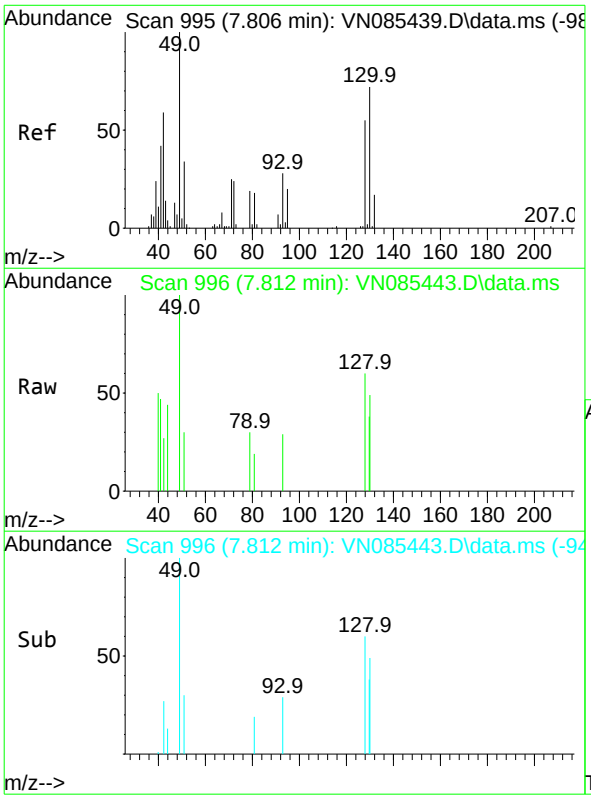
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 166.1 | 0.0 | 311.8 |
| 98 | 68.7 | 0.0 | 126.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

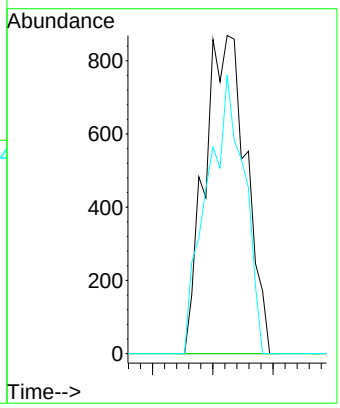
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

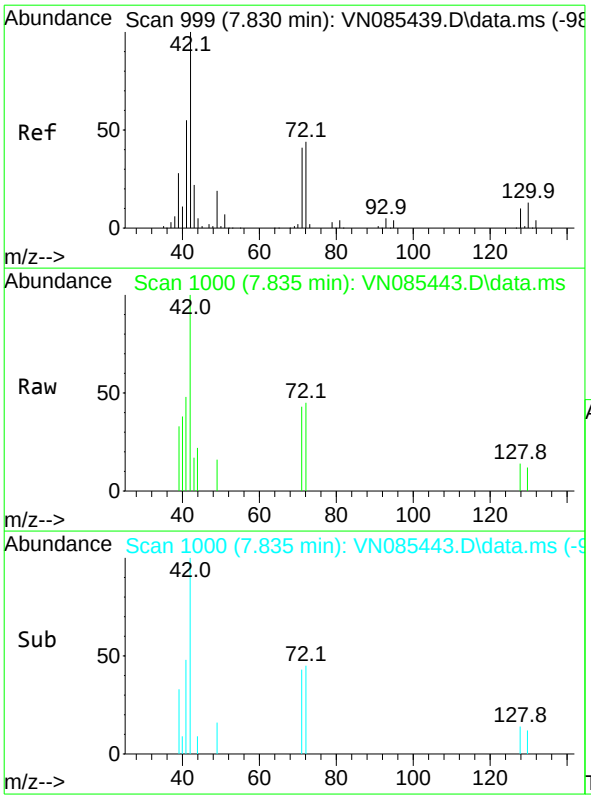



#28
Bromochloromethane
Concen: 1.138 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 49 Resp: 2082

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 0.0 | 0.0 | 4.4 |
| 130 | 78.0 | 55.0 | 82.4 |

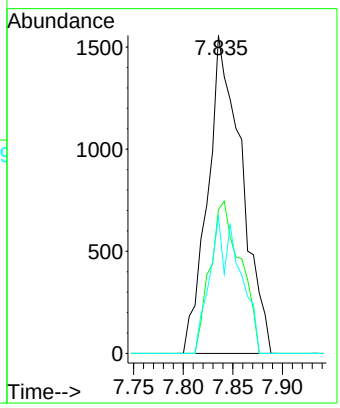





#29
Tetrahydrofuran
Concen: 4.548 ug/l
RT: 7.835 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 42 Resp: 3693

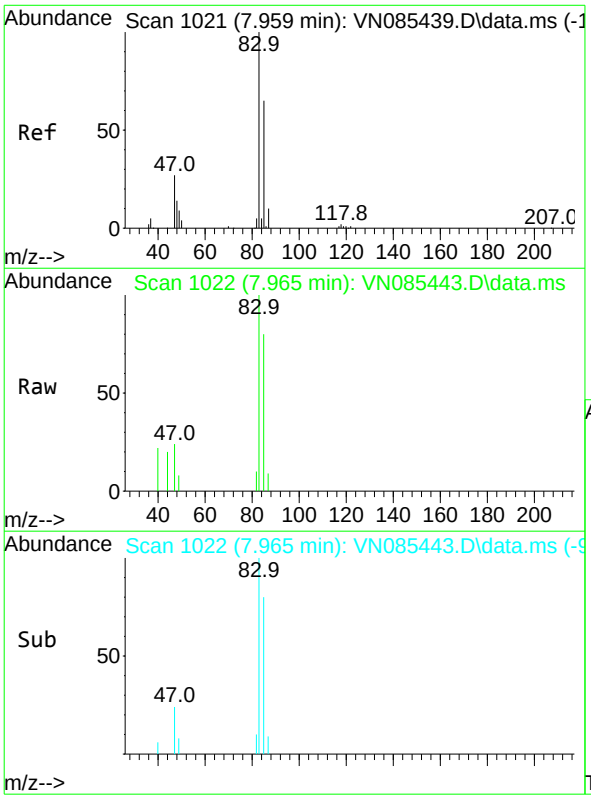
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 43.1 | 34.2 | 51.2 |
| 71 | 37.9 | 32.5 | 48.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

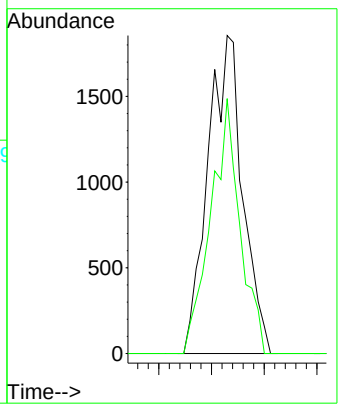
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

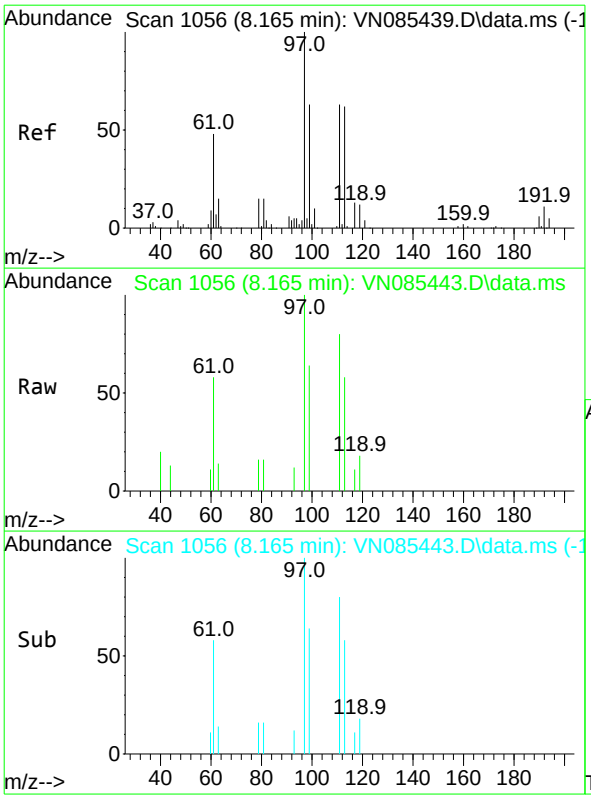



#30
Chloroform
Concen: 1.045 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 83 Resp: 4250

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 80.2 | 51.8 | 77.6# |

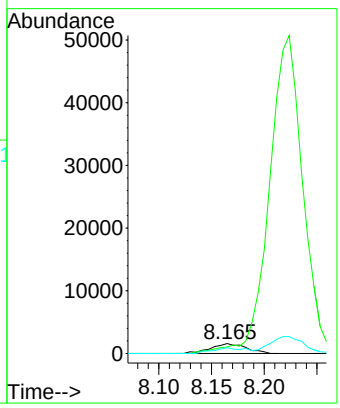





#32
1,1,1-Trichloroethane
Concen: 1.031 ug/l
RT: 8.165 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 97 Resp: 3678

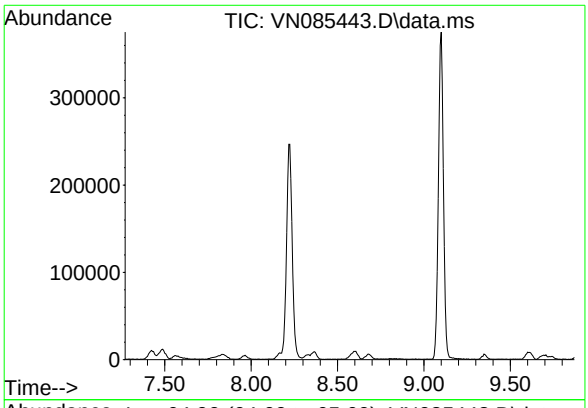
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 0.0 | 49.8 | 74.6# |
| 61 | 52.2 | 41.4 | 62.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

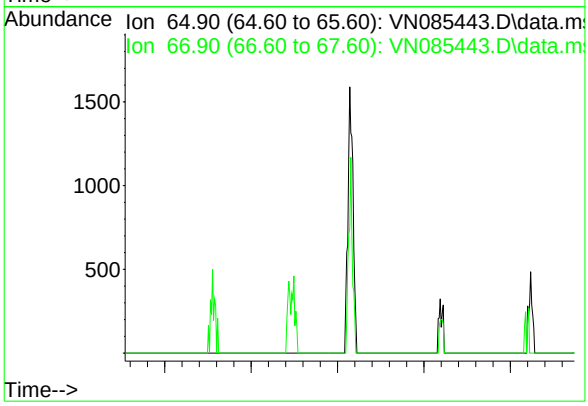


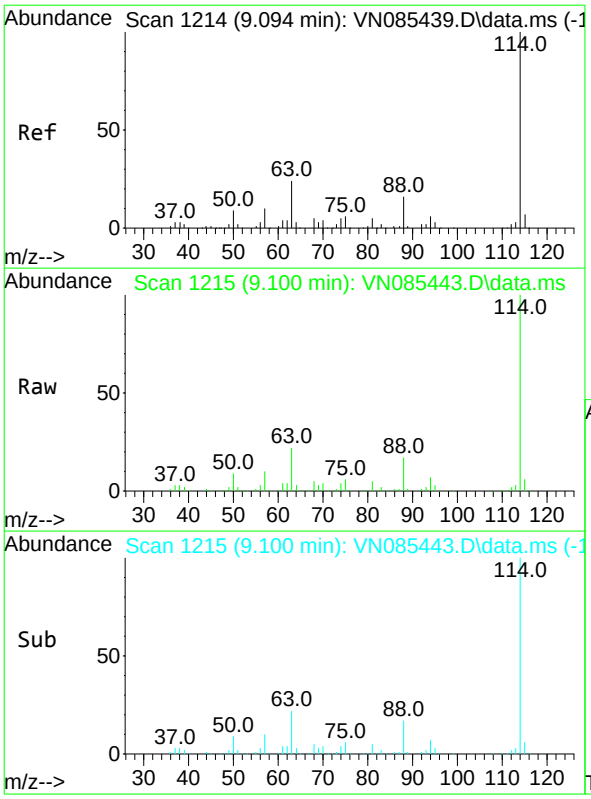

#33
1,2-Dichloroethane-d4
Concen: 0.000 ug/l
Expected RT: 8.57 min

Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 65

| Sig | Exp Ratio |
|---|---|
| 65 | 100 |
| 67 | 50.8 |

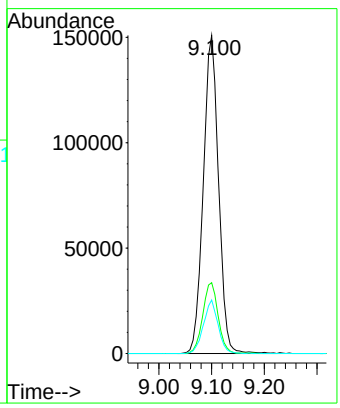





#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 12
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:114 Resp: 302938

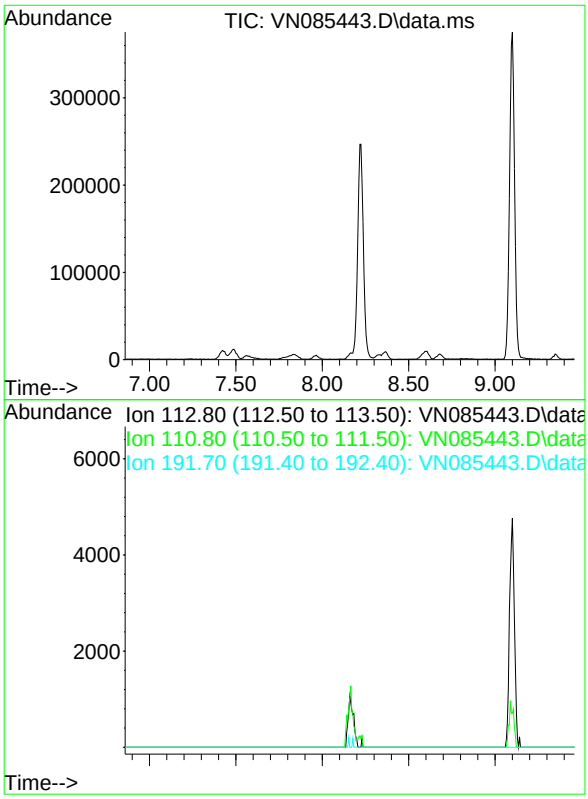
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.3 | 0.0 | 47.6 |
| 88 | 16.8 | 0.0 | 32.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

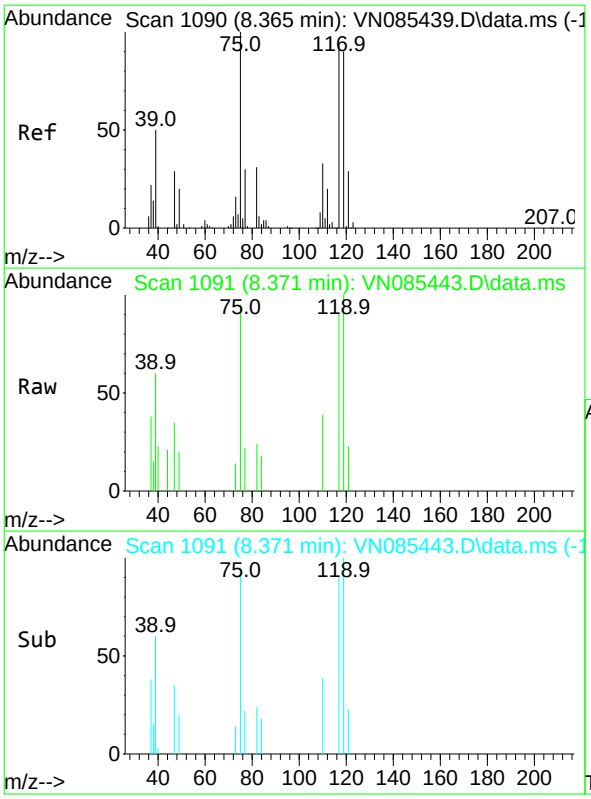



#35
Dibromofluoromethane
Concen: 0.000 ug/l
Expected RT: 8.16 min

Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 113

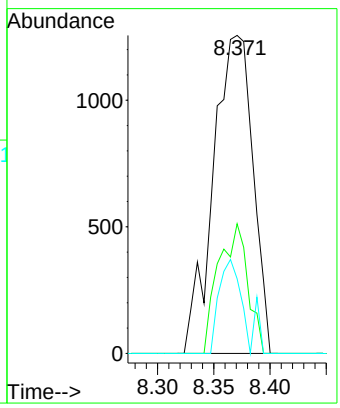
| Sig | Exp Ratio |
|---|---|
| 113 | 100 |
| 111 | 103.4 |
| 192 | 17.9 |




#36
1,1-Dichloropropene
Concen: 1.046 ug/l
RT: 8.371 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 75 Resp: 3084

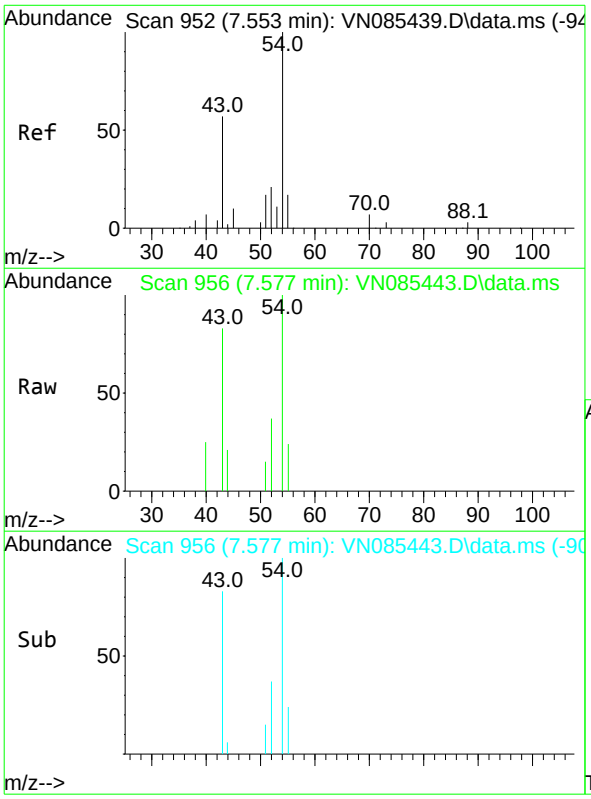
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 30.1 | 16.5 | 49.5 |
| 77 | 15.9 | 24.4 | 36.6# |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

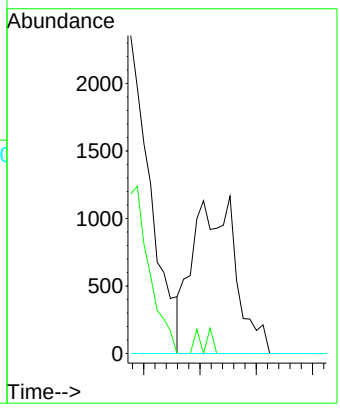
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

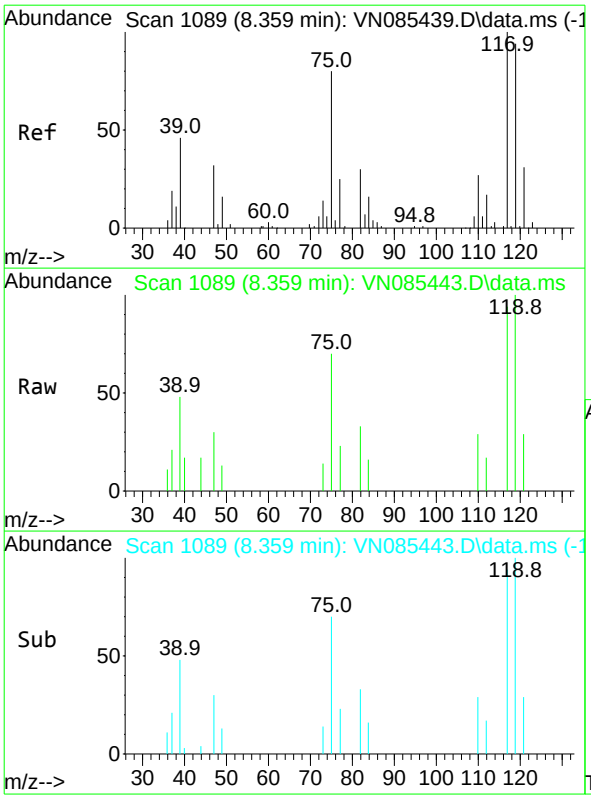



#37
Ethyl Acetate
Concen: 1.026 ug/l m
RT: 7.577 min Scan# 956
Delta R.T. 0.023 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 43 Resp: 3056

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 4.3 | 10.9 | 16.3# |
| 70 | 0.0 | 7.5 | 11.3# |

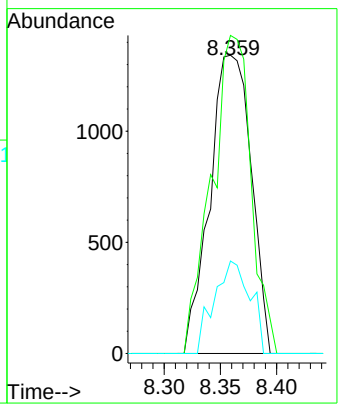





#38
Carbon Tetrachloride
Concen: 1.018 ug/l
RT: 8.359 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:117 Resp: 3436

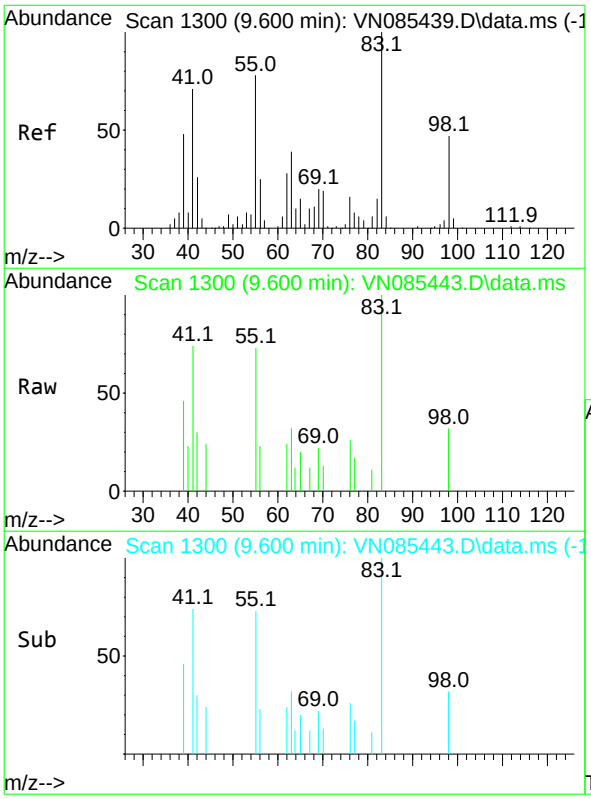
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 106.6 | 75.4 | 113.2 |
| 121 | 31.0 | 24.6 | 37.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

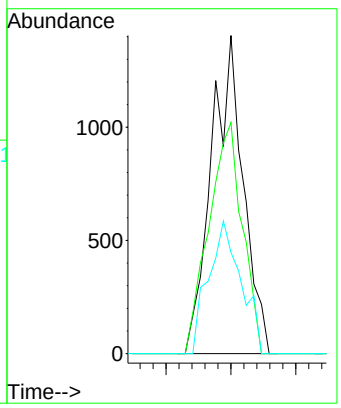
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

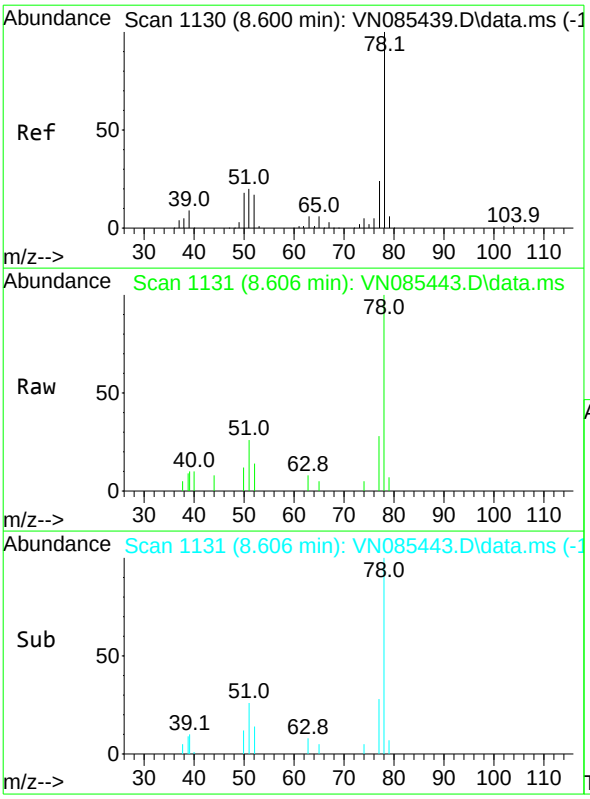



#39
Methylcyclohexane
Concen: 0.867 ug/l
RT: 9.600 min Scan# 1300
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 83 Resp: 2403

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 72.7 | 62.6 | 94.0 |
| 98 | 31.8 | 37.7 | 56.5# |

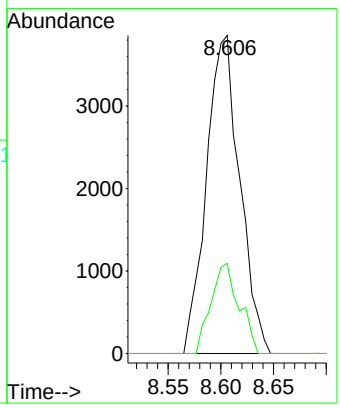





#40
Benzene
Concen: 0.957 ug/l
RT: 8.606 min Scan# 11
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 78 Resp: 8480

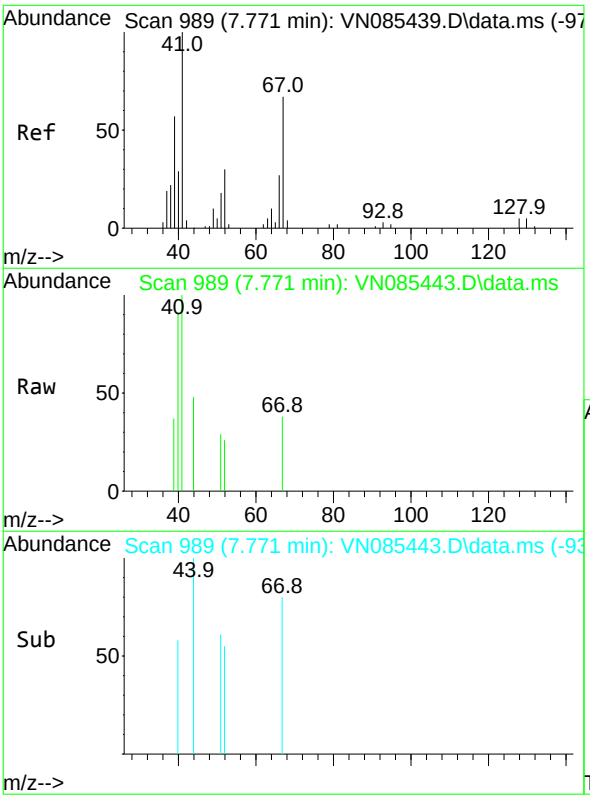
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 28.3 | 19.0 | 28.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

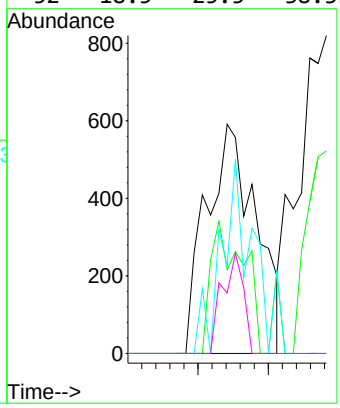
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

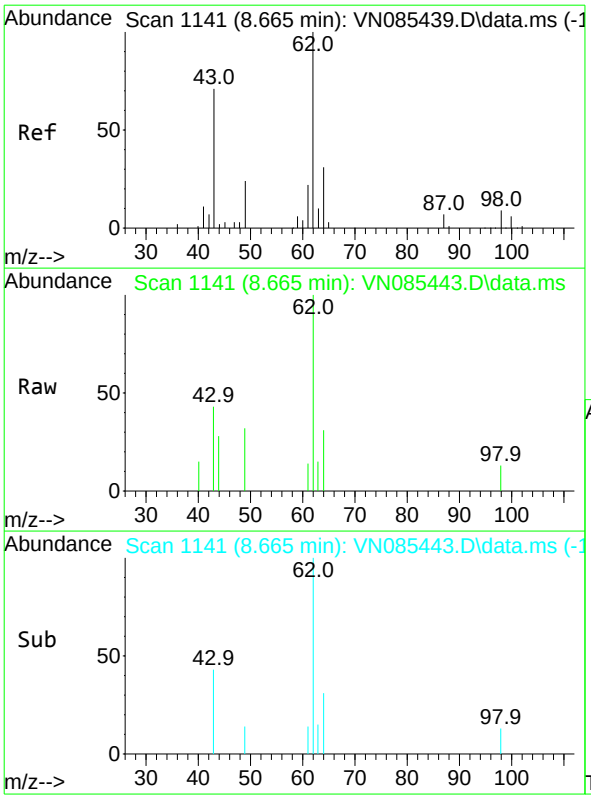



#41
Methacrylonitrile
Concen: 0.941 ug/l
RT: 7.771 min Scan# 989
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 41 Resp: 1458

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 37.6 | 46.0 | 69.0# |
| 67 | 53.8 | 57.4 | 86.2# |
| 52 | 18.5 | 25.5 | 38.3# |

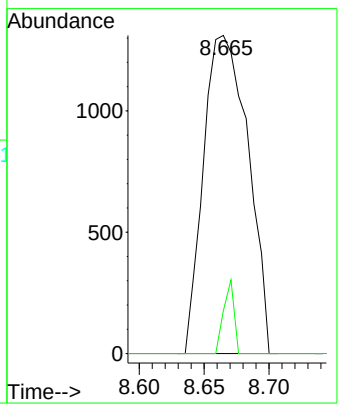





#42
1,2-Dichloroethane
Concen: 0.938 ug/l
RT: 8.665 min Scan# 11
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 62 Resp: 3131

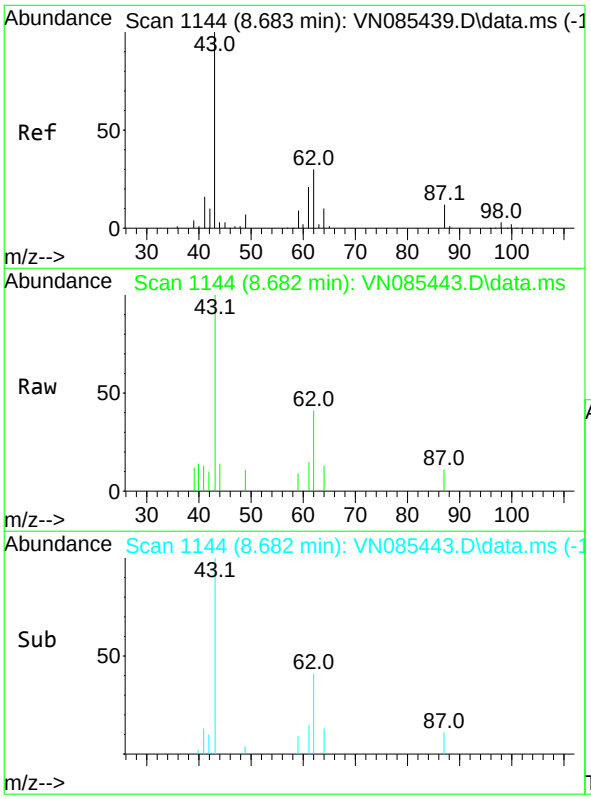
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 5.4 | 0.0 | 17.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

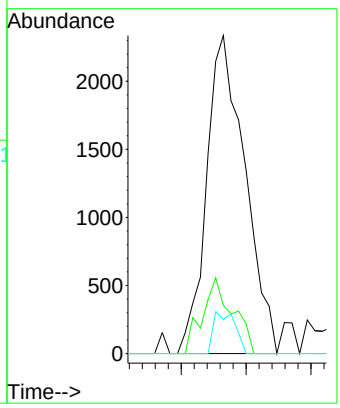
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

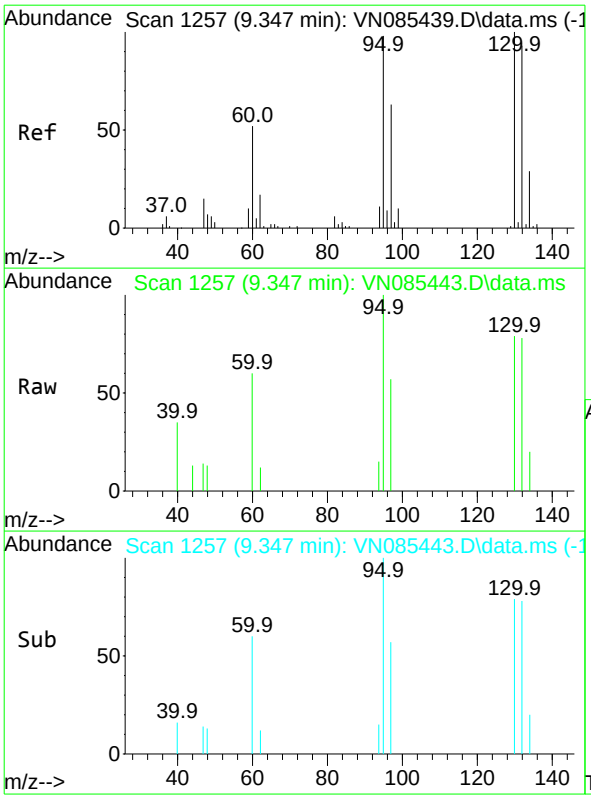



#43
Isopropyl Acetate
Concen: 1.007 ug/l
RT: 8.682 min Scan# 1144
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 43 Resp: 4803

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 18.9 | 20.7 | 31.1# |
| 87 | 7.3 | 9.8 | 14.8# |

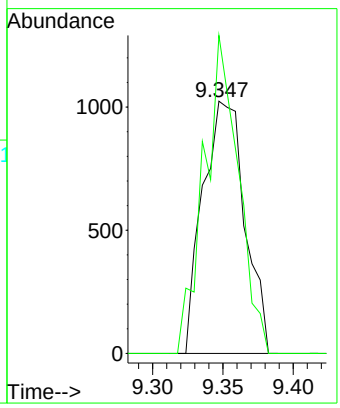





#44
Trichloroethene
Concen: 1.034 ug/l
RT: 9.347 min Scan# 12
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:130 Resp: 2133

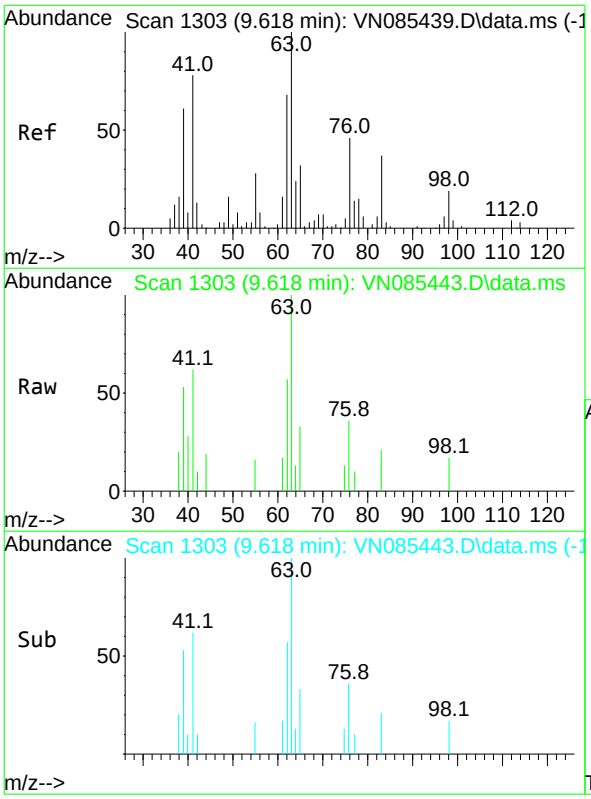
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 126.1 | 0.0 | 195.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

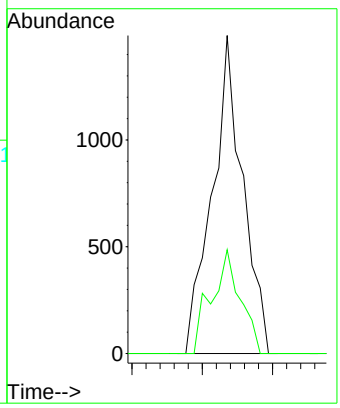
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

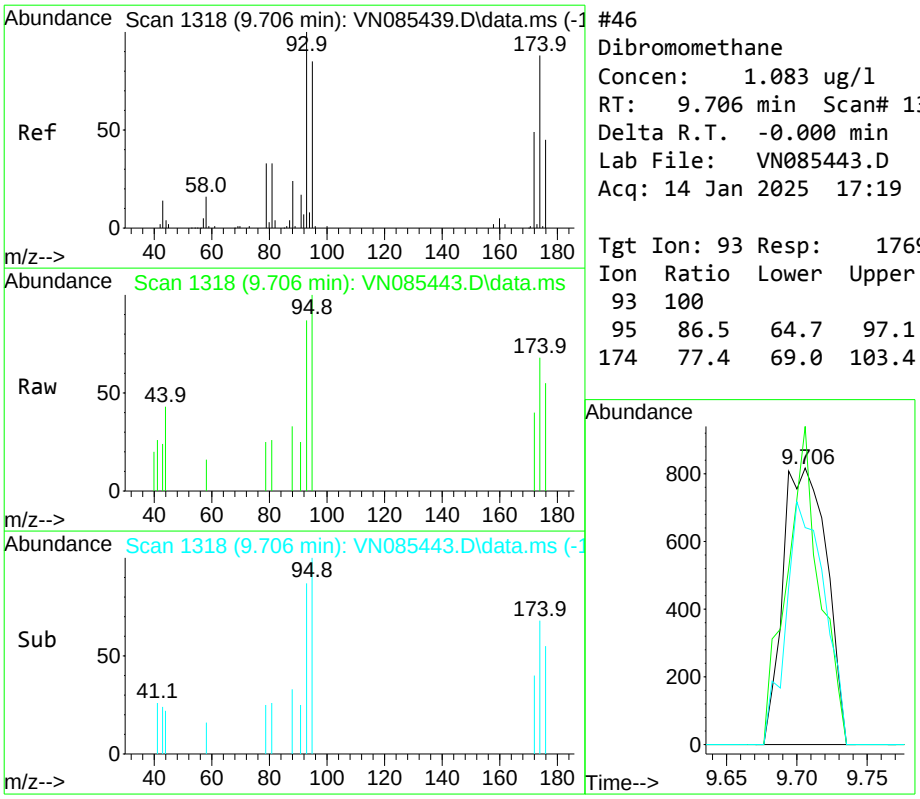



#45
1,2-Dichloropropane
Concen: 0.992 ug/l
RT: 9.618 min Scan# 1303
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 63 Resp: 2246

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 32.6 | 25.6 | 38.4 |






#46
Dibromomethane
Concen: 1.083 ug/l
RT: 9.706 min Scan# 13
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 93 Resp: 1769

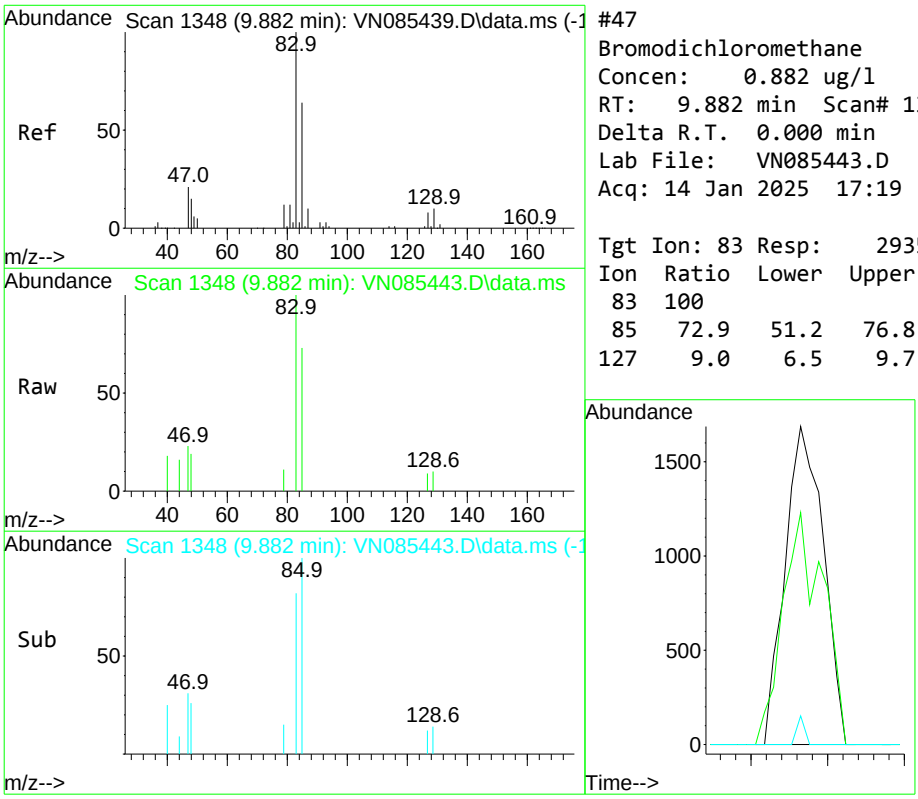
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 86.5 | 64.7 | 97.1 |
| 174 | 77.4 | 69.0 | 103.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

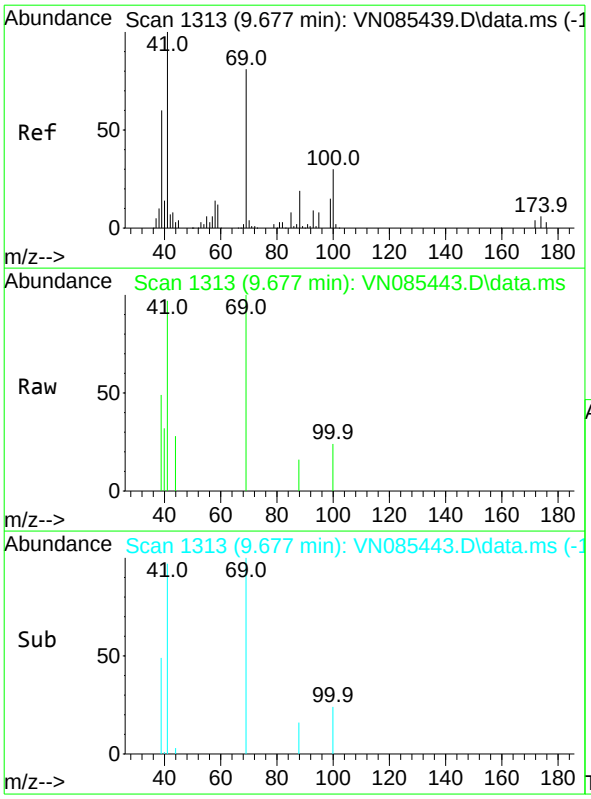
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025




#47
Bromodichloromethane
Concen: 0.882 ug/l
RT: 9.882 min Scan# 1348
Delta R.T. 0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 83 Resp: 2935

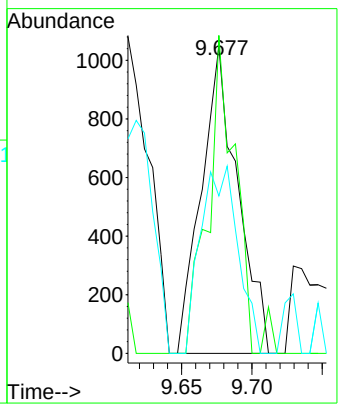
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 72.9 | 51.2 | 76.8 |
| 127 | 9.0 | 6.5 | 9.7 |




#48
Methyl methacrylate
Concen: 0.878 ug/l
RT: 9.677 min Scan# 13
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 41 Resp: 1886

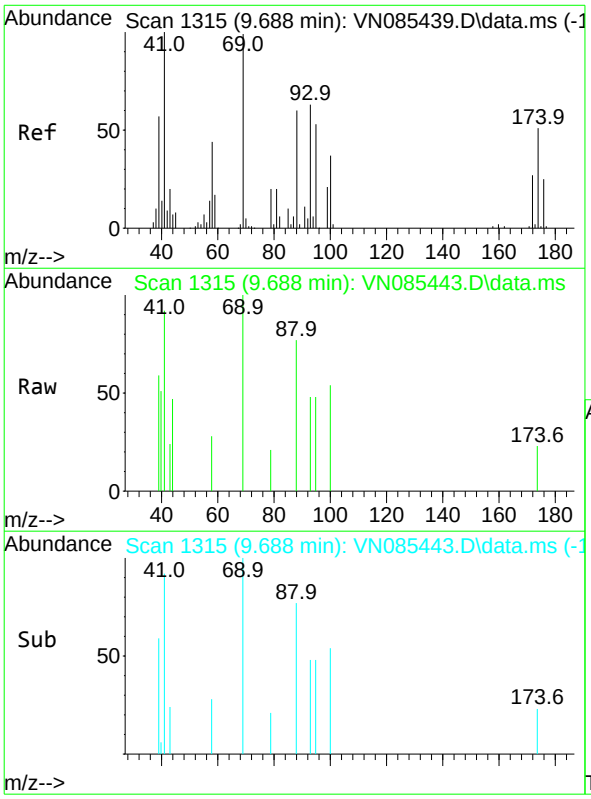
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 76.2 | 64.7 | 97.1 |
| 39 | 62.8 | 49.0 | 73.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

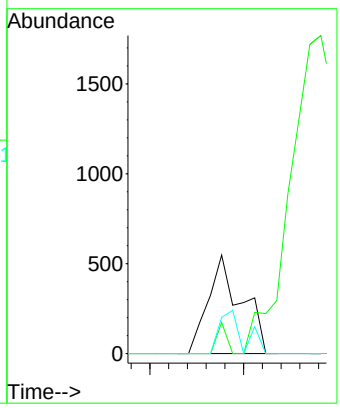
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

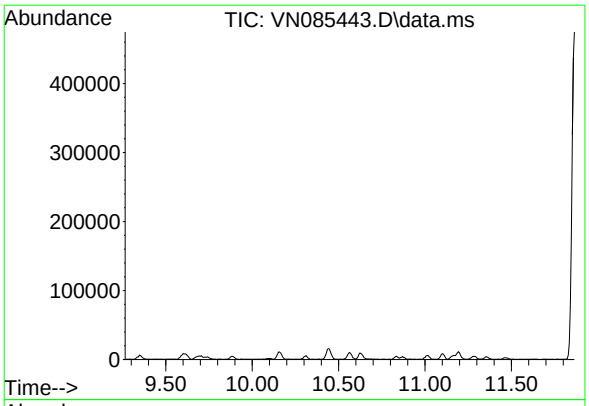



#49
1,4-Dioxane
Concen: 18.616 ug/l
RT: 9.688 min Scan# 1315
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 88 Resp: 673

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 0.0 | 26.6 | 39.8# |
| 58 | 31.1 | 59.5 | 89.3# |






#50
Toluene-d8
Concen: 0.000 ug/l
Expected RT: 10.56 min

Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

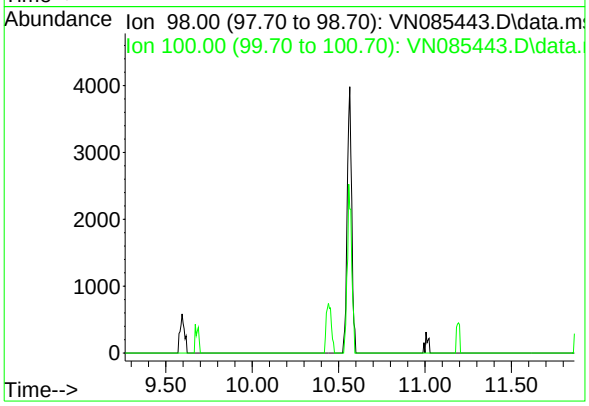
Tgt Ion: 98

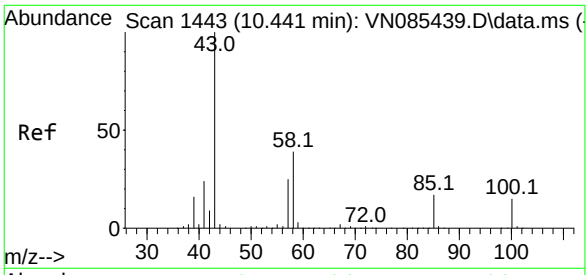
| Sig | Exp Ratio |
|---|---|
| 98 | 100 |
| 100 | 65.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

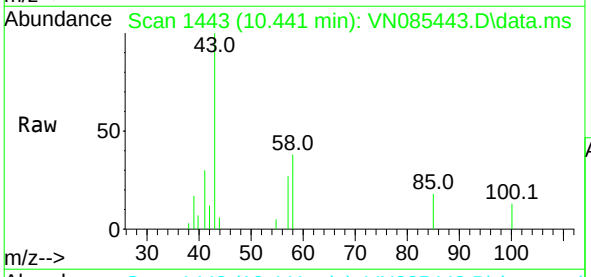


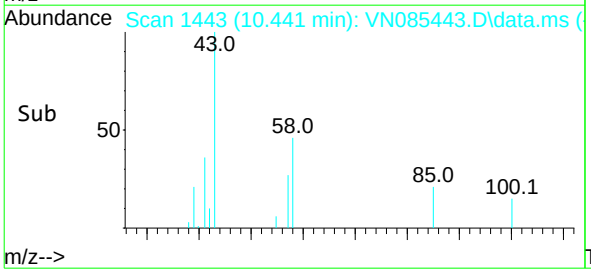



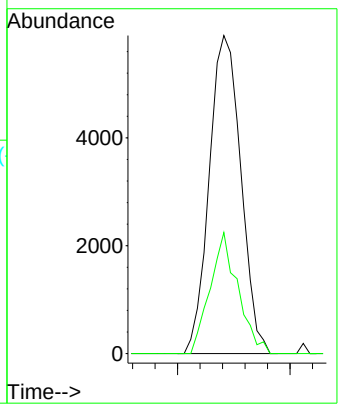

#51
4-Methyl-2-Pentanone
Concen: 4.163 ug/l
RT: 10.441 min Scan# 1443
Delta R.T. 0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

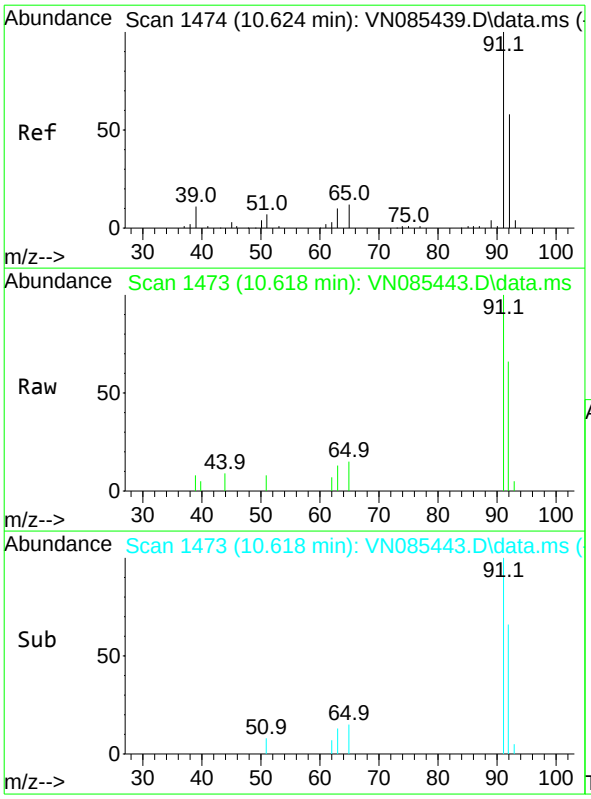
Tgt Ion: 43 Resp: 11523

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 33.6 | 30.5 | 45.7 |



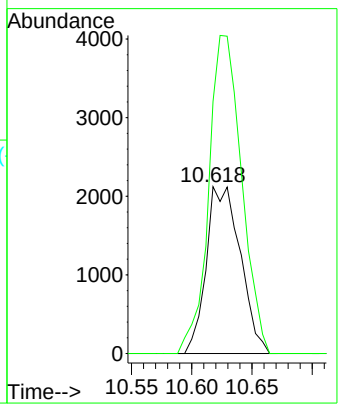






#52
Toluene
Concen: 0.814 ug/l
RT: 10.618 min Scan# 14
Delta R.T. -0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 92 Resp: 4180

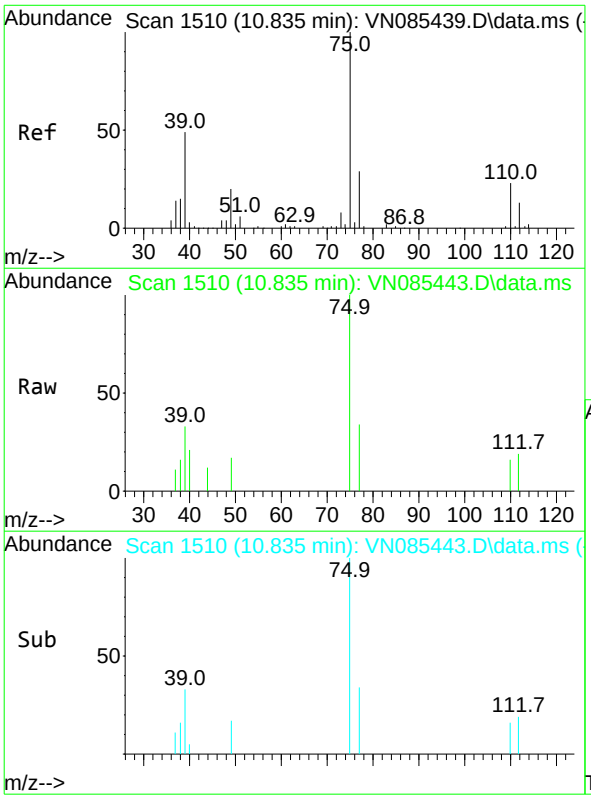
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 183.9 | 139.2 | 208.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

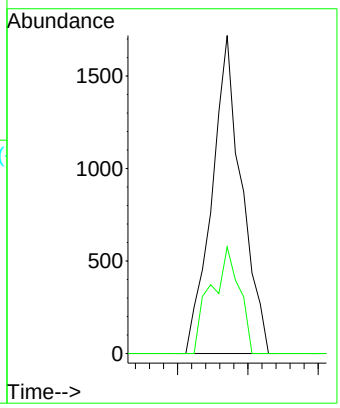
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

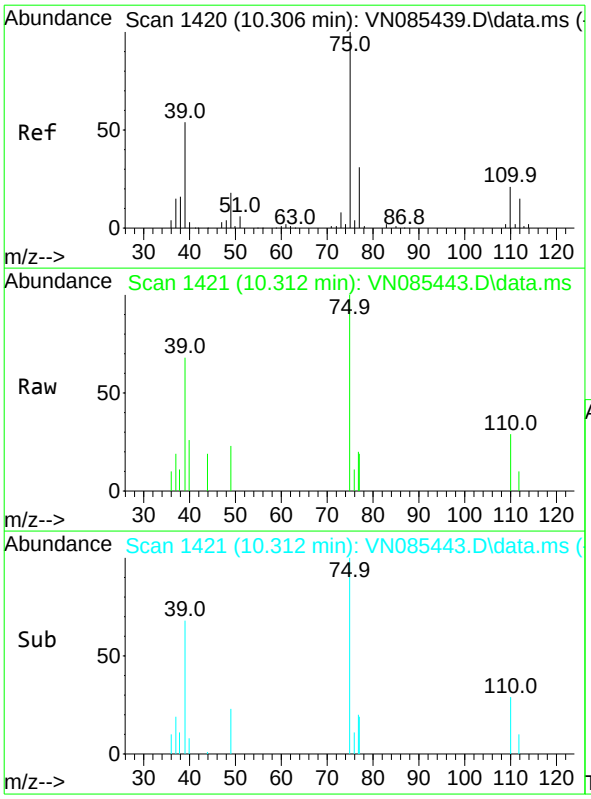



#53
t-1,3-Dichloropropene
Concen: 0.802 ug/l
RT: 10.835 min Scan# 1510
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 75 Resp: 2522

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 33.5 | 23.5 | 35.3 |

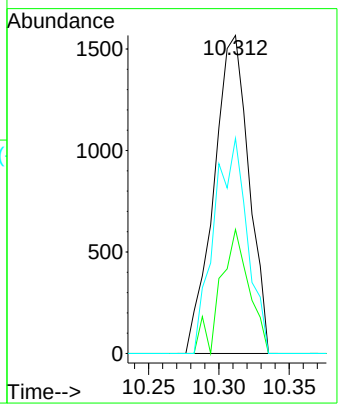





#54
cis-1,3-Dichloropropene
Concen: 0.811 ug/l
RT: 10.312 min Scan# 14
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 75 Resp: 2725

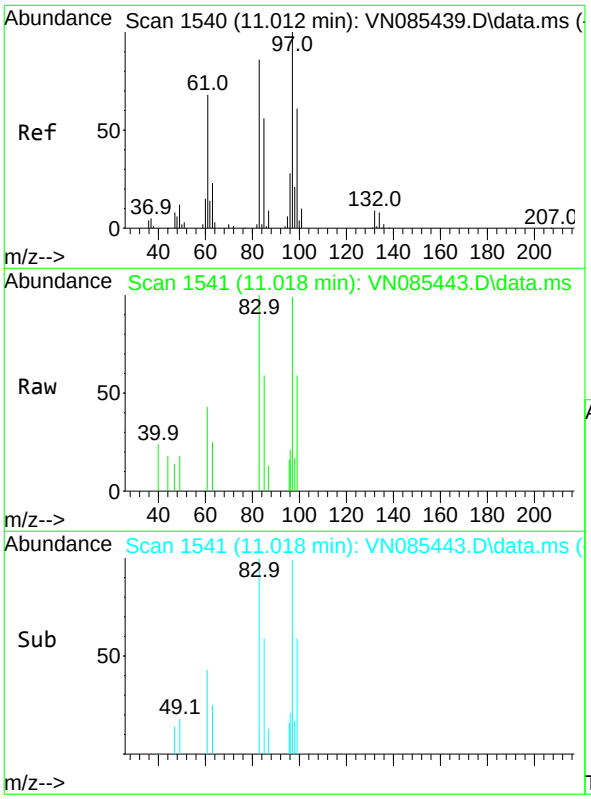
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 39.0 | 25.0 | 37.4# |
| 39 | 67.6 | 43.1 | 64.7# |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

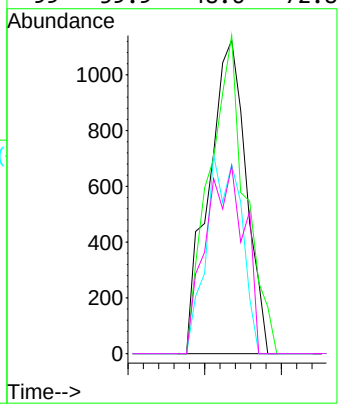
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

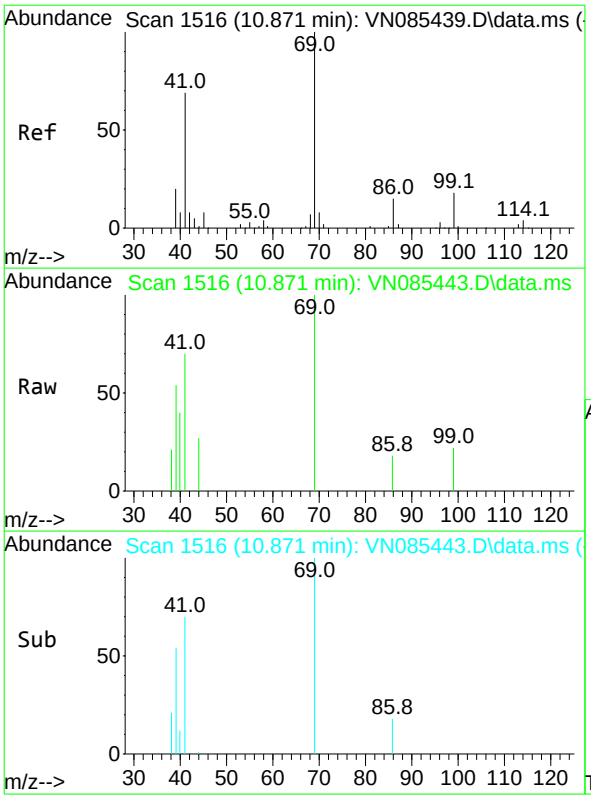



#55
1,1,2-Trichloroethane
Concen: 0.935 ug/l
RT: 11.018 min Scan# 1541
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 97 Resp: 1901

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 101.5 | 69.0 | 103.6 |
| 85 | 60.3 | 44.6 | 66.8 |
| 99 | 59.9 | 48.6 | 72.8 |

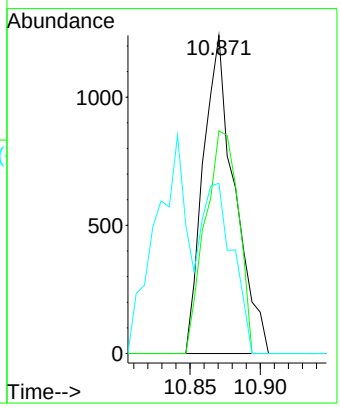





#56
Ethyl methacrylate
Concen: 2.471 ug/l
RT: 10.871 min Scan# 15
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 69 Resp: 1923

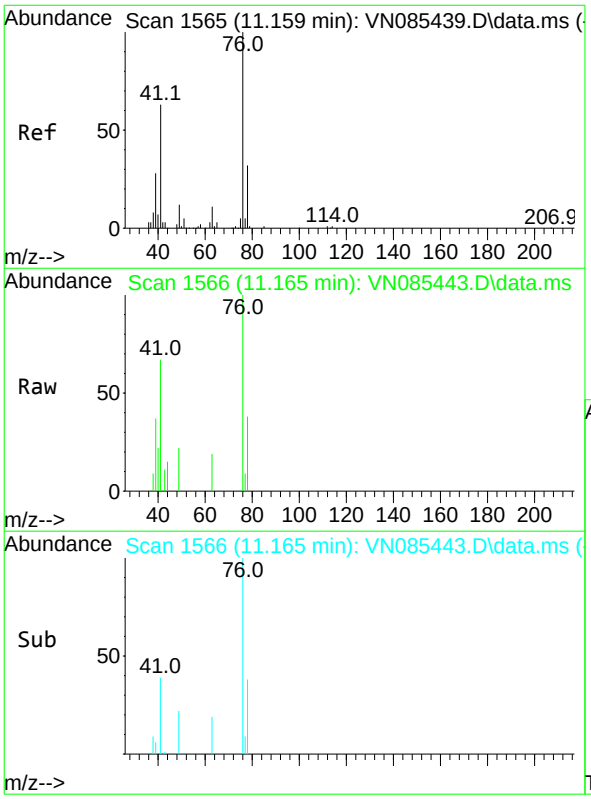
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 74.4 | 54.6 | 82.0 |
| 39 | 52.4 | 32.4 | 48.6# |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

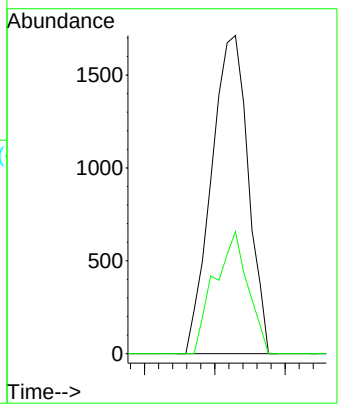
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

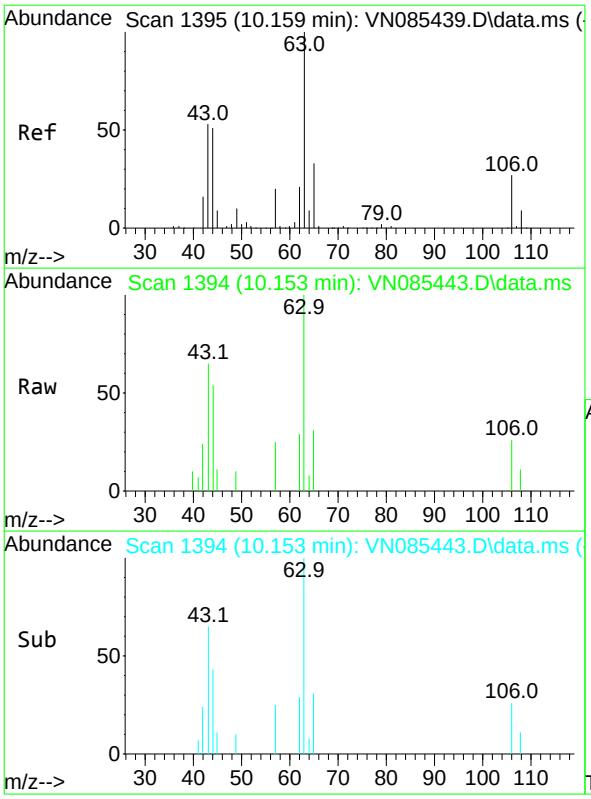



#57
1,3-Dichloropropane
Concen: 0.881 ug/l
RT: 11.165 min Scan# 1566
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 76 Resp: 3113

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 34.9 | 25.6 | 38.4 |

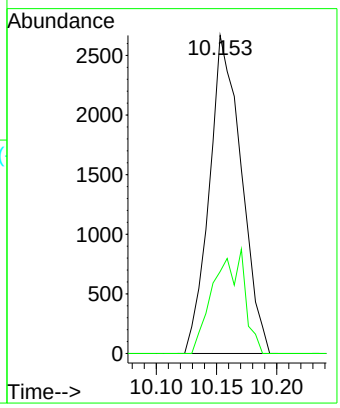





#58
2-Chloroethyl Vinyl ether
Concen: 3.822 ug/l
RT: 10.153 min Scan# 13
Delta R.T. -0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 63 Resp: 4929

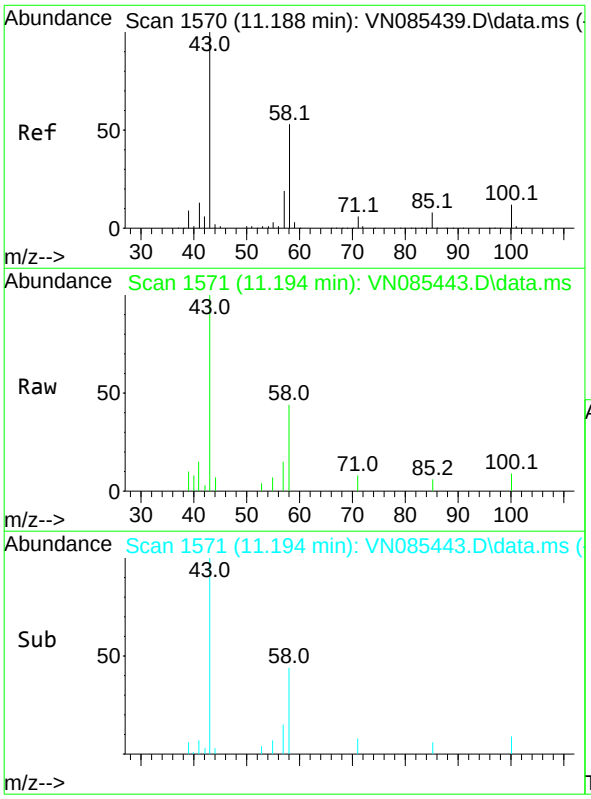
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 31.7 | 21.6 | 32.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

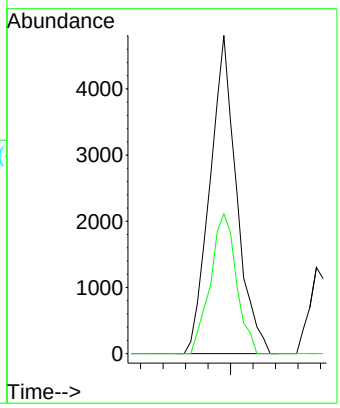
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

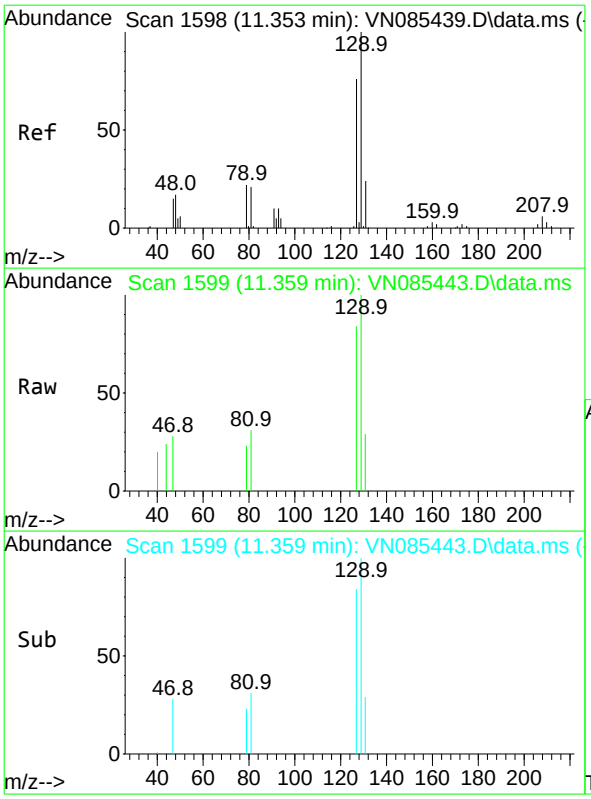



#59
2-Hexanone
Concen: 4.058 ug/l
RT: 11.194 min Scan# 1571
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 43 Resp: 7905

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 42.9 | 26.2 | 78.6 |

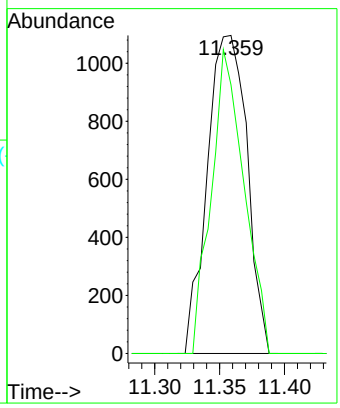





#60
Dibromochloromethane
Concen: 0.953 ug/l
RT: 11.359 min Scan# 15
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:129 Resp: 2339

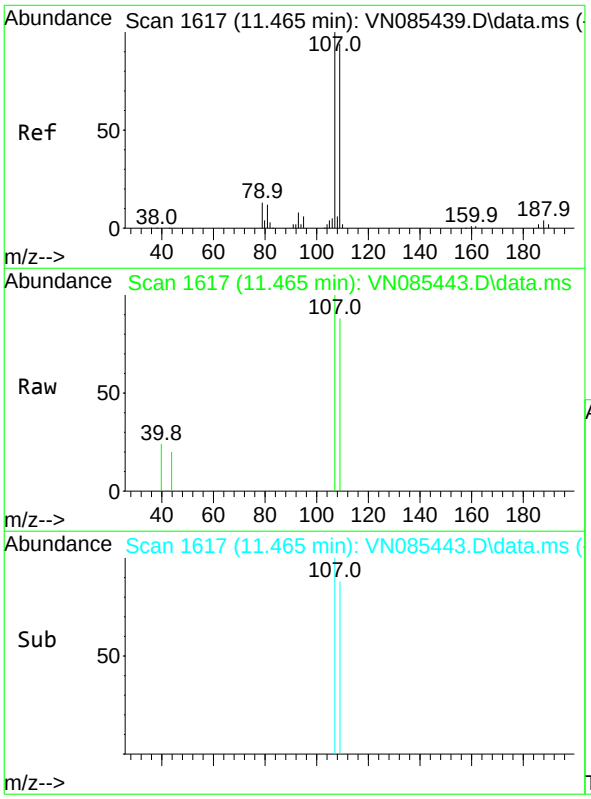
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 78.9 | 38.6 | 115.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

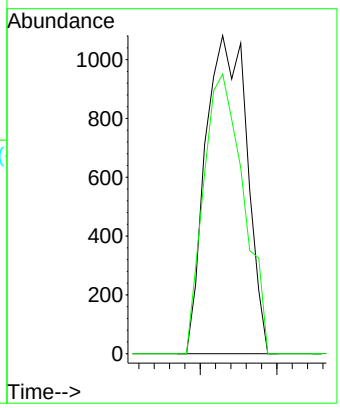
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

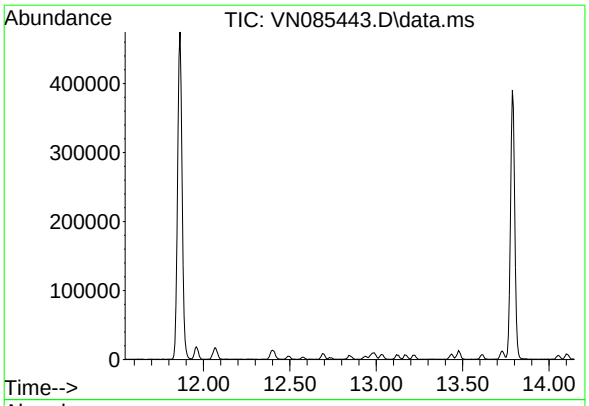



#61
1,2-Dibromoethane
Concen: 1.000 ug/l
RT: 11.465 min Scan# 1617
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:107 Resp: 2022

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 84.8 | 75.9 | 113.9 |






#62
4-Bromofluorobenzene
Concen: 0.000 ug/l
Expected RT: 12.85 min

Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

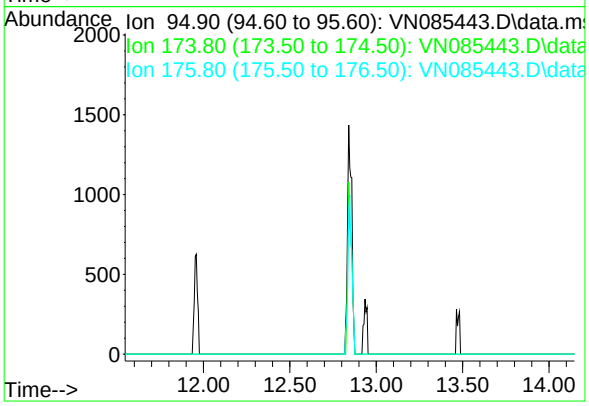
Tgt Ion: 95

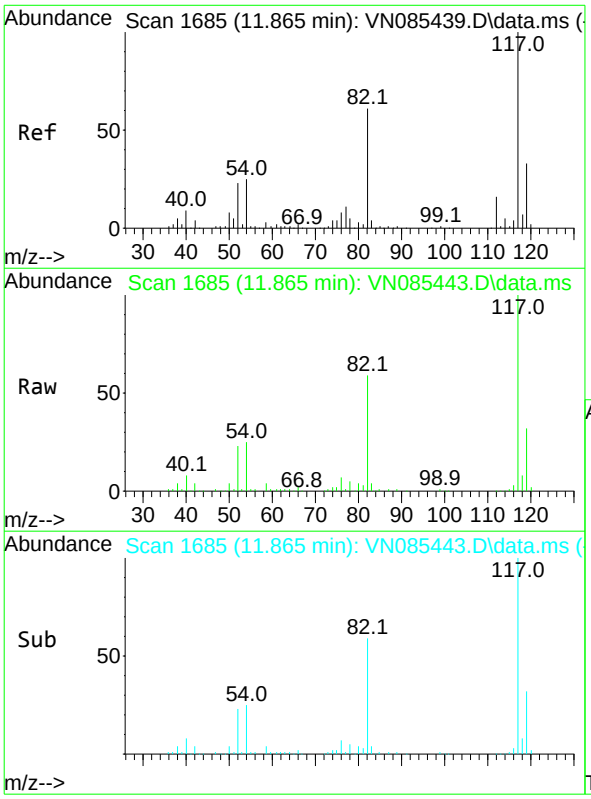
| Sig | Exp Ratio |
|---|---|
| 95 | 100 |
| 174 | 72.5 |
| 176 | 71.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

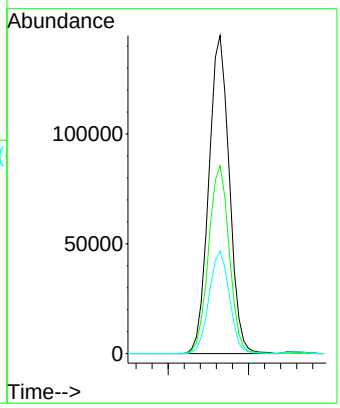


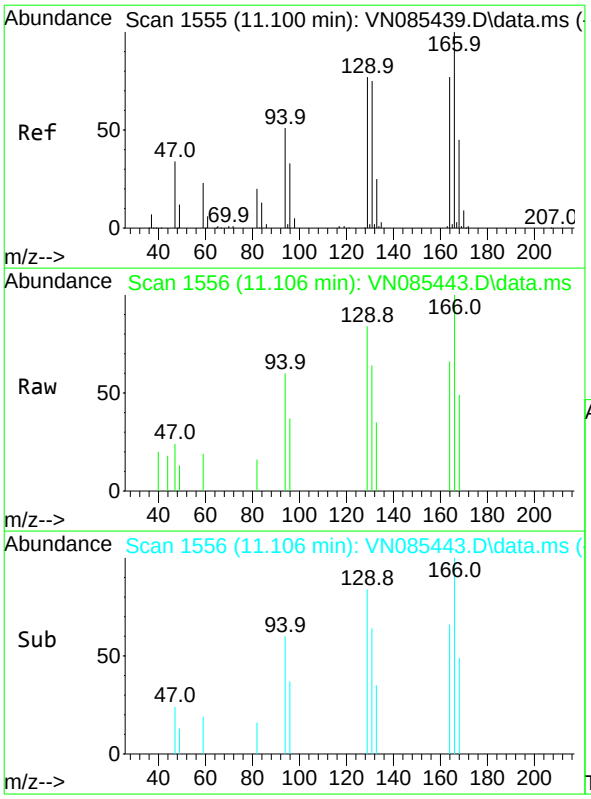




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:117 Resp: 256851

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 59.0 | 48.6 | 72.8 |
| 119 | 32.2 | 26.6 | 39.8 |

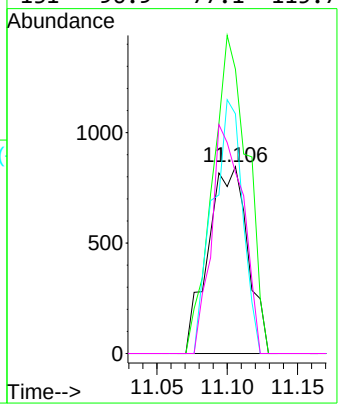





#64
Tetrachloroethene
Concen: 0.947 ug/l
RT: 11.106 min Scan# 15
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:164 Resp: 1658

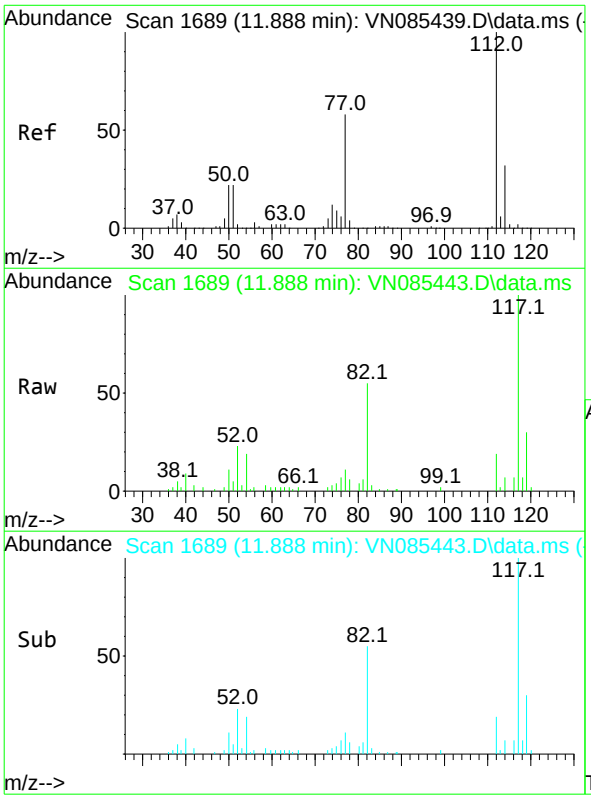
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 152.1 | 103.4 | 155.2 |
| 129 | 128.3 | 79.2 | 118.8# |
| 131 | 96.9 | 77.1 | 115.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

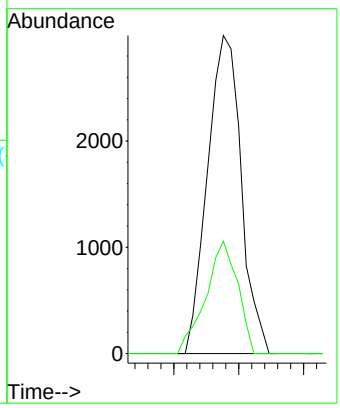
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

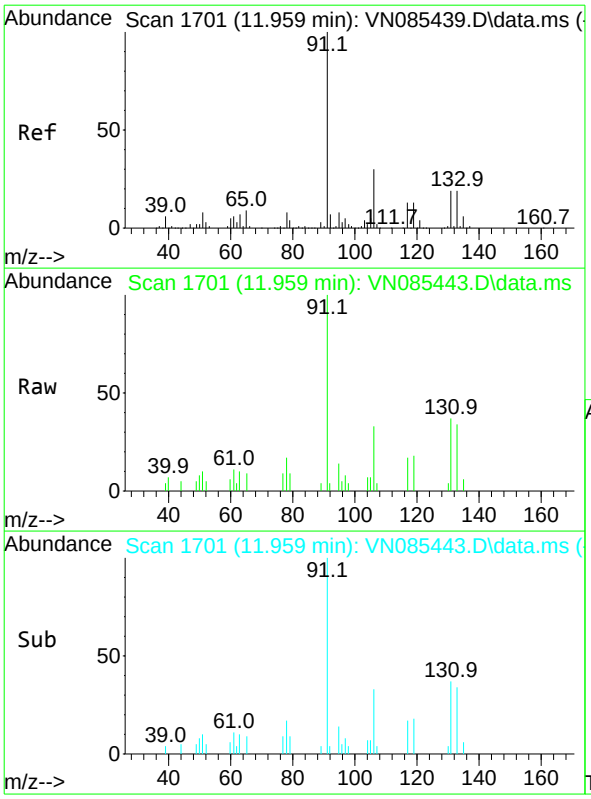



#65
Chlorobenzene
Concen: 0.960 ug/l
RT: 11.888 min Scan# 1689
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:112 Resp: 5401

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 35.3 | 25.3 | 37.9 |

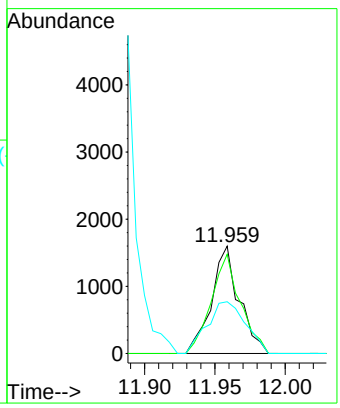





#66
1,1,1,2-Tetrachloroethane
Concen: 1.058 ug/l
RT: 11.959 min Scan# 17
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:131 Resp: 2185

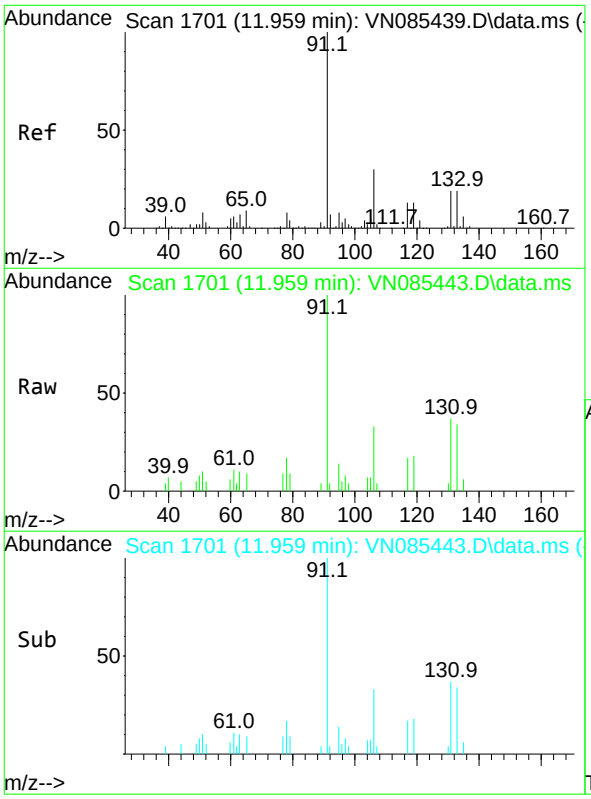
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 97.7 | 47.4 | 142.3 |
| 119 | 0.0 | 33.1 | 99.5# |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

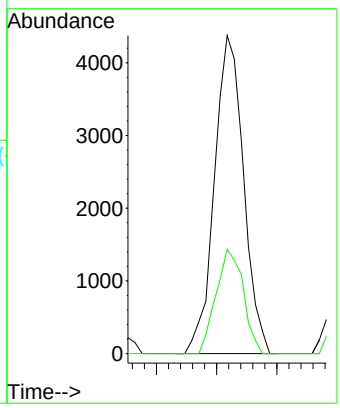
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

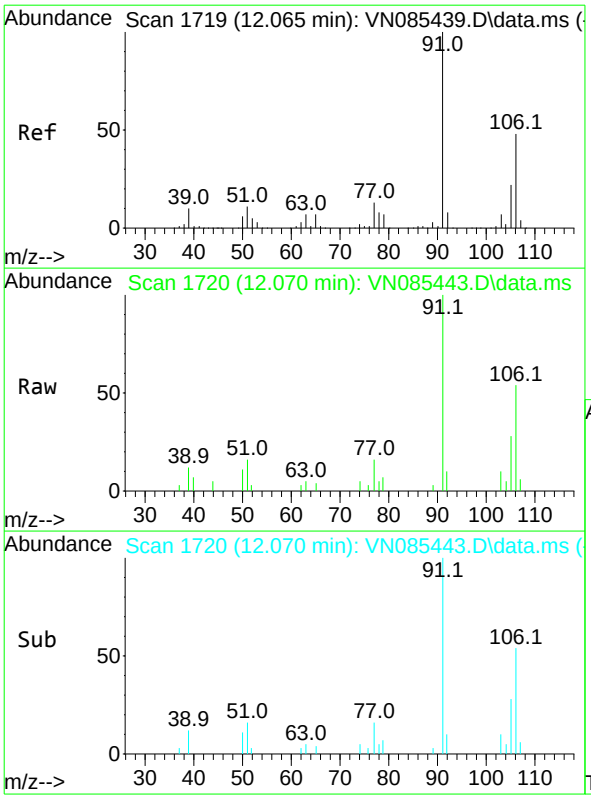



#67
Ethyl Benzene
Concen: 0.802 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 91 Resp: 7347

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 32.8 | 23.8 | 35.8 |

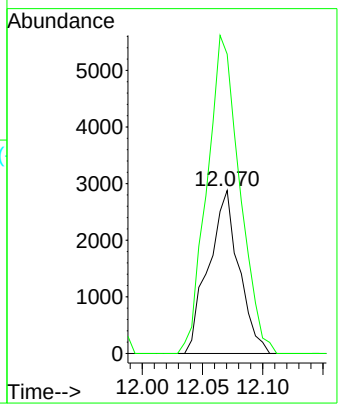





#68
m/p-Xylenes
Concen: 1.494 ug/l
RT: 12.070 min Scan# 17
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:106 Resp: 5059

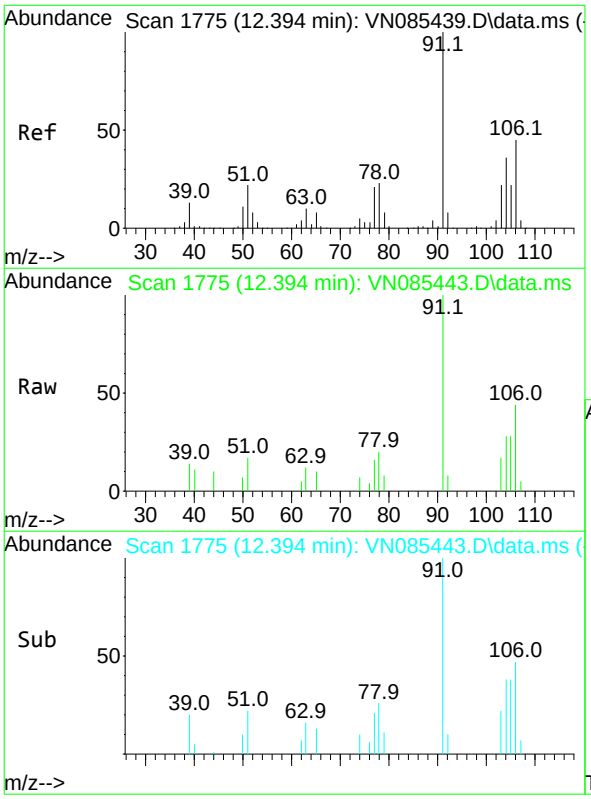
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 209.3 | 167.7 | 251.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

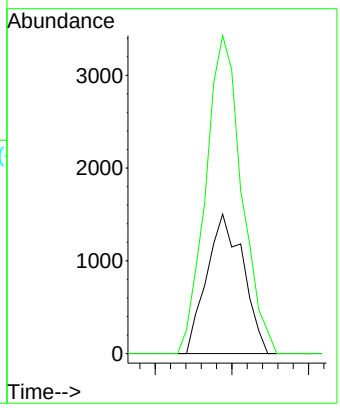
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

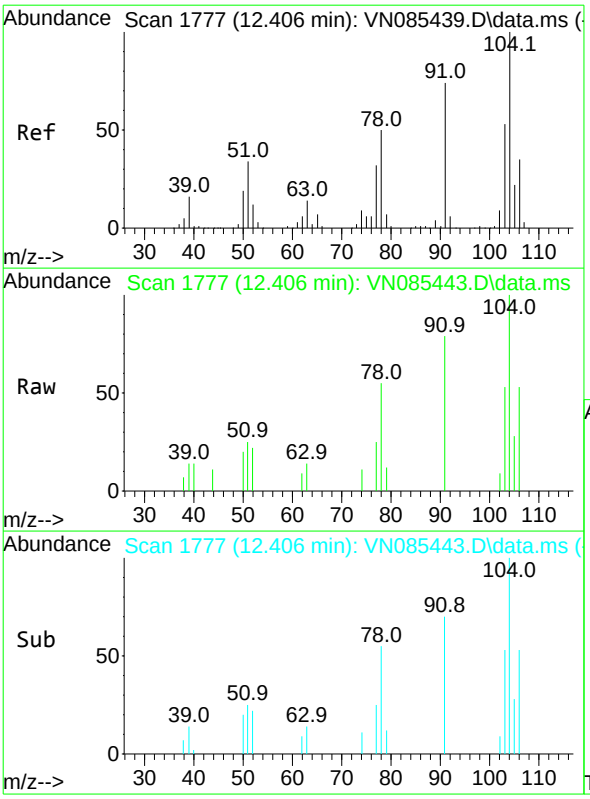



#69
o-Xylene
Concen: 0.766 ug/l
RT: 12.394 min Scan# 1775
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:106 Resp: 2478

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 225.4 | 110.4 | 331.2 |

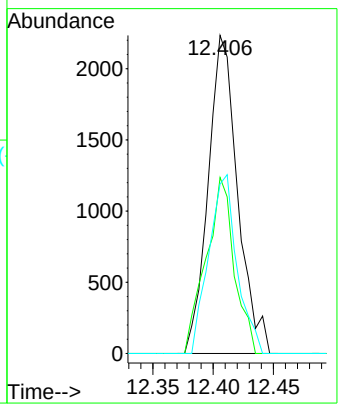





#70
Styrene
Concen: 0.712 ug/l
RT: 12.406 min Scan# 17
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:104 Resp: 3812

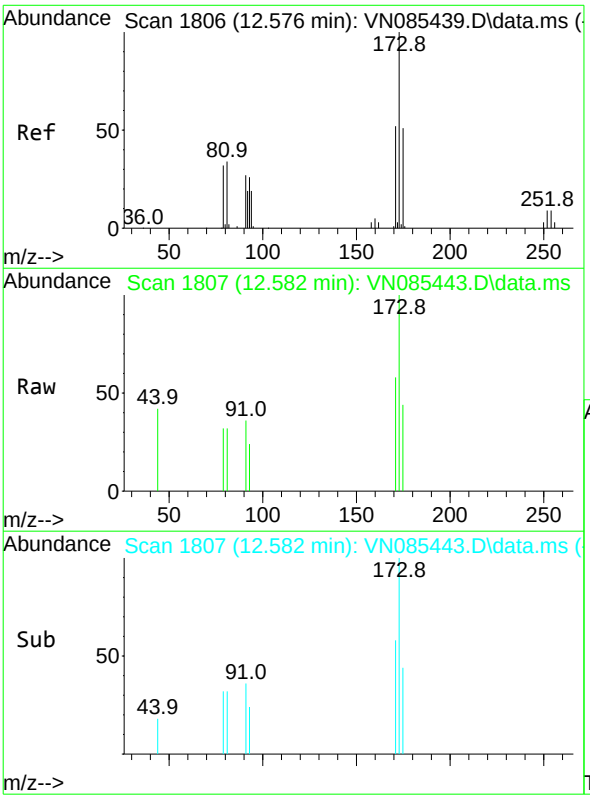
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 52.9 | 42.5 | 63.7 |
| 103 | 53.7 | 43.8 | 65.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

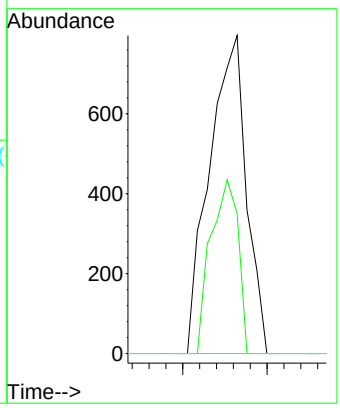
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

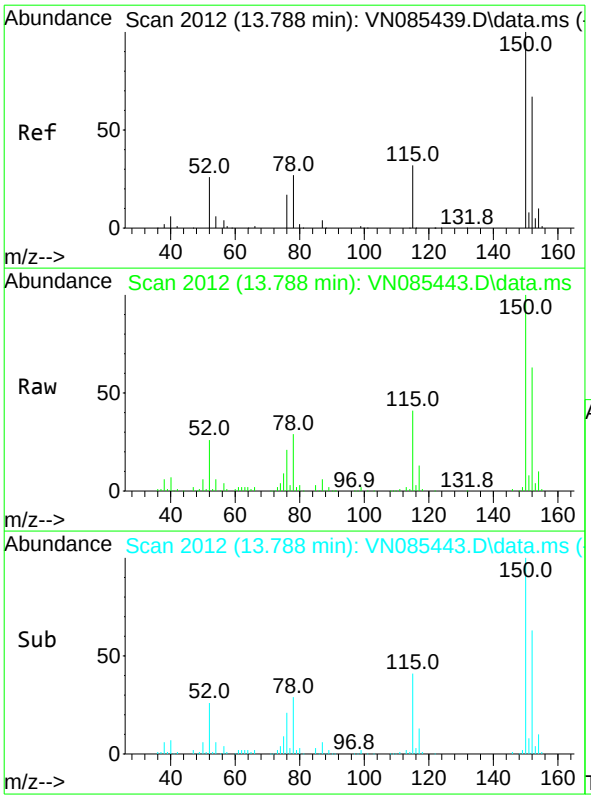



#71
Bromoform
Concen: 0.818 ug/l
RT: 12.582 min Scan# 1807
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:173 Resp: 1208

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 40.7 | 24.4 | 73.2 |
| 254 | 0.0 | 0.0 | 0.0 |

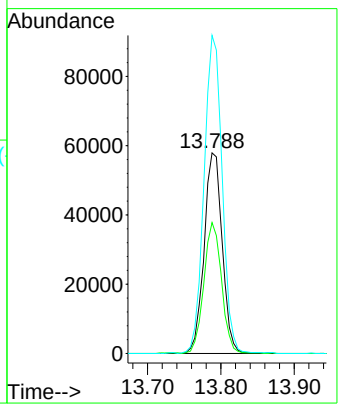





#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 20
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:152 Resp: 99539

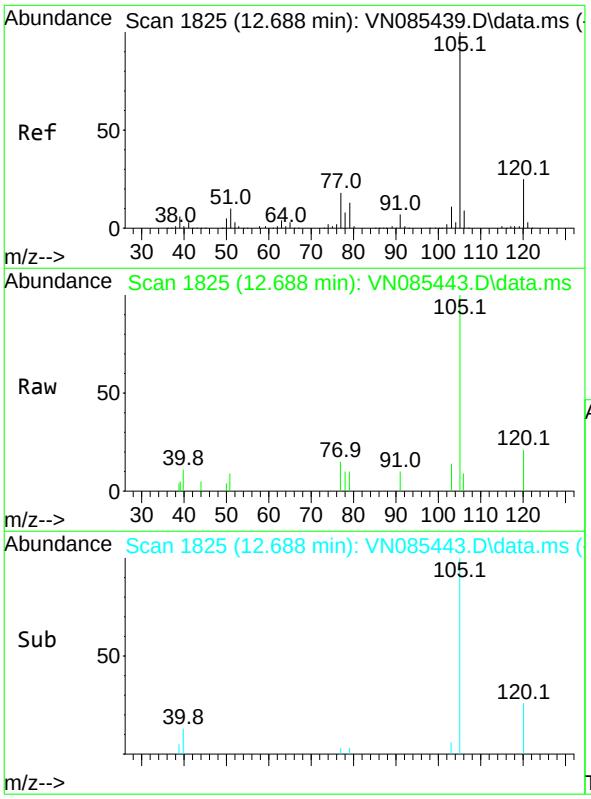
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 63.8 | 31.1 | 93.3 |
| 150 | 158.5 | 0.0 | 343.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

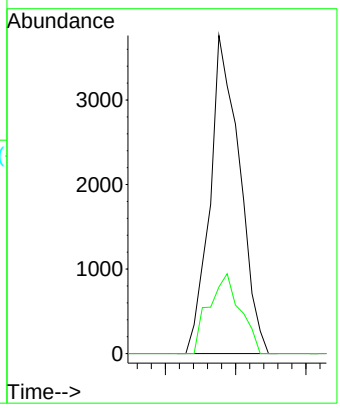
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

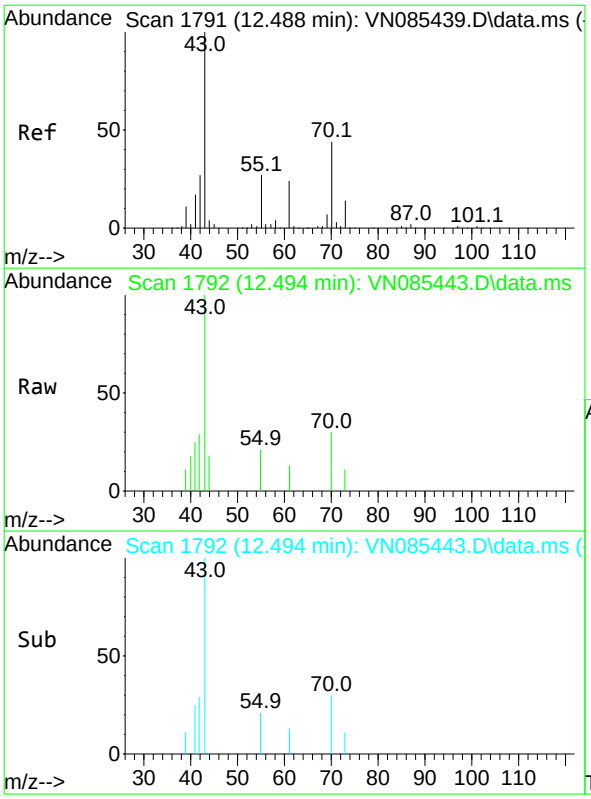



#73
Isopropylbenzene
Concen: 0.820 ug/l
RT: 12.688 min Scan# 1825
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:105 Resp: 5506

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.7 | 12.8 | 38.3 |

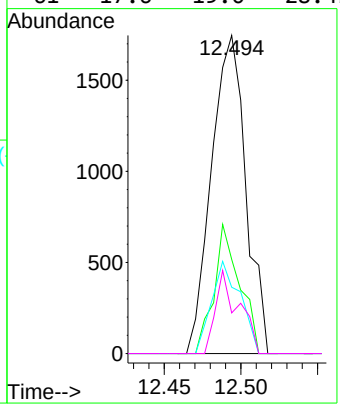





#74
N-amyl acetate
Concen: 0.899 ug/l
RT: 12.494 min Scan# 17
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 43 Resp: 2716

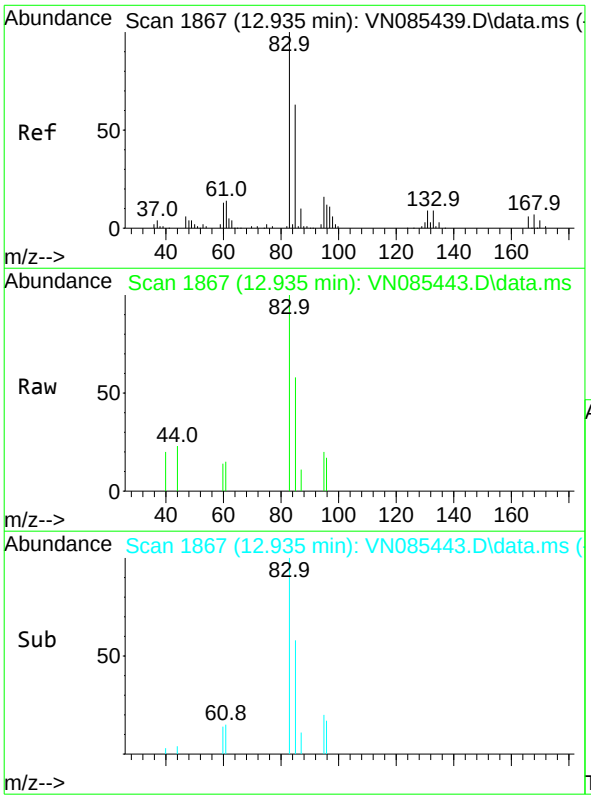
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 30.4 | 34.0 | 51.0# |
| 55 | 24.2 | 21.4 | 32.2 |
| 61 | 17.6 | 19.0 | 28.4# |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

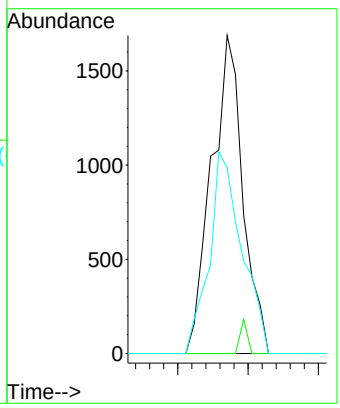
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

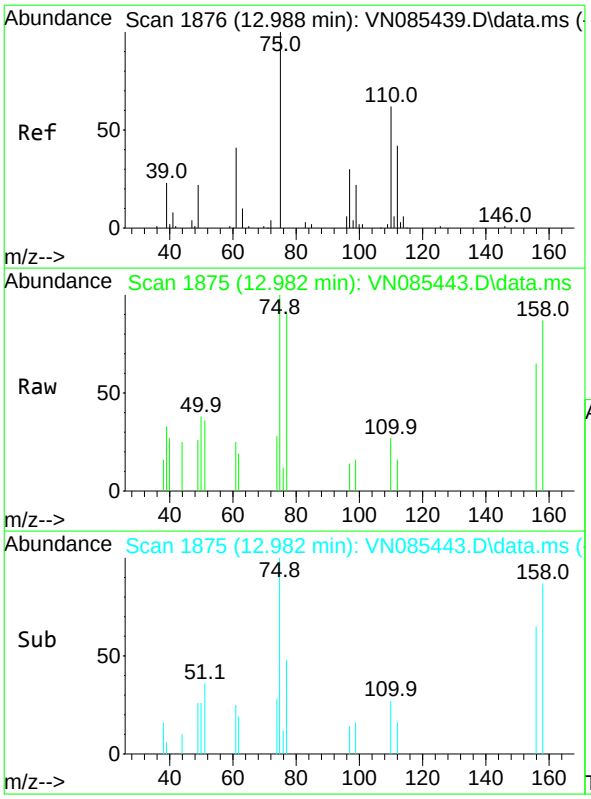



#75
1,1,2,2-Tetrachloroethane
Concen: 1.102 ug/l
RT: 12.935 min Scan# 1867
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 83 Resp: 2616

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 2.4 | 4.8 | 14.4# |
| 85 | 65.7 | 32.2 | 96.6 |

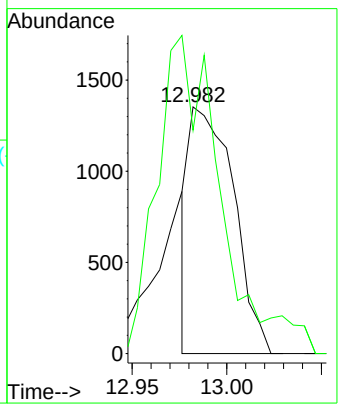





#76
1,2,3-Trichloropropane
Concen: 1.088 ug/l m
RT: 12.982 min Scan# 18
Delta R.T. -0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 75 Resp: 2198

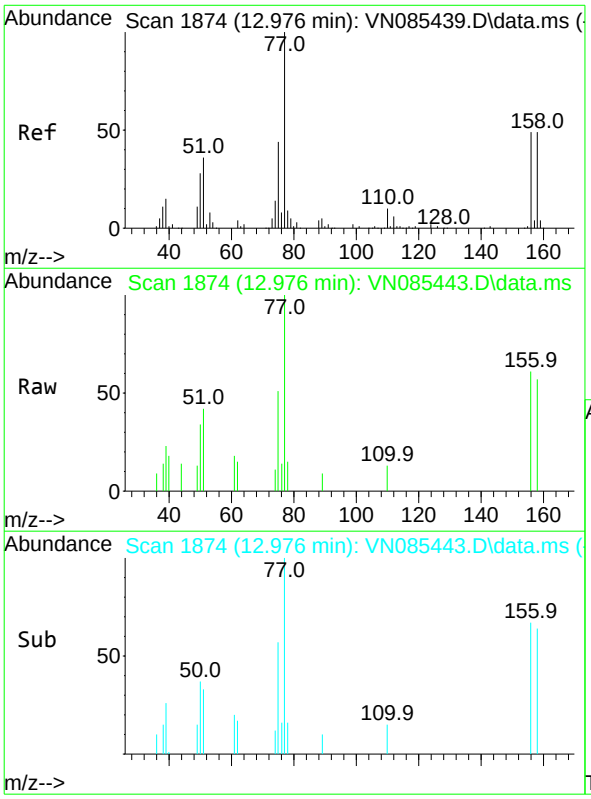
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 184.2 | 109.7 | 329.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

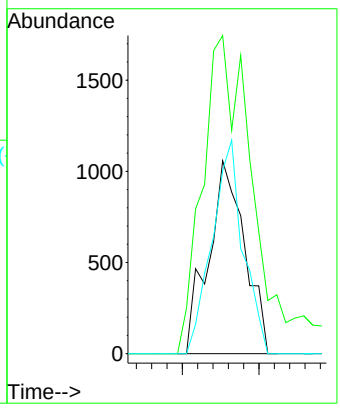
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

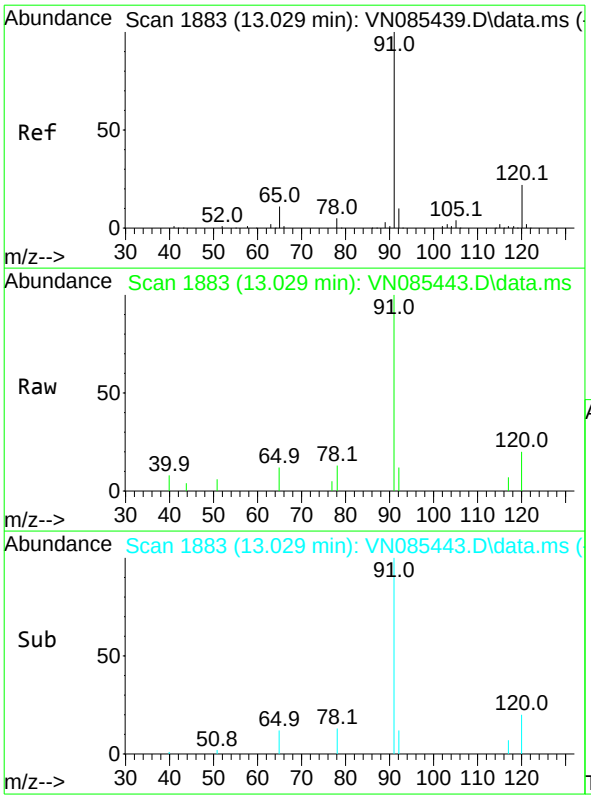



#77
Bromobenzene
Concen: 0.987 ug/l
RT: 12.976 min Scan# 1874
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:156 Resp: 1733

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 233.6 | 114.1 | 342.4 |
| 158 | 94.9 | 48.9 | 146.8 |

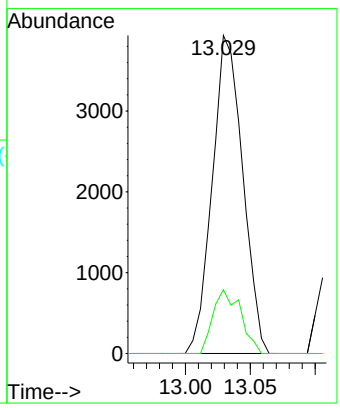





#78
n-propylbenzene
Concen: 0.808 ug/l
RT: 13.029 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 91 Resp: 6424

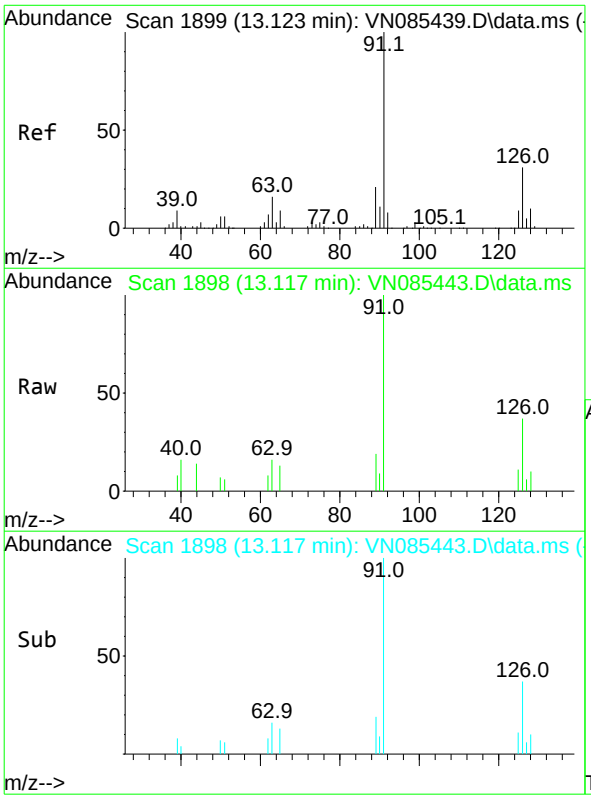
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 18.2 | 10.9 | 32.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

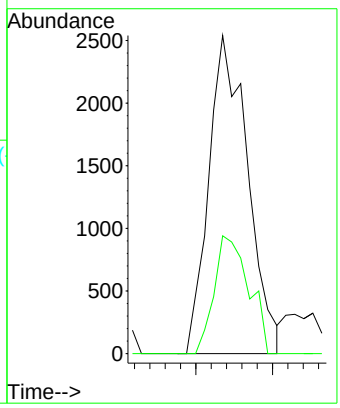
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

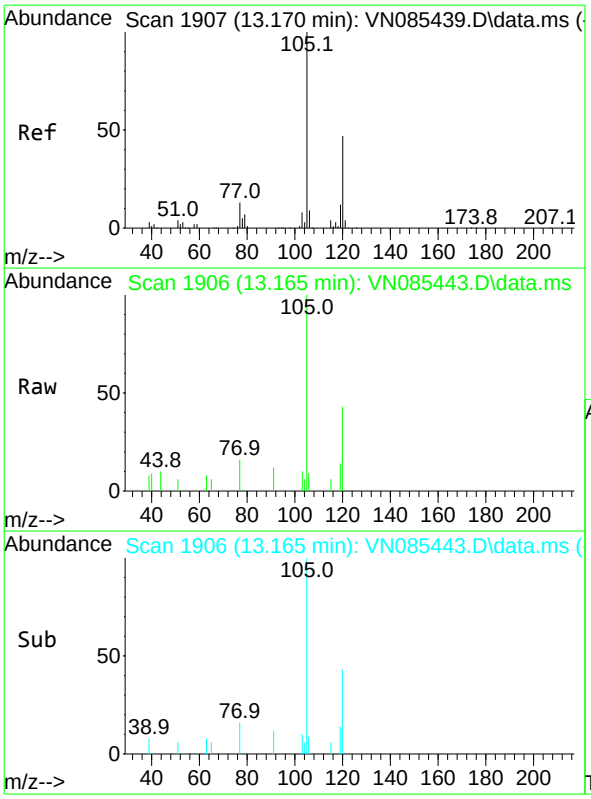



#79
2-Chlorotoluene
Concen: 0.871 ug/l
RT: 13.117 min Scan# 1898
Delta R.T. -0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 91 Resp: 4483

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 32.9 | 15.7 | 47.1 |

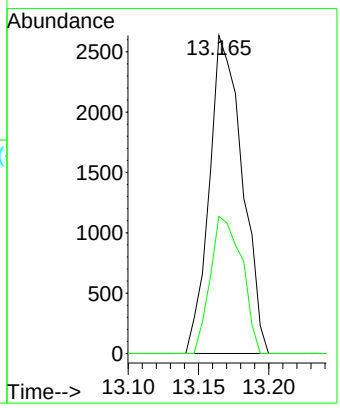





#80
1,3,5-Trimethylbenzene
Concen: 0.775 ug/l
RT: 13.165 min Scan# 19
Delta R.T. -0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:105 Resp: 4301

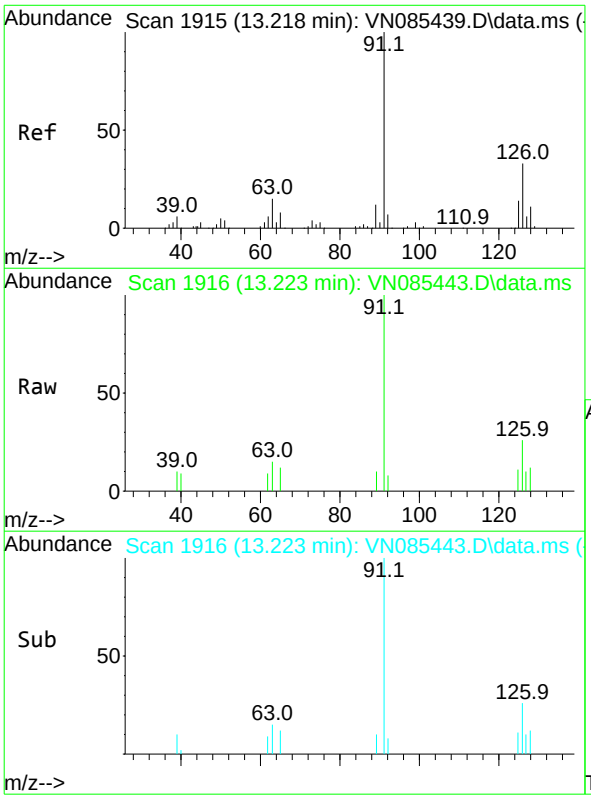
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 41.2 | 23.9 | 71.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

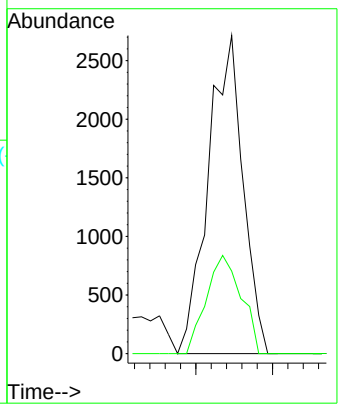
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

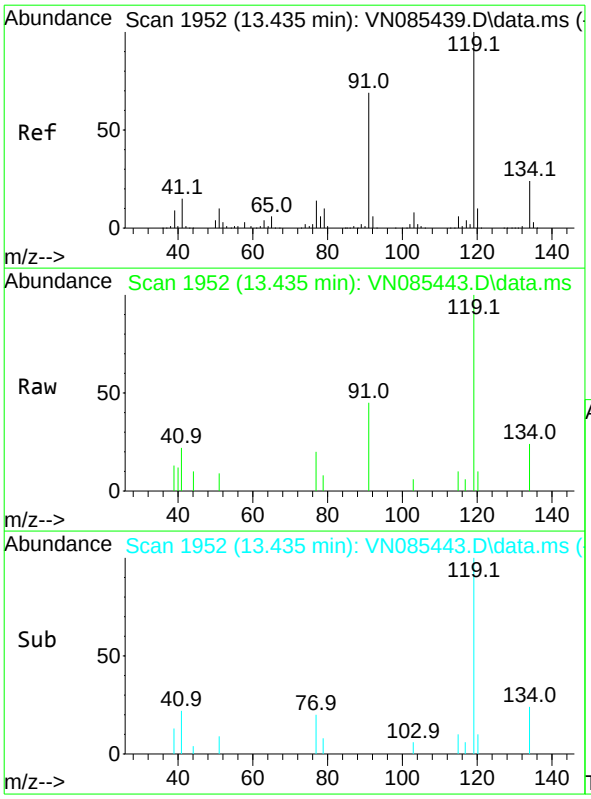



#82
4-Chlorotoluene
Concen: 0.833 ug/l
RT: 13.223 min Scan# 1916
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 91 Resp: 4268

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 31.0 | 15.9 | 47.7 |

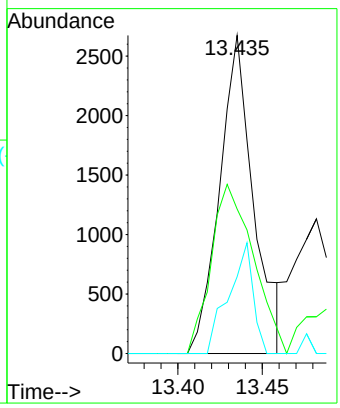





#83
tert-Butylbenzene
Concen: 0.805 ug/l
RT: 13.435 min Scan# 19
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:119 Resp: 3753

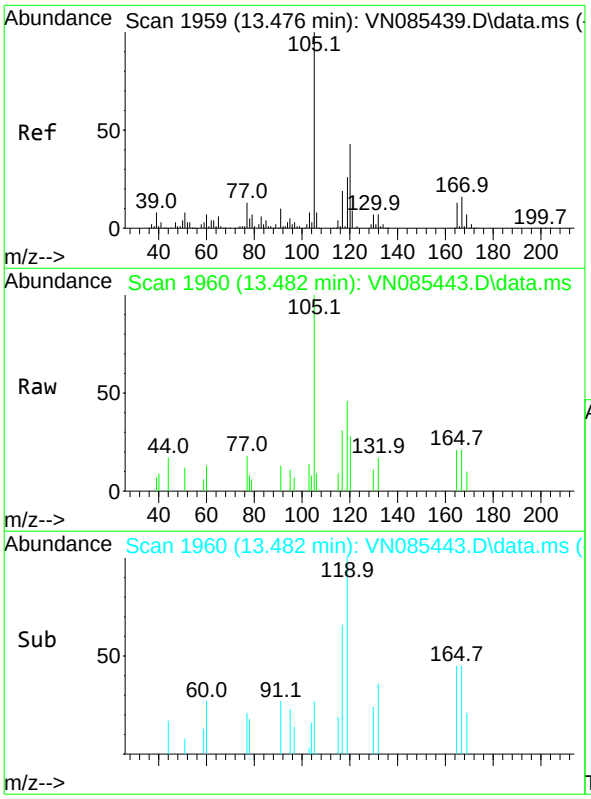
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 65.9 | 35.1 | 105.3 |
| 134 | 24.9 | 12.0 | 36.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

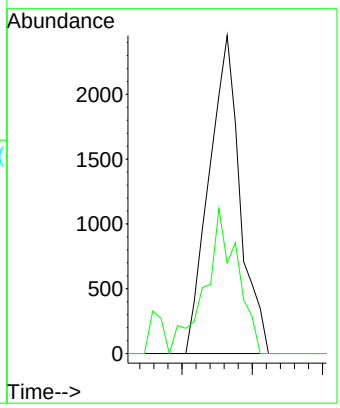
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

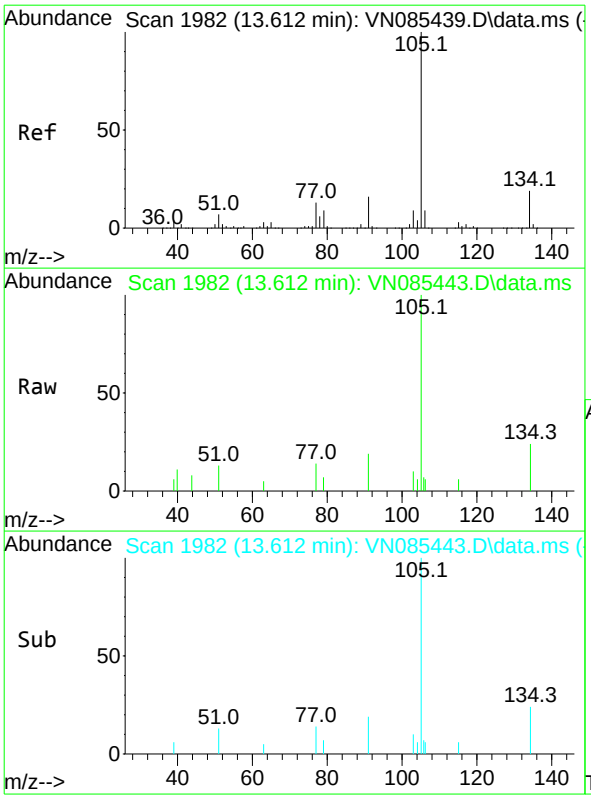



#84
1,2,4-Trimethylbenzene
Concen: 0.679 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:105 Resp: 3758

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 47.7 | 21.6 | 65.0 |

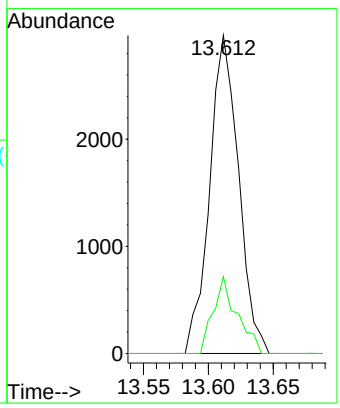





#85
sec-Butylbenzene
Concen: 0.714 ug/l
RT: 13.612 min Scan# 19
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:105 Resp: 4614

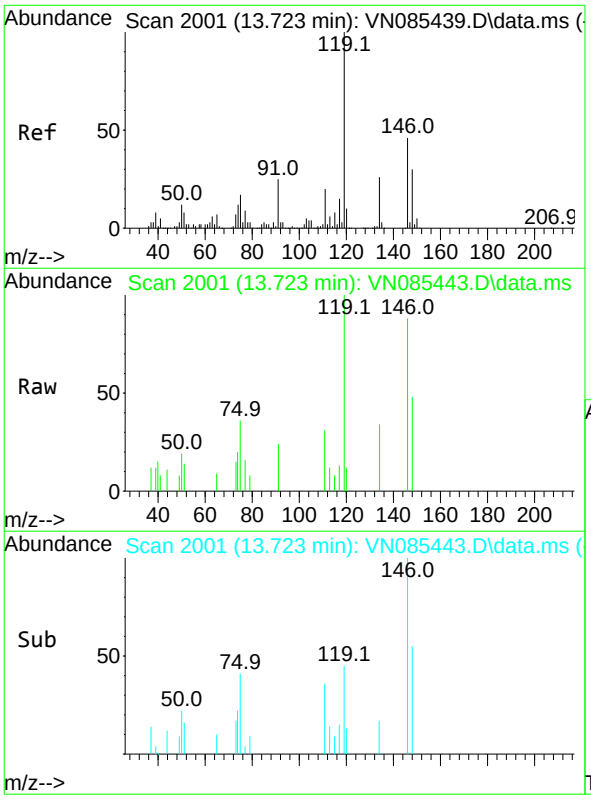
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.9 | 9.7 | 28.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

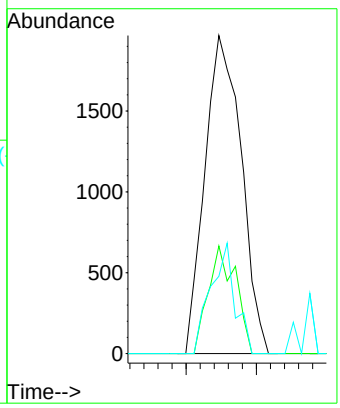
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

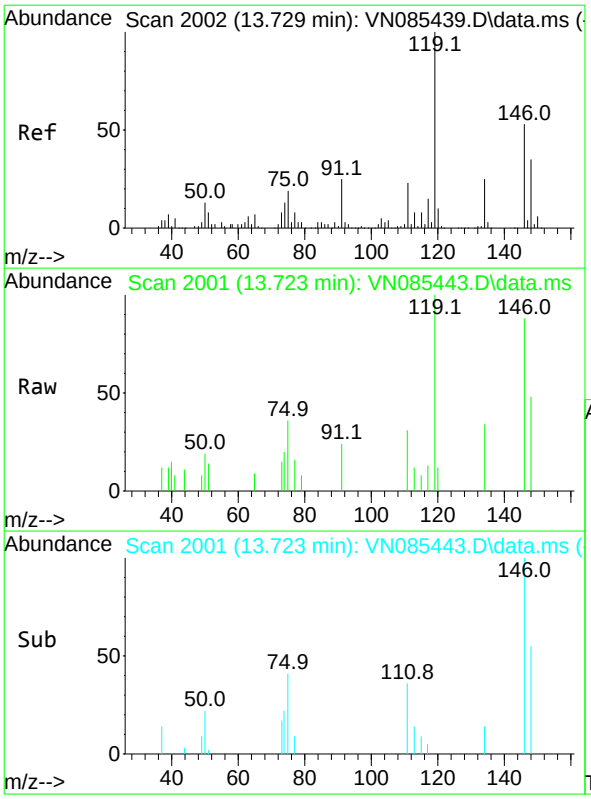



#86
p-Isopropyltoluene
Concen: 0.716 ug/l
RT: 13.723 min Scan# 2001
Delta R.T. 0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:119 Resp: 3538

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.6 | 12.7 | 38.0 |
| 91 | 23.2 | 12.7 | 38.1 |

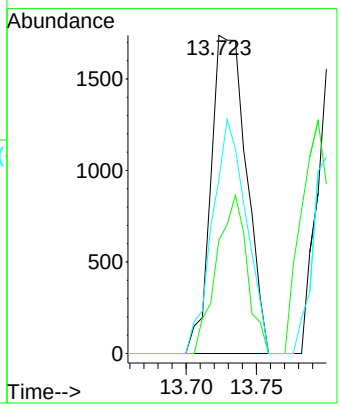





#87
1,3-Dichlorobenzene
Concen: 0.940 ug/l
RT: 13.723 min Scan# 20
Delta R.T. -0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:146 Resp: 3038

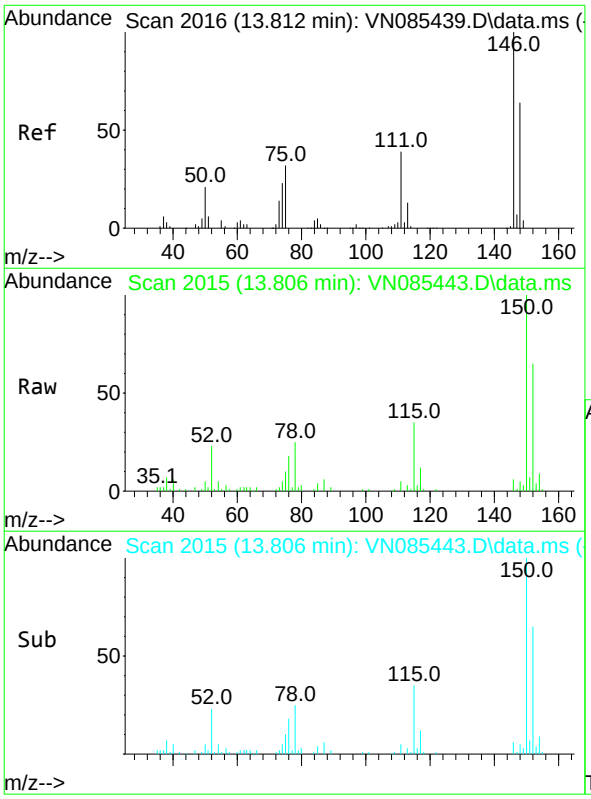
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.0 | 21.4 | 64.3 |
| 148 | 70.9 | 32.3 | 96.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

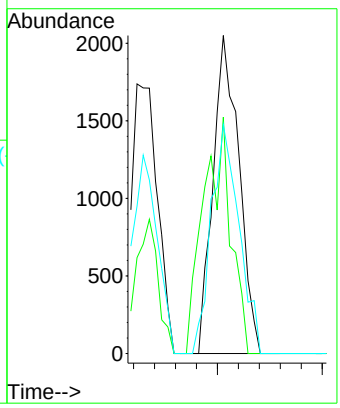
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

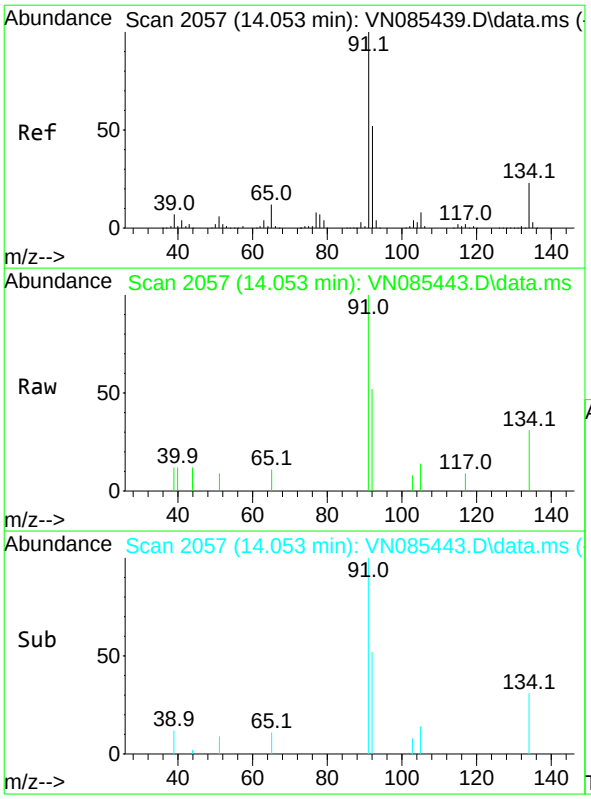



#88
1,4-Dichlorobenzene
Concen: 1.050 ug/l m
RT: 13.806 min Scan# 2015
Delta R.T. -0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:146 Resp: 3517

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 37.2 | 21.3 | 63.7 |
| 148 | 61.2 | 32.4 | 97.0 |

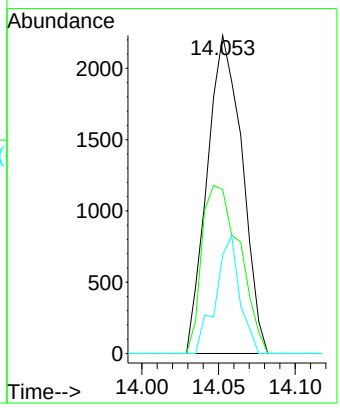





#89
n-Butylbenzene
Concen: 0.761 ug/l
RT: 14.053 min Scan# 20
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 91 Resp: 3527

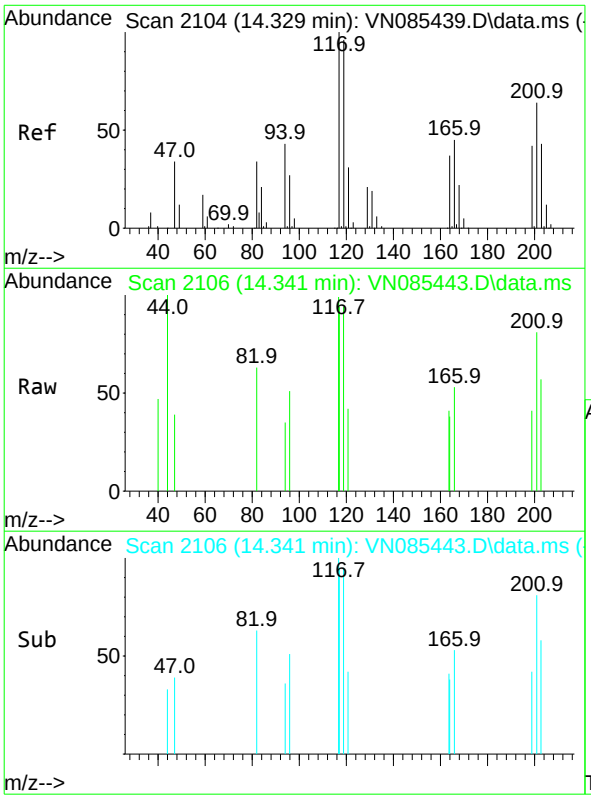
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 57.2 | 25.8 | 77.3 |
| 134 | 25.5 | 11.7 | 35.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

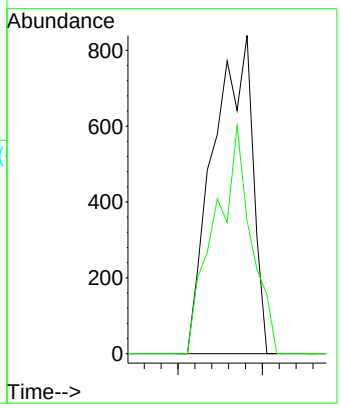
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

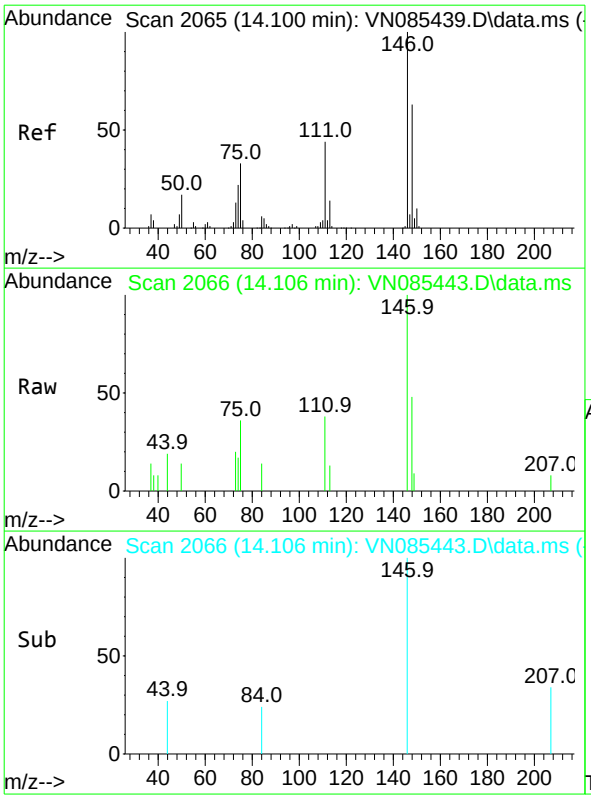



#90
Hexachloroethane
Concen: 1.102 ug/l
RT: 14.341 min Scan# 2106
Delta R.T. 0.012 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:117 Resp: 1355

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 66.5 | 33.7 | 101.0 |

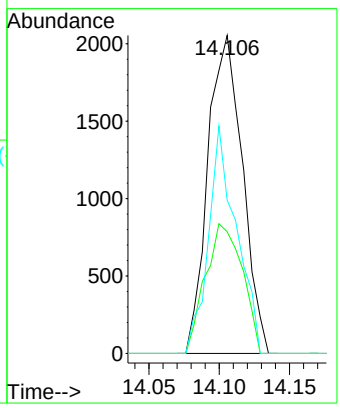





#91
1,2-Dichlorobenzene
Concen: 1.090 ug/l
RT: 14.106 min Scan# 20
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:146 Resp: 3515

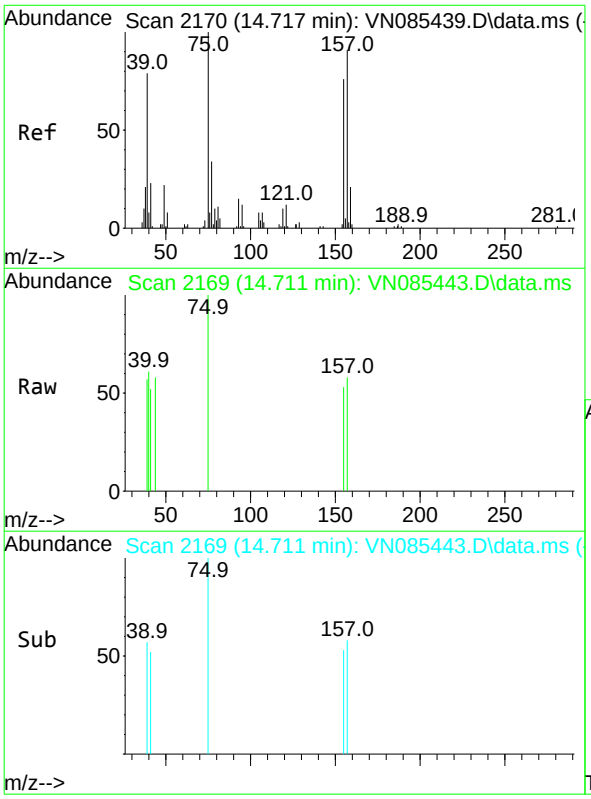
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.4 | 21.7 | 65.1 |
| 148 | 57.8 | 31.4 | 94.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

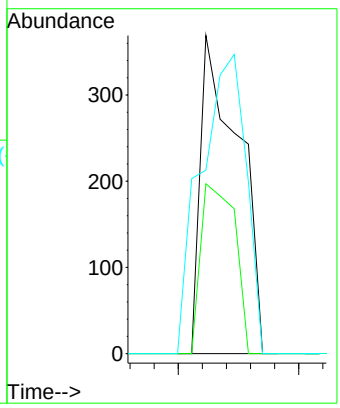
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

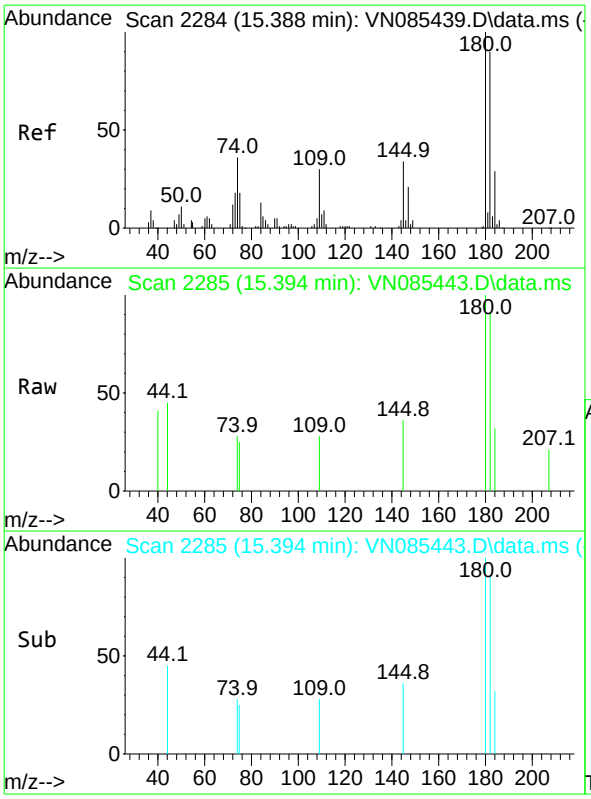



#92
1,2-Dibromo-3-Chloropropane
Concen: 0.928 ug/l
RT: 14.711 min Scan# 2169
Delta R.T. -0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 75 Resp: 402

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 48.0 | 36.4 | 109.2 |
| 157 | 112.7 | 45.4 | 136.1 |

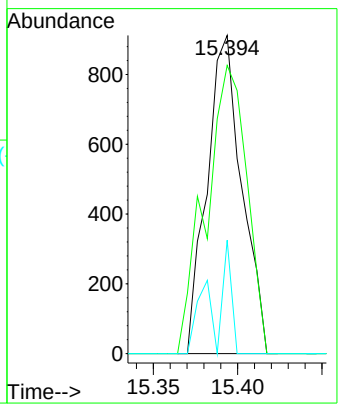





#93
1,2,4-Trichlorobenzene
Concen: 0.874 ug/l
RT: 15.394 min Scan# 22
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:180 Resp: 1310

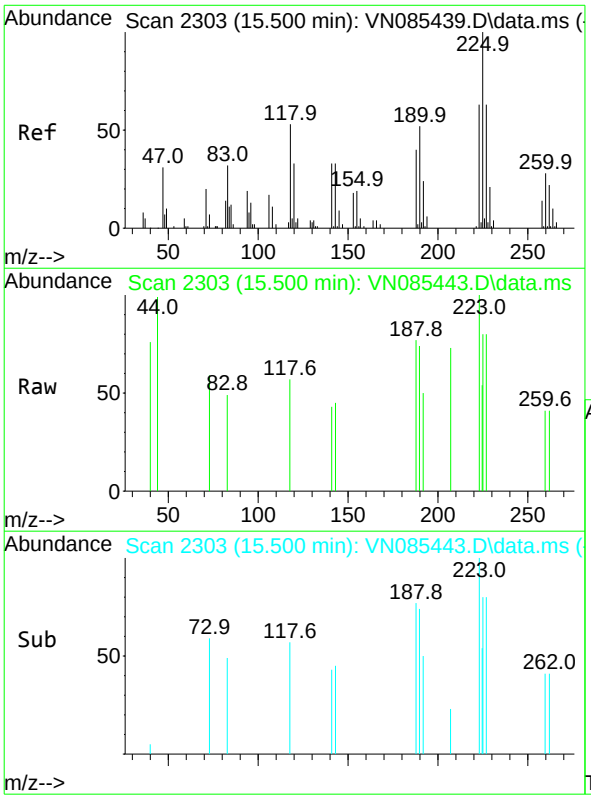
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 106.3 | 46.8 | 140.3 |
| 145 | 9.7 | 16.0 | 48.0# |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

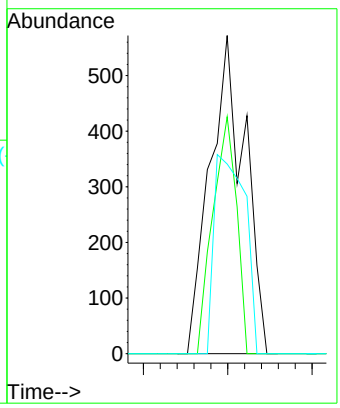
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

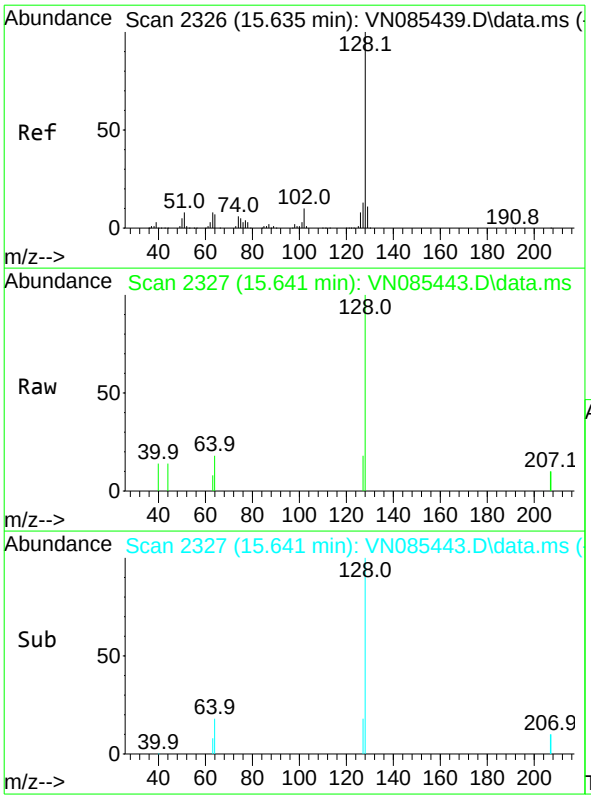



#94
Hexachlorobutadiene
Concen: 1.033 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:225 Resp: 822

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 50.7 | 30.7 | 92.1 |
| 227 | 55.7 | 30.9 | 92.5 |

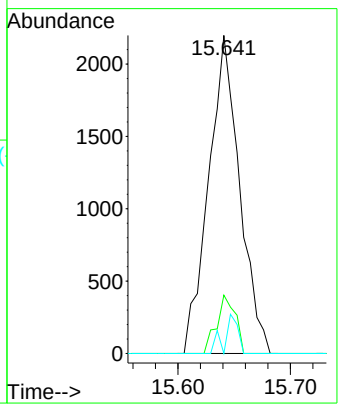





#95
Naphthalene
Concen: 0.941 ug/l
RT: 15.641 min Scan# 23
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:128 Resp: 4210

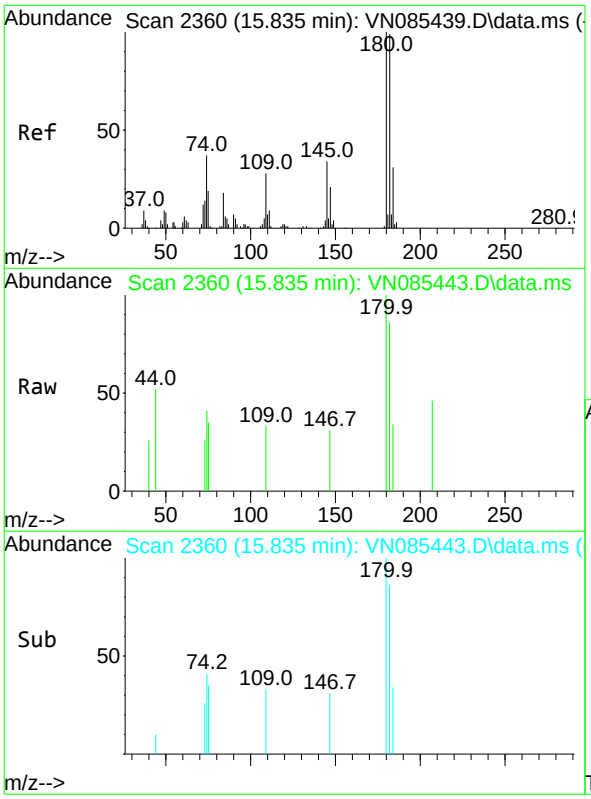
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 11.1 | 10.6 | 16.0 |
| 129 | 5.3 | 8.8 | 13.2# |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

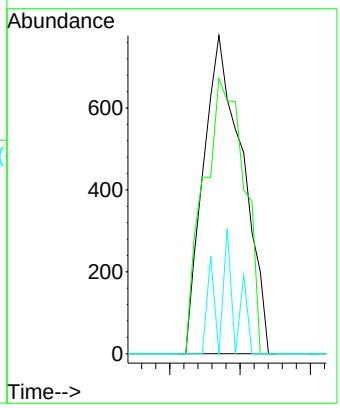
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025




#96
1,2,3-Trichlorobenzene
Concen: 0.985 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:180 Resp: 1494

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 90.2 | 47.4 | 142.2 |
| 145 | 11.8 | 16.9 | 50.7# |



ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085445.D
Acq On : 14 Jan 2025 18:06
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 12 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Quant Time: Jan 15 02:20:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.218 | 168 | 219757 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.094 | 114 | 370487 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 320948 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 158525 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.571 | 65 | 176594 | 49.782 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 99.560% | | | |
| 35) Dibromofluoromethane | 8.165 | 113 | 130487 | 50.768 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 101.540% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 477630 | 52.302 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 104.600% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 165249 | 52.899 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 105.800% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 130242 | 43.772 | ug/l | 100 |
| 3) Chloromethane | 2.360 | 50 | 138152 | 42.883 | ug/l | 99 |
| 4) Vinyl Chloride | 2.513 | 62 | 138316 | 42.715 | ug/l | 99 |
| 5) Bromomethane | 2.954 | 94 | 80019 | 40.910 | ug/l | 91 |
| 6) Chloroethane | 3.124 | 64 | 86837 | 42.299 | ug/l | 99 |
| 7) Trichlorofluoromethane | 3.501 | 101 | 206526 | 43.956 | ug/l | 99 |
| 8) Diethyl Ether | 3.959 | 74 | 69545 | 42.846 | ug/l | 100 |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 118310 | 44.706 | ug/l | 98 |
| 10) Methyl Iodide | 4.595 | 142 | 140190 | 46.259 | ug/l | 98 |
| 11) Tert butyl alcohol | 5.518 | 59 | 83933 | 206.633 | ug/l | 99 |
| 12) 1,1-Dichloroethene | 4.342 | 96 | 106880 | 45.317 | ug/l | 98 |
| 13) Acrolein | 4.177 | 56 | 135720 | 244.765 | ug/l | 99 |
| 14) Allyl chloride | 5.024 | 41 | 170308 | 44.501 | ug/l | 99 |
| 15) Acrylonitrile | 5.712 | 53 | 294062 | 227.920 | ug/l | 99 |
| 16) Acetone | 4.418 | 43 | 245248 | 213.971 | ug/l | 98 |
| 17) Carbon Disulfide | 4.712 | 76 | 300215 | 41.342 | ug/l | 100 |
| 18) Methyl Acetate | 5.018 | 43 | 156938 | 45.028 | ug/l | 100 |
| 19) Methyl tert-butyl Ether | 5.795 | 73 | 365819 | 47.768 | ug/l | 100 |
| 20) Methylene Chloride | 5.271 | 84 | 122059 | 43.017 | ug/l | 98 |
| 21) trans-1,2-Dichloroethene | 5.783 | 96 | 112597 | 44.672 | ug/l | 93 |
| 22) Diisopropyl ether | 6.665 | 45 | 399206 | 46.996 | ug/l | 99 |
| 23) Vinyl Acetate | 6.601 | 43 | 1471068 | 247.459 | ug/l | 100 |
| 24) 1,1-Dichloroethane | 6.571 | 63 | 228489 | 44.114 | ug/l | 98 |
| 25) 2-Butanone | 7.477 | 43 | 386125 | 228.924 | ug/l | 100 |
| 26) 2,2-Dichloropropane | 7.489 | 77 | 199303 | 47.593 | ug/l | 99 |
| 27) cis-1,2-Dichloroethene | 7.483 | 96 | 134920 | 45.446 | ug/l | 98 |
| 28) Bromochloromethane | 7.812 | 49 | 106323 | 44.122 | ug/l | 100 |
| 29) Tetrahydrofuran | 7.836 | 42 | 255650 | 239.065 | ug/l | 99 |
| 30) Chloroform | 7.965 | 83 | 235923 | 44.071 | ug/l | 98 |
| 31) Cyclohexane | 8.253 | 56 | 193034 | 42.878 | ug/l | 93 |
| 32) 1,1,1-Trichloroethane | 8.165 | 97 | 208172 | 44.332 | ug/l | 99 |
| 36) 1,1-Dichloropropene | 8.365 | 75 | 161834 | 44.863 | ug/l | 98 |
| 37) Ethyl Acetate | 7.559 | 43 | 160656 | 44.123 | ug/l | 97 |
| 38) Carbon Tetrachloride | 8.359 | 117 | 183592 | 44.456 | ug/l | 99 |
| 39) Methylcyclohexane | 9.600 | 83 | 168431 | 49.687 | ug/l | 98 |
| 40) Benzene | 8.600 | 78 | 494871 | 45.657 | ug/l | 99 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085445.D
Acq On : 14 Jan 2025 18:06
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 15 02:20:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

| Compound | R.T. | QIon | Response | Conc Units | | Dev(Min) |
|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.777 | 41 | 89326 | 47.155 ug/l | | 99 |
| 42) 1,2-Dichloroethane | 8.665 | 62 | 185663 | 45.481 ug/l | | 100 |
| 43) Isopropyl Acetate | 8.683 | 43 | 265107 | 45.440 ug/l | | 99 |
| 44) Trichloroethene | 9.347 | 130 | 110058 | 43.622 ug/l | | 96 |
| 45) 1,2-Dichloropropane | 9.618 | 63 | 123876 | 44.744 ug/l | | 97 |
| 46) Dibromomethane | 9.700 | 93 | 88325 | 44.214 ug/l | | 98 |
| 47) Bromodichloromethane | 9.889 | 83 | 185808 | 45.655 ug/l | | 99 |
| 48) Methyl methacrylate | 9.677 | 41 | 131142 | 49.948 ug/l | | 97 |
| 49) 1,4-Dioxane | 9.689 | 88 | 35051 | 792.760 ug/l | | 98 |
| 51) 4-Methyl-2-Pentanone | 10.441 | 43 | 832426 | 245.877 ug/l | | 99 |
| 52) Toluene | 10.630 | 92 | 301911 | 48.073 ug/l | | 99 |
| 53) t-1,3-Dichloropropene | 10.830 | 75 | 183680 | 47.757 ug/l | | 94 |
| 54) cis-1,3-Dichloropropene | 10.312 | 75 | 196307 | 47.783 ug/l | | 98 |
| 55) 1,1,2-Trichloroethane | 11.012 | 97 | 114757 | 46.173 ug/l | | 97 |
| 56) Ethyl methacrylate | 10.871 | 69 | 182170 | 43.762 ug/l | | 98 |
| 57) 1,3-Dichloropropane | 11.159 | 76 | 202583 | 46.877 ug/l | | 100 |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63 | 403949 | 256.116 ug/l | | 99 |
| 59) 2-Hexanone | 11.194 | 43 | 598433 | 251.213 ug/l | | 100 |
| 60) Dibromochloromethane | 11.353 | 129 | 137831 | 45.935 ug/l | | 99 |
| 61) 1,2-Dibromoethane | 11.465 | 107 | 110926 | 44.837 ug/l | | 100 |
| 64) Tetrachloroethene | 11.100 | 164 | 98211 | 44.886 ug/l | | 96 |
| 65) Chlorobenzene | 11.888 | 112 | 322723 | 45.901 ug/l | | 98 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 115379 | 44.712 ug/l | | 99 |
| 67) Ethyl Benzene | 11.959 | 91 | 577059 | 50.391 ug/l | | 97 |
| 68) m/p-Xylenes | 12.071 | 106 | 437367 | 103.341 ug/l | | 100 |
| 69) o-Xylene | 12.394 | 106 | 210698 | 52.093 ug/l | | 99 |
| 70) Styrene | 12.406 | 104 | 355459 | 53.103 ug/l | | 100 |
| 71) Bromoform | 12.577 | 173 | 90693 | 49.119 ug/l | # | 100 |
| 73) Isopropylbenzene | 12.694 | 105 | 534428 | 49.951 ug/l | | 99 |
| 74) N-amyl acetate | 12.488 | 43 | 234342 | 48.730 ug/l | | 100 |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 164882 | 43.627 ug/l | | 100 |
| 76) 1,2,3-Trichloropropane | 12.988 | 75 | 134976m | 41.891 ug/l | | |
| 77) Bromobenzene | 12.977 | 156 | 128968 | 46.138 ug/l | | 97 |
| 78) n-propylbenzene | 13.029 | 91 | 645977 | 51.001 ug/l | | 100 |
| 79) 2-Chlorotoluene | 13.124 | 91 | 392404 | 47.870 ug/l | | 99 |
| 80) 1,3,5-Trimethylbenzene | 13.171 | 105 | 456048 | 51.604 ug/l | | 100 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 58623m | 49.226 ug/l | | |
| 82) 4-Chlorotoluene | 13.218 | 91 | 398110 | 48.776 ug/l | | 100 |
| 83) tert-Butylbenzene | 13.435 | 119 | 378478 | 50.997 ug/l | | 98 |
| 84) 1,2,4-Trimethylbenzene | 13.477 | 105 | 457340 | 51.922 ug/l | | 100 |
| 85) sec-Butylbenzene | 13.612 | 105 | 532578 | 51.777 ug/l | | 100 |
| 86) p-Isopropyltoluene | 13.729 | 119 | 440284 | 47.795 ug/l | | 100 |
| 87) 1,3-Dichlorobenzene | 13.729 | 146 | 236387 | 45.920 ug/l | | 99 |
| 88) 1,4-Dichlorobenzene | 13.806 | 146 | 235319 | 44.102 ug/l | | 99 |
| 89) n-Butylbenzene | 14.053 | 91 | 373227 | 50.578 ug/l | | 99 |
| 90) Hexachloroethane | 14.329 | 117 | 88538 | 45.215 ug/l | | 100 |
| 91) 1,2-Dichlorobenzene | 14.100 | 146 | 231646 | 45.113 ug/l | | 99 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.718 | 75 | 31899 | 46.221 ug/l | | 97 |
| 93) 1,2,4-Trichlorobenzene | 15.388 | 180 | 109157 | 45.739 ug/l | | 98 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 53358 | 42.112 ug/l | | 99 |
| 95) Naphthalene | 15.641 | 128 | 335535 | 47.116 ug/l | | 100 |
| 96) 1,2,3-Trichlorobenzene | 15.835 | 180 | 107583 | 44.551 ug/l | | 99 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085445.D
Acq On : 14 Jan 2025 18:06
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 12 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Quant Time: Jan 15 02:20:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

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

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

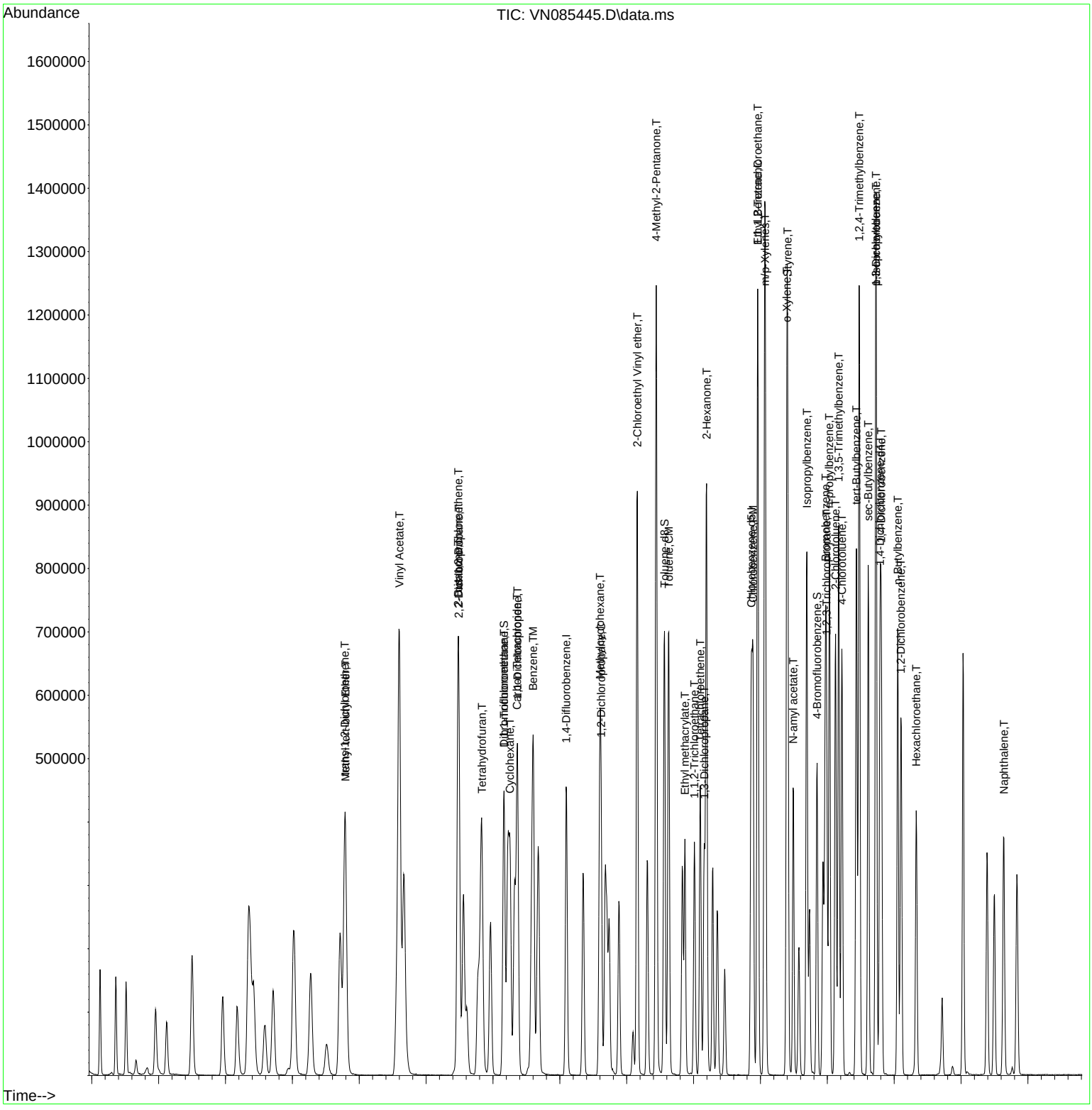
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085445.D
Acq On : 14 Jan 2025 18:06
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 12 Sample Multiplier: 1

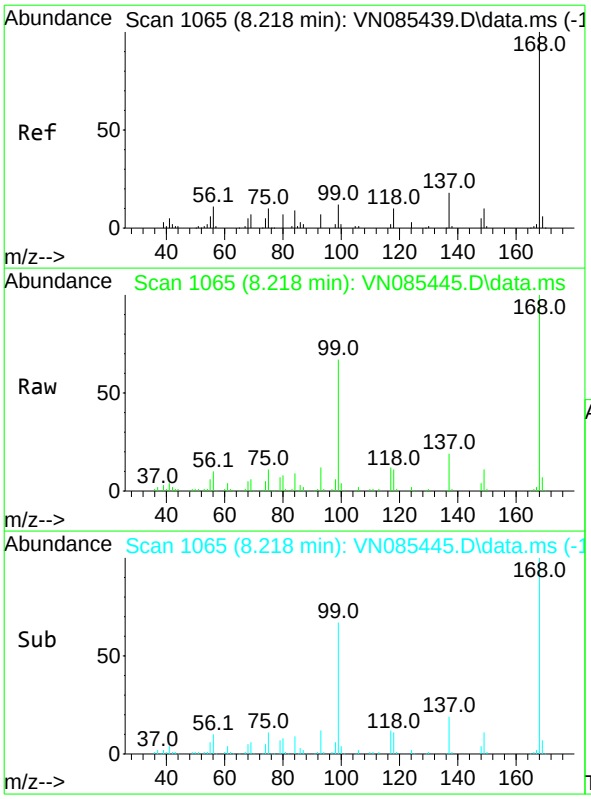
Quant Time: Jan 15 02:20:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

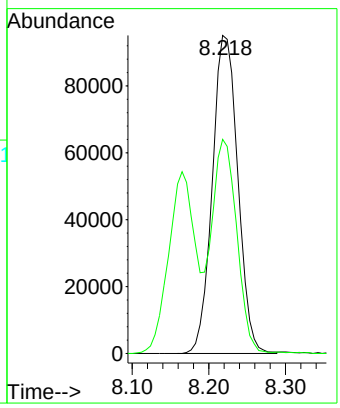





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.218 min Scan# 10
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:168 Resp: 219757

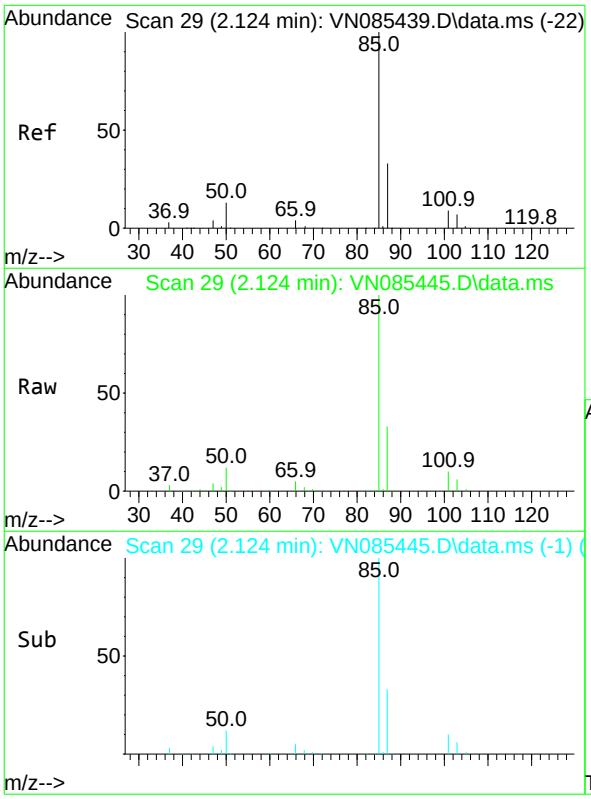
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 66.9 | 53.6 | 80.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

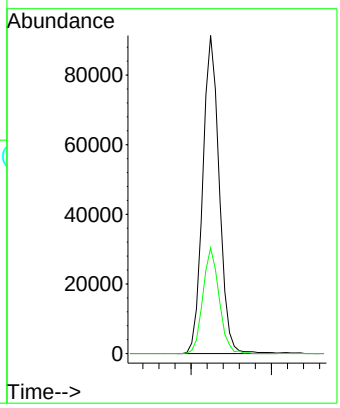
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

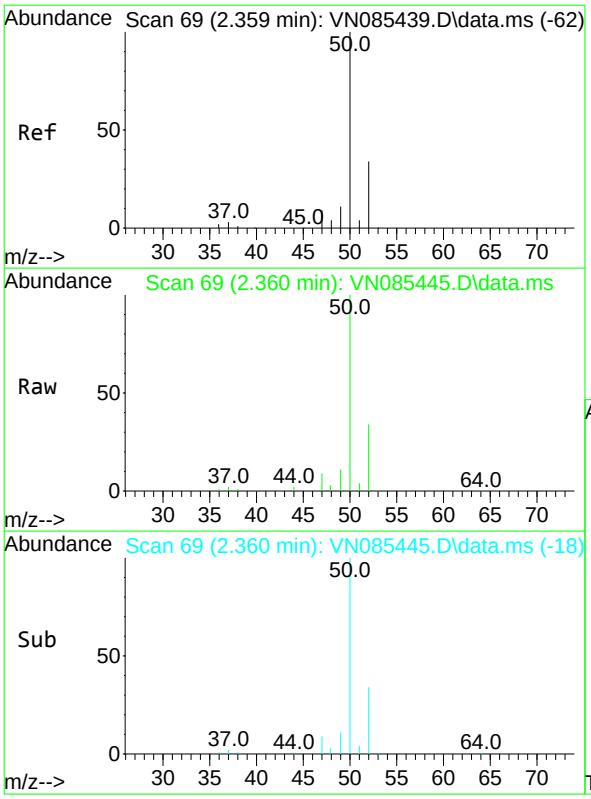



#2
Dichlorodifluoromethane
Concen: 43.772 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 85 Resp: 130242

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 33.2 | 16.7 | 50.1 |

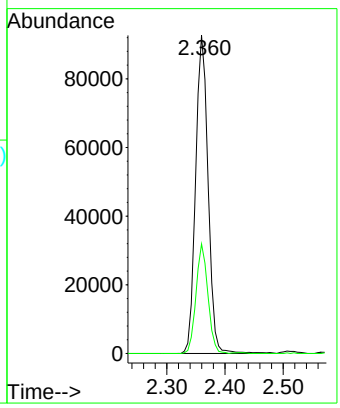





#3
Chloromethane
Concen: 42.883 ug/l
RT: 2.360 min Scan# 69
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 50 Resp: 138152

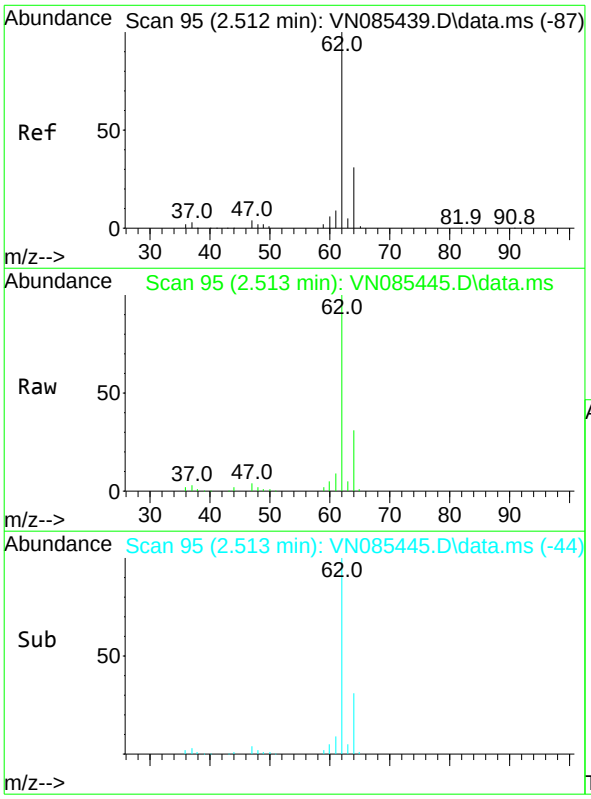
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 34.4 | 27.0 | 40.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

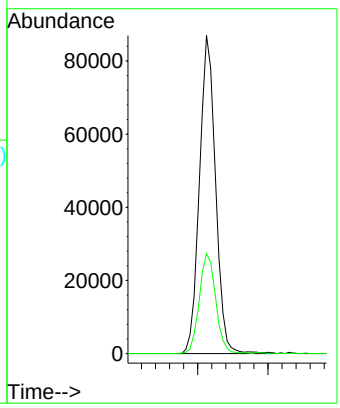
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

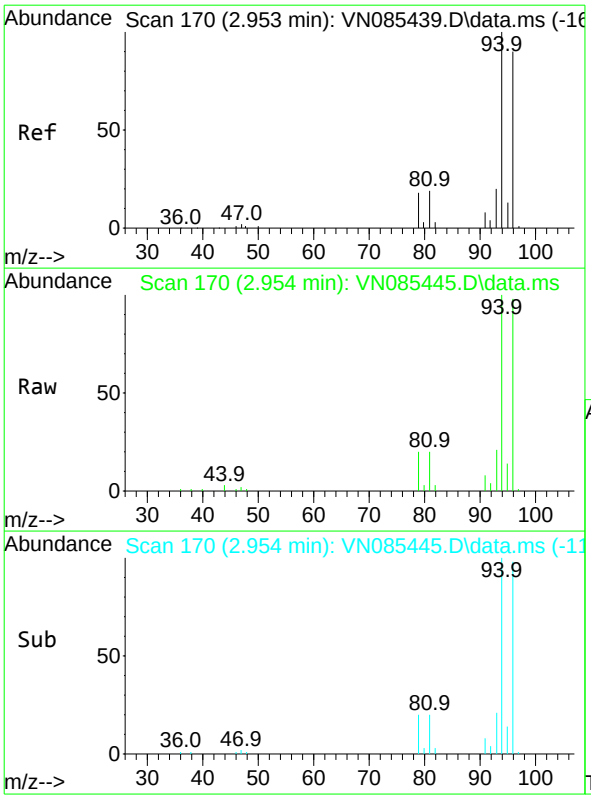



#4
Vinyl Chloride
Concen: 42.715 ug/l
RT: 2.513 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 62 Resp: 138316

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 31.4 | 24.8 | 37.2 |

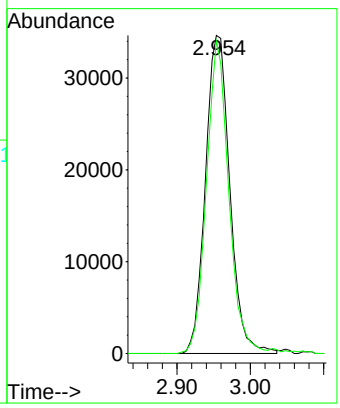





#5
Bromomethane
Concen: 40.910 ug/l
RT: 2.954 min Scan# 17
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 94 Resp: 80019

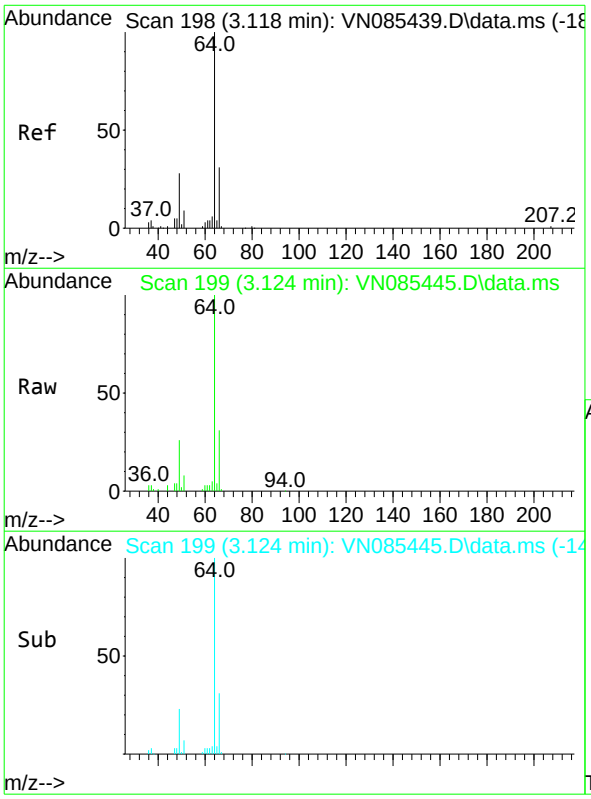
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 98.2 | 71.8 | 107.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

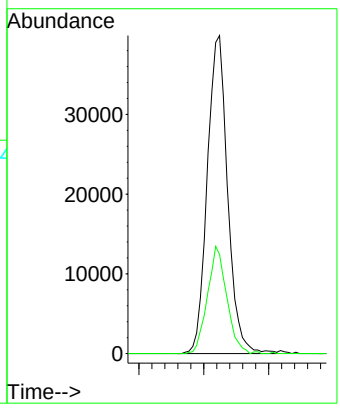
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

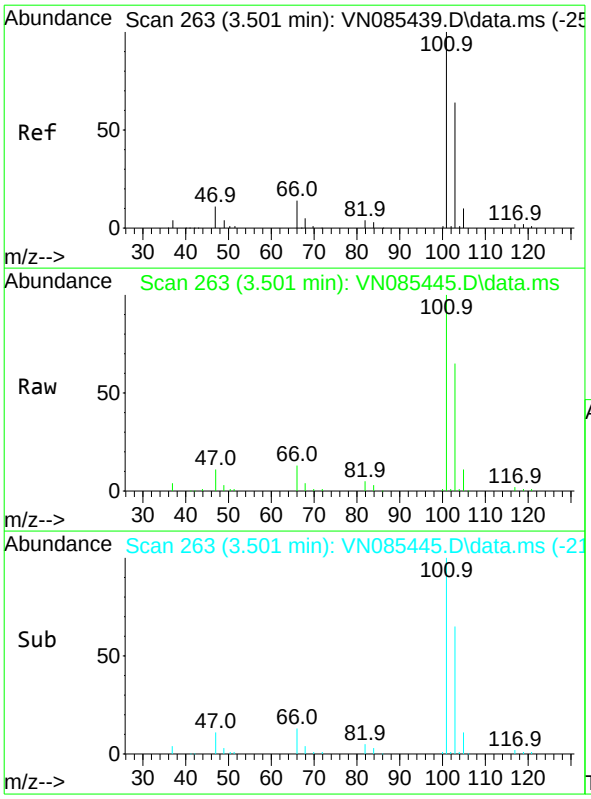



#6
Chloroethane
Concen: 42.299 ug/l
RT: 3.124 min Scan# 199
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 64 Resp: 86837

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 31.1 | 24.6 | 36.8 |

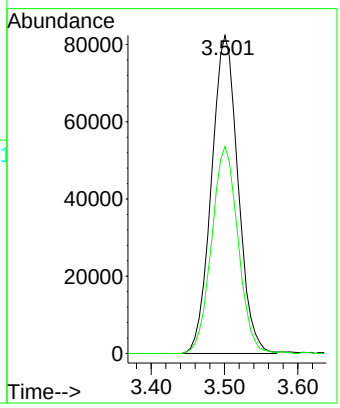





#7
Trichlorofluoromethane
Concen: 43.956 ug/l
RT: 3.501 min Scan# 26
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:101 Resp: 206526

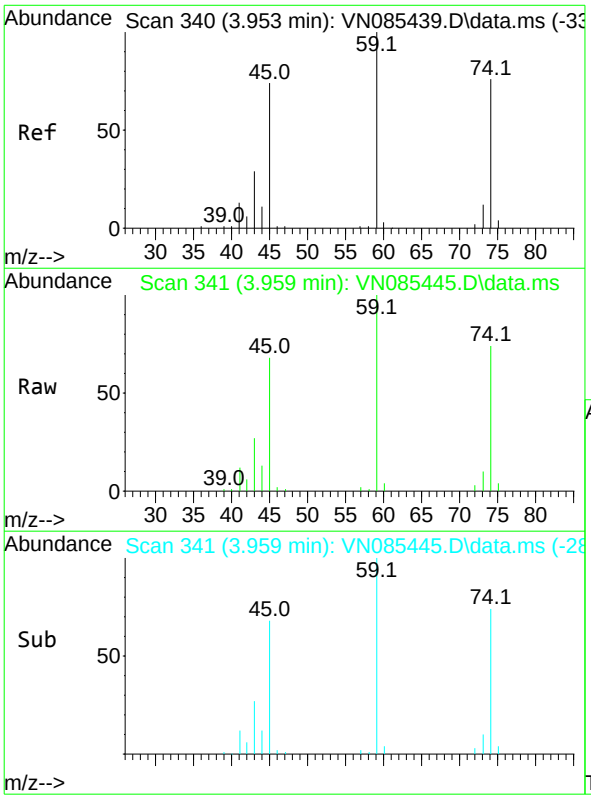
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 65.1 | 51.4 | 77.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

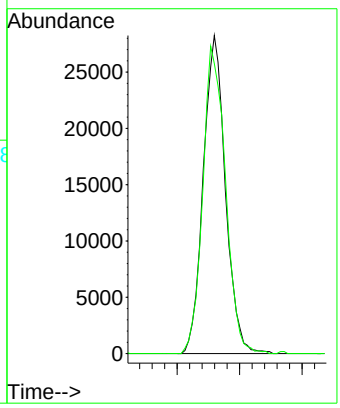
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

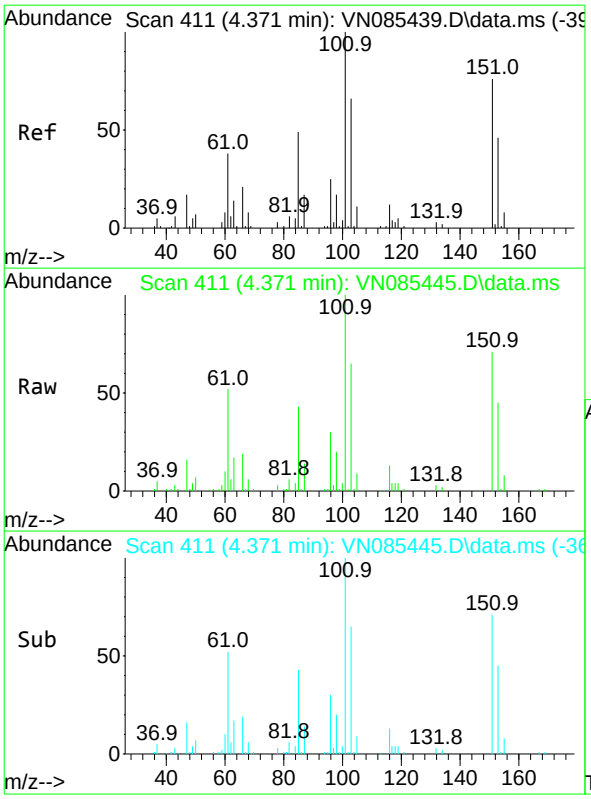



#8
Diethyl Ether
Concen: 42.846 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 74 Resp: 69545

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 99.0 | 49.7 | 149.1 |

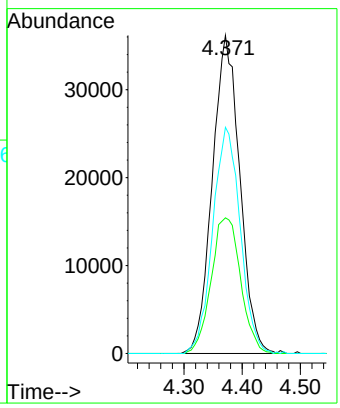





#9
1,1,2-Trichlorotrifluoroethane
Concen: 44.706 ug/l
RT: 4.371 min Scan# 41
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:101 Resp: 118310

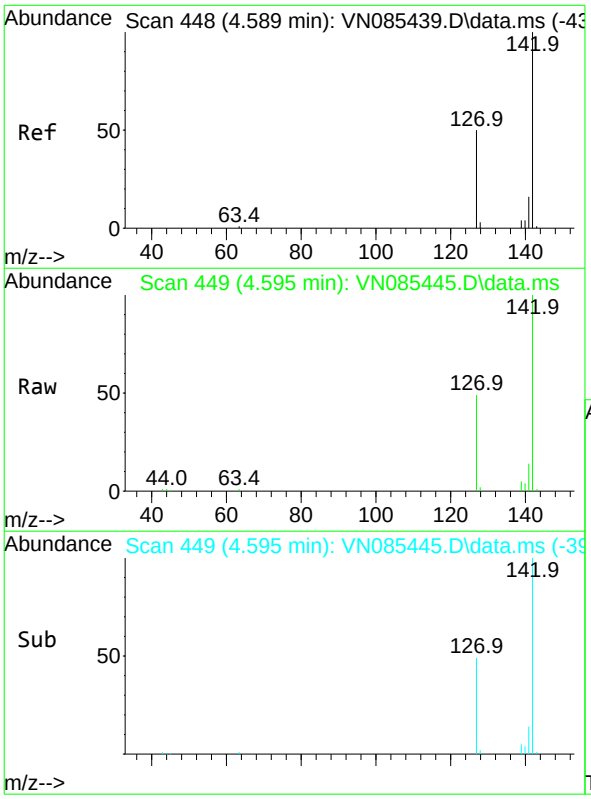
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 45.9 | 37.8 | 56.8 |
| 151 | 71.5 | 58.8 | 88.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

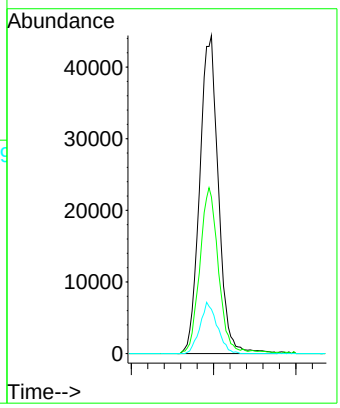
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

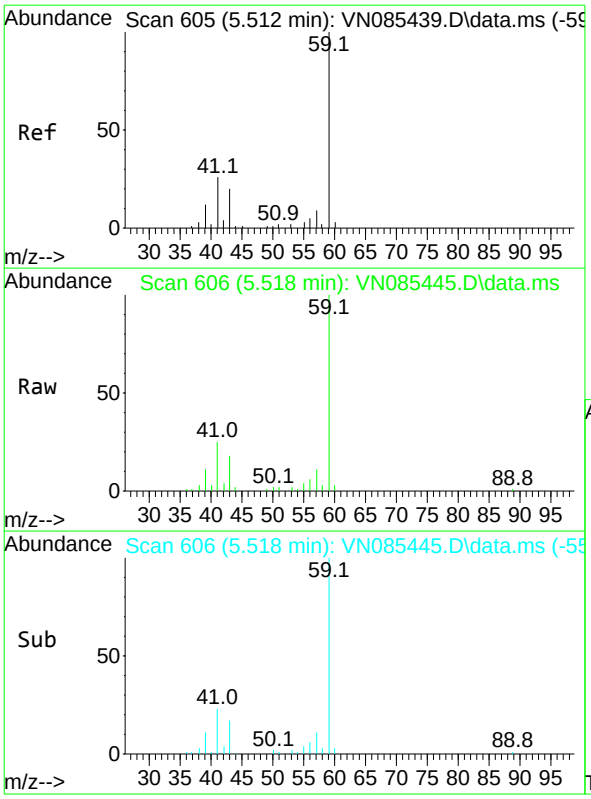



#10
Methyl Iodide
Concen: 46.259 ug/l
RT: 4.595 min Scan# 449
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:142 Resp: 140190

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 49.2 | 40.3 | 60.5 |
| 141 | 13.9 | 12.8 | 19.2 |

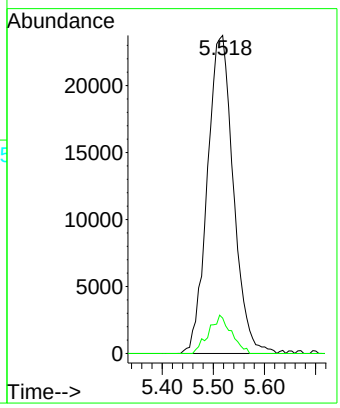





#11
Tert butyl alcohol
Concen: 206.633 ug/l
RT: 5.518 min Scan# 60
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 59 Resp: 83933

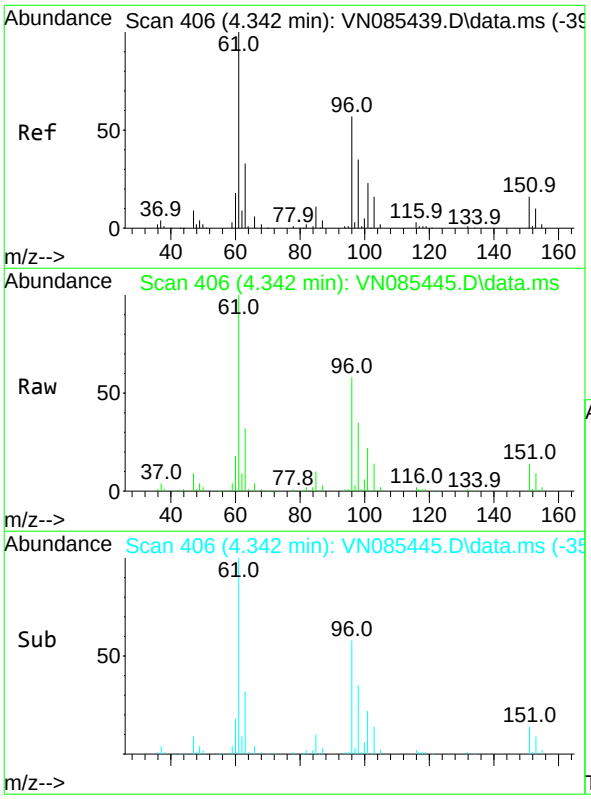
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 10.4 | 8.6 | 13.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

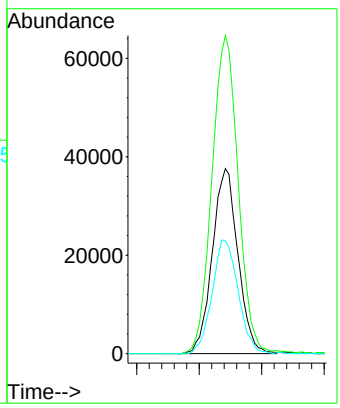
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

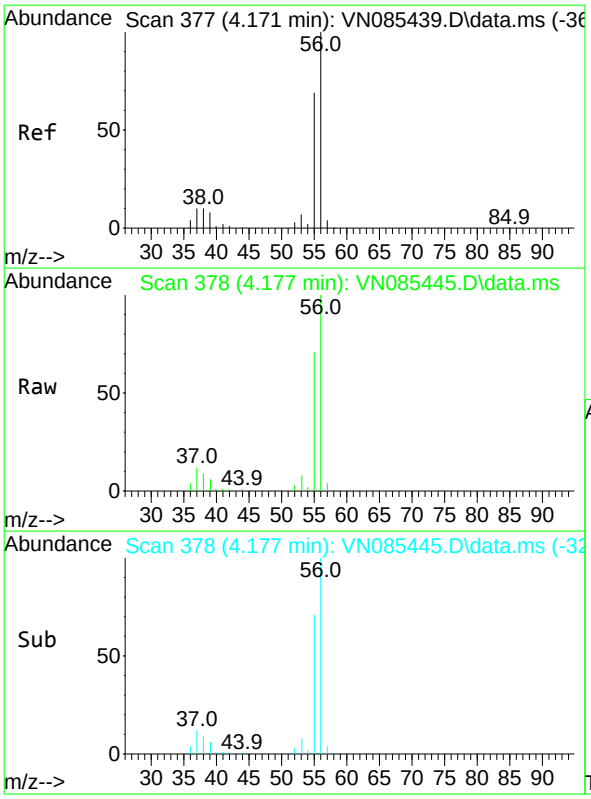



#12
1,1-Dichloroethene
Concen: 45.317 ug/l
RT: 4.342 min Scan# 406
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 96 Resp: 106880

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 171.9 | 141.0 | 211.4 |
| 98 | 61.0 | 49.0 | 73.6 |

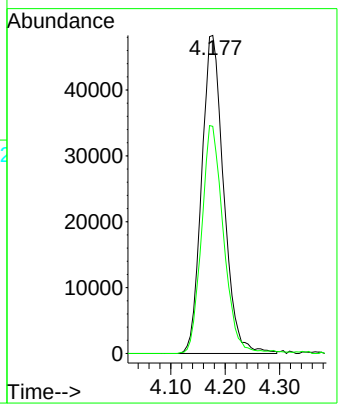





#13
Acrolein
Concen: 244.765 ug/l
RT: 4.177 min Scan# 37
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 56 Resp: 135720

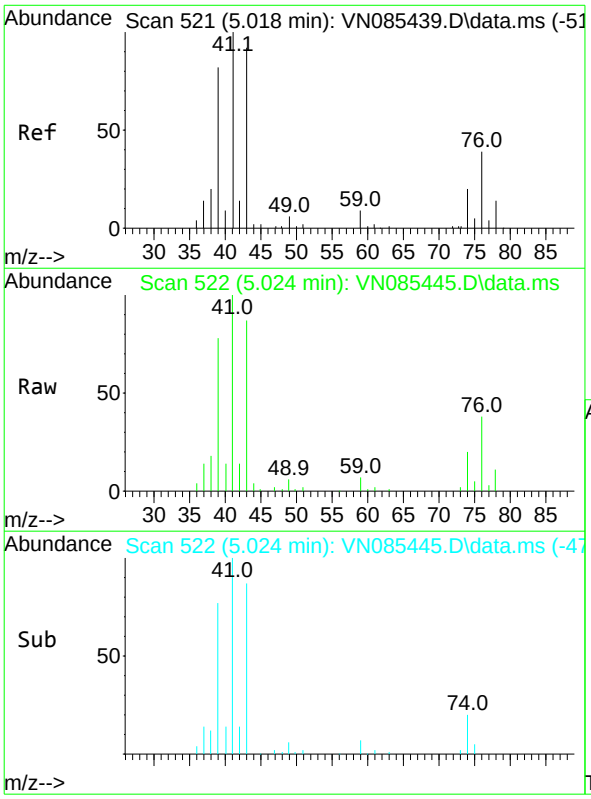
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 70.9 | 56.3 | 84.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

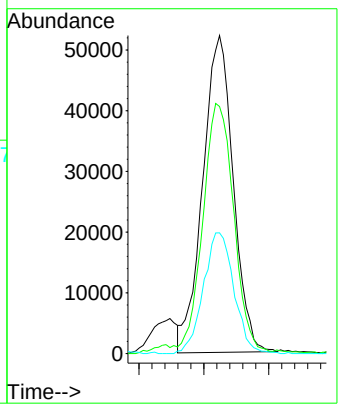
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

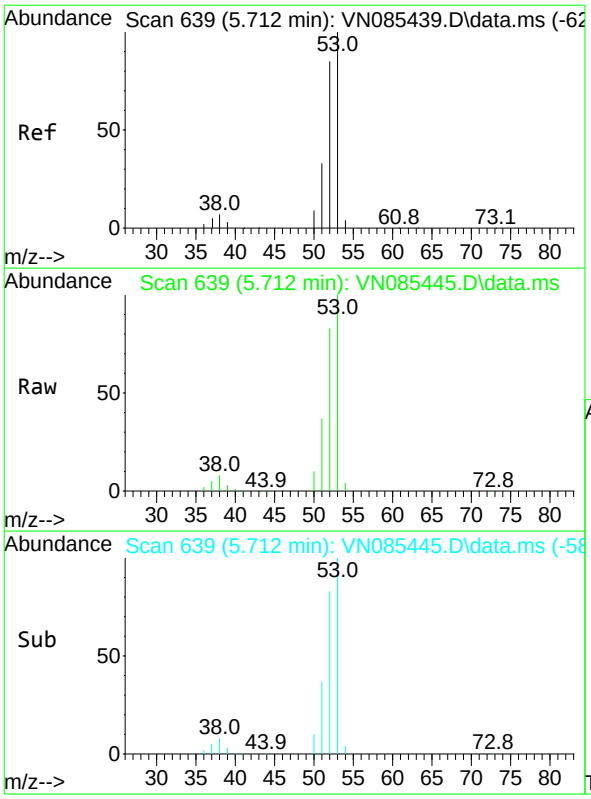



#14
Allyl chloride
Concen: 44.501 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 41 Resp: 170308

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 78.9 | 64.4 | 96.6 |
| 76 | 38.2 | 30.5 | 45.7 |

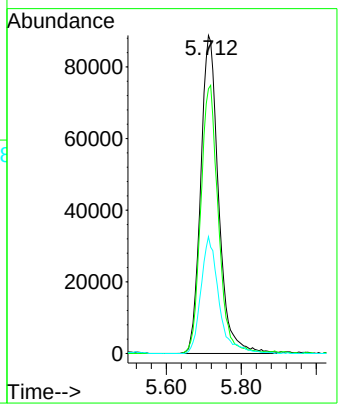





#15
Acrylonitrile
Concen: 227.920 ug/l
RT: 5.712 min Scan# 63
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 53 Resp: 294062

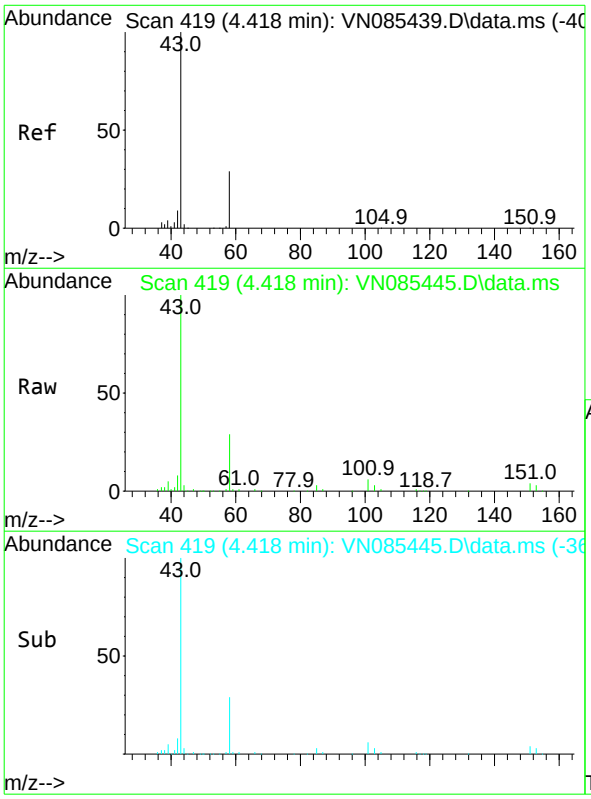
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 82.7 | 65.5 | 98.3 |
| 51 | 36.8 | 29.8 | 44.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

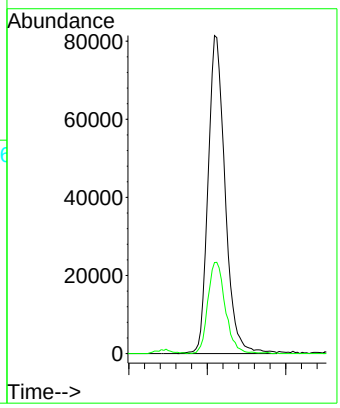
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

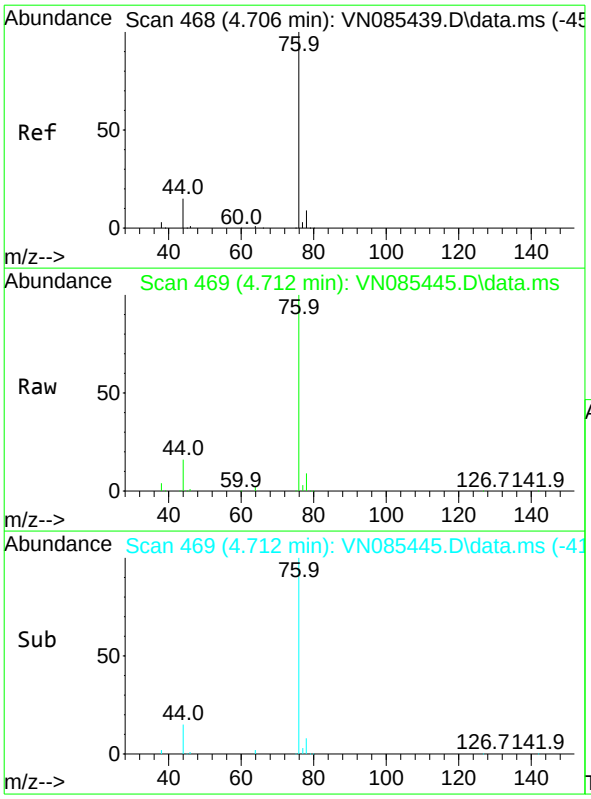



#16
Acetone
Concen: 213.971 ug/l
RT: 4.418 min Scan# 419
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 43 Resp: 245248

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 28.4 | 23.8 | 35.6 |

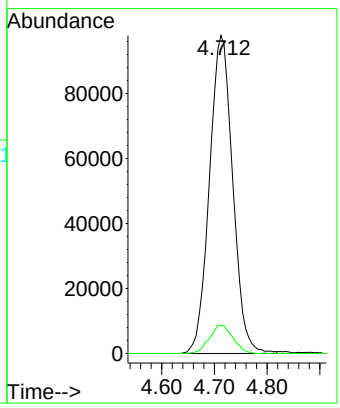





#17
Carbon Disulfide
Concen: 41.342 ug/l
RT: 4.712 min Scan# 46
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 76 Resp: 300215

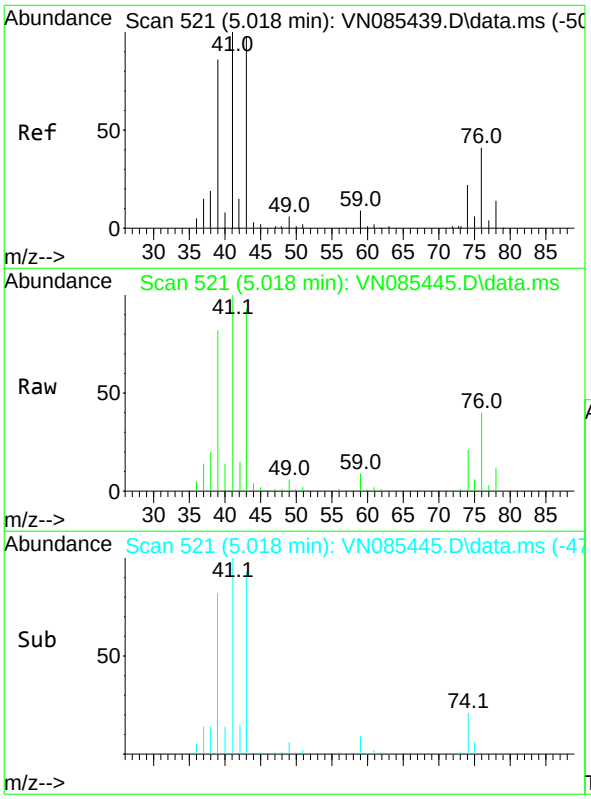
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 8.7 | 6.9 | 10.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

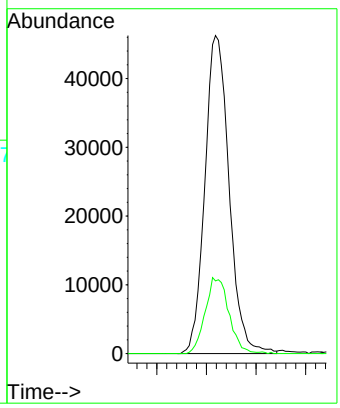
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

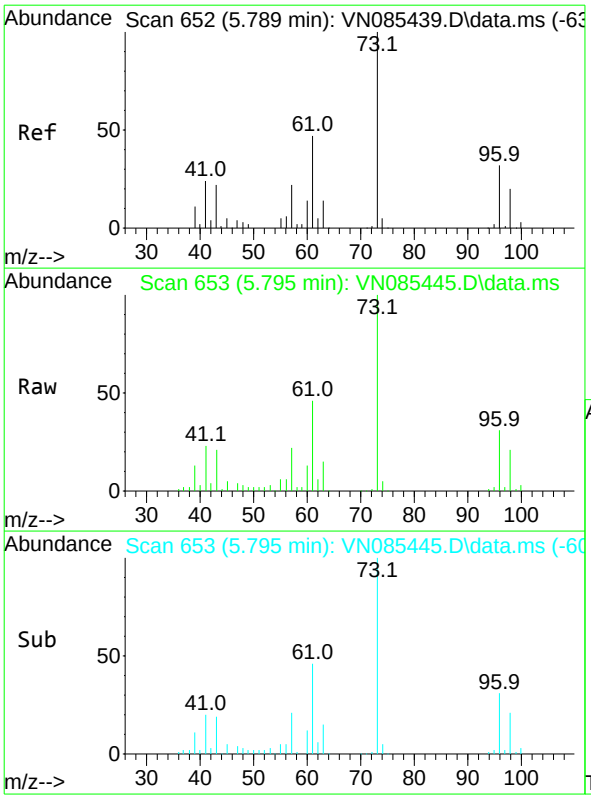



#18
Methyl Acetate
Concen: 45.028 ug/l
RT: 5.018 min Scan# 521
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 43 Resp: 156938

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 23.4 | 18.6 | 28.0 |

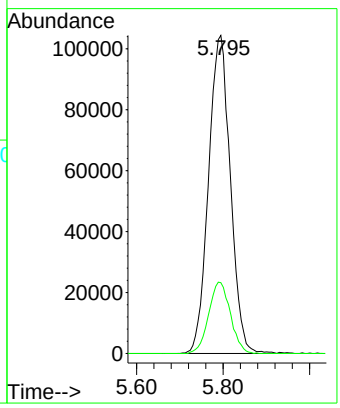





#19
Methyl tert-butyl Ether
Concen: 47.768 ug/l
RT: 5.795 min Scan# 65
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 73 Resp: 365819

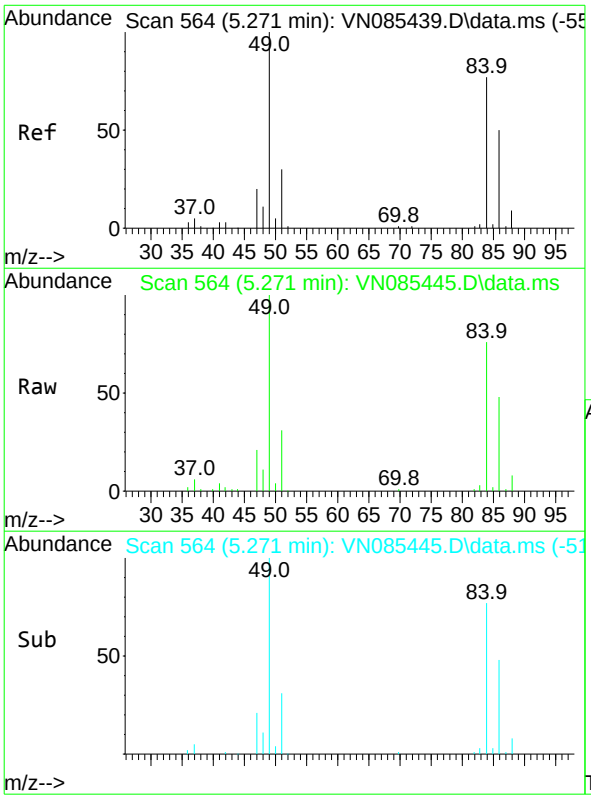
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 22.3 | 17.8 | 26.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

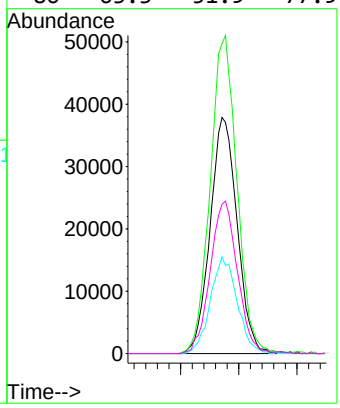
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

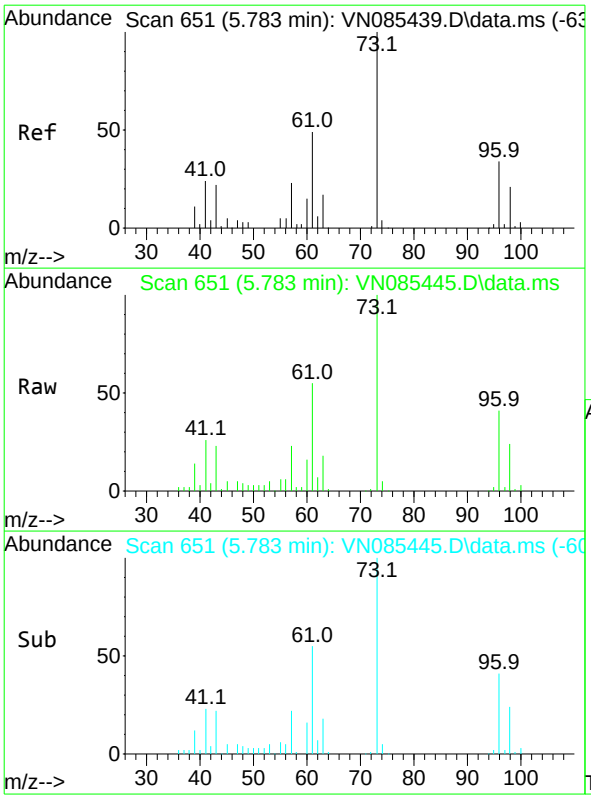



#20
Methylene Chloride
Concen: 43.017 ug/l
RT: 5.271 min Scan# 564
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 84 Resp: 122059

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 131.3 | 104.1 | 156.1 |
| 51 | 41.0 | 31.0 | 46.4 |
| 86 | 63.3 | 51.9 | 77.9 |

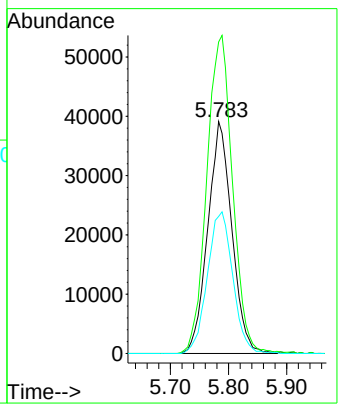





#21
trans-1,2-Dichloroethene
Concen: 44.672 ug/l
RT: 5.783 min Scan# 65
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 96 Resp: 112597

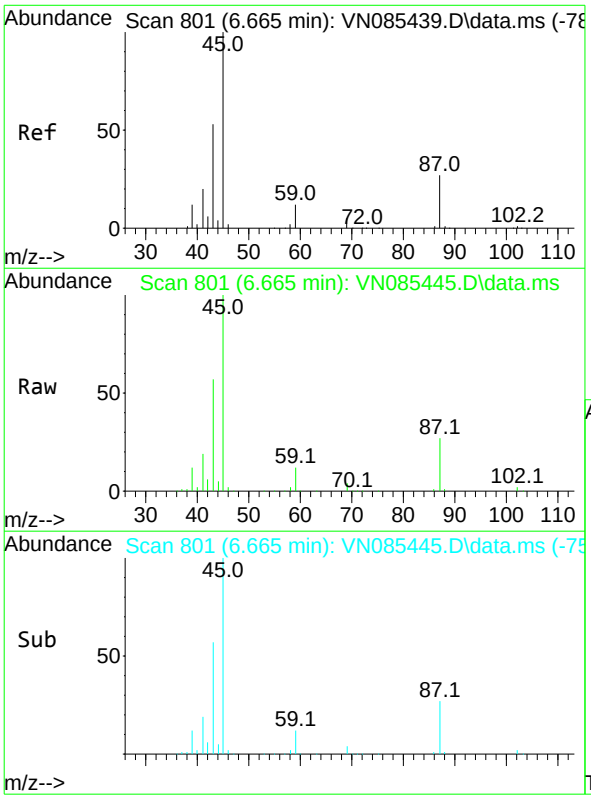
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 134.3 | 115.7 | 173.5 |
| 98 | 59.1 | 49.8 | 74.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

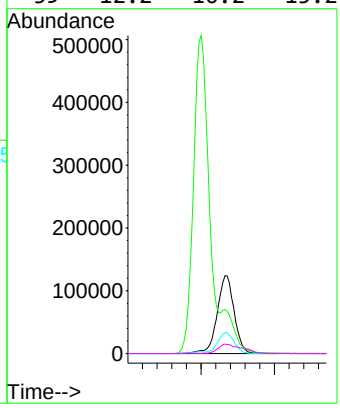
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

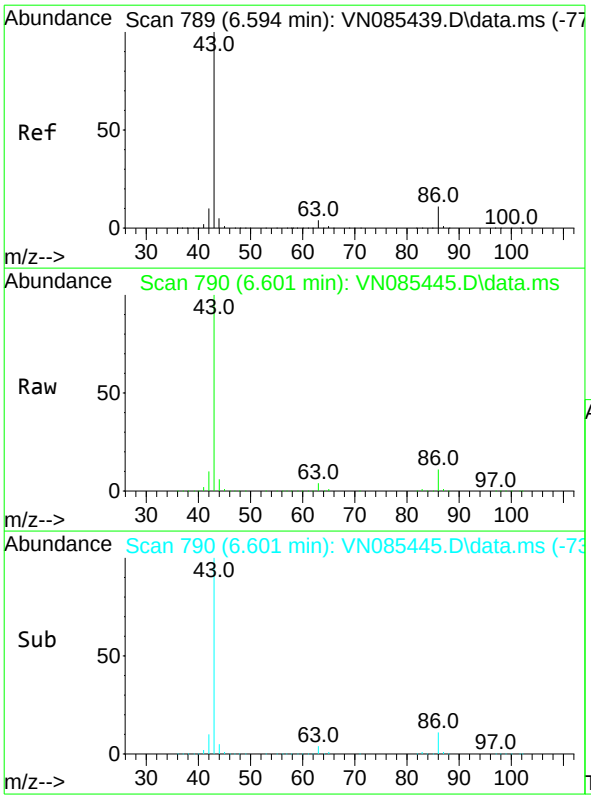



#22
Diisopropyl ether
Concen: 46.996 ug/l
RT: 6.665 min Scan# 801
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 45 Resp: 399206

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 56.0 | 45.0 | 67.6 |
| 87 | 26.8 | 21.8 | 32.8 |
| 59 | 12.2 | 10.2 | 15.2 |

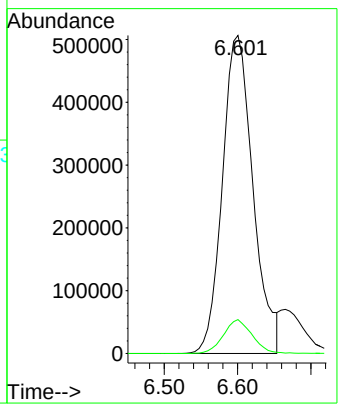





#23
Vinyl Acetate
Concen: 247.459 ug/l
RT: 6.601 min Scan# 79
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 43 Resp: 1471068

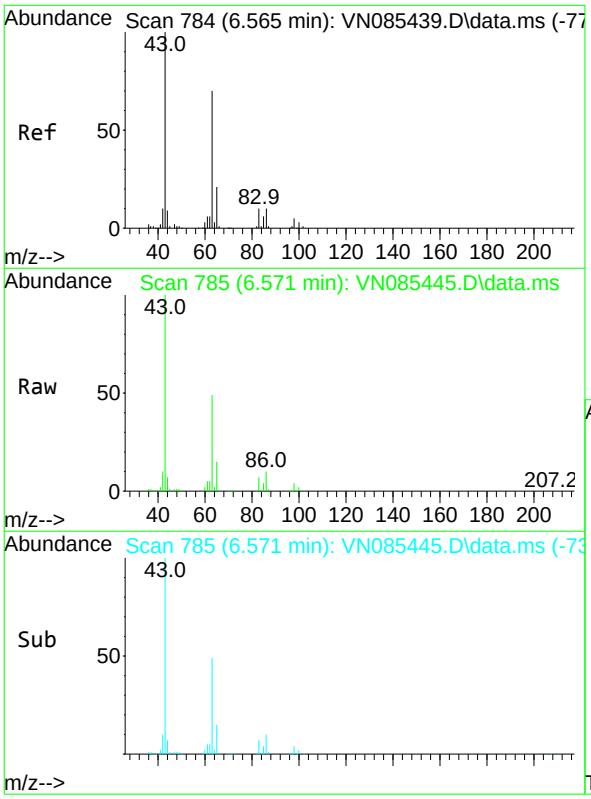
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 10.7 | 8.4 | 12.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

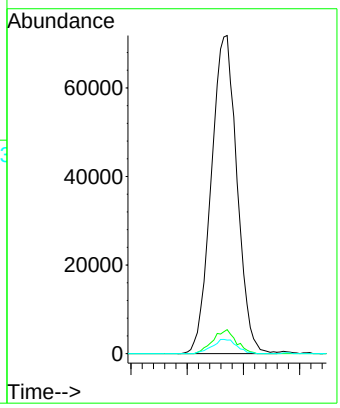
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

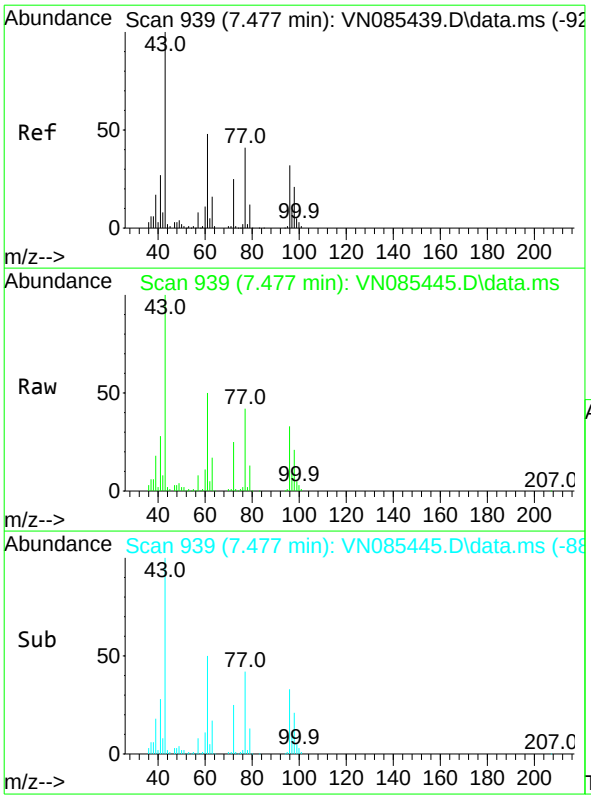



#24
1,1-Dichloroethane
Concen: 44.114 ug/l
RT: 6.571 min Scan# 785
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 63 Resp: 228489

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 7.5 | 3.3 | 9.8 |
| 100 | 4.2 | 2.0 | 6.0 |

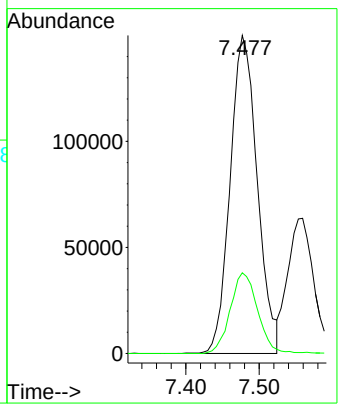





#25
2-Butanone
Concen: 228.924 ug/l
RT: 7.477 min Scan# 93
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 43 Resp: 386125

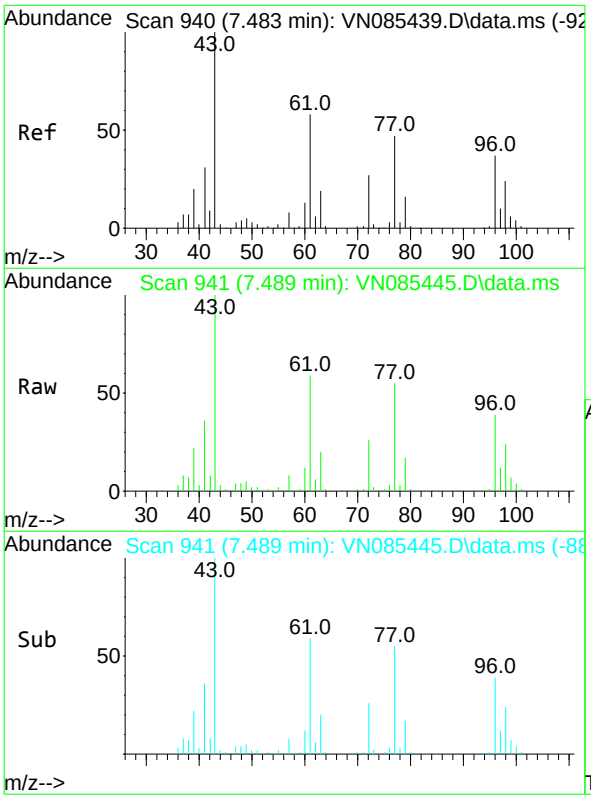
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 25.4 | 20.2 | 30.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

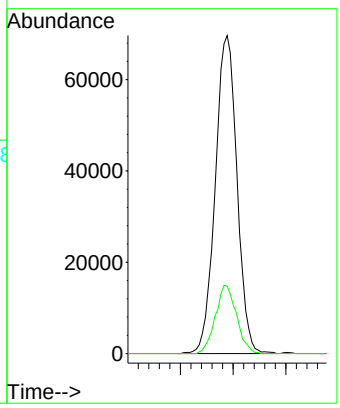
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

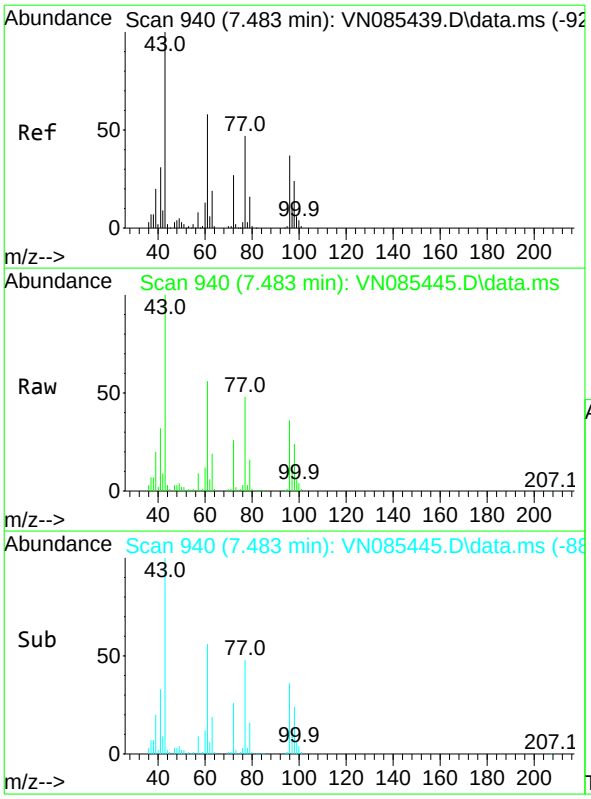



#26
2,2-Dichloropropane
Concen: 47.593 ug/l
RT: 7.489 min Scan# 941
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 77 Resp: 199303

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 20.9 | 10.7 | 32.1 |

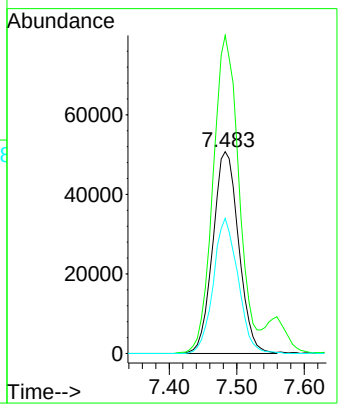





#27
cis-1,2-Dichloroethene
Concen: 45.446 ug/l
RT: 7.483 min Scan# 94
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 96 Resp: 134920

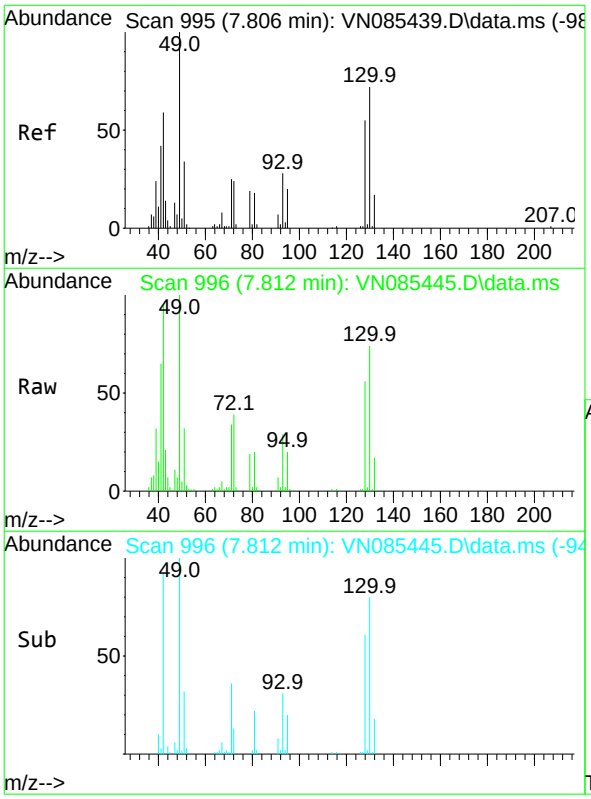
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 158.0 | 0.0 | 311.8 |
| 98 | 64.1 | 0.0 | 126.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

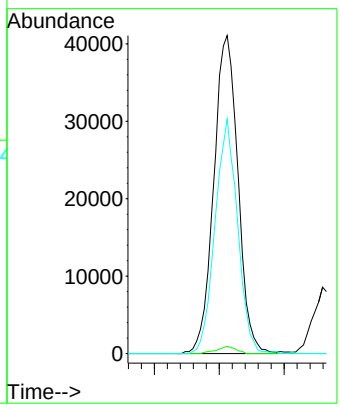
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

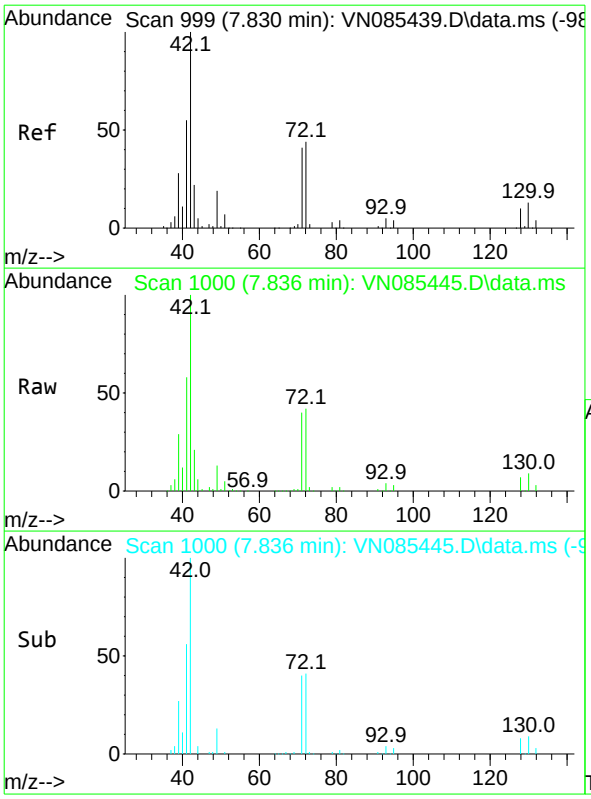



#28
Bromochloromethane
Concen: 44.122 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 49 Resp: 106323

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.8 | 0.0 | 4.4 |
| 130 | 68.6 | 55.0 | 82.4 |

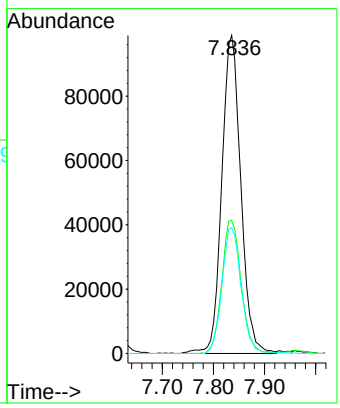





#29
Tetrahydrofuran
Concen: 239.065 ug/l
RT: 7.836 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 42 Resp: 255650

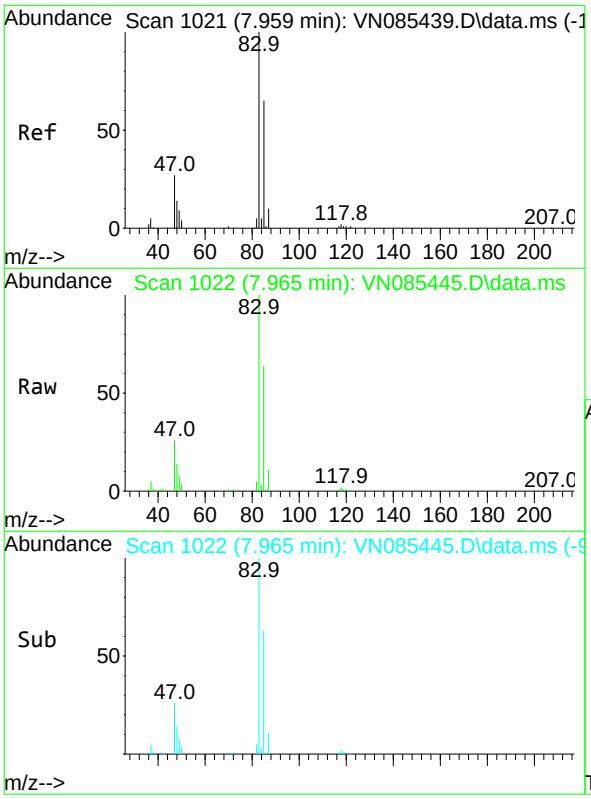
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 42.5 | 34.2 | 51.2 |
| 71 | 39.9 | 32.5 | 48.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

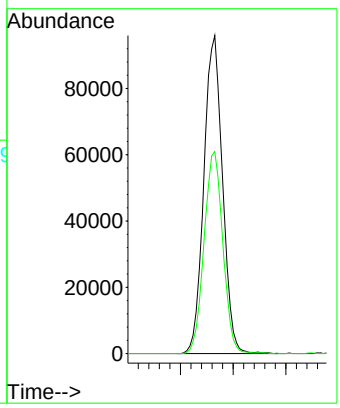
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

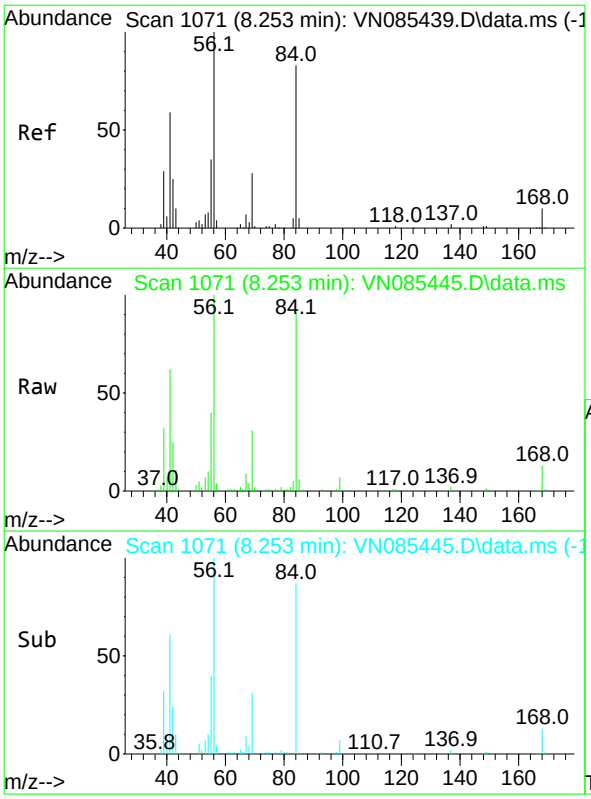



#30
Chloroform
Concen: 44.071 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 83 Resp: 235923

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 63.5 | 51.8 | 77.6 |

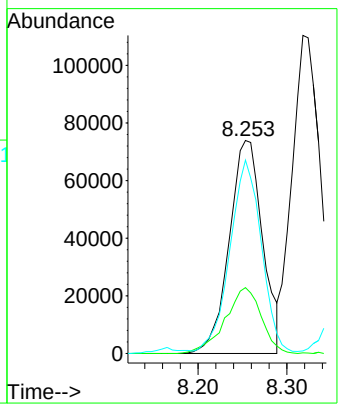





#31
Cyclohexane
Concen: 42.878 ug/l
RT: 8.253 min Scan# 10
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 56 Resp: 193034

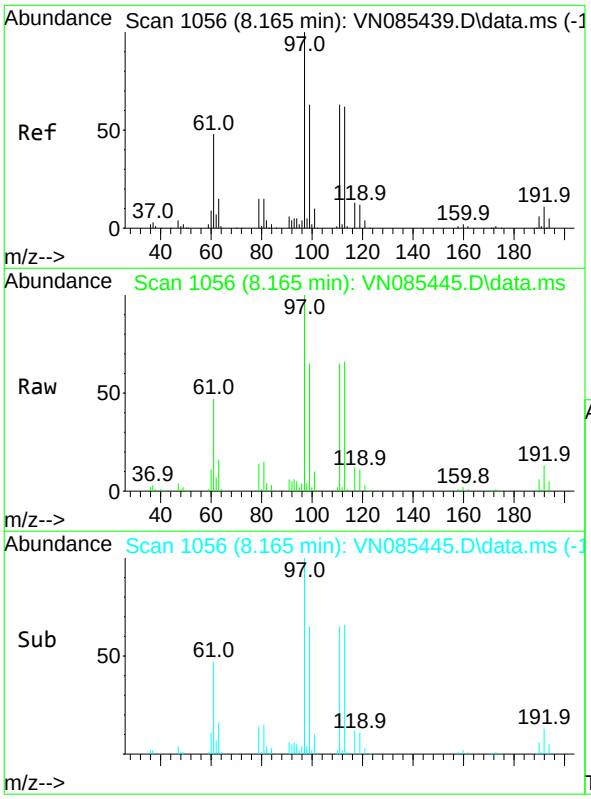
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 30.5 | 22.2 | 33.4 |
| 84 | 89.4 | 66.4 | 99.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

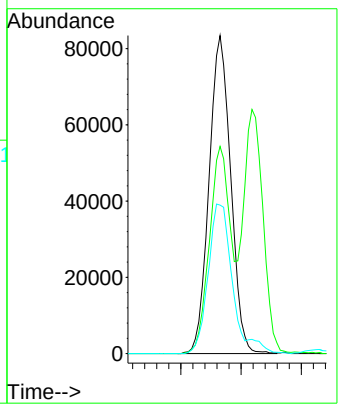
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

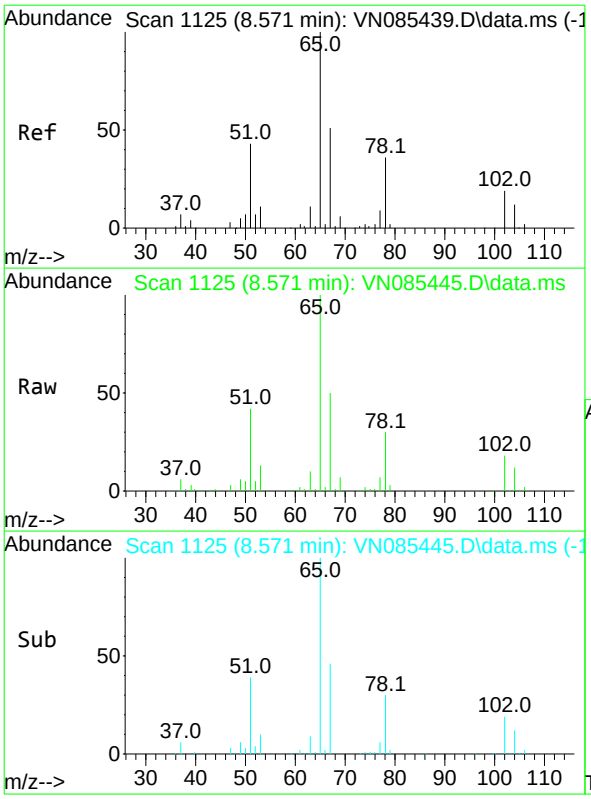



#32
1,1,1-Trichloroethane
Concen: 44.332 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 97 Resp: 208172

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 61.8 | 49.8 | 74.6 |
| 61 | 52.8 | 41.4 | 62.2 |

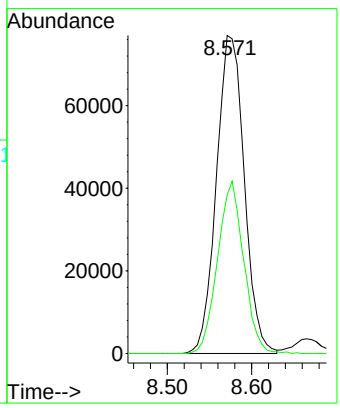





#33
1,2-Dichloroethane-d4
Concen: 49.782 ug/l
RT: 8.571 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 65 Resp: 176594

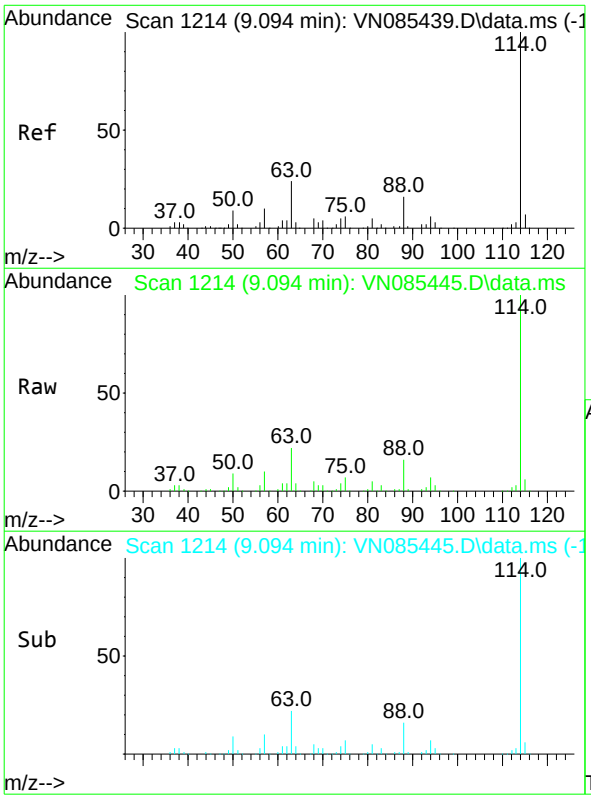
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.9 | 0.0 | 101.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

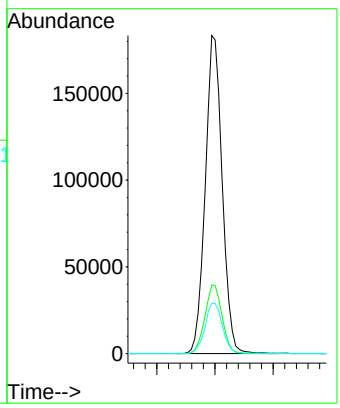
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

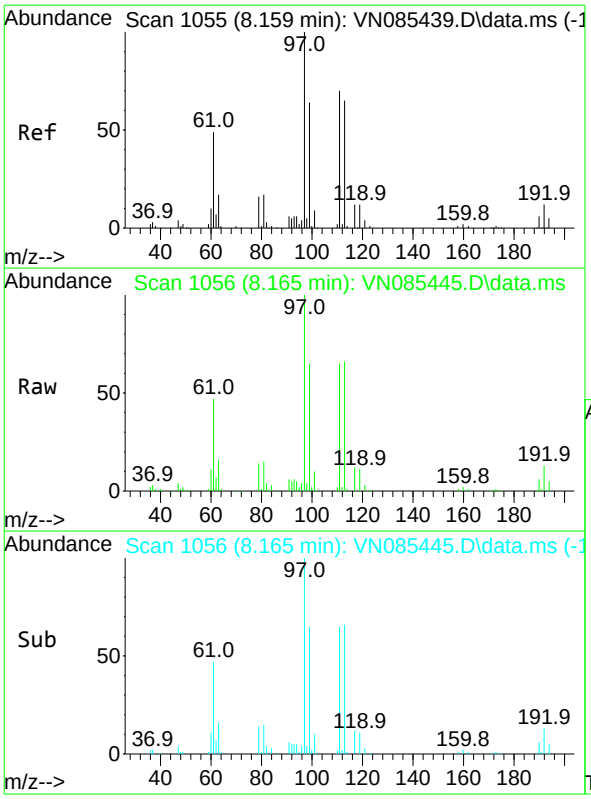



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.094 min Scan# 1214
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:114 Resp: 370487

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 21.6 | 0.0 | 47.6 |
| 88 | 15.8 | 0.0 | 32.6 |

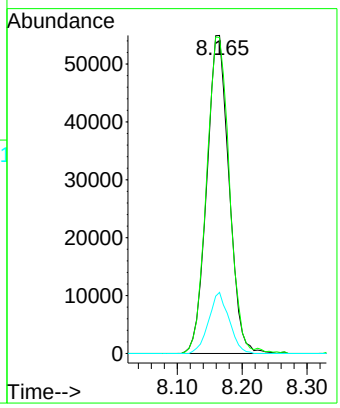





#35
Dibromofluoromethane
Concen: 50.768 ug/l
RT: 8.165 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:113 Resp: 130487

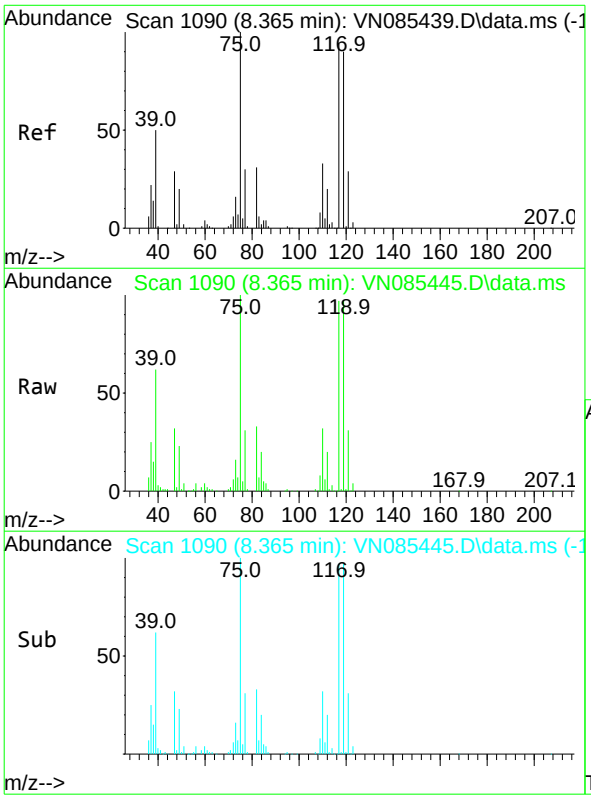
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 102.5 | 82.7 | 124.1 |
| 192 | 17.7 | 14.3 | 21.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

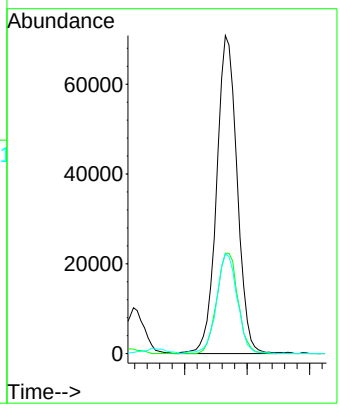
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

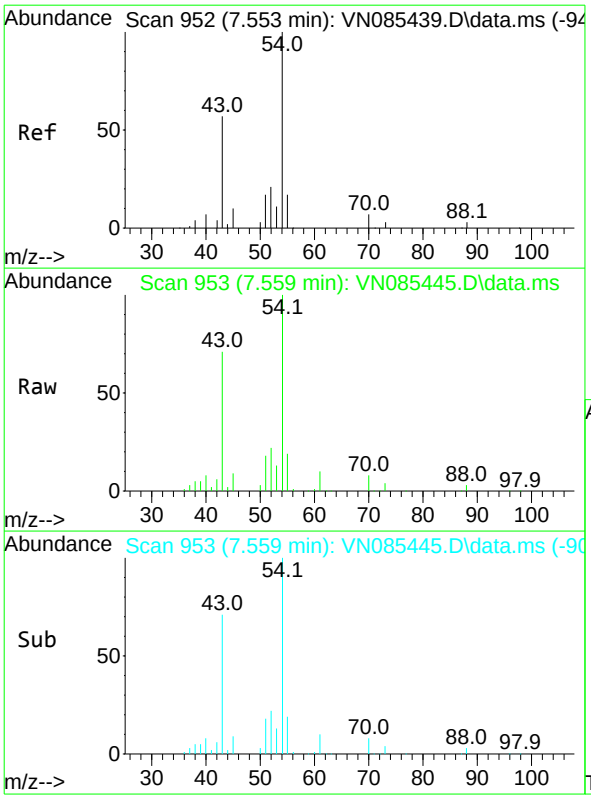



#36
1,1-Dichloropropene
Concen: 44.863 ug/l
RT: 8.365 min Scan# 1090
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 75 Resp: 161834

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 32.4 | 16.5 | 49.5 |
| 77 | 31.8 | 24.4 | 36.6 |

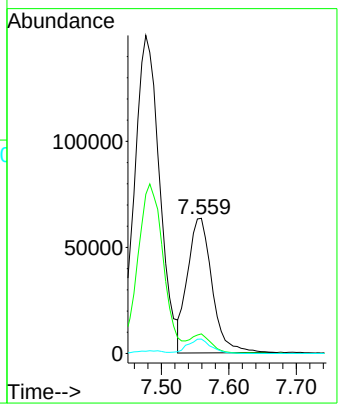





#37
Ethyl Acetate
Concen: 44.123 ug/l
RT: 7.559 min Scan# 95
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 43 Resp: 160656

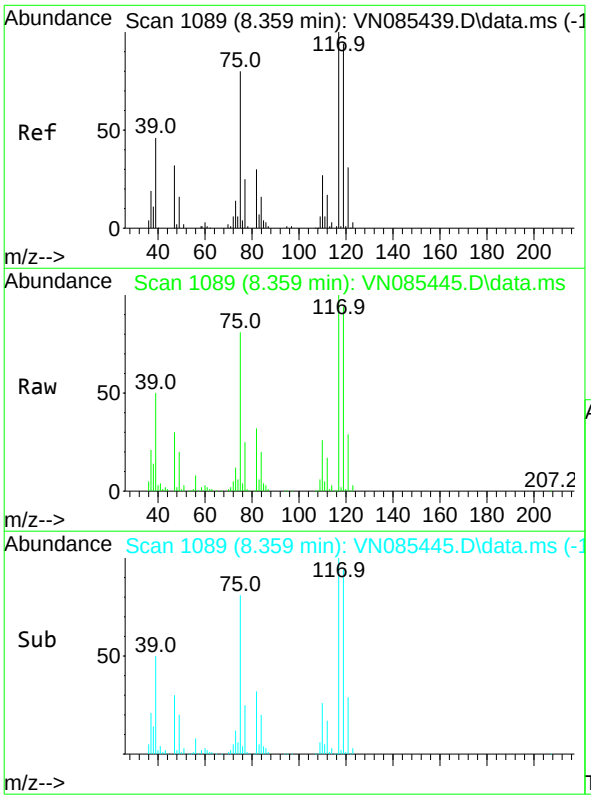
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 11.9 | 10.9 | 16.3 |
| 70 | 10.2 | 7.5 | 11.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

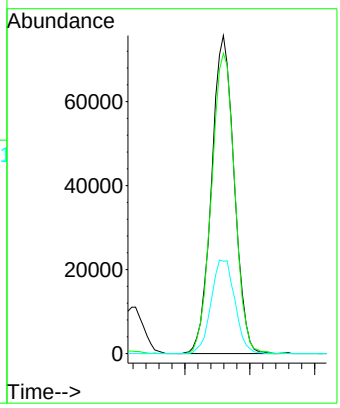
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

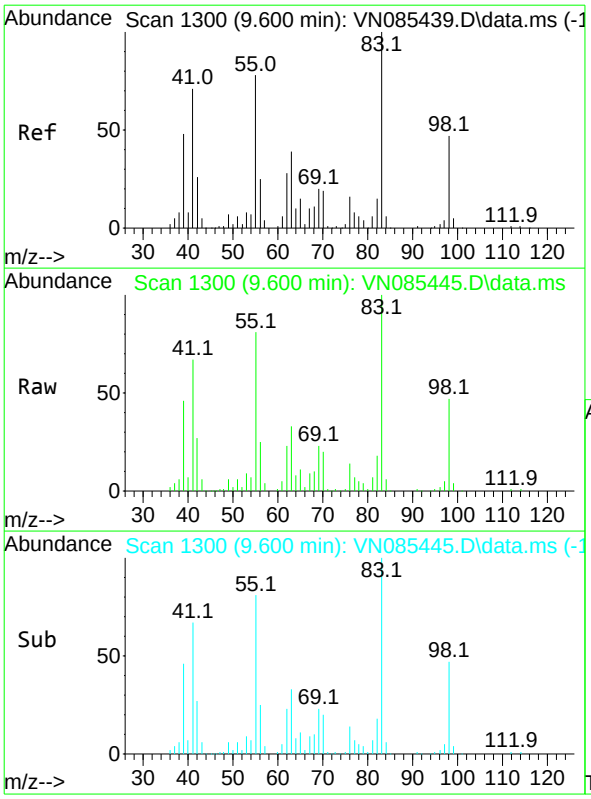



#38
Carbon Tetrachloride
Concen: 44.456 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:117 Resp: 183592

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 94.4 | 75.4 | 113.2 |
| 121 | 29.0 | 24.6 | 37.0 |

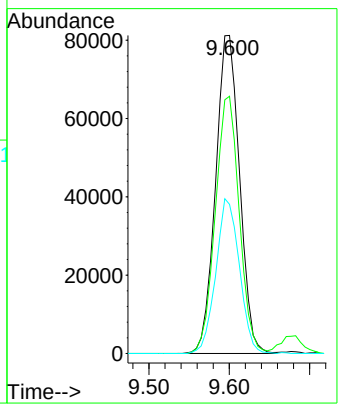





#39
Methylcyclohexane
Concen: 49.687 ug/l
RT: 9.600 min Scan# 13
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 83 Resp: 168431

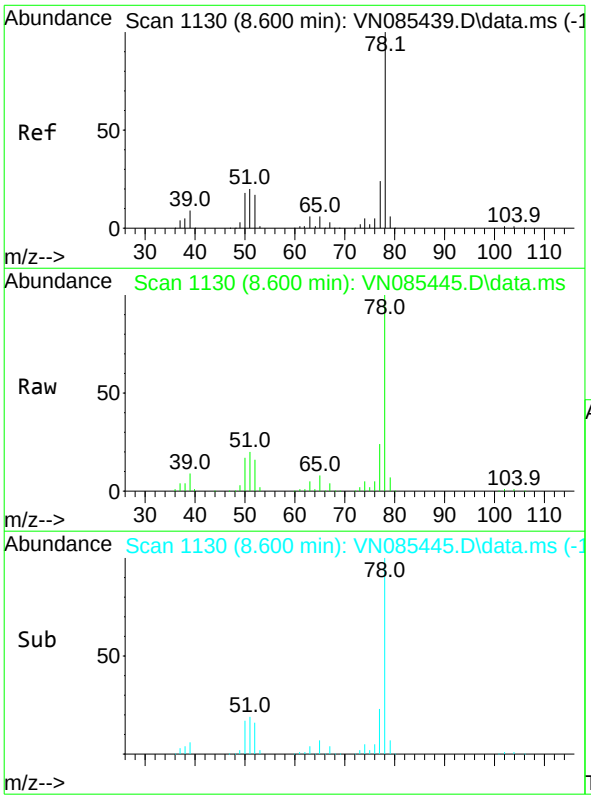
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 80.9 | 62.6 | 94.0 |
| 98 | 46.9 | 37.7 | 56.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

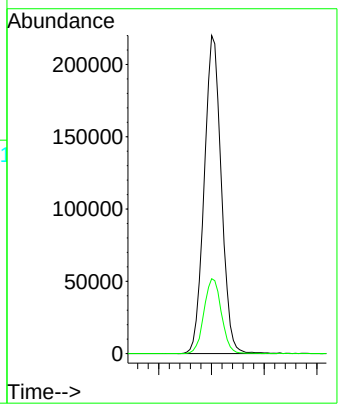
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

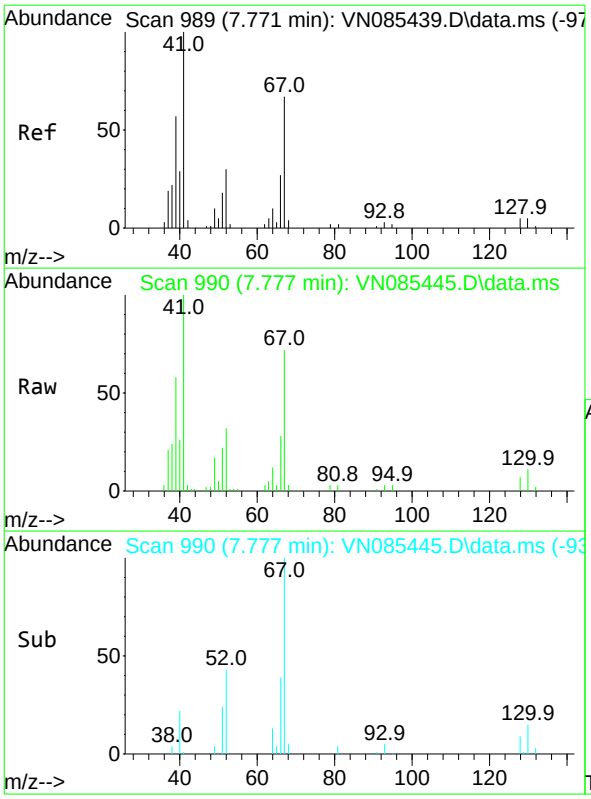



#40
Benzene
Concen: 45.657 ug/l
RT: 8.600 min Scan# 1130
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 78 Resp: 494871

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.5 | 19.0 | 28.6 |

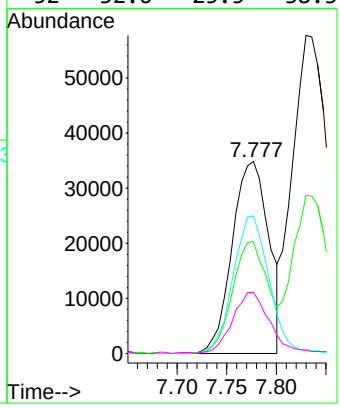





#41
Methacrylonitrile
Concen: 47.155 ug/l
RT: 7.777 min Scan# 99
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 41 Resp: 89326

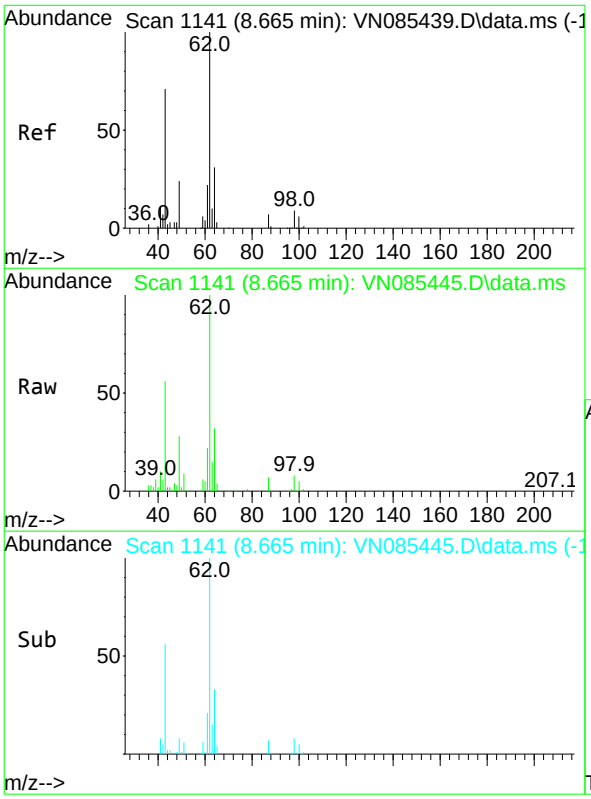
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 56.6 | 46.0 | 69.0 |
| 67 | 70.9 | 57.4 | 86.2 |
| 52 | 32.6 | 25.5 | 38.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

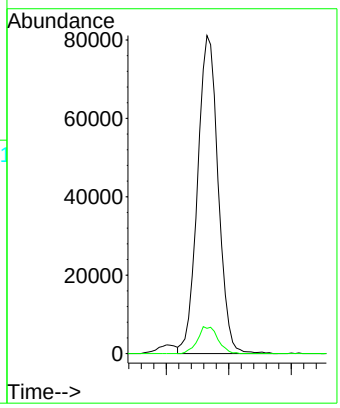
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

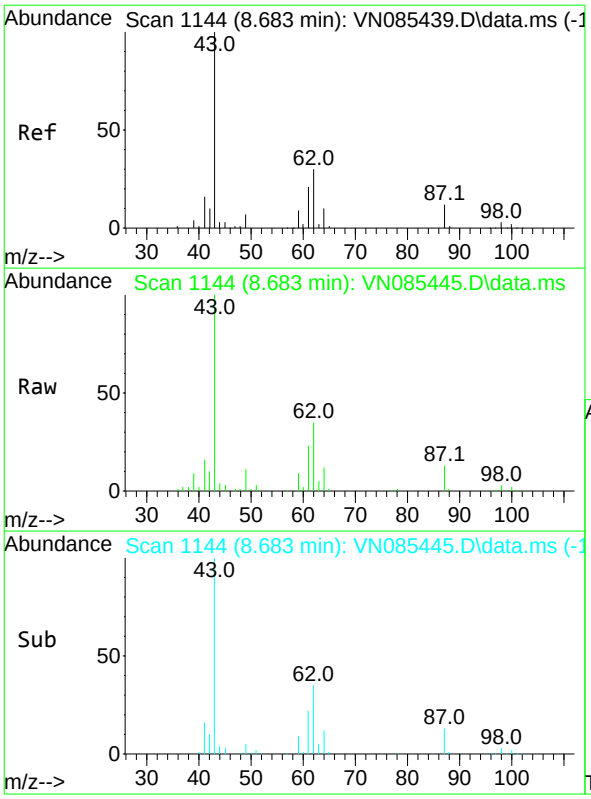



#42
1,2-Dichloroethane
Concen: 45.481 ug/l
RT: 8.665 min Scan# 1141
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 62 Resp: 185663

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 8.3 | 0.0 | 17.0 |

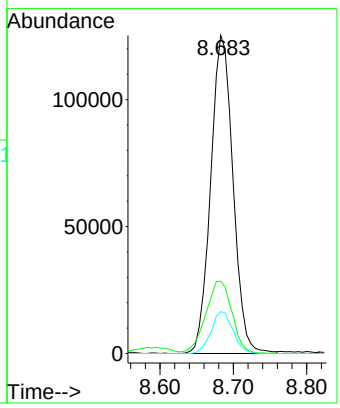





#43
Isopropyl Acetate
Concen: 45.440 ug/l
RT: 8.683 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 43 Resp: 265107

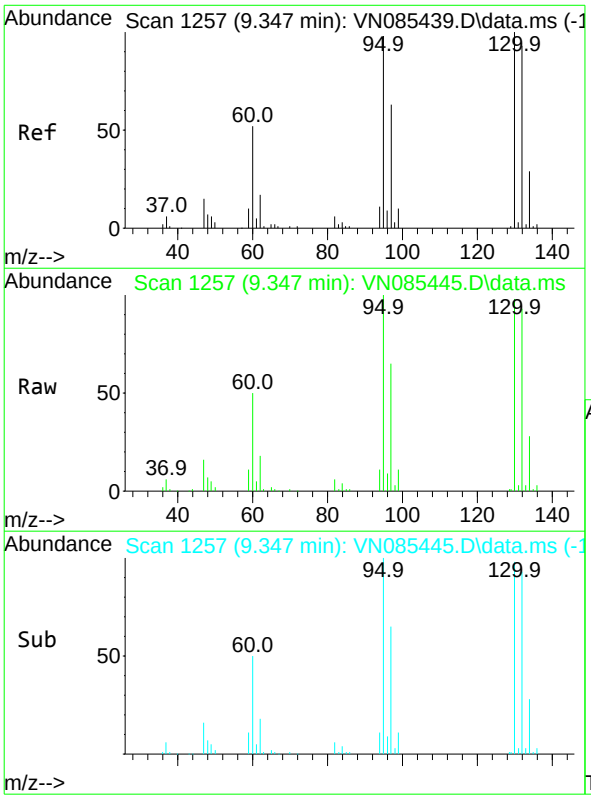
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 26.7 | 20.7 | 31.1 |
| 87 | 12.9 | 9.8 | 14.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

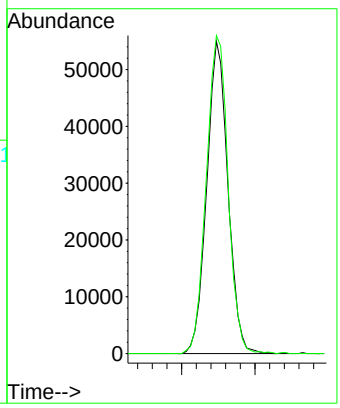
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

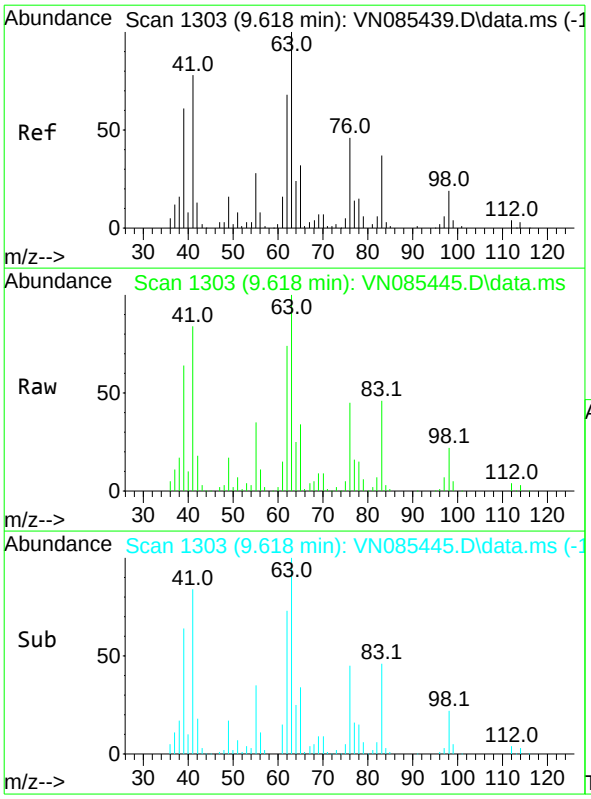



#44
Trichloroethene
Concen: 43.622 ug/l
RT: 9.347 min Scan# 1257
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:130 Resp: 110058

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 101.9 | 0.0 | 195.8 |

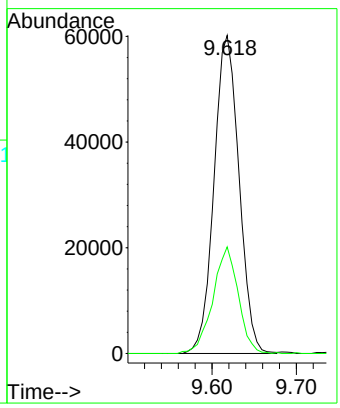





#45
1,2-Dichloropropane
Concen: 44.744 ug/l
RT: 9.618 min Scan# 13
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 63 Resp: 123876

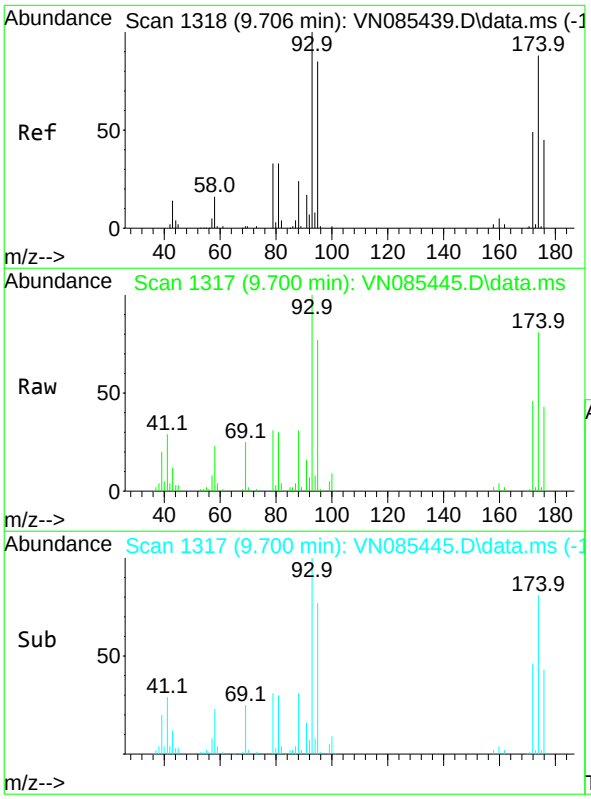
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 33.5 | 25.6 | 38.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

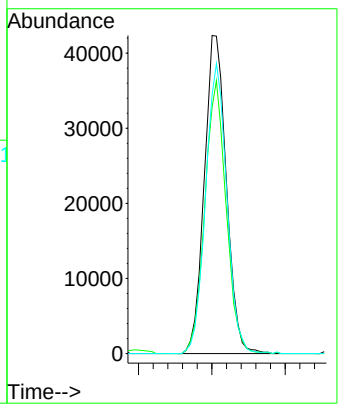
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

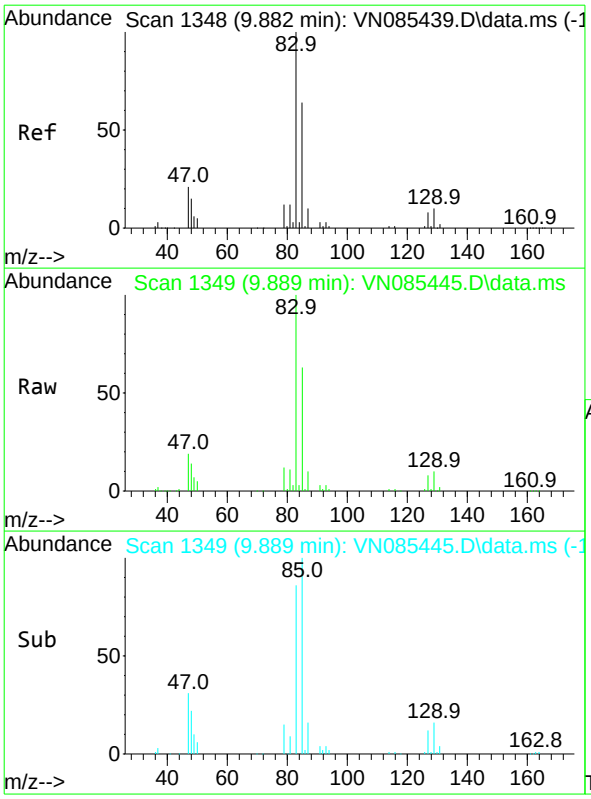



#46
Dibromomethane
Concen: 44.214 ug/l
RT: 9.700 min Scan# 1317
Delta R.T. -0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 93 Resp: 88325

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 82.9 | 64.7 | 97.1 |
| 174 | 88.0 | 69.0 | 103.4 |

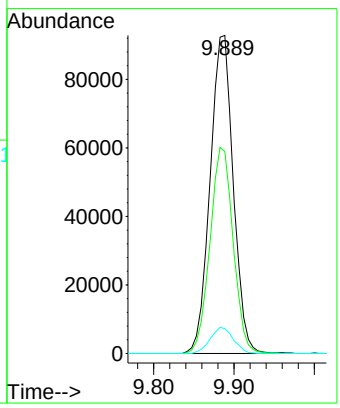





#47
Bromodichloromethane
Concen: 45.655 ug/l
RT: 9.889 min Scan# 13
Delta R.T. 0.007 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 83 Resp: 185808

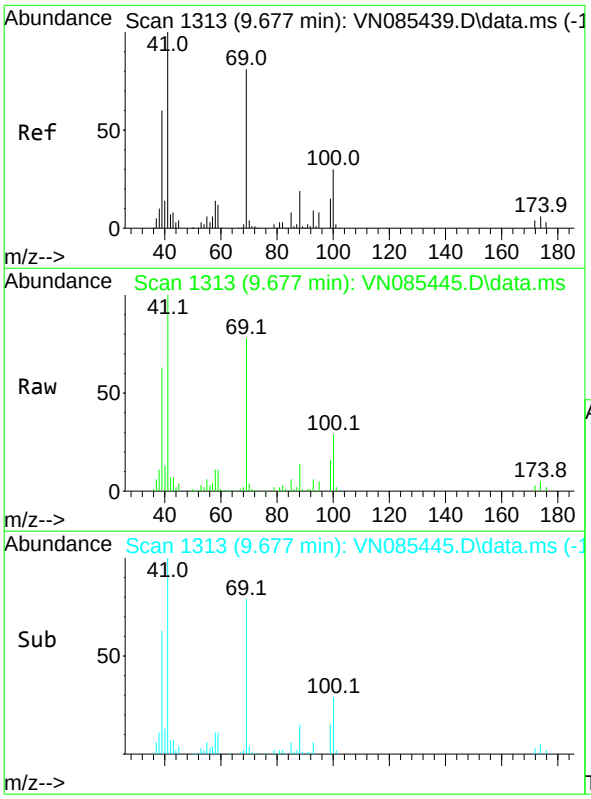
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 63.5 | 51.2 | 76.8 |
| 127 | 7.8 | 6.5 | 9.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

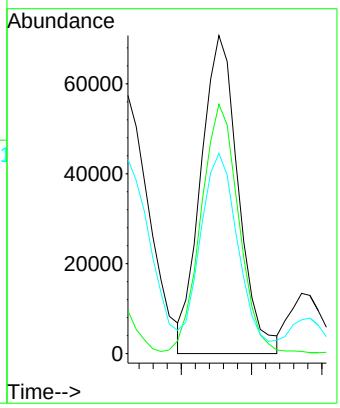
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

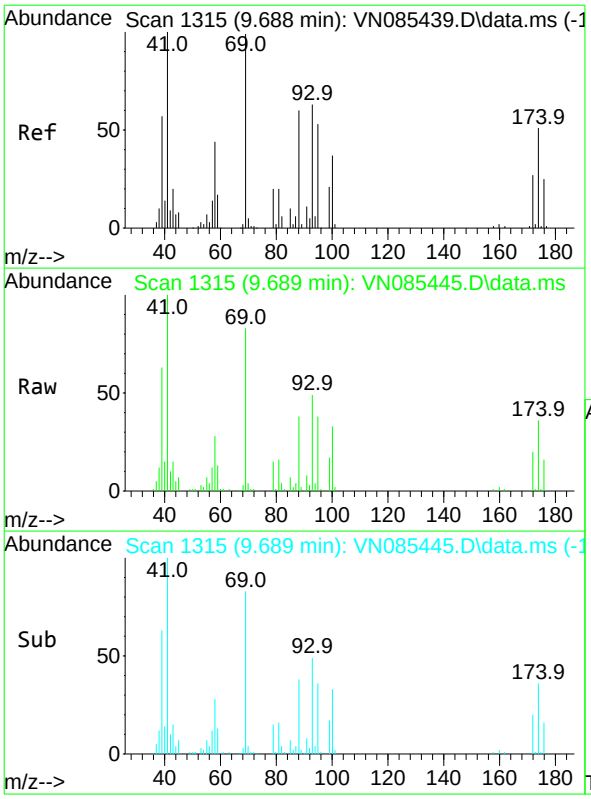



#48
Methyl methacrylate
Concen: 49.948 ug/l
RT: 9.677 min Scan# 1313
Delta R.T. -0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 41 Resp: 131142

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 78.6 | 64.7 | 97.1 |
| 39 | 63.3 | 49.0 | 73.6 |

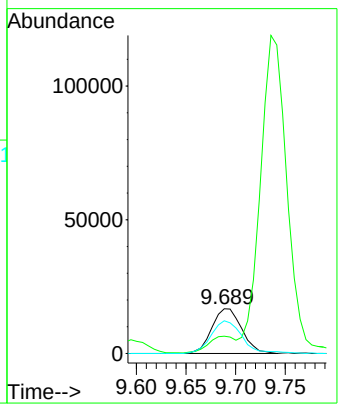





#49
1,4-Dioxane
Concen: 792.760 ug/l
RT: 9.689 min Scan# 13
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 88 Resp: 35051

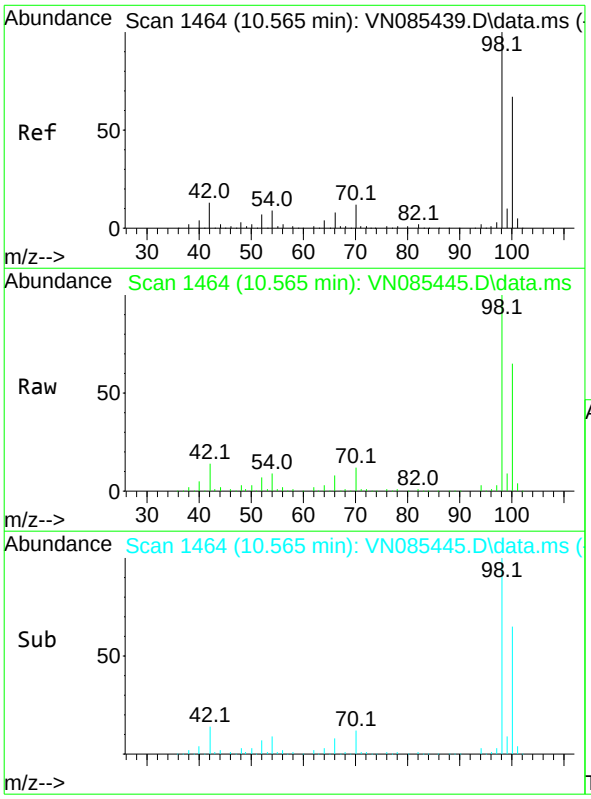
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 33.8 | 26.6 | 39.8 |
| 58 | 76.1 | 59.5 | 89.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

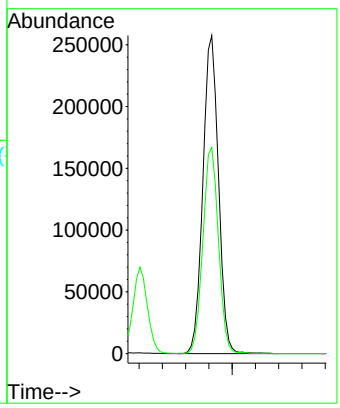
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

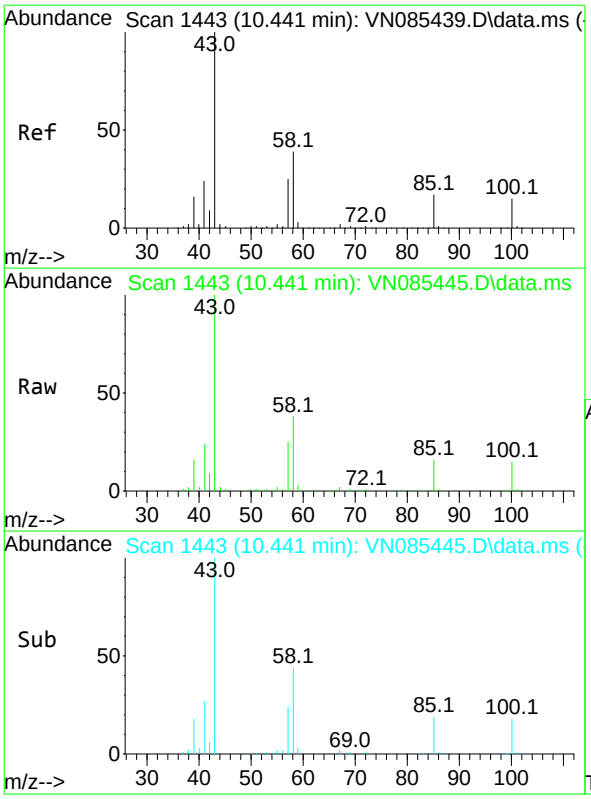



#50
Toluene-d8
Concen: 52.302 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 98 Resp: 477630

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.7 | 52.2 | 78.4 |

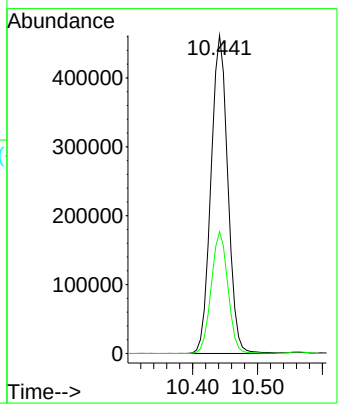





#51
4-Methyl-2-Pentanone
Concen: 245.877 ug/l
RT: 10.441 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 43 Resp: 832426

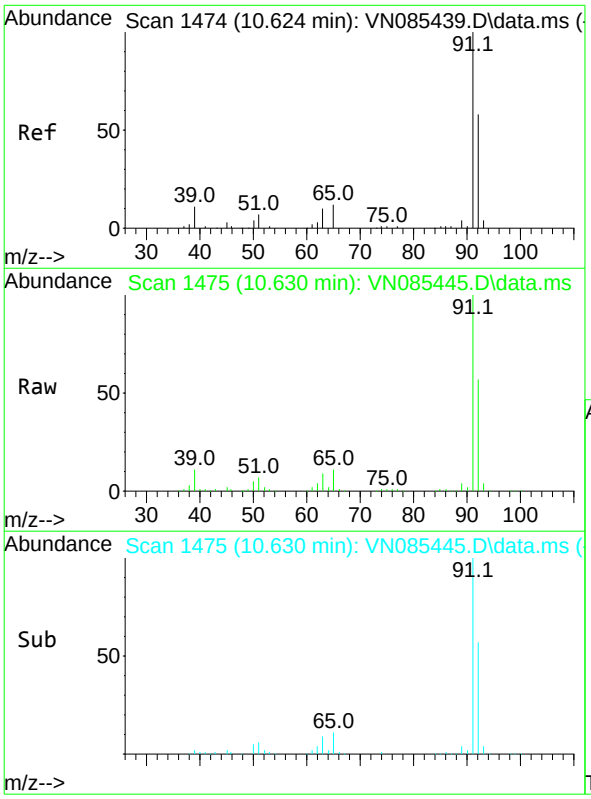
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 37.8 | 30.5 | 45.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

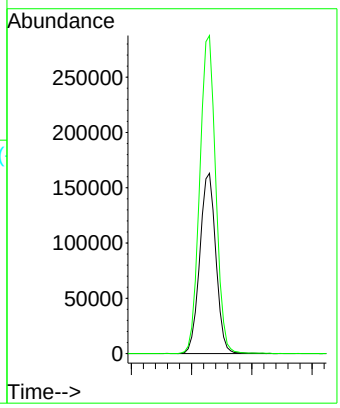
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

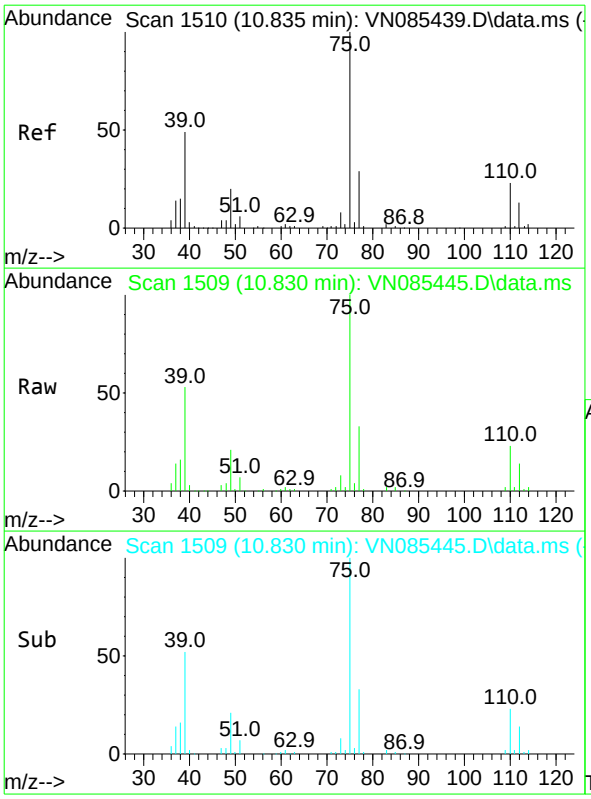



#52
Toluene
Concen: 48.073 ug/l
RT: 10.630 min Scan# 1475
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 92 Resp: 301911

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 175.7 | 139.2 | 208.8 |

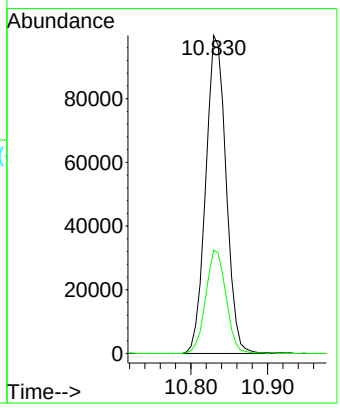





#53
t-1,3-Dichloropropene
Concen: 47.757 ug/l
RT: 10.830 min Scan# 15
Delta R.T. -0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 75 Resp: 183680

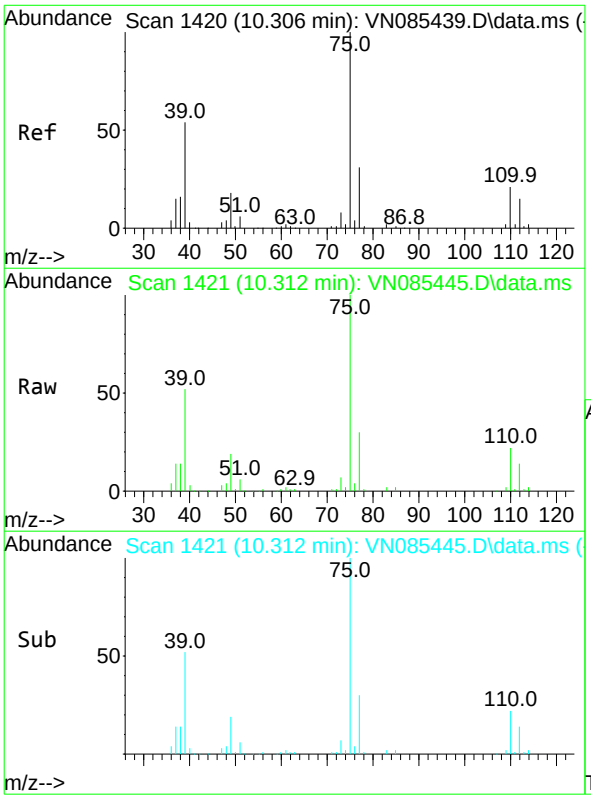
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.6 | 23.5 | 35.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

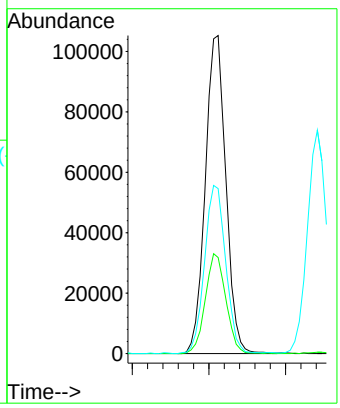
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

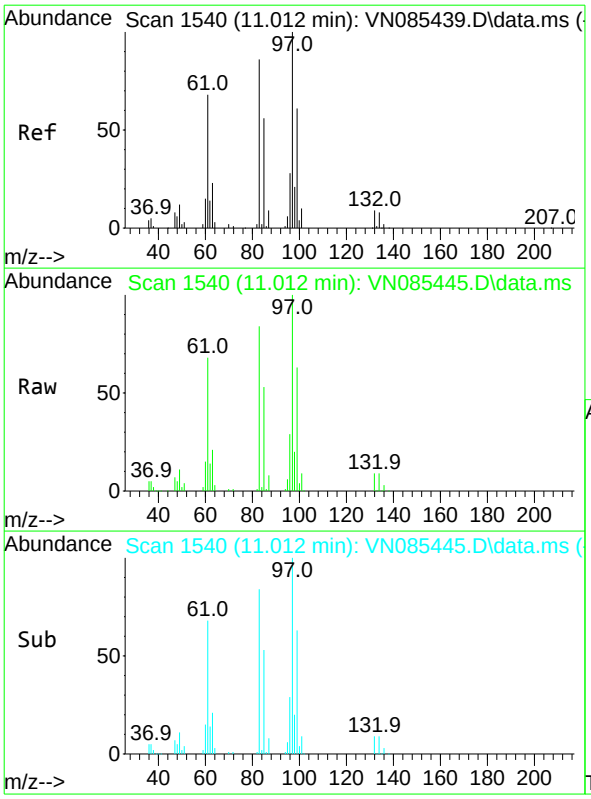



#54
cis-1,3-Dichloropropene
Concen: 47.783 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 75 Resp: 196307

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 30.2 | 25.0 | 37.4 |
| 39 | 51.9 | 43.1 | 64.7 |

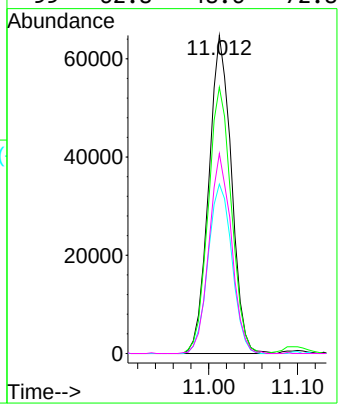





#55
1,1,2-Trichloroethane
Concen: 46.173 ug/l
RT: 11.012 min Scan# 15
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 97 Resp: 114757

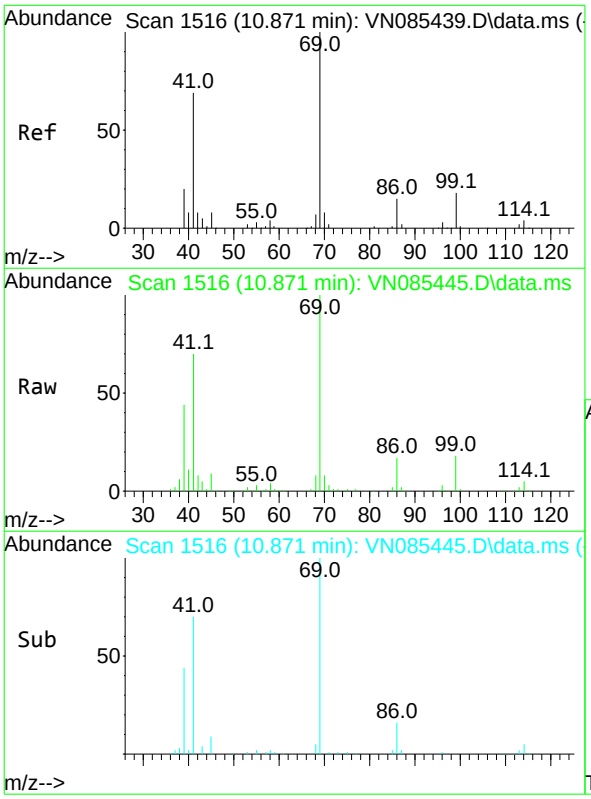
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 83.7 | 69.0 | 103.6 |
| 85 | 53.2 | 44.6 | 66.8 |
| 99 | 62.8 | 48.6 | 72.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

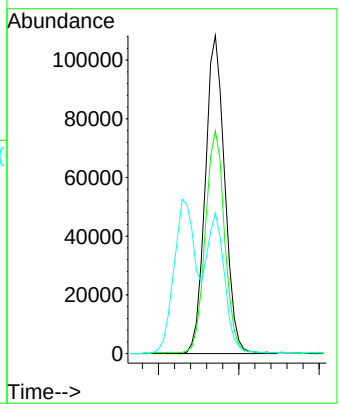
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

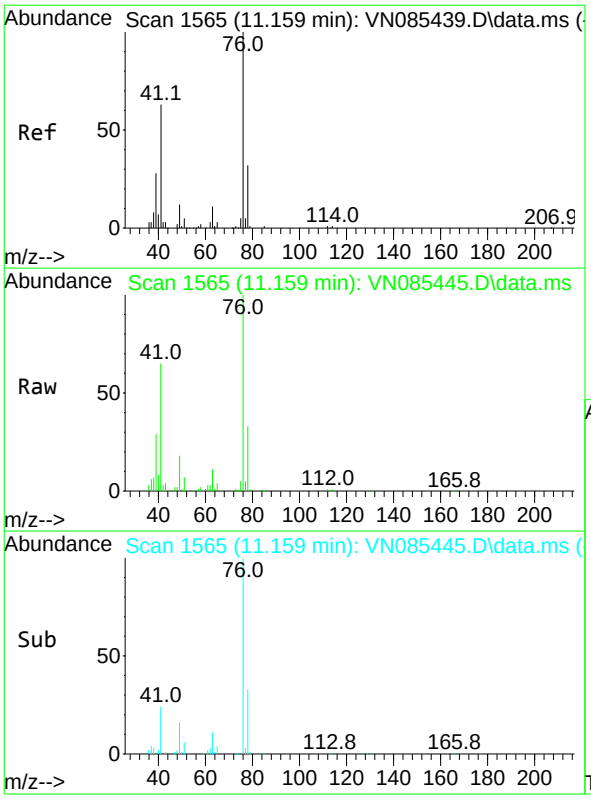



#56
Ethyl methacrylate
Concen: 43.762 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 69 Resp: 182170

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 70.4 | 54.6 | 82.0 |
| 39 | 40.2 | 32.4 | 48.6 |

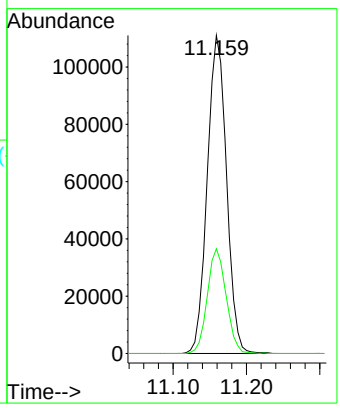





#57
1,3-Dichloropropane
Concen: 46.877 ug/l
RT: 11.159 min Scan# 15
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 76 Resp: 202583

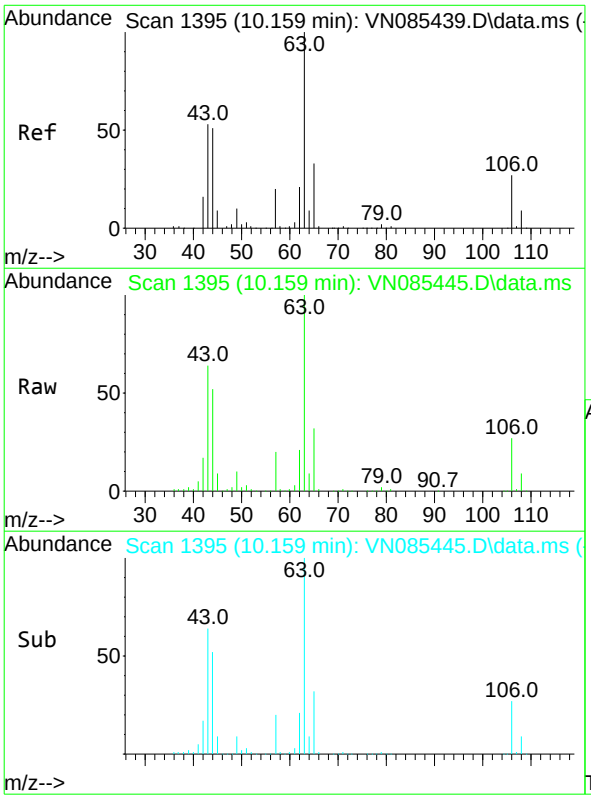
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.1 | 25.6 | 38.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

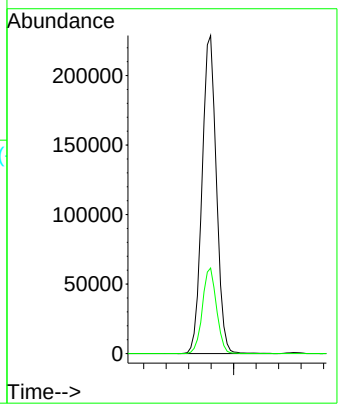
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

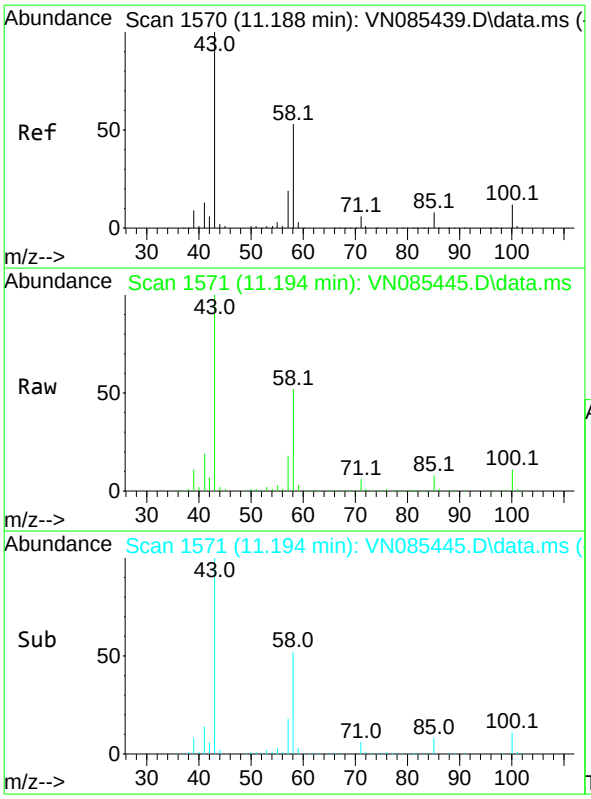



#58
2-Chloroethyl Vinyl ether
Concen: 256.116 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 63 Resp: 403949

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 26.4 | 21.6 | 32.4 |

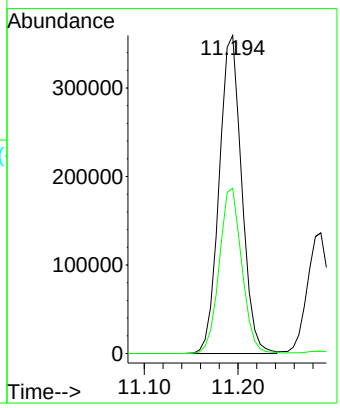





#59
2-Hexanone
Concen: 251.213 ug/l
RT: 11.194 min Scan# 15
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 43 Resp: 598433

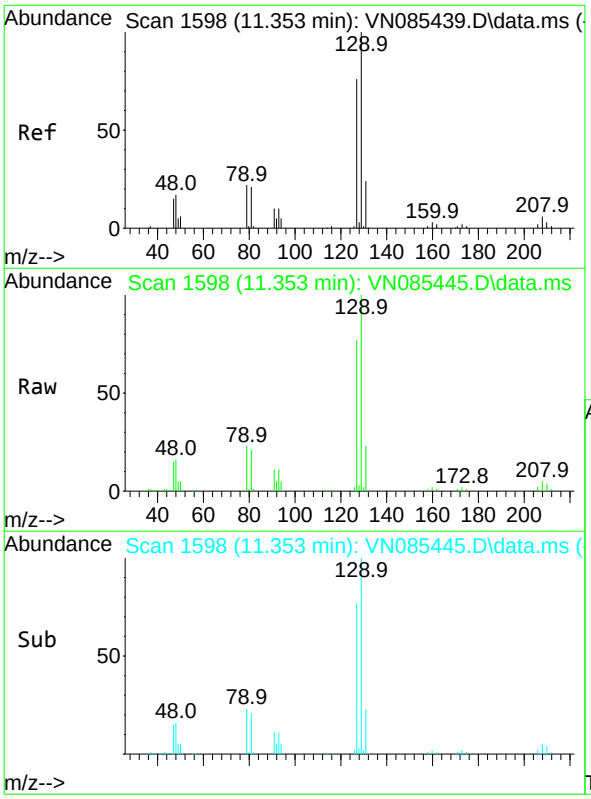
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 52.1 | 26.2 | 78.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

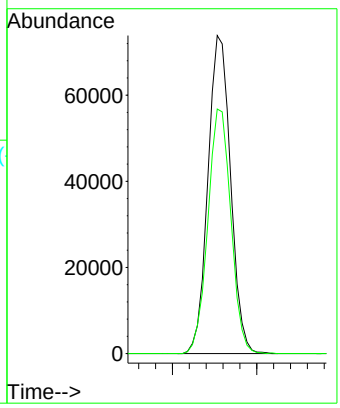
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

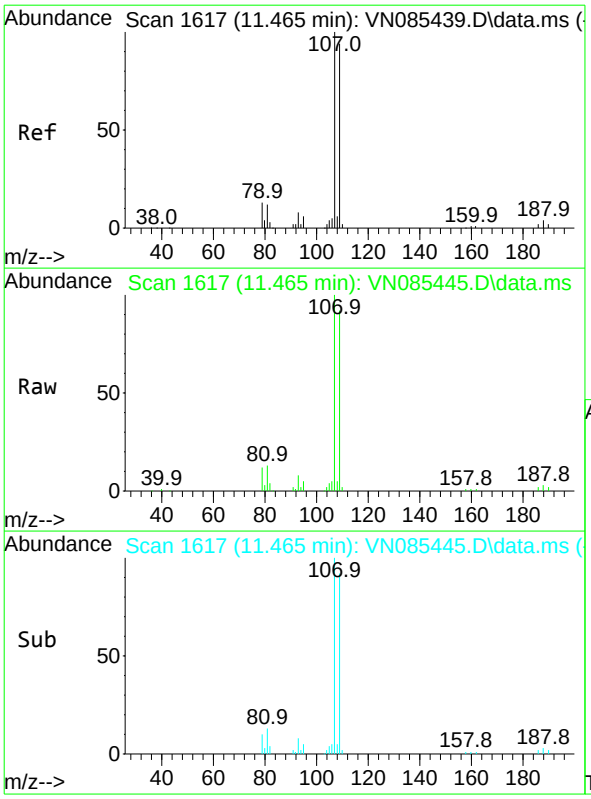



#60
Dibromochloromethane
Concen: 45.935 ug/l
RT: 11.353 min Scan# 1598
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:129 Resp: 137831

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 78.1 | 38.6 | 115.8 |

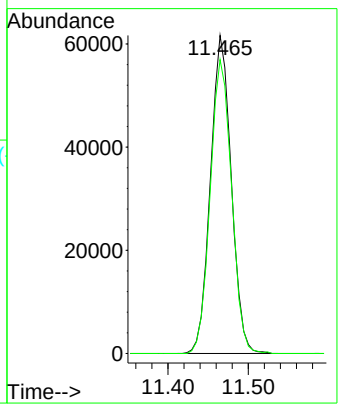





#61
1,2-Dibromoethane
Concen: 44.837 ug/l
RT: 11.465 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:107 Resp: 110926

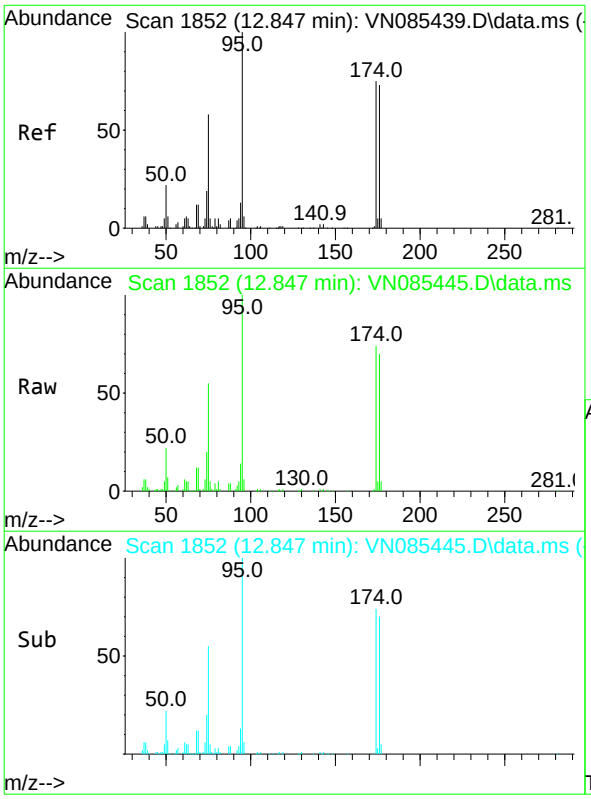
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 94.7 | 75.9 | 113.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

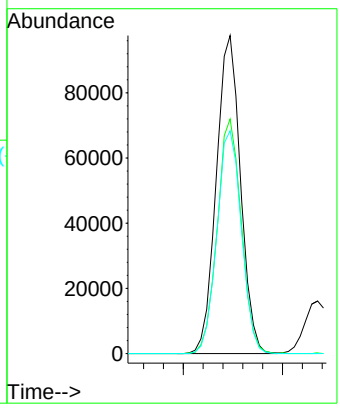
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

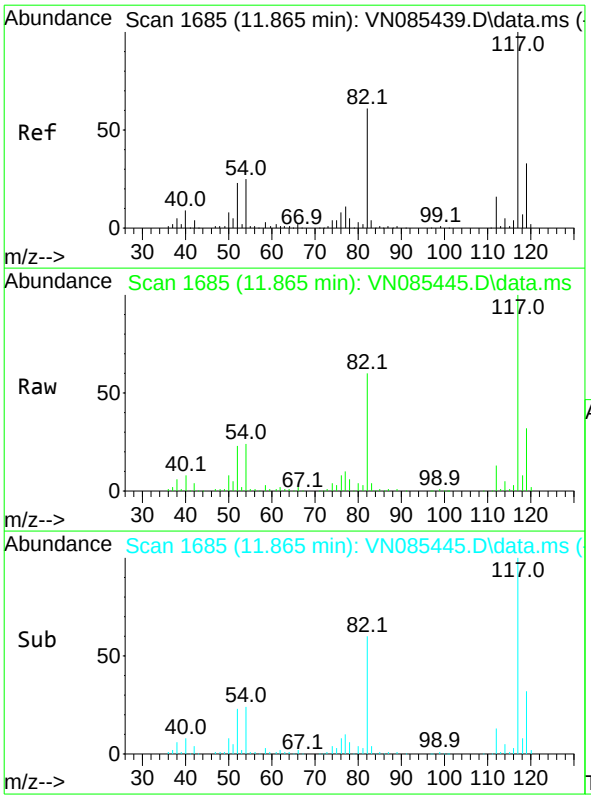



#62
4-Bromofluorobenzene
Concen: 52.899 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 95 Resp: 165249

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 73.1 | 0.0 | 145.0 |
| 176 | 70.8 | 0.0 | 142.4 |

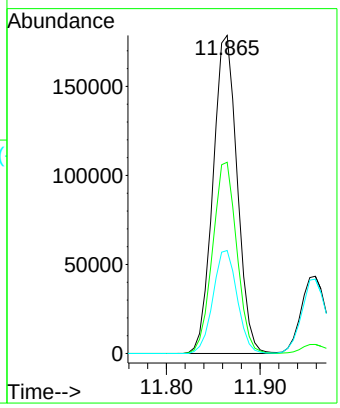





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:117 Resp: 320948

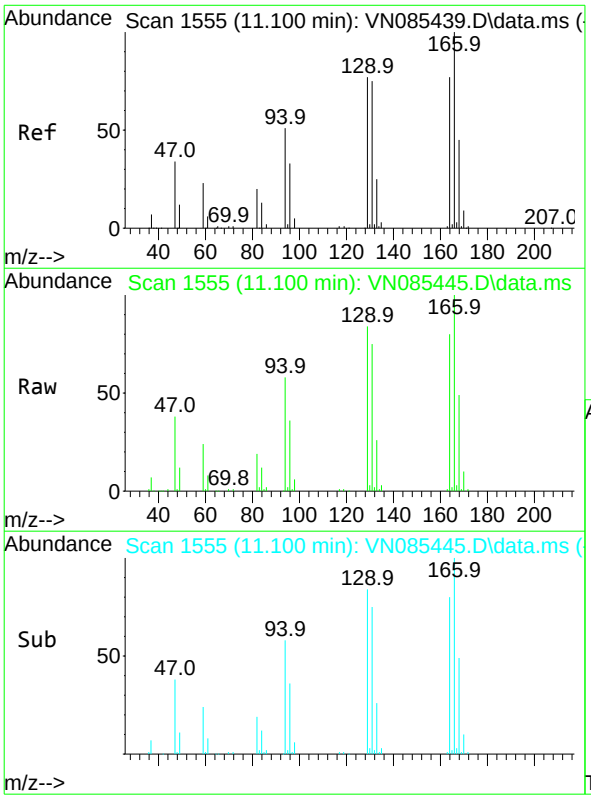
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 60.1 | 48.6 | 72.8 |
| 119 | 32.4 | 26.6 | 39.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

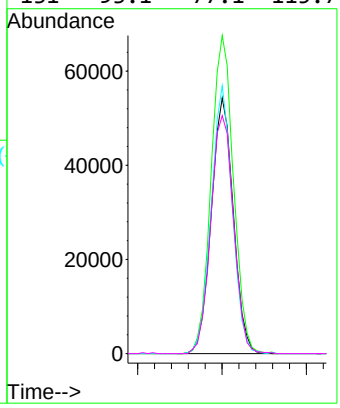
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

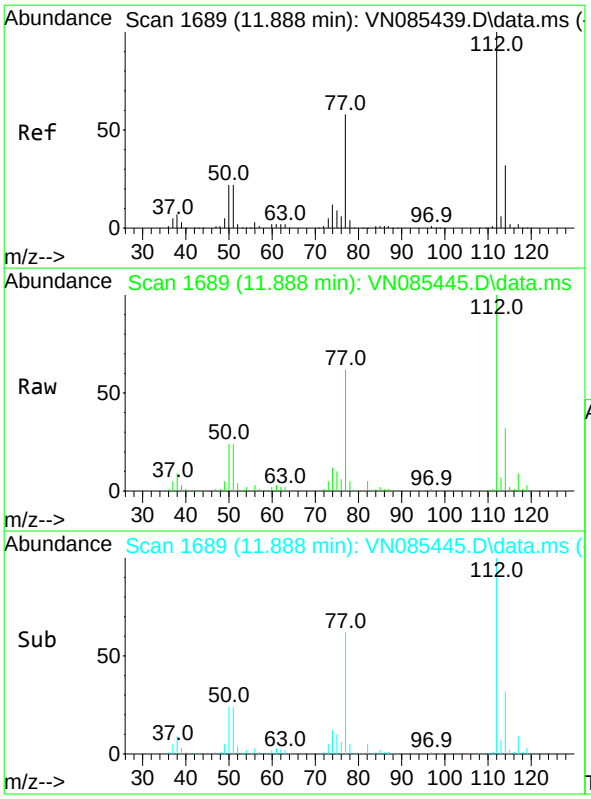



#64
Tetrachloroethene
Concen: 44.886 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:164 Resp: 98211

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 124.4 | 103.4 | 155.2 |
| 129 | 104.8 | 79.2 | 118.8 |
| 131 | 93.1 | 77.1 | 115.7 |

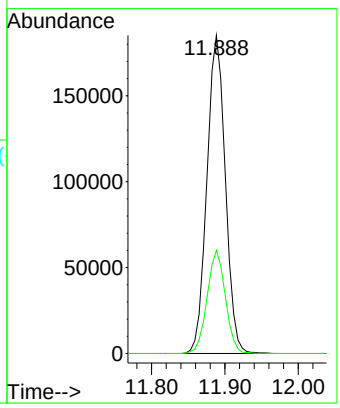





#65
Chlorobenzene
Concen: 45.901 ug/l
RT: 11.888 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:112 Resp: 322723

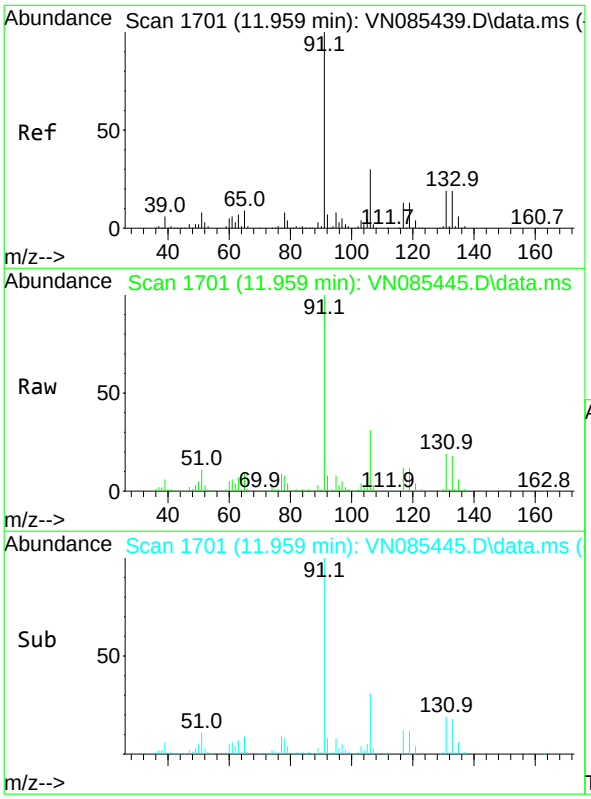
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 32.4 | 25.3 | 37.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

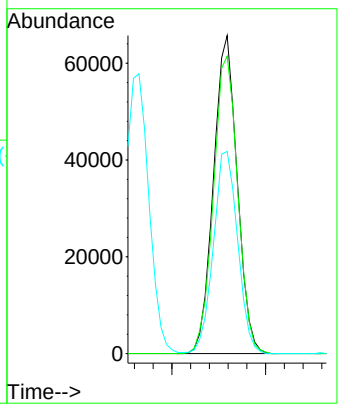
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

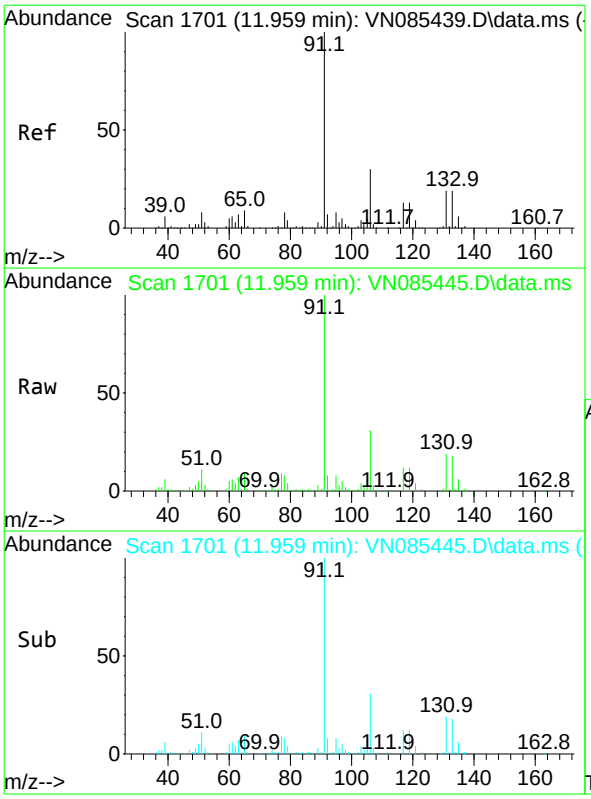



#66
1,1,1,2-Tetrachloroethane
Concen: 44.712 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:131 Resp: 115379

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 95.8 | 47.4 | 142.3 |
| 119 | 65.2 | 33.1 | 99.5 |

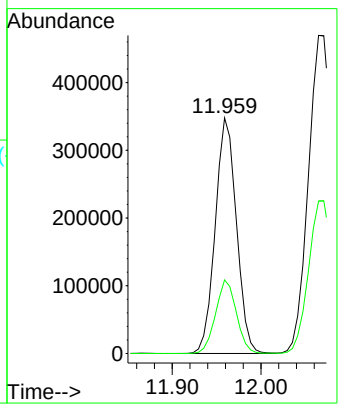





#67
Ethyl Benzene
Concen: 50.391 ug/l
RT: 11.959 min Scan# 17
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 91 Resp: 577059

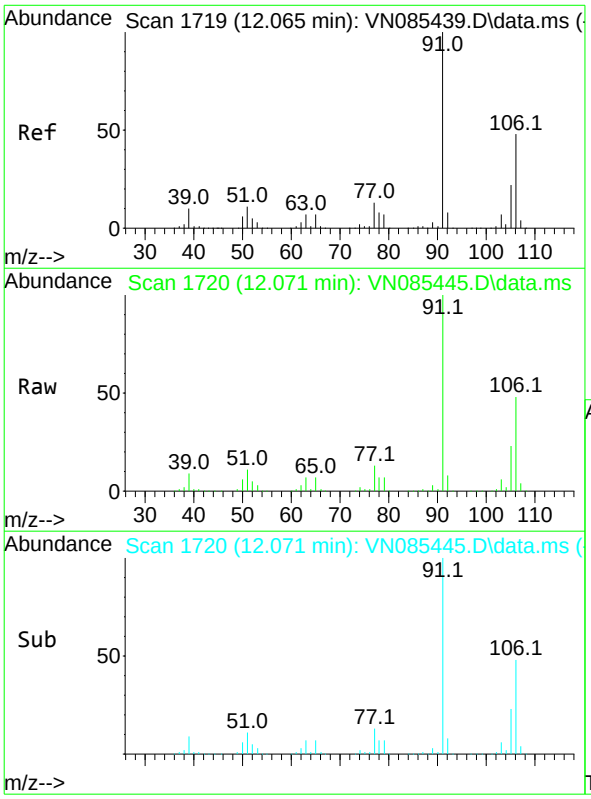
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 31.2 | 23.8 | 35.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

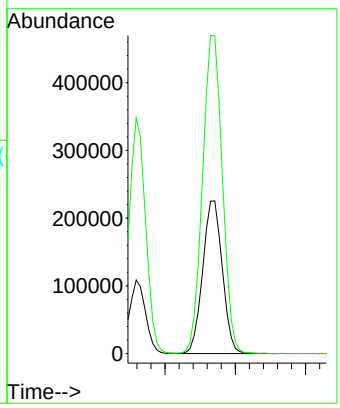
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

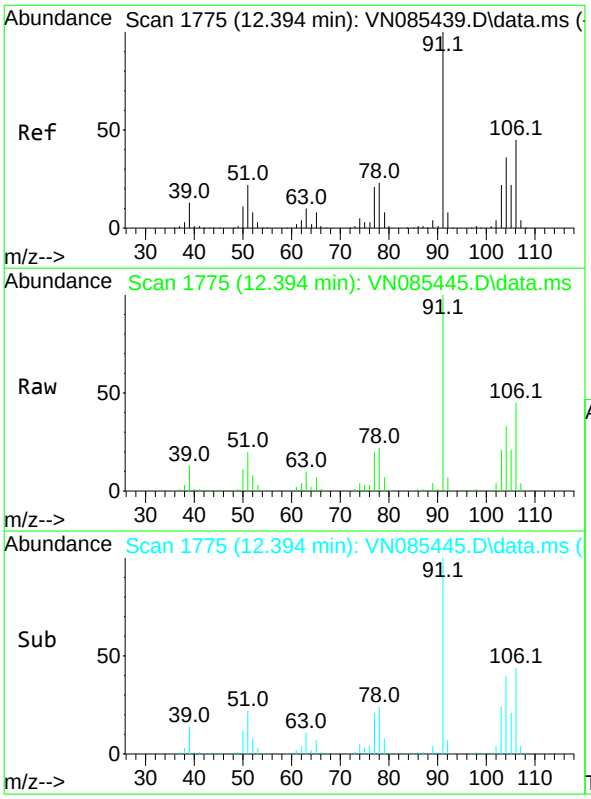



#68
m/p-Xylenes
Concen: 103.341 ug/l
RT: 12.071 min Scan# 1720
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:106 Resp: 437367

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 210.1 | 167.7 | 251.5 |

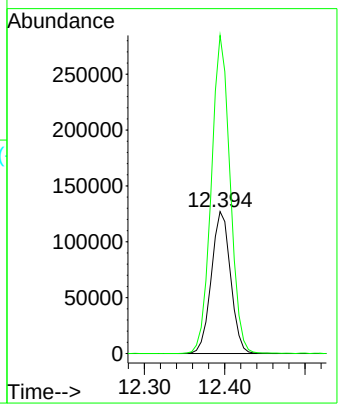





#69
o-Xylene
Concen: 52.093 ug/l
RT: 12.394 min Scan# 17
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:106 Resp: 210698

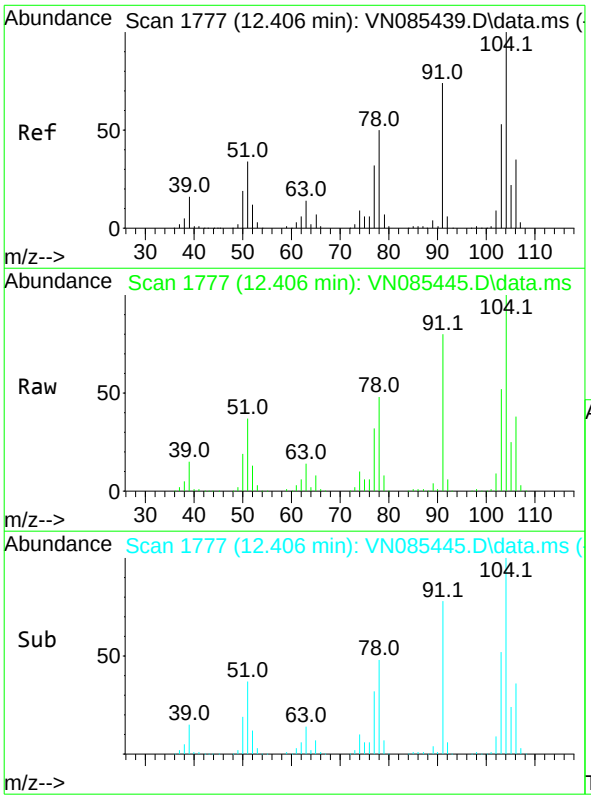
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 219.9 | 110.4 | 331.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

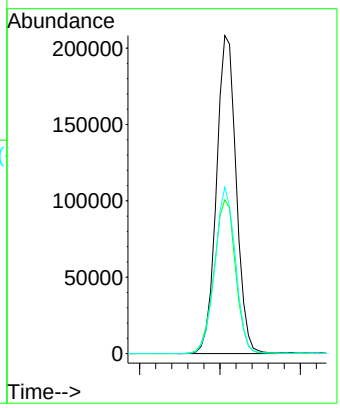
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

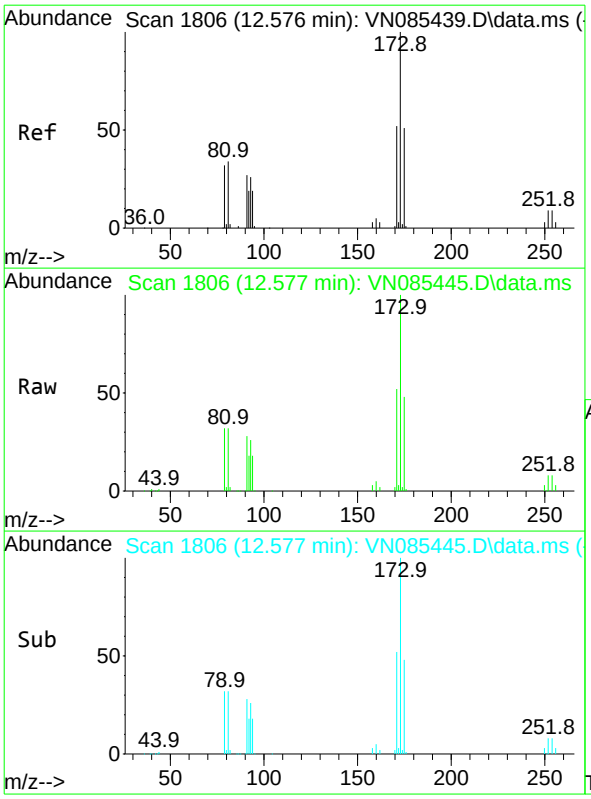



#70
Styrene
Concen: 53.103 ug/l
RT: 12.406 min Scan# 1777
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:104 Resp: 355459

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 52.8 | 42.5 | 63.7 |
| 103 | 54.5 | 43.8 | 65.8 |

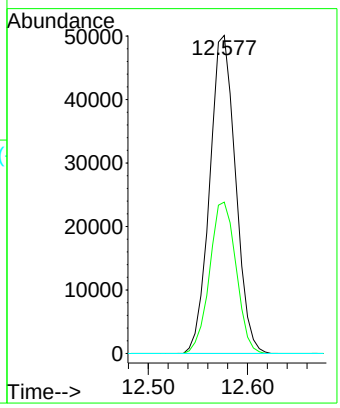





#71
Bromoform
Concen: 49.119 ug/l
RT: 12.577 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:173 Resp: 90693

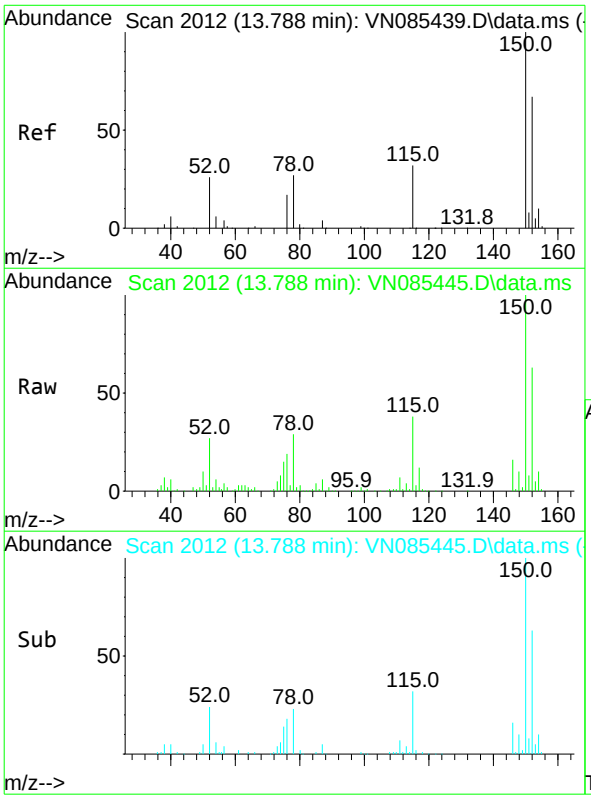
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 48.7 | 24.4 | 73.2 |
| 254 | 0.0 | 0.0 | 0.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

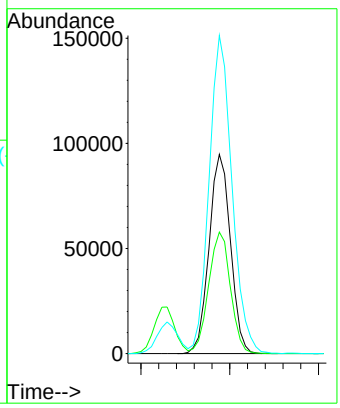
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

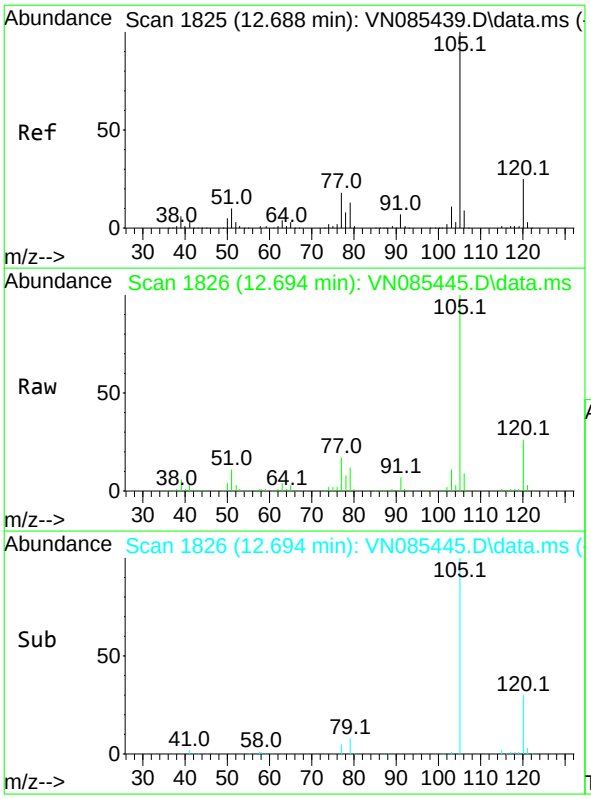



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:152 Resp: 158525

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 62.2 | 31.1 | 93.3 |
| 150 | 171.0 | 0.0 | 343.6 |

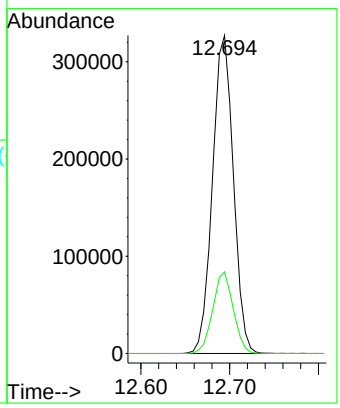





#73
Isopropylbenzene
Concen: 49.951 ug/l
RT: 12.694 min Scan# 18
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:105 Resp: 534428

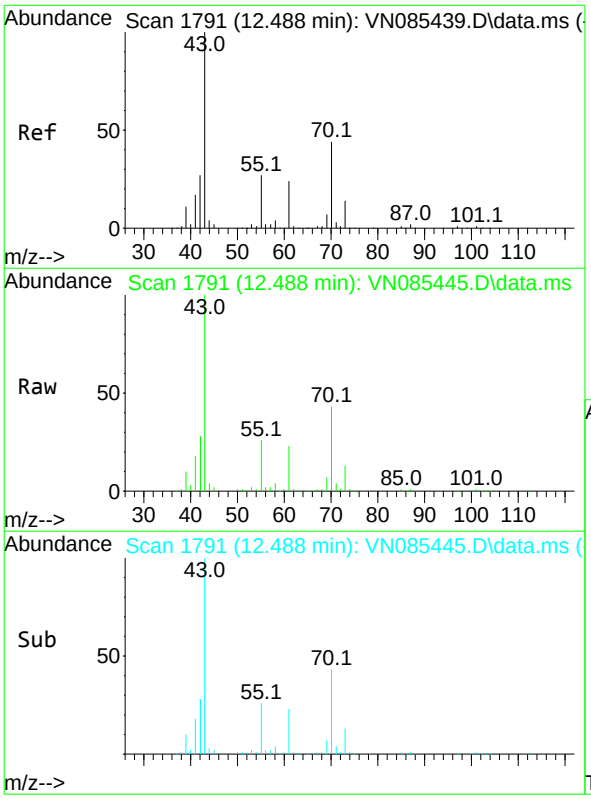
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.2 | 12.8 | 38.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

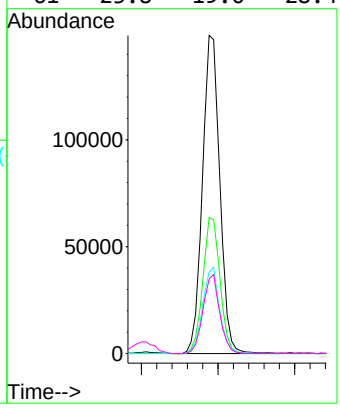
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

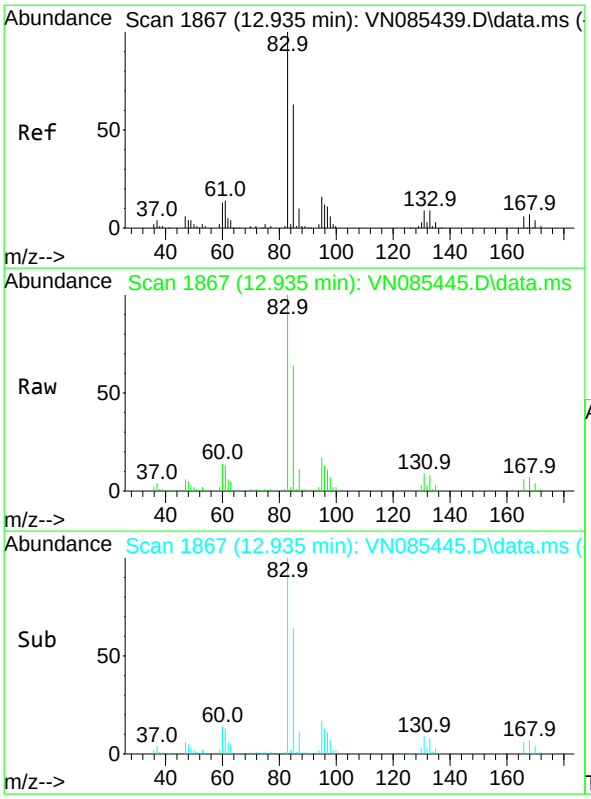



#74
N-amyl acetate
Concen: 48.730 ug/l
RT: 12.488 min Scan# 1791
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 43 Resp: 234342

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 42.2 | 34.0 | 51.0 |
| 55 | 26.5 | 21.4 | 32.2 |
| 61 | 23.8 | 19.0 | 28.4 |

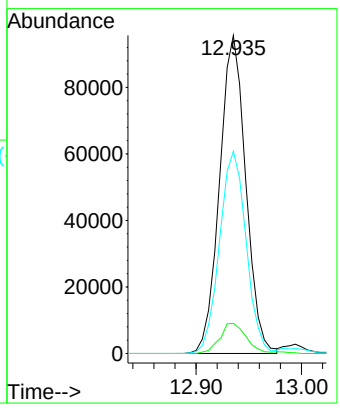





#75
1,1,2,2-Tetrachloroethane
Concen: 43.627 ug/l
RT: 12.935 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 83 Resp: 164882

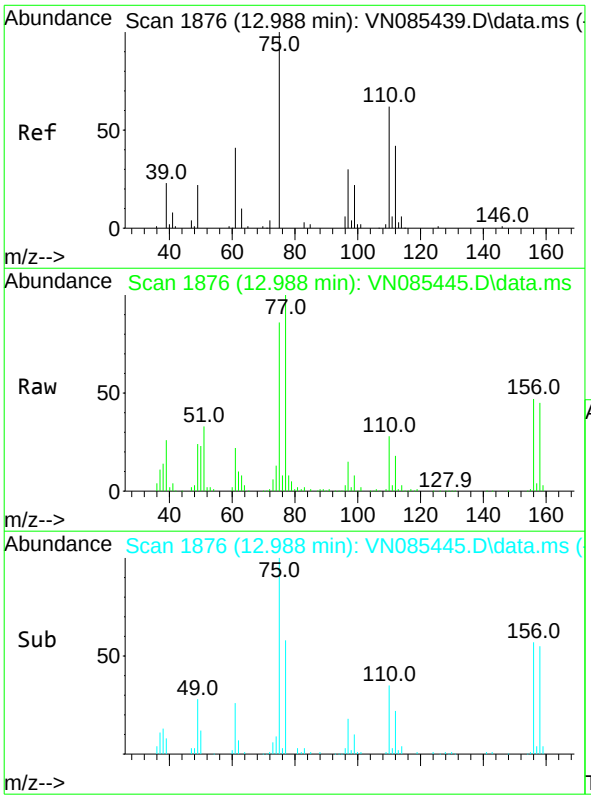
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 9.9 | 4.8 | 14.4 |
| 85 | 64.6 | 32.2 | 96.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

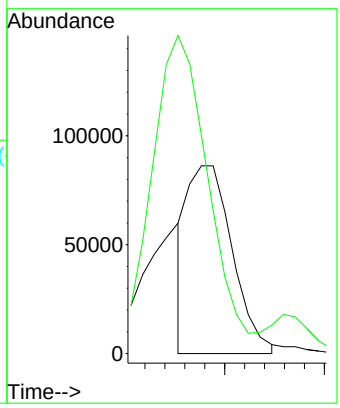
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

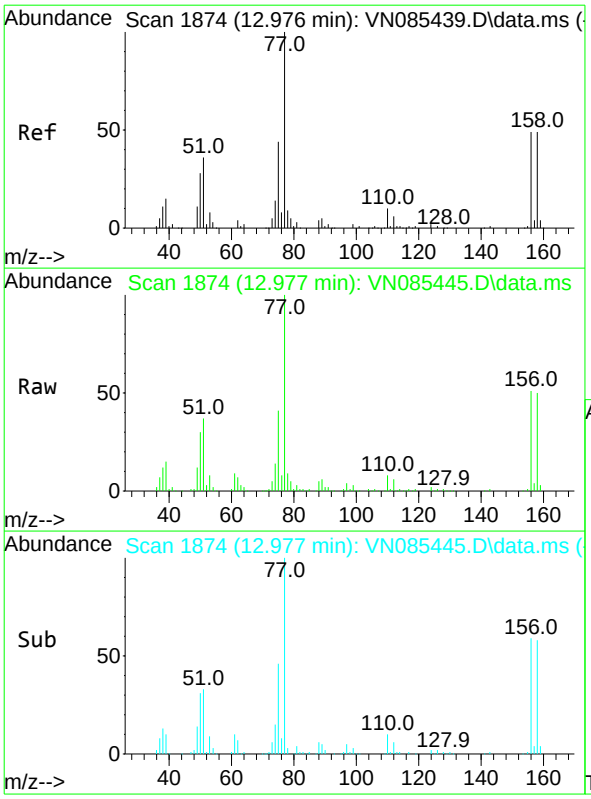



#76
1,2,3-Trichloropropane
Concen: 41.891 ug/l m
RT: 12.988 min Scan# 1876
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 75 Resp: 134976

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 213.9 | 109.7 | 329.2 |

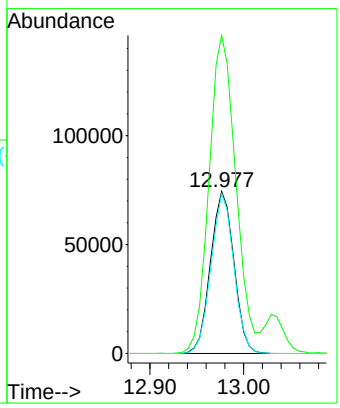





#77
Bromobenzene
Concen: 46.138 ug/l
RT: 12.977 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:156 Resp: 128968

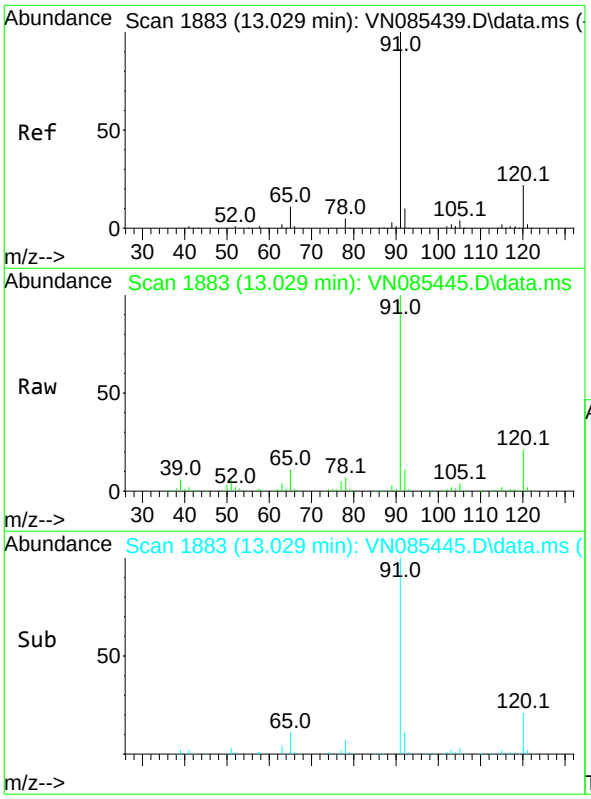
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 223.8 | 114.1 | 342.4 |
| 158 | 95.7 | 48.9 | 146.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

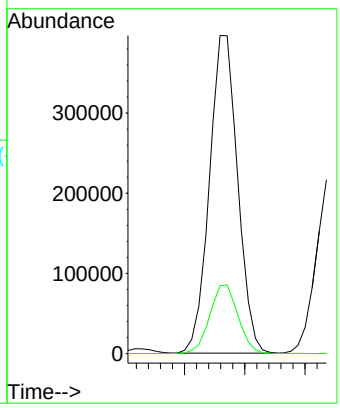
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

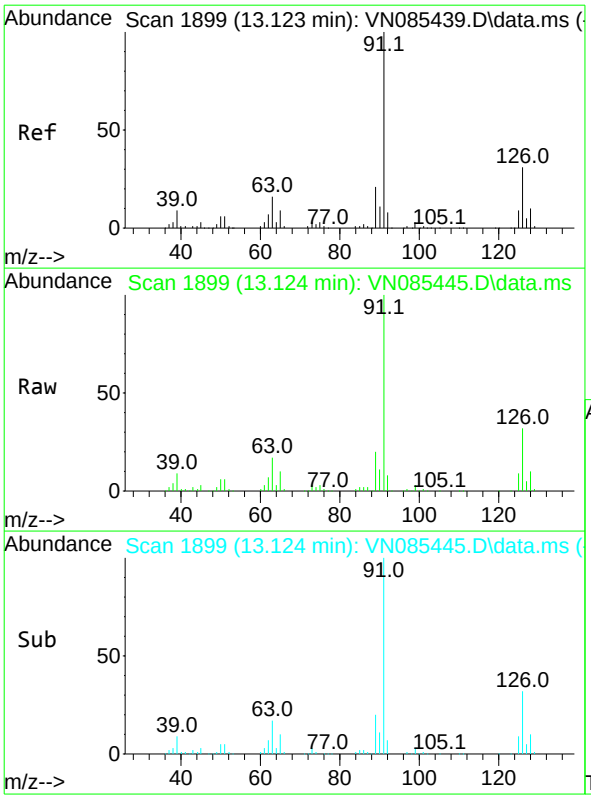



#78
n-propylbenzene
Concen: 51.001 ug/l
RT: 13.029 min Scan# 1883
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 91 Resp: 645977

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 21.7 | 10.9 | 32.6 |

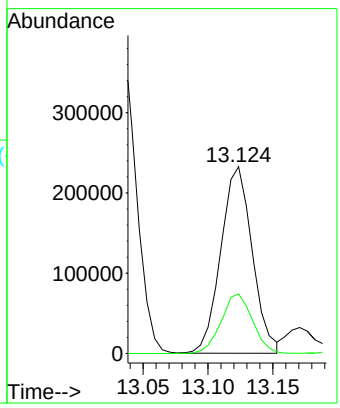





#79
2-Chlorotoluene
Concen: 47.870 ug/l
RT: 13.124 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 91 Resp: 392404

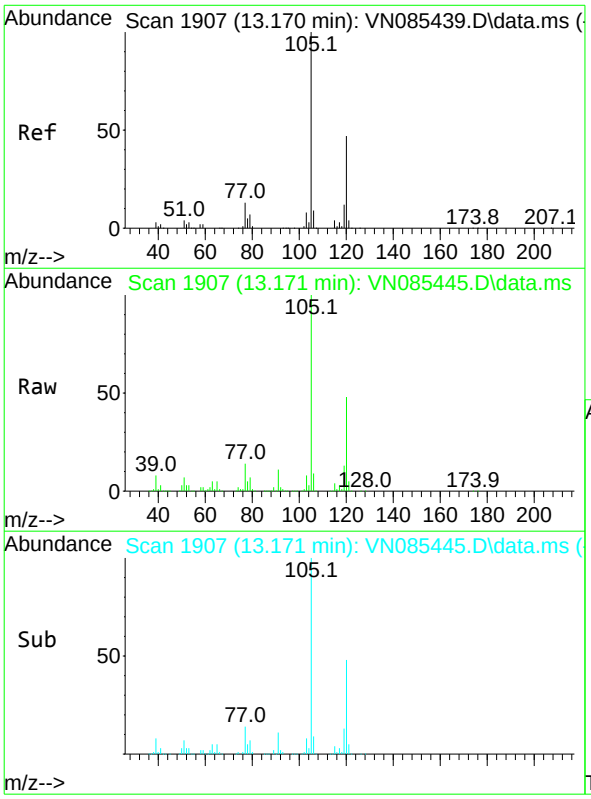
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 31.8 | 15.7 | 47.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

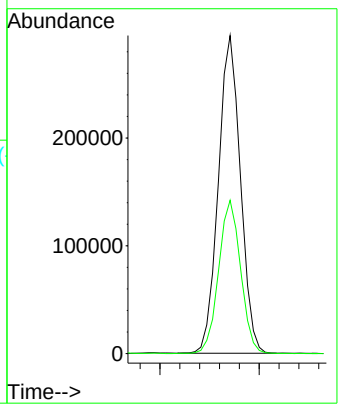
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

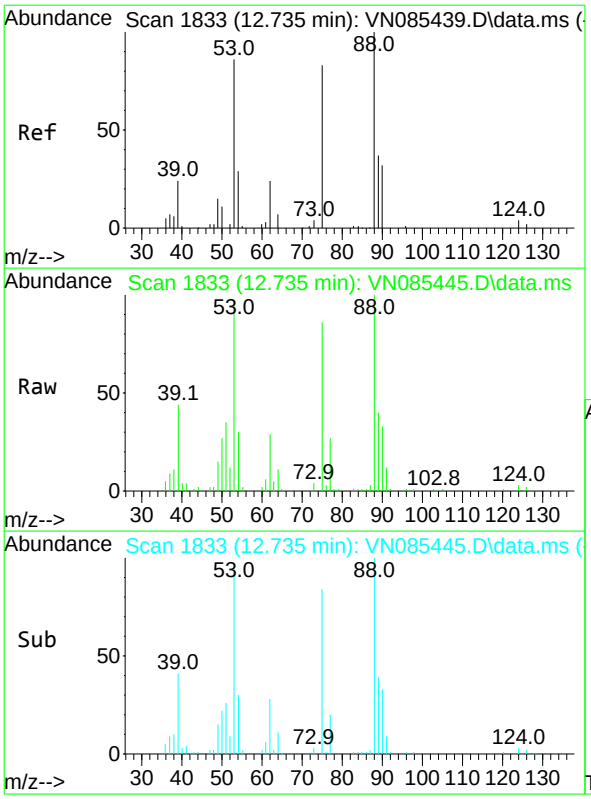



#80
1,3,5-Trimethylbenzene
Concen: 51.604 ug/l
RT: 13.171 min Scan# 1907
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:105 Resp: 456048

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 48.1 | 23.9 | 71.7 |

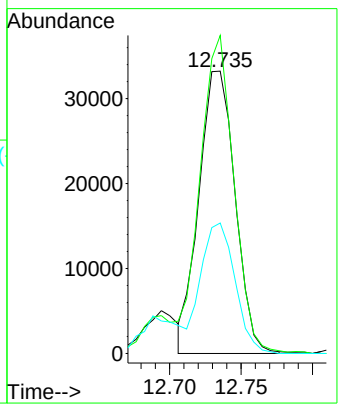





#81
trans-1,4-Dichloro-2-butene
Concen: 49.226 ug/l m
RT: 12.735 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 75 Resp: 58623

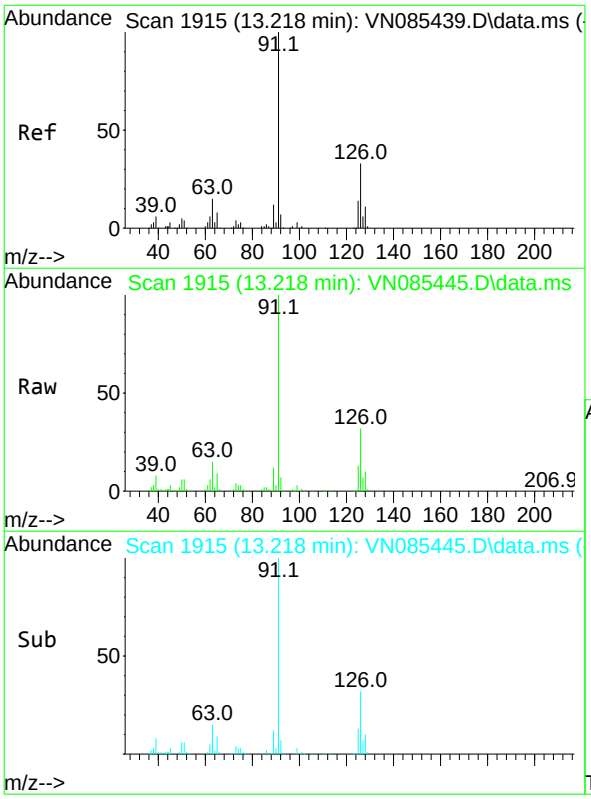
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 118.0 | 95.6 | 143.4 |
| 89 | 43.3 | 37.0 | 55.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

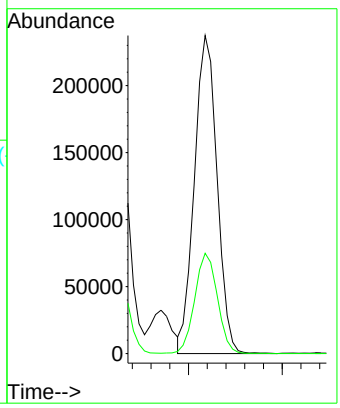
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

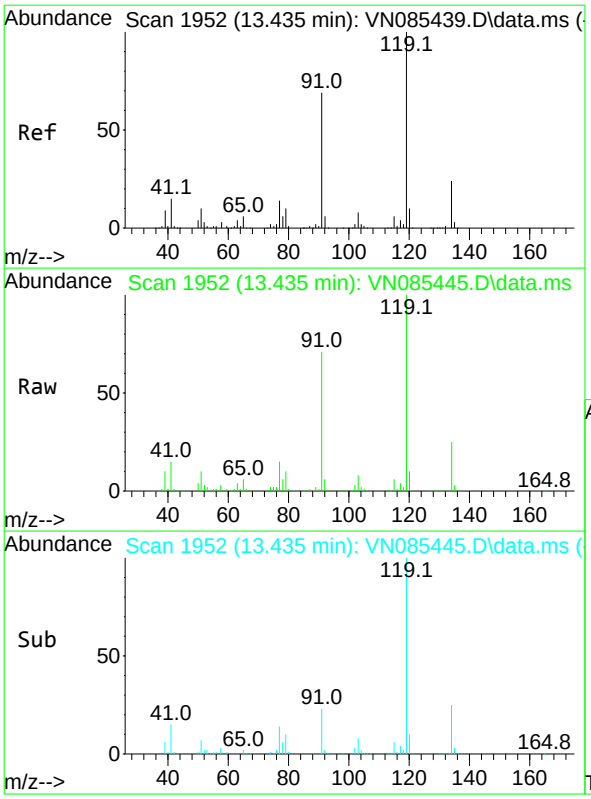



#82
4-Chlorotoluene
Concen: 48.776 ug/l
RT: 13.218 min Scan# 1915
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 91 Resp: 398110

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 31.6 | 15.9 | 47.7 |

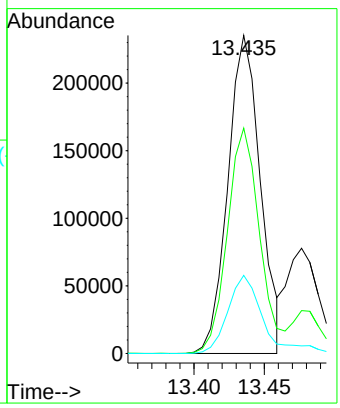





#83
tert-Butylbenzene
Concen: 50.997 ug/l
RT: 13.435 min Scan# 19
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:119 Resp: 378478

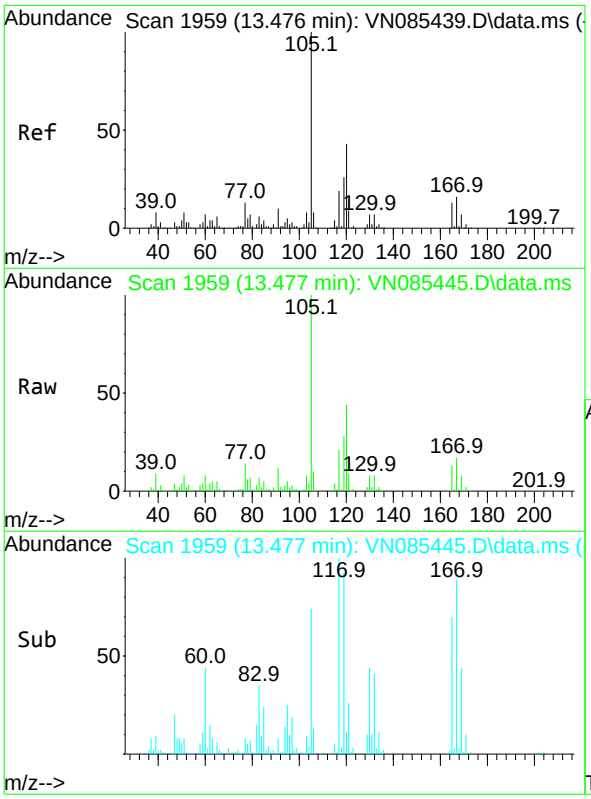
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 70.6 | 35.1 | 105.3 |
| 134 | 26.7 | 12.0 | 36.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

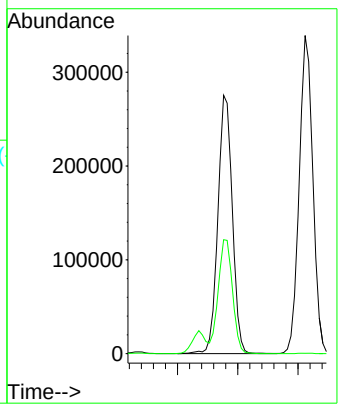
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

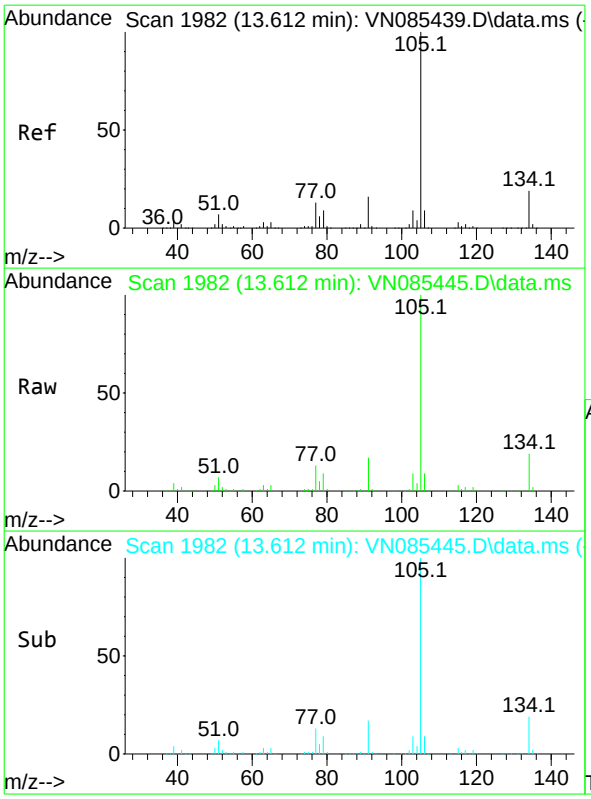



#84
1,2,4-Trimethylbenzene
Concen: 51.922 ug/l
RT: 13.477 min Scan# 1959
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:105 Resp: 457340

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 43.6 | 21.6 | 65.0 |

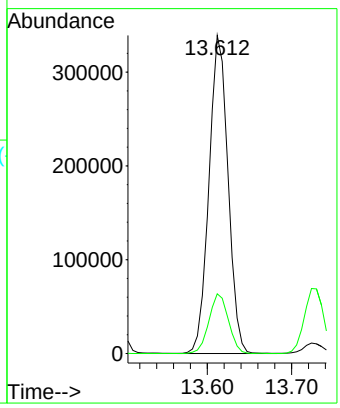





#85
sec-Butylbenzene
Concen: 51.777 ug/l
RT: 13.612 min Scan# 19
Delta R.T. -0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:105 Resp: 532578

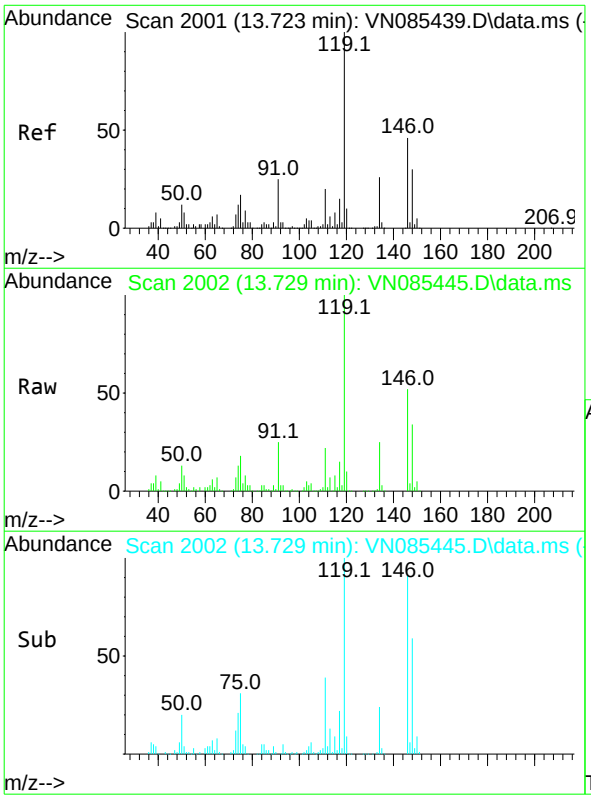
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.2 | 9.7 | 28.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

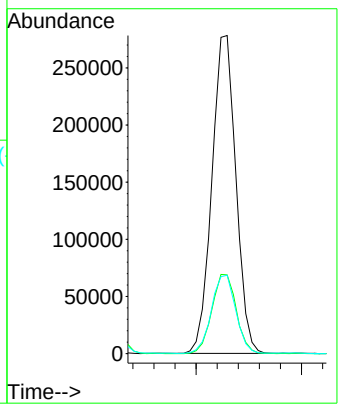
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

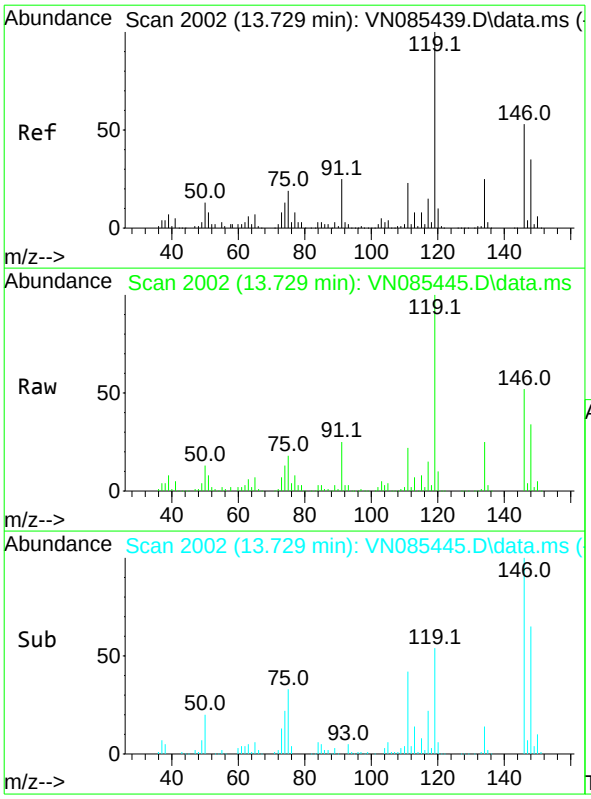



#86
p-Isopropyltoluene
Concen: 47.795 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:119 Resp: 440284

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.3 | 12.7 | 38.0 |
| 91 | 25.0 | 12.7 | 38.1 |

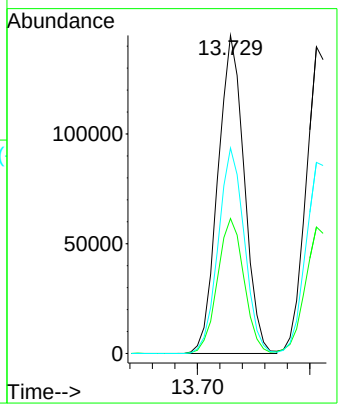





#87
1,3-Dichlorobenzene
Concen: 45.920 ug/l
RT: 13.729 min Scan# 20
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:146 Resp: 236387

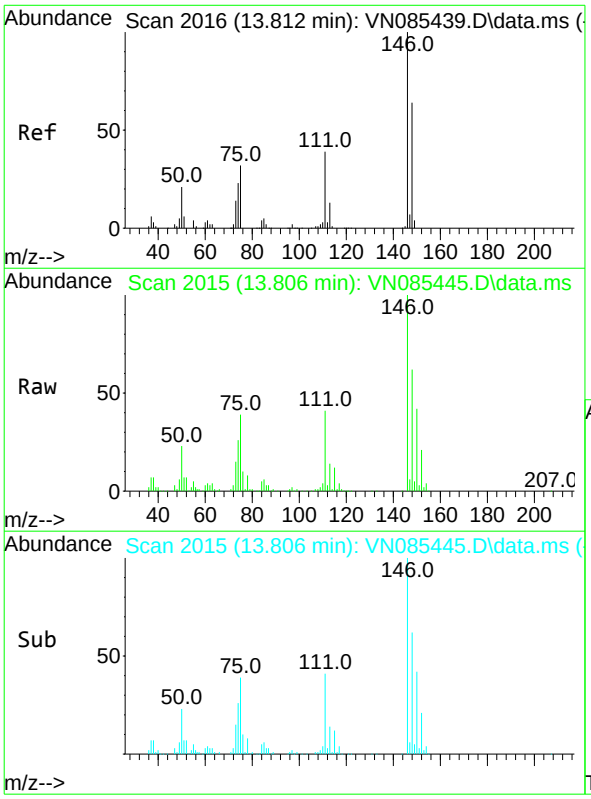
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.6 | 21.4 | 64.3 |
| 148 | 63.8 | 32.3 | 96.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations**
**APPROVED**

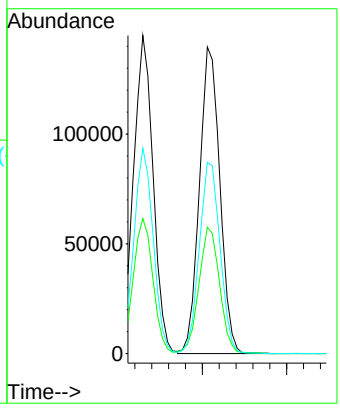
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

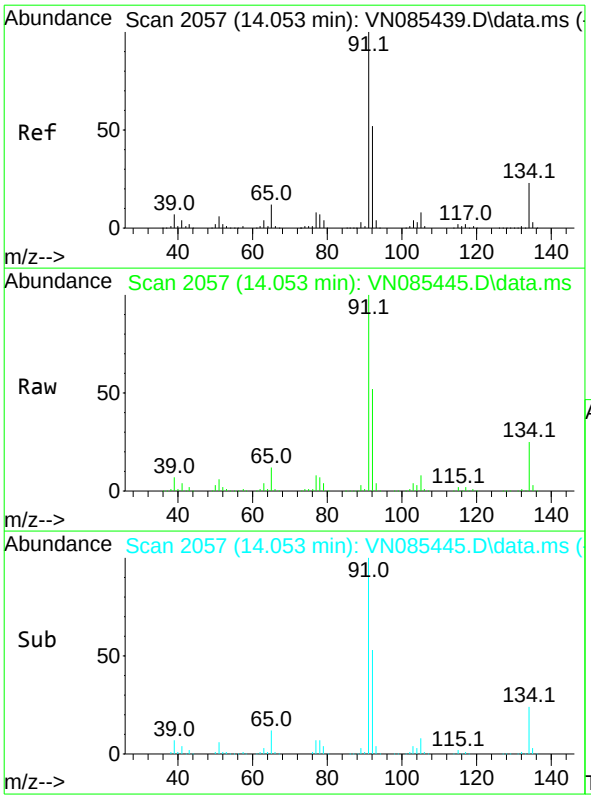



#88
1,4-Dichlorobenzene
Concen: 44.102 ug/l
RT: 13.806 min Scan# 2015
Delta R.T. -0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:146 Resp: 235319

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 41.9 | 21.3 | 63.7 |
| 148 | 63.5 | 32.4 | 97.0 |

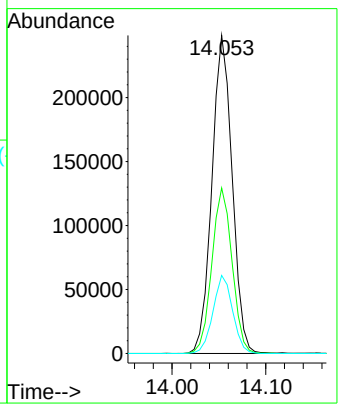





#89
n-Butylbenzene
Concen: 50.578 ug/l
RT: 14.053 min Scan# 20
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 91 Resp: 373227

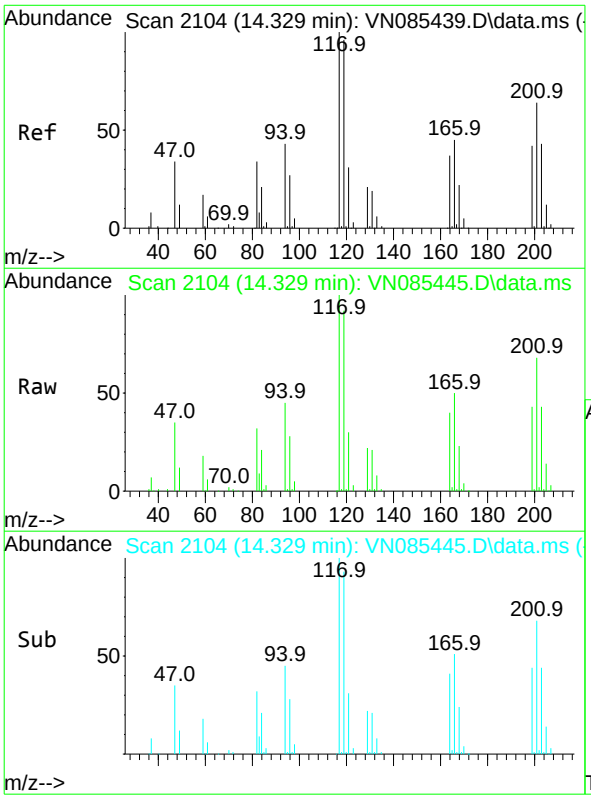
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 51.9 | 25.8 | 77.3 |
| 134 | 23.8 | 11.7 | 35.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

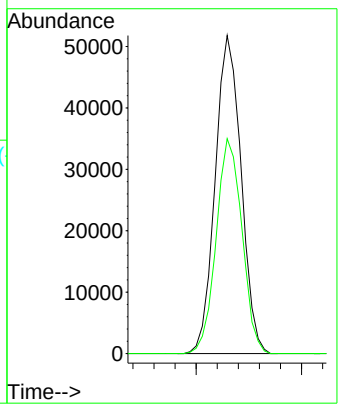
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

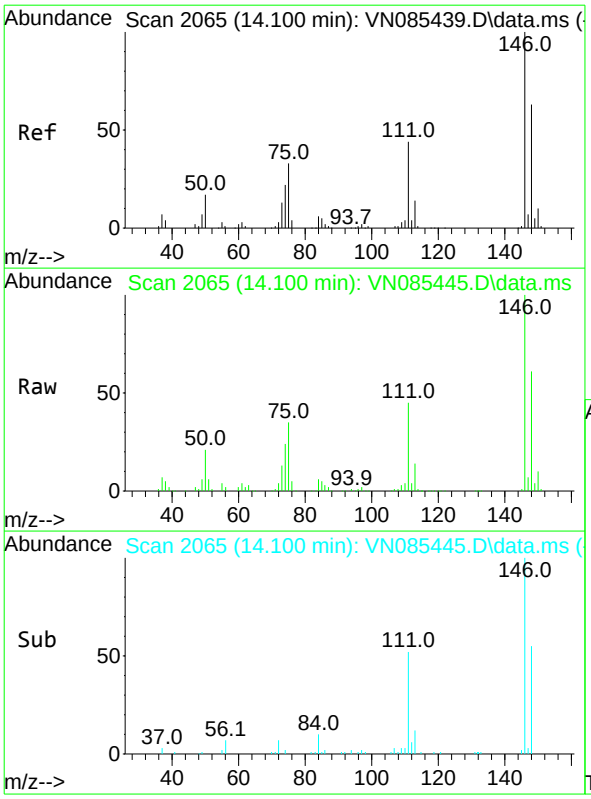



#90
Hexachloroethane
Concen: 45.215 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:117 Resp: 88538

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 67.2 | 33.7 | 101.0 |

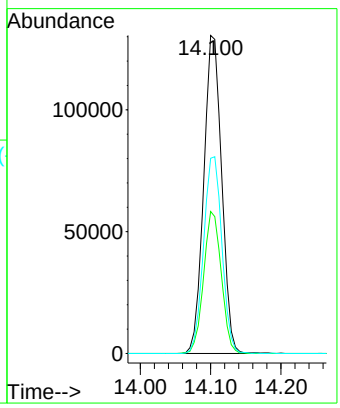





#91
1,2-Dichlorobenzene
Concen: 45.113 ug/l
RT: 14.100 min Scan# 20
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:146 Resp: 231646

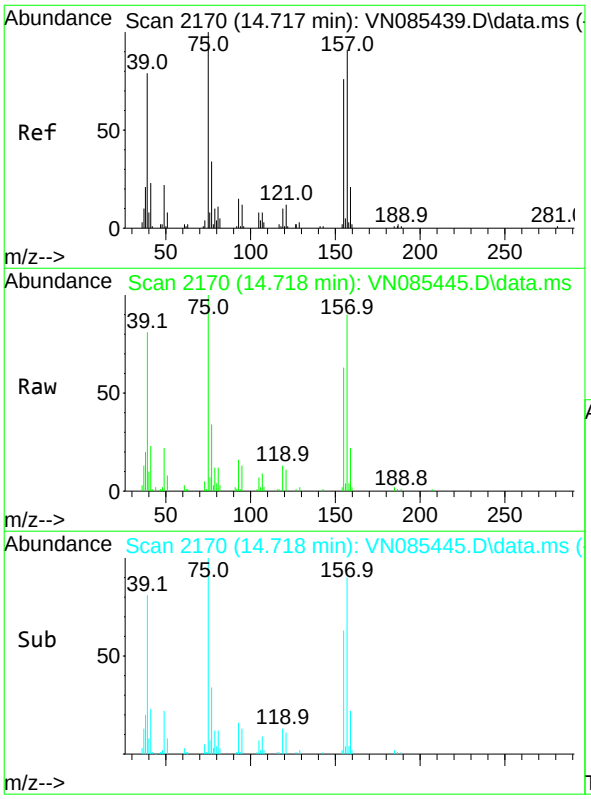
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.9 | 21.7 | 65.1 |
| 148 | 63.1 | 31.4 | 94.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

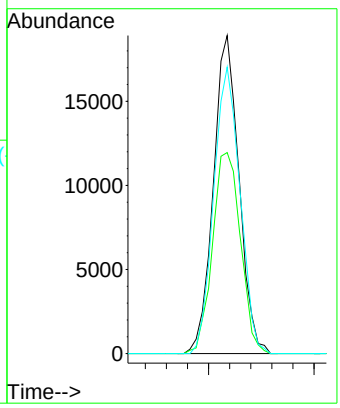
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

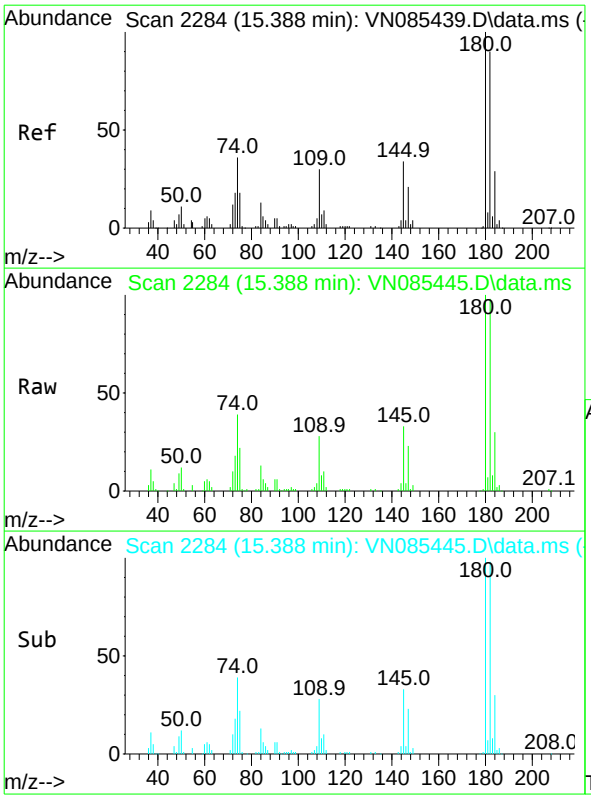



#92
1,2-Dibromo-3-Chloropropane
Concen: 46.221 ug/l
RT: 14.718 min Scan# 2170
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 75 Resp: 31899

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 69.0 | 36.4 | 109.2 |
| 157 | 92.3 | 45.4 | 136.1 |

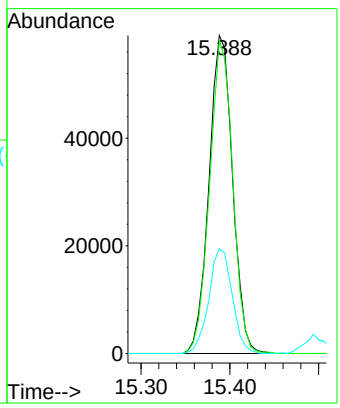





#93
1,2,4-Trichlorobenzene
Concen: 45.739 ug/l
RT: 15.388 min Scan# 22
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:180 Resp: 109157

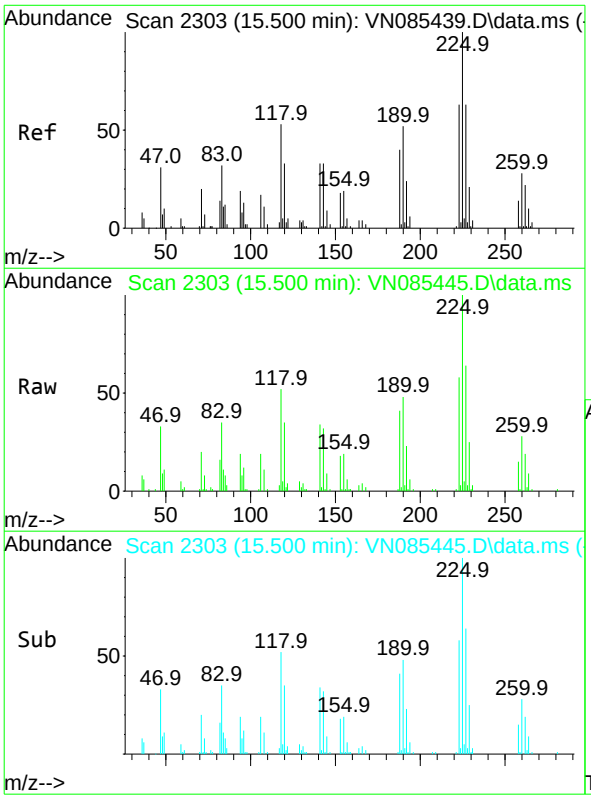
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 96.3 | 46.8 | 140.3 |
| 145 | 32.7 | 16.0 | 48.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations**
**APPROVED**

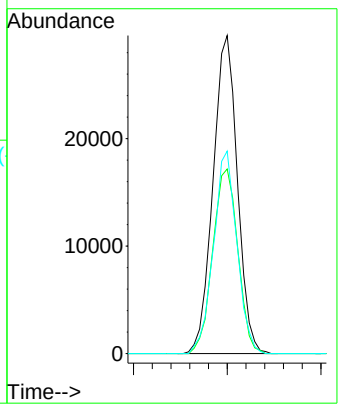
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

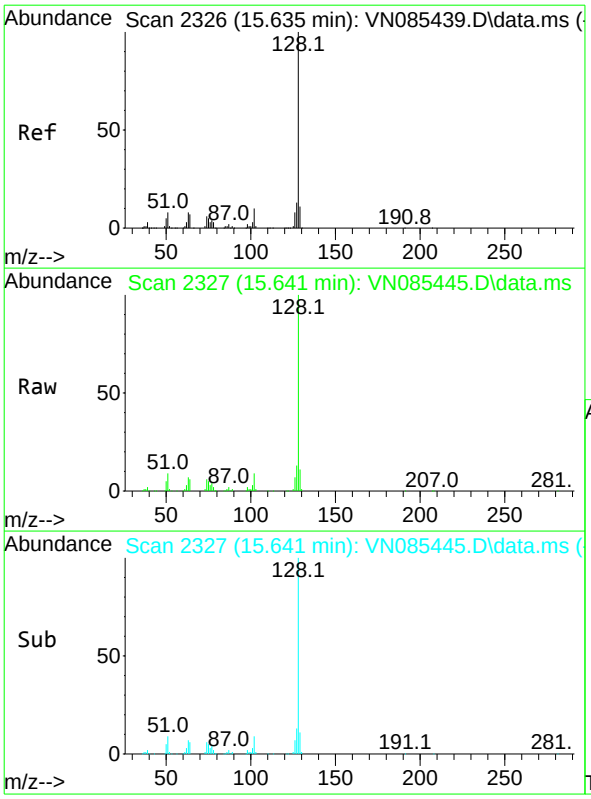



#94
Hexachlorobutadiene
Concen: 42.112 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:225 Resp: 53358

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 59.8 | 30.7 | 92.1 |
| 227 | 61.2 | 30.9 | 92.5 |

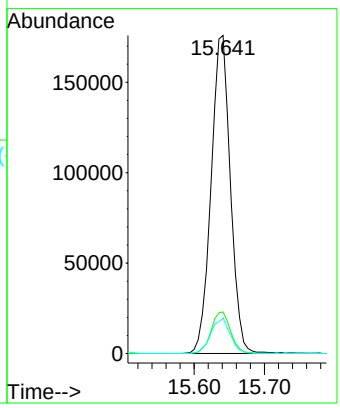





#95
Naphthalene
Concen: 47.116 ug/l
RT: 15.641 min Scan# 23
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:128 Resp: 335535

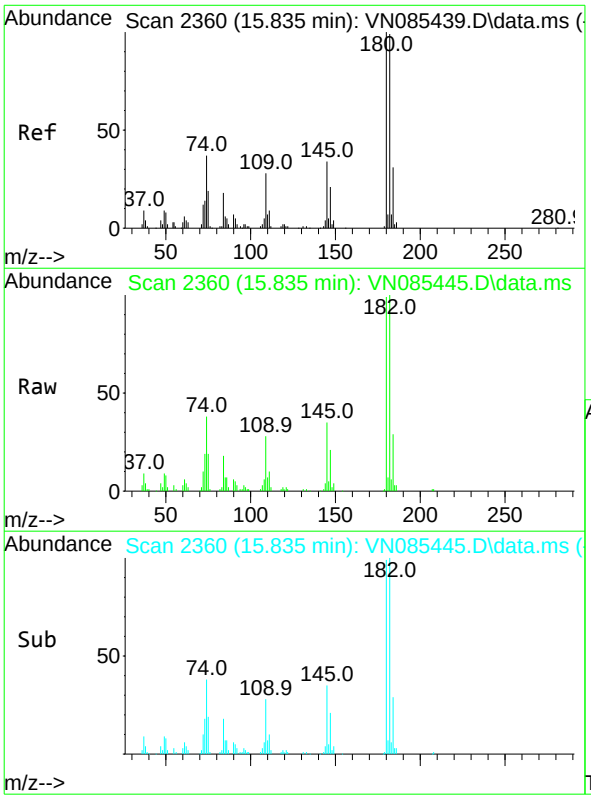
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 13.2 | 10.6 | 16.0 |
| 129 | 11.1 | 8.8 | 13.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

**Manual Integrations APPROVED**

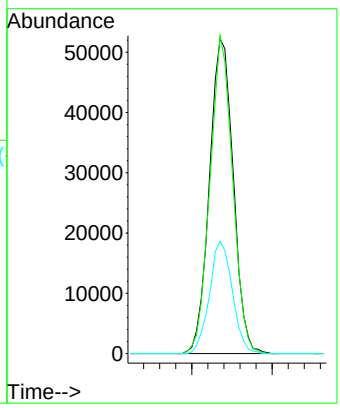
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025




#96
1,2,3-Trichlorobenzene
Concen: 44.551 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:180 Resp: 107583

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.6 | 47.4 | 142.2 |
| 145 | 34.3 | 16.9 | 50.7 |



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085445.D
Acq On : 14 Jan 2025 18:06
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 12 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

Quant Time: Jan 15 02:20:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 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 | 110 | 0.00 |
| 2 | T | Dichlorodifluoromethane | 0.677 | 0.593 | 12.4 | 104 | 0.00 |
| 3 | P | Chloromethane | 0.733 | 0.629 | 14.2 | 102 | 0.00 |
| 4 | C | Vinyl Chloride | 0.737 | 0.629 | 14.7# | 101 | 0.00 |
| 5 | T | Bromomethane | 0.445 | 0.364 | 18.2 | 96 | 0.00 |
| 6 | T | Chloroethane | 0.467 | 0.395 | 15.4 | 103 | 0.00 |
| 7 | T | Trichlorofluoromethane | 1.069 | 0.940 | 12.1 | 104 | 0.00 |
| 8 | T | Diethyl Ether | 0.369 | 0.316 | 14.4 | 97 | 0.00 |
| 9 | T | 1,1,2-Trichlorotrifluoroeth | 0.602 | 0.538 | 10.6 | 109 | 0.00 |
| 10 | T | Methyl Iodide | 0.690 | 0.638 | 7.5 | 98 | 0.00 |
| 11 | T | Tert butyl alcohol | 0.092 | 0.076 | 17.4 | 90 | 0.00 |
| 12 | CM | 1,1-Dichloroethene | 0.537 | 0.486 | 9.5# | 101 | 0.00 |
| 13 | T | Acrolein | 0.126 | 0.124 | 1.6 | 97 | 0.00 |
| 14 | T | Allyl chloride | 0.871 | 0.775 | 11.0 | 101 | 0.00 |
| 15 | T | Acrylonitrile | 0.294 | 0.268 | 8.8 | 99 | 0.00 |
| 16 | T | Acetone | 0.261 | 0.223 | 14.6 | 98 | 0.00 |
| 17 | T | Carbon Disulfide | 1.652 | 1.366 | 17.3 | 102 | 0.00 |
| 18 | T | Methyl Acetate | 0.793 | 0.714 | 10.0 | 100 | 0.00 |
| 19 | T | Methyl tert-butyl Ether | 1.742 | 1.665 | 4.4 | 98 | 0.00 |
| 20 | T | Methylene Chloride | 0.646 | 0.555 | 14.1 | 97 | 0.00 |
| 21 | T | trans-1,2-Dichloroethene | 0.573 | 0.512 | 10.6 | 102 | 0.00 |
| 22 | T | Diisopropyl ether | 1.933 | 1.817 | 6.0 | 98 | 0.00 |
| 23 | T | Vinyl Acetate | 1.353 | 1.339 | 1.0 | 99 | 0.00 |
| 24 | P | 1,1-Dichloroethane | 1.178 | 1.040 | 11.7 | 98 | 0.00 |
| 25 | T | 2-Butanone | 0.384 | 0.351 | 8.6 | 99 | 0.00 |
| 26 | T | 2,2-Dichloropropane | 0.953 | 0.907 | 4.8 | 107 | 0.00 |
| 27 | T | cis-1,2-Dichloroethene | 0.675 | 0.614 | 9.0 | 99 | 0.00 |
| 28 | T | Bromochloromethane | 0.548 | 0.484 | 11.7 | 98 | 0.00 |
| 29 | T | Tetrahydrofuran | 0.243 | 0.233 | 4.1 | 98 | 0.00 |
| 30 | C | Chloroform | 1.218 | 1.074 | 11.8# | 101 | 0.00 |
| 31 | T | Cyclohexane | 1.024 | 0.878 | 14.3 | 110 | 0.00 |
| 32 | T | 1,1,1-Trichloroethane | 1.068 | 0.947 | 11.3 | 103 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 | 0.807 | 0.804 | 0.4 | 107 | 0.00 |
| 34 | I | 1,4-Difluorobenzene | 1.000 | 1.000 | 0.0 | 109 | 0.00 |
| 35 | S | Dibromofluoromethane | 0.347 | 0.352 | -1.4 | 107 | 0.00 |
| 36 | T | 1,1-Dichloropropene | 0.487 | 0.437 | 10.3 | 103 | 0.00 |
| 37 | T | Ethyl Acetate | 0.491 | 0.434 | 11.6 | 97 | 0.00 |
| 38 | T | Carbon Tetrachloride | 0.557 | 0.496 | 11.0 | 102 | 0.00 |
| 39 | T | Methylcyclohexane | 0.457 | 0.455 | 0.4 | 107 | 0.00 |
| 40 | TM | Benzene | 1.463 | 1.336 | 8.7 | 100 | 0.00 |
| 41 | T | Methacrylonitrile | 0.256 | 0.241 | 5.9 | 97 | 0.00 |
| 42 | TM | 1,2-Dichloroethane | 0.551 | 0.501 | 9.1 | 100 | 0.00 |
| 43 | T | Isopropyl Acetate | 0.787 | 0.716 | 9.0 | 96 | 0.00 |
| 44 | TM | Trichloroethene | 0.341 | 0.297 | 12.9 | 100 | 0.00 |
| 45 | C | 1,2-Dichloropropane | 0.374 | 0.334 | 10.7# | 98 | 0.00 |
| 46 | T | Dibromomethane | 0.270 | 0.238 | 11.9 | 97 | 0.00 |
| 47 | T | Bromodichloromethane | 0.549 | 0.502 | 8.6 | 98 | 0.00 |
| 48 | T | Methyl methacrylate | 0.354 | 0.354 | 0.0 | 98 | 0.00 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085445.D
Acq On : 14 Jan 2025 18:06
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 12 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

Quant Time: Jan 15 02:20:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 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 | 0.006 | 0.005 | 16.7 | 81 | 0.00 |
| 50 | S | Toluene-d8 | 1.232 | 1.289 | -4.6 | 111 | 0.00 |
| 51 | T | 4-Methyl-2-Pentanone | 0.457 | 0.449 | 1.8 | 99 | 0.00 |
| 52 | CM | Toluene | 0.848 | 0.815 | 3.9# | 102 | 0.00 |
| 53 | T | t-1,3-Dichloropropene | 0.519 | 0.496 | 4.4 | 98 | 0.00 |
| 54 | T | cis-1,3-Dichloropropene | 0.554 | 0.530 | 4.3 | 98 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 0.335 | 0.310 | 7.5 | 99 | 0.00 |
| 56 | T | Ethyl methacrylate | 0.469 | 0.492 | -4.9 | 99 | 0.00 |
| 57 | T | 1,3-Dichloropropane | 0.583 | 0.547 | 6.2 | 99 | 0.00 |
| 58 | T | 2-Chloroethyl Vinyl ether | 0.213 | 0.218 | -2.3 | 99 | 0.00 |
| 59 | T | 2-Hexanone | 0.321 | 0.323 | -0.6 | 99 | 0.00 |
| 60 | T | Dibromochloromethane | 0.405 | 0.372 | 8.1 | 98 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 0.334 | 0.299 | 10.5 | 98 | 0.00 |
| 62 | S | 4-Bromofluorobenzene | 0.422 | 0.446 | -5.7 | 108 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 108 | 0.00 |
| 64 | T | Tetrachloroethene | 0.341 | 0.306 | 10.3 | 102 | 0.00 |
| 65 | PM | Chlorobenzene | 1.095 | 1.006 | 8.1 | 101 | 0.00 |
| 66 | T | 1,1,1,2-Tetrachloroethane | 0.402 | 0.359 | 10.7 | 99 | 0.00 |
| 67 | C | Ethyl Benzene | 1.784 | 1.798 | -0.8# | 104 | 0.00 |
| 68 | T | m/p-Xylenes | 0.659 | 0.681 | -3.3 | 104 | 0.00 |
| 69 | T | o-Xylene | 0.630 | 0.656 | -4.1 | 104 | 0.00 |
| 70 | T | Styrene | 1.043 | 1.108 | -6.2 | 102 | 0.00 |
| 71 | P | Bromoform | 0.288 | 0.283 | 1.7 | 98 | 0.00 |
| 72 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 108 | 0.00 |
| 73 | T | Isopropylbenzene | 3.375 | 3.371 | 0.1 | 106 | 0.00 |
| 74 | T | N-amyl acetate | 1.517 | 1.478 | 2.6 | 99 | 0.00 |
| 75 | P | 1,1,2,2-Tetrachloroethane | 1.192 | 1.040 | 12.8 | 98 | 0.00 |
| 76 | T | 1,2,3-Trichloropropane | 1.016 | 0.851 | 16.2 | 103 | 0.00 |
| 77 | T | Bromobenzene | 0.882 | 0.814 | 7.7 | 103 | 0.00 |
| 78 | T | n-propylbenzene | 3.995 | 4.075 | -2.0 | 106 | 0.00 |
| 79 | T | 2-Chlorotoluene | 2.586 | 2.475 | 4.3 | 104 | 0.00 |
| 80 | T | 1,3,5-Trimethylbenzene | 2.787 | 2.877 | -3.2 | 106 | 0.00 |
| 81 | T | trans-1,4-Dichloro-2-butene | 0.376 | 0.370 | 1.6 | 103 | 0.00 |
| 82 | T | 4-Chlorotoluene | 2.574 | 2.511 | 2.4 | 105 | 0.00 |
| 83 | T | tert-Butylbenzene | 2.341 | 2.387 | -2.0 | 106 | 0.00 |
| 84 | T | 1,2,4-Trimethylbenzene | 2.778 | 2.885 | -3.9 | 103 | 0.00 |
| 85 | T | sec-Butylbenzene | 3.244 | 3.360 | -3.6 | 106 | 0.00 |
| 86 | T | p-Isopropyltoluene | 2.631 | 2.777 | -5.5 | 105 | 0.00 |
| 87 | T | 1,3-Dichlorobenzene | 1.624 | 1.491 | 8.2 | 103 | 0.00 |
| 88 | T | 1,4-Dichlorobenzene | 1.683 | 1.484 | 11.8 | 103 | 0.00 |
| 89 | T | n-Butylbenzene | 2.327 | 2.354 | -1.2 | 103 | 0.00 |
| 90 | T | Hexachloroethane | 0.618 | 0.559 | 9.5 | 105 | 0.00 |
| 91 | T | 1,2-Dichlorobenzene | 1.620 | 1.461 | 9.8 | 102 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 0.218 | 0.201 | 7.8 | 98 | 0.00 |
| 93 | T | 1,2,4-Trichlorobenzene | 0.753 | 0.689 | 8.5 | 95 | 0.00 |
| 94 | T | Hexachlorobutadiene | 0.400 | 0.337 | 15.8 | 99 | 0.00 |
| 95 | T | Naphthalene | 2.246 | 2.117 | 5.7 | 92 | 0.00 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085445.D
Acq On : 14 Jan 2025 18:06
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 12 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

Quant Time: Jan 15 02:20:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 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 | 0.762 | 0.679 | 10.9 | 93 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085445.D
Acq On : 14 Jan 2025 18:06
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 12 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

Quant Time: Jan 15 02:20:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 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 | 110 | 0.00 |
| 2 | T | Dichlorodifluoromethane | 50.000 | 43.772 | 12.5 | 104 | 0.00 |
| 3 | P | Chloromethane | 50.000 | 42.883 | 14.2 | 102 | 0.00 |
| 4 | C | Vinyl Chloride | 50.000 | 42.715 | 14.6# | 101 | 0.00 |
| 5 | T | Bromomethane | 50.000 | 40.910 | 18.2 | 96 | 0.00 |
| 6 | T | Chloroethane | 50.000 | 42.299 | 15.4 | 103 | 0.00 |
| 7 | T | Trichlorofluoromethane | 50.000 | 43.956 | 12.1 | 104 | 0.00 |
| 8 | T | Diethyl Ether | 50.000 | 42.846 | 14.3 | 97 | 0.00 |
| 9 | T | 1,1,2-Trichlorotrifluoroeth | 50.000 | 44.706 | 10.6 | 109 | 0.00 |
| 10 | T | Methyl Iodide | 50.000 | 46.259 | 7.5 | 98 | 0.00 |
| 11 | T | Tert butyl alcohol | 250.000 | 206.633 | 17.3 | 90 | 0.00 |
| 12 | CM | 1,1-Dichloroethene | 50.000 | 45.317 | 9.4# | 101 | 0.00 |
| 13 | T | Acrolein | 250.000 | 244.765 | 2.1 | 97 | 0.00 |
| 14 | T | Allyl chloride | 50.000 | 44.501 | 11.0 | 101 | 0.00 |
| 15 | T | Acrylonitrile | 250.000 | 227.920 | 8.8 | 99 | 0.00 |
| 16 | T | Acetone | 250.000 | 213.971 | 14.4 | 98 | 0.00 |
| 17 | T | Carbon Disulfide | 50.000 | 41.342 | 17.3 | 102 | 0.00 |
| 18 | T | Methyl Acetate | 50.000 | 45.028 | 9.9 | 100 | 0.00 |
| 19 | T | Methyl tert-butyl Ether | 50.000 | 47.768 | 4.5 | 98 | 0.00 |
| 20 | T | Methylene Chloride | 50.000 | 43.017 | 14.0 | 97 | 0.00 |
| 21 | T | trans-1,2-Dichloroethene | 50.000 | 44.672 | 10.7 | 102 | 0.00 |
| 22 | T | Diisopropyl ether | 50.000 | 46.996 | 6.0 | 98 | 0.00 |
| 23 | T | Vinyl Acetate | 250.000 | 247.459 | 1.0 | 99 | 0.00 |
| 24 | P | 1,1-Dichloroethane | 50.000 | 44.114 | 11.8 | 98 | 0.00 |
| 25 | T | 2-Butanone | 250.000 | 228.924 | 8.4 | 99 | 0.00 |
| 26 | T | 2,2-Dichloropropane | 50.000 | 47.593 | 4.8 | 107 | 0.00 |
| 27 | T | cis-1,2-Dichloroethene | 50.000 | 45.446 | 9.1 | 99 | 0.00 |
| 28 | T | Bromochloromethane | 50.000 | 44.122 | 11.8 | 98 | 0.00 |
| 29 | T | Tetrahydrofuran | 250.000 | 239.065 | 4.4 | 98 | 0.00 |
| 30 | C | Chloroform | 50.000 | 44.071 | 11.9# | 101 | 0.00 |
| 31 | T | Cyclohexane | 50.000 | 42.878 | 14.2 | 110 | 0.00 |
| 32 | T | 1,1,1-Trichloroethane | 50.000 | 44.332 | 11.3 | 103 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 | 50.000 | 49.782 | 0.4 | 107 | 0.00 |
| 34 | I | 1,4-Difluorobenzene | 50.000 | 50.000 | 0.0 | 109 | 0.00 |
| 35 | S | Dibromofluoromethane | 50.000 | 50.768 | -1.5 | 107 | 0.00 |
| 36 | T | 1,1-Dichloropropene | 50.000 | 44.863 | 10.3 | 103 | 0.00 |
| 37 | T | Ethyl Acetate | 50.000 | 44.123 | 11.8 | 97 | 0.00 |
| 38 | T | Carbon Tetrachloride | 50.000 | 44.456 | 11.1 | 102 | 0.00 |
| 39 | T | Methylcyclohexane | 50.000 | 49.687 | 0.6 | 107 | 0.00 |
| 40 | TM | Benzene | 50.000 | 45.657 | 8.7 | 100 | 0.00 |
| 41 | T | Methacrylonitrile | 50.000 | 47.155 | 5.7 | 97 | 0.00 |
| 42 | TM | 1,2-Dichloroethane | 50.000 | 45.481 | 9.0 | 100 | 0.00 |
| 43 | T | Isopropyl Acetate | 50.000 | 45.440 | 9.1 | 96 | 0.00 |
| 44 | TM | Trichloroethene | 50.000 | 43.622 | 12.8 | 100 | 0.00 |
| 45 | C | 1,2-Dichloropropane | 50.000 | 44.744 | 10.5# | 98 | 0.00 |
| 46 | T | Dibromomethane | 50.000 | 44.214 | 11.6 | 97 | 0.00 |
| 47 | T | Bromodichloromethane | 50.000 | 45.655 | 8.7 | 98 | 0.00 |
| 48 | T | Methyl methacrylate | 50.000 | 49.948 | 0.1 | 98 | 0.00 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085445.D
Acq On : 14 Jan 2025 18:06
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 12 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

Quant Time: Jan 15 02:20:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 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 | 792.760 | 20.7 | 81 | 0.00 |
| 50 | S | Toluene-d8 | 50.000 | 52.302 | -4.6 | 111 | 0.00 |
| 51 | T | 4-Methyl-2-Pentanone | 250.000 | 245.877 | 1.6 | 99 | 0.00 |
| 52 | CM | Toluene | 50.000 | 48.073 | 3.9# | 102 | 0.00 |
| 53 | T | t-1,3-Dichloropropene | 50.000 | 47.757 | 4.5 | 98 | 0.00 |
| 54 | T | cis-1,3-Dichloropropene | 50.000 | 47.783 | 4.4 | 98 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 50.000 | 46.173 | 7.7 | 99 | 0.00 |
| 56 | T | Ethyl methacrylate | 50.000 | 43.762 | 12.5 | 99 | 0.00 |
| 57 | T | 1,3-Dichloropropane | 50.000 | 46.877 | 6.2 | 99 | 0.00 |
| 58 | T | 2-Chloroethyl Vinyl ether | 250.000 | 256.116 | -2.4 | 99 | 0.00 |
| 59 | T | 2-Hexanone | 250.000 | 251.213 | -0.5 | 99 | 0.00 |
| 60 | T | Dibromochloromethane | 50.000 | 45.935 | 8.1 | 98 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 50.000 | 44.837 | 10.3 | 98 | 0.00 |
| 62 | S | 4-Bromofluorobenzene | 50.000 | 52.899 | -5.8 | 108 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 50.000 | 50.000 | 0.0 | 108 | 0.00 |
| 64 | T | Tetrachloroethene | 50.000 | 44.886 | 10.2 | 102 | 0.00 |
| 65 | PM | Chlorobenzene | 50.000 | 45.901 | 8.2 | 101 | 0.00 |
| 66 | T | 1,1,1,2-Tetrachloroethane | 50.000 | 44.712 | 10.6 | 99 | 0.00 |
| 67 | C | Ethyl Benzene | 50.000 | 50.391 | -0.8# | 104 | 0.00 |
| 68 | T | m/p-Xylenes | 100.000 | 103.341 | -3.3 | 104 | 0.00 |
| 69 | T | o-Xylene | 50.000 | 52.093 | -4.2 | 104 | 0.00 |
| 70 | T | Styrene | 50.000 | 53.103 | -6.2 | 102 | 0.00 |
| 71 | P | Bromoform | 50.000 | 49.119 | 1.8 | 98 | 0.00 |
| 72 | I | 1,4-Dichlorobenzene-d4 | 50.000 | 50.000 | 0.0 | 108 | 0.00 |
| 73 | T | Isopropylbenzene | 50.000 | 49.951 | 0.1 | 106 | 0.00 |
| 74 | T | N-amyl acetate | 50.000 | 48.730 | 2.5 | 99 | 0.00 |
| 75 | P | 1,1,2,2-Tetrachloroethane | 50.000 | 43.627 | 12.7 | 98 | 0.00 |
| 76 | T | 1,2,3-Trichloropropane | 50.000 | 41.891 | 16.2 | 103 | 0.00 |
| 77 | T | Bromobenzene | 50.000 | 46.138 | 7.7 | 103 | 0.00 |
| 78 | T | n-propylbenzene | 50.000 | 51.001 | -2.0 | 106 | 0.00 |
| 79 | T | 2-Chlorotoluene | 50.000 | 47.870 | 4.3 | 104 | 0.00 |
| 80 | T | 1,3,5-Trimethylbenzene | 50.000 | 51.604 | -3.2 | 106 | 0.00 |
| 81 | T | trans-1,4-Dichloro-2-butene | 50.000 | 49.226 | 1.5 | 103 | 0.00 |
| 82 | T | 4-Chlorotoluene | 50.000 | 48.776 | 2.4 | 105 | 0.00 |
| 83 | T | tert-Butylbenzene | 50.000 | 50.997 | -2.0 | 106 | 0.00 |
| 84 | T | 1,2,4-Trimethylbenzene | 50.000 | 51.922 | -3.8 | 103 | 0.00 |
| 85 | T | sec-Butylbenzene | 50.000 | 51.777 | -3.6 | 106 | 0.00 |
| 86 | T | p-Isopropyltoluene | 50.000 | 47.795 | 4.4 | 105 | 0.00 |
| 87 | T | 1,3-Dichlorobenzene | 50.000 | 45.920 | 8.2 | 103 | 0.00 |
| 88 | T | 1,4-Dichlorobenzene | 50.000 | 44.102 | 11.8 | 103 | 0.00 |
| 89 | T | n-Butylbenzene | 50.000 | 50.578 | -1.2 | 103 | 0.00 |
| 90 | T | Hexachloroethane | 50.000 | 45.215 | 9.6 | 105 | 0.00 |
| 91 | T | 1,2-Dichlorobenzene | 50.000 | 45.113 | 9.8 | 102 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 50.000 | 46.221 | 7.6 | 98 | 0.00 |
| 93 | T | 1,2,4-Trichlorobenzene | 50.000 | 45.739 | 8.5 | 95 | 0.00 |
| 94 | T | Hexachlorobutadiene | 50.000 | 42.112 | 15.8 | 99 | 0.00 |
| 95 | T | Naphthalene | 50.000 | 47.116 | 5.8 | 92 | 0.00 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085445.D
Acq On : 14 Jan 2025 18:06
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 12 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN011425

Quant Time: Jan 15 02:20:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 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 | 44.551 | 10.9 | 93 | 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: RUTW01

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG No.: Q1241

Instrument ID: MSVOA_N Calibration Date/Time: 02/03/2025 12:56

Lab File ID: VN085617.D Init. Calib. Date(s): 01/14/2025 01/14/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 14:56 17:19

GC Column: RXI-624 ID: 0.25 (mm)

| COMPOUND | RRF | RRF050 | MIN RRF | %D | MAX%D |
|---|---|---|---|---|---|
| Vinyl Chloride | 0.737 | 0.636 | | -13.7 | 20 |
| 1,1-Dichloroethene | 0.537 | 0.488 | | -9.13 | 20 |
| 2-Butanone | 0.384 | 0.336 | | -12.5 | 20 |
| Carbon Tetrachloride | 0.557 | 0.512 | | -8.08 | 20 |
| Chloroform | 1.218 | 1.179 | | -3.2 | 20 |
| Benzene | 1.463 | 1.422 | | -2.8 | 20 |
| 1,2-Dichloroethane | 0.551 | 0.500 | | -9.26 | 20 |
| Trichloroethene | 0.341 | 0.329 | | -3.52 | 20 |
| Tetrachloroethene | 0.341 | 0.330 | | -3.23 | 20 |
| Chlorobenzene | 1.095 | 1.101 | 0.3 | 0.55 | 20 |
| 1,2-Dichloroethane-d4 | 0.807 | 0.719 | | -10.9 | 20 |
| Dibromofluoromethane | 0.347 | 0.346 | | -0.29 | 20 |
| Toluene-d8 | 1.232 | 1.296 | | 5.2 | 20 |
| 4-Bromofluorobenzene | 0.422 | 0.438 | | 3.79 | 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_N\Data\VN020325\
Data File : VN085617.D
Acq On : 03 Feb 2025 12:56
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 04 00:57:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.218 | 168 | 193909 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 331362 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 301323 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 152662 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.577 | 65 | 139495 | 44.566 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 89.140% | | | |
| 35) Dibromofluoromethane | 8.159 | 113 | 114784 | 49.931 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 99.860% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 429609 | 52.598 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 105.200% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 145023 | 51.906 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 103.820% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 98099 | 37.364 | ug/l | 98 |
| 3) Chloromethane | 2.359 | 50 | 97800 | 34.404 | ug/l | 99 |
| 4) Vinyl Chloride | 2.512 | 62 | 123341 | 43.167 | ug/l | 98 |
| 5) Bromomethane | 2.948 | 94 | 80016 | 46.361 | ug/l | 98 |
| 6) Chloroethane | 3.118 | 64 | 89522 | 49.419 | ug/l | 97 |
| 7) Trichlorofluoromethane | 3.495 | 101 | 198260 | 47.821 | ug/l | 98 |
| 8) Diethyl Ether | 3.959 | 74 | 62830 | 43.869 | ug/l | 87 |
| 9) 1,1,2-Trichlorotrifluo... | 4.365 | 101 | 108838 | 46.609 | ug/l | 97 |
| 10) Methyl Iodide | 4.583 | 142 | 124678 | 46.624 | ug/l | 94 |
| 11) Tert butyl alcohol | 5.518 | 59 | 95405 | 266.185 | ug/l | 99 |
| 12) 1,1-Dichloroethene | 4.342 | 96 | 94603 | 45.458 | ug/l | 89 |
| 13) Acrolein | 4.177 | 56 | 82470 | 168.557 | ug/l | 99 |
| 14) Allyl chloride | 5.024 | 41 | 123509 | 36.574 | ug/l # | 94 |
| 15) Acrylonitrile | 5.712 | 53 | 263353 | 231.327 | ug/l | 98 |
| 16) Acetone | 4.418 | 43 | 204618 | 202.320 | ug/l | 93 |
| 17) Carbon Disulfide | 4.712 | 76 | 223300 | 34.849 | ug/l | 100 |
| 18) Methyl Acetate | 5.018 | 43 | 139501 | 45.361 | ug/l | 92 |
| 19) Methyl tert-butyl Ether | 5.794 | 73 | 335538 | 49.654 | ug/l | 97 |
| 20) Methylene Chloride | 5.271 | 84 | 116799 | 46.650 | ug/l | 96 |
| 21) trans-1,2-Dichloroethene | 5.783 | 96 | 102531 | 46.100 | ug/l | 91 |
| 22) Diisopropyl ether | 6.671 | 45 | 334765 | 44.663 | ug/l | 96 |
| 23) Vinyl Acetate | 6.594 | 43 | 1130671 | 215.551 | ug/l | 96 |
| 24) 1,1-Dichloroethane | 6.565 | 63 | 212538 | 46.504 | ug/l | 99 |
| 25) 2-Butanone | 7.477 | 43 | 325763 | 218.881 | ug/l | 91 |
| 26) 2,2-Dichloropropane | 7.488 | 77 | 174244 | 47.156 | ug/l | 97 |
| 27) cis-1,2-Dichloroethene | 7.483 | 96 | 132413 | 50.547 | ug/l | 91 |
| 28) Bromochloromethane | 7.806 | 49 | 91622 | 43.090 | ug/l | 88 |
| 29) Tetrahydrofuran | 7.835 | 42 | 210490 | 223.073 | ug/l | 88 |
| 30) Chloroform | 7.965 | 83 | 228697 | 48.416 | ug/l | 99 |
| 31) Cyclohexane | 8.253 | 56 | 152259 | 38.329 | ug/l | 90 |
| 32) 1,1,1-Trichloroethane | 8.165 | 97 | 193335 | 46.661 | ug/l | 96 |
| 36) 1,1-Dichloropropene | 8.365 | 75 | 146021 | 45.259 | ug/l | 98 |
| 37) Ethyl Acetate | 7.559 | 43 | 132656 | 40.735 | ug/l | 95 |
| 38) Carbon Tetrachloride | 8.359 | 117 | 169547 | 45.902 | ug/l | 99 |
| 39) Methylcyclohexane | 9.600 | 83 | 141262 | 46.593 | ug/l | 95 |
| 40) Benzene | 8.600 | 78 | 471269 | 48.614 | ug/l | 98 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085617.D
Acq On : 03 Feb 2025 12:56
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 04 00:57:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.771 | 41 | 72917 | 43.037 | ug/l | | 92 |
| 42) 1,2-Dichloroethane | 8.665 | 62 | 165668 | 45.375 | ug/l | | 98 |
| 43) Isopropyl Acetate | 8.682 | 43 | 233249 | 44.700 | ug/l | | 97 |
| 44) Trichloroethene | 9.347 | 130 | 108885 | 48.252 | ug/l | | 96 |
| 45) 1,2-Dichloropropane | 9.618 | 63 | 119741 | 48.357 | ug/l | | 100 |
| 46) Dibromomethane | 9.706 | 93 | 84871 | 47.501 | ug/l | | 96 |
| 47) Bromodichloromethane | 9.882 | 83 | 183920 | 50.527 | ug/l | | 99 |
| 48) Methyl methacrylate | 9.677 | 41 | 106379 | 45.301 | ug/l | | 91 |
| 49) 1,4-Dioxane | 9.688 | 88 | 40950 | 1035.537 | ug/l | | 92 |
| 51) 4-Methyl-2-Pentanone | 10.441 | 43 | 708536 | 233.994 | ug/l | | 94 |
| 52) Toluene | 10.629 | 92 | 300704 | 53.534 | ug/l | | 100 |
| 53) t-1,3-Dichloropropene | 10.835 | 75 | 174396 | 50.697 | ug/l | | 93 |
| 54) cis-1,3-Dichloropropene | 10.312 | 75 | 187791 | 51.107 | ug/l | | 92 |
| 55) 1,1,2-Trichloroethane | 11.012 | 97 | 119203 | 53.625 | ug/l | | 97 |
| 56) Ethyl methacrylate | 10.871 | 69 | 170732 | 45.764 | ug/l | | 91 |
| 57) 1,3-Dichloropropane | 11.159 | 76 | 201421 | 52.111 | ug/l | | 100 |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63 | 340114 | 241.104 | ug/l | | 97 |
| 59) 2-Hexanone | 11.194 | 43 | 508614 | 238.718 | ug/l | | 91 |
| 60) Dibromochloromethane | 11.353 | 129 | 141685 | 52.795 | ug/l | | 100 |
| 61) 1,2-Dibromoethane | 11.465 | 107 | 112834 | 50.994 | ug/l | | 100 |
| 64) Tetrachloroethene | 11.100 | 164 | 99530 | 48.451 | ug/l | | 97 |
| 65) Chlorobenzene | 11.888 | 112 | 331849 | 50.273 | ug/l | | 98 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 119985 | 49.526 | ug/l | | 99 |
| 67) Ethyl Benzene | 11.959 | 91 | 567591 | 52.793 | ug/l | | 99 |
| 68) m/p-Xylenes | 12.071 | 106 | 446120 | 112.274 | ug/l | | 94 |
| 69) o-Xylene | 12.394 | 106 | 213152 | 56.132 | ug/l | | 93 |
| 70) Styrene | 12.406 | 104 | 372069 | 59.204 | ug/l | | 96 |
| 71) Bromoform | 12.576 | 173 | 89849 | 51.832 | ug/l | # | 99 |
| 73) Isopropylbenzene | 12.694 | 105 | 533437 | 51.773 | ug/l | | 98 |
| 74) N-amyl acetate | 12.488 | 43 | 196603 | 42.452 | ug/l | | 93 |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 173703 | 47.726 | ug/l | | 99 |
| 76) 1,2,3-Trichloropropane | 12.988 | 75 | 150787m | 48.596 | ug/l | | |
| 77) Bromobenzene | 12.976 | 156 | 131464 | 48.837 | ug/l | | 95 |
| 78) n-propylbenzene | 13.035 | 91 | 646489 | 53.002 | ug/l | | 99 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 385400 | 48.821 | ug/l | | 96 |
| 80) 1,3,5-Trimethylbenzene | 13.170 | 105 | 452745 | 53.197 | ug/l | | 98 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 64630 | 56.354 | ug/l | # | 73 |
| 82) 4-Chlorotoluene | 13.217 | 91 | 391197 | 49.770 | ug/l | | 97 |
| 83) tert-Butylbenzene | 13.435 | 119 | 377386 | 52.803 | ug/l | | 95 |
| 84) 1,2,4-Trimethylbenzene | 13.476 | 105 | 457878 | 53.980 | ug/l | | 98 |
| 85) sec-Butylbenzene | 13.612 | 105 | 540740 | 54.590 | ug/l | | 99 |
| 86) p-Isopropyltoluene | 13.723 | 119 | 448653 | 50.266 | ug/l | | 98 |
| 87) 1,3-Dichlorobenzene | 13.729 | 146 | 248411 | 50.109 | ug/l | | 99 |
| 88) 1,4-Dichlorobenzene | 13.812 | 146 | 247225 | 48.112 | ug/l | | 97 |
| 89) n-Butylbenzene | 14.053 | 91 | 375157 | 52.792 | ug/l | | 99 |
| 90) Hexachloroethane | 14.329 | 117 | 91155 | 48.339 | ug/l | | 97 |
| 91) 1,2-Dichlorobenzene | 14.100 | 146 | 240267 | 48.589 | ug/l | | 99 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75 | 29819 | 44.867 | ug/l | | 91 |
| 93) 1,2,4-Trichlorobenzene | 15.388 | 180 | 112114 | 48.782 | ug/l | | 98 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 54586 | 44.736 | ug/l | | 99 |
| 95) Naphthalene | 15.641 | 128 | 343491 | 50.085 | ug/l | | 100 |
| 96) 1,2,3-Trichlorobenzene | 15.841 | 180 | 112671 | 48.450 | ug/l | | 99 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085617.D
Acq On : 03 Feb 2025 12:56
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 04 00:57:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

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

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

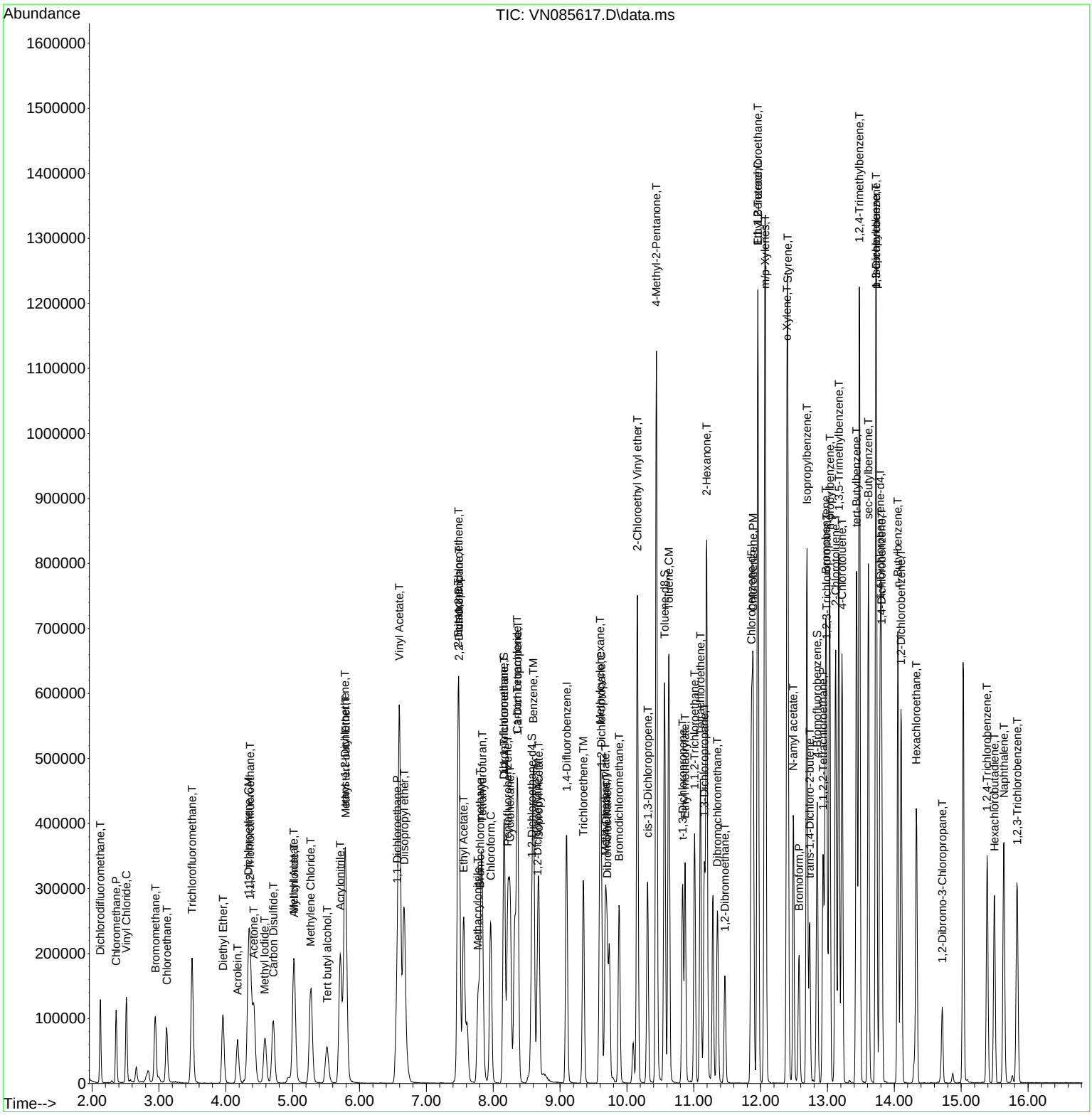
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085617.D
Acq On : 03 Feb 2025 12:56
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

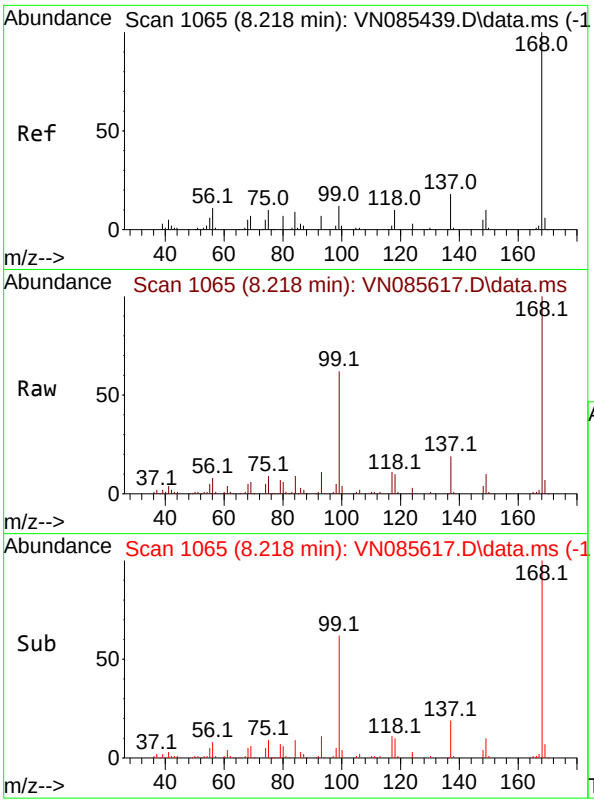
Quant Time: Feb 04 00:57:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

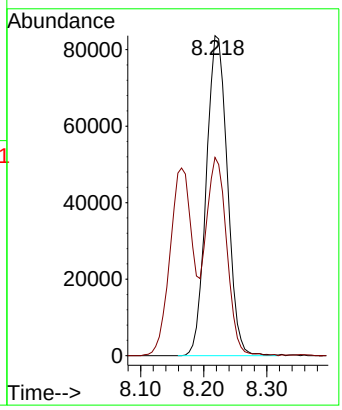





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.218 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:168 Resp: 193909

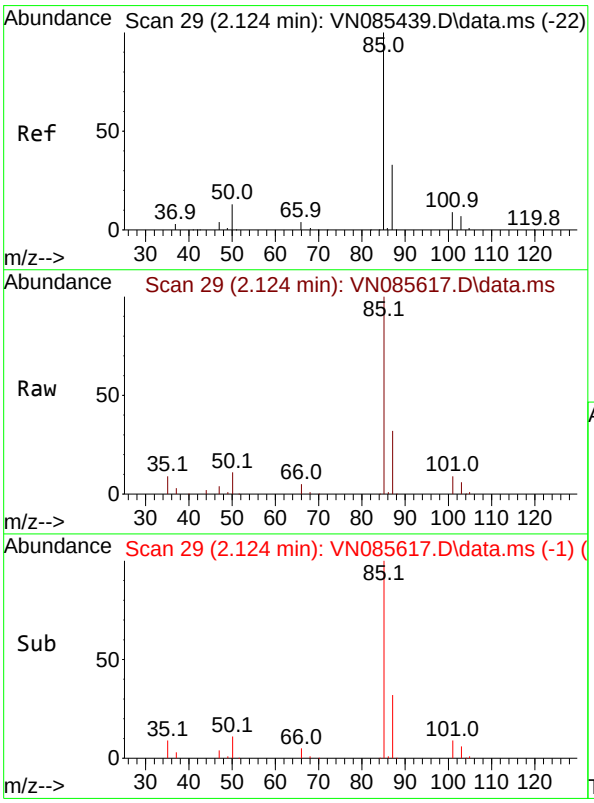
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 62.0 | 53.6 | 80.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

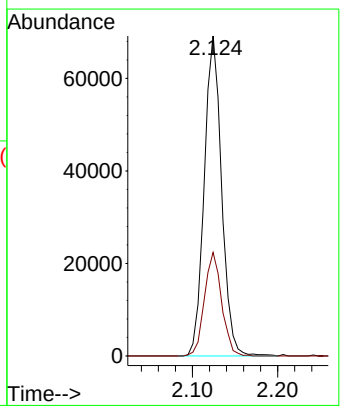
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

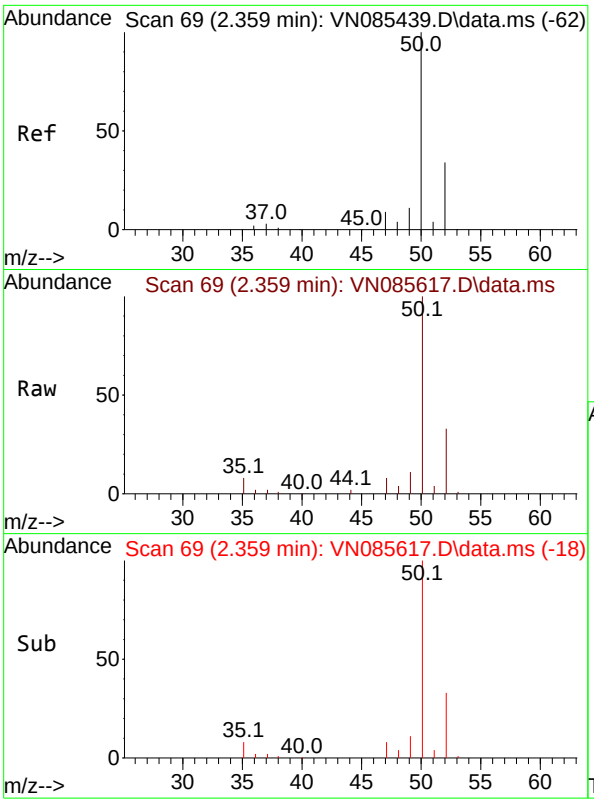



#2
Dichlorodifluoromethane
Concen: 37.364 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 85 Resp: 98099

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.4 | 16.7 | 50.1 |

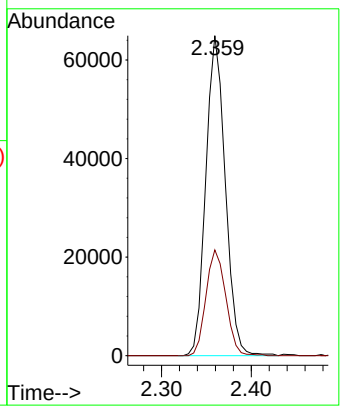





#3
Chloromethane
Concen: 34.404 ug/l
RT: 2.359 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 50 Resp: 9780

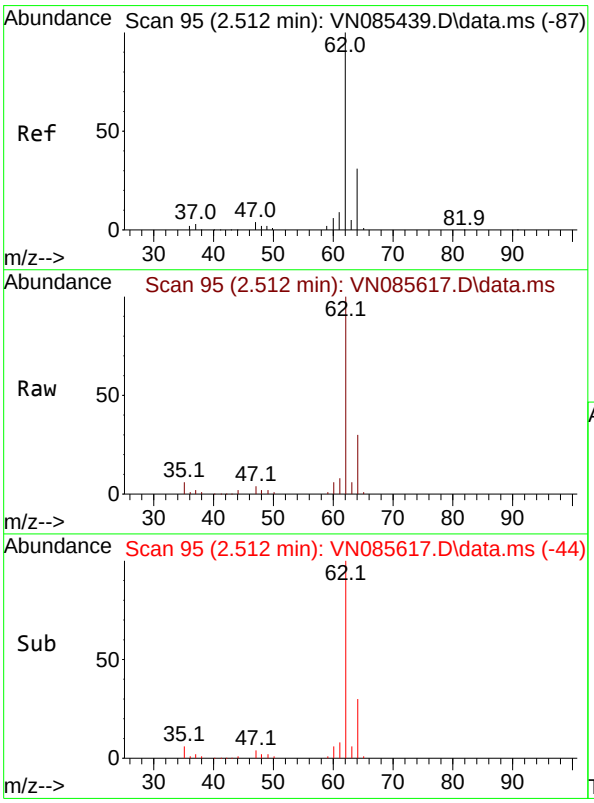
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 33.0 | 27.0 | 40.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

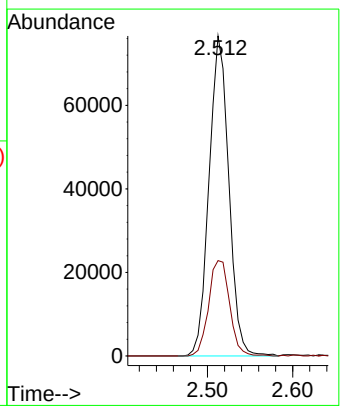
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

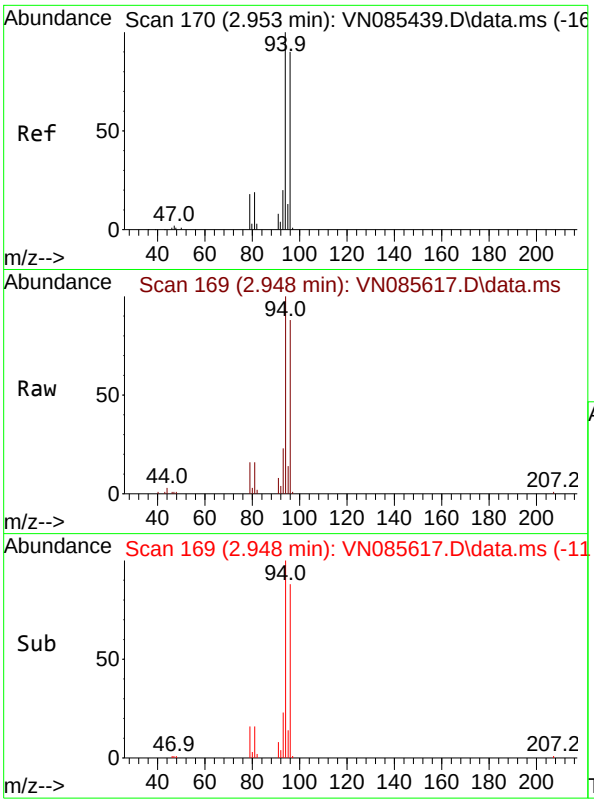



#4
Vinyl Chloride
Concen: 43.167 ug/l
RT: 2.512 min Scan# 95
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 62 Resp: 123341

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 29.8 | 24.8 | 37.2 |

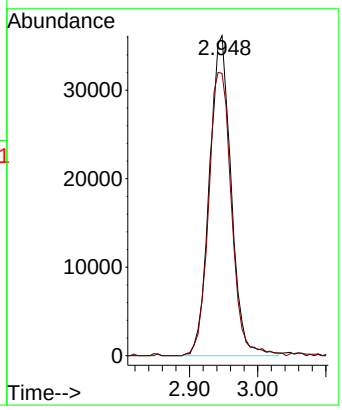





#5
Bromomethane
Concen: 46.361 ug/l
RT: 2.948 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 94 Resp: 8001

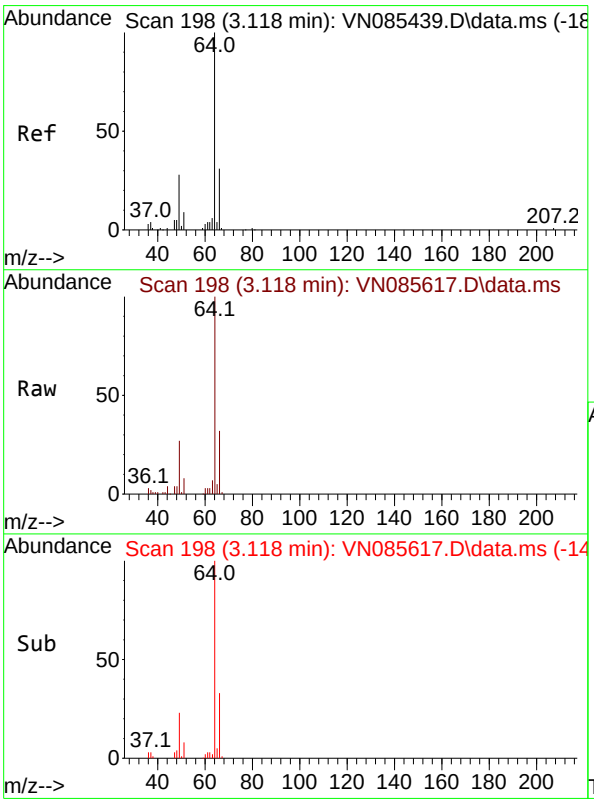
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 88.3 | 71.8 | 107.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

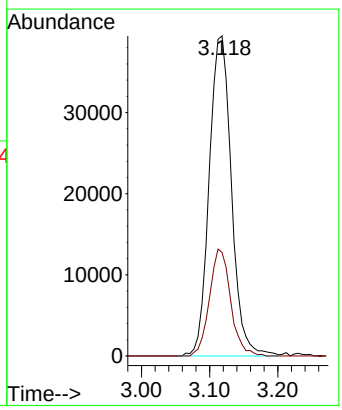
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

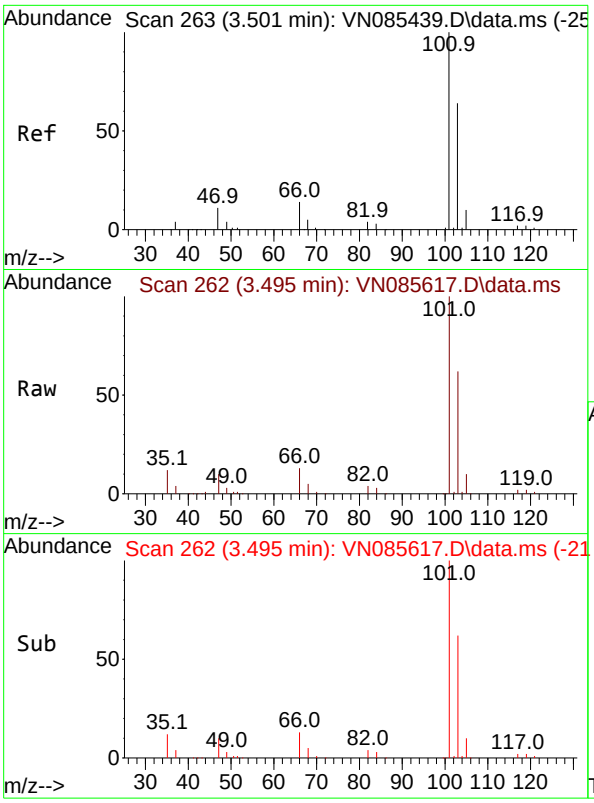



#6
Chloroethane
Concen: 49.419 ug/l
RT: 3.118 min Scan# 198
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 64 Resp: 89522

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 32.4 | 24.6 | 36.8 |

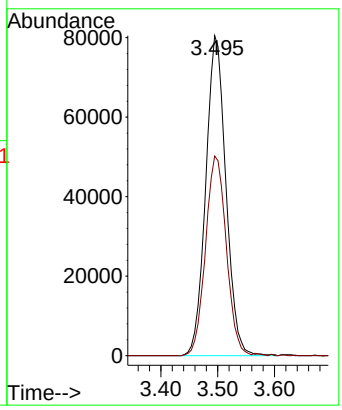





#7
Trichlorofluoromethane
Concen: 47.821 ug/l
RT: 3.495 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:101 Resp: 19826

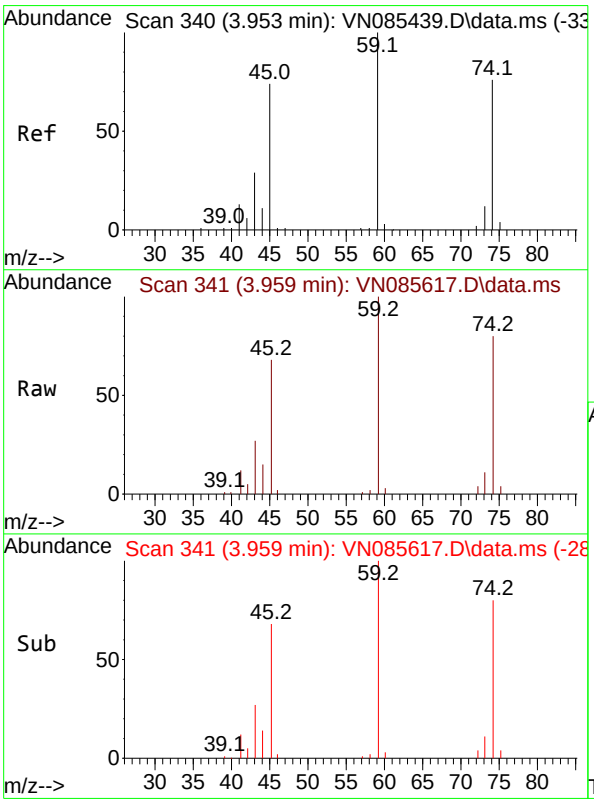
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 62.4 | 51.4 | 77.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

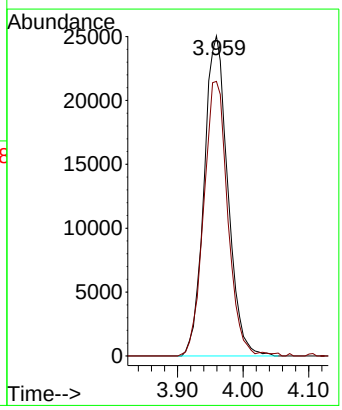
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

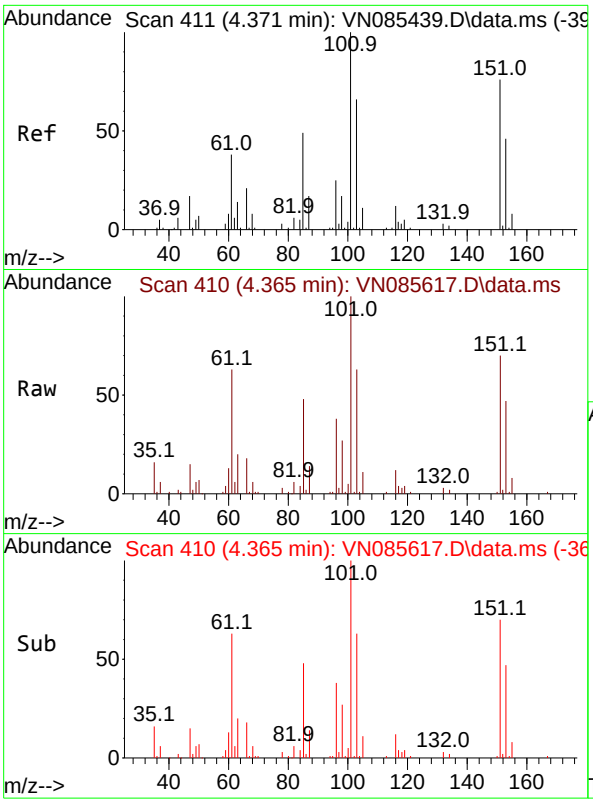



#8
Diethyl Ether
Concen: 43.869 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 74 Resp: 62830

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 86.5 | 49.7 | 149.1 |






#9
1,1,2-Trichlorotrifluoroethane
Concen: 46.609 ug/l
RT: 4.365 min Scan# 4
Delta R.T. -0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

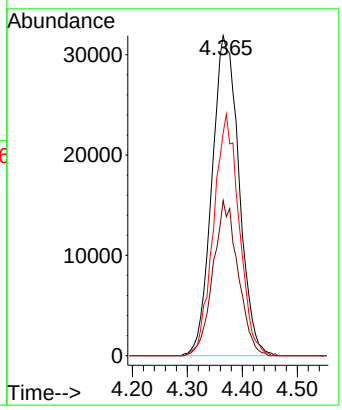
Tgt Ion:101 Resp: 10883

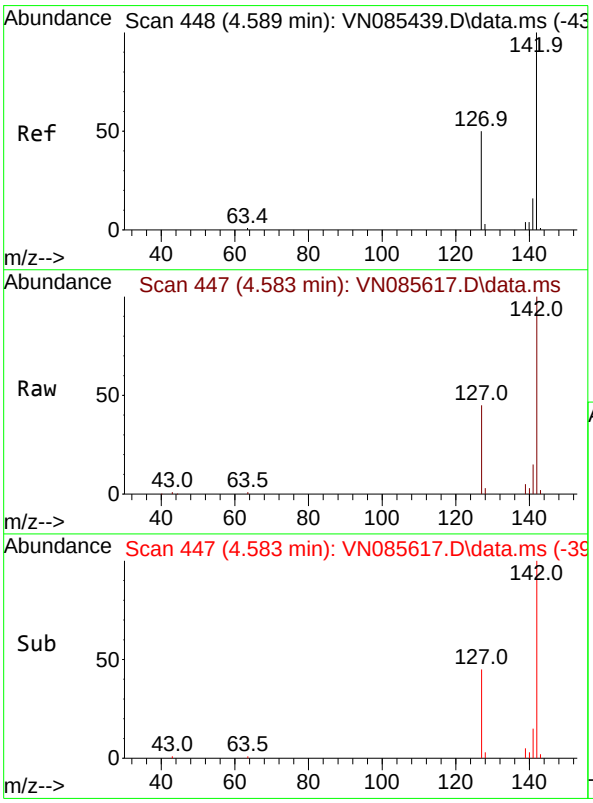
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 45.0 | 37.8 | 56.8 |
| 151 | 71.5 | 58.8 | 88.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

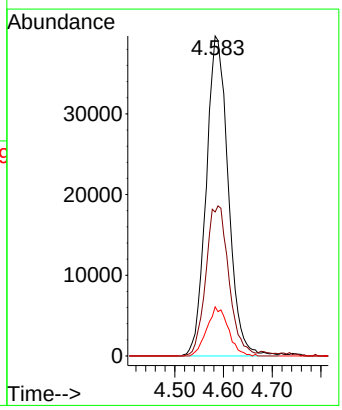


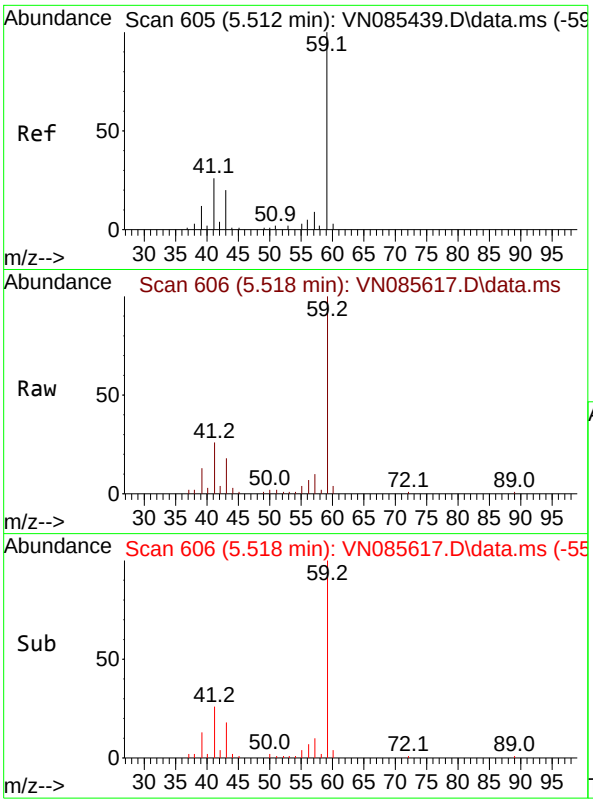




#10
Methyl Iodide
Concen: 46.624 ug/l
RT: 4.583 min Scan# 447
Delta R.T. -0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:142 Resp: 124678

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 45.0 | 40.3 | 60.5 |
| 141 | 15.4 | 12.8 | 19.2 |

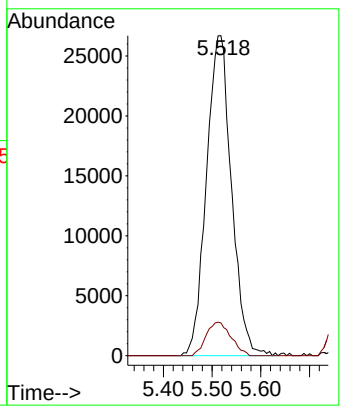





#11
Tert butyl alcohol
Concen: 266.185 ug/l
RT: 5.518 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 59 Resp: 9540

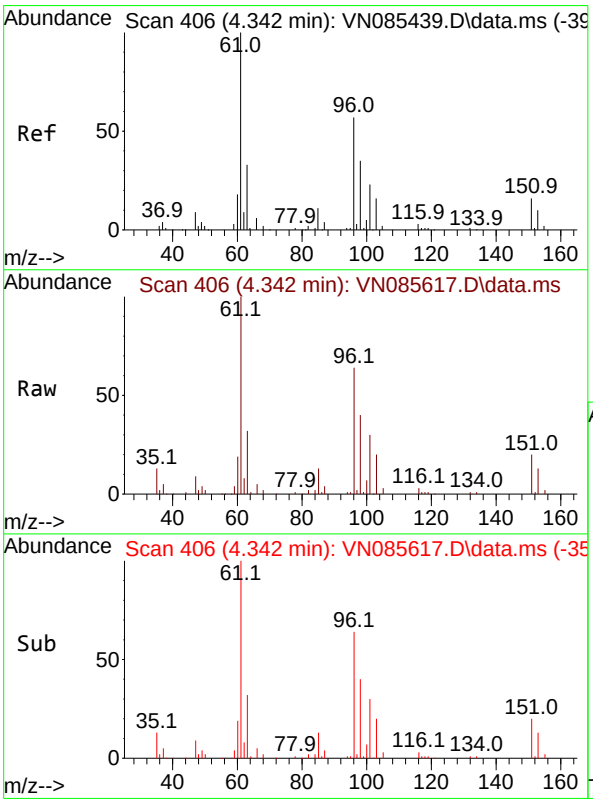
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 10.3 | 8.6 | 13.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

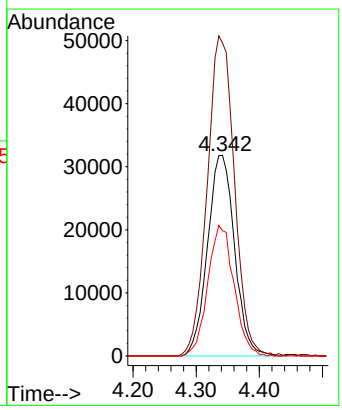
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

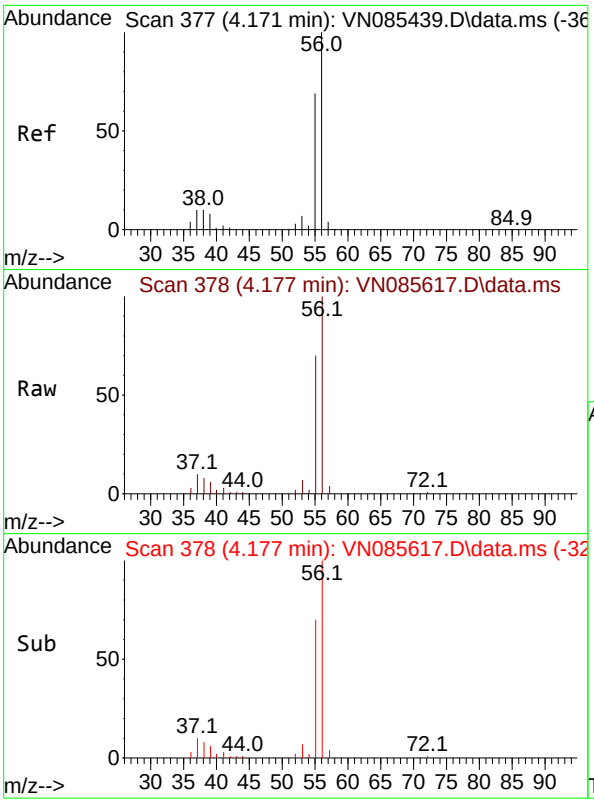



#12
1,1-Dichloroethene
Concen: 45.458 ug/l
RT: 4.342 min Scan# 406
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 96 Resp: 94603

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 156.0 | 141.0 | 211.4 |
| 98 | 62.5 | 49.0 | 73.6 |

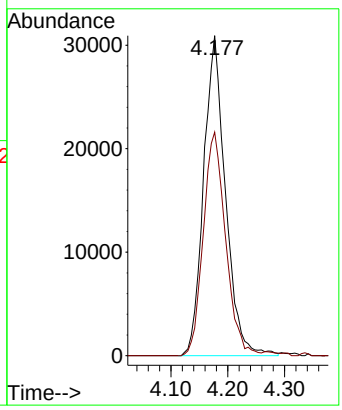





#13
Acrolein
Concen: 168.557 ug/l
RT: 4.177 min Scan# 3
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 56 Resp: 8247

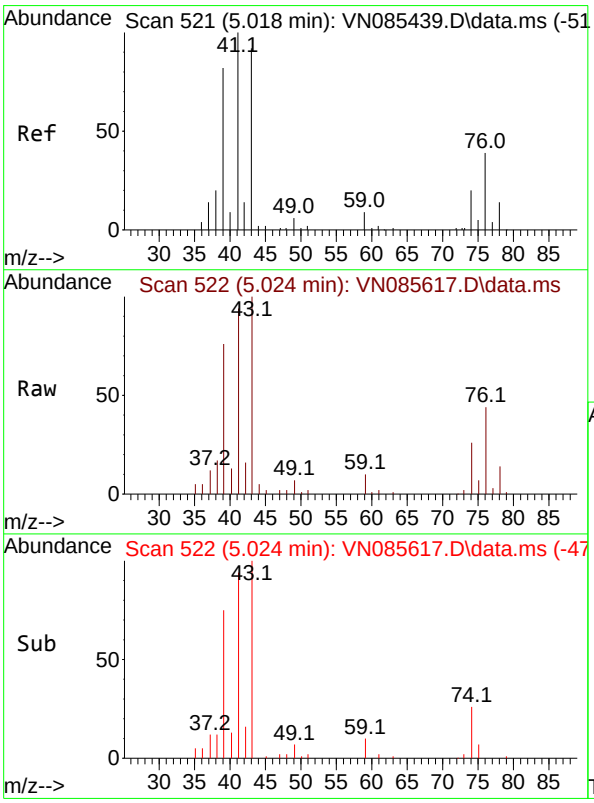
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 71.4 | 56.3 | 84.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

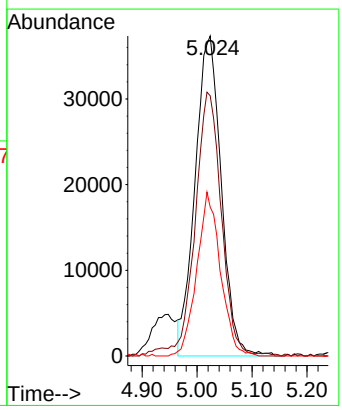
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

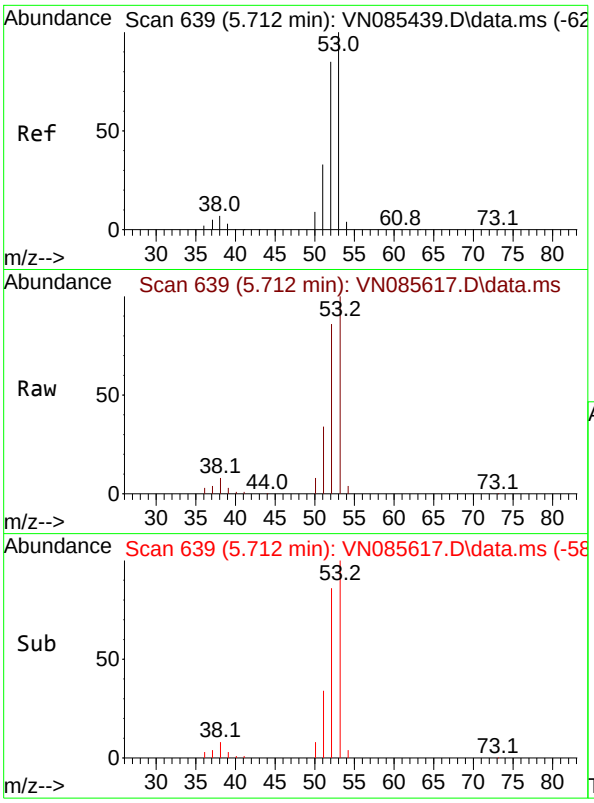



#14
Allyl chloride
Concen: 36.574 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 41 Resp: 123509

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 83.1 | 64.4 | 96.6 |
| 76 | 46.2 | 30.5 | 45.7# |

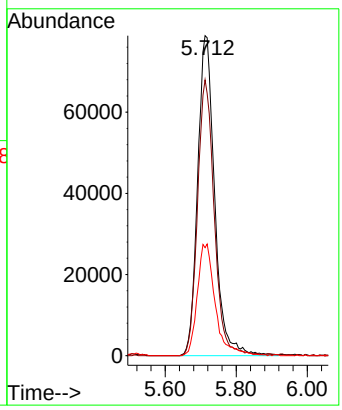





#15
Acrylonitrile
Concen: 231.327 ug/l
RT: 5.712 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 53 Resp: 26335

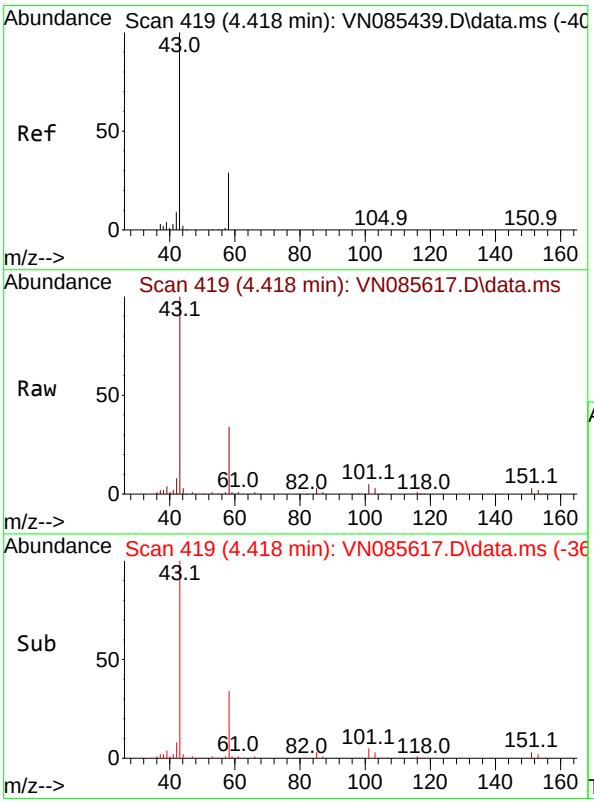
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 84.6 | 65.5 | 98.3 |
| 51 | 36.8 | 29.8 | 44.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

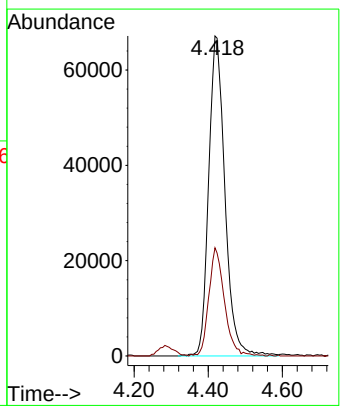
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

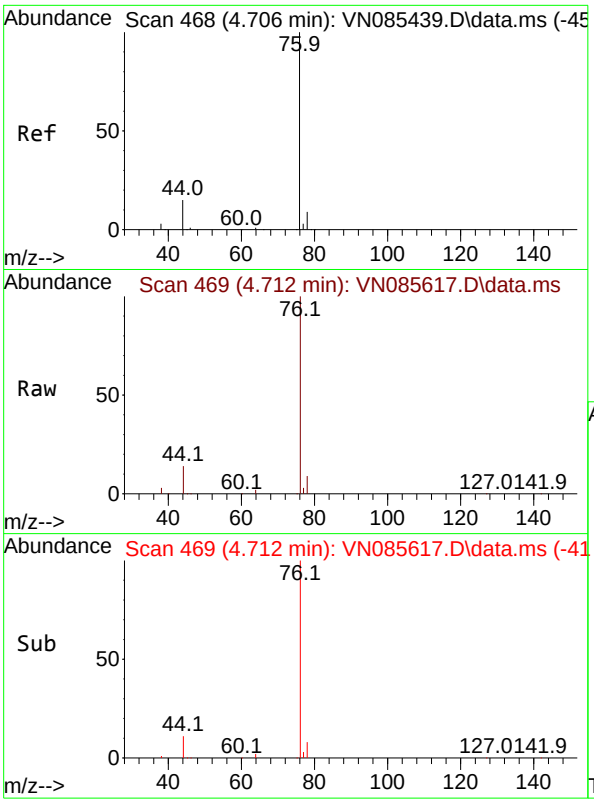



#16
Acetone
Concen: 202.320 ug/l
RT: 4.418 min Scan# 419
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 43 Resp: 204618

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 33.5 | 23.8 | 35.6 |

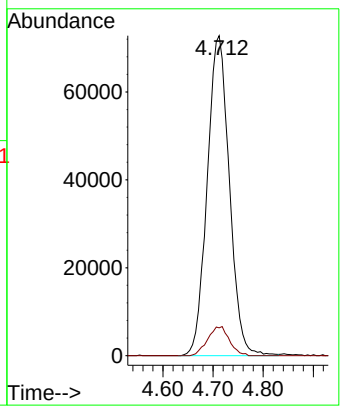





#17
Carbon Disulfide
Concen: 34.849 ug/l
RT: 4.712 min Scan# 4
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 76 Resp: 22330

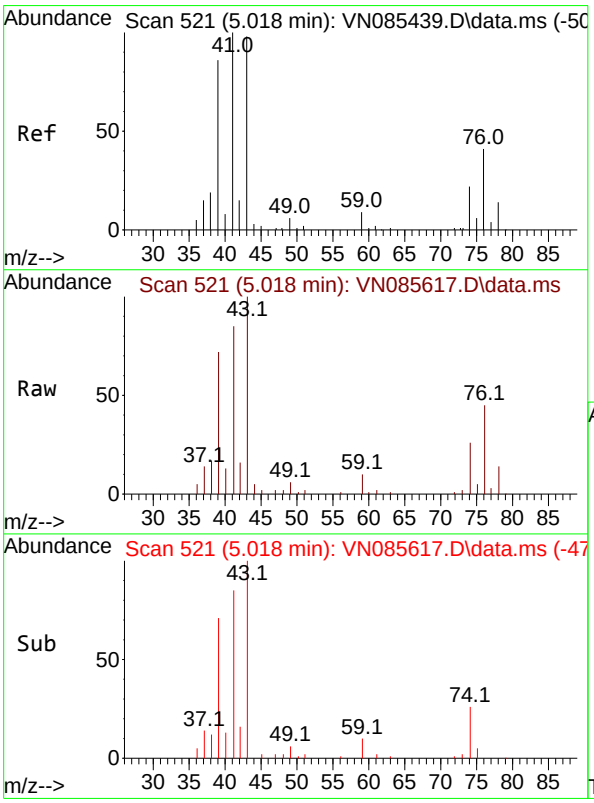
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 8.7 | 6.9 | 10.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

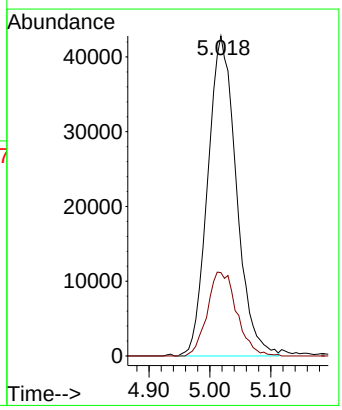
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

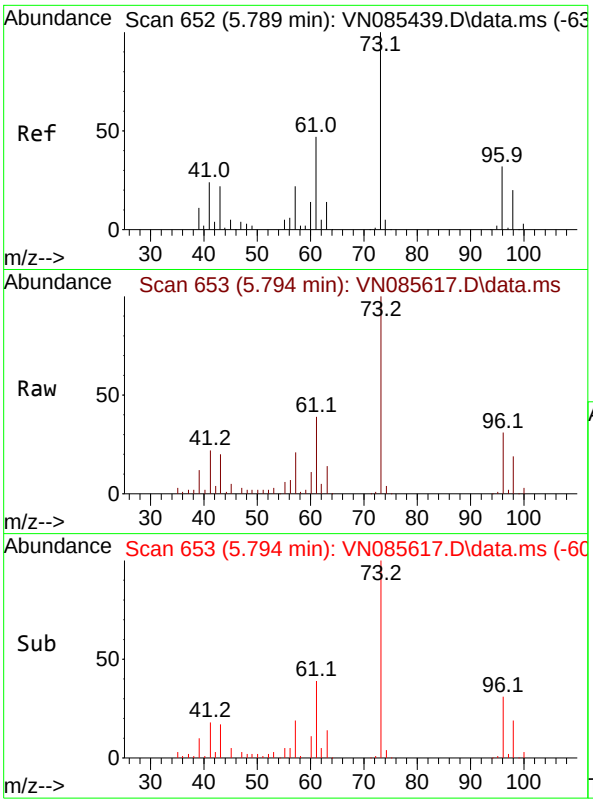



#18
Methyl Acetate
Concen: 45.361 ug/l
RT: 5.018 min Scan# 521
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 43 Resp: 139501

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 27.1 | 18.6 | 28.0 |






#19
Methyl tert-butyl Ether
Concen: 49.654 ug/l
RT: 5.794 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

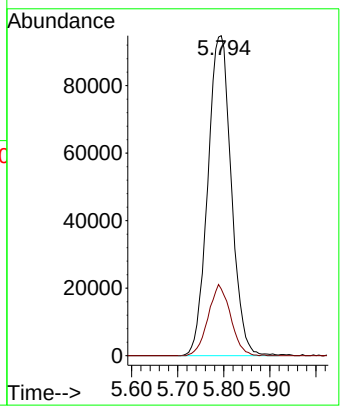
Tgt Ion: 73 Resp: 33553

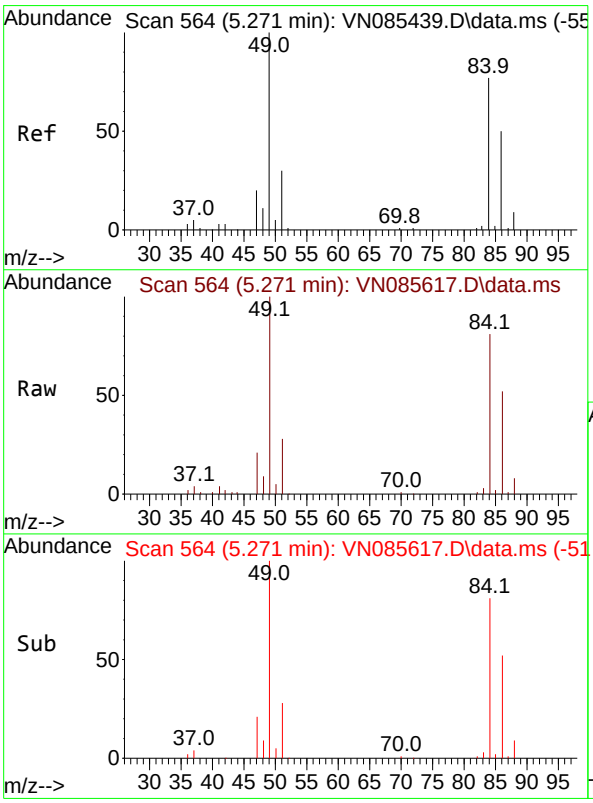
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 20.9 | 17.8 | 26.8 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

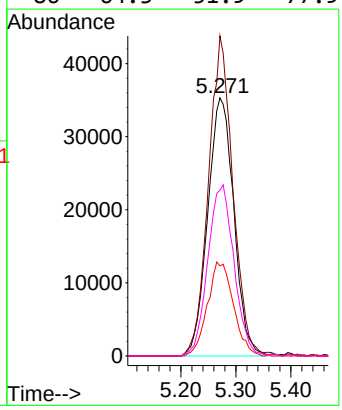


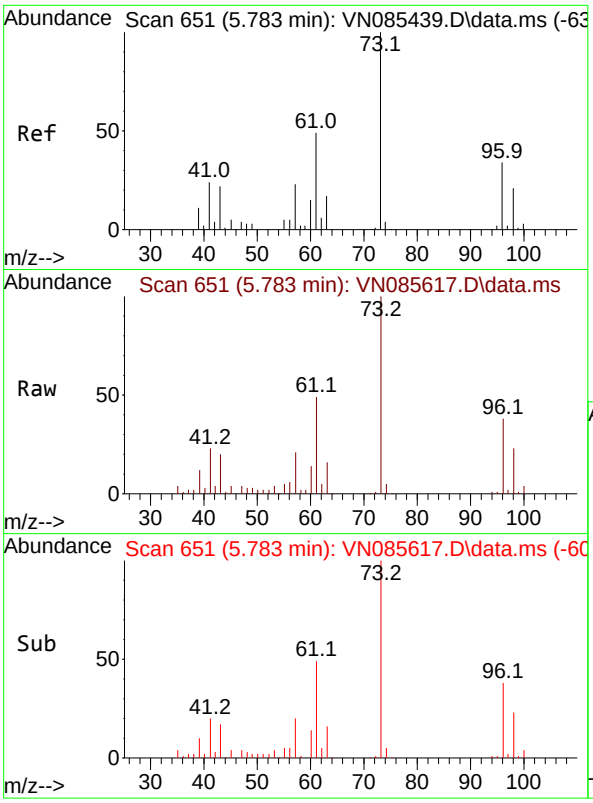




#20
Methylene Chloride
Concen: 46.650 ug/l
RT: 5.271 min Scan# 564
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 84 Resp: 116799

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 124.0 | 104.1 | 156.1 |
| 51 | 34.9 | 31.0 | 46.4 |
| 86 | 64.3 | 51.9 | 77.9 |

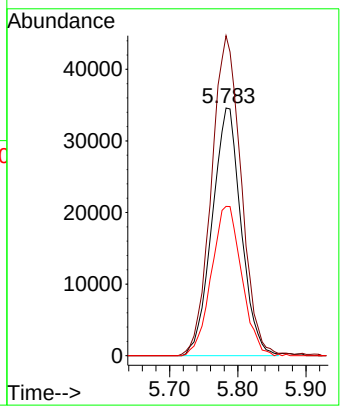





#21
trans-1,2-Dichloroethene
Concen: 46.100 ug/l
RT: 5.783 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 96 Resp: 10253

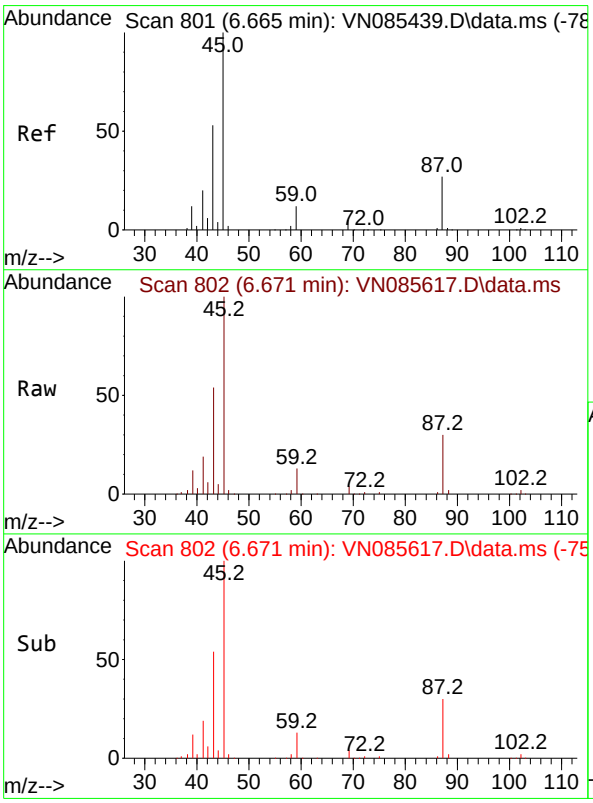
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 129.2 | 115.7 | 173.5 |
| 98 | 60.2 | 49.8 | 74.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

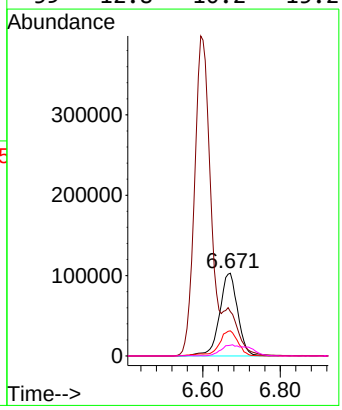
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

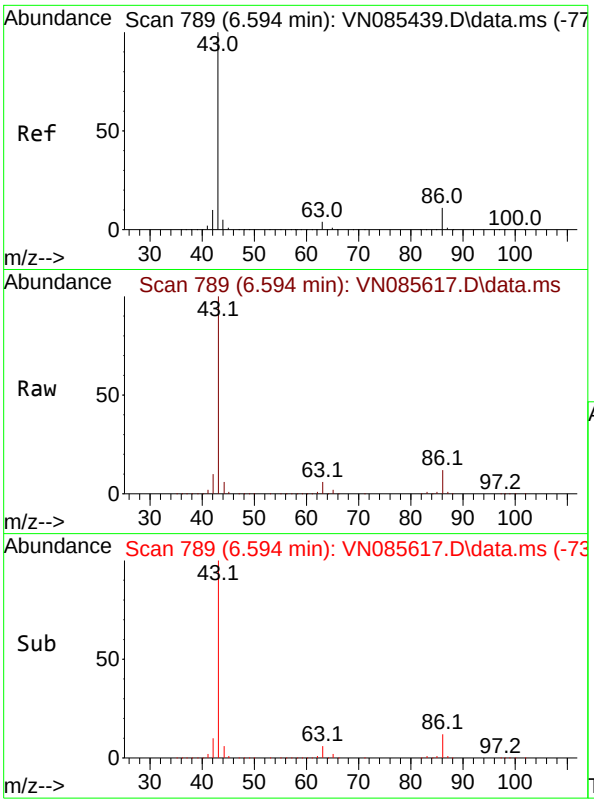



#22
Diisopropyl ether
Concen: 44.663 ug/l
RT: 6.671 min Scan# 802
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 45 Resp: 334765

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 52.8 | 45.0 | 67.6 |
| 87 | 30.3 | 21.8 | 32.8 |
| 59 | 12.8 | 10.2 | 15.2 |






#23
Vinyl Acetate
Concen: 215.551 ug/l
RT: 6.594 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

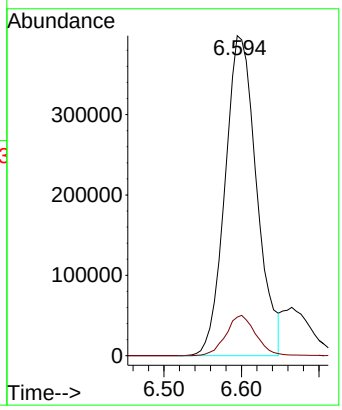
Tgt Ion: 43 Resp: 113067

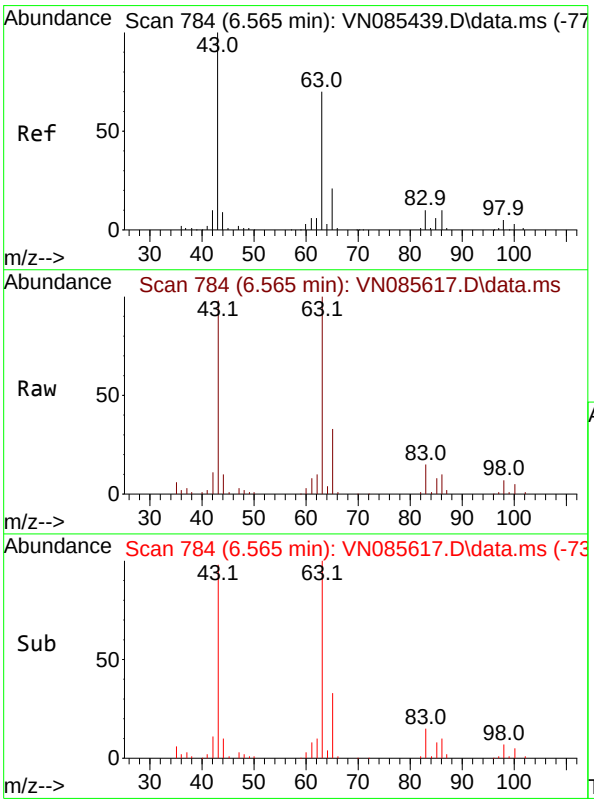
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 12.0 | 8.4 | 12.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

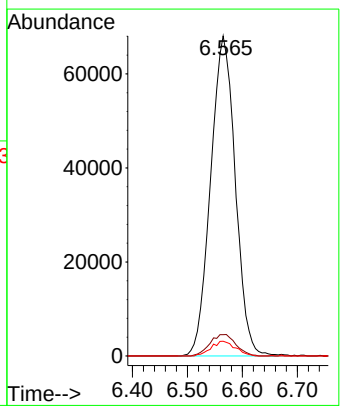


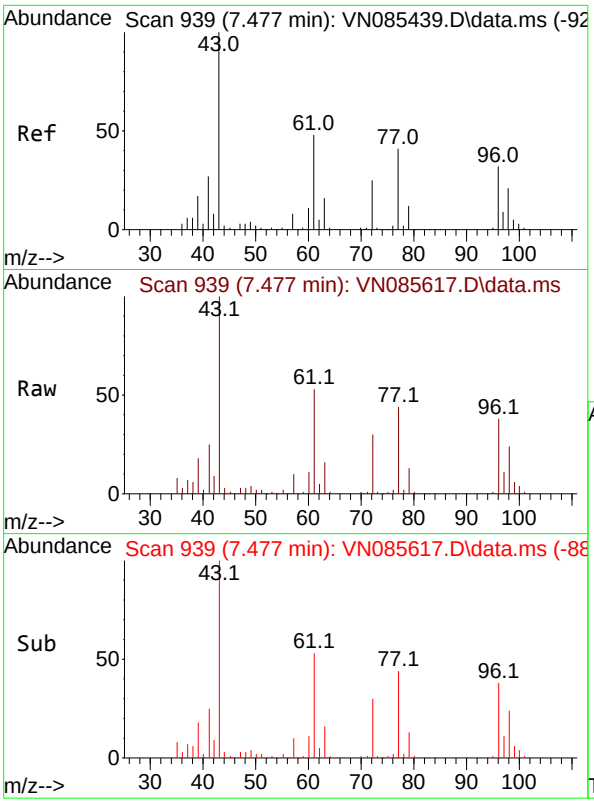




#24
1,1-Dichloroethane
Concen: 46.504 ug/l
RT: 6.565 min Scan# 784
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 63 Resp: 212538

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 6.7 | 3.3 | 9.8 |
| 100 | 4.6 | 2.0 | 6.0 |






#25
2-Butanone
Concen: 218.881 ug/l
RT: 7.477 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

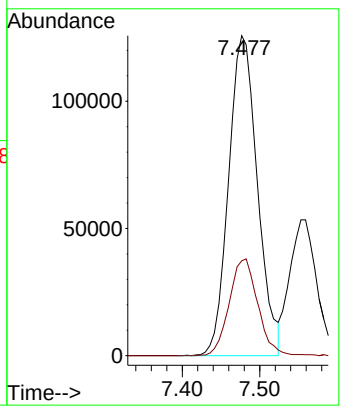
Tgt Ion: 43 Resp: 32576

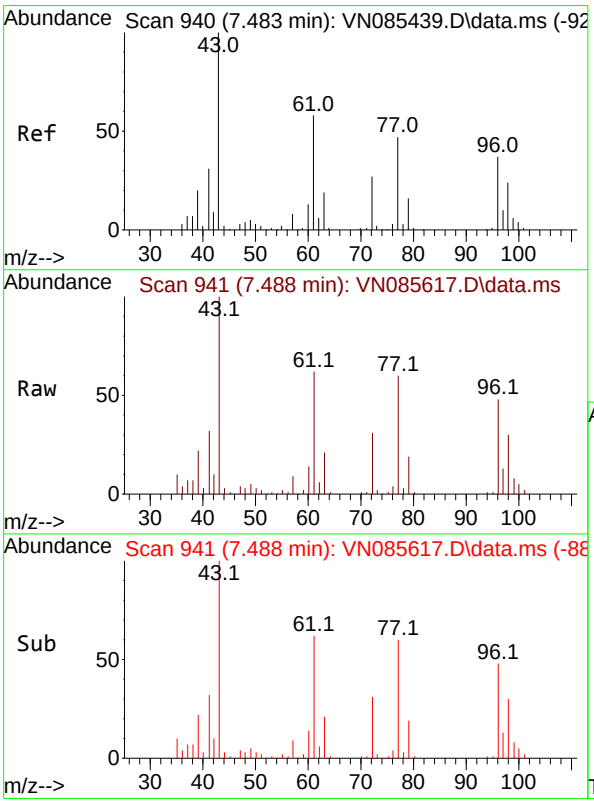
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 29.7 | 20.2 | 30.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

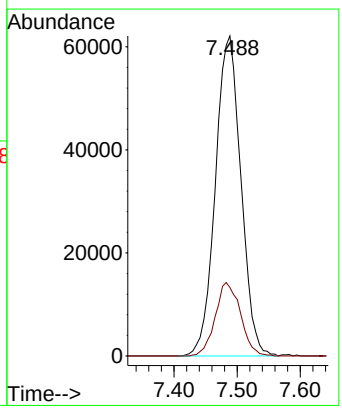


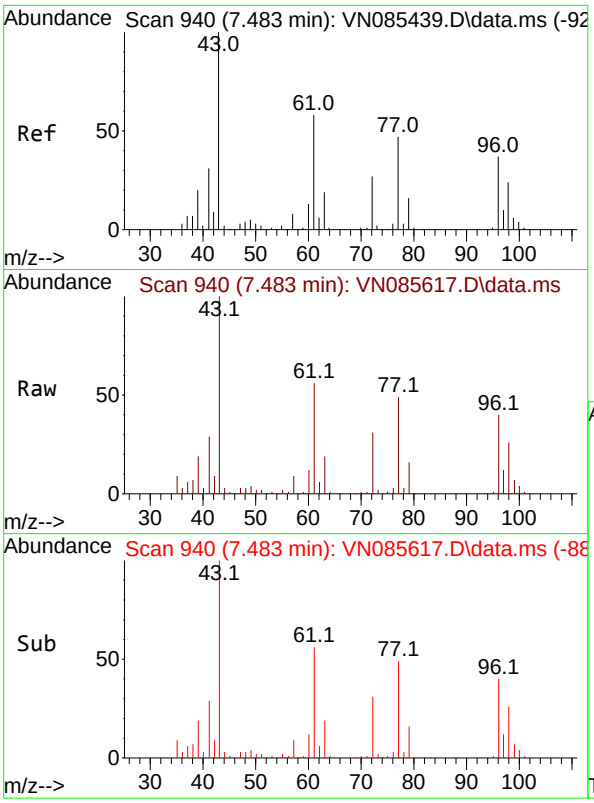




#26
2,2-Dichloropropane
Concen: 47.156 ug/l
RT: 7.488 min Scan# 941
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 77 Resp: 174244

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 22.7 | 10.7 | 32.1 |






#27
cis-1,2-Dichloroethene
Concen: 50.547 ug/l
RT: 7.483 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

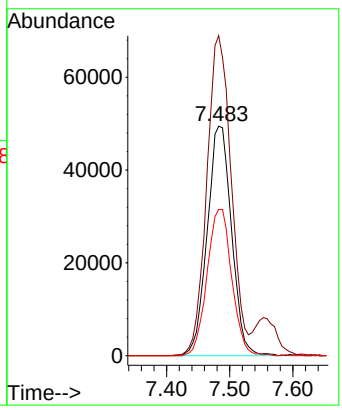
Tgt Ion: 96 Resp: 13241

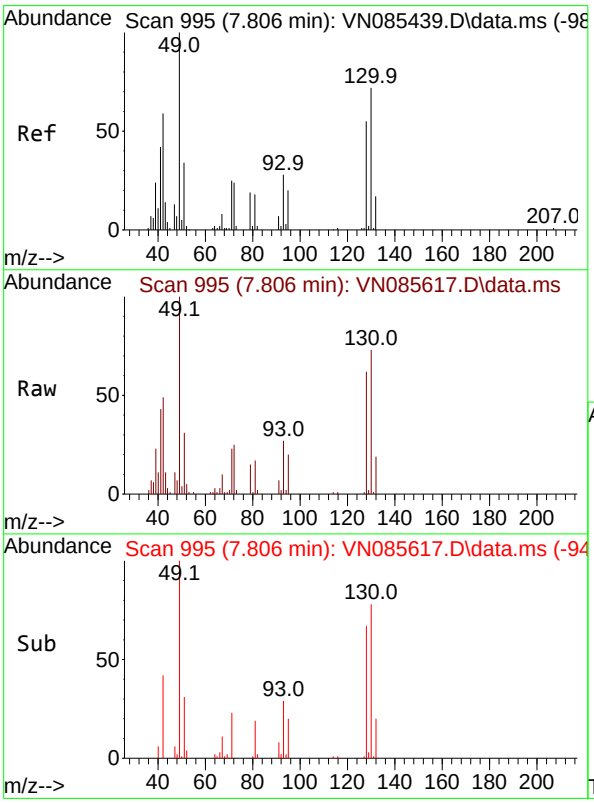
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 139.7 | 0.0 | 311.8 |
| 98 | 64.6 | 0.0 | 126.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

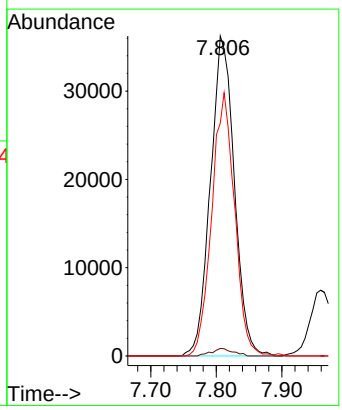


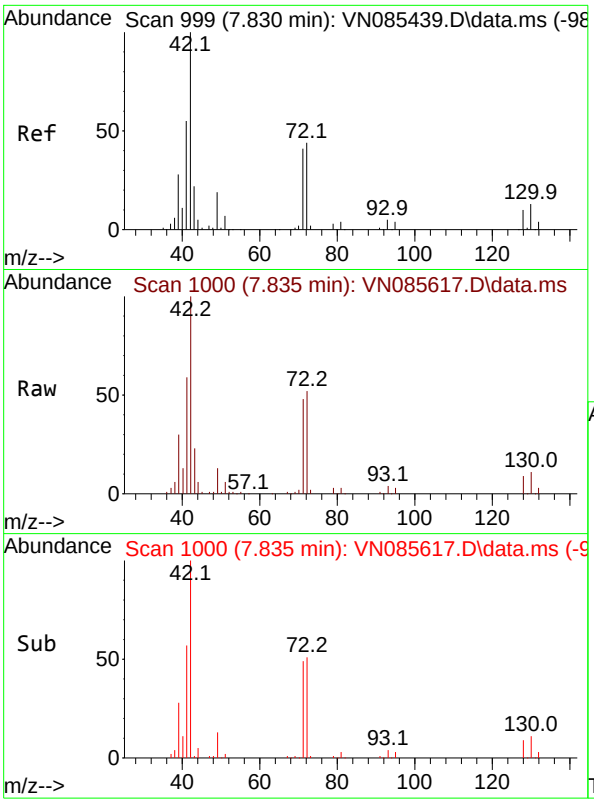




#28
Bromochloromethane
Concen: 43.090 ug/l
RT: 7.806 min Scan# 995
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 49 Resp: 91622

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 2.1 | 0.0 | 4.4 |
| 130 | 78.8 | 55.0 | 82.4 |

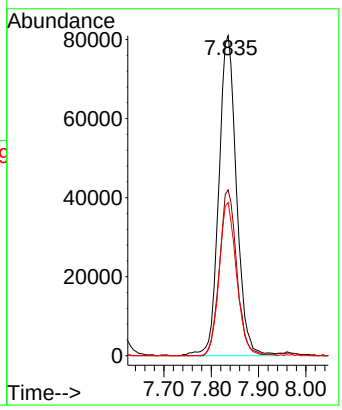





#29
Tetrahydrofuran
Concen: 223.073 ug/l
RT: 7.835 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 42 Resp: 21049

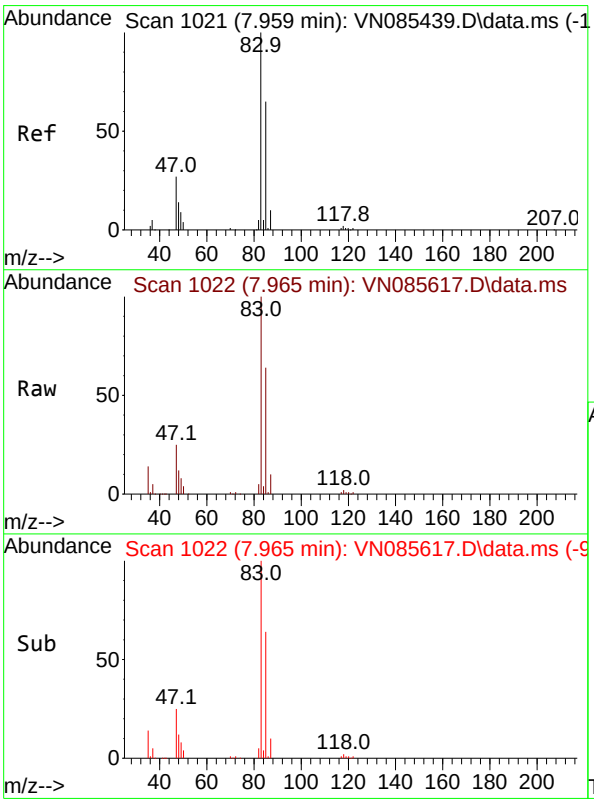
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 50.7 | 34.2 | 51.2 |
| 71 | 47.1 | 32.5 | 48.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

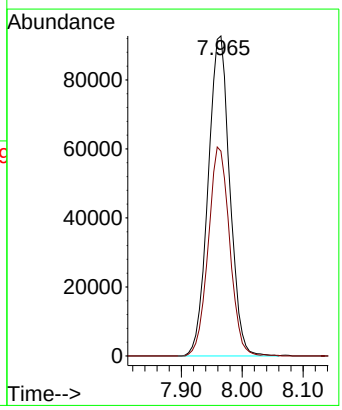
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

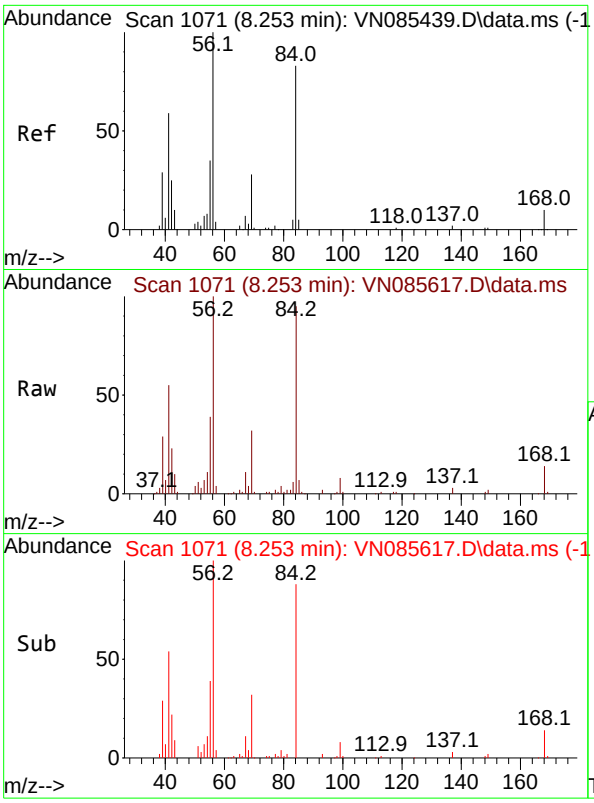



#30
Chloroform
Concen: 48.416 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 83 Resp: 228697

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.0 | 51.8 | 77.6 |

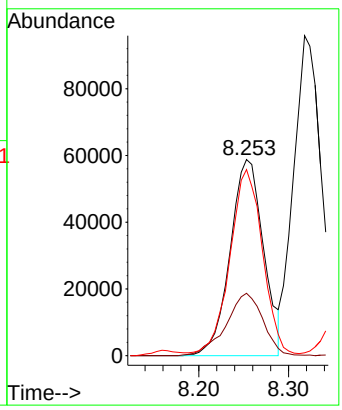





#31
Cyclohexane
Concen: 38.329 ug/l
RT: 8.253 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 56 Resp: 15225

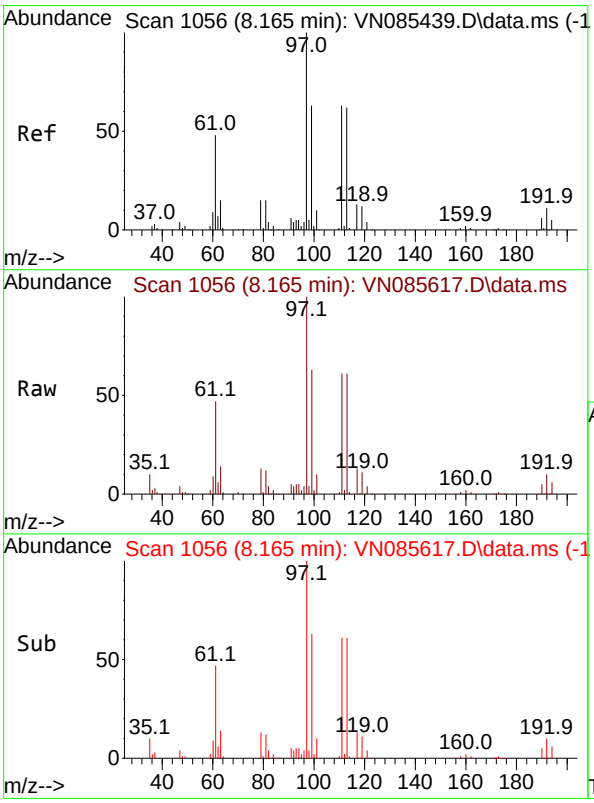
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 31.8 | 22.2 | 33.4 |
| 84 | 93.1 | 66.4 | 99.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

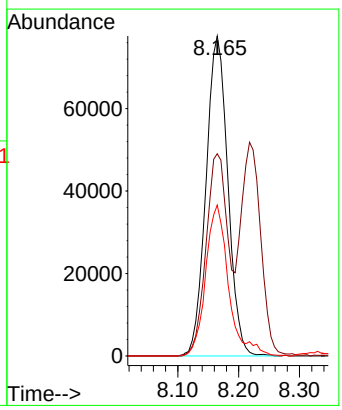
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

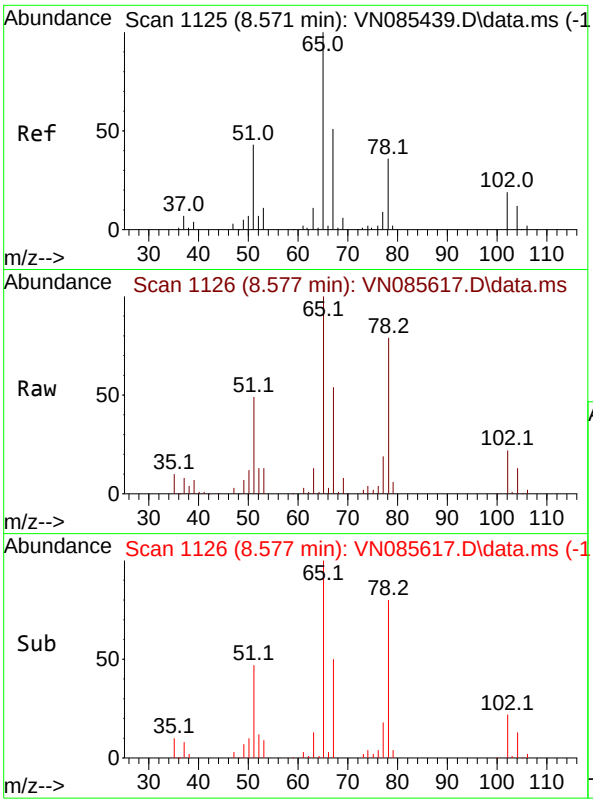



#32
1,1,1-Trichloroethane
Concen: 46.661 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 97 Resp: 193335

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 65.0 | 49.8 | 74.6 |
| 61 | 49.4 | 41.4 | 62.2 |

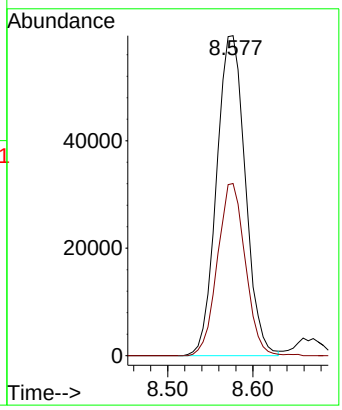





#33
1,2-Dichloroethane-d4
Concen: 44.566 ug/l
RT: 8.577 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 65 Resp: 13949

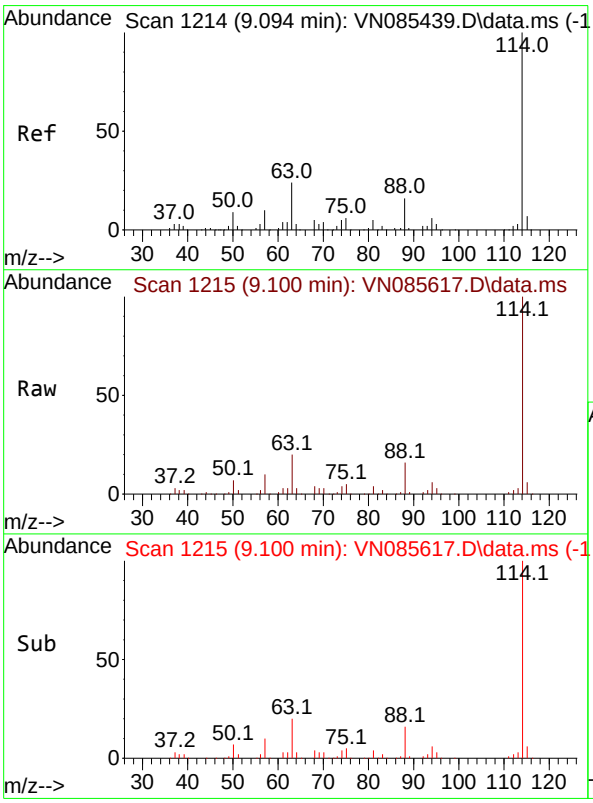
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 52.1 | 0.0 | 101.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

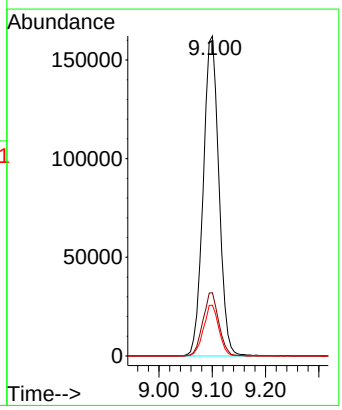
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

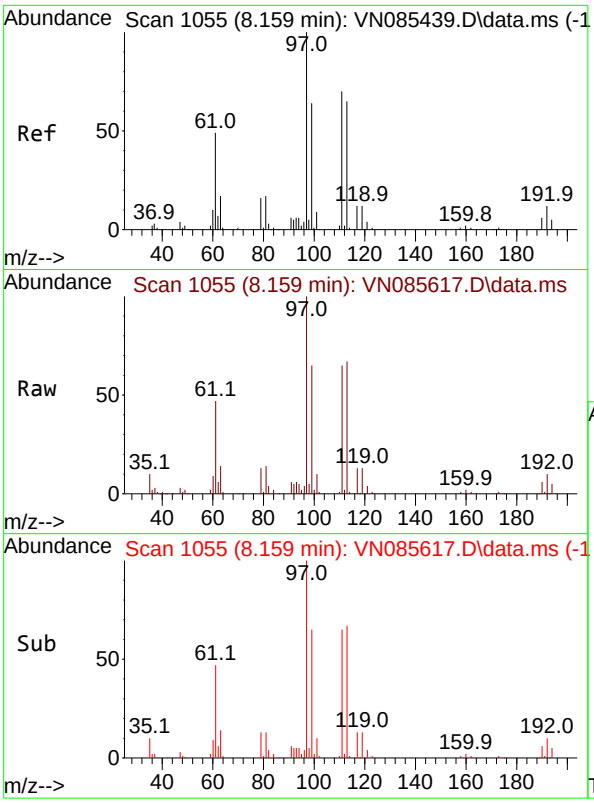



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:114 Resp: 331362

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 19.8 | 0.0 | 47.6 |
| 88 | 15.8 | 0.0 | 32.6 |

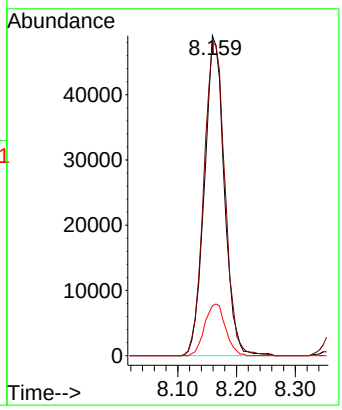





#35
Dibromofluoromethane
Concen: 49.931 ug/l
RT: 8.159 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:113 Resp: 11478

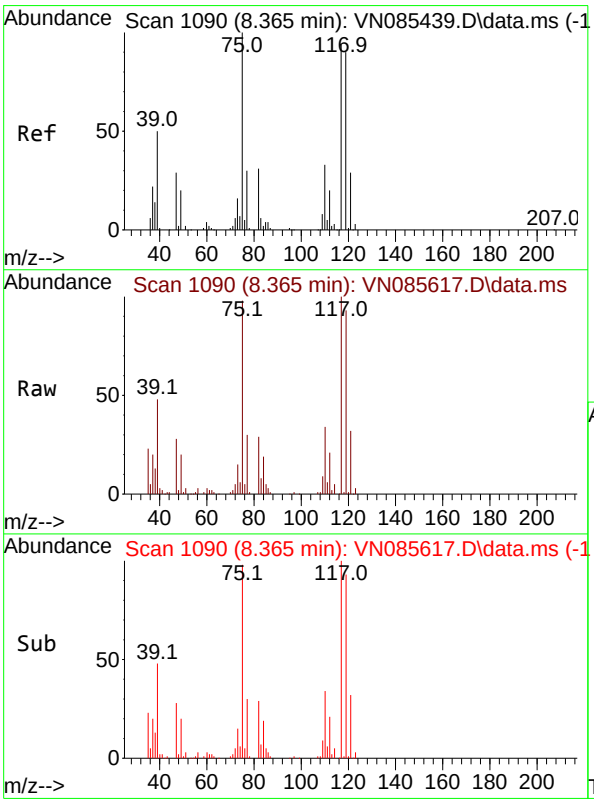
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 104.3 | 82.7 | 124.1 |
| 192 | 16.9 | 14.3 | 21.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

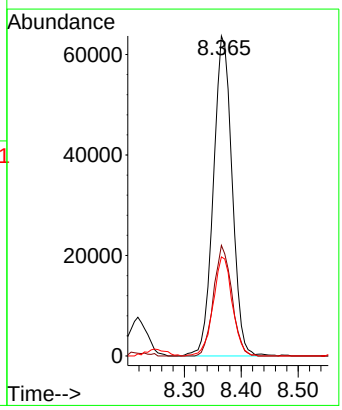
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

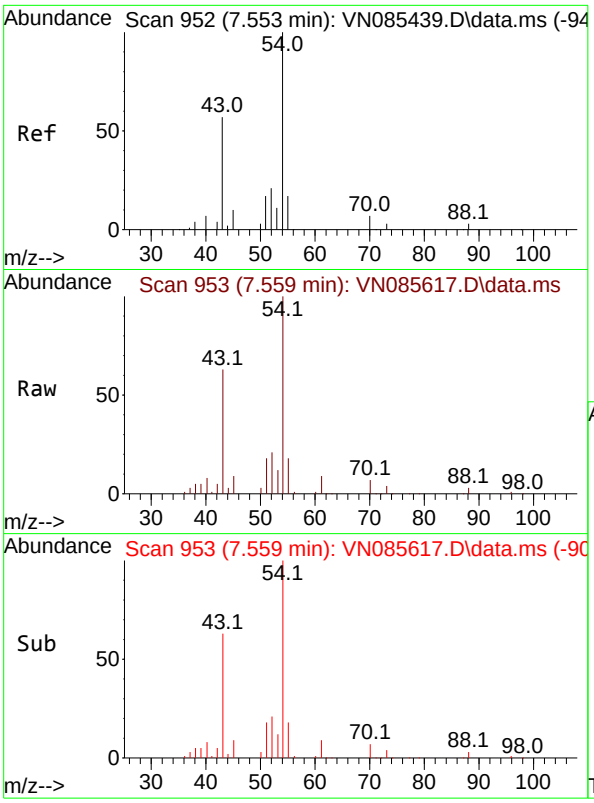



#36
1,1-Dichloropropene
Concen: 45.259 ug/l
RT: 8.365 min Scan# 1090
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 75 Resp: 146021

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 33.7 | 16.5 | 49.5 |
| 77 | 31.6 | 24.4 | 36.6 |






#37
Ethyl Acetate
Concen: 40.735 ug/l
RT: 7.559 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

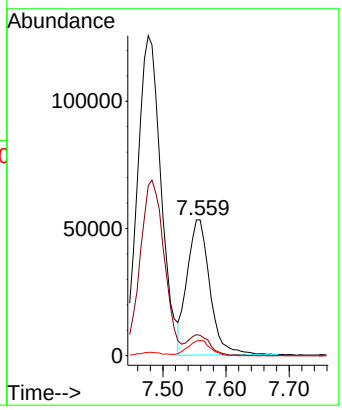
Tgt Ion: 43 Resp: 13265

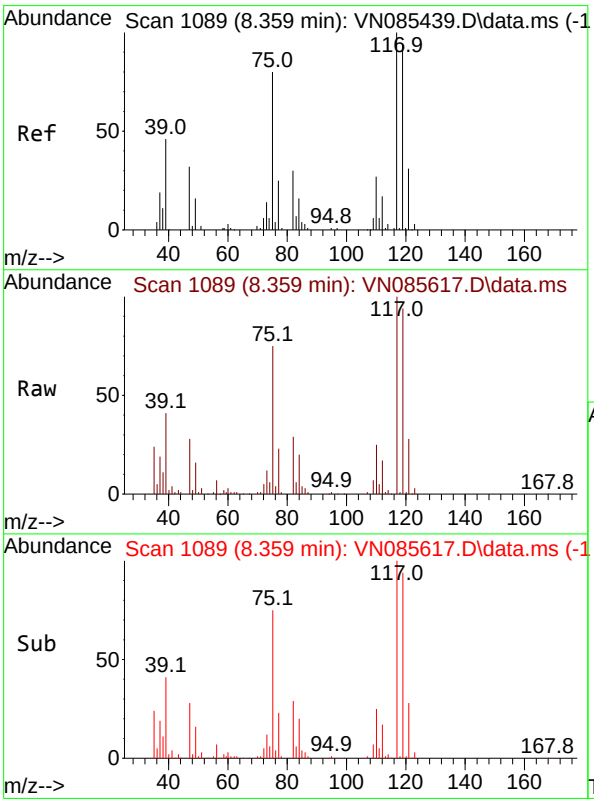
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 15.5 | 10.9 | 16.3 |
| 70 | 11.1 | 7.5 | 11.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

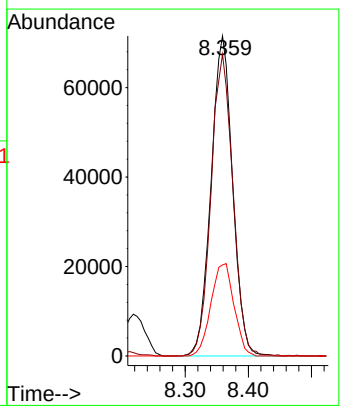


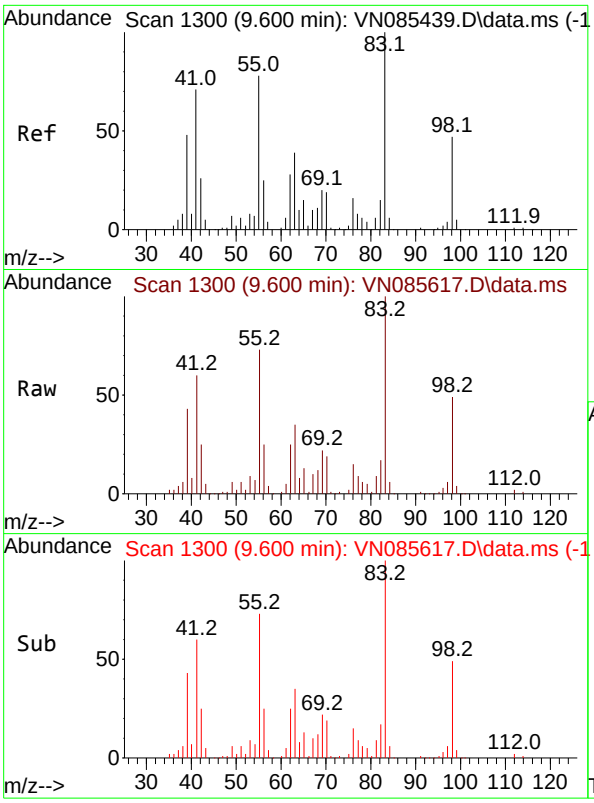




#38
Carbon Tetrachloride
Concen: 45.902 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:117 Resp: 169547

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 94.2 | 75.4 | 113.2 |
| 121 | 28.5 | 24.6 | 37.0 |

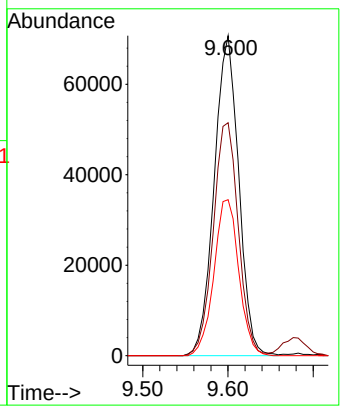





#39
Methylcyclohexane
Concen: 46.593 ug/l
RT: 9.600 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 83 Resp: 14126

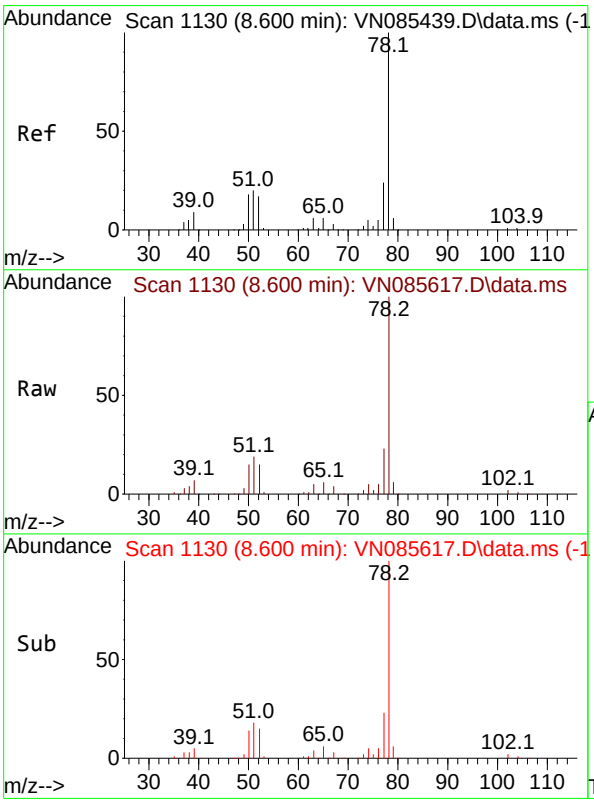
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 72.8 | 62.6 | 94.0 |
| 98 | 48.7 | 37.7 | 56.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

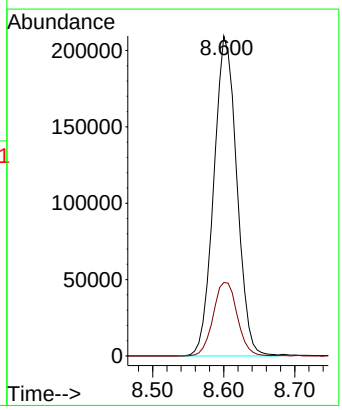
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

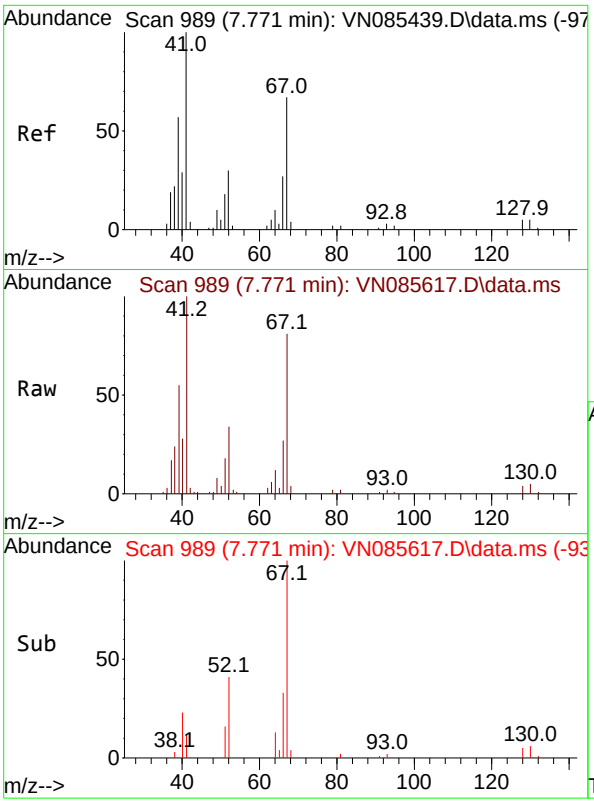



#40
Benzene
Concen: 48.614 ug/l
RT: 8.600 min Scan# 1130
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 78 Resp: 471269

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 22.9 | 19.0 | 28.6 |

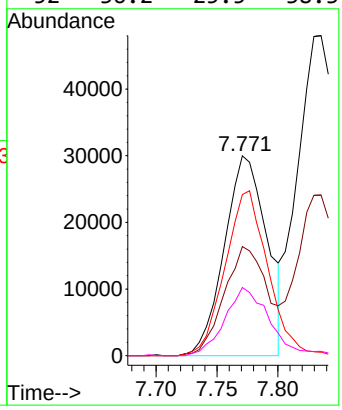





#41
Methacrylonitrile
Concen: 43.037 ug/l
RT: 7.771 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 41 Resp: 7291

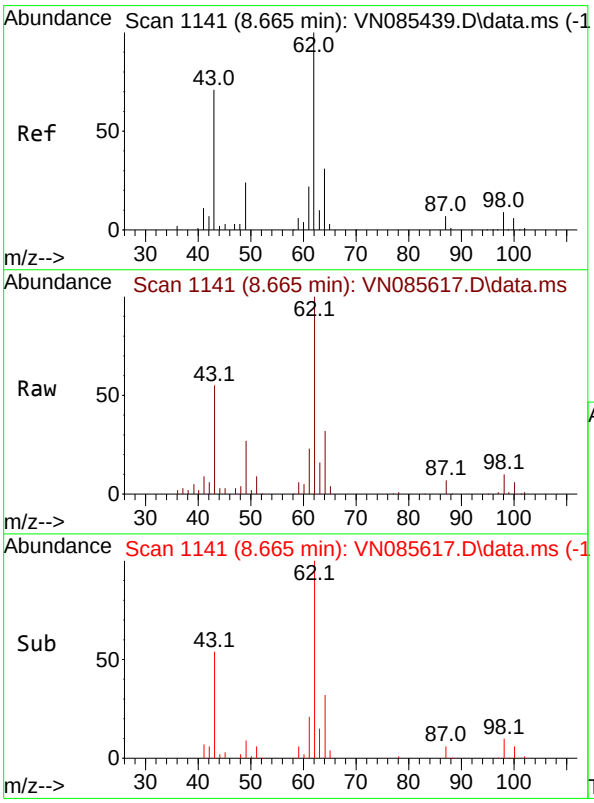
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 55.4 | 46.0 | 69.0 |
| 67 | 82.8 | 57.4 | 86.2 |
| 52 | 36.2 | 25.5 | 38.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

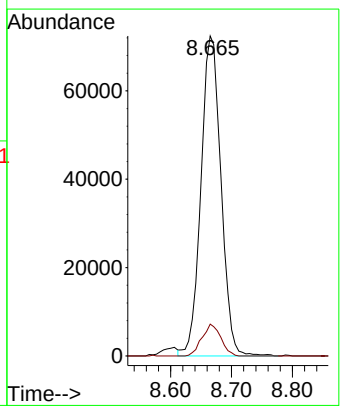
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

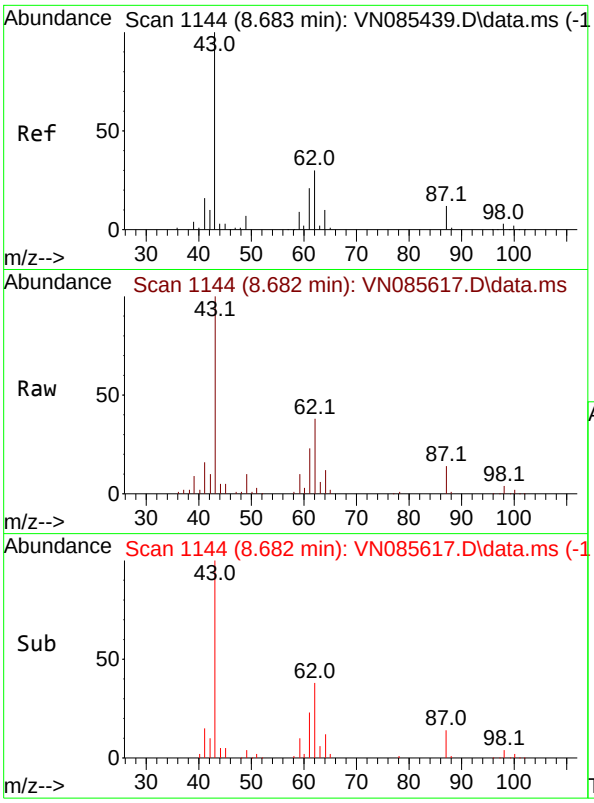



#42
1,2-Dichloroethane
Concen: 45.375 ug/l
RT: 8.665 min Scan# 1141
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 62 Resp: 165668

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 9.4 | 0.0 | 17.0 |

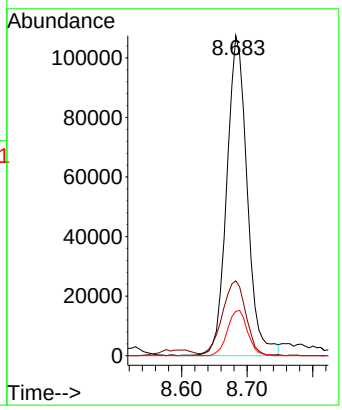





#43
Isopropyl Acetate
Concen: 44.700 ug/l
RT: 8.682 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 43 Resp: 23324

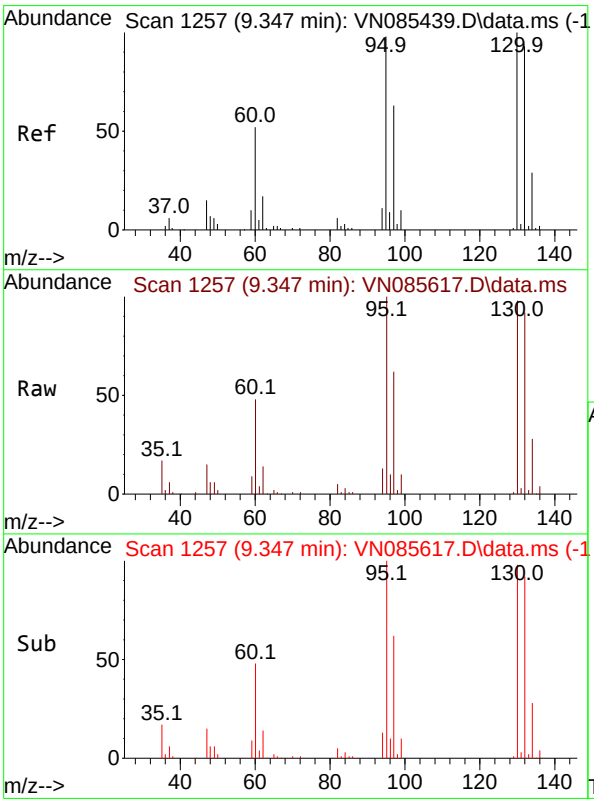
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 27.1 | 20.7 | 31.1 |
| 87 | 13.9 | 9.8 | 14.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

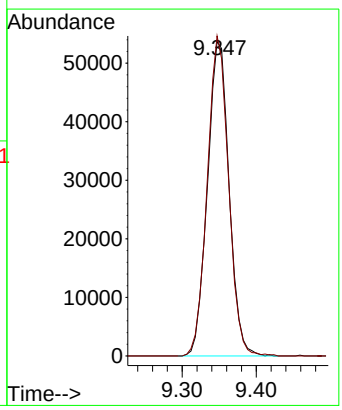
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

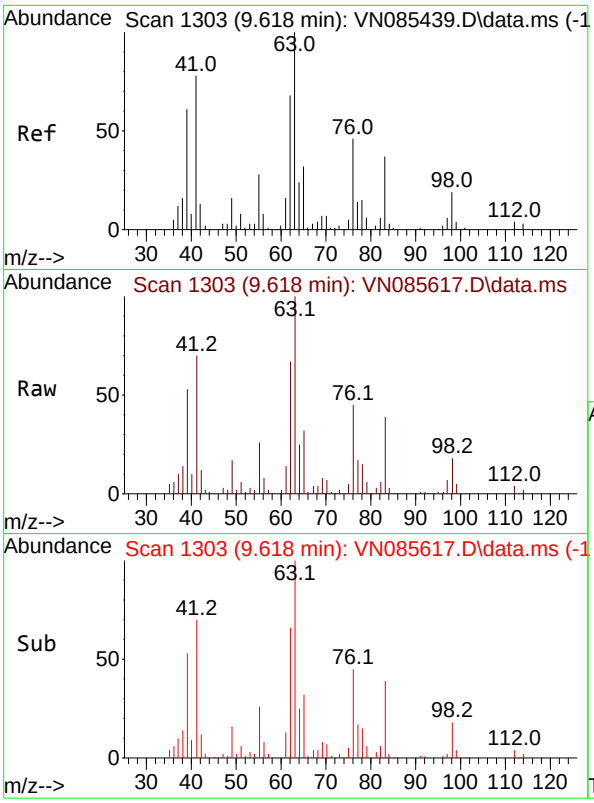



#44
Trichloroethene
Concen: 48.252 ug/l
RT: 9.347 min Scan# 1257
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:130 Resp: 108885

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 101.8 | 0.0 | 195.8 |

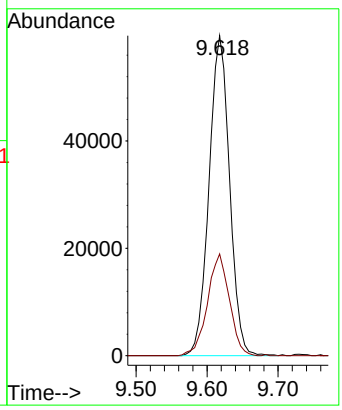





#45
1,2-Dichloropropane
Concen: 48.357 ug/l
RT: 9.618 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 63 Resp: 11974

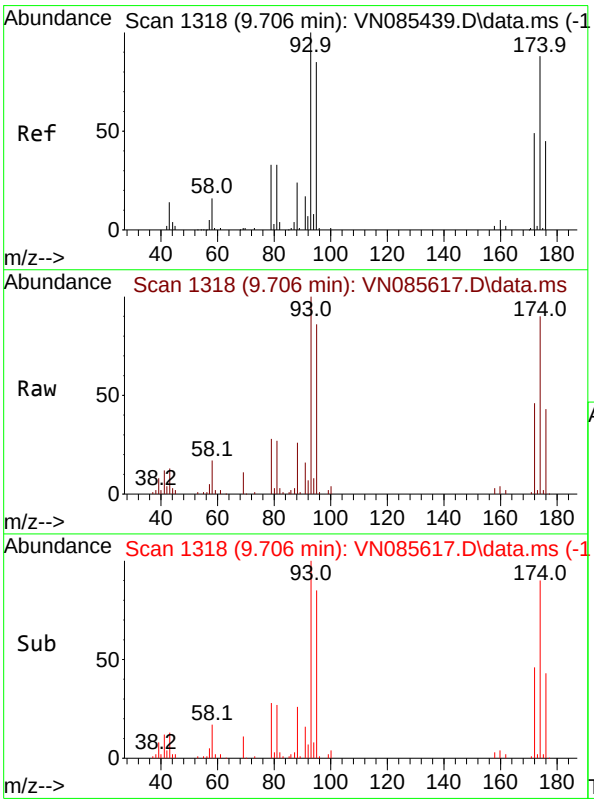
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 31.8 | 25.6 | 38.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

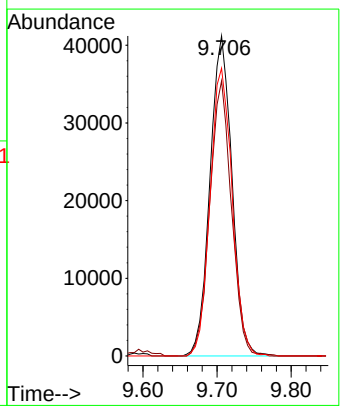
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

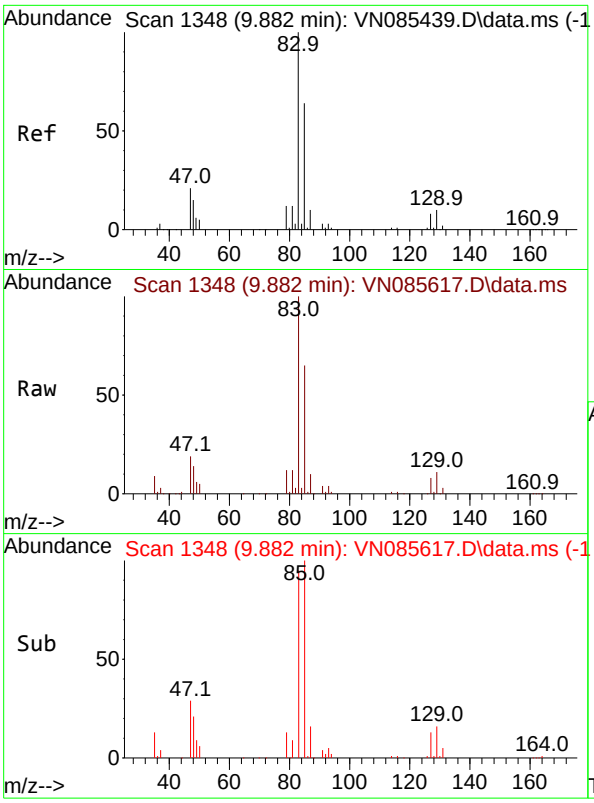



#46
Dibromomethane
Concen: 47.501 ug/l
RT: 9.706 min Scan# 1318
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 93 Resp: 84871

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 84.4 | 64.7 | 97.1 |
| 174 | 90.3 | 69.0 | 103.4 |






#47
Bromodichloromethane
Concen: 50.527 ug/l
RT: 9.882 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

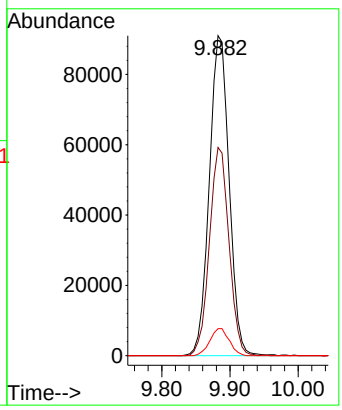
Tgt Ion: 83 Resp: 18392

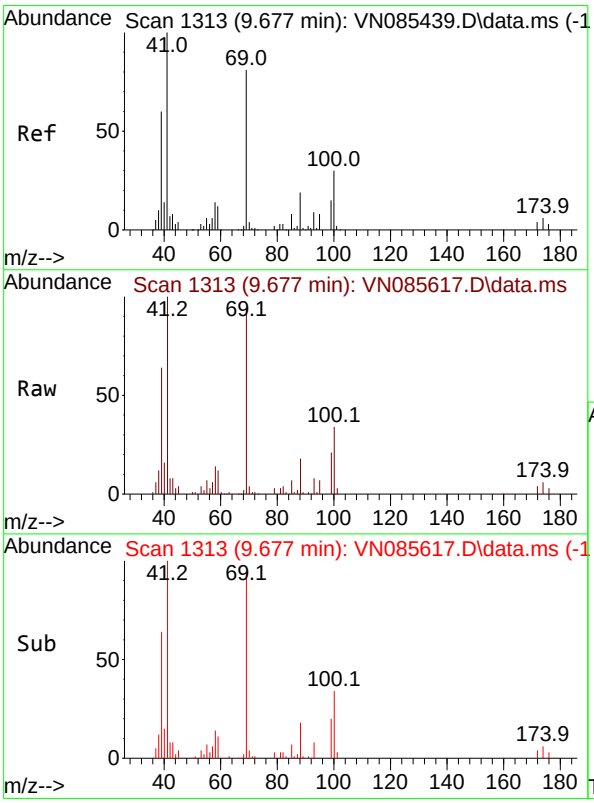
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 65.1 | 51.2 | 76.8 |
| 127 | 8.5 | 6.5 | 9.7 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

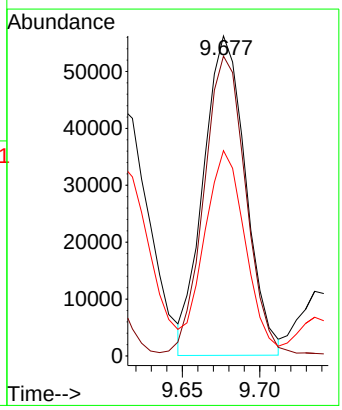


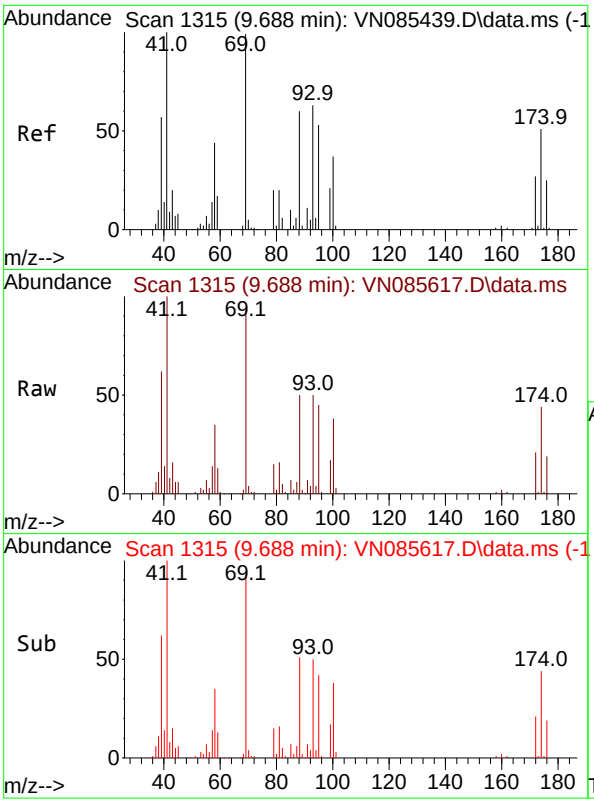




#48
Methyl methacrylate
Concen: 45.301 ug/l
RT: 9.677 min Scan# 1313
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 41 Resp: 106379

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 93.6 | 64.7 | 97.1 |
| 39 | 62.5 | 49.0 | 73.6 |

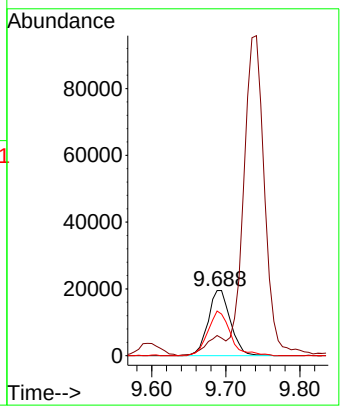





#49
1,4-Dioxane
Concen: 1035.537 ug/l
RT: 9.688 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 88 Resp: 4095

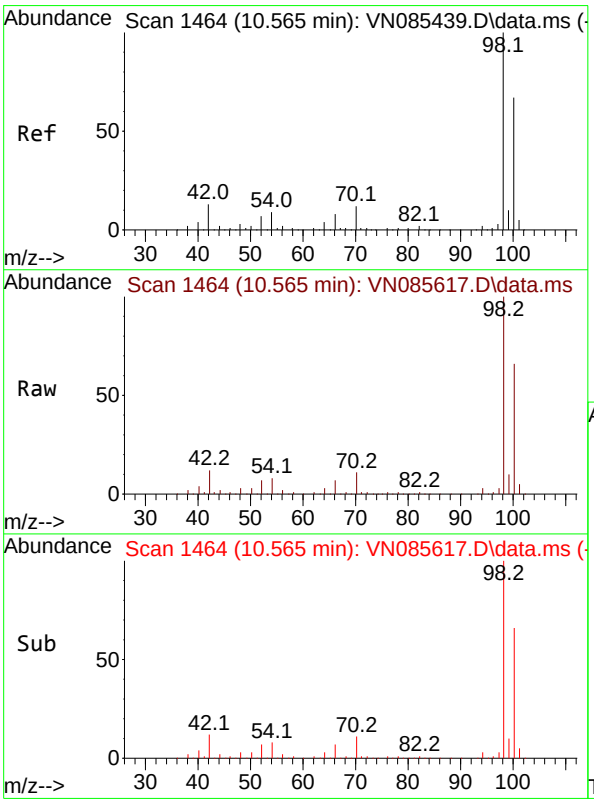
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 26.9 | 26.6 | 39.8 |
| 58 | 69.0 | 59.5 | 89.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

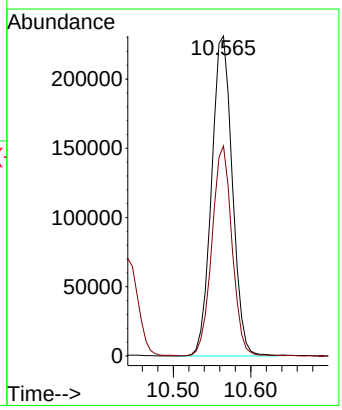
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

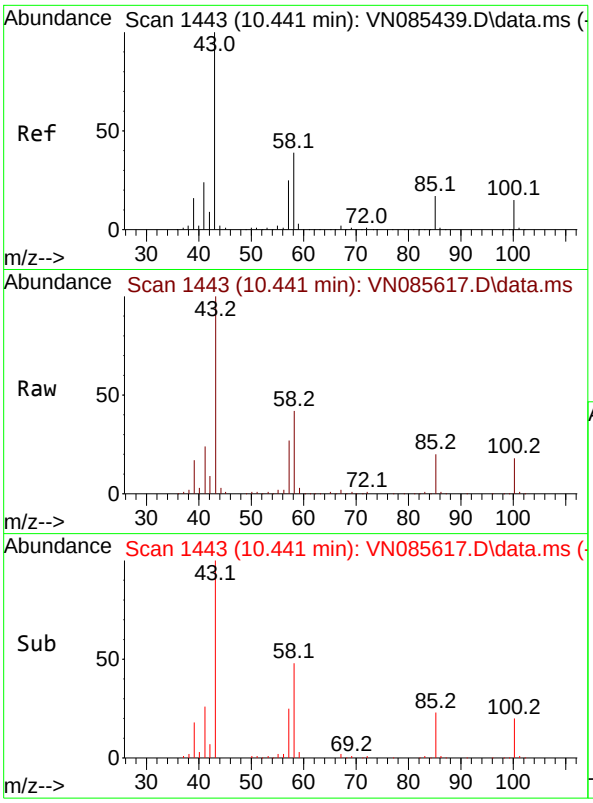



#50
Toluene-d8
Concen: 52.598 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 98 Resp: 429609

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 63.4 | 52.2 | 78.4 |

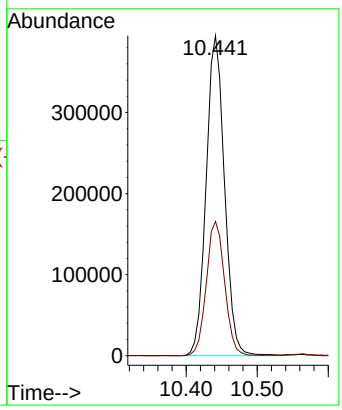





#51
4-Methyl-2-Pentanone
Concen: 233.994 ug/l
RT: 10.441 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 43 Resp: 70853

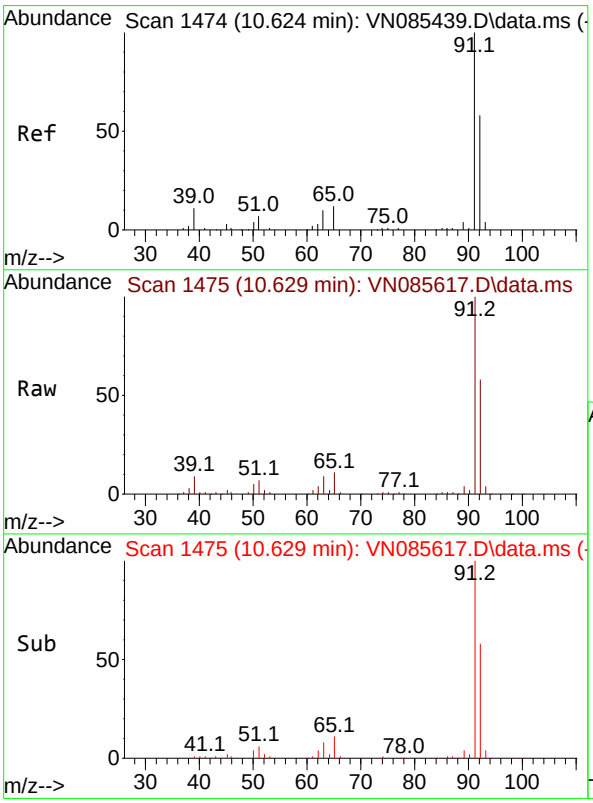
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 42.0 | 30.5 | 45.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

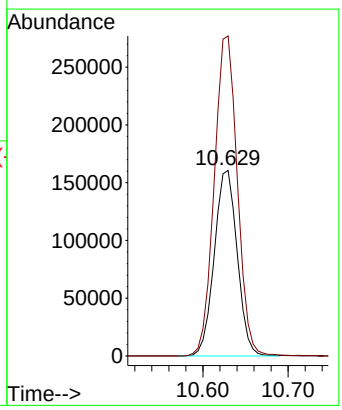
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

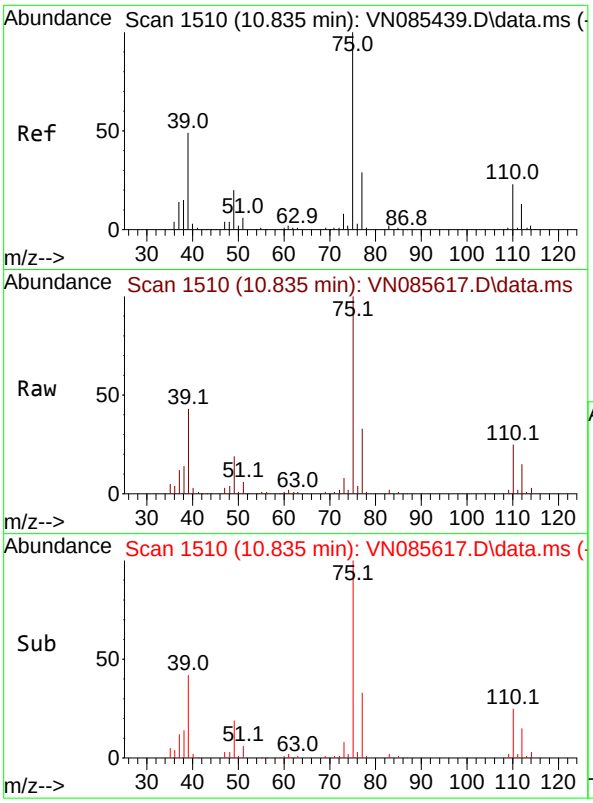



#52
Toluene
Concen: 53.534 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. 0.005 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 92 Resp: 300704

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 173.9 | 139.2 | 208.8 |

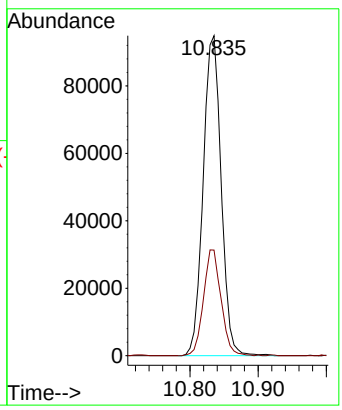





#53
t-1,3-Dichloropropene
Concen: 50.697 ug/l
RT: 10.835 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 75 Resp: 17439

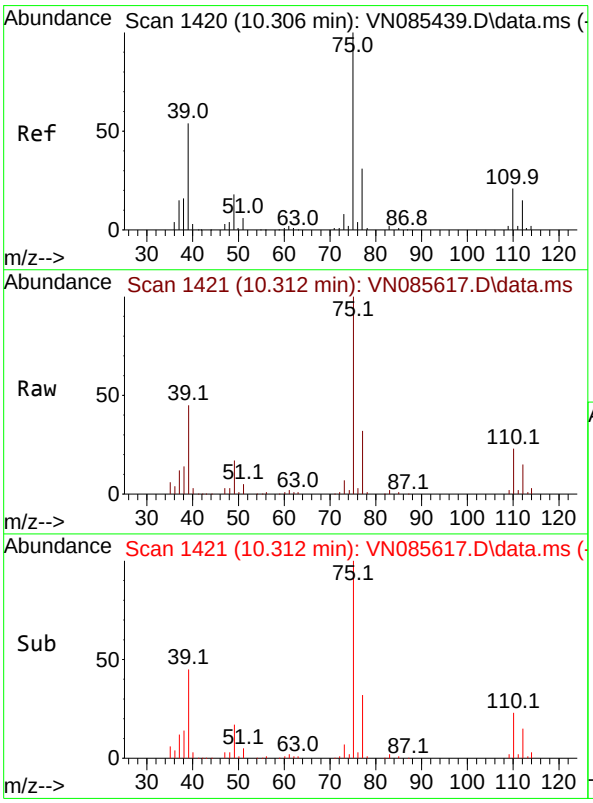
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 33.0 | 23.5 | 35.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

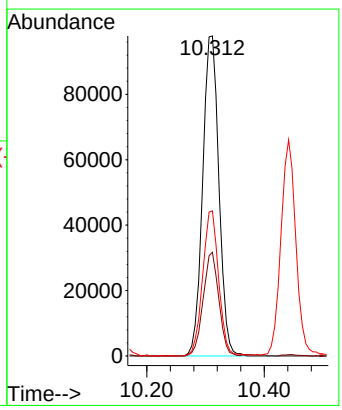
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

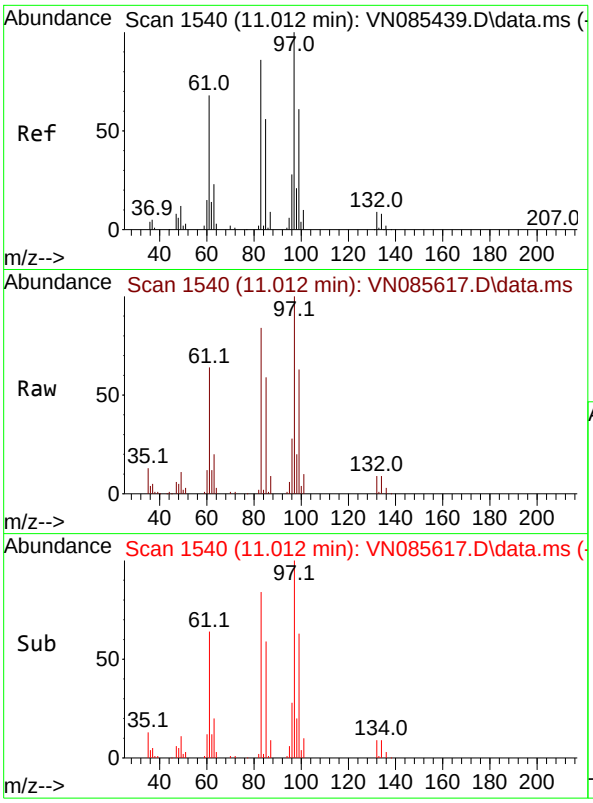



#54
cis-1,3-Dichloropropene
Concen: 51.107 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 75 Resp: 187791

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.4 | 25.0 | 37.4 |
| 39 | 45.3 | 43.1 | 64.7 |

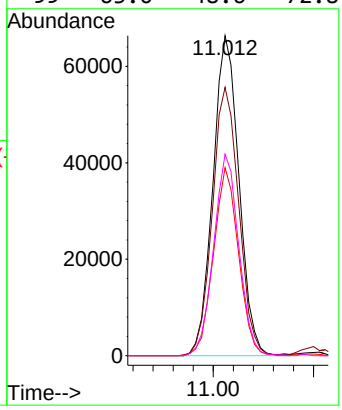





#55
1,1,2-Trichloroethane
Concen: 53.625 ug/l
RT: 11.012 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 97 Resp: 11920

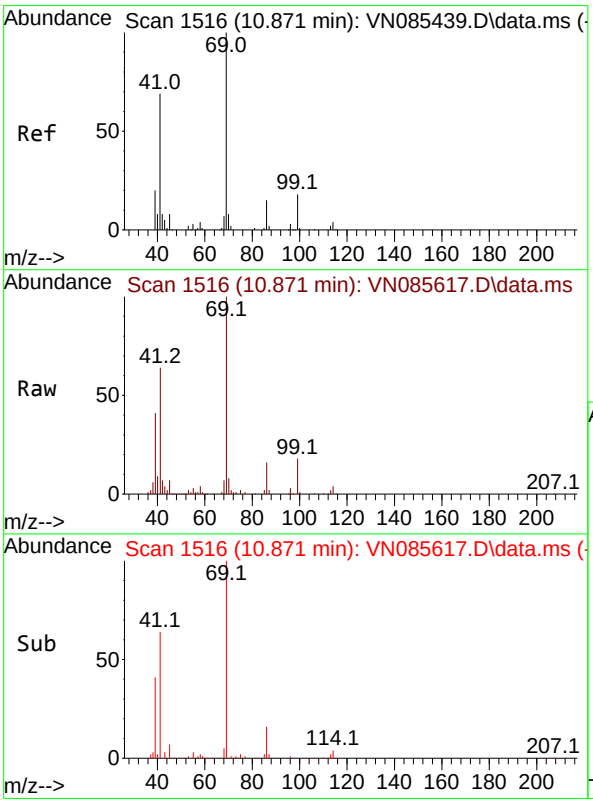
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 83.8 | 69.0 | 103.6 |
| 85 | 58.8 | 44.6 | 66.8 |
| 99 | 63.0 | 48.6 | 72.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

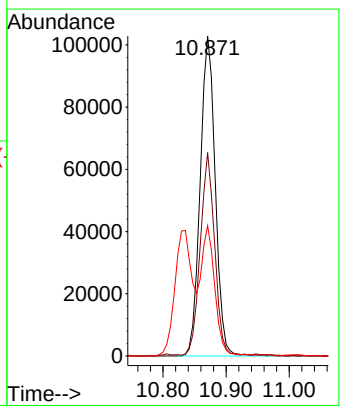
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

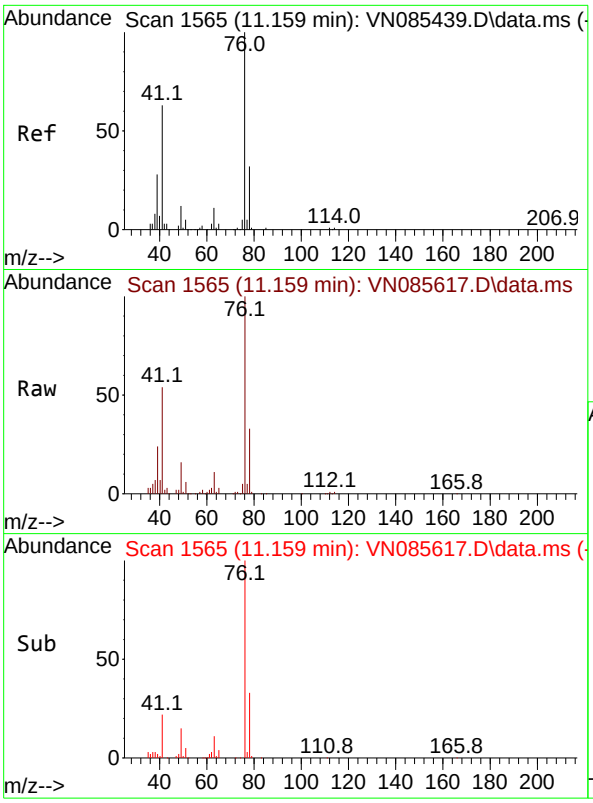



#56
Ethyl methacrylate
Concen: 45.764 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 69 Resp: 170732

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 59.8 | 54.6 | 82.0 |
| 39 | 36.3 | 32.4 | 48.6 |

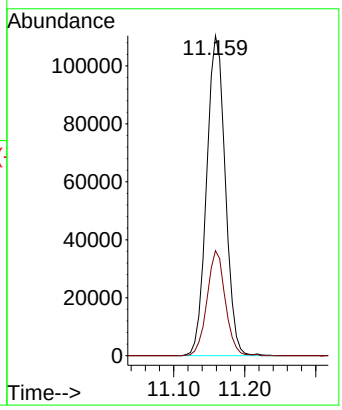





#57
1,3-Dichloropropane
Concen: 52.111 ug/l
RT: 11.159 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 76 Resp: 20142

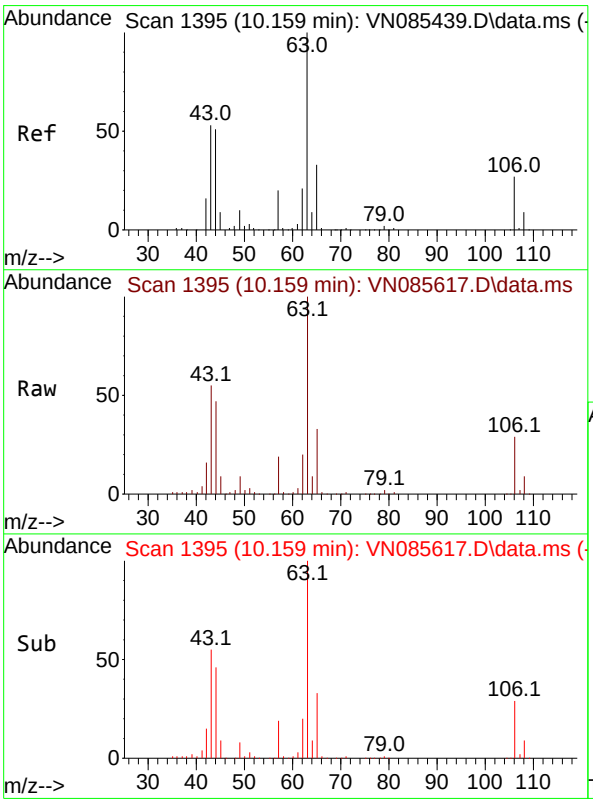
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.1 | 25.6 | 38.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

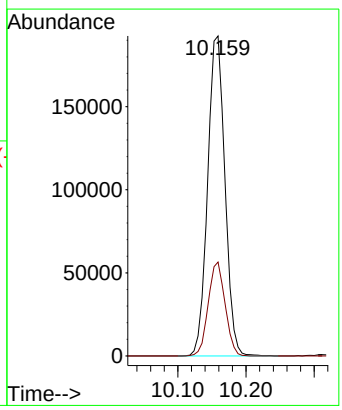
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

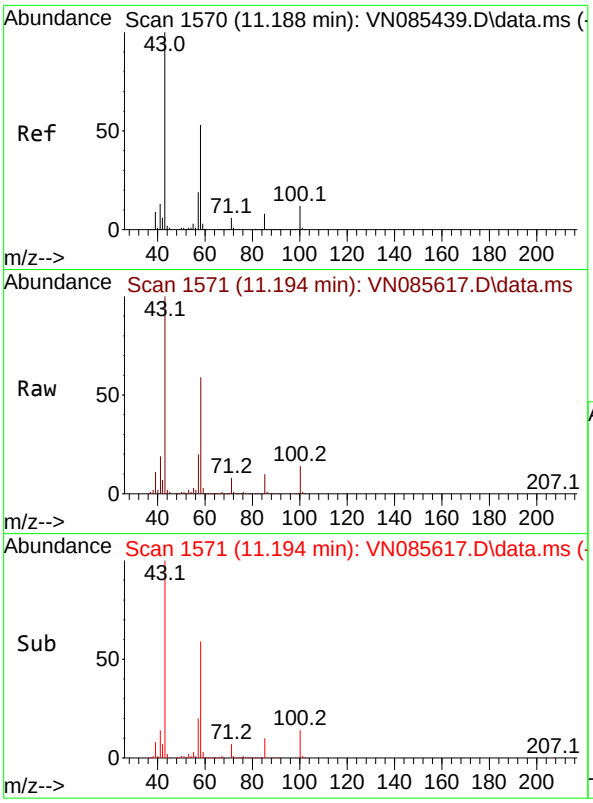



#58
2-Chloroethyl Vinyl ether
Concen: 241.104 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 63 Resp: 340114

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 28.6 | 21.6 | 32.4 |

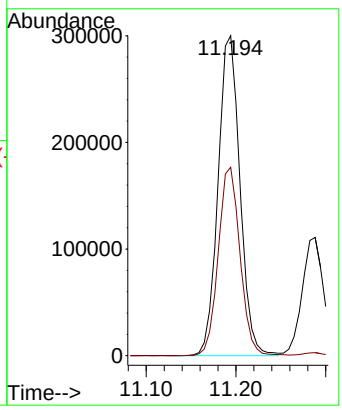





#59
2-Hexanone
Concen: 238.718 ug/l
RT: 11.194 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 43 Resp: 50861

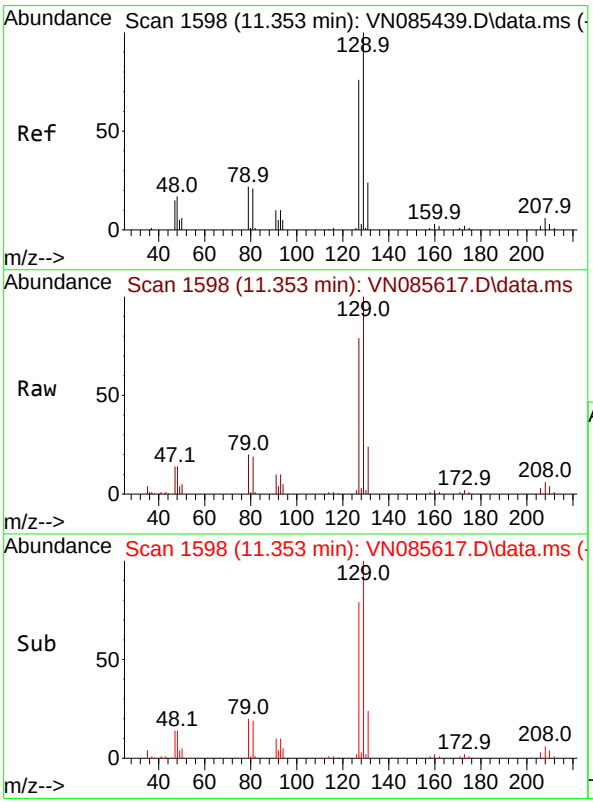
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 58.6 | 26.2 | 78.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

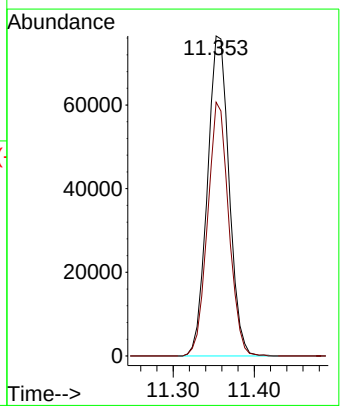
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

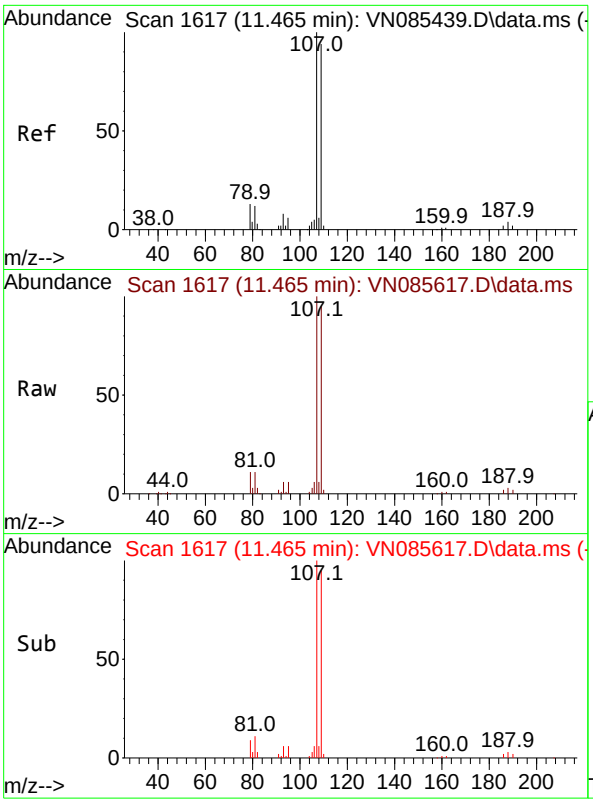



#60
Dibromochloromethane
Concen: 52.795 ug/l
RT: 11.353 min Scan# 1598
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:129 Resp: 141685

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 77.4 | 38.6 | 115.8 |

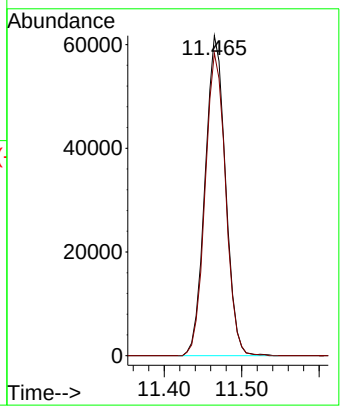





#61
1,2-Dibromoethane
Concen: 50.994 ug/l
RT: 11.465 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:107 Resp: 11283

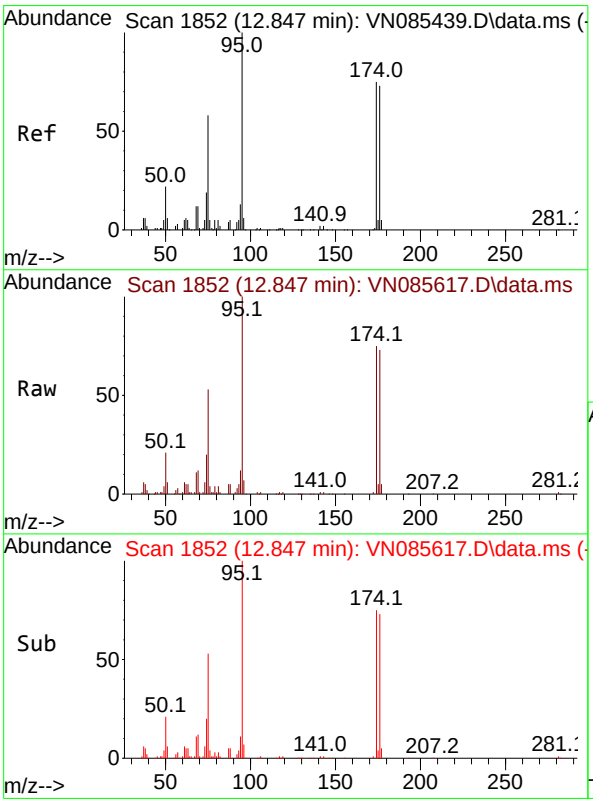
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 94.9 | 75.9 | 113.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

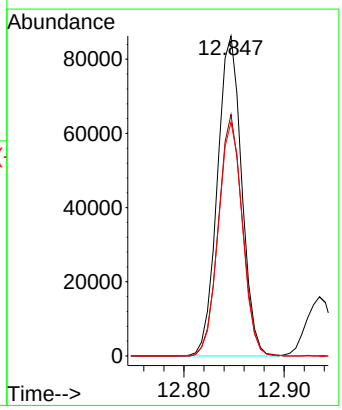
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

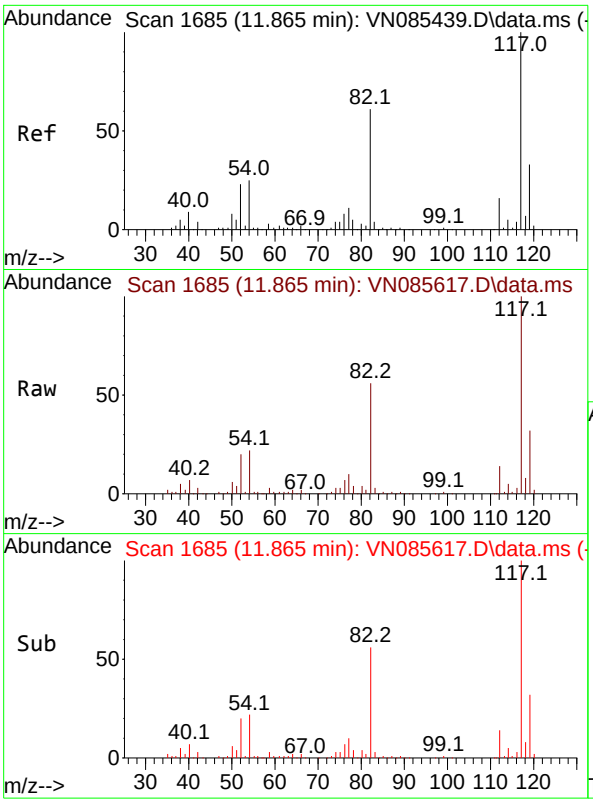



#62
4-Bromofluorobenzene
Concen: 51.906 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 95 Resp: 145023

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 74.1 | 0.0 | 145.0 |
| 176 | 72.7 | 0.0 | 142.4 |

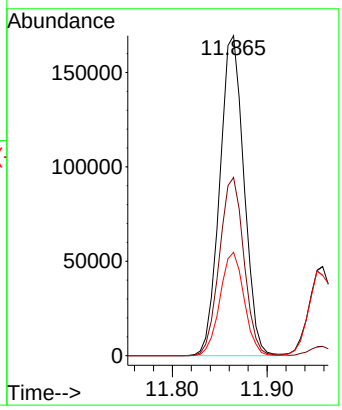





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:117 Resp: 30132

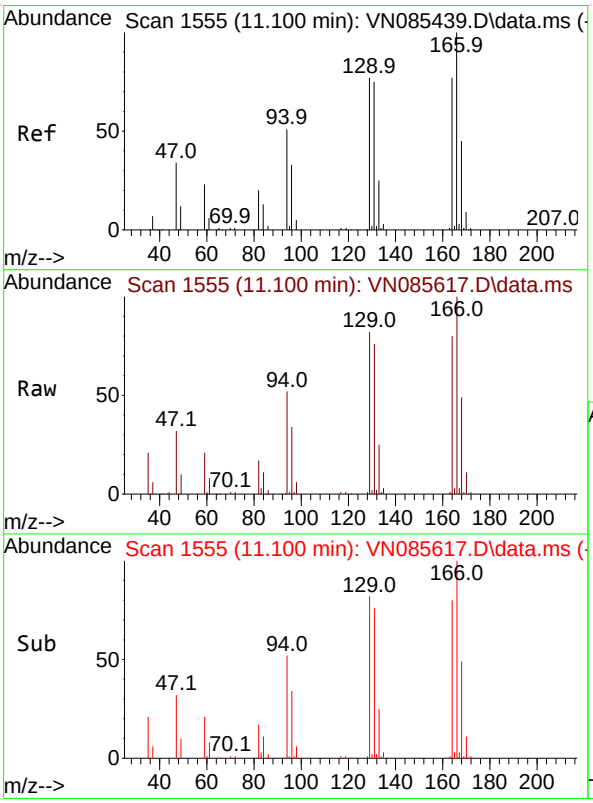
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 55.7 | 48.6 | 72.8 |
| 119 | 32.3 | 26.6 | 39.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

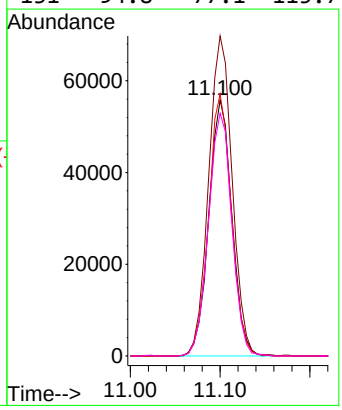
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

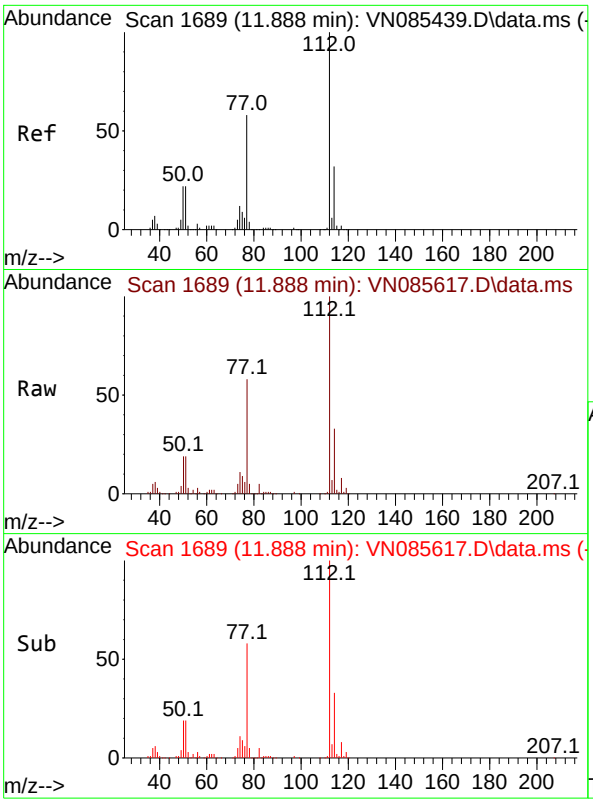



#64
Tetrachloroethene
Concen: 48.451 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:164 Resp: 99530

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 125.0 | 103.4 | 155.2 |
| 129 | 102.2 | 79.2 | 118.8 |
| 131 | 94.8 | 77.1 | 115.7 |

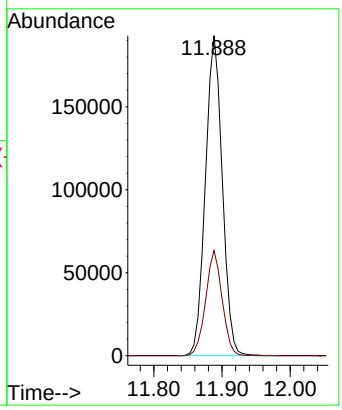





#65
Chlorobenzene
Concen: 50.273 ug/l
RT: 11.888 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:112 Resp: 33184

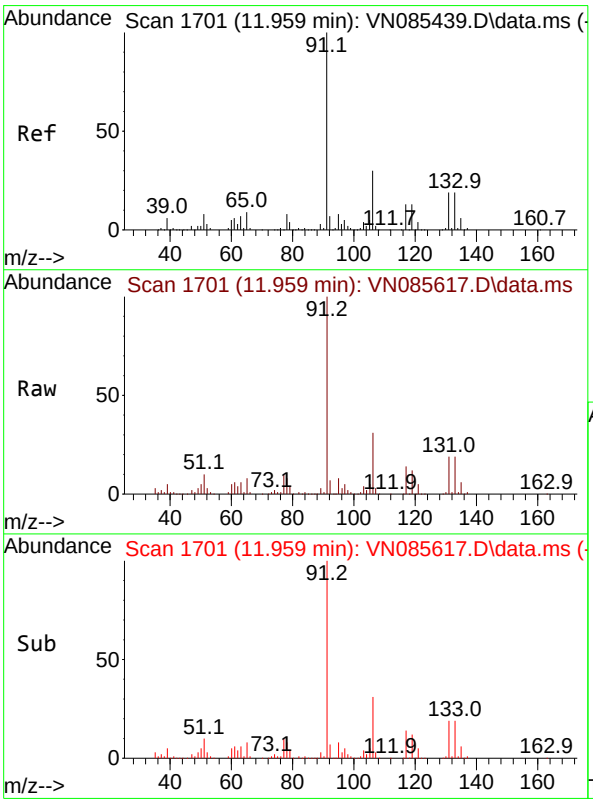
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 32.9 | 25.3 | 37.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

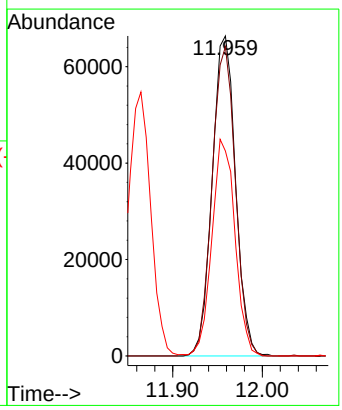
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

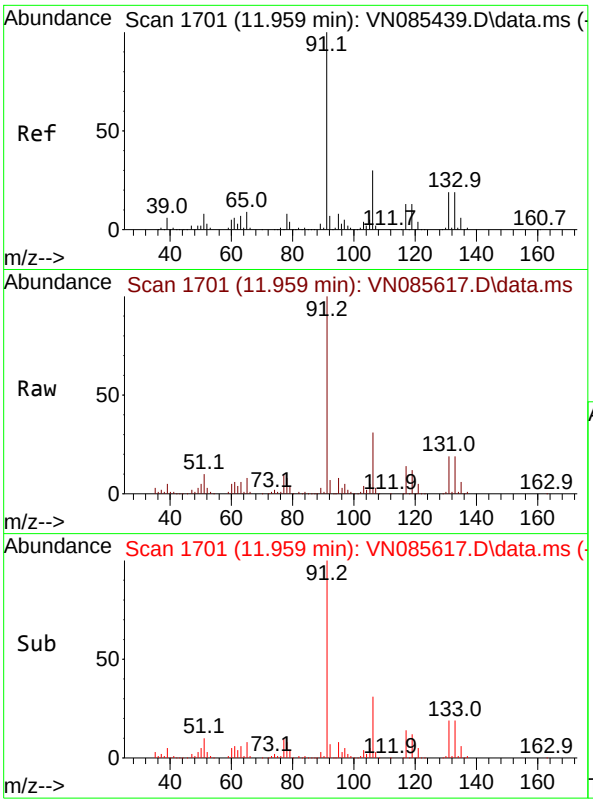



#66
1,1,1,2-Tetrachloroethane
Concen: 49.526 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:131 Resp: 119985

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 96.7 | 47.4 | 142.3 |
| 119 | 67.0 | 33.1 | 99.5 |

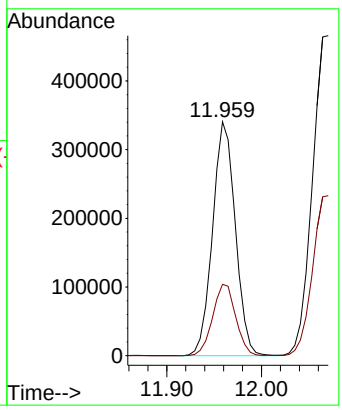





#67
Ethyl Benzene
Concen: 52.793 ug/l
RT: 11.959 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 91 Resp: 56759

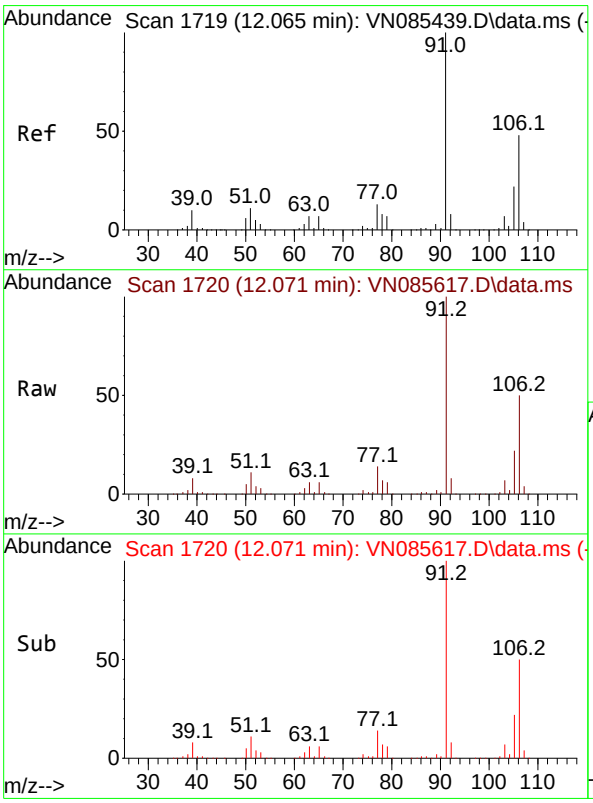
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 30.5 | 23.8 | 35.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

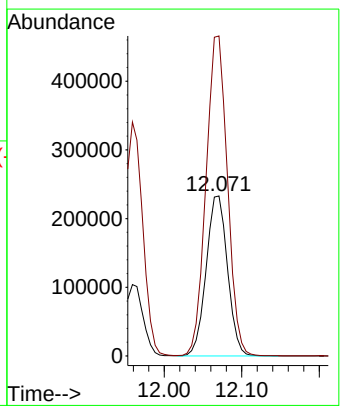
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

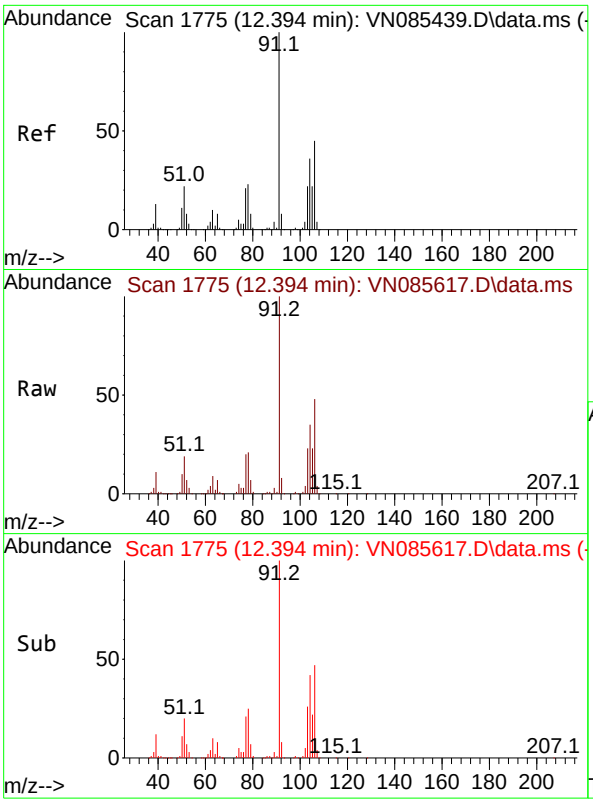



#68
m/p-Xylenes
Concen: 112.274 ug/l
RT: 12.071 min Scan# 1720
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:106 Resp: 446120

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 200.5 | 167.7 | 251.5 |






#69
o-Xylene
Concen: 56.132 ug/l
RT: 12.394 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

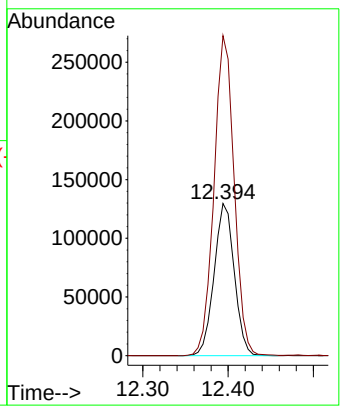
Tgt Ion:106 Resp: 21315

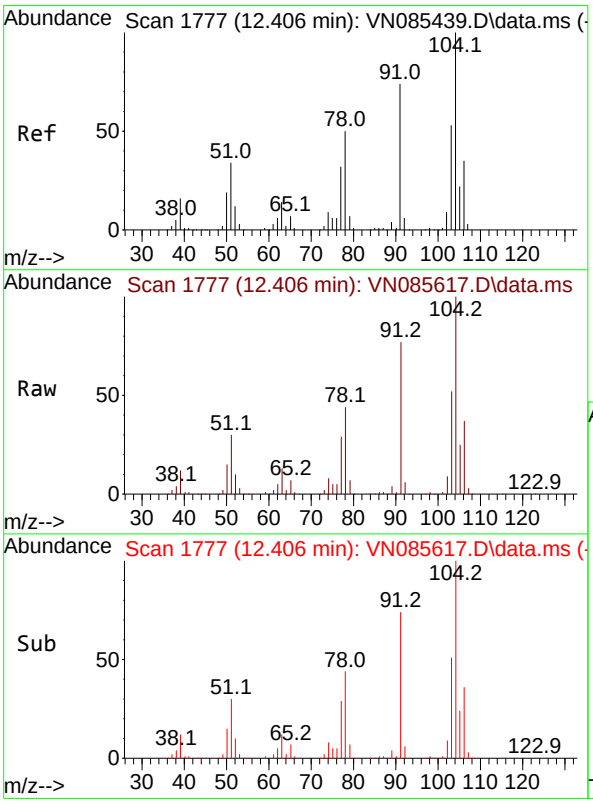
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 210.1 | 110.4 | 331.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

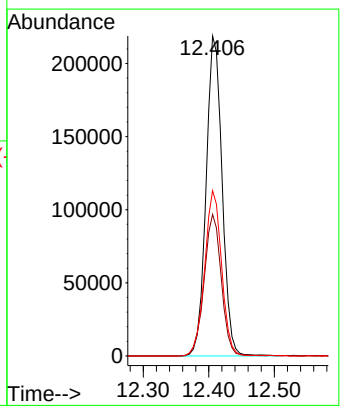


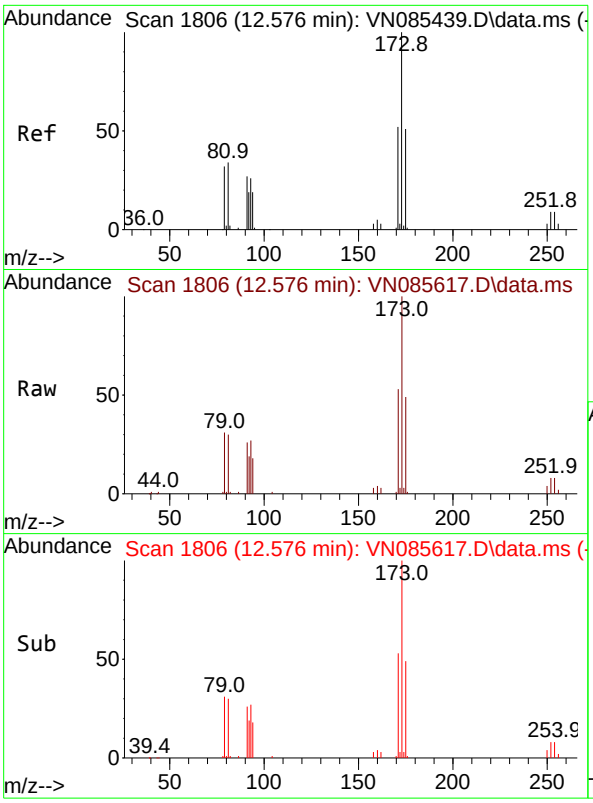




#70
Styrene
Concen: 59.204 ug/l
RT: 12.406 min Scan# 1777
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:104 Resp: 372069

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 47.4 | 42.5 | 63.7 |
| 103 | 54.7 | 43.8 | 65.8 |

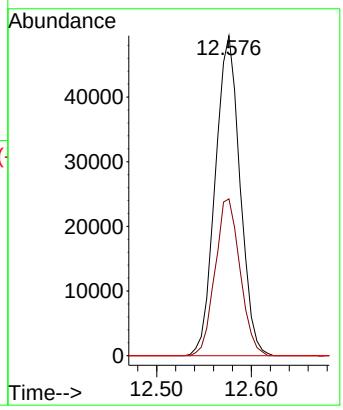





#71
Bromoform
Concen: 51.832 ug/l
RT: 12.576 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:173 Resp: 8984

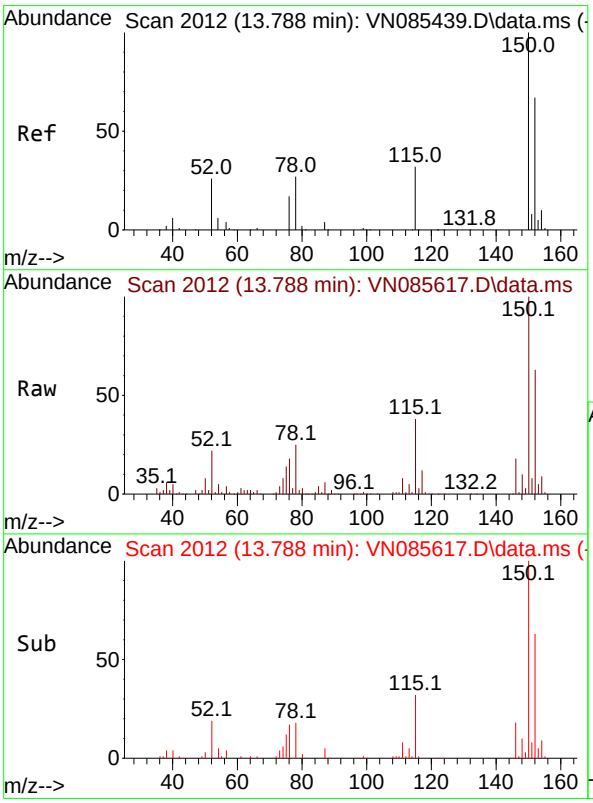
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 49.5 | 24.4 | 73.2 |
| 254 | 0.0 | 0.0 | 0.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

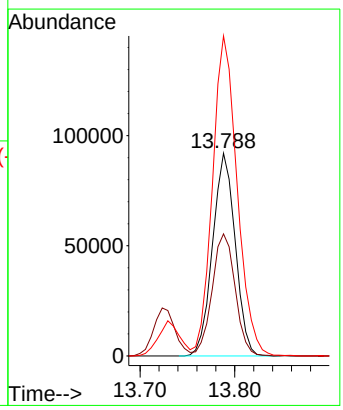
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

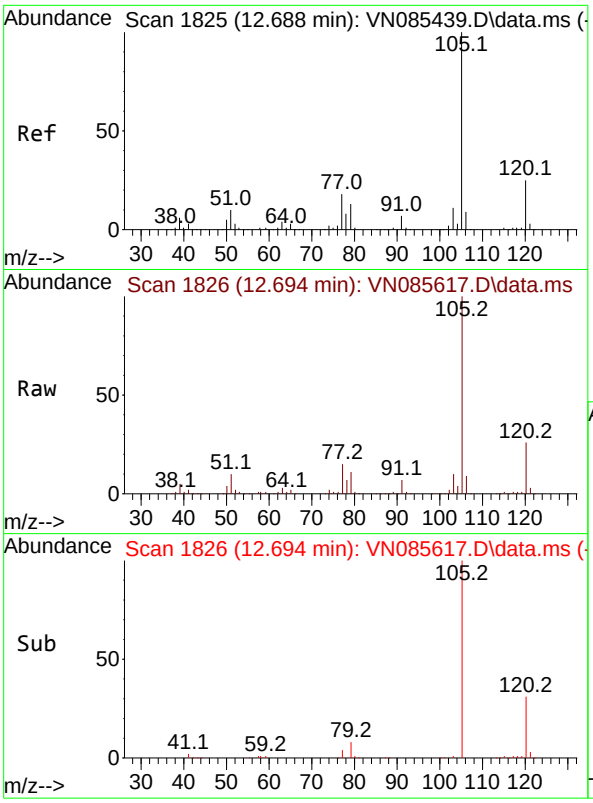



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:152 Resp: 152662

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 61.5 | 31.1 | 93.3 |
| 150 | 172.3 | 0.0 | 343.6 |






#73
Isopropylbenzene
Concen: 51.773 ug/l
RT: 12.694 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

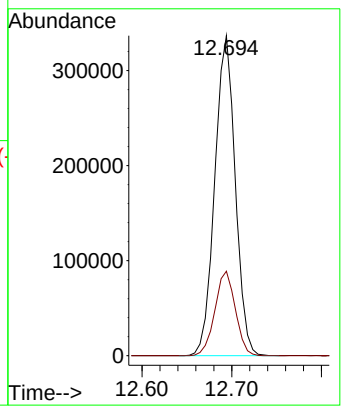
Tgt Ion:105 Resp: 53343

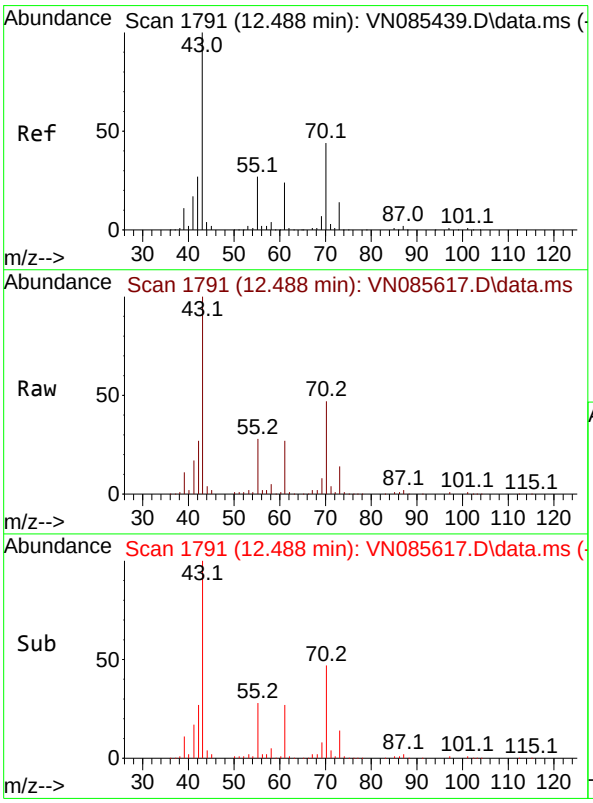
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.3 | 12.8 | 38.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

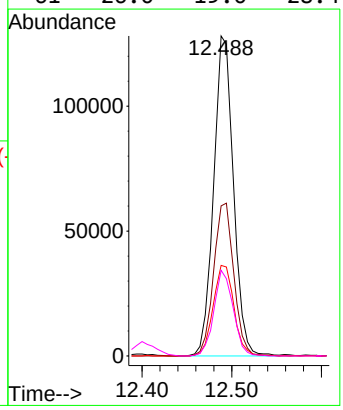


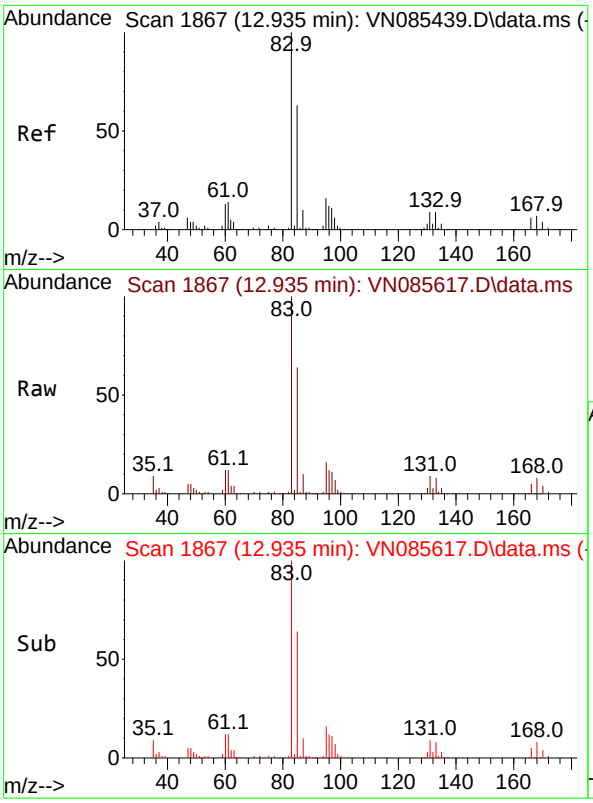




#74
N-amyl acetate
Concen: 42.452 ug/l
RT: 12.488 min Scan# 1791
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 43 Resp: 196603

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 48.7 | 34.0 | 51.0 |
| 55 | 29.8 | 21.4 | 32.2 |
| 61 | 26.0 | 19.0 | 28.4 |






#75
1,1,2,2-Tetrachloroethane
Concen: 47.726 ug/l
RT: 12.935 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

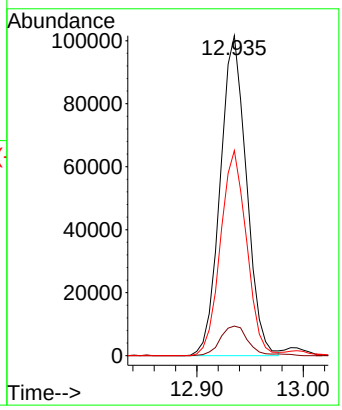
Tgt Ion: 83 Resp: 17370

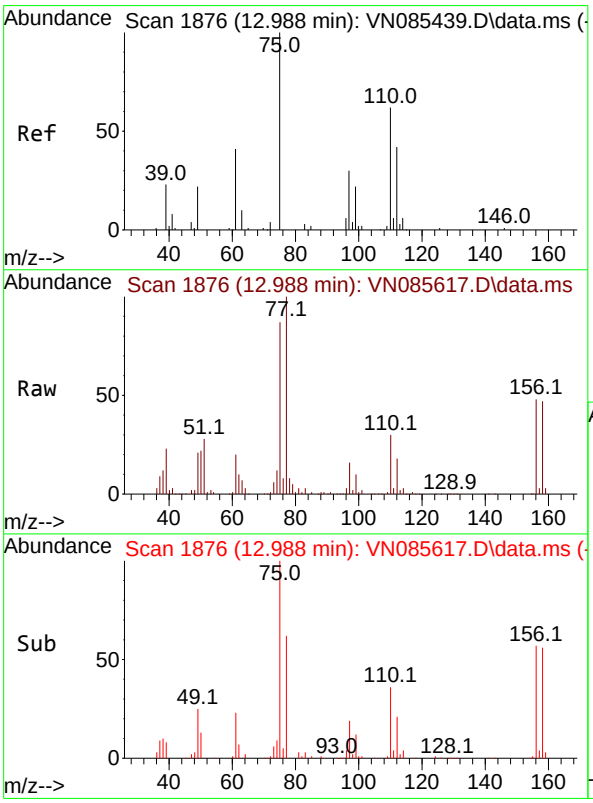
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 10.0 | 4.8 | 14.4 |
| 85 | 63.7 | 32.2 | 96.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

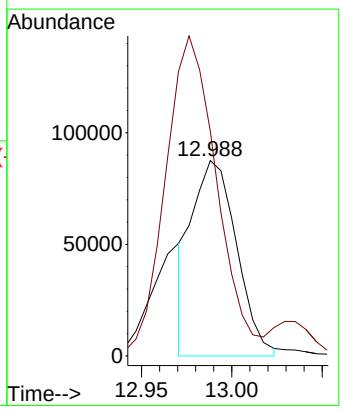


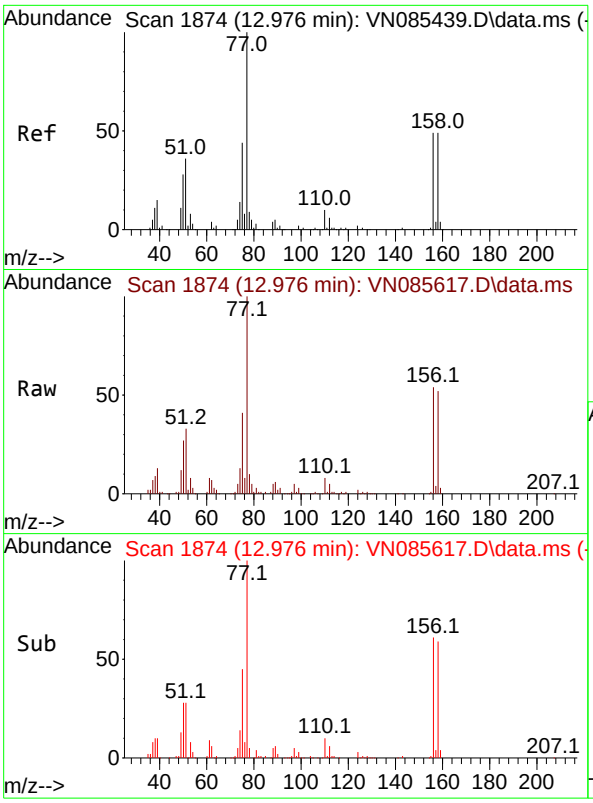




#76
1,2,3-Trichloropropane
Concen: 48.596 ug/l m
RT: 12.988 min Scan# 1876
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 75 Resp: 150787

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 188.8 | 109.7 | 329.2 |

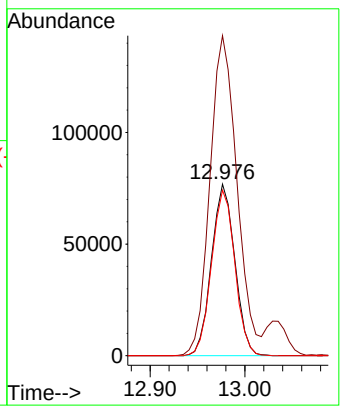





#77
Bromobenzene
Concen: 48.837 ug/l
RT: 12.976 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:156 Resp: 13146

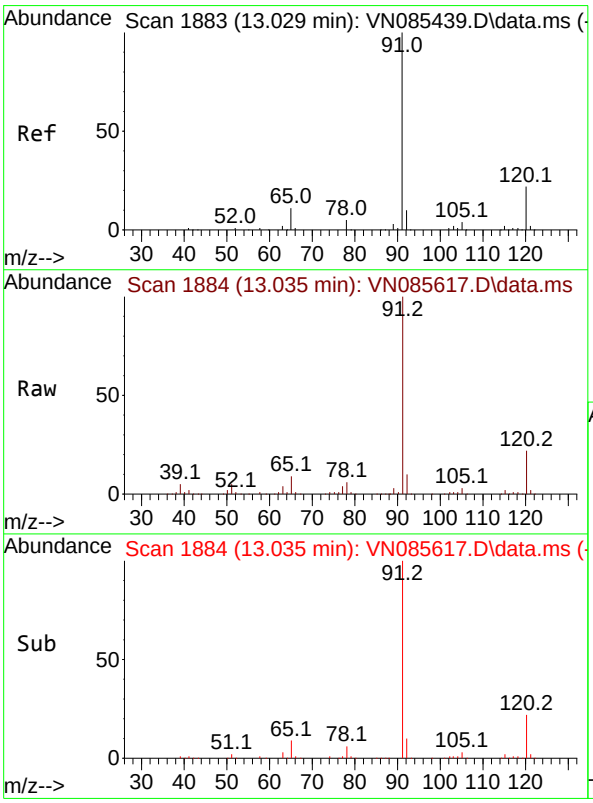
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 216.6 | 114.1 | 342.4 |
| 158 | 96.2 | 48.9 | 146.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

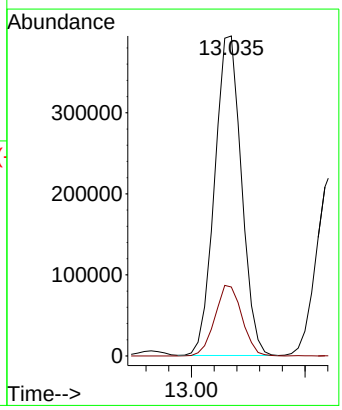
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

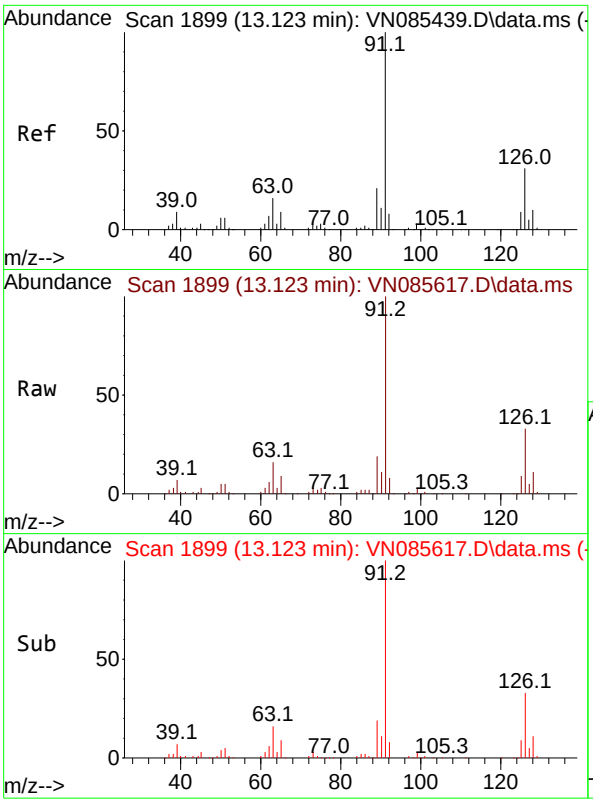



#78
n-propylbenzene
Concen: 53.002 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 91 Resp: 646489

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.3 | 10.9 | 32.6 |






#79
2-Chlorotoluene
Concen: 48.821 ug/l
RT: 13.123 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

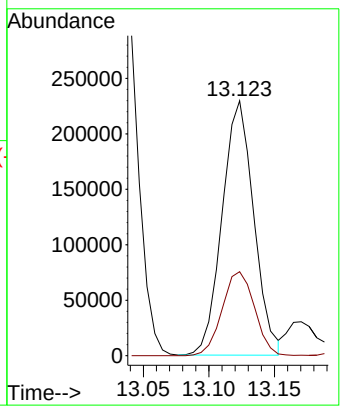
Tgt Ion: 91 Resp: 38540

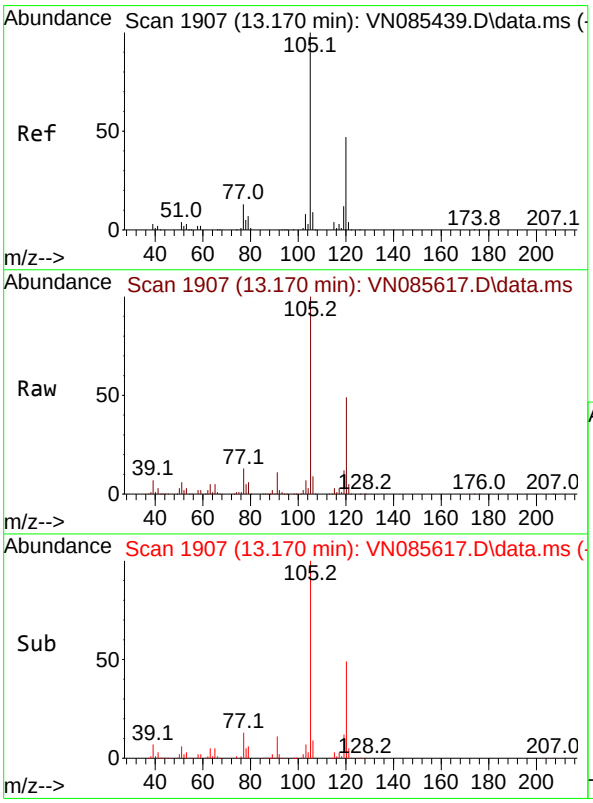
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 33.8 | 15.7 | 47.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

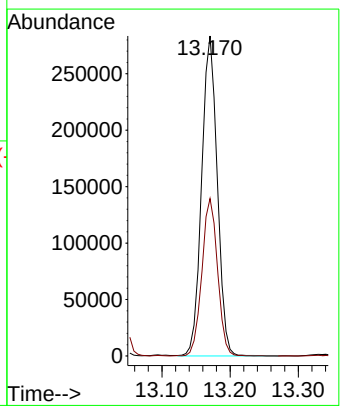


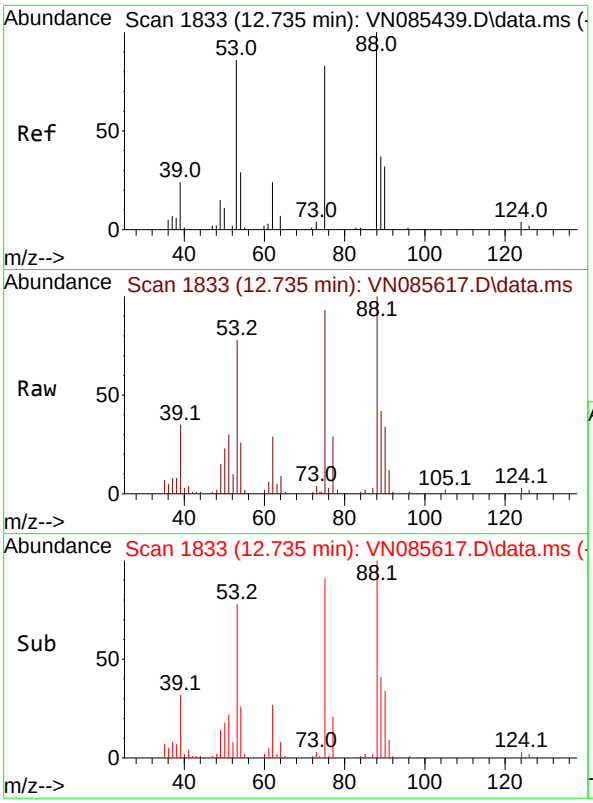




#80
1,3,5-Trimethylbenzene
Concen: 53.197 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:105 Resp: 452745

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 49.2 | 23.9 | 71.7 |






#81
trans-1,4-Dichloro-2-butene
Concen: 56.354 ug/l
RT: 12.735 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

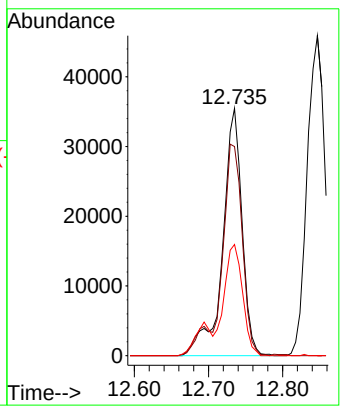
Tgt Ion: 75 Resp: 6463

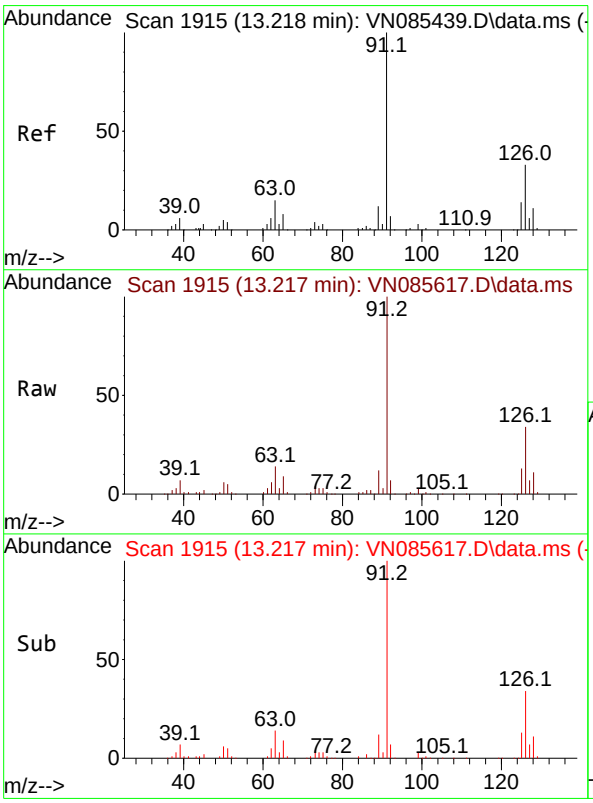
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 80.9 | 95.6 | 143.4 |
| 89 | 42.8 | 37.0 | 55.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

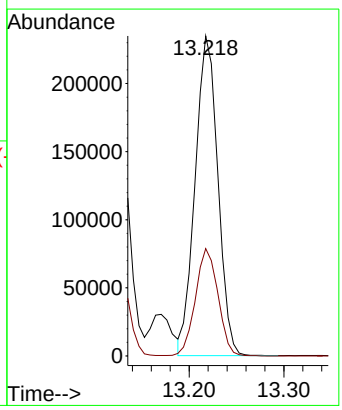


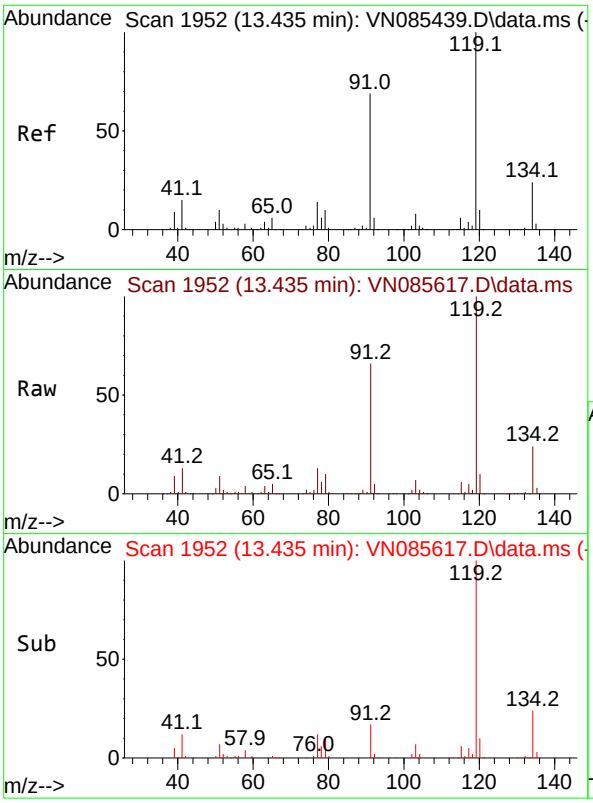




#82
4-Chlorotoluene
Concen: 49.770 ug/l
RT: 13.217 min Scan# 1915
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 91 Resp: 391197

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 33.4 | 15.9 | 47.7 |

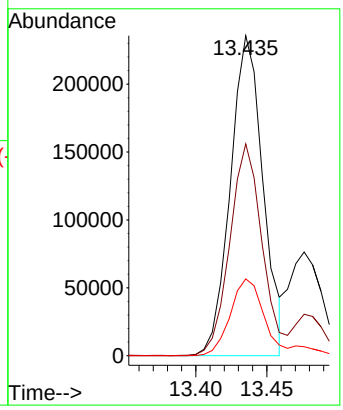





#83
tert-Butylbenzene
Concen: 52.803 ug/l
RT: 13.435 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:119 Resp: 37738

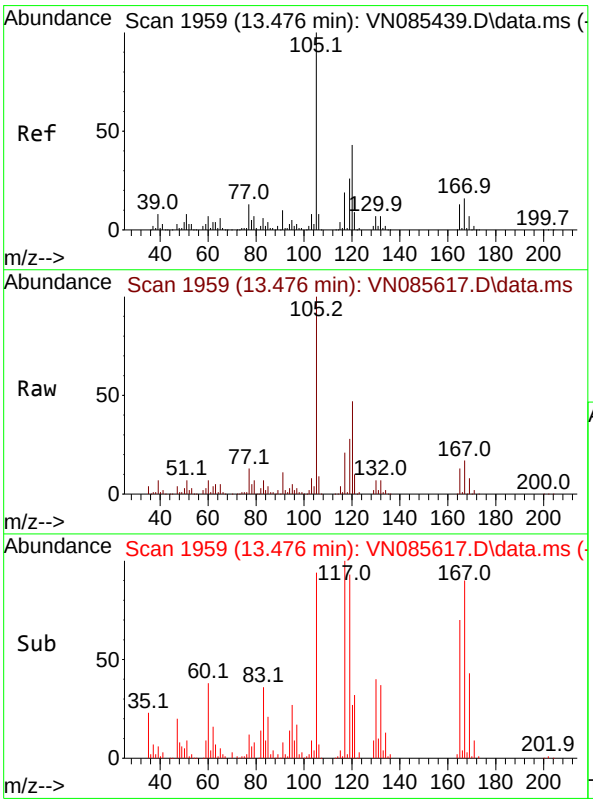
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 65.9 | 35.1 | 105.3 |
| 134 | 26.8 | 12.0 | 36.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

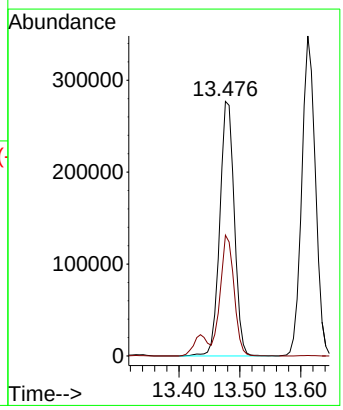
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

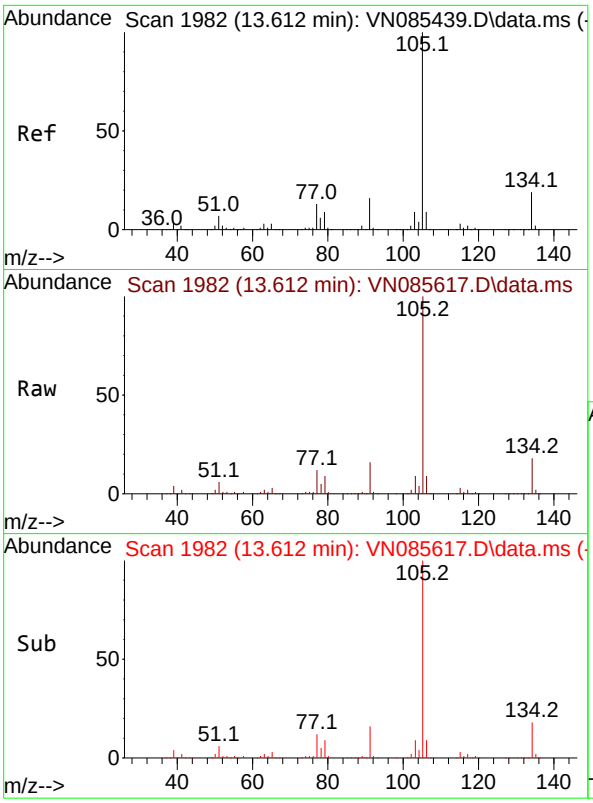



#84
1,2,4-Trimethylbenzene
Concen: 53.980 ug/l
RT: 13.476 min Scan# 1959
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:105 Resp: 457878

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 44.9 | 21.6 | 65.0 |






#85
sec-Butylbenzene
Concen: 54.590 ug/l
RT: 13.612 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

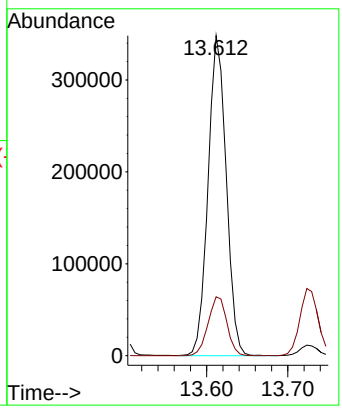
Tgt Ion:105 Resp: 54074

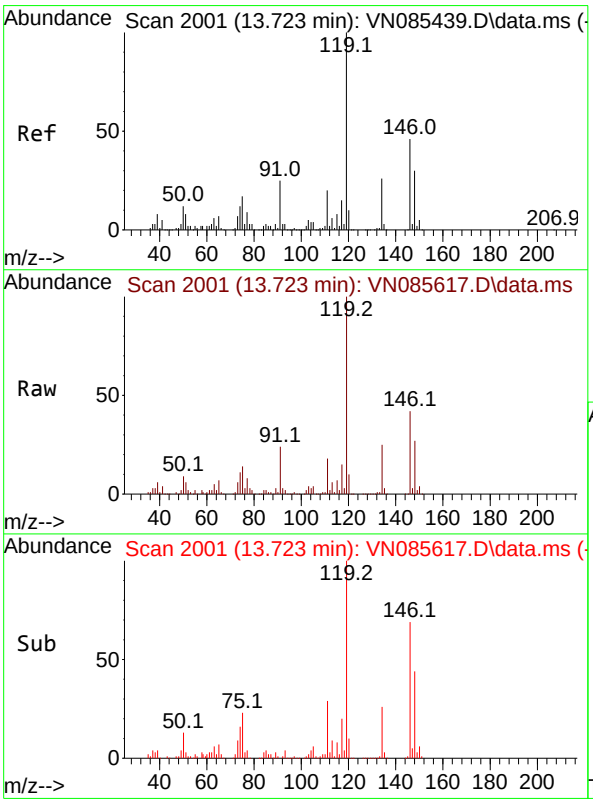
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.0 | 9.7 | 28.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

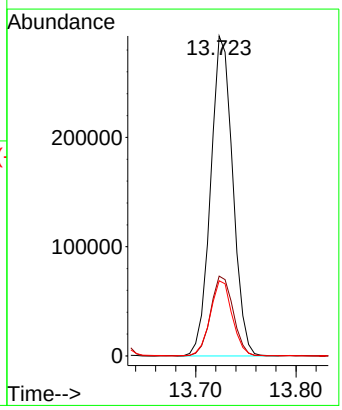


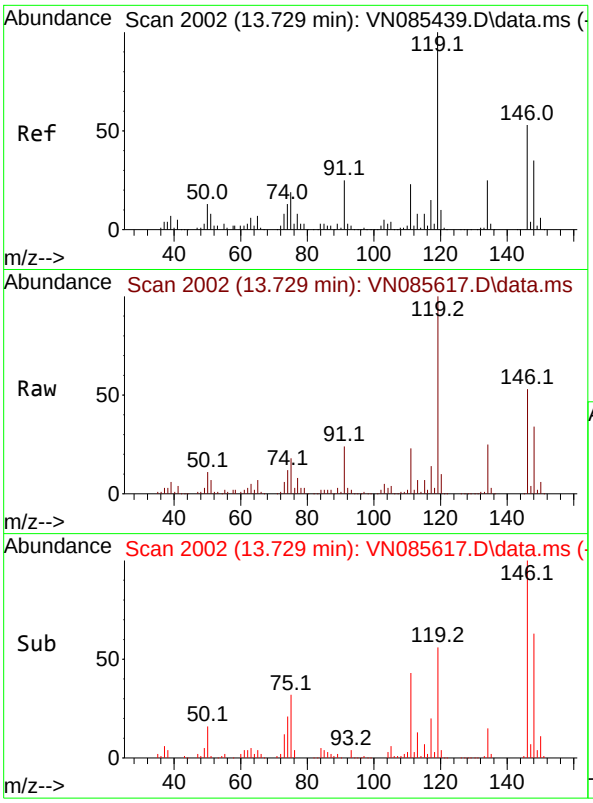




#86
p-Isopropyltoluene
Concen: 50.266 ug/l
RT: 13.723 min Scan# 2001
Delta R.T. 0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:119 Resp: 448653

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.5 | 12.7 | 38.0 |
| 91 | 23.3 | 12.7 | 38.1 |

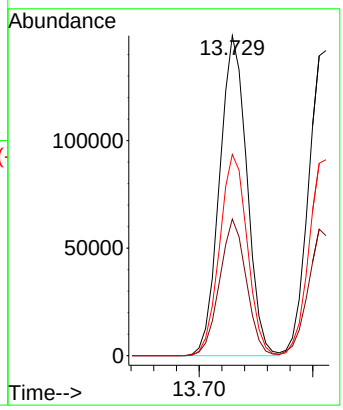





#87
1,3-Dichlorobenzene
Concen: 50.109 ug/l
RT: 13.729 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:146 Resp: 24841

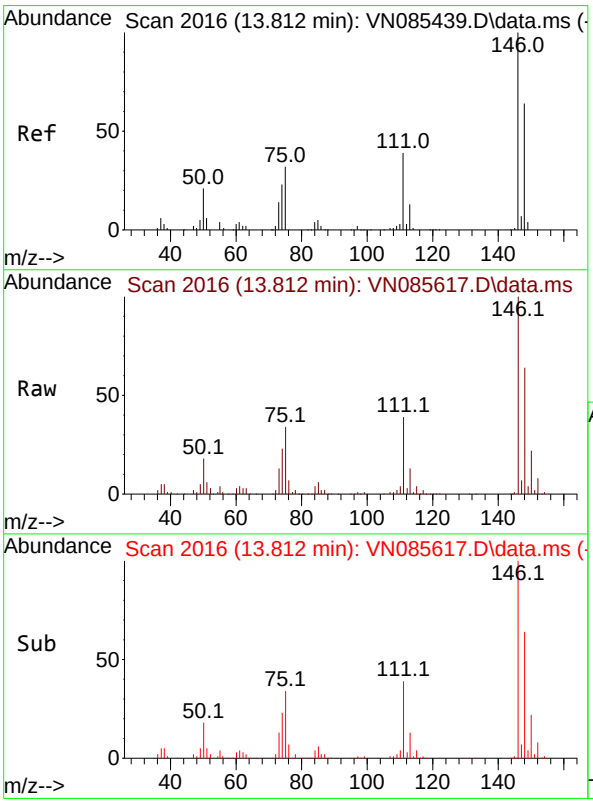
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 41.8 | 21.4 | 64.3 |
| 148 | 63.7 | 32.3 | 96.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

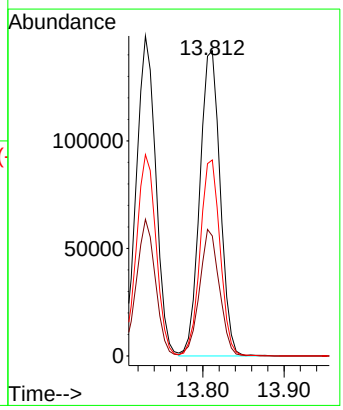
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

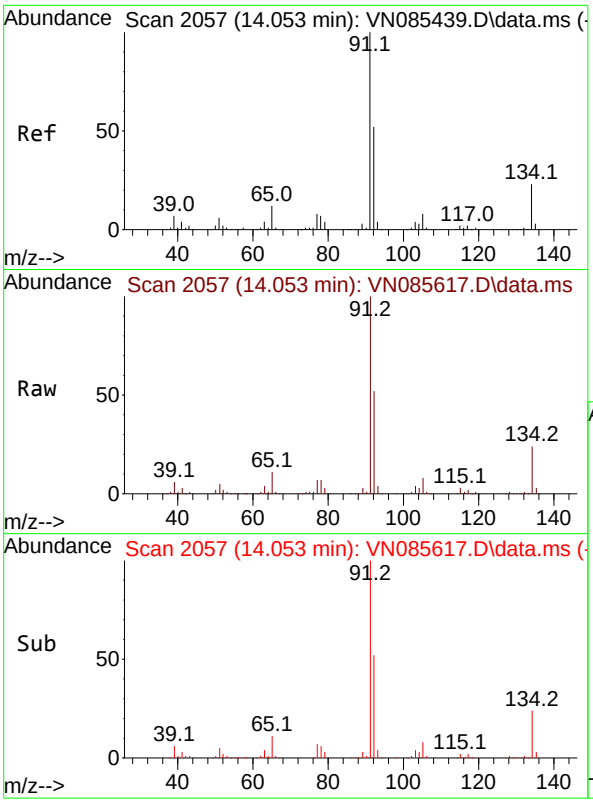



#88
1,4-Dichlorobenzene
Concen: 48.112 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:146 Resp: 247225

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 40.1 | 21.3 | 63.7 |
| 148 | 63.0 | 32.4 | 97.0 |






#89
n-Butylbenzene
Concen: 52.792 ug/l
RT: 14.053 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

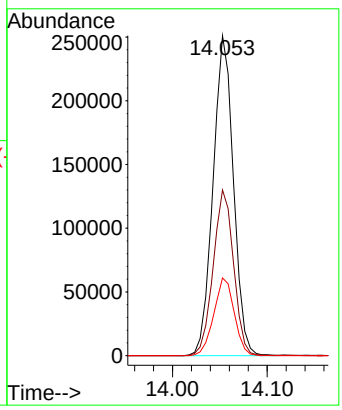
Tgt Ion: 91 Resp: 37515

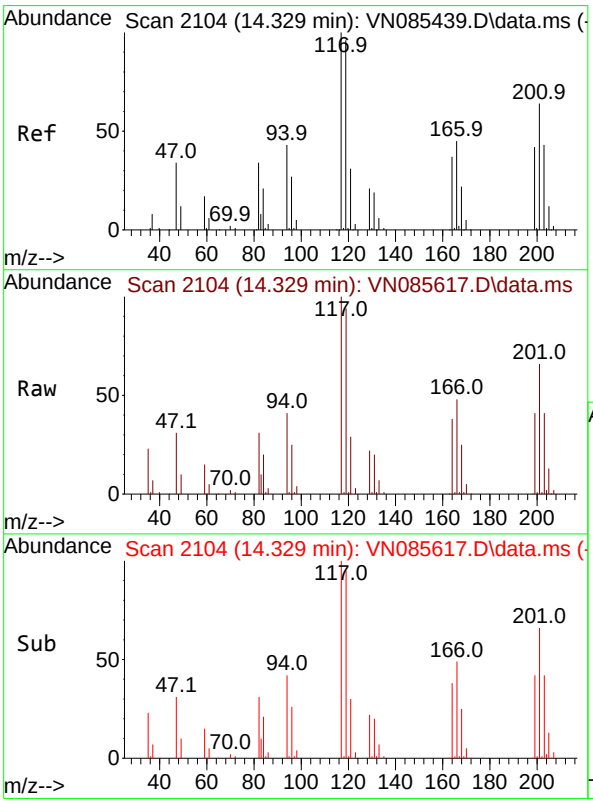
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 51.8 | 25.8 | 77.3 |
| 134 | 24.4 | 11.7 | 35.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

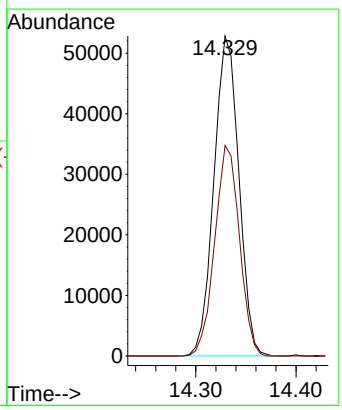


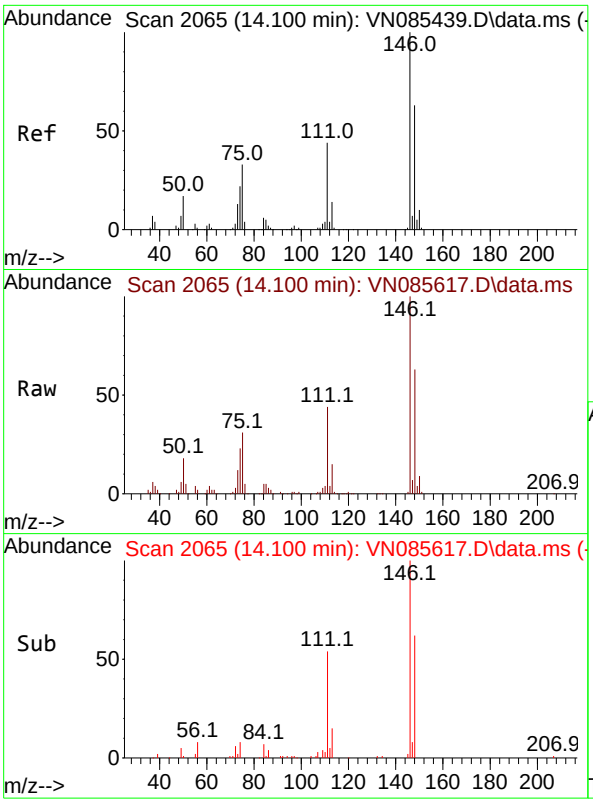




#90
Hexachloroethane
Concen: 48.339 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:117 Resp: 91155

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 65.2 | 33.7 | 101.0 |

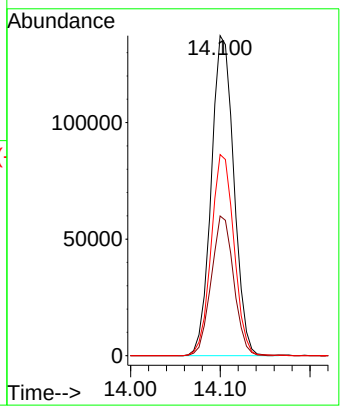





#91
1,2-Dichlorobenzene
Concen: 48.589 ug/l
RT: 14.100 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:146 Resp: 24026

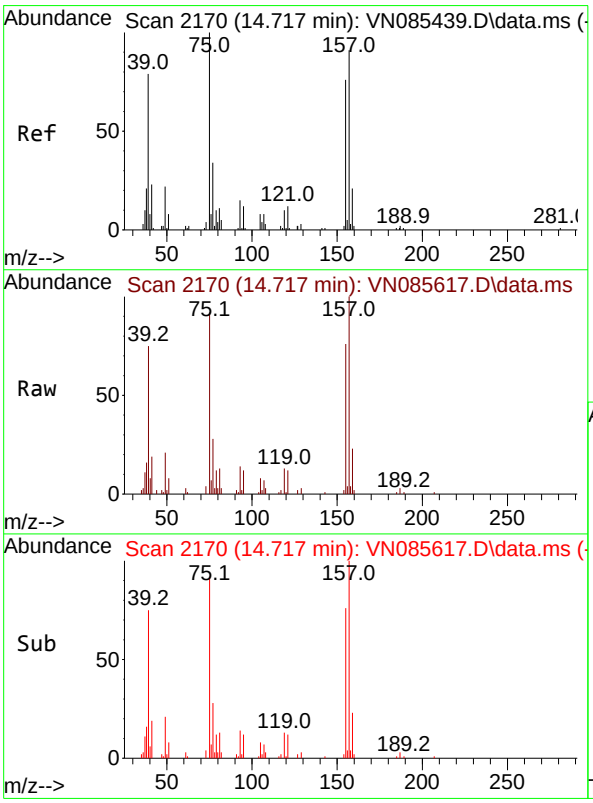
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.3 | 21.7 | 65.1 |
| 148 | 63.4 | 31.4 | 94.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

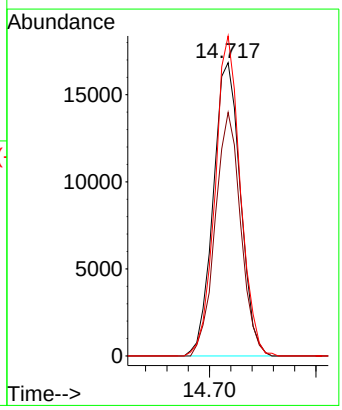
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

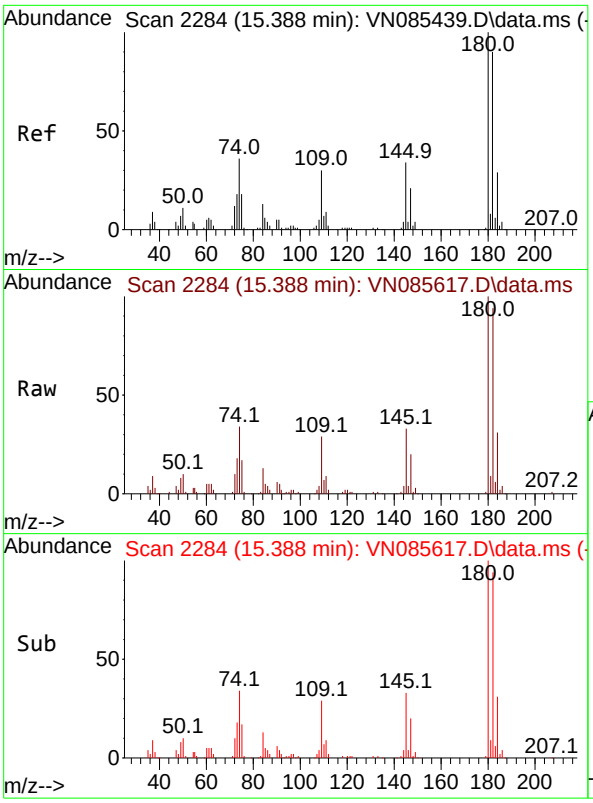



#92
1,2-Dibromo-3-Chloropropane
Concen: 44.867 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 75 Resp: 29819

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 78.2 | 36.4 | 109.2 |
| 157 | 101.3 | 45.4 | 136.1 |

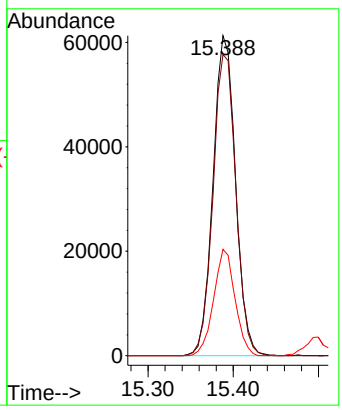





#93
1,2,4-Trichlorobenzene
Concen: 48.782 ug/l
RT: 15.388 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:180 Resp: 11211

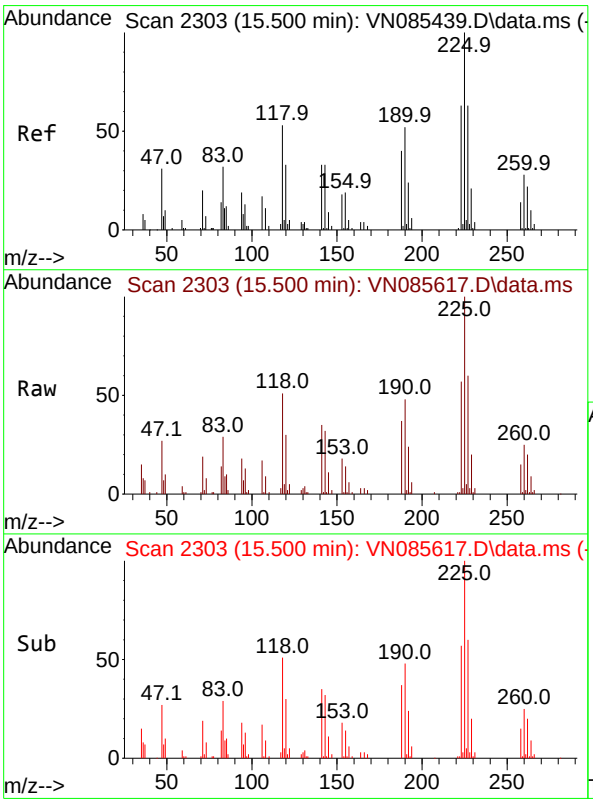
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 96.0 | 46.8 | 140.3 |
| 145 | 31.6 | 16.0 | 48.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

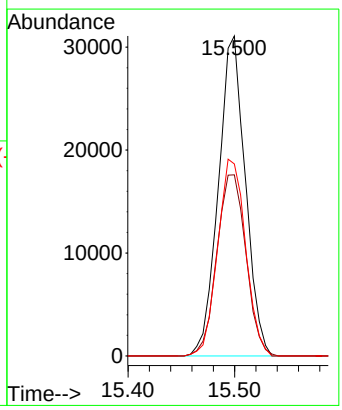
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

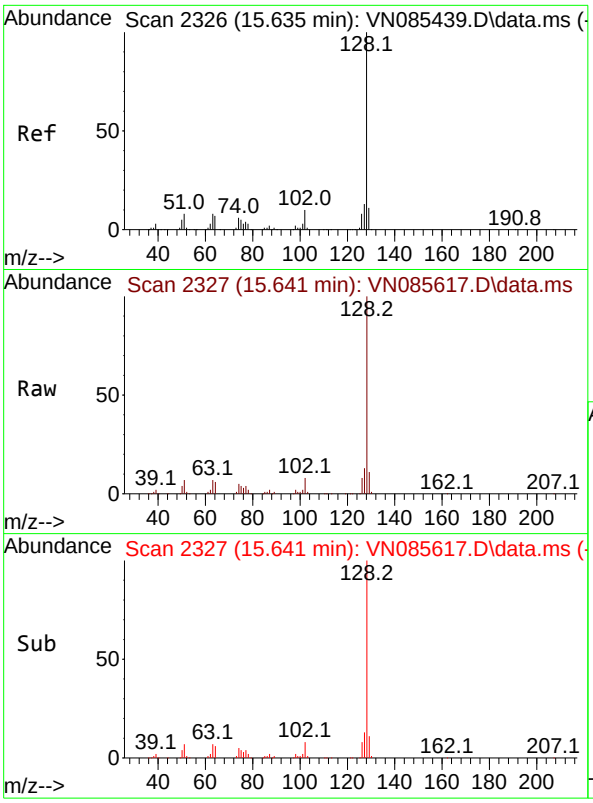



#94
Hexachlorobutadiene
Concen: 44.736 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:225 Resp: 54586

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 61.1 | 30.7 | 92.1 |
| 227 | 63.7 | 30.9 | 92.5 |

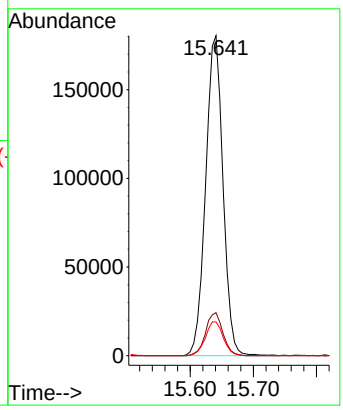





#95
Naphthalene
Concen: 50.085 ug/l
RT: 15.641 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:128 Resp: 34349

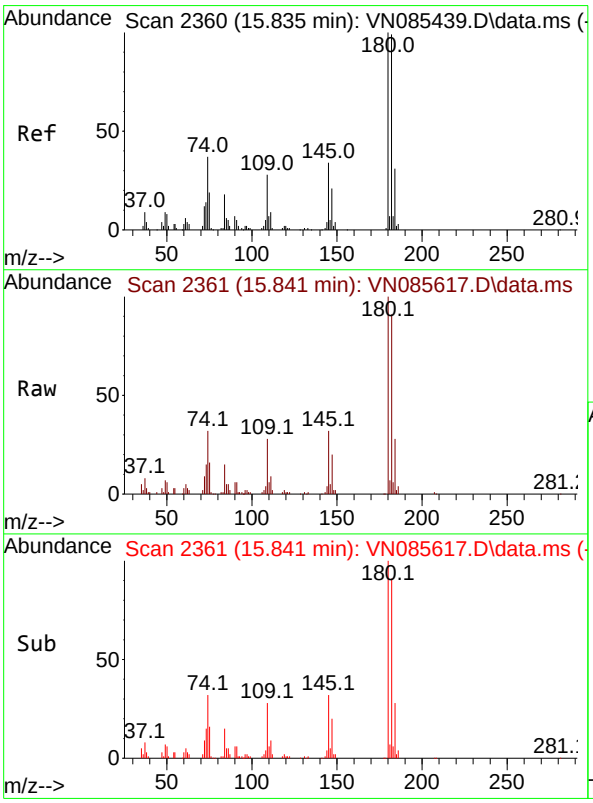
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 13.4 | 10.6 | 16.0 |
| 129 | 10.9 | 8.8 | 13.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

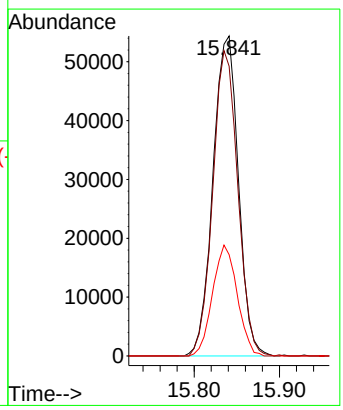
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025




#96
1,2,3-Trichlorobenzene
Concen: 48.450 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:180 Resp: 112671

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 93.9 | 47.4 | 142.2 |
| 145 | 33.6 | 16.9 | 50.7 |



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085617.D
Acq On : 03 Feb 2025 12:56
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Feb 04 00:57:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 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 | 97 | 0.00 |
| 2 | T | Dichlorodifluoromethane | 0.677 | 0.506 | 25.3# | 78 | 0.00 |
| 3 | P | Chloromethane | 0.733 | 0.504 | 31.2# | 72 | 0.00 |
| 4 | C | Vinyl Chloride | 0.737 | 0.636 | 13.7# | 90 | 0.00 |
| 5 | T | Bromomethane | 0.445 | 0.413 | 7.2 | 96 | 0.00 |
| 6 | T | Chloroethane | 0.467 | 0.462 | 1.1 | 106 | 0.00 |
| 7 | T | Trichlorofluoromethane | 1.069 | 1.022 | 4.4 | 100 | 0.00 |
| 8 | T | Diethyl Ether | 0.369 | 0.324 | 12.2 | 88 | 0.00 |
| 9 | T | 1,1,2-Trichlorotrifluoroeth | 0.602 | 0.561 | 6.8 | 101 | 0.00 |
| 10 | T | Methyl Iodide | 0.690 | 0.643 | 6.8 | 87 | 0.00 |
| 11 | T | Tert butyl alcohol | 0.092 | 0.098 | -6.5 | 103 | 0.00 |
| 12 | CM | 1,1-Dichloroethene | 0.537 | 0.488 | 9.1# | 89 | 0.00 |
| 13 | T | Acrolein | 0.126 | 0.085 | 32.5# | 59 | 0.00 |
| 14 | T | Allyl chloride | 0.871 | 0.637 | 26.9# | 73 | 0.00 |
| 15 | T | Acrylonitrile | 0.294 | 0.272 | 7.5 | 89 | 0.00 |
| 16 | T | Acetone | 0.261 | 0.211 | 19.2 | 81 | 0.00 |
| 17 | T | Carbon Disulfide | 1.652 | 1.152 | 30.3# | 76 | 0.00 |
| 18 | T | Methyl Acetate | 0.793 | 0.719 | 9.3 | 89 | 0.00 |
| 19 | T | Methyl tert-butyl Ether | 1.742 | 1.730 | 0.7 | 90 | 0.00 |
| 20 | T | Methylene Chloride | 0.646 | 0.602 | 6.8 | 93 | 0.00 |
| 21 | T | trans-1,2-Dichloroethene | 0.573 | 0.529 | 7.7 | 93 | 0.00 |
| 22 | T | Diisopropyl ether | 1.933 | 1.726 | 10.7 | 82 | 0.00 |
| 23 | T | Vinyl Acetate | 1.353 | 1.166 | 13.8 | 76 | 0.00 |
| 24 | P | 1,1-Dichloroethane | 1.178 | 1.096 | 7.0 | 91 | 0.00 |
| 25 | T | 2-Butanone | 0.384 | 0.336 | 12.5 | 84 | 0.00 |
| 26 | T | 2,2-Dichloropropane | 0.953 | 0.899 | 5.7 | 93 | 0.00 |
| 27 | T | cis-1,2-Dichloroethene | 0.675 | 0.683 | -1.2 | 97 | 0.00 |
| 28 | T | Bromochloromethane | 0.548 | 0.472 | 13.9 | 85 | 0.00 |
| 29 | T | Tetrahydrofuran | 0.243 | 0.217 | 10.7 | 81 | 0.00 |
| 30 | C | Chloroform | 1.218 | 1.179 | 3.2# | 98 | 0.00 |
| 31 | T | Cyclohexane | 1.024 | 0.785 | 23.3 | 87 | 0.00 |
| 32 | T | 1,1,1-Trichloroethane | 1.068 | 0.997 | 6.6 | 95 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 | 0.807 | 0.719 | 10.9 | 84 | 0.00 |
| 34 | I | 1,4-Difluorobenzene | 1.000 | 1.000 | 0.0 | 97 | 0.00 |
| 35 | S | Dibromofluoromethane | 0.347 | 0.346 | 0.3 | 94 | 0.00 |
| 36 | T | 1,1-Dichloropropene | 0.487 | 0.441 | 9.4 | 93 | 0.00 |
| 37 | T | Ethyl Acetate | 0.491 | 0.400 | 18.5 | 80 | 0.00 |
| 38 | T | Carbon Tetrachloride | 0.557 | 0.512 | 8.1 | 94 | 0.00 |
| 39 | T | Methylcyclohexane | 0.457 | 0.426 | 6.8 | 90 | 0.00 |
| 40 | TM | Benzene | 1.463 | 1.422 | 2.8 | 96 | 0.00 |
| 41 | T | Methacrylonitrile | 0.256 | 0.220 | 14.1 | 80 | 0.00 |
| 42 | TM | 1,2-Dichloroethane | 0.551 | 0.500 | 9.3 | 89 | 0.00 |
| 43 | T | Isopropyl Acetate | 0.787 | 0.704 | 10.5 | 84 | 0.00 |
| 44 | TM | Trichloroethene | 0.341 | 0.329 | 3.5 | 99 | 0.00 |
| 45 | C | 1,2-Dichloropropane | 0.374 | 0.361 | 3.5# | 95 | 0.00 |
| 46 | T | Dibromomethane | 0.270 | 0.256 | 5.2 | 94 | 0.00 |
| 47 | T | Bromodichloromethane | 0.549 | 0.555 | -1.1 | 97 | 0.00 |
| 48 | T | Methyl methacrylate | 0.354 | 0.321 | 9.3 | 80 | 0.00 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085617.D
Acq On : 03 Feb 2025 12:56
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Feb 04 00:57:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 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 | 0.006 | 0.006 | 0.0 | 95 | 0.00 |
| 50 | S | Toluene-d8 | 1.232 | 1.296 | -5.2 | 100 | 0.00 |
| 51 | T | 4-Methyl-2-Pentanone | 0.457 | 0.428 | 6.3 | 85 | 0.00 |
| 52 | CM | Toluene | 0.848 | 0.907 | -7.0# | 102 | 0.00 |
| 53 | T | t-1,3-Dichloropropene | 0.519 | 0.526 | -1.3 | 93 | 0.00 |
| 54 | T | cis-1,3-Dichloropropene | 0.554 | 0.567 | -2.3 | 94 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 0.335 | 0.360 | -7.5 | 103 | 0.00 |
| 56 | T | Ethyl methacrylate | 0.469 | 0.515 | -9.8 | 92 | 0.00 |
| 57 | T | 1,3-Dichloropropane | 0.583 | 0.608 | -4.3 | 98 | 0.00 |
| 58 | T | 2-Chloroethyl Vinyl ether | 0.213 | 0.205 | 3.8 | 83 | 0.00 |
| 59 | T | 2-Hexanone | 0.321 | 0.307 | 4.4 | 84 | 0.00 |
| 60 | T | Dibromochloromethane | 0.405 | 0.428 | -5.7 | 101 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 0.334 | 0.341 | -2.1 | 99 | 0.00 |
| 62 | S | 4-Bromofluorobenzene | 0.422 | 0.438 | -3.8 | 95 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 101 | 0.00 |
| 64 | T | Tetrachloroethene | 0.341 | 0.330 | 3.2 | 104 | 0.00 |
| 65 | PM | Chlorobenzene | 1.095 | 1.101 | -0.5 | 104 | 0.00 |
| 66 | T | 1,1,1,2-Tetrachloroethane | 0.402 | 0.398 | 1.0 | 103 | 0.00 |
| 67 | C | Ethyl Benzene | 1.784 | 1.884 | -5.6# | 102 | 0.00 |
| 68 | T | m/p-Xylenes | 0.659 | 0.740 | -12.3 | 106 | 0.00 |
| 69 | T | o-Xylene | 0.630 | 0.707 | -12.2 | 105 | 0.00 |
| 70 | T | Styrene | 1.043 | 1.235 | -18.4 | 107 | 0.00 |
| 71 | P | Bromoform | 0.288 | 0.298 | -3.5 | 97 | 0.00 |
| 72 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 104 | 0.00 |
| 73 | T | Isopropylbenzene | 3.375 | 3.494 | -3.5 | 106 | 0.00 |
| 74 | T | N-amyl acetate | 1.517 | 1.288 | 15.1 | 83 | 0.00 |
| 75 | P | 1,1,2,2-Tetrachloroethane | 1.192 | 1.138 | 4.5 | 103 | 0.00 |
| 76 | T | 1,2,3-Trichloropropane | 1.016 | 0.988 | 2.8 | 115 | 0.00 |
| 77 | T | Bromobenzene | 0.882 | 0.861 | 2.4 | 105 | 0.00 |
| 78 | T | n-propylbenzene | 3.995 | 4.235 | -6.0 | 106 | 0.00 |
| 79 | T | 2-Chlorotoluene | 2.586 | 2.525 | 2.4 | 102 | 0.00 |
| 80 | T | 1,3,5-Trimethylbenzene | 2.787 | 2.966 | -6.4 | 105 | 0.00 |
| 81 | T | trans-1,4-Dichloro-2-butene | 0.376 | 0.423 | -12.5 | 113 | 0.00 |
| 82 | T | 4-Chlorotoluene | 2.574 | 2.563 | 0.4 | 103 | 0.00 |
| 83 | T | tert-Butylbenzene | 2.341 | 2.472 | -5.6 | 106 | 0.00 |
| 84 | T | 1,2,4-Trimethylbenzene | 2.778 | 2.999 | -8.0 | 104 | 0.00 |
| 85 | T | sec-Butylbenzene | 3.244 | 3.542 | -9.2 | 108 | 0.00 |
| 86 | T | p-Isopropyltoluene | 2.631 | 2.939 | -11.7 | 107 | 0.00 |
| 87 | T | 1,3-Dichlorobenzene | 1.624 | 1.627 | -0.2 | 108 | 0.00 |
| 88 | T | 1,4-Dichlorobenzene | 1.683 | 1.619 | 3.8 | 108 | 0.00 |
| 89 | T | n-Butylbenzene | 2.327 | 2.457 | -5.6 | 103 | 0.00 |
| 90 | T | Hexachloroethane | 0.618 | 0.597 | 3.4 | 108 | 0.00 |
| 91 | T | 1,2-Dichlorobenzene | 1.620 | 1.574 | 2.8 | 105 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 0.218 | 0.195 | 10.6 | 92 | 0.00 |
| 93 | T | 1,2,4-Trichlorobenzene | 0.753 | 0.734 | 2.5 | 98 | 0.00 |
| 94 | T | Hexachlorobutadiene | 0.400 | 0.358 | 10.5 | 101 | 0.00 |
| 95 | T | Naphthalene | 2.246 | 2.250 | -0.2 | 94 | 0.00 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085617.D
Acq On : 03 Feb 2025 12:56
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Feb 04 00:57:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 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 | 0.762 | 0.738 | 3.1 | 98 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085617.D
Acq On : 03 Feb 2025 12:56
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Feb 04 00:57:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 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 | 97 | 0.00 |
| 2 | T | Dichlorodifluoromethane | 50.000 | 37.364 | 25.3# | 78 | 0.00 |
| 3 | P | Chloromethane | 50.000 | 34.404 | 31.2# | 72 | 0.00 |
| 4 | C | Vinyl Chloride | 50.000 | 43.167 | 13.7# | 90 | 0.00 |
| 5 | T | Bromomethane | 50.000 | 46.361 | 7.3 | 96 | 0.00 |
| 6 | T | Chloroethane | 50.000 | 49.419 | 1.2 | 106 | 0.00 |
| 7 | T | Trichlorofluoromethane | 50.000 | 47.821 | 4.4 | 100 | 0.00 |
| 8 | T | Diethyl Ether | 50.000 | 43.869 | 12.3 | 88 | 0.00 |
| 9 | T | 1,1,2-Trichlorotrifluoroeth | 50.000 | 46.609 | 6.8 | 101 | 0.00 |
| 10 | T | Methyl Iodide | 50.000 | 46.624 | 6.8 | 87 | 0.00 |
| 11 | T | Tert butyl alcohol | 250.000 | 266.185 | -6.5 | 103 | 0.00 |
| 12 | CM | 1,1-Dichloroethene | 50.000 | 45.458 | 9.1# | 89 | 0.00 |
| 13 | T | Acrolein | 250.000 | 168.557 | 32.6# | 59 | 0.00 |
| 14 | T | Allyl chloride | 50.000 | 36.574 | 26.9# | 73 | 0.00 |
| 15 | T | Acrylonitrile | 250.000 | 231.327 | 7.5 | 89 | 0.00 |
| 16 | T | Acetone | 250.000 | 202.320 | 19.1 | 81 | 0.00 |
| 17 | T | Carbon Disulfide | 50.000 | 34.849 | 30.3# | 76 | 0.00 |
| 18 | T | Methyl Acetate | 50.000 | 45.361 | 9.3 | 89 | 0.00 |
| 19 | T | Methyl tert-butyl Ether | 50.000 | 49.654 | 0.7 | 90 | 0.00 |
| 20 | T | Methylene Chloride | 50.000 | 46.650 | 6.7 | 93 | 0.00 |
| 21 | T | trans-1,2-Dichloroethene | 50.000 | 46.100 | 7.8 | 93 | 0.00 |
| 22 | T | Diisopropyl ether | 50.000 | 44.663 | 10.7 | 82 | 0.00 |
| 23 | T | Vinyl Acetate | 250.000 | 215.551 | 13.8 | 76 | 0.00 |
| 24 | P | 1,1-Dichloroethane | 50.000 | 46.504 | 7.0 | 91 | 0.00 |
| 25 | T | 2-Butanone | 250.000 | 218.881 | 12.4 | 84 | 0.00 |
| 26 | T | 2,2-Dichloropropane | 50.000 | 47.156 | 5.7 | 93 | 0.00 |
| 27 | T | cis-1,2-Dichloroethene | 50.000 | 50.547 | -1.1 | 97 | 0.00 |
| 28 | T | Bromochloromethane | 50.000 | 43.090 | 13.8 | 85 | 0.00 |
| 29 | T | Tetrahydrofuran | 250.000 | 223.073 | 10.8 | 81 | 0.00 |
| 30 | C | Chloroform | 50.000 | 48.416 | 3.2# | 98 | 0.00 |
| 31 | T | Cyclohexane | 50.000 | 38.329 | 23.3 | 87 | 0.00 |
| 32 | T | 1,1,1-Trichloroethane | 50.000 | 46.661 | 6.7 | 95 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 | 50.000 | 44.566 | 10.9 | 84 | 0.00 |
| 34 | I | 1,4-Difluorobenzene | 50.000 | 50.000 | 0.0 | 97 | 0.00 |
| 35 | S | Dibromofluoromethane | 50.000 | 49.931 | 0.1 | 94 | 0.00 |
| 36 | T | 1,1-Dichloropropene | 50.000 | 45.259 | 9.5 | 93 | 0.00 |
| 37 | T | Ethyl Acetate | 50.000 | 40.735 | 18.5 | 80 | 0.00 |
| 38 | T | Carbon Tetrachloride | 50.000 | 45.902 | 8.2 | 94 | 0.00 |
| 39 | T | Methylcyclohexane | 50.000 | 46.593 | 6.8 | 90 | 0.00 |
| 40 | TM | Benzene | 50.000 | 48.614 | 2.8 | 96 | 0.00 |
| 41 | T | Methacrylonitrile | 50.000 | 43.037 | 13.9 | 80 | 0.00 |
| 42 | TM | 1,2-Dichloroethane | 50.000 | 45.375 | 9.3 | 89 | 0.00 |
| 43 | T | Isopropyl Acetate | 50.000 | 44.700 | 10.6 | 84 | 0.00 |
| 44 | TM | Trichloroethene | 50.000 | 48.252 | 3.5 | 99 | 0.00 |
| 45 | C | 1,2-Dichloropropane | 50.000 | 48.357 | 3.3# | 95 | 0.00 |
| 46 | T | Dibromomethane | 50.000 | 47.501 | 5.0 | 94 | 0.00 |
| 47 | T | Bromodichloromethane | 50.000 | 50.527 | -1.1 | 97 | 0.00 |
| 48 | T | Methyl methacrylate | 50.000 | 45.301 | 9.4 | 80 | 0.00 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085617.D
Acq On : 03 Feb 2025 12:56
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Feb 04 00:57:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 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 | 1035.537 | -3.6 | 95 | 0.00 |
| 50 | S | Toluene-d8 | 50.000 | 52.598 | -5.2 | 100 | 0.00 |
| 51 | T | 4-Methyl-2-Pentanone | 250.000 | 233.994 | 6.4 | 85 | 0.00 |
| 52 | CM | Toluene | 50.000 | 53.534 | -7.1# | 102 | 0.00 |
| 53 | T | t-1,3-Dichloropropene | 50.000 | 50.697 | -1.4 | 93 | 0.00 |
| 54 | T | cis-1,3-Dichloropropene | 50.000 | 51.107 | -2.2 | 94 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 50.000 | 53.625 | -7.2 | 103 | 0.00 |
| 56 | T | Ethyl methacrylate | 50.000 | 45.764 | 8.5 | 92 | 0.00 |
| 57 | T | 1,3-Dichloropropane | 50.000 | 52.111 | -4.2 | 98 | 0.00 |
| 58 | T | 2-Chloroethyl Vinyl ether | 250.000 | 241.104 | 3.6 | 83 | 0.00 |
| 59 | T | 2-Hexanone | 250.000 | 238.718 | 4.5 | 84 | 0.00 |
| 60 | T | Dibromochloromethane | 50.000 | 52.795 | -5.6 | 101 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 50.000 | 50.994 | -2.0 | 99 | 0.00 |
| 62 | S | 4-Bromofluorobenzene | 50.000 | 51.906 | -3.8 | 95 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 50.000 | 50.000 | 0.0 | 101 | 0.00 |
| 64 | T | Tetrachloroethene | 50.000 | 48.451 | 3.1 | 104 | 0.00 |
| 65 | PM | Chlorobenzene | 50.000 | 50.273 | -0.5 | 104 | 0.00 |
| 66 | T | 1,1,1,2-Tetrachloroethane | 50.000 | 49.526 | 0.9 | 103 | 0.00 |
| 67 | C | Ethyl Benzene | 50.000 | 52.793 | -5.6# | 102 | 0.00 |
| 68 | T | m/p-Xylenes | 100.000 | 112.274 | -12.3 | 106 | 0.00 |
| 69 | T | o-Xylene | 50.000 | 56.132 | -12.3 | 105 | 0.00 |
| 70 | T | Styrene | 50.000 | 59.204 | -18.4 | 107 | 0.00 |
| 71 | P | Bromoform | 50.000 | 51.832 | -3.7 | 97 | 0.00 |
| 72 | I | 1,4-Dichlorobenzene-d4 | 50.000 | 50.000 | 0.0 | 104 | 0.00 |
| 73 | T | Isopropylbenzene | 50.000 | 51.773 | -3.5 | 106 | 0.00 |
| 74 | T | N-amyl acetate | 50.000 | 42.452 | 15.1 | 83 | 0.00 |
| 75 | P | 1,1,2,2-Tetrachloroethane | 50.000 | 47.726 | 4.5 | 103 | 0.00 |
| 76 | T | 1,2,3-Trichloropropane | 50.000 | 48.596 | 2.8 | 115 | 0.00 |
| 77 | T | Bromobenzene | 50.000 | 48.837 | 2.3 | 105 | 0.00 |
| 78 | T | n-propylbenzene | 50.000 | 53.002 | -6.0 | 106 | 0.00 |
| 79 | T | 2-Chlorotoluene | 50.000 | 48.821 | 2.4 | 102 | 0.00 |
| 80 | T | 1,3,5-Trimethylbenzene | 50.000 | 53.197 | -6.4 | 105 | 0.00 |
| 81 | T | trans-1,4-Dichloro-2-butene | 50.000 | 56.354 | -12.7 | 113 | 0.00 |
| 82 | T | 4-Chlorotoluene | 50.000 | 49.770 | 0.5 | 103 | 0.00 |
| 83 | T | tert-Butylbenzene | 50.000 | 52.803 | -5.6 | 106 | 0.00 |
| 84 | T | 1,2,4-Trimethylbenzene | 50.000 | 53.980 | -8.0 | 104 | 0.00 |
| 85 | T | sec-Butylbenzene | 50.000 | 54.590 | -9.2 | 108 | 0.00 |
| 86 | T | p-Isopropyltoluene | 50.000 | 50.266 | -0.5 | 107 | 0.00 |
| 87 | T | 1,3-Dichlorobenzene | 50.000 | 50.109 | -0.2 | 108 | 0.00 |
| 88 | T | 1,4-Dichlorobenzene | 50.000 | 48.112 | 3.8 | 108 | 0.00 |
| 89 | T | n-Butylbenzene | 50.000 | 52.792 | -5.6 | 103 | 0.00 |
| 90 | T | Hexachloroethane | 50.000 | 48.339 | 3.3 | 108 | 0.00 |
| 91 | T | 1,2-Dichlorobenzene | 50.000 | 48.589 | 2.8 | 105 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 50.000 | 44.867 | 10.3 | 92 | 0.00 |
| 93 | T | 1,2,4-Trichlorobenzene | 50.000 | 48.782 | 2.4 | 98 | 0.00 |
| 94 | T | Hexachlorobutadiene | 50.000 | 44.736 | 10.5 | 101 | 0.00 |
| 95 | T | Naphthalene | 50.000 | 50.085 | -0.2 | 94 | 0.00 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085617.D
Acq On : 03 Feb 2025 12:56
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Feb 04 00:57:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 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 | 48.450 | 3.1 | 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: RUTW01

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG No.: Q1241

Instrument ID: MSVOA_N Calibration Date/Time: 02/04/2025 11:05

Lab File ID: VN085645.D Init. Calib. Date(s): 01/14/2025 01/14/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 14:56 17:19

GC Column: RXI-624 ID: 0.25 (mm)

| COMPOUND | RRF | RRF050 | MIN RRF | %D | MAX%D |
|---|---|---|---|---|---|
| Vinyl Chloride | 0.737 | 0.924 | | 25.37 | 20 |
| 1,1-Dichloroethene | 0.537 | 0.620 | | 15.46 | 20 |
| 2-Butanone | 0.384 | 0.371 | | -3.38 | 20 |
| Carbon Tetrachloride | 0.557 | 0.585 | | 5.03 | 20 |
| Chloroform | 1.218 | 1.257 | | 3.2 | 20 |
| Benzene | 1.463 | 1.643 | | 12.3 | 20 |
| 1,2-Dichloroethane | 0.551 | 0.538 | | -2.36 | 20 |
| Trichloroethene | 0.341 | 0.382 | | 12.02 | 20 |
| Tetrachloroethene | 0.341 | 0.397 | | 16.42 | 20 |
| Chlorobenzene | 1.095 | 1.230 | 0.3 | 12.33 | 20 |
| 1,2-Dichloroethane-d4 | 0.807 | 0.771 | | -4.46 | 20 |
| Dibromofluoromethane | 0.347 | 0.369 | | 6.34 | 20 |
| Toluene-d8 | 1.232 | 1.373 | | 11.44 | 20 |
| 4-Bromofluorobenzene | 0.422 | 0.472 | | 11.85 | 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_N\Data\VN020425\
Data File : VN085645.D
Acq On : 04 Feb 2025 11:05
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 05 01:01:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 200704 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 345148 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 309053 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 157058 | 50.000 | ug/l | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.577 | 65 | 154798 | 47.780 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 95.560% | | | |
| 35) Dibromofluoromethane | 8.165 | 113 | 127274 | 53.153 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 106.300% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 473979 | 55.713 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 111.420% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 163009 | 56.013 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 112.020% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 168819 | 62.124 | ug/l | 98 |
| 3) Chloromethane | 2.359 | 50 | 151639 | 51.538 | ug/l | 99 |
| 4) Vinyl Chloride | 2.512 | 62 | 185363 | 62.678 | ug/l | 98 |
| 5) Bromomethane | 2.942 | 94 | 115992 | 64.931 | ug/l | 95 |
| 6) Chloroethane | 3.118 | 64 | 116980 | 62.391 | ug/l | 98 |
| 7) Trichlorofluoromethane | 3.495 | 101 | 227801 | 53.087 | ug/l | 99 |
| 8) Diethyl Ether | 3.959 | 74 | 75659 | 51.037 | ug/l | 88 |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 136051 | 56.291 | ug/l | 97 |
| 10) Methyl Iodide | 4.589 | 142 | 171090 | 61.814 | ug/l | 96 |
| 11) Tert butyl alcohol | 5.518 | 59 | 90596 | 244.210 | ug/l | 100 |
| 12) 1,1-Dichloroethene | 4.336 | 96 | 124529 | 57.812 | ug/l | 91 |
| 13) Acrolein | 4.177 | 56 | 85431 | 168.697 | ug/l | 99 |
| 14) Allyl chloride | 5.024 | 41 | 157091 | 44.944 | ug/l # | 94 |
| 15) Acrylonitrile | 5.718 | 53 | 303850 | 257.863 | ug/l | 99 |
| 16) Acetone | 4.424 | 43 | 236574 | 225.997 | ug/l | 94 |
| 17) Carbon Disulfide | 4.712 | 76 | 378039 | 57.001 | ug/l | 98 |
| 18) Methyl Acetate | 5.018 | 43 | 143957 | 45.225 | ug/l | 92 |
| 19) Methyl tert-butyl Ether | 5.795 | 73 | 384956 | 55.039 | ug/l | 98 |
| 20) Methylene Chloride | 5.277 | 84 | 141744 | 54.697 | ug/l | 91 |
| 21) trans-1,2-Dichloroethene | 5.783 | 96 | 132371 | 57.502 | ug/l | 94 |
| 22) Diisopropyl ether | 6.671 | 45 | 381754 | 49.208 | ug/l | 97 |
| 23) Vinyl Acetate | 6.600 | 43 | 1409531 | 259.616 | ug/l | 95 |
| 24) 1,1-Dichloroethane | 6.565 | 63 | 245805 | 51.962 | ug/l | 98 |
| 25) 2-Butanone | 7.477 | 43 | 372307 | 241.685 | ug/l | 91 |
| 26) 2,2-Dichloropropane | 7.489 | 77 | 220150 | 57.562 | ug/l | 98 |
| 27) cis-1,2-Dichloroethene | 7.483 | 96 | 155112 | 57.208 | ug/l | 93 |
| 28) Bromochloromethane | 7.806 | 49 | 95572 | 43.426 | ug/l | 87 |
| 29) Tetrahydrofuran | 7.836 | 42 | 249949 | 255.923 | ug/l | 89 |
| 30) Chloroform | 7.965 | 83 | 252335 | 51.611 | ug/l | 100 |
| 31) Cyclohexane | 8.253 | 56 | 204306 | 49.690 | ug/l | 91 |
| 32) 1,1,1-Trichloroethane | 8.165 | 97 | 225191 | 52.509 | ug/l | 96 |
| 36) 1,1-Dichloropropene | 8.371 | 75 | 183927 | 54.731 | ug/l | 98 |
| 37) Ethyl Acetate | 7.559 | 43 | 159199 | 46.933 | ug/l | 98 |
| 38) Carbon Tetrachloride | 8.359 | 117 | 202078 | 52.524 | ug/l | 99 |
| 39) Methylcyclohexane | 9.600 | 83 | 195859 | 62.021 | ug/l | 93 |
| 40) Benzene | 8.606 | 78 | 567137 | 56.166 | ug/l | 99 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085645.D
Acq On : 04 Feb 2025 11:05
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 05 01:01:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.777 | 41 | 81539 | 46.204 | ug/l | | 91 |
| 42) 1,2-Dichloroethane | 8.671 | 62 | 185776 | 48.850 | ug/l | | 97 |
| 43) Isopropyl Acetate | 8.688 | 43 | 271553 | 49.962 | ug/l | | 95 |
| 44) Trichloroethene | 9.347 | 130 | 131785 | 56.068 | ug/l | | 100 |
| 45) 1,2-Dichloropropane | 9.618 | 63 | 137051 | 53.137 | ug/l | | 99 |
| 46) Dibromomethane | 9.706 | 93 | 97554 | 52.419 | ug/l | | 96 |
| 47) Bromodichloromethane | 9.882 | 83 | 202509 | 53.411 | ug/l | | 98 |
| 48) Methyl methacrylate | 9.677 | 41 | 122409 | 50.045 | ug/l | | 89 |
| 49) 1,4-Dioxane | 9.694 | 88 | 47051 | 1142.294 | ug/l | # | 89 |
| 51) 4-Methyl-2-Pentanone | 10.441 | 43 | 800853 | 253.917 | ug/l | | 94 |
| 52) Toluene | 10.629 | 92 | 351922 | 60.150 | ug/l | | 100 |
| 53) t-1,3-Dichloropropene | 10.835 | 75 | 204407 | 57.048 | ug/l | | 97 |
| 54) cis-1,3-Dichloropropene | 10.312 | 75 | 221256 | 57.810 | ug/l | # | 90 |
| 55) 1,1,2-Trichloroethane | 11.012 | 97 | 129296 | 55.842 | ug/l | | 99 |
| 56) Ethyl methacrylate | 10.871 | 69 | 199066 | 50.997 | ug/l | | 90 |
| 57) 1,3-Dichloropropane | 11.159 | 76 | 225579 | 56.030 | ug/l | | 100 |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63 | 335470 | 228.313 | ug/l | | 97 |
| 59) 2-Hexanone | 11.194 | 43 | 580109 | 261.399 | ug/l | | 91 |
| 60) Dibromochloromethane | 11.359 | 129 | 152370 | 54.508 | ug/l | | 98 |
| 61) 1,2-Dibromoethane | 11.465 | 107 | 129588 | 56.226 | ug/l | | 99 |
| 64) Tetrachloroethene | 11.100 | 164 | 122776 | 58.273 | ug/l | | 96 |
| 65) Chlorobenzene | 11.888 | 112 | 380252 | 56.165 | ug/l | | 98 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 133801 | 53.847 | ug/l | | 100 |
| 67) Ethyl Benzene | 11.959 | 91 | 654450 | 59.349 | ug/l | | 97 |
| 68) m/p-Xylenes | 12.071 | 106 | 518534 | 127.234 | ug/l | | 95 |
| 69) o-Xylene | 12.394 | 106 | 241242 | 61.940 | ug/l | | 96 |
| 70) Styrene | 12.412 | 104 | 419116 | 65.022 | ug/l | | 97 |
| 71) Bromoform | 12.576 | 173 | 99802 | 56.133 | ug/l | # | 98 |
| 73) Isopropylbenzene | 12.694 | 105 | 606175 | 57.186 | ug/l | | 99 |
| 74) N-amyl acetate | 12.494 | 43 | 234045 | 49.123 | ug/l | | 94 |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 188424 | 50.322 | ug/l | | 100 |
| 76) 1,2,3-Trichloropropane | 12.994 | 75 | 153753m | 48.165 | ug/l | | |
| 77) Bromobenzene | 12.976 | 156 | 148155 | 53.497 | ug/l | | 95 |
| 78) n-propylbenzene | 13.035 | 91 | 731968 | 58.330 | ug/l | | 99 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 439835 | 54.157 | ug/l | | 96 |
| 80) 1,3,5-Trimethylbenzene | 13.171 | 105 | 514612 | 58.774 | ug/l | | 99 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 68031 | 57.659 | ug/l | # | 81 |
| 82) 4-Chlorotoluene | 13.218 | 91 | 445323 | 55.070 | ug/l | | 97 |
| 83) tert-Butylbenzene | 13.435 | 119 | 411462 | 55.960 | ug/l | | 96 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 519388 | 59.518 | ug/l | | 98 |
| 85) sec-Butylbenzene | 13.612 | 105 | 605413 | 59.408 | ug/l | | 99 |
| 86) p-Isopropyltoluene | 13.729 | 119 | 506039 | 54.534 | ug/l | | 97 |
| 87) 1,3-Dichlorobenzene | 13.729 | 146 | 277733 | 54.455 | ug/l | | 99 |
| 88) 1,4-Dichlorobenzene | 13.812 | 146 | 278955 | 52.768 | ug/l | | 97 |
| 89) n-Butylbenzene | 14.053 | 91 | 429742 | 58.781 | ug/l | | 99 |
| 90) Hexachloroethane | 14.329 | 117 | 98723 | 50.887 | ug/l | | 98 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 266234 | 52.333 | ug/l | | 99 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75 | 33244 | 48.620 | ug/l | | 93 |
| 93) 1,2,4-Trichlorobenzene | 15.388 | 180 | 124629 | 52.709 | ug/l | | 98 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 60840 | 48.466 | ug/l | | 99 |
| 95) Naphthalene | 15.641 | 128 | 394392 | 55.897 | ug/l | | 99 |
| 96) 1,2,3-Trichlorobenzene | 15.835 | 180 | 125197 | 52.330 | ug/l | | 99 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085645.D
Acq On : 04 Feb 2025 11:05
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 05 01:01:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

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

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

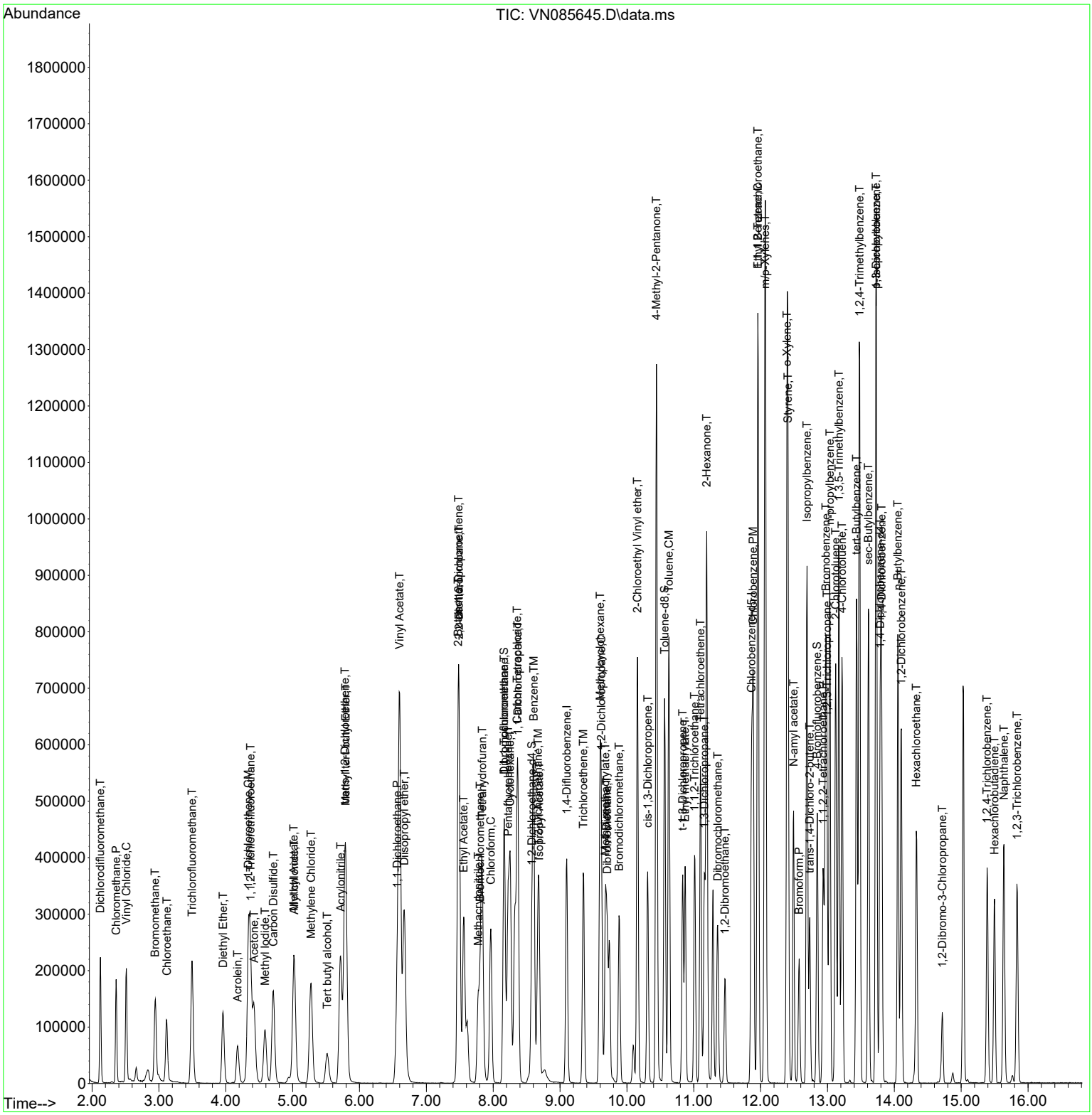
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085645.D
Acq On : 04 Feb 2025 11:05
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

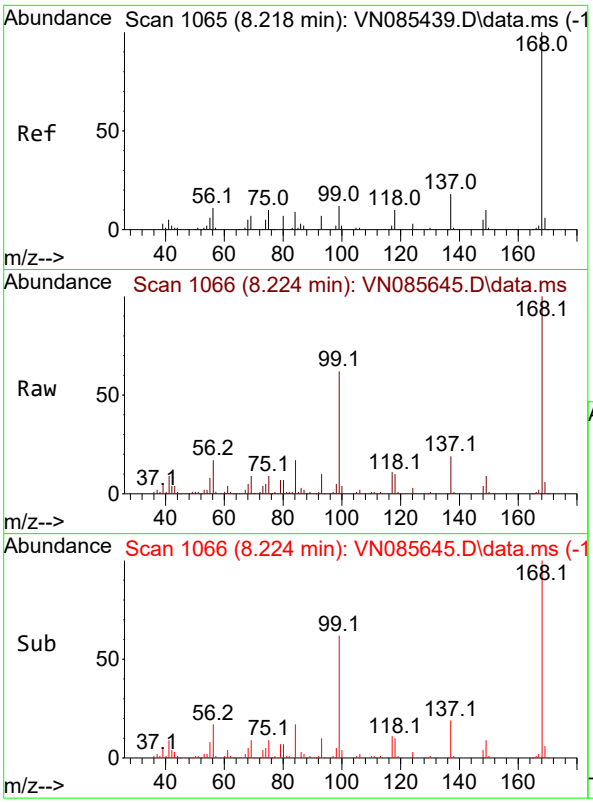
Quant Time: Feb 05 01:01:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

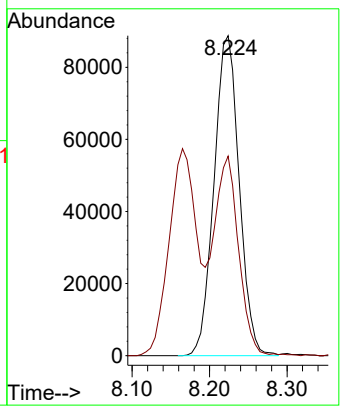





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:168 Resp: 20070

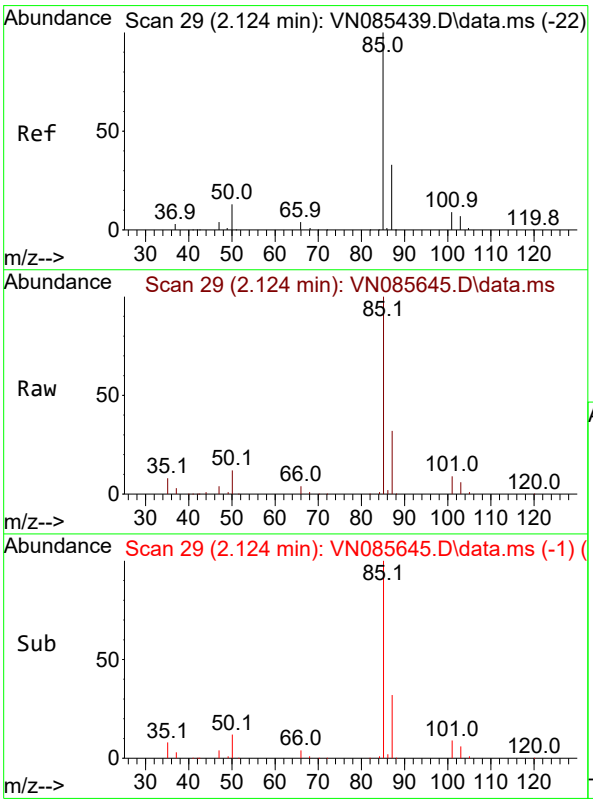
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 62.0 | 53.6 | 80.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

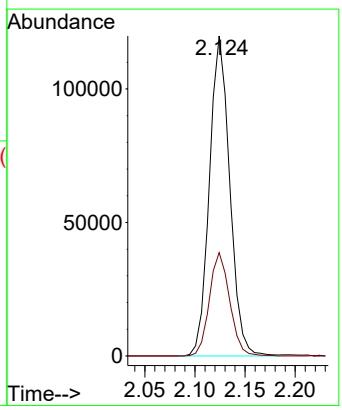
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

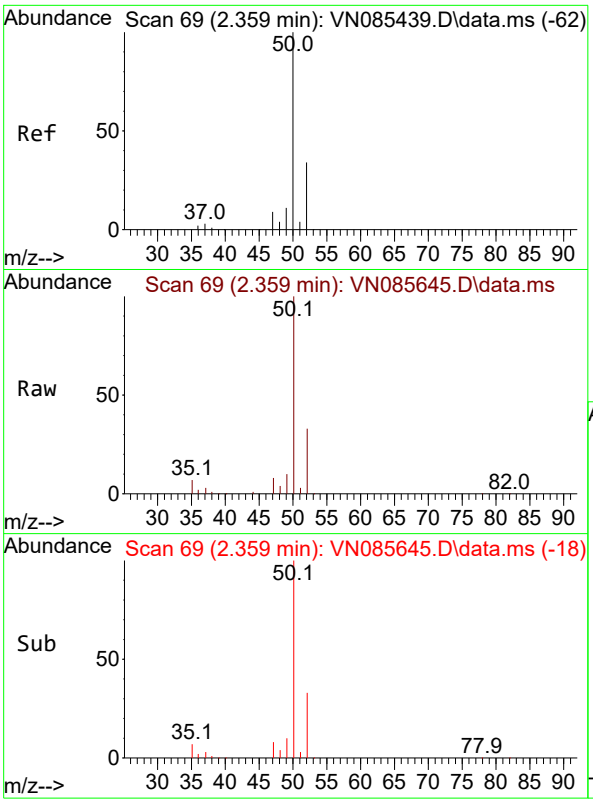



#2
Dichlorodifluoromethane
Concen: 62.124 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 85 Resp: 168819

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.3 | 16.7 | 50.1 |

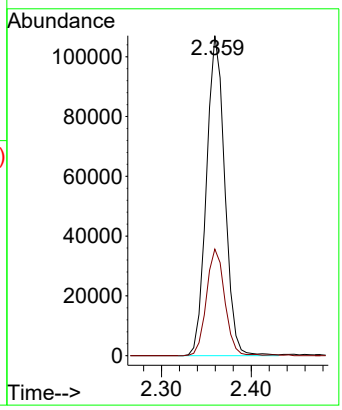





#3
Chloromethane
Concen: 51.538 ug/l
RT: 2.359 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 50 Resp: 15163

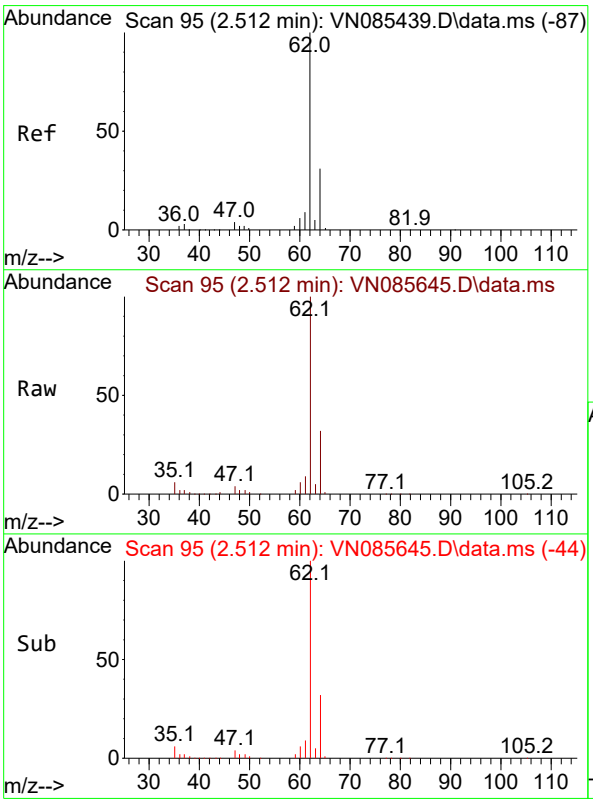
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 33.3 | 27.0 | 40.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

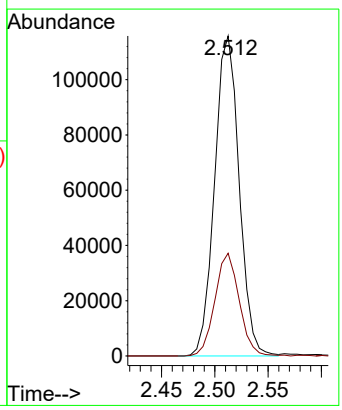
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

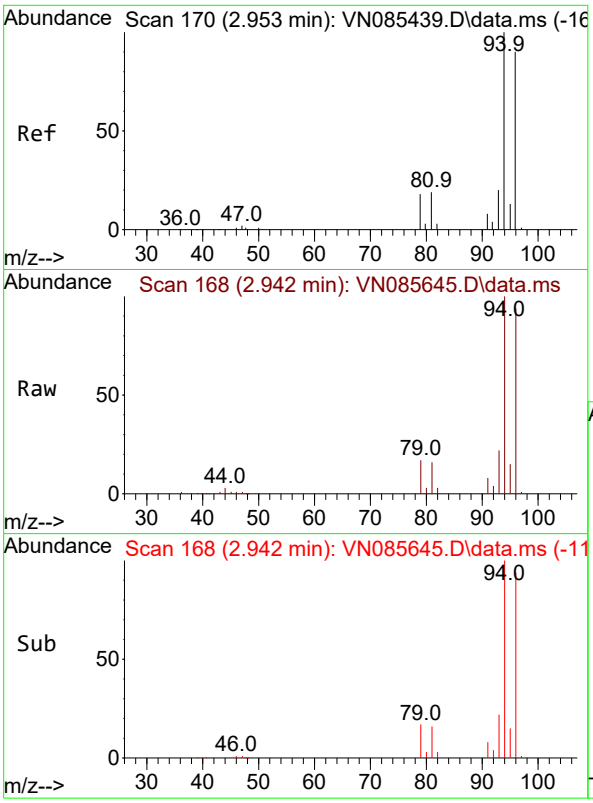



#4
Vinyl Chloride
Concen: 62.678 ug/l
RT: 2.512 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 62 Resp: 185363

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 32.1 | 24.8 | 37.2 |

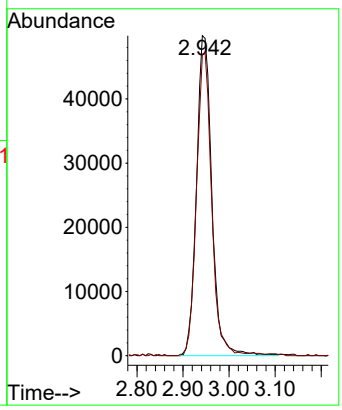





#5
Bromomethane
Concen: 64.931 ug/l
RT: 2.942 min Scan# 1
Delta R.T. -0.012 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 94 Resp: 11599

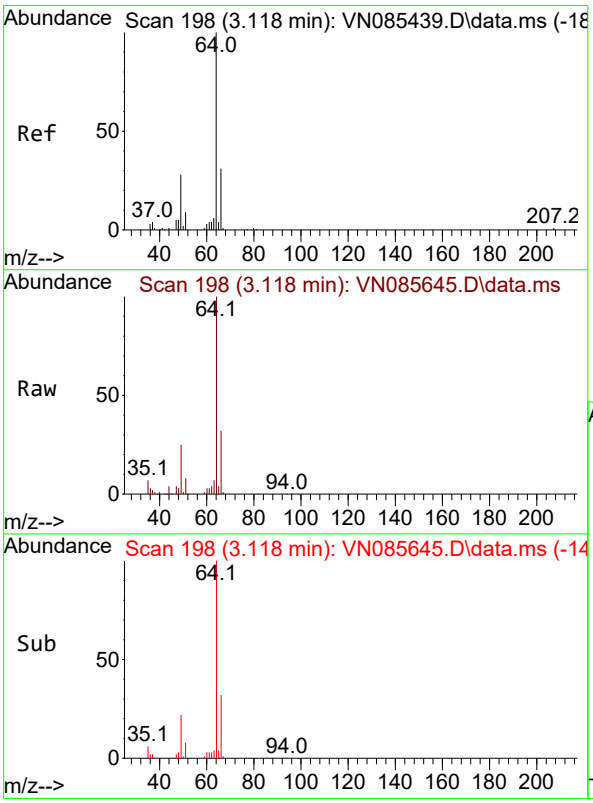
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 94.0 | 71.8 | 107.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

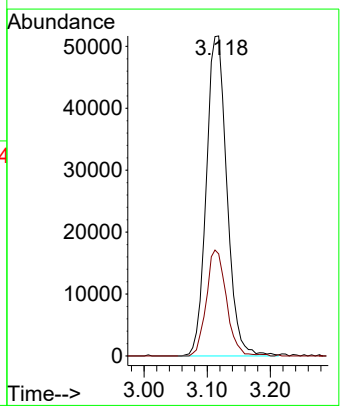
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

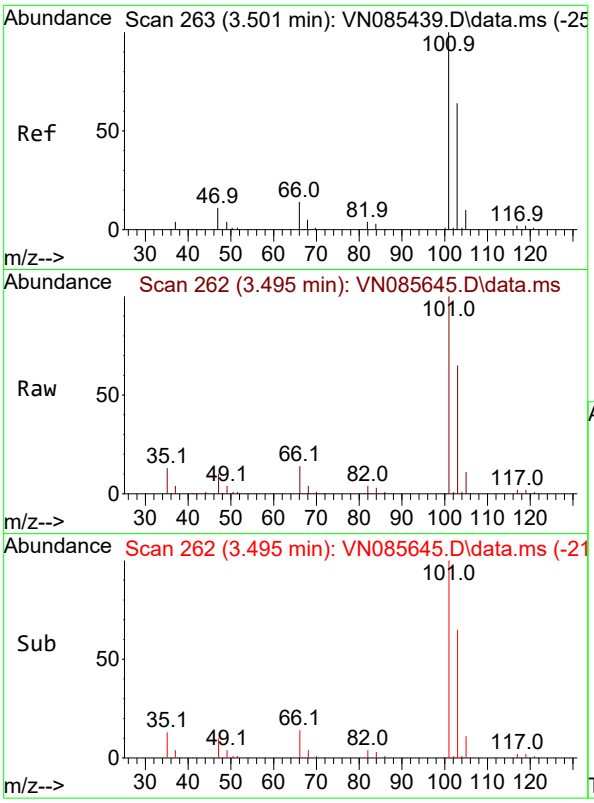



#6
Chloroethane
Concen: 62.391 ug/l
RT: 3.118 min Scan# 198
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 64 Resp: 116980

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 31.9 | 24.6 | 36.8 |






#7
Trichlorofluoromethane
Concen: 53.087 ug/l
RT: 3.495 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

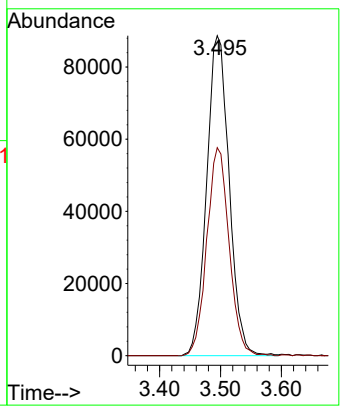
Tgt Ion:101 Resp: 22780

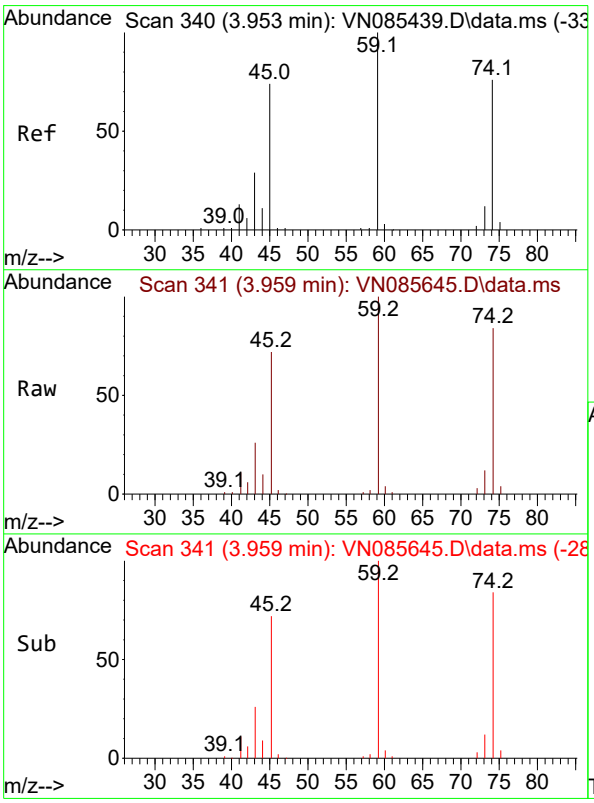
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 65.0 | 51.4 | 77.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

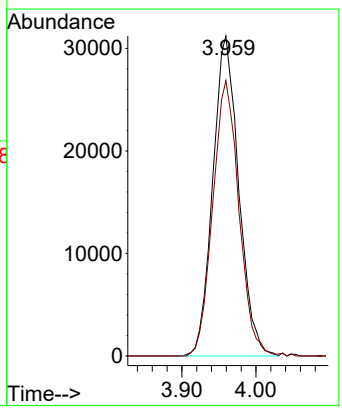


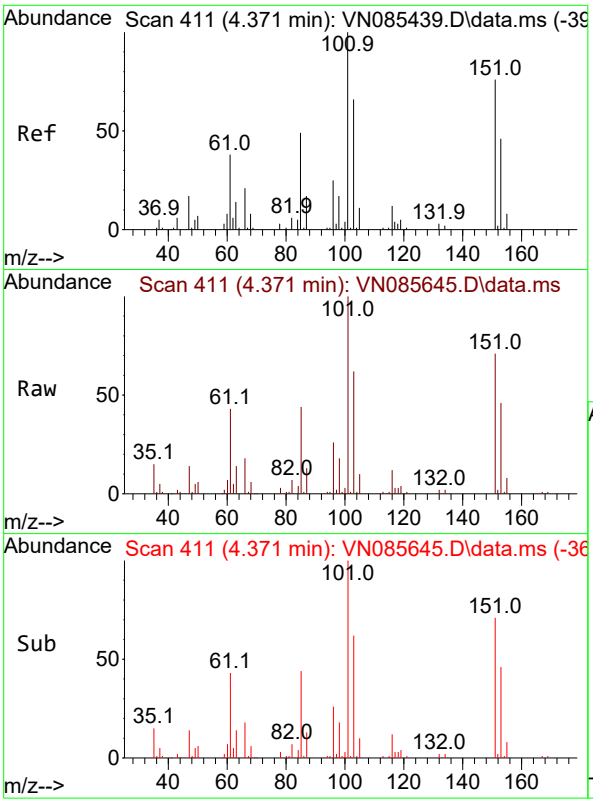




#8
Diethyl Ether
Concen: 51.037 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 74 Resp: 75659

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 87.0 | 49.7 | 149.1 |






#9
1,1,2-Trichlorotrifluoroethane
Concen: 56.291 ug/l
RT: 4.371 min Scan# 41
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

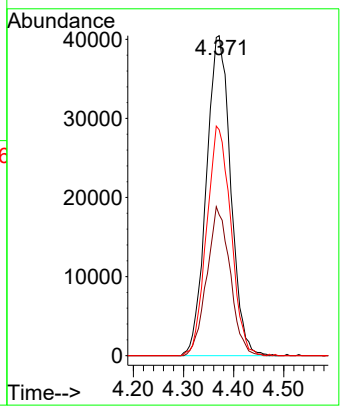
Tgt Ion:101 Resp: 13605

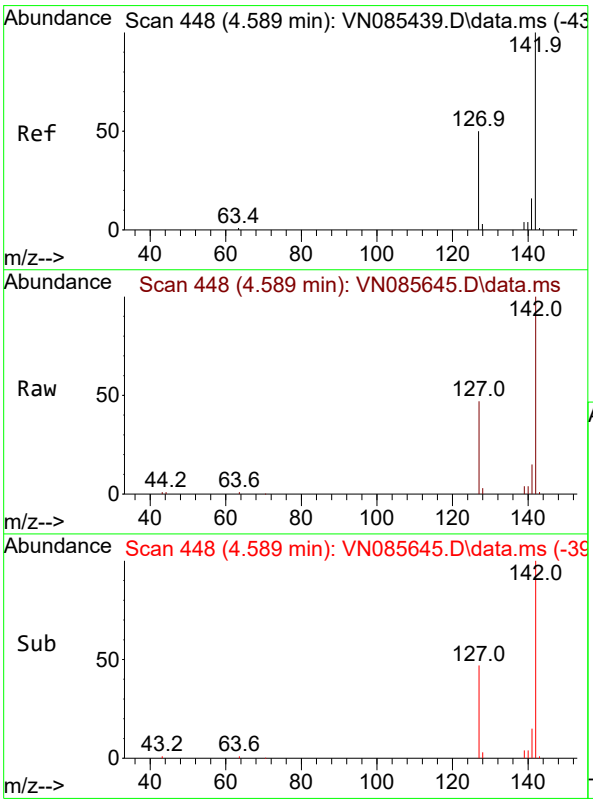
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 44.6 | 37.8 | 56.8 |
| 151 | 71.5 | 58.8 | 88.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

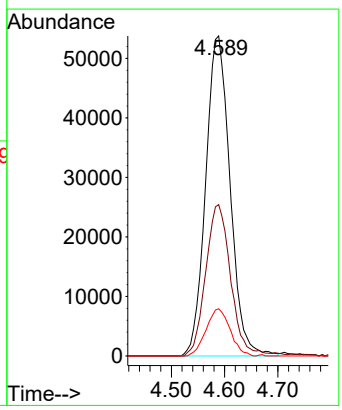


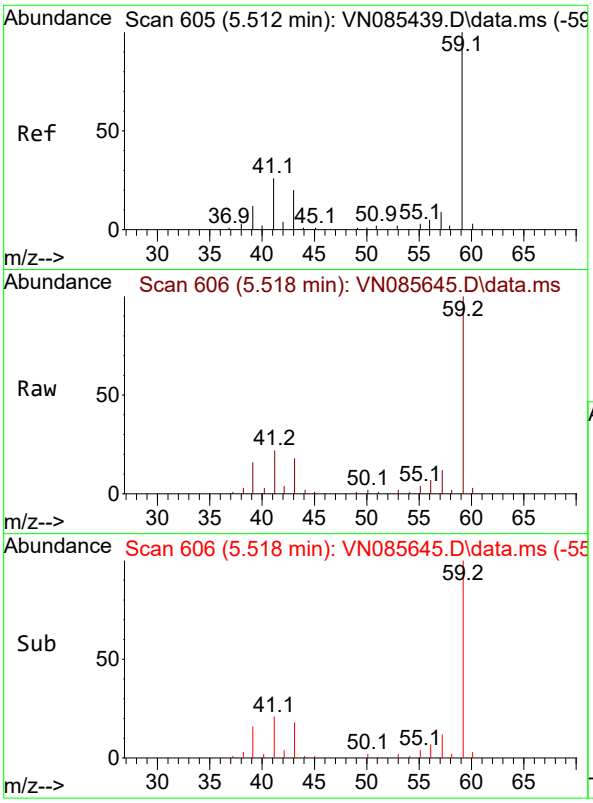




#10
Methyl Iodide
Concen: 61.814 ug/l
RT: 4.589 min Scan# 448
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:142 Resp: 171090

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 47.3 | 40.3 | 60.5 |
| 141 | 14.8 | 12.8 | 19.2 |

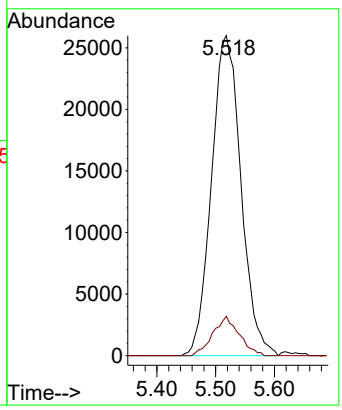





#11
Tert butyl alcohol
Concen: 244.210 ug/l
RT: 5.518 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 59 Resp: 9059

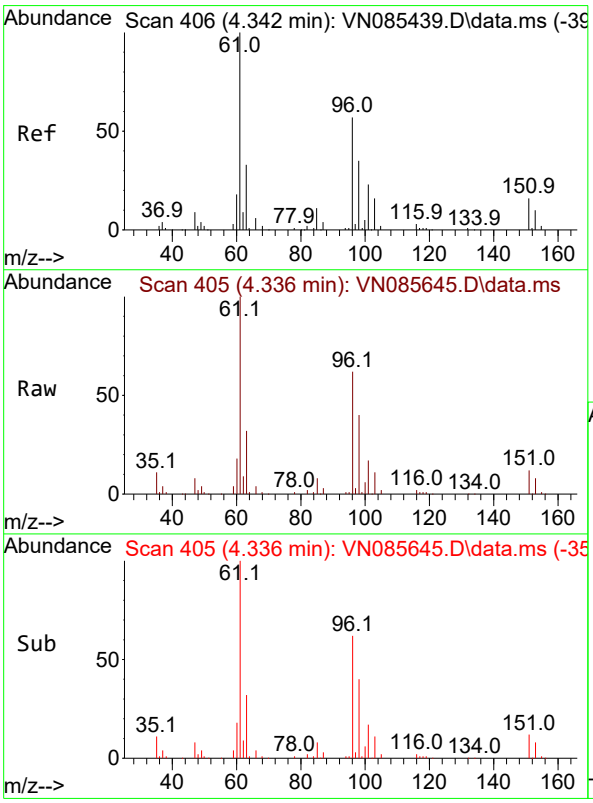
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 10.9 | 8.6 | 13.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

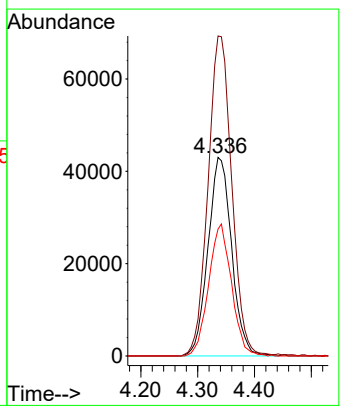
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

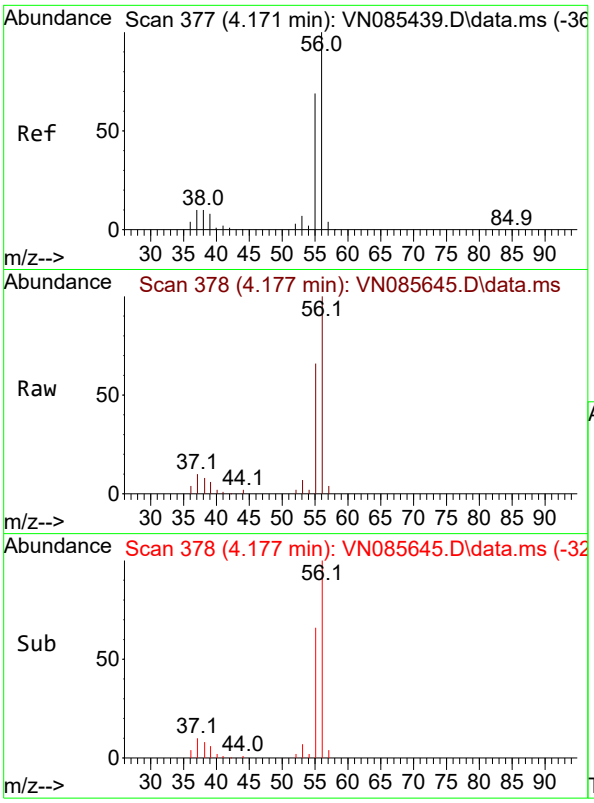



#12
1,1-Dichloroethene
Concen: 57.812 ug/l
RT: 4.336 min Scan# 405
Delta R.T. -0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 96 Resp: 124529

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 161.2 | 141.0 | 211.4 |
| 98 | 63.9 | 49.0 | 73.6 |






#13
Acrolein
Concen: 168.697 ug/l
RT: 4.177 min Scan# 3
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

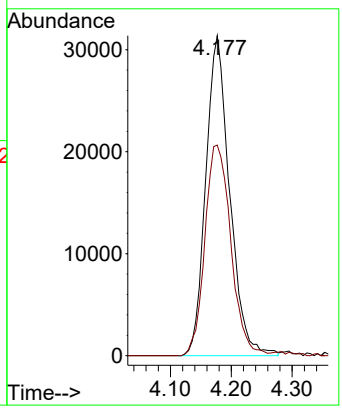
Tgt Ion: 56 Resp: 8543

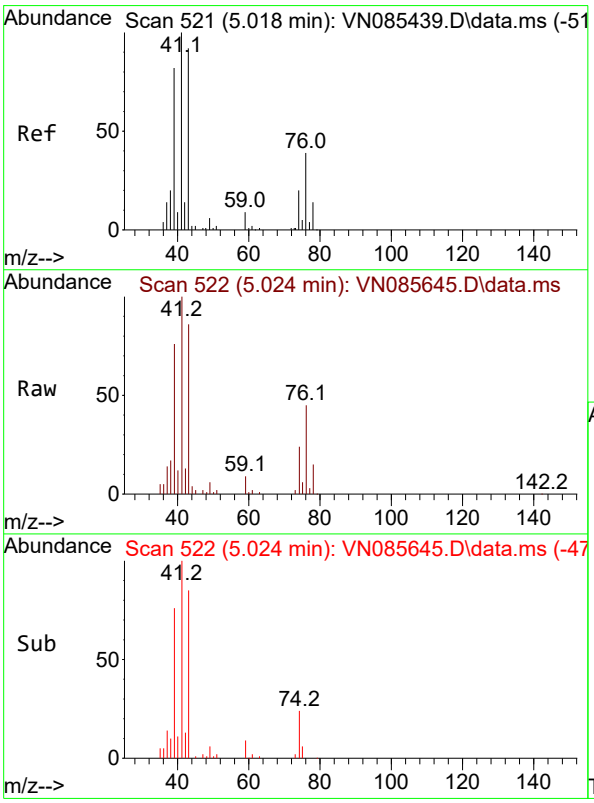
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 71.5 | 56.3 | 84.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

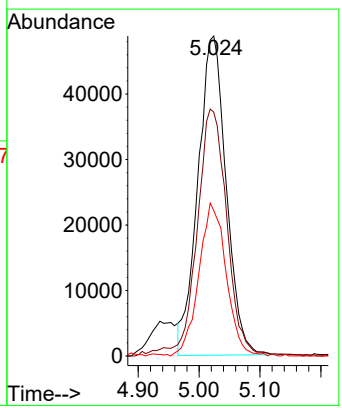


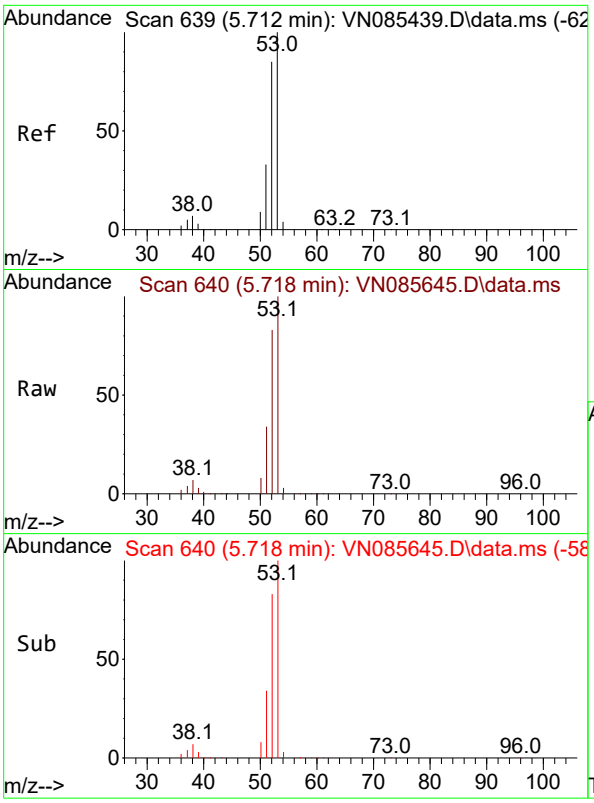




#14
Allyl chloride
Concen: 44.944 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 41 Resp: 157091

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 82.1 | 64.4 | 96.6 |
| 76 | 46.3 | 30.5 | 45.7# |

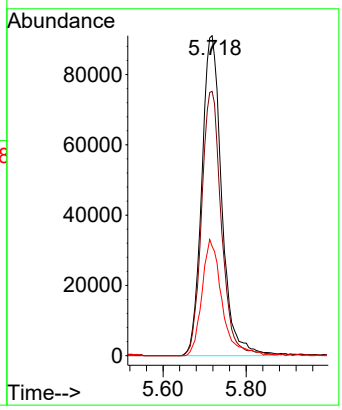





#15
Acrylonitrile
Concen: 257.863 ug/l
RT: 5.718 min Scan# 64
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 53 Resp: 30385

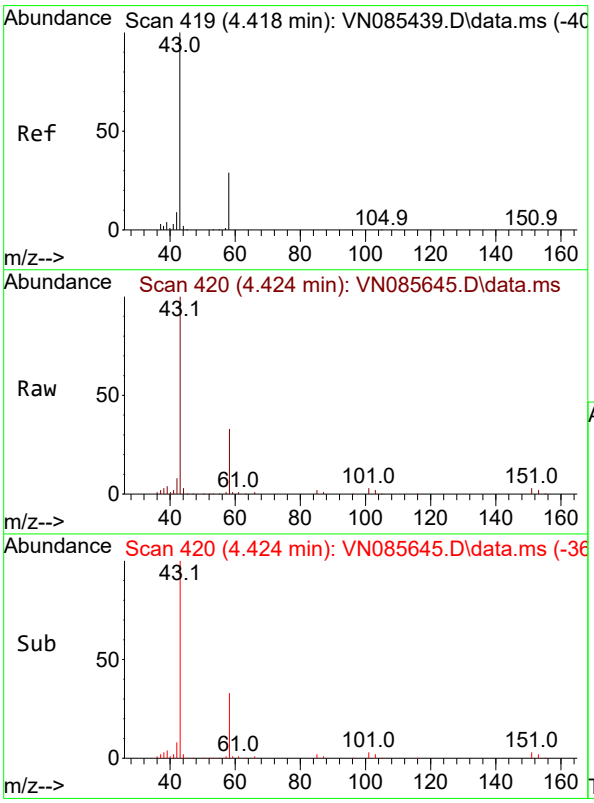
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 82.0 | 65.5 | 98.3 |
| 51 | 36.3 | 29.8 | 44.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

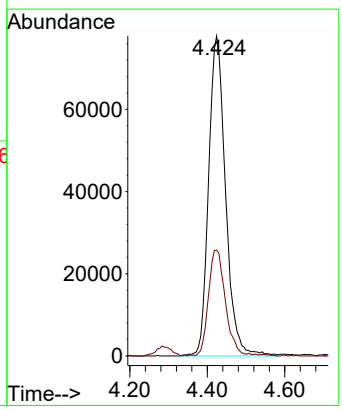
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

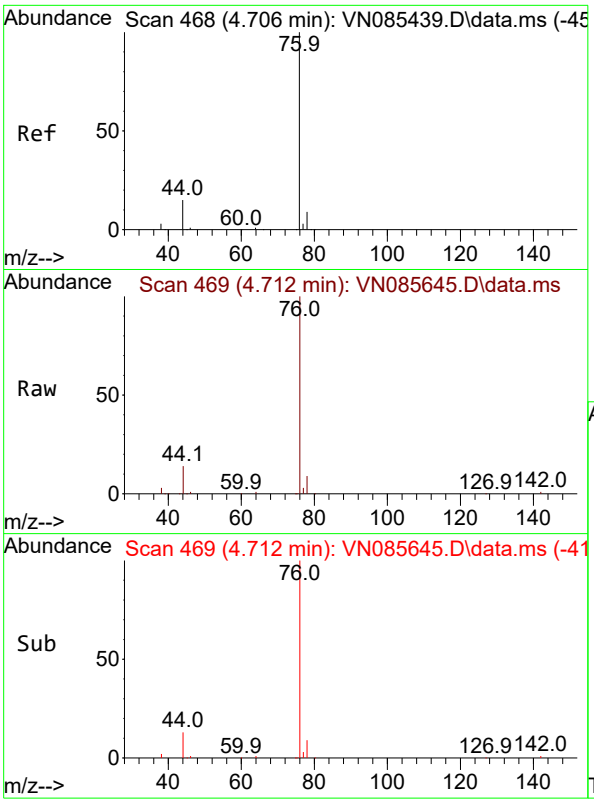



#16
Acetone
Concen: 225.997 ug/l
RT: 4.424 min Scan# 420
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 43 Resp: 236574

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 33.1 | 23.8 | 35.6 |

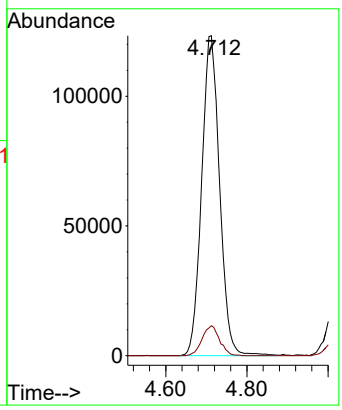





#17
Carbon Disulfide
Concen: 57.001 ug/l
RT: 4.712 min Scan# 4
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 76 Resp: 37803

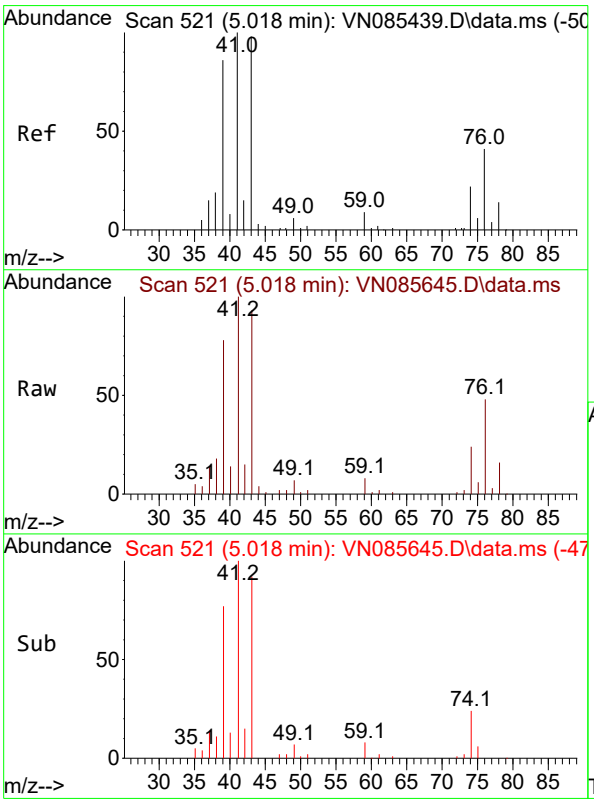
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.4 | 6.9 | 10.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

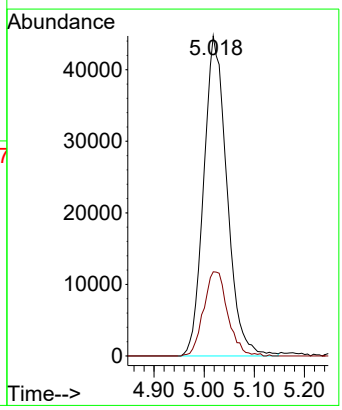
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

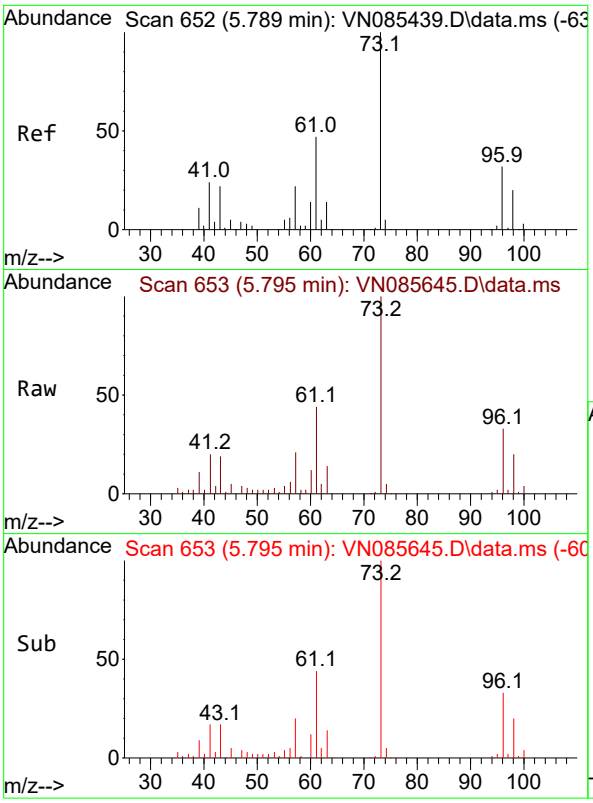



#18
Methyl Acetate
Concen: 45.225 ug/l
RT: 5.018 min Scan# 521
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 43 Resp: 143957

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 27.3 | 18.6 | 28.0 |

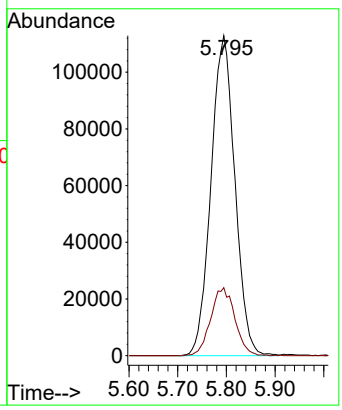





#19
Methyl tert-butyl Ether
Concen: 55.039 ug/l
RT: 5.795 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 73 Resp: 38495

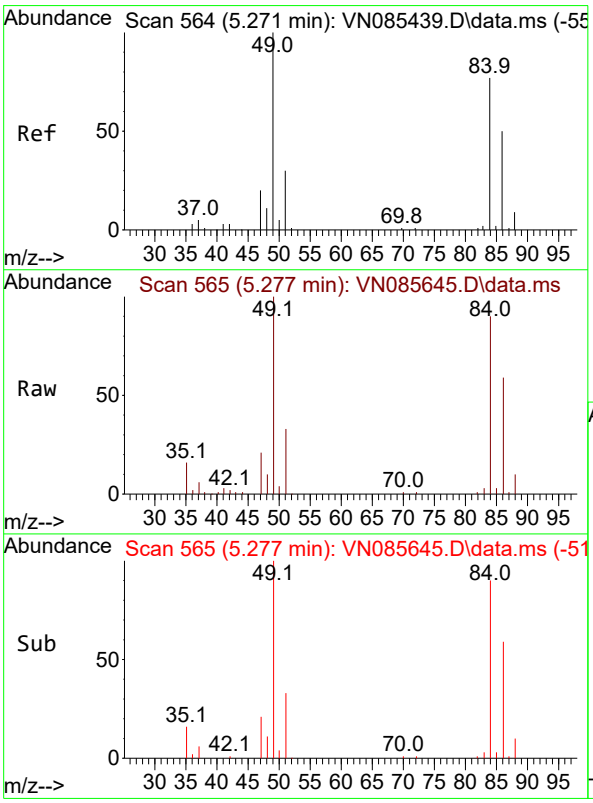
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 21.2 | 17.8 | 26.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

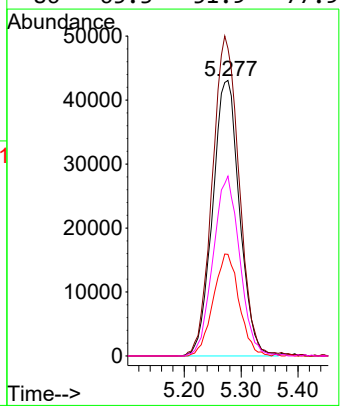
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

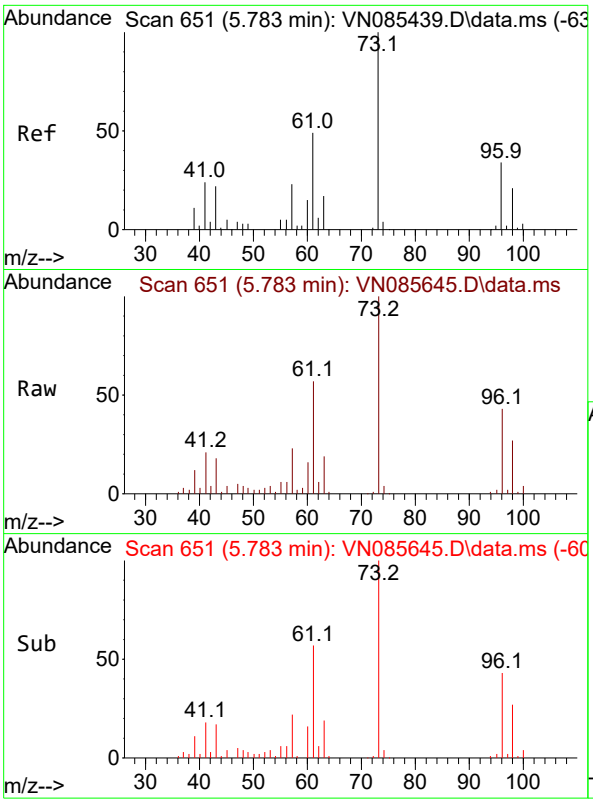



#20
Methylene Chloride
Concen: 54.697 ug/l
RT: 5.277 min Scan# 565
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 84 Resp: 141744

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 111.6 | 104.1 | 156.1 |
| 51 | 36.9 | 31.0 | 46.4 |
| 86 | 65.3 | 51.9 | 77.9 |






#21
trans-1,2-Dichloroethene
Concen: 57.502 ug/l
RT: 5.783 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

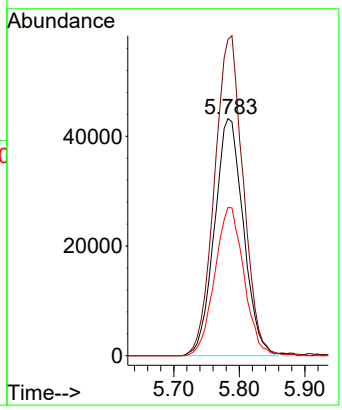
Tgt Ion: 96 Resp: 13237

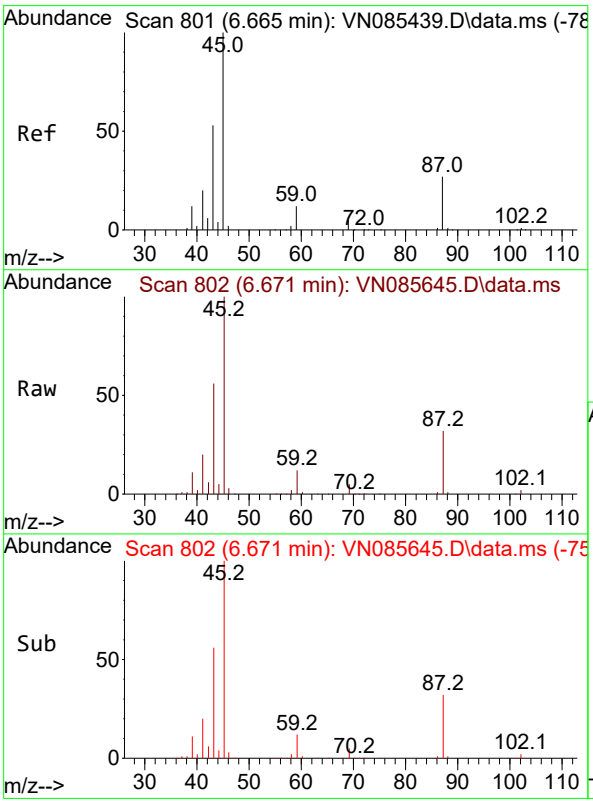
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 133.3 | 115.7 | 173.5 |
| 98 | 62.5 | 49.8 | 74.8 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

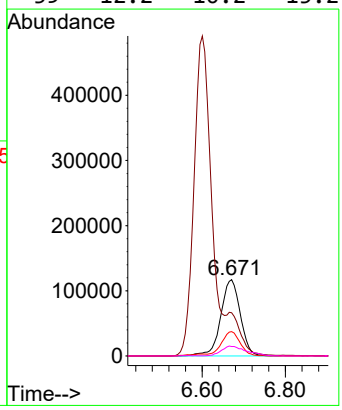


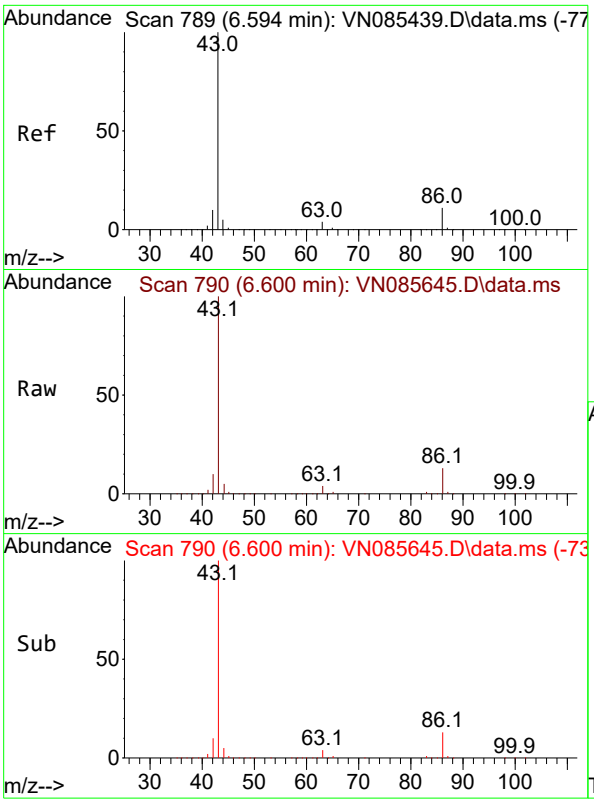




#22
Diisopropyl ether
Concen: 49.208 ug/l
RT: 6.671 min Scan# 802
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 45 Resp: 381754

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 55.5 | 45.0 | 67.6 |
| 87 | 31.9 | 21.8 | 32.8 |
| 59 | 12.2 | 10.2 | 15.2 |

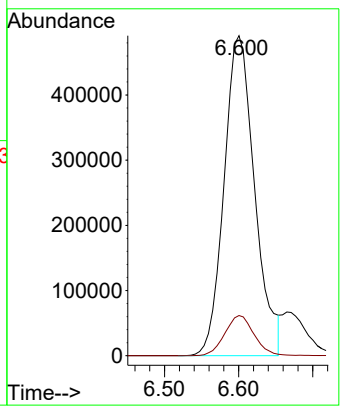





#23
Vinyl Acetate
Concen: 259.616 ug/l
RT: 6.600 min Scan# 7
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 43 Resp: 140953

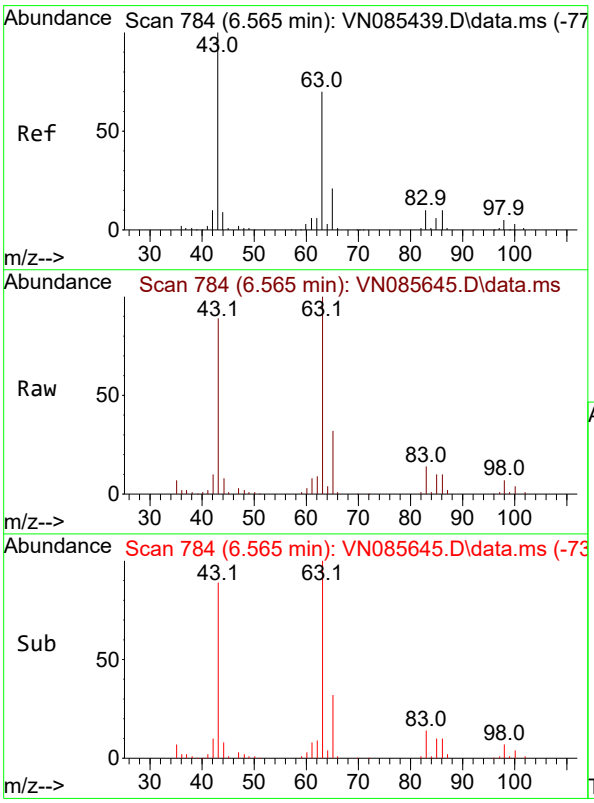
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 12.5 | 8.4 | 12.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

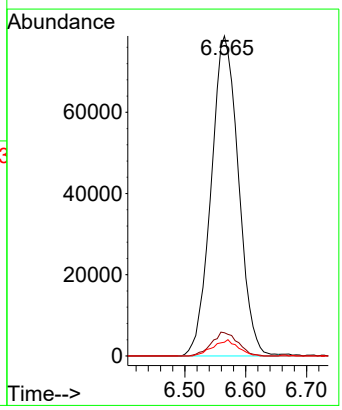
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

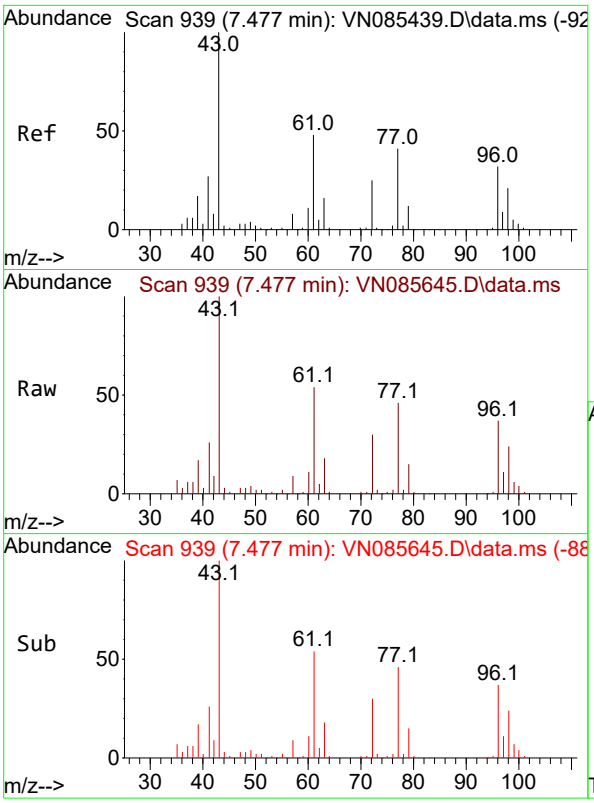



#24
1,1-Dichloroethane
Concen: 51.962 ug/l
RT: 6.565 min Scan# 784
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 63 Resp: 245805

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 7.2 | 3.3 | 9.8 |
| 100 | 4.3 | 2.0 | 6.0 |






#25
2-Butanone
Concen: 241.685 ug/l
RT: 7.477 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

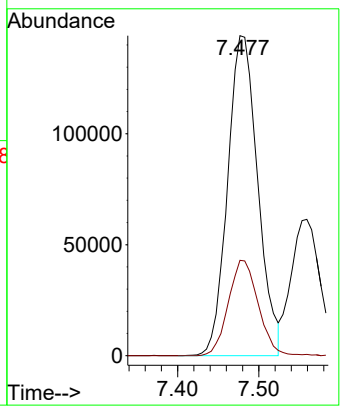
Tgt Ion: 43 Resp: 37230

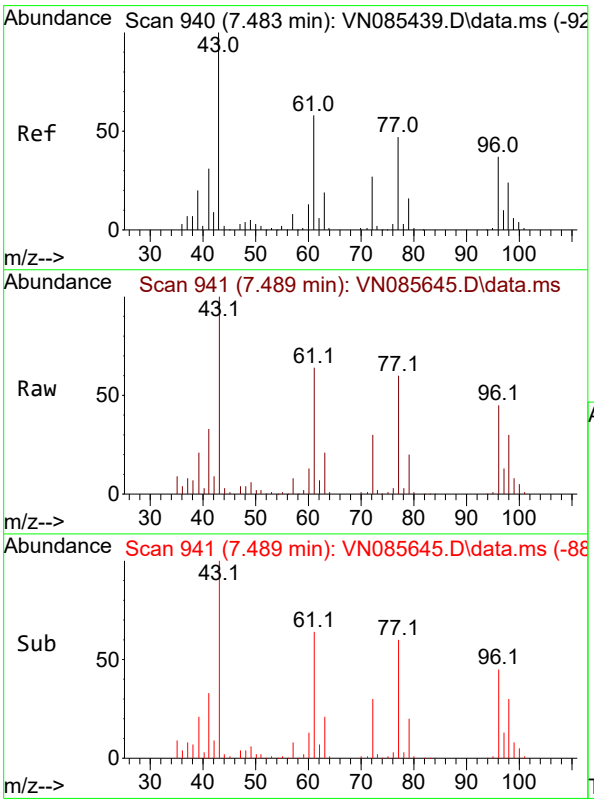
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 29.8 | 20.2 | 30.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

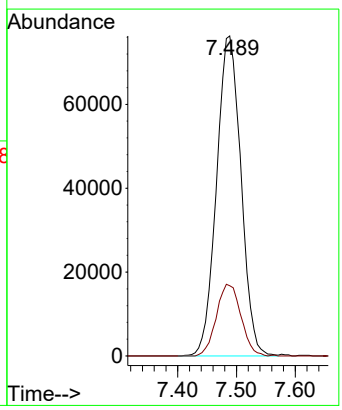


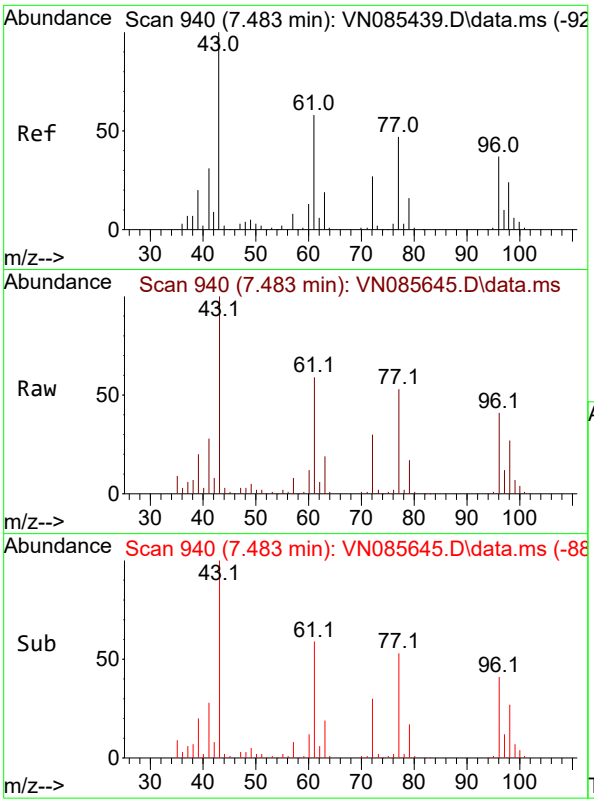




#26
2,2-Dichloropropane
Concen: 57.562 ug/l
RT: 7.489 min Scan# 941
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 77 Resp: 220150

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 22.5 | 10.7 | 32.1 |






#27
cis-1,2-Dichloroethene
Concen: 57.208 ug/l
RT: 7.483 min Scan# 94
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

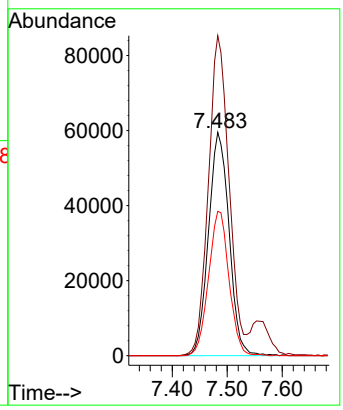
Tgt Ion: 96 Resp: 15511

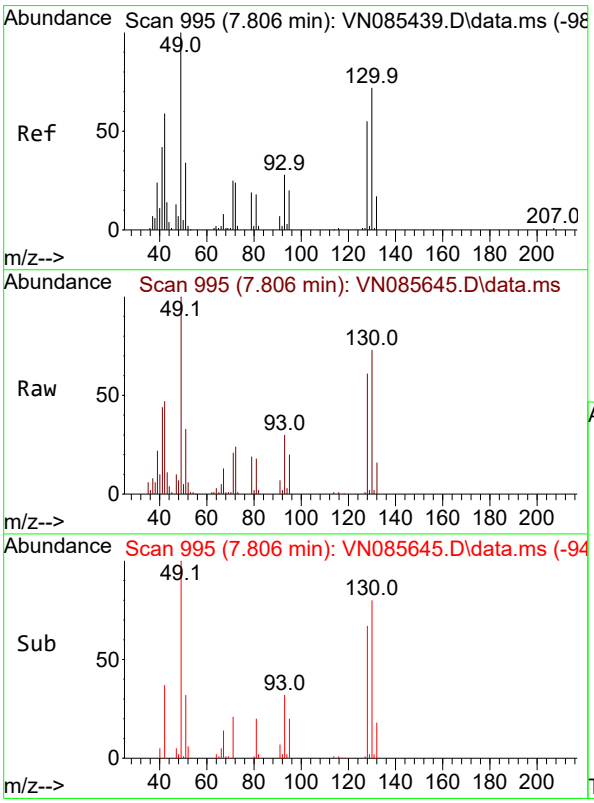
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 143.8 | 0.0 | 311.8 |
| 98 | 64.1 | 0.0 | 126.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

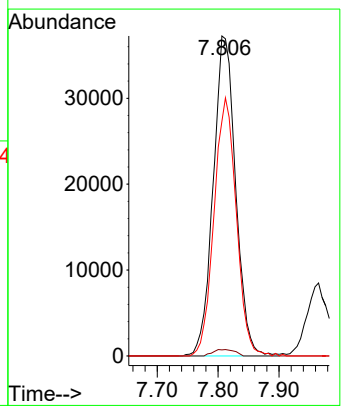


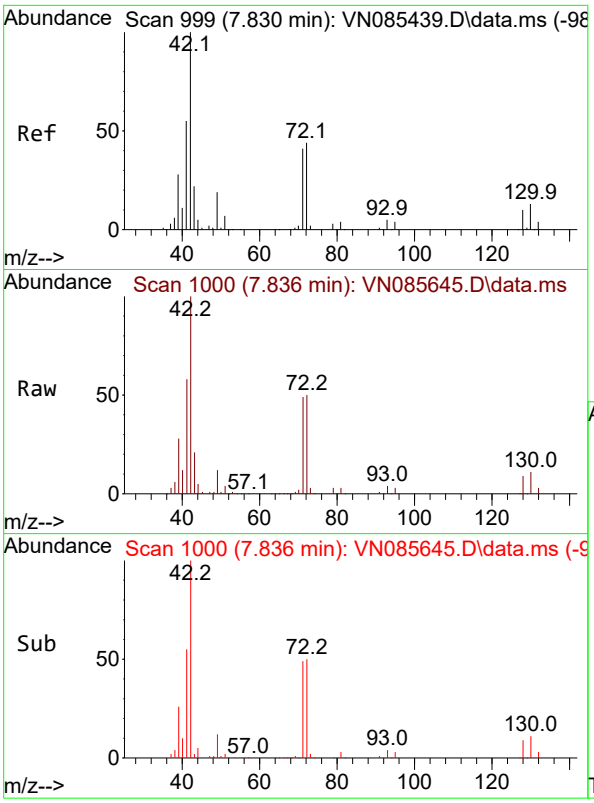




#28
Bromochloromethane
Concen: 43.426 ug/l
RT: 7.806 min Scan# 995
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 49 Resp: 95572

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 2.0 | 0.0 | 4.4 |
| 130 | 79.8 | 55.0 | 82.4 |

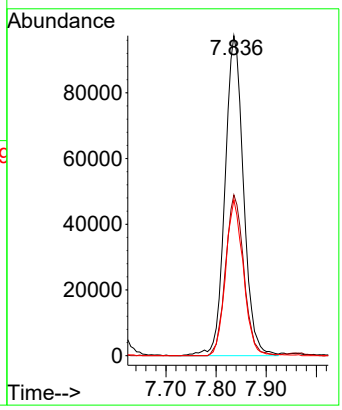





#29
Tetrahydrofuran
Concen: 255.923 ug/l
RT: 7.836 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 42 Resp: 24994

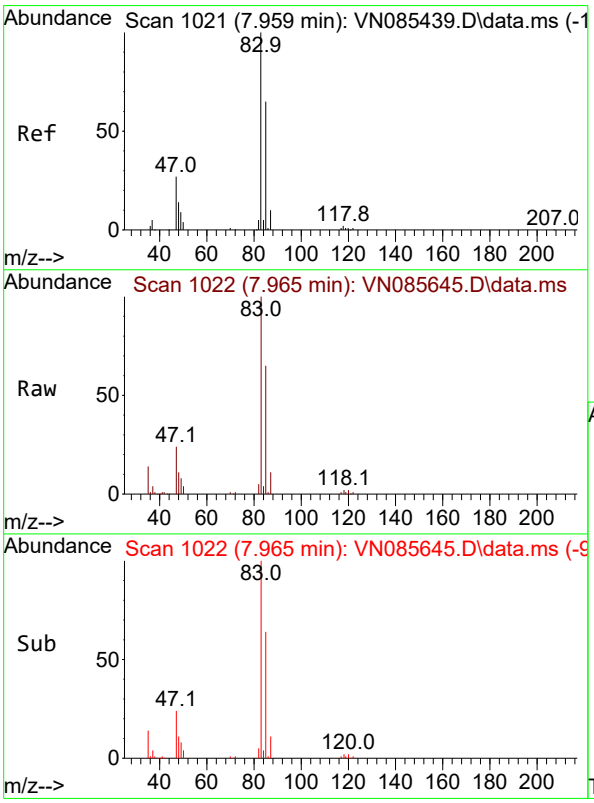
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 49.7 | 34.2 | 51.2 |
| 71 | 46.9 | 32.5 | 48.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

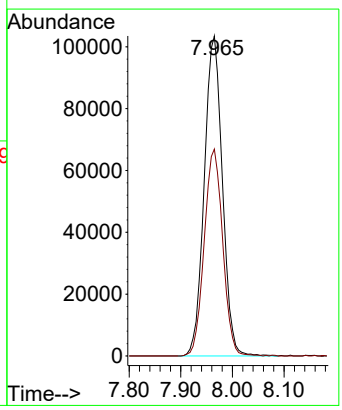
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

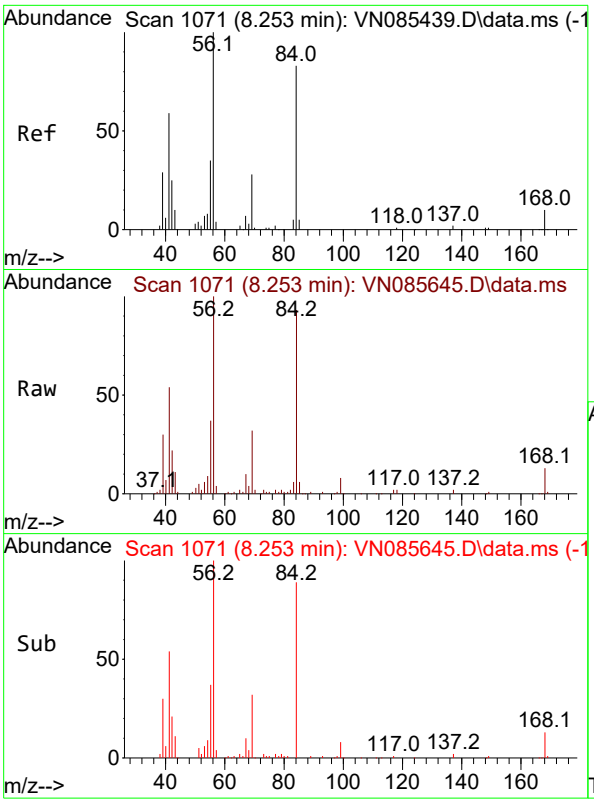



#30
Chloroform
Concen: 51.611 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 83 Resp: 252335

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.7 | 51.8 | 77.6 |

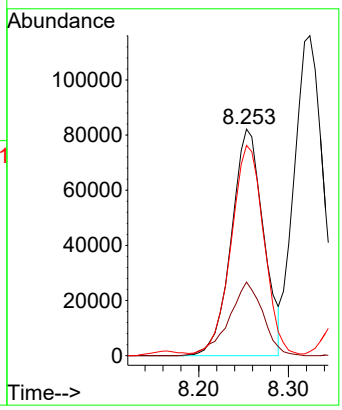





#31
Cyclohexane
Concen: 49.690 ug/l
RT: 8.253 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 56 Resp: 20430

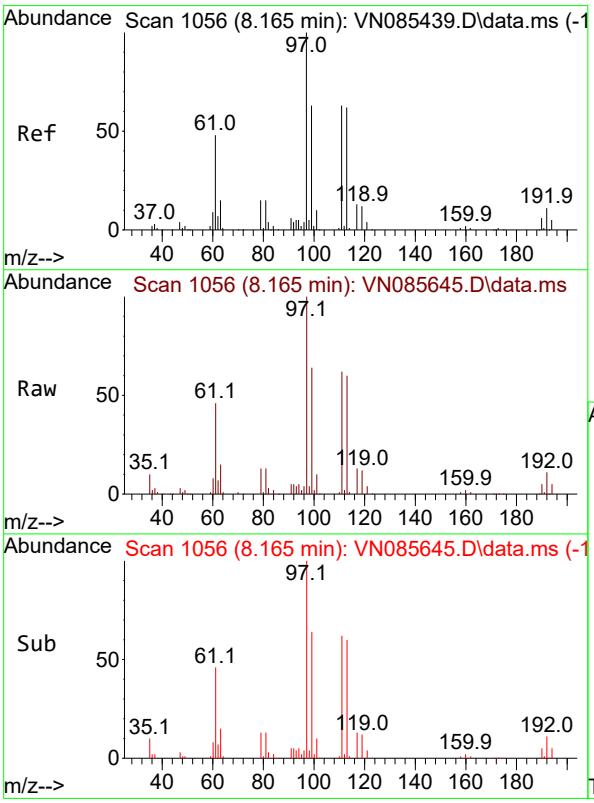
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 32.5 | 22.2 | 33.4 |
| 84 | 91.5 | 66.4 | 99.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

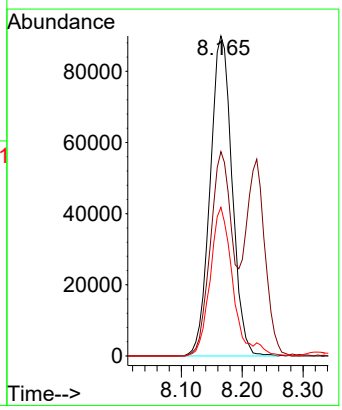
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

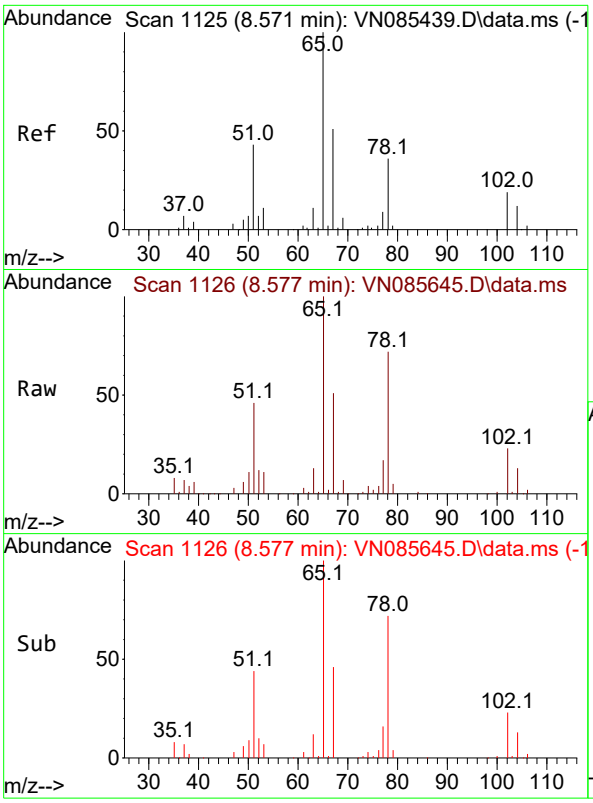



#32
1,1,1-Trichloroethane
Concen: 52.509 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 97 Resp: 225191

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 64.3 | 49.8 | 74.6 |
| 61 | 48.2 | 41.4 | 62.2 |

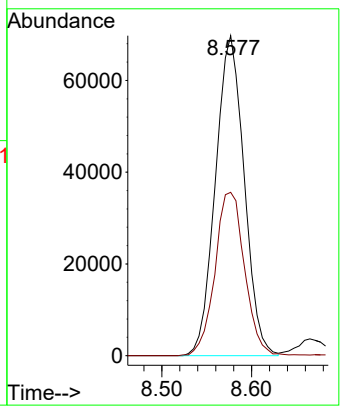





#33
1,2-Dichloroethane-d4
Concen: 47.780 ug/l
RT: 8.577 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 65 Resp: 15479

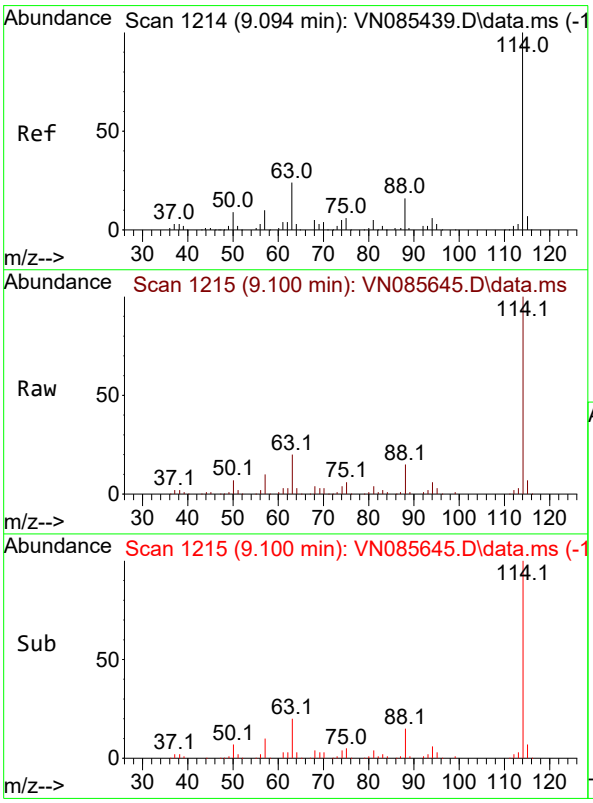
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 52.9 | 0.0 | 101.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

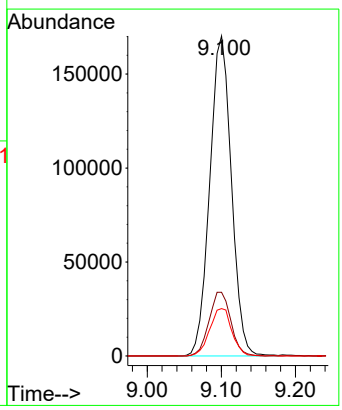
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

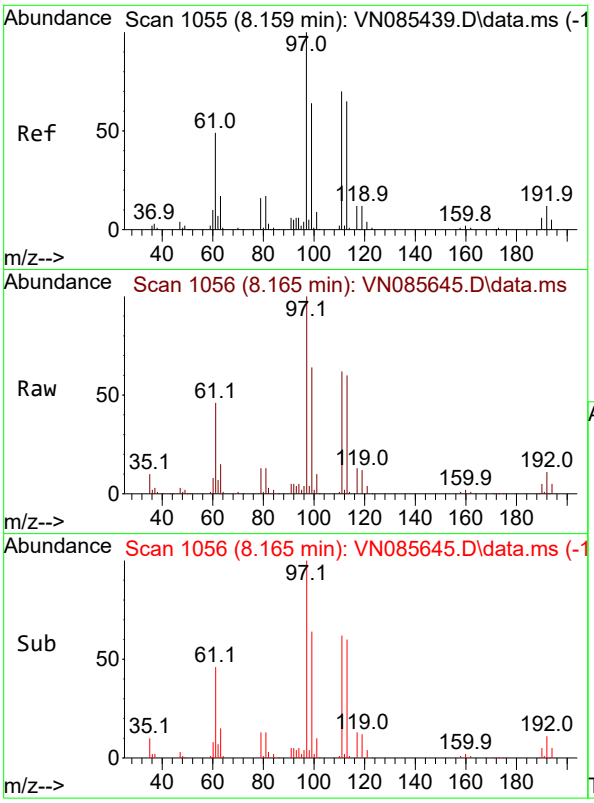



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:114 Resp: 345148

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 19.9 | 0.0 | 47.6 |
| 88 | 14.8 | 0.0 | 32.6 |

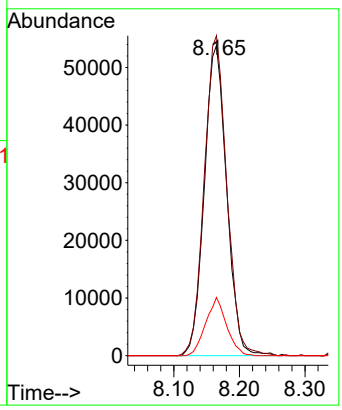





#35
Dibromofluoromethane
Concen: 53.153 ug/l
RT: 8.165 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:113 Resp: 12727

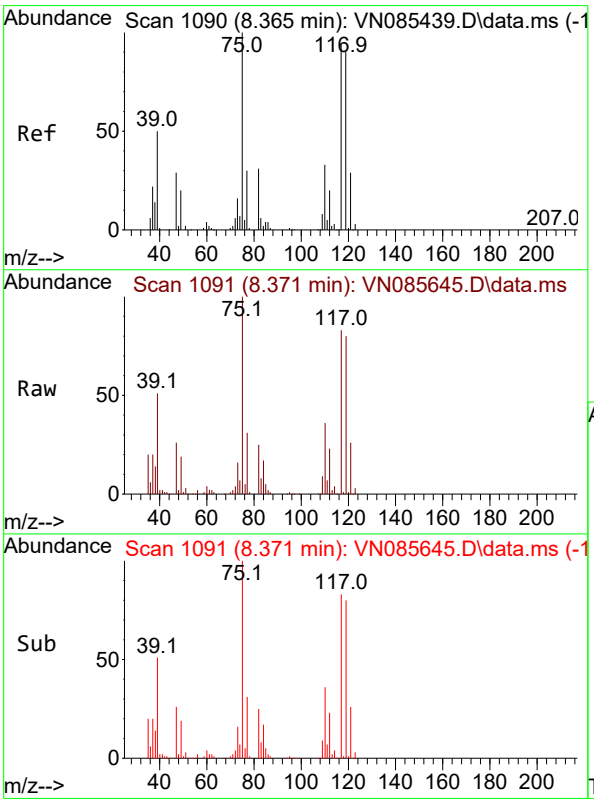
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 104.1 | 82.7 | 124.1 |
| 192 | 17.6 | 14.3 | 21.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

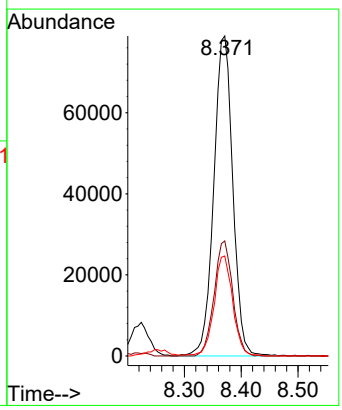
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

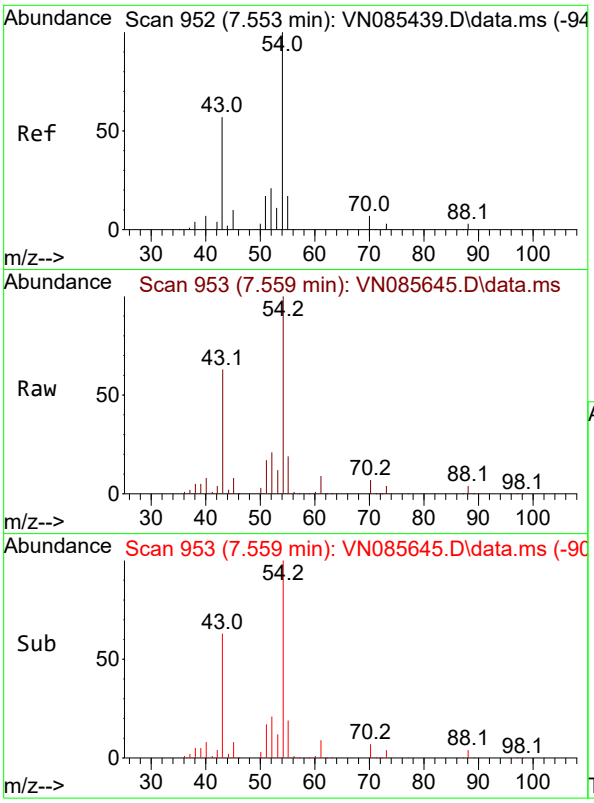



#36
1,1-Dichloropropene
Concen: 54.731 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 75 Resp: 183927

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 35.1 | 16.5 | 49.5 |
| 77 | 30.7 | 24.4 | 36.6 |






#37
Ethyl Acetate
Concen: 46.933 ug/l
RT: 7.559 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

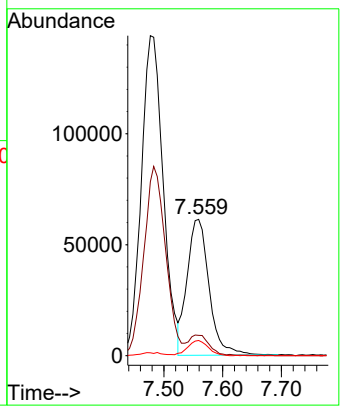
Tgt Ion: 43 Resp: 15919

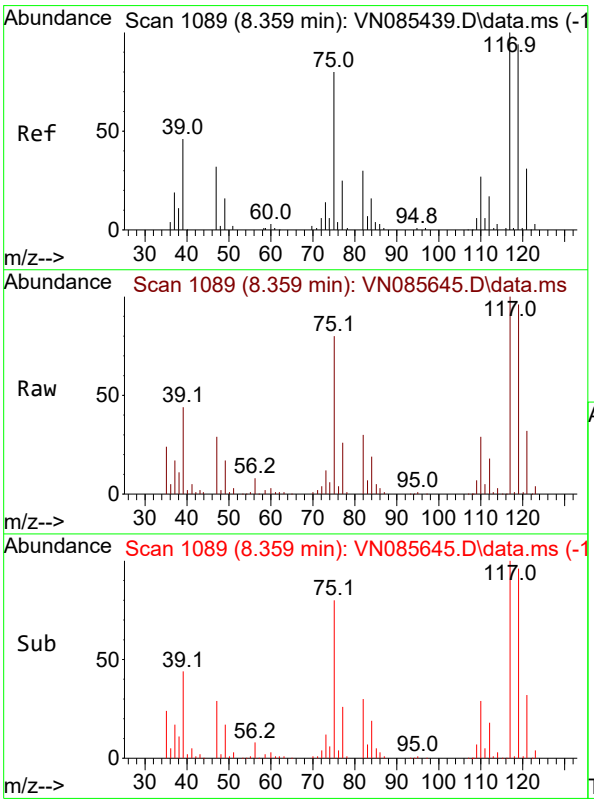
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 14.2 | 10.9 | 16.3 |
| 70 | 10.4 | 7.5 | 11.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

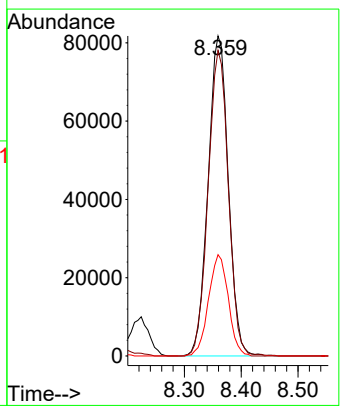


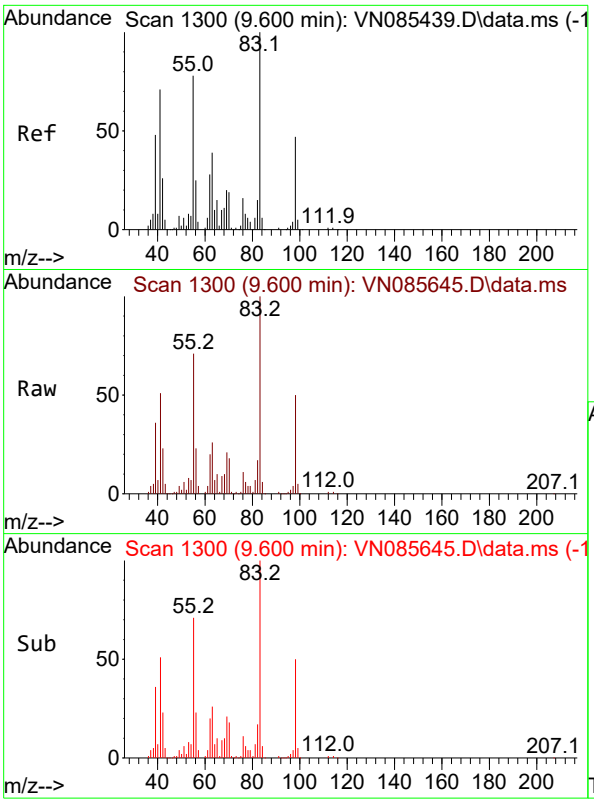




#38
Carbon Tetrachloride
Concen: 52.524 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:117 Resp: 202078

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 95.5 | 75.4 | 113.2 |
| 121 | 31.6 | 24.6 | 37.0 |






#39
Methylcyclohexane
Concen: 62.021 ug/l
RT: 9.600 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

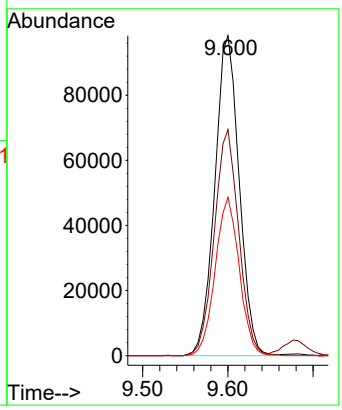
Tgt Ion: 83 Resp: 19585

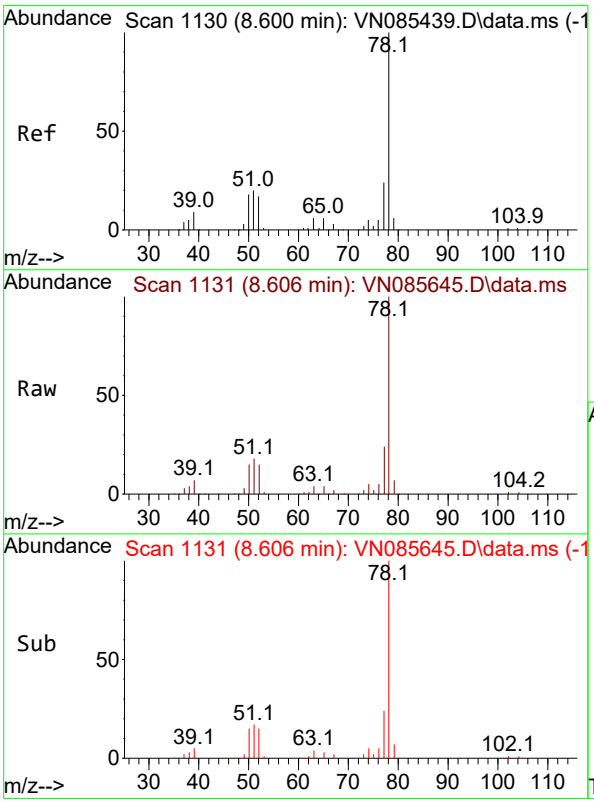
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 70.7 | 62.6 | 94.0 |
| 98 | 49.5 | 37.7 | 56.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

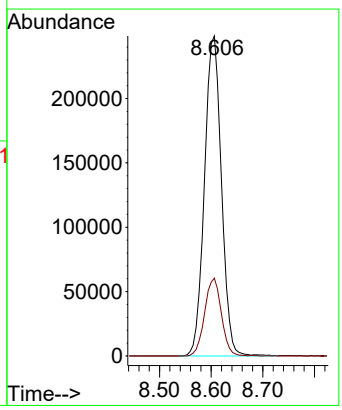


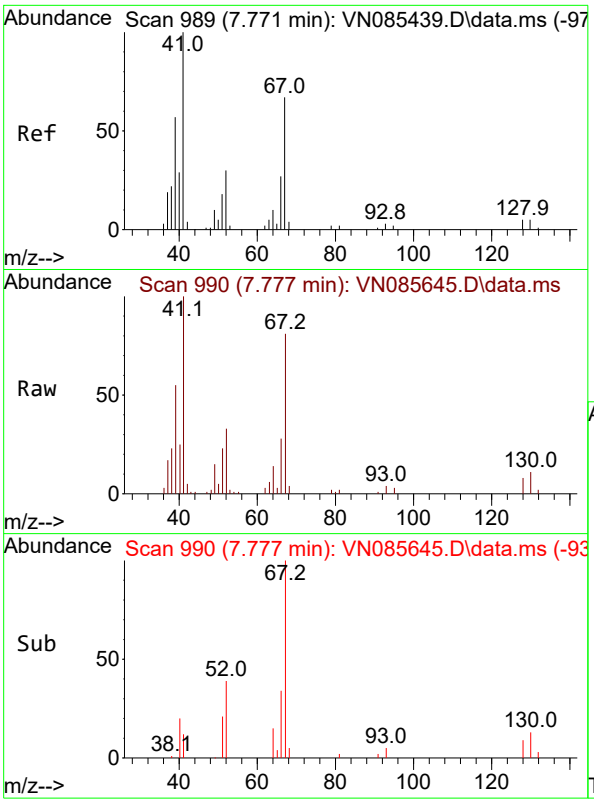




#40
Benzene
Concen: 56.166 ug/l
RT: 8.606 min Scan# 1131
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 78 Resp: 567137

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 24.3 | 19.0 | 28.6 |

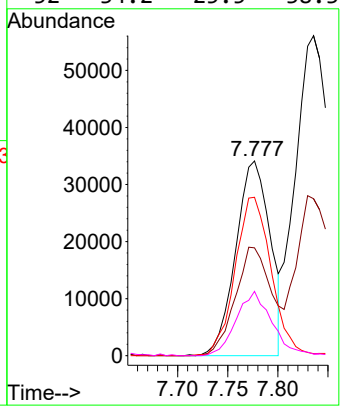





#41
Methacrylonitrile
Concen: 46.204 ug/l
RT: 7.777 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 41 Resp: 8153

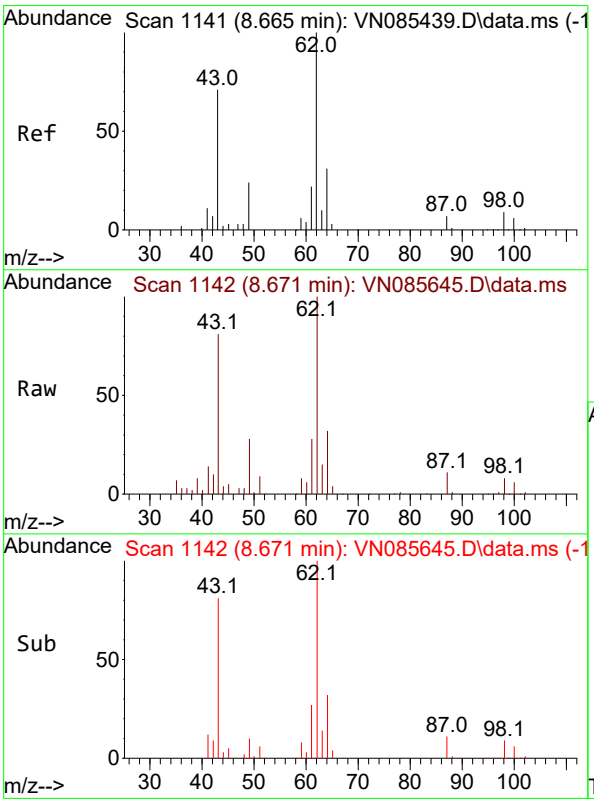
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 60.2 | 46.0 | 69.0 |
| 67 | 85.5 | 57.4 | 86.2 |
| 52 | 34.2 | 25.5 | 38.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

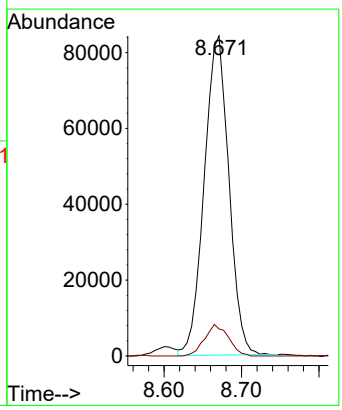
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

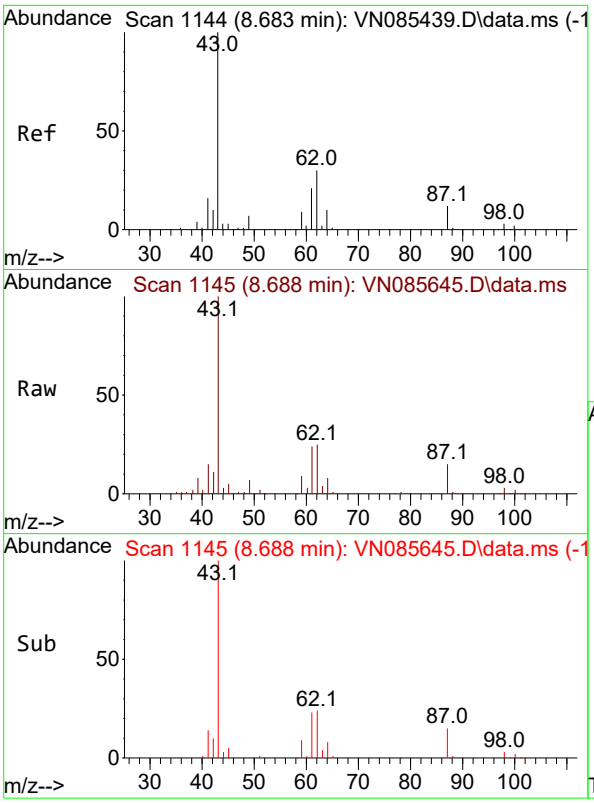



#42
1,2-Dichloroethane
Concen: 48.850 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 62 Resp: 185776

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 9.5 | 0.0 | 17.0 |

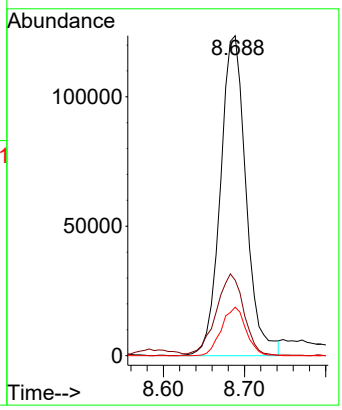





#43
Isopropyl Acetate
Concen: 49.962 ug/l
RT: 8.688 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 43 Resp: 27155

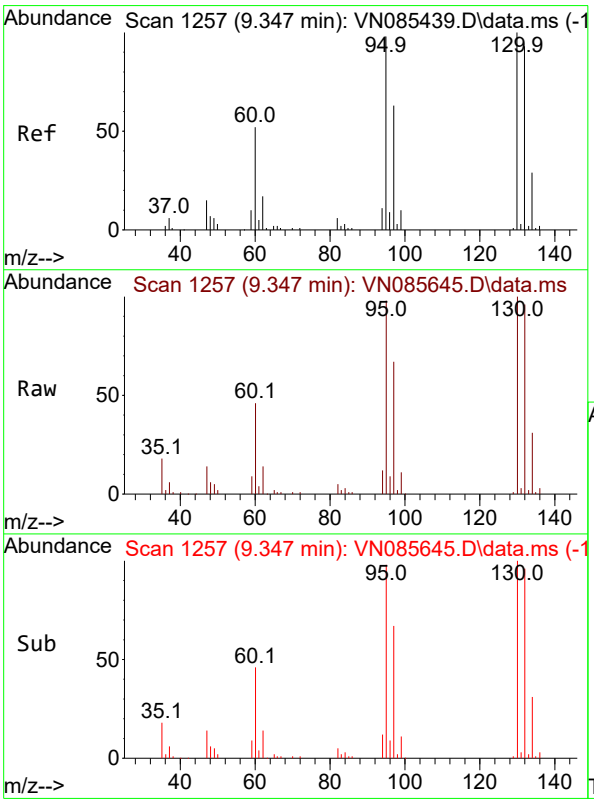
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 27.9 | 20.7 | 31.1 |
| 87 | 14.6 | 9.8 | 14.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

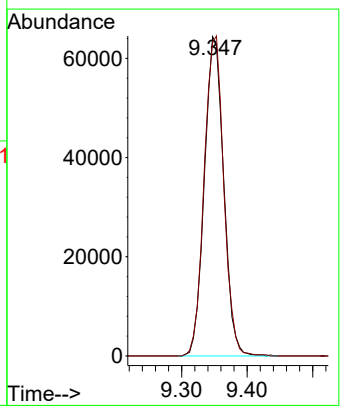
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

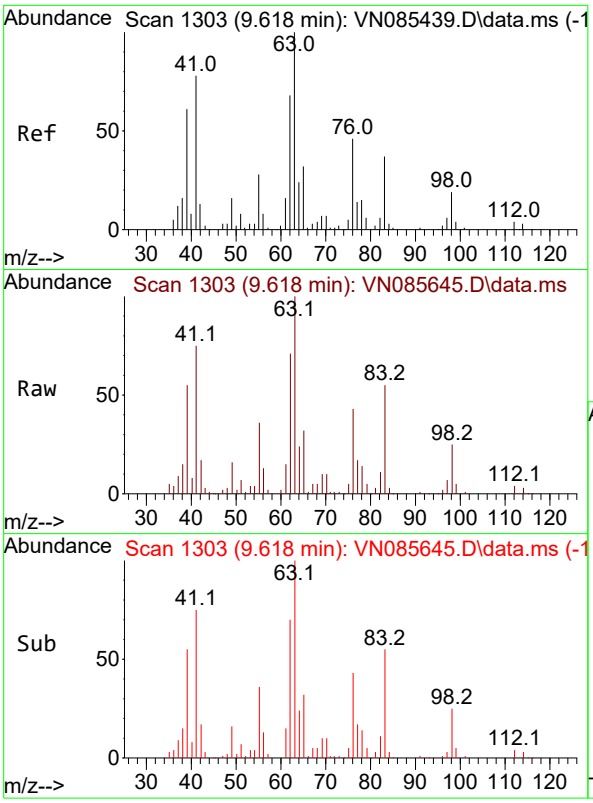



#44
Trichloroethene
Concen: 56.068 ug/l
RT: 9.347 min Scan# 1257
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:130 Resp: 131785

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 98.1 | 0.0 | 195.8 |

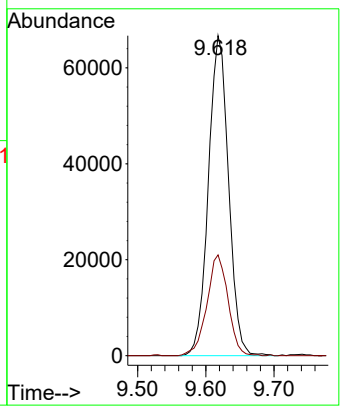





#45
1,2-Dichloropropane
Concen: 53.137 ug/l
RT: 9.618 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 63 Resp: 13705

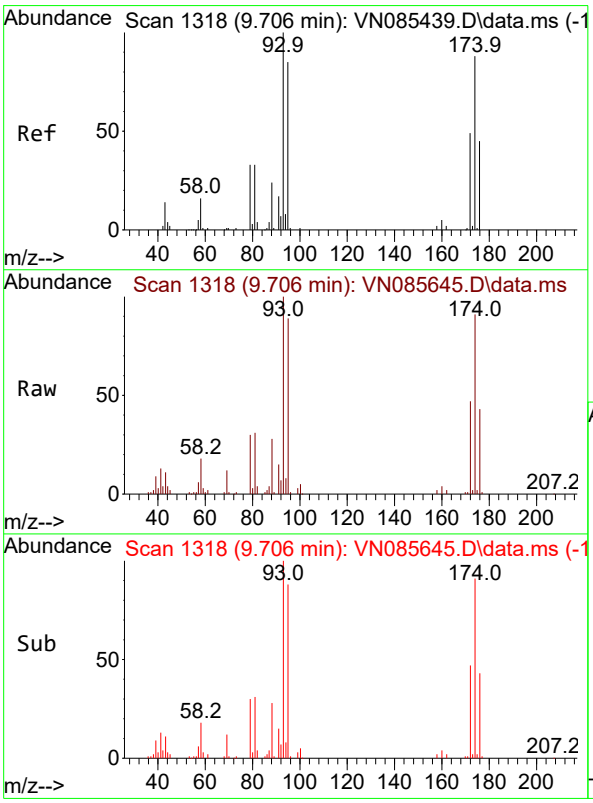
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 31.5 | 25.6 | 38.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

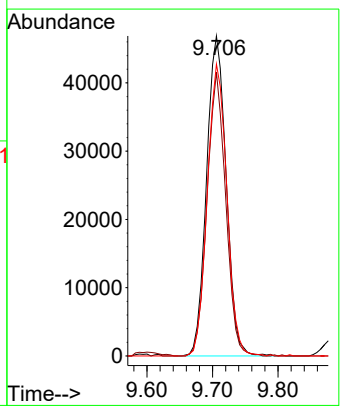
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

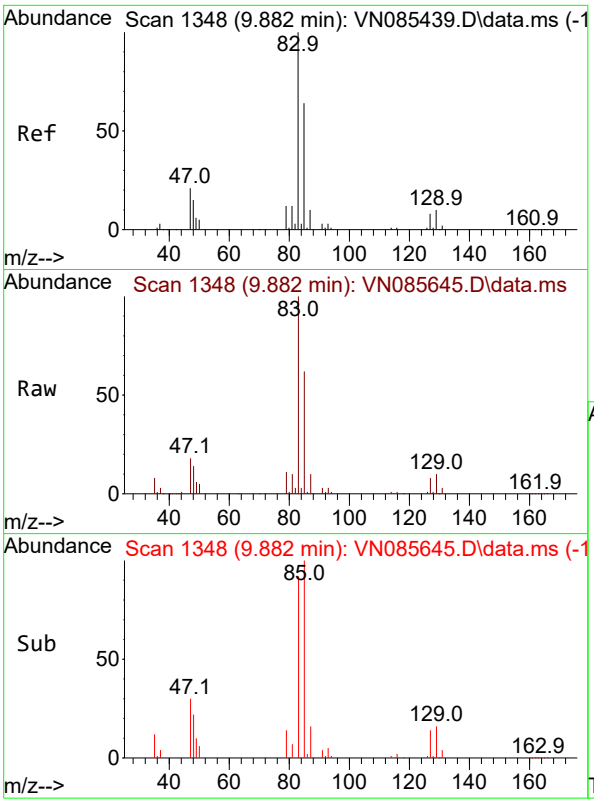



#46
Dibromomethane
Concen: 52.419 ug/l
RT: 9.706 min Scan# 1318
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 93 Resp: 97554

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 84.0 | 64.7 | 97.1 |
| 174 | 90.8 | 69.0 | 103.4 |

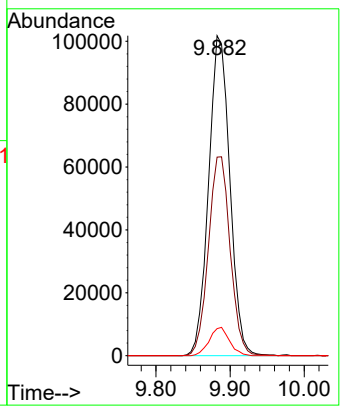





#47
Bromodichloromethane
Concen: 53.411 ug/l
RT: 9.882 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 83 Resp: 20250

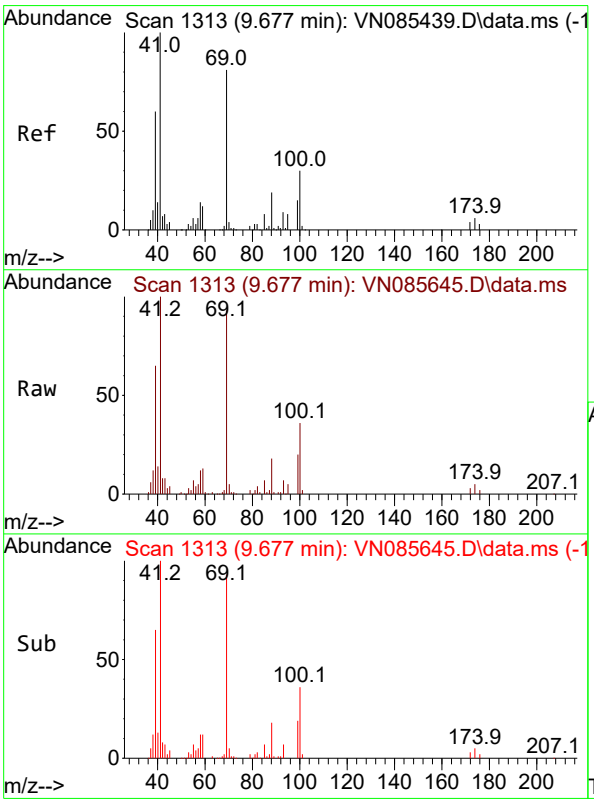
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 62.0 | 51.2 | 76.8 |
| 127 | 8.5 | 6.5 | 9.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

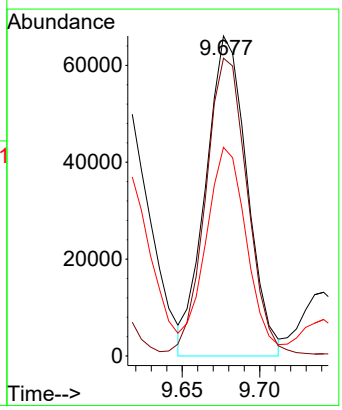
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

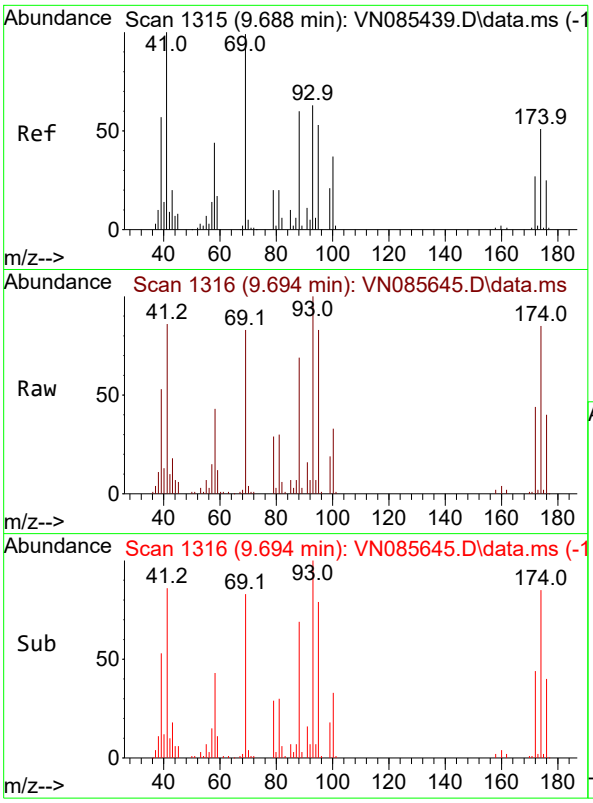



#48
Methyl methacrylate
Concen: 50.045 ug/l
RT: 9.677 min Scan# 1313
Delta R.T. -0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 41 Resp: 122409

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 94.5 | 64.7 | 97.1 |
| 39 | 65.0 | 49.0 | 73.6 |

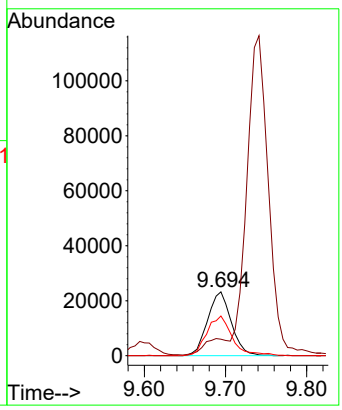





#49
1,4-Dioxane
Concen: 1142.294 ug/l
RT: 9.694 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 88 Resp: 4705

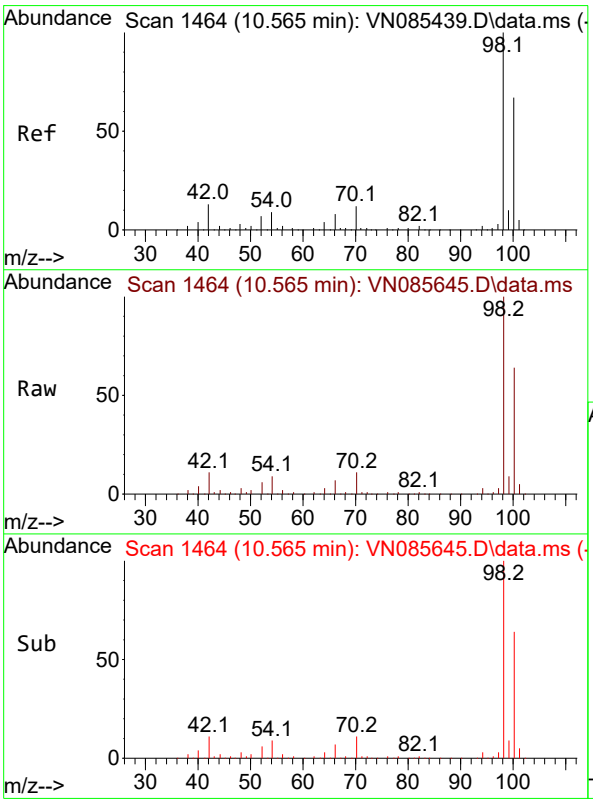
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 24.5 | 26.6 | 39.8 |
| 58 | 66.8 | 59.5 | 89.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

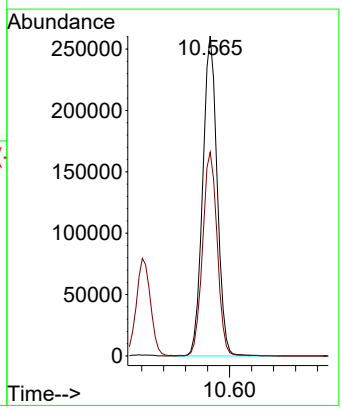
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

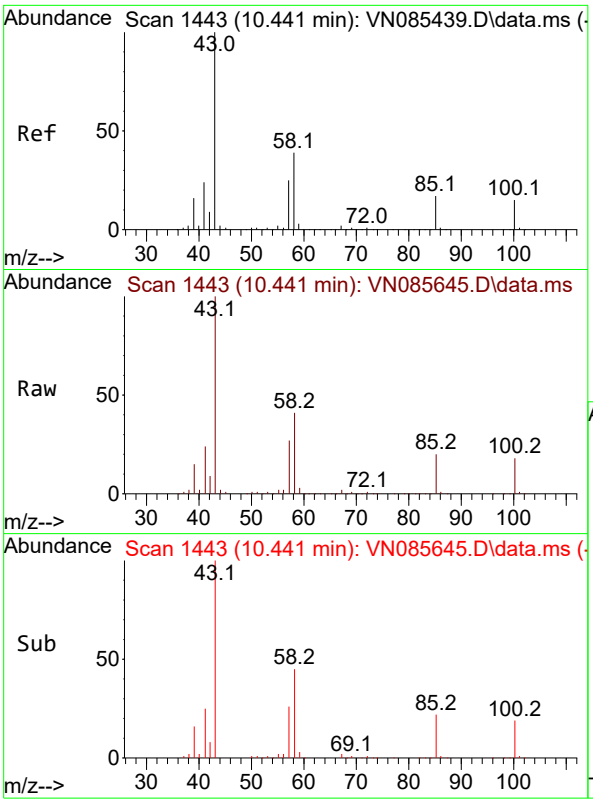



#50
Toluene-d8
Concen: 55.713 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 98 Resp: 473979

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.3 | 52.2 | 78.4 |






#51
4-Methyl-2-Pentanone
Concen: 253.917 ug/l
RT: 10.441 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

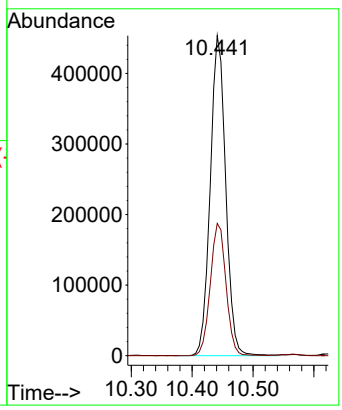
Tgt Ion: 43 Resp: 80085

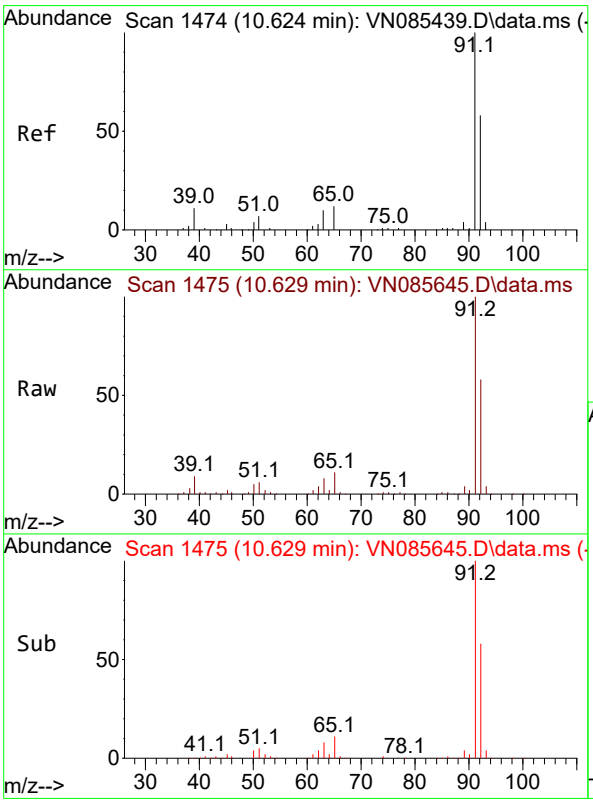
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 41.9 | 30.5 | 45.7 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

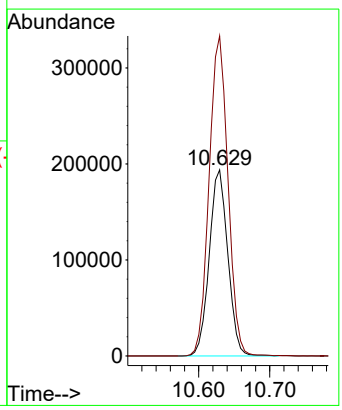


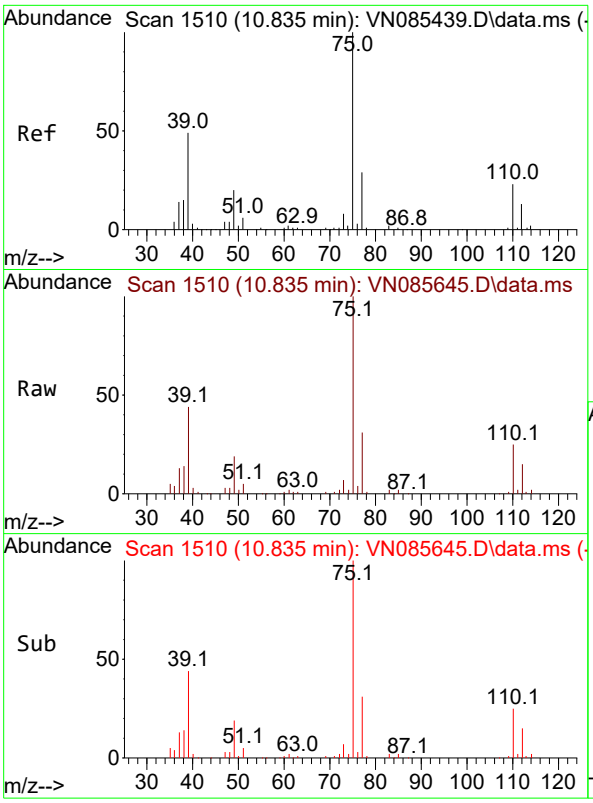




#52
Toluene
Concen: 60.150 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. 0.005 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 92 Resp: 351922

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 174.5 | 139.2 | 208.8 |

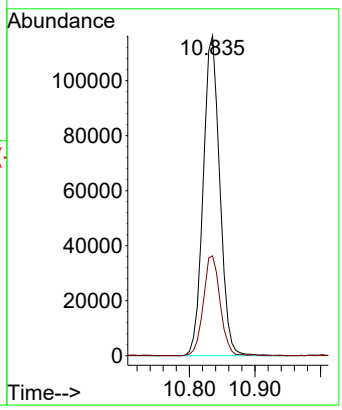





#53
t-1,3-Dichloropropene
Concen: 57.048 ug/l
RT: 10.835 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 75 Resp: 20440

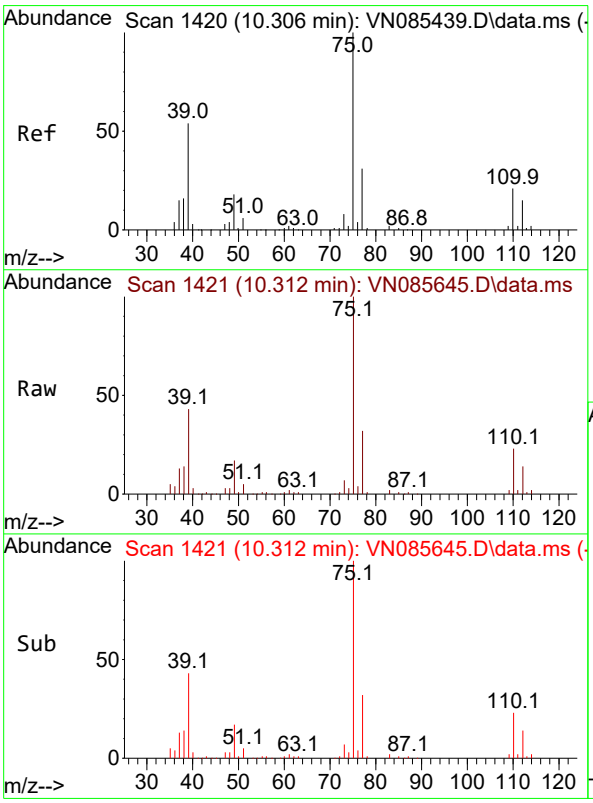
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.2 | 23.5 | 35.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

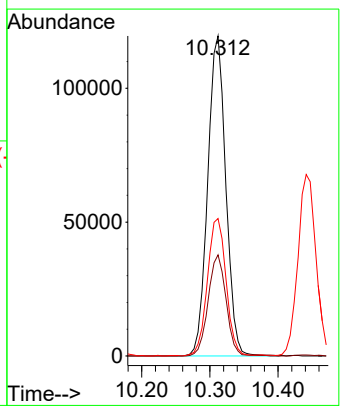
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

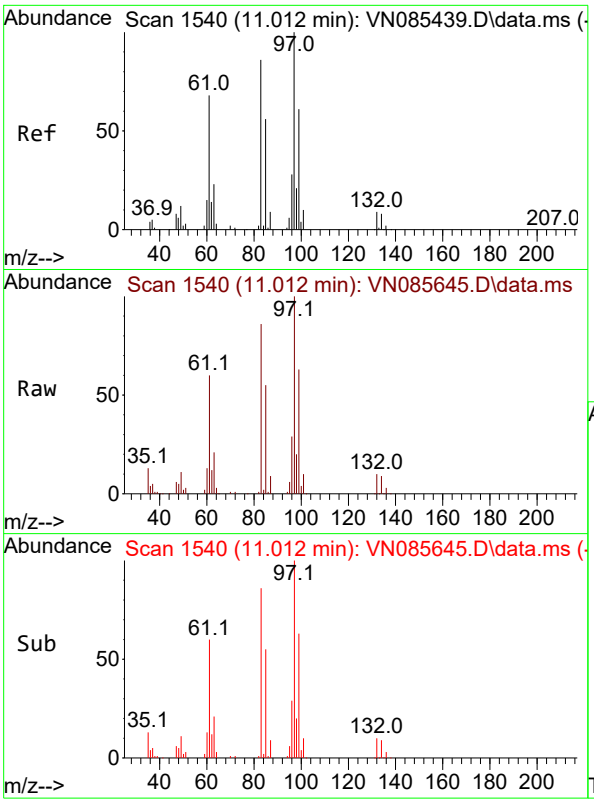



#54
cis-1,3-Dichloropropene
Concen: 57.810 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 75 Resp: 221256

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.6 | 25.0 | 37.4 |
| 39 | 42.8 | 43.1 | 64.7# |

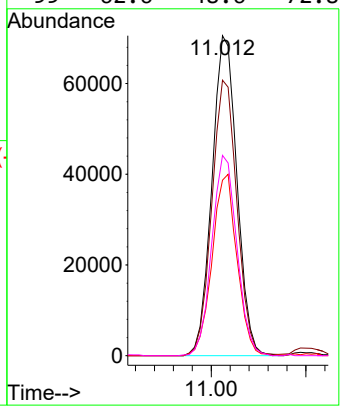





#55
1,1,2-Trichloroethane
Concen: 55.842 ug/l
RT: 11.012 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 97 Resp: 12929

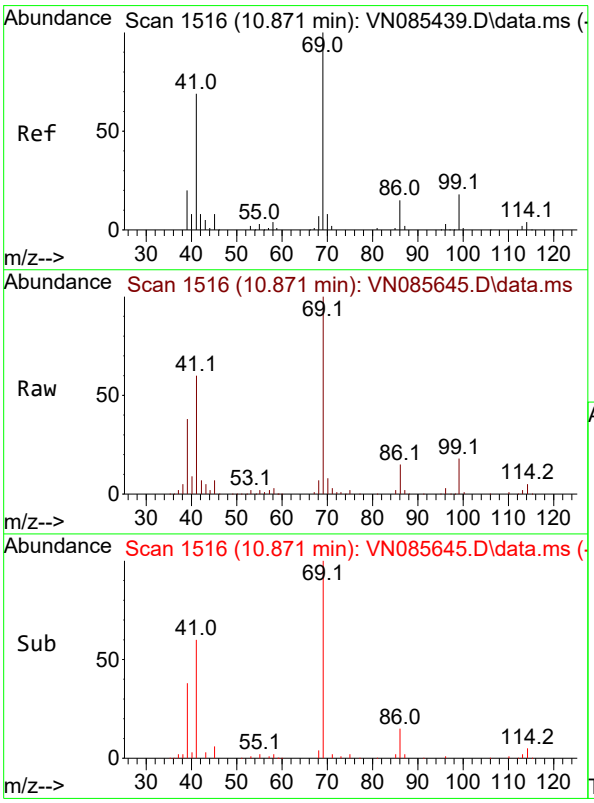
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 86.1 | 69.0 | 103.6 |
| 85 | 54.9 | 44.6 | 66.8 |
| 99 | 62.6 | 48.6 | 72.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

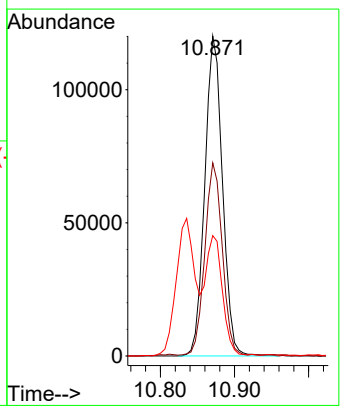
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

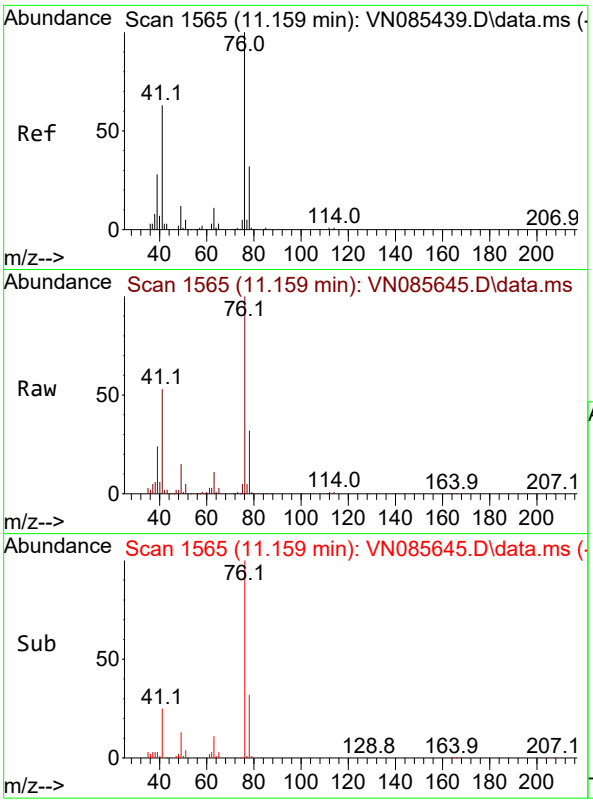



#56
Ethyl methacrylate
Concen: 50.997 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 69 Resp: 199066

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 59.3 | 54.6 | 82.0 |
| 39 | 35.8 | 32.4 | 48.6 |

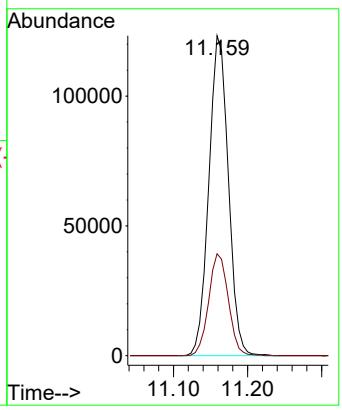





#57
1,3-Dichloropropane
Concen: 56.030 ug/l
RT: 11.159 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 76 Resp: 22557

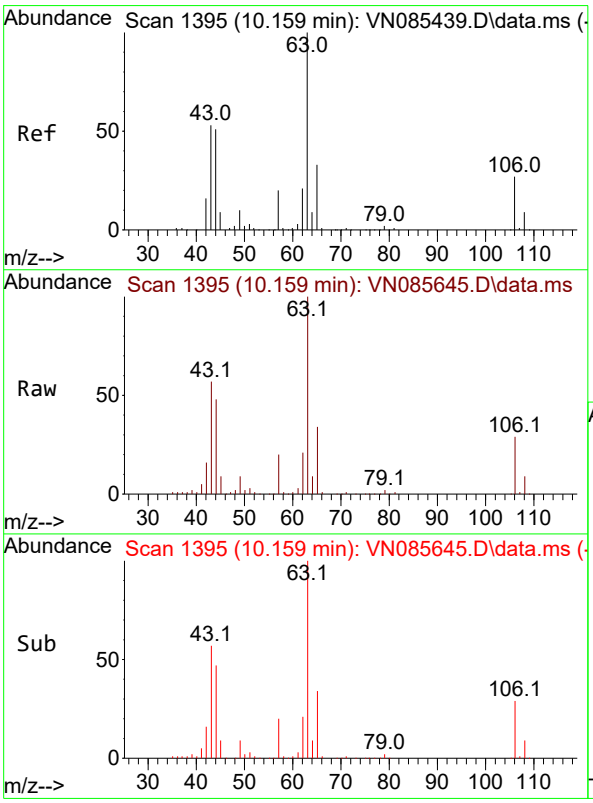
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.0 | 25.6 | 38.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

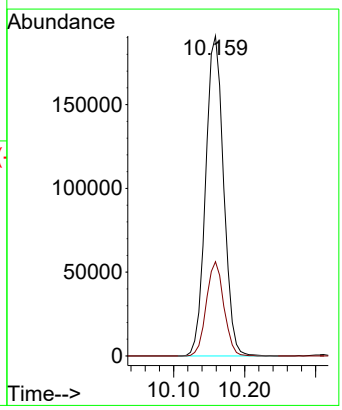
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

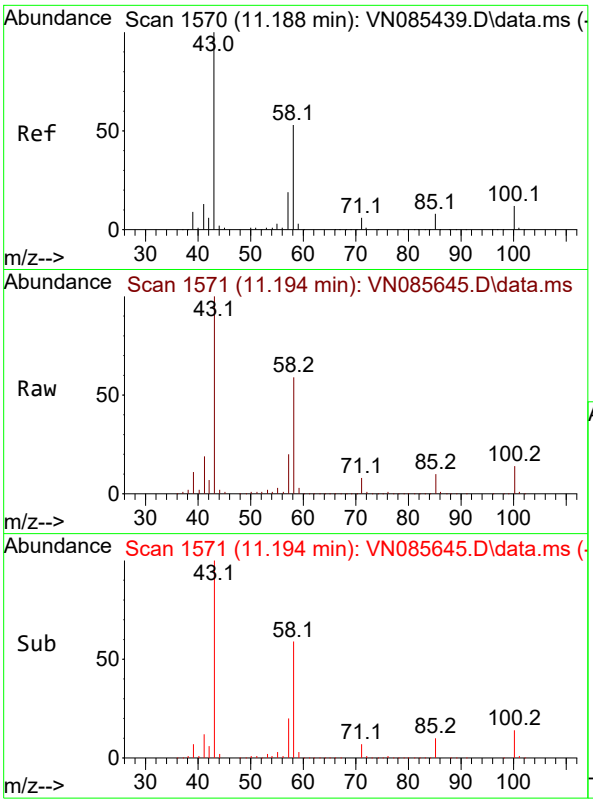



#58
2-Chloroethyl Vinyl ether
Concen: 228.313 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 63 Resp: 335470

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 28.7 | 21.6 | 32.4 |

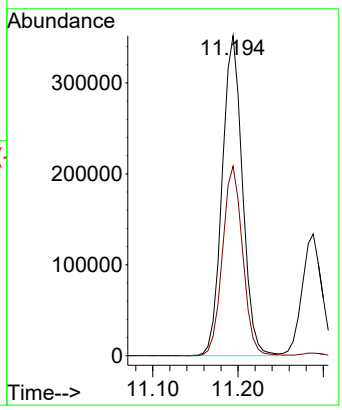





#59
2-Hexanone
Concen: 261.399 ug/l
RT: 11.194 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 43 Resp: 58010

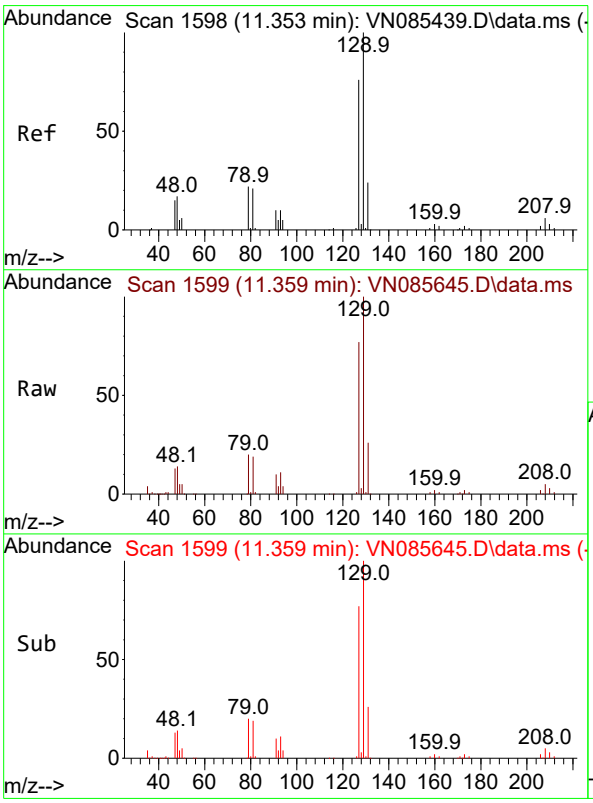
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 58.9 | 26.2 | 78.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

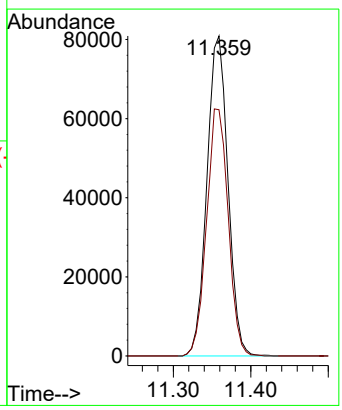
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

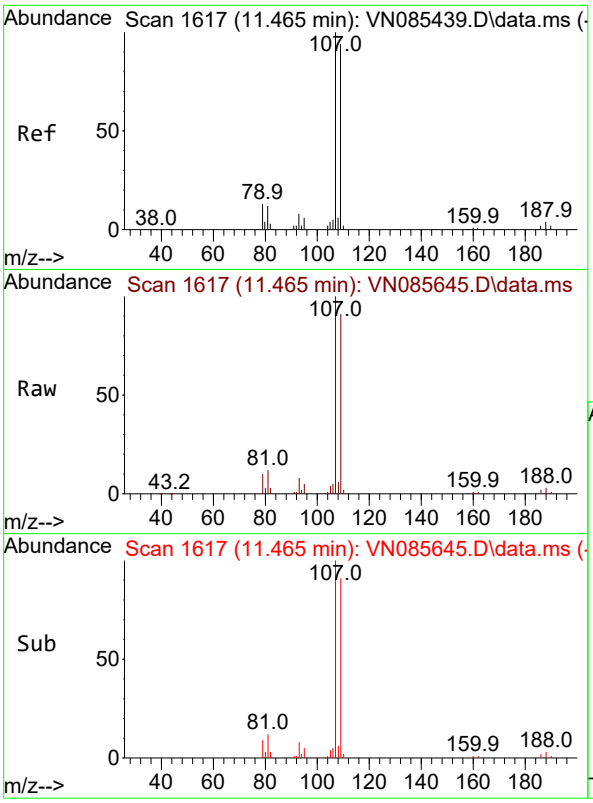



#60
Dibromochloromethane
Concen: 54.508 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:129 Resp: 152370

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 79.3 | 38.6 | 115.8 |

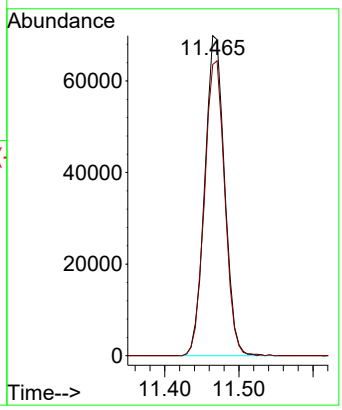





#61
1,2-Dibromoethane
Concen: 56.226 ug/l
RT: 11.465 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:107 Resp: 12958

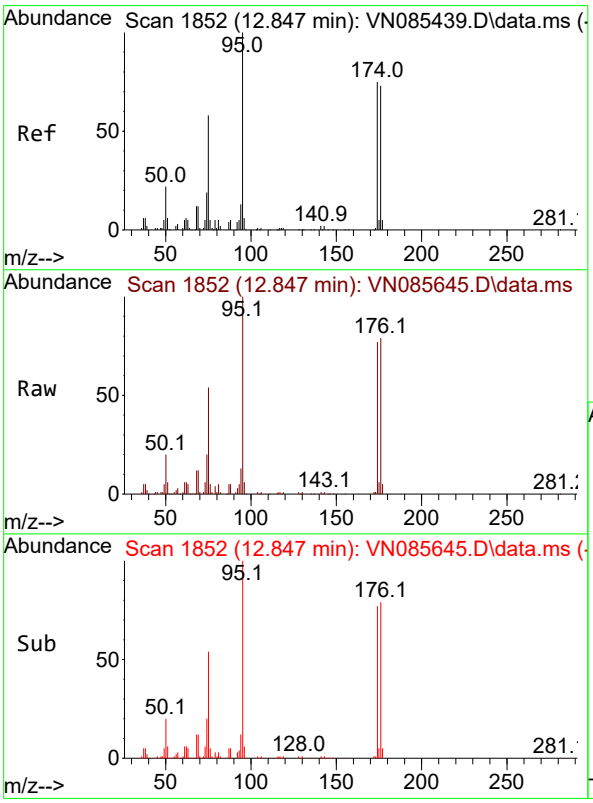
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 94.2 | 75.9 | 113.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

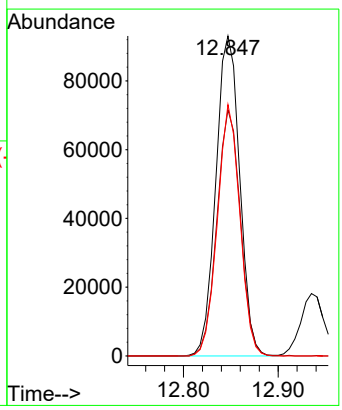
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

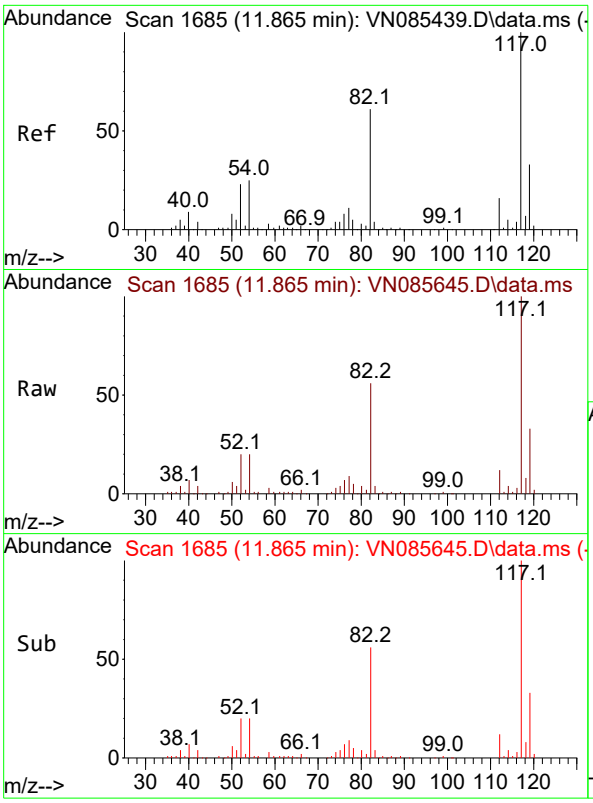



#62
4-Bromofluorobenzene
Concen: 56.013 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 95 Resp: 163009

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 75.9 | 0.0 | 145.0 |
| 176 | 73.9 | 0.0 | 142.4 |

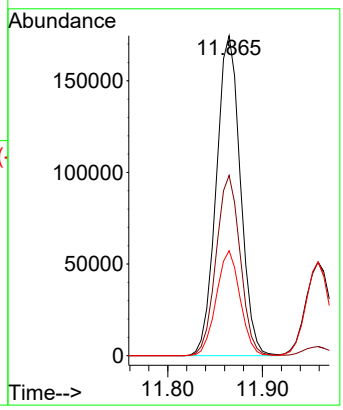





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:117 Resp: 30905

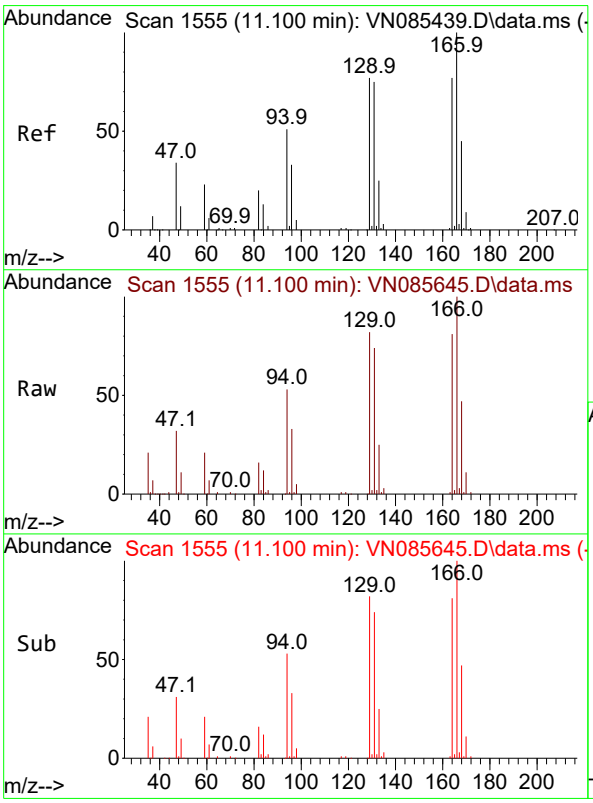
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 56.3 | 48.6 | 72.8 |
| 119 | 32.8 | 26.6 | 39.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

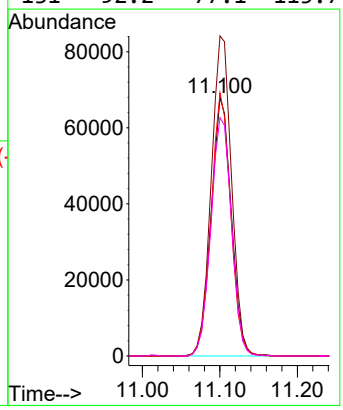
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

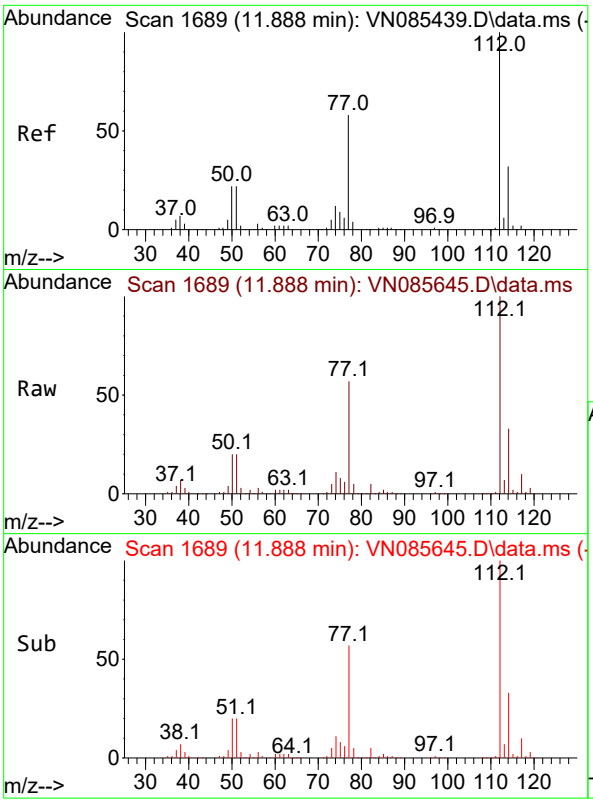



#64
Tetrachloroethene
Concen: 58.273 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:164 Resp: 122776

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 123.9 | 103.4 | 155.2 |
| 129 | 101.8 | 79.2 | 118.8 |
| 131 | 92.2 | 77.1 | 115.7 |

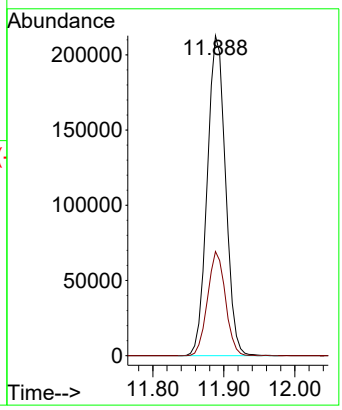





#65
Chlorobenzene
Concen: 56.165 ug/l
RT: 11.888 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:112 Resp: 38025

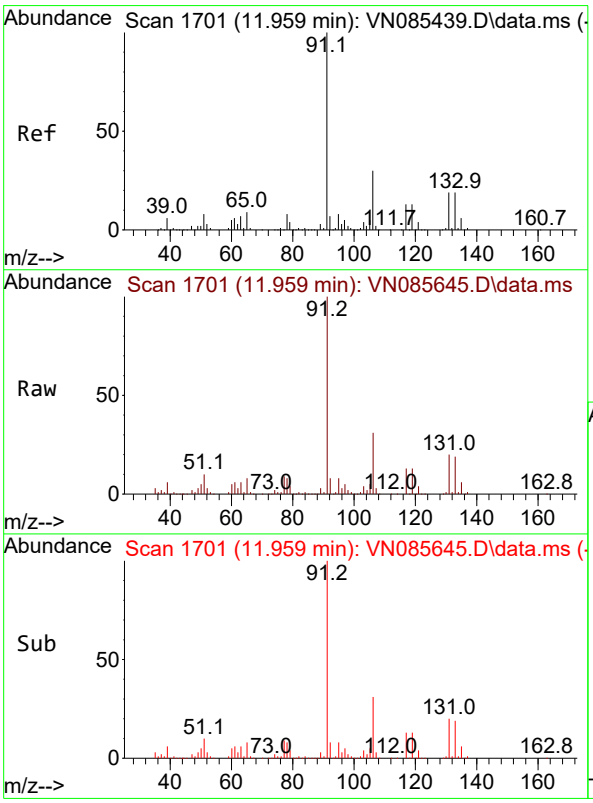
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 32.6 | 25.3 | 37.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

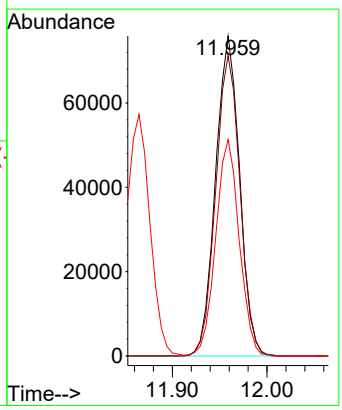
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

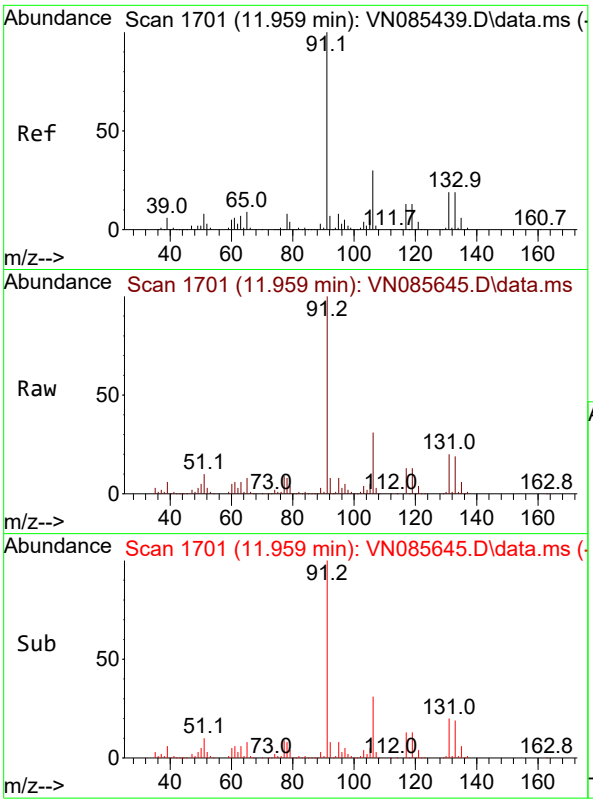



#66
1,1,1,2-Tetrachloroethane
Concen: 53.847 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:131 Resp: 133801

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 95.1 | 47.4 | 142.3 |
| 119 | 66.4 | 33.1 | 99.5 |

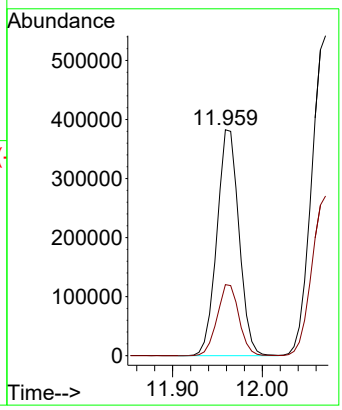





#67
Ethyl Benzene
Concen: 59.349 ug/l
RT: 11.959 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 91 Resp: 6544

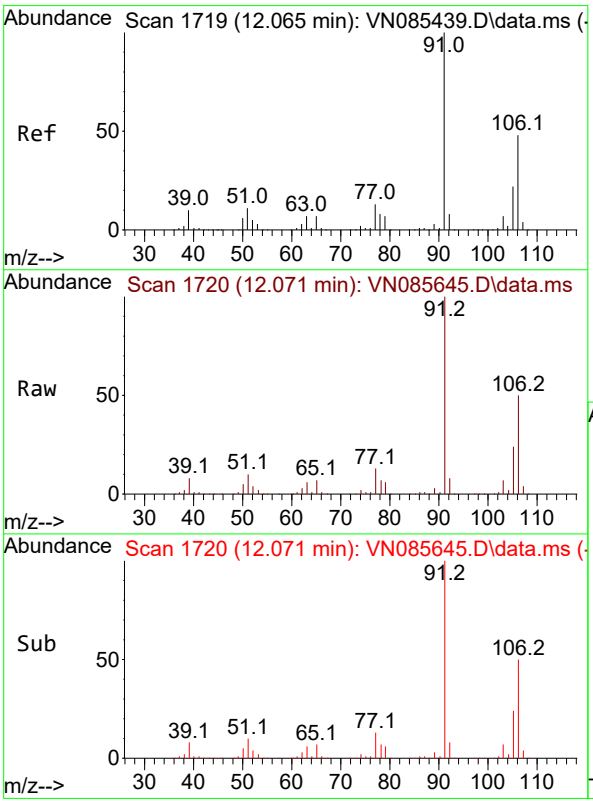
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 31.5 | 23.8 | 35.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

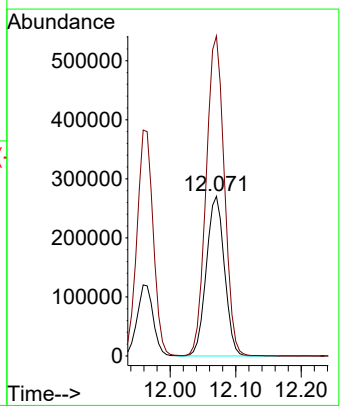
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

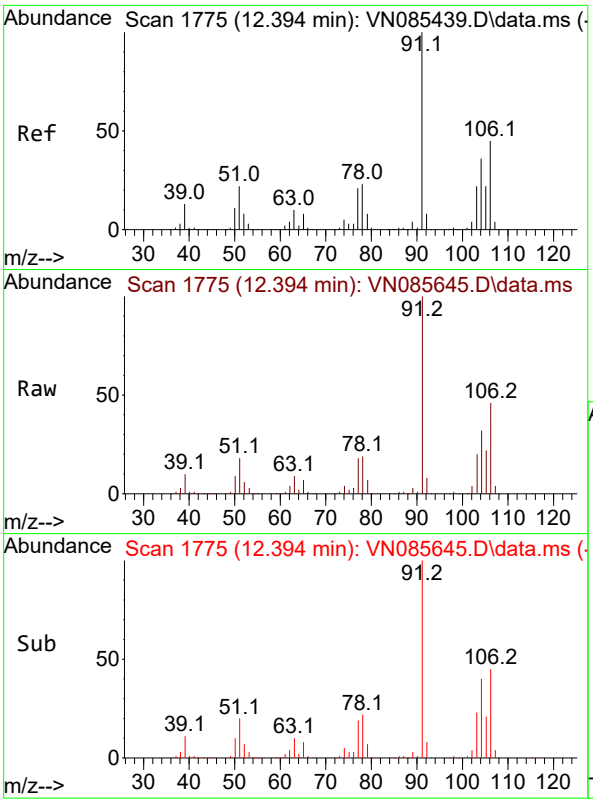



#68
m/p-Xylenes
Concen: 127.234 ug/l
RT: 12.071 min Scan# 1720
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:106 Resp: 518534

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 201.3 | 167.7 | 251.5 |

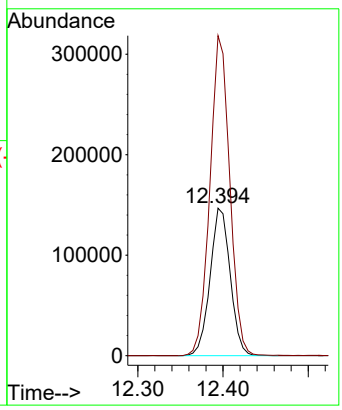





#69
o-Xylene
Concen: 61.940 ug/l
RT: 12.394 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:106 Resp: 24124

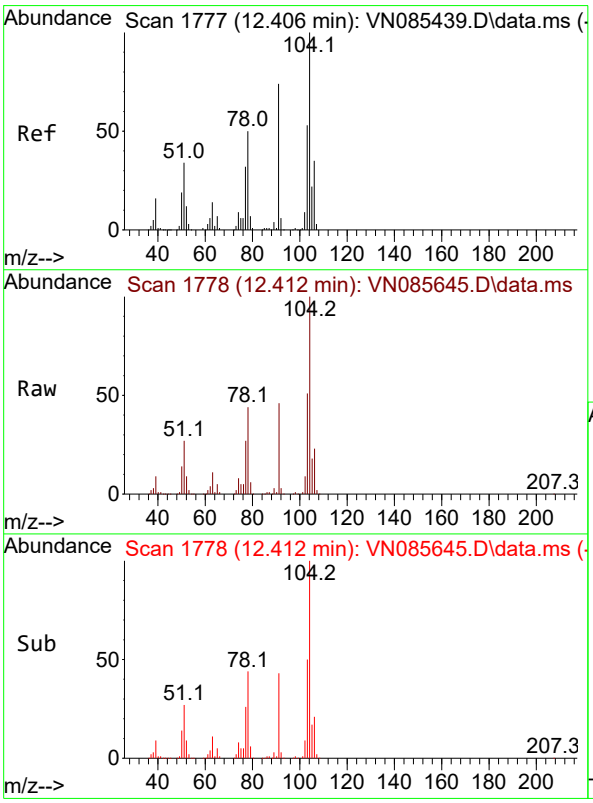
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 214.2 | 110.4 | 331.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

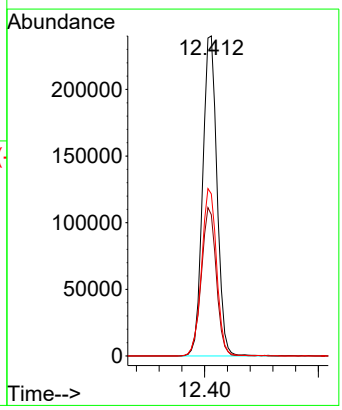
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

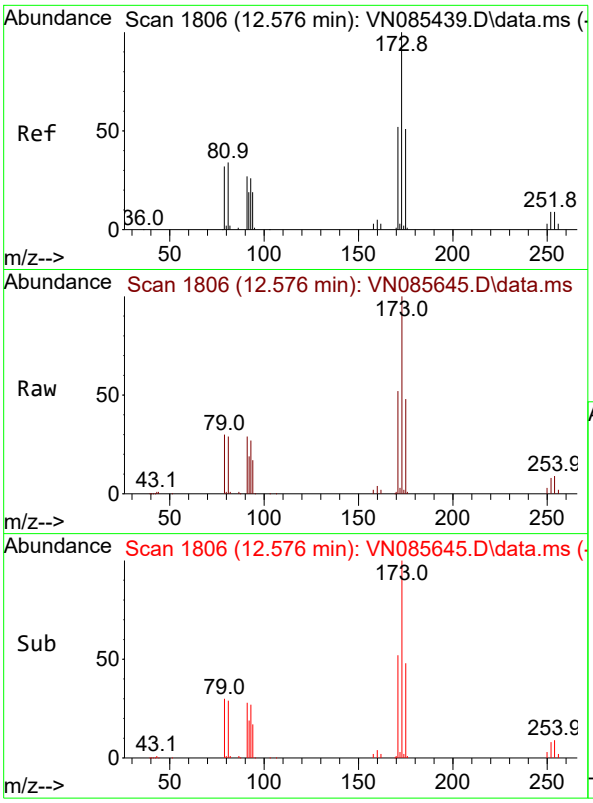



#70
Styrene
Concen: 65.022 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:104 Resp: 419116

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 48.4 | 42.5 | 63.7 |
| 103 | 54.9 | 43.8 | 65.8 |

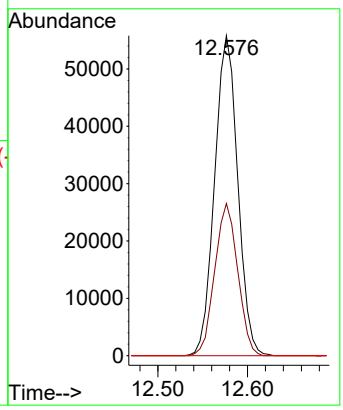





#71
Bromoform
Concen: 56.133 ug/l
RT: 12.576 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:173 Resp: 9980

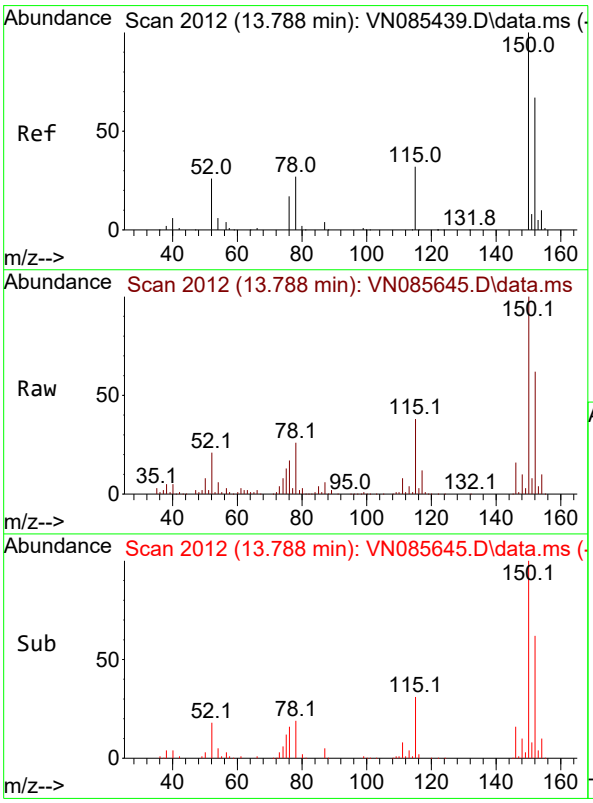
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 47.2 | 24.4 | 73.2 |
| 254 | 0.0 | 0.0 | 0.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

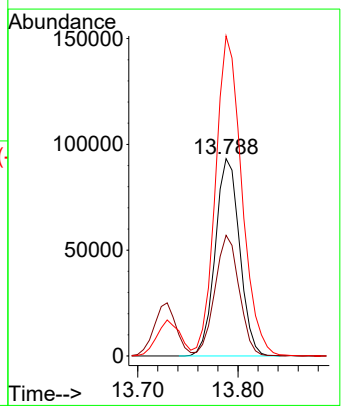
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

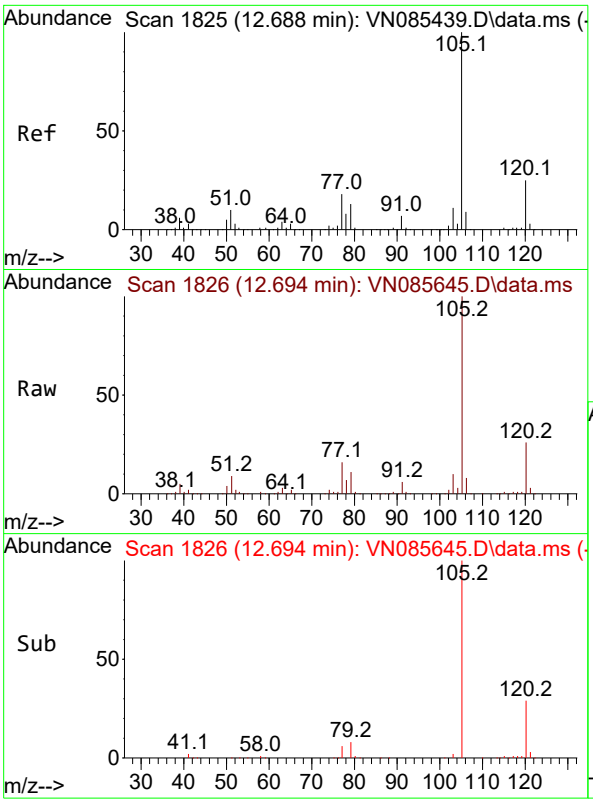



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:152 Resp: 157058

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 61.2 | 31.1 | 93.3 |
| 150 | 175.6 | 0.0 | 343.6 |

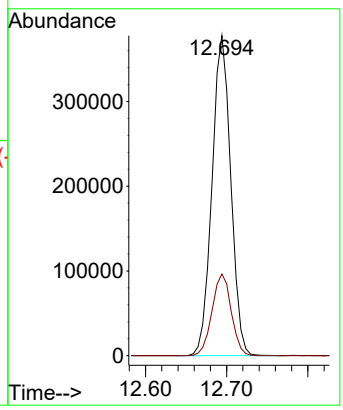





#73
Isopropylbenzene
Concen: 57.186 ug/l
RT: 12.694 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:105 Resp: 60617

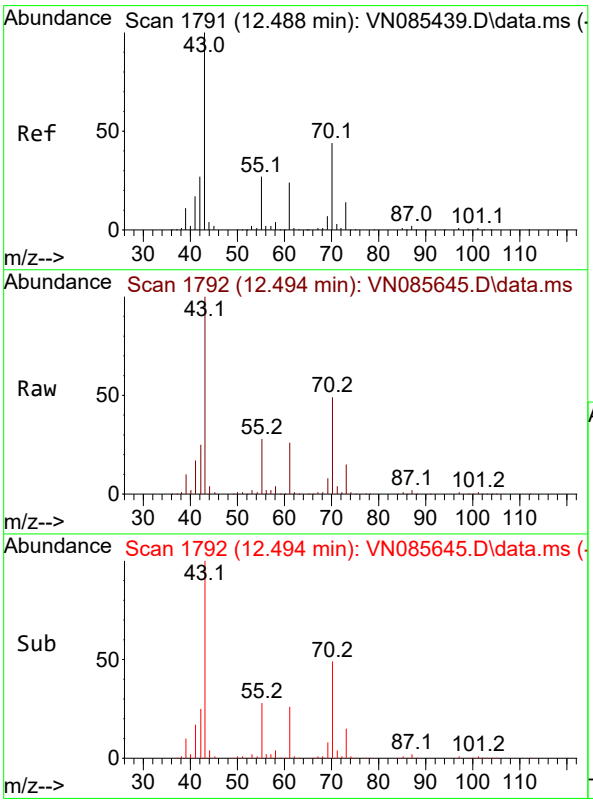
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.1 | 12.8 | 38.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

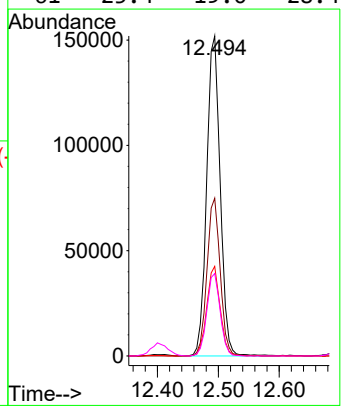
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

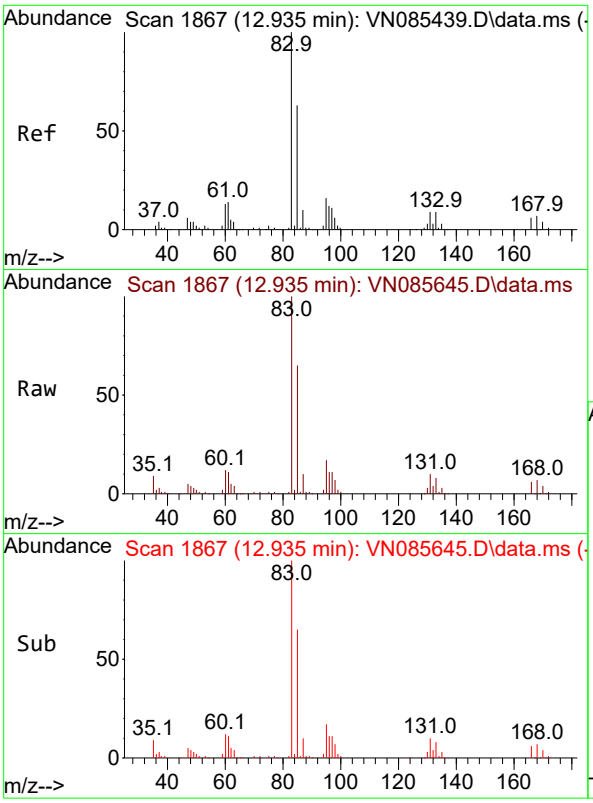



#74
N-amyl acetate
Concen: 49.123 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 43 Resp: 234045

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 48.2 | 34.0 | 51.0 |
| 55 | 27.8 | 21.4 | 32.2 |
| 61 | 25.4 | 19.0 | 28.4 |

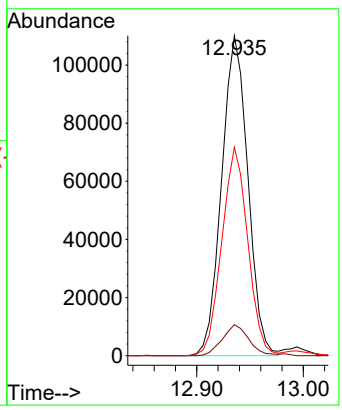





#75
1,1,2,2-Tetrachloroethane
Concen: 50.322 ug/l
RT: 12.935 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 83 Resp: 18842

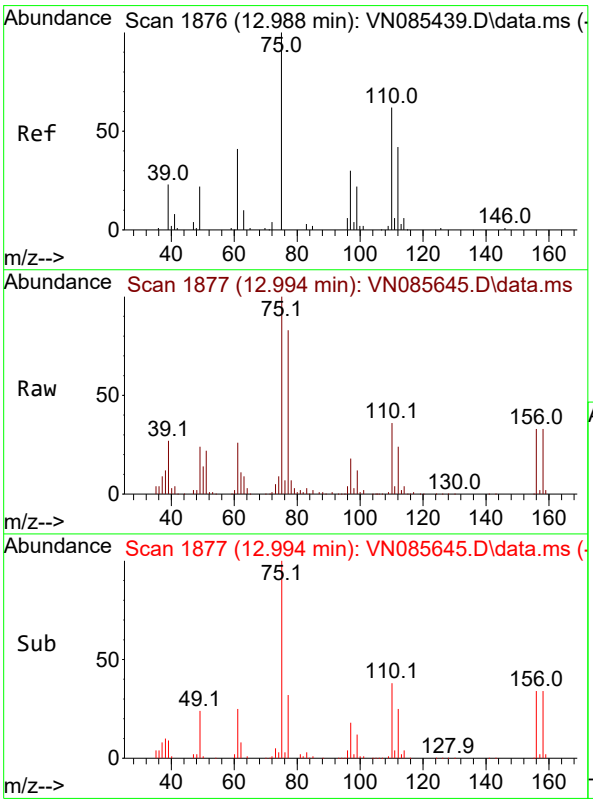
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 9.9 | 4.8 | 14.4 |
| 85 | 64.2 | 32.2 | 96.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

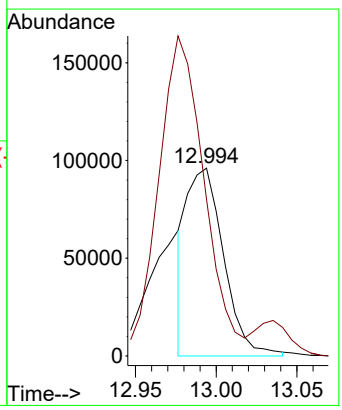
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

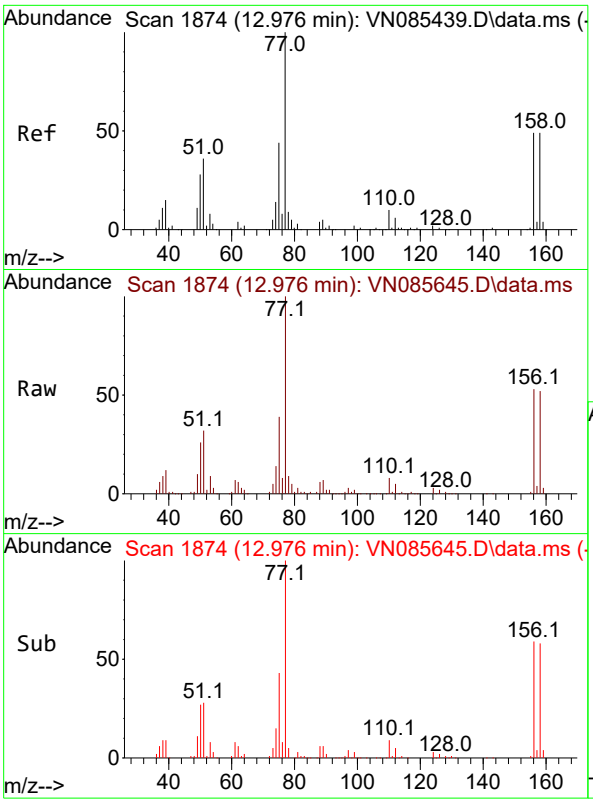



#76
1,2,3-Trichloropropane
Concen: 48.165 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 75 Resp: 153753

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 209.9 | 109.7 | 329.2 |

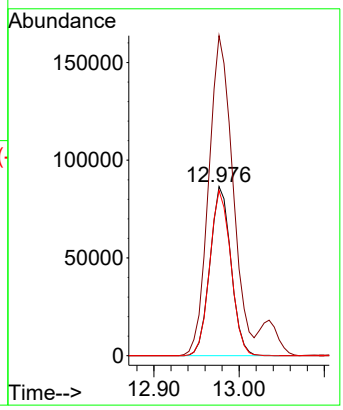





#77
Bromobenzene
Concen: 53.497 ug/l
RT: 12.976 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:156 Resp: 14815

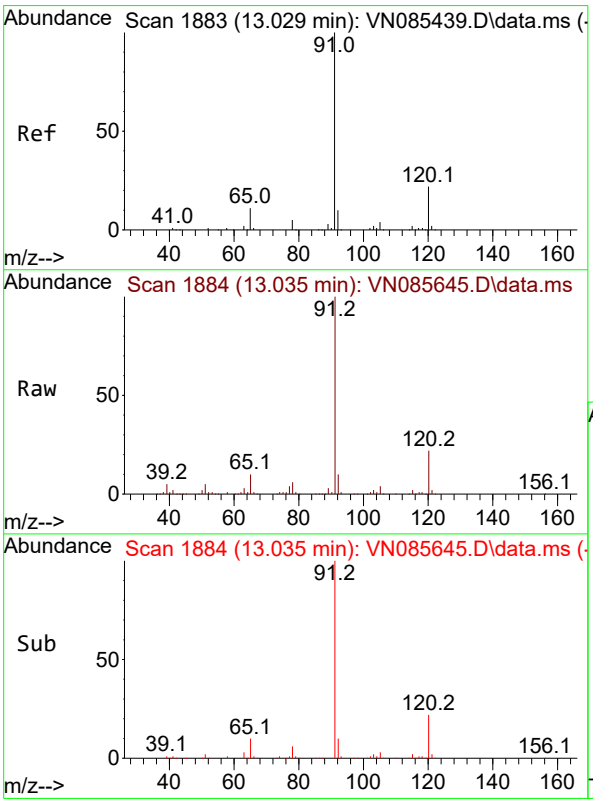
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 217.8 | 114.1 | 342.4 |
| 158 | 98.2 | 48.9 | 146.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

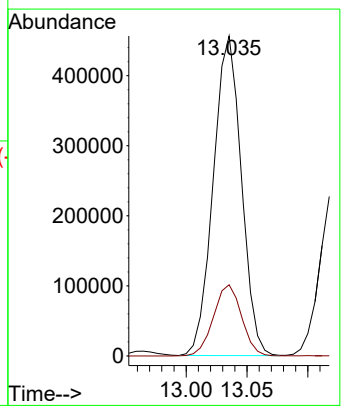
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

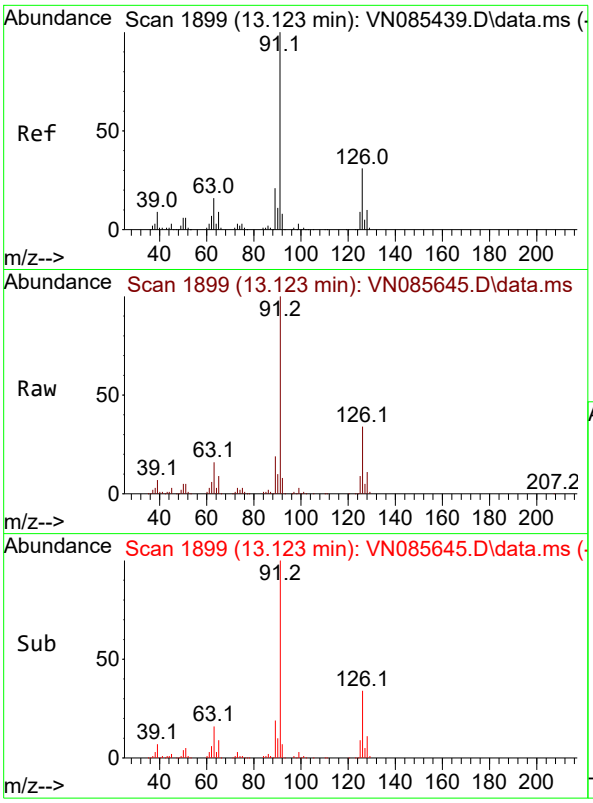



#78
n-propylbenzene
Concen: 58.330 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 91 Resp: 731968

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.3 | 10.9 | 32.6 |

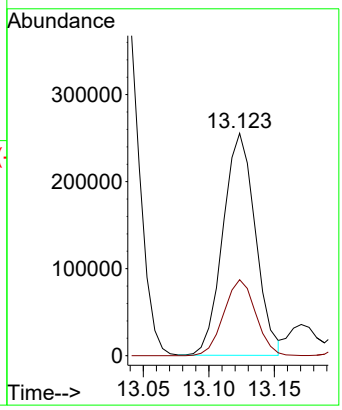





#79
2-Chlorotoluene
Concen: 54.157 ug/l
RT: 13.123 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 91 Resp: 43983

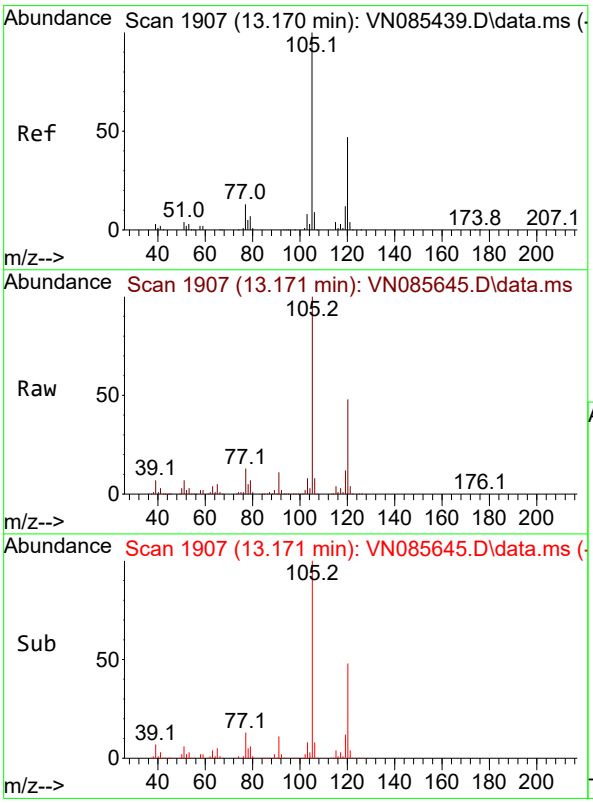
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 33.7 | 15.7 | 47.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

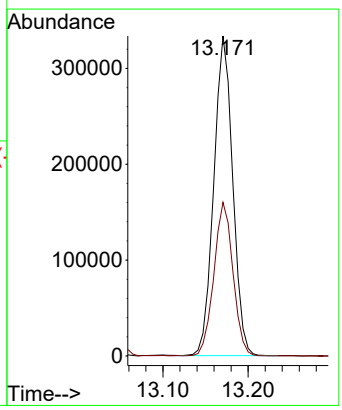
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

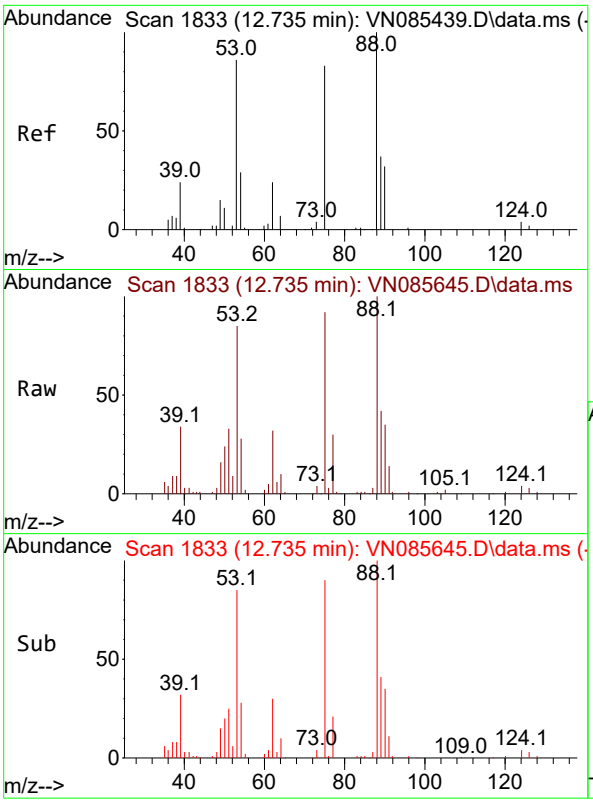



#80
1,3,5-Trimethylbenzene
Concen: 58.774 ug/l
RT: 13.171 min Scan# 1907
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:105 Resp: 514612

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 48.4 | 23.9 | 71.7 |






#81
trans-1,4-Dichloro-2-butene
Concen: 57.659 ug/l
RT: 12.735 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

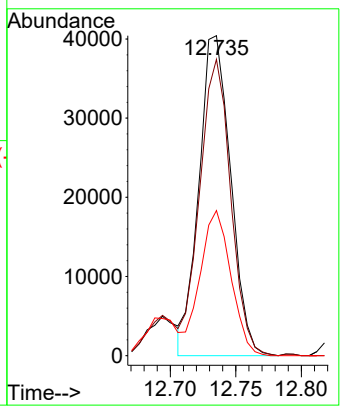
Tgt Ion: 75 Resp: 6803

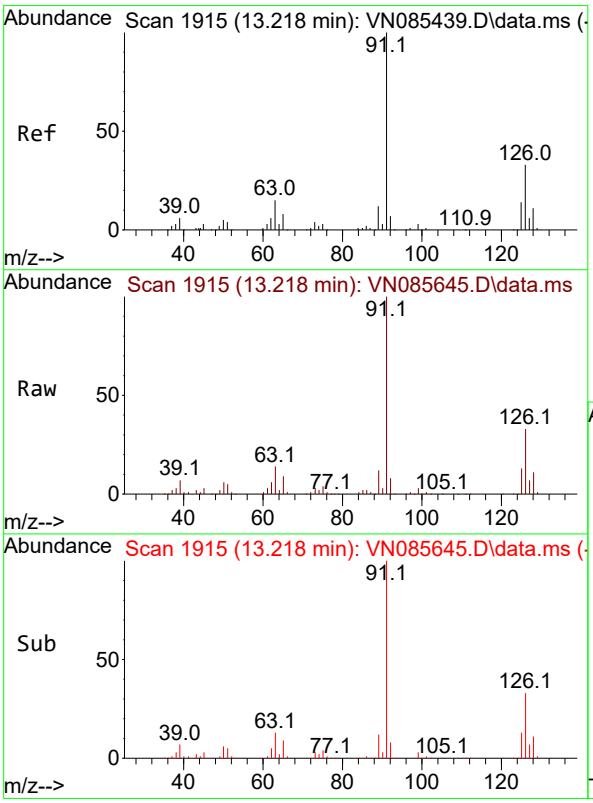
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 90.8 | 95.6 | 143.4 |
| 89 | 44.8 | 37.0 | 55.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

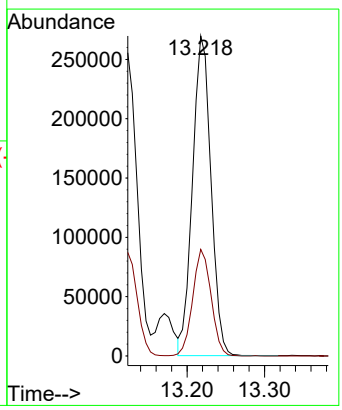


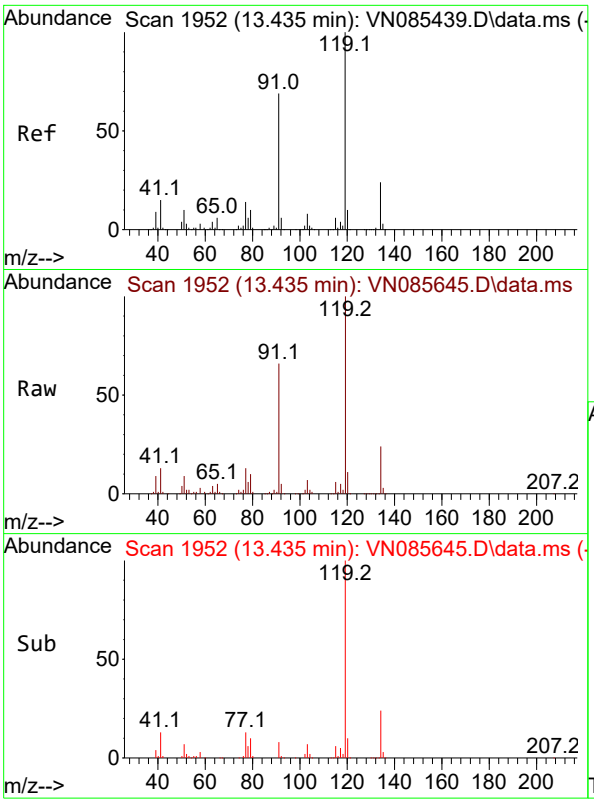




#82
4-Chlorotoluene
Concen: 55.070 ug/l
RT: 13.218 min Scan# 1915
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 91 Resp: 445323

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 33.2 | 15.9 | 47.7 |






#83
tert-Butylbenzene
Concen: 55.960 ug/l
RT: 13.435 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

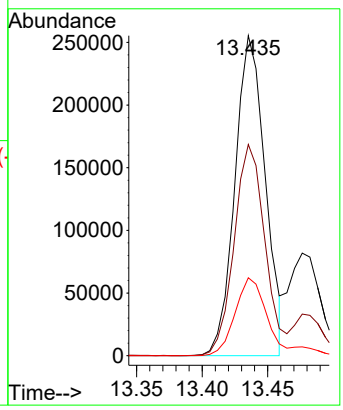
Tgt Ion:119 Resp: 41146

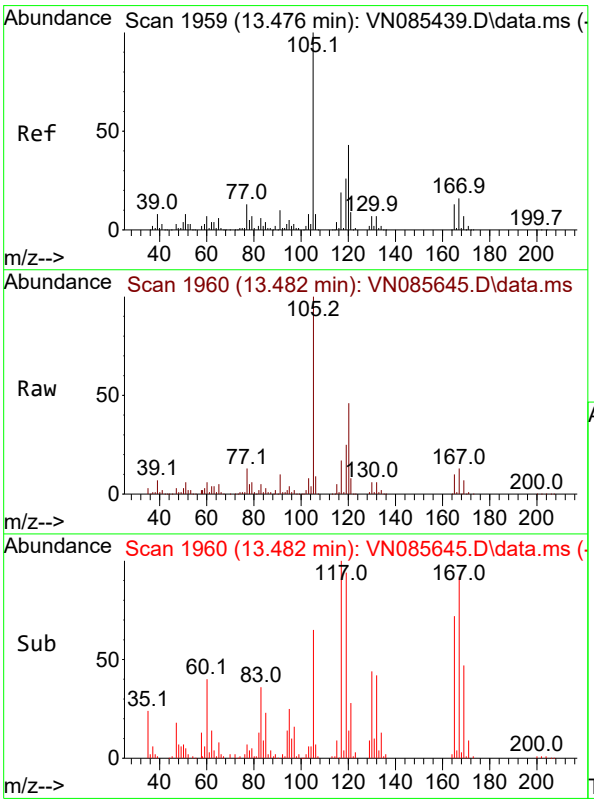
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 67.4 | 35.1 | 105.3 |
| 134 | 27.2 | 12.0 | 36.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

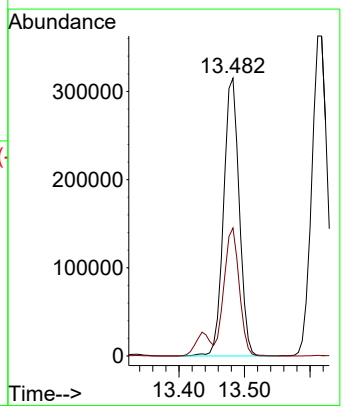


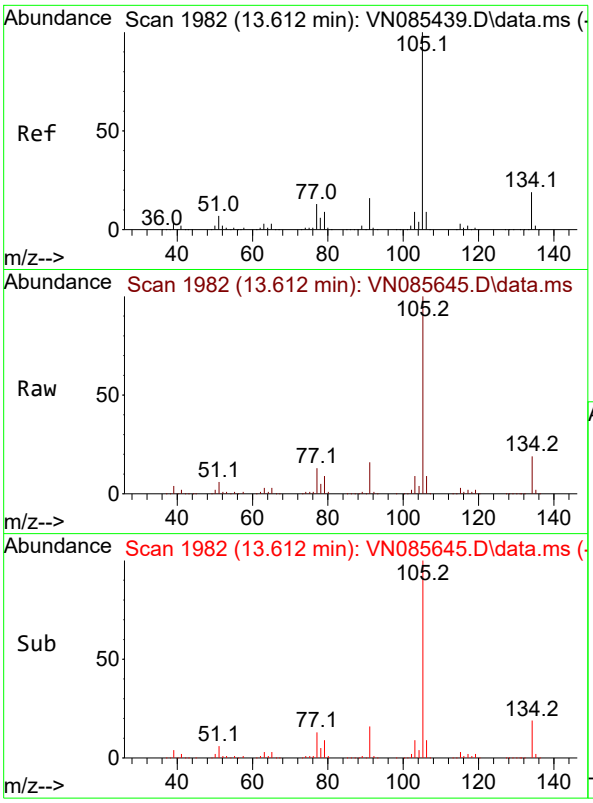




#84
1,2,4-Trimethylbenzene
Concen: 59.518 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:105 Resp: 519388

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 44.8 | 21.6 | 65.0 |

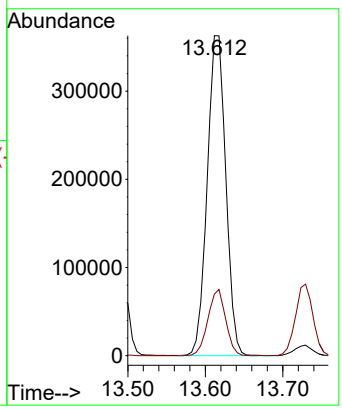





#85
sec-Butylbenzene
Concen: 59.408 ug/l
RT: 13.612 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:105 Resp: 60541

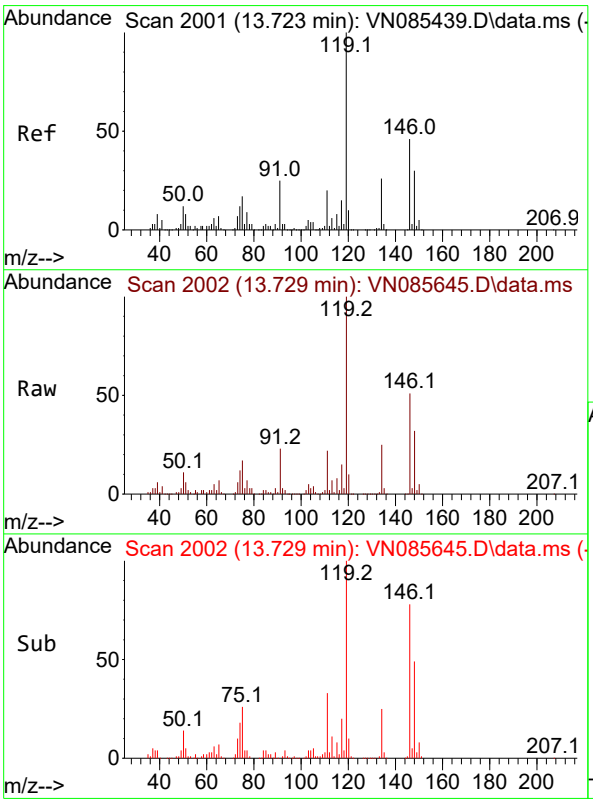
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.7 | 9.7 | 28.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

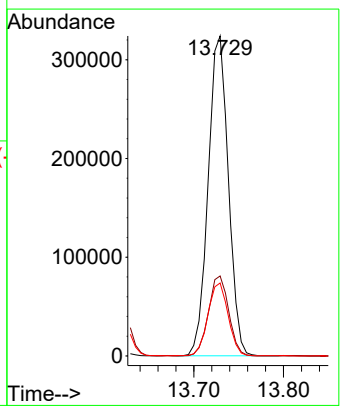
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

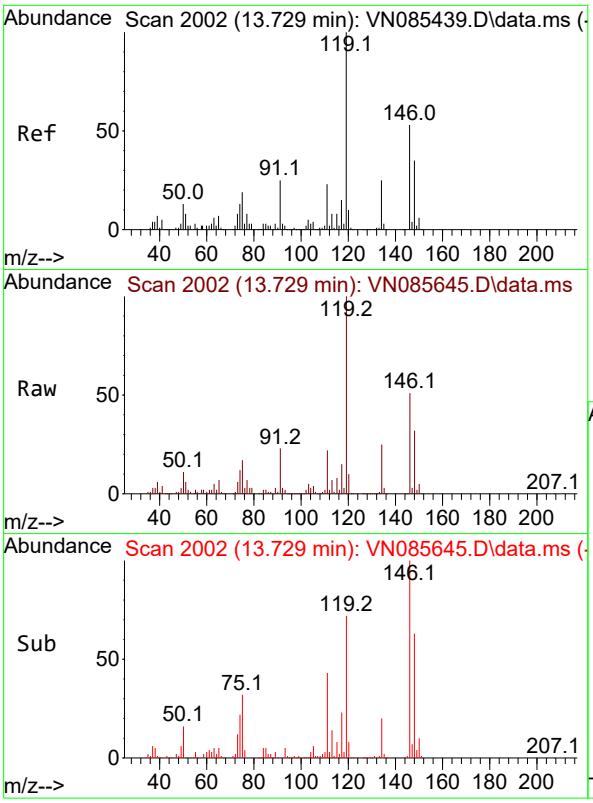



#86
p-Isopropyltoluene
Concen: 54.534 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:119 Resp: 506039

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.2 | 12.7 | 38.0 |
| 91 | 22.8 | 12.7 | 38.1 |

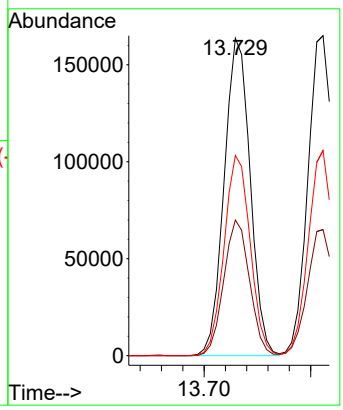





#87
1,3-Dichlorobenzene
Concen: 54.455 ug/l
RT: 13.729 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:146 Resp: 27773

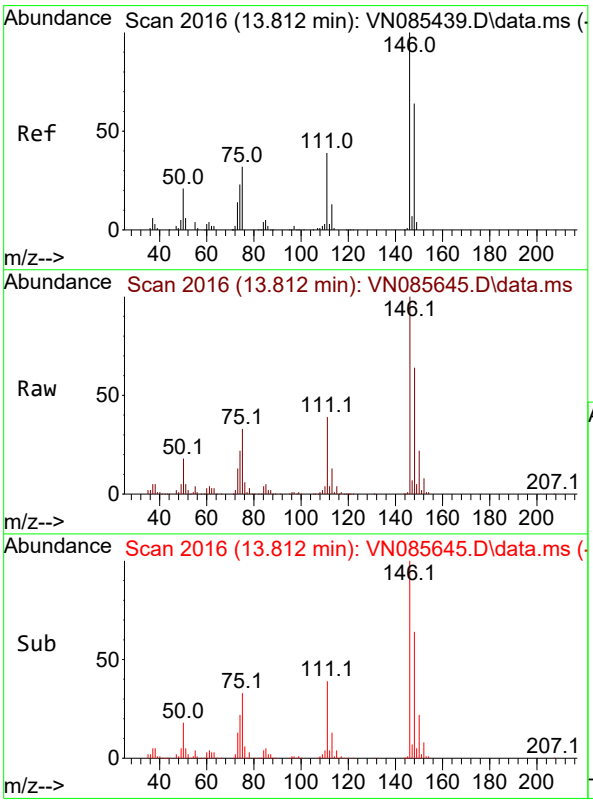
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.4 | 21.4 | 64.3 |
| 148 | 63.4 | 32.3 | 96.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

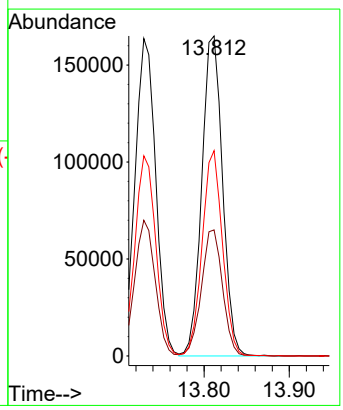
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

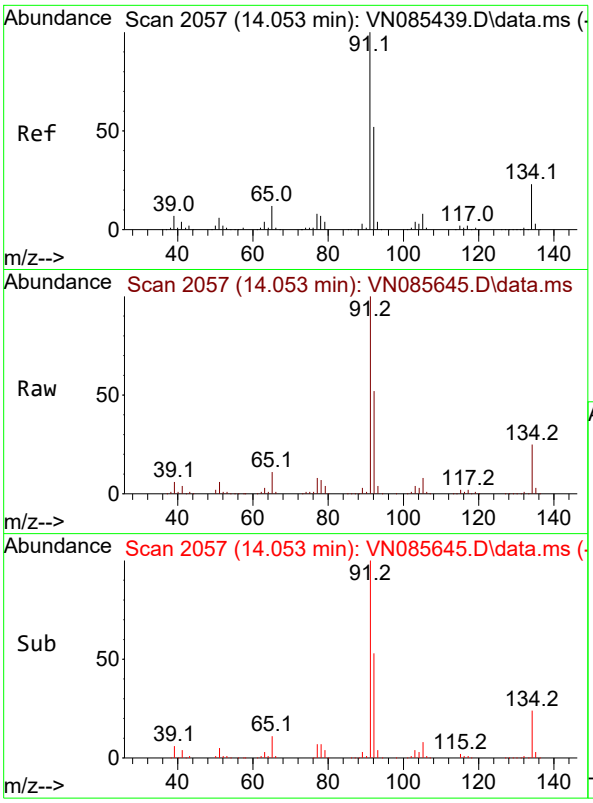



#88
1,4-Dichlorobenzene
Concen: 52.768 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:146 Resp: 278955

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 40.4 | 21.3 | 63.7 |
| 148 | 63.0 | 32.4 | 97.0 |

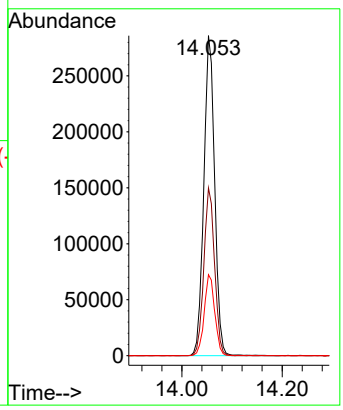





#89
n-Butylbenzene
Concen: 58.781 ug/l
RT: 14.053 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 91 Resp: 42974

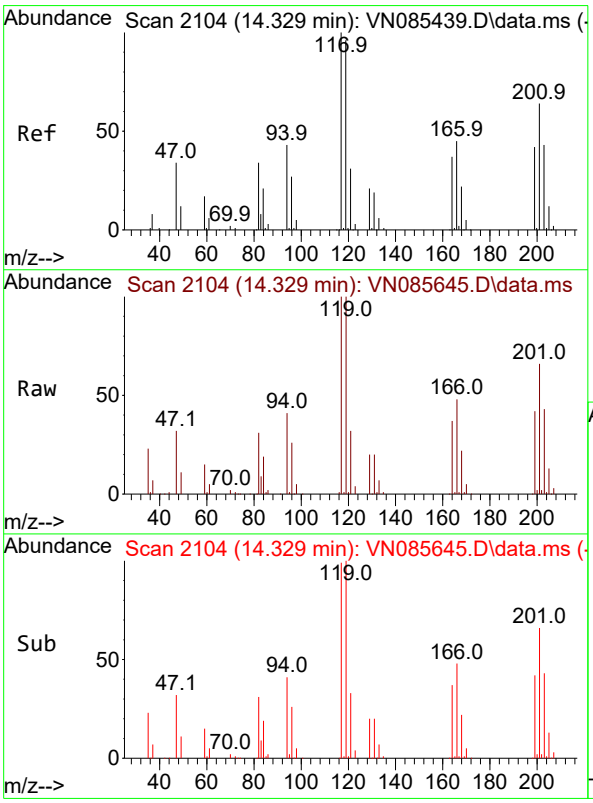
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 52.0 | 25.8 | 77.3 |
| 134 | 24.6 | 11.7 | 35.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

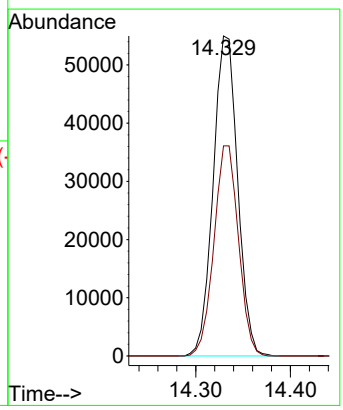
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

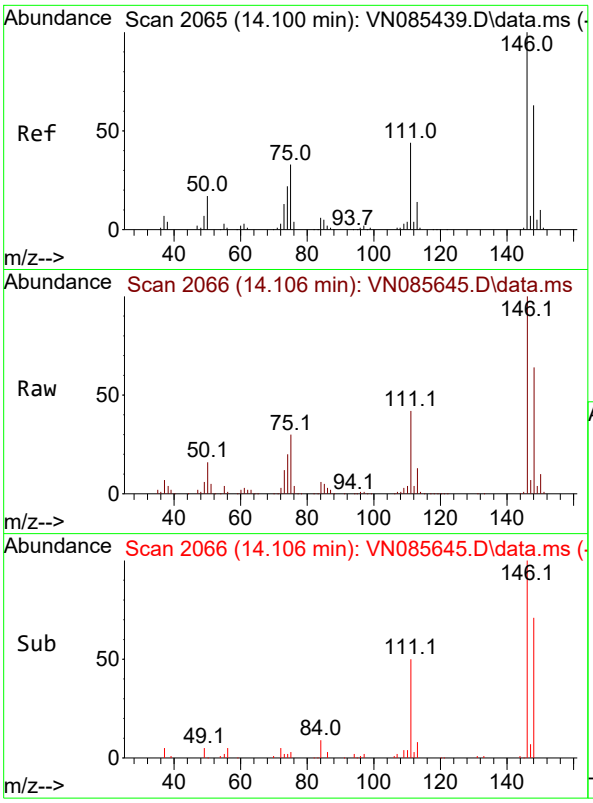



#90
Hexachloroethane
Concen: 50.887 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:117 Resp: 98723

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 65.8 | 33.7 | 101.0 |

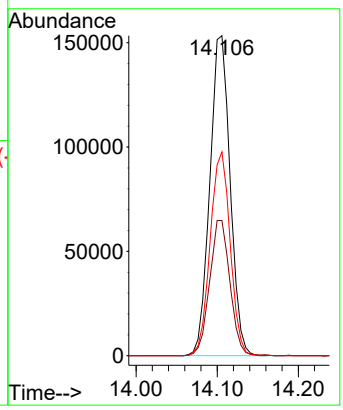





#91
1,2-Dichlorobenzene
Concen: 52.333 ug/l
RT: 14.106 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:146 Resp: 26623

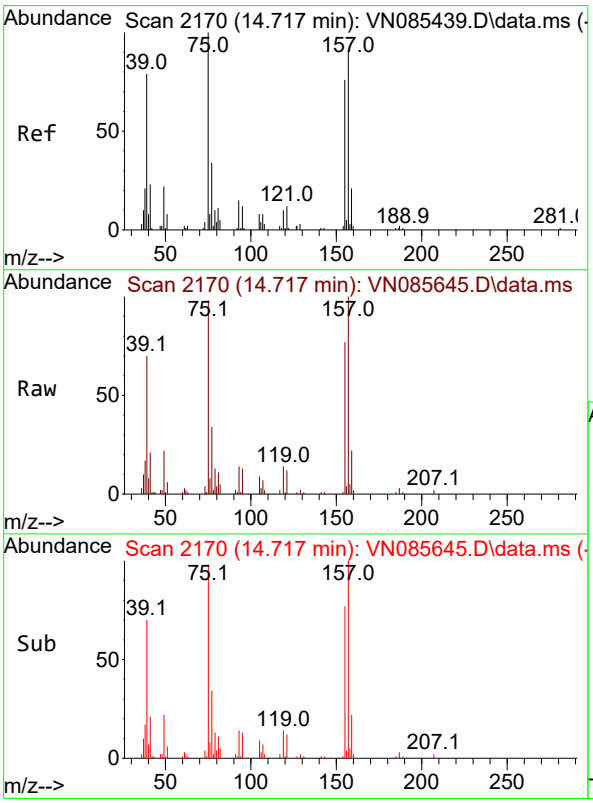
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.2 | 21.7 | 65.1 |
| 148 | 62.9 | 31.4 | 94.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

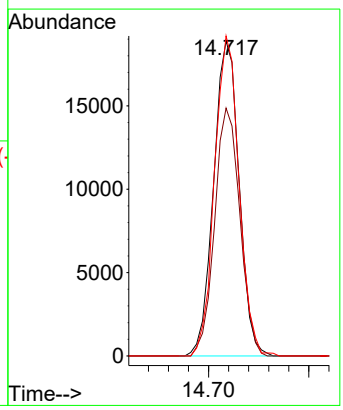
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

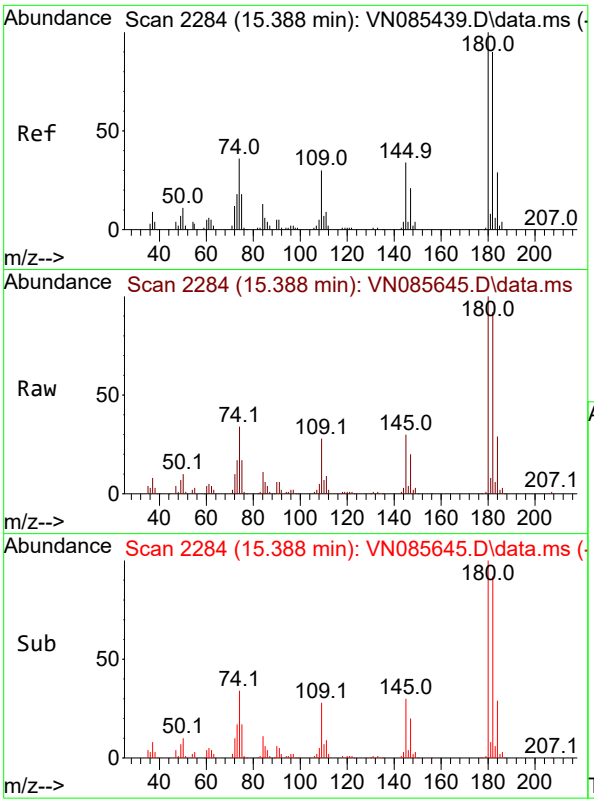



#92
1,2-Dibromo-3-Chloropropane
Concen: 48.620 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 75 Resp: 33244

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 78.3 | 36.4 | 109.2 |
| 157 | 97.5 | 45.4 | 136.1 |

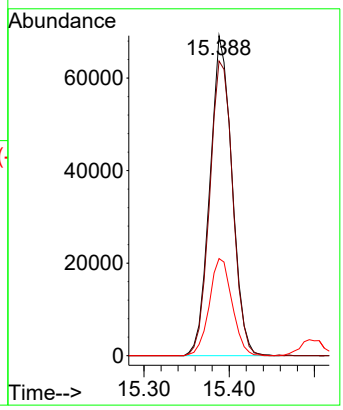





#93
1,2,4-Trichlorobenzene
Concen: 52.709 ug/l
RT: 15.388 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:180 Resp: 12462

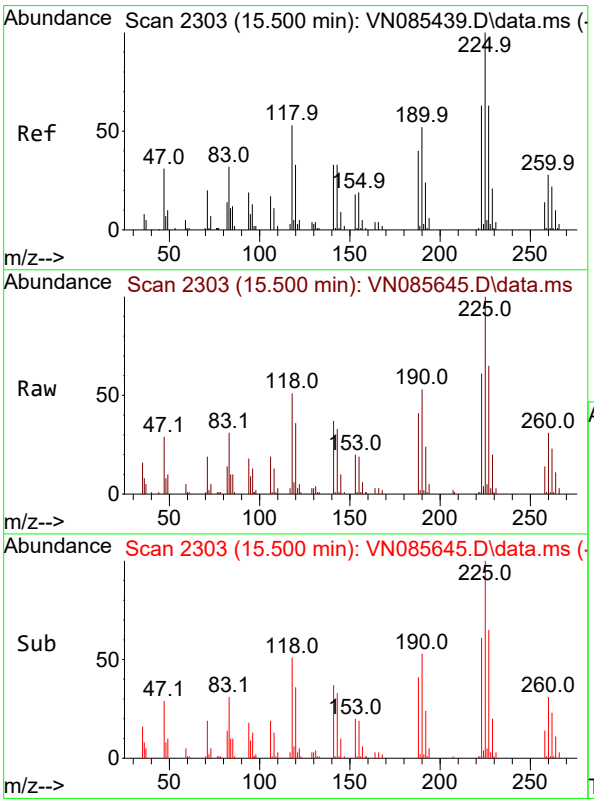
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.6 | 46.8 | 140.3 |
| 145 | 31.2 | 16.0 | 48.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

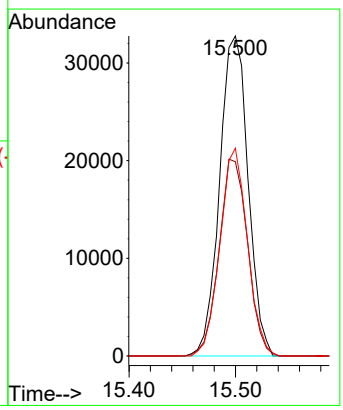
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

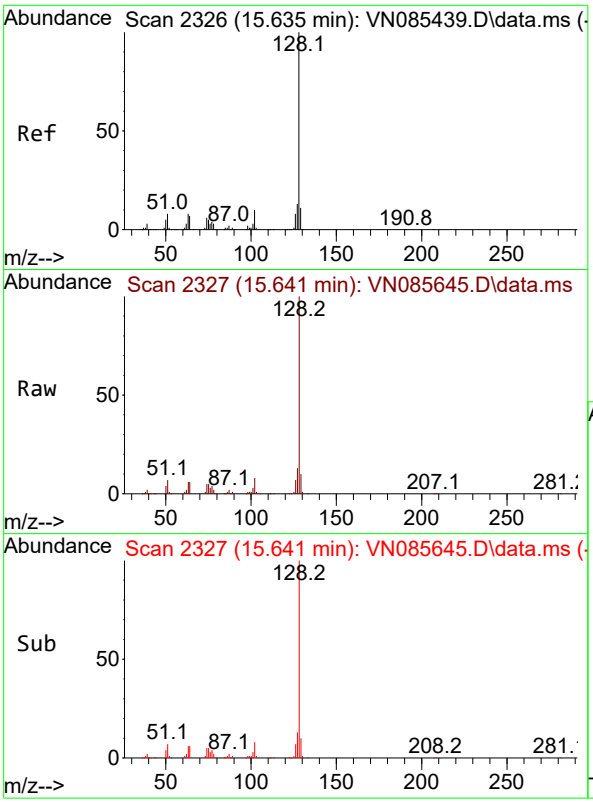



#94
Hexachlorobutadiene
Concen: 48.466 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:225 Resp: 60840

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 61.7 | 30.7 | 92.1 |
| 227 | 62.6 | 30.9 | 92.5 |

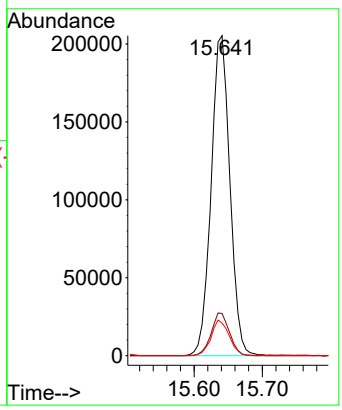





#95
Naphthalene
Concen: 55.897 ug/l
RT: 15.641 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:128 Resp: 39439

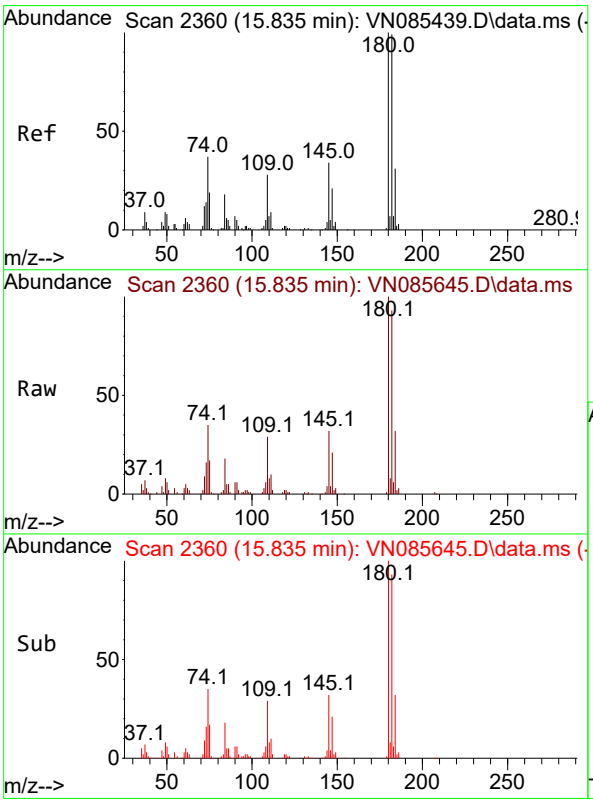
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 13.0 | 10.6 | 16.0 |
| 129 | 10.7 | 8.8 | 13.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

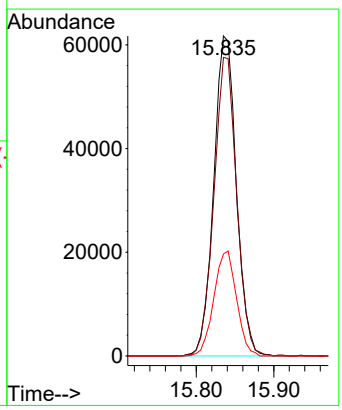
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025




#96
1,2,3-Trichlorobenzene
Concen: 52.330 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:180 Resp: 125197

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 94.0 | 47.4 | 142.2 |
| 145 | 32.8 | 16.9 | 50.7 |



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085645.D
Acq On : 04 Feb 2025 11:05
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Feb 05 01:01:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 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 | 101 | 0.00 |
| 2 | T | Dichlorodifluoromethane | 0.677 | 0.841 | -24.2 | 135 | 0.00 |
| 3 | P | Chloromethane | 0.733 | 0.756 | -3.1 | 112 | 0.00 |
| 4 | C | Vinyl Chloride | 0.737 | 0.924 | -25.4# | 135 | 0.00 |
| 5 | T | Bromomethane | 0.445 | 0.578 | -29.9# | 139 | -0.01 |
| 6 | T | Chloroethane | 0.467 | 0.583 | -24.8 | 138 | 0.00 |
| 7 | T | Trichlorofluoromethane | 1.069 | 1.135 | -6.2 | 115 | 0.00 |
| 8 | T | Diethyl Ether | 0.369 | 0.377 | -2.2 | 105 | 0.00 |
| 9 | T | 1,1,2-Trichlorotrifluoroeth | 0.602 | 0.678 | -12.6 | 126 | 0.00 |
| 10 | T | Methyl Iodide | 0.690 | 0.852 | -23.5 | 119 | 0.00 |
| 11 | T | Tert butyl alcohol | 0.092 | 0.090 | 2.2 | 98 | 0.00 |
| 12 | CM | 1,1-Dichloroethene | 0.537 | 0.620 | -15.5# | 117 | 0.00 |
| 13 | T | Acrolein | 0.126 | 0.085 | 32.5# | 61 | 0.00 |
| 14 | T | Allyl chloride | 0.871 | 0.783 | 10.1 | 93 | 0.00 |
| 15 | T | Acrylonitrile | 0.294 | 0.303 | -3.1 | 102 | 0.00 |
| 16 | T | Acetone | 0.261 | 0.236 | 9.6 | 94 | 0.00 |
| 17 | T | Carbon Disulfide | 1.652 | 1.884 | -14.0 | 128 | 0.00 |
| 18 | T | Methyl Acetate | 0.793 | 0.717 | 9.6 | 91 | 0.00 |
| 19 | T | Methyl tert-butyl Ether | 1.742 | 1.918 | -10.1 | 103 | 0.00 |
| 20 | T | Methylene Chloride | 0.646 | 0.706 | -9.3 | 113 | 0.00 |
| 21 | T | trans-1,2-Dichloroethene | 0.573 | 0.660 | -15.2 | 120 | 0.00 |
| 22 | T | Diisopropyl ether | 1.933 | 1.902 | 1.6 | 94 | 0.00 |
| 23 | T | Vinyl Acetate | 1.353 | 1.405 | -3.8 | 95 | 0.00 |
| 24 | P | 1,1-Dichloroethane | 1.178 | 1.225 | -4.0 | 105 | 0.00 |
| 25 | T | 2-Butanone | 0.384 | 0.371 | 3.4 | 96 | 0.00 |
| 26 | T | 2,2-Dichloropropane | 0.953 | 1.097 | -15.1 | 118 | 0.00 |
| 27 | T | cis-1,2-Dichloroethene | 0.675 | 0.773 | -14.5 | 114 | 0.00 |
| 28 | T | Bromochloromethane | 0.548 | 0.476 | 13.1 | 88 | 0.00 |
| 29 | T | Tetrahydrofuran | 0.243 | 0.249 | -2.5 | 96 | 0.00 |
| 30 | C | Chloroform | 1.218 | 1.257 | -3.2# | 108 | 0.00 |
| 31 | T | Cyclohexane | 1.024 | 1.018 | 0.6 | 116 | 0.00 |
| 32 | T | 1,1,1-Trichloroethane | 1.068 | 1.122 | -5.1 | 111 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 | 0.807 | 0.771 | 4.5 | 93 | 0.00 |
| 34 | I | 1,4-Difluorobenzene | 1.000 | 1.000 | 0.0 | 102 | 0.00 |
| 35 | S | Dibromofluoromethane | 0.347 | 0.369 | -6.3 | 105 | 0.00 |
| 36 | T | 1,1-Dichloropropene | 0.487 | 0.533 | -9.4 | 117 | 0.00 |
| 37 | T | Ethyl Acetate | 0.491 | 0.461 | 6.1 | 96 | 0.00 |
| 38 | T | Carbon Tetrachloride | 0.557 | 0.585 | -5.0 | 112 | 0.00 |
| 39 | T | Methylcyclohexane | 0.457 | 0.567 | -24.1 | 125 | 0.00 |
| 40 | TM | Benzene | 1.463 | 1.643 | -12.3 | 115 | 0.00 |
| 41 | T | Methacrylonitrile | 0.256 | 0.236 | 7.8 | 89 | 0.00 |
| 42 | TM | 1,2-Dichloroethane | 0.551 | 0.538 | 2.4 | 100 | 0.00 |
| 43 | T | Isopropyl Acetate | 0.787 | 0.787 | 0.0 | 98 | 0.00 |
| 44 | TM | Trichloroethene | 0.341 | 0.382 | -12.0 | 120 | 0.00 |
| 45 | C | 1,2-Dichloropropane | 0.374 | 0.397 | -6.1# | 109 | 0.00 |
| 46 | T | Dibromomethane | 0.270 | 0.283 | -4.8 | 108 | 0.00 |
| 47 | T | Bromodichloromethane | 0.549 | 0.587 | -6.9 | 107 | 0.00 |
| 48 | T | Methyl methacrylate | 0.354 | 0.355 | -0.3 | 92 | 0.00 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085645.D
Acq On : 04 Feb 2025 11:05
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Feb 05 01:01:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 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 | 0.006 | 0.007 | -16.7 | 109 | 0.00 |
| 50 | S | Toluene-d8 | 1.232 | 1.373 | -11.4 | 110 | 0.00 |
| 51 | T | 4-Methyl-2-Pentanone | 0.457 | 0.464 | -1.5 | 96 | 0.00 |
| 52 | CM | Toluene | 0.848 | 1.020 | -20.3# | 119 | 0.00 |
| 53 | T | t-1,3-Dichloropropene | 0.519 | 0.592 | -14.1 | 109 | 0.00 |
| 54 | T | cis-1,3-Dichloropropene | 0.554 | 0.641 | -15.7 | 111 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 0.335 | 0.375 | -11.9 | 112 | 0.00 |
| 56 | T | Ethyl methacrylate | 0.469 | 0.577 | -23.0 | 108 | 0.00 |
| 57 | T | 1,3-Dichloropropane | 0.583 | 0.654 | -12.2 | 110 | 0.00 |
| 58 | T | 2-Chloroethyl Vinyl ether | 0.213 | 0.194 | 8.9 | 82 | 0.00 |
| 59 | T | 2-Hexanone | 0.321 | 0.336 | -4.7 | 96 | 0.00 |
| 60 | T | Dibromochloromethane | 0.405 | 0.441 | -8.9 | 108 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 0.334 | 0.375 | -12.3 | 114 | 0.00 |
| 62 | S | 4-Bromofluorobenzene | 0.422 | 0.472 | -11.8 | 107 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 104 | 0.00 |
| 64 | T | Tetrachloroethene | 0.341 | 0.397 | -16.4 | 128 | 0.00 |
| 65 | PM | Chlorobenzene | 1.095 | 1.230 | -12.3 | 119 | 0.00 |
| 66 | T | 1,1,1,2-Tetrachloroethane | 0.402 | 0.433 | -7.7 | 115 | 0.00 |
| 67 | C | Ethyl Benzene | 1.784 | 2.118 | -18.7# | 118 | 0.00 |
| 68 | T | m/p-Xylenes | 0.659 | 0.839 | -27.3# | 123 | 0.00 |
| 69 | T | o-Xylene | 0.630 | 0.781 | -24.0 | 119 | 0.00 |
| 70 | T | Styrene | 1.043 | 1.356 | -30.0# | 120 | 0.00 |
| 71 | P | Bromoform | 0.288 | 0.323 | -12.2 | 108 | 0.00 |
| 72 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 107 | 0.00 |
| 73 | T | Isopropylbenzene | 3.375 | 3.860 | -14.4 | 120 | 0.00 |
| 74 | T | N-amyl acetate | 1.517 | 1.490 | 1.8 | 98 | 0.00 |
| 75 | P | 1,1,2,2-Tetrachloroethane | 1.192 | 1.200 | -0.7 | 112 | 0.00 |
| 76 | T | 1,2,3-Trichloropropane | 1.016 | 0.979 | 3.6 | 117 | 0.00 |
| 77 | T | Bromobenzene | 0.882 | 0.943 | -6.9 | 118 | 0.00 |
| 78 | T | n-propylbenzene | 3.995 | 4.660 | -16.6 | 120 | 0.00 |
| 79 | T | 2-Chlorotoluene | 2.586 | 2.800 | -8.3 | 116 | 0.00 |
| 80 | T | 1,3,5-Trimethylbenzene | 2.787 | 3.277 | -17.6 | 119 | 0.00 |
| 81 | T | trans-1,4-Dichloro-2-butene | 0.376 | 0.433 | -15.2 | 119 | 0.00 |
| 82 | T | 4-Chlorotoluene | 2.574 | 2.835 | -10.1 | 117 | 0.00 |
| 83 | T | tert-Butylbenzene | 2.341 | 2.620 | -11.9 | 115 | 0.00 |
| 84 | T | 1,2,4-Trimethylbenzene | 2.778 | 3.307 | -19.0 | 117 | 0.00 |
| 85 | T | sec-Butylbenzene | 3.244 | 3.855 | -18.8 | 121 | 0.00 |
| 86 | T | p-Isopropyltoluene | 2.631 | 3.222 | -22.5 | 120 | 0.00 |
| 87 | T | 1,3-Dichlorobenzene | 1.624 | 1.768 | -8.9 | 121 | 0.00 |
| 88 | T | 1,4-Dichlorobenzene | 1.683 | 1.776 | -5.5 | 122 | 0.00 |
| 89 | T | n-Butylbenzene | 2.327 | 2.736 | -17.6 | 118 | 0.00 |
| 90 | T | Hexachloroethane | 0.618 | 0.629 | -1.8 | 117 | 0.00 |
| 91 | T | 1,2-Dichlorobenzene | 1.620 | 1.695 | -4.6 | 117 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 0.218 | 0.212 | 2.8 | 102 | 0.00 |
| 93 | T | 1,2,4-Trichlorobenzene | 0.753 | 0.794 | -5.4 | 109 | 0.00 |
| 94 | T | Hexachlorobutadiene | 0.400 | 0.387 | 3.3 | 113 | 0.00 |
| 95 | T | Naphthalene | 2.246 | 2.511 | -11.8 | 108 | 0.00 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085645.D
Acq On : 04 Feb 2025 11:05
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Feb 05 01:01:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 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 | 0.762 | 0.797 | -4.6 | 109 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085645.D
Acq On : 04 Feb 2025 11:05
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Feb 05 01:01:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 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 | 101 | 0.00 |
| 2 | T | Dichlorodifluoromethane | 50.000 | 62.124 | -24.2 | 135 | 0.00 |
| 3 | P | Chloromethane | 50.000 | 51.538 | -3.1 | 112 | 0.00 |
| 4 | C | Vinyl Chloride | 50.000 | 62.678 | -25.4# | 135 | 0.00 |
| 5 | T | Bromomethane | 50.000 | 64.931 | -29.9# | 139 | -0.01 |
| 6 | T | Chloroethane | 50.000 | 62.391 | -24.8 | 138 | 0.00 |
| 7 | T | Trichlorofluoromethane | 50.000 | 53.087 | -6.2 | 115 | 0.00 |
| 8 | T | Diethyl Ether | 50.000 | 51.037 | -2.1 | 105 | 0.00 |
| 9 | T | 1,1,2-Trichlorotrifluoroeth | 50.000 | 56.291 | -12.6 | 126 | 0.00 |
| 10 | T | Methyl Iodide | 50.000 | 61.814 | -23.6 | 119 | 0.00 |
| 11 | T | Tert butyl alcohol | 250.000 | 244.210 | 2.3 | 98 | 0.00 |
| 12 | CM | 1,1-Dichloroethene | 50.000 | 57.812 | -15.6# | 117 | 0.00 |
| 13 | T | Acrolein | 250.000 | 168.697 | 32.5# | 61 | 0.00 |
| 14 | T | Allyl chloride | 50.000 | 44.944 | 10.1 | 93 | 0.00 |
| 15 | T | Acrylonitrile | 250.000 | 257.863 | -3.1 | 102 | 0.00 |
| 16 | T | Acetone | 250.000 | 225.997 | 9.6 | 94 | 0.00 |
| 17 | T | Carbon Disulfide | 50.000 | 57.001 | -14.0 | 128 | 0.00 |
| 18 | T | Methyl Acetate | 50.000 | 45.225 | 9.5 | 91 | 0.00 |
| 19 | T | Methyl tert-butyl Ether | 50.000 | 55.039 | -10.1 | 103 | 0.00 |
| 20 | T | Methylene Chloride | 50.000 | 54.697 | -9.4 | 113 | 0.00 |
| 21 | T | trans-1,2-Dichloroethene | 50.000 | 57.502 | -15.0 | 120 | 0.00 |
| 22 | T | Diisopropyl ether | 50.000 | 49.208 | 1.6 | 94 | 0.00 |
| 23 | T | Vinyl Acetate | 250.000 | 259.616 | -3.8 | 95 | 0.00 |
| 24 | P | 1,1-Dichloroethane | 50.000 | 51.962 | -3.9 | 105 | 0.00 |
| 25 | T | 2-Butanone | 250.000 | 241.685 | 3.3 | 96 | 0.00 |
| 26 | T | 2,2-Dichloropropane | 50.000 | 57.562 | -15.1 | 118 | 0.00 |
| 27 | T | cis-1,2-Dichloroethene | 50.000 | 57.208 | -14.4 | 114 | 0.00 |
| 28 | T | Bromochloromethane | 50.000 | 43.426 | 13.1 | 88 | 0.00 |
| 29 | T | Tetrahydrofuran | 250.000 | 255.923 | -2.4 | 96 | 0.00 |
| 30 | C | Chloroform | 50.000 | 51.611 | -3.2# | 108 | 0.00 |
| 31 | T | Cyclohexane | 50.000 | 49.690 | 0.6 | 116 | 0.00 |
| 32 | T | 1,1,1-Trichloroethane | 50.000 | 52.509 | -5.0 | 111 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 | 50.000 | 47.780 | 4.4 | 93 | 0.00 |
| 34 | I | 1,4-Difluorobenzene | 50.000 | 50.000 | 0.0 | 102 | 0.00 |
| 35 | S | Dibromofluoromethane | 50.000 | 53.153 | -6.3 | 105 | 0.00 |
| 36 | T | 1,1-Dichloropropene | 50.000 | 54.731 | -9.5 | 117 | 0.00 |
| 37 | T | Ethyl Acetate | 50.000 | 46.933 | 6.1 | 96 | 0.00 |
| 38 | T | Carbon Tetrachloride | 50.000 | 52.524 | -5.0 | 112 | 0.00 |
| 39 | T | Methylcyclohexane | 50.000 | 62.021 | -24.0 | 125 | 0.00 |
| 40 | TM | Benzene | 50.000 | 56.166 | -12.3 | 115 | 0.00 |
| 41 | T | Methacrylonitrile | 50.000 | 46.204 | 7.6 | 89 | 0.00 |
| 42 | TM | 1,2-Dichloroethane | 50.000 | 48.850 | 2.3 | 100 | 0.00 |
| 43 | T | Isopropyl Acetate | 50.000 | 49.962 | 0.1 | 98 | 0.00 |
| 44 | TM | Trichloroethene | 50.000 | 56.068 | -12.1 | 120 | 0.00 |
| 45 | C | 1,2-Dichloropropane | 50.000 | 53.137 | -6.3# | 109 | 0.00 |
| 46 | T | Dibromomethane | 50.000 | 52.419 | -4.8 | 108 | 0.00 |
| 47 | T | Bromodichloromethane | 50.000 | 53.411 | -6.8 | 107 | 0.00 |
| 48 | T | Methyl methacrylate | 50.000 | 50.045 | -0.1 | 92 | 0.00 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085645.D
Acq On : 04 Feb 2025 11:05
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Feb 05 01:01:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 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 | 1142.294 | -14.2 | 109 | 0.00 |
| 50 | S | Toluene-d8 | 50.000 | 55.713 | -11.4 | 110 | 0.00 |
| 51 | T | 4-Methyl-2-Pentanone | 250.000 | 253.917 | -1.6 | 96 | 0.00 |
| 52 | CM | Toluene | 50.000 | 60.150 | -20.3# | 119 | 0.00 |
| 53 | T | t-1,3-Dichloropropene | 50.000 | 57.048 | -14.1 | 109 | 0.00 |
| 54 | T | cis-1,3-Dichloropropene | 50.000 | 57.810 | -15.6 | 111 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 50.000 | 55.842 | -11.7 | 112 | 0.00 |
| 56 | T | Ethyl methacrylate | 50.000 | 50.997 | -2.0 | 108 | 0.00 |
| 57 | T | 1,3-Dichloropropane | 50.000 | 56.030 | -12.1 | 110 | 0.00 |
| 58 | T | 2-Chloroethyl Vinyl ether | 250.000 | 228.313 | 8.7 | 82 | 0.00 |
| 59 | T | 2-Hexanone | 250.000 | 261.399 | -4.6 | 96 | 0.00 |
| 60 | T | Dibromochloromethane | 50.000 | 54.508 | -9.0 | 108 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 50.000 | 56.226 | -12.5 | 114 | 0.00 |
| 62 | S | 4-Bromofluorobenzene | 50.000 | 56.013 | -12.0 | 107 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 50.000 | 50.000 | 0.0 | 104 | 0.00 |
| 64 | T | Tetrachloroethene | 50.000 | 58.273 | -16.5 | 128 | 0.00 |
| 65 | PM | Chlorobenzene | 50.000 | 56.165 | -12.3 | 119 | 0.00 |
| 66 | T | 1,1,1,2-Tetrachloroethane | 50.000 | 53.847 | -7.7 | 115 | 0.00 |
| 67 | C | Ethyl Benzene | 50.000 | 59.349 | -18.7# | 118 | 0.00 |
| 68 | T | m/p-Xylenes | 100.000 | 127.234 | -27.2# | 123 | 0.00 |
| 69 | T | o-Xylene | 50.000 | 61.940 | -23.9 | 119 | 0.00 |
| 70 | T | Styrene | 50.000 | 65.022 | -30.0# | 120 | 0.00 |
| 71 | P | Bromoform | 50.000 | 56.133 | -12.3 | 108 | 0.00 |
| 72 | I | 1,4-Dichlorobenzene-d4 | 50.000 | 50.000 | 0.0 | 107 | 0.00 |
| 73 | T | Isopropylbenzene | 50.000 | 57.186 | -14.4 | 120 | 0.00 |
| 74 | T | N-amyl acetate | 50.000 | 49.123 | 1.8 | 98 | 0.00 |
| 75 | P | 1,1,2,2-Tetrachloroethane | 50.000 | 50.322 | -0.6 | 112 | 0.00 |
| 76 | T | 1,2,3-Trichloropropane | 50.000 | 48.165 | 3.7 | 117 | 0.00 |
| 77 | T | Bromobenzene | 50.000 | 53.497 | -7.0 | 118 | 0.00 |
| 78 | T | n-propylbenzene | 50.000 | 58.330 | -16.7 | 120 | 0.00 |
| 79 | T | 2-Chlorotoluene | 50.000 | 54.157 | -8.3 | 116 | 0.00 |
| 80 | T | 1,3,5-Trimethylbenzene | 50.000 | 58.774 | -17.5 | 119 | 0.00 |
| 81 | T | trans-1,4-Dichloro-2-butene | 50.000 | 57.659 | -15.3 | 119 | 0.00 |
| 82 | T | 4-Chlorotoluene | 50.000 | 55.070 | -10.1 | 117 | 0.00 |
| 83 | T | tert-Butylbenzene | 50.000 | 55.960 | -11.9 | 115 | 0.00 |
| 84 | T | 1,2,4-Trimethylbenzene | 50.000 | 59.518 | -19.0 | 117 | 0.00 |
| 85 | T | sec-Butylbenzene | 50.000 | 59.408 | -18.8 | 121 | 0.00 |
| 86 | T | p-Isopropyltoluene | 50.000 | 54.534 | -9.1 | 120 | 0.00 |
| 87 | T | 1,3-Dichlorobenzene | 50.000 | 54.455 | -8.9 | 121 | 0.00 |
| 88 | T | 1,4-Dichlorobenzene | 50.000 | 52.768 | -5.5 | 122 | 0.00 |
| 89 | T | n-Butylbenzene | 50.000 | 58.781 | -17.6 | 118 | 0.00 |
| 90 | T | Hexachloroethane | 50.000 | 50.887 | -1.8 | 117 | 0.00 |
| 91 | T | 1,2-Dichlorobenzene | 50.000 | 52.333 | -4.7 | 117 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 50.000 | 48.620 | 2.8 | 102 | 0.00 |
| 93 | T | 1,2,4-Trichlorobenzene | 50.000 | 52.709 | -5.4 | 109 | 0.00 |
| 94 | T | Hexachlorobutadiene | 50.000 | 48.466 | 3.1 | 113 | 0.00 |
| 95 | T | Naphthalene | 50.000 | 55.897 | -11.8 | 108 | 0.00 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085645.D
Acq On : 04 Feb 2025 11:05
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Feb 05 01:01:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 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 | 52.330 | -4.7 | 109 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 6

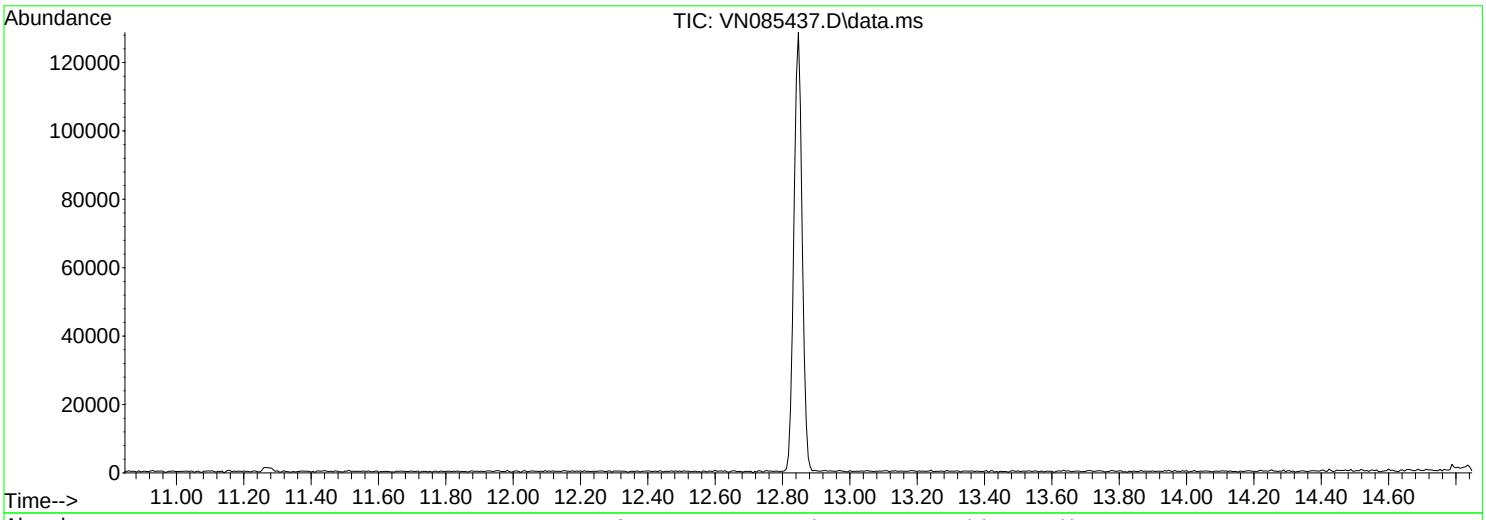
# QC SAMPLE DATA

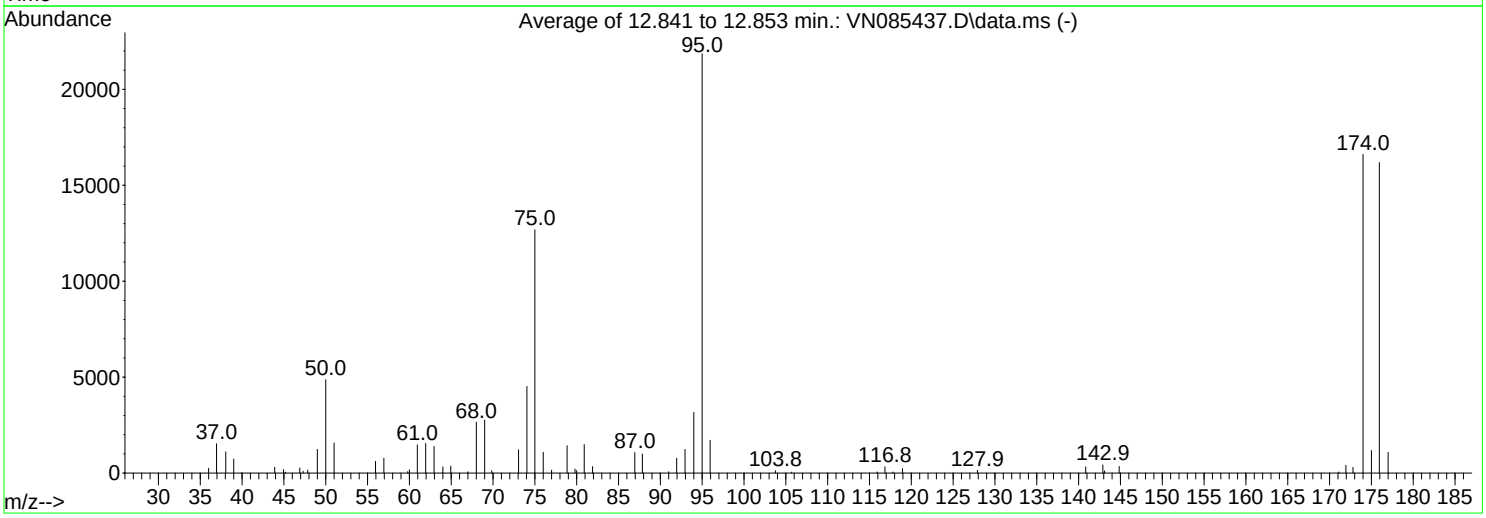
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085437.D
Acq On : 14 Jan 2025 14:22
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Title : SW846 8260
Last Update : Wed Jan 15 02:16:08 2025




AutoFind: Scans 1851, 1852, 1853; Background Corrected with Scan 1843

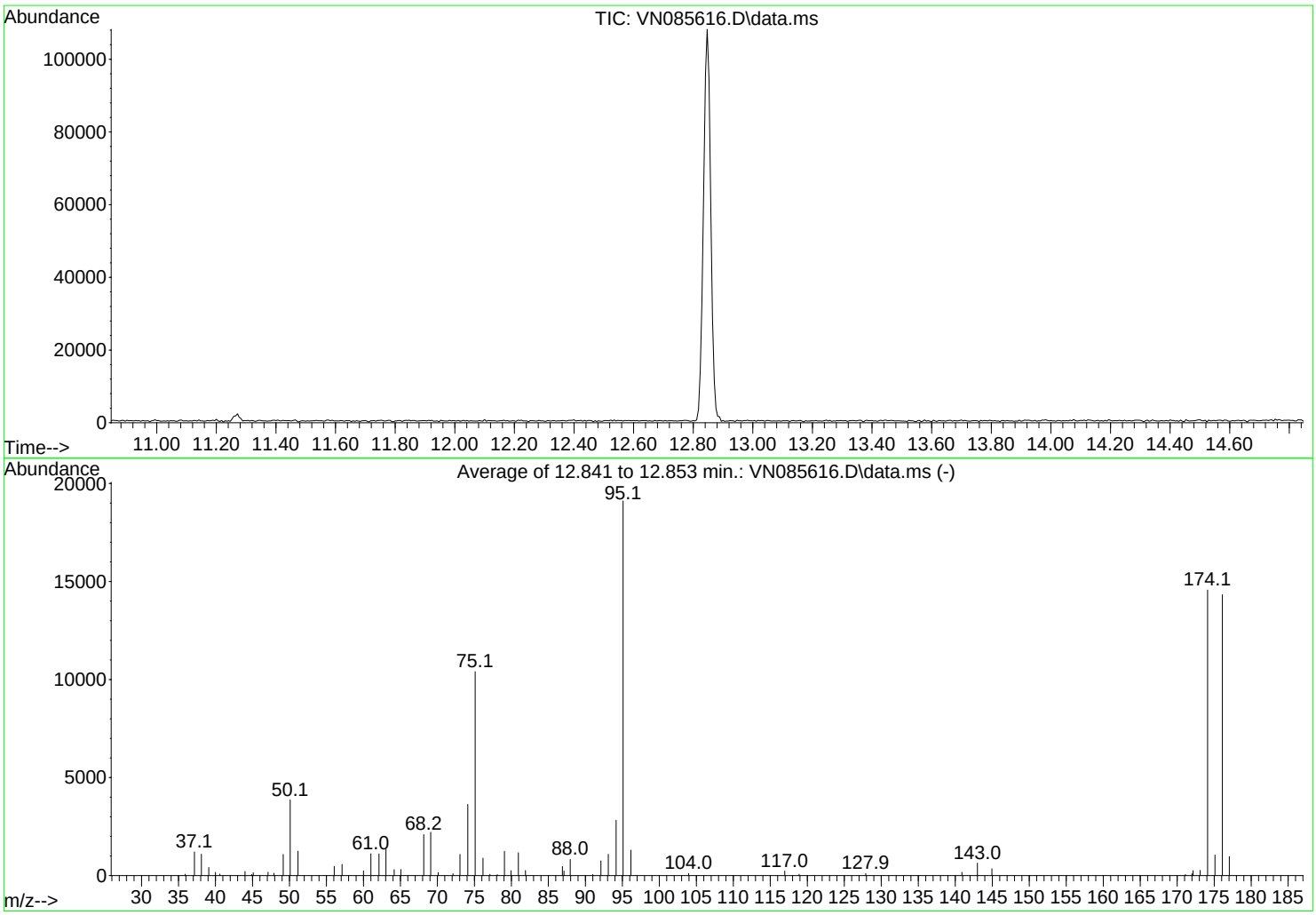
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 22.3 | 4864 | PASS |
| 75 | 95 | 30 | 60 | 58.0 | 12679 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 21856 | PASS |
| 96 | 95 | 5 | 9 | 7.8 | 1703 | PASS |
| 173 | 174 | 0.00 | 2 | 1.8 | 296 | PASS |
| 174 | 95 | 50 | 100 | 76.0 | 16613 | PASS |
| 175 | 174 | 5 | 9 | 7.1 | 1179 | PASS |
| 176 | 174 | 95 | 101 | 97.4 | 16185 | PASS |
| 177 | 176 | 5 | 9 | 6.7 | 1079 | PASS |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085616.D
Acq On : 03 Feb 2025 12:23
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Title : SW846 8260
Last Update : Wed Jan 15 02:16:08 2025




AutoFind: Scans 1851, 1852, 1853; Background Corrected with Scan 1843

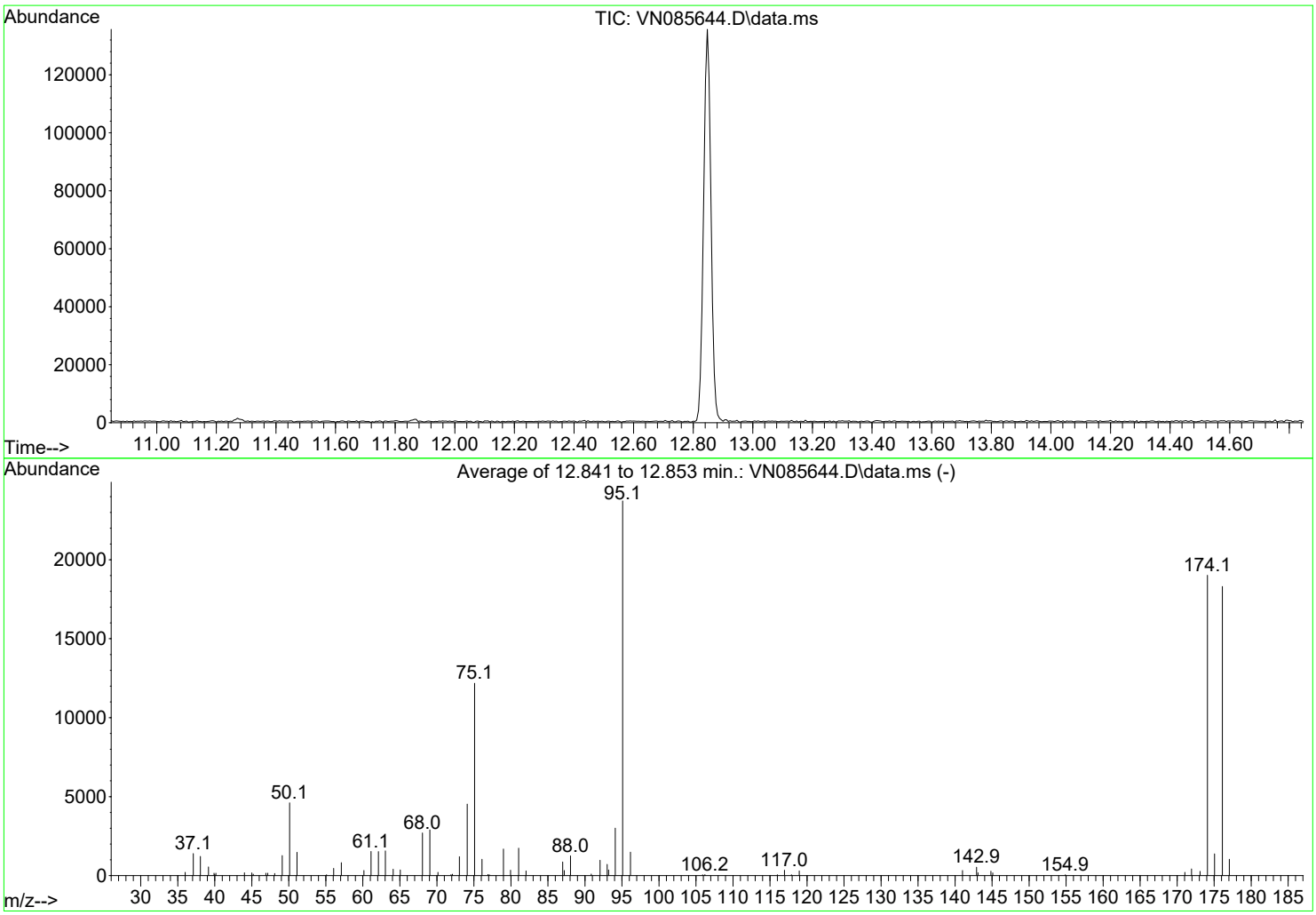
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 20.2 | 3864 | PASS |
| 75 | 95 | 30 | 60 | 54.4 | 10405 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 19112 | PASS |
| 96 | 95 | 5 | 9 | 6.8 | 1297 | PASS |
| 173 | 174 | 0.00 | 2 | 1.9 | 270 | PASS |
| 174 | 95 | 50 | 100 | 76.2 | 14567 | PASS |
| 175 | 174 | 5 | 9 | 7.2 | 1052 | PASS |
| 176 | 174 | 95 | 101 | 98.4 | 14328 | PASS |
| 177 | 176 | 5 | 9 | 6.8 | 972 | PASS |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085644.D
Acq On : 04 Feb 2025 09:55
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Title : SW846 8260
Last Update : Wed Jan 15 02:16:08 2025




AutoFind: Scans 1851, 1852, 1853; Background Corrected with Scan 1843

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 19.4 | 4605 | PASS |
| 75 | 95 | 30 | 60 | 51.3 | 12174 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 23728 | PASS |
| 96 | 95 | 5 | 9 | 6.3 | 1483 | PASS |
| 173 | 174 | 0.00 | 2 | 1.4 | 274 | PASS |
| 174 | 95 | 50 | 100 | 80.1 | 19016 | PASS |
| 175 | 174 | 5 | 9 | 7.2 | 1374 | PASS |
| 176 | 174 | 95 | 101 | 96.3 | 18307 | PASS |
| 177 | 176 | 5 | 9 | 5.7 | 1035 | PASS |

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | RU2 Engineering, LLC | Date Collected: | |
| Project: | NYCDDC SANTWOBR Brooklyn Bridge BBMCR | Date Received: | |
| Client Sample ID: | VN0203WBL01 | SDG No.: | Q1241 |
| Lab Sample ID: | VN0203WBL01 | 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: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN085618.D | 1 | | 02/03/25 13:34 | VN020325 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-01-4 | Vinyl Chloride | 5.00 | U | 0.34 | 5.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 5.00 | U | 0.26 | 5.00 | ug/L |
| 78-93-3 | 2-Butanone | 25.0 | U | 1.30 | 25.0 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 5.00 | U | 0.25 | 5.00 | ug/L |
| 67-66-3 | Chloroform | 5.00 | U | 0.26 | 5.00 | ug/L |
| 71-43-2 | Benzene | 5.00 | U | 0.16 | 5.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 5.00 | U | 0.24 | 5.00 | ug/L |
| 79-01-6 | Trichloroethene | 5.00 | U | 0.32 | 5.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 5.00 | U | 0.25 | 5.00 | ug/L |
| 108-90-7 | Chlorobenzene | 5.00 | U | 0.13 | 5.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 50.4 | | 74 - 125 | 101% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 50.6 | | 75 - 124 | 101% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 50.1 | | 86 - 113 | 100% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 42.6 | | 77 - 121 | 85% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 184000 | 8.224 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 355000 | 9.1 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 307000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 112000 | 13.788 | | | |

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_N\Data\VN020325\
Data File : VN085618.D
Acq On : 03 Feb 2025 13:34
Operator : JC\MD
Sample : VN0203WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBL01

Quant Time: Feb 04 00:57:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 183958 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 354826 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 307130 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 111992 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.571 | 65 | 149772 | 50.437 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 100.880% | | | |
| 35) Dibromofluoromethane | 8.165 | 113 | 124502 | 50.577 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 101.160% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 438134 | 50.095 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 100.180% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 127520 | 42.623 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 85.240% | | | |

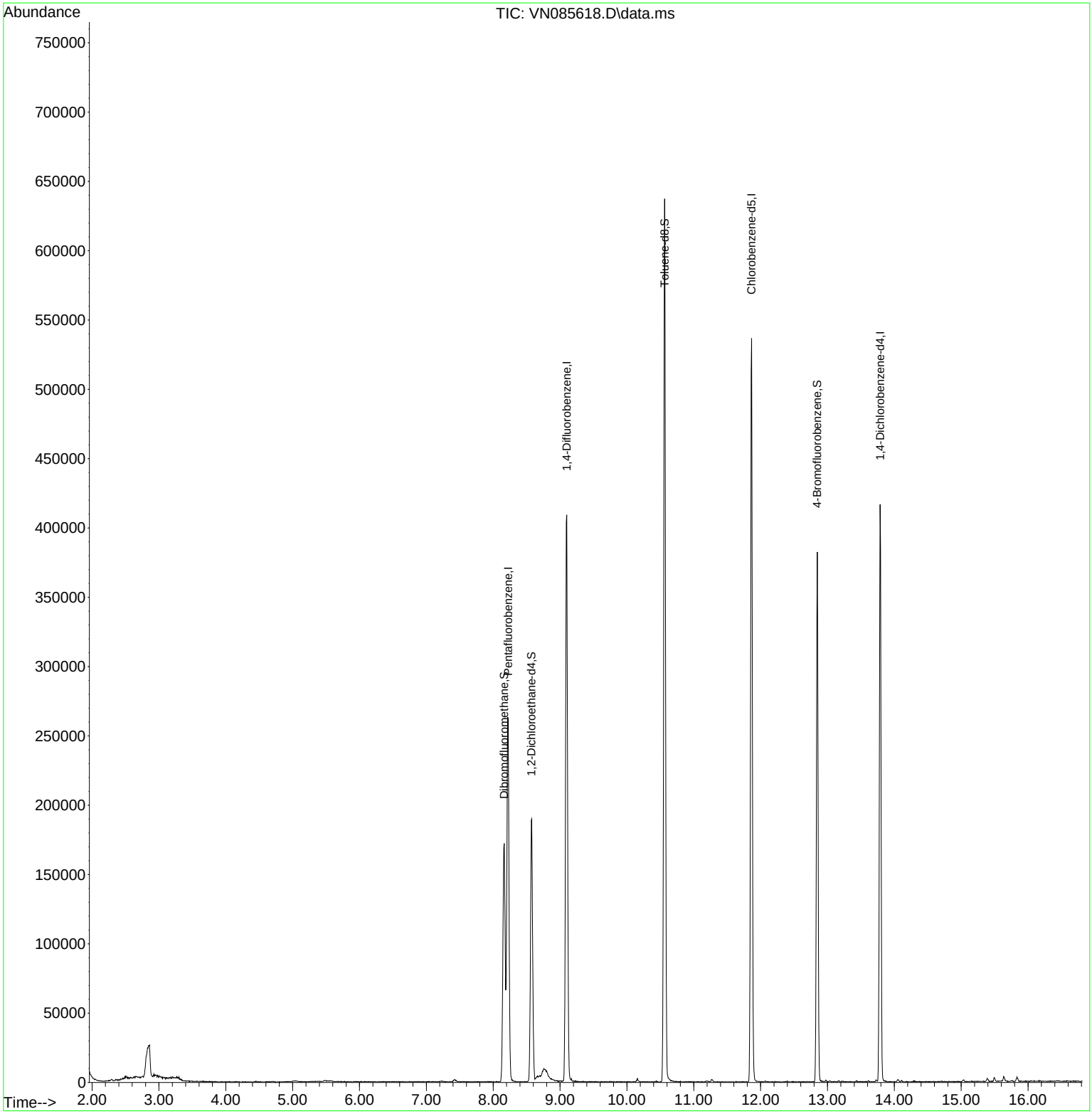
Target Compounds Qvalue

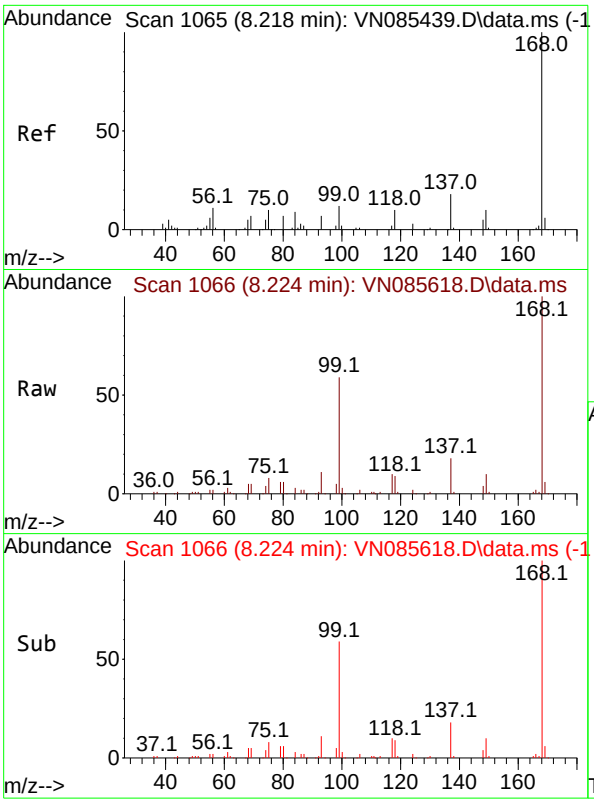
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085618.D
Acq On : 03 Feb 2025 13:34
Operator : JC\MD
Sample : VN0203WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBL01

Quant Time: Feb 04 00:57:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration



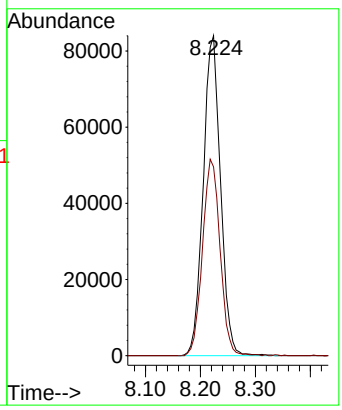


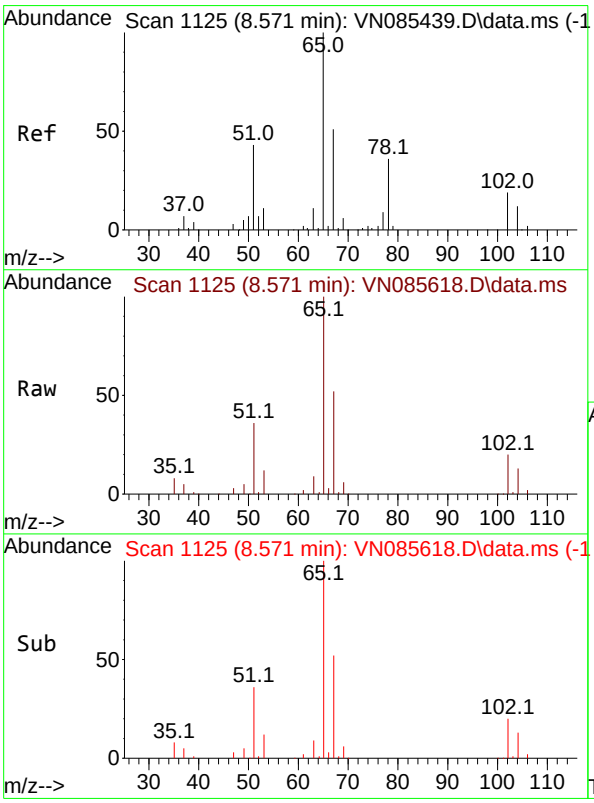

#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085618.D
Acq: 03 Feb 2025 13:34

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBL01

Tgt Ion:168 Resp: 183958

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 59.0 | 53.6 | 80.4 |

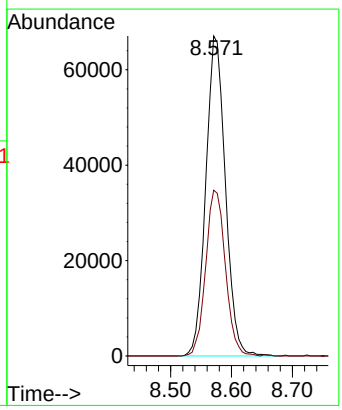


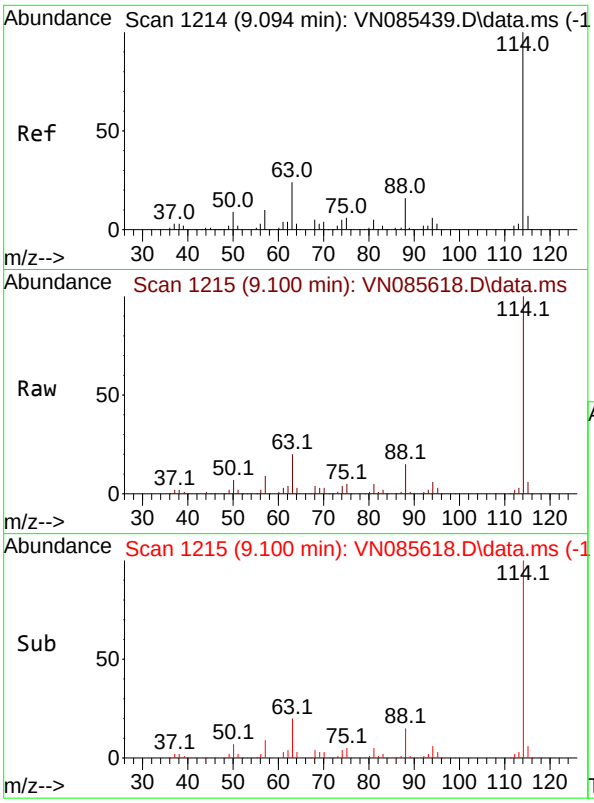




#33
1,2-Dichloroethane-d4
Concen: 50.437 ug/l
RT: 8.571 min Scan# 1125
Delta R.T. -0.000 min
Lab File: VN085618.D
Acq: 03 Feb 2025 13:34

Tgt Ion: 65 Resp: 149772

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 52.1 | 0.0 | 101.6 |



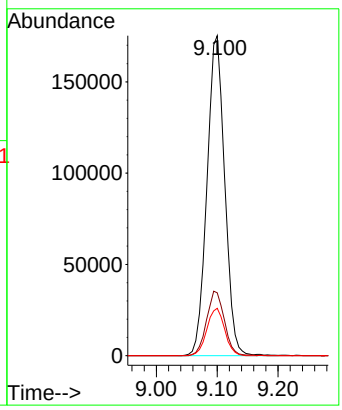


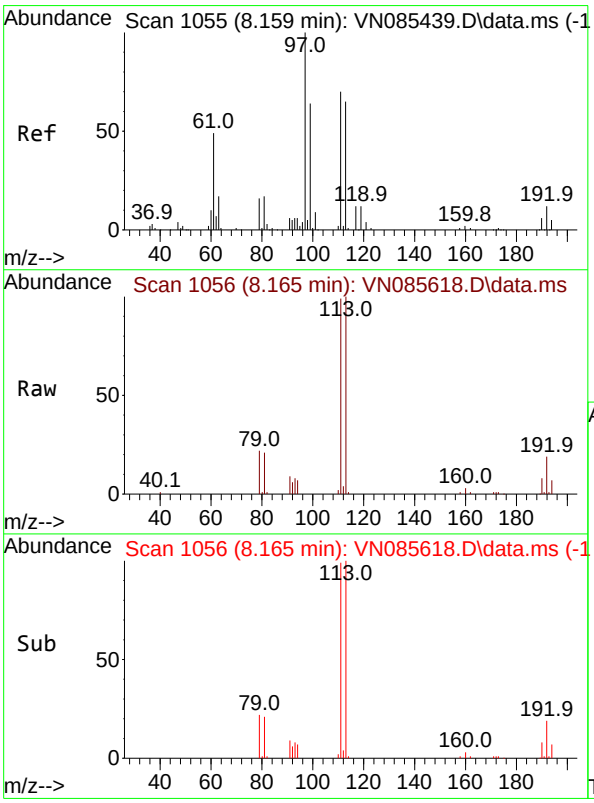

#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085618.D
Acq: 03 Feb 2025 13:34

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBL01

Tgt Ion:114 Resp: 354826

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 19.7 | 0.0 | 47.6 |
| 88 | 14.8 | 0.0 | 32.6 |

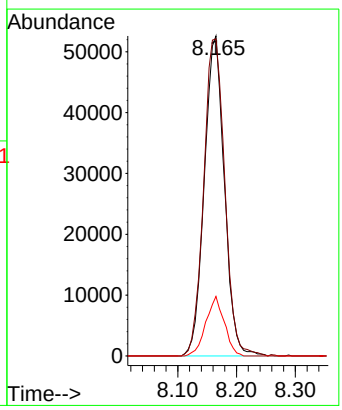


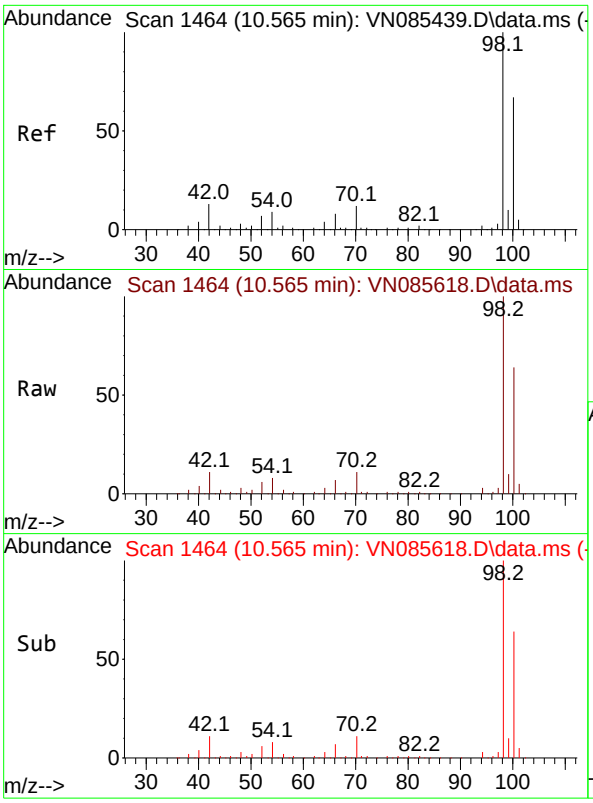




#35
Dibromofluoromethane
Concen: 50.577 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.006 min
Lab File: VN085618.D
Acq: 03 Feb 2025 13:34

Tgt Ion:113 Resp: 124502

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 104.3 | 82.7 | 124.1 |
| 192 | 17.2 | 14.3 | 21.5 |



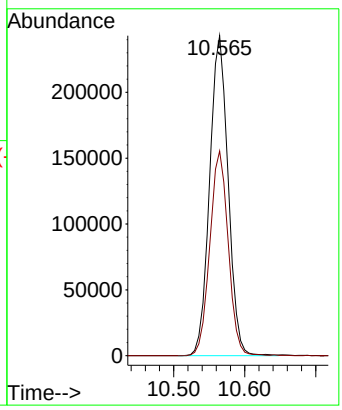


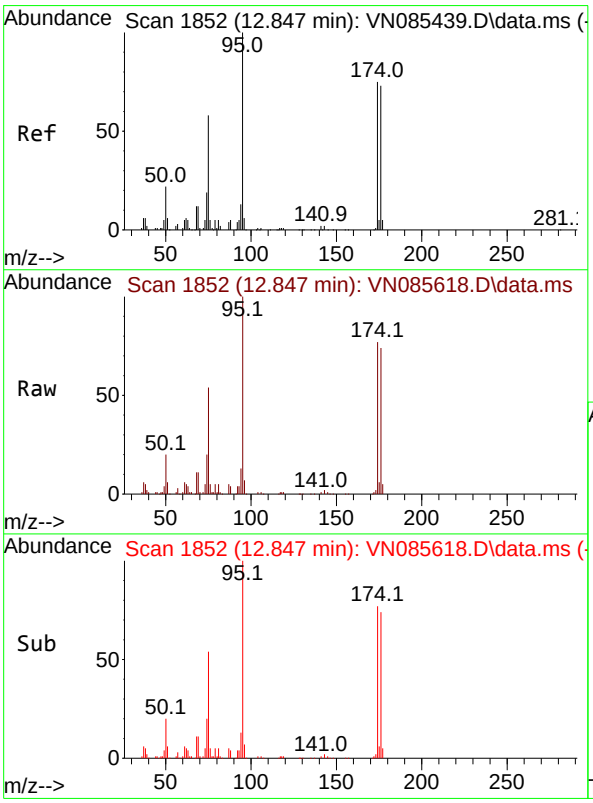

#50
Toluene-d8
Concen: 50.095 ug/l
RT: 10.565 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN085618.D
Acq: 03 Feb 2025 13:34

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBL01

Tgt Ion: 98 Resp: 438134

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 63.6 | 52.2 | 78.4 |

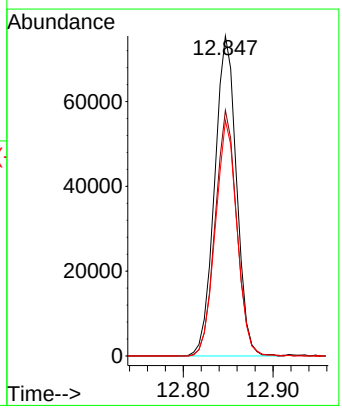


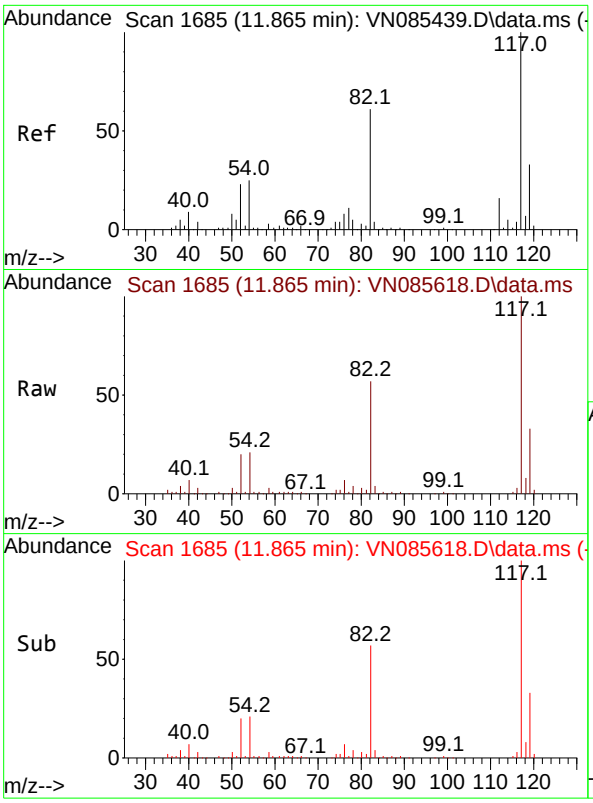




#62
4-Bromofluorobenzene
Concen: 42.623 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN085618.D
Acq: 03 Feb 2025 13:34

Tgt Ion: 95 Resp: 127520

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 75.8 | 0.0 | 145.0 |
| 176 | 72.7 | 0.0 | 142.4 |



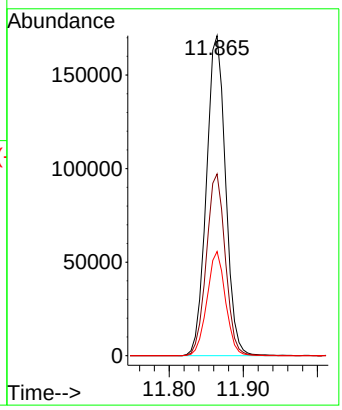


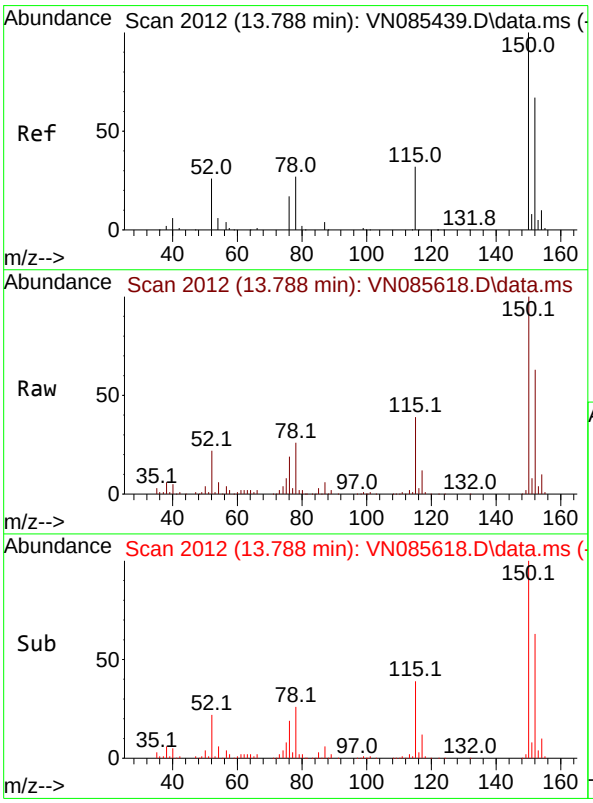

#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085618.D
Acq: 03 Feb 2025 13:34

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBL01

Tgt Ion:117 Resp: 307130

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 56.8 | 48.6 | 72.8 |
| 119 | 32.6 | 26.6 | 39.8 |

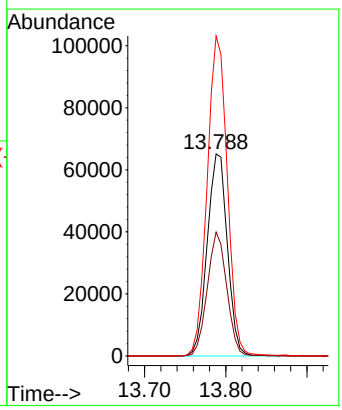



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.000 min
Lab File: VN085618.D
Acq: 03 Feb 2025 13:34

Tgt Ion:152 Resp: 111992

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 59.5 | 31.1 | 93.3 |
| 150 | 158.2 | 0.0 | 343.6 |



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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | RU2 Engineering, LLC | Date Collected: | |
| Project: | NYCDDC SANTWOBR Brooklyn Bridge BBMCR | Date Received: | |
| Client Sample ID: | VN0204WBL01 | SDG No.: | Q1241 |
| Lab Sample ID: | VN0204WBL01 | 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: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN085647.D | 1 | | 02/04/25 12:31 | VN020425 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-01-4 | Vinyl Chloride | 1.00 | U | 0.34 | 1.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 1.00 | U | 0.26 | 1.00 | ug/L |
| 78-93-3 | 2-Butanone | 5.00 | U | 1.30 | 5.00 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 1.00 | U | 0.25 | 1.00 | ug/L |
| 67-66-3 | Chloroform | 1.00 | U | 0.26 | 1.00 | ug/L |
| 71-43-2 | Benzene | 1.00 | U | 0.16 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 1.00 | U | 0.24 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 1.00 | U | 0.32 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 1.00 | U | 0.25 | 1.00 | ug/L |
| 108-90-7 | Chlorobenzene | 1.00 | U | 0.13 | 1.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 49.9 | | 74 - 125 | 100% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 50.3 | | 75 - 124 | 101% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 49.2 | | 86 - 113 | 98% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 44.2 | | 77 - 121 | 88% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 198000 | 8.224 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 379000 | 9.1 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 329000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 132000 | 13.788 | | | |

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_N\Data\VN020425\
Data File : VN085647.D
Acq On : 04 Feb 2025 12:31
Operator : JC\MD
Sample : VN0204WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBL01

Quant Time: Feb 05 01:02:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 197983 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 379434 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 328690 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 132287 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.577 | 65 | 159588 | 49.936 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 99.880% | | | |
| 35) Dibromofluoromethane | 8.165 | 113 | 132313 | 50.264 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 100.520% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 460162 | 49.201 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 98.400% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 141527 | 44.237 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 88.480% | | | |

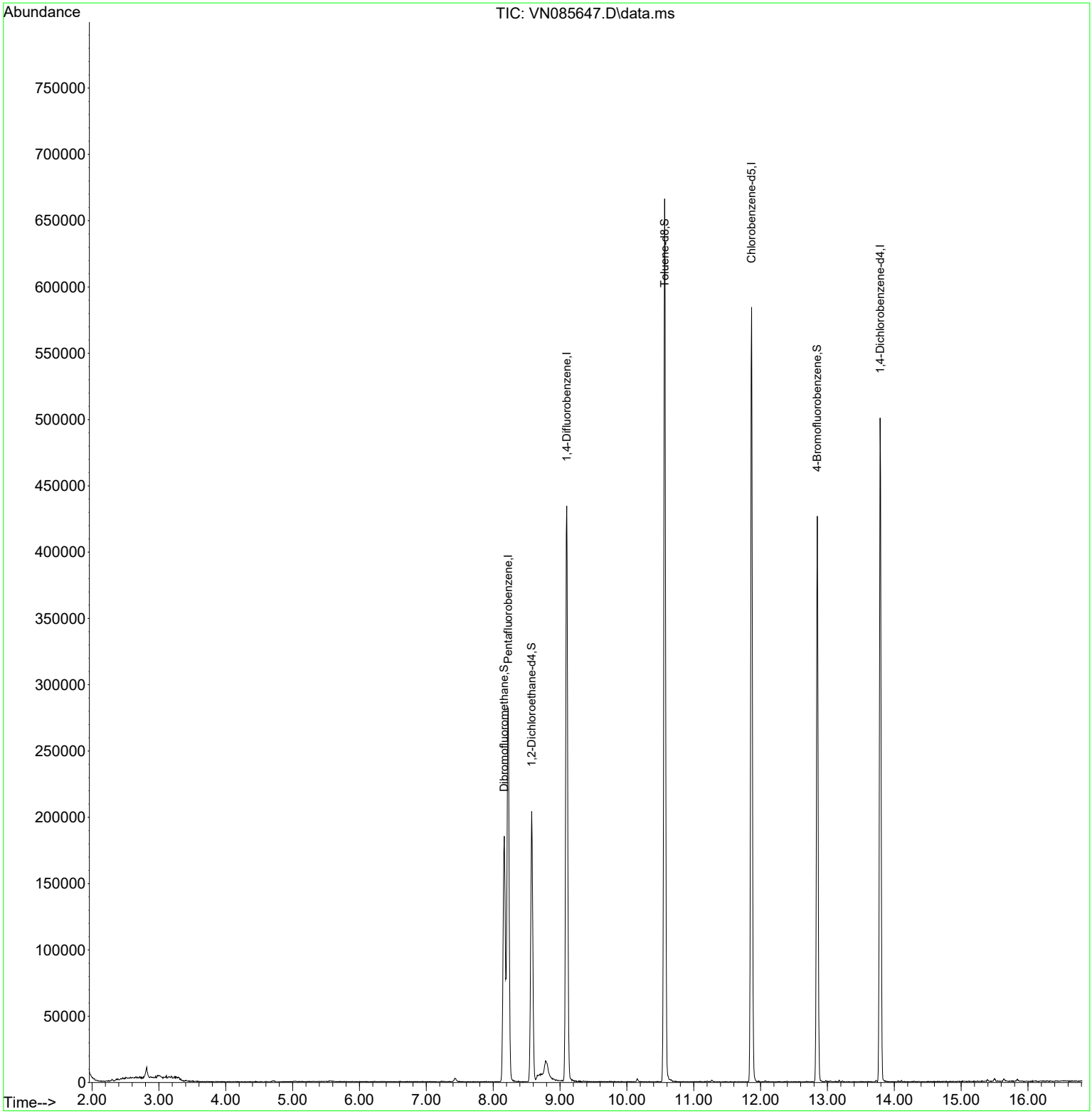
Target Compounds Qvalue

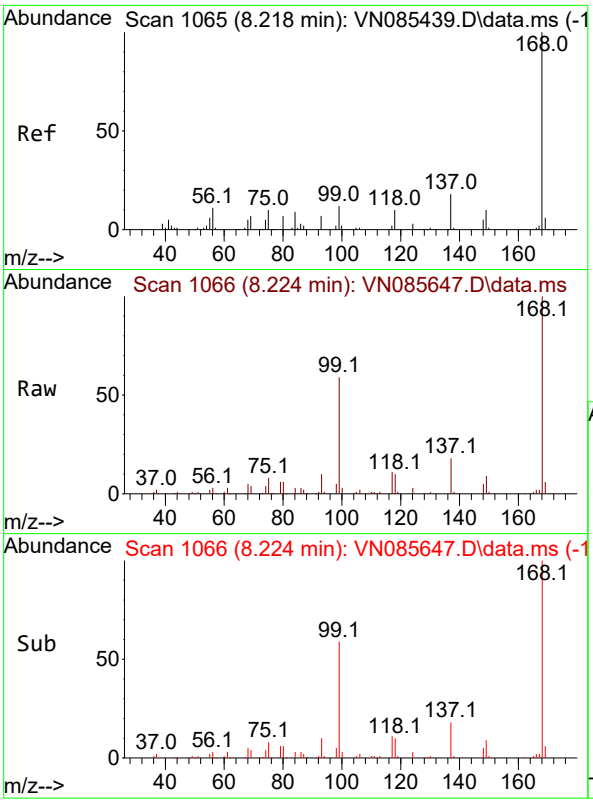
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085647.D
Acq On : 04 Feb 2025 12:31
Operator : JC\MD
Sample : VN0204WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBL01

Quant Time: Feb 05 01:02:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration



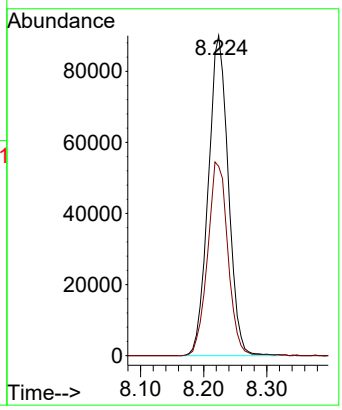


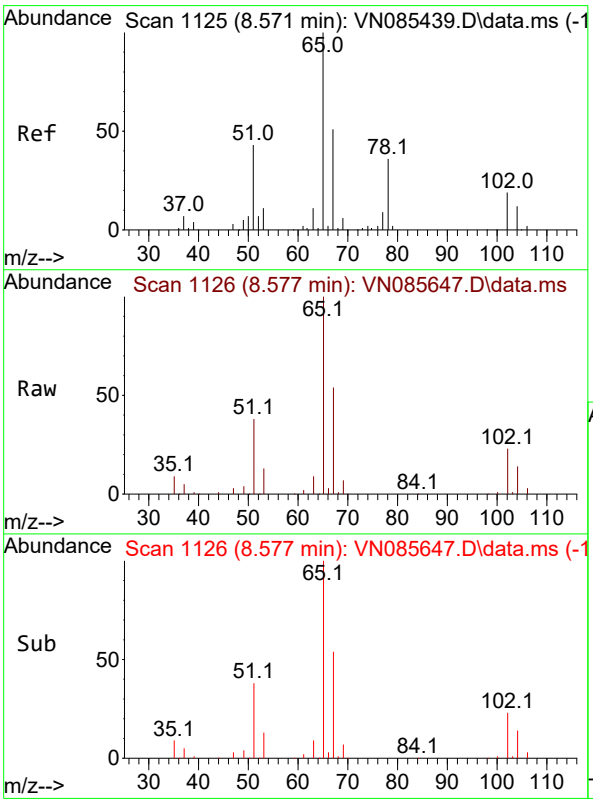

#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085647.D
Acq: 04 Feb 2025 12:31

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBL01

Tgt Ion:168 Resp: 197983

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 59.2 | 53.6 | 80.4 |

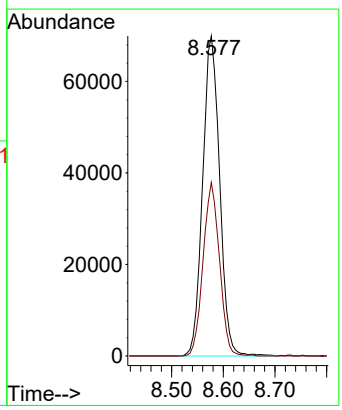


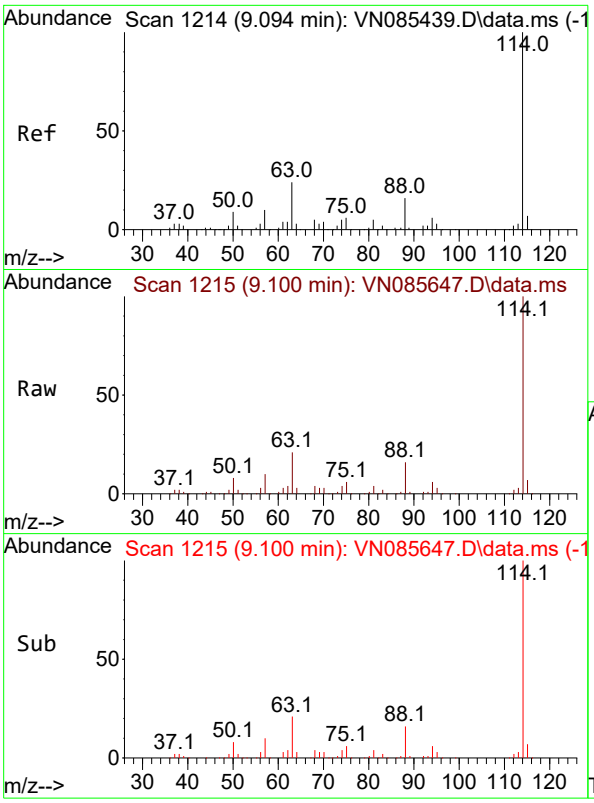




#33
1,2-Dichloroethane-d4
Concen: 49.936 ug/l
RT: 8.577 min Scan# 1126
Delta R.T. 0.006 min
Lab File: VN085647.D
Acq: 04 Feb 2025 12:31

Tgt Ion: 65 Resp: 159588

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 52.3 | 0.0 | 101.6 |



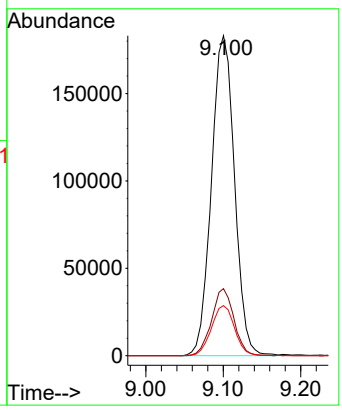


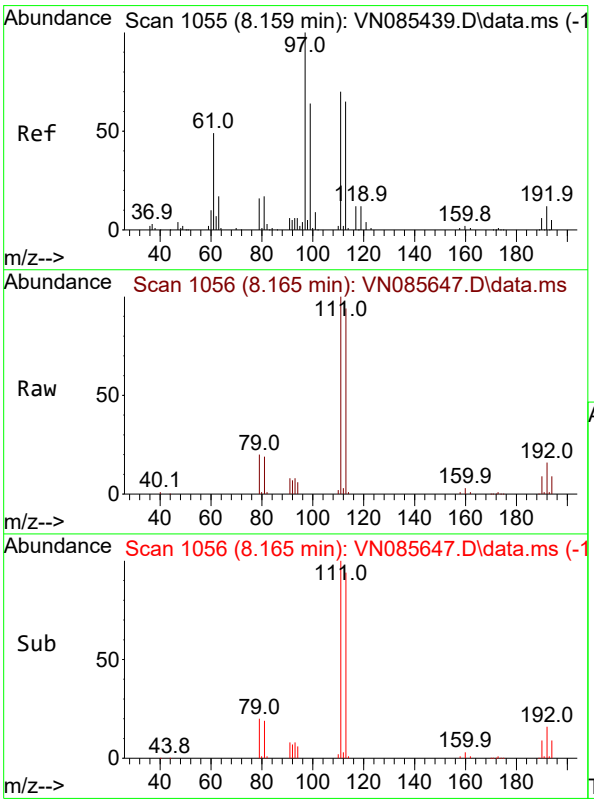

#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085647.D
Acq: 04 Feb 2025 12:31

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBL01

Tgt Ion:114 Resp: 379434

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 21.0 | 0.0 | 47.6 |
| 88 | 15.7 | 0.0 | 32.6 |

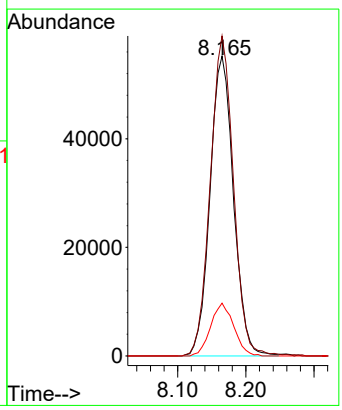


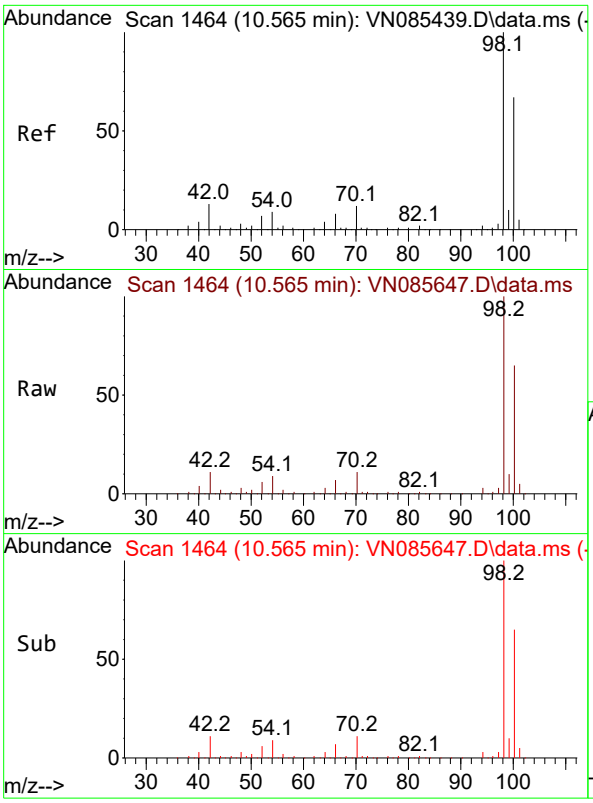




#35
Dibromofluoromethane
Concen: 50.264 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.006 min
Lab File: VN085647.D
Acq: 04 Feb 2025 12:31

Tgt Ion:113 Resp: 132313

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 105.6 | 82.7 | 124.1 |
| 192 | 17.4 | 14.3 | 21.5 |



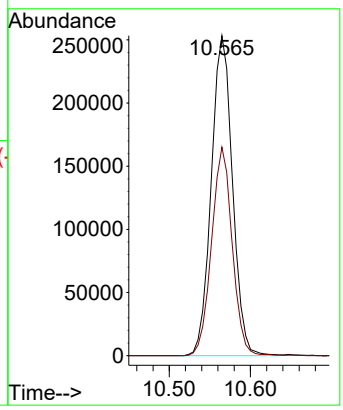


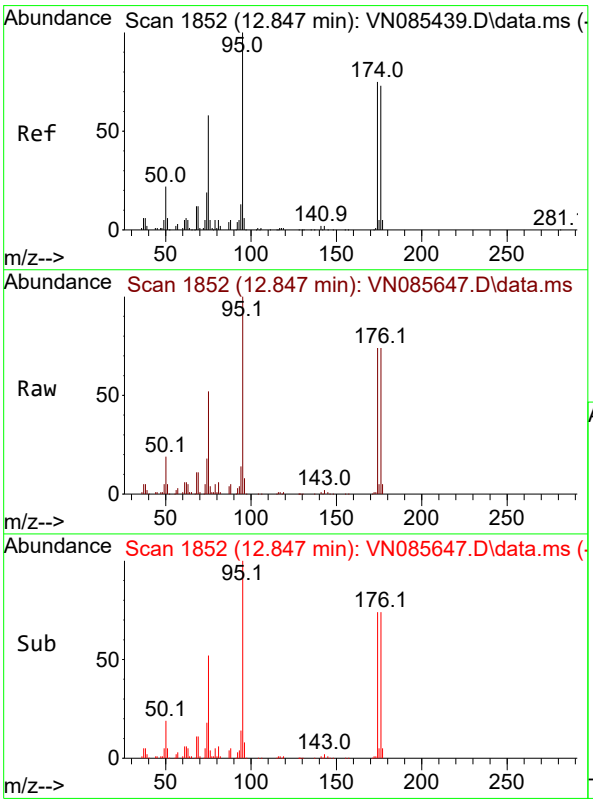

#50
Toluene-d8
Concen: 49.201 ug/l
RT: 10.565 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN085647.D
Acq: 04 Feb 2025 12:31

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBL01

Tgt Ion: 98 Resp: 460162

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 63.4 | 52.2 | 78.4 |

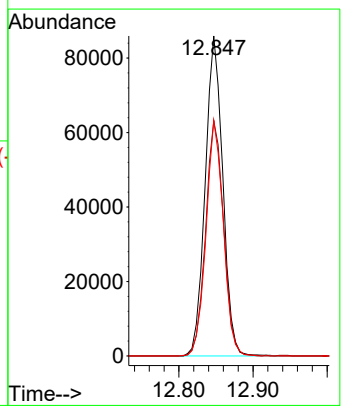


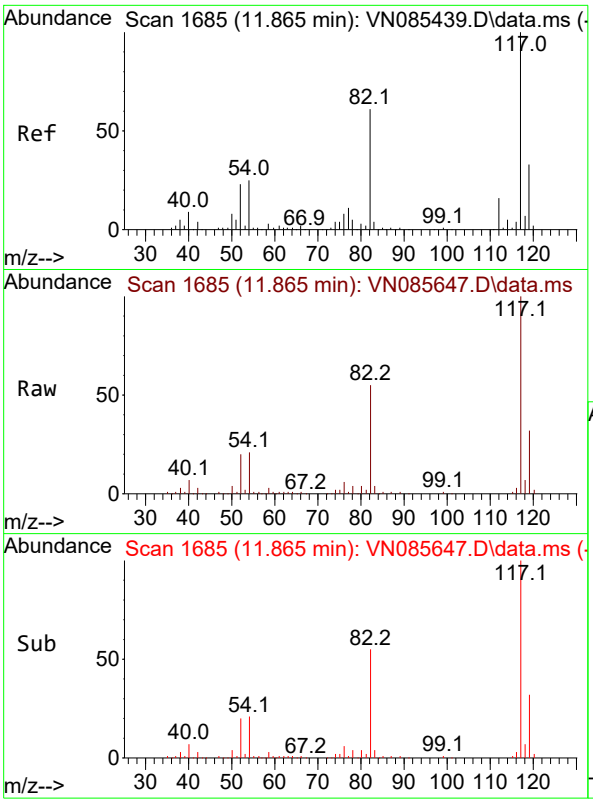




#62
4-Bromofluorobenzene
Concen: 44.237 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN085647.D
Acq: 04 Feb 2025 12:31

Tgt Ion: 95 Resp: 141527

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 75.4 | 0.0 | 145.0 |
| 176 | 72.4 | 0.0 | 142.4 |



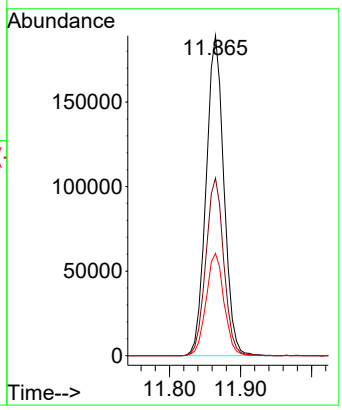


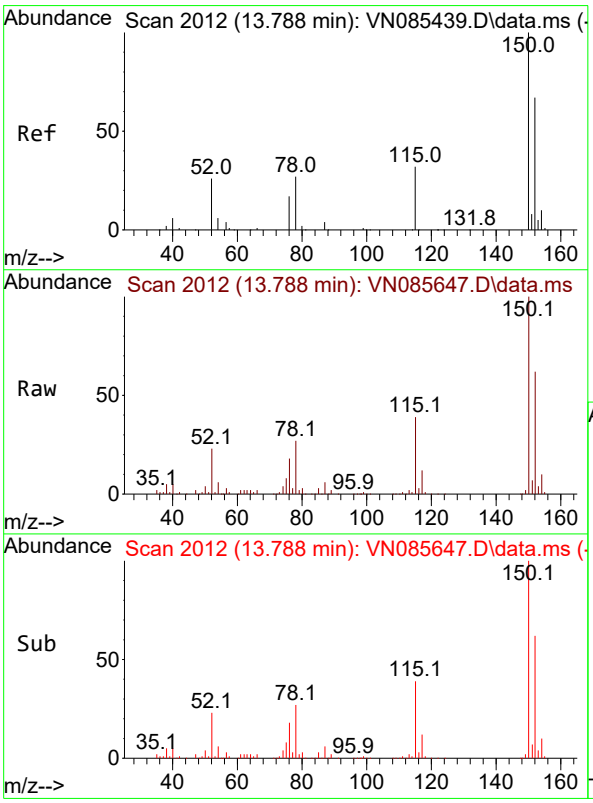

#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085647.D
Acq: 04 Feb 2025 12:31

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBL01

Tgt Ion:117 Resp: 328690

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 55.5 | 48.6 | 72.8 |
| 119 | 31.9 | 26.6 | 39.8 |

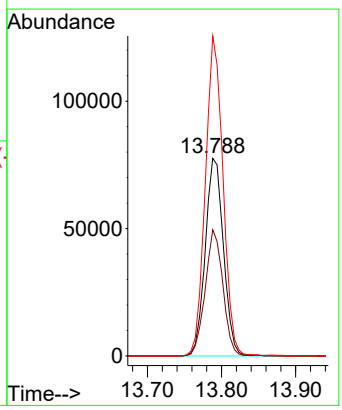



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. 0.000 min
Lab File: VN085647.D
Acq: 04 Feb 2025 12:31

Tgt Ion:152 Resp: 132287

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 61.9 | 31.1 | 93.3 |
| 150 | 156.8 | 0.0 | 343.6 |



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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | RU2 Engineering, LLC | Date Collected: | |
| Project: | NYCDDC SANTWOBR Brooklyn Bridge BBMCR | Date Received: | |
| Client Sample ID: | VN0203WBS01 | SDG No.: | Q1241 |
| Lab Sample ID: | VN0203WBS01 | 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: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN085619.D | 1 | | 02/03/25 13:58 | VN020325 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-01-4 | Vinyl Chloride | 18.0 | | 0.34 | 5.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 17.3 | | 0.26 | 5.00 | ug/L |
| 78-93-3 | 2-Butanone | 88.6 | | 1.30 | 25.0 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 17.5 | | 0.25 | 5.00 | ug/L |
| 67-66-3 | Chloroform | 19.0 | | 0.26 | 5.00 | ug/L |
| 71-43-2 | Benzene | 18.6 | | 0.16 | 5.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 17.2 | | 0.24 | 5.00 | ug/L |
| 79-01-6 | Trichloroethene | 18.4 | | 0.32 | 5.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 19.2 | | 0.25 | 5.00 | ug/L |
| 108-90-7 | Chlorobenzene | 19.0 | | 0.13 | 5.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 47.8 | | 74 - 125 | 96% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 52.2 | | 75 - 124 | 104% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 54.6 | | 86 - 113 | 109% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 51.1 | | 77 - 121 | 102% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 189000 | 8.224 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 327000 | 9.1 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 287000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 141000 | 13.788 | | | |

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_N\Data\VN020325\
Data File : VN085619.D
Acq On : 03 Feb 2025 13:58
Operator : JC\MD
Sample : VN0203WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 04 00:57:55 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 188870 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 327054 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 287245 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 141185 | 50.000 | ug/l | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.577 | 65 | 145603 | 47.758 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 95.520% | | | |
| 35) Dibromofluoromethane | 8.165 | 113 | 118527 | 52.239 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 104.480% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 440013 | 54.582 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 109.160% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 140993 | 51.128 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 102.260% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 38687 | 15.128 | ug/l | 97 |
| 3) Chloromethane | 2.359 | 50 | 39178 | 14.150 | ug/l | 99 |
| 4) Vinyl Chloride | 2.512 | 62 | 50107 | 18.004 | ug/l | 98 |
| 5) Bromomethane | 2.959 | 94 | 32854 | 19.544 | ug/l | 100 |
| 6) Chloroethane | 3.124 | 64 | 34668 | 19.648 | ug/l | 92 |
| 7) Trichlorofluoromethane | 3.495 | 101 | 71688 | 17.753 | ug/l | 95 |
| 8) Diethyl Ether | 3.959 | 74 | 22305 | 15.989 | ug/l | 93 |
| 9) 1,1,2-Trichlorotrifluo... | 4.377 | 101 | 41316 | 18.165 | ug/l | 98 |
| 10) Methyl Iodide | 4.589 | 142 | 44373 | 17.036 | ug/l | 97 |
| 11) Tert butyl alcohol | 5.518 | 59 | 34586 | 99.071 | ug/l | 100 |
| 12) 1,1-Dichloroethene | 4.347 | 96 | 35011 | 17.272 | ug/l | 91 |
| 13) Acrolein | 4.183 | 56 | 24346 | 51.087 | ug/l | 99 |
| 14) Allyl chloride | 5.018 | 41 | 46069 | 14.006 | ug/l | 95 |
| 15) Acrylonitrile | 5.712 | 53 | 105201 | 94.873 | ug/l | 99 |
| 16) Acetone | 4.424 | 43 | 84320 | 85.597 | ug/l | 93 |
| 17) Carbon Disulfide | 4.718 | 76 | 83320 | 13.350 | ug/l | 98 |
| 18) Methyl Acetate | 5.030 | 43 | 57710 | 19.266 | ug/l | 95 |
| 19) Methyl tert-butyl Ether | 5.794 | 73 | 120113 | 18.249 | ug/l | 97 |
| 20) Methylene Chloride | 5.277 | 84 | 45987 | 18.858 | ug/l | 91 |
| 21) trans-1,2-Dichloroethene | 5.789 | 96 | 37886 | 17.489 | ug/l | 93 |
| 22) Diisopropyl ether | 6.665 | 45 | 121562 | 16.651 | ug/l | 98 |
| 23) Vinyl Acetate | 6.600 | 43 | 406095 | 79.484 | ug/l # | 93 |
| 24) 1,1-Dichloroethane | 6.571 | 63 | 79173 | 17.785 | ug/l | 97 |
| 25) 2-Butanone | 7.483 | 43 | 128446 | 88.606 | ug/l | 96 |
| 26) 2,2-Dichloropropane | 7.488 | 77 | 68597 | 19.060 | ug/l | 97 |
| 27) cis-1,2-Dichloroethene | 7.488 | 96 | 47714 | 18.700 | ug/l | 93 |
| 28) Bromochloromethane | 7.812 | 49 | 37432 | 18.074 | ug/l | 87 |
| 29) Tetrahydrofuran | 7.835 | 42 | 82755 | 90.042 | ug/l | 90 |
| 30) Chloroform | 7.965 | 83 | 87616 | 19.043 | ug/l | 96 |
| 31) Cyclohexane | 8.253 | 56 | 54962 | 14.205 | ug/l | 96 |
| 32) 1,1,1-Trichloroethane | 8.165 | 97 | 72591 | 17.987 | ug/l | 97 |
| 36) 1,1-Dichloropropene | 8.371 | 75 | 52640 | 16.530 | ug/l | 97 |
| 37) Ethyl Acetate | 7.553 | 43 | 52153 | 16.226 | ug/l # | 97 |
| 38) Carbon Tetrachloride | 8.359 | 117 | 63941 | 17.539 | ug/l | 97 |
| 39) Methylcyclohexane | 9.594 | 83 | 47017 | 15.712 | ug/l | 99 |
| 40) Benzene | 8.600 | 78 | 178066 | 18.610 | ug/l | 98 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085619.D
Acq On : 03 Feb 2025 13:58
Operator : JC\MD
Sample : VN0203WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 04 00:57:55 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.777 | 41 | 27186 | 16.257 | ug/l | | 93 |
| 42) 1,2-Dichloroethane | 8.665 | 62 | 62118 | 17.238 | ug/l | | 97 |
| 43) Isopropyl Acetate | 8.688 | 43 | 90788 | 17.628 | ug/l | | 98 |
| 44) Trichloroethene | 9.347 | 130 | 40975 | 18.397 | ug/l | | 95 |
| 45) 1,2-Dichloropropane | 9.618 | 63 | 44363 | 18.152 | ug/l | | 97 |
| 46) Dibromomethane | 9.706 | 93 | 32561 | 18.464 | ug/l | | 99 |
| 47) Bromodichloromethane | 9.882 | 83 | 68763 | 19.139 | ug/l | | 97 |
| 48) Methyl methacrylate | 9.677 | 41 | 36614 | 15.797 | ug/l | # | 86 |
| 49) 1,4-Dioxane | 9.694 | 88 | 16166 | 414.188 | ug/l | # | 78 |
| 51) 4-Methyl-2-Pentanone | 10.441 | 43 | 273103 | 91.380 | ug/l | | 95 |
| 52) Toluene | 10.629 | 92 | 109097 | 19.678 | ug/l | | 99 |
| 53) t-1,3-Dichloropropene | 10.835 | 75 | 63985 | 18.846 | ug/l | | 97 |
| 54) cis-1,3-Dichloropropene | 10.312 | 75 | 67151 | 18.516 | ug/l | | 92 |
| 55) 1,1,2-Trichloroethane | 11.012 | 97 | 44783 | 20.411 | ug/l | | 97 |
| 56) Ethyl methacrylate | 10.871 | 69 | 57740 | 16.950 | ug/l | | 94 |
| 57) 1,3-Dichloropropane | 11.159 | 76 | 74082 | 19.419 | ug/l | | 99 |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63 | 104900 | 75.342 | ug/l | | 97 |
| 59) 2-Hexanone | 11.194 | 43 | 193608 | 92.067 | ug/l | | 95 |
| 60) Dibromochloromethane | 11.359 | 129 | 51263 | 19.353 | ug/l | | 99 |
| 61) 1,2-Dibromoethane | 11.465 | 107 | 42556 | 19.486 | ug/l | | 99 |
| 64) Tetrachloroethene | 11.100 | 164 | 37520 | 19.160 | ug/l | | 98 |
| 65) Chlorobenzene | 11.888 | 112 | 119593 | 19.005 | ug/l | | 99 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 44553 | 19.291 | ug/l | | 99 |
| 67) Ethyl Benzene | 11.959 | 91 | 191202 | 18.656 | ug/l | | 100 |
| 68) m/p-Xylenes | 12.070 | 106 | 150700 | 39.785 | ug/l | | 96 |
| 69) o-Xylene | 12.394 | 106 | 68756 | 18.994 | ug/l | | 98 |
| 70) Styrene | 12.406 | 104 | 118783 | 19.827 | ug/l | | 97 |
| 71) Bromoform | 12.576 | 173 | 33352 | 20.183 | ug/l | # | 98 |
| 73) Isopropylbenzene | 12.694 | 105 | 175479 | 18.416 | ug/l | | 99 |
| 74) N-amyl acetate | 12.494 | 43 | 67669 | 15.799 | ug/l | | 91 |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 66278 | 19.691 | ug/l | | 99 |
| 76) 1,2,3-Trichloropropane | 12.988 | 75 | 57701m | 20.108 | ug/l | | |
| 77) Bromobenzene | 12.976 | 156 | 45701 | 18.357 | ug/l | | 96 |
| 78) n-propylbenzene | 13.035 | 91 | 212161 | 18.808 | ug/l | | 100 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 132501 | 18.149 | ug/l | | 96 |
| 80) 1,3,5-Trimethylbenzene | 13.170 | 105 | 151767 | 19.282 | ug/l | | 100 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 20631 | 19.452 | ug/l | | 90 |
| 82) 4-Chlorotoluene | 13.217 | 91 | 133497 | 18.365 | ug/l | | 97 |
| 83) tert-Butylbenzene | 13.435 | 119 | 121493 | 18.381 | ug/l | | 97 |
| 84) 1,2,4-Trimethylbenzene | 13.476 | 105 | 151424 | 19.303 | ug/l | | 97 |
| 85) sec-Butylbenzene | 13.612 | 105 | 174506 | 19.049 | ug/l | | 99 |
| 86) p-Isopropyltoluene | 13.723 | 119 | 139399 | 18.340 | ug/l | | 99 |
| 87) 1,3-Dichlorobenzene | 13.729 | 146 | 83480 | 18.208 | ug/l | | 100 |
| 88) 1,4-Dichlorobenzene | 13.812 | 146 | 85839 | 18.063 | ug/l | | 99 |
| 89) n-Butylbenzene | 14.053 | 91 | 114517 | 17.425 | ug/l | | 98 |
| 90) Hexachloroethane | 14.329 | 117 | 31928 | 18.308 | ug/l | | 97 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 84316 | 18.437 | ug/l | | 98 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75 | 11783 | 19.170 | ug/l | | 95 |
| 93) 1,2,4-Trichlorobenzene | 15.388 | 180 | 34556 | 16.258 | ug/l | | 99 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 18281 | 16.200 | ug/l | | 97 |
| 95) Naphthalene | 15.635 | 128 | 102342 | 16.136 | ug/l | | 99 |
| 96) 1,2,3-Trichlorobenzene | 15.835 | 180 | 34678 | 16.124 | ug/l | | 97 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085619.D
Acq On : 03 Feb 2025 13:58
Operator : JC\MD
Sample : VN0203WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 04 00:57:55 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

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

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

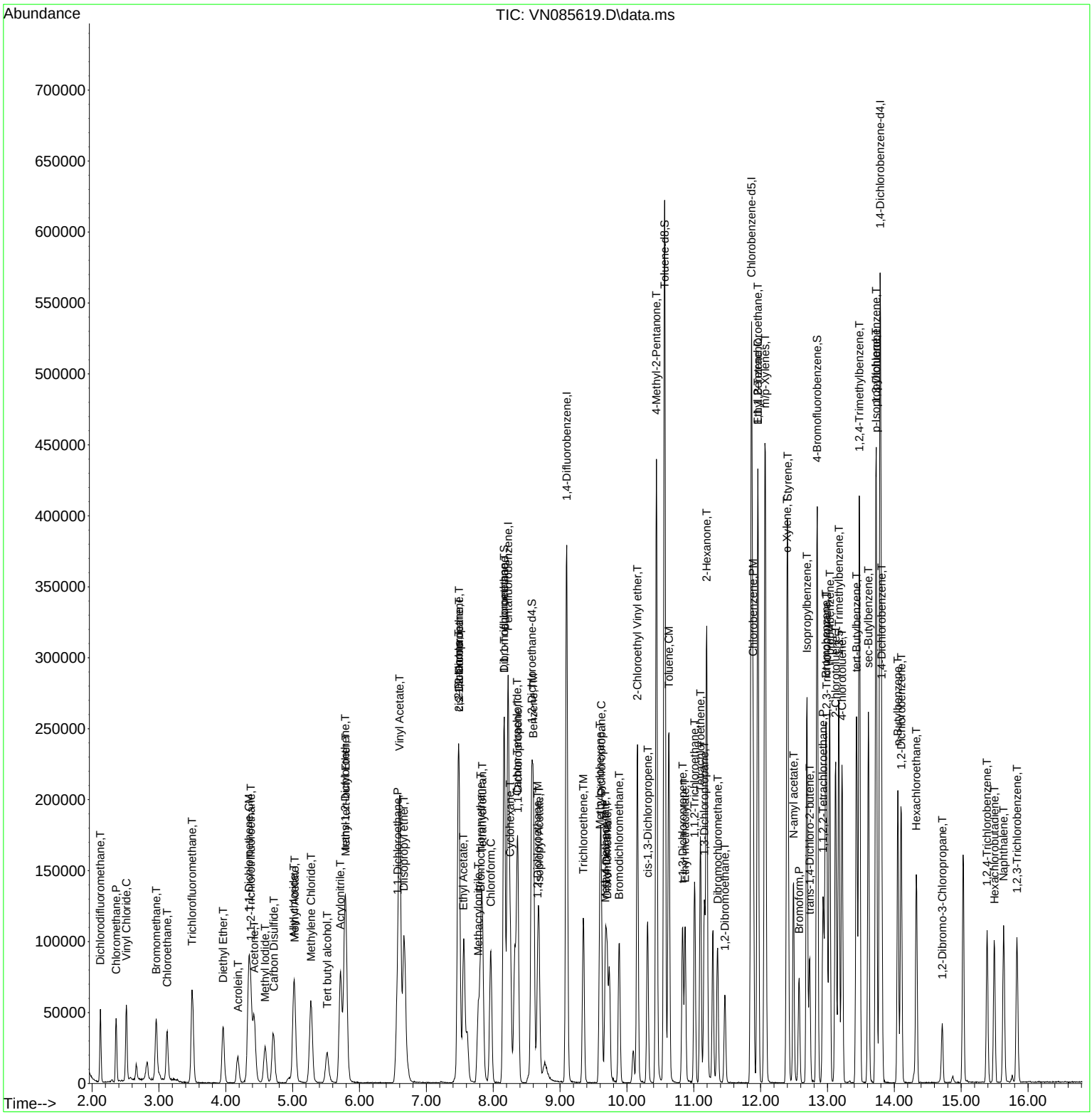
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085619.D
Acq On : 03 Feb 2025 13:58
Operator : JC\MD
Sample : VN0203WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

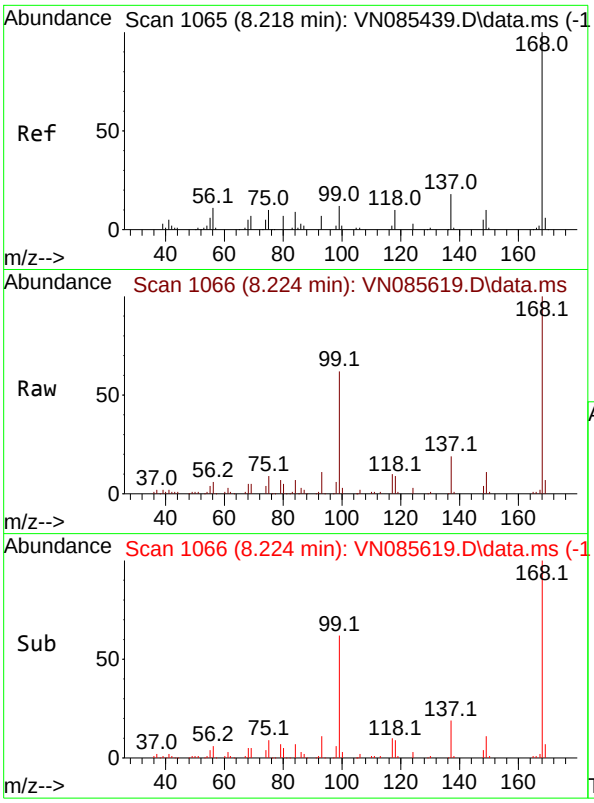
Quant Time: Feb 04 00:57:55 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

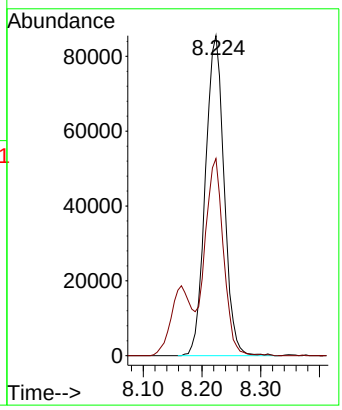

Abundance
TIC: VN085619.D\data.ms
Time-->
Dichlorodifluoromethane,T
Chloromethane,P
Vinyl Chloride,C
Bromomethane,T
Chloroethane,T
Trichlorofluoromethane,T
Diethyl Ether,T
Acrolein,T
Methyl Iodide,T
Carbon Disulfide,T
Tert butyl alcohol,T
Acrylonitrile,T
Methylene Chloride,T
Vinyl Acetate,T
Ethyl Acetate,T
Methacrylonitrile,T
Chloroform,C
Cyclohexane,I
Trichloroethene,TM
Bromodichloromethane,T
cis-1,3-Dichloropropene,T
4-Methyl-2-Pentanone,T
Toluene-d8,S
Toluene,CM
2-Chloroethyl Vinyl ether,T
2-Hexanone,T
Dibromochloromethane,T
1,2-Dibromoethane,T
Chlorobenzene-d5,I
Chlorobenzene,PM
Ethyl Benzene,T
m/p-Xylenes,T
o-Xylene,Styrene,T
Isopropylbenzene,T
4-Bromofluorobenzene,S
N-amyl acetate,T
Bromoform,P
trans-1,4-Dichloro-2-butene,T
1,1,2,2-Tetrachloroethane,P
1,2,3-Trichloropropane,T
4-Chlorotoluene,T
1,2,4-Trimethylbenzene,T
tert-Butylbenzene,T
sec-Butylbenzene,T
1,4-Dichlorobenzene-d4,I
1,4-Dichlorobenzene,T
p-Isopropyltoluene,T
1,2-Dichlorobenzene,T
n-Butylbenzene,T
Hexachloroethane,T
1,2-Dibromo-3-Chloropropane,T
1,2,4-Trichlorobenzene,T
Hexachlorobutadiene,T
Naphthalene,T
1,2,3-Trichlorobenzene,T
1,4-Difluorobenzene,I
Bromochloromethane,S
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Benzene,T
1,1-Dichloroethene,P
Dibromomethane,T
1,1-Dichloroethane,P
Methyl Acetate,T
Methyl tert-butyl ether,T
Methyl Acetate,T
Methyl tert-butyl ether,T
Methyl Acetate,T
Methyl tert-butyl ether,T
Methyl tert-butyl ether,T
Methyl tert-butyl ether




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:168 Resp: 18887

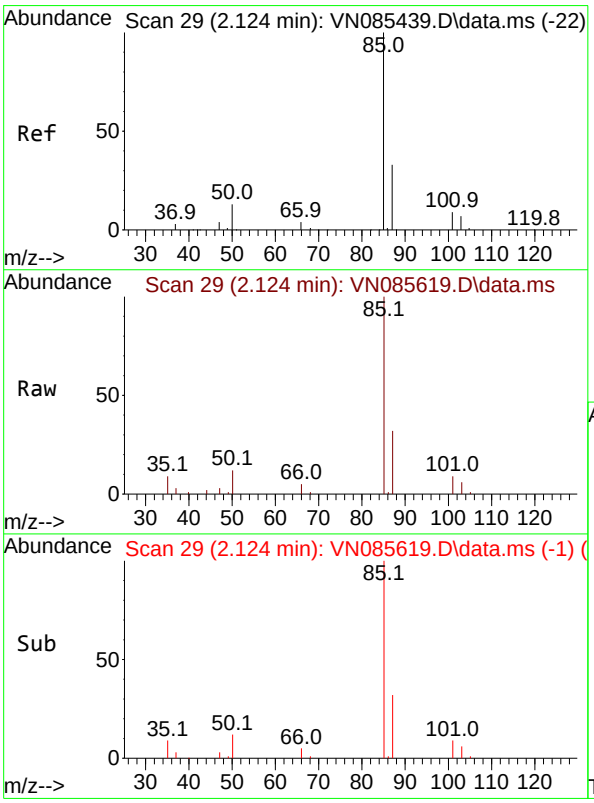
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 61.6 | 53.6 | 80.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

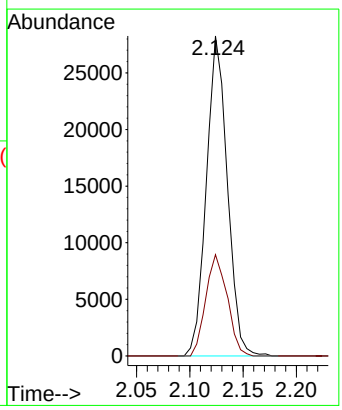
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

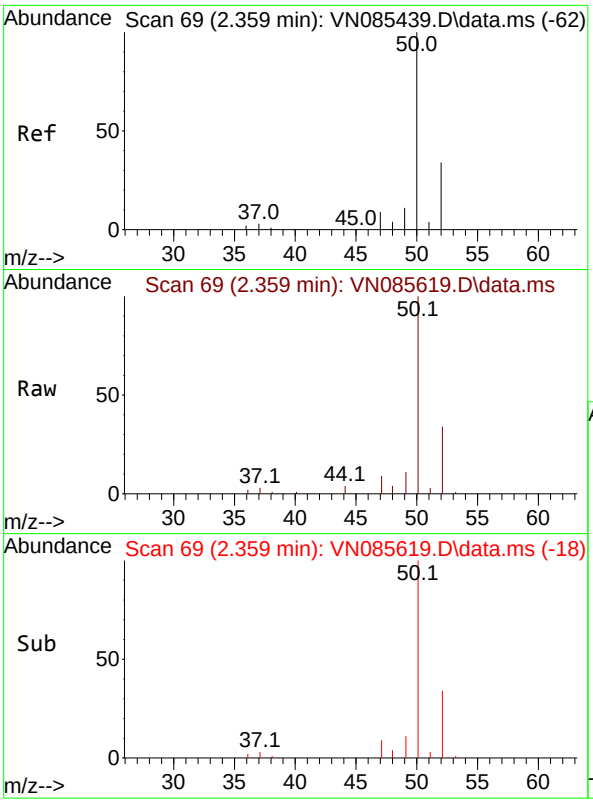



#2
Dichlorodifluoromethane
Concen: 15.128 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 85 Resp: 38687

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 31.6 | 16.7 | 50.1 |

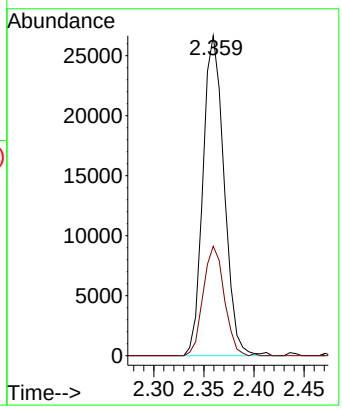





#3
Chloromethane
Concen: 14.150 ug/l
RT: 2.359 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 50 Resp: 3917

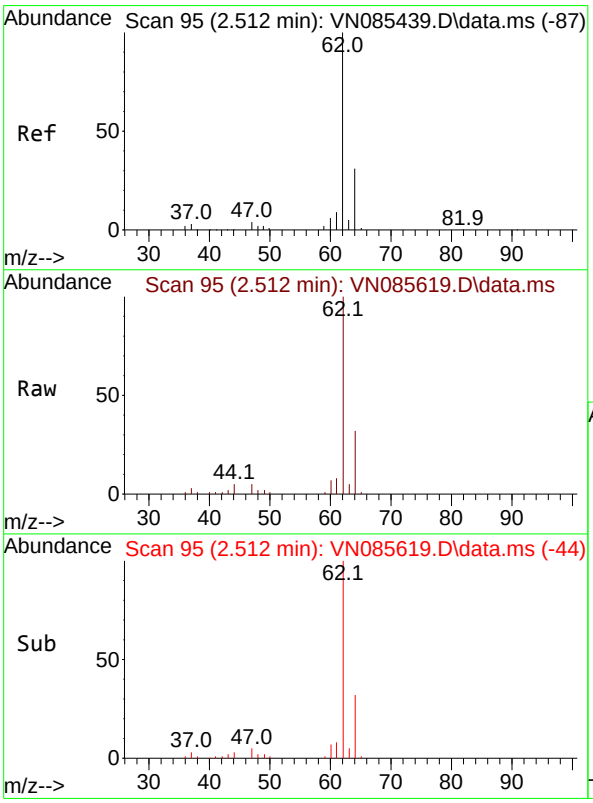
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 34.2 | 27.0 | 40.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

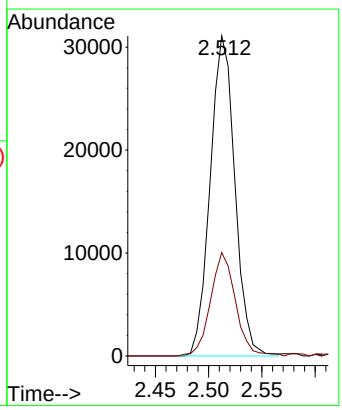
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

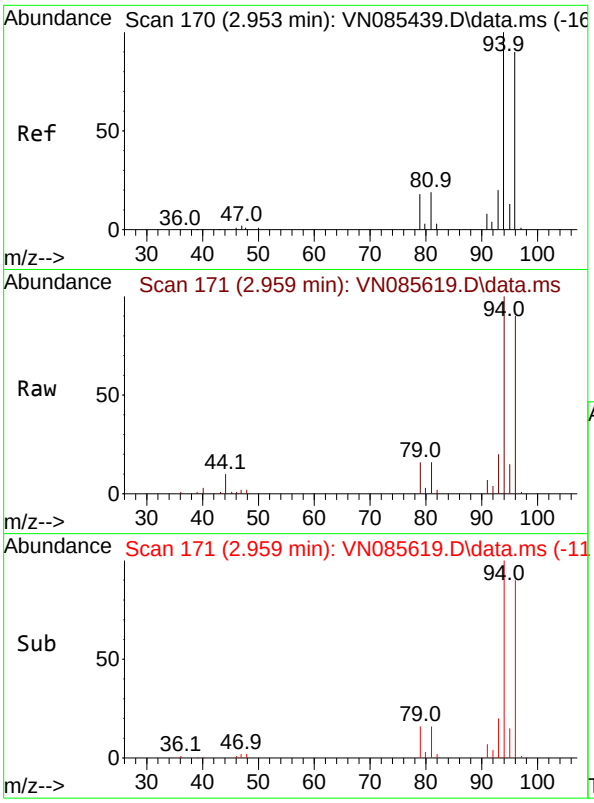



#4
Vinyl Chloride
Concen: 18.004 ug/l
RT: 2.512 min Scan# 95
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 62 Resp: 50107

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 32.3 | 24.8 | 37.2 |

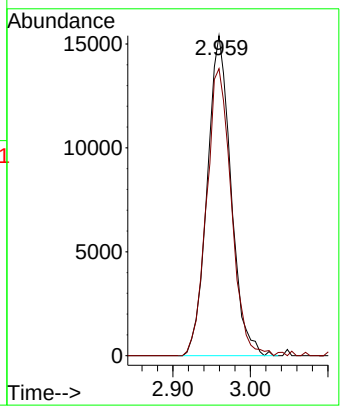





#5
Bromomethane
Concen: 19.544 ug/l
RT: 2.959 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 94 Resp: 3285

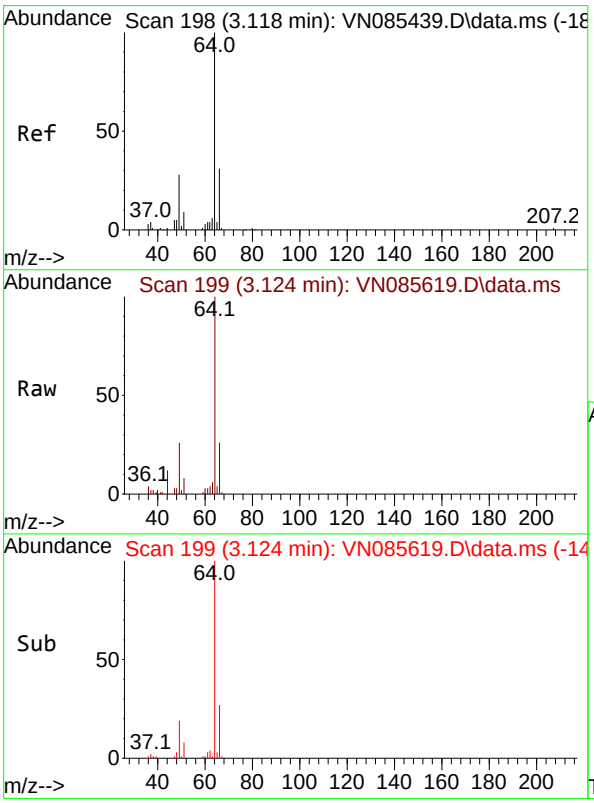
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 89.7 | 71.8 | 107.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

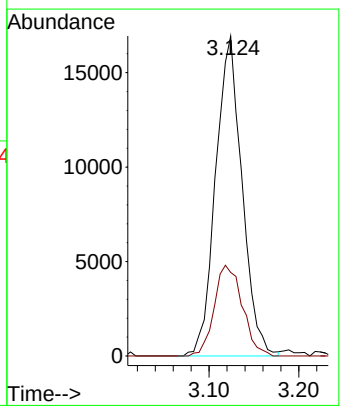
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

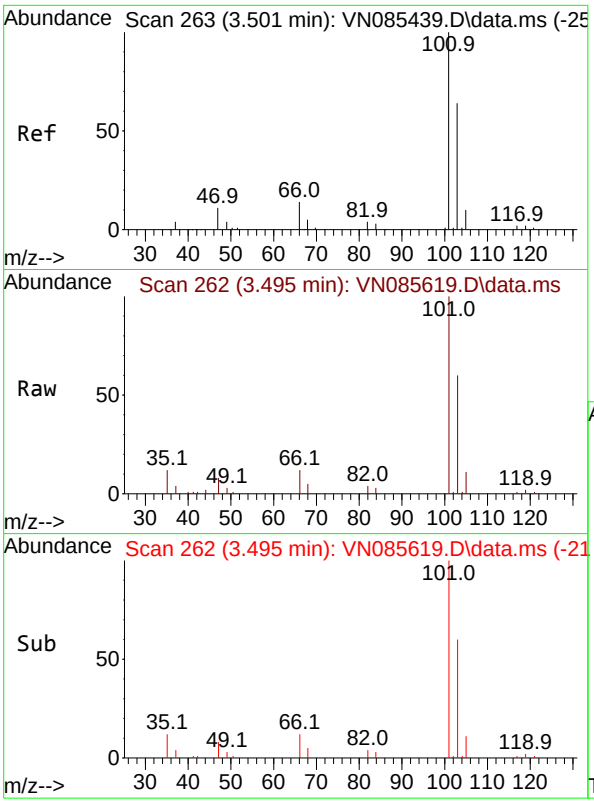



#6
Chloroethane
Concen: 19.648 ug/l
RT: 3.124 min Scan# 199
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 64 Resp: 34668

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 26.1 | 24.6 | 36.8 |

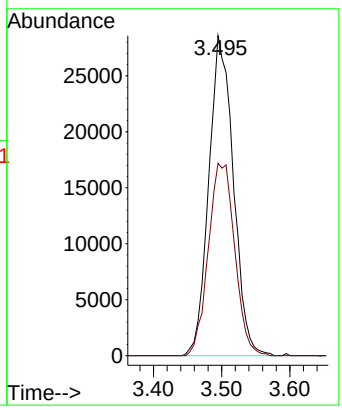





#7
Trichlorofluoromethane
Concen: 17.753 ug/l
RT: 3.495 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:101 Resp: 7168

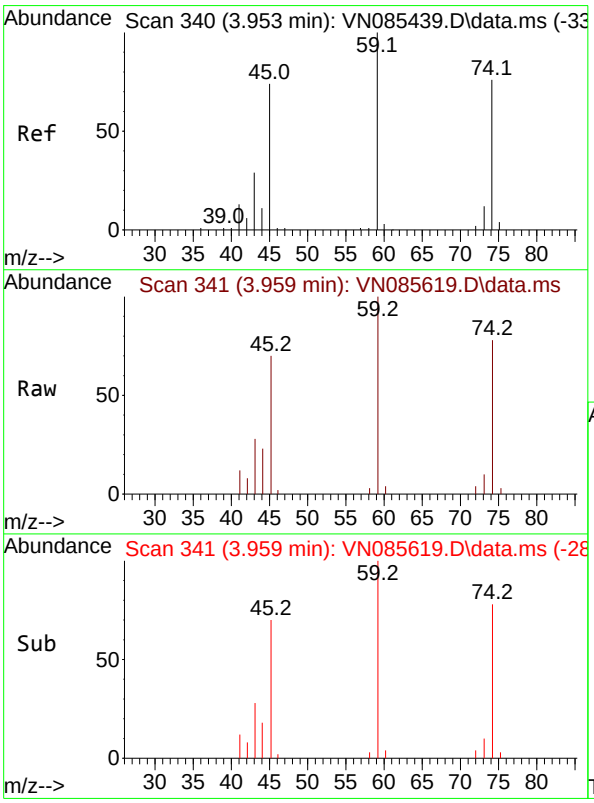
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 60.1 | 51.4 | 77.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

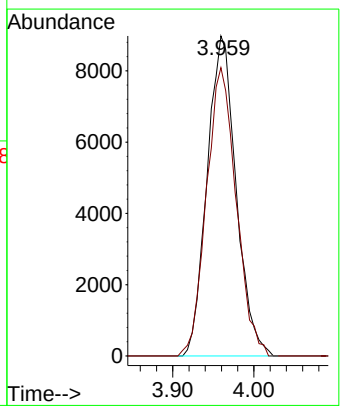
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

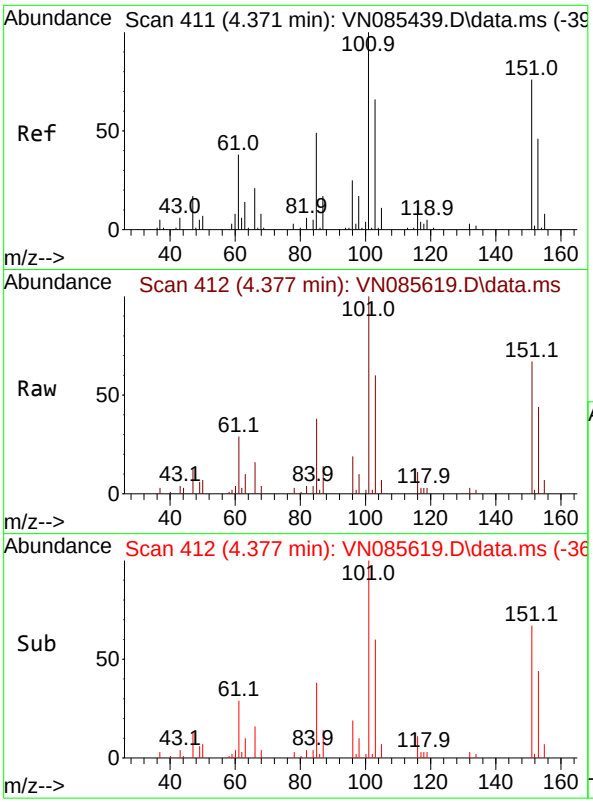



#8
Diethyl Ether
Concen: 15.989 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 74 Resp: 22305

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 92.2 | 49.7 | 149.1 |

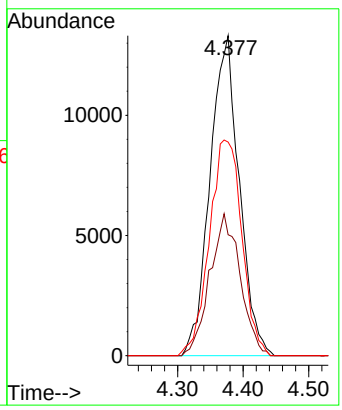





#9
1,1,2-Trichlorotrifluoroethane
Concen: 18.165 ug/l
RT: 4.377 min Scan# 4
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:101 Resp: 4131

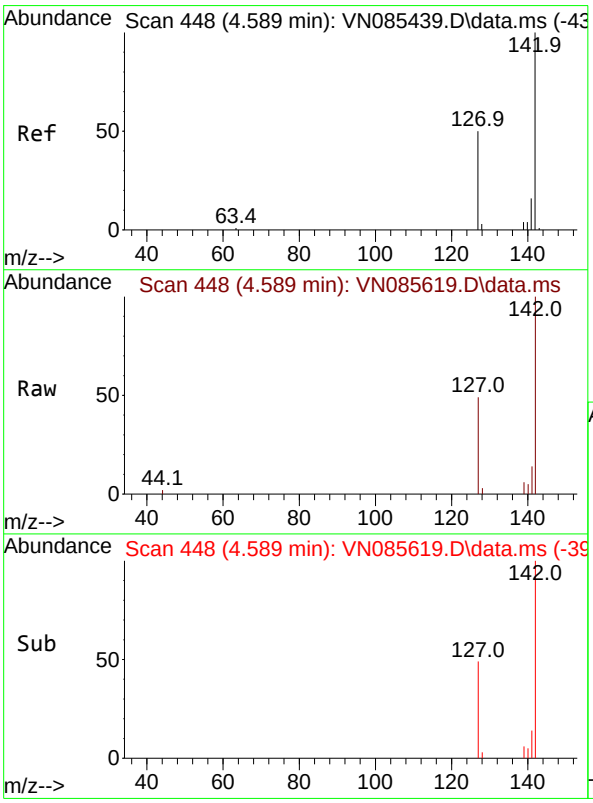
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 45.8 | 37.8 | 56.8 |
| 151 | 74.8 | 58.8 | 88.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

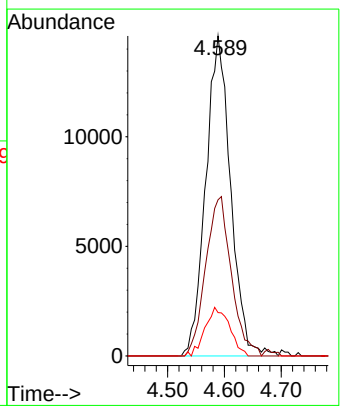
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

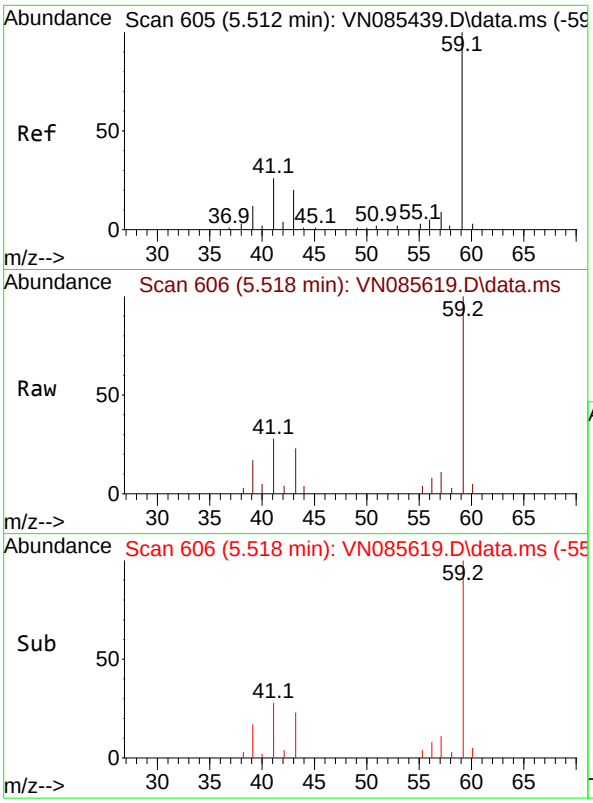



#10
Methyl Iodide
Concen: 17.036 ug/l
RT: 4.589 min Scan# 448
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:142 Resp: 44373

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 48.8 | 40.3 | 60.5 |
| 141 | 13.6 | 12.8 | 19.2 |






#11
Tert butyl alcohol
Concen: 99.071 ug/l
RT: 5.518 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

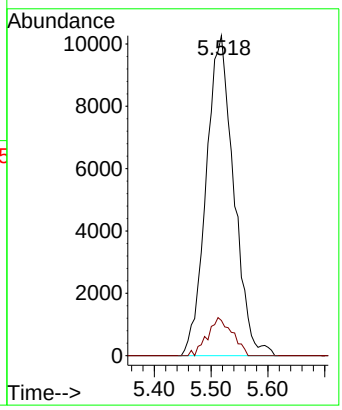
Tgt Ion: 59 Resp: 3458

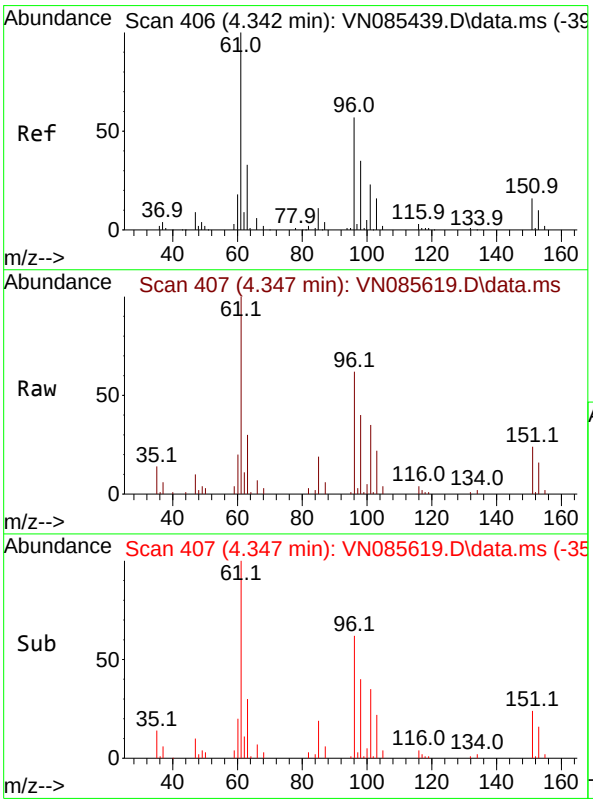
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 10.7 | 8.6 | 13.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

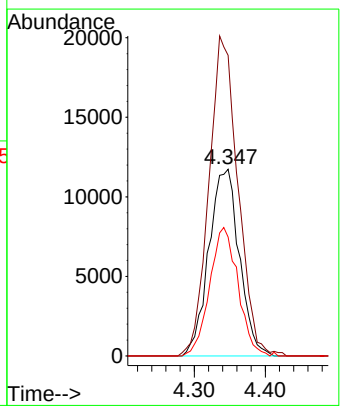


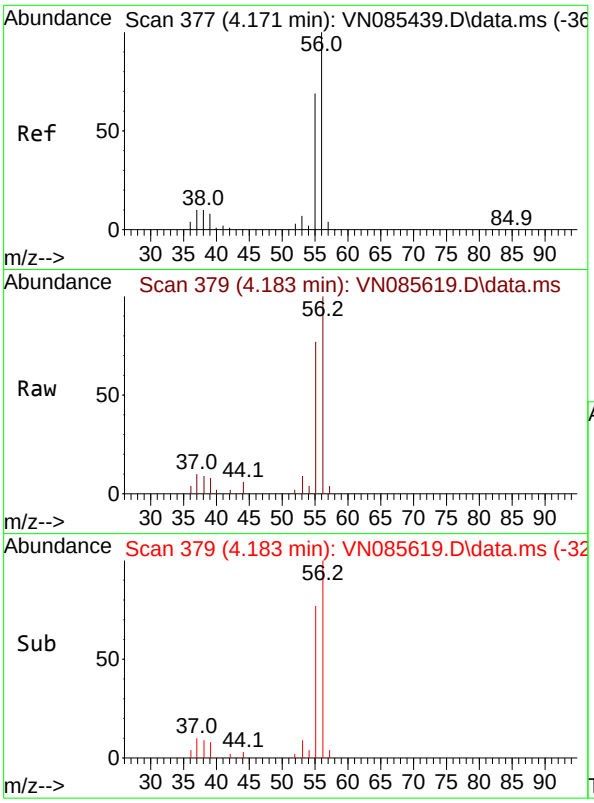




#12
1,1-Dichloroethene
Concen: 17.272 ug/l
RT: 4.347 min Scan# 407
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 96 Resp: 35011

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 161.0 | 141.0 | 211.4 |
| 98 | 63.6 | 49.0 | 73.6 |

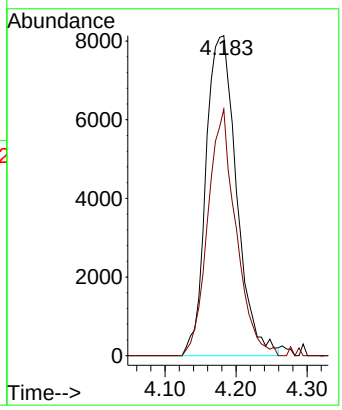





#13
Acrolein
Concen: 51.087 ug/l
RT: 4.183 min Scan# 3
Delta R.T. 0.012 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 56 Resp: 2434

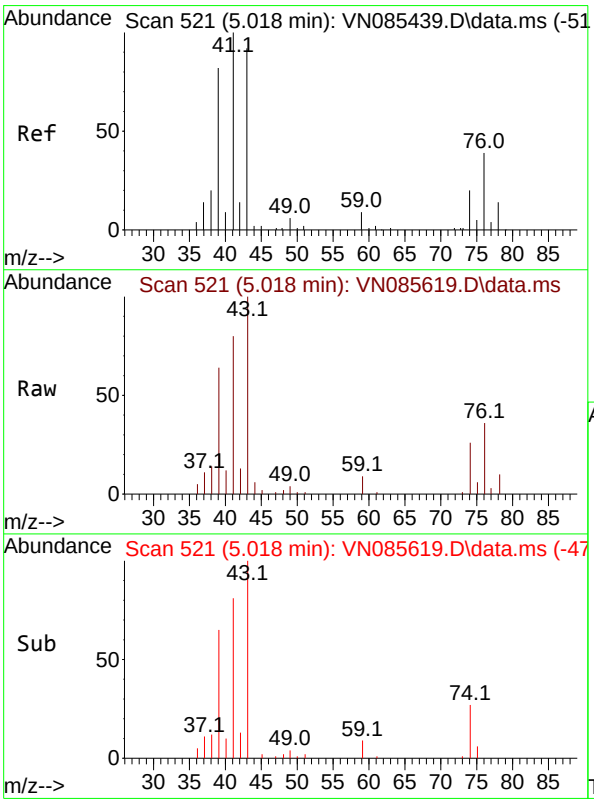
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 70.9 | 56.3 | 84.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

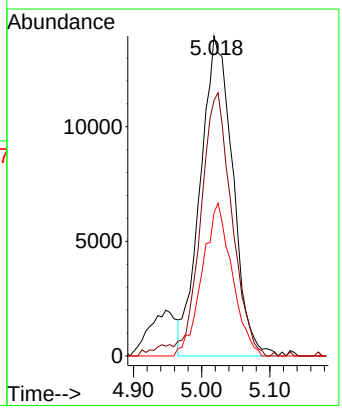
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

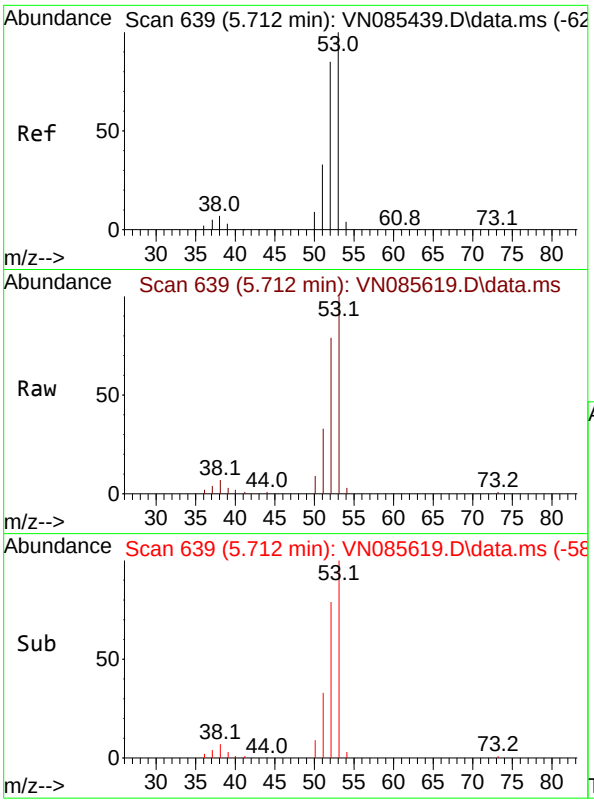



#14
Allyl chloride
Concen: 14.006 ug/l
RT: 5.018 min Scan# 521
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 41 Resp: 46069

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 78.3 | 64.4 | 96.6 |
| 76 | 44.1 | 30.5 | 45.7 |

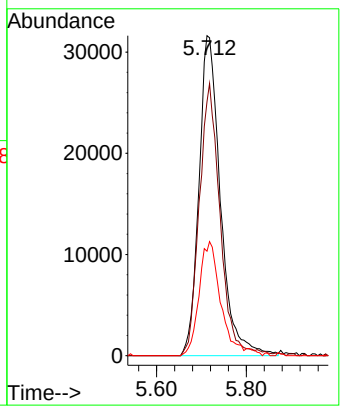





#15
Acrylonitrile
Concen: 94.873 ug/l
RT: 5.712 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 53 Resp: 10520

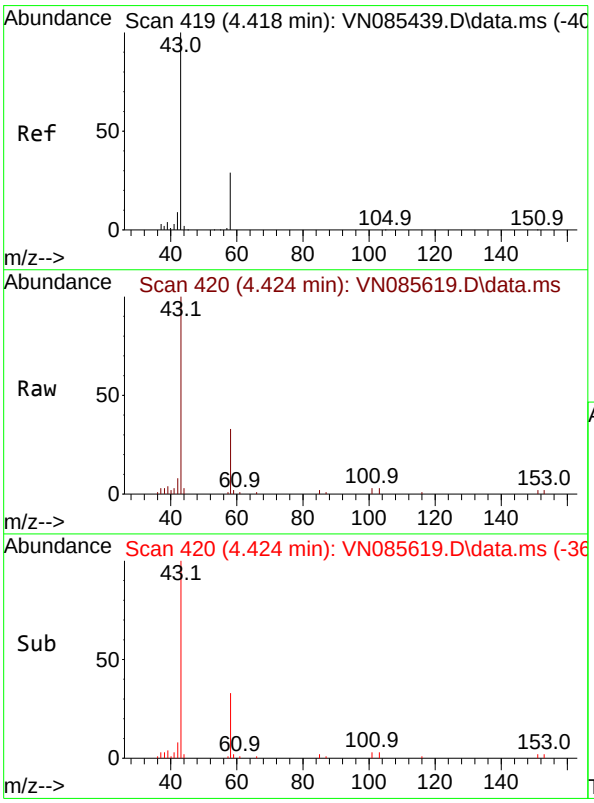
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 82.3 | 65.5 | 98.3 |
| 51 | 35.6 | 29.8 | 44.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

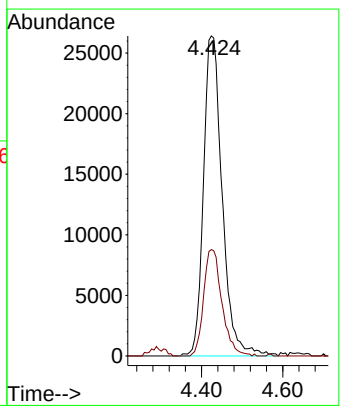
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

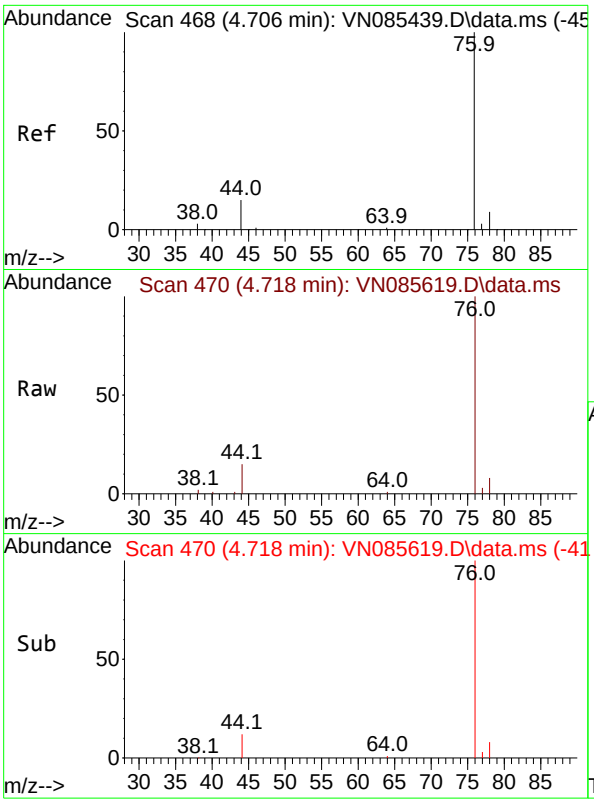



#16
Acetone
Concen: 85.597 ug/l
RT: 4.424 min Scan# 420
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 43 Resp: 84320

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 33.2 | 23.8 | 35.6 |

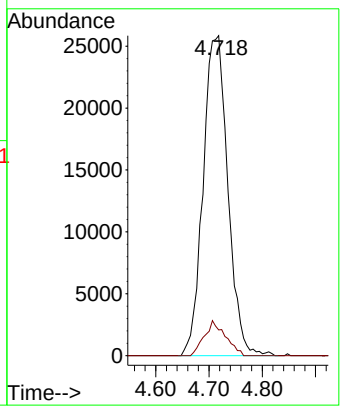





#17
Carbon Disulfide
Concen: 13.350 ug/l
RT: 4.718 min Scan# 4
Delta R.T. 0.012 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 76 Resp: 8332

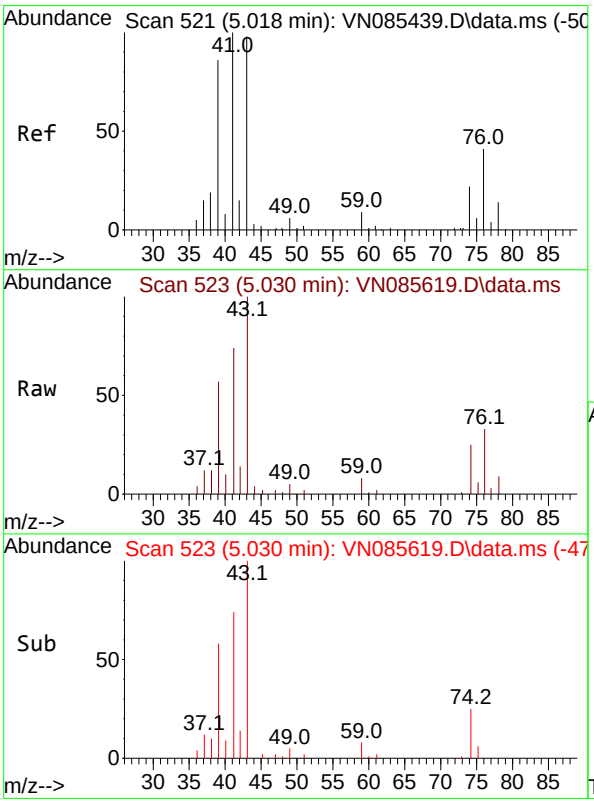
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 8.1 | 6.9 | 10.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations APPROVED**

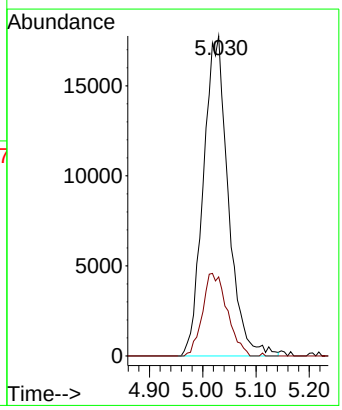
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

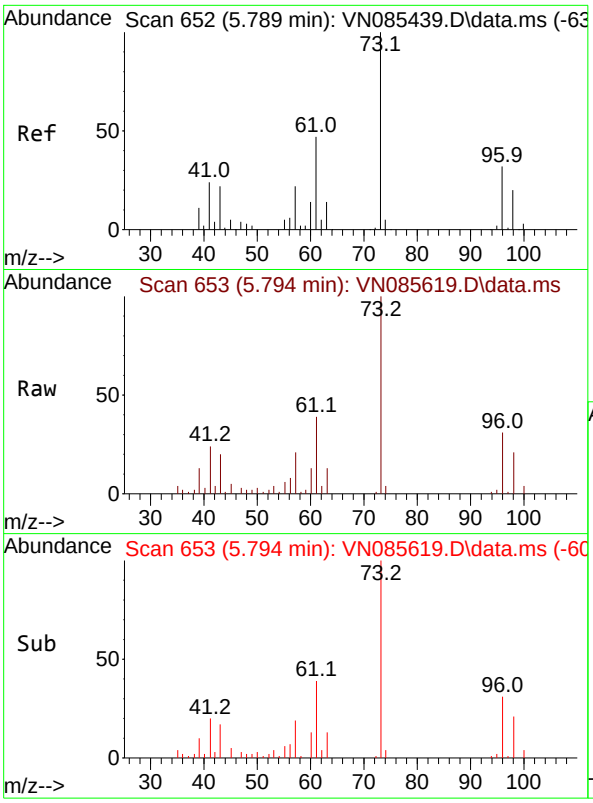



#18
Methyl Acetate
Concen: 19.266 ug/l
RT: 5.030 min Scan# 523
Delta R.T. 0.012 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 43 Resp: 57710

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 25.6 | 18.6 | 28.0 |

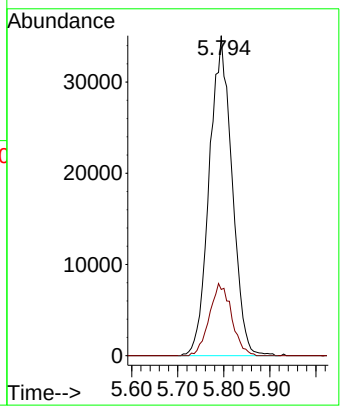





#19
Methyl tert-butyl Ether
Concen: 18.249 ug/l
RT: 5.794 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 73 Resp: 12011

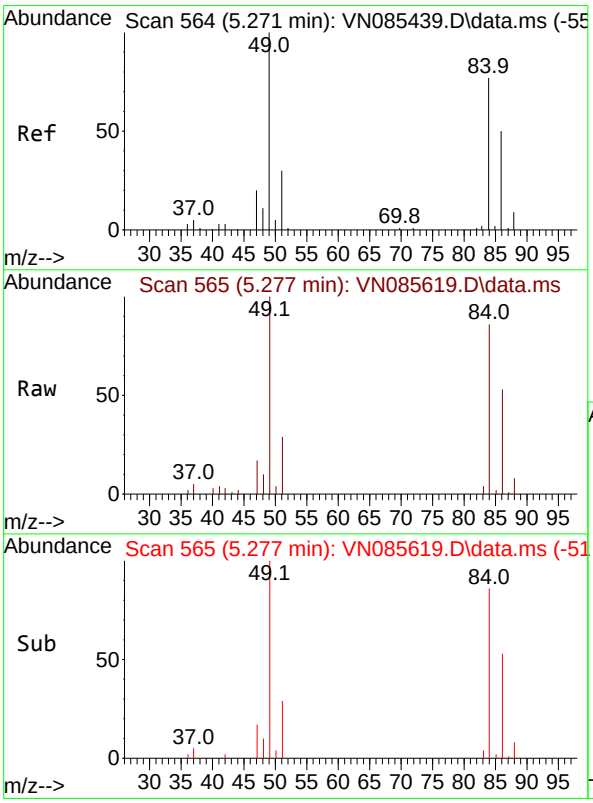
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 20.7 | 17.8 | 26.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

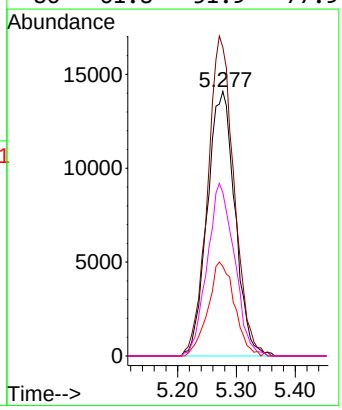
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

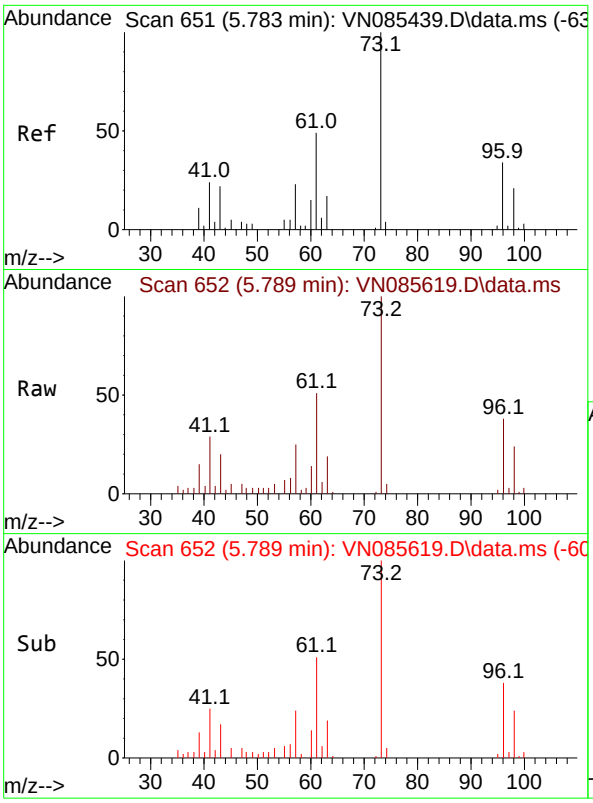



#20
Methylene Chloride
Concen: 18.858 ug/l
RT: 5.277 min Scan# 565
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 84 Resp: 45987

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 116.7 | 104.1 | 156.1 |
| 51 | 33.8 | 31.0 | 46.4 |
| 86 | 61.8 | 51.9 | 77.9 |

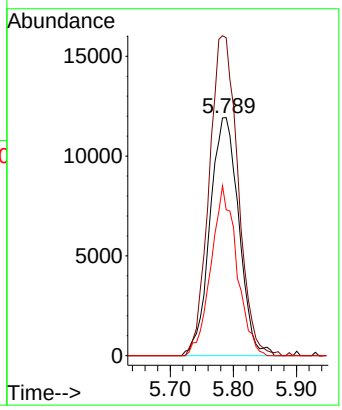





#21
trans-1,2-Dichloroethene
Concen: 17.489 ug/l
RT: 5.789 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 96 Resp: 3788

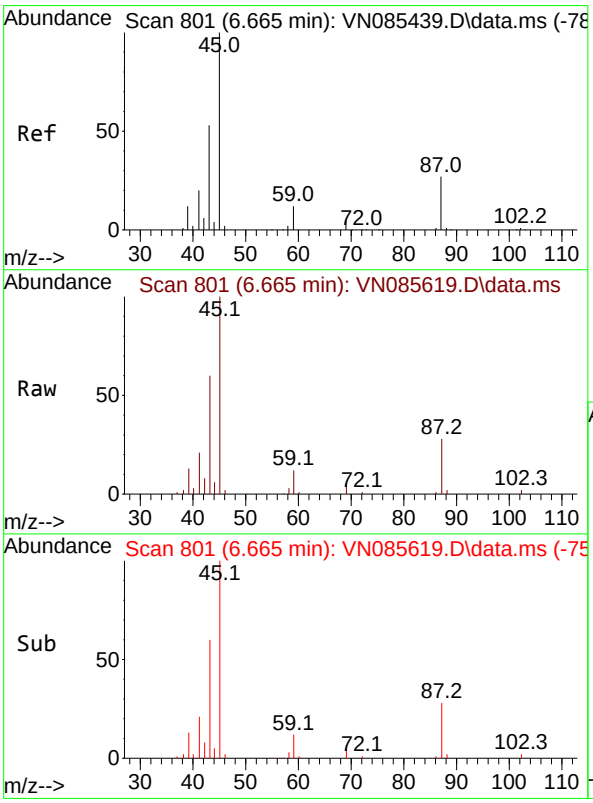
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 133.6 | 115.7 | 173.5 |
| 98 | 61.3 | 49.8 | 74.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

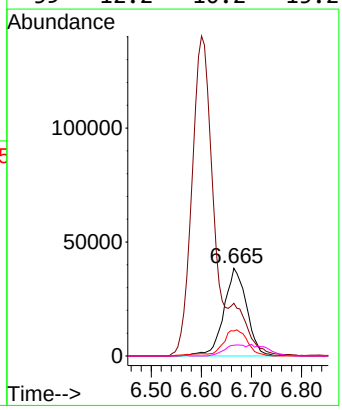
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

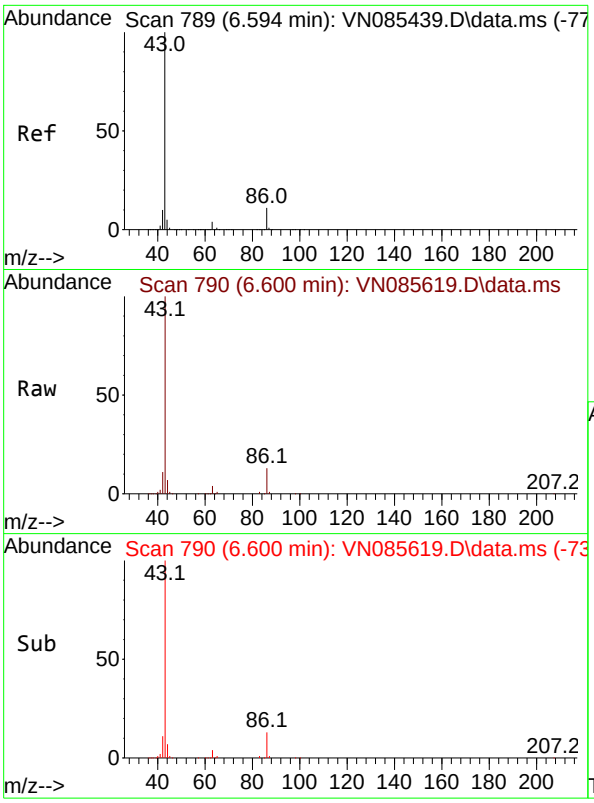



#22
Diisopropyl ether
Concen: 16.651 ug/l
RT: 6.665 min Scan# 801
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 45 Resp: 121562

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 57.9 | 45.0 | 67.6 |
| 87 | 28.5 | 21.8 | 32.8 |
| 59 | 12.2 | 10.2 | 15.2 |

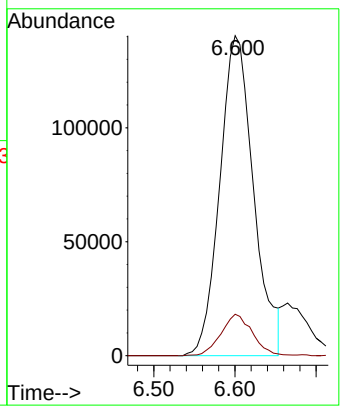





#23
Vinyl Acetate
Concen: 79.484 ug/l
RT: 6.600 min Scan# 7
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 43 Resp: 40609

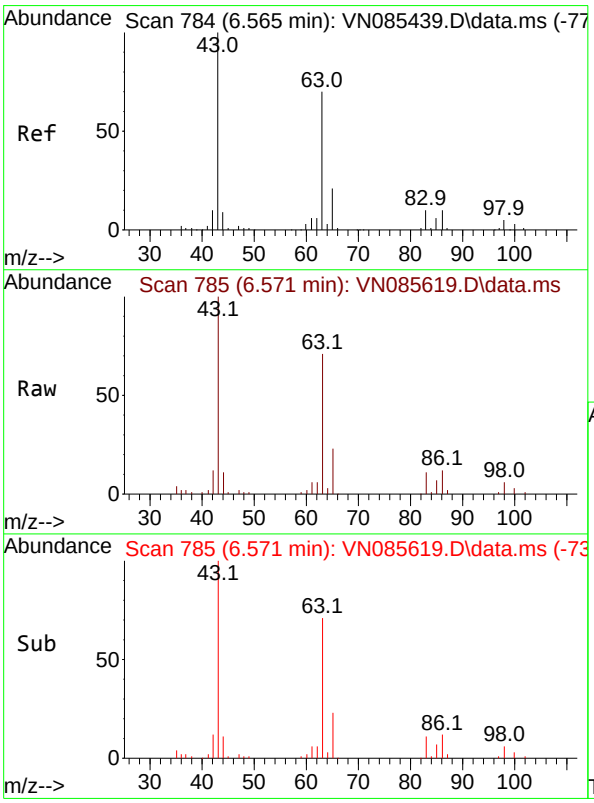
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 12.9 | 8.4 | 12.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

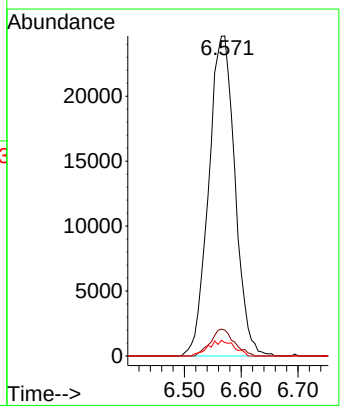
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

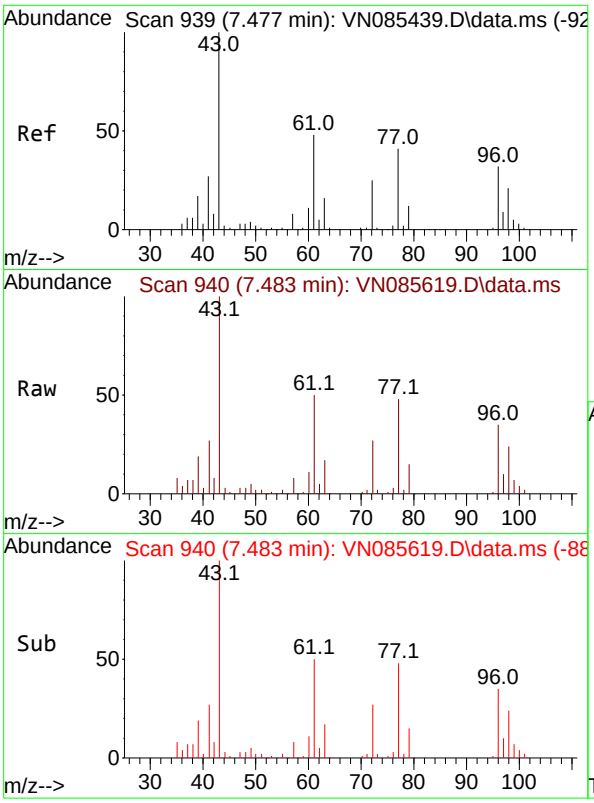



#24
1,1-Dichloroethane
Concen: 17.785 ug/l
RT: 6.571 min Scan# 785
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 63 Resp: 79173

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 8.1 | 3.3 | 9.8 |
| 100 | 4.2 | 2.0 | 6.0 |

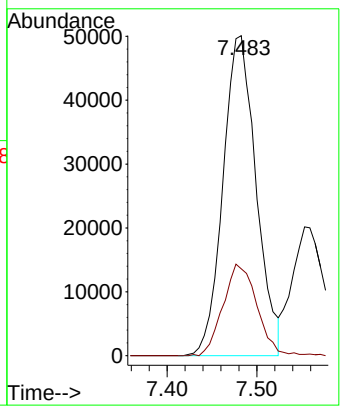





#25
2-Butanone
Concen: 88.606 ug/l
RT: 7.483 min Scan# 94
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 43 Resp: 12844

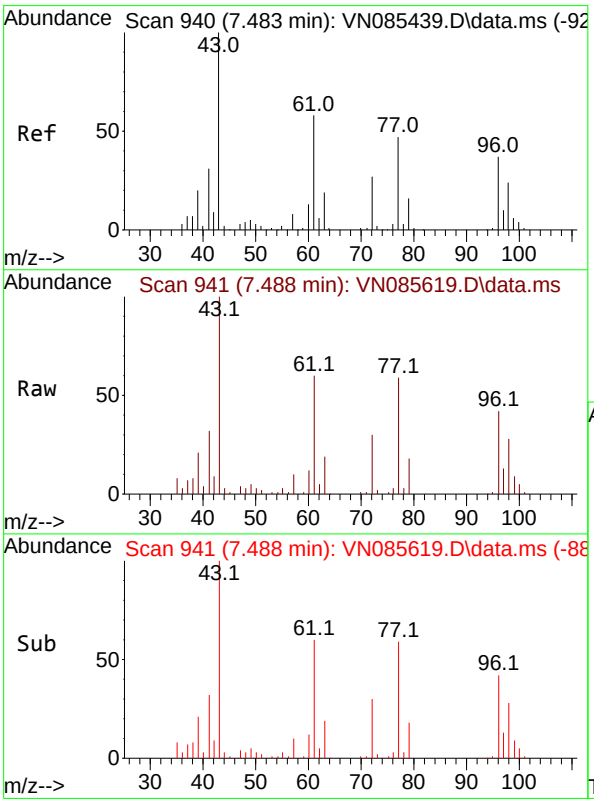
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 27.2 | 20.2 | 30.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

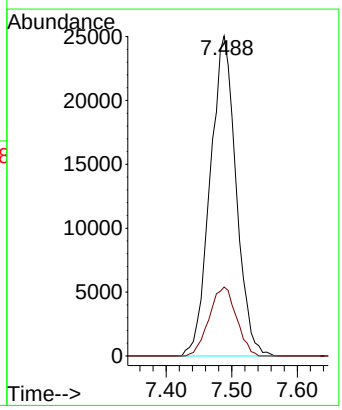
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

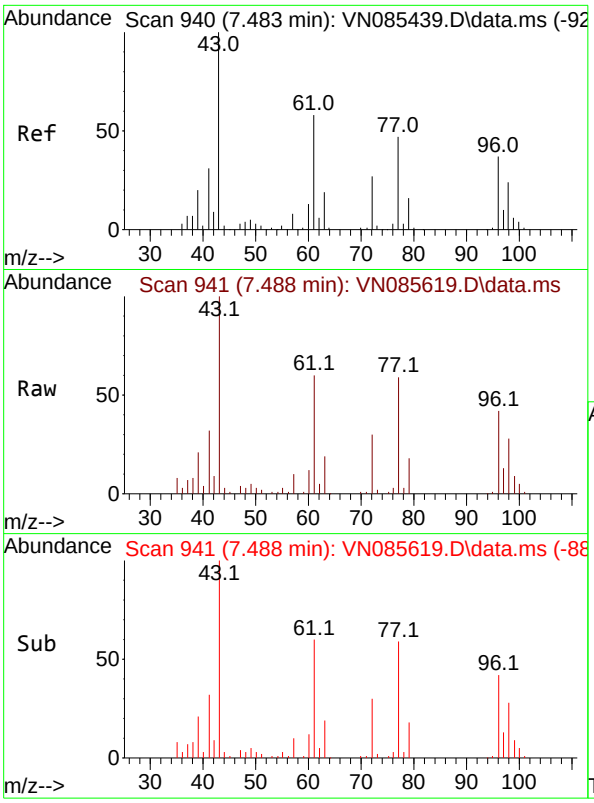



#26
2,2-Dichloropropane
Concen: 19.060 ug/l
RT: 7.488 min Scan# 941
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 77 Resp: 68597

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 22.7 | 10.7 | 32.1 |






#27
cis-1,2-Dichloroethene
Concen: 18.700 ug/l
RT: 7.488 min Scan# 94
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

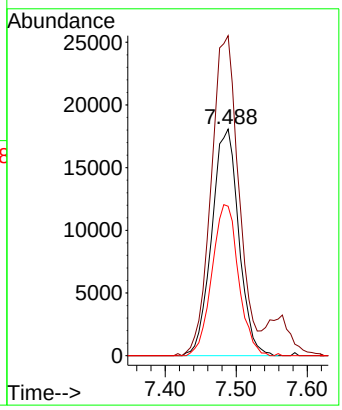
Tgt Ion: 96 Resp: 4771

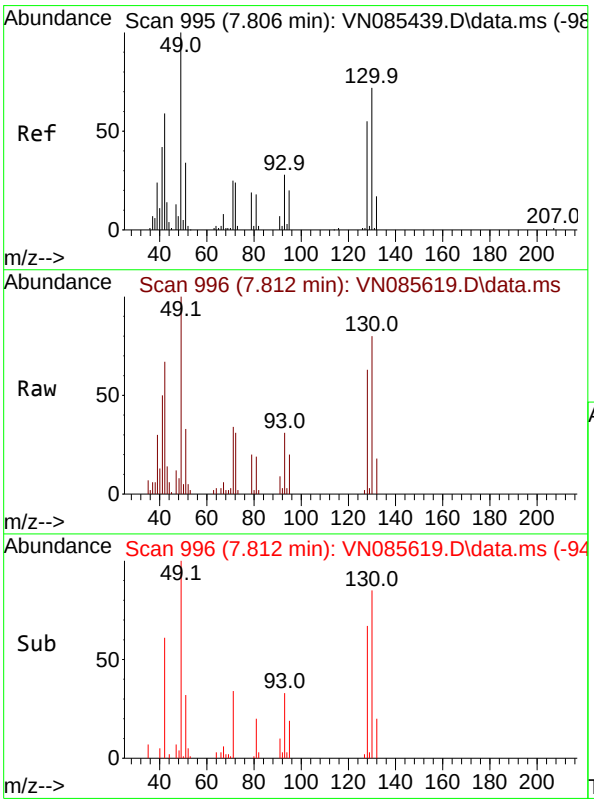
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 144.9 | 0.0 | 311.8 |
| 98 | 65.6 | 0.0 | 126.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

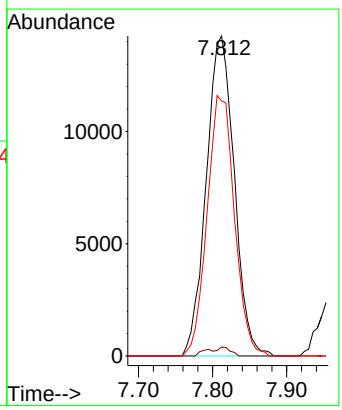


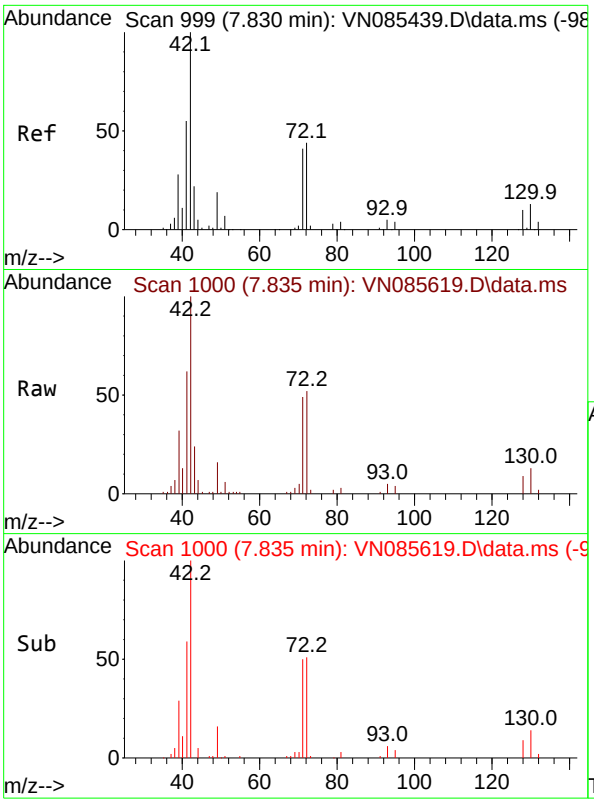




#28
Bromochloromethane
Concen: 18.074 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 49 Resp: 37432

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.3 | 0.0 | 4.4 |
| 130 | 79.3 | 55.0 | 82.4 |

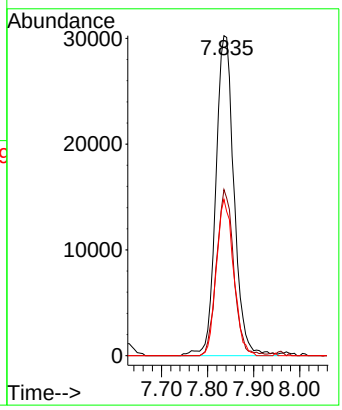





#29
Tetrahydrofuran
Concen: 90.042 ug/l
RT: 7.835 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 42 Resp: 8275

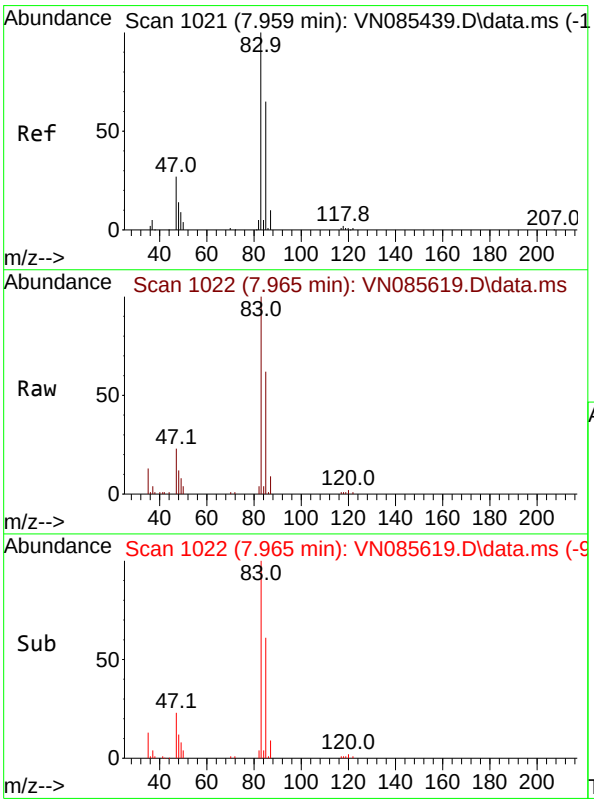
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 49.2 | 34.2 | 51.2 |
| 71 | 46.3 | 32.5 | 48.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations APPROVED**

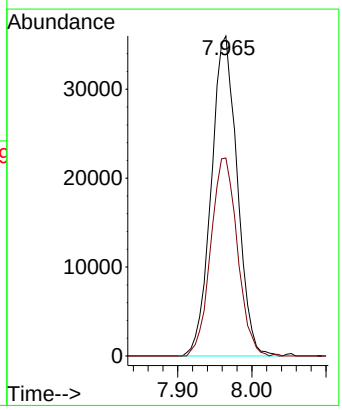
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

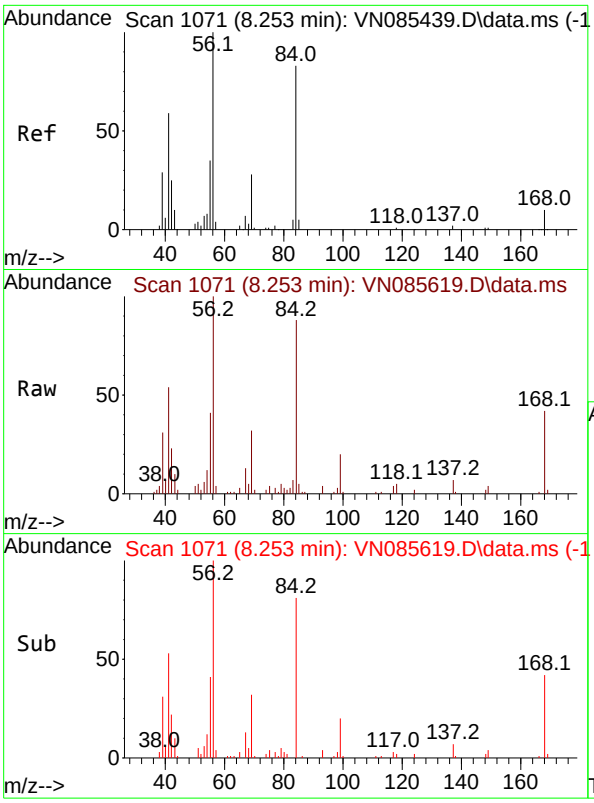



#30
Chloroform
Concen: 19.043 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 83 Resp: 87616

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 61.8 | 51.8 | 77.6 |

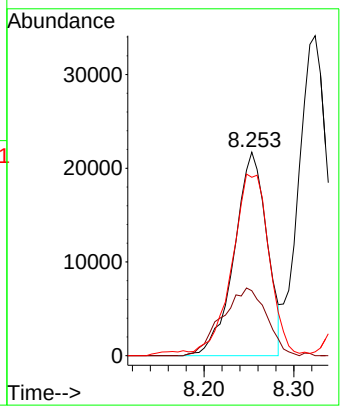





#31
Cyclohexane
Concen: 14.205 ug/l
RT: 8.253 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 56 Resp: 5496

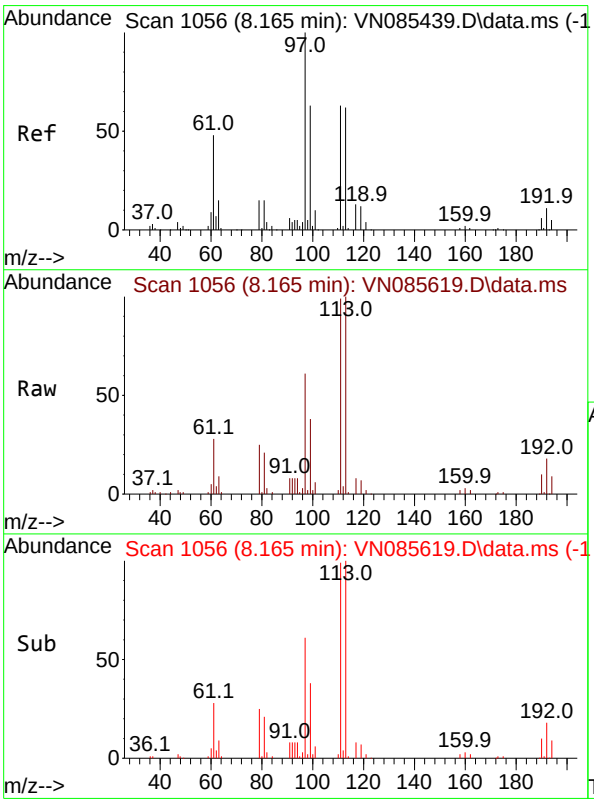
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 31.9 | 22.2 | 33.4 |
| 84 | 85.9 | 66.4 | 99.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

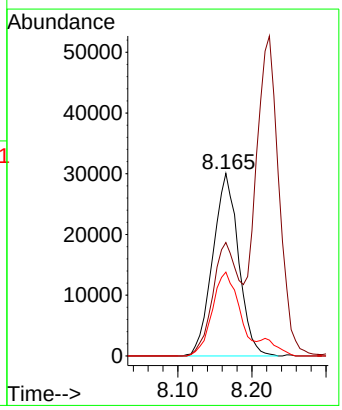
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

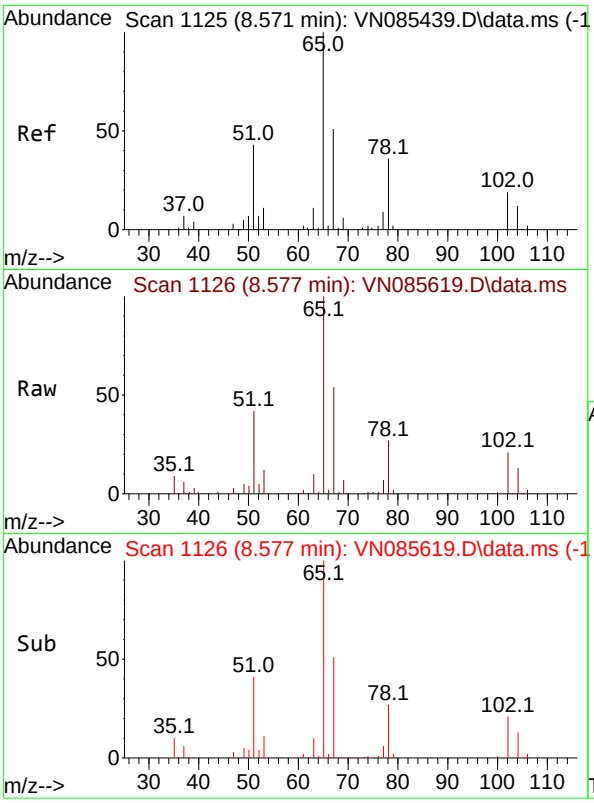



#32
1,1,1-Trichloroethane
Concen: 17.987 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 97 Resp: 72591

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 63.1 | 49.8 | 74.6 |
| 61 | 48.7 | 41.4 | 62.2 |

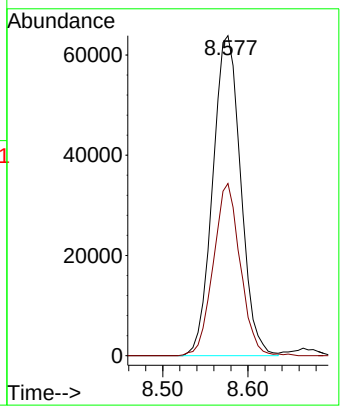





#33
1,2-Dichloroethane-d4
Concen: 47.758 ug/l
RT: 8.577 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 65 Resp: 14560

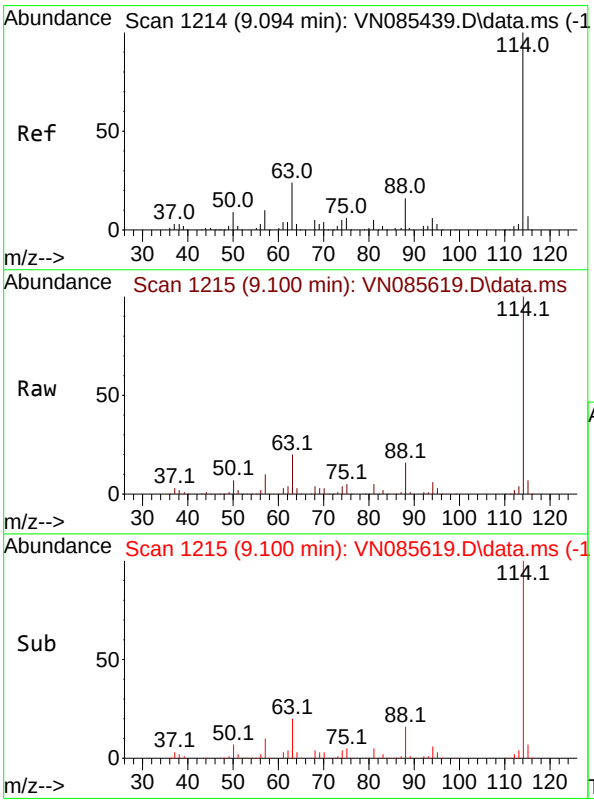
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 51.8 | 0.0 | 101.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

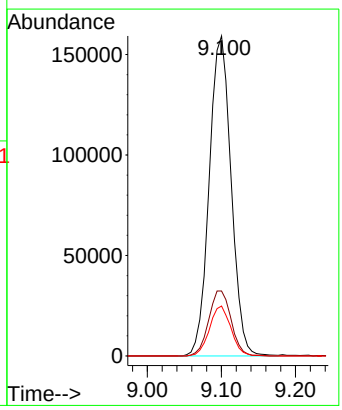
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

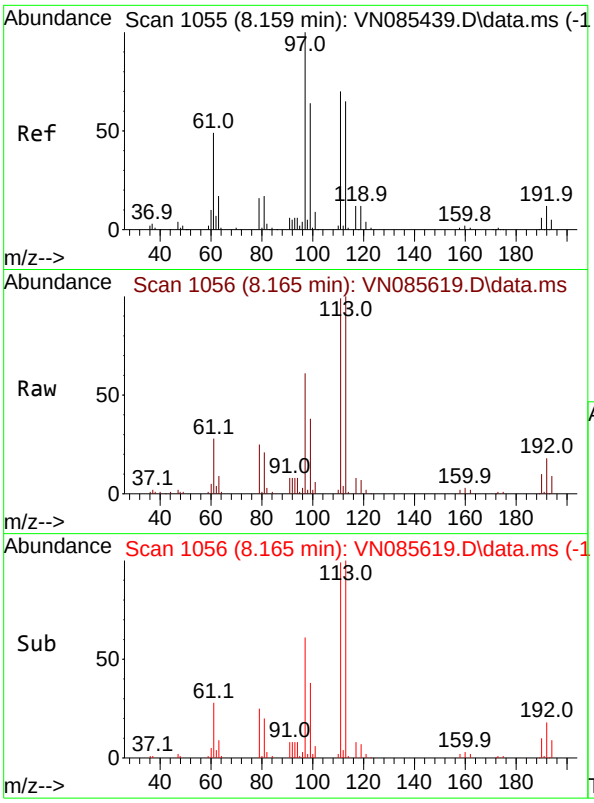



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:114 Resp: 327054

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 20.3 | 0.0 | 47.6 |
| 88 | 15.6 | 0.0 | 32.6 |

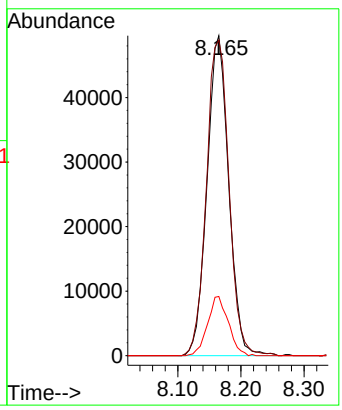





#35
Dibromofluoromethane
Concen: 52.239 ug/l
RT: 8.165 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:113 Resp: 11852

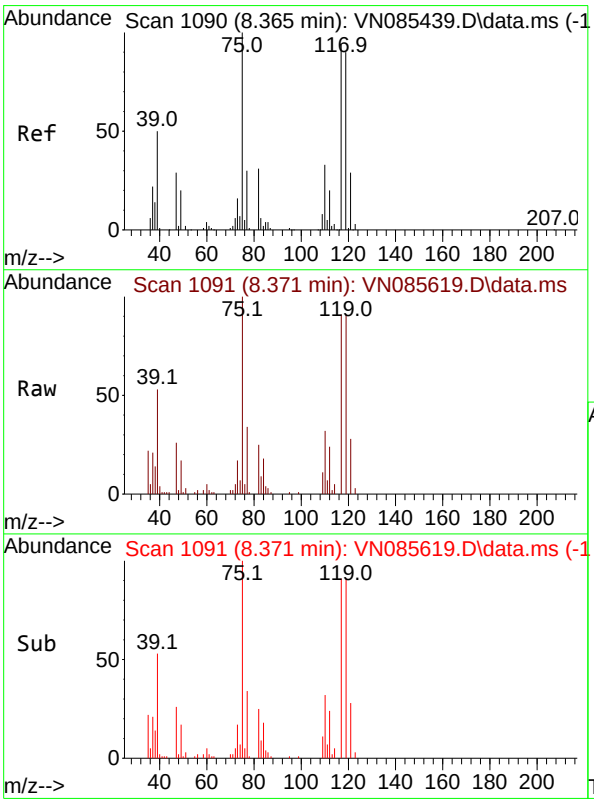
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 102.7 | 82.7 | 124.1 |
| 192 | 17.7 | 14.3 | 21.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

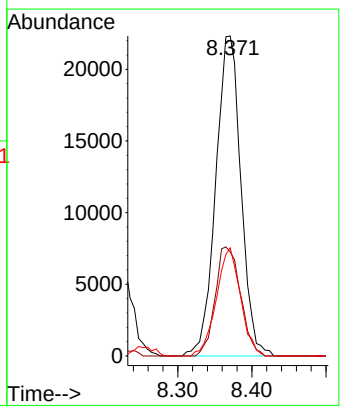
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

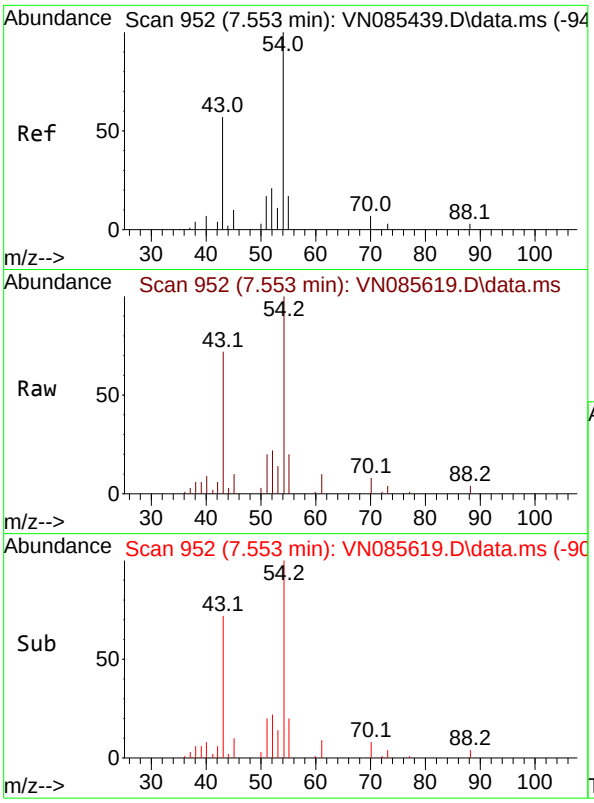



#36
1,1-Dichloropropene
Concen: 16.530 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 75 Resp: 52640

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 34.2 | 16.5 | 49.5 |
| 77 | 32.4 | 24.4 | 36.6 |

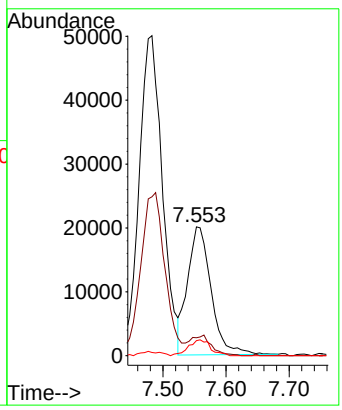





#37
Ethyl Acetate
Concen: 16.226 ug/l
RT: 7.553 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 43 Resp: 5215

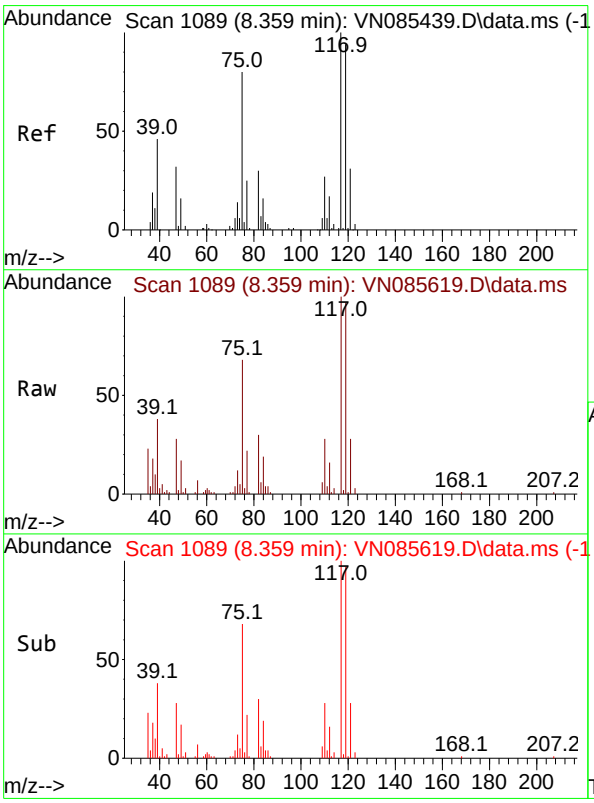
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 14.1 | 10.9 | 16.3 |
| 70 | 11.5 | 7.5 | 11.3# |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

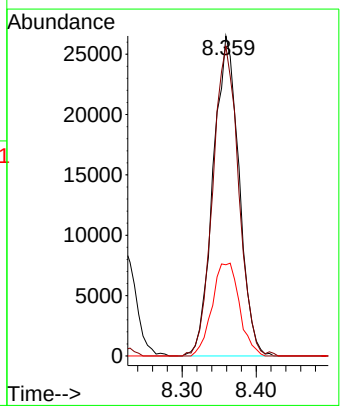
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

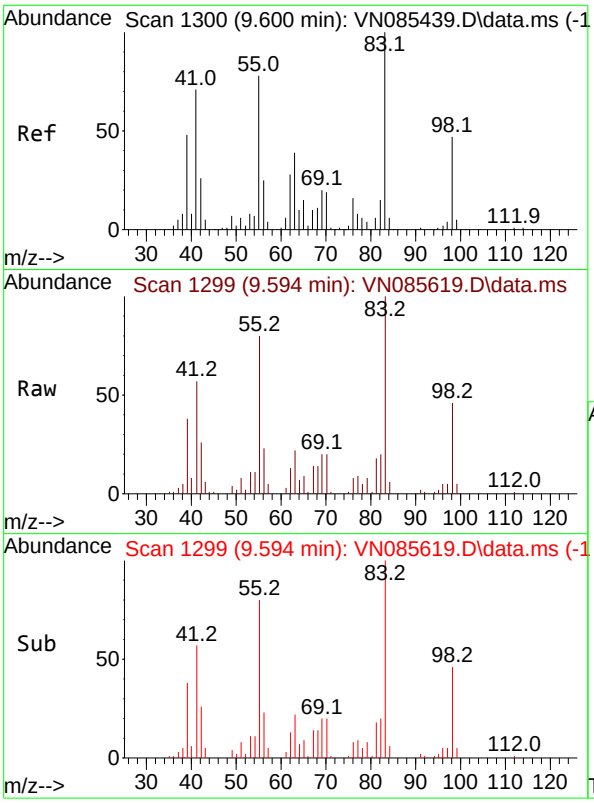



#38
Carbon Tetrachloride
Concen: 17.539 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:117 Resp: 63941

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 96.8 | 75.4 | 113.2 |
| 121 | 28.5 | 24.6 | 37.0 |

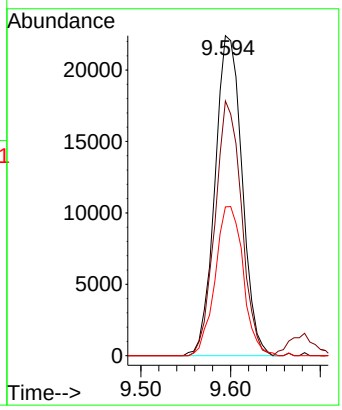





#39
Methylcyclohexane
Concen: 15.712 ug/l
RT: 9.594 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 83 Resp: 4701

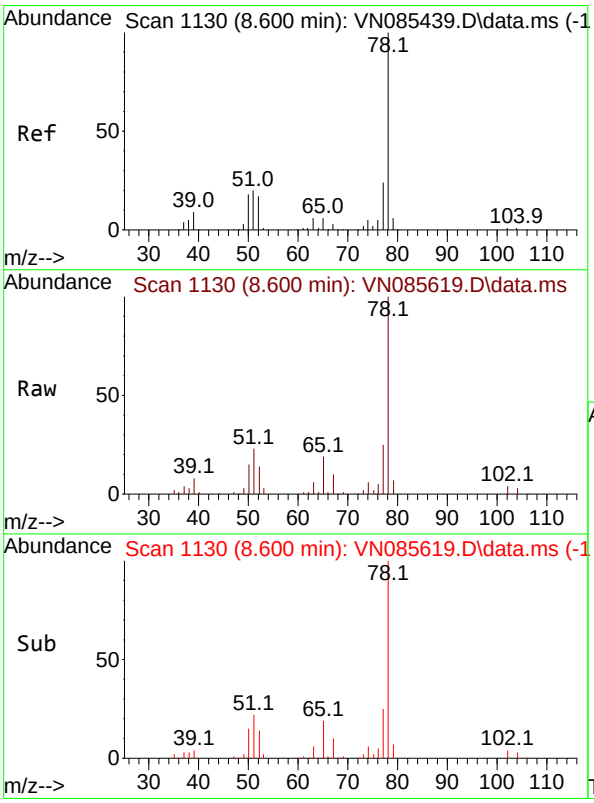
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 79.6 | 62.6 | 94.0 |
| 98 | 46.5 | 37.7 | 56.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

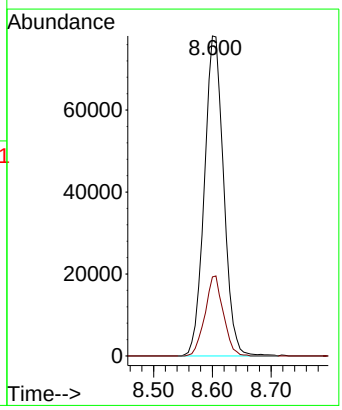
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

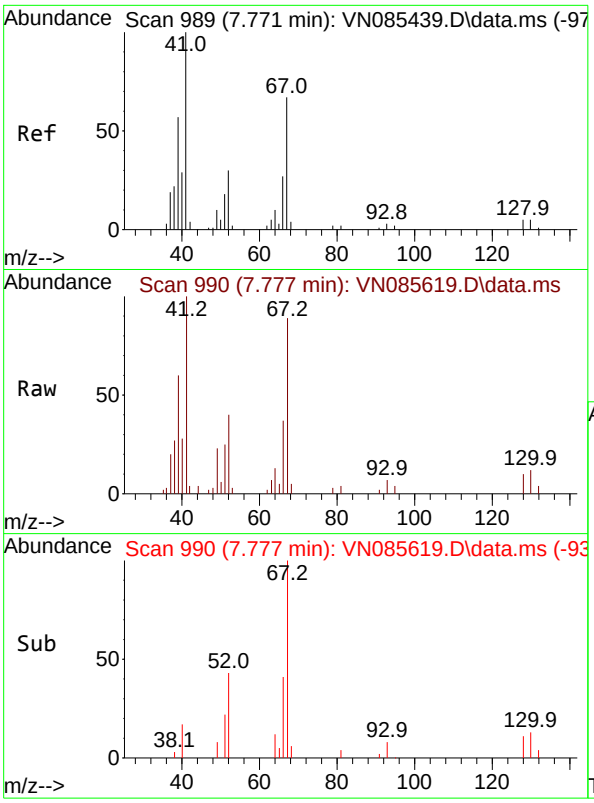



#40
Benzene
Concen: 18.610 ug/l
RT: 8.600 min Scan# 1130
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 78 Resp: 178066

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 24.7 | 19.0 | 28.6 |

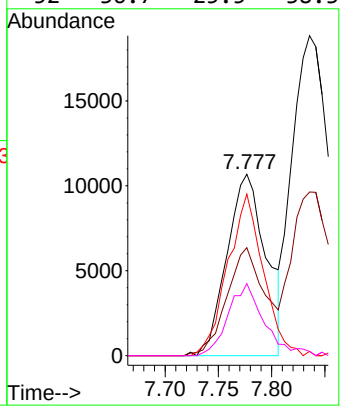





#41
Methacrylonitrile
Concen: 16.257 ug/l
RT: 7.777 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 41 Resp: 2718

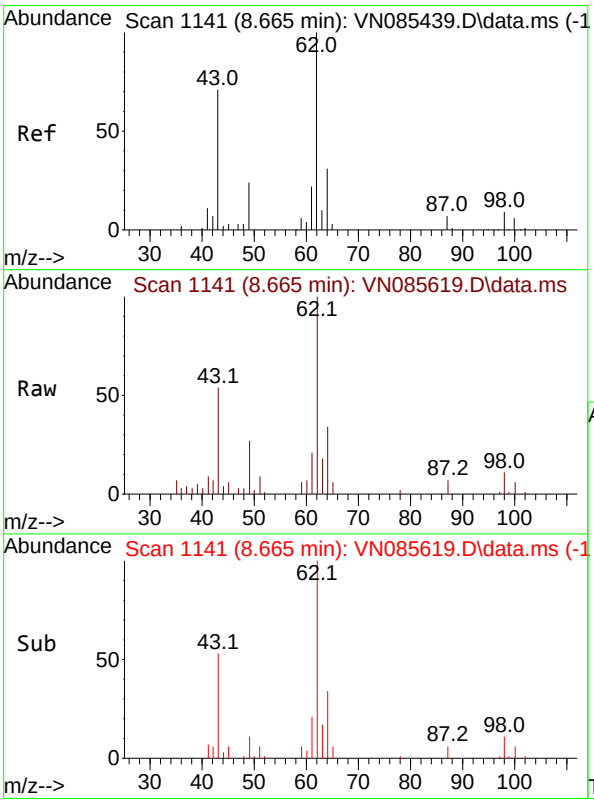
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 58.7 | 46.0 | 69.0 |
| 67 | 81.3 | 57.4 | 86.2 |
| 52 | 36.7 | 25.5 | 38.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

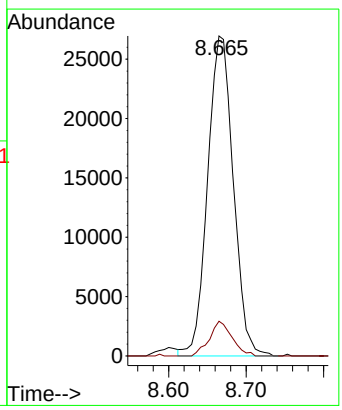
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

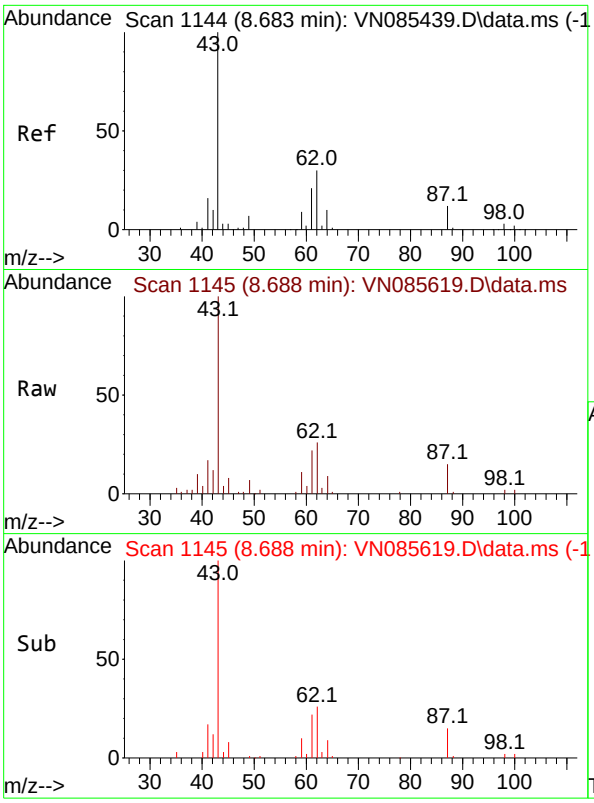



#42
1,2-Dichloroethane
Concen: 17.238 ug/l
RT: 8.665 min Scan# 1141
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 62 Resp: 62118

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 9.5 | 0.0 | 17.0 |

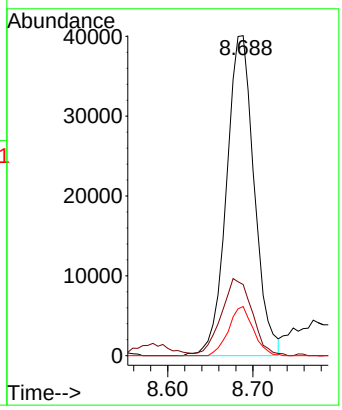





#43
Isopropyl Acetate
Concen: 17.628 ug/l
RT: 8.688 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 43 Resp: 9078

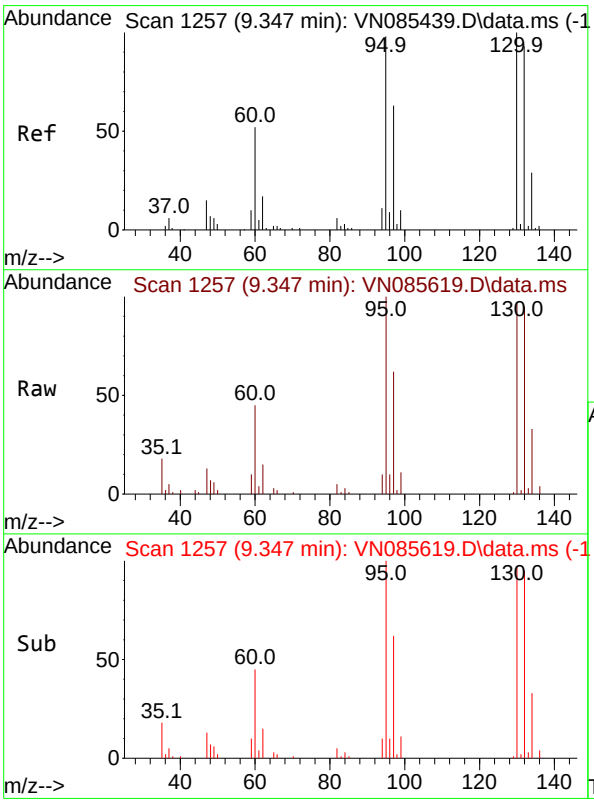
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 26.7 | 20.7 | 31.1 |
| 87 | 13.7 | 9.8 | 14.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

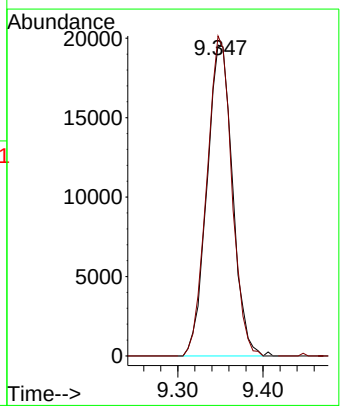
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

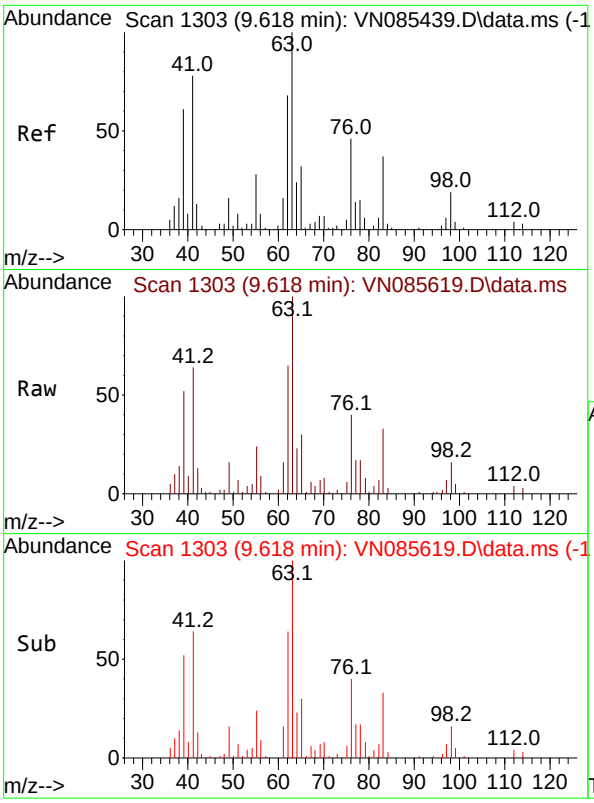



#44
Trichloroethene
Concen: 18.397 ug/l
RT: 9.347 min Scan# 1257
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:130 Resp: 40975

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 102.9 | 0.0 | 195.8 |

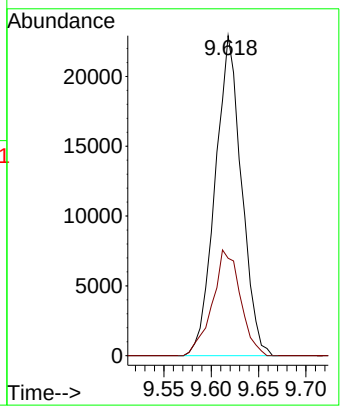





#45
1,2-Dichloropropane
Concen: 18.152 ug/l
RT: 9.618 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 63 Resp: 4436

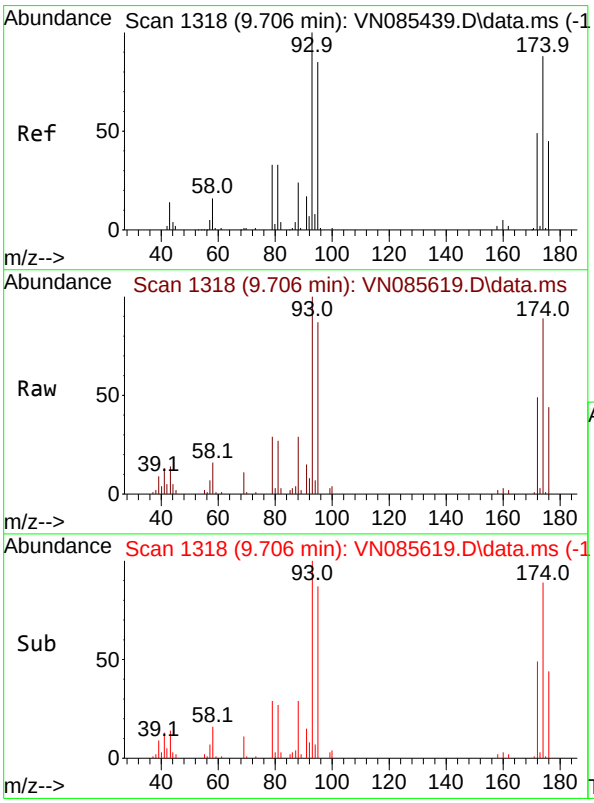
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 30.5 | 25.6 | 38.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

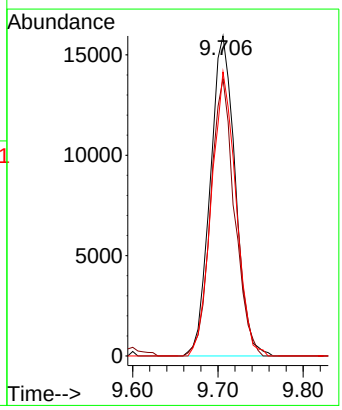
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

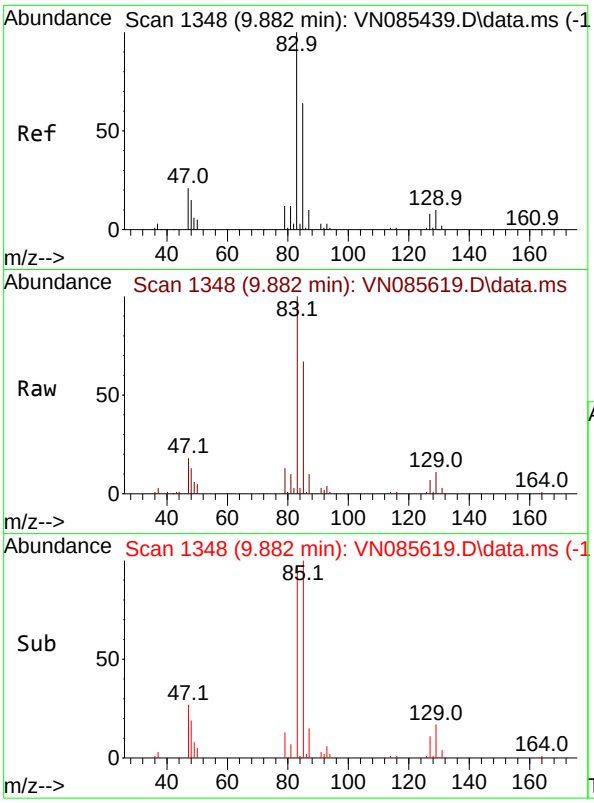



#46
Dibromomethane
Concen: 18.464 ug/l
RT: 9.706 min Scan# 1318
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 93 Resp: 32561

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 82.8 | 64.7 | 97.1 |
| 174 | 86.8 | 69.0 | 103.4 |

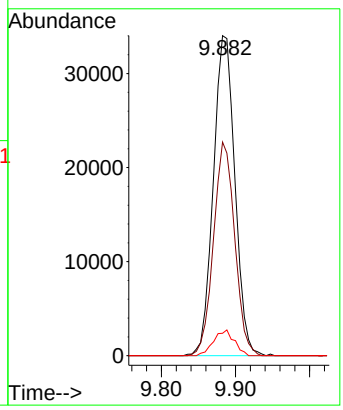





#47
Bromodichloromethane
Concen: 19.139 ug/l
RT: 9.882 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 83 Resp: 6876

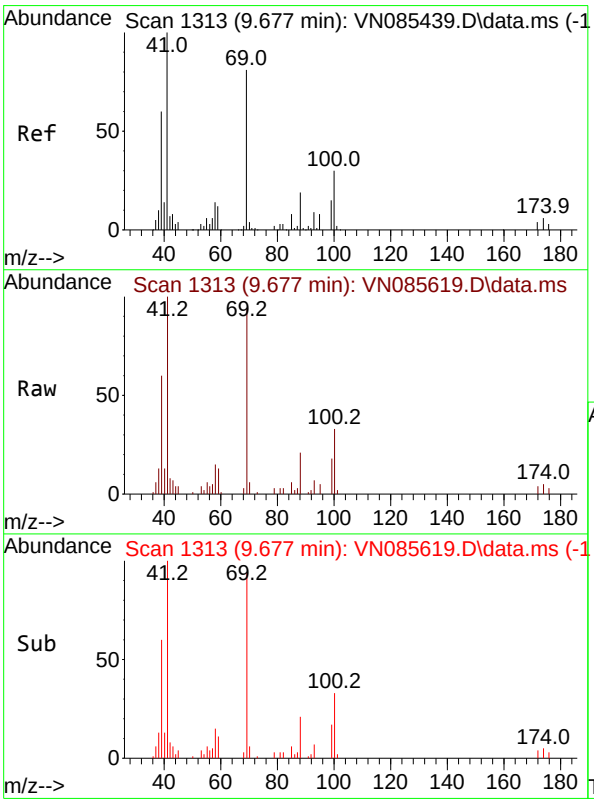
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 66.8 | 51.2 | 76.8 |
| 127 | 7.0 | 6.5 | 9.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

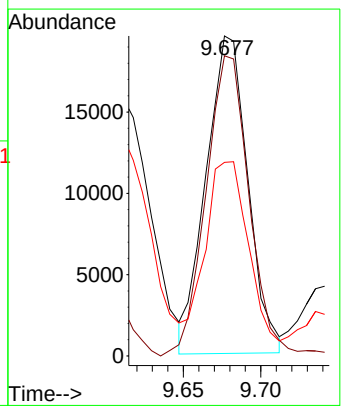
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

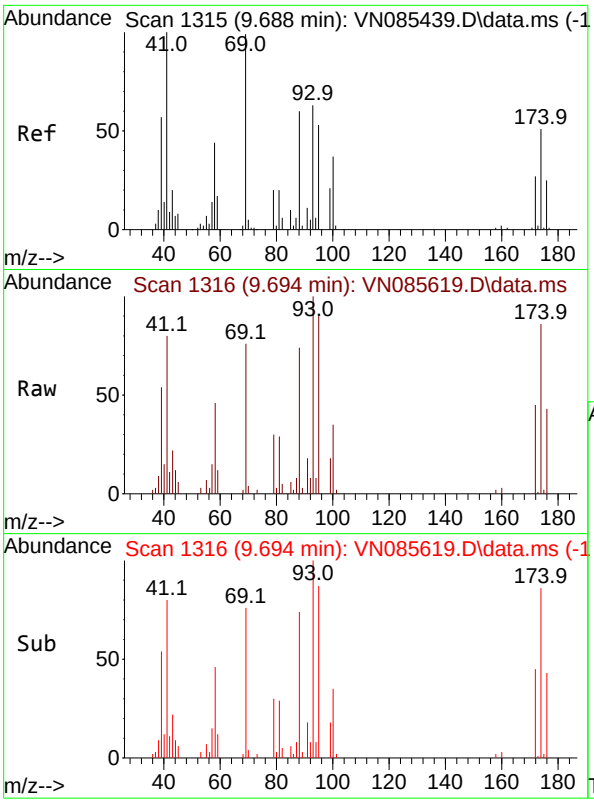



#48
Methyl methacrylate
Concen: 15.797 ug/l
RT: 9.677 min Scan# 1313
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 41 Resp: 36614

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 98.0 | 64.7 | 97.1# |
| 39 | 65.9 | 49.0 | 73.6 |






#49
1,4-Dioxane
Concen: 414.188 ug/l
RT: 9.694 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

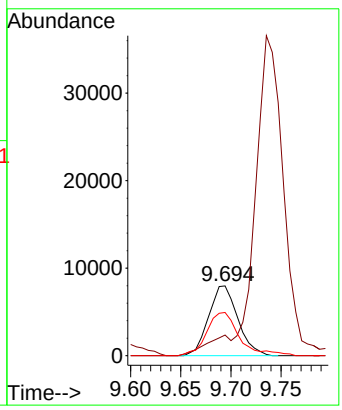
Tgt Ion: 88 Resp: 1616

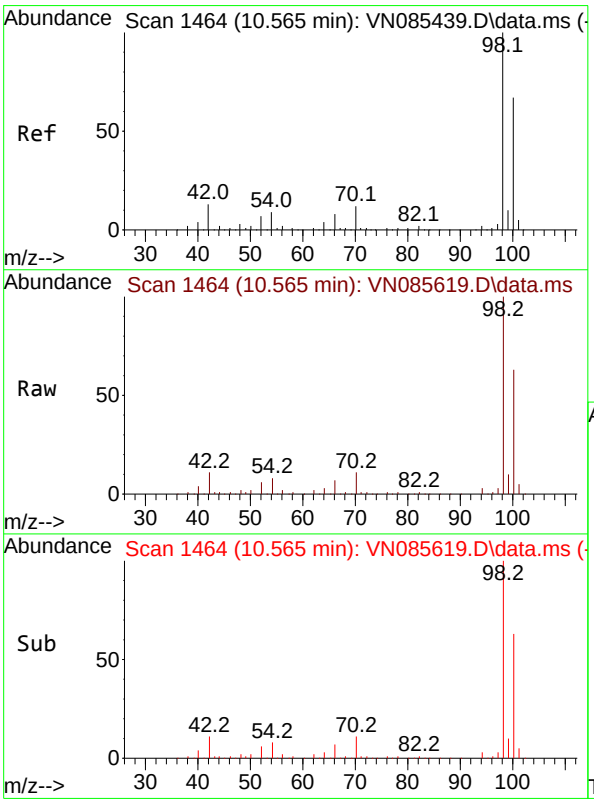
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 0.0 | 26.6 | 39.8# |
| 58 | 69.0 | 59.5 | 89.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

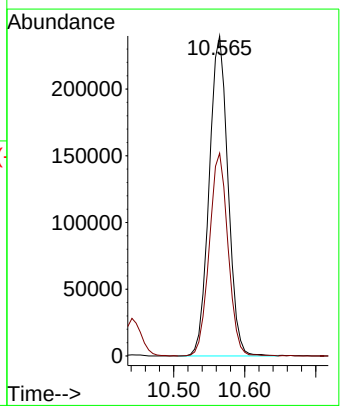


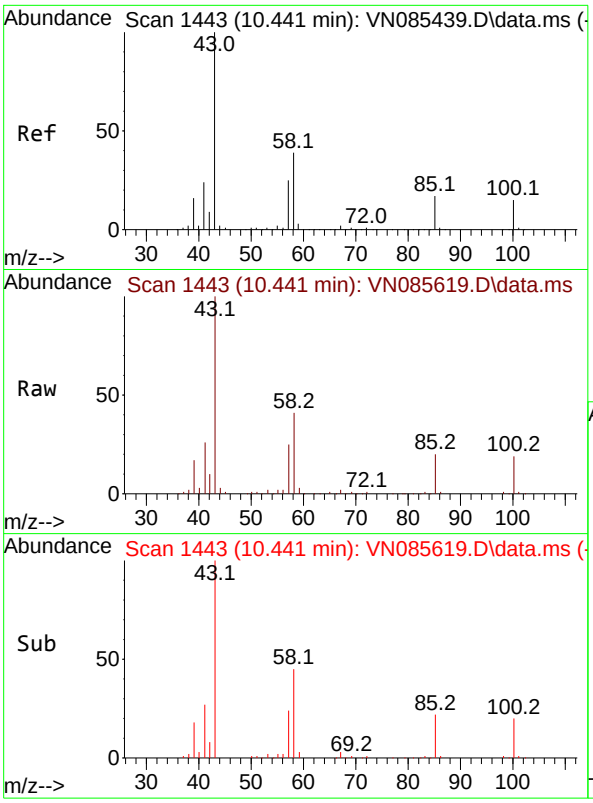




#50
Toluene-d8
Concen: 54.582 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 98 Resp: 440013

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 63.1 | 52.2 | 78.4 |

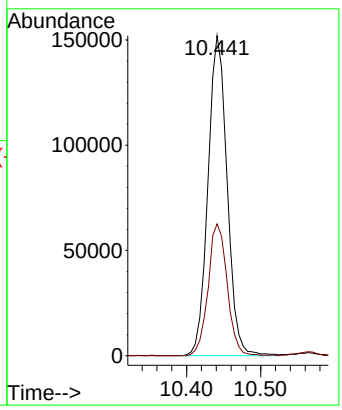





#51
4-Methyl-2-Pentanone
Concen: 91.380 ug/l
RT: 10.441 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 43 Resp: 27310

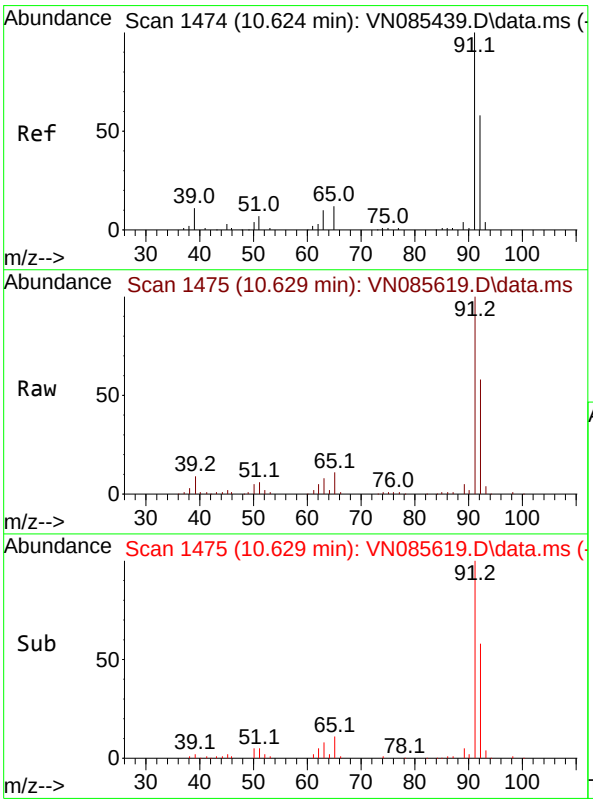
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 41.1 | 30.5 | 45.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations APPROVED**

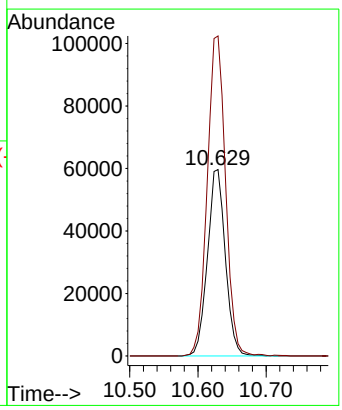
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

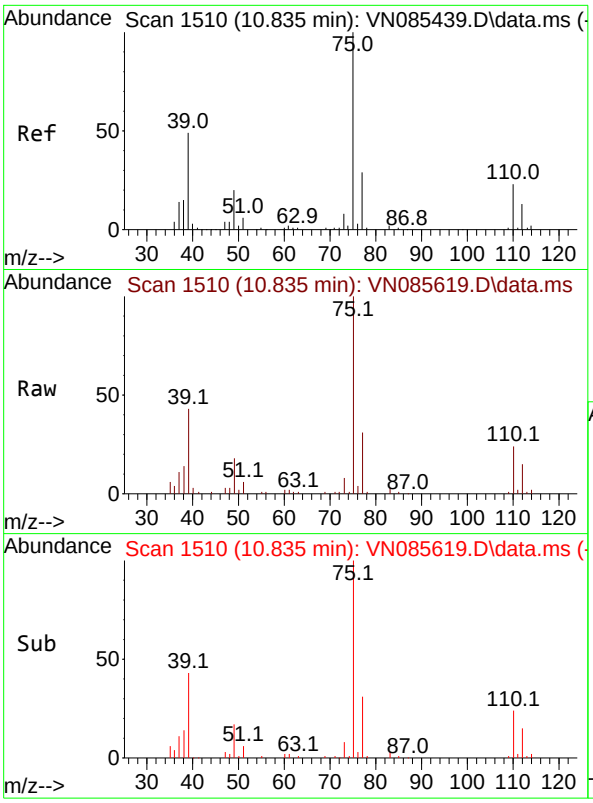



#52
Toluene
Concen: 19.678 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. 0.005 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 92 Resp: 109097

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 175.1 | 139.2 | 208.8 |

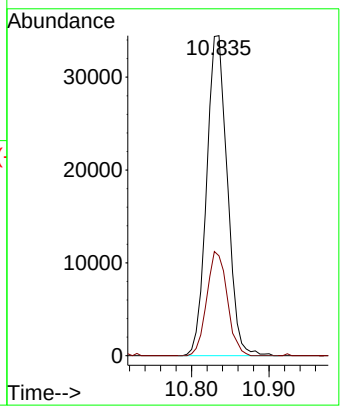





#53
t-1,3-Dichloropropene
Concen: 18.846 ug/l
RT: 10.835 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 75 Resp: 6398

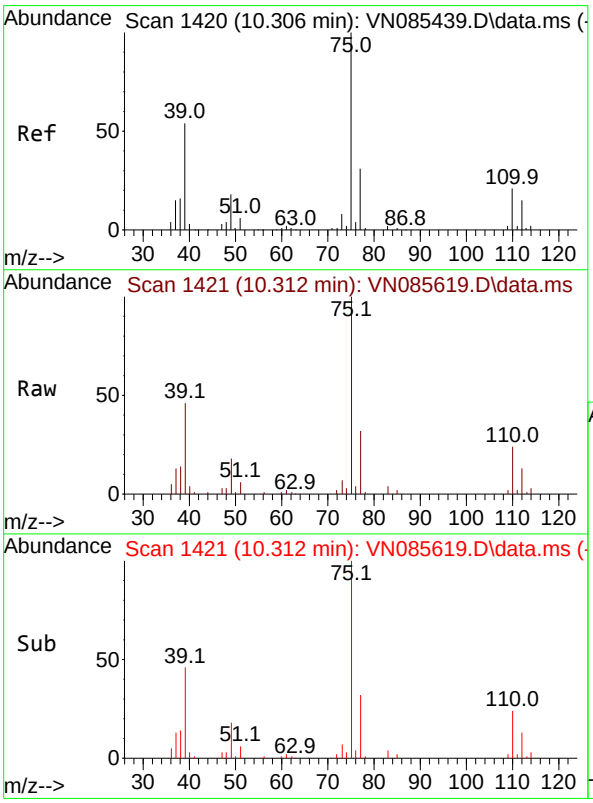
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.2 | 23.5 | 35.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

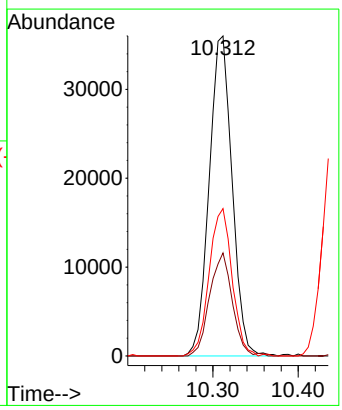
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

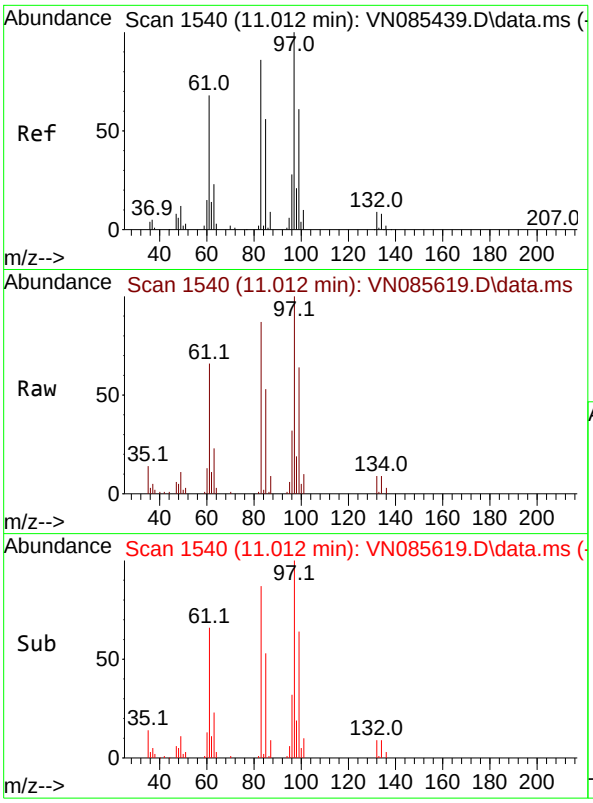



#54
cis-1,3-Dichloropropene
Concen: 18.516 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 75 Resp: 67151

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.2 | 25.0 | 37.4 |
| 39 | 46.0 | 43.1 | 64.7 |

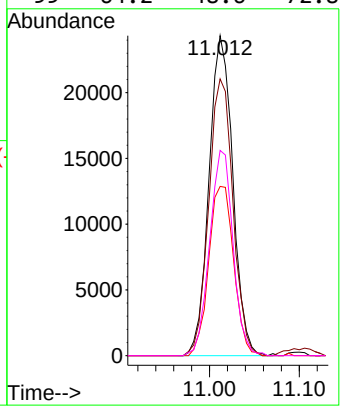





#55
1,1,2-Trichloroethane
Concen: 20.411 ug/l
RT: 11.012 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 97 Resp: 4478

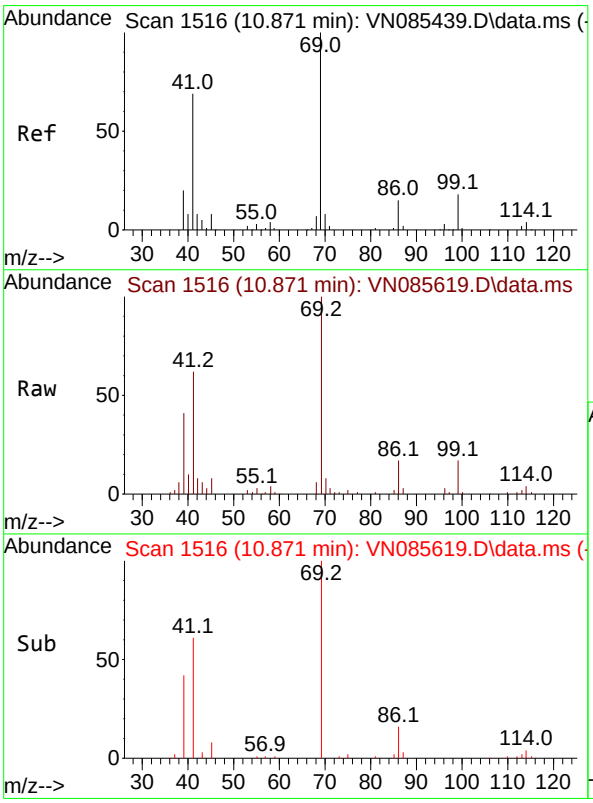
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 86.5 | 69.0 | 103.6 |
| 85 | 52.9 | 44.6 | 66.8 |
| 99 | 64.2 | 48.6 | 72.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

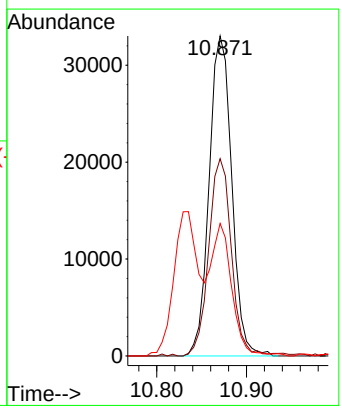
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

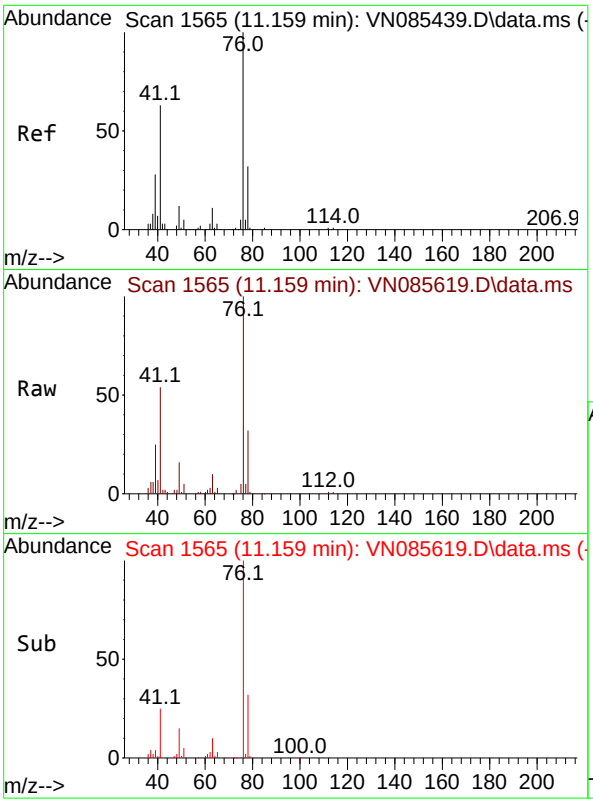



#56
Ethyl methacrylate
Concen: 16.950 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 69 Resp: 57740

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 61.7 | 54.6 | 82.0 |
| 39 | 38.4 | 32.4 | 48.6 |






#57
1,3-Dichloropropane
Concen: 19.419 ug/l
RT: 11.159 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

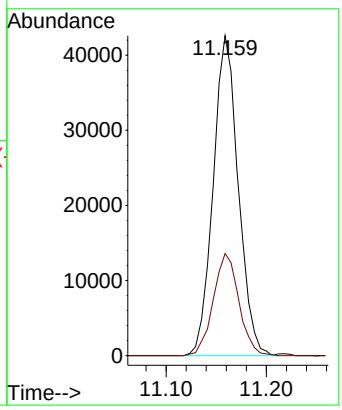
Tgt Ion: 76 Resp: 7408

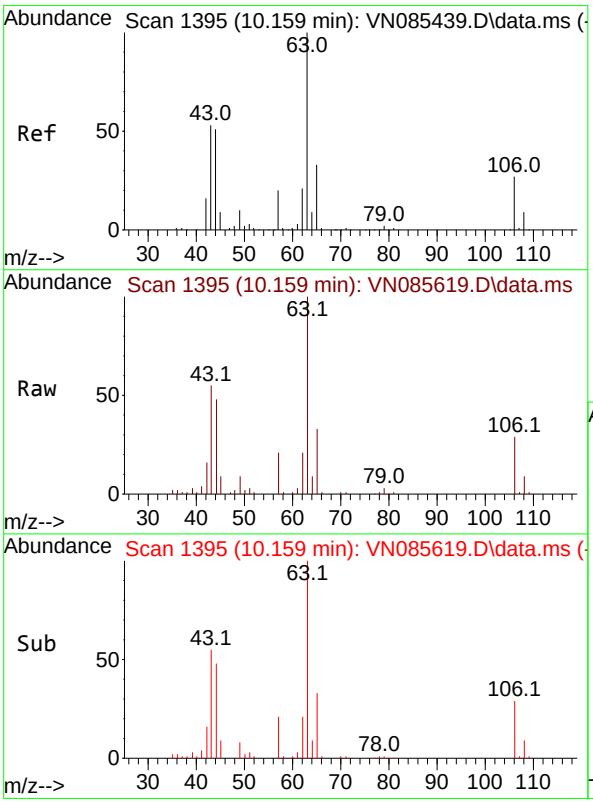
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.6 | 25.6 | 38.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

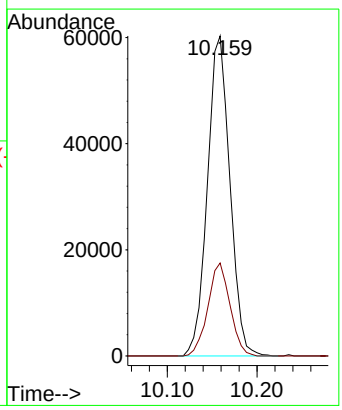


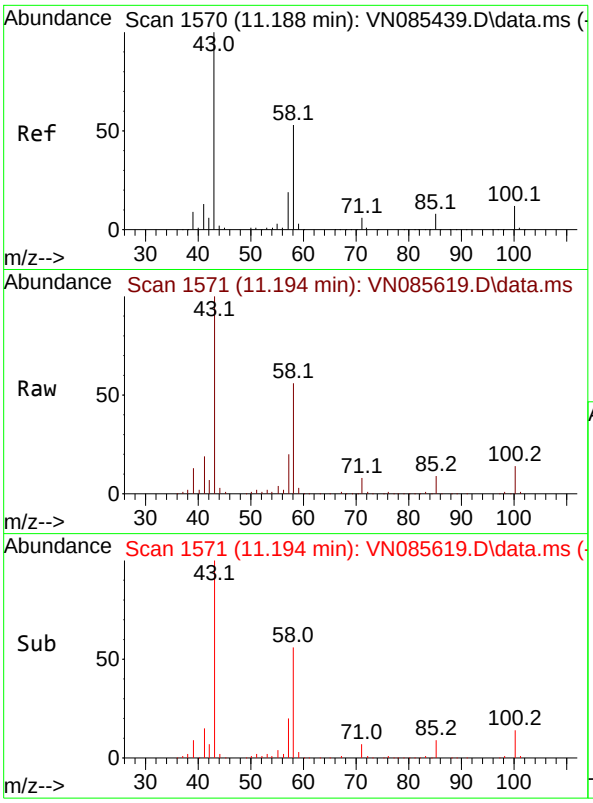




#58
2-Chloroethyl Vinyl ether
Concen: 75.342 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 63 Resp: 104900

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 28.6 | 21.6 | 32.4 |

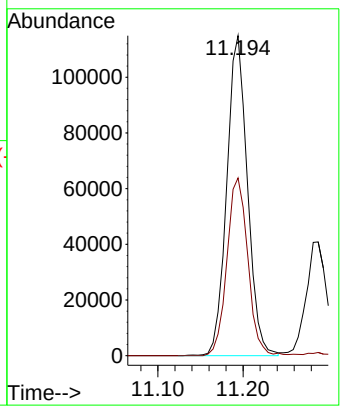





#59
2-Hexanone
Concen: 92.067 ug/l
RT: 11.194 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 43 Resp: 19360

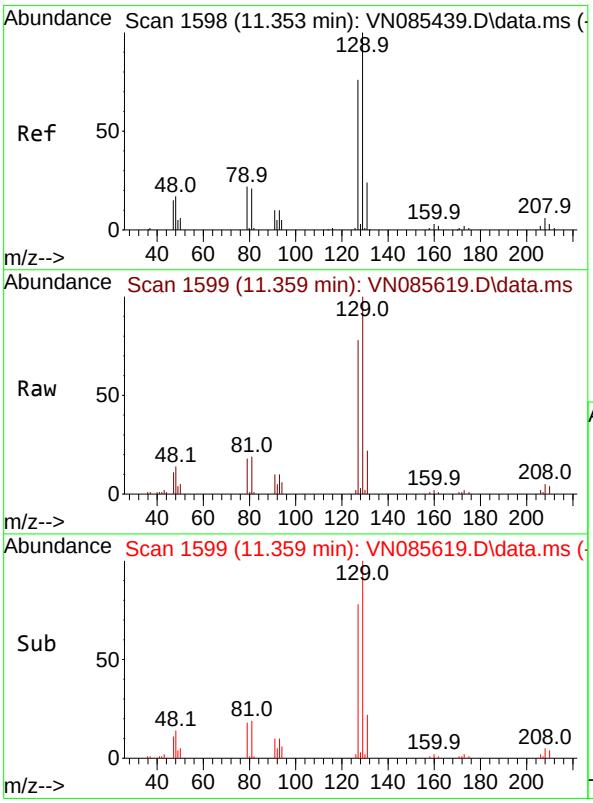
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 56.1 | 26.2 | 78.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

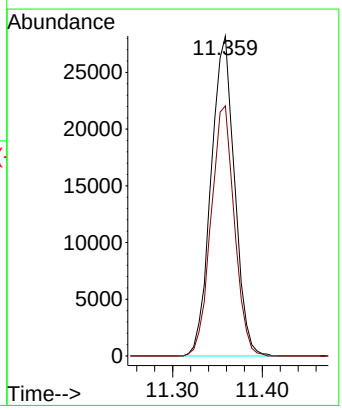
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

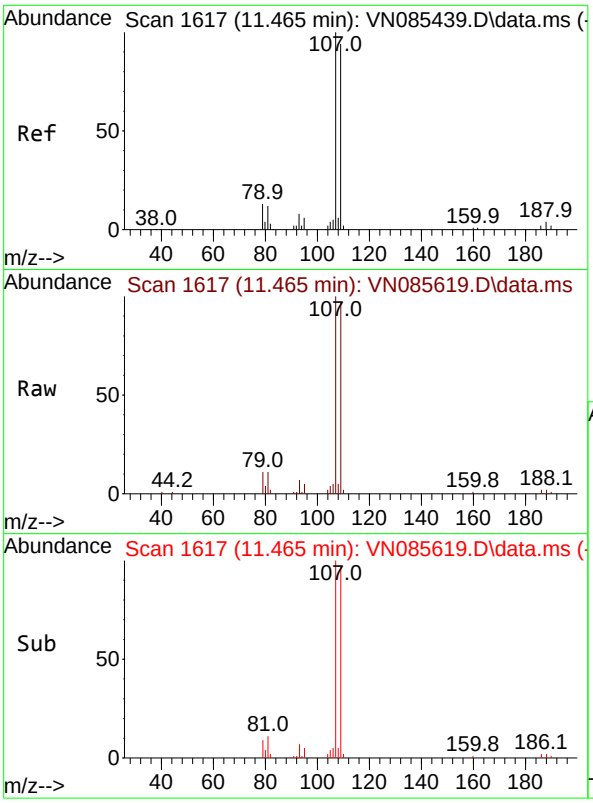



#60
Dibromochloromethane
Concen: 19.353 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:129 Resp: 51263

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 77.7 | 38.6 | 115.8 |






#61
1,2-Dibromoethane
Concen: 19.486 ug/l
RT: 11.465 min Scan# 1(
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

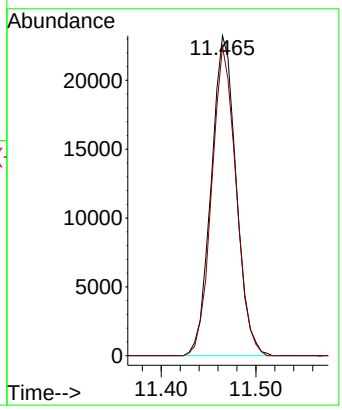
Tgt Ion:107 Resp: 4255(

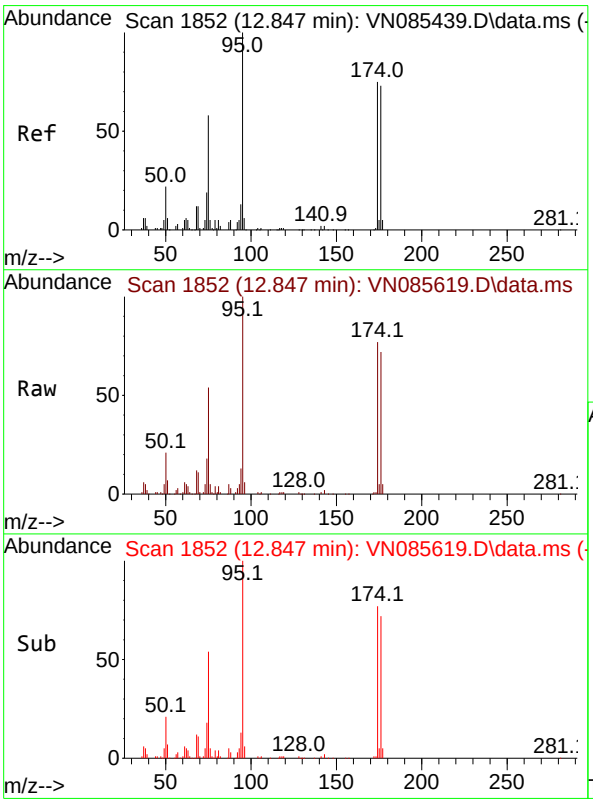
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 94.1 | 75.9 | 113.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

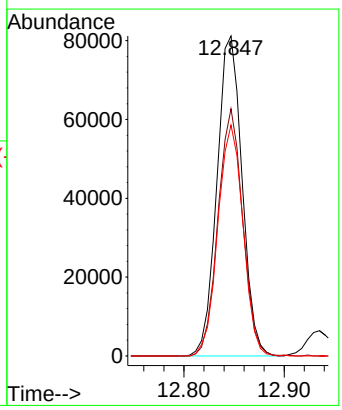


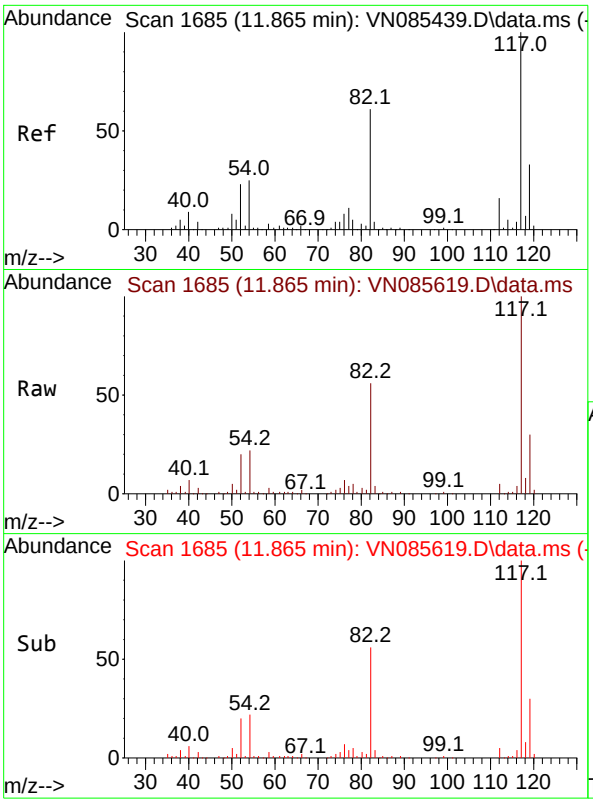




#62
4-Bromofluorobenzene
Concen: 51.128 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 95 Resp: 140993

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 76.0 | 0.0 | 145.0 |
| 176 | 72.1 | 0.0 | 142.4 |

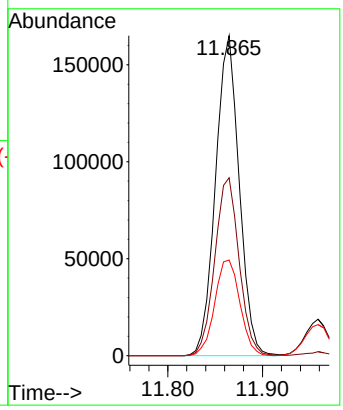





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:117 Resp: 28724

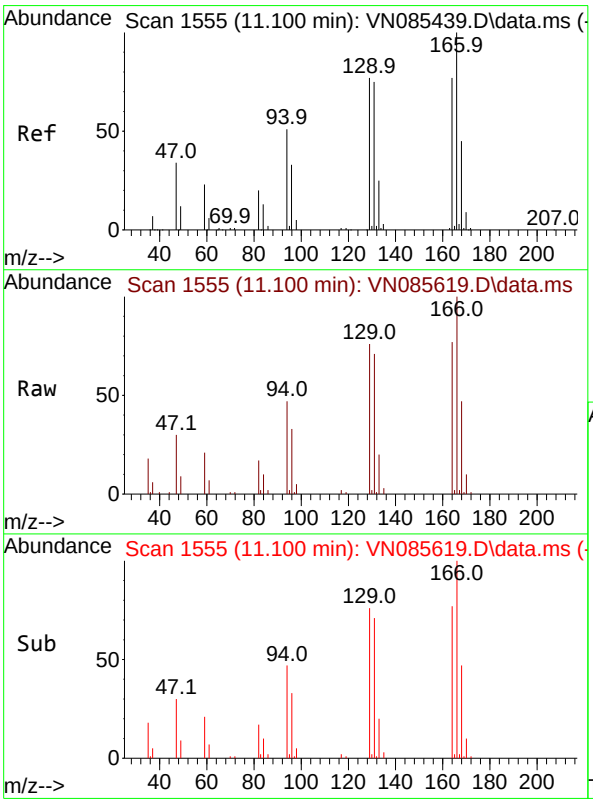
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 55.6 | 48.6 | 72.8 |
| 119 | 29.9 | 26.6 | 39.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

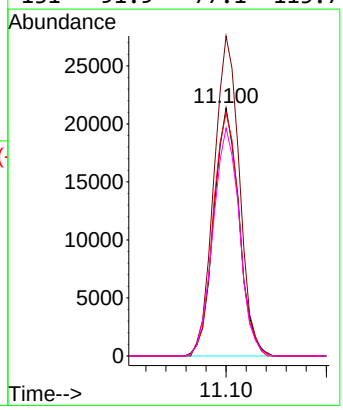
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

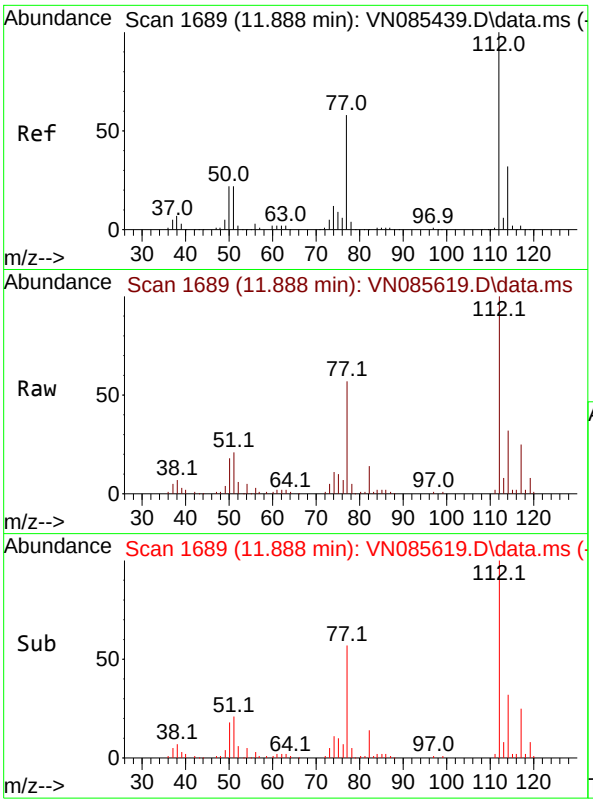



#64
Tetrachloroethene
Concen: 19.160 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:164 Resp: 37520

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 129.0 | 103.4 | 155.2 |
| 129 | 98.0 | 79.2 | 118.8 |
| 131 | 91.9 | 77.1 | 115.7 |

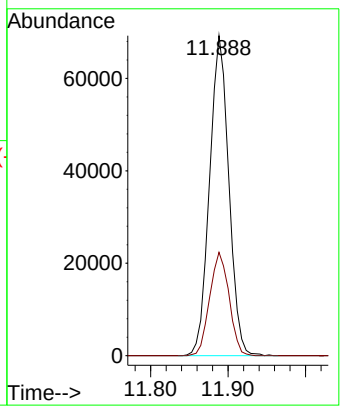





#65
Chlorobenzene
Concen: 19.005 ug/l
RT: 11.888 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:112 Resp: 11959

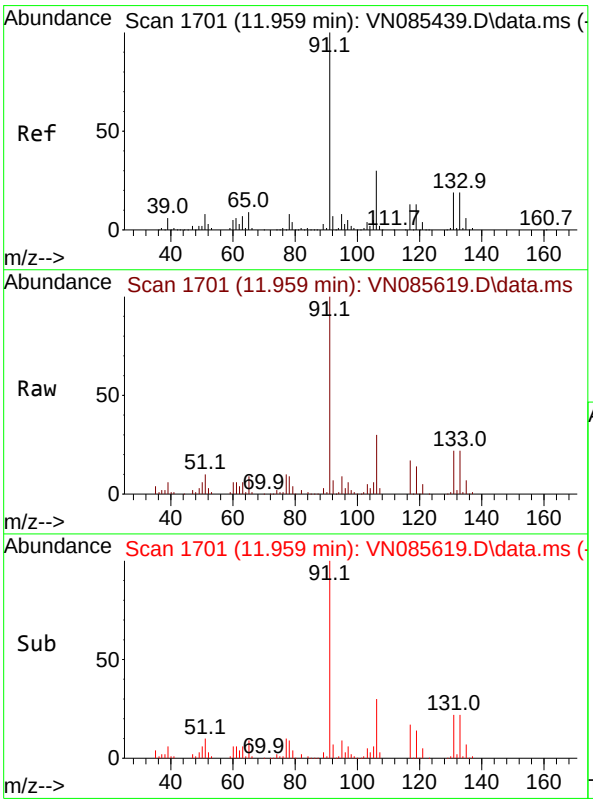
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 32.3 | 25.3 | 37.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

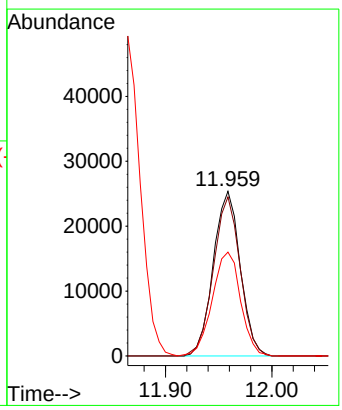
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

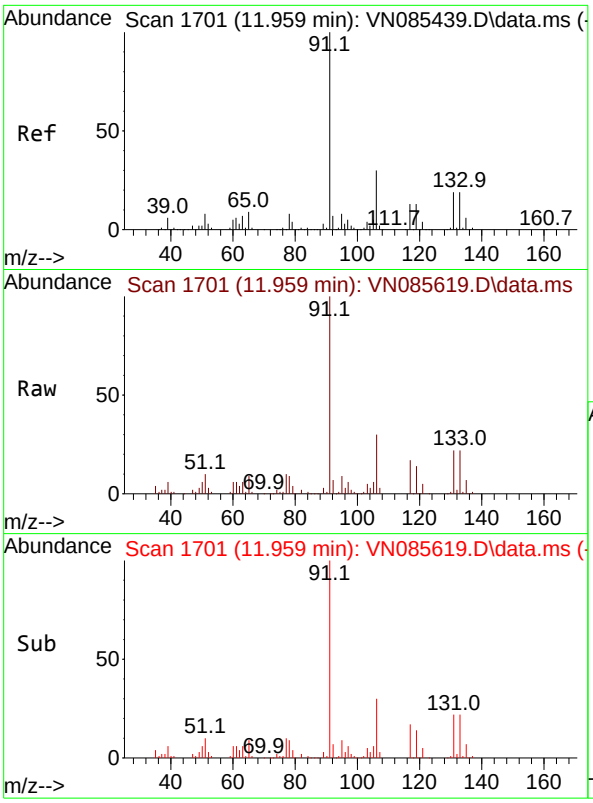



#66
1,1,1,2-Tetrachloroethane
Concen: 19.291 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:131 Resp: 44553

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 96.0 | 47.4 | 142.3 |
| 119 | 66.2 | 33.1 | 99.5 |

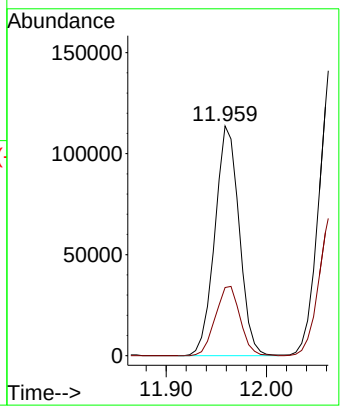





#67
Ethyl Benzene
Concen: 18.656 ug/l
RT: 11.959 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 91 Resp: 19120

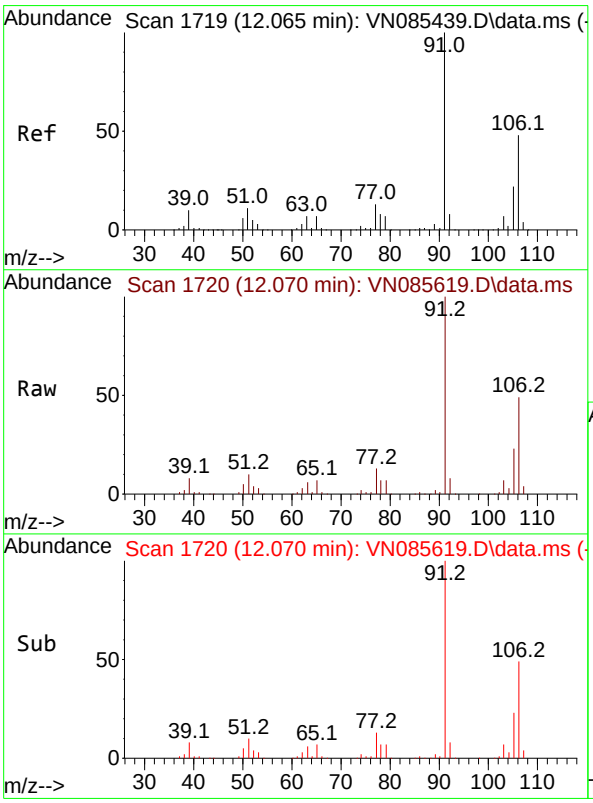
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 29.7 | 23.8 | 35.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations APPROVED**

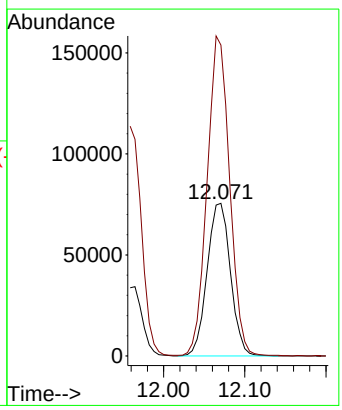
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

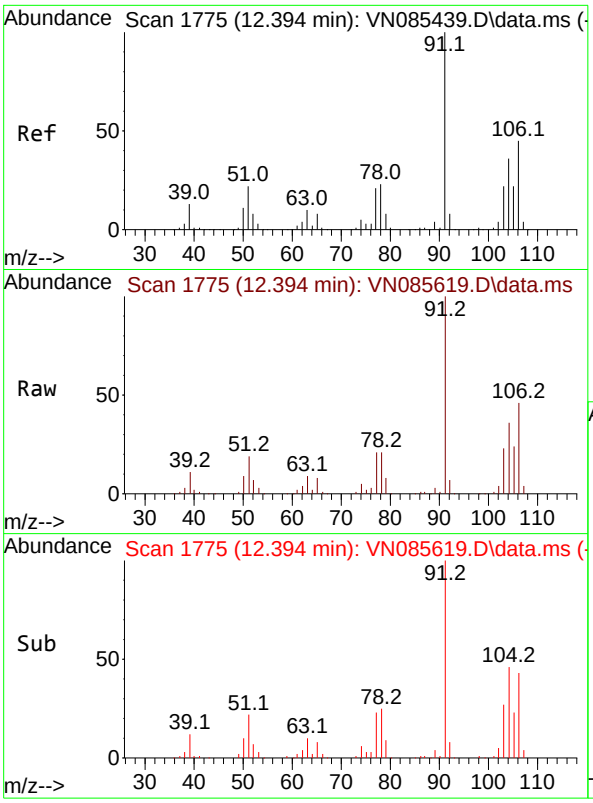



#68
m/p-Xylenes
Concen: 39.785 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:106 Resp: 150700

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 202.7 | 167.7 | 251.5 |






#69
o-Xylene
Concen: 18.994 ug/l
RT: 12.394 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

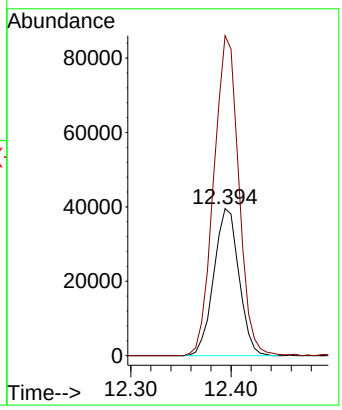
Tgt Ion:106 Resp: 6875

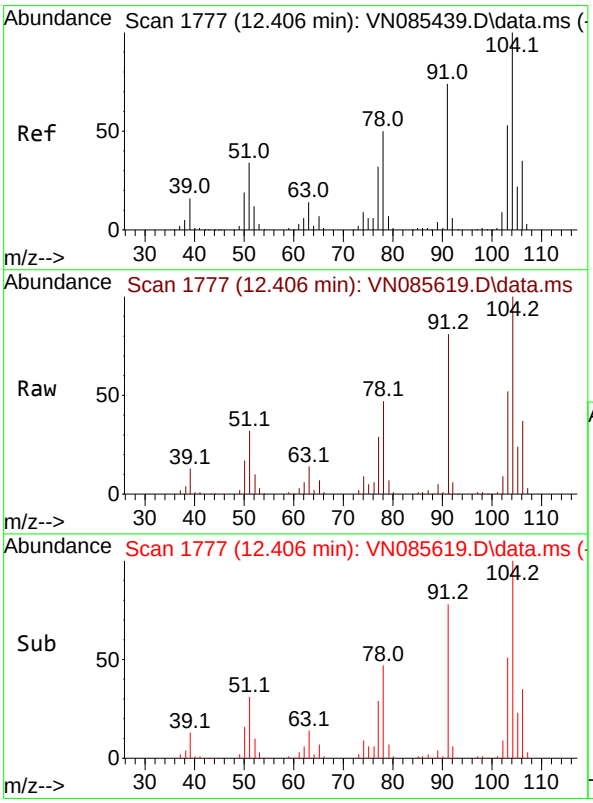
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 217.4 | 110.4 | 331.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

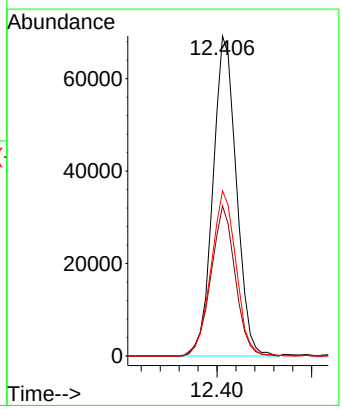


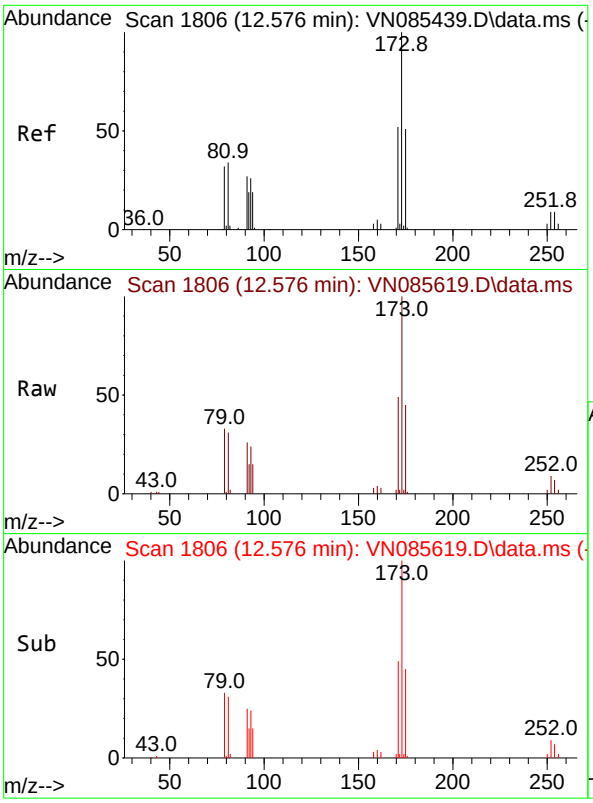




#70
Styrene
Concen: 19.827 ug/l
RT: 12.406 min Scan# 1777
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:104 Resp: 118783

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 48.8 | 42.5 | 63.7 |
| 103 | 55.0 | 43.8 | 65.8 |

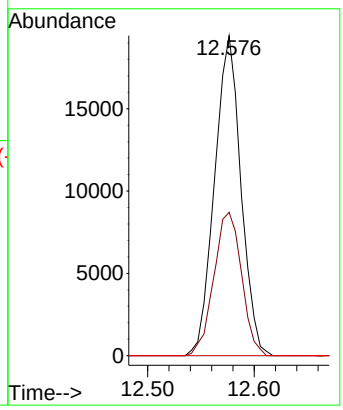





#71
Bromoform
Concen: 20.183 ug/l
RT: 12.576 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:173 Resp: 3335

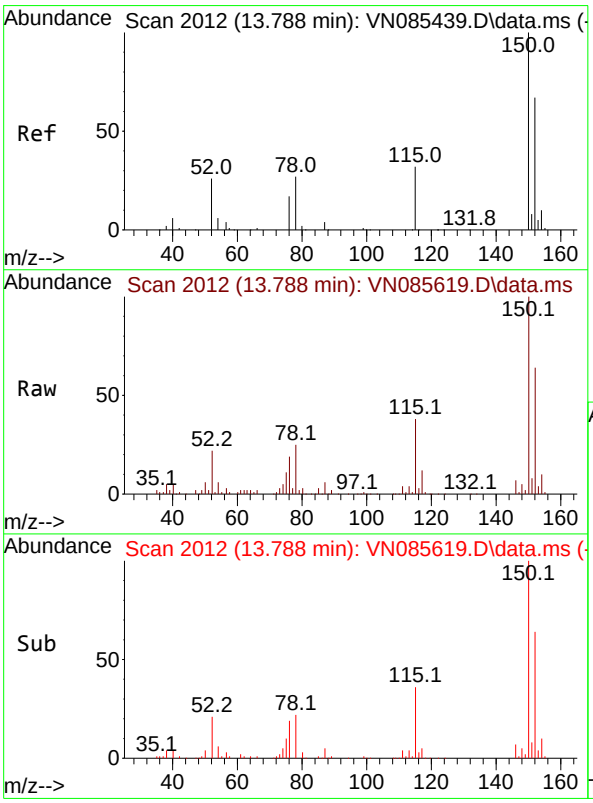
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 47.2 | 24.4 | 73.2 |
| 254 | 0.0 | 0.0 | 0.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

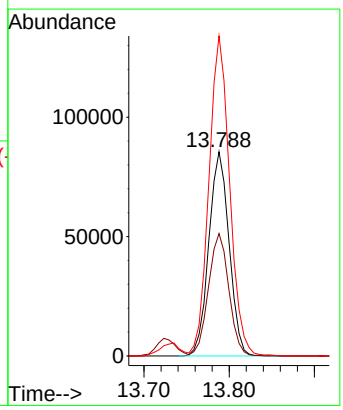
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

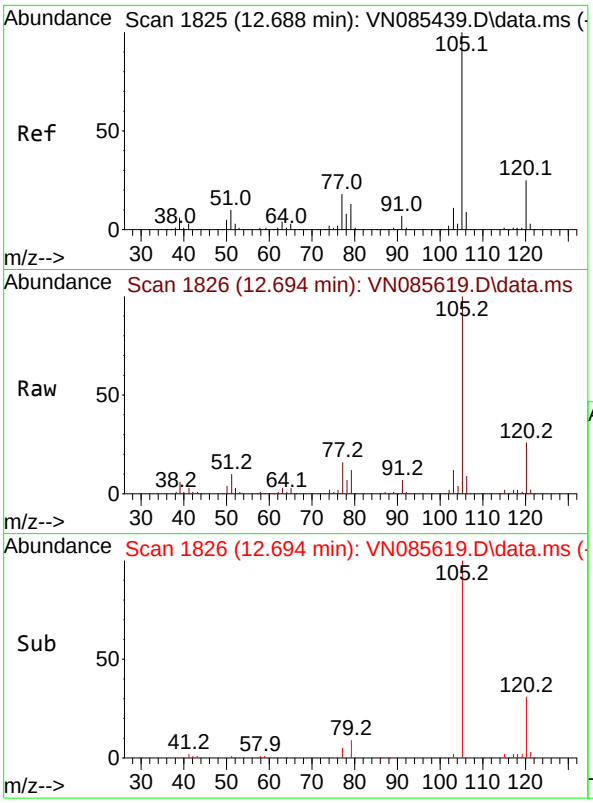



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:152 Resp: 141185

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 60.3 | 31.1 | 93.3 |
| 150 | 160.4 | 0.0 | 343.6 |

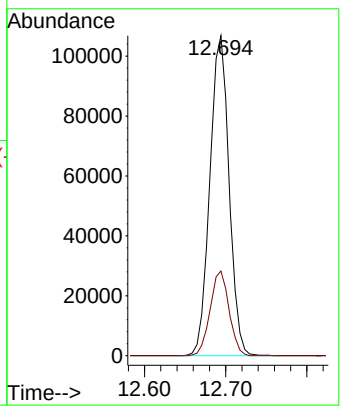





#73
Isopropylbenzene
Concen: 18.416 ug/l
RT: 12.694 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:105 Resp: 17547

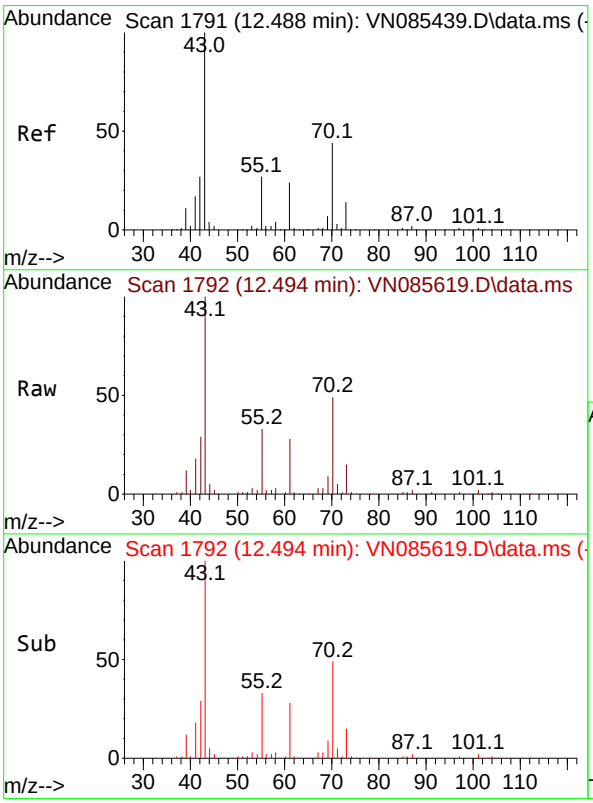
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.0 | 12.8 | 38.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations APPROVED**

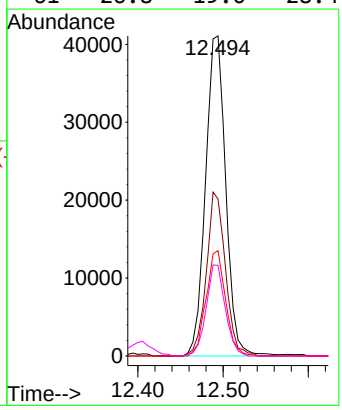
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

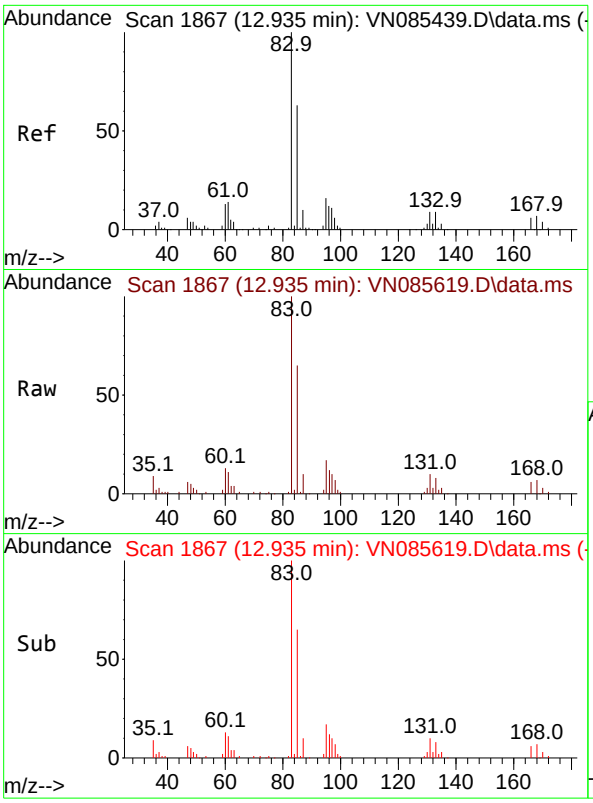



#74
N-amyl acetate
Concen: 15.799 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 43 Resp: 67669

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 48.3 | 34.0 | 51.0 |
| 55 | 31.8 | 21.4 | 32.2 |
| 61 | 26.8 | 19.0 | 28.4 |

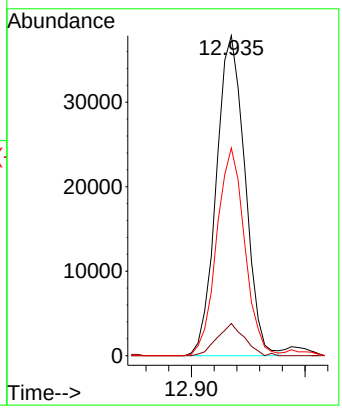





#75
1,1,2,2-Tetrachloroethane
Concen: 19.691 ug/l
RT: 12.935 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 83 Resp: 6627

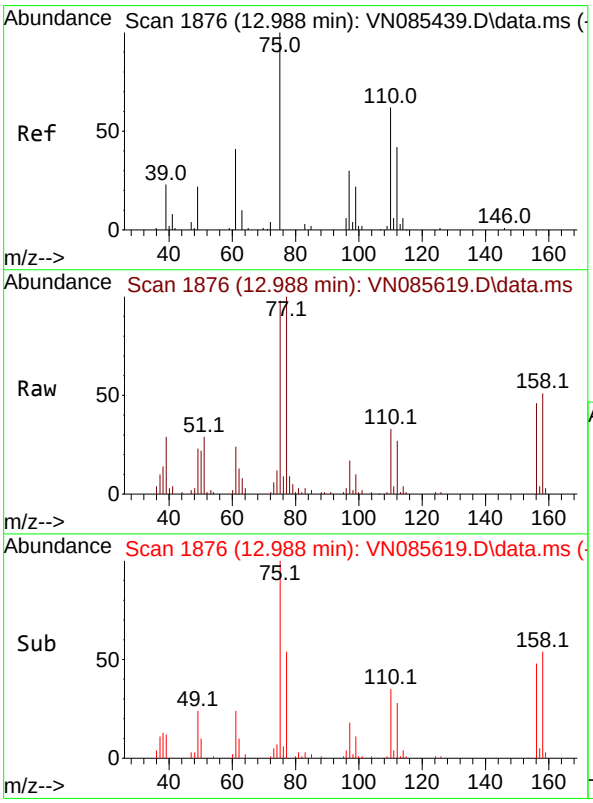
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 9.6 | 4.8 | 14.4 |
| 85 | 63.5 | 32.2 | 96.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

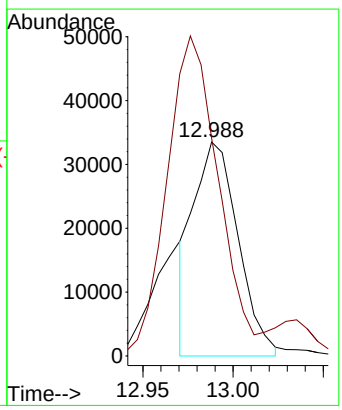
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

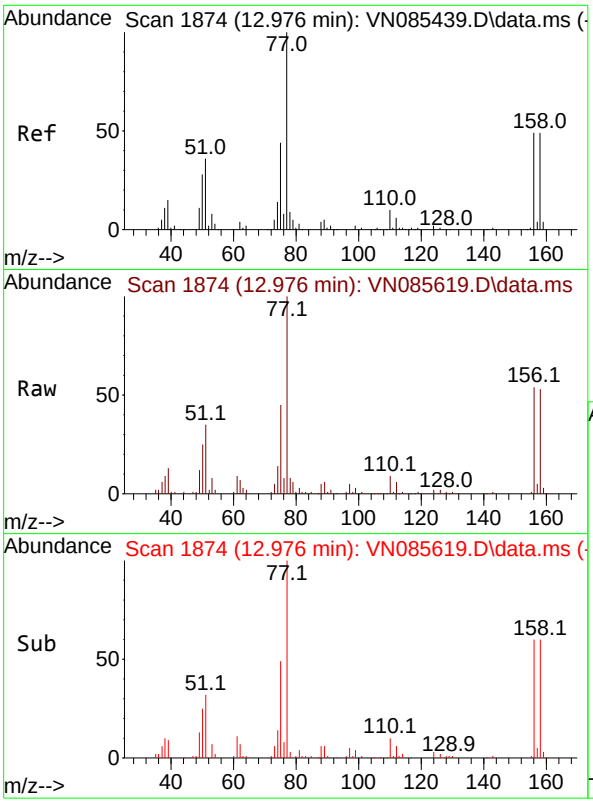



#76
1,2,3-Trichloropropane
Concen: 20.108 ug/l m
RT: 12.988 min Scan# 1876
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 75 Resp: 57701

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 174.2 | 109.7 | 329.2 |

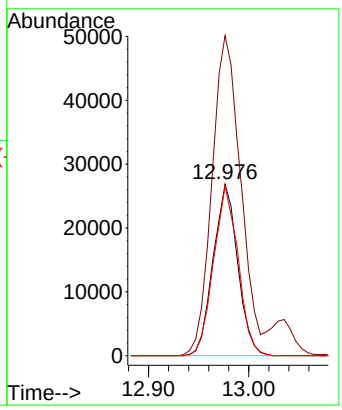





#77
Bromobenzene
Concen: 18.357 ug/l
RT: 12.976 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:156 Resp: 4570

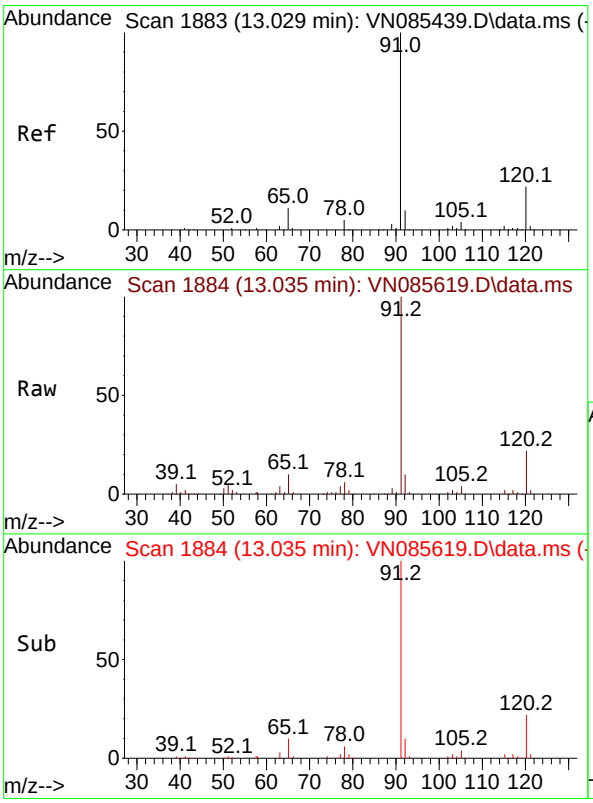
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 219.9 | 114.1 | 342.4 |
| 158 | 98.9 | 48.9 | 146.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

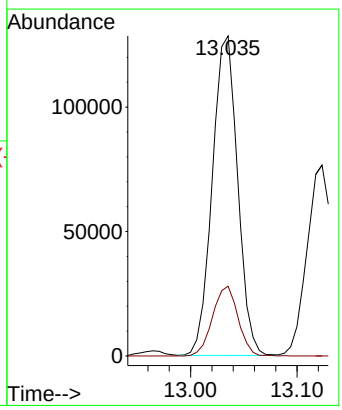
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

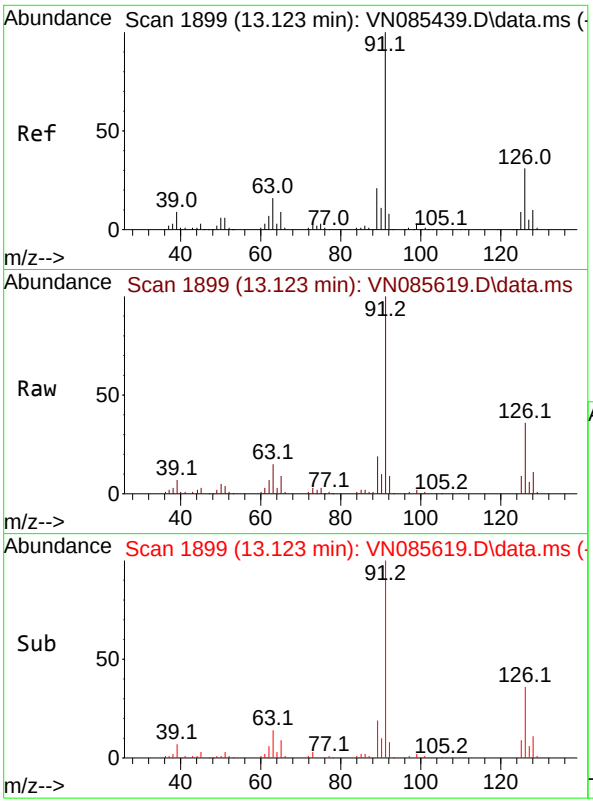



#78
n-propylbenzene
Concen: 18.808 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 91 Resp: 212161

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 21.9 | 10.9 | 32.6 |

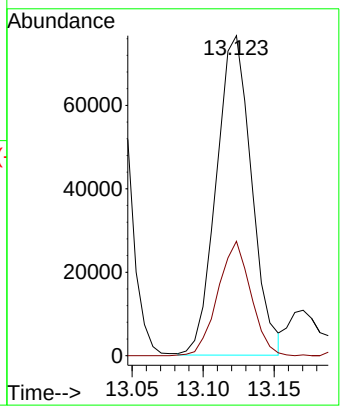





#79
2-Chlorotoluene
Concen: 18.149 ug/l
RT: 13.123 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 91 Resp: 13250

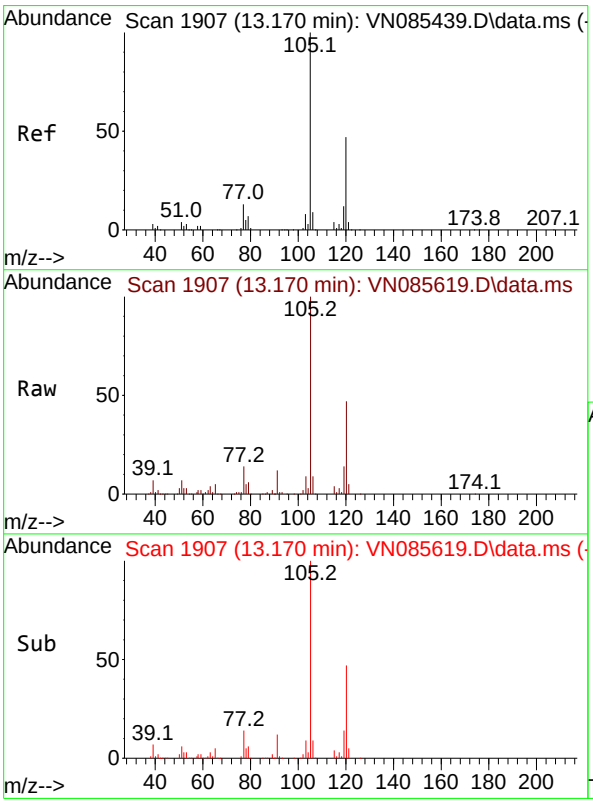
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 33.4 | 15.7 | 47.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

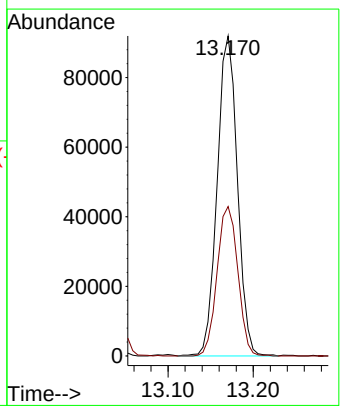
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

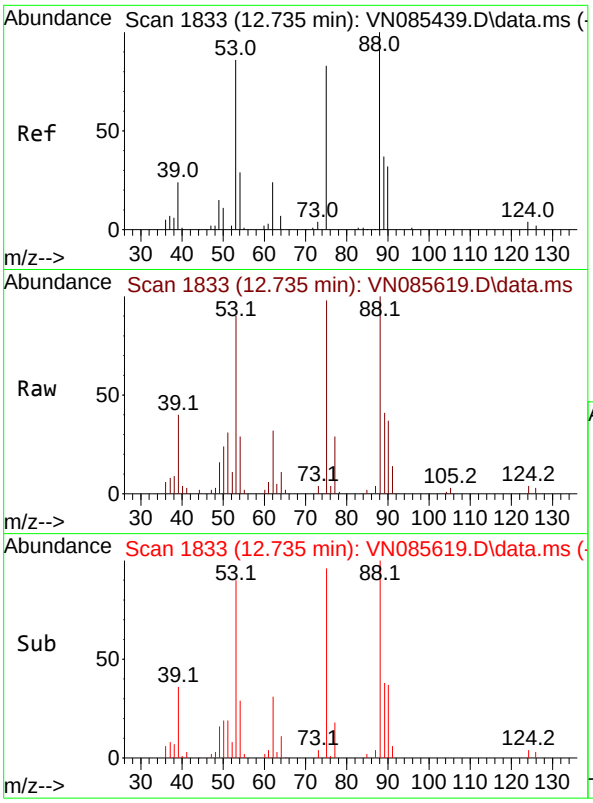



#80
1,3,5-Trimethylbenzene
Concen: 19.282 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:105 Resp: 151767

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 47.9 | 23.9 | 71.7 |






#81
trans-1,4-Dichloro-2-butene
Concen: 19.452 ug/l
RT: 12.735 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

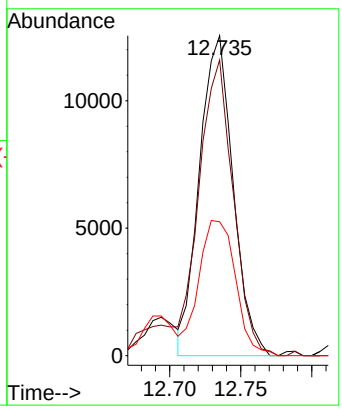
Tgt Ion: 75 Resp: 2063

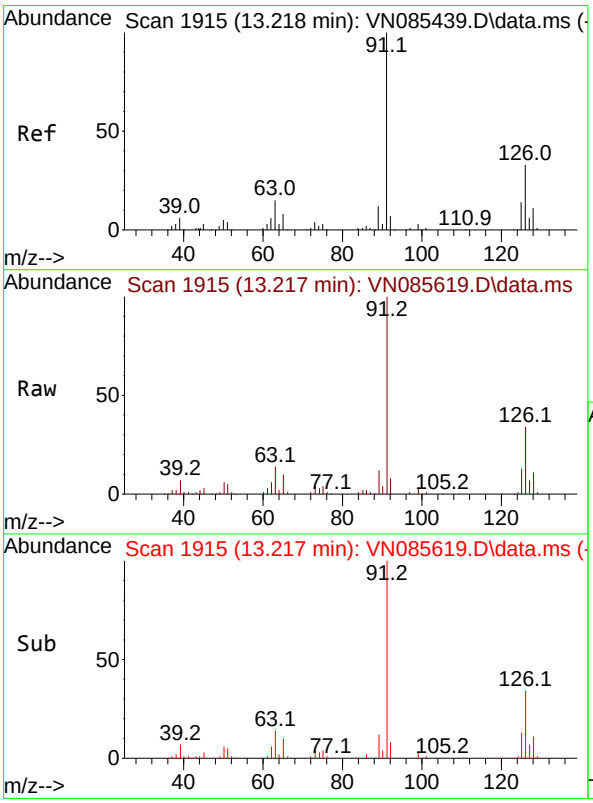
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 104.9 | 95.6 | 143.4 |
| 89 | 46.4 | 37.0 | 55.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

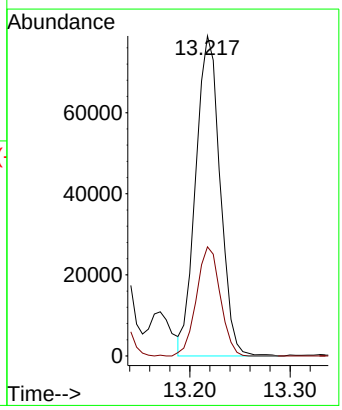


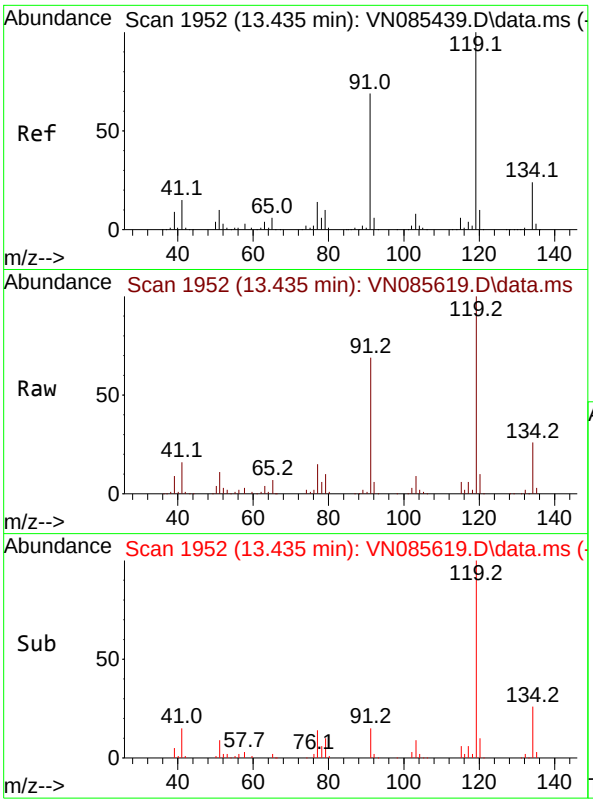




#82
4-Chlorotoluene
Concen: 18.365 ug/l
RT: 13.217 min Scan# 1915
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 91 Resp: 133497

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 33.2 | 15.9 | 47.7 |






#83
tert-Butylbenzene
Concen: 18.381 ug/l
RT: 13.435 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

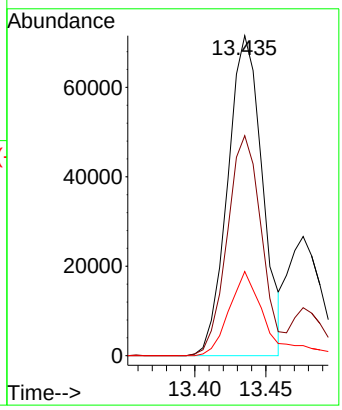
Tgt Ion:119 Resp: 12149

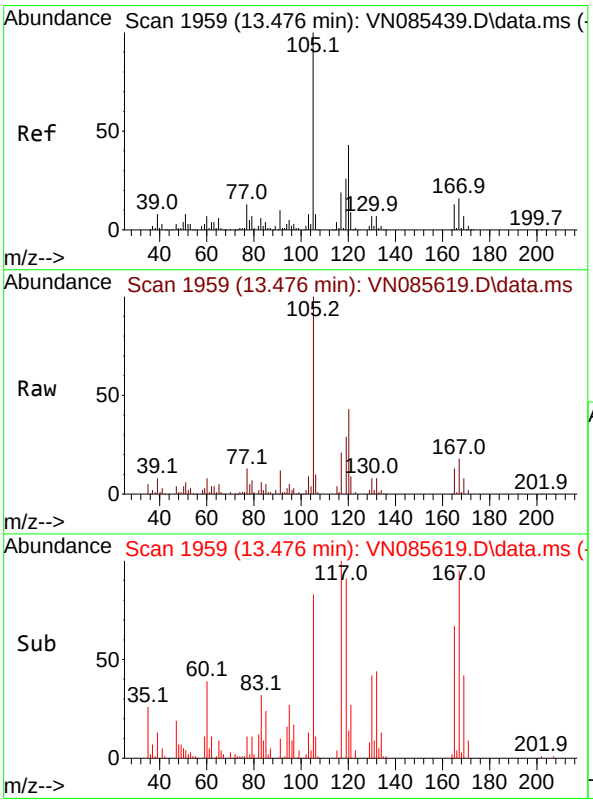
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 68.9 | 35.1 | 105.3 |
| 134 | 27.2 | 12.0 | 36.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

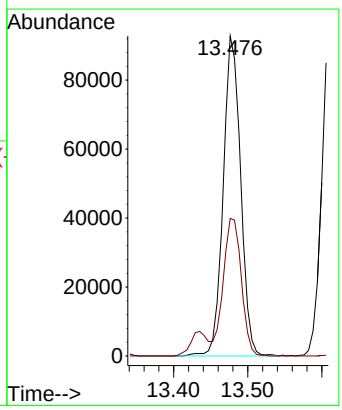


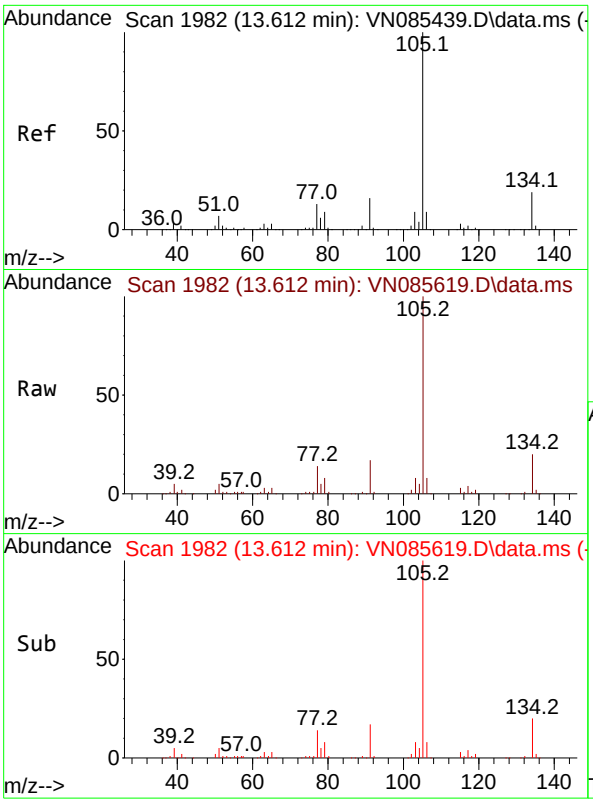




#84
1,2,4-Trimethylbenzene
Concen: 19.303 ug/l
RT: 13.476 min Scan# 1959
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:105 Resp: 151424

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 45.3 | 21.6 | 65.0 |

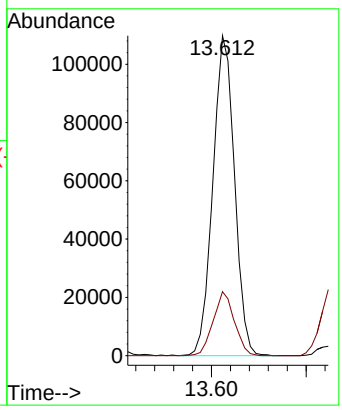





#85
sec-Butylbenzene
Concen: 19.049 ug/l
RT: 13.612 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:105 Resp: 17450

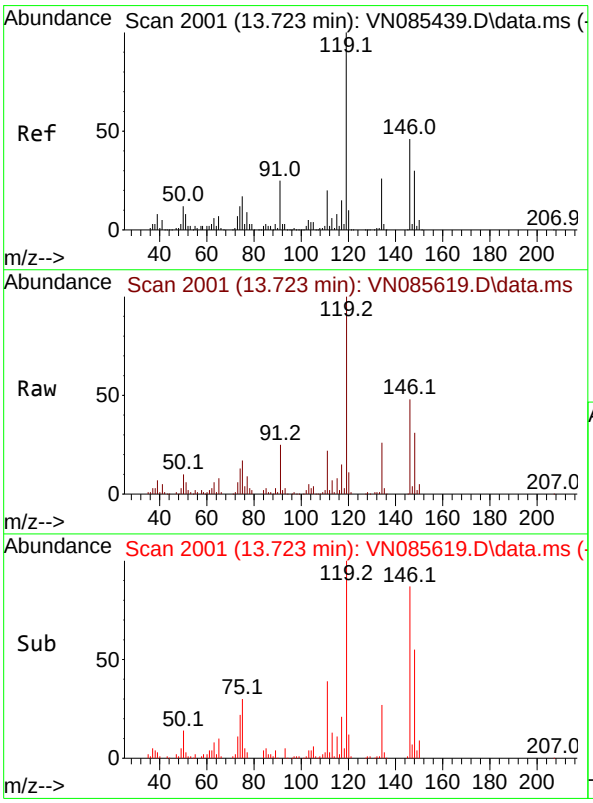
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.6 | 9.7 | 28.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

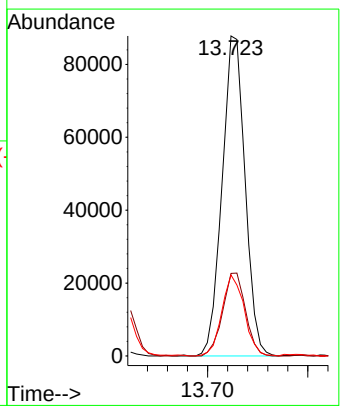
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

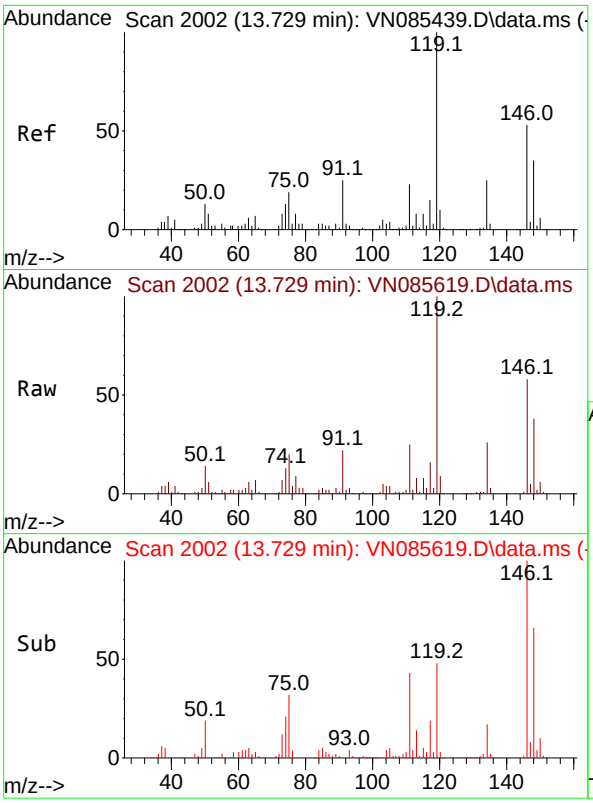



#86
p-Isopropyltoluene
Concen: 18.340 ug/l
RT: 13.723 min Scan# 2001
Delta R.T. 0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:119 Resp: 139399

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.8 | 12.7 | 38.0 |
| 91 | 24.7 | 12.7 | 38.1 |

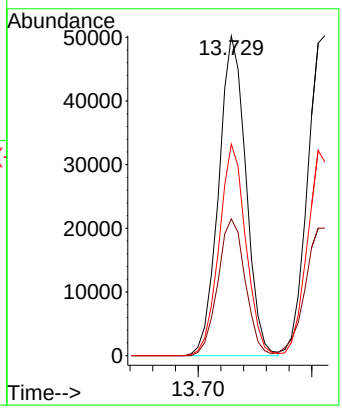





#87
1,3-Dichlorobenzene
Concen: 18.208 ug/l
RT: 13.729 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:146 Resp: 8348

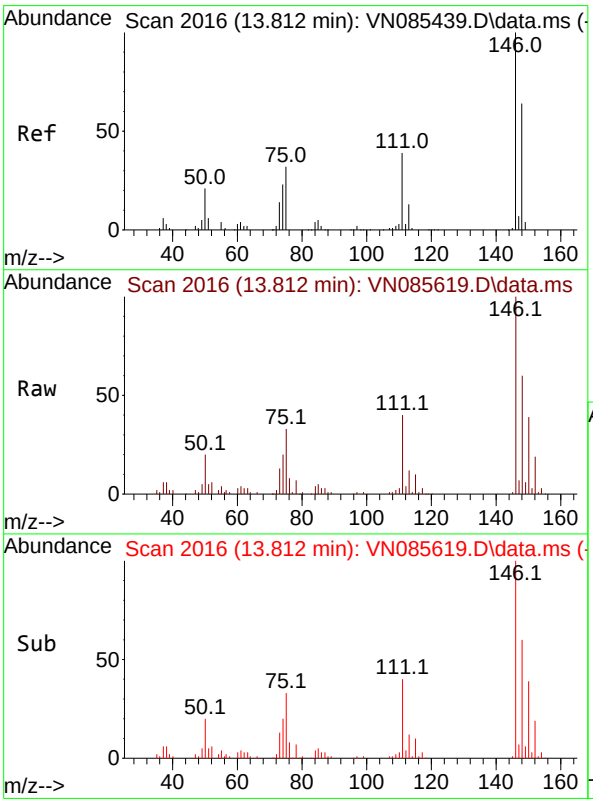
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.0 | 21.4 | 64.3 |
| 148 | 65.0 | 32.3 | 96.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

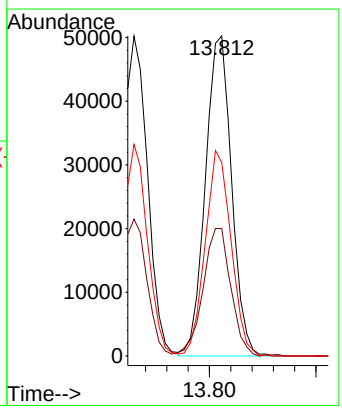
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

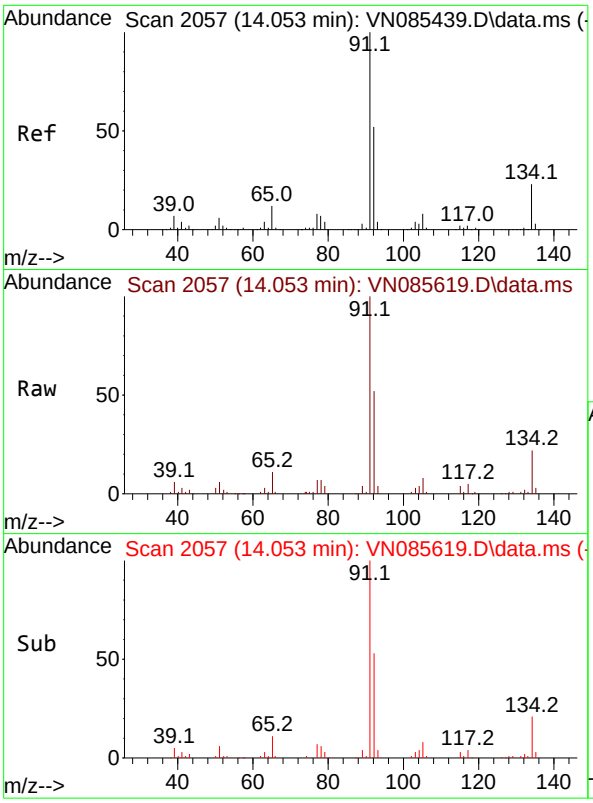



#88
1,4-Dichlorobenzene
Concen: 18.063 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:146 Resp: 85839

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.3 | 21.3 | 63.7 |
| 148 | 63.5 | 32.4 | 97.0 |

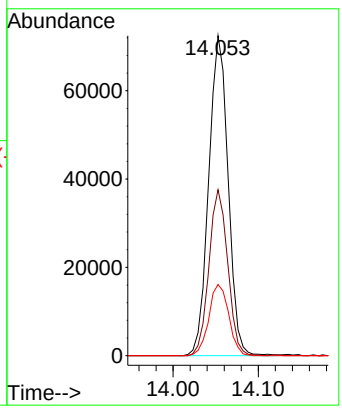





#89
n-Butylbenzene
Concen: 17.425 ug/l
RT: 14.053 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 91 Resp: 11451

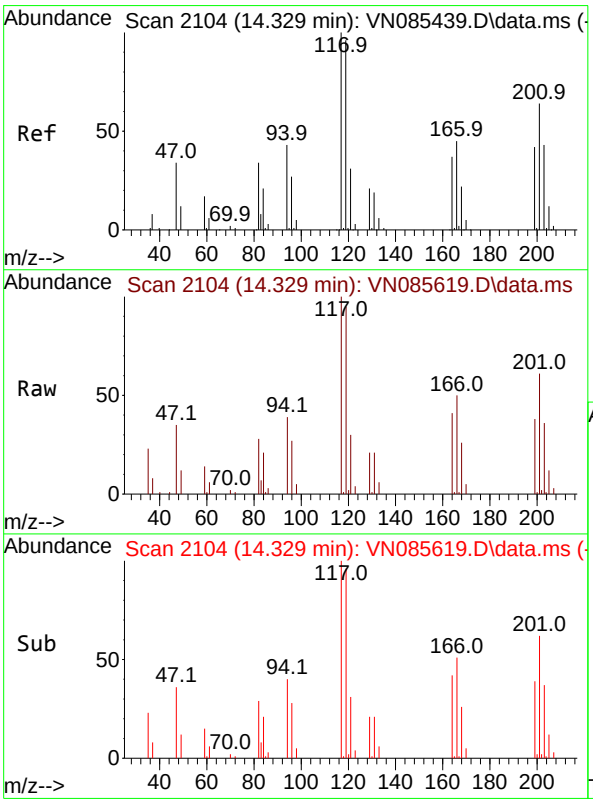
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 50.3 | 25.8 | 77.3 |
| 134 | 22.9 | 11.7 | 35.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

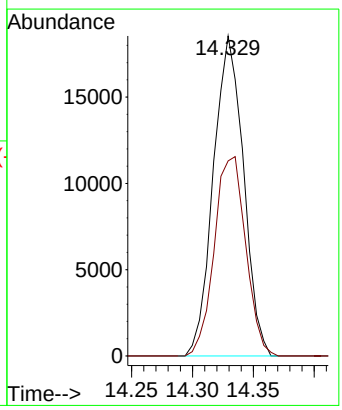
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

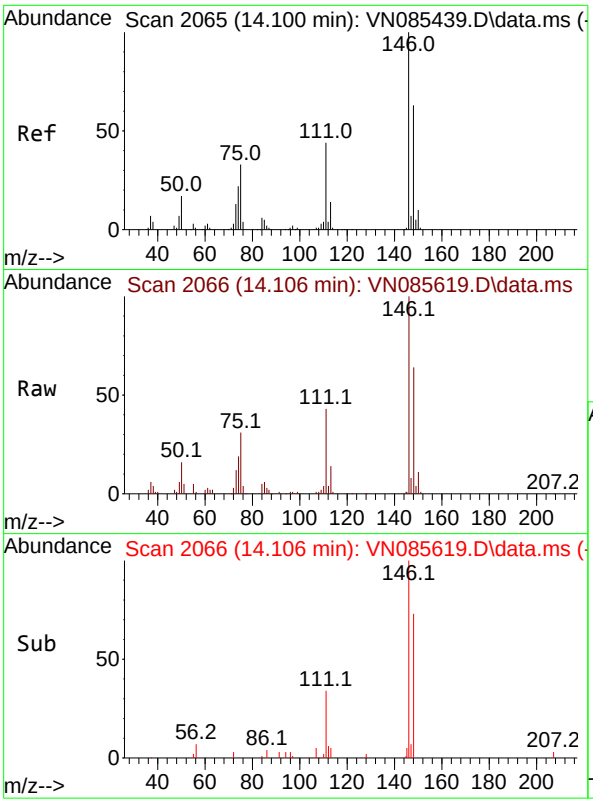



#90
Hexachloroethane
Concen: 18.308 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:117 Resp: 31928

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 64.9 | 33.7 | 101.0 |

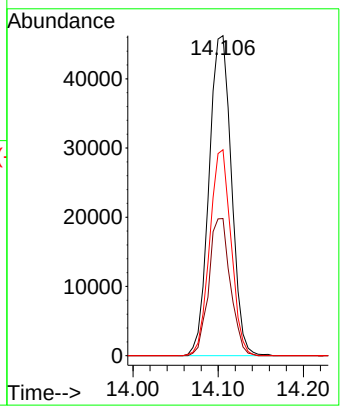





#91
1,2-Dichlorobenzene
Concen: 18.437 ug/l
RT: 14.106 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:146 Resp: 8431

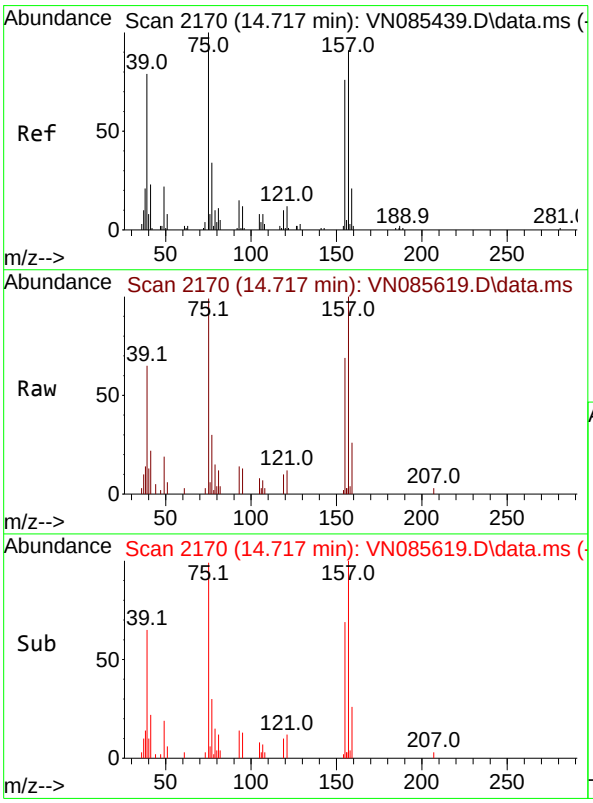
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 41.4 | 21.7 | 65.1 |
| 148 | 61.5 | 31.4 | 94.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations**
**APPROVED**

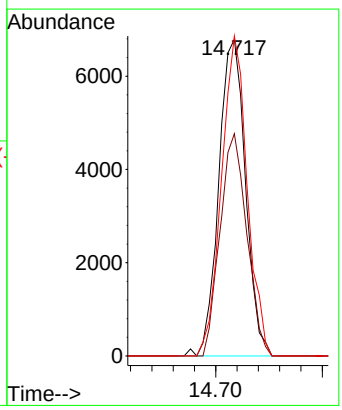
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

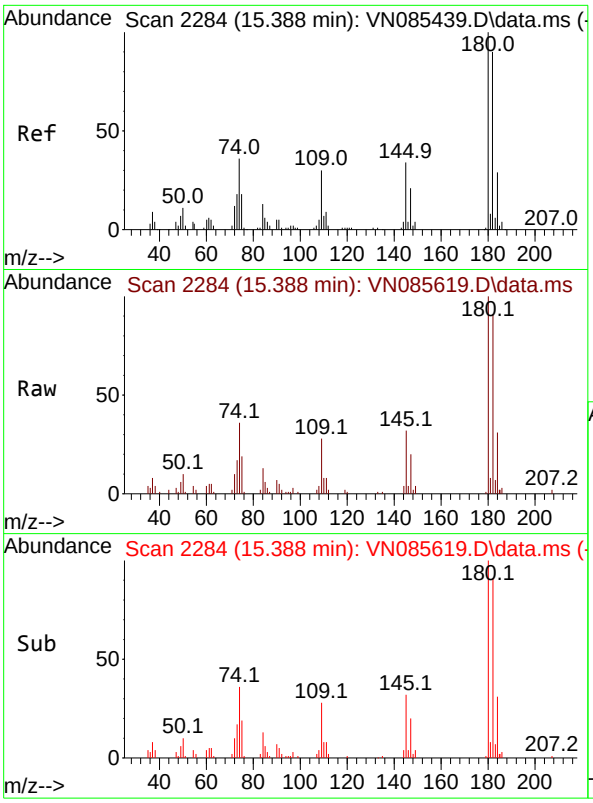



#92
1,2-Dibromo-3-Chloropropane
Concen: 19.170 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 75 Resp: 11783

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 70.4 | 36.4 | 109.2 |
| 157 | 97.6 | 45.4 | 136.1 |

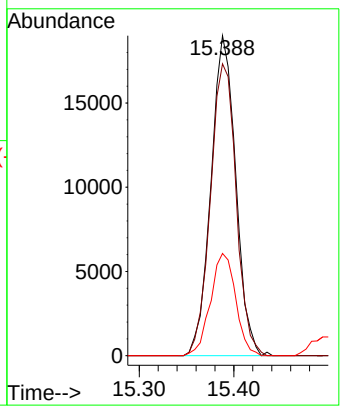





#93
1,2,4-Trichlorobenzene
Concen: 16.258 ug/l
RT: 15.388 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:180 Resp: 3455

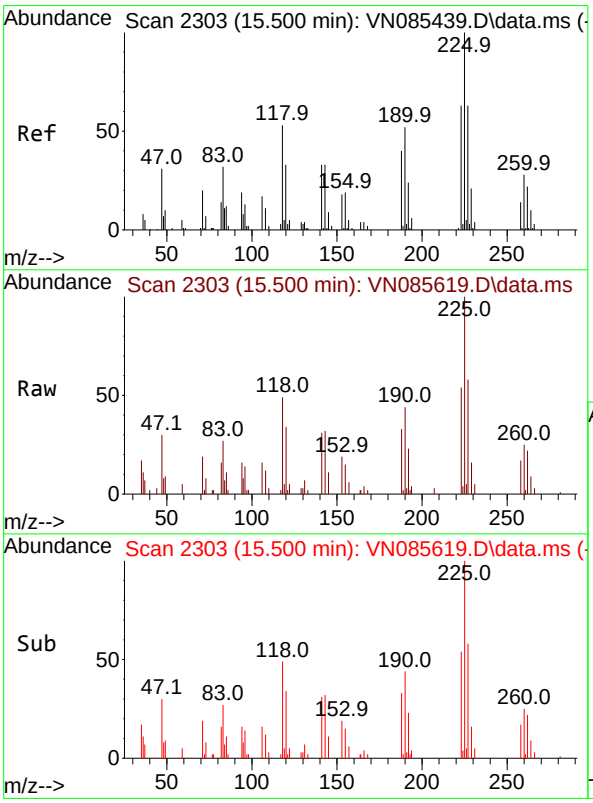
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 94.6 | 46.8 | 140.3 |
| 145 | 32.5 | 16.0 | 48.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations APPROVED**

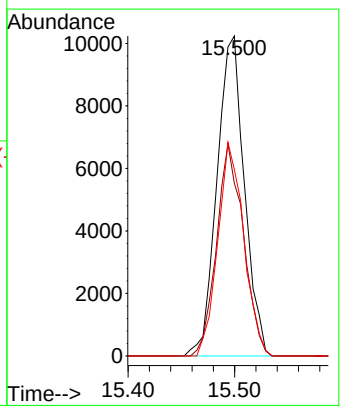
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

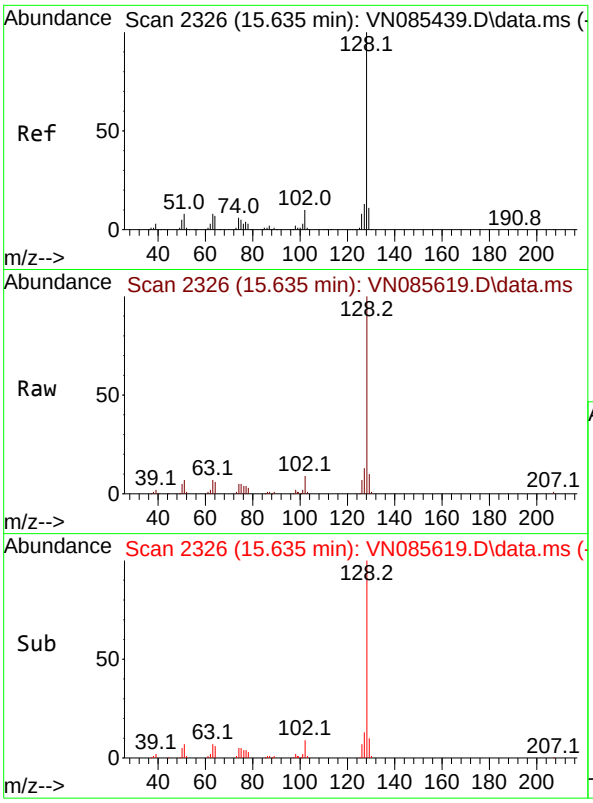



#94
Hexachlorobutadiene
Concen: 16.200 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:225 Resp: 18281

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 64.9 | 30.7 | 92.1 |
| 227 | 63.2 | 30.9 | 92.5 |

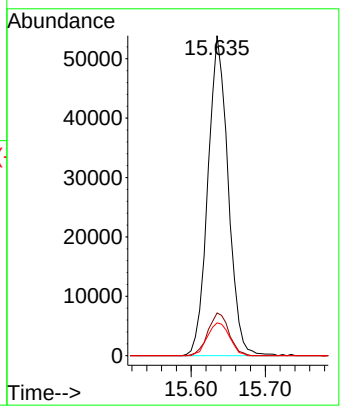





#95
Naphthalene
Concen: 16.136 ug/l
RT: 15.635 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:128 Resp: 10234

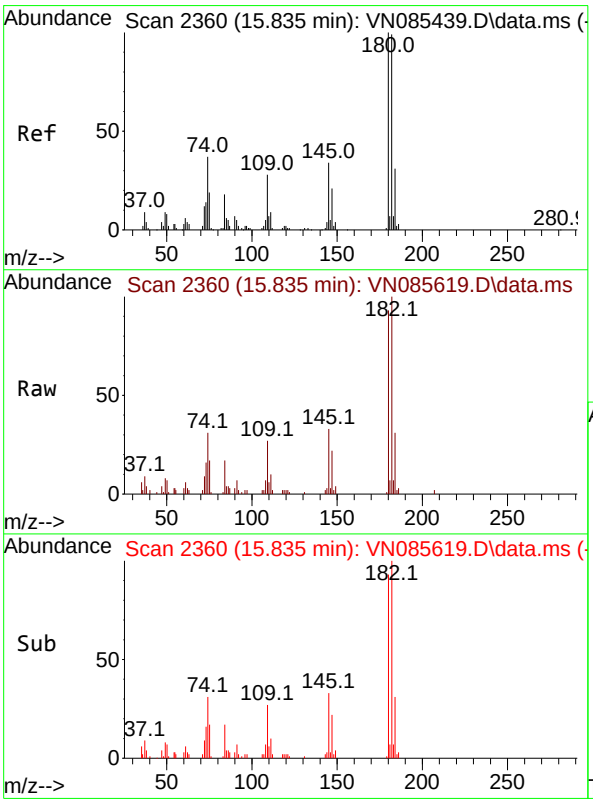
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 13.9 | 10.6 | 16.0 |
| 129 | 11.2 | 8.8 | 13.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBS01

**Manual Integrations APPROVED**

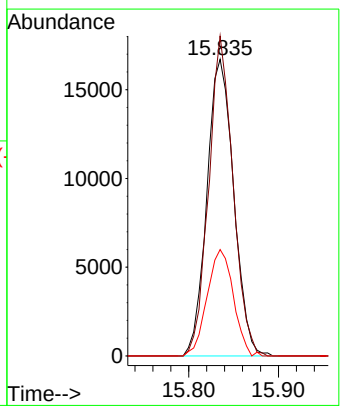
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025




#96
1,2,3-Trichlorobenzene
Concen: 16.124 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:180 Resp: 34678

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 97.8 | 47.4 | 142.2 |
| 145 | 35.0 | 16.9 | 50.7 |



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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | RU2 Engineering, LLC | Date Collected: | |
| Project: | NYCDDC SANTWOBR Brooklyn Bridge BBMCR | Date Received: | |
| Client Sample ID: | VN0204WBS02 | SDG No.: | Q1241 |
| Lab Sample ID: | VN0204WBS02 | 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: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN085651.D | 1 | | 02/04/25 14:51 | VN020425 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-01-4 | Vinyl Chloride | 25.2 | | 0.34 | 1.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 21.6 | | 0.26 | 1.00 | ug/L |
| 78-93-3 | 2-Butanone | 99.4 | | 1.30 | 5.00 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 19.1 | | 0.25 | 1.00 | ug/L |
| 67-66-3 | Chloroform | 20.1 | | 0.26 | 1.00 | ug/L |
| 71-43-2 | Benzene | 20.6 | | 0.16 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 18.2 | | 0.24 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 19.8 | | 0.32 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 21.2 | | 0.25 | 1.00 | ug/L |
| 108-90-7 | Chlorobenzene | 20.7 | | 0.13 | 1.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 45.2 | | 74 - 125 | 90% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 48.7 | | 75 - 124 | 97% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 49.8 | | 86 - 113 | 100% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 47.8 | | 77 - 121 | 96% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 206000 | 8.224 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 367000 | 9.1 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 318000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 150000 | 13.788 | | | |

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_N\Data\VN020425\
Data File : VN085651.D
Acq On : 04 Feb 2025 14:51
Operator : JC\MD
Sample : VN0204WBS02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 05 01:04:28 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 206401 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 367320 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 317764 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 150317 | 50.000 | ug/l | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.577 | 65 | 150502 | 45.172 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 90.340% | | | |
| 35) Dibromofluoromethane | 8.165 | 113 | 124212 | 48.743 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 97.480% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 450633 | 49.771 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 99.540% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 148181 | 47.844 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 95.680% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 65996 | 23.616 | ug/l | 99 |
| 3) Chloromethane | 2.359 | 50 | 62270 | 20.580 | ug/l | 97 |
| 4) Vinyl Chloride | 2.512 | 62 | 76709 | 25.222 | ug/l | 98 |
| 5) Bromomethane | 2.954 | 94 | 45534 | 24.786 | ug/l | 97 |
| 6) Chloroethane | 3.118 | 64 | 47623 | 24.698 | ug/l | 92 |
| 7) Trichlorofluoromethane | 3.495 | 101 | 90803 | 20.577 | ug/l | 99 |
| 8) Diethyl Ether | 3.965 | 74 | 28815 | 18.901 | ug/l | 91 |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 53527 | 21.535 | ug/l | 98 |
| 10) Methyl Iodide | 4.589 | 142 | 63259 | 22.224 | ug/l | 97 |
| 11) Tert butyl alcohol | 5.524 | 59 | 41188 | 107.962 | ug/l | 98 |
| 12) 1,1-Dichloroethene | 4.342 | 96 | 47753 | 21.557 | ug/l | 93 |
| 13) Acrolein | 4.183 | 56 | 31533 | 60.548 | ug/l | 99 |
| 14) Allyl chloride | 5.024 | 41 | 59657m | 16.597 | ug/l | |
| 15) Acrylonitrile | 5.718 | 53 | 123860 | 102.213 | ug/l | 99 |
| 16) Acetone | 4.424 | 43 | 100115 | 92.999 | ug/l | 97 |
| 17) Carbon Disulfide | 4.712 | 76 | 147410 | 21.613 | ug/l | 96 |
| 18) Methyl Acetate | 5.030 | 43 | 62179 | 18.995 | ug/l | 94 |
| 19) Methyl tert-butyl Ether | 5.795 | 73 | 145880 | 20.281 | ug/l | 96 |
| 20) Methylene Chloride | 5.277 | 84 | 56823 | 21.322 | ug/l | 91 |
| 21) trans-1,2-Dichloroethene | 5.789 | 96 | 51109 | 21.589 | ug/l | 89 |
| 22) Diisopropyl ether | 6.671 | 45 | 148162 | 18.571 | ug/l | 95 |
| 23) Vinyl Acetate | 6.606 | 43 | 533384 | 95.530 | ug/l | 96 |
| 24) 1,1-Dichloroethane | 6.565 | 63 | 96240 | 19.783 | ug/l | 95 |
| 25) 2-Butanone | 7.483 | 43 | 157483 | 99.409 | ug/l # | 87 |
| 26) 2,2-Dichloropropane | 7.489 | 77 | 85009 | 21.614 | ug/l | 96 |
| 27) cis-1,2-Dichloroethene | 7.483 | 96 | 58653 | 21.035 | ug/l | 93 |
| 28) Bromochloromethane | 7.812 | 49 | 33036 | 14.596 | ug/l | 86 |
| 29) Tetrahydrofuran | 7.836 | 42 | 102635 | 102.187 | ug/l | 90 |
| 30) Chloroform | 7.965 | 83 | 101271 | 20.142 | ug/l | 99 |
| 31) Cyclohexane | 8.259 | 56 | 78673 | 18.606 | ug/l | 90 |
| 32) 1,1,1-Trichloroethane | 8.165 | 97 | 88190 | 19.996 | ug/l | 96 |
| 36) 1,1-Dichloropropene | 8.371 | 75 | 70286 | 19.652 | ug/l | 99 |
| 37) Ethyl Acetate | 7.559 | 43 | 65973 | 18.275 | ug/l | 98 |
| 38) Carbon Tetrachloride | 8.365 | 117 | 78107 | 19.076 | ug/l | 96 |
| 39) Methylcyclohexane | 9.600 | 83 | 67494 | 20.082 | ug/l | 94 |
| 40) Benzene | 8.606 | 78 | 221792 | 20.639 | ug/l | 97 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085651.D
Acq On : 04 Feb 2025 14:51
Operator : JC\MD
Sample : VN0204WBS02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 05 01:04:28 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.777 | 41 | 34320 | 18.274 | ug/l | | 92 |
| 42) 1,2-Dichloroethane | 8.671 | 62 | 73577 | 18.179 | ug/l | | 97 |
| 43) Isopropyl Acetate | 8.688 | 43 | 115982m | 20.051 | ug/l | | |
| 44) Trichloroethene | 9.353 | 130 | 49633 | 19.842 | ug/l | | 97 |
| 45) 1,2-Dichloropropane | 9.618 | 63 | 53997 | 19.672 | ug/l | | 97 |
| 46) Dibromomethane | 9.706 | 93 | 39110 | 19.747 | ug/l | | 98 |
| 47) Bromodichloromethane | 9.888 | 83 | 77727 | 19.263 | ug/l | | 96 |
| 48) Methyl methacrylate | 9.677 | 41 | 47105 | 18.096 | ug/l | | 89 |
| 49) 1,4-Dioxane | 9.694 | 88 | 19272 | 439.639 | ug/l | | 94 |
| 51) 4-Methyl-2-Pentanone | 10.441 | 43 | 328830 | 97.965 | ug/l | | 94 |
| 52) Toluene | 10.630 | 92 | 135369 | 21.741 | ug/l | | 100 |
| 53) t-1,3-Dichloropropene | 10.835 | 75 | 74675 | 19.583 | ug/l | | 100 |
| 54) cis-1,3-Dichloropropene | 10.312 | 75 | 83030 | 20.385 | ug/l | # | 87 |
| 55) 1,1,2-Trichloroethane | 11.018 | 97 | 51534 | 20.914 | ug/l | | 99 |
| 56) Ethyl methacrylate | 10.871 | 69 | 70589 | 18.280 | ug/l | | 94 |
| 57) 1,3-Dichloropropane | 11.159 | 76 | 86420 | 20.170 | ug/l | | 99 |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63 | 106039 | 67.812 | ug/l | | 97 |
| 59) 2-Hexanone | 11.194 | 43 | 238617 | 101.031 | ug/l | | 93 |
| 60) Dibromochloromethane | 11.359 | 129 | 59256 | 19.918 | ug/l | | 99 |
| 61) 1,2-Dibromoethane | 11.465 | 107 | 50776 | 20.701 | ug/l | | 99 |
| 64) Tetrachloroethene | 11.100 | 164 | 45898 | 21.187 | ug/l | | 97 |
| 65) Chlorobenzene | 11.888 | 112 | 143836 | 20.663 | ug/l | | 98 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 51716 | 20.242 | ug/l | | 100 |
| 67) Ethyl Benzene | 11.965 | 91 | 233116 | 20.561 | ug/l | | 98 |
| 68) m/p-Xylenes | 12.071 | 106 | 181911 | 43.412 | ug/l | | 98 |
| 69) o-Xylene | 12.400 | 106 | 84365 | 21.067 | ug/l | | 97 |
| 70) Styrene | 12.412 | 104 | 145039 | 21.885 | ug/l | | 97 |
| 71) Bromoform | 12.576 | 173 | 38717 | 21.179 | ug/l | # | 99 |
| 73) Isopropylbenzene | 12.694 | 105 | 210944 | 20.793 | ug/l | | 98 |
| 74) N-amyl acetate | 12.494 | 43 | 84808 | 18.598 | ug/l | | 94 |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 75120 | 20.962 | ug/l | | 100 |
| 76) 1,2,3-Trichloropropane | 12.988 | 75 | 62358m | 20.410 | ug/l | | |
| 77) Bromobenzene | 12.976 | 156 | 54340 | 20.501 | ug/l | | 95 |
| 78) n-propylbenzene | 13.035 | 91 | 250899 | 20.891 | ug/l | | 99 |
| 79) 2-Chlorotoluene | 13.124 | 91 | 158204 | 20.353 | ug/l | | 98 |
| 80) 1,3,5-Trimethylbenzene | 13.171 | 105 | 178682 | 21.323 | ug/l | | 98 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 24629 | 21.810 | ug/l | | 90 |
| 82) 4-Chlorotoluene | 13.218 | 91 | 157925 | 20.405 | ug/l | | 98 |
| 83) tert-Butylbenzene | 13.435 | 119 | 140205 | 19.923 | ug/l | | 97 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 178481 | 21.370 | ug/l | | 97 |
| 85) sec-Butylbenzene | 13.612 | 105 | 202909 | 20.804 | ug/l | | 100 |
| 86) p-Isopropyltoluene | 13.729 | 119 | 167070 | 20.523 | ug/l | | 98 |
| 87) 1,3-Dichlorobenzene | 13.729 | 146 | 97119 | 19.896 | ug/l | | 99 |
| 88) 1,4-Dichlorobenzene | 13.812 | 146 | 98065 | 19.382 | ug/l | | 99 |
| 89) n-Butylbenzene | 14.053 | 91 | 130043 | 18.585 | ug/l | | 98 |
| 90) Hexachloroethane | 14.329 | 117 | 35354 | 19.041 | ug/l | | 96 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 95513 | 19.617 | ug/l | | 99 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75 | 13567 | 20.732 | ug/l | | 94 |
| 93) 1,2,4-Trichlorobenzene | 15.388 | 180 | 39645 | 17.519 | ug/l | | 96 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 20609 | 17.154 | ug/l | | 98 |
| 95) Naphthalene | 15.641 | 128 | 123413 | 18.276 | ug/l | | 99 |
| 96) 1,2,3-Trichlorobenzene | 15.841 | 180 | 41163 | 17.977 | ug/l | | 99 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085651.D
Acq On : 04 Feb 2025 14:51
Operator : JC\MD
Sample : VN0204WBS02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 05 01:04:28 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

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

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

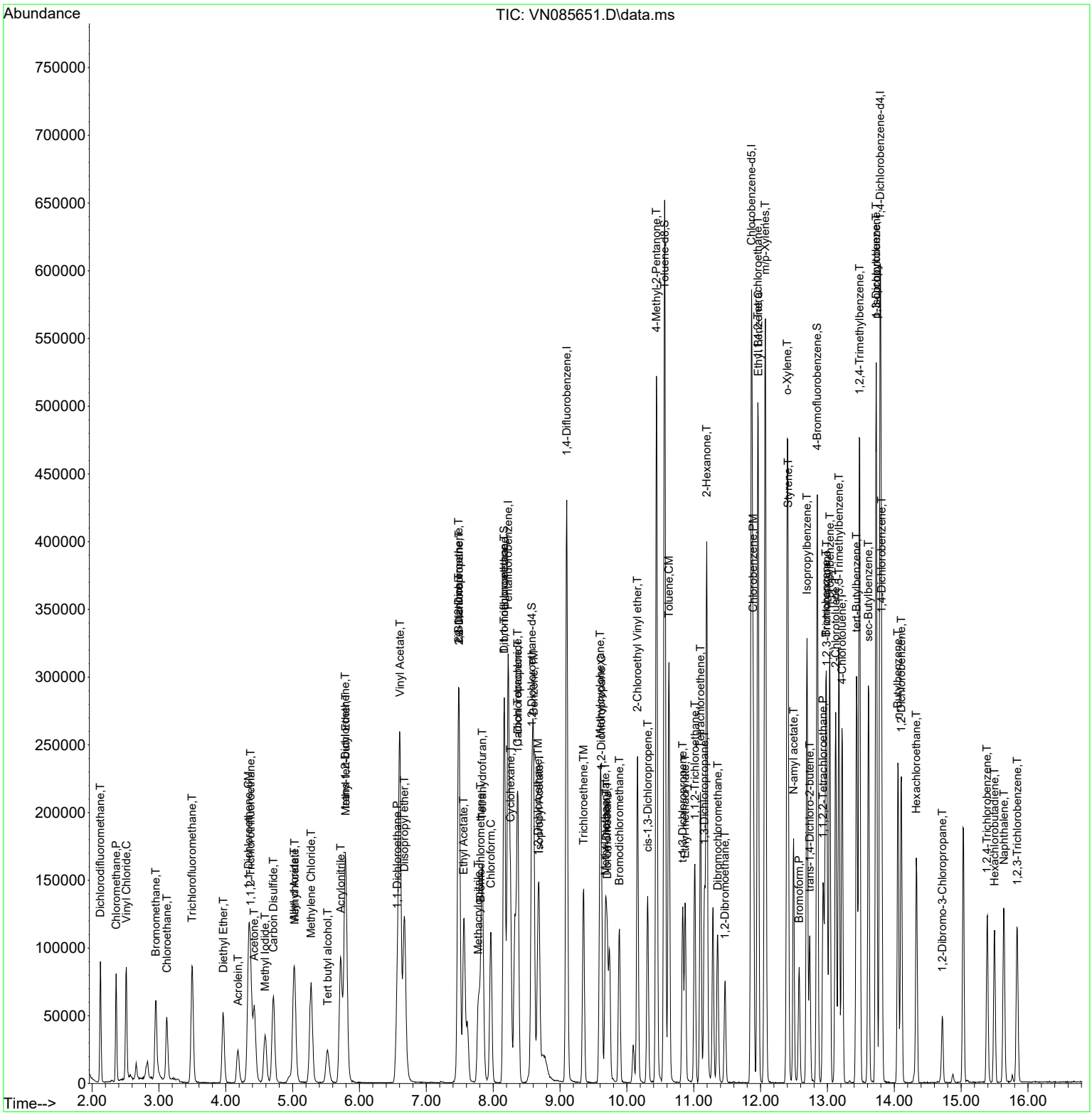
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085651.D
Acq On : 04 Feb 2025 14:51
Operator : JC\MD
Sample : VN0204WBS02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

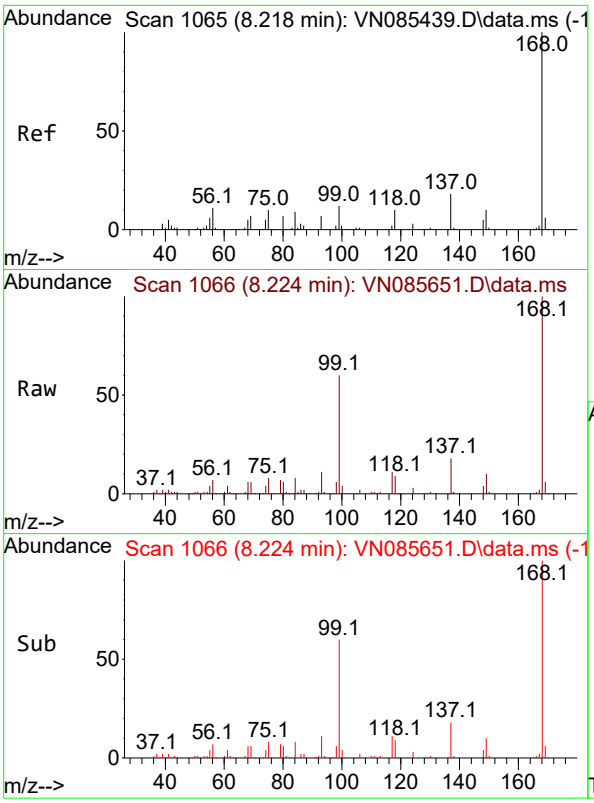
Quant Time: Feb 05 01:04:28 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

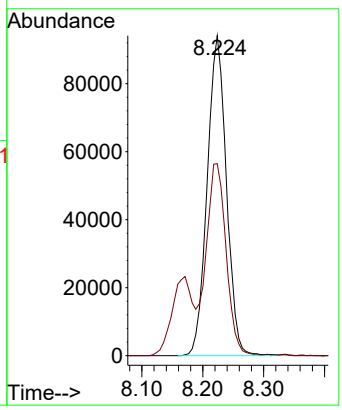





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:168 Resp: 20640

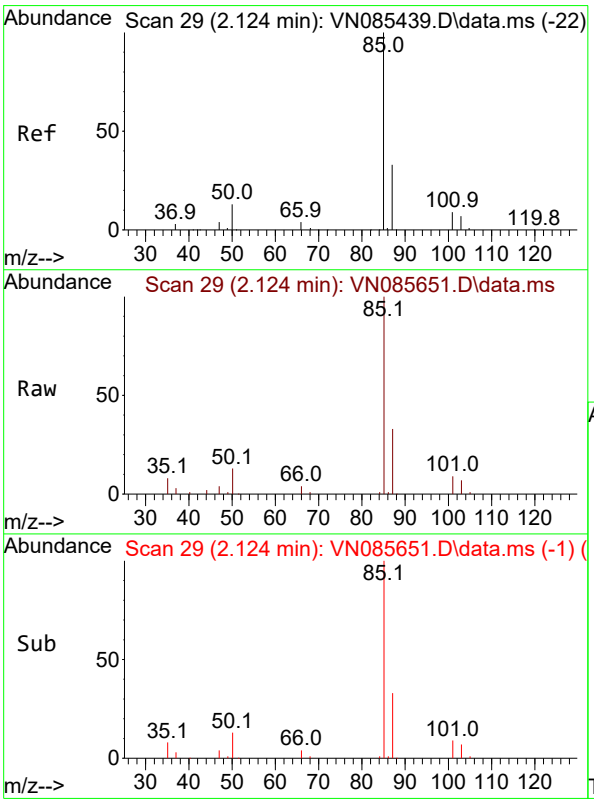
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 59.8 | 53.6 | 80.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

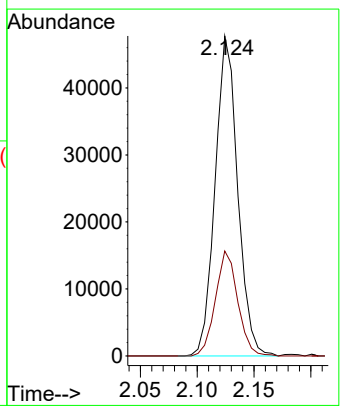
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

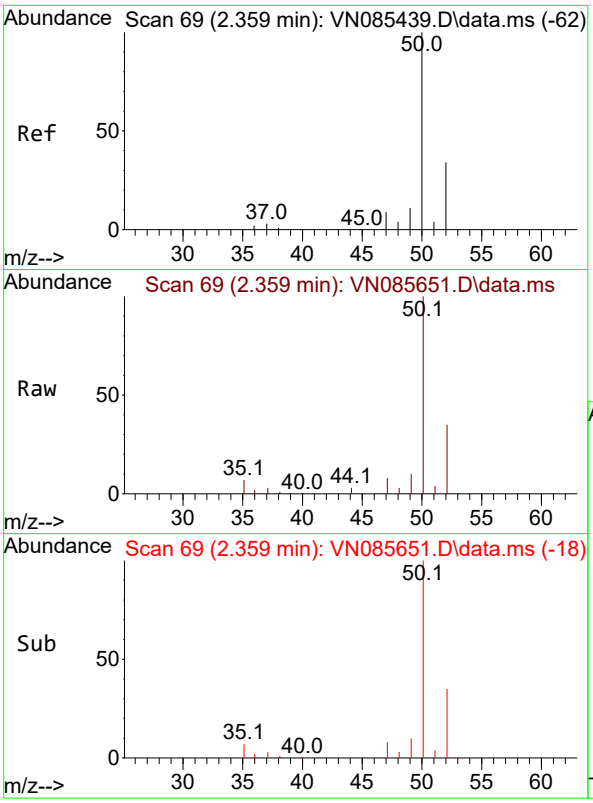



#2
Dichlorodifluoromethane
Concen: 23.616 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 85 Resp: 65996

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.8 | 16.7 | 50.1 |

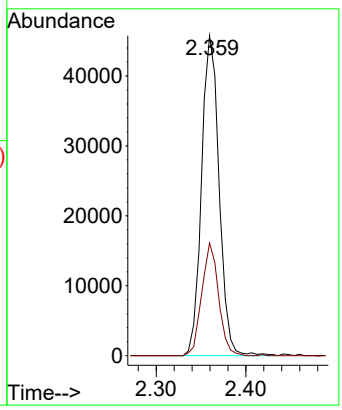





#3
Chloromethane
Concen: 20.580 ug/l
RT: 2.359 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 50 Resp: 6227

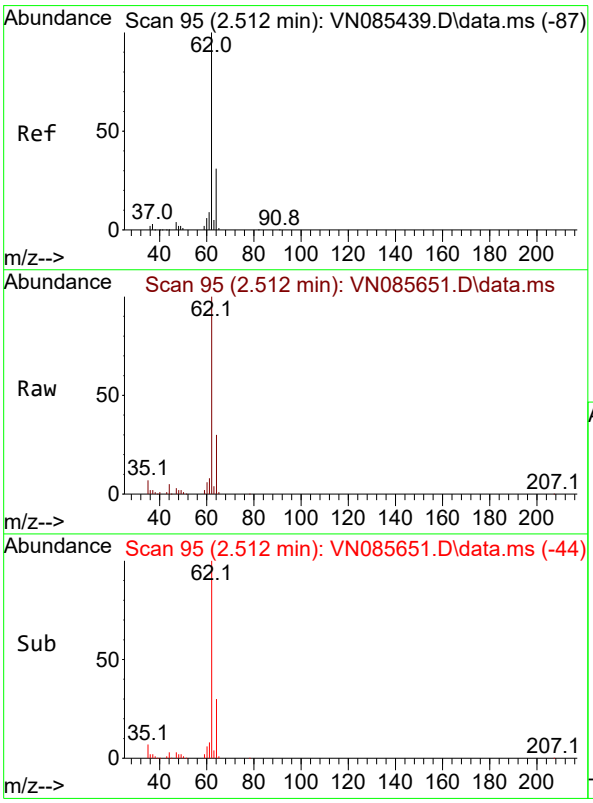
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 35.3 | 27.0 | 40.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

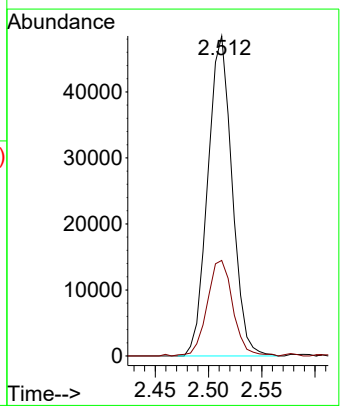
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

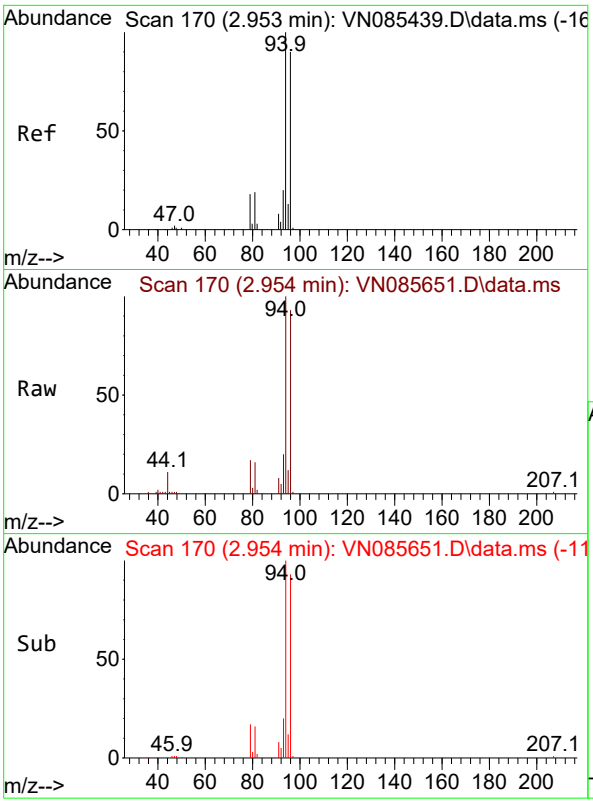



#4
Vinyl Chloride
Concen: 25.222 ug/l
RT: 2.512 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 62 Resp: 76709

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 29.8 | 24.8 | 37.2 |

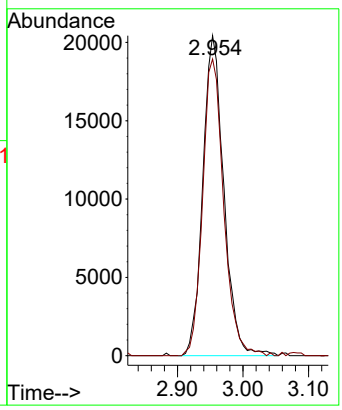





#5
Bromomethane
Concen: 24.786 ug/l
RT: 2.954 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 94 Resp: 4553

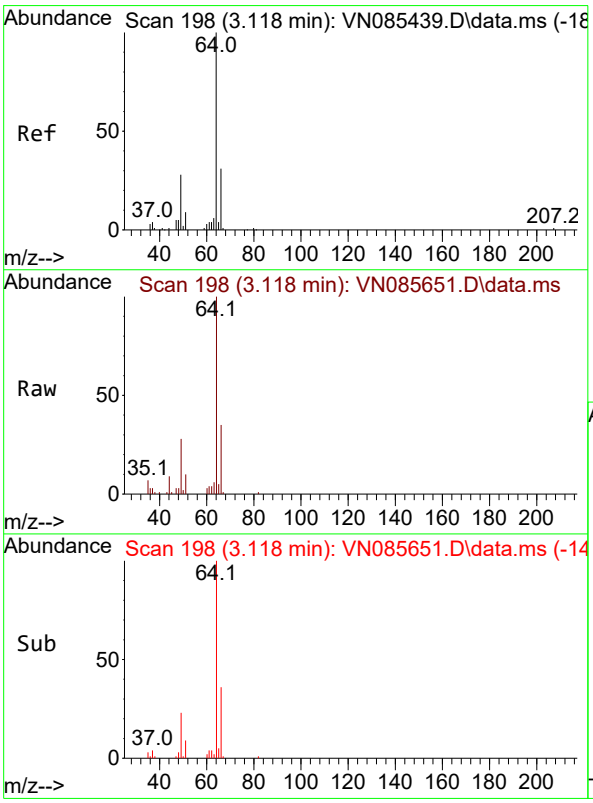
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 92.7 | 71.8 | 107.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

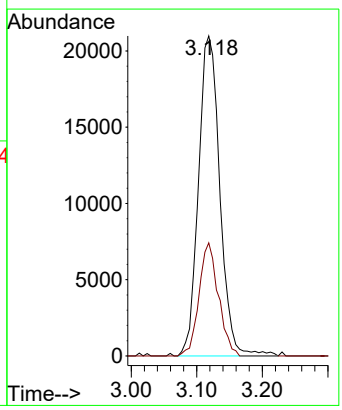
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

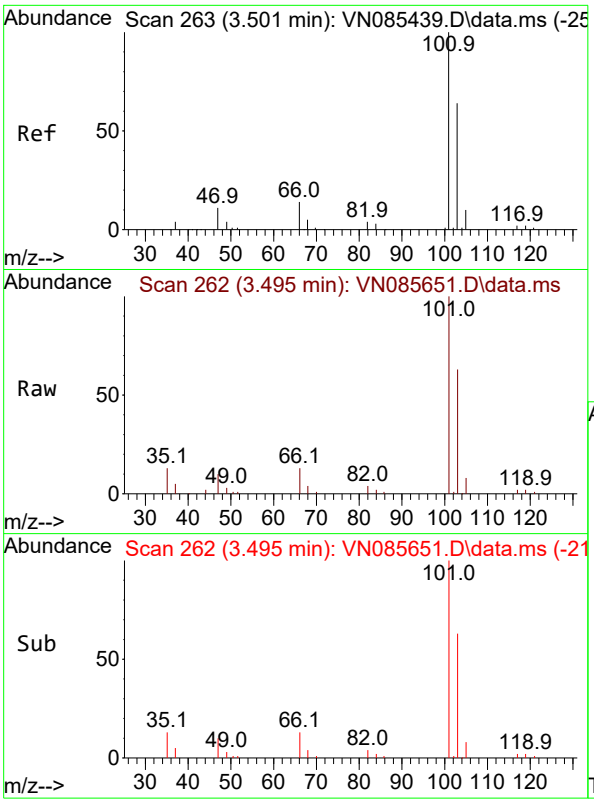



#6
Chloroethane
Concen: 24.698 ug/l
RT: 3.118 min Scan# 198
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 64 Resp: 47623

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 35.3 | 24.6 | 36.8 |

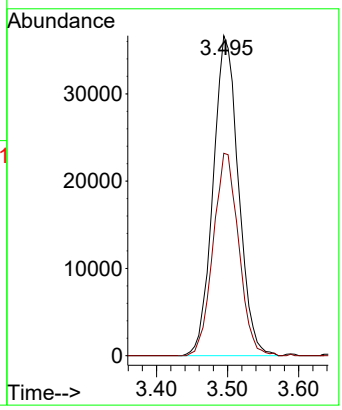





#7
Trichlorofluoromethane
Concen: 20.577 ug/l
RT: 3.495 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:101 Resp: 9080

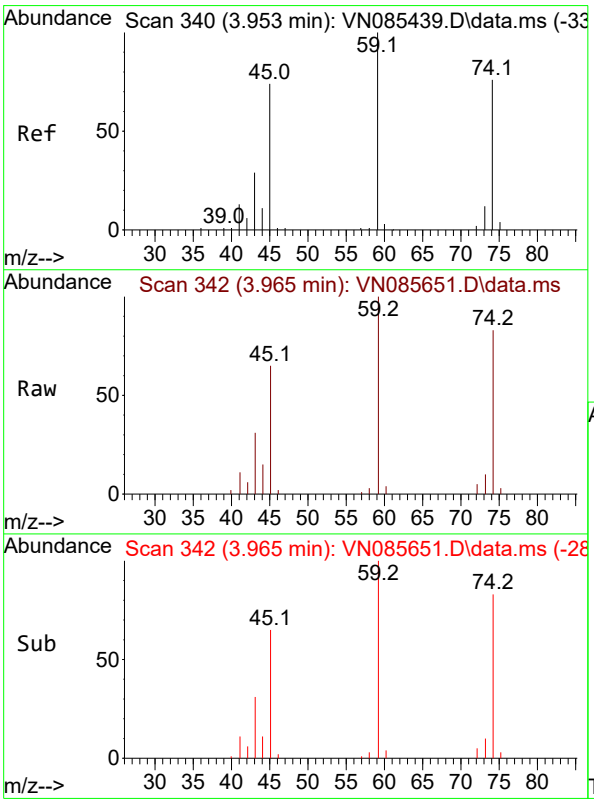
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 63.2 | 51.4 | 77.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

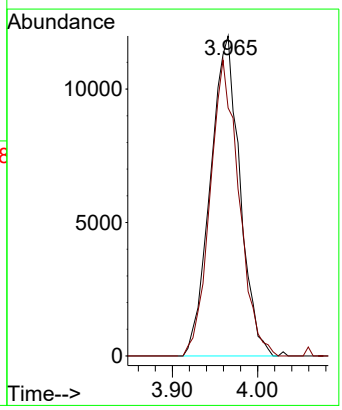
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

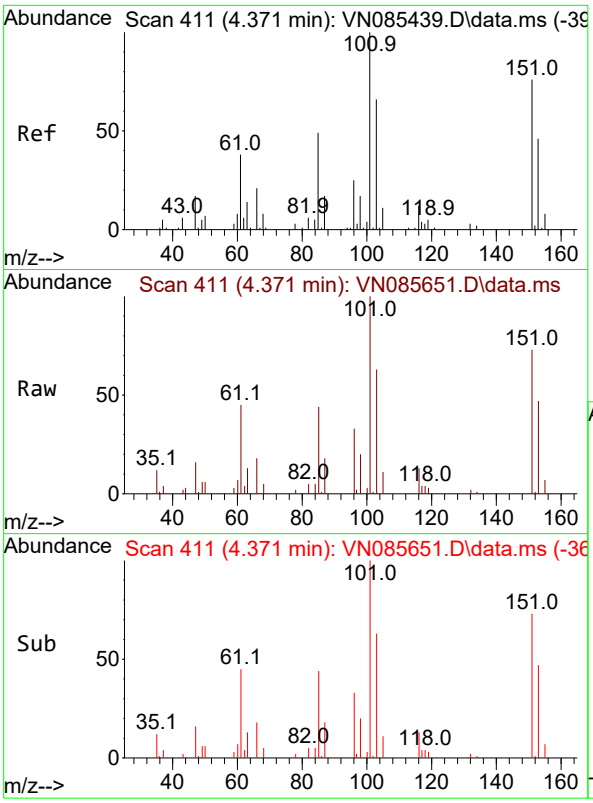



#8
Diethyl Ether
Concen: 18.901 ug/l
RT: 3.965 min Scan# 342
Delta R.T. 0.012 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 74 Resp: 28815

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 90.7 | 49.7 | 149.1 |

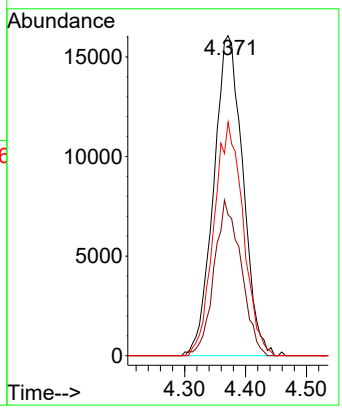





#9
1,1,2-Trichlorotrifluoroethane
Concen: 21.535 ug/l
RT: 4.371 min Scan# 41
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:101 Resp: 5352

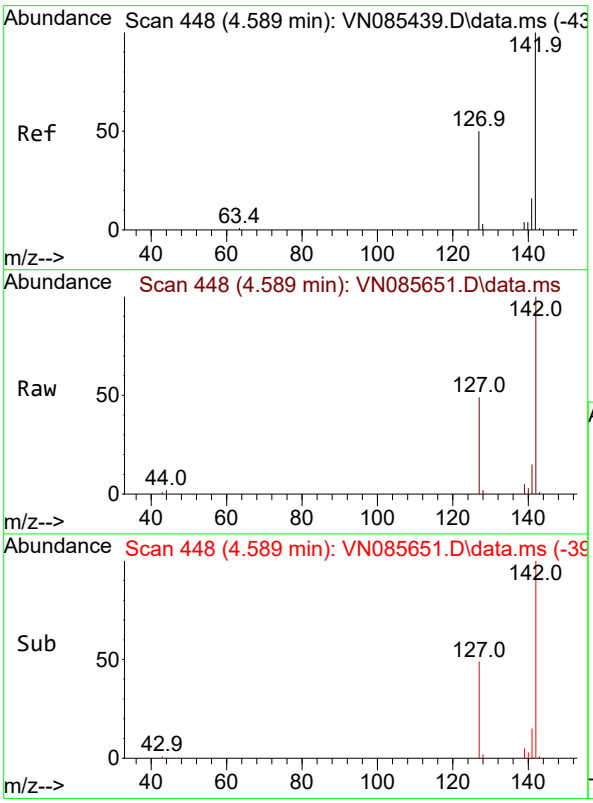
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 44.9 | 37.8 | 56.8 |
| 151 | 73.3 | 58.8 | 88.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

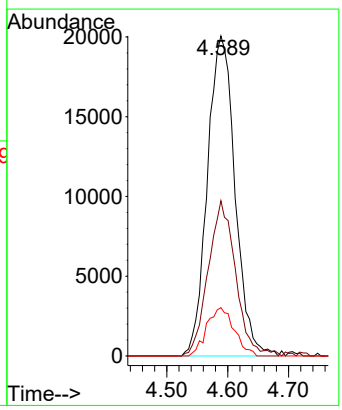
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

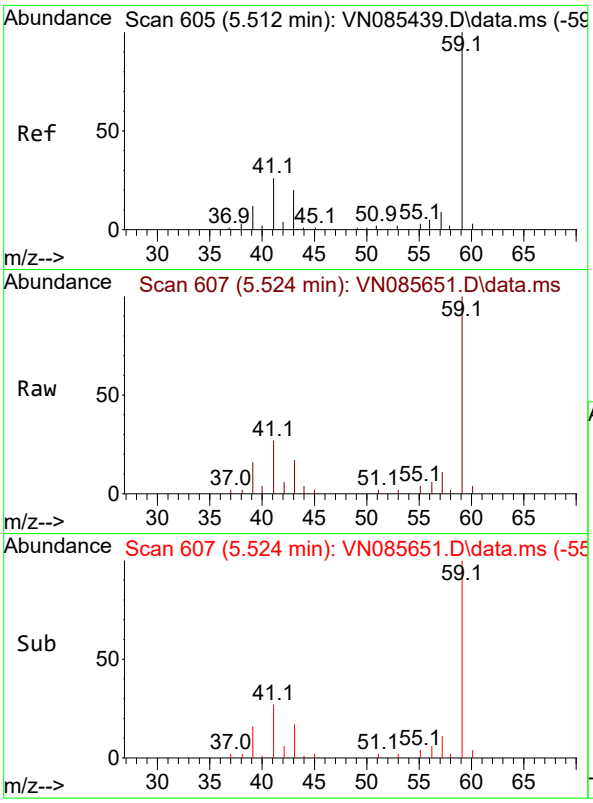



#10
Methyl Iodide
Concen: 22.224 ug/l
RT: 4.589 min Scan# 448
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:142 Resp: 63259

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 48.5 | 40.3 | 60.5 |
| 141 | 15.1 | 12.8 | 19.2 |

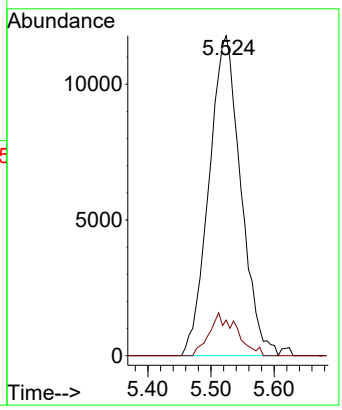





#11
Tert butyl alcohol
Concen: 107.962 ug/l
RT: 5.524 min Scan# 6
Delta R.T. 0.012 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 59 Resp: 4118

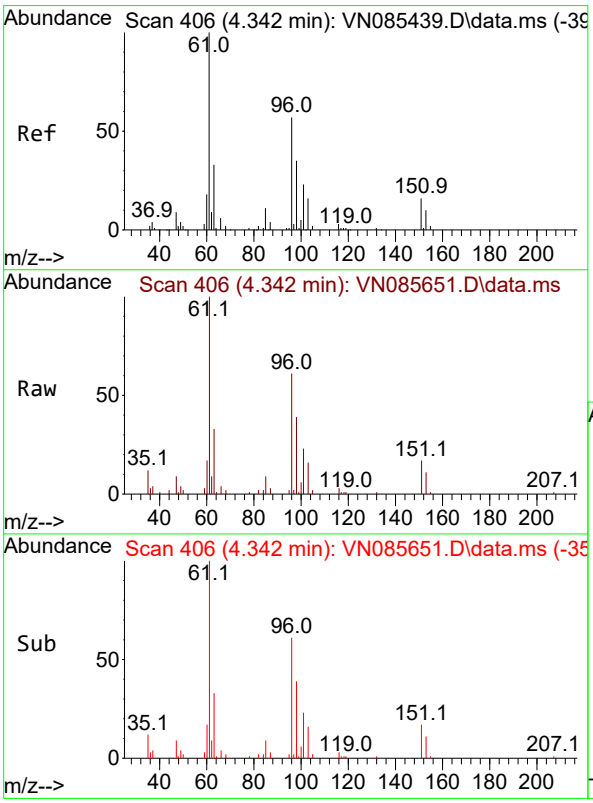
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 11.6 | 8.6 | 13.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

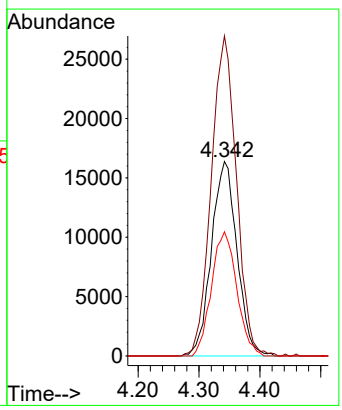
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

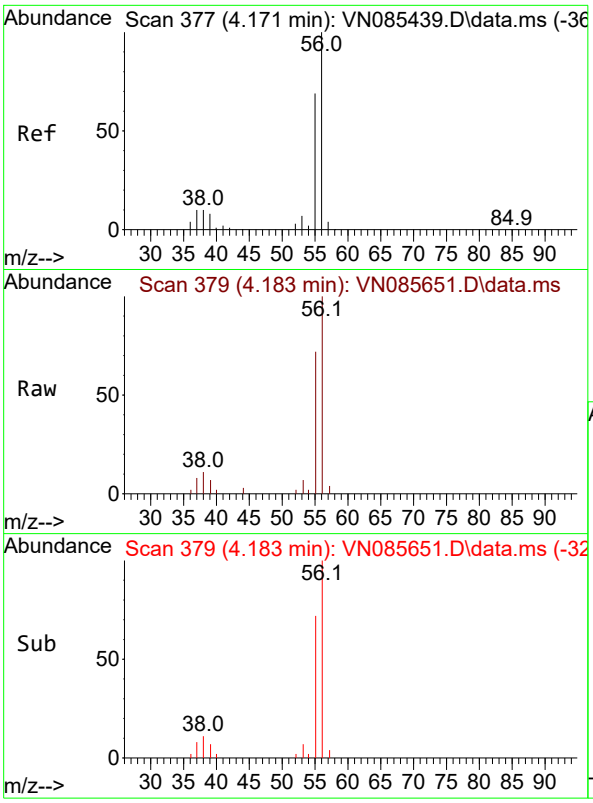



#12
1,1-Dichloroethene
Concen: 21.557 ug/l
RT: 4.342 min Scan# 406
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 96 Resp: 47753

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 164.6 | 141.0 | 211.4 |
| 98 | 63.8 | 49.0 | 73.6 |

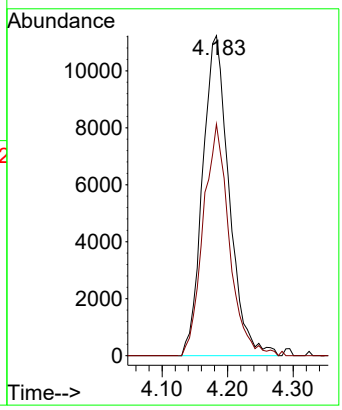





#13
Acrolein
Concen: 60.548 ug/l
RT: 4.183 min Scan# 3
Delta R.T. 0.012 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 56 Resp: 3153

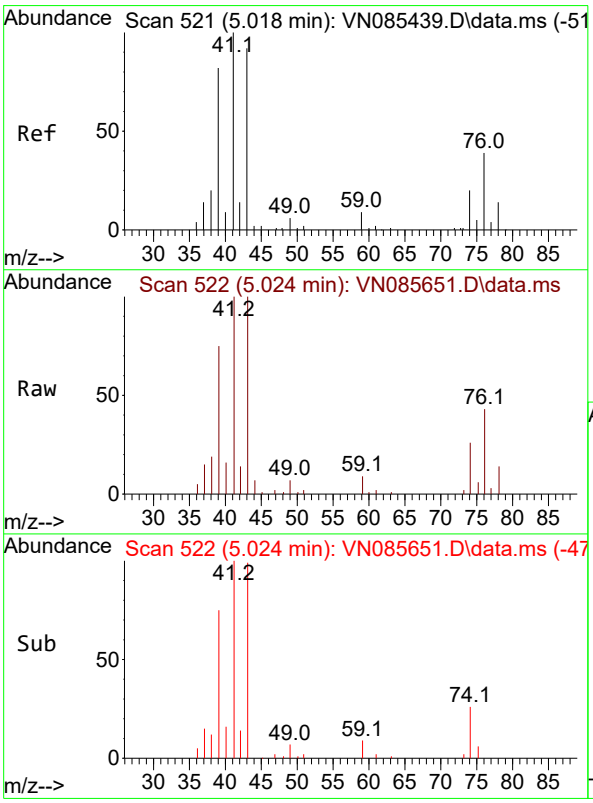
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 71.3 | 56.3 | 84.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

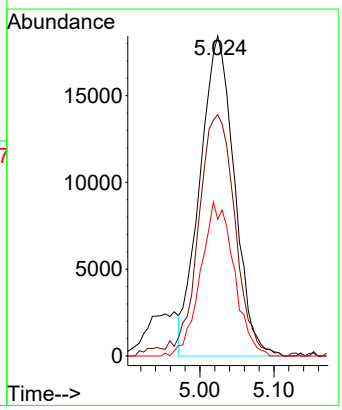
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

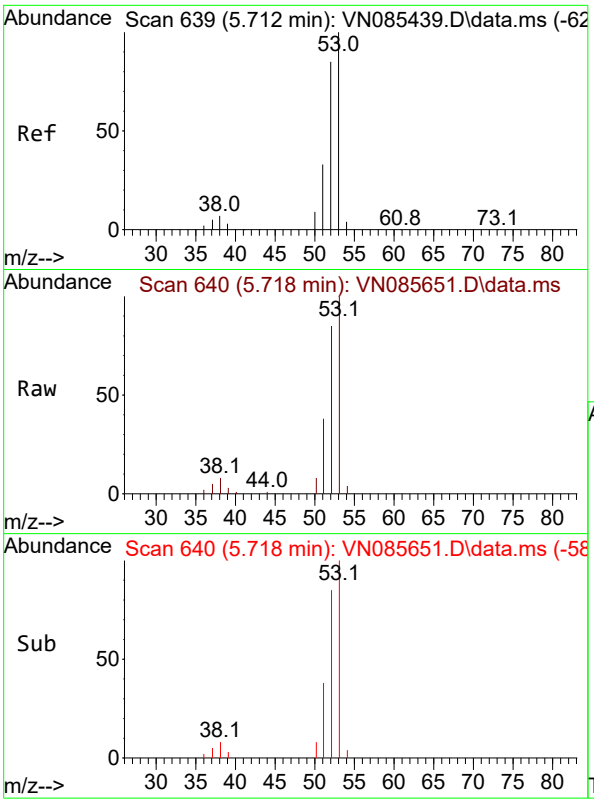



#14
Allyl chloride
Concen: 16.597 ug/l m
RT: 5.024 min Scan# 522
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 41 Resp: 59657

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 81.4 | 64.4 | 96.6 |
| 76 | 46.5 | 30.5 | 45.7# |

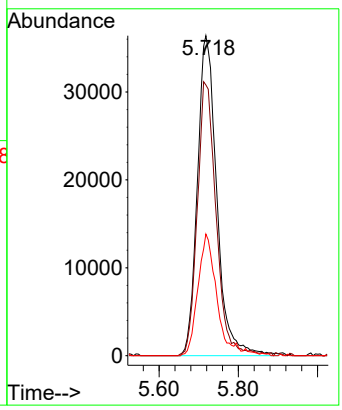





#15
Acrylonitrile
Concen: 102.213 ug/l
RT: 5.718 min Scan# 64
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 53 Resp: 12386

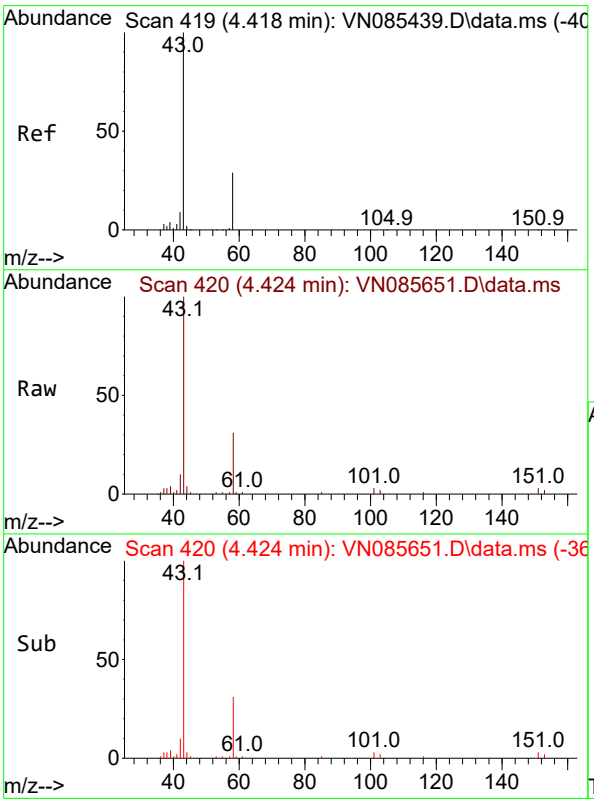
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 82.8 | 65.5 | 98.3 |
| 51 | 36.5 | 29.8 | 44.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

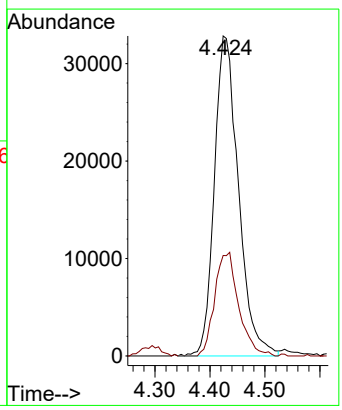
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

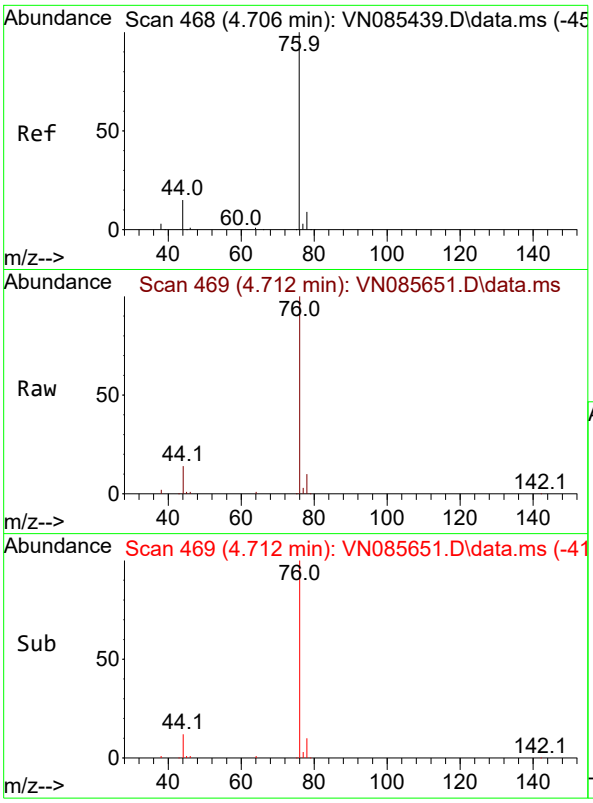



#16
Acetone
Concen: 92.999 ug/l
RT: 4.424 min Scan# 420
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 43 Resp: 100115

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 31.4 | 23.8 | 35.6 |

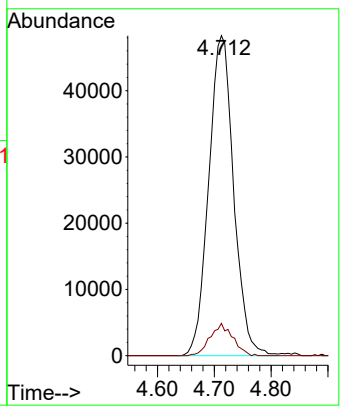





#17
Carbon Disulfide
Concen: 21.613 ug/l
RT: 4.712 min Scan# 4
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 76 Resp: 14741

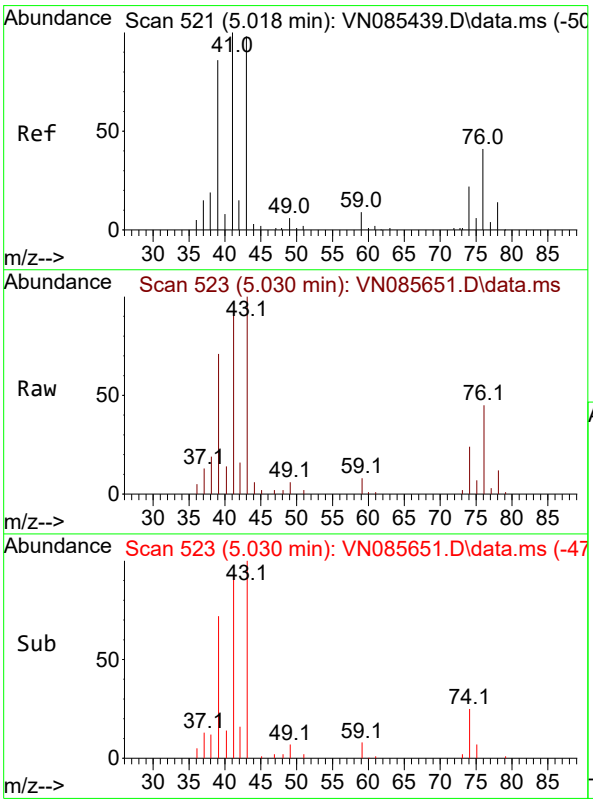
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 10.1 | 6.9 | 10.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

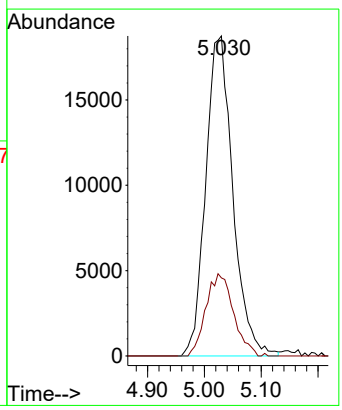
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

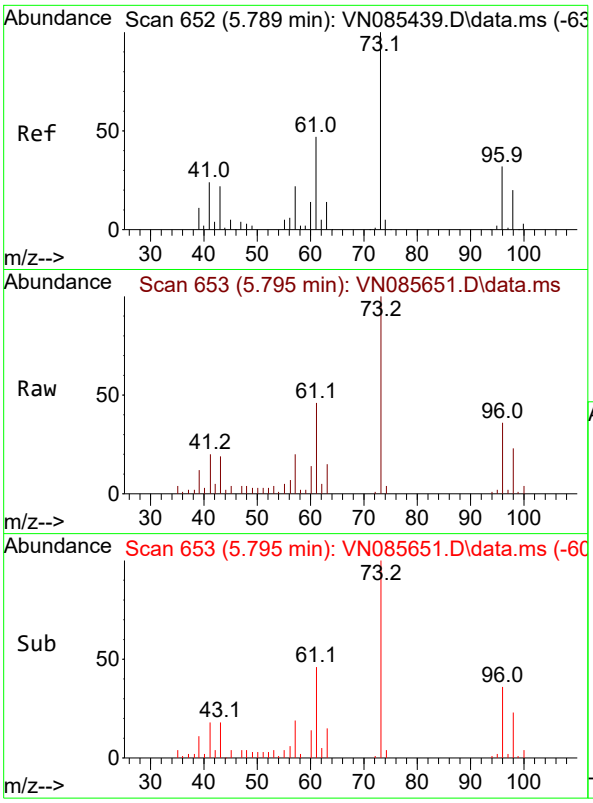



#18
Methyl Acetate
Concen: 18.995 ug/l
RT: 5.030 min Scan# 523
Delta R.T. 0.012 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 43 Resp: 62179

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 26.0 | 18.6 | 28.0 |

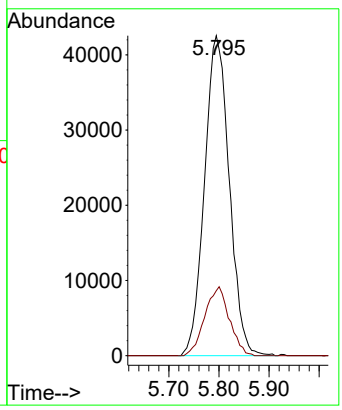





#19
Methyl tert-butyl Ether
Concen: 20.281 ug/l
RT: 5.795 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 73 Resp: 14588

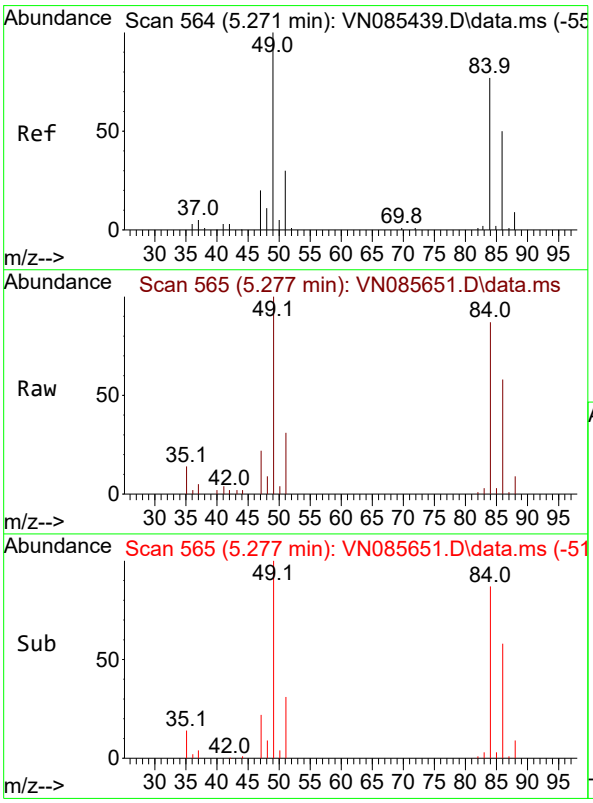
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 20.3 | 17.8 | 26.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

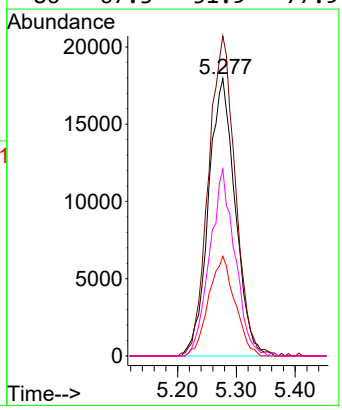
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

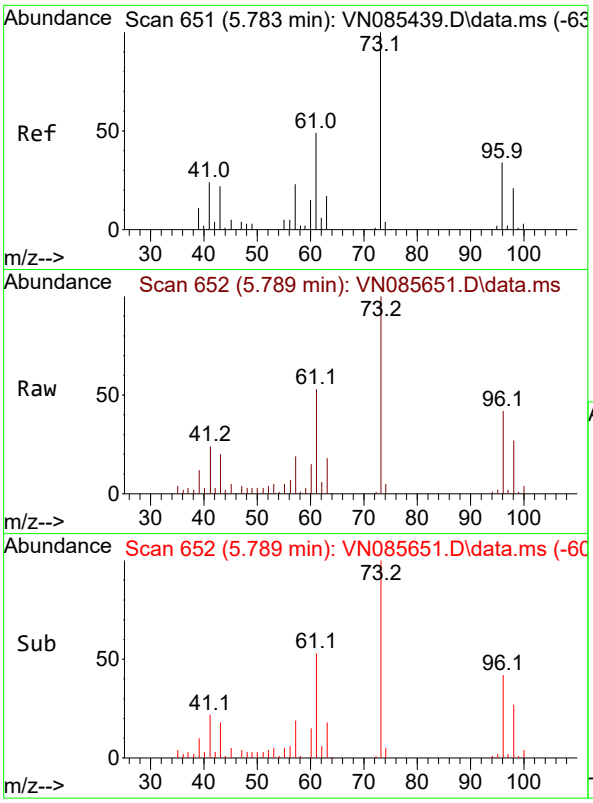



#20
Methylene Chloride
Concen: 21.322 ug/l
RT: 5.277 min Scan# 565
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 84 Resp: 56823

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 115.3 | 104.1 | 156.1 |
| 51 | 36.0 | 31.0 | 46.4 |
| 86 | 67.3 | 51.9 | 77.9 |

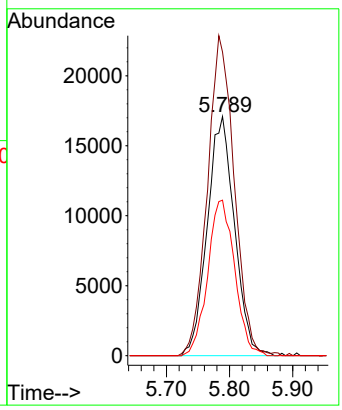





#21
trans-1,2-Dichloroethene
Concen: 21.589 ug/l
RT: 5.789 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 96 Resp: 5110

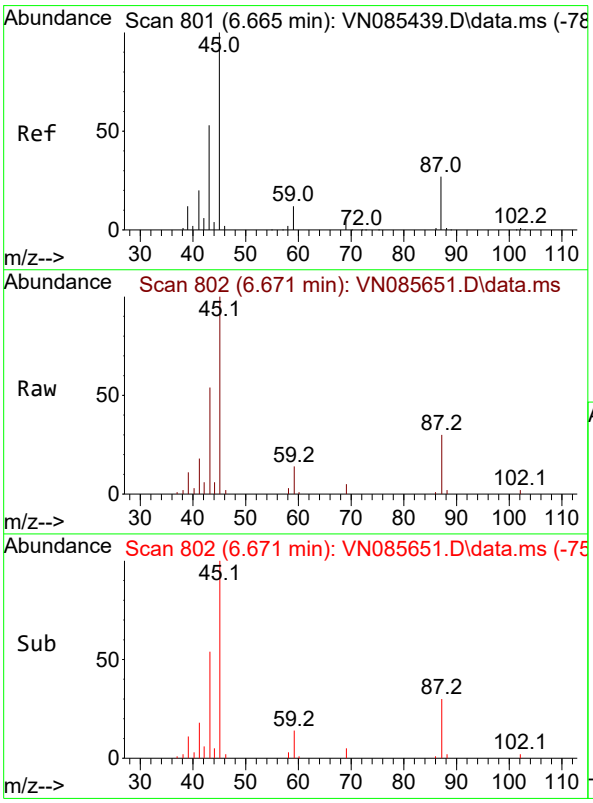
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 126.9 | 115.7 | 173.5 |
| 98 | 65.0 | 49.8 | 74.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations APPROVED**

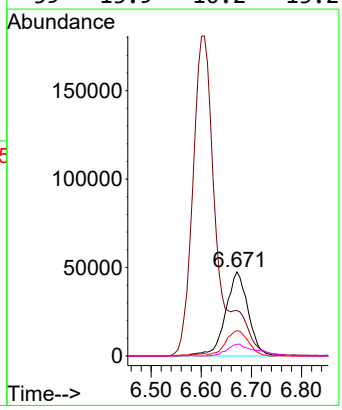
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

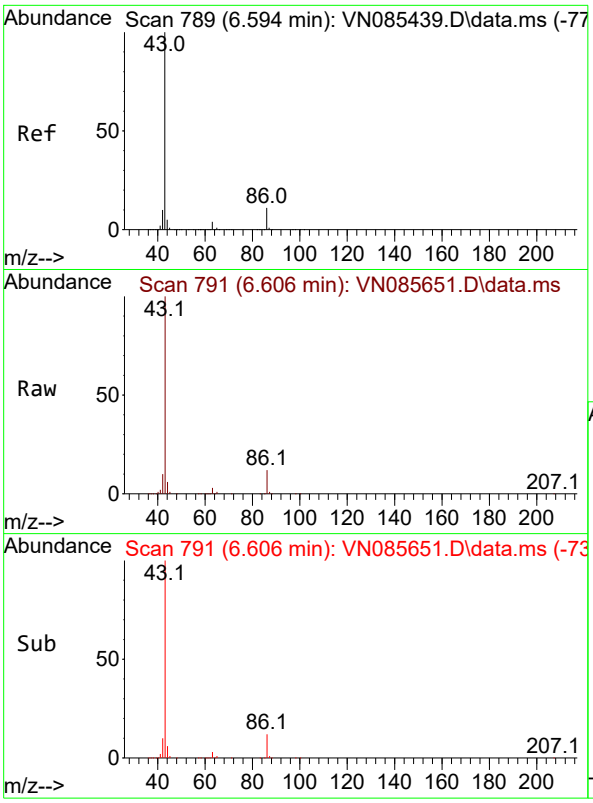



#22
Diisopropyl ether
Concen: 18.571 ug/l
RT: 6.671 min Scan# 802
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 45 Resp: 148162

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 51.9 | 45.0 | 67.6 |
| 87 | 29.7 | 21.8 | 32.8 |
| 59 | 13.9 | 10.2 | 15.2 |

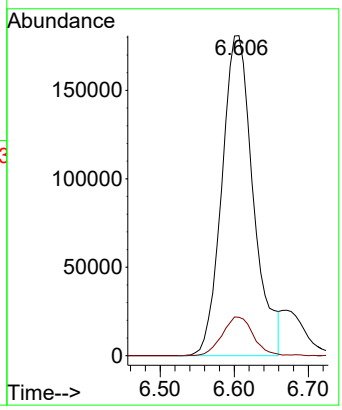





#23
Vinyl Acetate
Concen: 95.530 ug/l
RT: 6.606 min Scan# 7
Delta R.T. 0.012 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 43 Resp: 53338

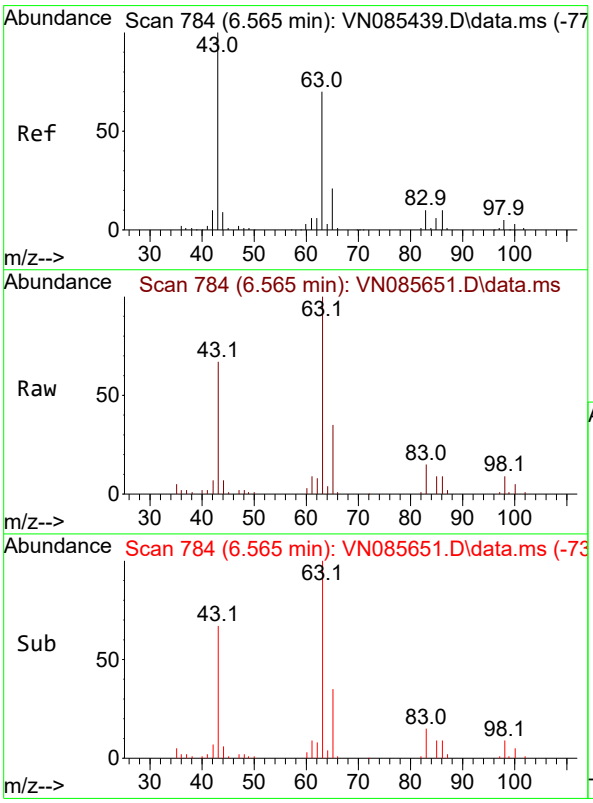
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 12.0 | 8.4 | 12.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

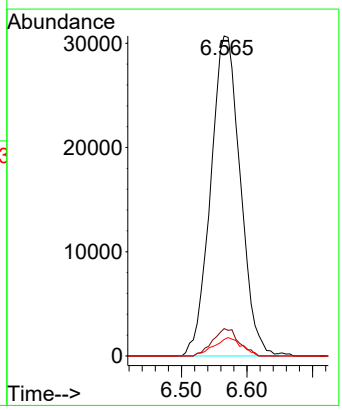
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

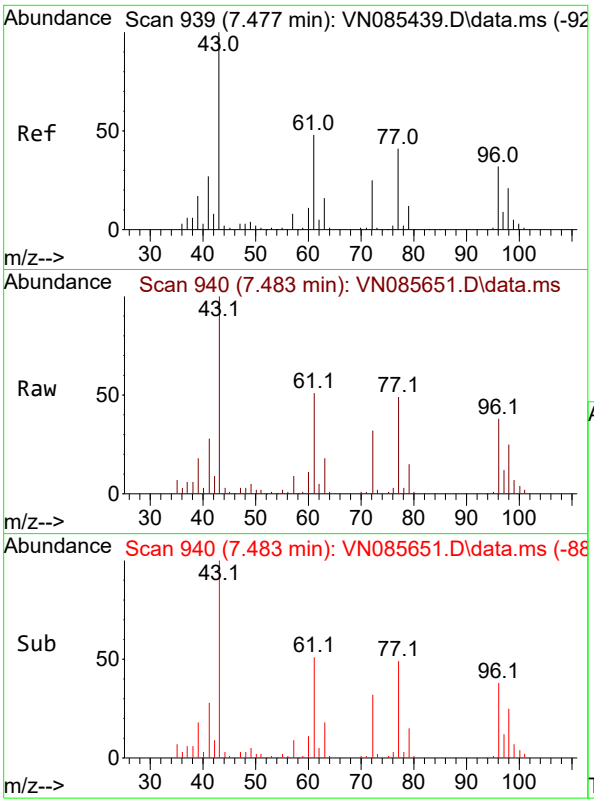



#24
1,1-Dichloroethane
Concen: 19.783 ug/l
RT: 6.565 min Scan# 784
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 63 Resp: 96240

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 8.5 | 3.3 | 9.8 |
| 100 | 5.1 | 2.0 | 6.0 |






#25
2-Butanone
Concen: 99.409 ug/l
RT: 7.483 min Scan# 94
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

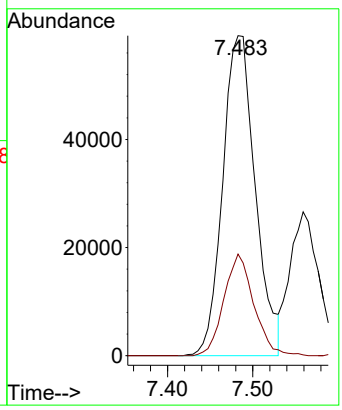
Tgt Ion: 43 Resp: 15748

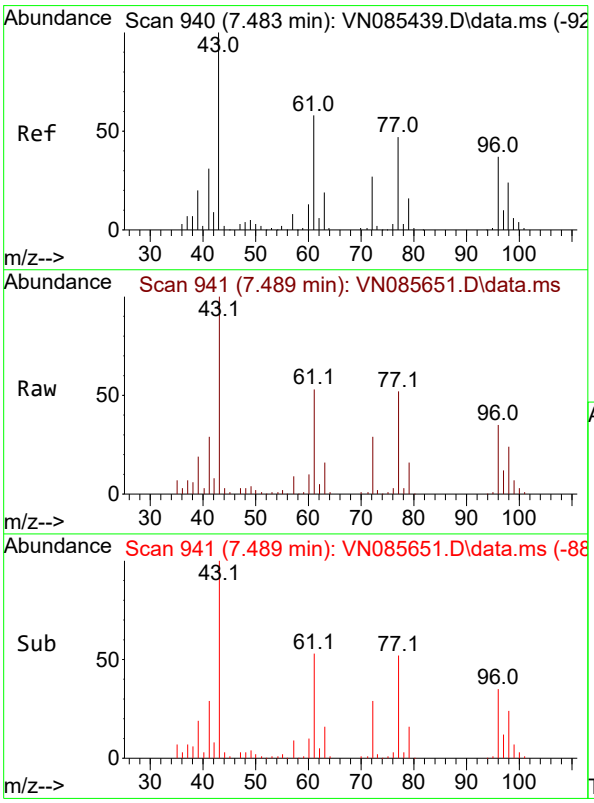
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 31.8 | 20.2 | 30.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

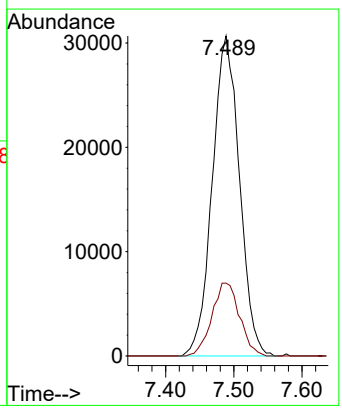


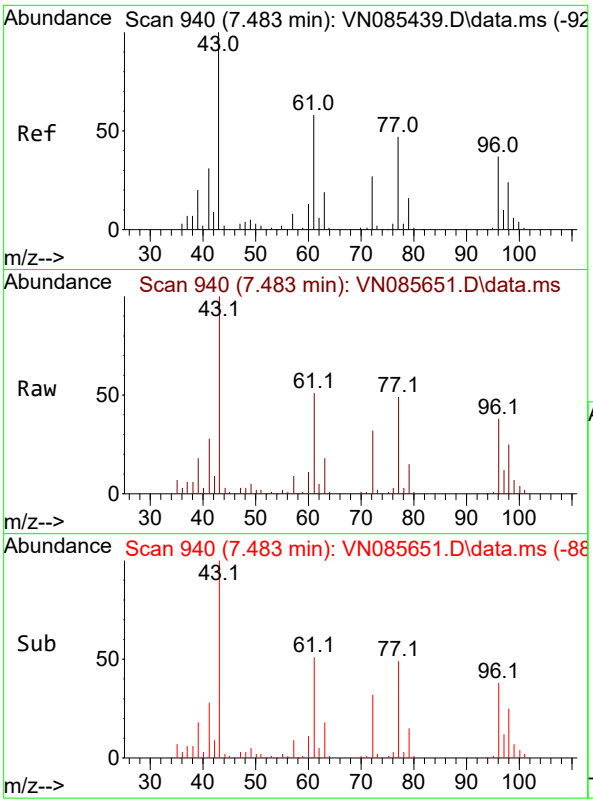




#26
2,2-Dichloropropane
Concen: 21.614 ug/l
RT: 7.489 min Scan# 941
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 77 Resp: 85009

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 23.2 | 10.7 | 32.1 |






#27
cis-1,2-Dichloroethene
Concen: 21.035 ug/l
RT: 7.483 min Scan# 94
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

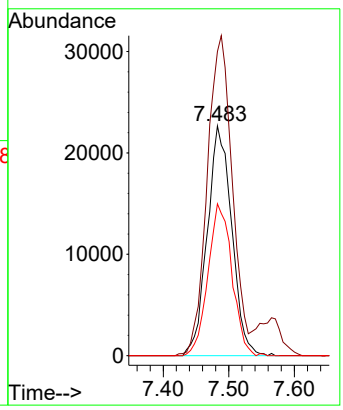
Tgt Ion: 96 Resp: 5865

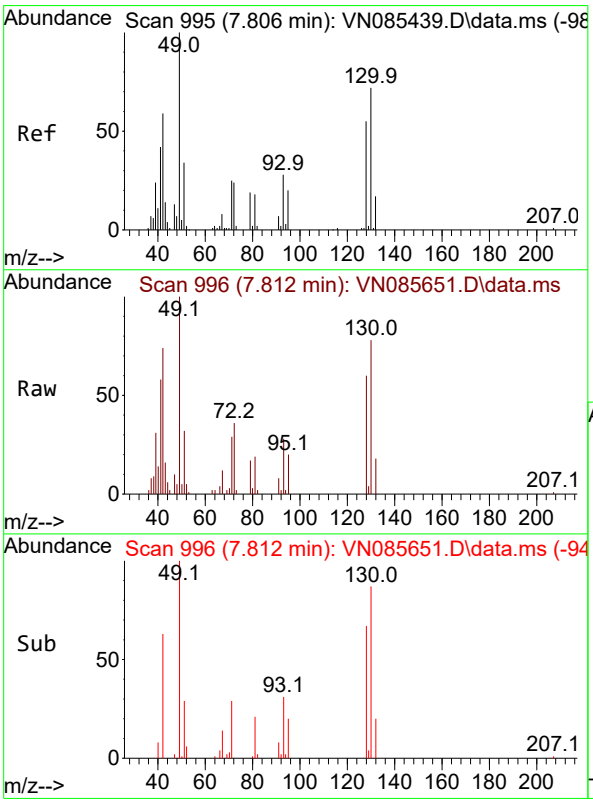
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 143.5 | 0.0 | 311.8 |
| 98 | 64.7 | 0.0 | 126.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

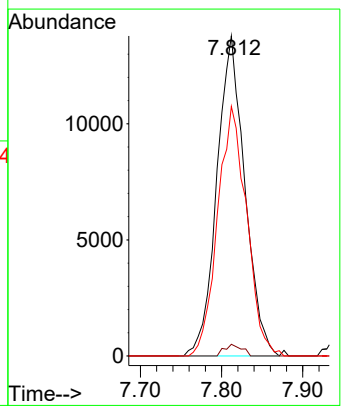


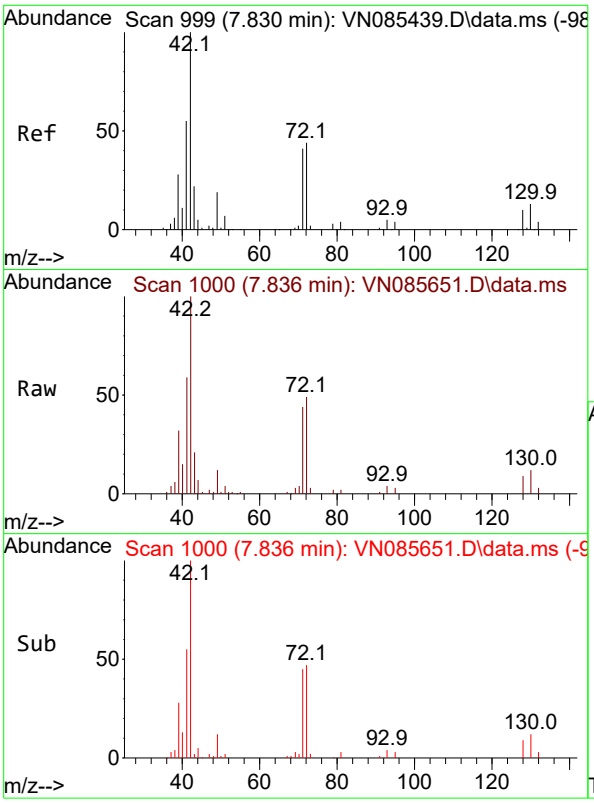




#28
Bromochloromethane
Concen: 14.596 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 49 Resp: 33036

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 2.2 | 0.0 | 4.4 |
| 130 | 80.8 | 55.0 | 82.4 |

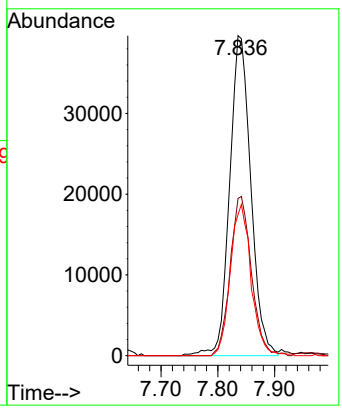





#29
Tetrahydrofuran
Concen: 102.187 ug/l
RT: 7.836 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 42 Resp: 10263

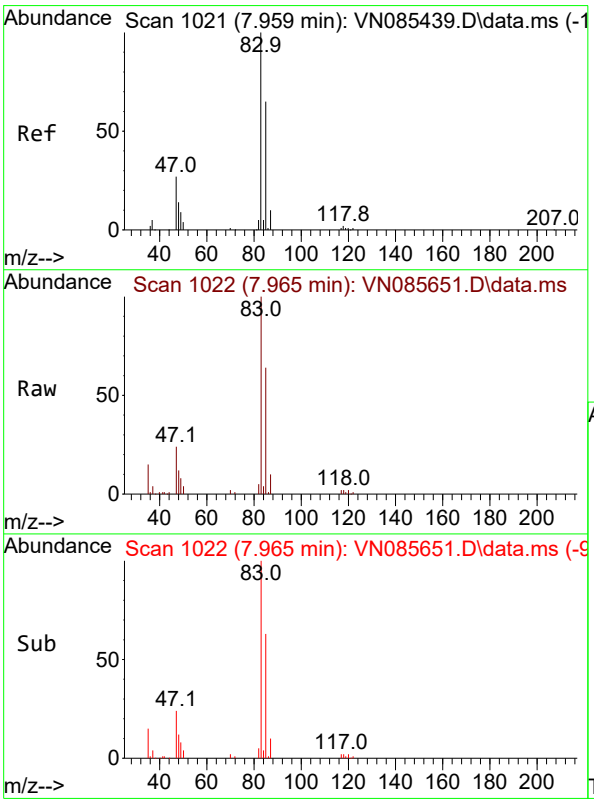
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 50.0 | 34.2 | 51.2 |
| 71 | 46.2 | 32.5 | 48.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations APPROVED**

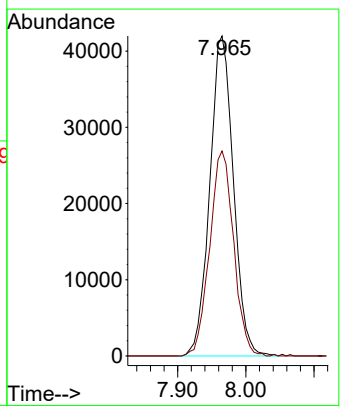
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

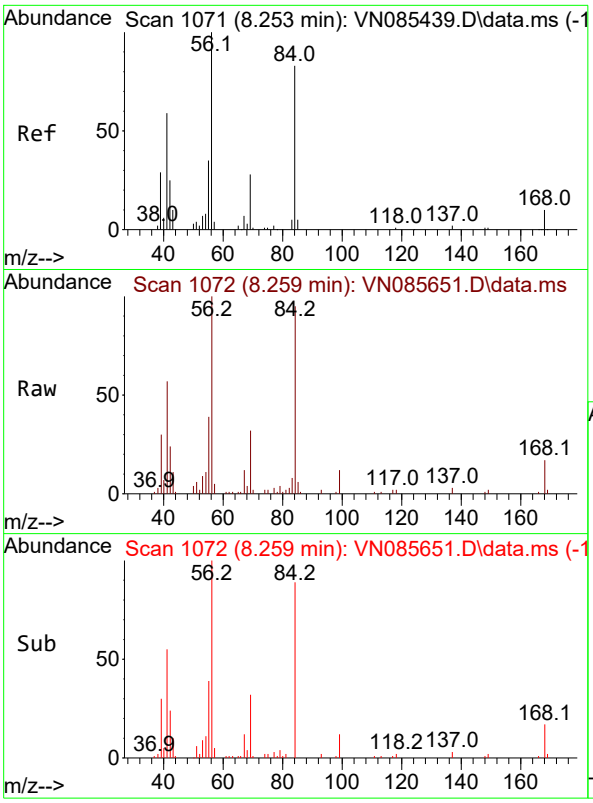



#30
Chloroform
Concen: 20.142 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 83 Resp: 101271

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.0 | 51.8 | 77.6 |

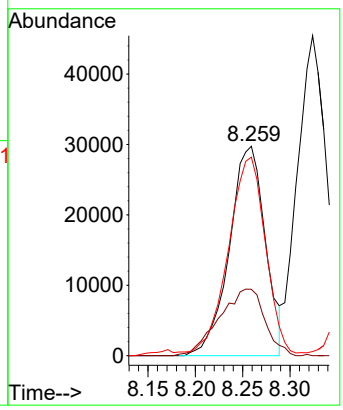





#31
Cyclohexane
Concen: 18.606 ug/l
RT: 8.259 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 56 Resp: 7867

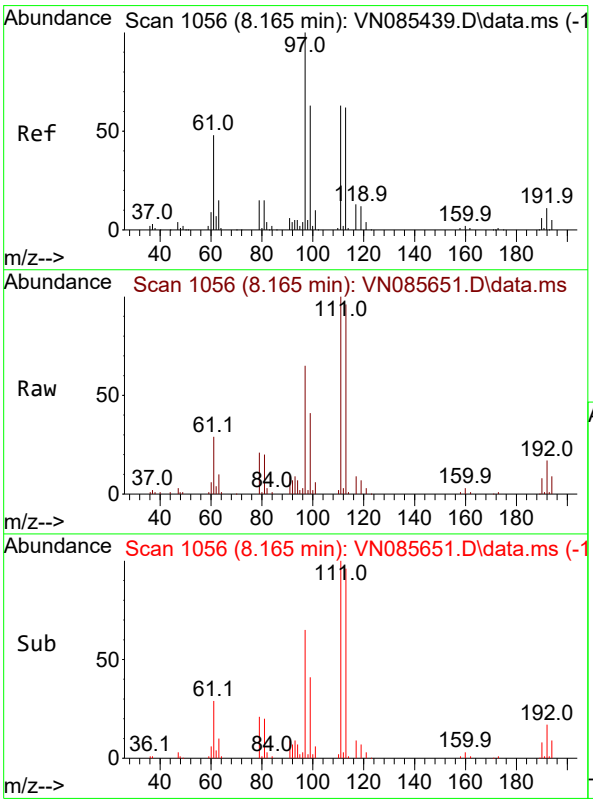
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 31.0 | 22.2 | 33.4 |
| 84 | 93.0 | 66.4 | 99.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations APPROVED**

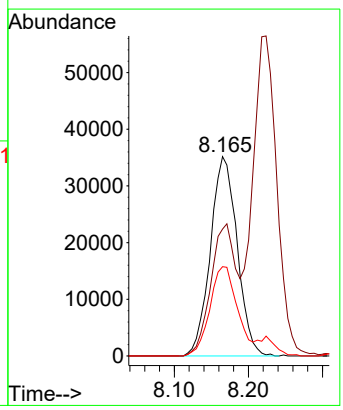
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

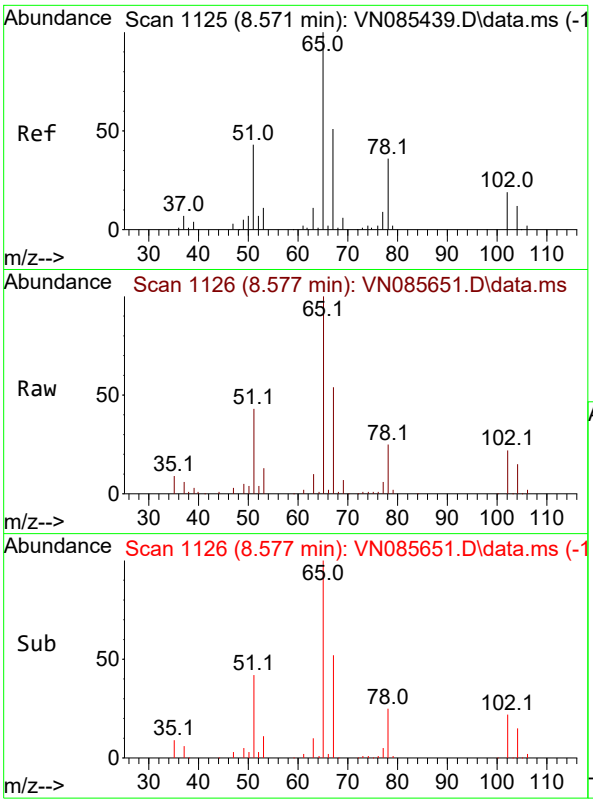



#32
1,1,1-Trichloroethane
Concen: 19.996 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 97 Resp: 88190

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 62.7 | 49.8 | 74.6 |
| 61 | 46.1 | 41.4 | 62.2 |

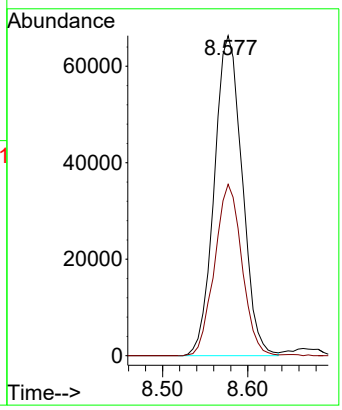





#33
1,2-Dichloroethane-d4
Concen: 45.172 ug/l
RT: 8.577 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 65 Resp: 15050

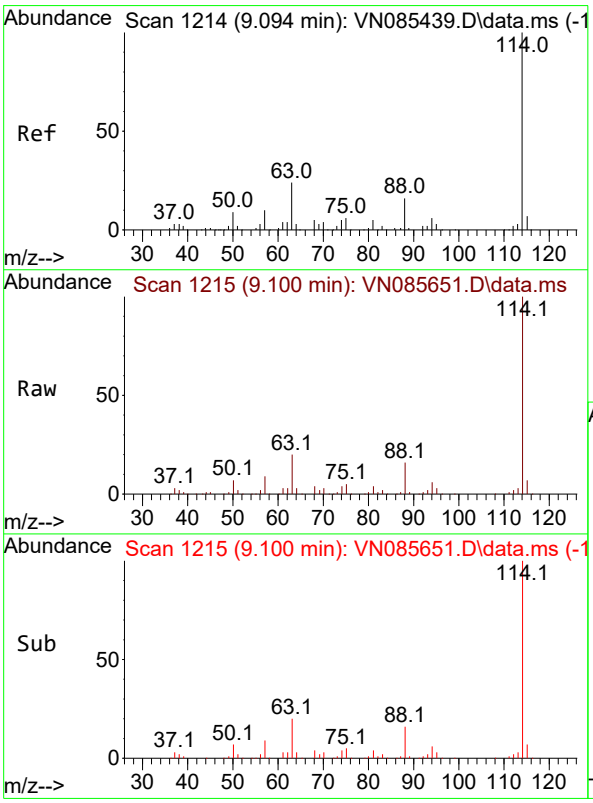
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 52.5 | 0.0 | 101.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

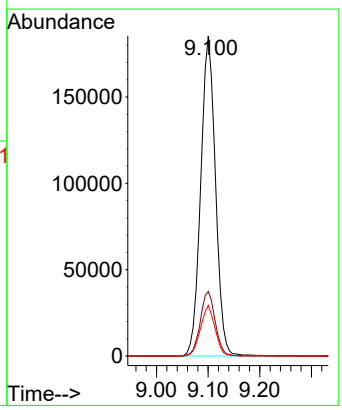
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

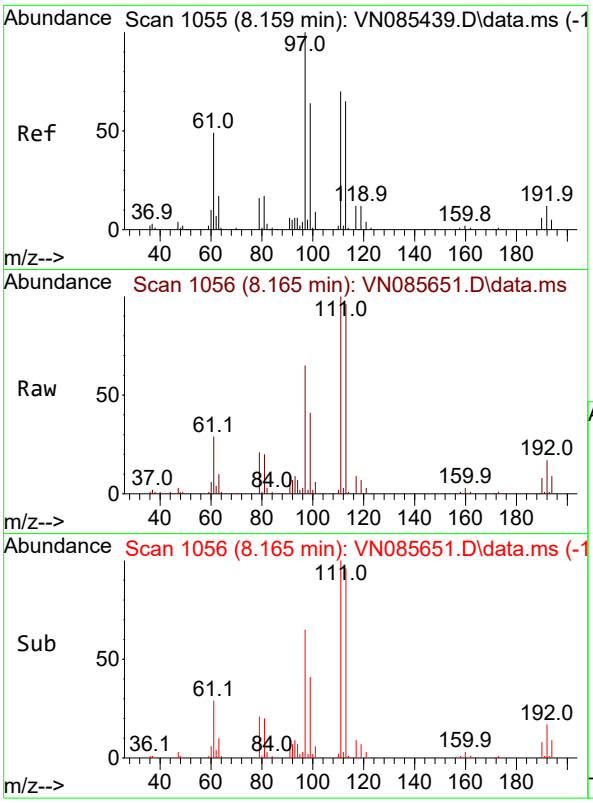



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:114 Resp: 367320

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 20.2 | 0.0 | 47.6 |
| 88 | 15.8 | 0.0 | 32.6 |

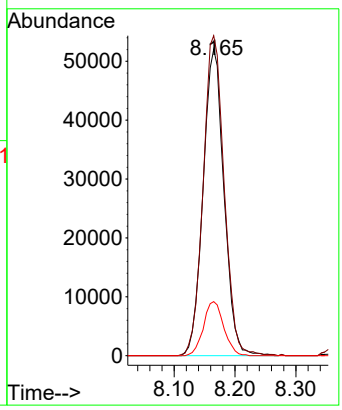





#35
Dibromofluoromethane
Concen: 48.743 ug/l
RT: 8.165 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:113 Resp: 12421

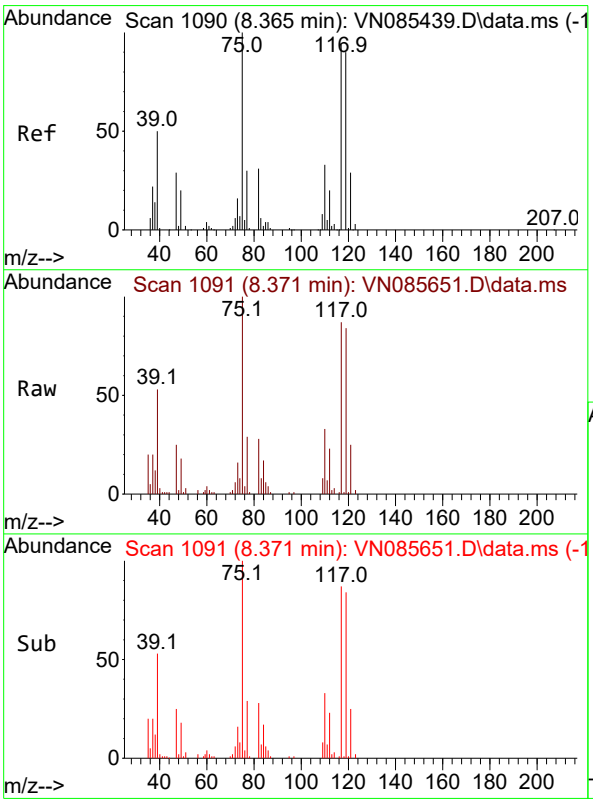
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 104.9 | 82.7 | 124.1 |
| 192 | 17.1 | 14.3 | 21.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations APPROVED**

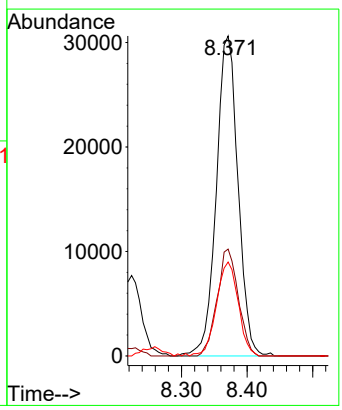
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

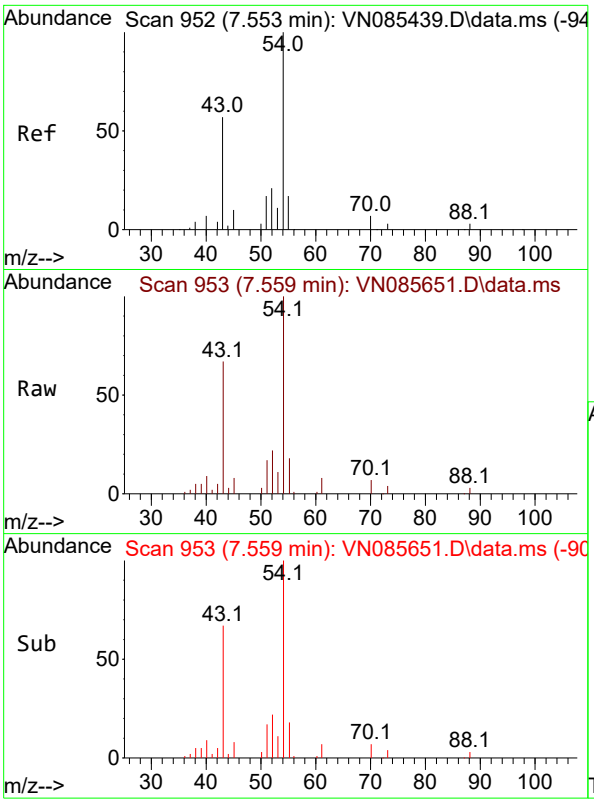



#36
1,1-Dichloropropene
Concen: 19.652 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 75 Resp: 70286

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 32.6 | 16.5 | 49.5 |
| 77 | 29.5 | 24.4 | 36.6 |

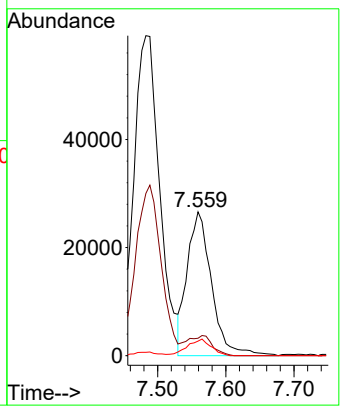





#37
Ethyl Acetate
Concen: 18.275 ug/l
RT: 7.559 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 43 Resp: 6597

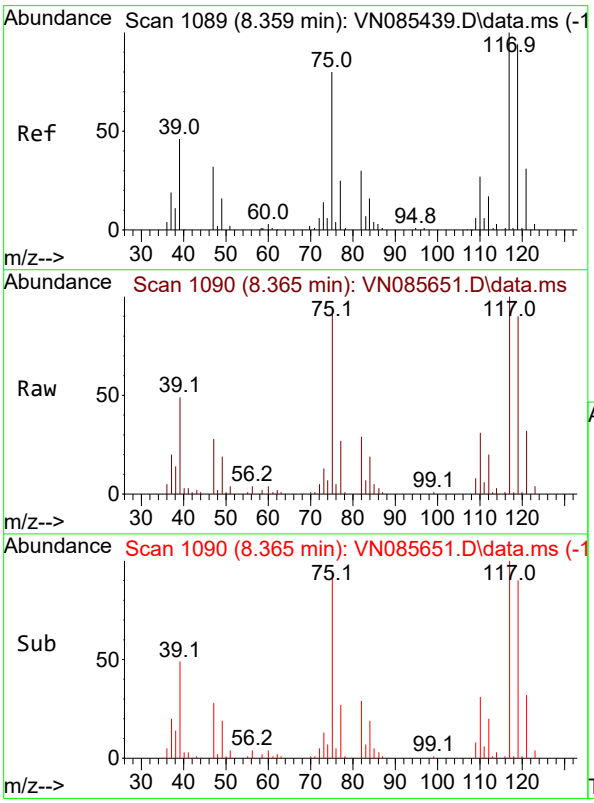
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 13.7 | 10.9 | 16.3 |
| 70 | 11.3 | 7.5 | 11.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations APPROVED**

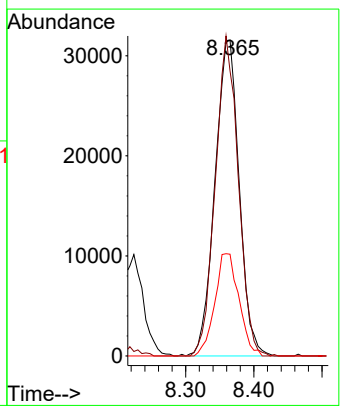
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

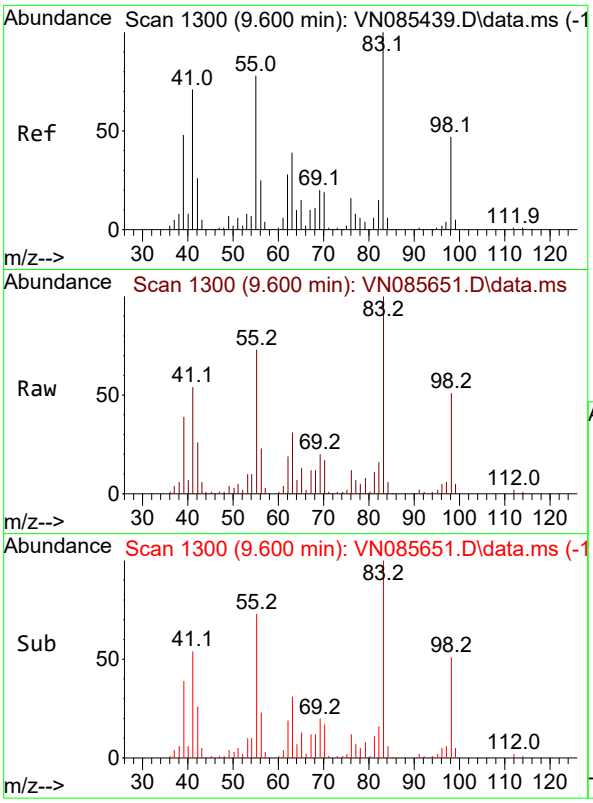



#38
Carbon Tetrachloride
Concen: 19.076 ug/l
RT: 8.365 min Scan# 1090
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:117 Resp: 78107

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 90.2 | 75.4 | 113.2 |
| 121 | 32.2 | 24.6 | 37.0 |

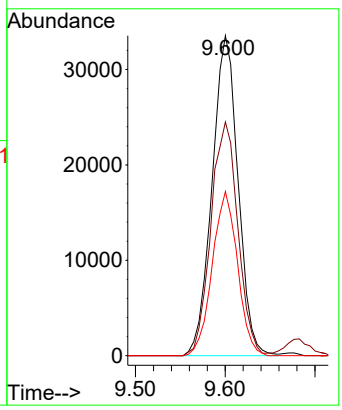





#39
Methylcyclohexane
Concen: 20.082 ug/l
RT: 9.600 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 83 Resp: 6749

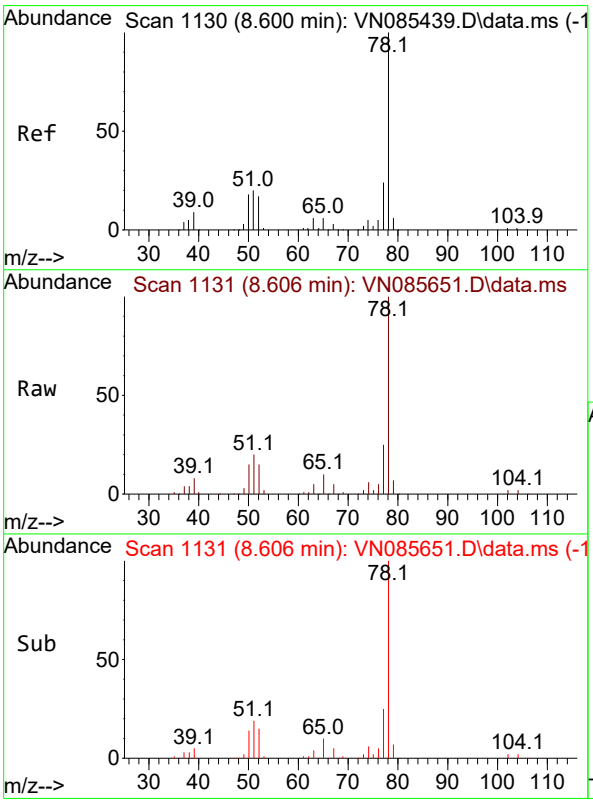
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 73.1 | 62.6 | 94.0 |
| 98 | 51.3 | 37.7 | 56.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations APPROVED**

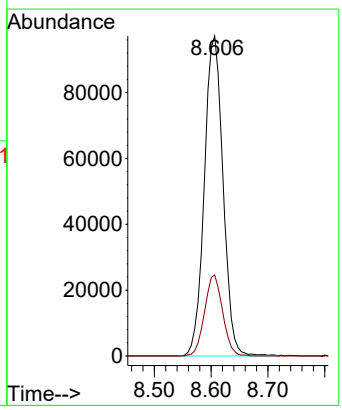
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

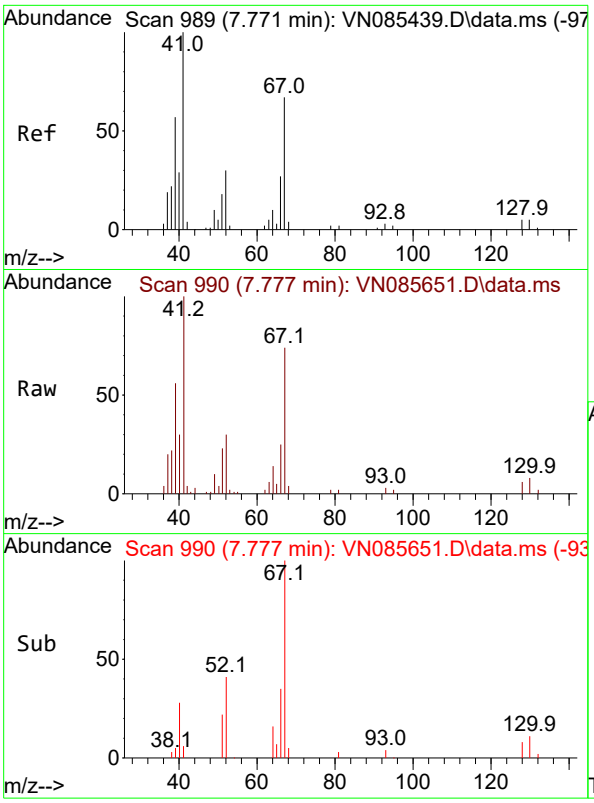



#40
Benzene
Concen: 20.639 ug/l
RT: 8.606 min Scan# 1131
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 78 Resp: 221792

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 25.3 | 19.0 | 28.6 |

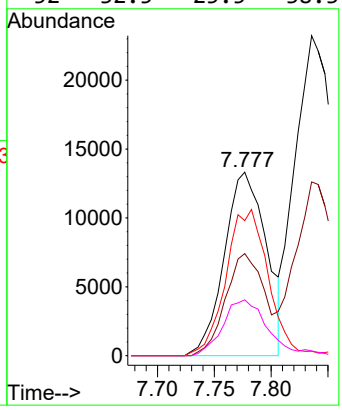





#41
Methacrylonitrile
Concen: 18.274 ug/l
RT: 7.777 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 41 Resp: 3432

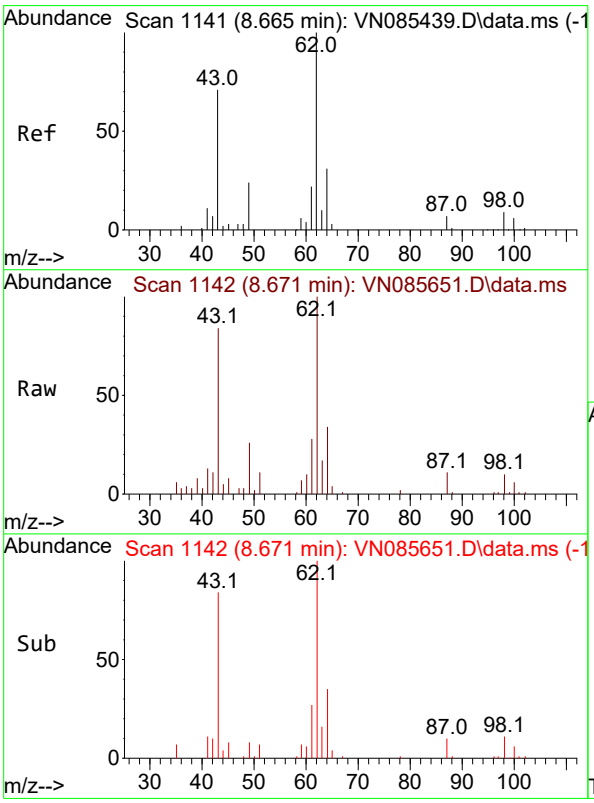
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 50.0 | 46.0 | 69.0 |
| 67 | 80.2 | 57.4 | 86.2 |
| 52 | 32.5 | 25.5 | 38.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

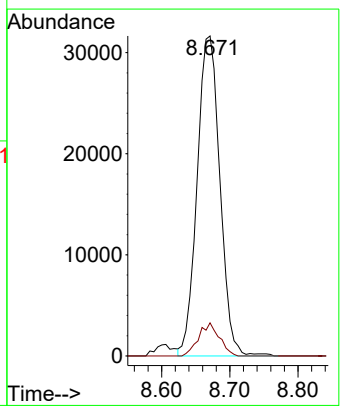
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

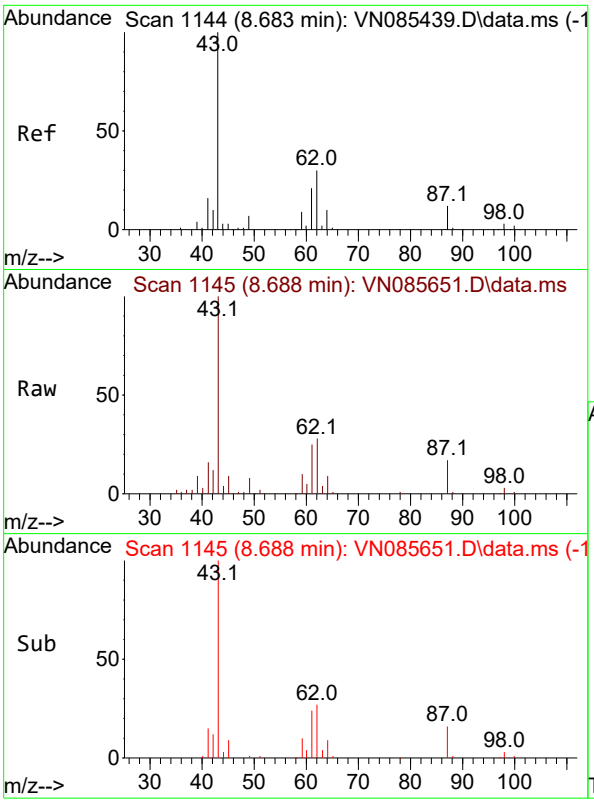



#42
1,2-Dichloroethane
Concen: 18.179 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 62 Resp: 73577

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 9.4 | 0.0 | 17.0 |

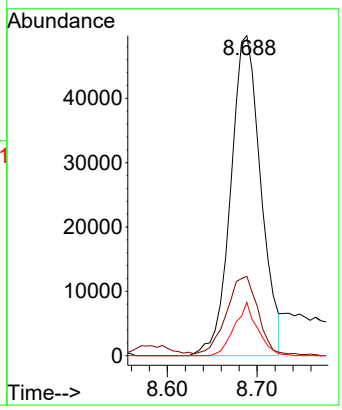





#43
Isopropyl Acetate
Concen: 20.051 ug/l m
RT: 8.688 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 43 Resp: 11598

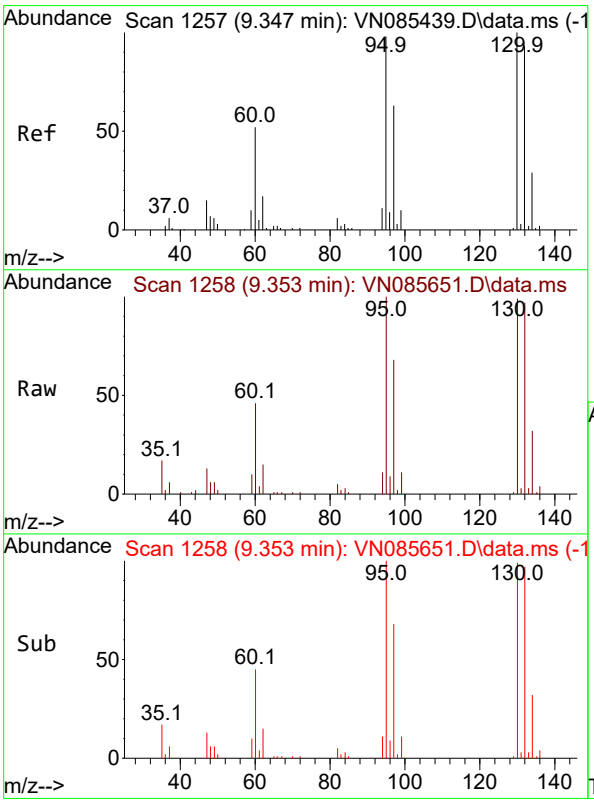
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 26.6 | 20.7 | 31.1 |
| 87 | 12.7 | 9.8 | 14.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations APPROVED**

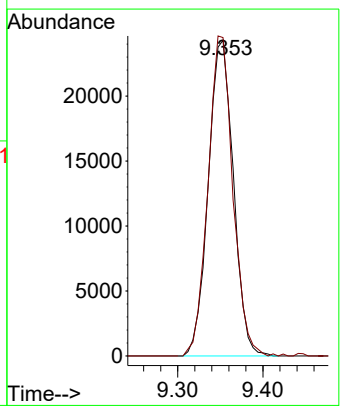
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

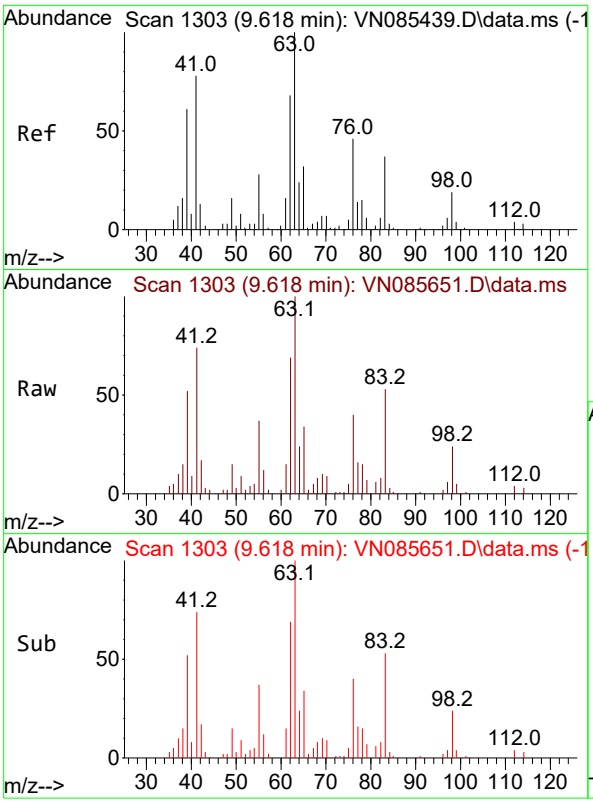



#44
Trichloroethene
Concen: 19.842 ug/l
RT: 9.353 min Scan# 1258
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:130 Resp: 49633

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 100.9 | 0.0 | 195.8 |

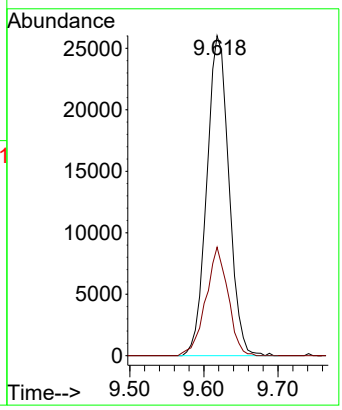





#45
1,2-Dichloropropane
Concen: 19.672 ug/l
RT: 9.618 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 63 Resp: 5399

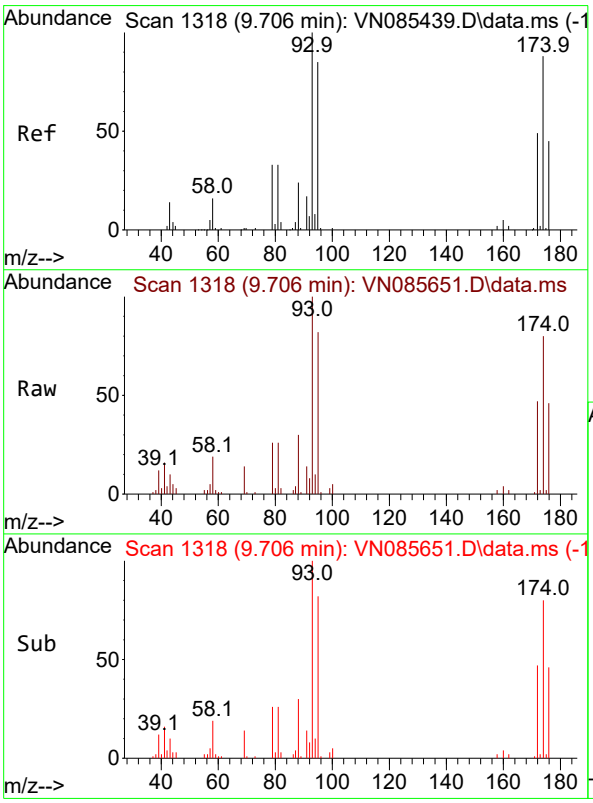
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 33.9 | 25.6 | 38.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

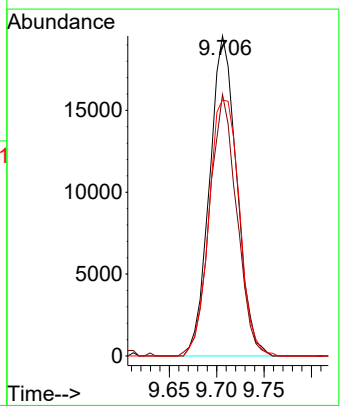
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

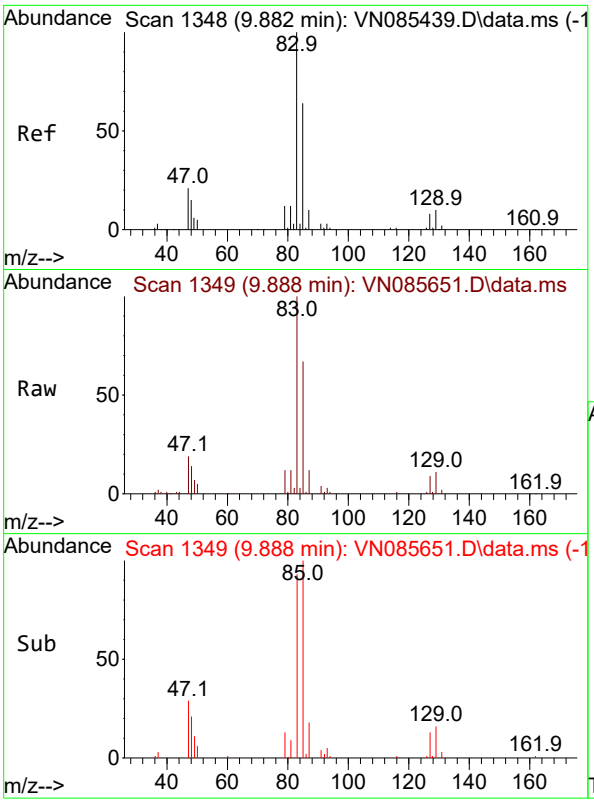



#46
Dibromomethane
Concen: 19.747 ug/l
RT: 9.706 min Scan# 1318
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 93 Resp: 39110

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 81.4 | 64.7 | 97.1 |
| 174 | 89.0 | 69.0 | 103.4 |

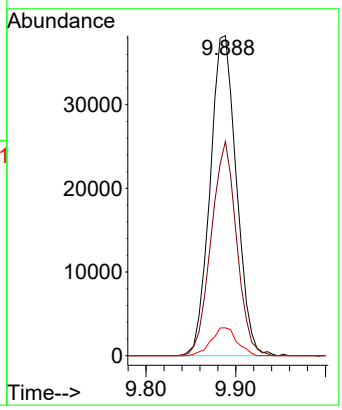





#47
Bromodichloromethane
Concen: 19.263 ug/l
RT: 9.888 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 83 Resp: 7772

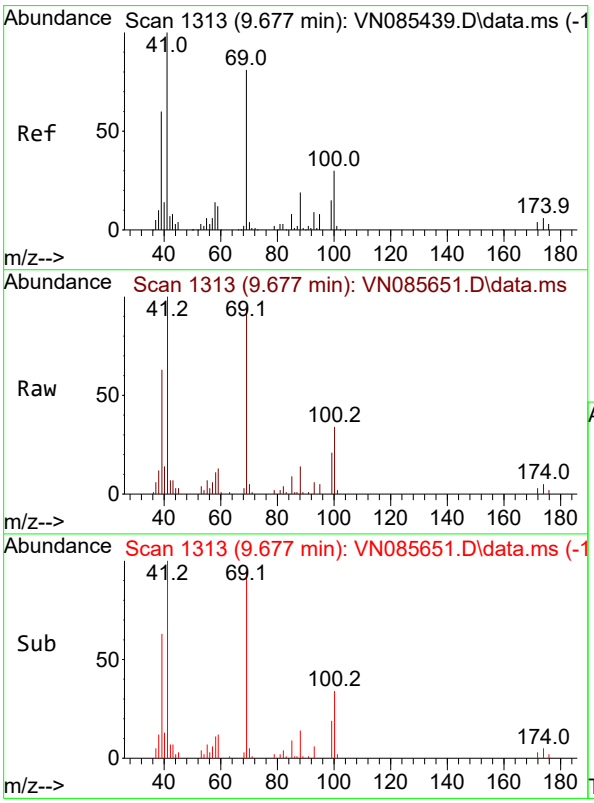
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 67.0 | 51.2 | 76.8 |
| 127 | 8.7 | 6.5 | 9.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations APPROVED**

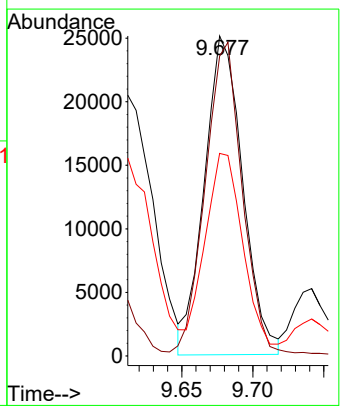
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

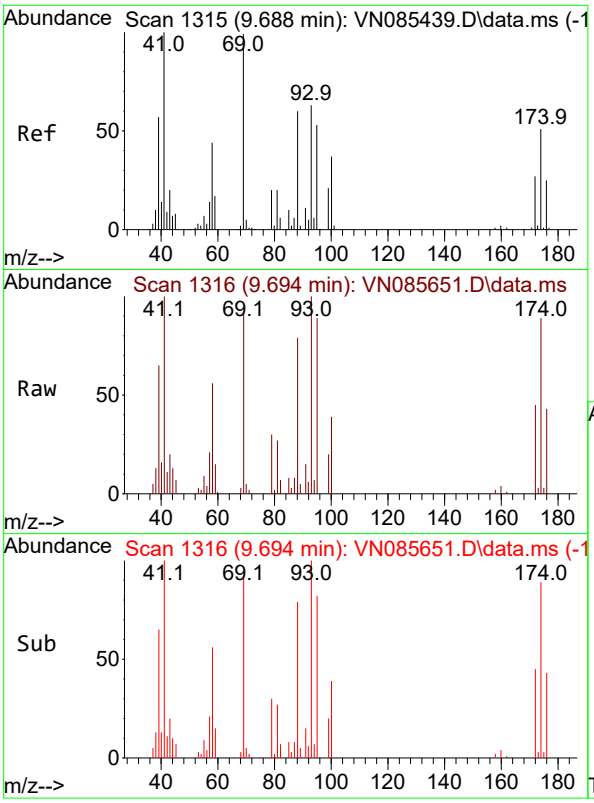



#48
Methyl methacrylate
Concen: 18.096 ug/l
RT: 9.677 min Scan# 1313
Delta R.T. -0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 41 Resp: 47105

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 96.3 | 64.7 | 97.1 |
| 39 | 63.8 | 49.0 | 73.6 |

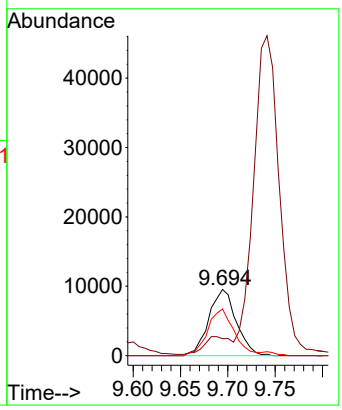





#49
1,4-Dioxane
Concen: 439.639 ug/l
RT: 9.694 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 88 Resp: 1927

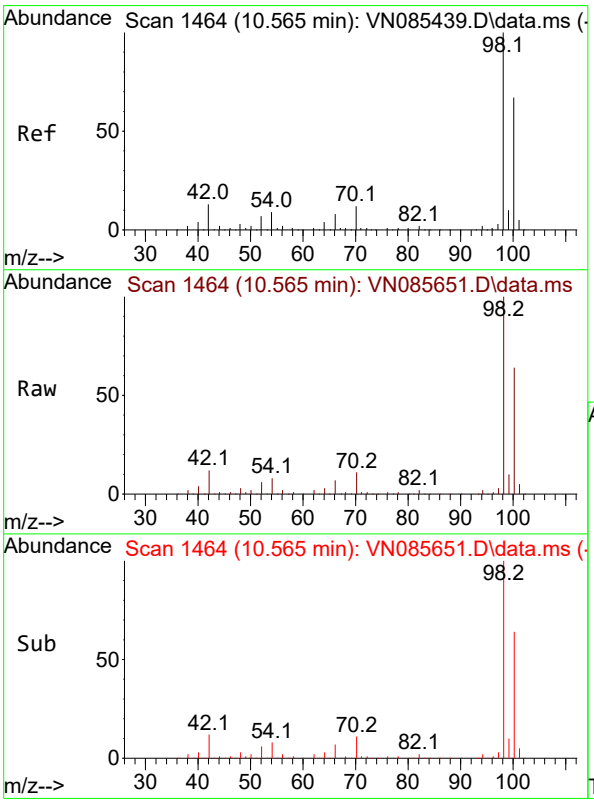
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 27.7 | 26.6 | 39.8 |
| 58 | 70.7 | 59.5 | 89.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

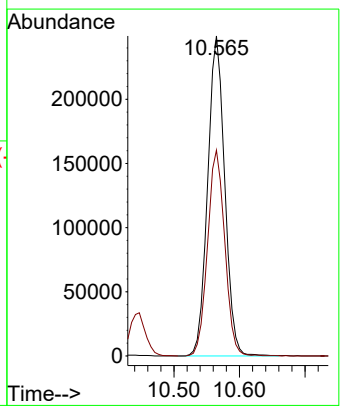
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

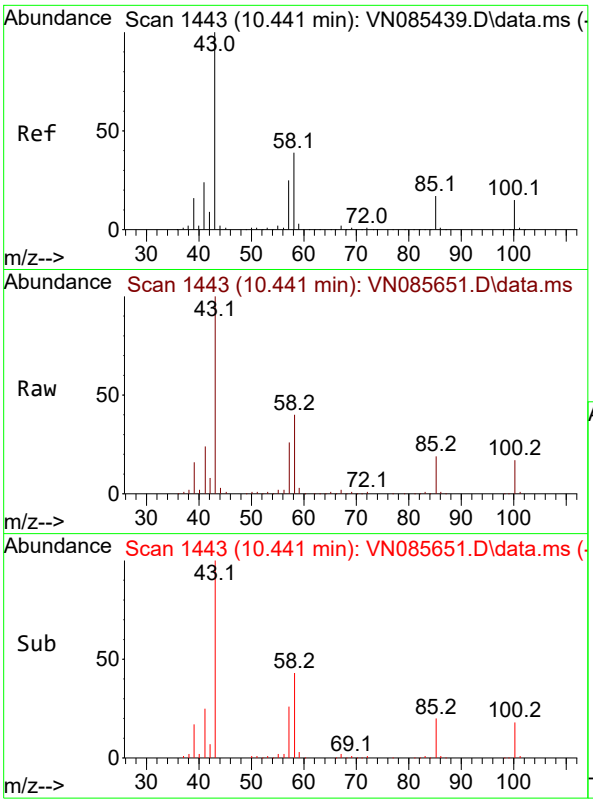



#50
Toluene-d8
Concen: 49.771 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 98 Resp: 450633

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.9 | 52.2 | 78.4 |






#51
4-Methyl-2-Pentanone
Concen: 97.965 ug/l
RT: 10.441 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

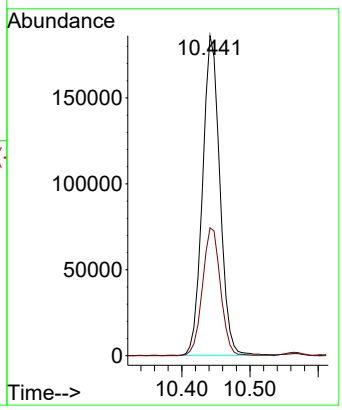
Tgt Ion: 43 Resp: 32883

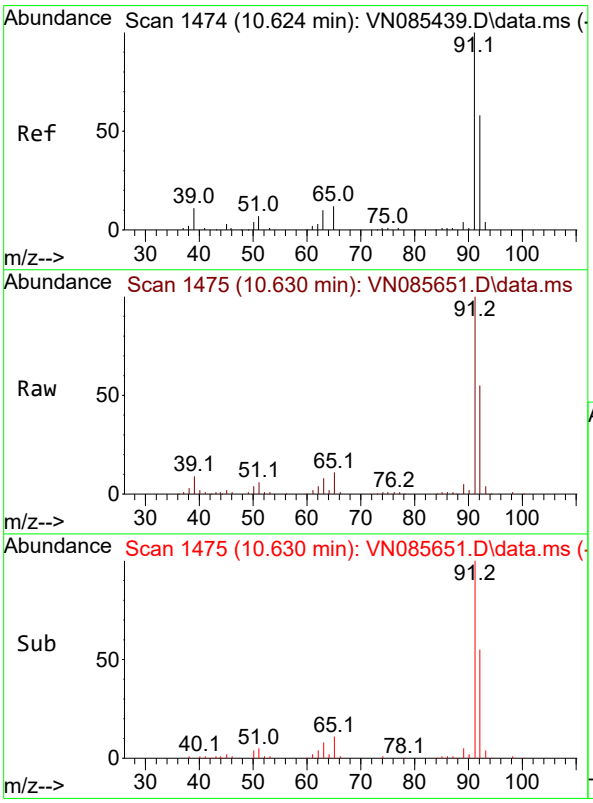
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 41.7 | 30.5 | 45.7 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

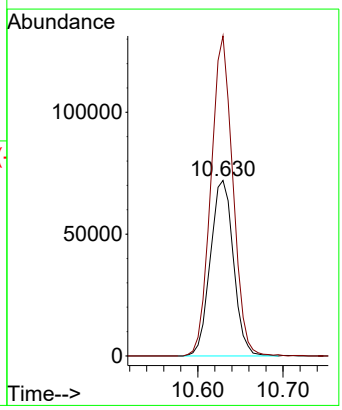


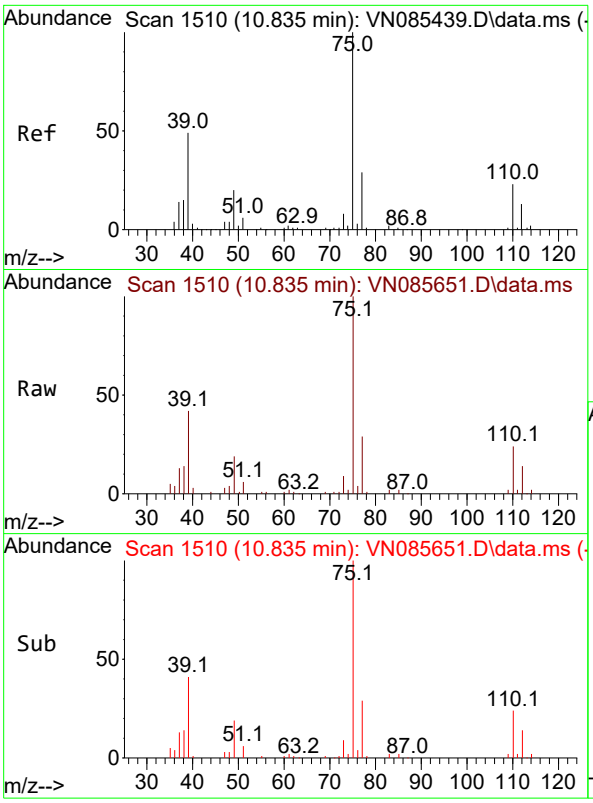




#52
Toluene
Concen: 21.741 ug/l
RT: 10.630 min Scan# 1475
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 92 Resp: 135369

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 173.5 | 139.2 | 208.8 |

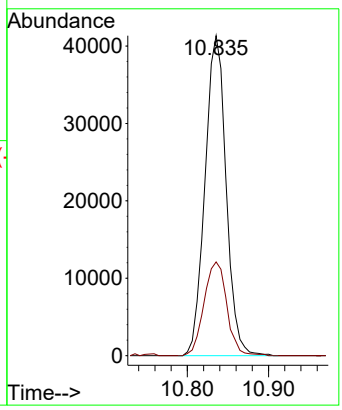





#53
t-1,3-Dichloropropene
Concen: 19.583 ug/l
RT: 10.835 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 75 Resp: 7467

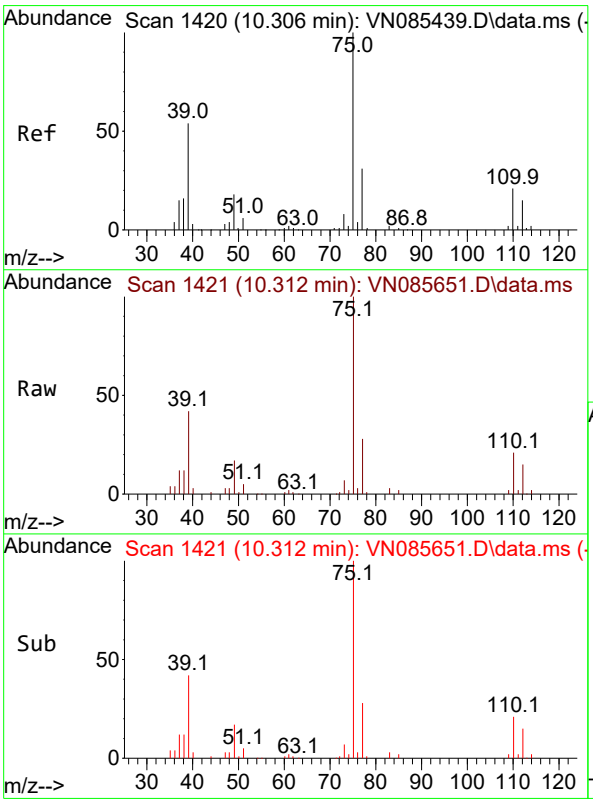
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 29.3 | 23.5 | 35.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations APPROVED**

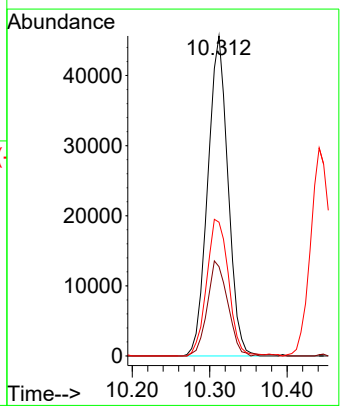
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

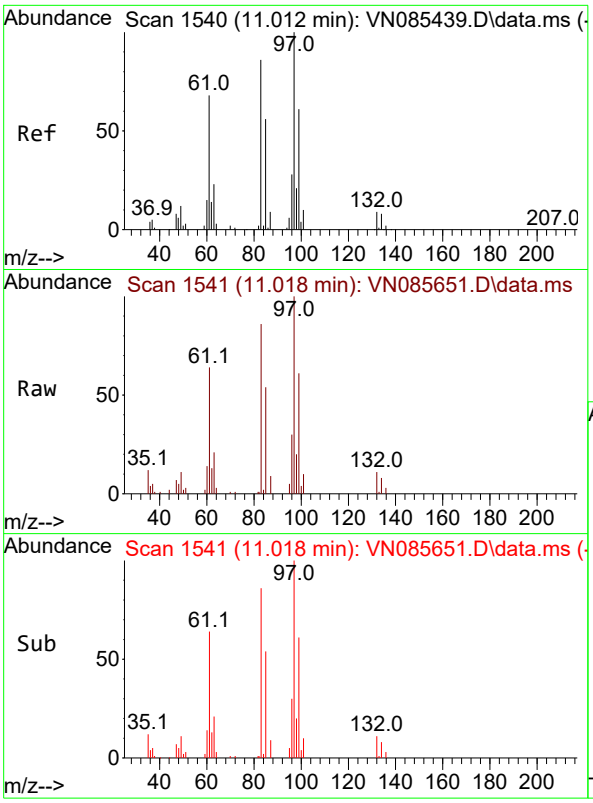



#54
cis-1,3-Dichloropropene
Concen: 20.385 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 75 Resp: 83030

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 27.9 | 25.0 | 37.4 |
| 39 | 41.8 | 43.1 | 64.7# |

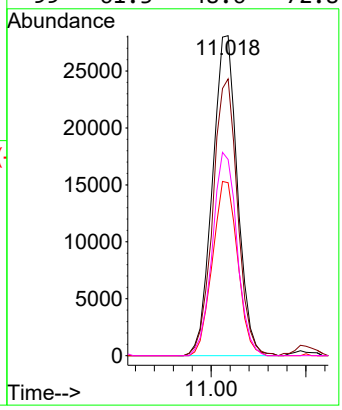





#55
1,1,2-Trichloroethane
Concen: 20.914 ug/l
RT: 11.018 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 97 Resp: 5153

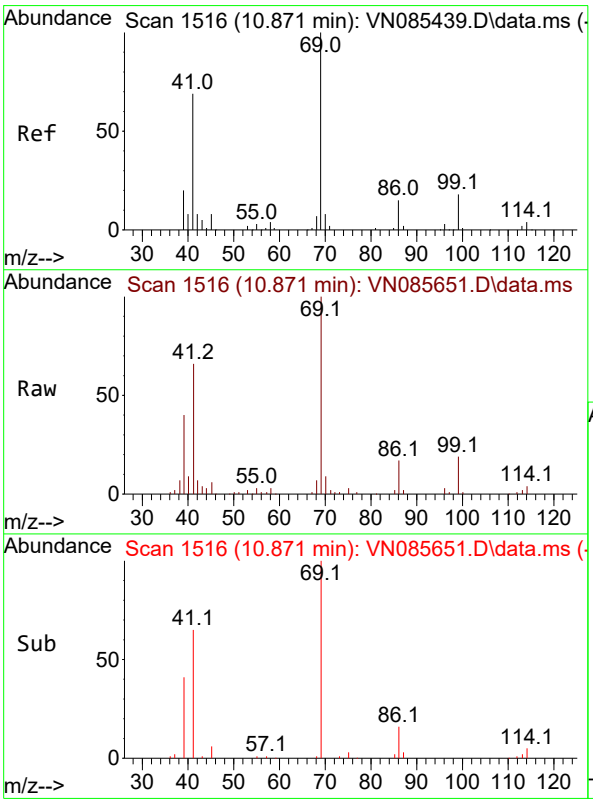
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 86.5 | 69.0 | 103.6 |
| 85 | 54.0 | 44.6 | 66.8 |
| 99 | 61.3 | 48.6 | 72.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations APPROVED**

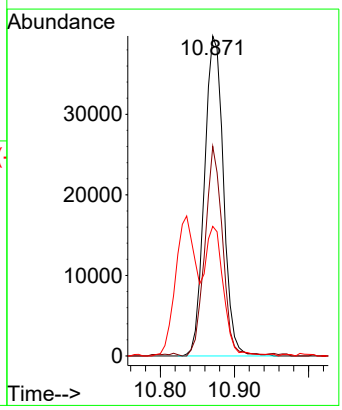
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

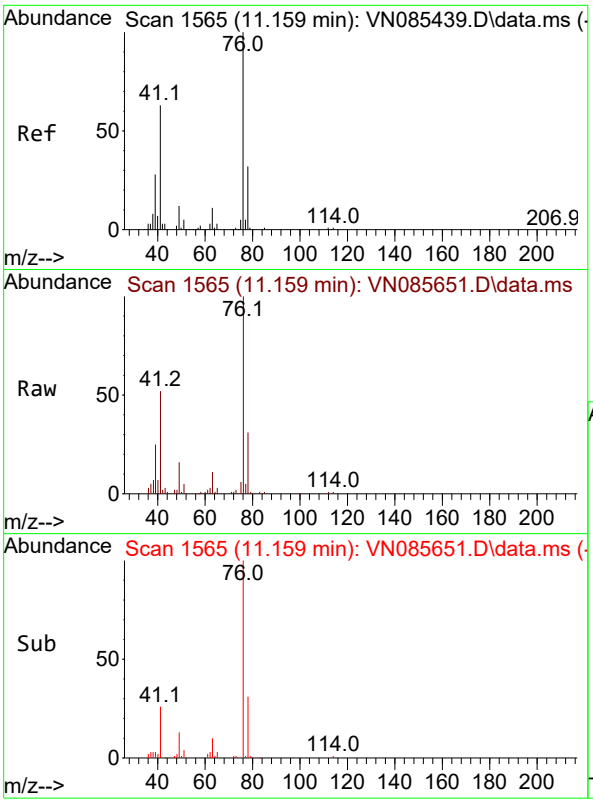



#56
Ethyl methacrylate
Concen: 18.280 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 69 Resp: 70589

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 60.9 | 54.6 | 82.0 |
| 39 | 39.6 | 32.4 | 48.6 |

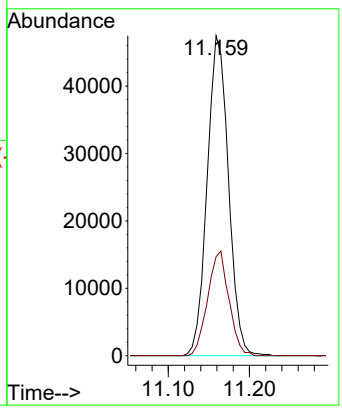





#57
1,3-Dichloropropane
Concen: 20.170 ug/l
RT: 11.159 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 76 Resp: 8642

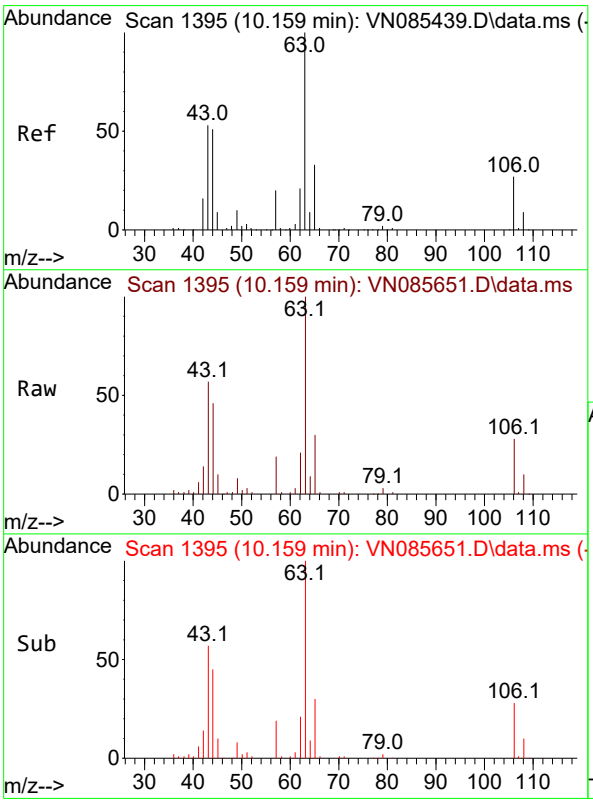
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.6 | 25.6 | 38.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

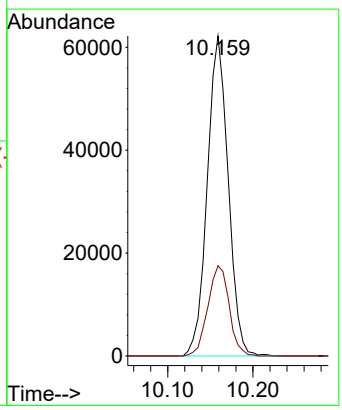
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

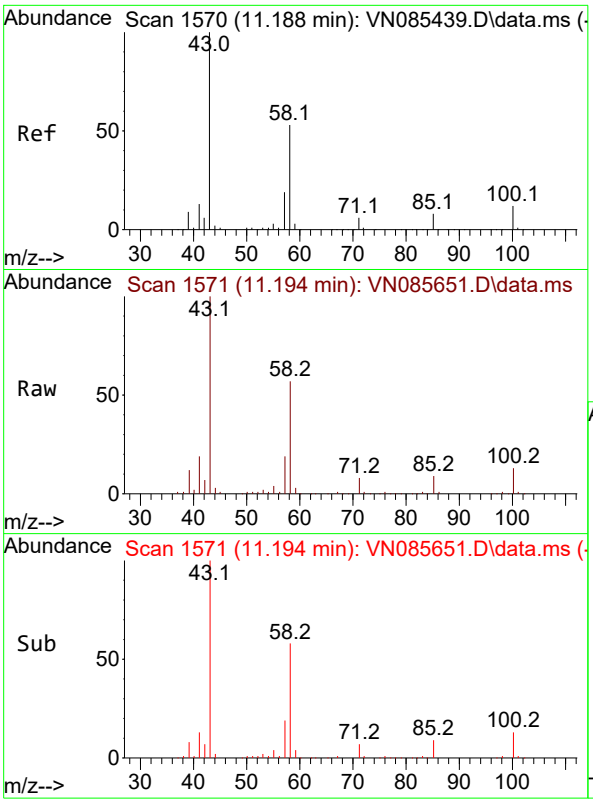



#58
2-Chloroethyl Vinyl ether
Concen: 67.812 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 63 Resp: 106039

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 28.7 | 21.6 | 32.4 |






#59
2-Hexanone
Concen: 101.031 ug/l
RT: 11.194 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

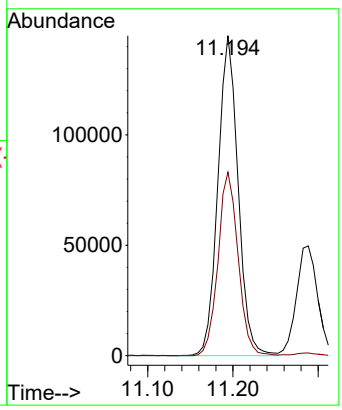
Tgt Ion: 43 Resp: 23861

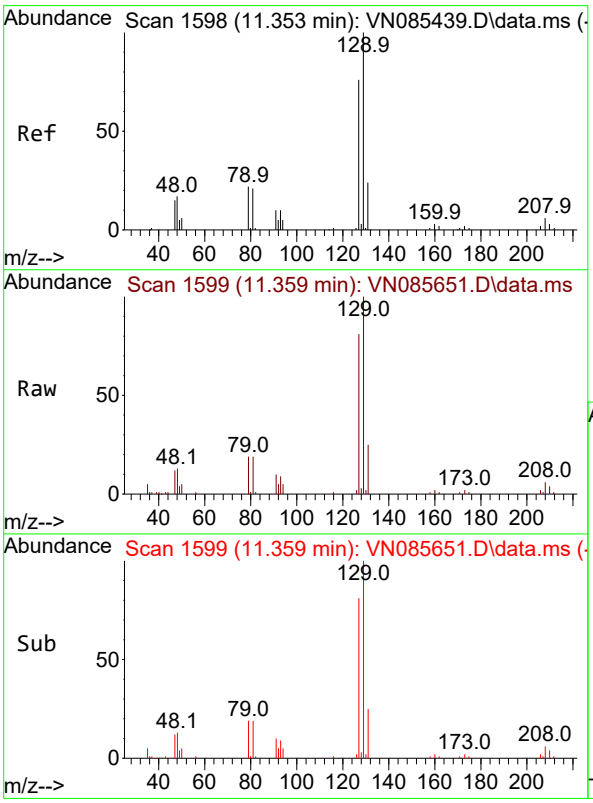
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 57.1 | 26.2 | 78.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

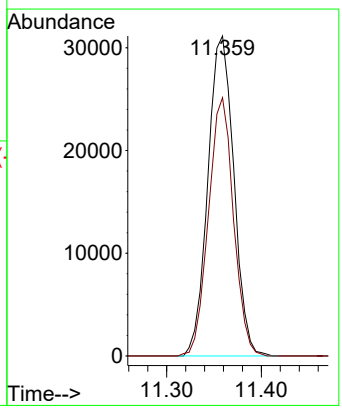


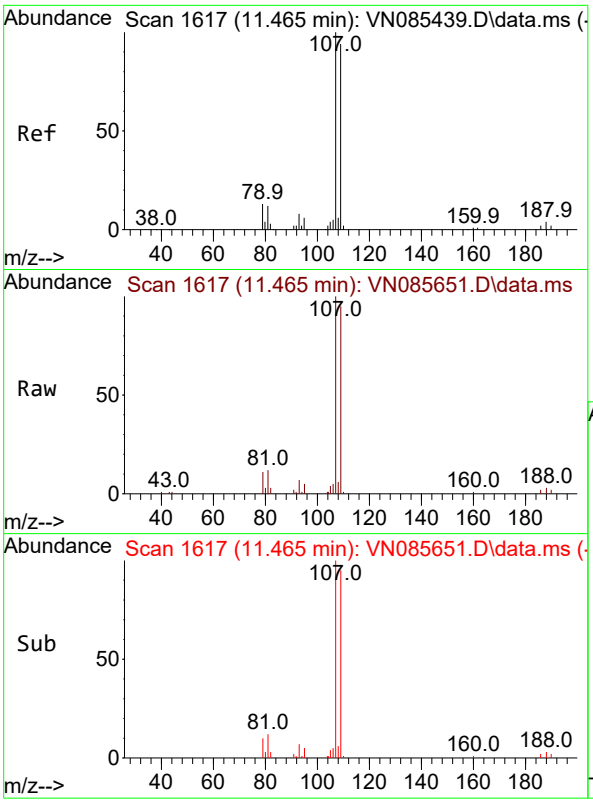




#60
Dibromochloromethane
Concen: 19.918 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:129 Resp: 59256

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 77.8 | 38.6 | 115.8 |

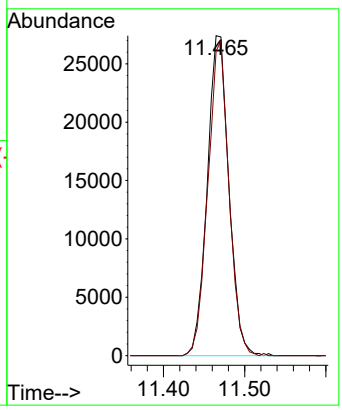





#61
1,2-Dibromoethane
Concen: 20.701 ug/l
RT: 11.465 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:107 Resp: 5077

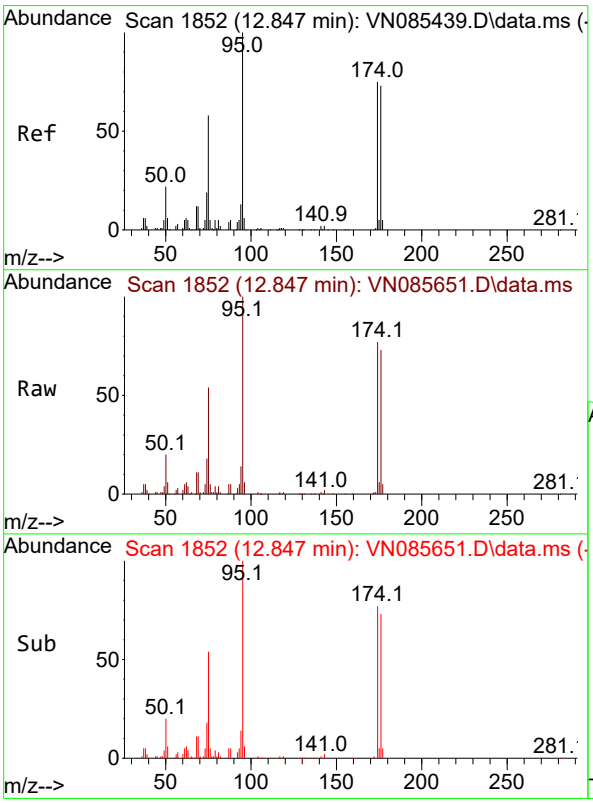
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 95.4 | 75.9 | 113.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations APPROVED**

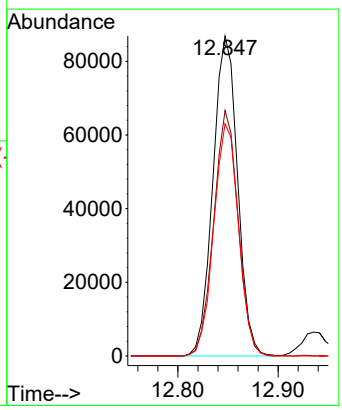
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

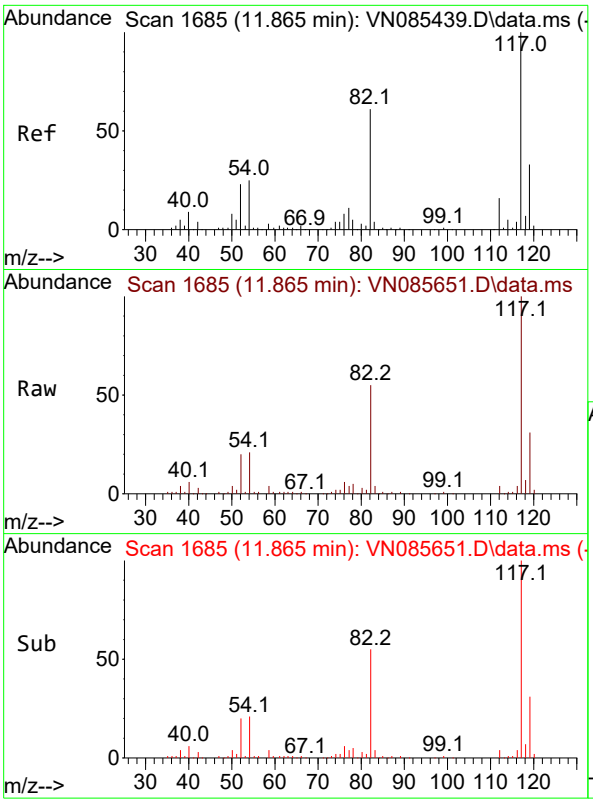



#62
4-Bromofluorobenzene
Concen: 47.844 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 95 Resp: 148181

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 76.0 | 0.0 | 145.0 |
| 176 | 72.9 | 0.0 | 142.4 |

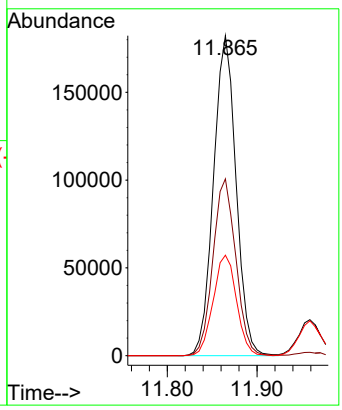





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:117 Resp: 31776

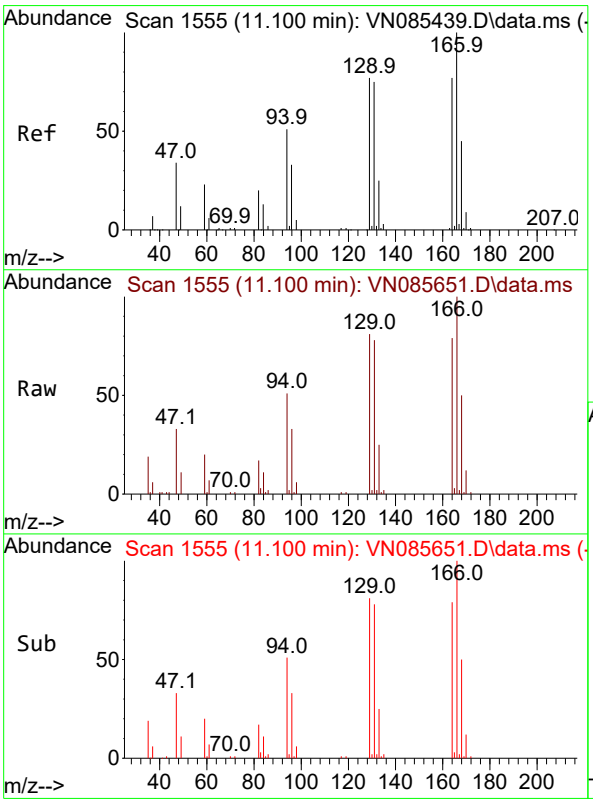
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 55.3 | 48.6 | 72.8 |
| 119 | 31.4 | 26.6 | 39.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

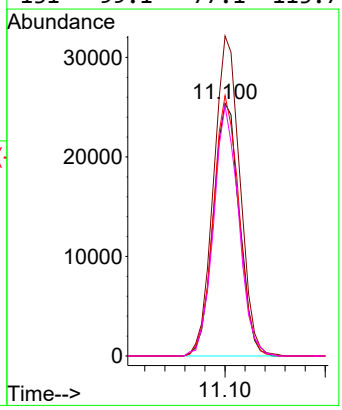
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

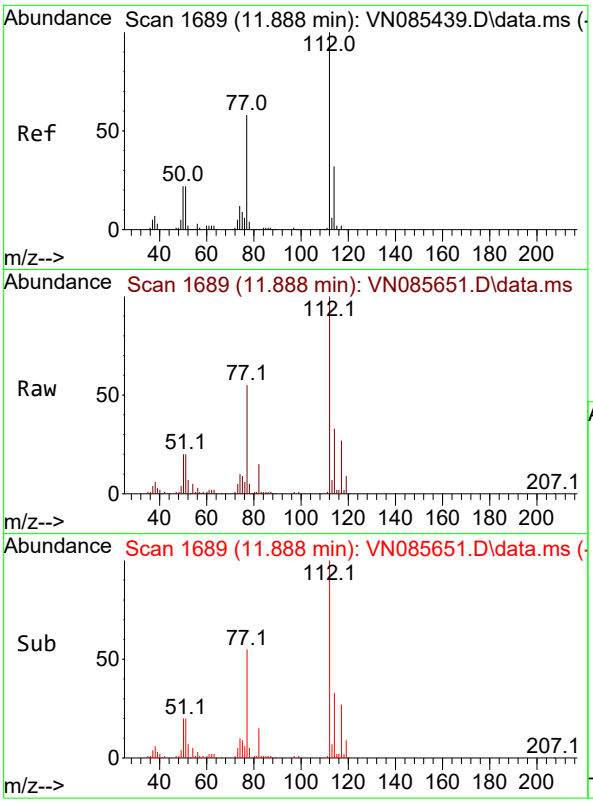



#64
Tetrachloroethene
Concen: 21.187 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:164 Resp: 45898

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 126.8 | 103.4 | 155.2 |
| 129 | 103.2 | 79.2 | 118.8 |
| 131 | 99.1 | 77.1 | 115.7 |

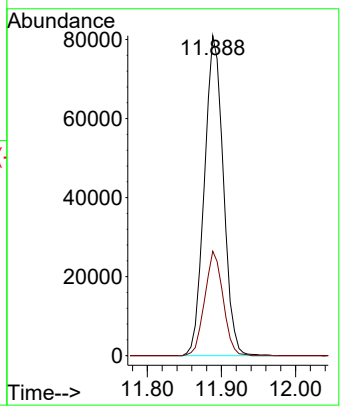





#65
Chlorobenzene
Concen: 20.663 ug/l
RT: 11.888 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:112 Resp: 14383

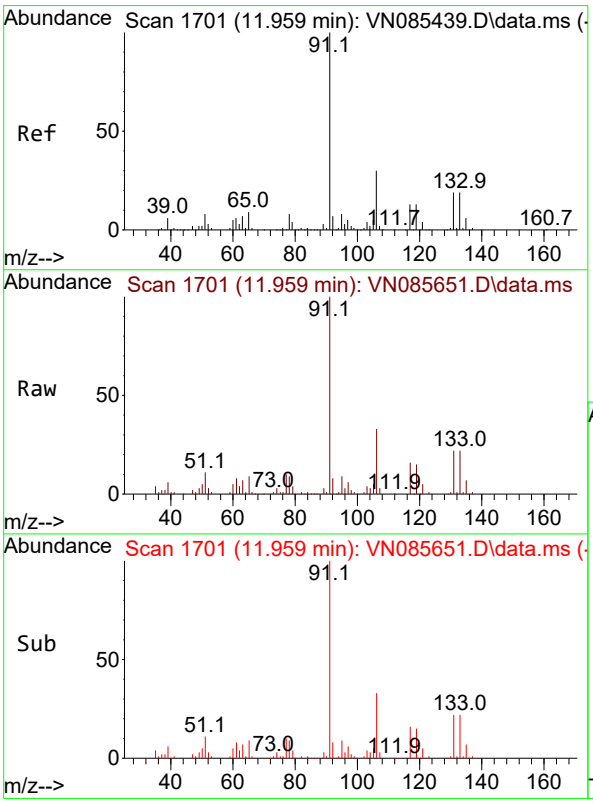
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 32.6 | 25.3 | 37.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

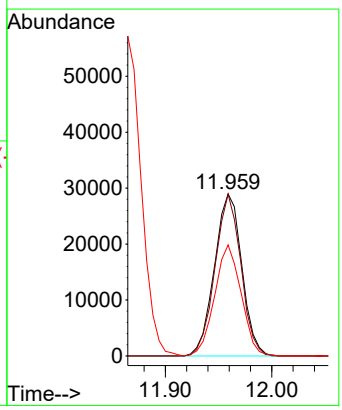
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

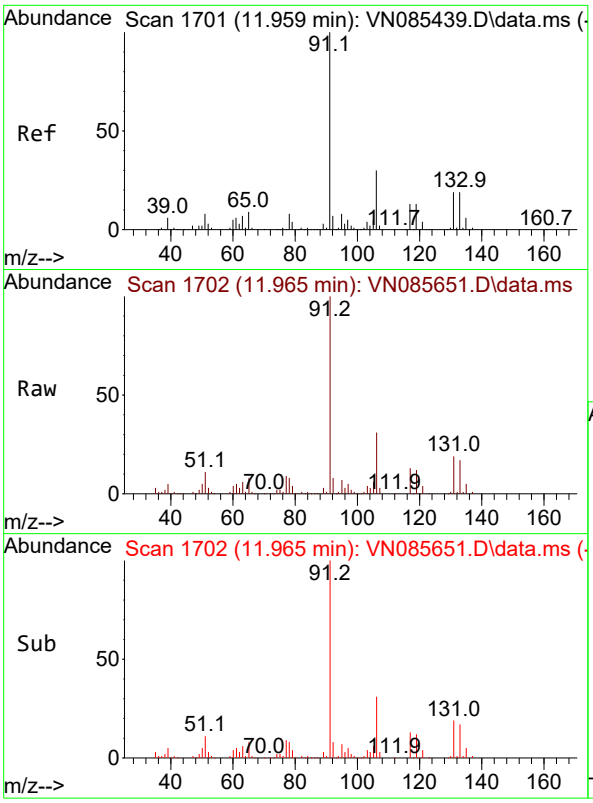



#66
1,1,1,2-Tetrachloroethane
Concen: 20.242 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:131 Resp: 51716

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 94.2 | 47.4 | 142.3 |
| 119 | 66.3 | 33.1 | 99.5 |

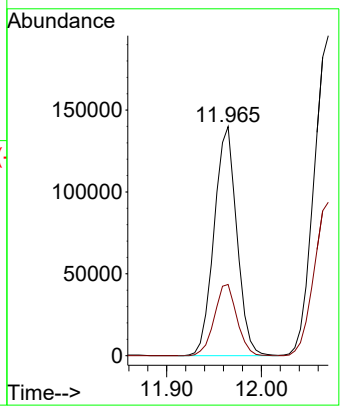





#67
Ethyl Benzene
Concen: 20.561 ug/l
RT: 11.965 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 91 Resp: 23311

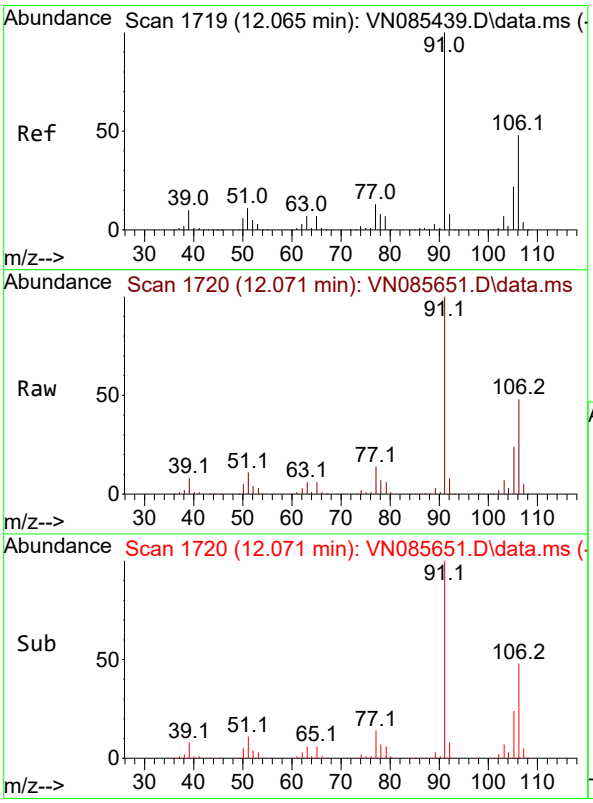
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 31.1 | 23.8 | 35.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations APPROVED**

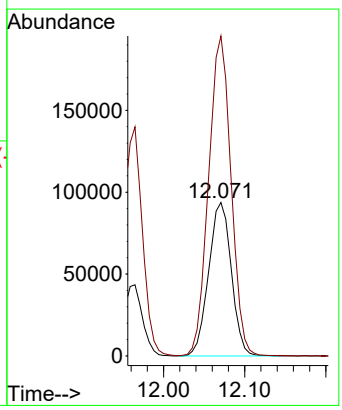
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

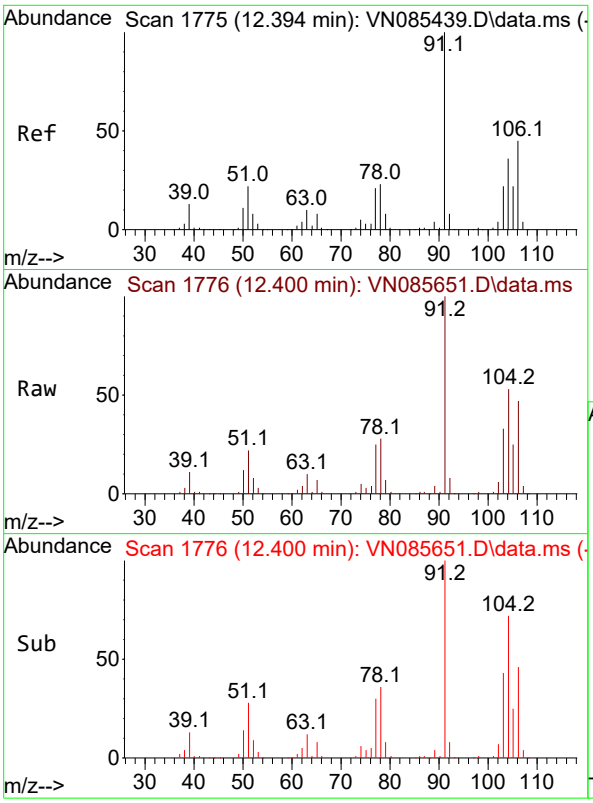



#68
m/p-Xylenes
Concen: 43.412 ug/l
RT: 12.071 min Scan# 1720
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:106 Resp: 181911

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 206.7 | 167.7 | 251.5 |

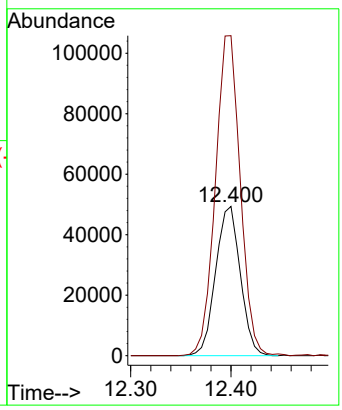





#69
o-Xylene
Concen: 21.067 ug/l
RT: 12.400 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:106 Resp: 8436

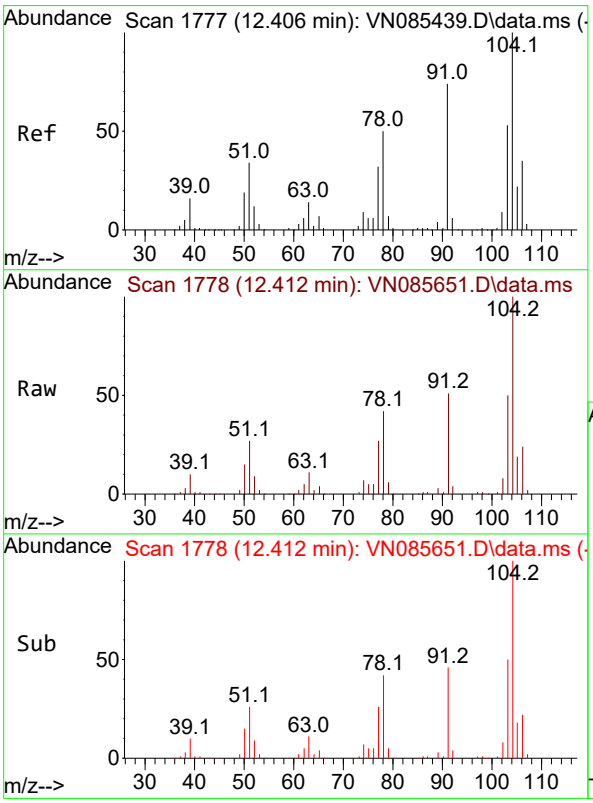
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 216.2 | 110.4 | 331.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

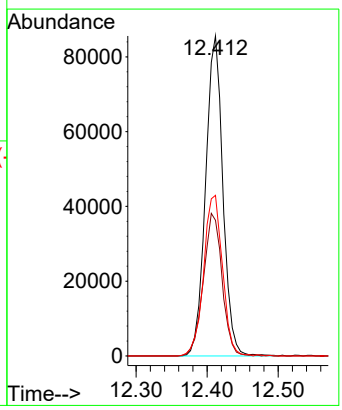
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

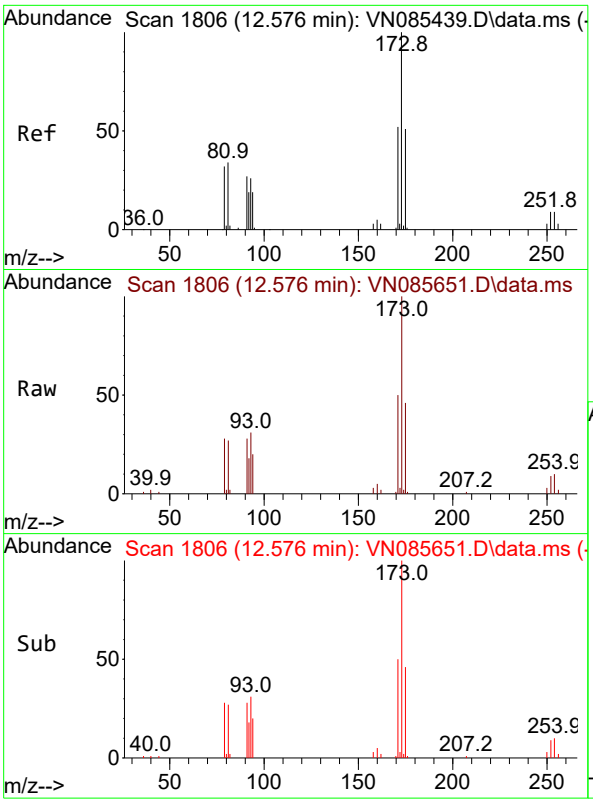



#70
Styrene
Concen: 21.885 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:104 Resp: 145039

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 48.2 | 42.5 | 63.7 |
| 103 | 54.7 | 43.8 | 65.8 |

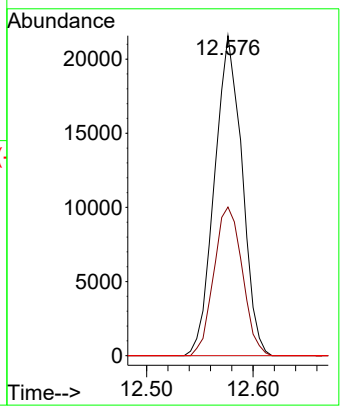





#71
Bromoform
Concen: 21.179 ug/l
RT: 12.576 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:173 Resp: 3871

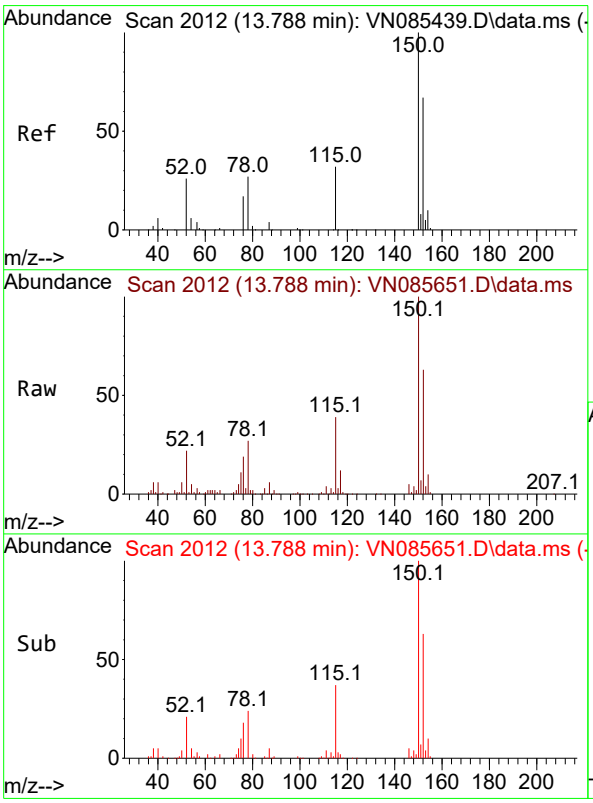
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 48.0 | 24.4 | 73.2 |
| 254 | 0.0 | 0.0 | 0.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

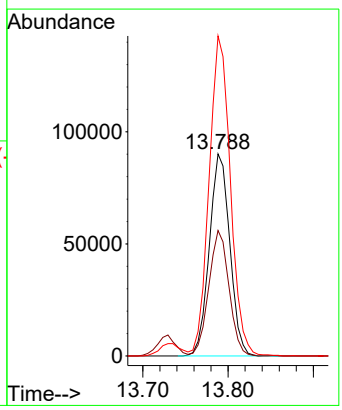
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

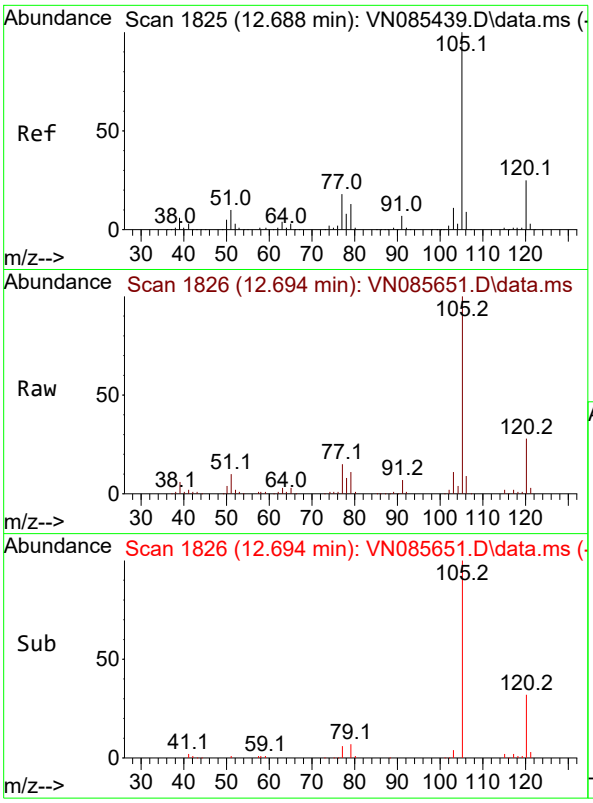



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:152 Resp: 150317

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 61.4 | 31.1 | 93.3 |
| 150 | 164.9 | 0.0 | 343.6 |

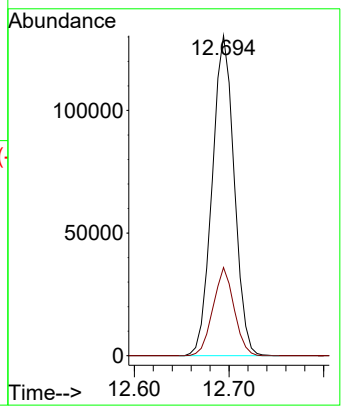





#73
Isopropylbenzene
Concen: 20.793 ug/l
RT: 12.694 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:105 Resp: 21094

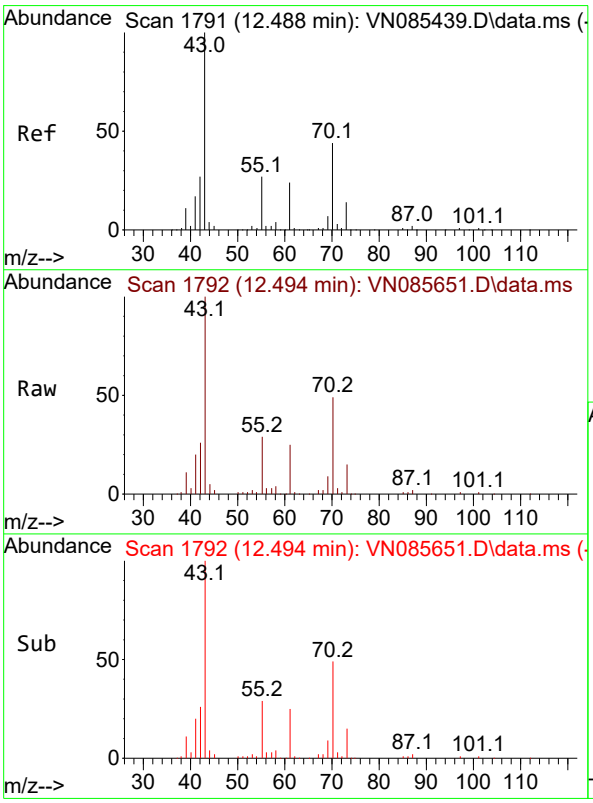
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.3 | 12.8 | 38.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

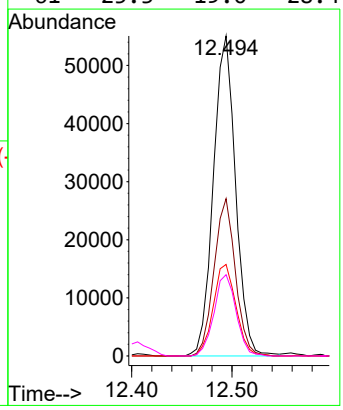
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

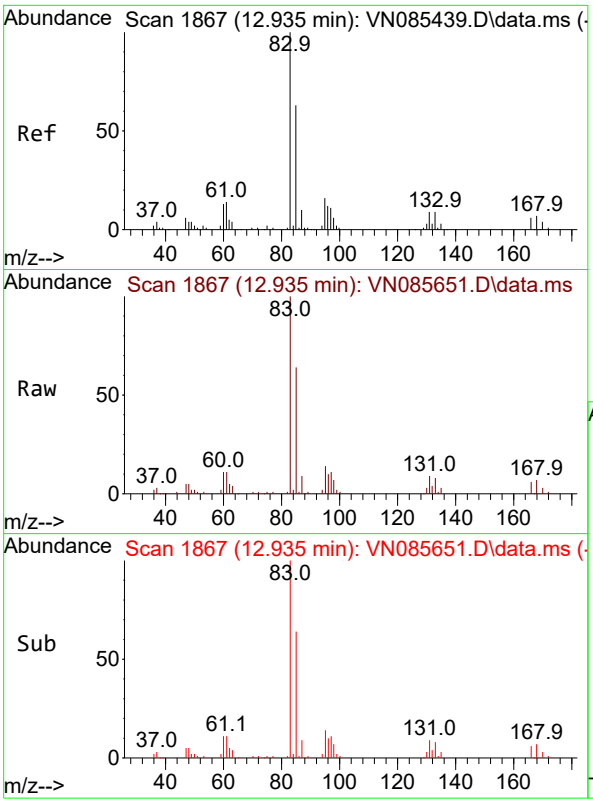



#74
N-amyl acetate
Concen: 18.598 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 43 Resp: 84808

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 47.3 | 34.0 | 51.0 |
| 55 | 29.2 | 21.4 | 32.2 |
| 61 | 25.3 | 19.0 | 28.4 |

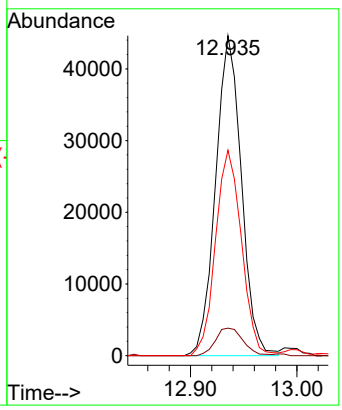





#75
1,1,2,2-Tetrachloroethane
Concen: 20.962 ug/l
RT: 12.935 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 83 Resp: 7512

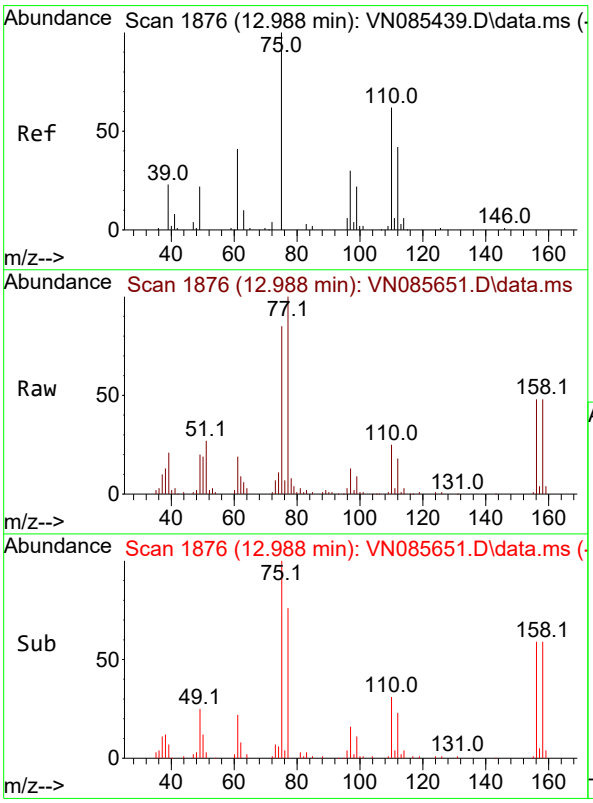
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 9.5 | 4.8 | 14.4 |
| 85 | 64.6 | 32.2 | 96.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

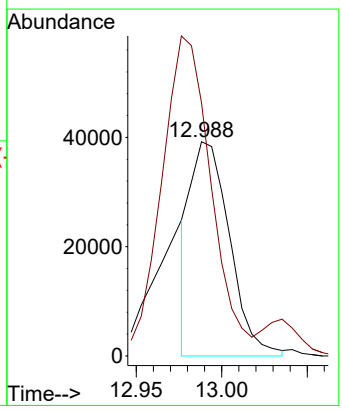
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

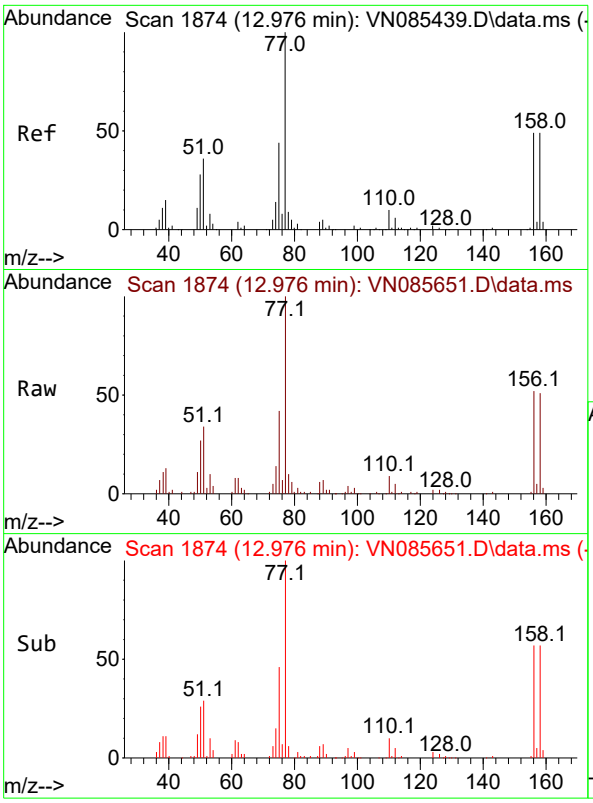



#76
1,2,3-Trichloropropane
Concen: 20.410 ug/l m
RT: 12.988 min Scan# 1876
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 75 Resp: 62358

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 189.0 | 109.7 | 329.2 |

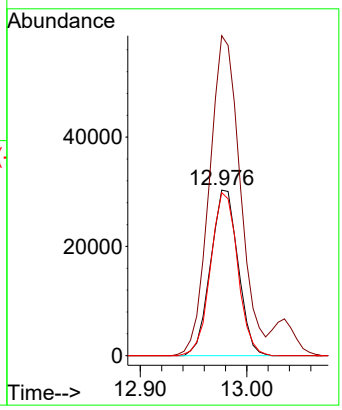





#77
Bromobenzene
Concen: 20.501 ug/l
RT: 12.976 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:156 Resp: 5434

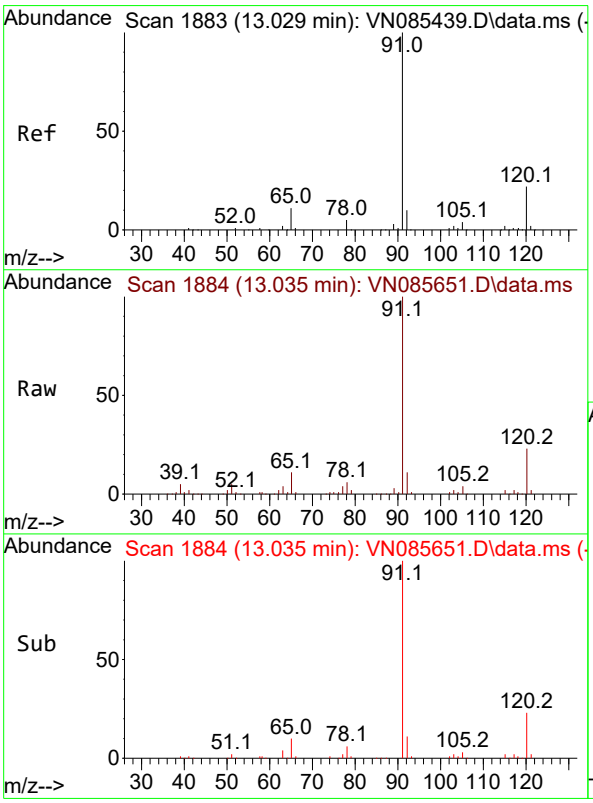
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 216.9 | 114.1 | 342.4 |
| 158 | 96.9 | 48.9 | 146.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

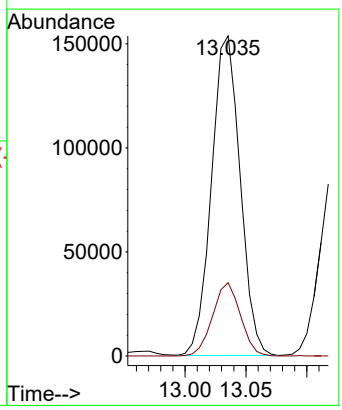
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

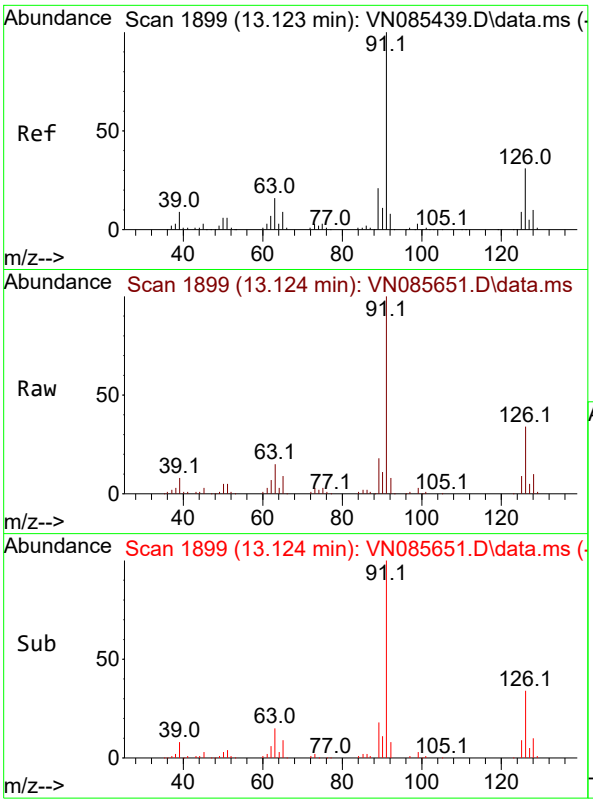



#78
n-propylbenzene
Concen: 20.891 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 91 Resp: 250899

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.2 | 10.9 | 32.6 |

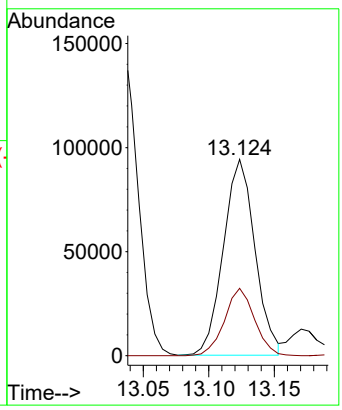





#79
2-Chlorotoluene
Concen: 20.353 ug/l
RT: 13.124 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 91 Resp: 15820

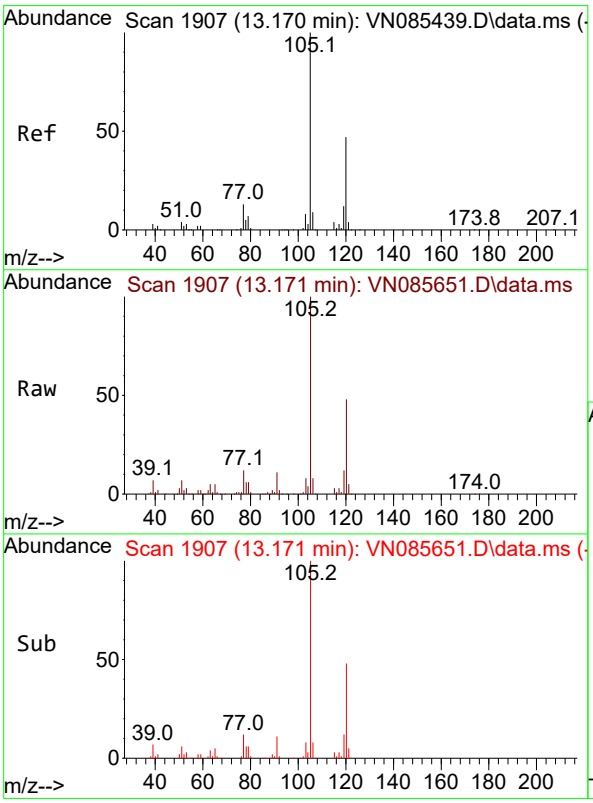
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 32.7 | 15.7 | 47.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations APPROVED**

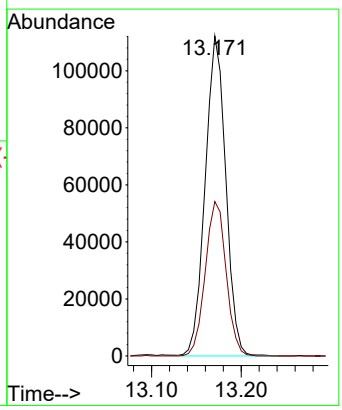
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

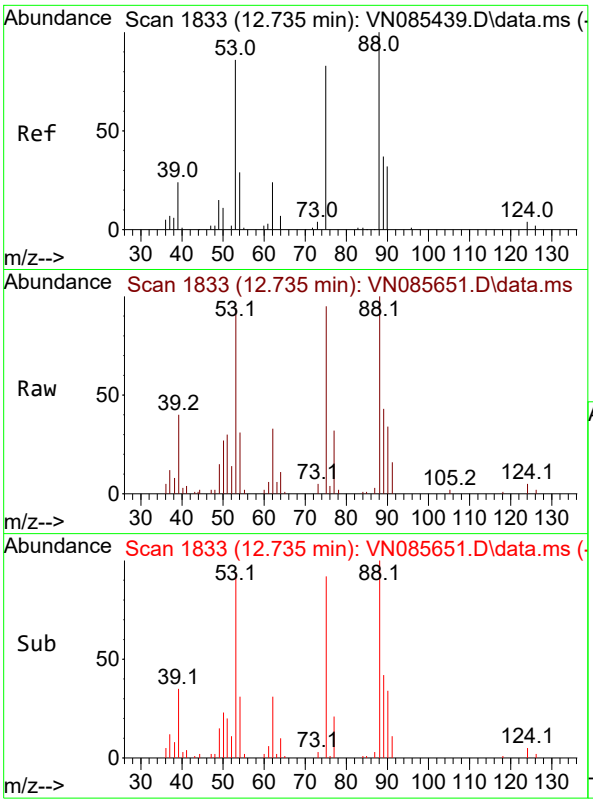



#80
1,3,5-Trimethylbenzene
Concen: 21.323 ug/l
RT: 13.171 min Scan# 1907
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:105 Resp: 178682

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 48.8 | 23.9 | 71.7 |

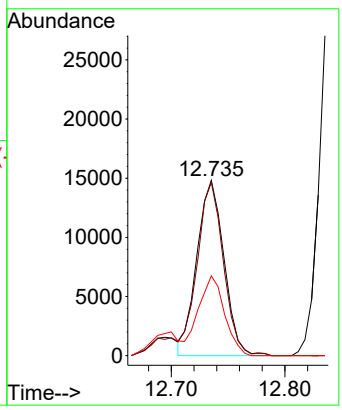





#81
trans-1,4-Dichloro-2-butene
Concen: 21.810 ug/l
RT: 12.735 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 75 Resp: 2462

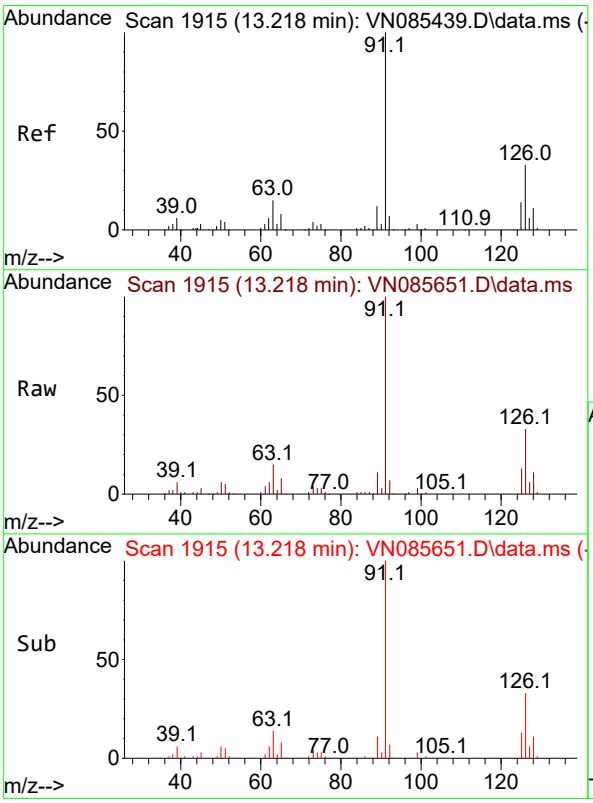
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 105.9 | 95.6 | 143.4 |
| 89 | 43.5 | 37.0 | 55.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

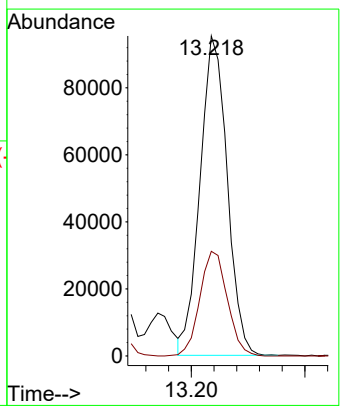
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

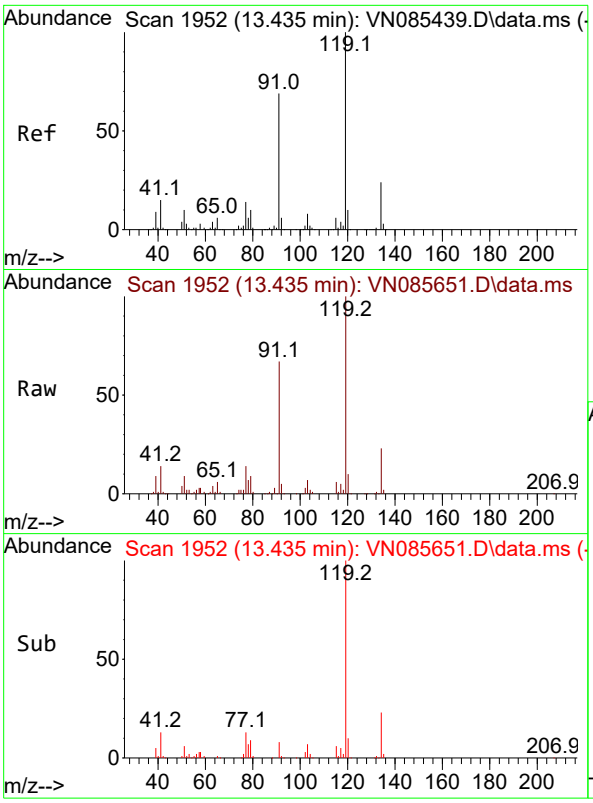



#82
4-Chlorotoluene
Concen: 20.405 ug/l
RT: 13.218 min Scan# 1915
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 91 Resp: 157925

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 33.2 | 15.9 | 47.7 |






#83
tert-Butylbenzene
Concen: 19.923 ug/l
RT: 13.435 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

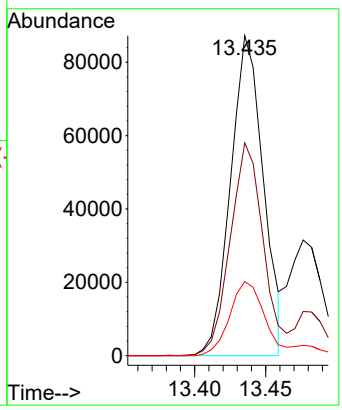
Tgt Ion:119 Resp: 14020

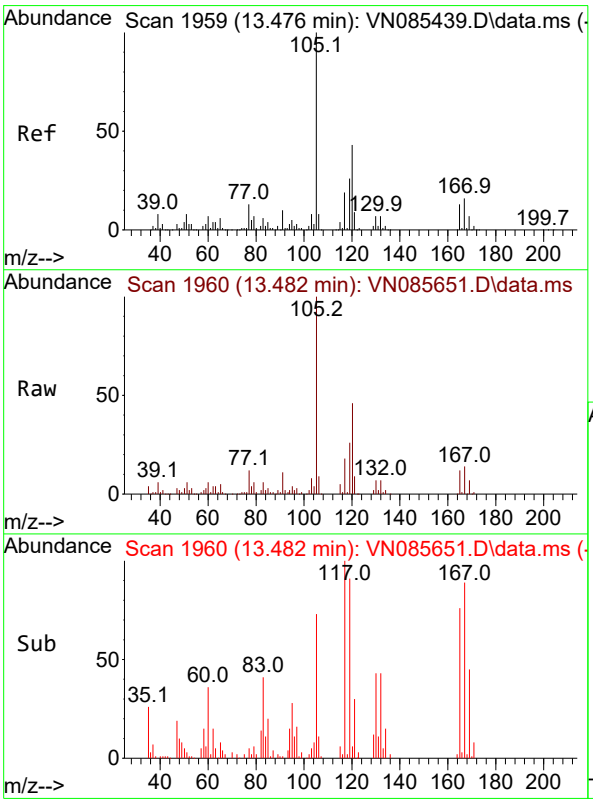
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 67.3 | 35.1 | 105.3 |
| 134 | 24.3 | 12.0 | 36.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

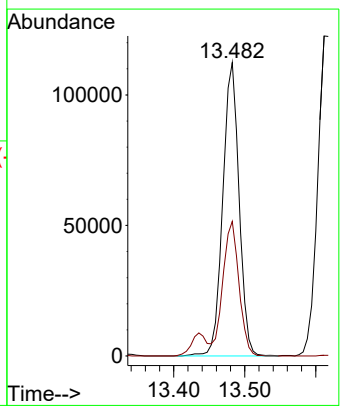


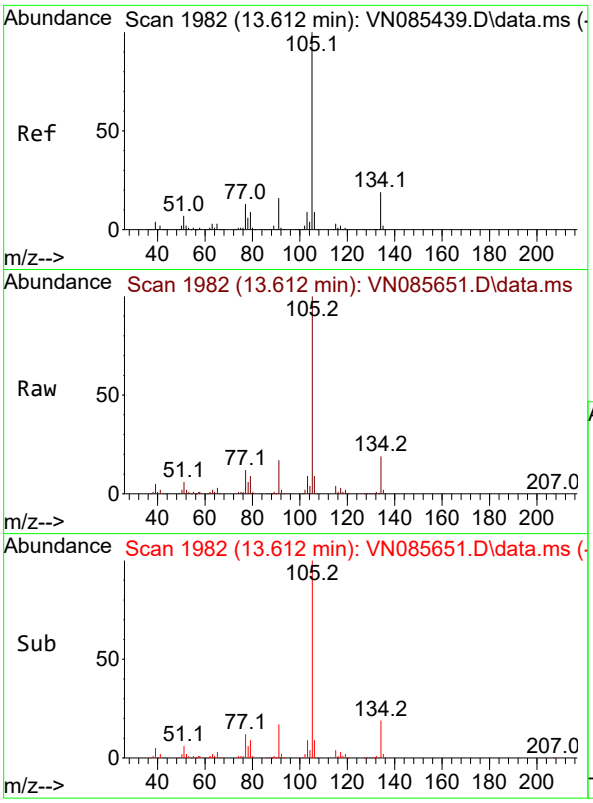




#84
1,2,4-Trimethylbenzene
Concen: 21.370 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:105 Resp: 178481

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 45.3 | 21.6 | 65.0 |

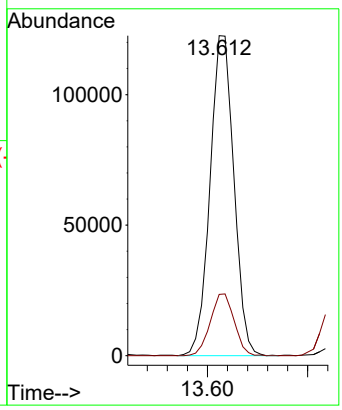





#85
sec-Butylbenzene
Concen: 20.804 ug/l
RT: 13.612 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:105 Resp: 20290

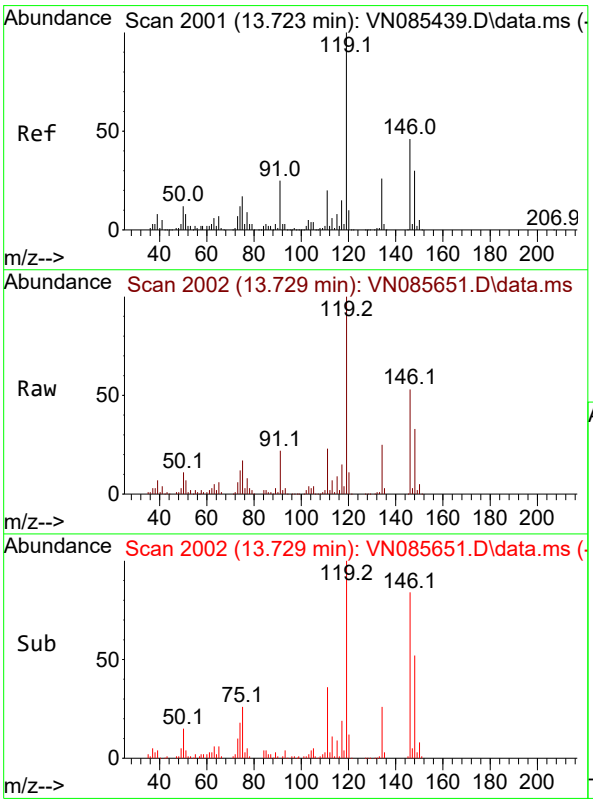
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.3 | 9.7 | 28.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

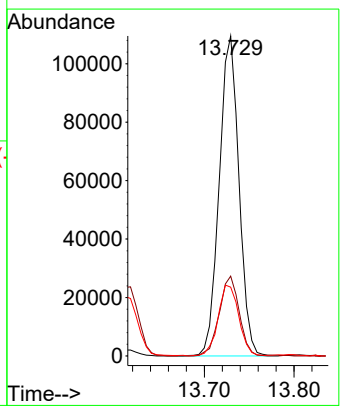
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

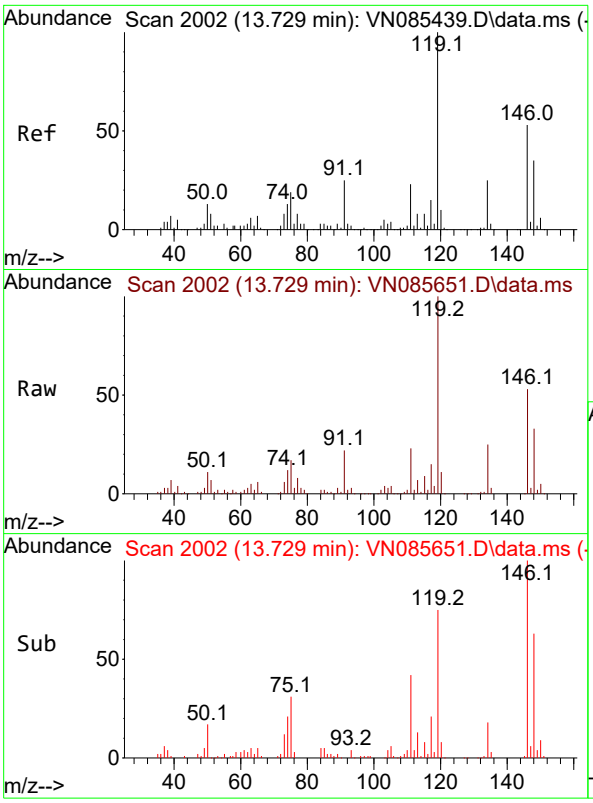



#86
p-Isopropyltoluene
Concen: 20.523 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:119 Resp: 167070

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.2 | 12.7 | 38.0 |
| 91 | 23.4 | 12.7 | 38.1 |

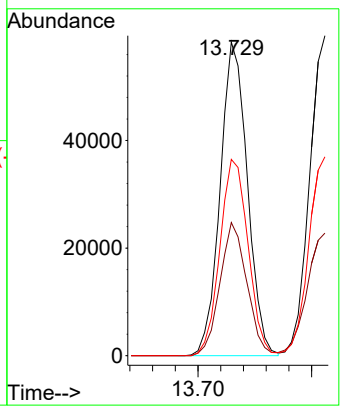





#87
1,3-Dichlorobenzene
Concen: 19.896 ug/l
RT: 13.729 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:146 Resp: 9711

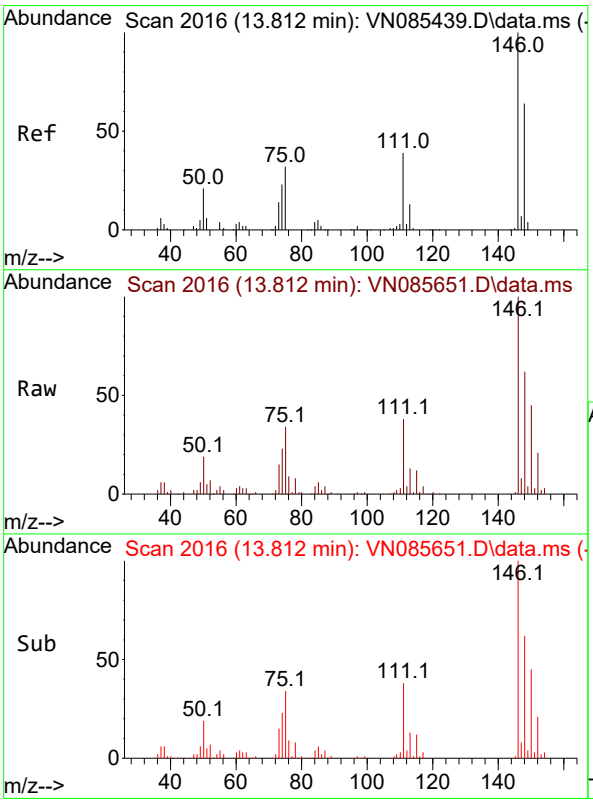
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.1 | 21.4 | 64.3 |
| 148 | 64.8 | 32.3 | 96.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

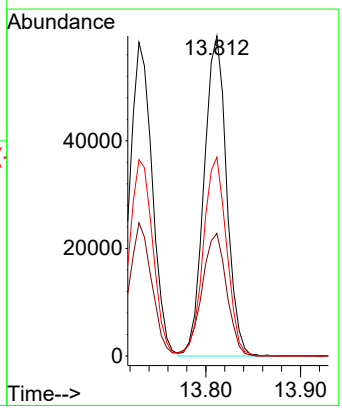
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

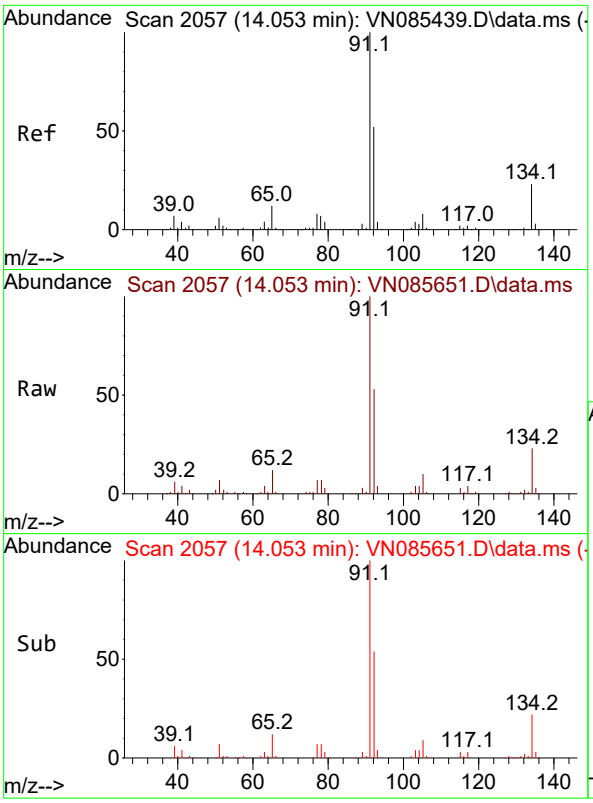



#88
1,4-Dichlorobenzene
Concen: 19.382 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:146 Resp: 98065

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.0 | 21.3 | 63.7 |
| 148 | 64.1 | 32.4 | 97.0 |

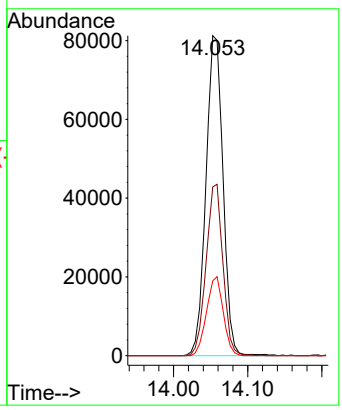





#89
n-Butylbenzene
Concen: 18.585 ug/l
RT: 14.053 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 91 Resp: 13004

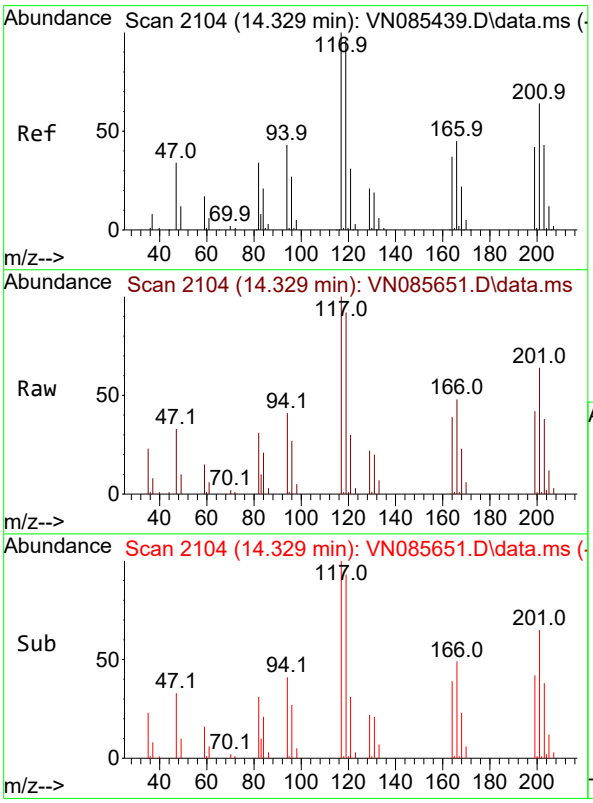
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 52.6 | 25.8 | 77.3 |
| 134 | 24.1 | 11.7 | 35.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

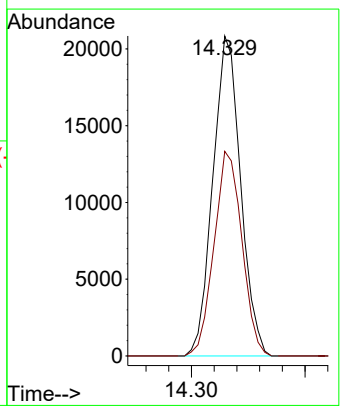
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

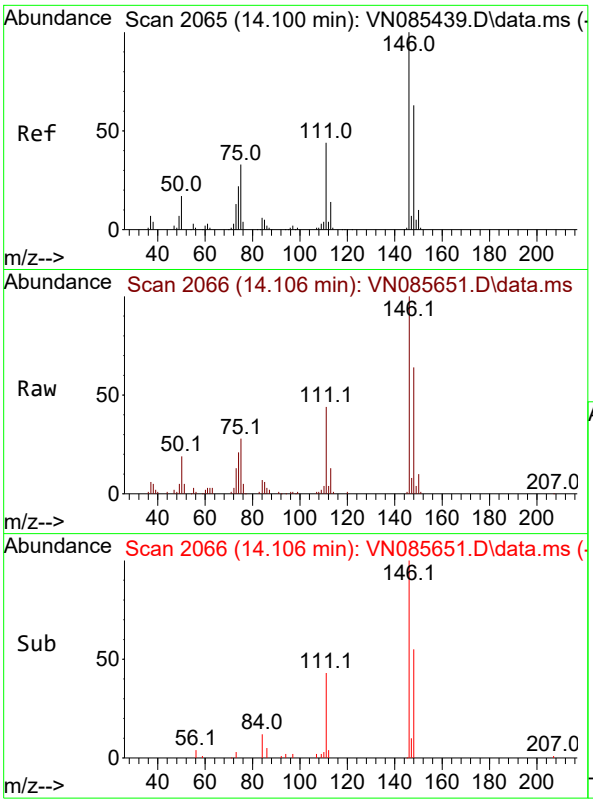



#90
Hexachloroethane
Concen: 19.041 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:117 Resp: 35354

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 64.2 | 33.7 | 101.0 |

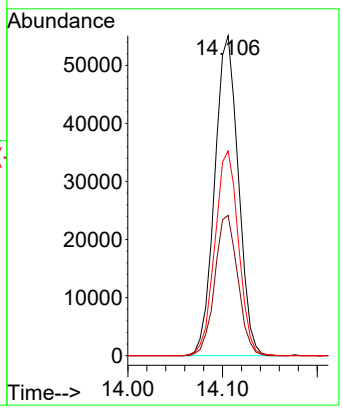





#91
1,2-Dichlorobenzene
Concen: 19.617 ug/l
RT: 14.106 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:146 Resp: 9551

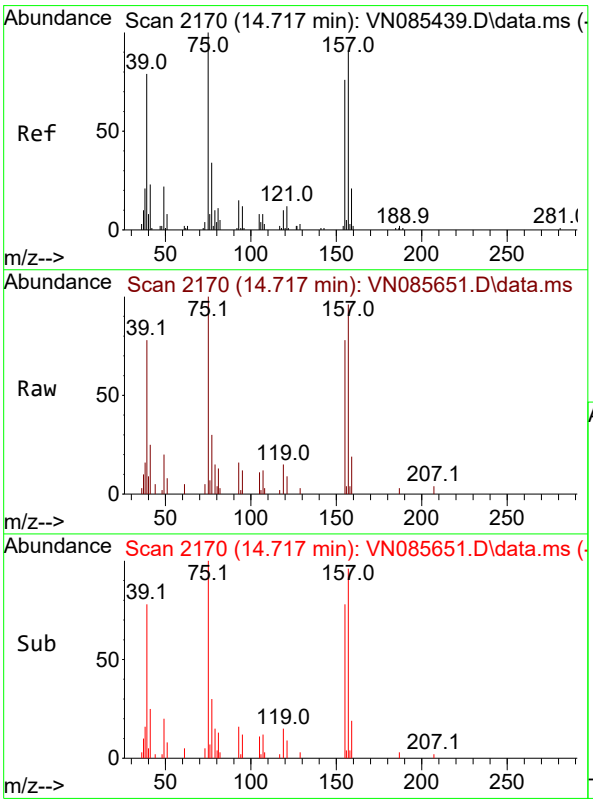
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.8 | 21.7 | 65.1 |
| 148 | 64.1 | 31.4 | 94.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

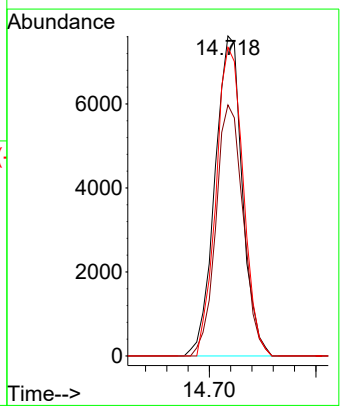
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

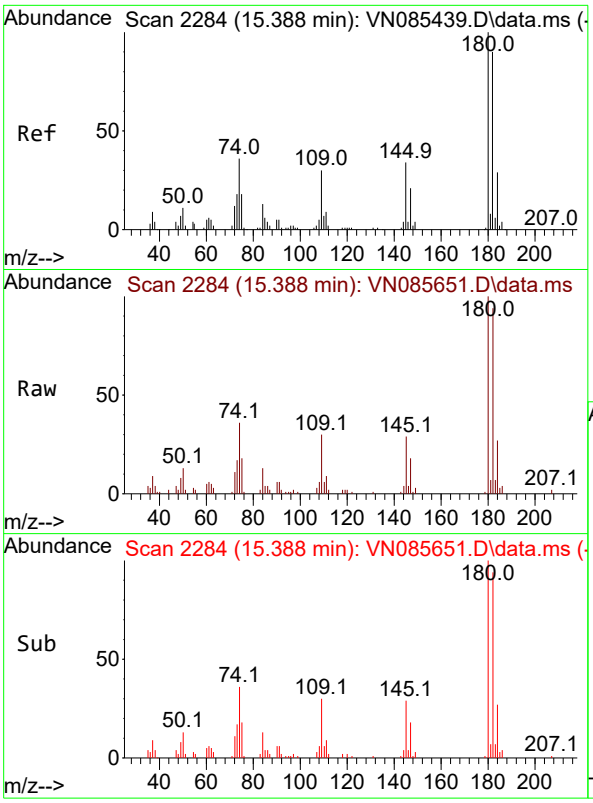



#92
1,2-Dibromo-3-Chloropropane
Concen: 20.732 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 75 Resp: 13567

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 78.3 | 36.4 | 109.2 |
| 157 | 95.9 | 45.4 | 136.1 |

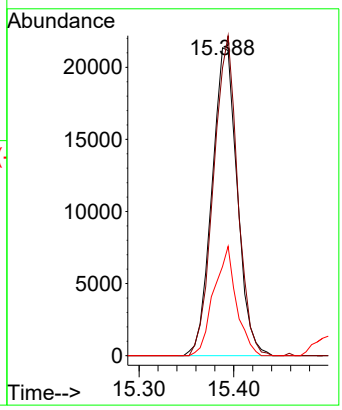





#93
1,2,4-Trichlorobenzene
Concen: 17.519 ug/l
RT: 15.388 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:180 Resp: 3964

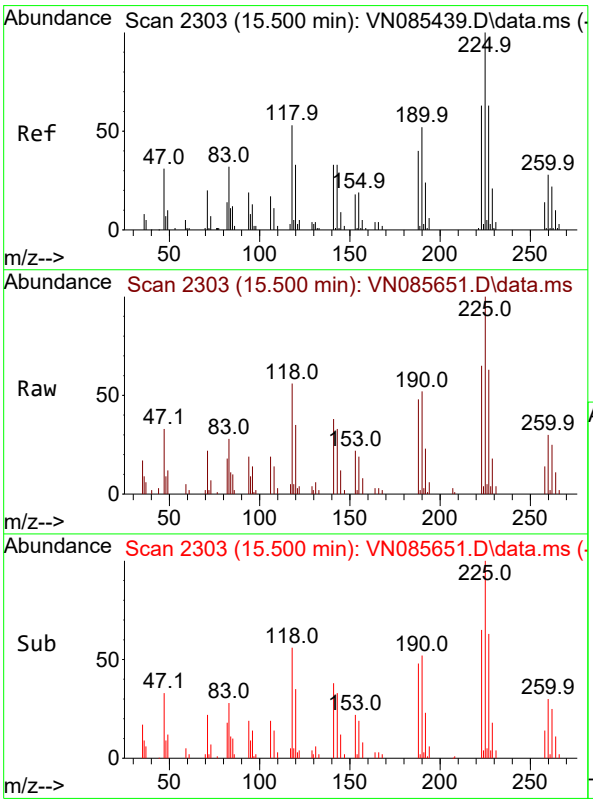
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 98.7 | 46.8 | 140.3 |
| 145 | 31.6 | 16.0 | 48.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations APPROVED**

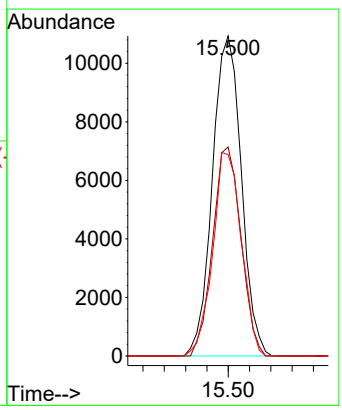
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

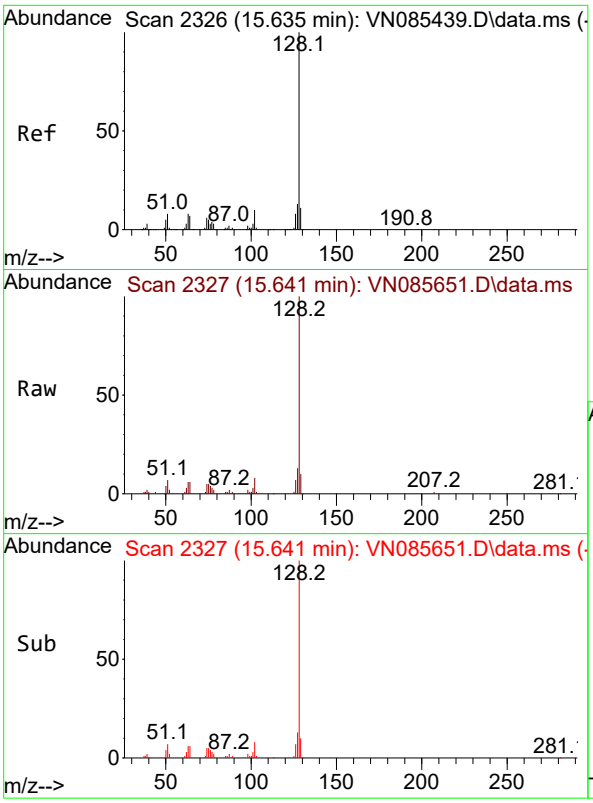



#94
Hexachlorobutadiene
Concen: 17.154 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:225 Resp: 20609

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 63.9 | 30.7 | 92.1 |
| 227 | 62.6 | 30.9 | 92.5 |

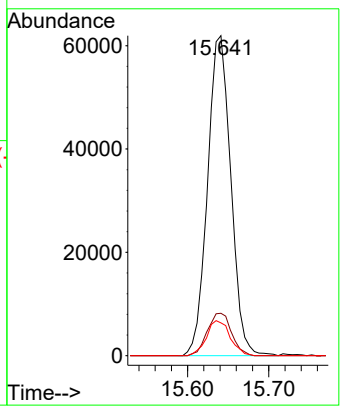





#95
Naphthalene
Concen: 18.276 ug/l
RT: 15.641 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:128 Resp: 12341

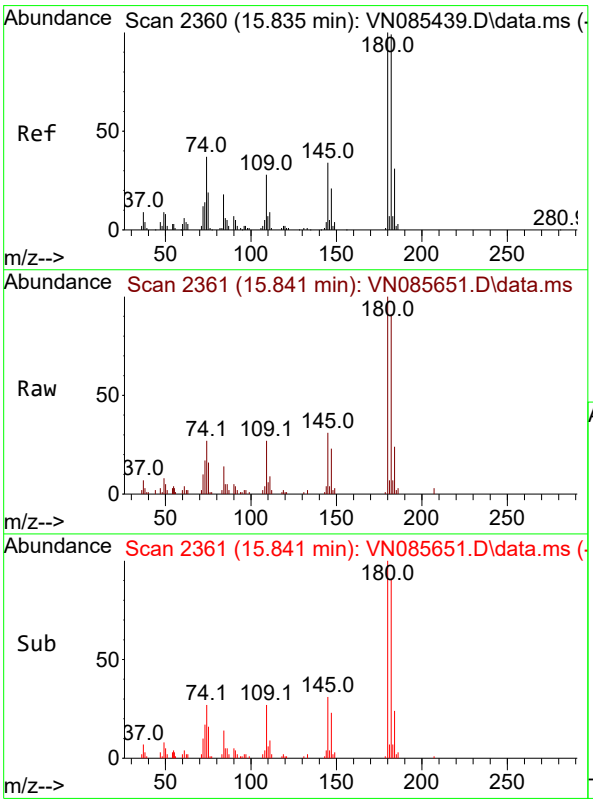
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 13.8 | 10.6 | 16.0 |
| 129 | 11.1 | 8.8 | 13.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0204WBS02

**Manual Integrations**
**APPROVED**

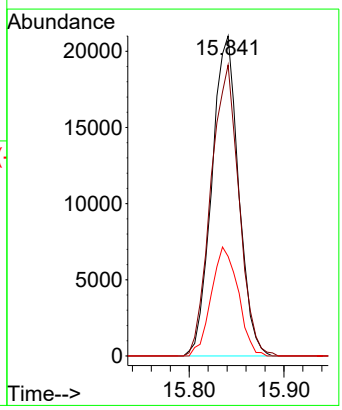
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025




#96
1,2,3-Trichlorobenzene
Concen: 17.977 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:180 Resp: 41163

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.5 | 47.4 | 142.2 |
| 145 | 34.3 | 16.9 | 50.7 |



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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | RU2 Engineering, LLC | Date Collected: | |
| Project: | NYCDDC SANTWOBR Brooklyn Bridge BBMCR | Date Received: | |
| Client Sample ID: | VN0203WBSD01 | SDG No.: | Q1241 |
| Lab Sample ID: | VN0203WBSD01 | 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: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN085620.D | 1 | | 02/03/25 14:22 | VN020325 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-01-4 | Vinyl Chloride | 18.9 | | 0.34 | 5.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 18.1 | | 0.26 | 5.00 | ug/L |
| 78-93-3 | 2-Butanone | 94.6 | | 1.30 | 25.0 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 17.8 | | 0.25 | 5.00 | ug/L |
| 67-66-3 | Chloroform | 19.8 | | 0.26 | 5.00 | ug/L |
| 71-43-2 | Benzene | 18.8 | | 0.16 | 5.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 17.5 | | 0.24 | 5.00 | ug/L |
| 79-01-6 | Trichloroethene | 18.2 | | 0.32 | 5.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 19.1 | | 0.25 | 5.00 | ug/L |
| 108-90-7 | Chlorobenzene | 19.6 | | 0.13 | 5.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 48.0 | | 74 - 125 | 96% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 51.0 | | 75 - 124 | 102% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 51.7 | | 86 - 113 | 103% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 48.8 | | 77 - 121 | 98% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 177000 | 8.224 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 317000 | 9.1 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 278000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 132000 | 13.788 | | | |

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_N\Data\VN020325\
Data File : VN085620.D
Acq On : 03 Feb 2025 14:22
Operator : JC\MD
Sample : VN0203WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 04 00:58:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 177381 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 316818 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 277592 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 132351 | 50.000 | ug/l | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.577 | 65 | 137375 | 47.978 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 95.960% | | | |
| 35) Dibromofluoromethane | 8.165 | 113 | 112154 | 51.027 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 102.060% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 403865 | 51.716 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 103.440% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 130381 | 48.807 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 97.620% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 36725 | 15.291 | ug/l | 96 |
| 3) Chloromethane | 2.359 | 50 | 37630 | 14.471 | ug/l | 98 |
| 4) Vinyl Chloride | 2.512 | 62 | 49451 | 18.920 | ug/l | 93 |
| 5) Bromomethane | 2.959 | 94 | 32239 | 20.420 | ug/l | 96 |
| 6) Chloroethane | 3.124 | 64 | 33310 | 20.102 | ug/l | 100 |
| 7) Trichlorofluoromethane | 3.500 | 101 | 68134 | 17.966 | ug/l | 98 |
| 8) Diethyl Ether | 3.965 | 74 | 23505 | 17.941 | ug/l | 89 |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 41678 | 19.512 | ug/l | 98 |
| 10) Methyl Iodide | 4.594 | 142 | 46834 | 19.146 | ug/l | 95 |
| 11) Tert butyl alcohol | 5.512 | 59 | 33754 | 102.951 | ug/l | 98 |
| 12) 1,1-Dichloroethene | 4.347 | 96 | 34518 | 18.132 | ug/l | 83 |
| 13) Acrolein | 4.183 | 56 | 22257 | 49.729 | ug/l | 96 |
| 14) Allyl chloride | 5.024 | 41 | 51626 | 16.712 | ug/l | 92 |
| 15) Acrylonitrile | 5.724 | 53 | 103456 | 99.342 | ug/l | 99 |
| 16) Acetone | 4.424 | 43 | 83180 | 89.909 | ug/l | 94 |
| 17) Carbon Disulfide | 4.712 | 76 | 82042 | 13.997 | ug/l | 98 |
| 18) Methyl Acetate | 5.018 | 43 | 59280 | 21.072 | ug/l | 91 |
| 19) Methyl tert-butyl Ether | 5.794 | 73 | 123329 | 19.951 | ug/l | 99 |
| 20) Methylene Chloride | 5.271 | 84 | 44642 | 19.492 | ug/l | 91 |
| 21) trans-1,2-Dichloroethene | 5.789 | 96 | 37520 | 18.442 | ug/l | 94 |
| 22) Diisopropyl ether | 6.665 | 45 | 123987 | 18.083 | ug/l | 98 |
| 23) Vinyl Acetate | 6.600 | 43 | 413834 | 86.245 | ug/l | 95 |
| 24) 1,1-Dichloroethane | 6.565 | 63 | 79023 | 18.901 | ug/l | 97 |
| 25) 2-Butanone | 7.482 | 43 | 128769 | 94.582 | ug/l | 95 |
| 26) 2,2-Dichloropropane | 7.488 | 77 | 67615 | 20.004 | ug/l | 96 |
| 27) cis-1,2-Dichloroethene | 7.488 | 96 | 47023 | 19.623 | ug/l | 93 |
| 28) Bromochloromethane | 7.812 | 49 | 36218 | 18.620 | ug/l | 89 |
| 29) Tetrahydrofuran | 7.841 | 42 | 81866 | 94.844 | ug/l | 91 |
| 30) Chloroform | 7.965 | 83 | 85403 | 19.765 | ug/l | 97 |
| 31) Cyclohexane | 8.253 | 56 | 56062 | 15.428 | ug/l # | 82 |
| 32) 1,1,1-Trichloroethane | 8.165 | 97 | 71876 | 18.963 | ug/l | 97 |
| 36) 1,1-Dichloropropene | 8.371 | 75 | 51010 | 16.536 | ug/l | 99 |
| 37) Ethyl Acetate | 7.559 | 43 | 51943 | 16.682 | ug/l # | 97 |
| 38) Carbon Tetrachloride | 8.359 | 117 | 62929 | 17.819 | ug/l | 99 |
| 39) Methylcyclohexane | 9.594 | 83 | 47049 | 16.231 | ug/l | 97 |
| 40) Benzene | 8.600 | 78 | 174408 | 18.817 | ug/l | 99 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085620.D
Acq On : 03 Feb 2025 14:22
Operator : JC\MD
Sample : VN0203WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 04 00:58:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.777 | 41 | 26968 | 16.648 | ug/l | # | 88 |
| 42) 1,2-Dichloroethane | 8.665 | 62 | 61132 | 17.512 | ug/l | | 97 |
| 43) Isopropyl Acetate | 8.682 | 43 | 91136 | 18.267 | ug/l | | 97 |
| 44) Trichloroethene | 9.353 | 130 | 39267 | 18.200 | ug/l | | 99 |
| 45) 1,2-Dichloropropane | 9.618 | 63 | 44301 | 18.712 | ug/l | | 98 |
| 46) Dibromomethane | 9.706 | 93 | 32808 | 19.205 | ug/l | | 99 |
| 47) Bromodichloromethane | 9.882 | 83 | 67537 | 19.406 | ug/l | | 99 |
| 48) Methyl methacrylate | 9.676 | 41 | 36989 | 16.475 | ug/l | # | 87 |
| 49) 1,4-Dioxane | 9.688 | 88 | 16068 | 424.978 | ug/l | | 91 |
| 51) 4-Methyl-2-Pentanone | 10.441 | 43 | 276729 | 95.585 | ug/l | | 95 |
| 52) Toluene | 10.629 | 92 | 107257 | 19.972 | ug/l | | 97 |
| 53) t-1,3-Dichloropropene | 10.835 | 75 | 63248 | 19.230 | ug/l | | 96 |
| 54) cis-1,3-Dichloropropene | 10.312 | 75 | 65503 | 18.645 | ug/l | | 94 |
| 55) 1,1,2-Trichloroethane | 11.012 | 97 | 44024 | 20.714 | ug/l | | 97 |
| 56) Ethyl methacrylate | 10.871 | 69 | 58187 | 17.556 | ug/l | | 91 |
| 57) 1,3-Dichloropropane | 11.159 | 76 | 74646 | 20.199 | ug/l | | 99 |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63 | 106559 | 79.007 | ug/l | | 98 |
| 59) 2-Hexanone | 11.194 | 43 | 196651 | 96.535 | ug/l | | 95 |
| 60) Dibromochloromethane | 11.359 | 129 | 51933 | 20.240 | ug/l | | 98 |
| 61) 1,2-Dibromoethane | 11.465 | 107 | 42700 | 20.183 | ug/l | | 99 |
| 64) Tetrachloroethene | 11.100 | 164 | 36100 | 19.076 | ug/l | | 95 |
| 65) Chlorobenzene | 11.888 | 112 | 119360 | 19.628 | ug/l | | 100 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 45386 | 20.335 | ug/l | | 98 |
| 67) Ethyl Benzene | 11.959 | 91 | 189154 | 19.098 | ug/l | | 100 |
| 68) m/p-Xylenes | 12.070 | 106 | 148722 | 40.628 | ug/l | | 95 |
| 69) o-Xylene | 12.394 | 106 | 68283 | 19.519 | ug/l | | 96 |
| 70) Styrene | 12.412 | 104 | 117567 | 20.307 | ug/l | | 96 |
| 71) Bromoform | 12.576 | 173 | 34300 | 21.478 | ug/l | # | 97 |
| 73) Isopropylbenzene | 12.694 | 105 | 172454 | 19.306 | ug/l | | 99 |
| 74) N-amyl acetate | 12.494 | 43 | 67688 | 16.859 | ug/l | | 92 |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 66716 | 21.144 | ug/l | | 100 |
| 76) 1,2,3-Trichloropropane | 12.994 | 75 | 59990m | 22.301 | ug/l | | |
| 77) Bromobenzene | 12.976 | 156 | 45507 | 19.499 | ug/l | | 95 |
| 78) n-propylbenzene | 13.035 | 91 | 208681 | 19.734 | ug/l | | 99 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 132631 | 19.380 | ug/l | | 97 |
| 80) 1,3,5-Trimethylbenzene | 13.170 | 105 | 147177 | 19.947 | ug/l | | 98 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 20135 | 20.251 | ug/l | | 90 |
| 82) 4-Chlorotoluene | 13.217 | 91 | 131384 | 19.280 | ug/l | | 98 |
| 83) tert-Butylbenzene | 13.435 | 119 | 119331 | 19.259 | ug/l | | 97 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 146712 | 19.950 | ug/l | | 98 |
| 85) sec-Butylbenzene | 13.612 | 105 | 172226 | 20.055 | ug/l | | 99 |
| 86) p-Isopropyltoluene | 13.729 | 119 | 137244 | 19.216 | ug/l | | 99 |
| 87) 1,3-Dichlorobenzene | 13.729 | 146 | 83838 | 19.507 | ug/l | | 99 |
| 88) 1,4-Dichlorobenzene | 13.806 | 146 | 83412 | 18.724 | ug/l | | 100 |
| 89) n-Butylbenzene | 14.053 | 91 | 112690 | 18.291 | ug/l | | 100 |
| 90) Hexachloroethane | 14.335 | 117 | 31482 | 19.257 | ug/l | | 98 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 81715 | 19.061 | ug/l | | 98 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75 | 11390 | 19.768 | ug/l | | 94 |
| 93) 1,2,4-Trichlorobenzene | 15.388 | 180 | 35819 | 17.977 | ug/l | | 99 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 18661 | 17.641 | ug/l | | 99 |
| 95) Naphthalene | 15.641 | 128 | 107097 | 18.013 | ug/l | | 99 |
| 96) 1,2,3-Trichlorobenzene | 15.835 | 180 | 36123 | 17.917 | ug/l | | 98 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085620.D
Acq On : 03 Feb 2025 14:22
Operator : JC\MD
Sample : VN0203WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 04 00:58:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

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

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

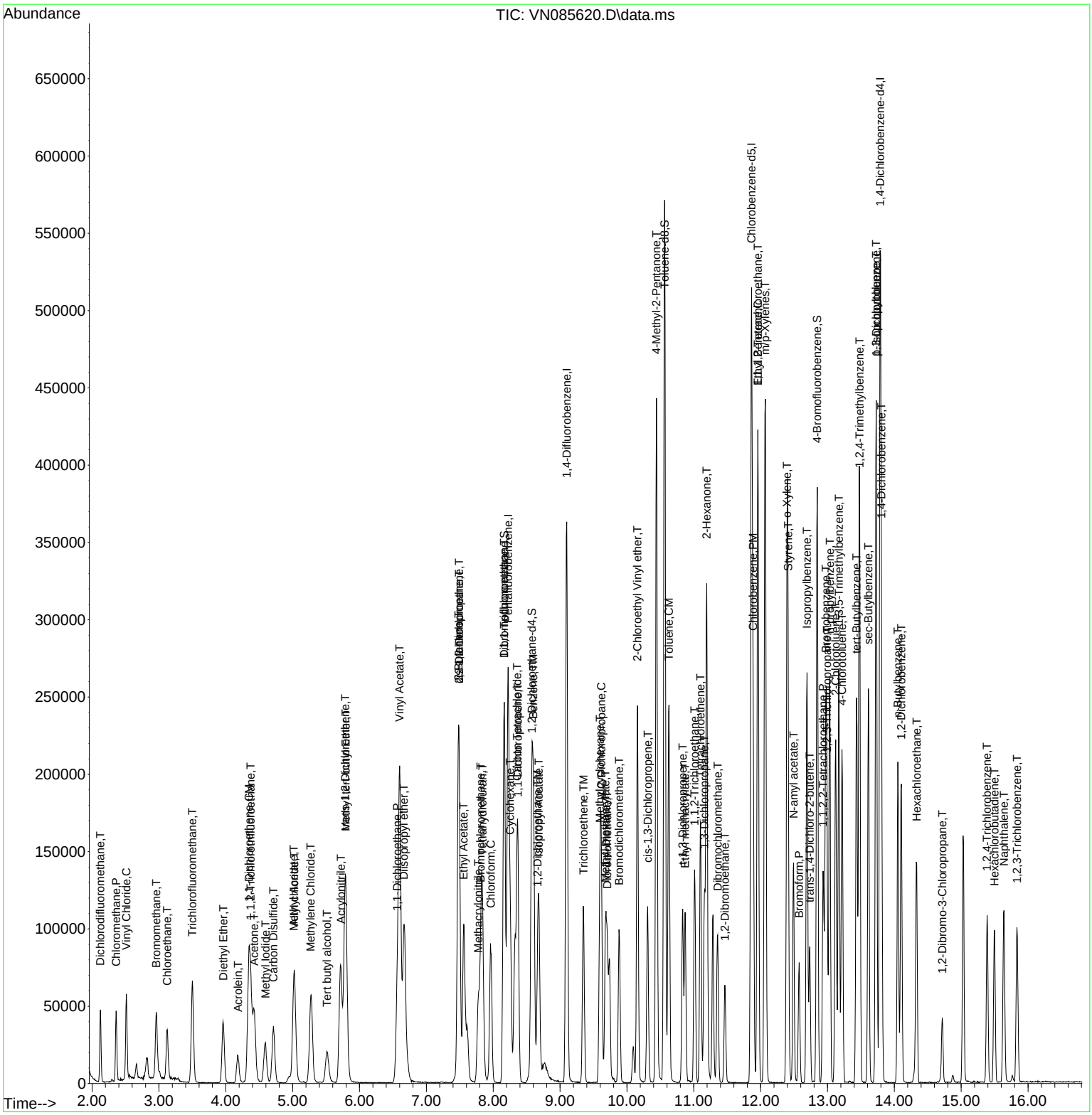
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085620.D
Acq On : 03 Feb 2025 14:22
Operator : JC\MD
Sample : VN0203WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

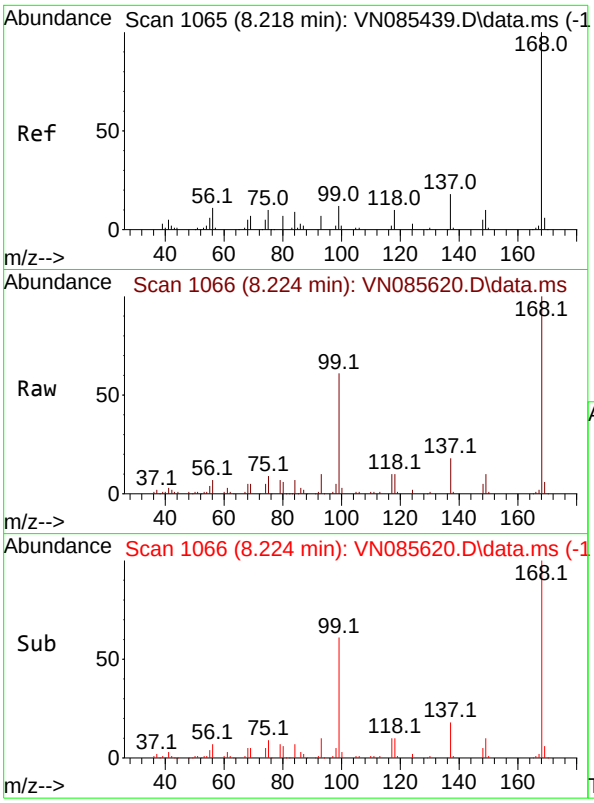
Quant Time: Feb 04 00:58:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

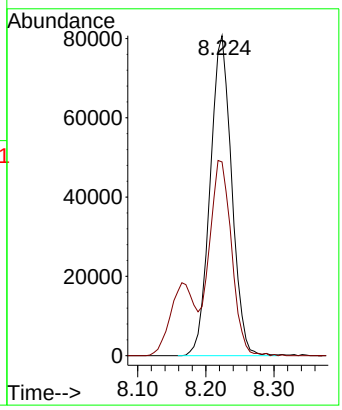





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:168 Resp: 17738

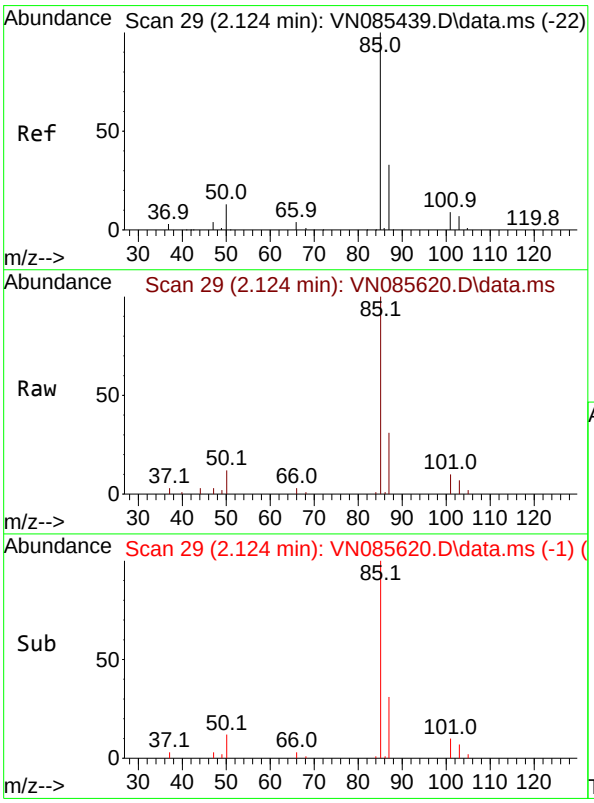
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 60.6 | 53.6 | 80.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

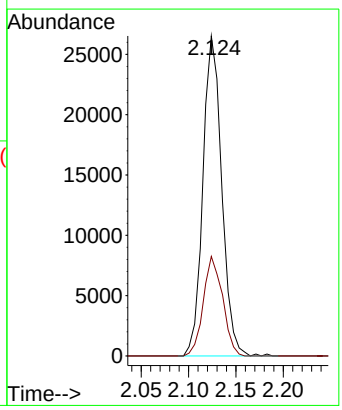
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

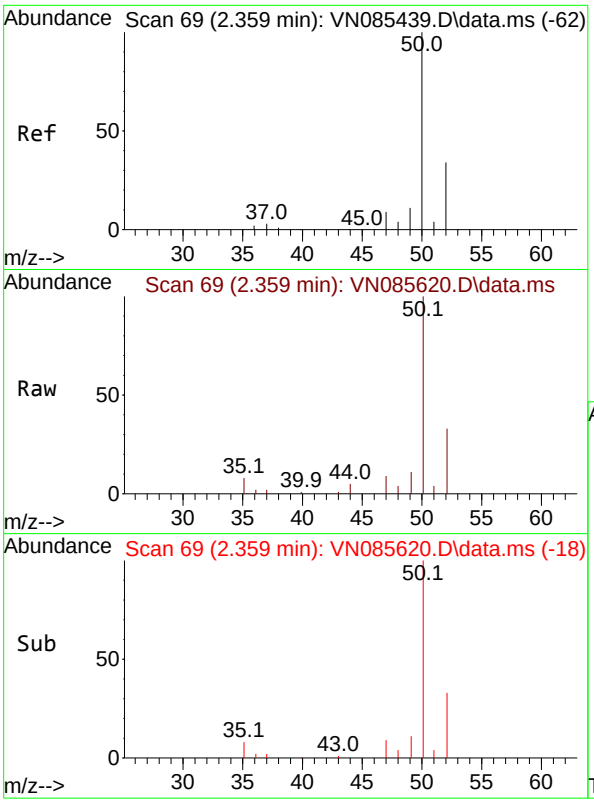



#2
Dichlorodifluoromethane
Concen: 15.291 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 85 Resp: 36725

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 31.1 | 16.7 | 50.1 |

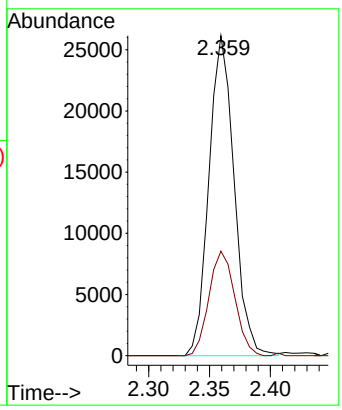





#3
Chloromethane
Concen: 14.471 ug/l
RT: 2.359 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 50 Resp: 3763

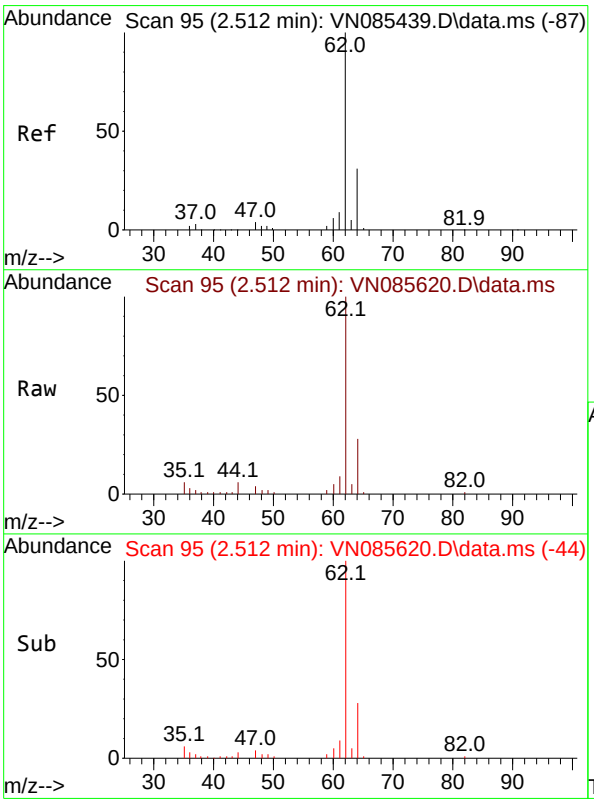
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 32.7 | 27.0 | 40.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

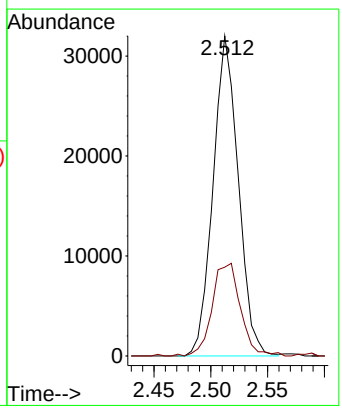
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

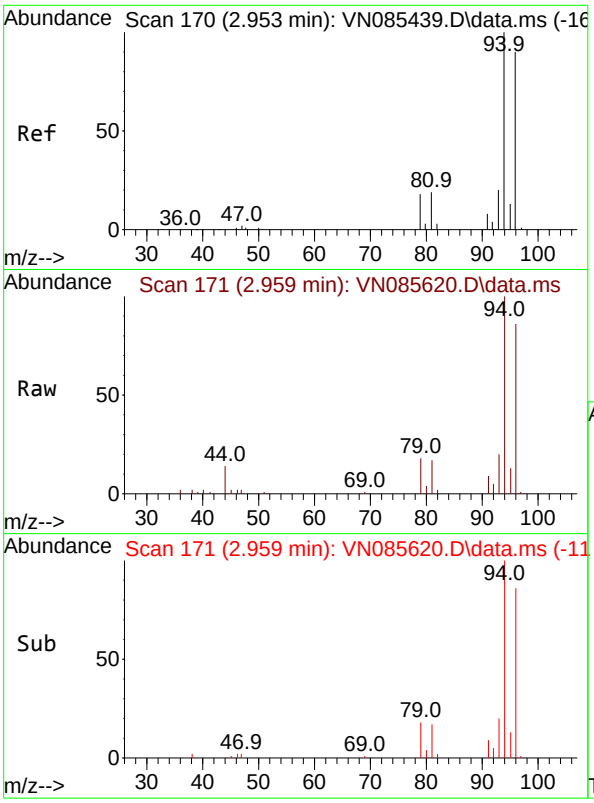



#4
Vinyl Chloride
Concen: 18.920 ug/l
RT: 2.512 min Scan# 95
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 62 Resp: 49451

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 27.2 | 24.8 | 37.2 |

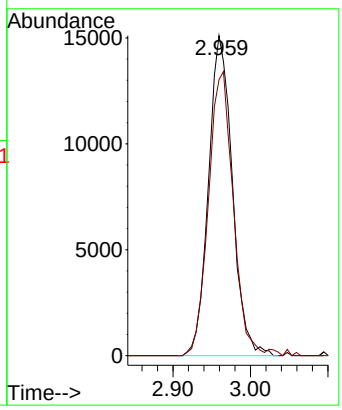





#5
Bromomethane
Concen: 20.420 ug/l
RT: 2.959 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 94 Resp: 3223

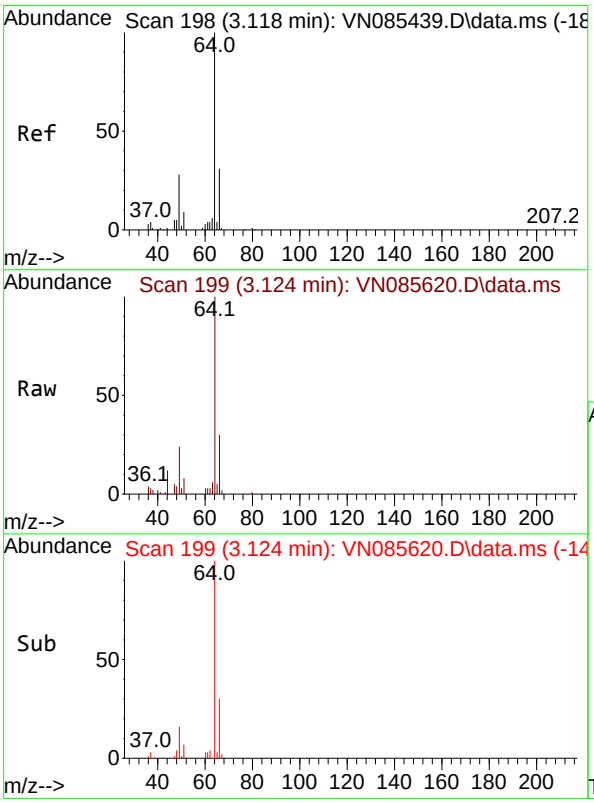
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 86.3 | 71.8 | 107.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

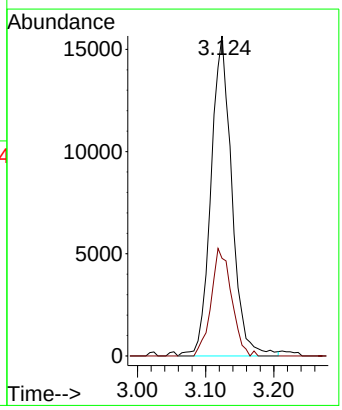
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

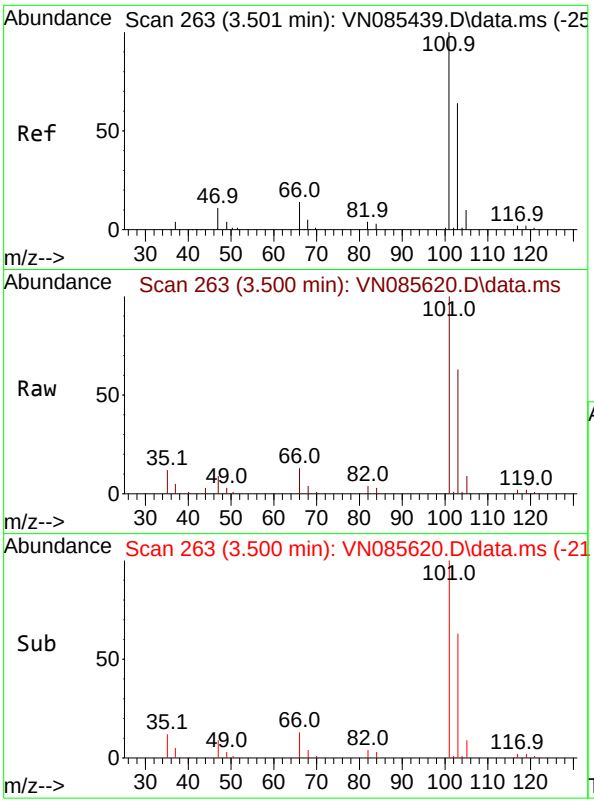



#6
Chloroethane
Concen: 20.102 ug/l
RT: 3.124 min Scan# 199
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 64 Resp: 33310

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 30.5 | 24.6 | 36.8 |

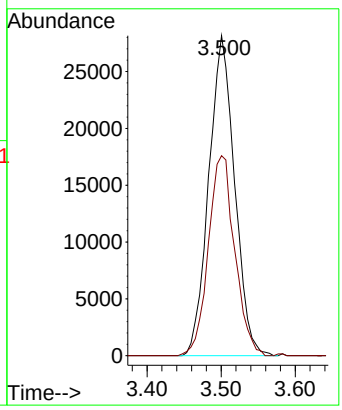





#7
Trichlorofluoromethane
Concen: 17.966 ug/l
RT: 3.500 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:101 Resp: 6813

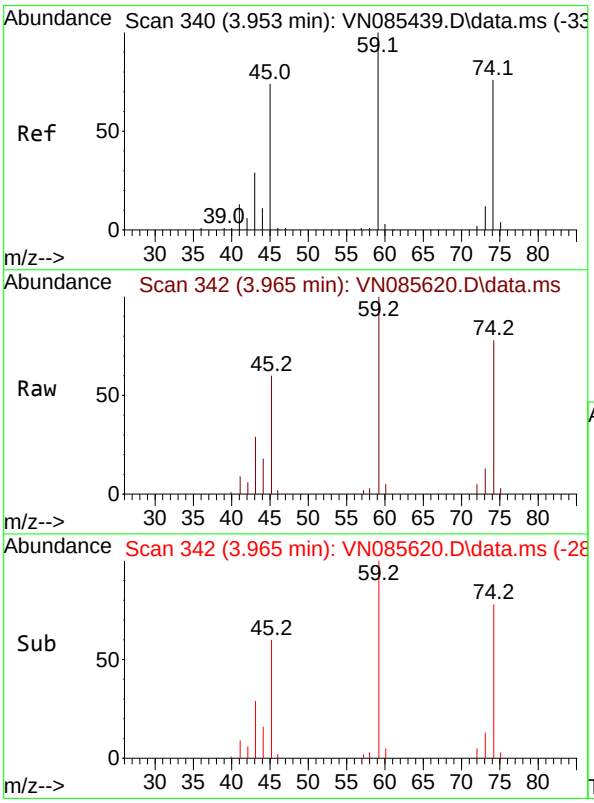
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 62.5 | 51.4 | 77.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

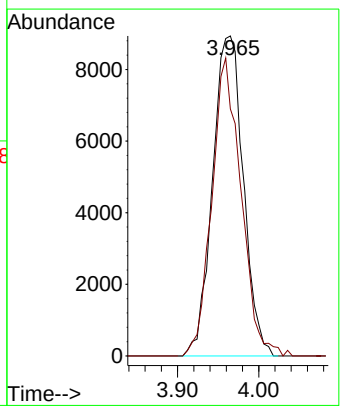
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

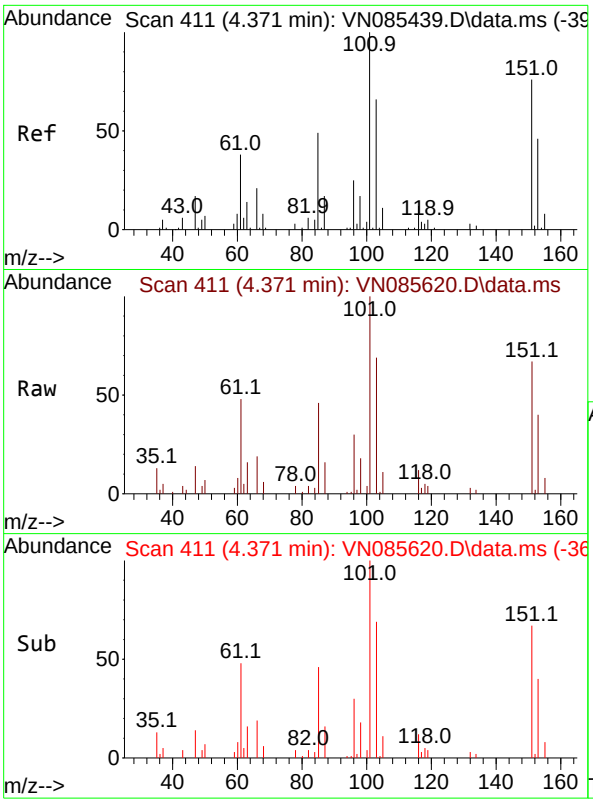



#8
Diethyl Ether
Concen: 17.941 ug/l
RT: 3.965 min Scan# 342
Delta R.T. 0.012 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 74 Resp: 23505

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 88.6 | 49.7 | 149.1 |

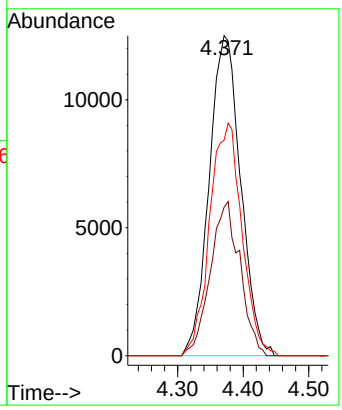





#9
1,1,2-Trichlorotrifluoroethane
Concen: 19.512 ug/l
RT: 4.371 min Scan# 41
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:101 Resp: 4167

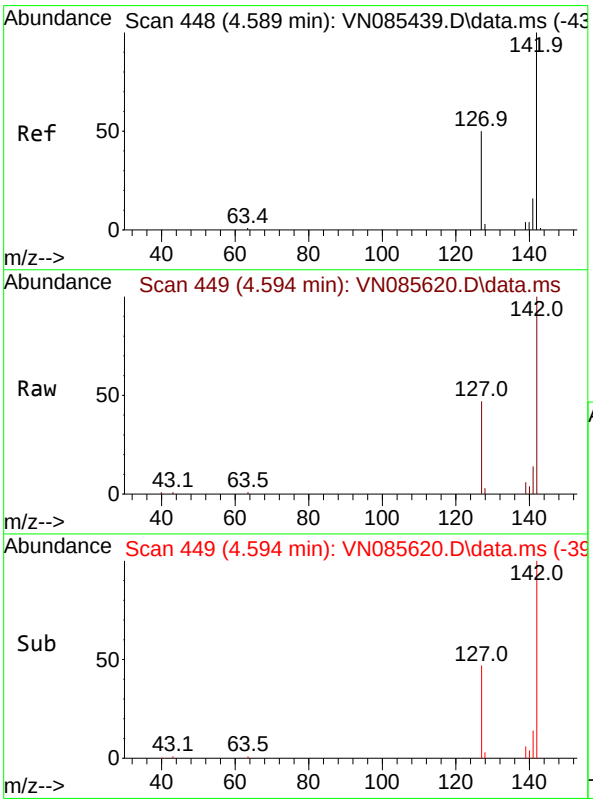
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 45.5 | 37.8 | 56.8 |
| 151 | 74.3 | 58.8 | 88.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

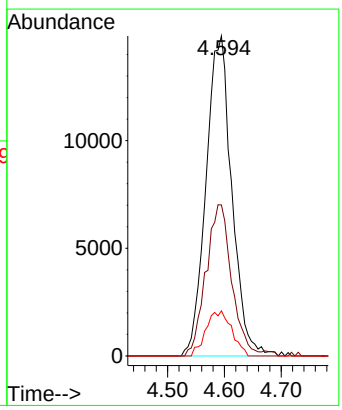
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

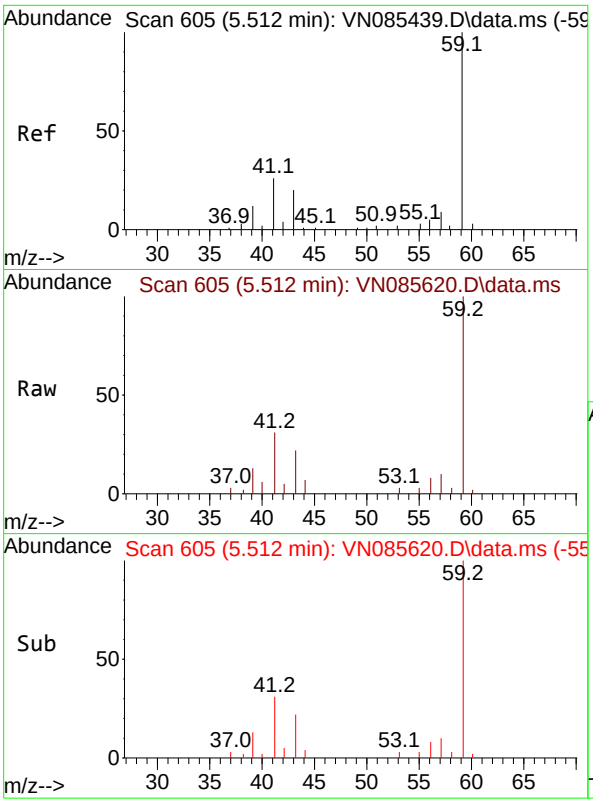



#10
Methyl Iodide
Concen: 19.146 ug/l
RT: 4.594 min Scan# 449
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:142 Resp: 46834

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 47.2 | 40.3 | 60.5 |
| 141 | 14.1 | 12.8 | 19.2 |






#11
Tert butyl alcohol
Concen: 102.951 ug/l
RT: 5.512 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

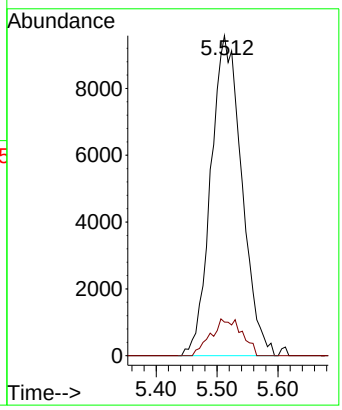
Tgt Ion: 59 Resp: 3375

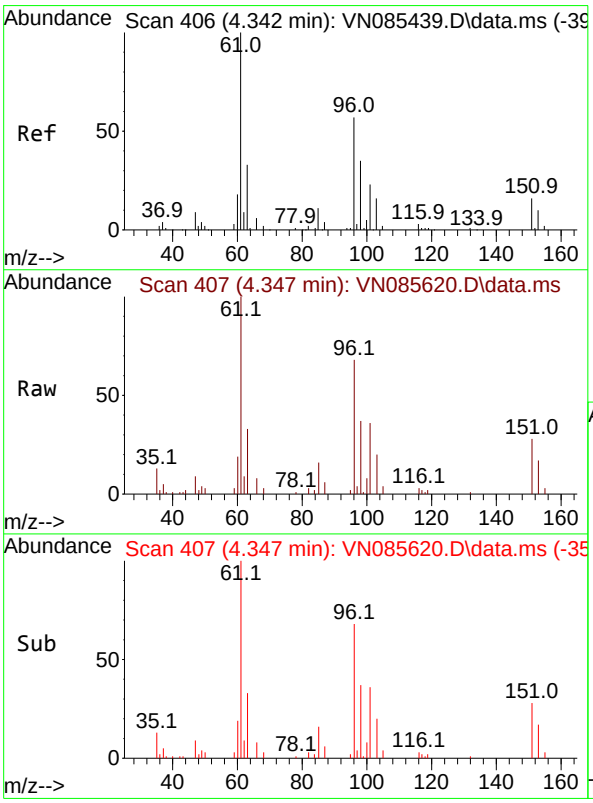
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 11.5 | 8.6 | 13.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

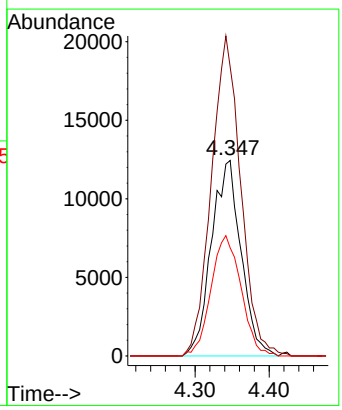


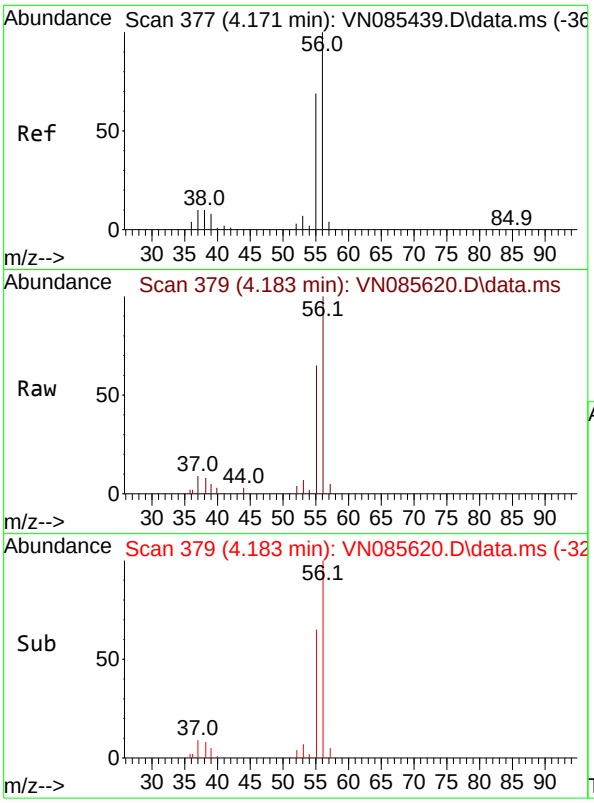




#12
1,1-Dichloroethene
Concen: 18.132 ug/l
RT: 4.347 min Scan# 407
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 96 Resp: 34518

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 147.7 | 141.0 | 211.4 |
| 98 | 55.3 | 49.0 | 73.6 |

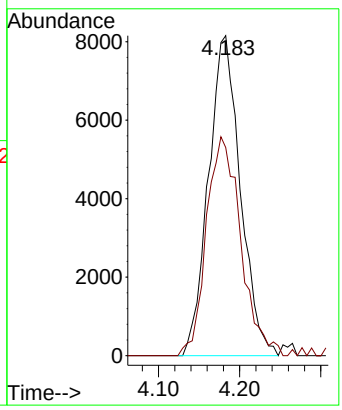





#13
Acrolein
Concen: 49.729 ug/l
RT: 4.183 min Scan# 3
Delta R.T. 0.012 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 56 Resp: 2225

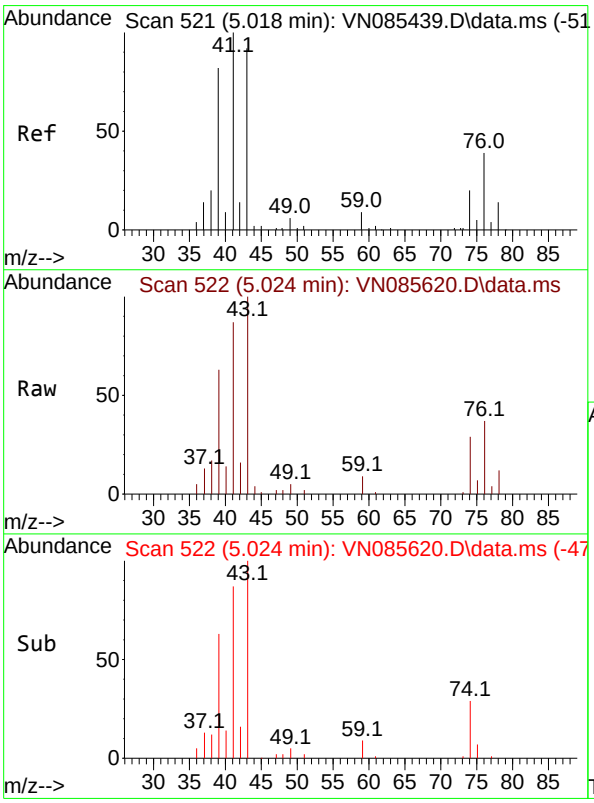
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 73.5 | 56.3 | 84.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

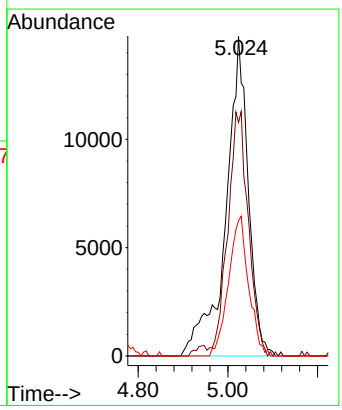
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

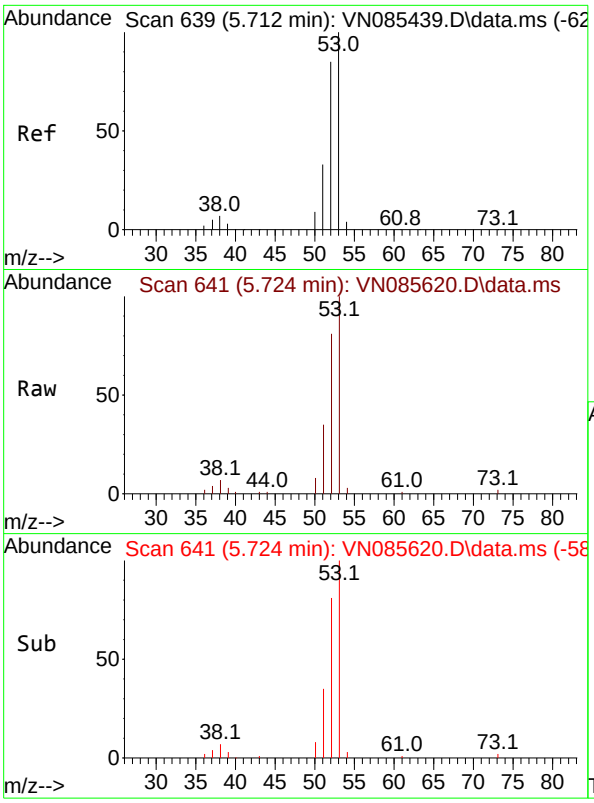



#14
Allyl chloride
Concen: 16.712 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 41 Resp: 51626

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 70.1 | 64.4 | 96.6 |
| 76 | 38.9 | 30.5 | 45.7 |

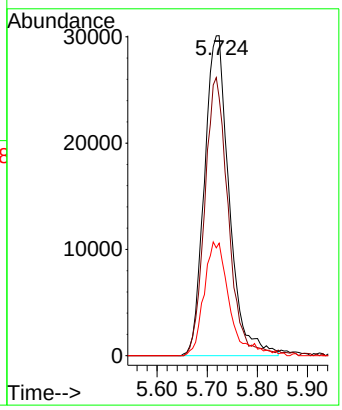





#15
Acrylonitrile
Concen: 99.342 ug/l
RT: 5.724 min Scan# 64
Delta R.T. 0.012 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 53 Resp: 10345

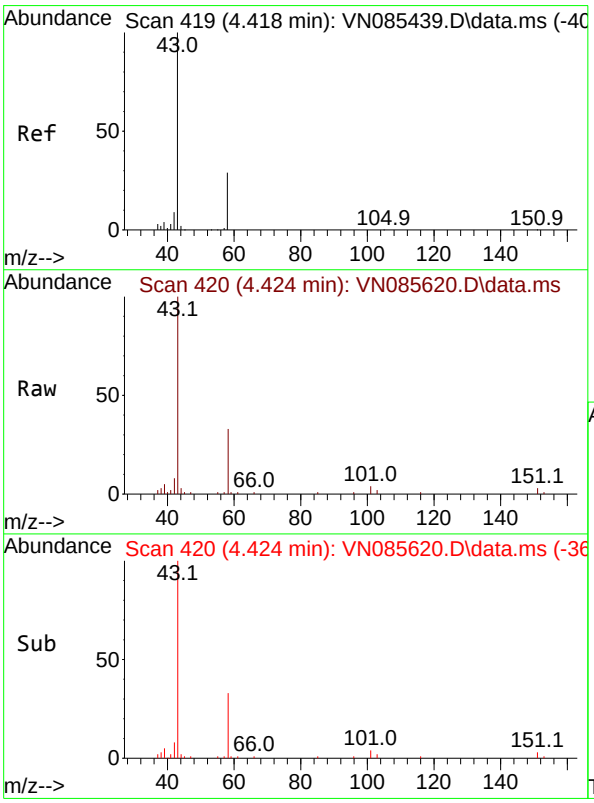
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 82.1 | 65.5 | 98.3 |
| 51 | 36.7 | 29.8 | 44.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

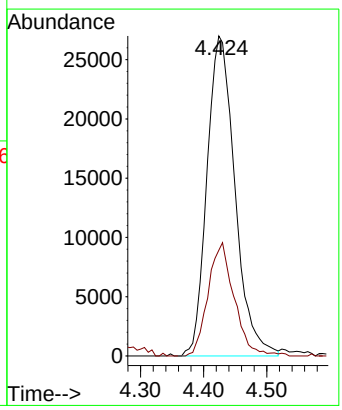
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

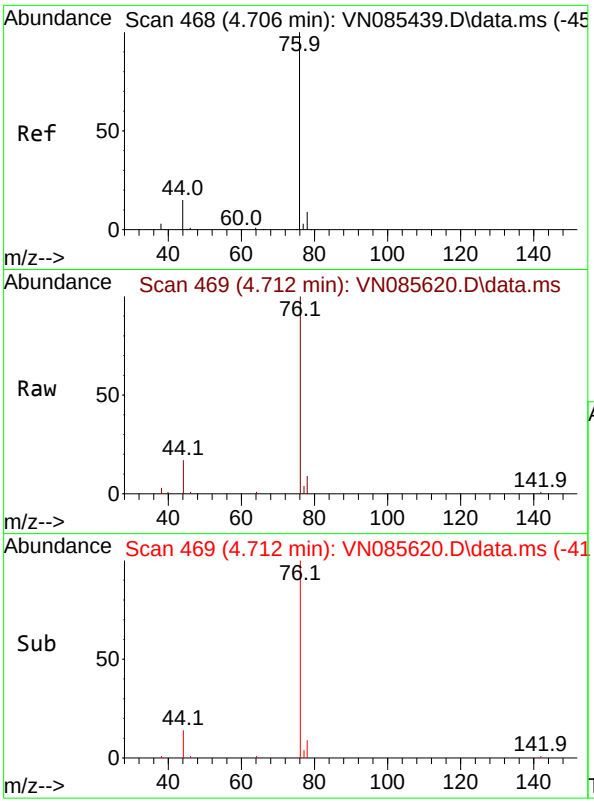



#16
Acetone
Concen: 89.909 ug/l
RT: 4.424 min Scan# 420
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 43 Resp: 83180

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 33.0 | 23.8 | 35.6 |

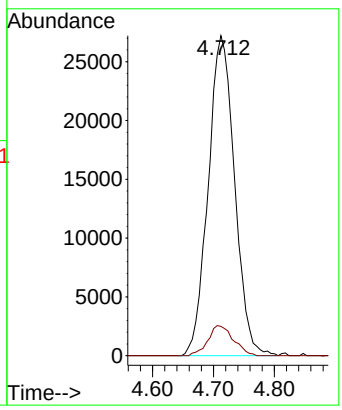





#17
Carbon Disulfide
Concen: 13.997 ug/l
RT: 4.712 min Scan# 4
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 76 Resp: 8204

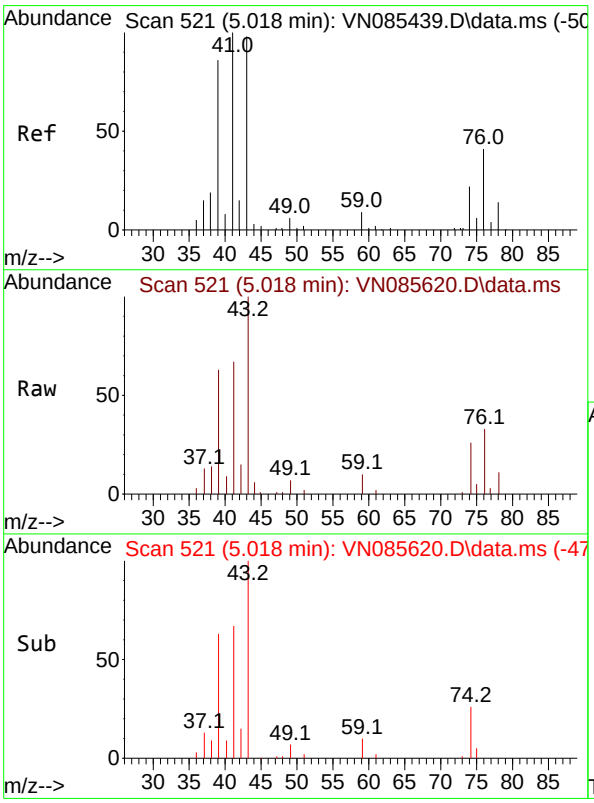
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.2 | 6.9 | 10.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

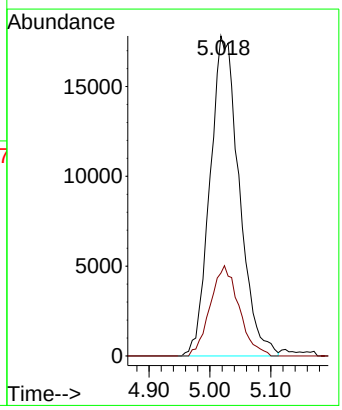
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

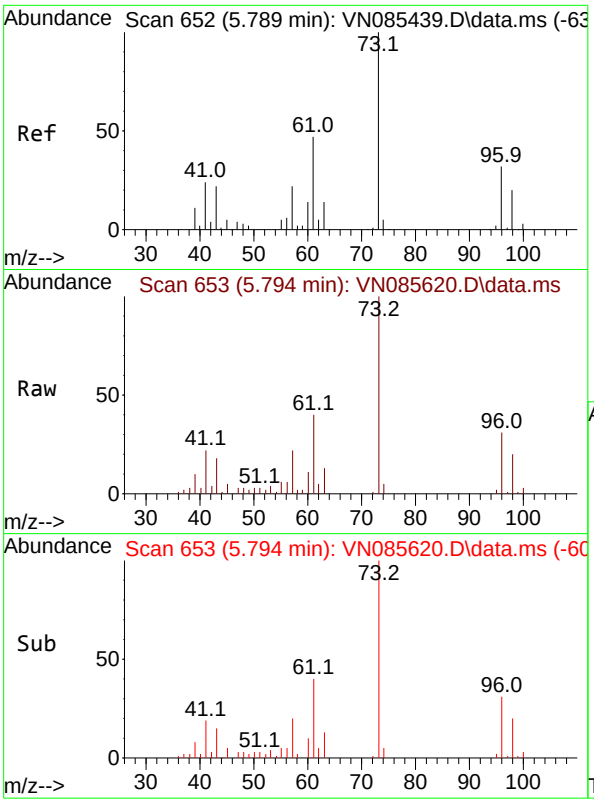



#18
Methyl Acetate
Concen: 21.072 ug/l
RT: 5.018 min Scan# 521
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 43 Resp: 59280

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 27.8 | 18.6 | 28.0 |

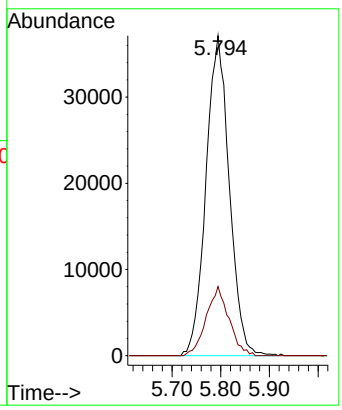





#19
Methyl tert-butyl Ether
Concen: 19.951 ug/l
RT: 5.794 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 73 Resp: 12332

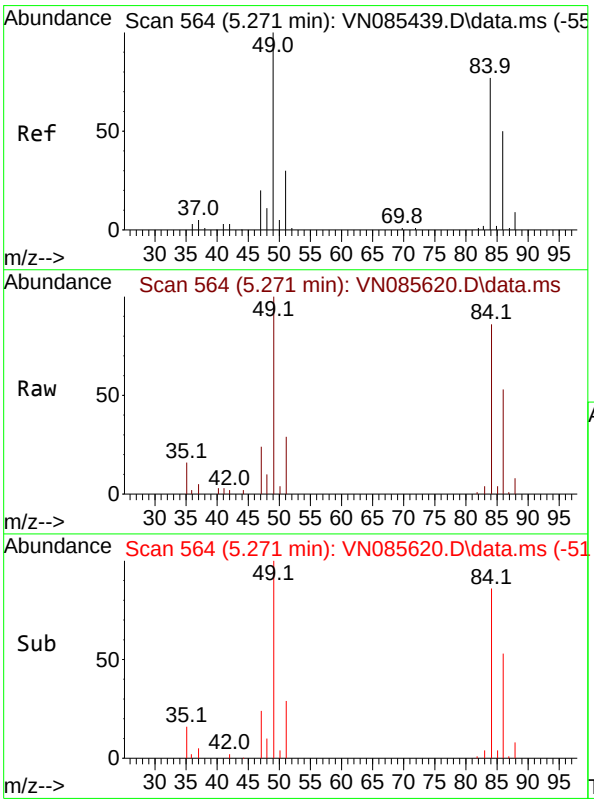
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 21.6 | 17.8 | 26.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

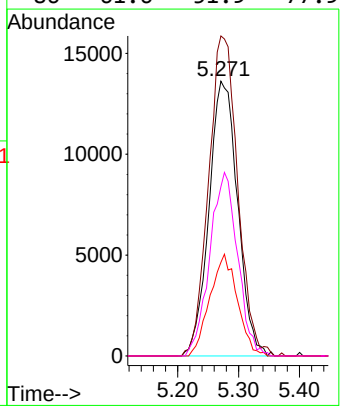
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

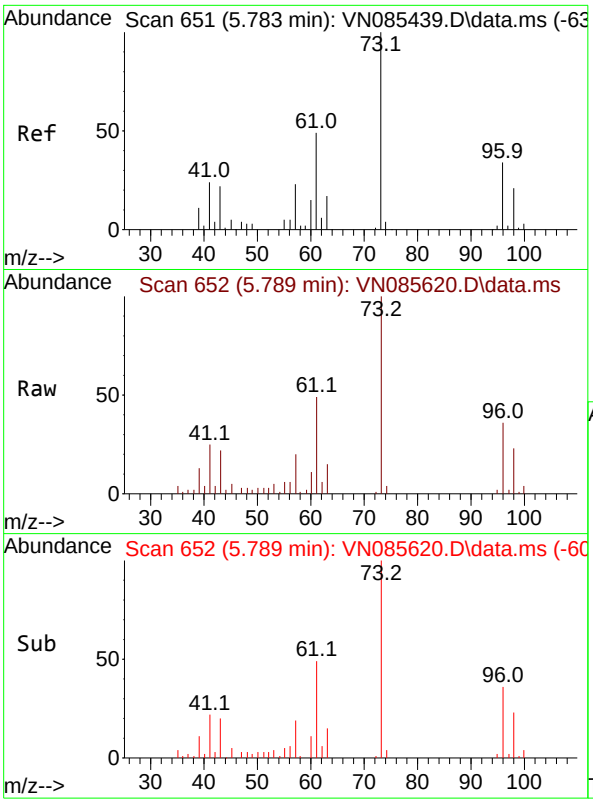



#20
Methylene Chloride
Concen: 19.492 ug/l
RT: 5.271 min Scan# 564
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 84 Resp: 44642

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 116.5 | 104.1 | 156.1 |
| 51 | 34.1 | 31.0 | 46.4 |
| 86 | 61.6 | 51.9 | 77.9 |

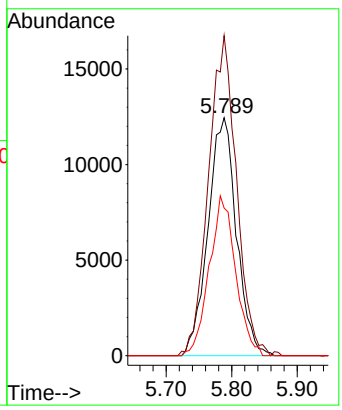





#21
trans-1,2-Dichloroethene
Concen: 18.442 ug/l
RT: 5.789 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 96 Resp: 3752

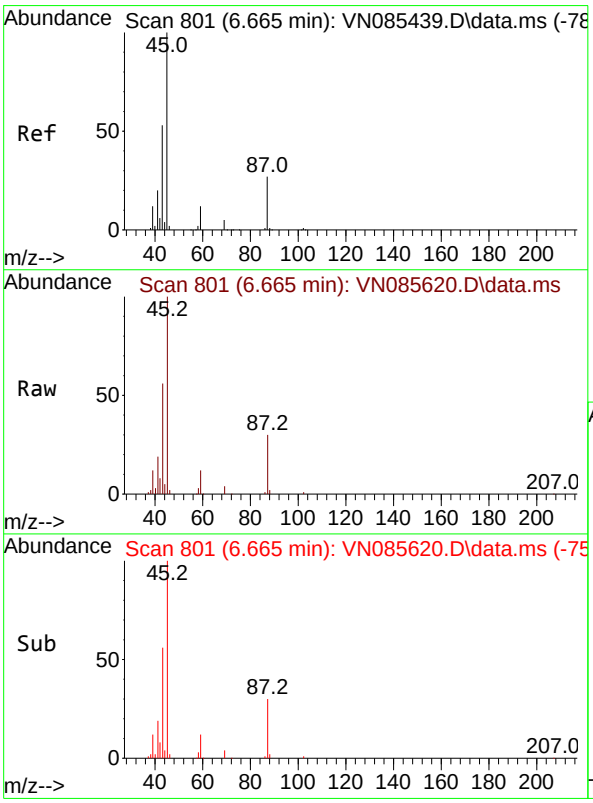
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 134.5 | 115.7 | 173.5 |
| 98 | 62.1 | 49.8 | 74.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

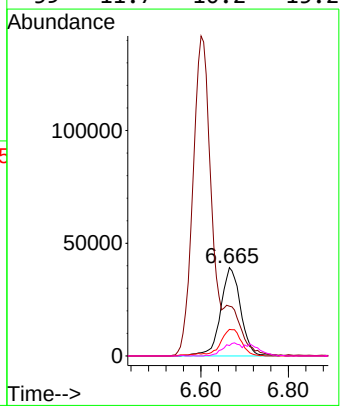
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

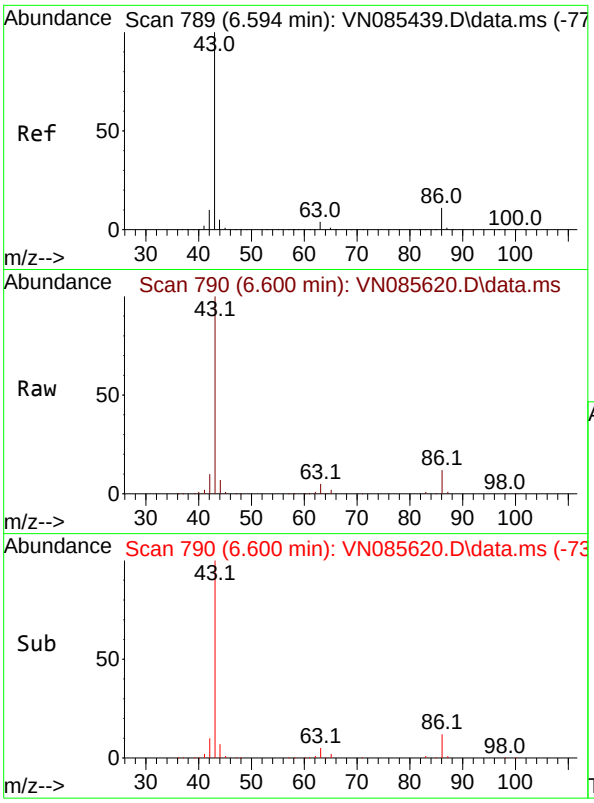



#22
Diisopropyl ether
Concen: 18.083 ug/l
RT: 6.665 min Scan# 801
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 45 Resp: 123987

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 55.6 | 45.0 | 67.6 |
| 87 | 30.1 | 21.8 | 32.8 |
| 59 | 11.7 | 10.2 | 15.2 |

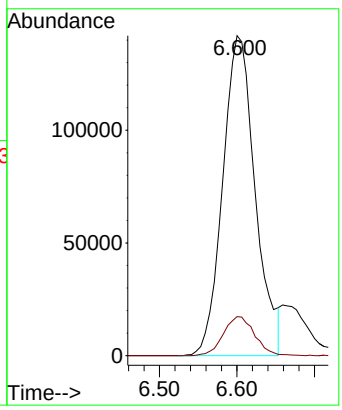





#23
Vinyl Acetate
Concen: 86.245 ug/l
RT: 6.600 min Scan# 7
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 43 Resp: 41383

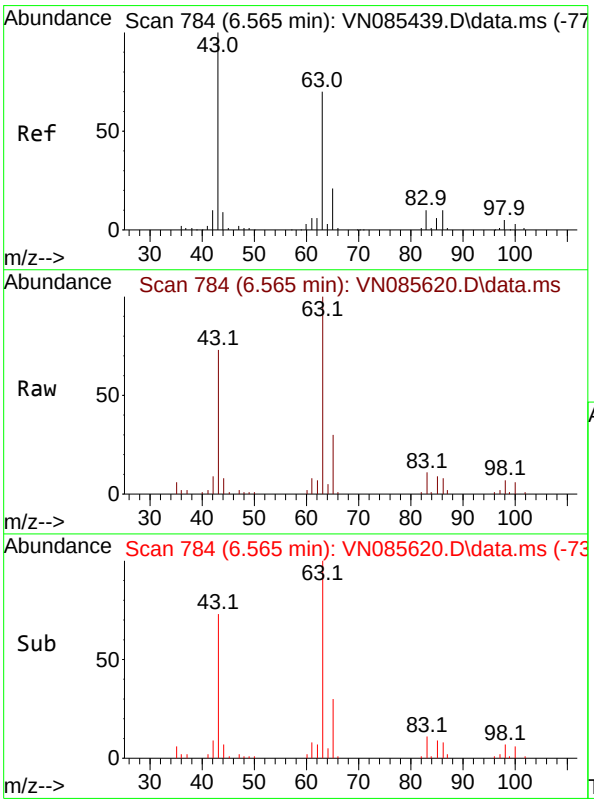
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 12.2 | 8.4 | 12.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

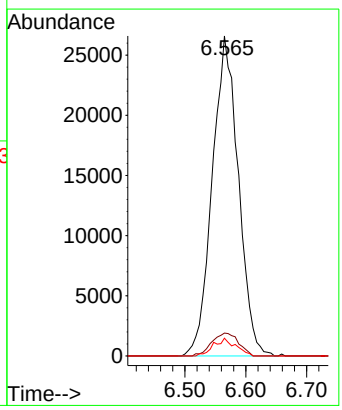
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

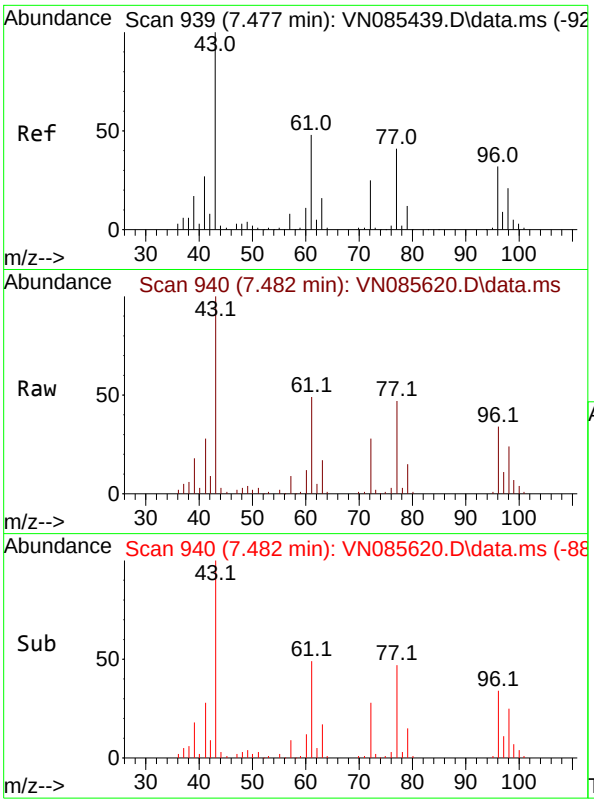



#24
1,1-Dichloroethane
Concen: 18.901 ug/l
RT: 6.565 min Scan# 784
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 63 Resp: 79023

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 7.2 | 3.3 | 9.8 |
| 100 | 5.6 | 2.0 | 6.0 |






#25
2-Butanone
Concen: 94.582 ug/l
RT: 7.482 min Scan# 94
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

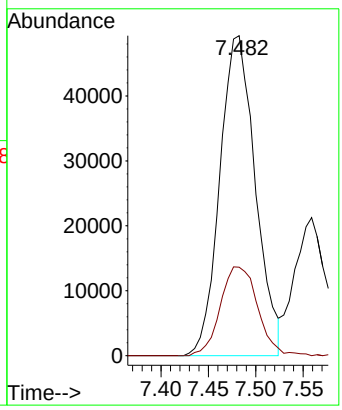
Tgt Ion: 43 Resp: 12876

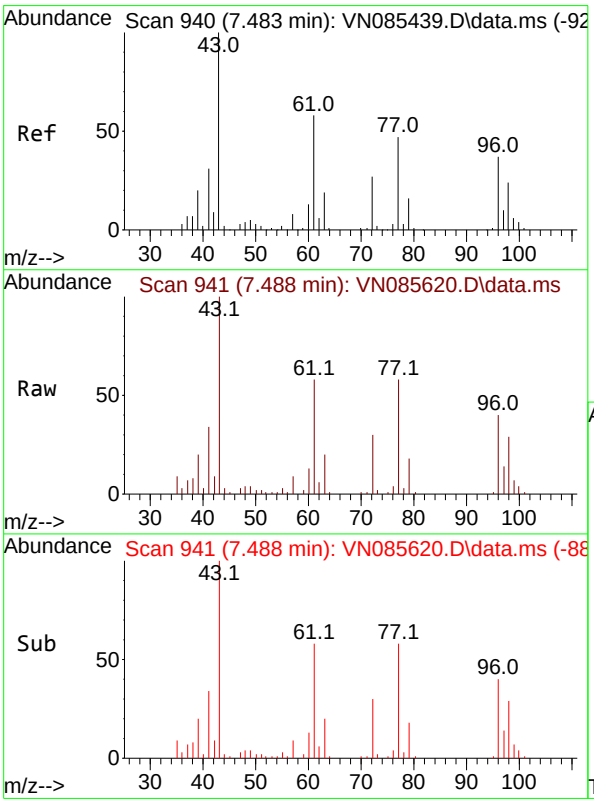
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 27.6 | 20.2 | 30.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

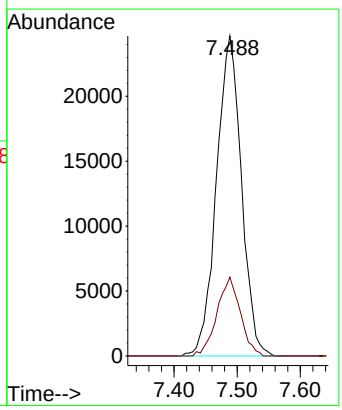


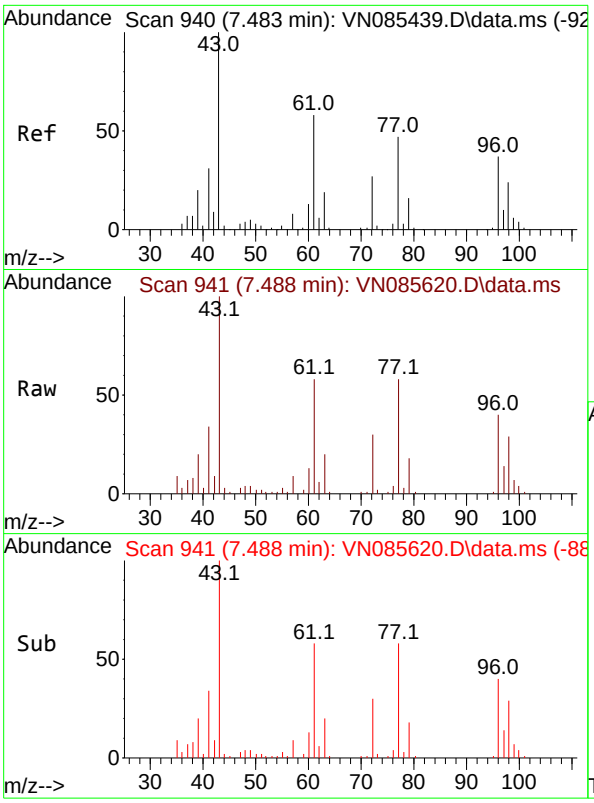




#26
2,2-Dichloropropane
Concen: 20.004 ug/l
RT: 7.488 min Scan# 941
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 77 Resp: 67615

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 23.1 | 10.7 | 32.1 |






#27
cis-1,2-Dichloroethene
Concen: 19.623 ug/l
RT: 7.488 min Scan# 94
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

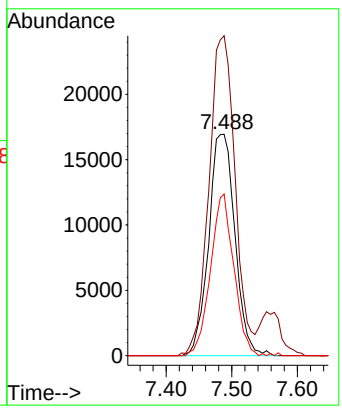
Tgt Ion: 96 Resp: 4702

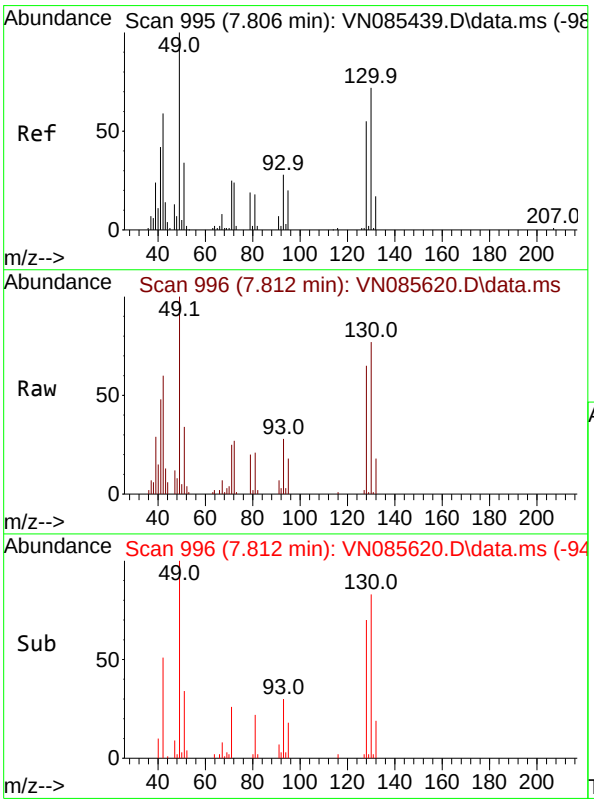
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 144.2 | 0.0 | 311.8 |
| 98 | 65.0 | 0.0 | 126.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

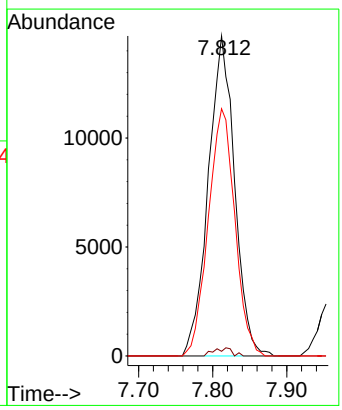


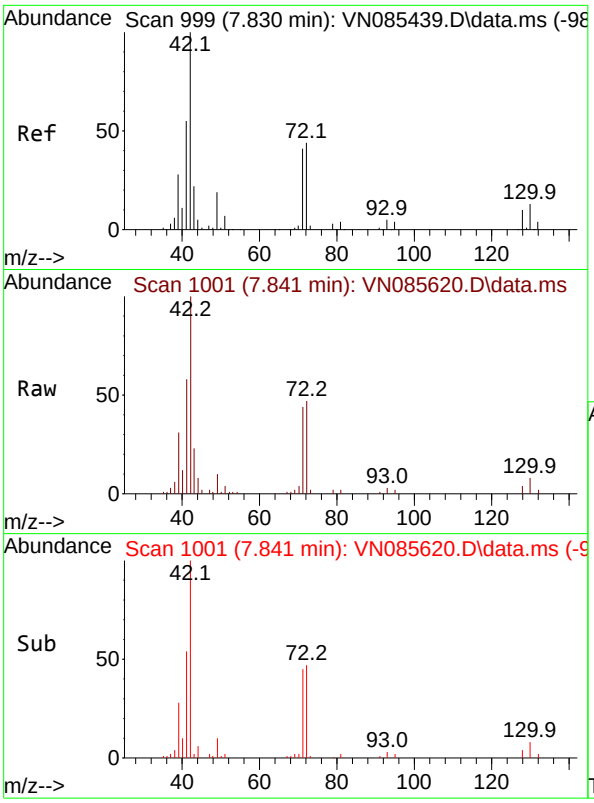




#28
Bromochloromethane
Concen: 18.620 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 49 Resp: 36218

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.7 | 0.0 | 4.4 |
| 130 | 78.1 | 55.0 | 82.4 |

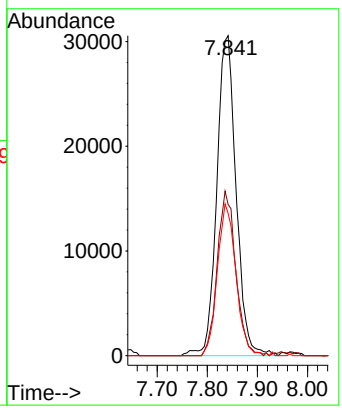





#29
Tetrahydrofuran
Concen: 94.844 ug/l
RT: 7.841 min Scan# 1
Delta R.T. 0.012 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 42 Resp: 8186

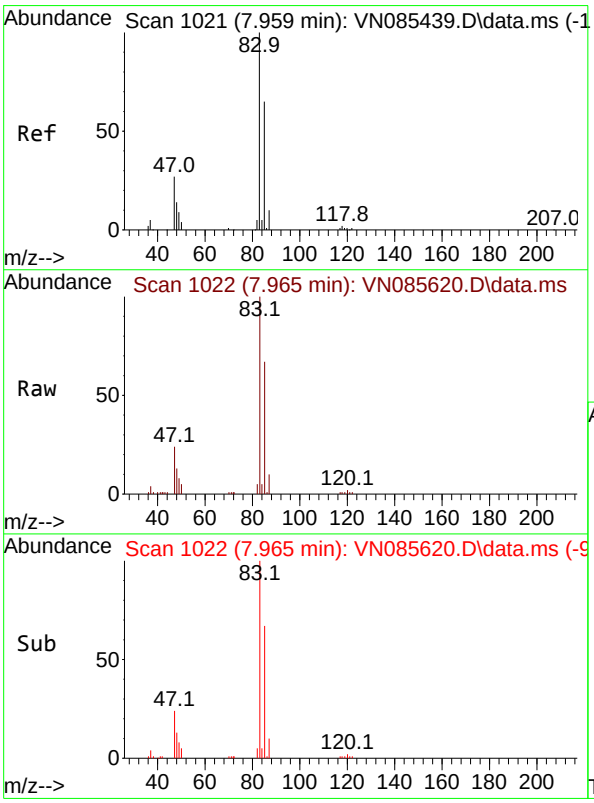
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 49.1 | 34.2 | 51.2 |
| 71 | 45.7 | 32.5 | 48.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

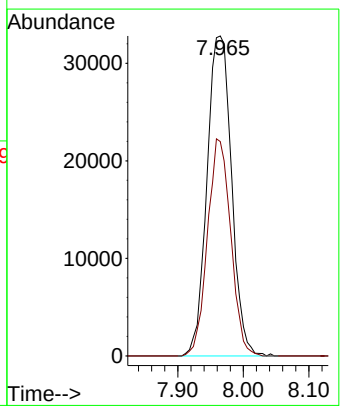
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

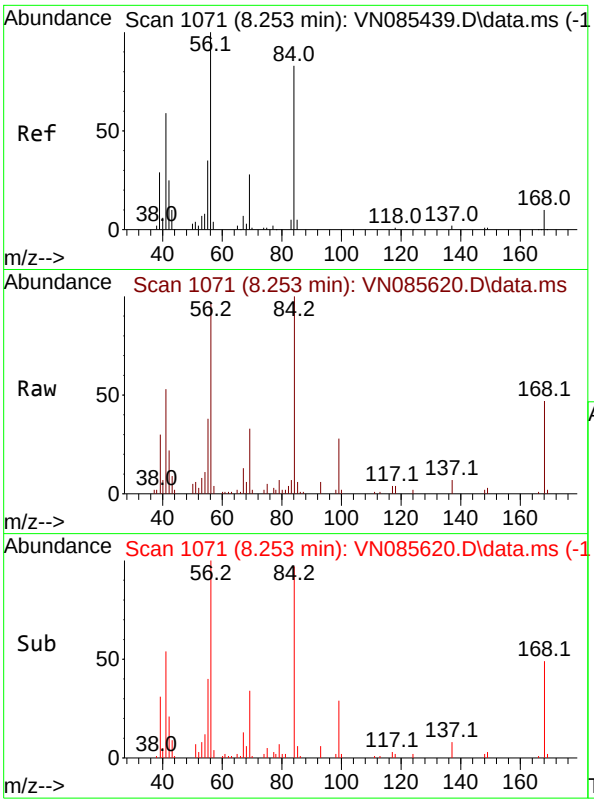



#30
Chloroform
Concen: 19.765 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 83 Resp: 85403

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 67.0 | 51.8 | 77.6 |

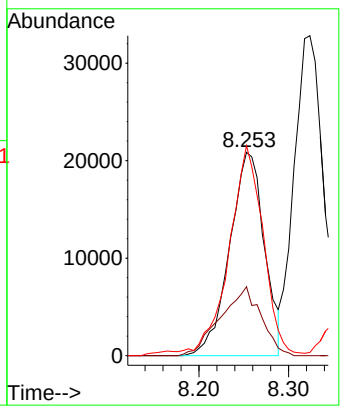





#31
Cyclohexane
Concen: 15.428 ug/l
RT: 8.253 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 56 Resp: 5606

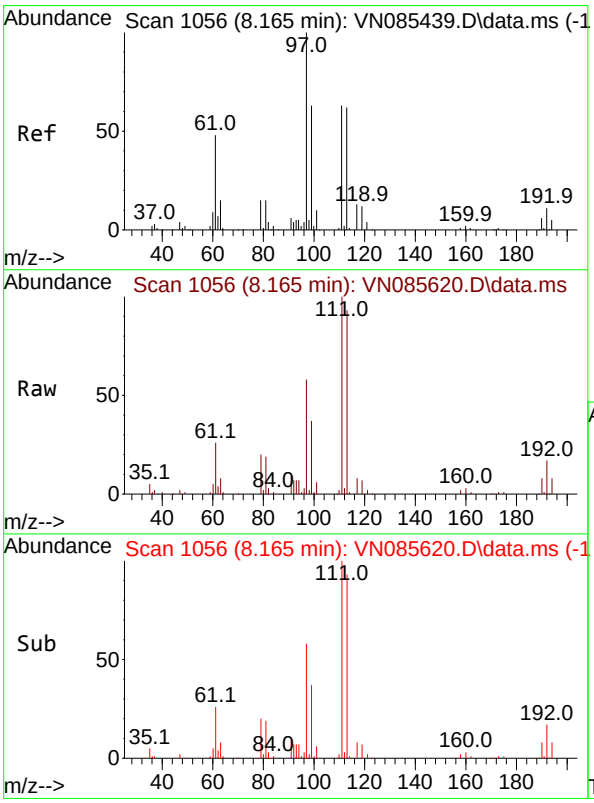
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 33.9 | 22.2 | 33.4 |
| 84 | 101.3 | 66.4 | 99.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

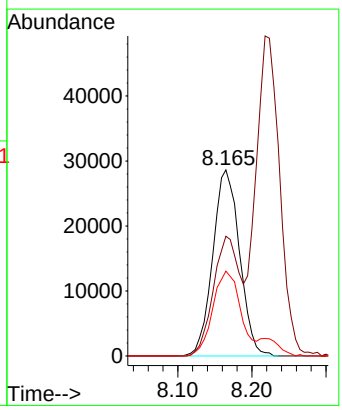
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

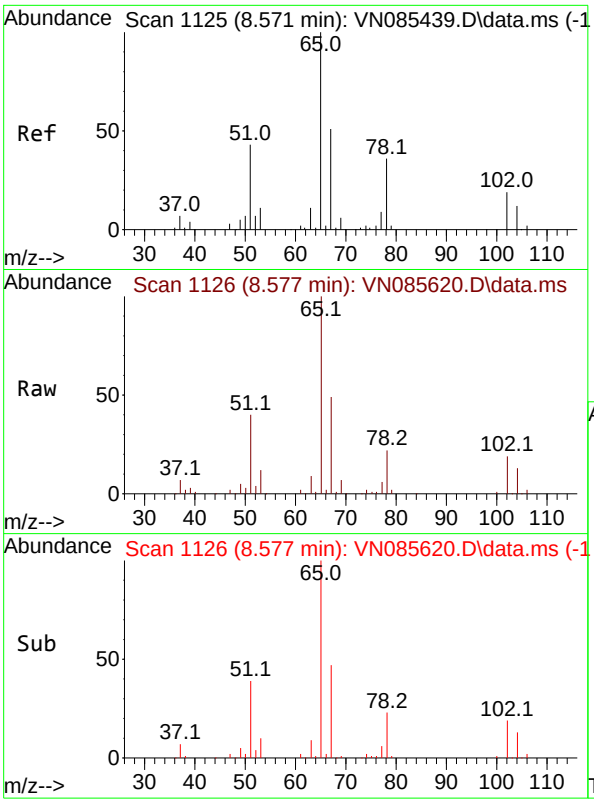



#32
1,1,1-Trichloroethane
Concen: 18.963 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 97 Resp: 71876

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 62.9 | 49.8 | 74.6 |
| 61 | 47.5 | 41.4 | 62.2 |

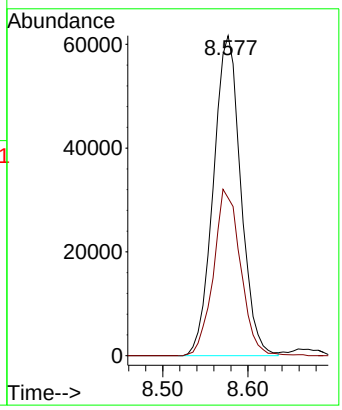





#33
1,2-Dichloroethane-d4
Concen: 47.978 ug/l
RT: 8.577 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 65 Resp: 13737

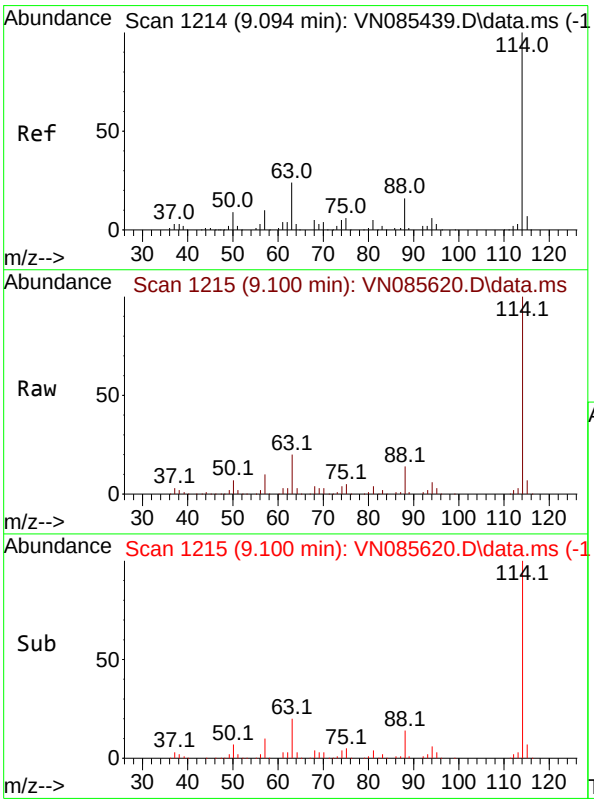
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 51.6 | 0.0 | 101.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

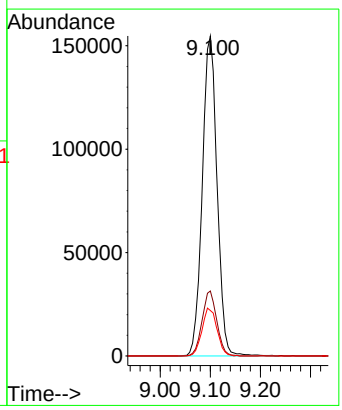
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

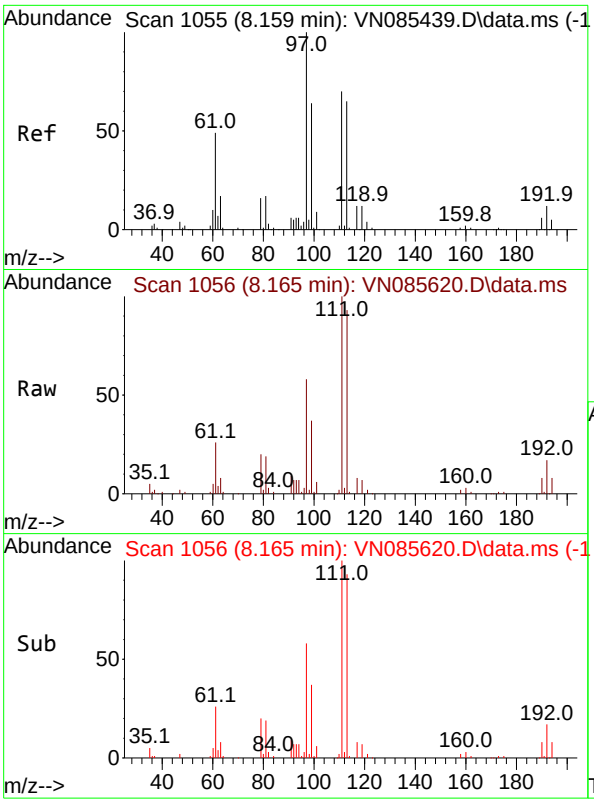



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:114 Resp: 316818

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 20.3 | 0.0 | 47.6 |
| 88 | 14.2 | 0.0 | 32.6 |

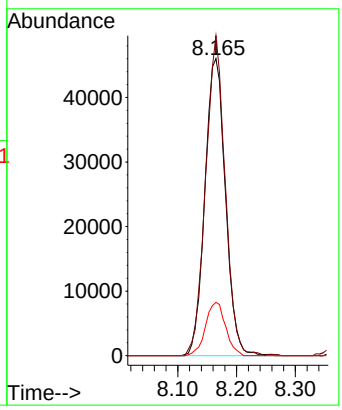





#35
Dibromofluoromethane
Concen: 51.027 ug/l
RT: 8.165 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:113 Resp: 11215

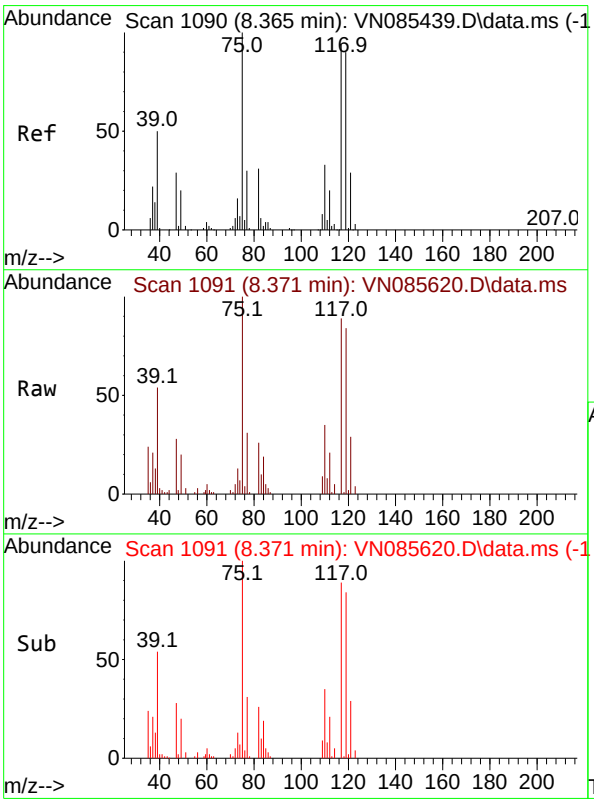
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 102.3 | 82.7 | 124.1 |
| 192 | 17.5 | 14.3 | 21.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

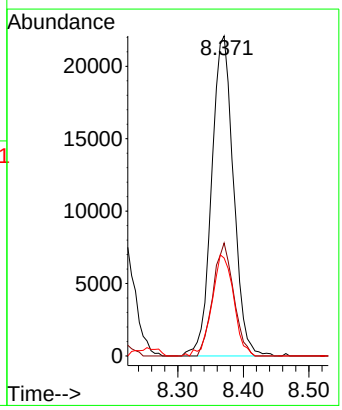
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

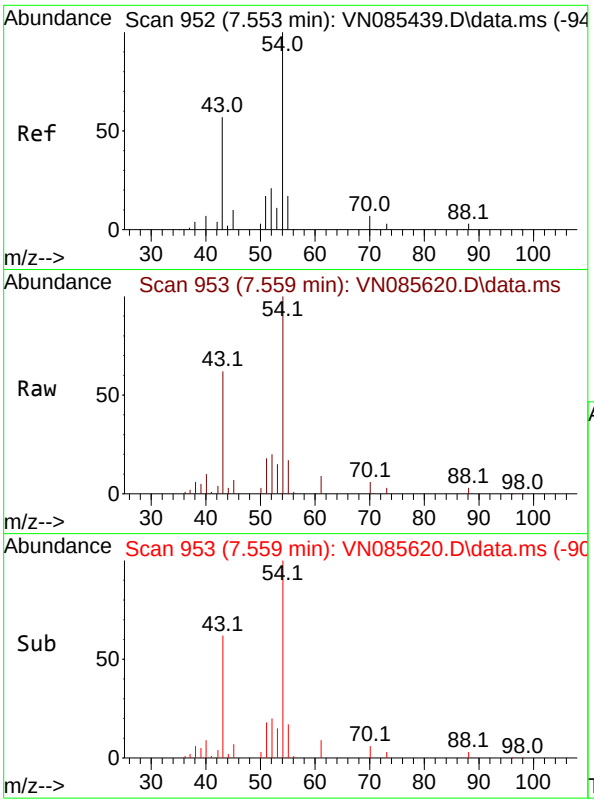



#36
1,1-Dichloropropene
Concen: 16.536 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 75 Resp: 51010

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 33.6 | 16.5 | 49.5 |
| 77 | 31.5 | 24.4 | 36.6 |






#37
Ethyl Acetate
Concen: 16.682 ug/l
RT: 7.559 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

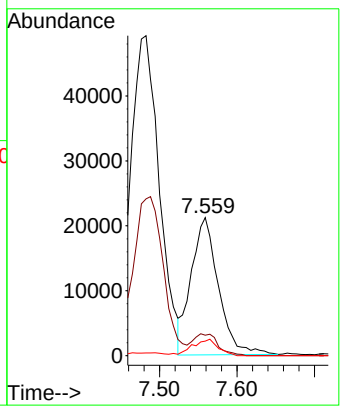
Tgt Ion: 43 Resp: 5194

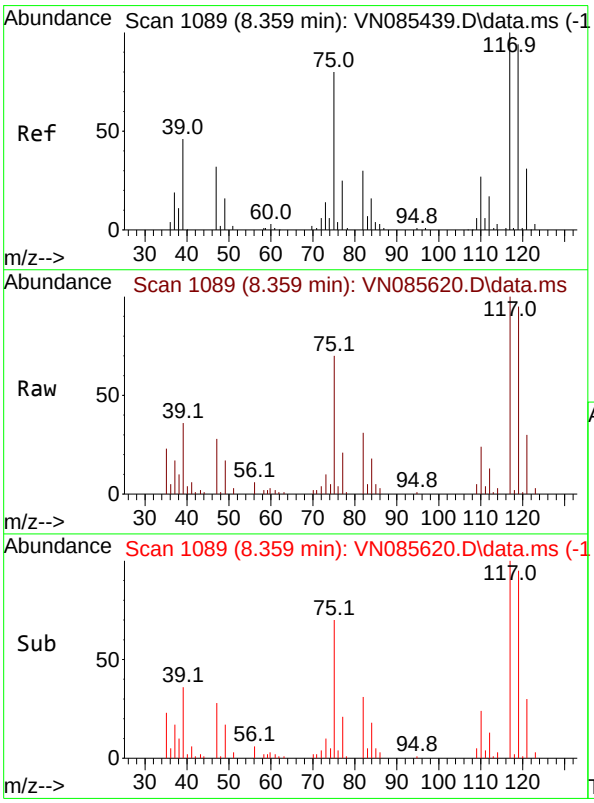
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 14.4 | 10.9 | 16.3 |
| 70 | 11.3 | 7.5 | 11.3# |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

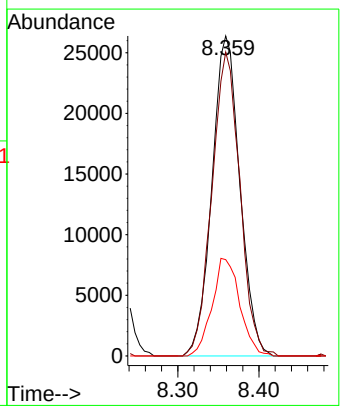


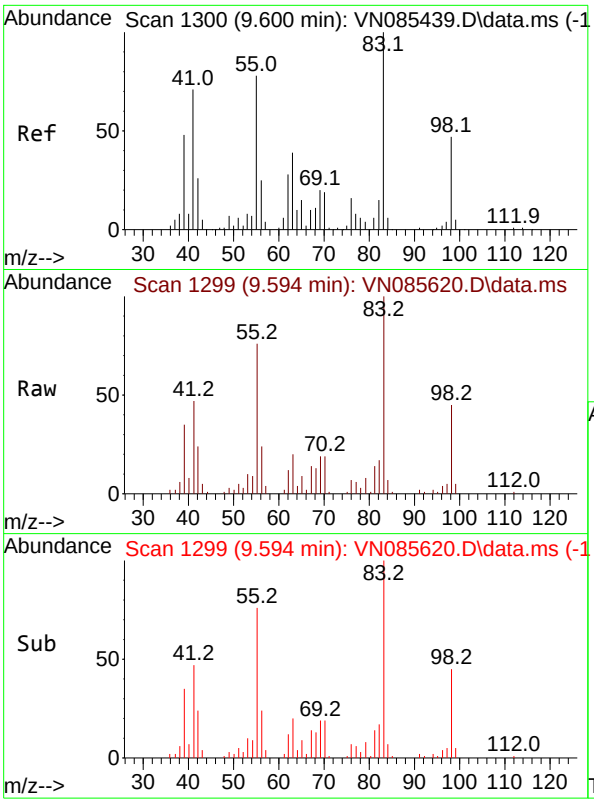




#38
Carbon Tetrachloride
Concen: 17.819 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:117 Resp: 62929

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 94.9 | 75.4 | 113.2 |
| 121 | 30.1 | 24.6 | 37.0 |

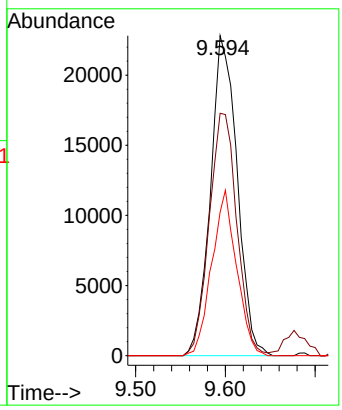





#39
Methylcyclohexane
Concen: 16.231 ug/l
RT: 9.594 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 83 Resp: 4704

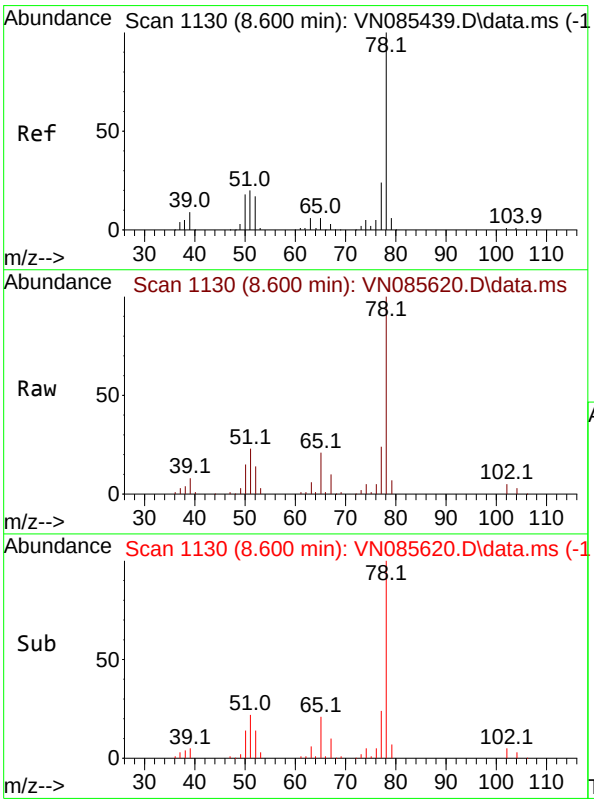
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 75.7 | 62.6 | 94.0 |
| 98 | 44.8 | 37.7 | 56.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

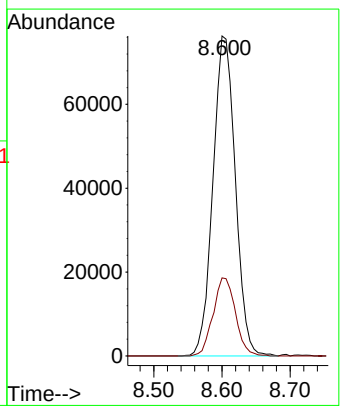
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

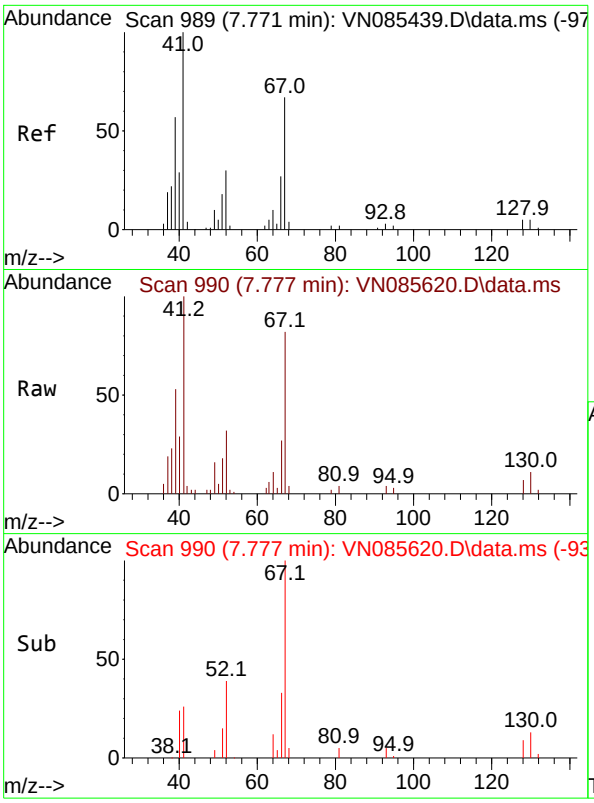



#40
Benzene
Concen: 18.817 ug/l
RT: 8.600 min Scan# 1130
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 78 Resp: 174408

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 24.4 | 19.0 | 28.6 |

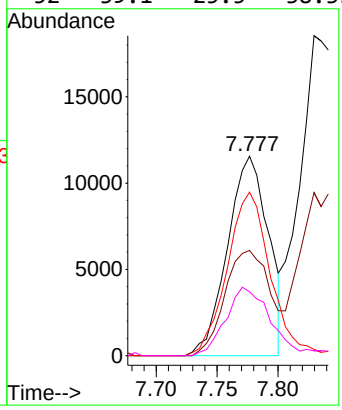





#41
Methacrylonitrile
Concen: 16.648 ug/l
RT: 7.777 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 41 Resp: 2696

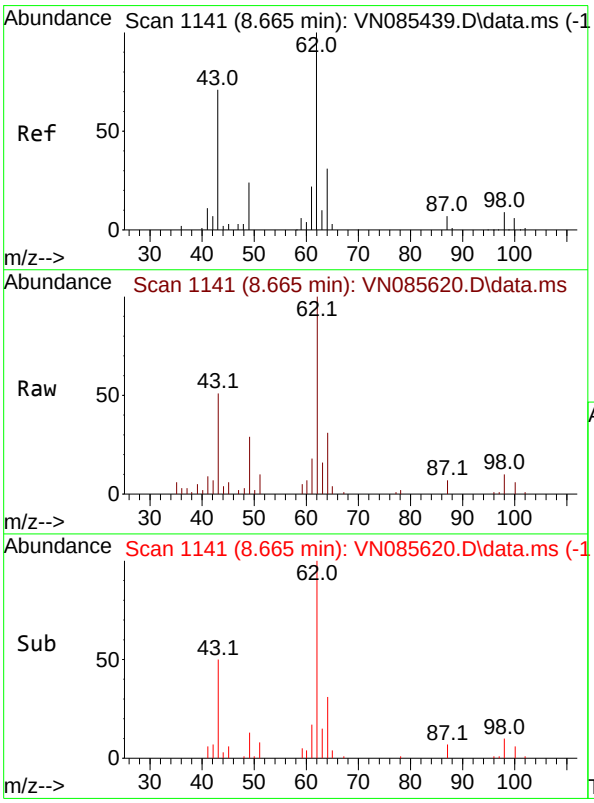
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 60.7 | 46.0 | 69.0 |
| 67 | 86.5 | 57.4 | 86.2# |
| 52 | 39.1 | 25.5 | 38.3# |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

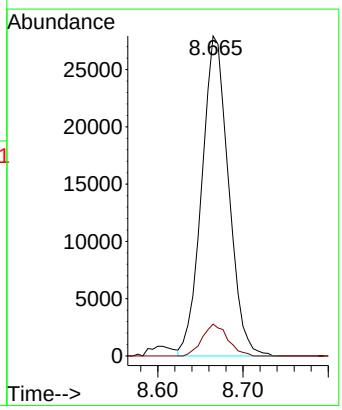
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

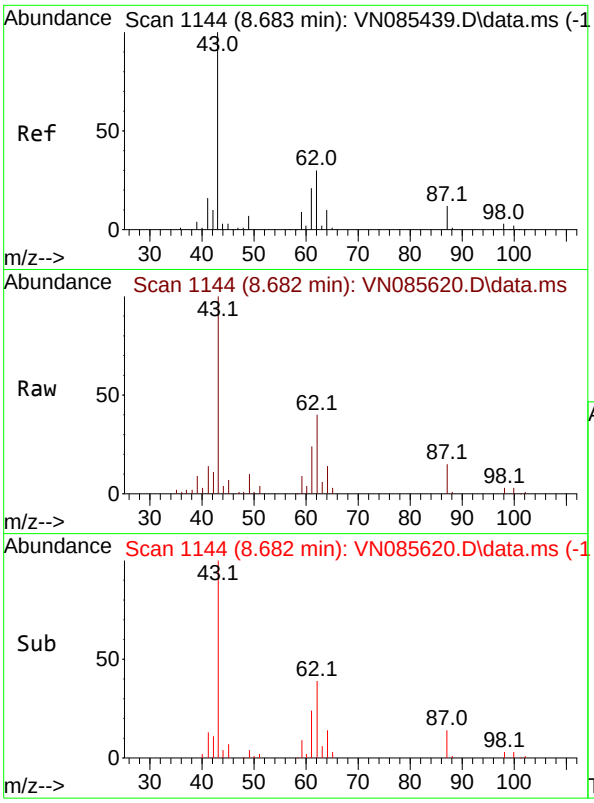



#42
1,2-Dichloroethane
Concen: 17.512 ug/l
RT: 8.665 min Scan# 1141
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 62 Resp: 61132

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 9.5 | 0.0 | 17.0 |






#43
Isopropyl Acetate
Concen: 18.267 ug/l
RT: 8.682 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

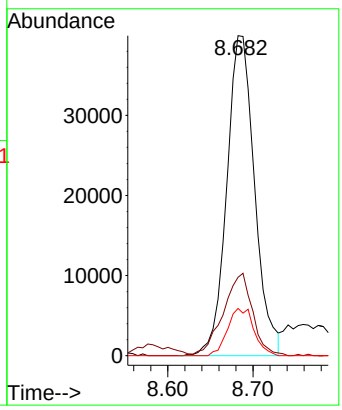
Tgt Ion: 43 Resp: 9113

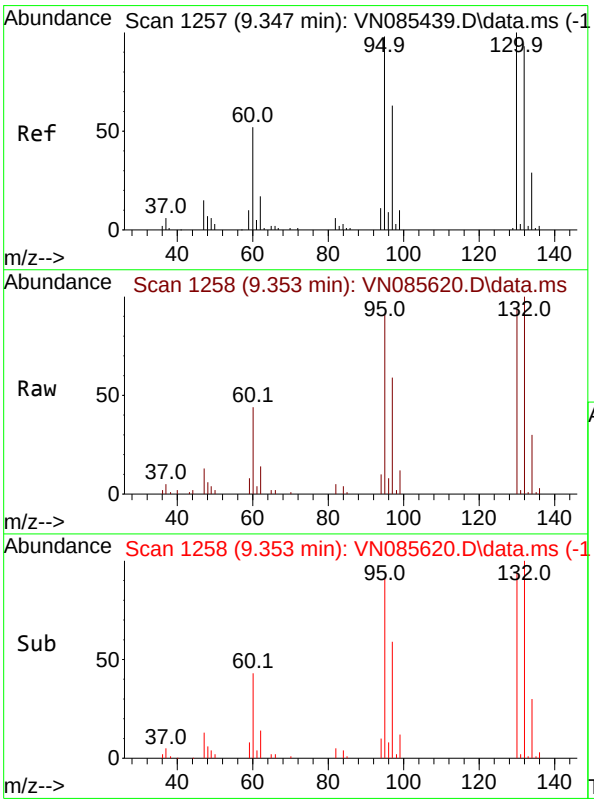
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 27.0 | 20.7 | 31.1 |
| 87 | 14.0 | 9.8 | 14.8 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

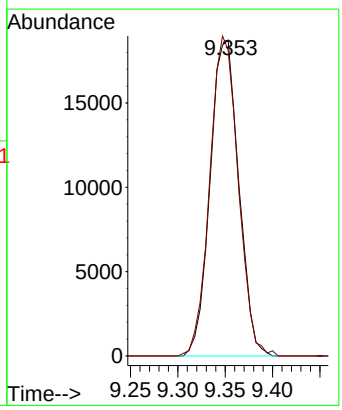


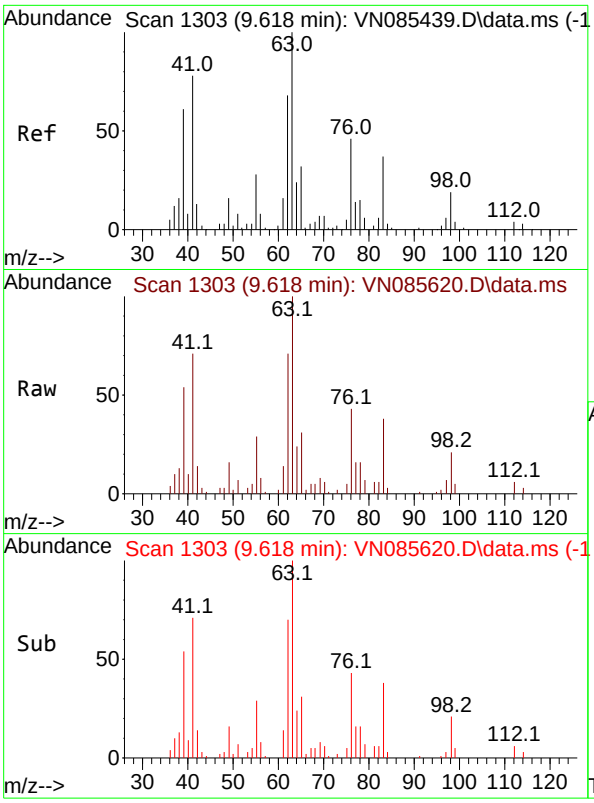




#44
Trichloroethene
Concen: 18.200 ug/l
RT: 9.353 min Scan# 1258
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:130 Resp: 39267

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 96.9 | 0.0 | 195.8 |

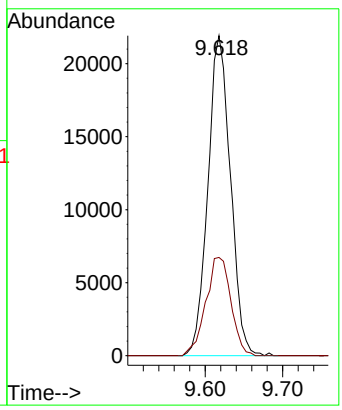





#45
1,2-Dichloropropane
Concen: 18.712 ug/l
RT: 9.618 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 63 Resp: 4430

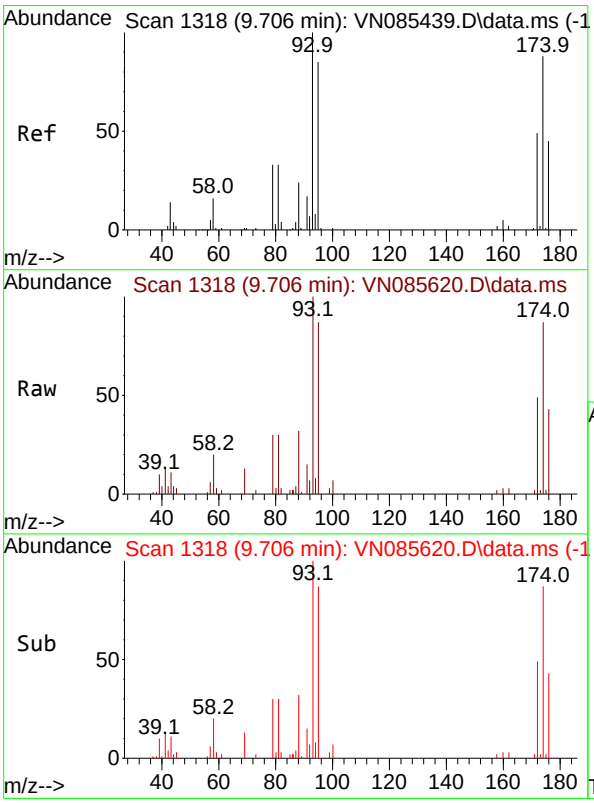
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 30.7 | 25.6 | 38.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

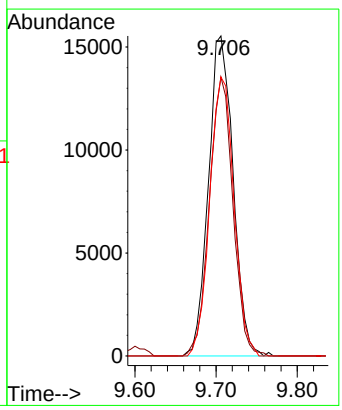
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

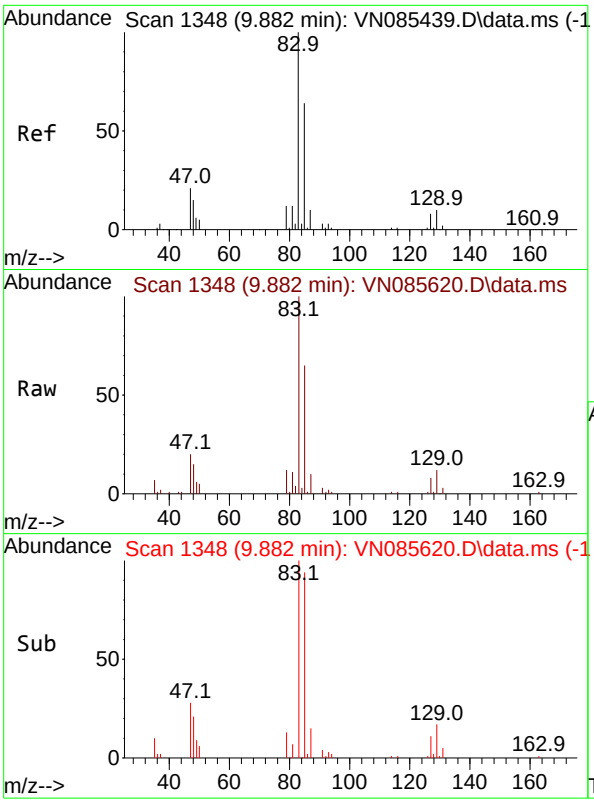



#46
Dibromomethane
Concen: 19.205 ug/l
RT: 9.706 min Scan# 1318
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 93 Resp: 32808

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 83.2 | 64.7 | 97.1 |
| 174 | 85.8 | 69.0 | 103.4 |

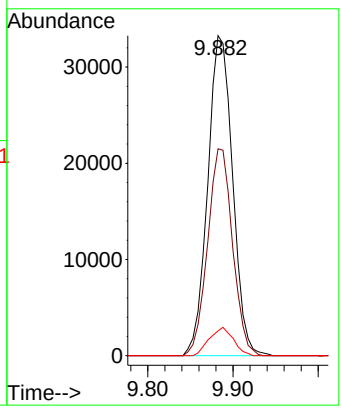





#47
Bromodichloromethane
Concen: 19.406 ug/l
RT: 9.882 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 83 Resp: 6753

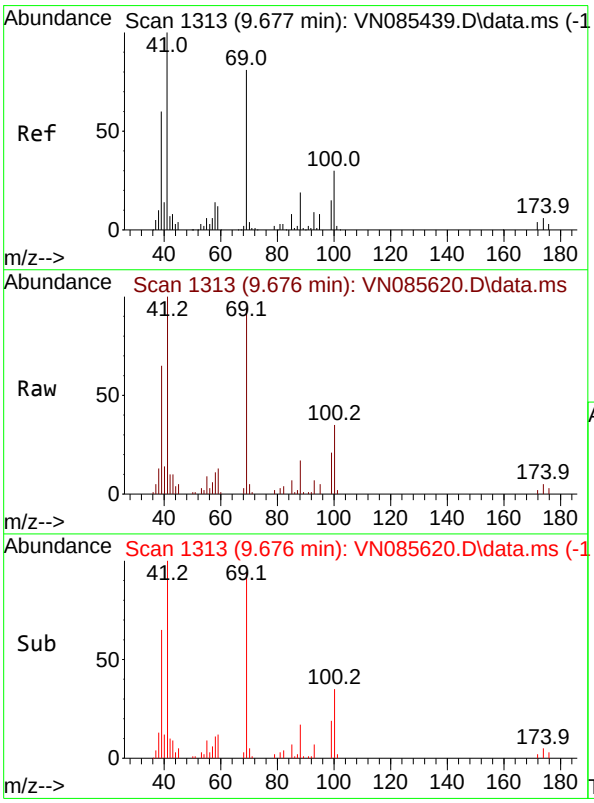
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.7 | 51.2 | 76.8 |
| 127 | 7.8 | 6.5 | 9.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

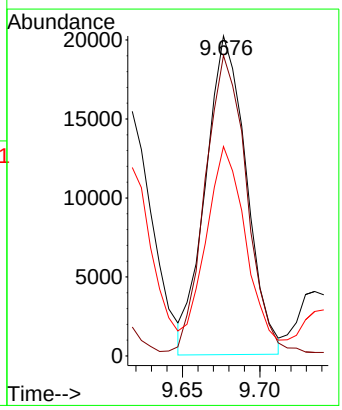
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

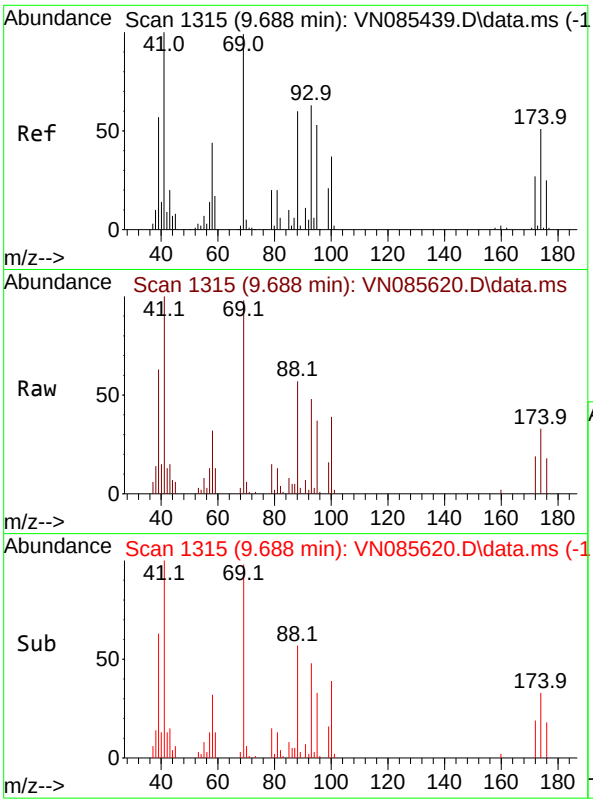



#48
Methyl methacrylate
Concen: 16.475 ug/l
RT: 9.676 min Scan# 1313
Delta R.T. -0.001 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 41 Resp: 36989

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 98.2 | 64.7 | 97.1# |
| 39 | 65.0 | 49.0 | 73.6 |






#49
1,4-Dioxane
Concen: 424.978 ug/l
RT: 9.688 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

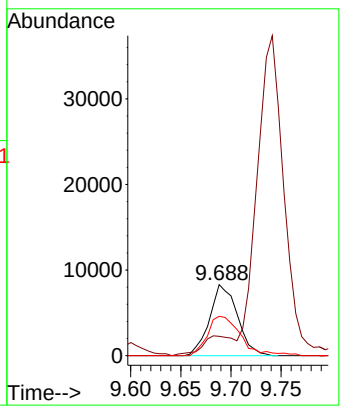
Tgt Ion: 88 Resp: 1606

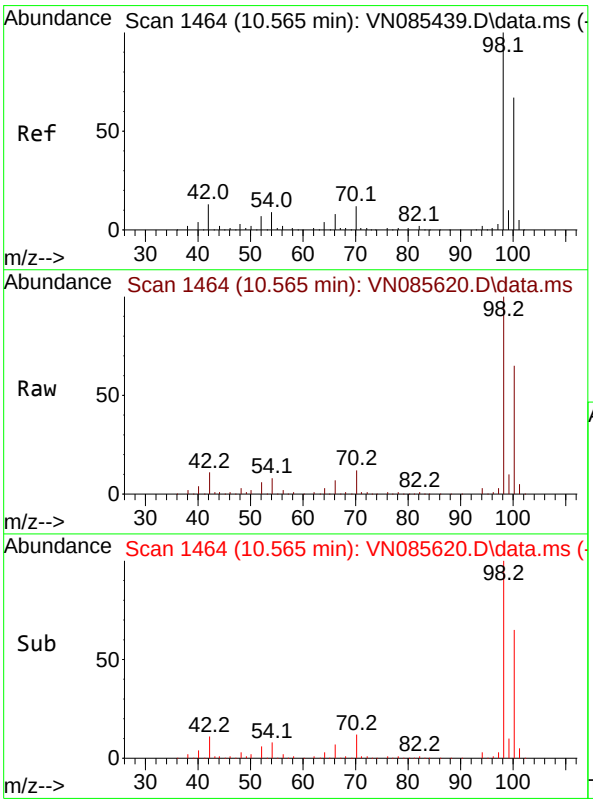
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 28.5 | 26.6 | 39.8 |
| 58 | 66.3 | 59.5 | 89.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

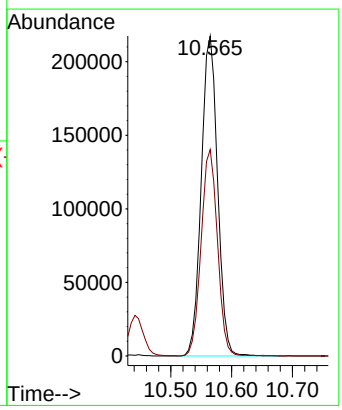


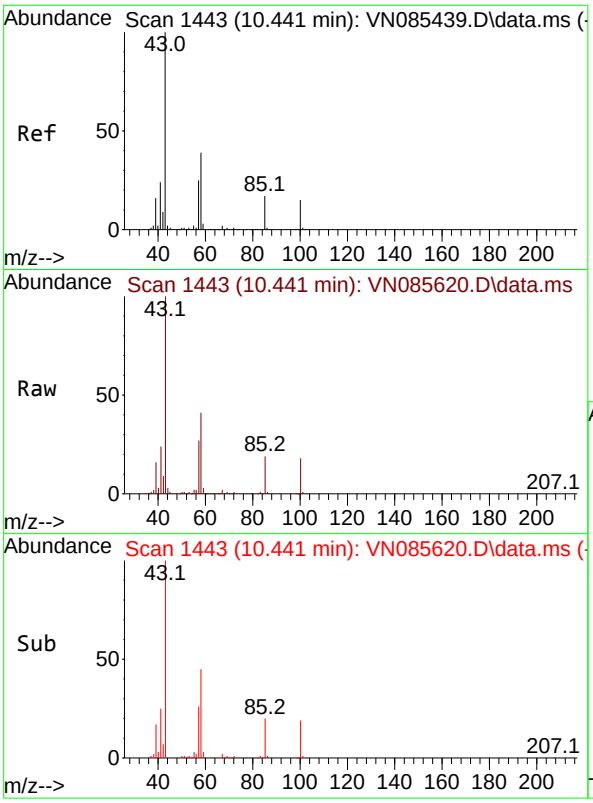




#50
Toluene-d8
Concen: 51.716 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 98 Resp: 403865

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.6 | 52.2 | 78.4 |

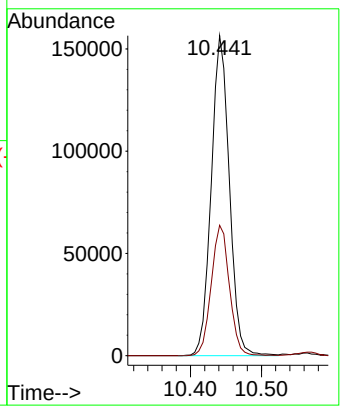





#51
4-Methyl-2-Pentanone
Concen: 95.585 ug/l
RT: 10.441 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 43 Resp: 27672

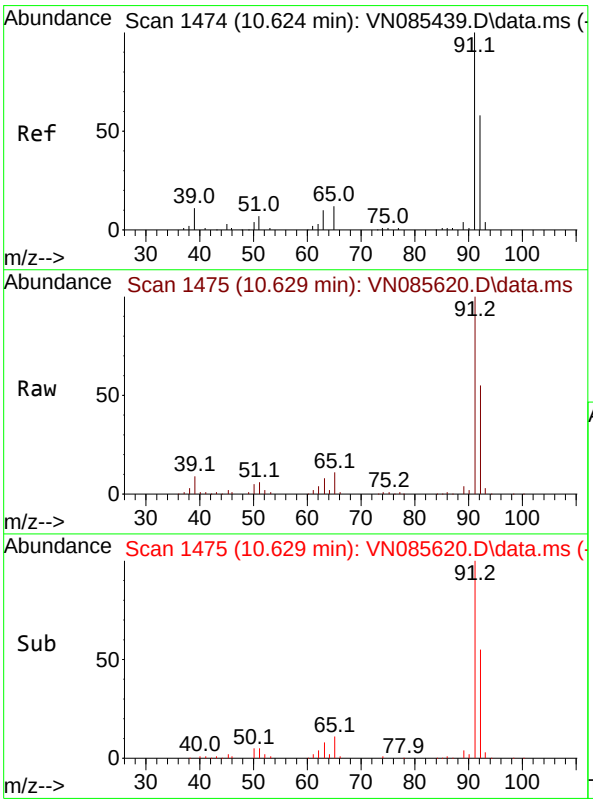
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 40.9 | 30.5 | 45.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

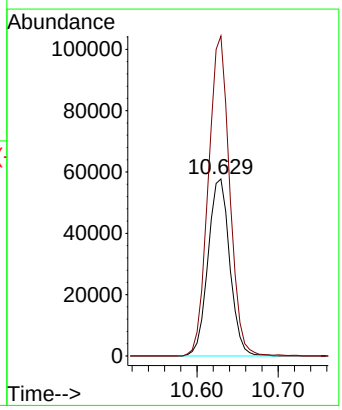
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

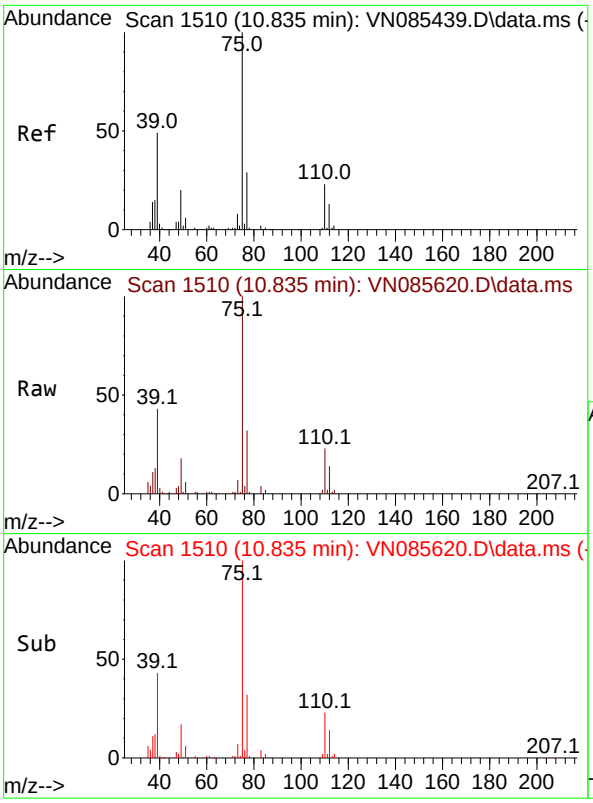



#52
Toluene
Concen: 19.972 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. 0.005 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 92 Resp: 107257

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 177.6 | 139.2 | 208.8 |

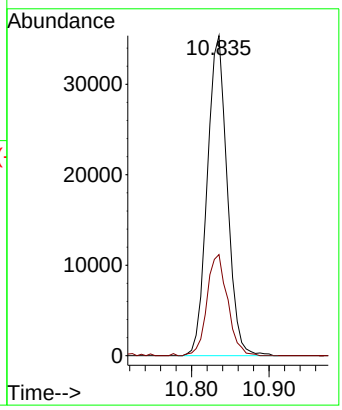





#53
t-1,3-Dichloropropene
Concen: 19.230 ug/l
RT: 10.835 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 75 Resp: 6324

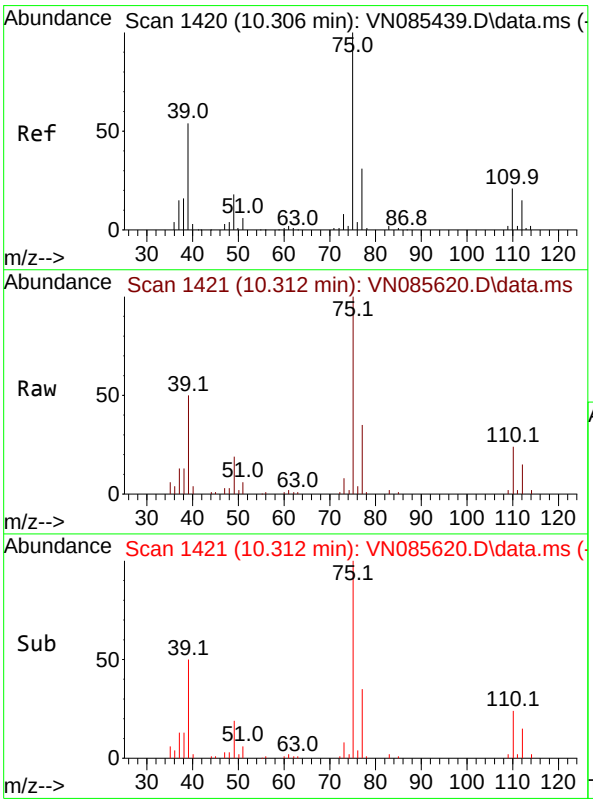
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.6 | 23.5 | 35.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

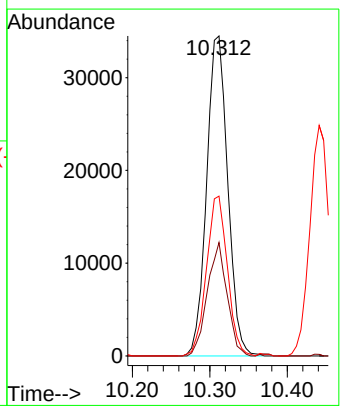
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

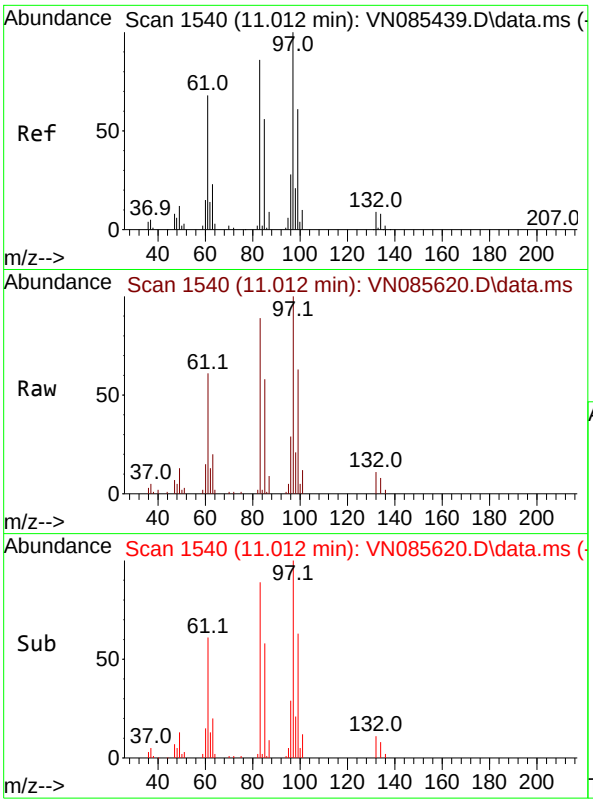



#54
cis-1,3-Dichloropropene
Concen: 18.645 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 75 Resp: 65503

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 35.5 | 25.0 | 37.4 |
| 39 | 49.9 | 43.1 | 64.7 |

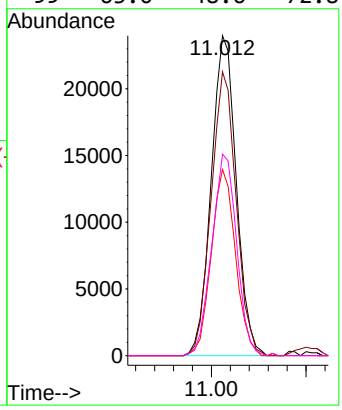





#55
1,1,2-Trichloroethane
Concen: 20.714 ug/l
RT: 11.012 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 97 Resp: 4402

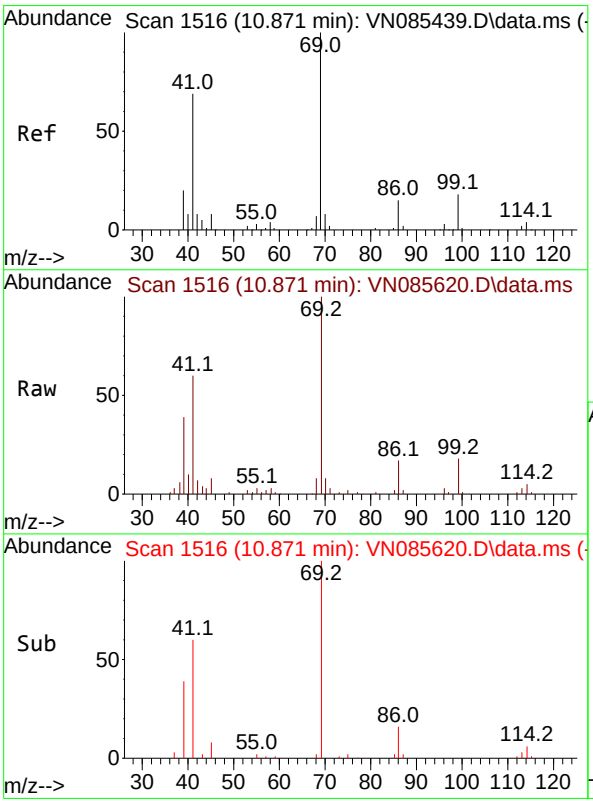
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 88.7 | 69.0 | 103.6 |
| 85 | 58.2 | 44.6 | 66.8 |
| 99 | 63.0 | 48.6 | 72.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

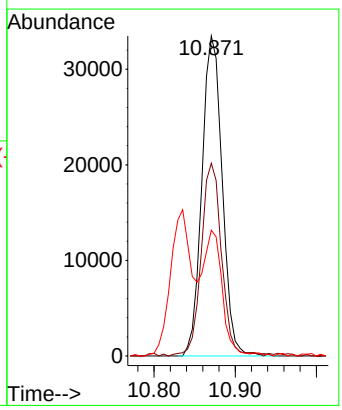
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

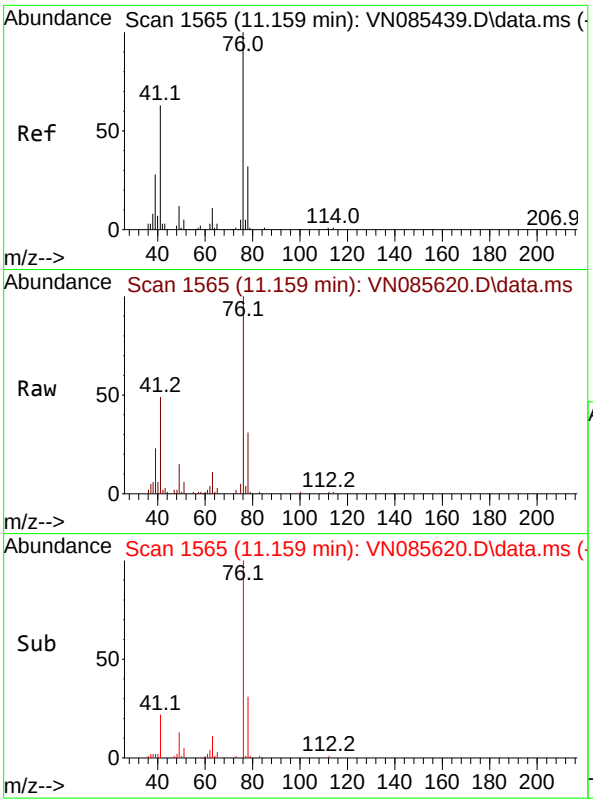



#56
Ethyl methacrylate
Concen: 17.556 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 69 Resp: 58187

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 60.2 | 54.6 | 82.0 |
| 39 | 35.6 | 32.4 | 48.6 |

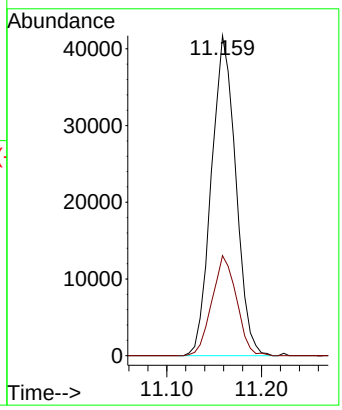





#57
1,3-Dichloropropane
Concen: 20.199 ug/l
RT: 11.159 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 76 Resp: 7464

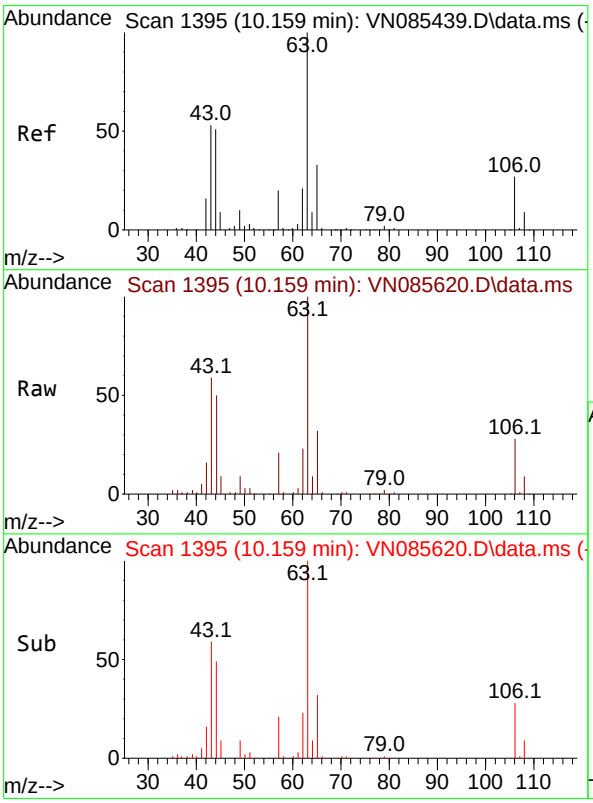
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 31.5 | 25.6 | 38.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

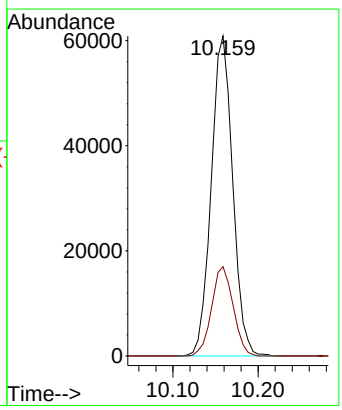
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

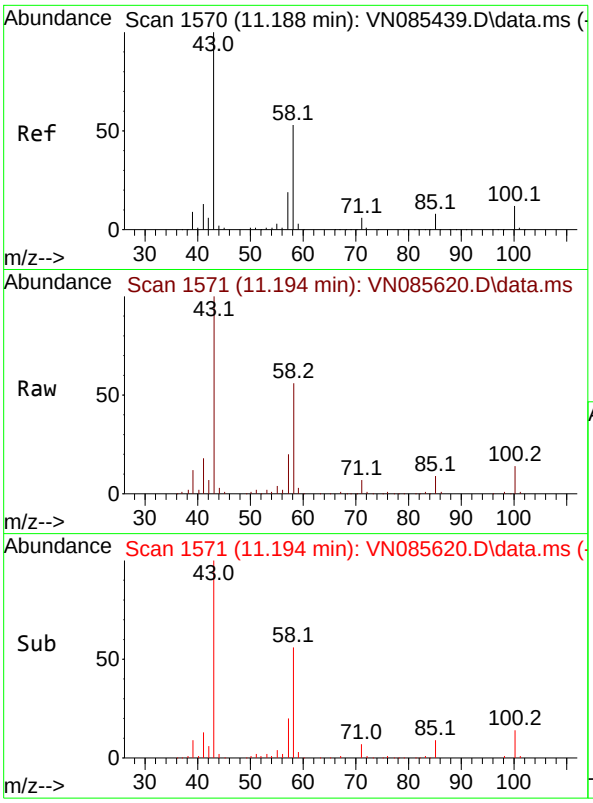



#58
2-Chloroethyl Vinyl ether
Concen: 79.007 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 63 Resp: 106559

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 28.0 | 21.6 | 32.4 |

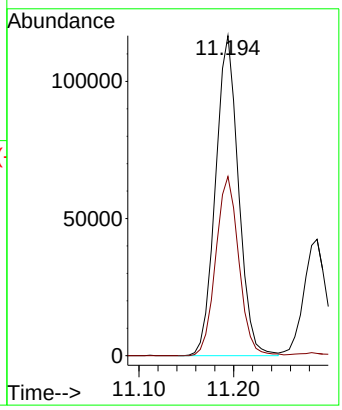





#59
2-Hexanone
Concen: 96.535 ug/l
RT: 11.194 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 43 Resp: 19665

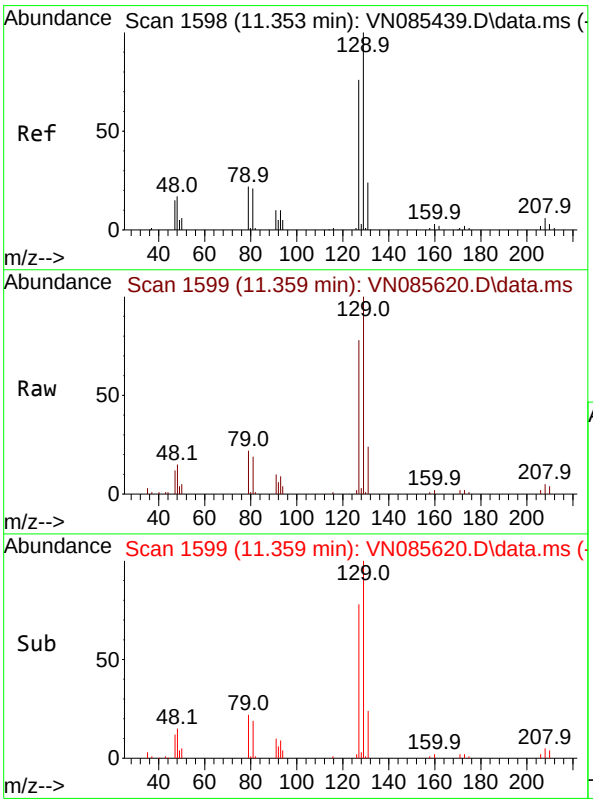
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 56.2 | 26.2 | 78.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

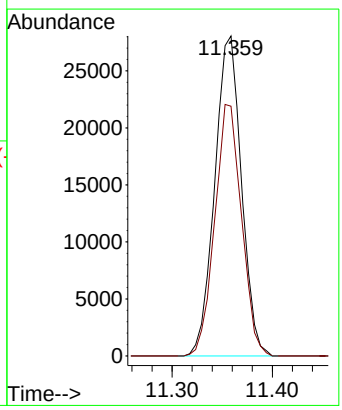
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

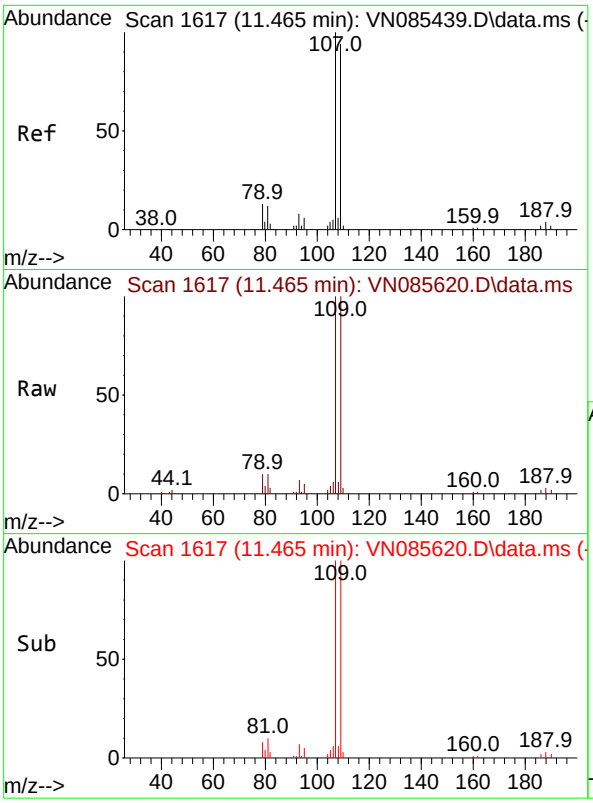



#60
Dibromochloromethane
Concen: 20.240 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:129 Resp: 51933

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 78.6 | 38.6 | 115.8 |






#61
1,2-Dibromoethane
Concen: 20.183 ug/l
RT: 11.465 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

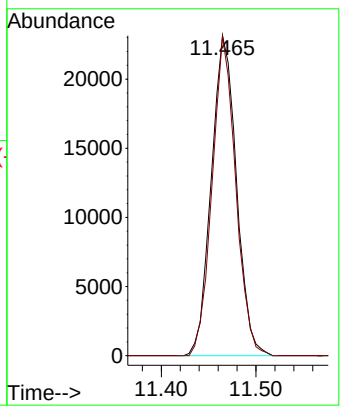
Tgt Ion:107 Resp: 4270

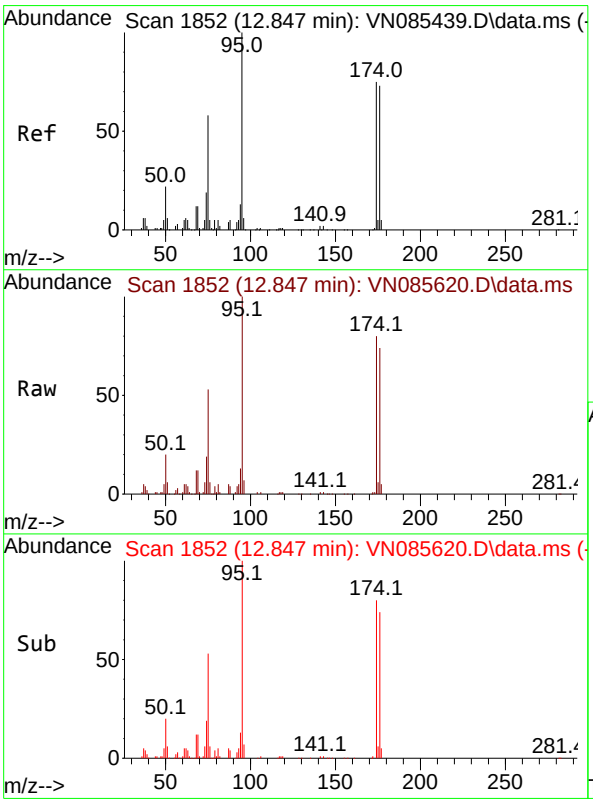
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 93.7 | 75.9 | 113.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

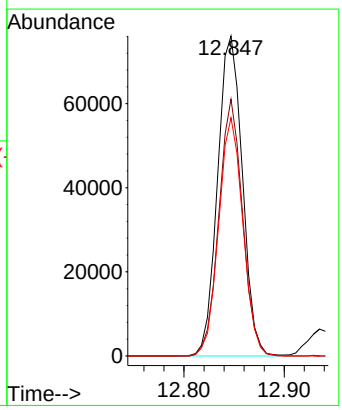


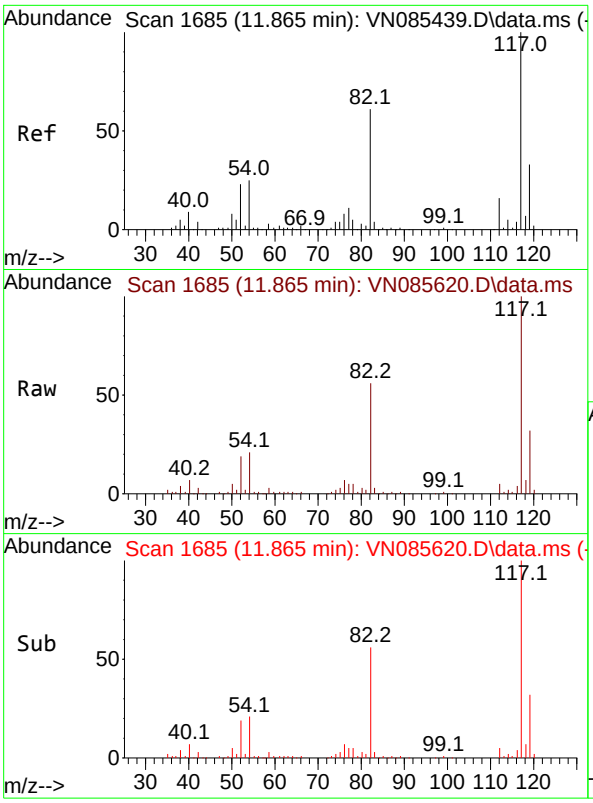




#62
4-Bromofluorobenzene
Concen: 48.807 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 95 Resp: 130381

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 76.8 | 0.0 | 145.0 |
| 176 | 72.7 | 0.0 | 142.4 |

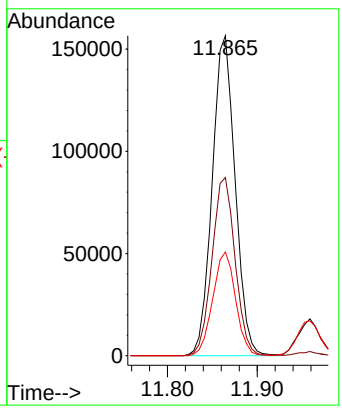





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:117 Resp: 27759

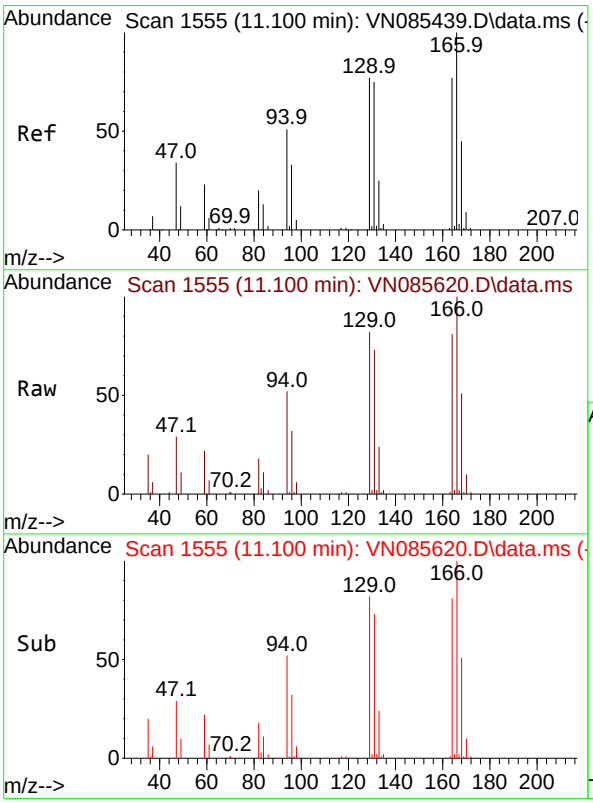
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 55.7 | 48.6 | 72.8 |
| 119 | 32.4 | 26.6 | 39.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

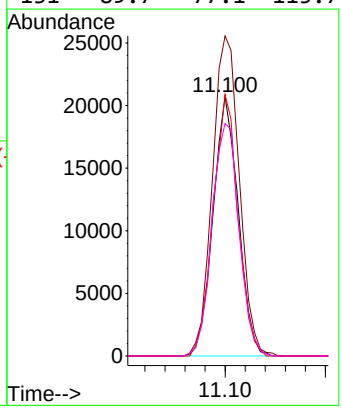
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

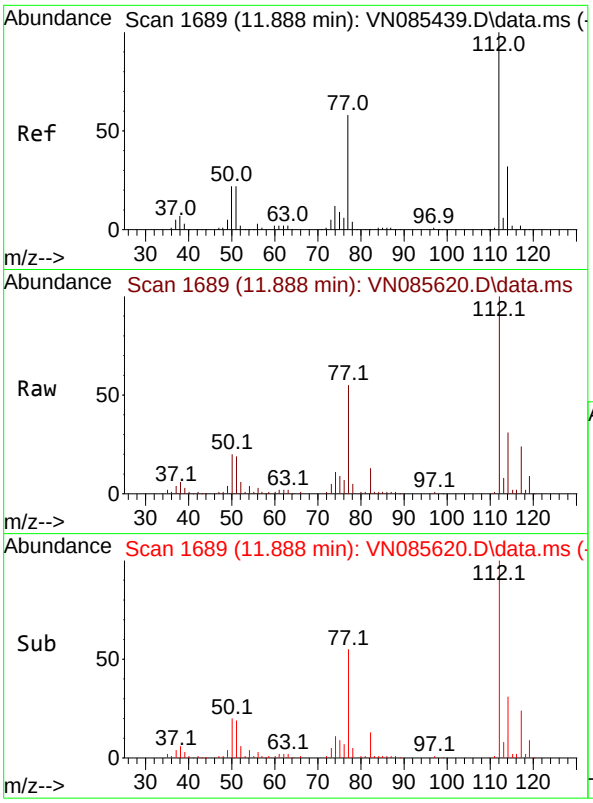



#64
Tetrachloroethene
Concen: 19.076 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:164 Resp: 36100

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 123.4 | 103.4 | 155.2 |
| 129 | 100.7 | 79.2 | 118.8 |
| 131 | 89.7 | 77.1 | 115.7 |

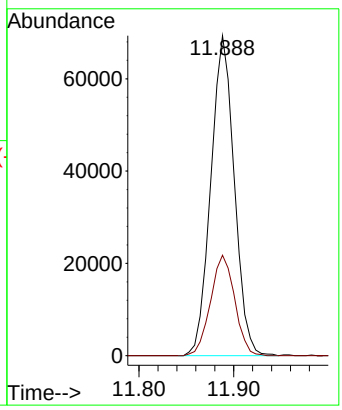





#65
Chlorobenzene
Concen: 19.628 ug/l
RT: 11.888 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:112 Resp: 11936

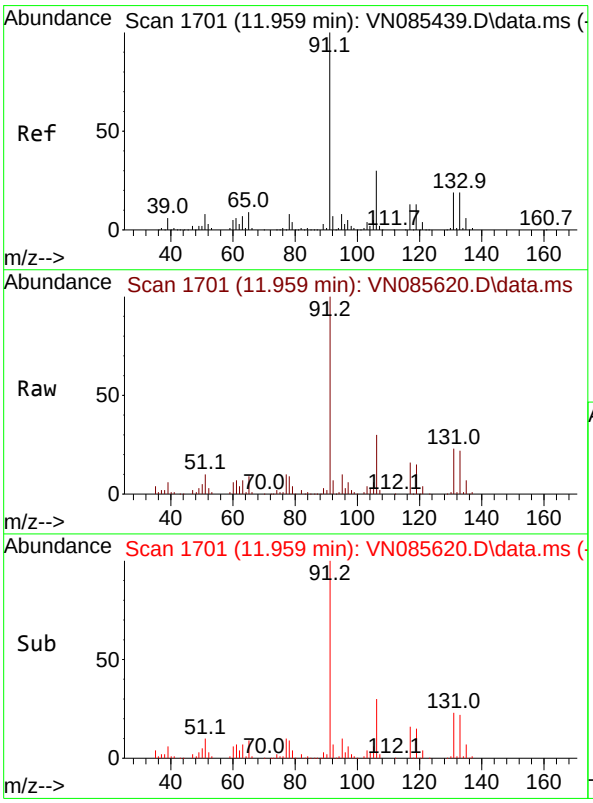
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 31.4 | 25.3 | 37.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

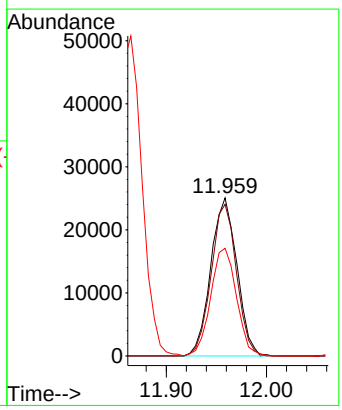
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

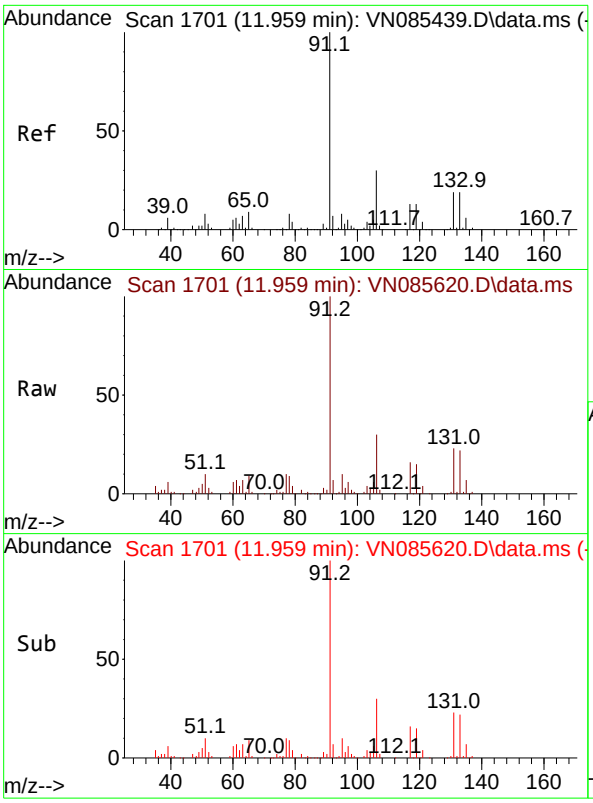



#66
1,1,1,2-Tetrachloroethane
Concen: 20.335 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:131 Resp: 45386

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 93.1 | 47.4 | 142.3 |
| 119 | 67.1 | 33.1 | 99.5 |






#67
Ethyl Benzene
Concen: 19.098 ug/l
RT: 11.959 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

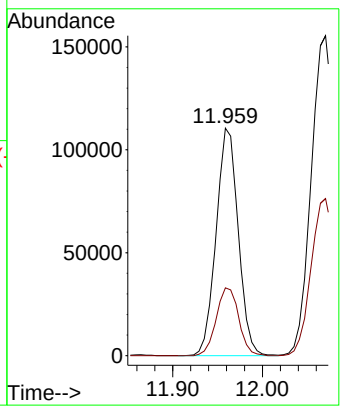
Tgt Ion: 91 Resp: 18915

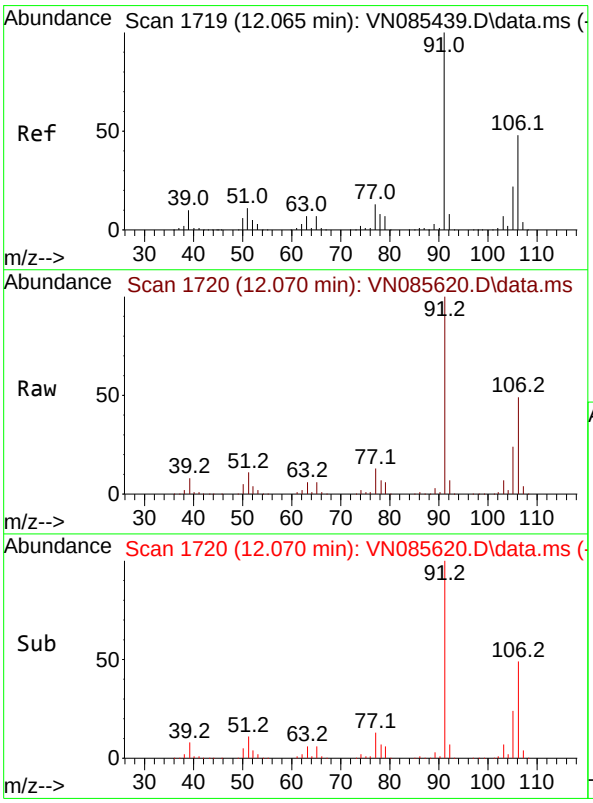
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 29.8 | 23.8 | 35.8 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

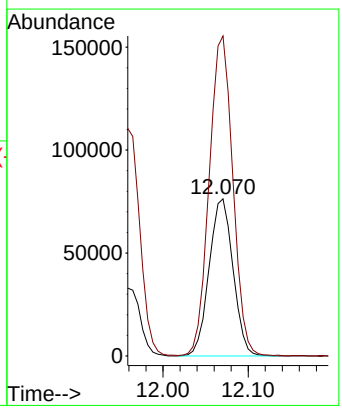


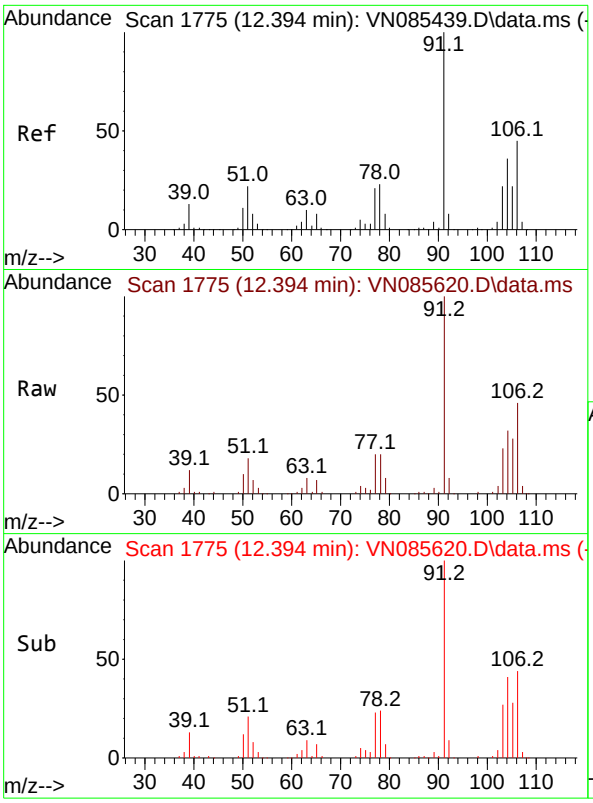




#68
m/p-Xylenes
Concen: 40.628 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:106 Resp: 148722

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 201.7 | 167.7 | 251.5 |






#69
o-Xylene
Concen: 19.519 ug/l
RT: 12.394 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

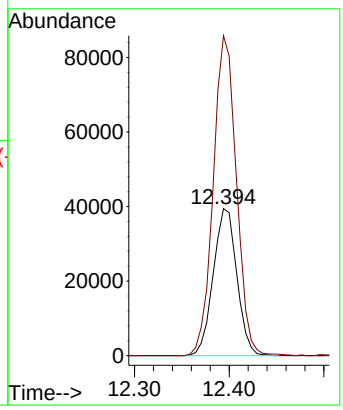
Tgt Ion:106 Resp: 6828

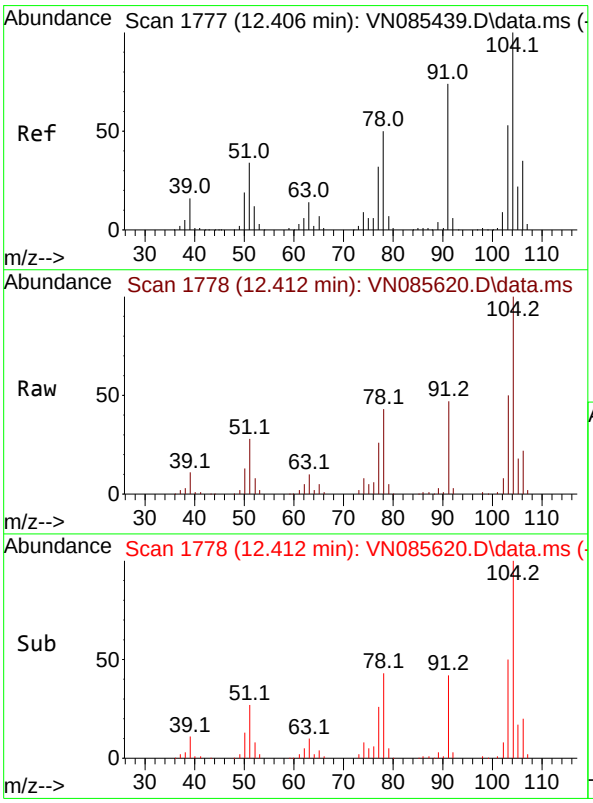
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 214.1 | 110.4 | 331.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

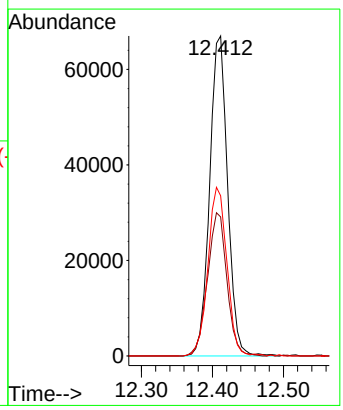


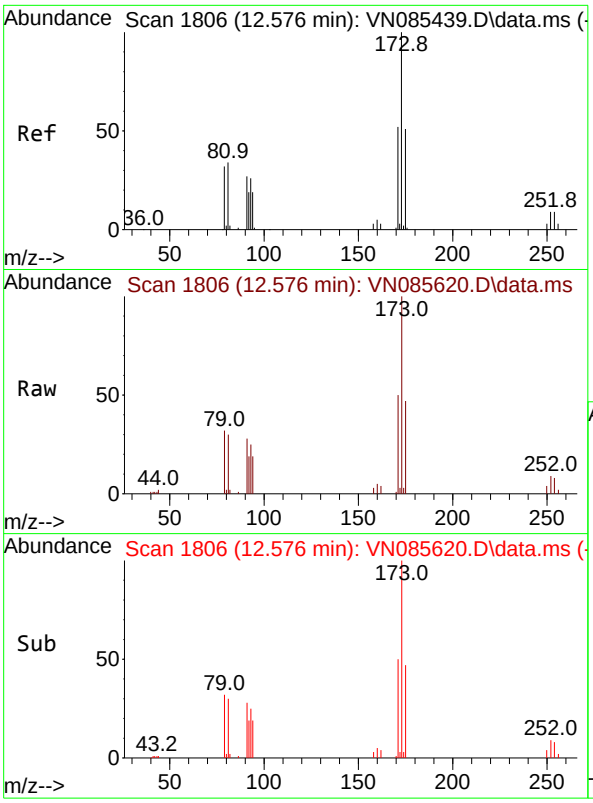




#70
Styrene
Concen: 20.307 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:104 Resp: 117567

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 48.5 | 42.5 | 63.7 |
| 103 | 55.8 | 43.8 | 65.8 |

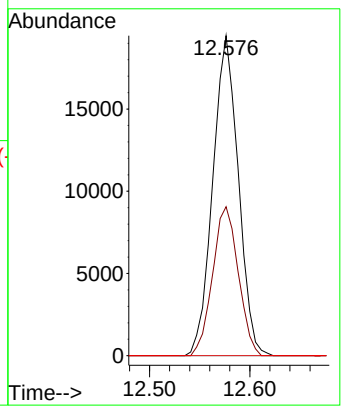





#71
Bromoform
Concen: 21.478 ug/l
RT: 12.576 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:173 Resp: 3430

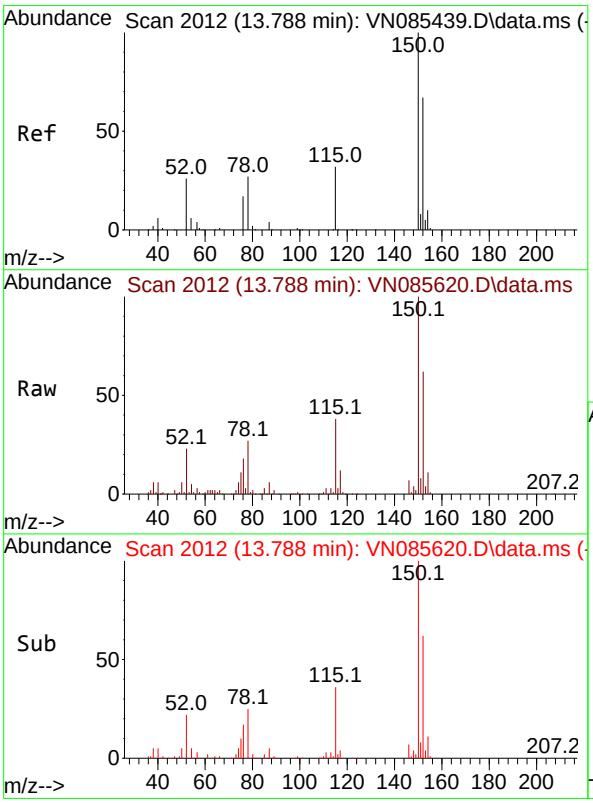
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 46.9 | 24.4 | 73.2 |
| 254 | 0.0 | 0.0 | 0.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

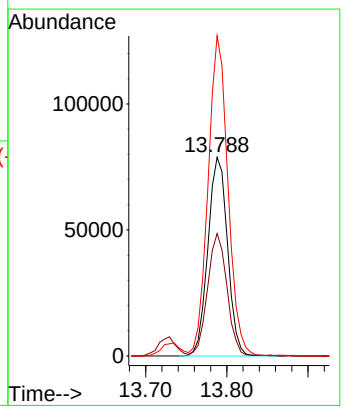
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

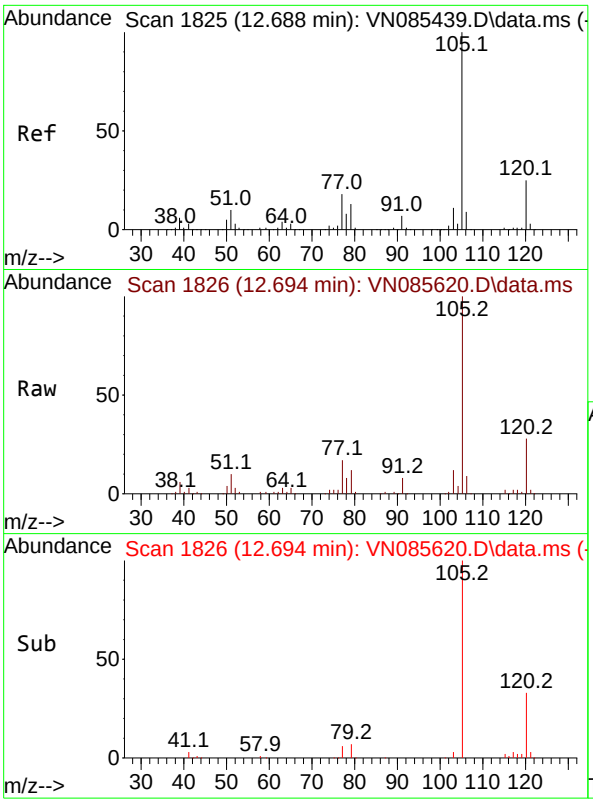



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:152 Resp: 132351

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 61.0 | 31.1 | 93.3 |
| 150 | 162.5 | 0.0 | 343.6 |

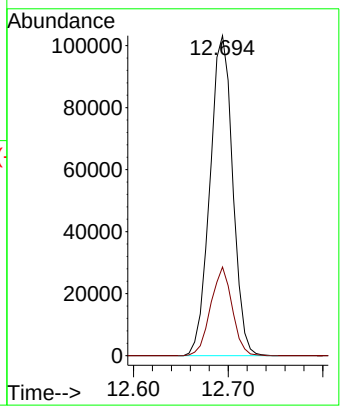





#73
Isopropylbenzene
Concen: 19.306 ug/l
RT: 12.694 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:105 Resp: 17245

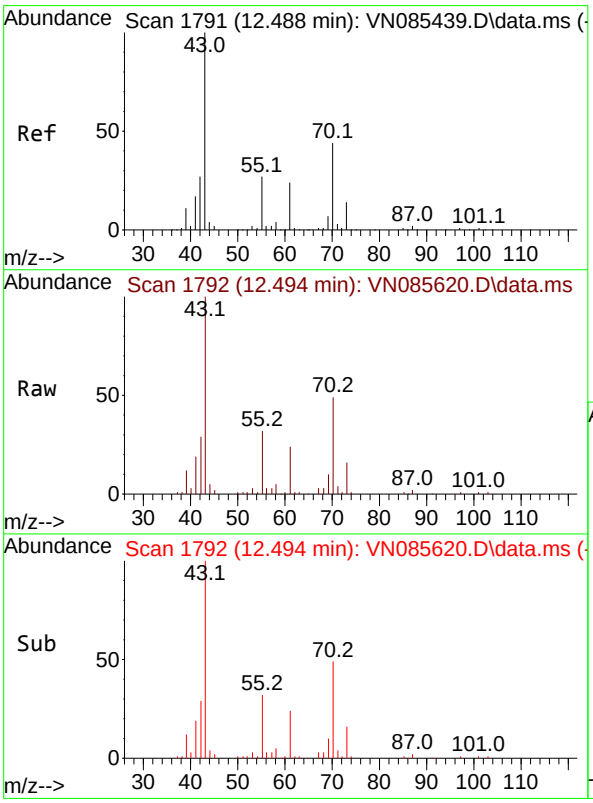
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.2 | 12.8 | 38.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

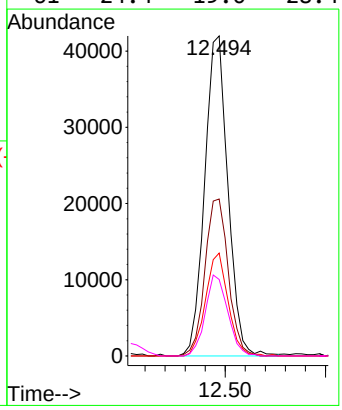
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

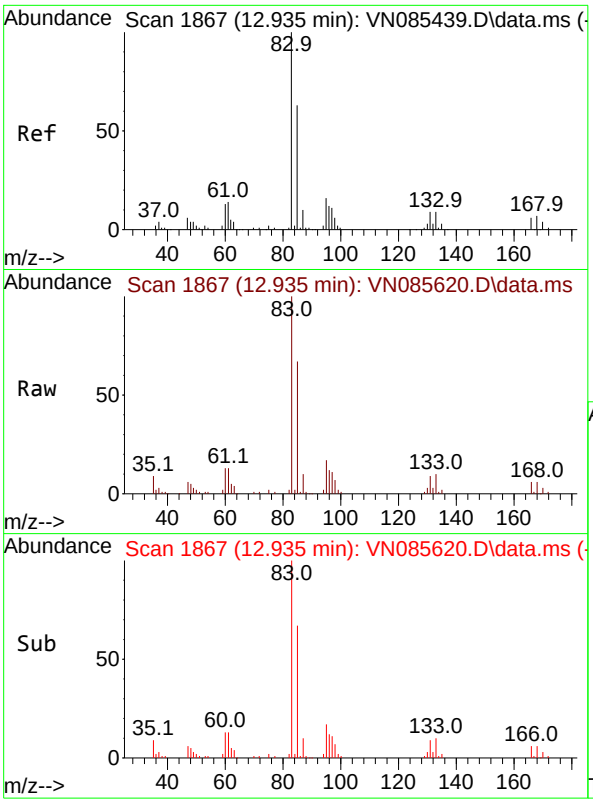



#74
N-amyl acetate
Concen: 16.859 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 43 Resp: 67688

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 49.3 | 34.0 | 51.0 |
| 55 | 31.4 | 21.4 | 32.2 |
| 61 | 24.4 | 19.0 | 28.4 |






#75
1,1,2,2-Tetrachloroethane
Concen: 21.144 ug/l
RT: 12.935 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

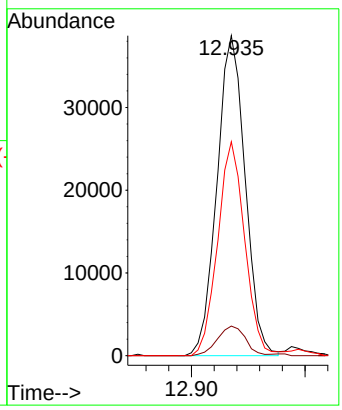
Tgt Ion: 83 Resp: 6671

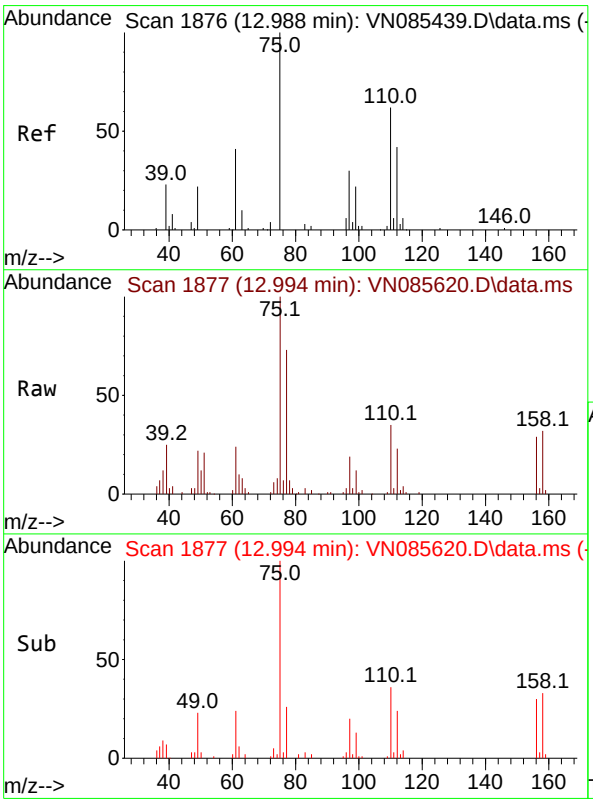
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 9.5 | 4.8 | 14.4 |
| 85 | 64.1 | 32.2 | 96.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

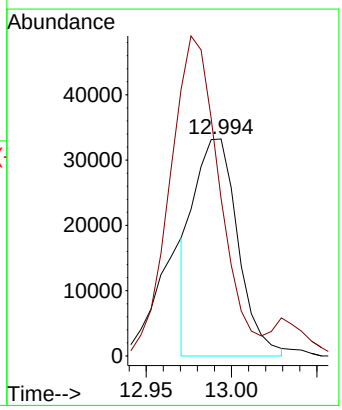


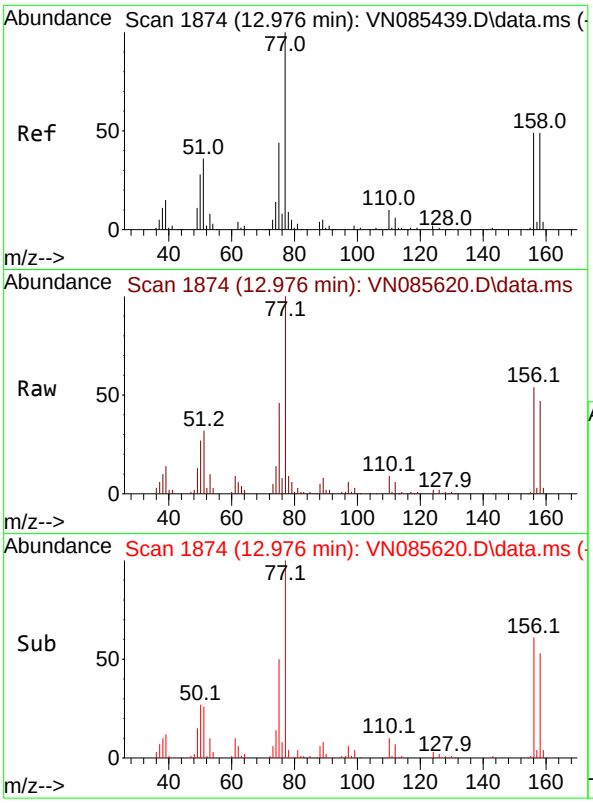




#76
1,2,3-Trichloropropane
Concen: 22.301 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 75 Resp: 59990

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 165.1 | 109.7 | 329.2 |

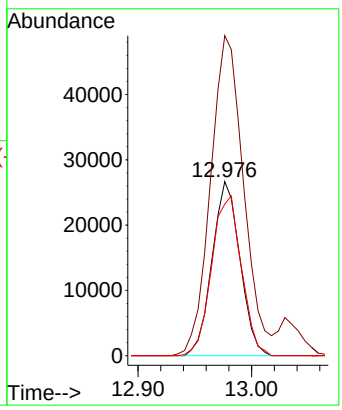





#77
Bromobenzene
Concen: 19.499 ug/l
RT: 12.976 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:156 Resp: 4550

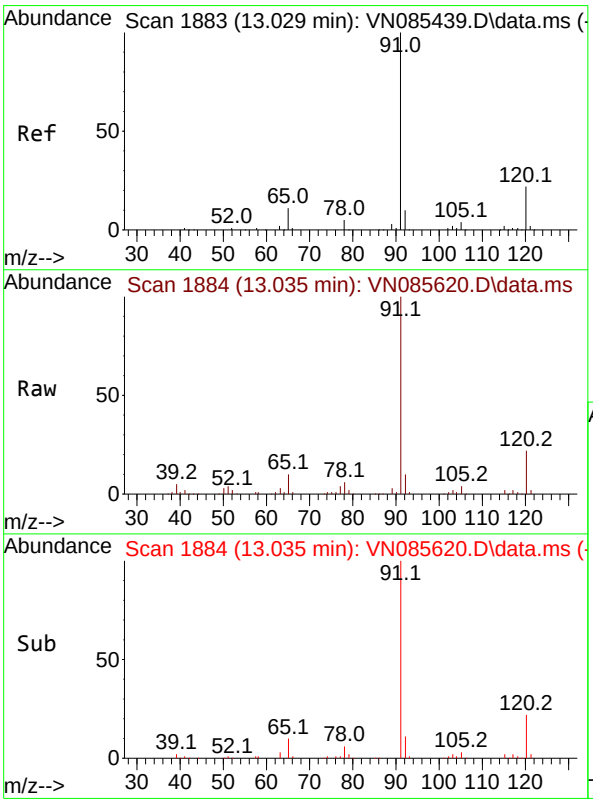
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 217.6 | 114.1 | 342.4 |
| 158 | 97.8 | 48.9 | 146.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

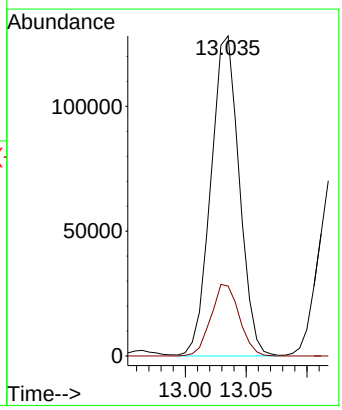
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

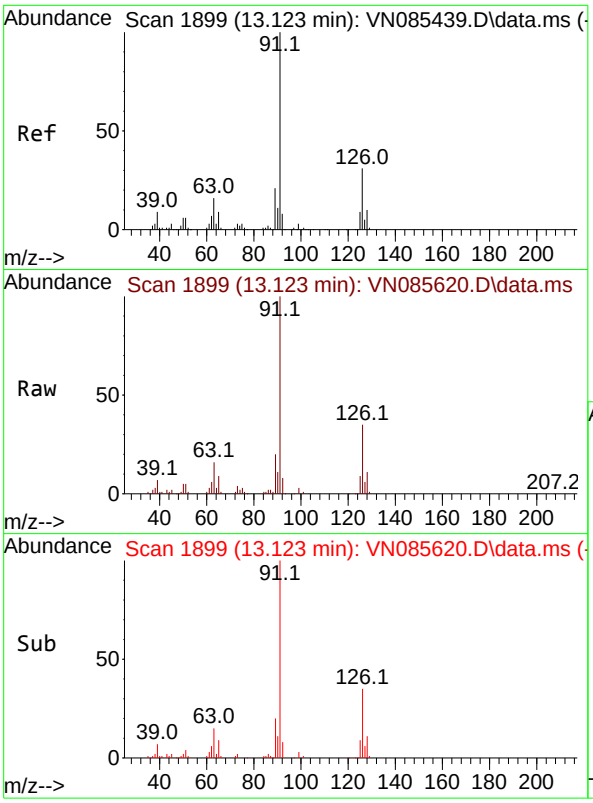



#78
n-propylbenzene
Concen: 19.734 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 91 Resp: 208681

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.2 | 10.9 | 32.6 |






#79
2-Chlorotoluene
Concen: 19.380 ug/l
RT: 13.123 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

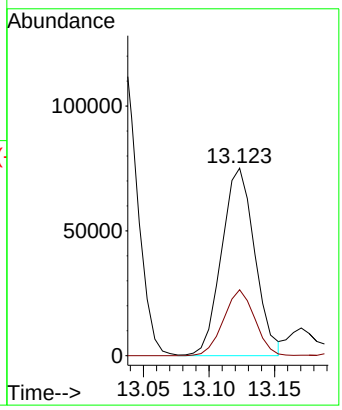
Tgt Ion: 91 Resp: 13263

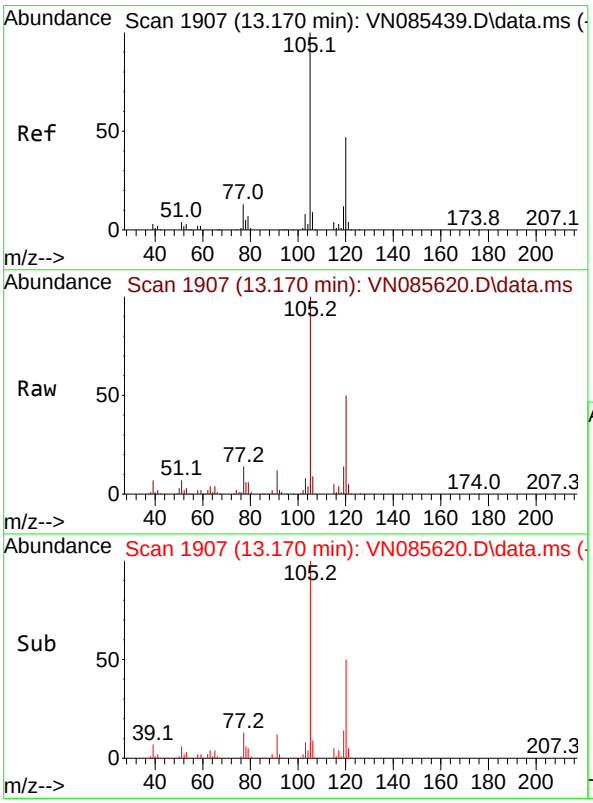
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 33.0 | 15.7 | 47.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

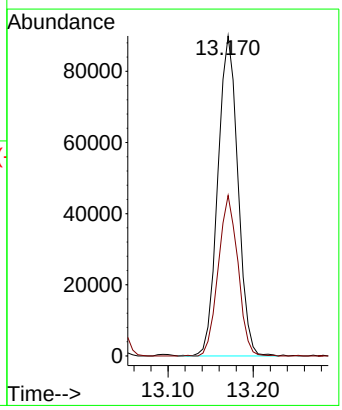


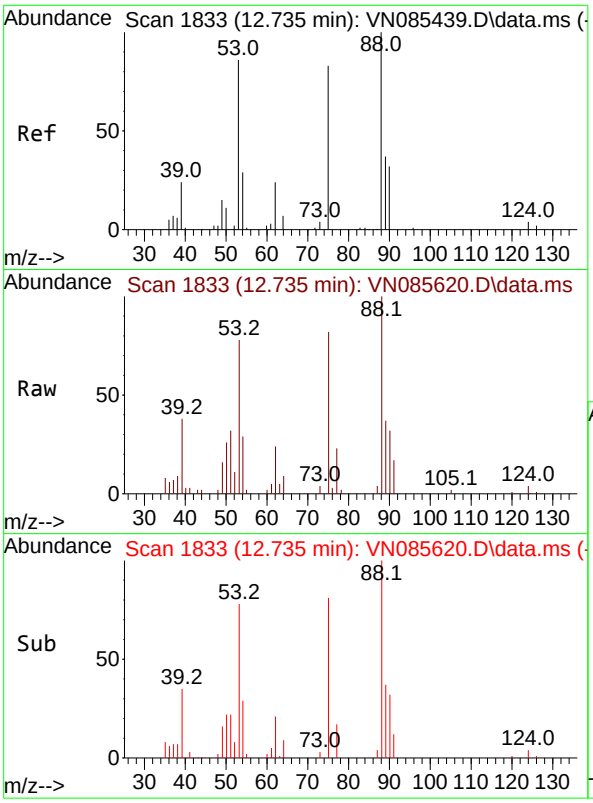




#80
1,3,5-Trimethylbenzene
Concen: 19.947 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:105 Resp: 147177

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 49.0 | 23.9 | 71.7 |






#81
trans-1,4-Dichloro-2-butene
Concen: 20.251 ug/l
RT: 12.735 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

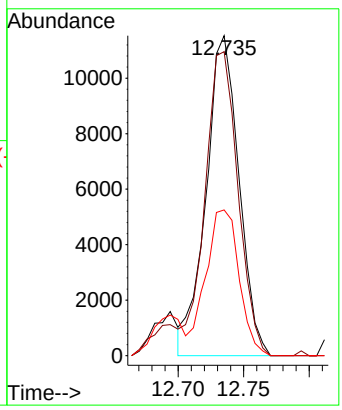
Tgt Ion: 75 Resp: 2013

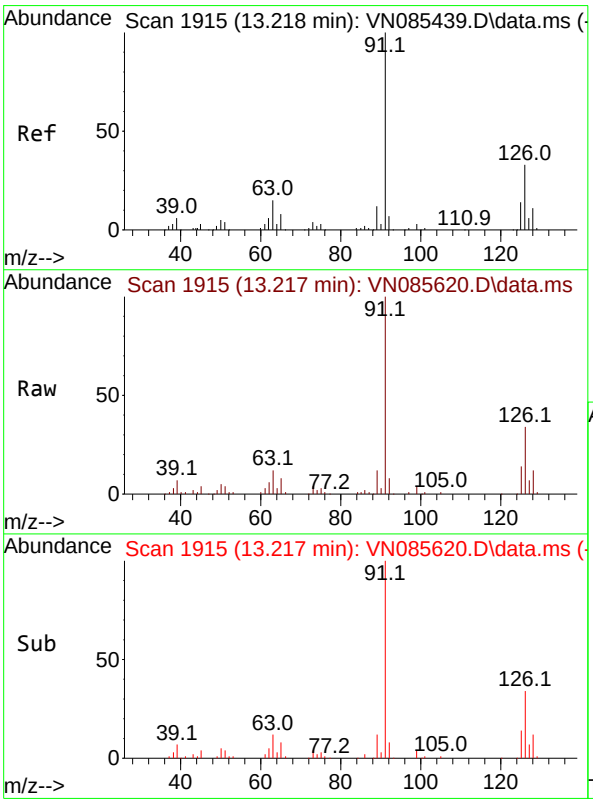
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 103.9 | 95.6 | 143.4 |
| 89 | 46.2 | 37.0 | 55.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

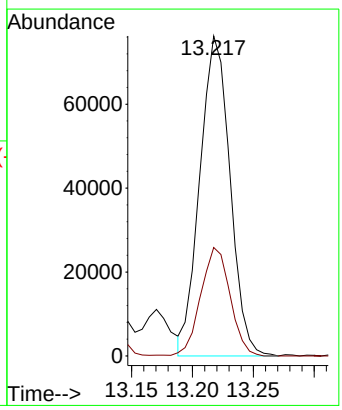


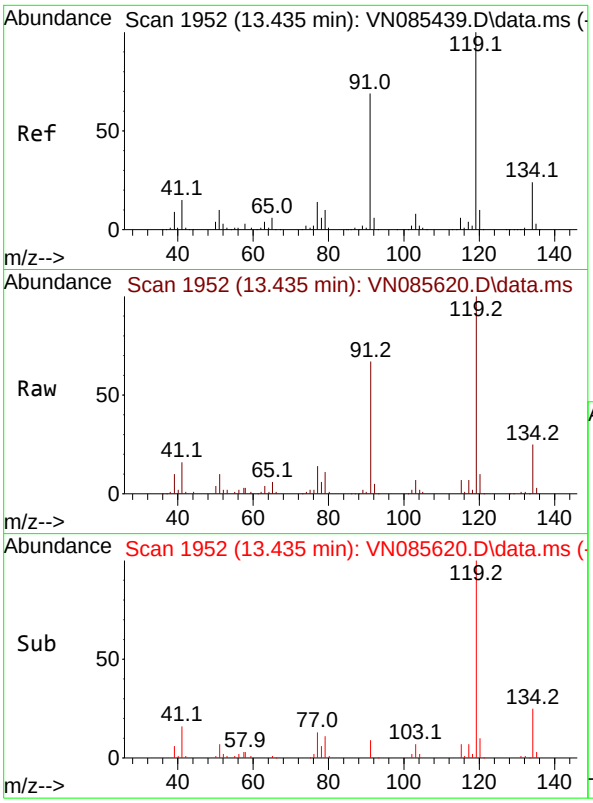




#82
4-Chlorotoluene
Concen: 19.280 ug/l
RT: 13.217 min Scan# 1915
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 91 Resp: 131384

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 33.1 | 15.9 | 47.7 |






#83
tert-Butylbenzene
Concen: 19.259 ug/l
RT: 13.435 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

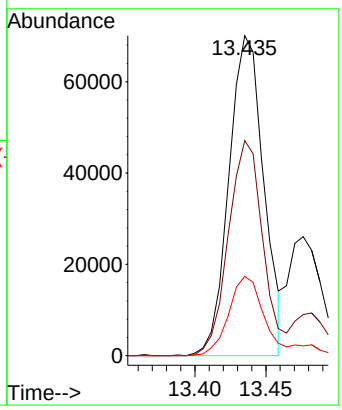
Tgt Ion:119 Resp: 11933

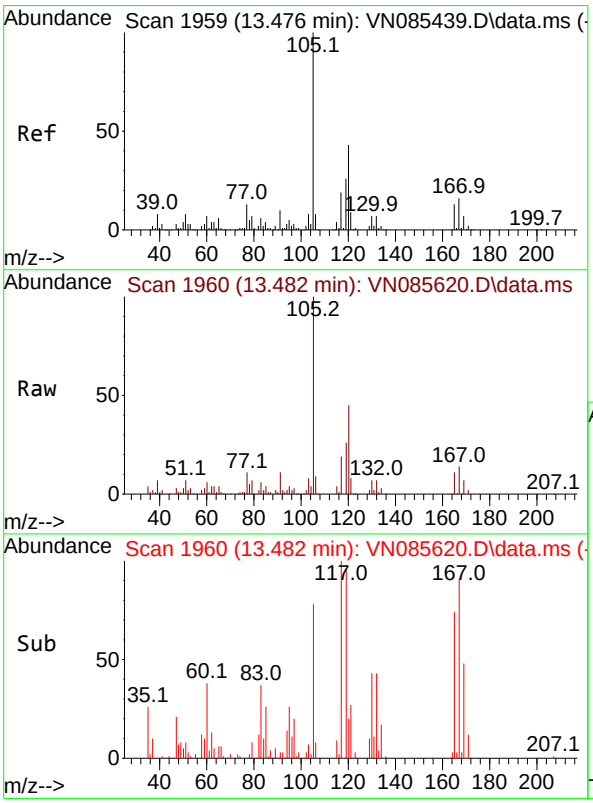
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 67.0 | 35.1 | 105.3 |
| 134 | 24.7 | 12.0 | 36.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

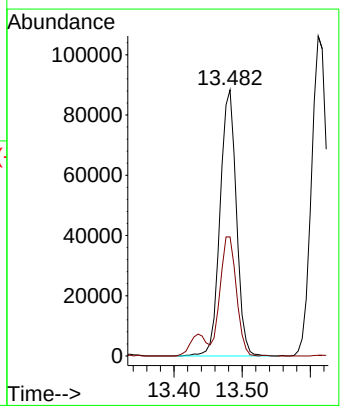


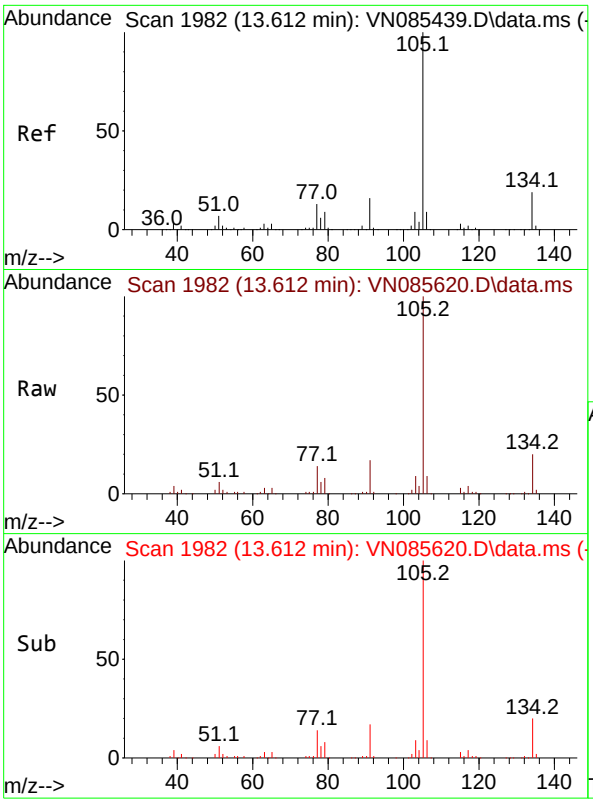




#84
1,2,4-Trimethylbenzene
Concen: 19.950 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:105 Resp: 146712

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 44.8 | 21.6 | 65.0 |






#85
sec-Butylbenzene
Concen: 20.055 ug/l
RT: 13.612 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

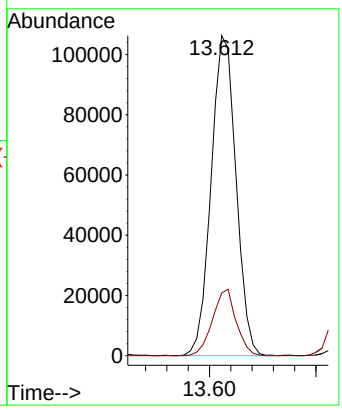
Tgt Ion:105 Resp: 17222

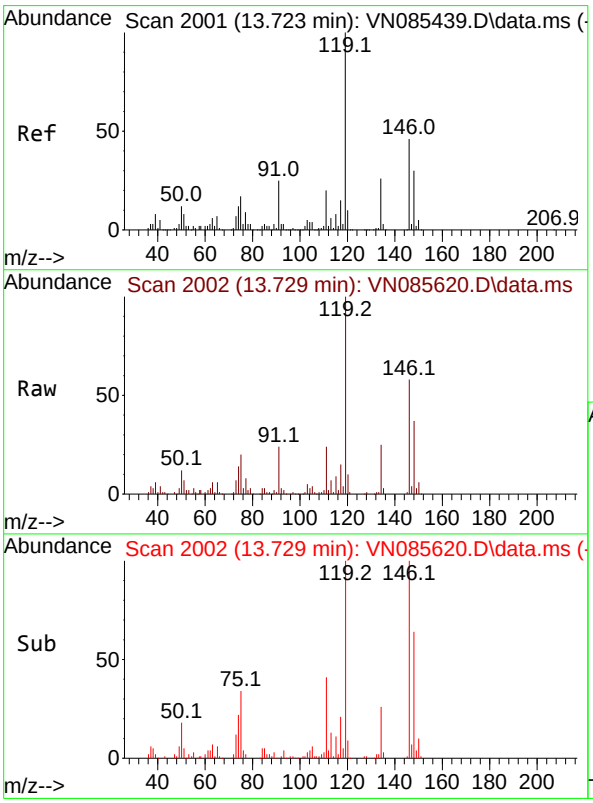
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.6 | 9.7 | 28.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

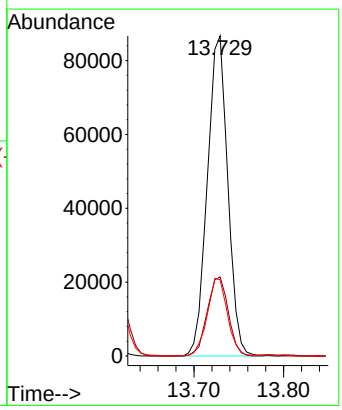


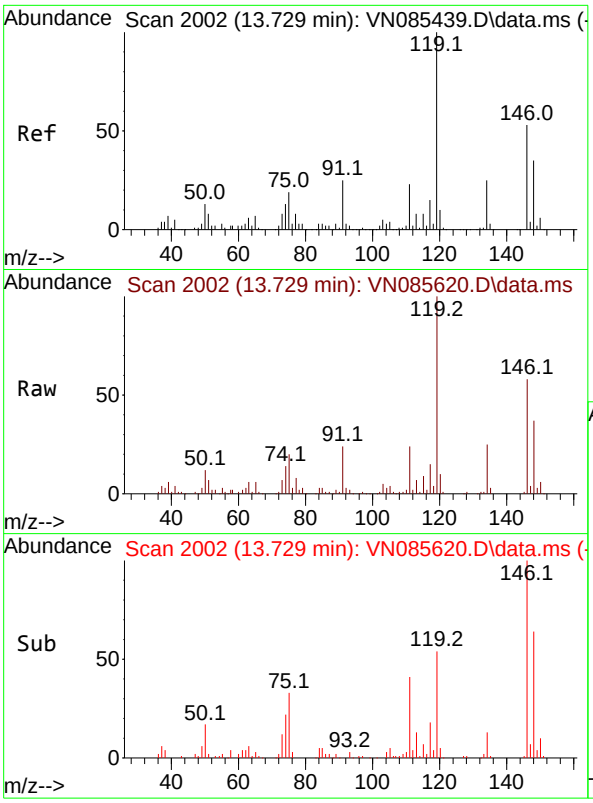




#86
p-Isopropyltoluene
Concen: 19.216 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:119 Resp: 137244

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.3 | 12.7 | 38.0 |
| 91 | 24.0 | 12.7 | 38.1 |

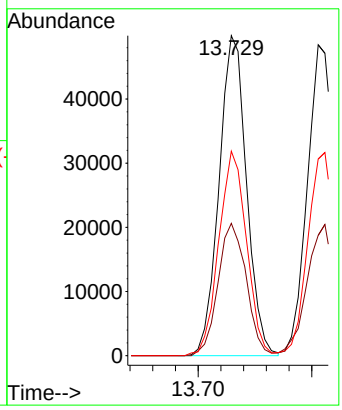





#87
1,3-Dichlorobenzene
Concen: 19.507 ug/l
RT: 13.729 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:146 Resp: 8383

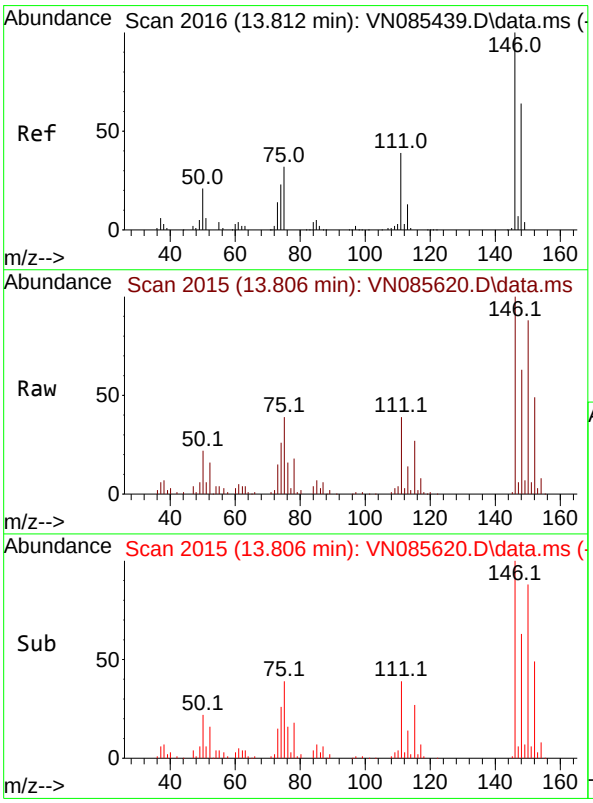
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.4 | 21.4 | 64.3 |
| 148 | 64.4 | 32.3 | 96.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

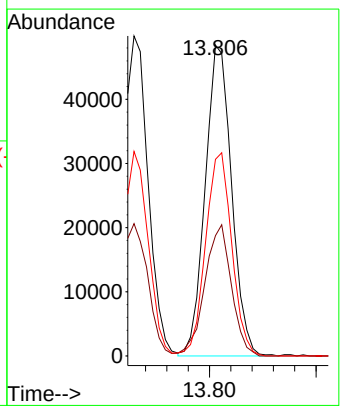
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

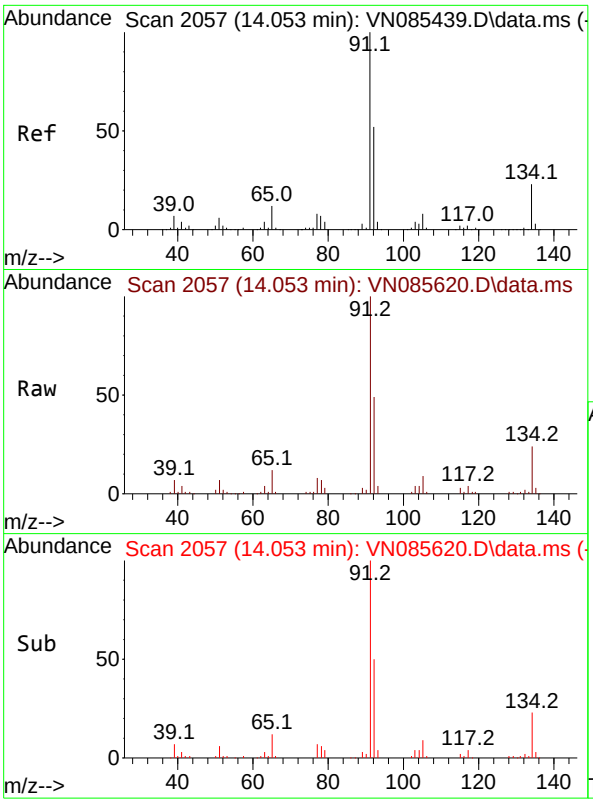



#88
1,4-Dichlorobenzene
Concen: 18.724 ug/l
RT: 13.806 min Scan# 2015
Delta R.T. -0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:146 Resp: 83412

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.7 | 21.3 | 63.7 |
| 148 | 64.9 | 32.4 | 97.0 |






#89
n-Butylbenzene
Concen: 18.291 ug/l
RT: 14.053 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

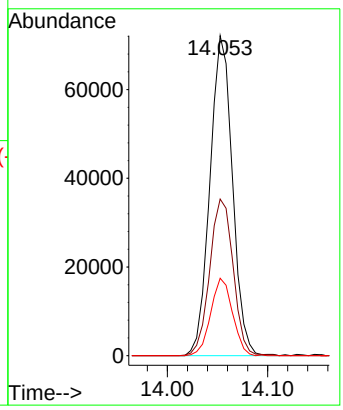
Tgt Ion: 91 Resp: 11269

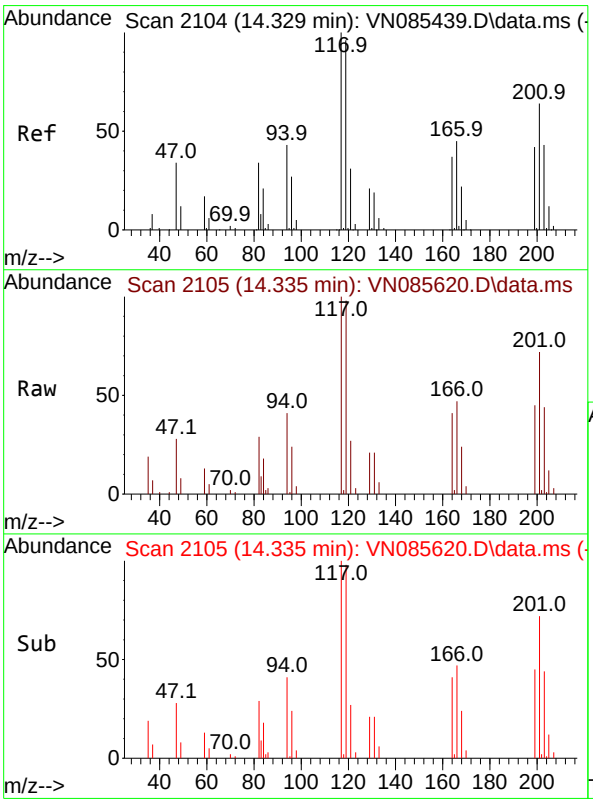
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 51.1 | 25.8 | 77.3 |
| 134 | 23.5 | 11.7 | 35.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

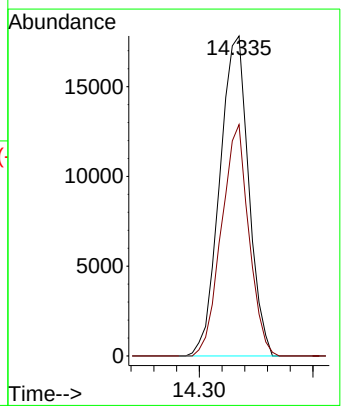


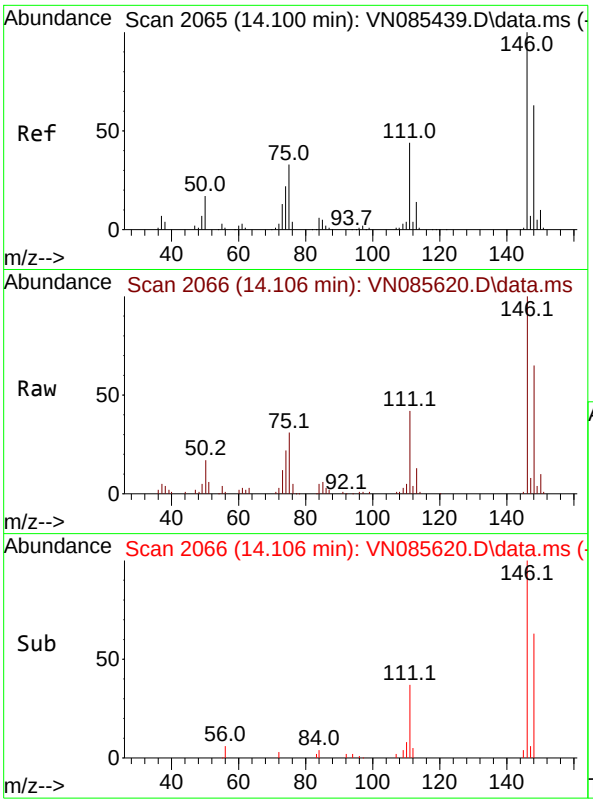




#90
Hexachloroethane
Concen: 19.257 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:117 Resp: 31482

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 68.6 | 33.7 | 101.0 |

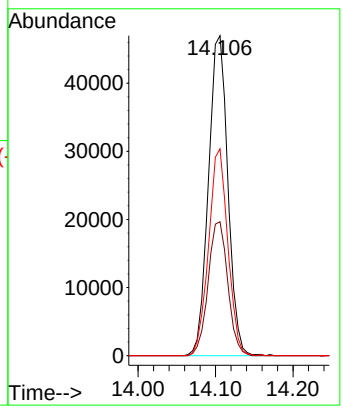





#91
1,2-Dichlorobenzene
Concen: 19.061 ug/l
RT: 14.106 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:146 Resp: 8171

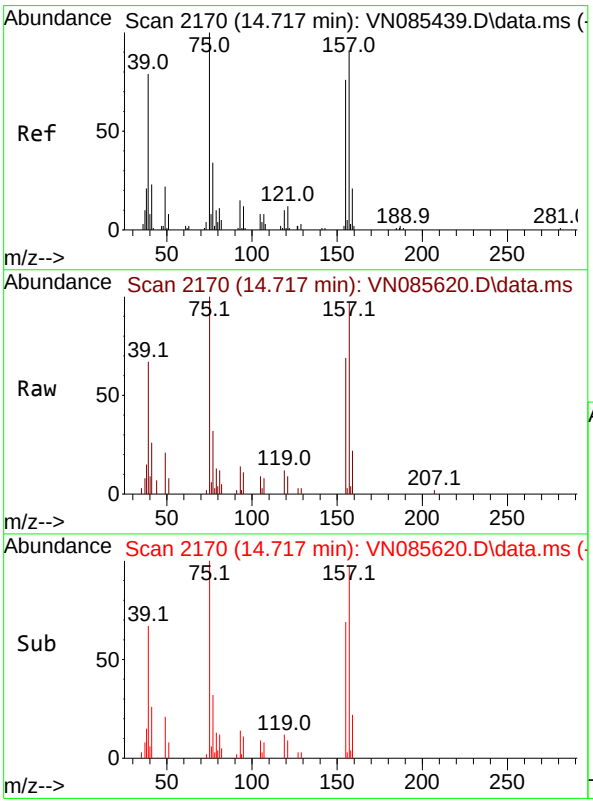
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.4 | 21.7 | 65.1 |
| 148 | 64.1 | 31.4 | 94.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

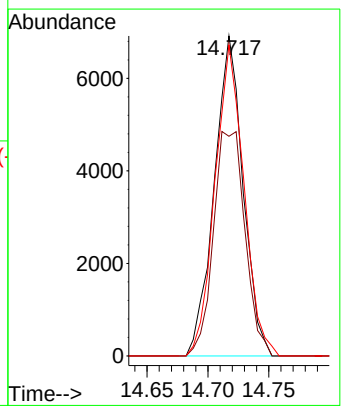
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

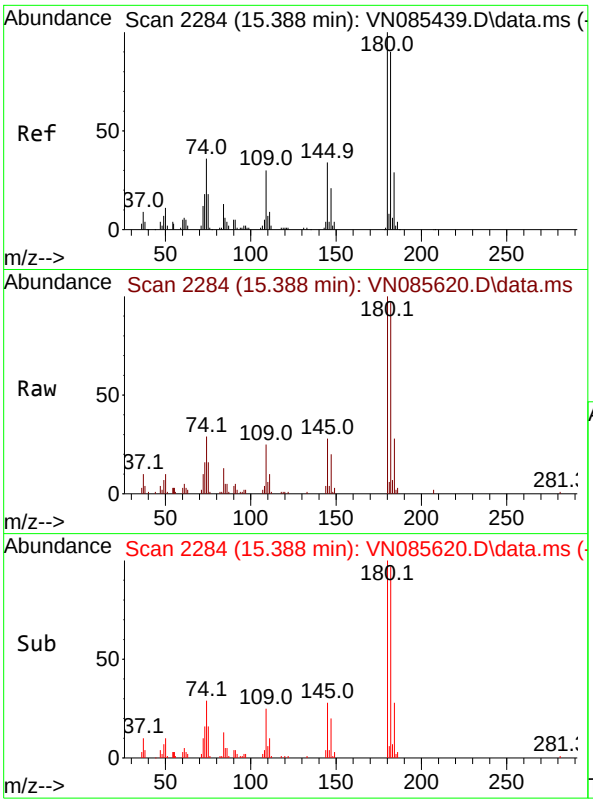



#92
1,2-Dibromo-3-Chloropropane
Concen: 19.768 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 75 Resp: 11390

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 77.0 | 36.4 | 109.2 |
| 157 | 97.3 | 45.4 | 136.1 |






#93
1,2,4-Trichlorobenzene
Concen: 17.977 ug/l
RT: 15.388 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

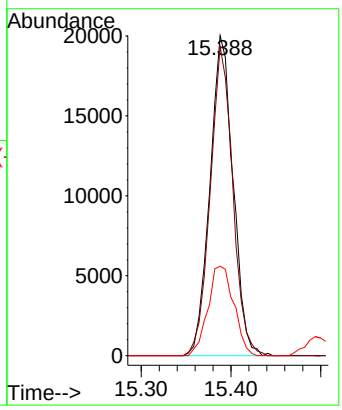
Tgt Ion:180 Resp: 3581

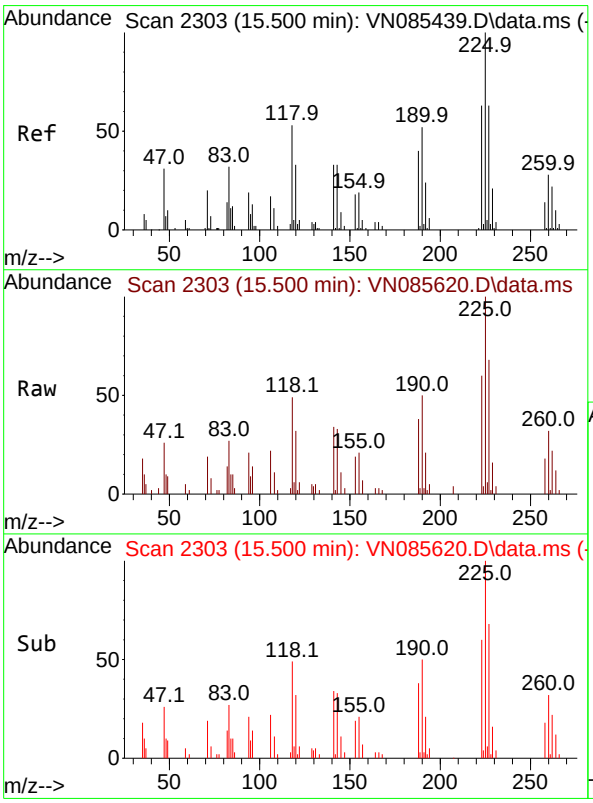
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 94.1 | 46.8 | 140.3 |
| 145 | 31.3 | 16.0 | 48.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

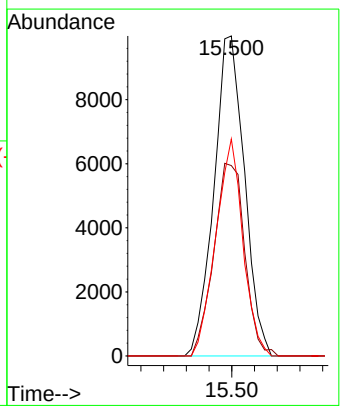


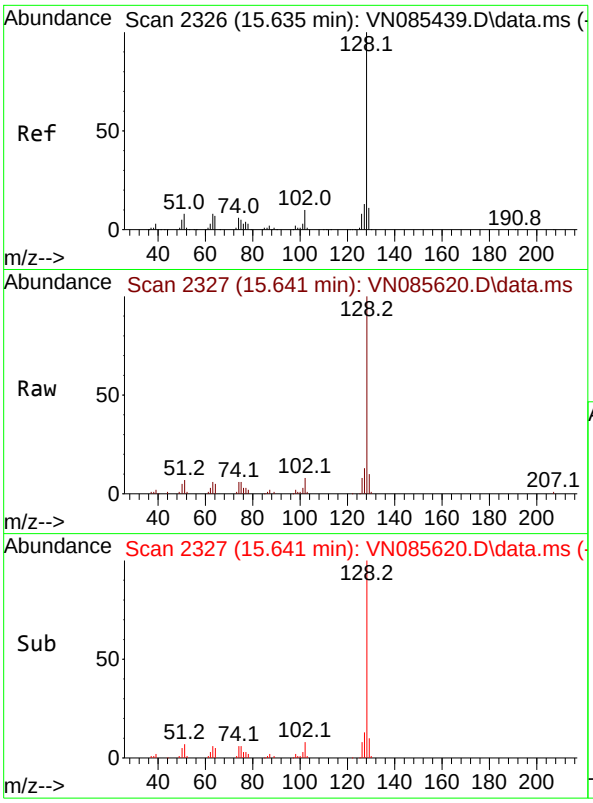




#94
Hexachlorobutadiene
Concen: 17.641 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:225 Resp: 18661

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 60.9 | 30.7 | 92.1 |
| 227 | 60.3 | 30.9 | 92.5 |

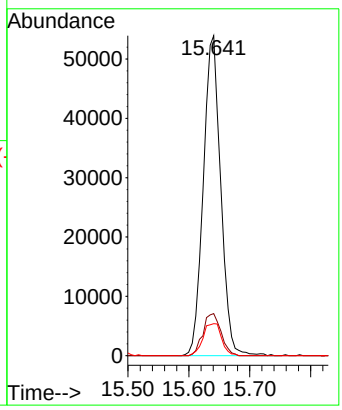





#95
Naphthalene
Concen: 18.013 ug/l
RT: 15.641 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:128 Resp: 10709

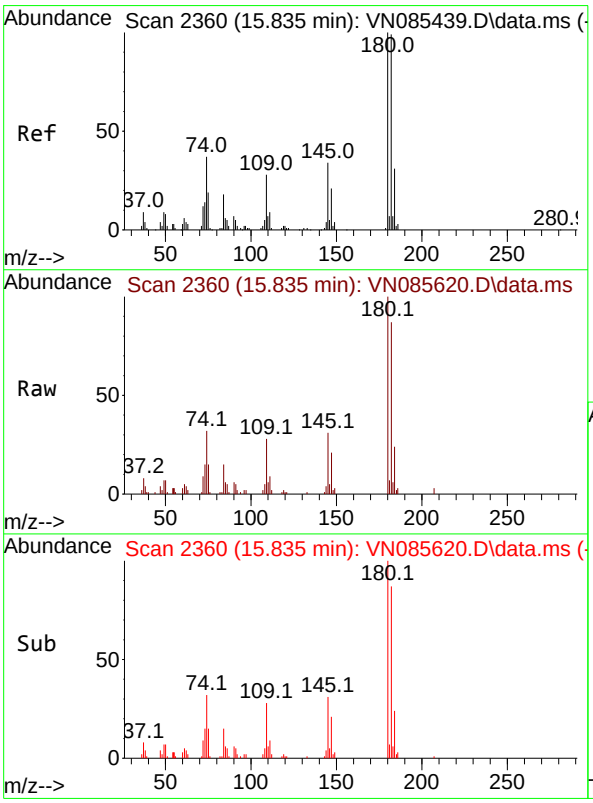
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 13.7 | 10.6 | 16.0 |
| 129 | 10.8 | 8.8 | 13.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0203WBSD01

**Manual Integrations**
**APPROVED**

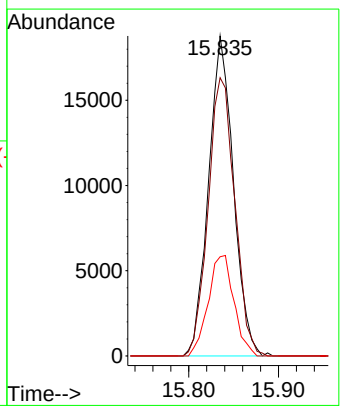
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025




#96
1,2,3-Trichlorobenzene
Concen: 17.917 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:180 Resp: 36123

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 92.8 | 47.4 | 142.2 |
| 145 | 32.5 | 16.9 | 50.7 |



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

# Manual Integration Report

| Sequence: | VN011425 | Instrument | MSVOA_n |
|---|---|---|---|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|
| VSTDICC100 | VN085438.D | 1,2,3-Trichloropropane | JOHN | 1/15/2025 9:31:09 AM | MMDadoda | 1/15/2025 12:55:19 PM | Peak Integrated by Software |
| VSTDICCC050 | VN085439.D | 1,2,3-Trichloropropane | JOHN | 1/15/2025 9:31:14 AM | MMDadoda | 1/15/2025 12:55:22 PM | Peak Integrated by Software |
| VSTDICC020 | VN085440.D | 1,2,3-Trichloropropane | JOHN | 1/15/2025 9:31:19 AM | MMDadoda | 1/15/2025 12:55:25 PM | Peak Integrated by Software |
| VSTDICC020 | VN085440.D | trans-1,4-Dichloro-2-but ene | JOHN | 1/15/2025 9:31:19 AM | MMDadoda | 1/15/2025 12:55:25 PM | Peak Integrated by Software |
| VSTDICC020 | VN085440.D | Vinyl Acetate | JOHN | 1/15/2025 9:31:19 AM | MMDadoda | 1/15/2025 12:55:25 PM | Peak Integrated by Software |
| VSTDICC010 | VN085441.D | 1,2,3-Trichloropropane | JOHN | 1/15/2025 9:31:23 AM | MMDadoda | 1/15/2025 12:55:29 PM | Peak Integrated by Software |
| VSTDICC005 | VN085442.D | 1,2,3-Trichloropropane | JOHN | 1/15/2025 9:31:28 AM | MMDadoda | 1/15/2025 12:55:34 PM | Peak Integrated by Software |
| VSTDICC005 | VN085442.D | Ethyl Acetate | JOHN | 1/15/2025 9:31:28 AM | MMDadoda | 1/15/2025 12:55:34 PM | Peak Integrated by Software |
| VSTDICC005 | VN085442.D | Vinyl Acetate | JOHN | 1/15/2025 9:31:28 AM | MMDadoda | 1/15/2025 12:55:34 PM | Peak Integrated by Software |
| VSTDICC001 | VN085443.D | 1,1,2-Trichlorotrifluoroet hane | JOHN | 1/15/2025 9:31:32 AM | MMDadoda | 1/15/2025 12:55:39 PM | Peak Integrated by Software |
| VSTDICC001 | VN085443.D | 1,1-Dichloroethane | JOHN | 1/15/2025 9:31:32 AM | MMDadoda | 1/15/2025 12:55:39 PM | Peak Integrated by Software |
| VSTDICC001 | VN085443.D | 1,2,3-Trichloropropane | JOHN | 1/15/2025 9:31:32 AM | MMDadoda | 1/15/2025 12:55:39 PM | Peak Integrated by Software |
| VSTDICC001 | VN085443.D | 1,4-Dichlorobenzene | JOHN | 1/15/2025 9:31:32 AM | MMDadoda | 1/15/2025 12:55:39 PM | Peak Integrated by Software |

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

# Manual Integration Report

| Sequence: | VN011425 | Instrument | MSVOA_n |
|---|---|---|---|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|
| VSTDICC001 | VN085443.D | 2-Butanone | JOHN | 1/15/2025 9:31:32 AM | MMDadoda | 1/15/2025 12:55:39 PM | Peak Integrated by Software |
| VSTDICC001 | VN085443.D | Ethyl Acetate | JOHN | 1/15/2025 9:31:32 AM | MMDadoda | 1/15/2025 12:55:39 PM | Peak Integrated by Software |
| VSTDICC001 | VN085443.D | Vinyl Acetate | JOHN | 1/15/2025 9:31:32 AM | MMDadoda | 1/15/2025 12:55:39 PM | Peak Integrated by Software |
| VSTDICV050 | VN085445.D | 1,2,3-Trichloropropane | JOHN | 1/15/2025 9:31:37 AM | MMDadoda | 1/15/2025 12:55:43 PM | Peak Integrated by Software |
| VSTDICV050 | VN085445.D | trans-1,4-Dichloro-2-but ene | JOHN | 1/15/2025 9:31:37 AM | MMDadoda | 1/15/2025 12:55:43 PM | Peak Integrated by Software |

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

# Manual Integration Report

| Sequence: | VN020325 | Instrument | MSVOA_n |
|---|---|---|---|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|
| VSTDCCC050 | VN085617.D | 1,2,3-Trichloropropane | JOHN | 2/4/2025 9:51:42 AM | MMDadoda | 2/4/2025 3:45:56 PM | Peak Integrated by Software |
| VN0203WBS01 | VN085619.D | 1,2,3-Trichloropropane | JOHN | 2/4/2025 9:51:46 AM | MMDadoda | 2/4/2025 3:45:58 PM | Peak Integrated by Software |
| VN0203WBSD01 | VN085620.D | 1,2,3-Trichloropropane | JOHN | 2/4/2025 9:51:50 AM | MMDadoda | 2/4/2025 3:46:00 PM | Peak Integrated by Software |
| VSTDCCC050 | VN085643.D | 1,2,3-Trichloropropane | JOHN | 2/4/2025 9:52:10 AM | MMDadoda | 2/4/2025 3:46:03 PM | Peak Integrated by Software |

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

# Manual Integration Report

| Sequence: | VN020425 | Instrument | MSVOA_n |
|---|---|---|---|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|
| VSTDCCC050 | VN085645.D | 1,2,3-Trichloropropane | JOHN | 2/5/2025 9:38:29 AM | MMDadoda | 2/6/2025 11:04:41 AM | Peak Integrated by Software |
| VN0204WBS02 | VN085651.D | 1,2,3-Trichloropropane | JOHN | 2/5/2025 9:38:42 AM | MMDadoda | 2/6/2025 11:04:44 AM | Peak Integrated by Software |
| VN0204WBS02 | VN085651.D | Allyl chloride | JOHN | 2/5/2025 9:38:42 AM | MMDadoda | 2/6/2025 11:04:44 AM | Peak Integrated by Software |
| VN0204WBS02 | VN085651.D | Isopropyl Acetate | JOHN | 2/5/2025 9:38:42 AM | MMDadoda | 2/6/2025 11:04:44 AM | Peak Integrated by Software |
| VSTDCCC050 | VN085664.D | 1,2,3-Trichloropropane | JOHN | 2/5/2025 9:39:19 AM | MMDadoda | 2/6/2025 11:04:52 AM | Peak Integrated by Software |

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

**Instrument ID: MSVOA_N**

## Daily Analysis Runlog For Sequence/QCBatch ID # VN011425

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 1/15/2025 9:31:51 AM | | | | |
| Supervise By | Mahesh Dadoda | Supervise On | 1/15/2025 12:55:51 PM | | | | |
| SubDirectory | VN011425 | HP Acquire Method | MSVOA_N | | HP Processing Method | 82N011425W.M | |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP132529 |
| Initial Calibration Stds | VP132530,VP132531,VP132532,VP132533,VP132534,VP132535 |
| CCC | |
| Internal Standard/PEM | |
| ICV/I.BLK | VP132544 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | Data File Name | Date-Time | Operator | Status |
|---|---|---|---|---|---|
| 1 | BFB | VN085437.D | 14 Jan 2025 14:22 | JC\MD | Ok |
| 2 | VSTDICC100 | VN085438.D | 14 Jan 2025 14:56 | JC\MD | Ok,M |
| 3 | VSTDICCC050 | VN085439.D | 14 Jan 2025 15:19 | JC\MD | Ok,M |
| 4 | VSTDICC020 | VN085440.D | 14 Jan 2025 15:43 | JC\MD | Ok,M |
| 5 | VSTDICC010 | VN085441.D | 14 Jan 2025 16:07 | JC\MD | Ok,M |
| 6 | VSTDICC005 | VN085442.D | 14 Jan 2025 16:31 | JC\MD | Ok,M |
| 7 | VSTDICC001 | VN085443.D | 14 Jan 2025 17:19 | JC\MD | Ok,M |
| 8 | IBLK | VN085444.D | 14 Jan 2025 17:42 | JC\MD | Ok |
| 9 | VSTDICV050 | VN085445.D | 14 Jan 2025 18:06 | JC\MD | Ok,M |

M : Manual Integration

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

**Instrument ID: MSVOA_N**

## Daily Analysis Runlog For Sequence/QCBatch ID # VN020325

| | | | | | |
|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 2/4/2025 9:54:13 AM | | |
| Supervise By | Mahesh Dadoda | Supervise On | 2/4/2025 3:46:08 PM | | |
| SubDirectory | VN020325 | HP Acquire Method | | HP Processing Method | 82N011425W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP132834 |
| Initial Calibration Stds | |
| CCC | VP132835,VP132836 |
| Internal Standard/PEM | |
| ICV/I.BLK | |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | Data File Name | Date-Time | Operator | Status |
|---|---|---|---|---|---|
| 1 | BFB | VN085616.D | 03 Feb 2025 12:23 | JC\MD | Ok |
| 2 | VSTDCCC050 | VN085617.D | 03 Feb 2025 12:56 | JC\MD | Ok,M |
| 3 | VN0203WBL01 | VN085618.D | 03 Feb 2025 13:34 | JC\MD | Ok |
| 4 | VN0203WBS01 | VN085619.D | 03 Feb 2025 13:58 | JC\MD | Ok,M |
| 5 | VN0203WBSD01 | VN085620.D | 03 Feb 2025 14:22 | JC\MD | Ok,M |
| 6 | PB166424TB | VN085621.D | 03 Feb 2025 14:48 | JC\MD | Ok |
| 7 | PB166424ZHE#01 | VN085622.D | 03 Feb 2025 15:12 | JC\MD | Ok |
| 8 | PB166424ZHE#02 | VN085623.D | 03 Feb 2025 15:36 | JC\MD | Ok |
| 9 | PB166424ZHE#03 | VN085624.D | 03 Feb 2025 16:00 | JC\MD | Ok |
| 10 | PB166424ZHE#04 | VN085625.D | 03 Feb 2025 16:24 | JC\MD | Ok |
| 11 | PB166424ZHE#05 | VN085626.D | 03 Feb 2025 16:49 | JC\MD | Ok |
| 12 | PB166424ZHE#06 | VN085627.D | 03 Feb 2025 17:13 | JC\MD | Ok |
| 13 | PB166424ZHE#07 | VN085628.D | 03 Feb 2025 17:37 | JC\MD | Ok |
| 14 | PB166424ZHE#08 | VN085629.D | 03 Feb 2025 18:01 | JC\MD | Ok |
| 15 | PB166424ZHE#09 | VN085630.D | 03 Feb 2025 18:25 | JC\MD | Ok |
| 16 | PB166424ZHE#10 | VN085631.D | 03 Feb 2025 18:49 | JC\MD | Ok |
| 17 | Q1221-02 | VN085632.D | 03 Feb 2025 19:13 | JC\MD | Not Ok |
| 18 | Q1232-02 | VN085633.D | 03 Feb 2025 19:37 | JC\MD | Ok |
| 19 | Q1241-02 | VN085634.D | 03 Feb 2025 20:02 | JC\MD | Not Ok |
| 20 | Q1216-18 | VN085635.D | 03 Feb 2025 20:25 | JC\MD | Ok |
| 21 | Q1241-06 | VN085636.D | 03 Feb 2025 20:49 | JC\MD | Ok |

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

**Instrument ID: MSVOA_N**

## Daily Analysis Runlog For Sequence/QCBatch ID # VN020325

| | | | | | |
|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 2/4/2025 9:54:13 AM | | |
| Supervise By | Mahesh Dadoda | Supervise On | 2/4/2025 3:46:08 PM | | |
| SubDirectory | VN020325 | HP Acquire Method | | HP Processing Method | 82N011425W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP132834 |
| Initial Calibration Stds | |
| CCC | VP132835,VP132836 |
| Internal Standard/PEM | |
| ICV/I.BLK | |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| | | | | | |
|---|---|---|---|---|---|
| 22 | Q1241-10 | VN085637.D | 03 Feb 2025 21:13 | JC\MD | Ok |
| 23 | Q1241-14 | VN085638.D | 03 Feb 2025 21:37 | JC\MD | Ok |
| 24 | Q1241-18 | VN085639.D | 03 Feb 2025 22:01 | JC\MD | Ok |
| 25 | Q1242-02 | VN085640.D | 03 Feb 2025 22:25 | JC\MD | Ok |
| 26 | Q1219-02 | VN085641.D | 03 Feb 2025 22:49 | JC\MD | Ok |
| 27 | Q1232-10 | VN085642.D | 03 Feb 2025 23:14 | JC\MD | Ok |
| 28 | VSTDCCC050 | VN085643.D | 03 Feb 2025 23:37 | JC\MD | Ok,M |

M : Manual Integration

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

**Instrument ID: MSVOA_N**

## Daily Analysis Runlog For Sequence/QCBatch ID # VN020425

| | | | | | |
|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 2/5/2025 9:55:08 AM | | |
| Supervise By | Mahesh Dadoda | Supervise On | 2/6/2025 11:05:00 AM | | |
| SubDirectory | VN020425 | HP Acquire Method | | HP Processing Method | 82N011425W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP132858 |
| Initial Calibration Stds | |
| CCC | VP132859,VP132860 |
| Internal Standard/PEM | |
| ICV/I.BLK | |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | Data File Name | Date-Time | Operator | Status |
|---|---|---|---|---|---|
| 1 | BFB | VN085644.D | 04 Feb 2025 09:55 | JC\MD | Ok |
| 2 | VSTDCCC050 | VN085645.D | 04 Feb 2025 11:05 | JC\MD | Ok,M |
| 3 | VN0204MBL01 | VN085646.D | 04 Feb 2025 12:07 | JC\MD | Ok |
| 4 | VN0204WBL01 | VN085647.D | 04 Feb 2025 12:31 | JC\MD | Ok |
| 5 | VN0204WBS01 | VN085648.D | 04 Feb 2025 13:38 | JC\MD | Not Ok |
| 6 | Q1234-06 | VN085649.D | 04 Feb 2025 14:02 | JC\MD | Ok |
| 7 | Q1241-02 | VN085650.D | 04 Feb 2025 14:27 | JC\MD | Ok |
| 8 | VN0204WBS02 | VN085651.D | 04 Feb 2025 14:51 | JC\MD | Ok,M |
| 9 | VN0204MBS01 | VN085652.D | 04 Feb 2025 15:24 | JC\MD | Ok,M |
| 10 | Q1218-01ME | VN085653.D | 04 Feb 2025 15:49 | JC\MD | Not Ok |
| 11 | Q1219-01 | VN085654.D | 04 Feb 2025 16:13 | JC\MD | Ok,M |
| 12 | VN0204WBSD02 | VN085655.D | 04 Feb 2025 16:37 | JC\MD | Ok,M |
| 13 | IBLK | VN085656.D | 04 Feb 2025 17:01 | JC\MD | Ok |
| 14 | Q1268-01 | VN085657.D | 04 Feb 2025 17:25 | JC\MD | ReRun |
| 15 | Q1268-02 | VN085658.D | 04 Feb 2025 17:50 | JC\MD | ReRun |
| 16 | Q1268-03 | VN085659.D | 04 Feb 2025 18:14 | JC\MD | ReRun |
| 17 | Q1268-04 | VN085660.D | 04 Feb 2025 18:38 | JC\MD | ReRun |
| 18 | Q1249-01 | VN085661.D | 04 Feb 2025 19:02 | JC\MD | Ok |
| 19 | IBLK | VN085662.D | 04 Feb 2025 19:27 | JC\MD | Ok |
| 20 | Q1282-01 | VN085663.D | 04 Feb 2025 19:51 | JC\MD | Ok |
| 21 | VSTDCCC050 | VN085664.D | 04 Feb 2025 20:15 | JC\MD | Ok,M |

M : Manual Integration

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

**Instrument ID:** MSVOA_N

## Daily Analysis Runlog For Sequence/QCBatch ID # VN011425

| | | | | | |
|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 1/15/2025 9:31:51 AM | | |
| Supervise By | Mahesh Dadoda | Supervise On | 1/15/2025 12:55:51 PM | | |
| SubDirectory | VN011425 | HP Acquire Method | MSVOA_N | HP Processing Method | 82N011425W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP132529 |
| Initial Calibration Stds | VP132530,VP132531,VP132532,VP132533,VP132534,VP132535 |
| CCC | |
| Internal Standard/PEM | |
| ICV/I.BLK | VP132544 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | ClientID | Data File Name | Date-Time | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | BFB | BFB | VN085437.D | 14 Jan 2025 14:22 | | JC\MD | Ok |
| 2 | VSTDICC100 | VSTDICC100 | VN085438.D | 14 Jan 2025 14:56 | | JC\MD | Ok,M |
| 3 | VSTDICCC050 | VSTDICCC050 | VN085439.D | 14 Jan 2025 15:19 | Comp.#56 is on Linear Regression | JC\MD | Ok,M |
| 4 | VSTDICC020 | VSTDICC020 | VN085440.D | 14 Jan 2025 15:43 | Comp.#86 is on Quadratic Regression | JC\MD | Ok,M |
| 5 | VSTDICC010 | VSTDICC010 | VN085441.D | 14 Jan 2025 16:07 | | JC\MD | Ok,M |
| 6 | VSTDICC005 | VSTDICC005 | VN085442.D | 14 Jan 2025 16:31 | | JC\MD | Ok,M |
| 7 | VSTDICC001 | VSTDICC001 | VN085443.D | 14 Jan 2025 17:19 | | JC\MD | Ok,M |
| 8 | IBLK | IBLK | VN085444.D | 14 Jan 2025 17:42 | | JC\MD | Ok |
| 9 | VSTDICV050 | ICVVN011425 | VN085445.D | 14 Jan 2025 18:06 | | JC\MD | Ok,M |

M : Manual Integration

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

**Instrument ID:** MSVOA_N

## Daily Analysis Runlog For Sequence/QCBatch ID # VN020325

| | | | | | |
|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 2/4/2025 9:54:13 AM | | |
| Supervise By | Mahesh Dadoda | Supervise On | 2/4/2025 3:46:08 PM | | |
| SubDirectory | VN020325 | HP Acquire Method | | HP Processing Method | 82N011425W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP132834 |
| Initial Calibration Stds | |
| CCC | VP132835,VP132836 |
| 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 | VN085616.D | 03 Feb 2025 12:23 | | JC\MD | Ok |
| 2 | VSTDCCC050 | VSTDCCC050 | VN085617.D | 03 Feb 2025 12:56 | V13516 | JC\MD | Ok,M |
| 3 | VN0203WBL01 | VN0203WBL01 | VN085618.D | 03 Feb 2025 13:34 | | JC\MD | Ok |
| 4 | VN0203WBS01 | VN0203WBS01 | VN085619.D | 03 Feb 2025 13:58 | | JC\MD | Ok,M |
| 5 | VN0203WBSD01 | VN0203WBSD01 | VN085620.D | 03 Feb 2025 14:22 | | JC\MD | Ok,M |
| 6 | PB166424TB | PB166424TB | VN085621.D | 03 Feb 2025 14:48 | | JC\MD | Ok |
| 7 | PB166424ZHE#01 | PB166424ZHE#01 | VN085622.D | 03 Feb 2025 15:12 | | JC\MD | Ok |
| 8 | PB166424ZHE#02 | PB166424ZHE#02 | VN085623.D | 03 Feb 2025 15:36 | | JC\MD | Ok |
| 9 | PB166424ZHE#03 | PB166424ZHE#03 | VN085624.D | 03 Feb 2025 16:00 | | JC\MD | Ok |
| 10 | PB166424ZHE#04 | PB166424ZHE#04 | VN085625.D | 03 Feb 2025 16:24 | | JC\MD | Ok |
| 11 | PB166424ZHE#05 | PB166424ZHE#05 | VN085626.D | 03 Feb 2025 16:49 | | JC\MD | Ok |
| 12 | PB166424ZHE#06 | PB166424ZHE#06 | VN085627.D | 03 Feb 2025 17:13 | | JC\MD | Ok |
| 13 | PB166424ZHE#07 | PB166424ZHE#07 | VN085628.D | 03 Feb 2025 17:37 | | JC\MD | Ok |
| 14 | PB166424ZHE#08 | PB166424ZHE#08 | VN085629.D | 03 Feb 2025 18:01 | | JC\MD | Ok |
| 15 | PB166424ZHE#09 | PB166424ZHE#09 | VN085630.D | 03 Feb 2025 18:25 | | JC\MD | Ok |
| 16 | PB166424ZHE#10 | PB166424ZHE#10 | VN085631.D | 03 Feb 2025 18:49 | | JC\MD | Ok |
| 17 | Q1221-02 | CHESTNUT-CONCRE | VN085632.D | 03 Feb 2025 19:13 | Surrogate Fail;Already analyzed | JC\MD | Not Ok |
| 18 | Q1232-02 | JPP-46.2-012925 | VN085633.D | 03 Feb 2025 19:37 | vial A pH#5.0 | JC\MD | Ok |

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

**Instrument ID:** MSVOA_N

## Daily Analysis Runlog For Sequence/QCBatch ID # VN020325

| | | | | | |
|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 2/4/2025 9:54:13 AM | | |
| Supervise By | Mahesh Dadoda | Supervise On | 2/4/2025 3:46:08 PM | | |
| SubDirectory | VN020325 | HP Acquire Method | | HP Processing Method | 82N011425W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP132834 |
| Initial Calibration Stds | |
| CCC | VP132835,VP132836 |
| Internal Standard/PEM | |
| ICV/I.BLK | |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 19 | Q1241-02 | JPP-3.5-013025 | VN085634.D | 03 Feb 2025 20:02 | RT shifted | JC\MD | Not Ok |
| 20 | Q1216-18 | JPP-26.2-012825 | VN085635.D | 03 Feb 2025 20:25 | vial A pH#5.0 | JC\MD | Ok |
| 21 | Q1241-06 | JPP-5.3-013025 | VN085636.D | 03 Feb 2025 20:49 | vial A pH#5.0 | JC\MD | Ok |
| 22 | Q1241-10 | JPP-5.2-013025 | VN085637.D | 03 Feb 2025 21:13 | vial A pH#5.0 | JC\MD | Ok |
| 23 | Q1241-14 | JPP-5.4-013025 | VN085638.D | 03 Feb 2025 21:37 | vial A pH#5.0 | JC\MD | Ok |
| 24 | Q1241-18 | JPP-51.4-013025 | VN085639.D | 03 Feb 2025 22:01 | vial A pH#5.0 | JC\MD | Ok |
| 25 | Q1242-02 | JPP-6.2-013025 | VN085640.D | 03 Feb 2025 22:25 | vial A pH#5.0 | JC\MD | Ok |
| 26 | Q1219-02 | LAW-25-0015 | VN085641.D | 03 Feb 2025 22:49 | vial A pH#5.0 | JC\MD | Ok |
| 27 | Q1232-10 | JPP-42.1-012925 | VN085642.D | 03 Feb 2025 23:14 | vial A pH#5.0 | JC\MD | Ok |
| 28 | VSTDCCC050 | VSTDCCC050EC | VN085643.D | 03 Feb 2025 23:37 | | JC\MD | Ok,M |

M : Manual Integration

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

**Instrument ID:** MSVOA_N

## Daily Analysis Runlog For Sequence/QCBatch ID # VN020425

| | | | | | |
|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 2/5/2025 9:55:08 AM | | |
| Supervise By | Mahesh Dadoda | Supervise On | 2/6/2025 11:05:00 AM | | |
| SubDirectory | VN020425 | HP Acquire Method | | HP Processing Method | 82N011425W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP132858 |
| Initial Calibration Stds | |
| CCC | VP132859,VP132860 |
| 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 | VN085644.D | 04 Feb 2025 09:55 | | JC\MD | Ok |
| 2 | VSTDCCC050 | VSTDCCC050 | VN085645.D | 04 Feb 2025 11:05 | CCAL failed high for comp. #68,69 and low for comp.#13 | JC\MD | Ok,M |
| 3 | VN0204MBL01 | VN0204MBL01 | VN085646.D | 04 Feb 2025 12:07 | | JC\MD | Ok |
| 4 | VN0204WBL01 | VN0204WBL01 | VN085647.D | 04 Feb 2025 12:31 | | JC\MD | Ok |
| 5 | VN0204WBS01 | VN0204WBS01 | VN085648.D | 04 Feb 2025 13:38 | Surrogate Fail | JC\MD | Not Ok |
| 6 | Q1234-06 | 50605 | VN085649.D | 04 Feb 2025 14:02 | vial A pH<2 | JC\MD | Ok |
| 7 | Q1241-02 | JPP-3.5-013025 | VN085650.D | 04 Feb 2025 14:27 | vial A pH#5.0 | JC\MD | Ok |
| 8 | VN0204WBS02 | VN0204WBS02 | VN085651.D | 04 Feb 2025 14:51 | BS failed low for comp. #58 | JC\MD | Ok,M |
| 9 | VN0204MBS01 | VN0204MBS01 | VN085652.D | 04 Feb 2025 15:24 | BS failed low for comp. #28 | JC\MD | Ok,M |
| 10 | Q1218-01ME | BELL-25-002ME | VN085653.D | 04 Feb 2025 15:49 | Already analyzed | JC\MD | Not Ok |
| 11 | Q1219-01 | LAW-25-0015 | VN085654.D | 04 Feb 2025 16:13 | | JC\MD | Ok,M |
| 12 | VN0204WBSD02 | VN0204WBSD02 | VN085655.D | 04 Feb 2025 16:37 | BSD failed low for comp. #58 | JC\MD | Ok,M |
| 13 | IBLK | IBLK | VN085656.D | 04 Feb 2025 17:01 | | JC\MD | Ok |
| 14 | Q1268-01 | Storage-Blank-SOIL-RE | VN085657.D | 04 Feb 2025 17:25 | vial A pH<2 | JC\MD | ReRun |
| 15 | Q1268-02 | Storage-Blank-WATER- | VN085658.D | 04 Feb 2025 17:50 | vial A pH<2 | JC\MD | ReRun |
| 16 | Q1268-03 | Storage-Blank-WATER- | VN085659.D | 04 Feb 2025 18:14 | vial A pH<2 | JC\MD | ReRun |
| 17 | Q1268-04 | Storage-Blank-SAMPLE | VN085660.D | 04 Feb 2025 18:38 | vial A pH<2 | JC\MD | ReRun |

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

**Instrument ID:** MSVOA_N

## Daily Analysis Runlog For Sequence/QCBatch ID # VN020425

| | | | | | |
|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 2/5/2025 9:55:08 AM | | |
| Supervise By | Mahesh Dadoda | Supervise On | 2/6/2025 11:05:00 AM | | |
| SubDirectory | VN020425 | HP Acquire Method | | HP Processing Method | 82N011425W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP132858 |
| Initial Calibration Stds | |
| CCC | VP132859,VP132860 |
| Internal Standard/PEM | |
| ICV/I.BLK | |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 18 | Q1249-01 | BP-VPB-192-GW-460-4 | VN085661.D | 04 Feb 2025 19:02 | vial A pH<2 | JC\MD | Ok |
| 19 | IBLK | IBLK | VN085662.D | 04 Feb 2025 19:27 | | JC\MD | Ok |
| 20 | Q1282-01 | SW-WTS-02 | VN085663.D | 04 Feb 2025 19:51 | vial A pH<2 | JC\MD | Ok |
| 21 | VSTDCCC050 | VSTDCCC050EC | VN085664.D | 04 Feb 2025 20:15 | | JC\MD | Ok,M |

M : Manual Integration

Alliance TECHNICAL GROUP

# TCLP EXTRACTION LOGPAGE

PB166424

**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 :** 114771

**Start Prep Date :** 01/31/2025 **Time :** 14:10

**End Prep Date :** 02/01/2025 **Time :** 07:35

**Combination Ratio :** 20

**ZHE Cleaning Batch :** ~~N/A~~ 28 VN020325,

**Initial Room Temperature:** 23 °C

**Final Room Temperature:** 22 °C

**TCLP Technician Signature :** JP

**Supervisor By :** 12

| 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 | WP110801 |
| 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:**

ALL ZHE samples are extracted and given as vial A & B. Leak checked after 10 mintues of tumbling. TUMBLER ZHE-1 /ZHE-2 checked.30 rpm.

| Date / Time | Prepped Sample Relinquished By/Location | Received By/Location |
|---|---|---|
| 02/03/25 08:30 | JP / TCLP Room | MD / VOC Lab |
| | Preparation Group | Analysis Group |

Alliance TECHNICAL GROUP

## TCLP EXTRACTION LOGPAGE

PB166424

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|
| PB166424TB | LEB424 | 11 | N/A | 500 | N/A | N/A | N/A | 4.93 | N/A | ZHE-2 |
| Q1239-02 | 286 | 01 | 25.02 | 500 | N/A | N/A | N/A | N/A | N/A | ZHE-1 |
| Q1239-05 | 348 | 02 | 25.03 | 500 | N/A | N/A | N/A | N/A | N/A | ZHE-1 |
| Q1239-08 | RBR22266 | 03 | 25.02 | 500 | N/A | N/A | N/A | N/A | N/A | ZHE-1 |
| Q1239-11 | 357 | 04 | 25.03 | 500 | N/A | N/A | N/A | N/A | N/A | ZHE-1 |
| Q1241-02 | JPP-3.5-013025 | 05 | 25.02 | 500 | N/A | N/A | N/A | N/A | N/A | ZHE-1 |
| Q1241-06 | JPP-5.3-013025 | 06 | 25.03 | 500 | N/A | N/A | N/A | N/A | N/A | ZHE-1 |
| Q1241-10 | JPP-5.2-013025 | 07 | 25.04 | 500 | N/A | N/A | N/A | N/A | N/A | ZHE-1 |
| Q1241-14 | JPP-5.4-013025 | 08 | 25.03 | 500 | N/A | N/A | N/A | N/A | N/A | ZHE-1 |
| Q1241-18 | JPP-51.4-013025 | 09 | 25.02 | 500 | N/A | N/A | N/A | N/A | N/A | ZHE-1 |
| Q1242-02 | JPP-6.2-013025 | 10 | 25.03 | 500 | N/A | N/A | N/A | N/A | N/A | ZHE-1 |

| SampleID | ClientID | Sample Weight (g) | Filter Weight (g) | Filtrate (mL) | Filter + Solid (After 100°C) | % solids | % Dry Solids |
|---|---|---|---|---|---|---|---|
| PB166424TB | LEB424 | N/A | N/A | N/A | N/A | N/A | N/A |
| Q1239-02 | 286 | N/A | N/A | N/A | N/A | 100 | N/A |
| Q1239-05 | 348 | N/A | N/A | N/A | N/A | 100 | N/A |
| Q1239-08 | RBR22266 | N/A | N/A | N/A | N/A | 100 | N/A |
| Q1239-11 | 357 | N/A | N/A | N/A | N/A | 100 | N/A |
| Q1241-02 | JPP-3.5-013025 | N/A | N/A | N/A | N/A | 100 | N/A |
| Q1241-06 | JPP-5.3-013025 | N/A | N/A | N/A | N/A | 100 | N/A |
| Q1241-10 | JPP-5.2-013025 | N/A | N/A | N/A | N/A | 100 | N/A |
| Q1241-14 | JPP-5.4-013025 | N/A | N/A | N/A | N/A | 100 | N/A |
| Q1241-18 | JPP-51.4-013025 | N/A | N/A | N/A | N/A | 100 | N/A |
| Q1242-02 | JPP-6.2-013025 | N/A | N/A | N/A | N/A | 100 | N/A |

# WORKLIST(Hardcopy Internal Chain)

**WorkList Name :** TCLP ZHE Q1242 **WorkList ID :** 187350 **Department :** TCLP Extraction **Date :** 01-31-2025 10:27:01

| Sample | Customer Sample | Matrix | Test | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method |
|---|---|---|---|---|---|---|---|---|
| Q1239-02 | 286 | Solid | TCLP ZHE Extraction | Cool 4 deg C | PSEG03 | N31 | 01/30/2025 | 1311 ZHE |
| Q1239-05 | 348 | Solid | TCLP ZHE Extraction | Cool 4 deg C | PSEG03 | N31 | 01/30/2025 | 1311 ZHE |
| Q1239-08 | RBR22266 | Solid | TCLP ZHE Extraction | Cool 4 deg C | PSEG03 | N31 | 01/30/2025 | 1311 ZHE |
| Q1239-11 | 357 | Solid | TCLP ZHE Extraction | Cool 4 deg C | PSEG03 | N31 | 01/30/2025 | 1311 ZHE |
| Q1241-02 | JPP-3.5-013025 | Solid | TCLP ZHE Extraction | Cool 4 deg C | PSEG03 | N31 | 01/30/2025 | 1311 ZHE |
| Q1241-06 | JPP-5.3-013025 | Solid | TCLP ZHE Extraction | Cool 4 deg C | RUTW01 | E11 | 01/30/2025 | 1311 ZHE |
| Q1241-10 | JPP-5.2-013025 | Solid | TCLP ZHE Extraction | Cool 4 deg C | RUTW01 | E11 | 01/30/2025 | 1311 ZHE |
| Q1241-14 | JPP-5.4-013025 | Solid | TCLP ZHE Extraction | Cool 4 deg C | RUTW01 | E11 | 01/30/2025 | 1311 ZHE |
| Q1241-18 | JPP-51.4-013025 | Solid | TCLP ZHE Extraction | Cool 4 deg C | RUTW01 | E11 | 01/30/2025 | 1311 ZHE |
| Q1242-02 | JPP-6.2-013025 | Solid | TCLP ZHE Extraction | Cool 4 deg C | RUTW01 | E11 | 01/30/2025 | 1311 ZHE |

**Date/Time** 01/31/25 1200

**Raw Sample Received by:** JP (WQC)

**Raw Sample Relinquished by:** RJ (CEXT-ICP)

**Date/Time** 01/31/25 1700

**Raw Sample Received by:** RJ (CEXT-ICP)

**Raw Sample Relinquished by:** JP (WQC)

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

# Prep Standard - Chemical Standard Summary

**Order ID :** Q1241

**Test :** TCLP VOA

**Prepbatch ID :**

**Sequence ID/Qc Batch ID:** VN020325,VN020425,

**Standard ID :**
VP130430,VP131746,VP131767,VP132035,VP132096,VP132468,VP132613,VP132834,VP132835,VP132836,VP132858,VP132859,VP132860,

**Chemical ID :**
V13391,V13446,V13457,V13460,V13465,V13466,V13707,V14145,V14154,V14175,V14176,V14289,V14433,V14439,V14521,V14522,V14614,V14624,V14627,V14630,V14631,V14632,V14633,V14722,V14723,V14724,V14754,V14756,V14801,V14814,V14830,V14831,V14832,W3112,

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

# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 617 | 8260 Surrogate, 400PPM | VP130430 | 09/20/2024 | 02/28/2025 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 09/26/2024 |

**FROM** 0.40000ml of V13707 + 24.60000ml of V14145 = Final Quantity: 25.000 ml

| 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

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

# VOC STANDARD PREPARATION LOG

| 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

| 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

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

# VOC STANDARD PREPARATION LOG

| 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

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 51 | 8260 Working STD (Acrolein) -first source, 800PPM | VP132468 | 01/08/2025 | 02/07/2025 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 01/17/2025 |

**FROM** 1.00000ml of V14832 + 1.50000ml of V14830 + 1.50000ml of V14831 + 21.00000ml of V14627 = Final Quantity: 25.000 ml

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

# 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 | VP132613 | 01/20/2025 | 02/28/2025 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 01/29/2025 |

**FROM** 0.40000ml of V13446 + 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 V14722 + 1.00000ml of V14754 + 1.00000ml of V14756 + 1.00000ml of V14801 + 1.00000ml of V14814 + 1.50000ml of V14723 + 1.50000ml of V14724 + 10.60000ml of V14624 = Final Quantity: 25.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 589 | BFB TUNE CHECK | VP132834 | 02/03/2025 | 02/04/2025 | John Carlone | None | None | Semsettin Yesilyurt 02/05/2025 |

**FROM** 39.98400ml of W3112 + 0.01600ml of VP131767 = Final Quantity: 40.000 ml

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

# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 620 | 50 PPB CCC, 8260-Water | VP132835 | 02/03/2025 | 02/04/2025 | John Carlone | None | None | Semsettin Yesilyurt 02/05/2025 |

**FROM** 39.94450ml of W3112 + 0.00500ml of VP130430 + 0.00500ml of VP132096 + 0.00800ml of VP131746 + 0.01250ml of VP132035 + 0.01250ml of VP132468 + 0.01250ml of VP132613 = 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 | VP132836 | 02/03/2025 | 02/04/2025 | John Carlone | None | None | Semsettin Yesilyurt 02/05/2025 |

**FROM** 39.94450ml of W3112 + 0.00500ml of VP130430 + 0.00500ml of VP132096 + 0.00800ml of VP131746 + 0.01250ml of VP132035 + 0.01250ml of VP132468 + 0.01250ml of VP132613 = Final Quantity: 40.000 ml

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

# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 589 | BFB TUNE CHECK | VP132858 | 02/04/2025 | 02/05/2025 | John Carlone | None | None | Semsettin Yesilyurt 02/06/2025 |

**FROM** 39.98400ml of W3112 + 0.01600ml of VP131767 = 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 | VP132859 | 02/04/2025 | 02/05/2025 | John Carlone | None | None | Semsettin Yesilyurt 02/06/2025 |

**FROM** 39.94450ml of W3112 + 0.00500ml of VP130430 + 0.00500ml of VP132096 + 0.00800ml of VP131746 + 0.01250ml of VP132035 + 0.01250ml of VP132468 + 0.01250ml of VP132613 = Final Quantity: 40.000 ml

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

# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 620 | 50 PPB CCC, 8260-Water | VP132860 | 02/04/2025 | 02/05/2025 | John Carlone | None | None | Semsettin Yesilyurt 02/06/2025 |

**FROM** 39.94450ml of W3112 + 0.00500ml of VP130430 + 0.00500ml of VP132096 + 0.00800ml of VP131746 + 0.01250ml of VP132035 + 0.01250ml of VP132468 + 0.01250ml of VP132613 = 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 | 30470 / VOA Stock Solution, tert-butanol std, 1mL, P&TM | A0181905 | 02/28/2025 | 01/10/2025 / SAM | 01/23/2023 / SAM | V13446 |

| 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 |

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 | 555582 / Custom Mixture, 8260 A/B Surrogate Mix [CS 5179-2] | A0196865 | 06/10/2025 | 06/10/2024 / SAM | 04/12/2023 / SAM | V13707 |

| 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 | 02/28/2025 | 08/29/2024 / SAM | 02/06/2024 / SAM | V14145 |

| 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 |

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 | 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 |

| 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 | 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 |

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 # |
|---|---|---|---|---|---|---|
| Seidler Chemical | BA9077-02 / Methanol, Purge/Trap (cs=6x1L) | 23I0762004 | 07/06/2025 | 01/06/2025 / SAM | 11/26/2024 / SAM | V14627 |

| 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 |

| 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 |

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 | 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 |

| 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 | 30042 / VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml | A0216826 | 07/10/2025 | 01/10/2025 / SAM | 12/17/2024 / SAM | V14756 |

| 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 | A0220563 | 06/30/2026 | 01/10/2025 / SAM | 01/08/2025 / SAM | V14801 |

| 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 |

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 # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 91980 / Acrolin Std (Min = 5) | 010725 | 02/07/2025 | 01/08/2025 / SAM | 01/08/2025 / SAM | V14830 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 91980 / Acrolin Std (Min = 5) | 010725 | 02/07/2025 | 01/08/2025 / SAM | 01/08/2025 / SAM | V14831 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 91980 / Acrolin Std (Min = 5) | 010725 | 02/07/2025 | 01/08/2025 / SAM | 01/08/2025 / SAM | V14832 |

| 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

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

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

**Certified Reference Material CRM**

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Dec 01/08/25

5 vial

V14823-to V14827 V14829

## CERTIFIED WEIGHT REPORT

**Part Number:** 91980
**Lot Number:** 010725
**Description:** Acrolein

**Expiration Date:** 020725
**Recommended Storage:** Refrigerate (4 °C)
**Nominal Concentration (µg/mL):** 5000
**NIST Test ID#:** 6UTB

**Solvent(s):** Water **Lot#** 072324Q

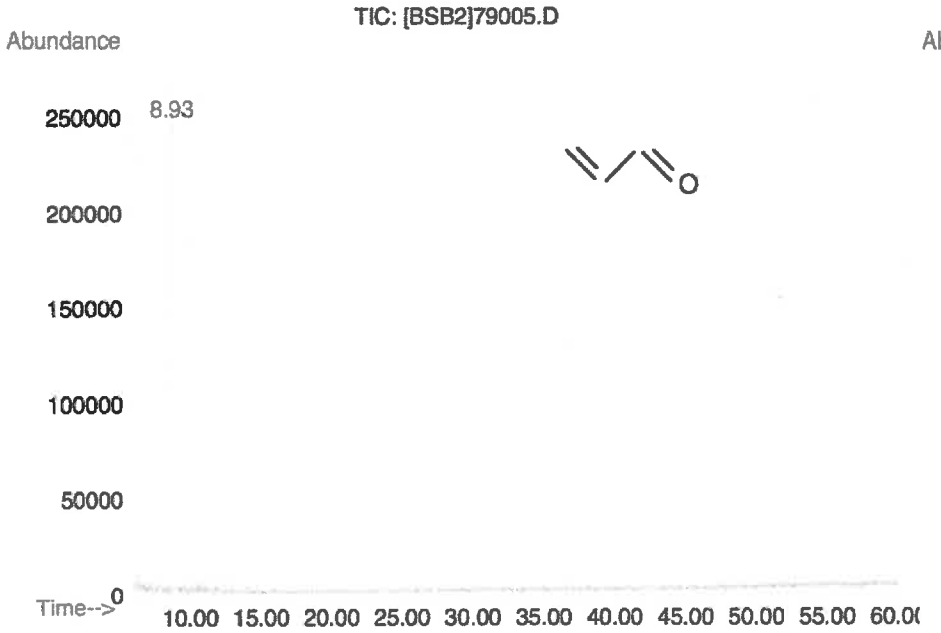
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

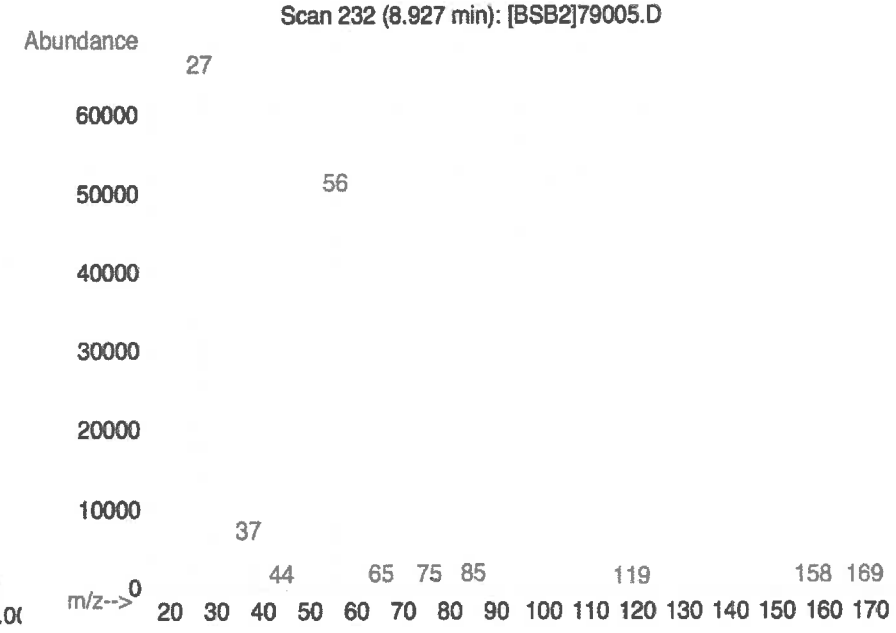
Weight(s) shown below were combined and diluted to (mL): 10.0

| | |
|---|---|
| | 010725 |
| Formulated By: Anthony Mahoney | DATE |
| | 010725 |
| 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 | 0.05178 | 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. | Emergency Telephone International | **1-352-323-3500** |
| | Hamden CT, 06514 | 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. 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
www.absolutestandards.com

***Certified Reference Material CRM***

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Dec 01/08/25

5 vial

V14823-to V14827 V14829

## CERTIFIED WEIGHT REPORT

**Part Number:** 91980
**Lot Number:** 010725
**Description:** Acrolein

**Expiration Date:** 020725
**Recommended Storage:** Refrigerate (4 °C)
**Nominal Concentration (µg/mL):** 5000
**NIST Test ID#:** 6UTB

**Solvent(s):** Water **Lot#** 072324Q

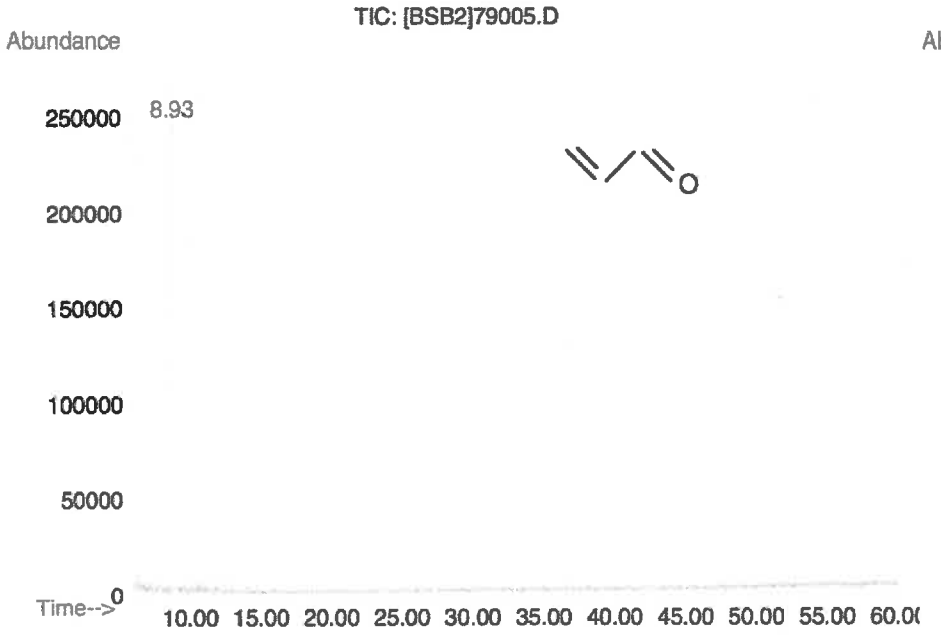
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

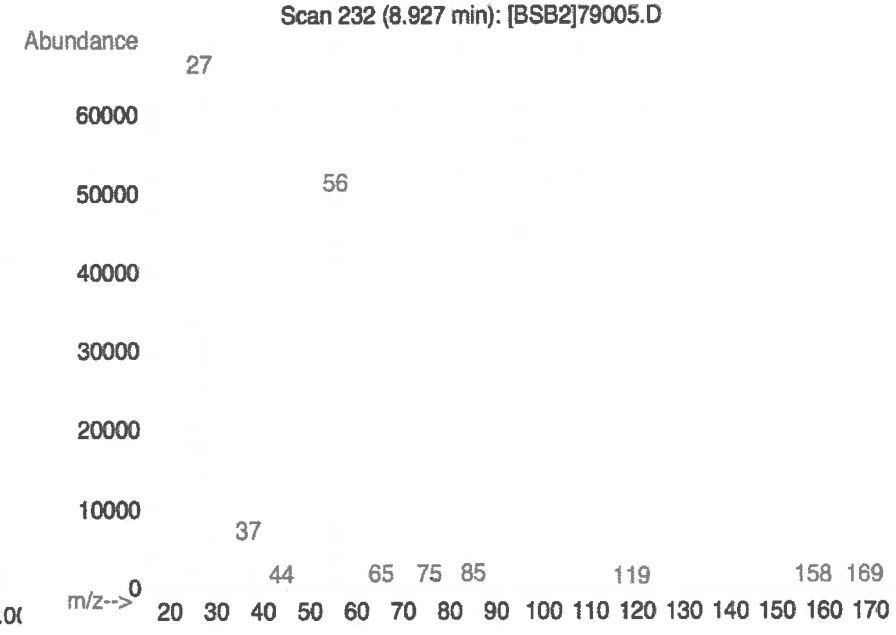
Weight(s) shown below were combined and diluted to (mL): 10.0

| | |
|---|---|
| | 010725 |
| Formulated By: Anthony Mahoney | DATE |
| | 010725 |
| 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 | 0.05178 | 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. | Emergency Telephone International | **1-352-323-3500** |
| | Hamden CT, 06514 | 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. 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
www.absolutestandards.com

**Certified Reference Material CRM**

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Dec 01/08/25

5 vial

V14823-to V14827 V14829

## CERTIFIED WEIGHT REPORT

**Part Number:** 91980
**Lot Number:** 010725
**Description:** Acrolein

**Expiration Date:** 020725
**Recommended Storage:** Refrigerate (4 °C)
**Nominal Concentration (µg/mL):** 5000
**NIST Test ID#:** 6UTB

**Solvent(s):** Water **Lot#** 072324Q

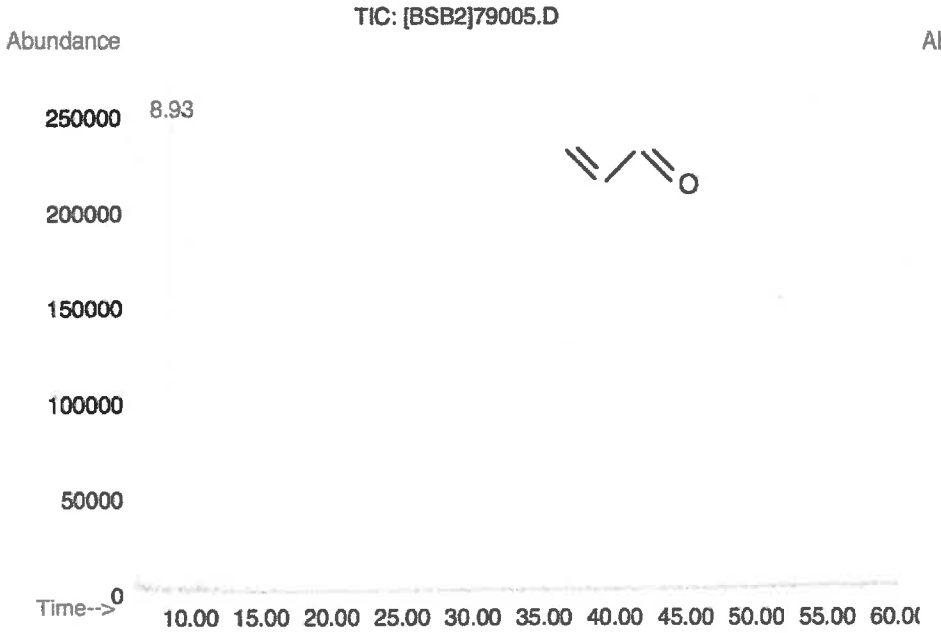
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

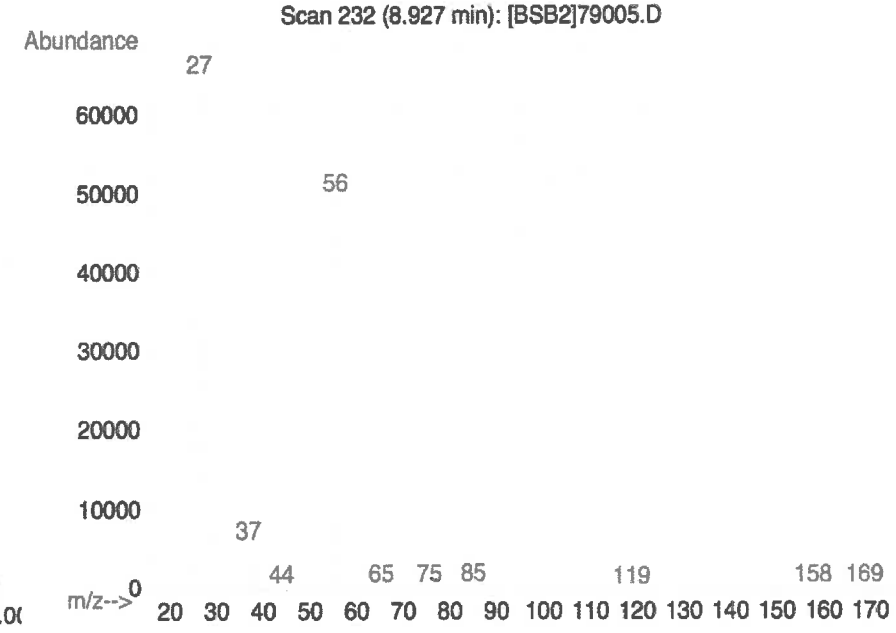
Weight(s) shown below were combined and diluted to (mL): 10.0

| | |
|---|---|
| | 010725 |
| Formulated By: Anthony Mahoney | DATE |
| | 010725 |
| 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 | 0.05178 | 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. | Emergency Telephone International | **1-352-323-3500** |
| | Hamden CT, 06514 | 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. 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 5E-05 Balance Uncertainty 0.021 Flask Uncertainty

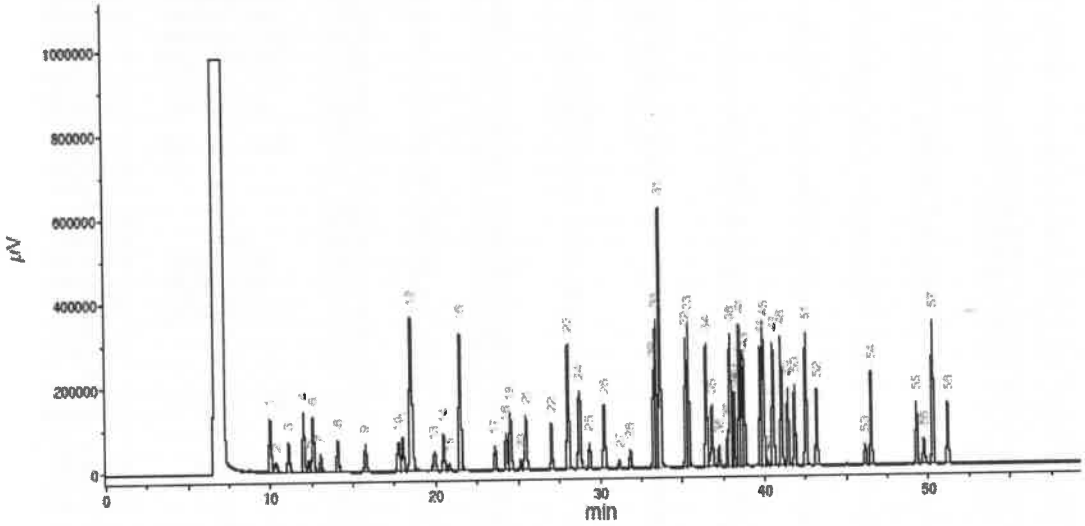
| Compound | (RM#) Part Number | Lot Number | Dil. Factor | Initial Vol. (mL) | Initial Conc.(µg/mL) | Nominal Conc (µg/mL) | Purity (%) | Purity Uncertainty | Uncertainty Pipette (mL) | Target Weight(g) | Actual Weight(g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent 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 | (0381) | 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 | 40010.0 | 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-Dibromoethene | 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 | 46.46 |
| 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.

## 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

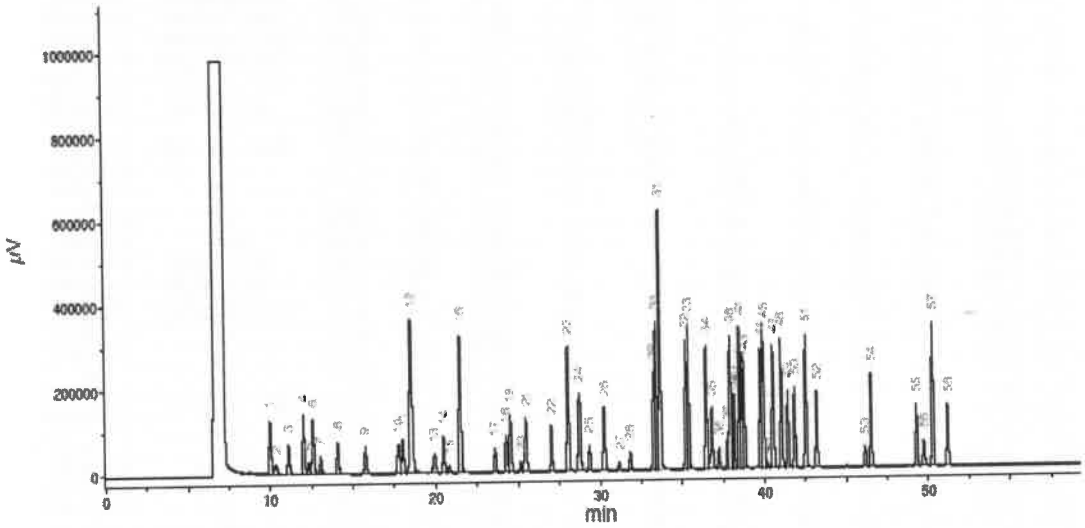
| Compound | (RM#) Part Number | Lot Number | Dil. Factor | Initial Vol. (mL) | Initial Conc.(µg/mL) | Nominal Conc (µg/mL) | Purity (%) | Purity Uncertainty | Uncertainty Pipette (mL) | Target Weight(g) | Actual Weight(g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent 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 | (0381) | 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 | 40010.0 | 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-Dibromoethene | 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 | 46.46 |
| 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

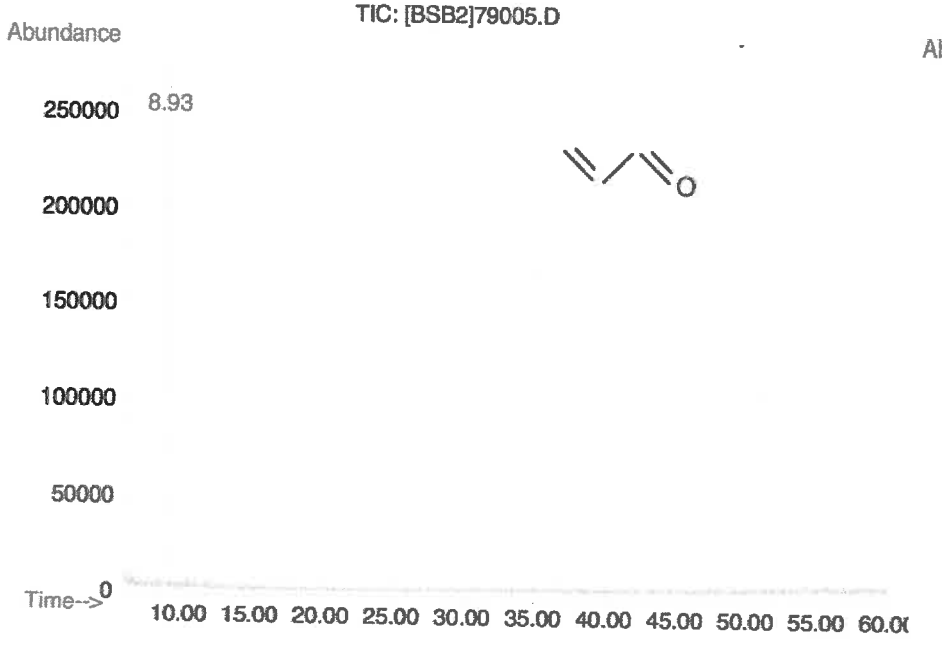
Expiration Date: 101424
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

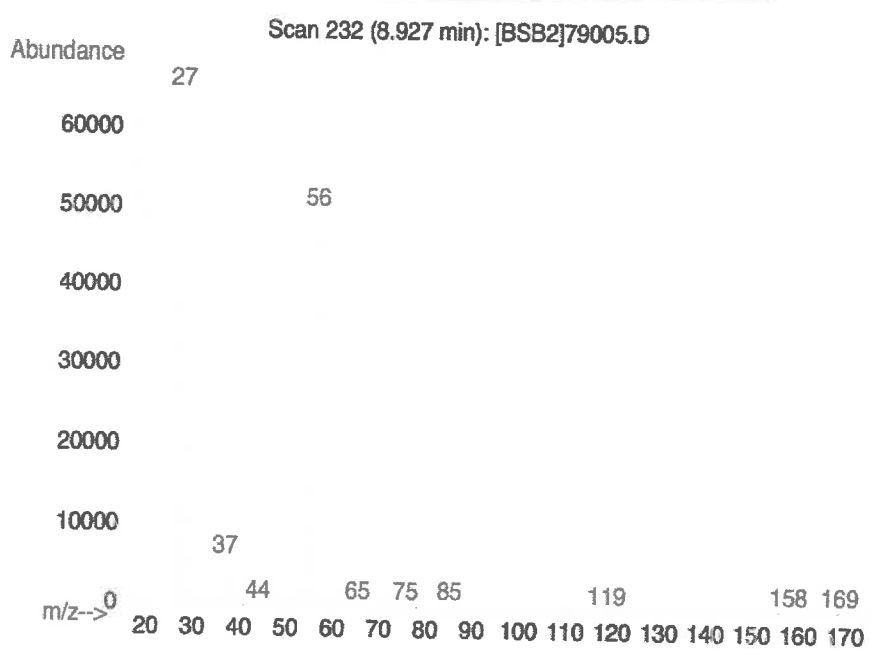
Weight(s) shown below were combined and diluted to (mL): 10.0 | 5E-05 Balance Uncertainty | 0.001 Flask Uncertainty

| | |
|---|---|
| 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).

**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

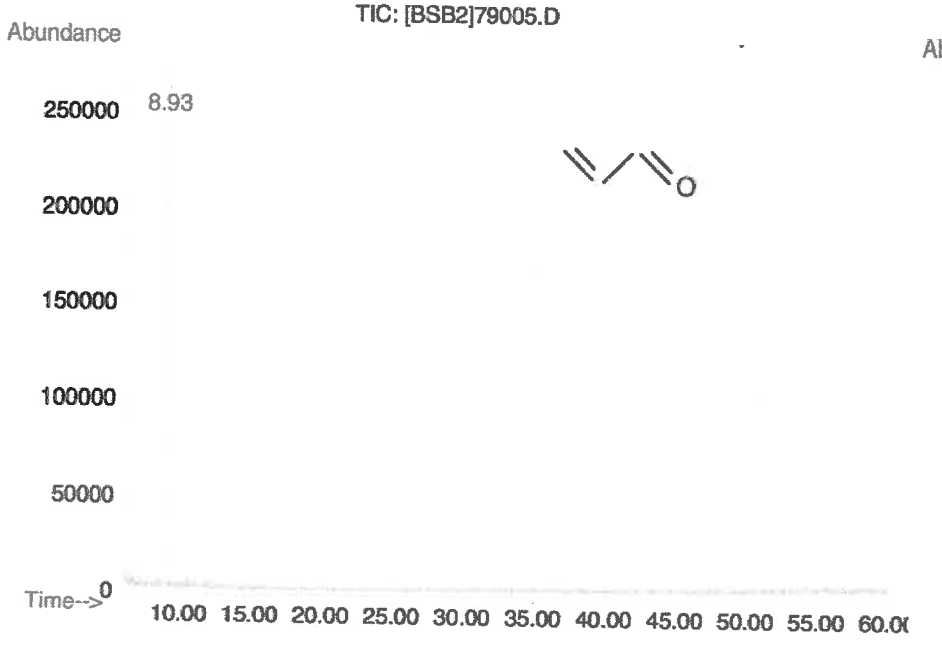
Expiration Date: 101424
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

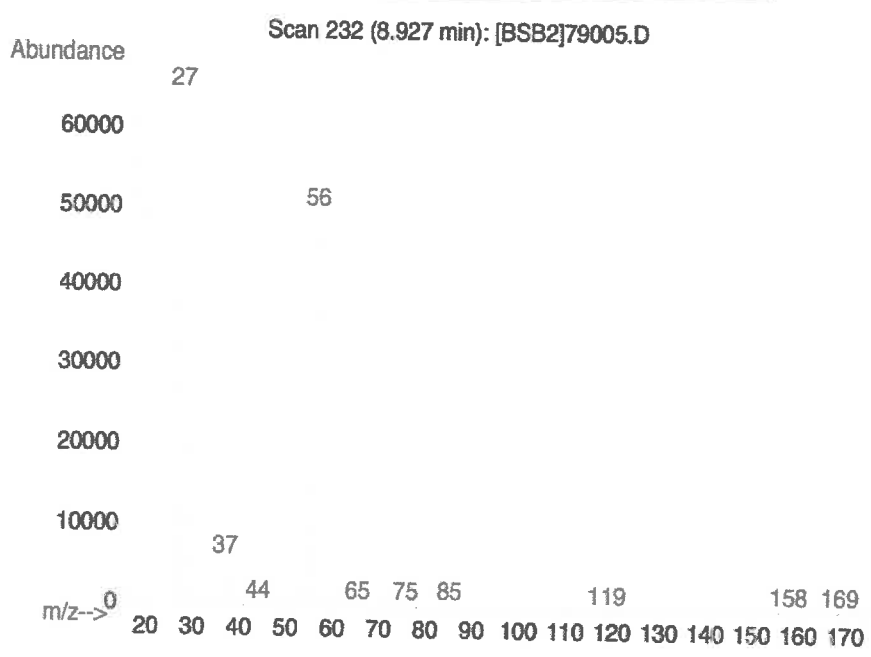
Weight(s) shown below were combined and diluted to (mL): 10.0 | 5E-05 Balance Uncertainty | 0.001 Flask Uncertainty

| | |
|---|---|
| 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).

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

***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

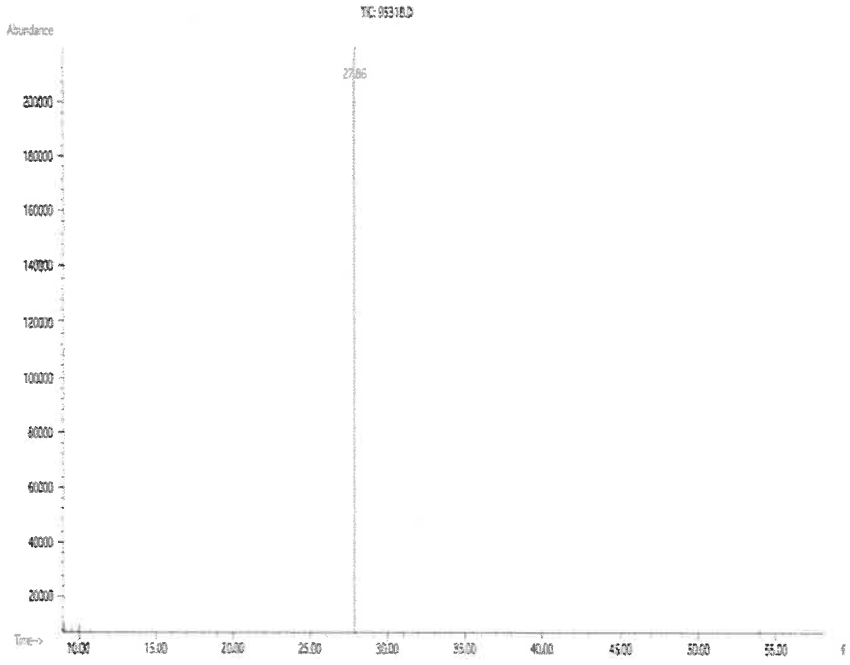
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

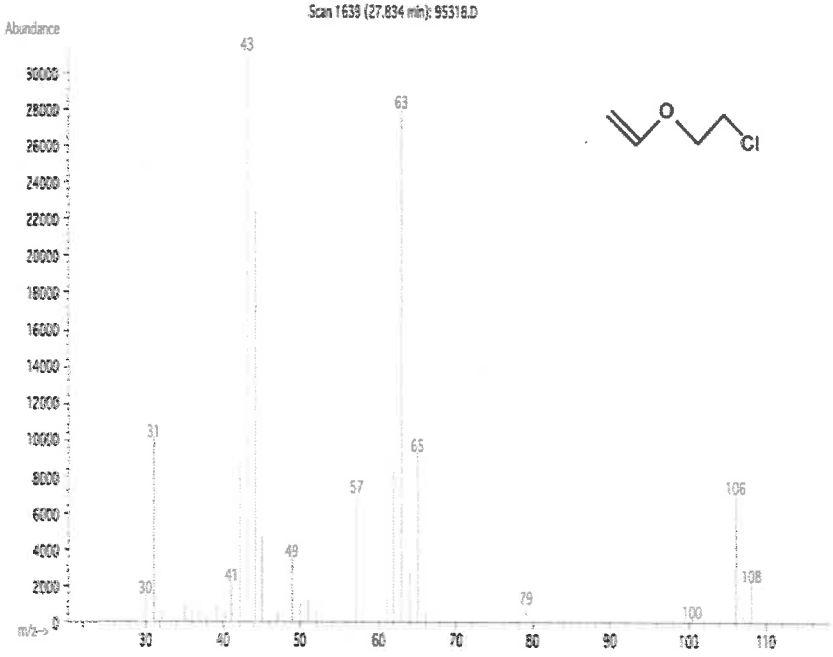
Prashant Chauhan 120524
Formulated By: Prashant Chauhan DATE

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.

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

***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

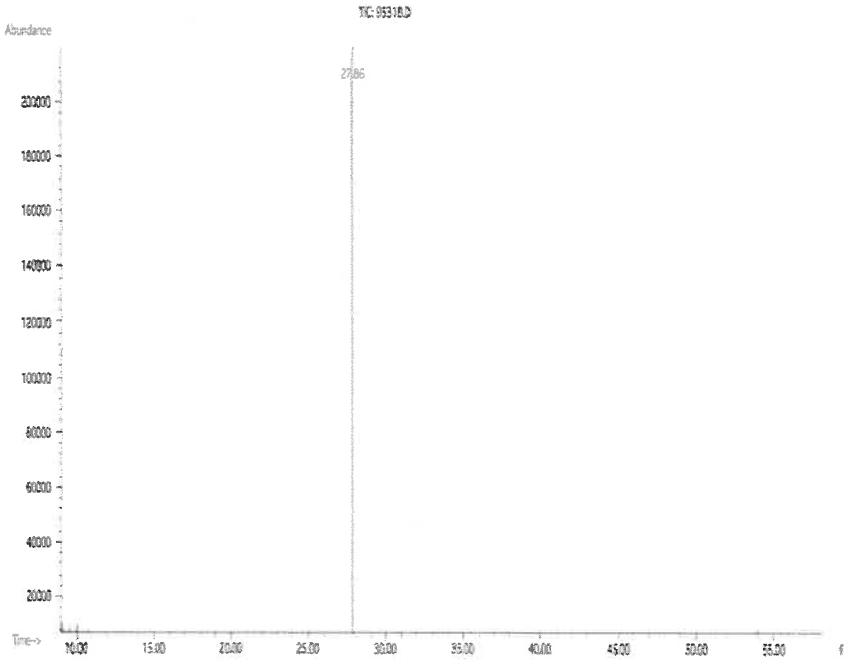
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

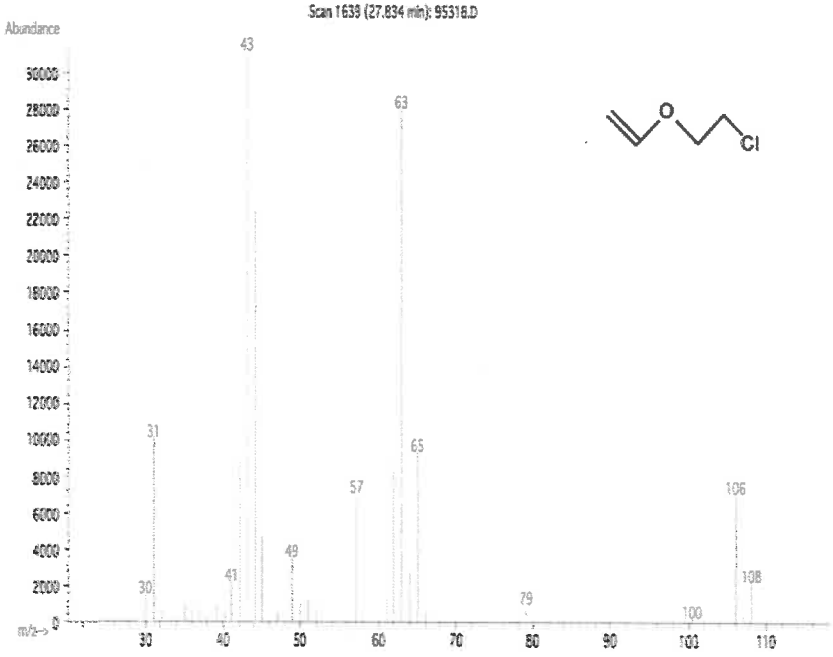
Weight(s) shown below were combined and diluted to (mL): 50.0

| | | |
|---|---|---|
| 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.
- 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.

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

***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

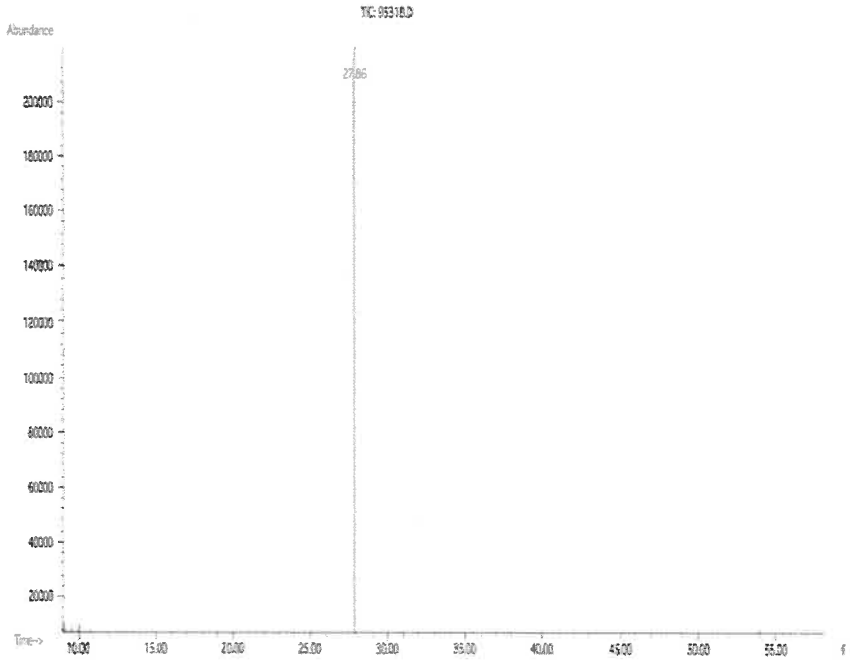
**Solvent(s):** Methanol **Lot#** EJ143-US

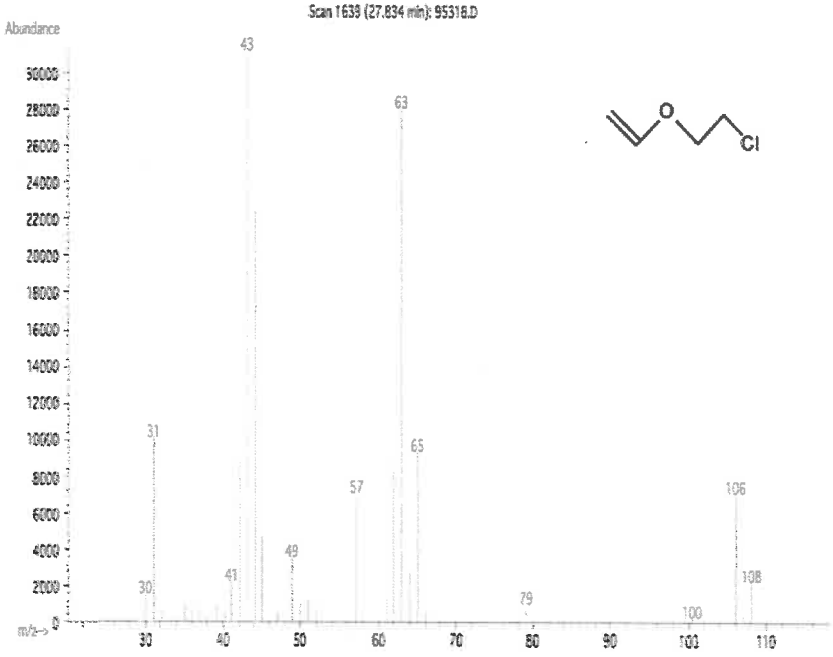
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

| | | |
|---|---|---|
| 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.

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

***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

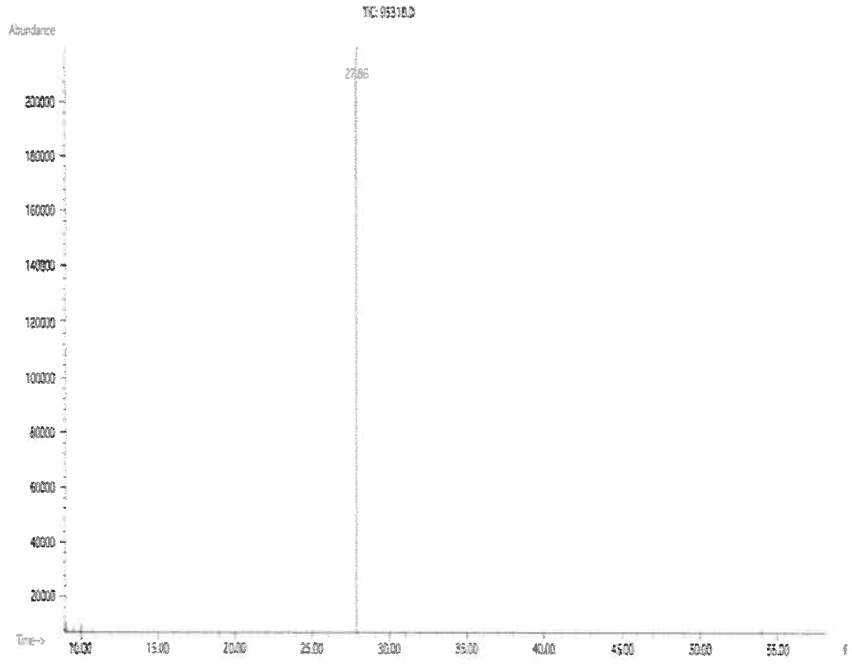
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

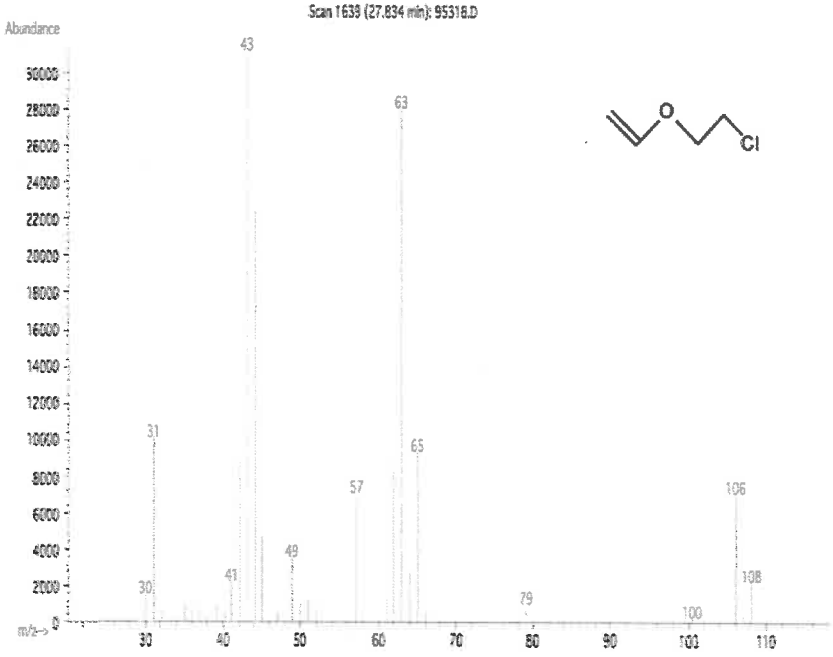
Prashant Chauhan 120524
Formulated By: Prashant Chauhan DATE

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.

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

# CERTIFIED REFERENCE MATERIAL

## Certificate of Analysis

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. :** 30470 **Lot No.:** A0181905

**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 :** February 28, 2025 **Storage:** 0°C or colder

**Ship:** Ambient

### CERTIFIED VALUES

| Elution Order | Compound | | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | |
|---|---|---|---|---|---|
| 1 | tert-Butanol (TBA) | | 50,126.0 µg/mL | +/- 293.4988 µg/mL | Gravimetric |
| | **CAS #** 75-65-0 | (Lot SHBM7694) | | +/- 1,073.7654 µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 1,104.9494 µg/mL | Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

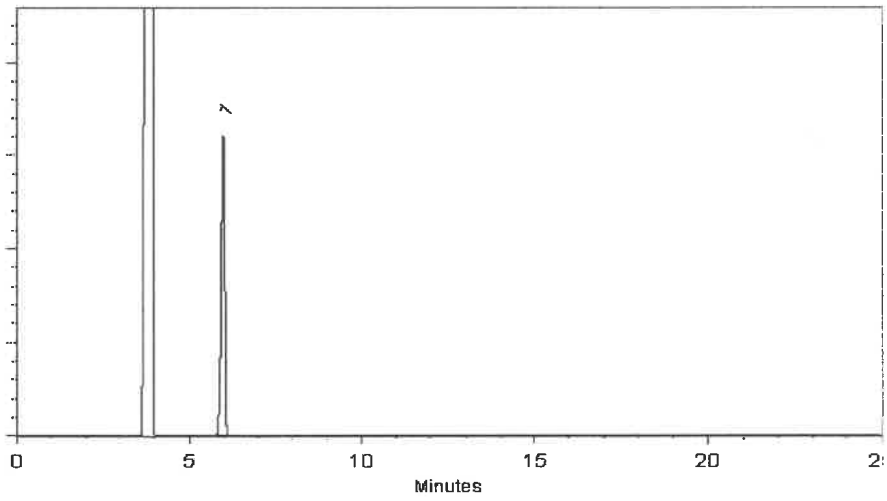
**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**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




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.

John Friedline - Operations Technician I

**Date Mixed:** 16-Feb-2022 **Balance:** B442140311

Merlina Cowan - Operations Tech I

**Date Passed:** 21-Feb-2022

**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 combined stressed uncertainty value ( includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

*k* is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

| Label Conditions | Standard Conditions | Non-Standard Conditions |
|---|---|---|
| 25°C Nominal (Room Temperature) | < 60°C | ≥ 60°C up to 7 days |
| 10°C or colder (Refrigerate) | < 40°C | ≥ 40°C up to 7 days |
| 0°C or colder (Freezer)<br>-20°C or colder (Deep Freezer) | < 25°C | ≥ 25°C up to 7 days |

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules 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 ampules. 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.

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 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. :** 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.)

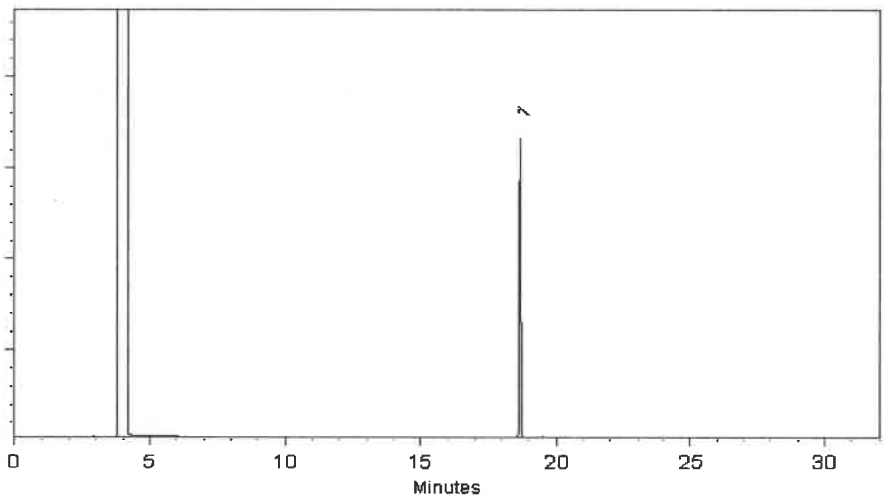
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl




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.

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

### 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.

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 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. :** 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%

# 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.)

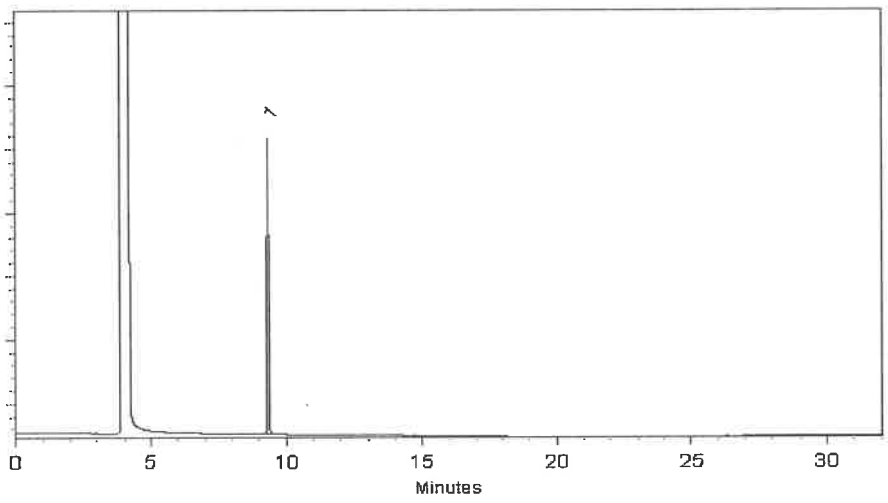
**Inj. Temp:**
200°C

**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.

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.

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 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. :** 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%

# 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.)

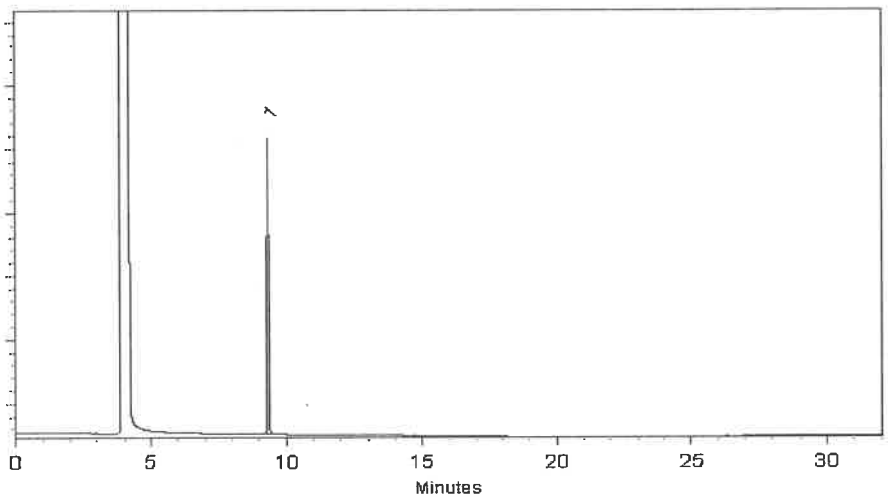
**Inj. Temp:**
200°C

**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.

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.

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 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. :** 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%

# 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.)

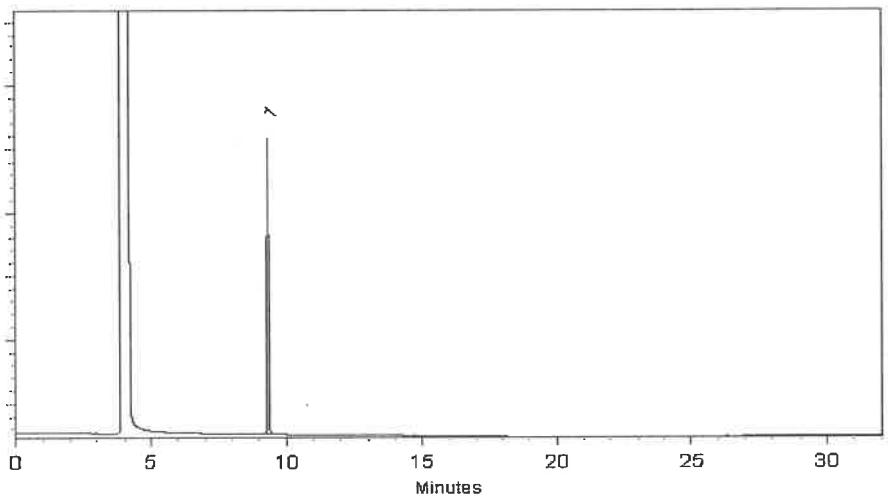
**Inj. Temp:**
200°C

**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.

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.

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 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. :** 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%

# 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.)

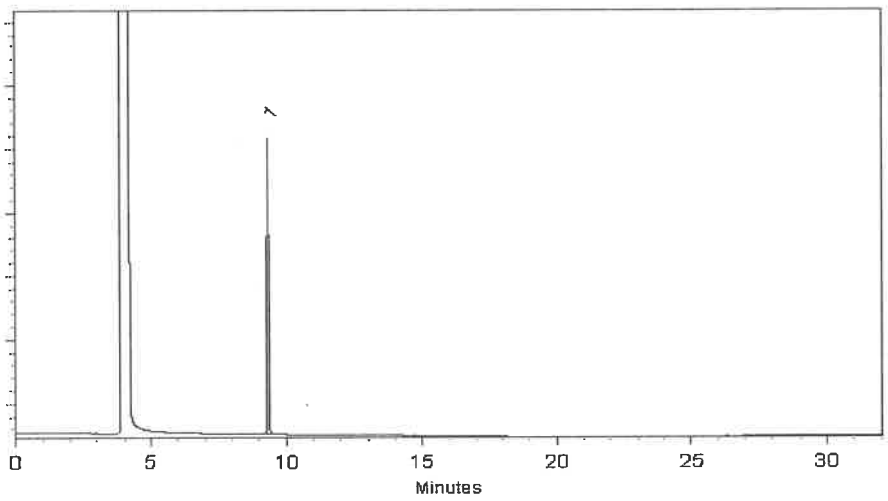
**Inj. Temp:**
200°C

**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.

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.

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

*gravimetric*

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. :** 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.

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 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.)

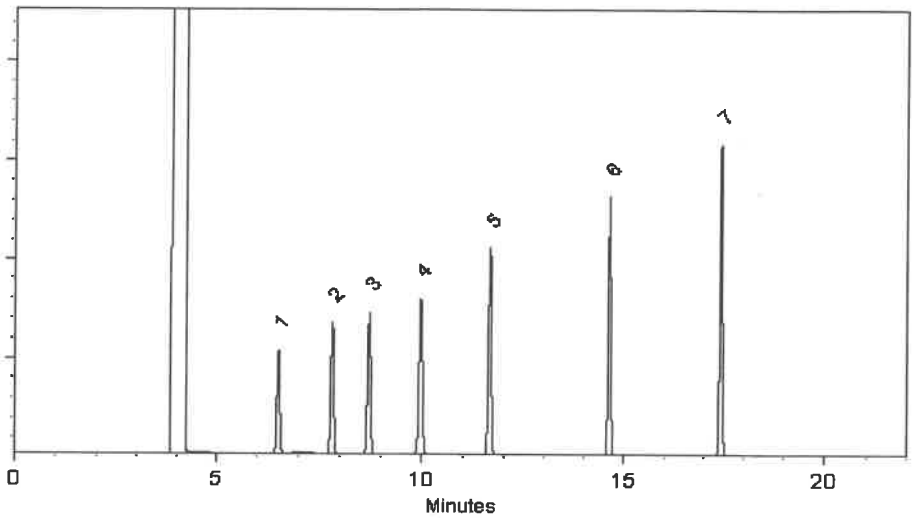
**Inj. Temp:**
200°C

**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.
- 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.

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 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.)

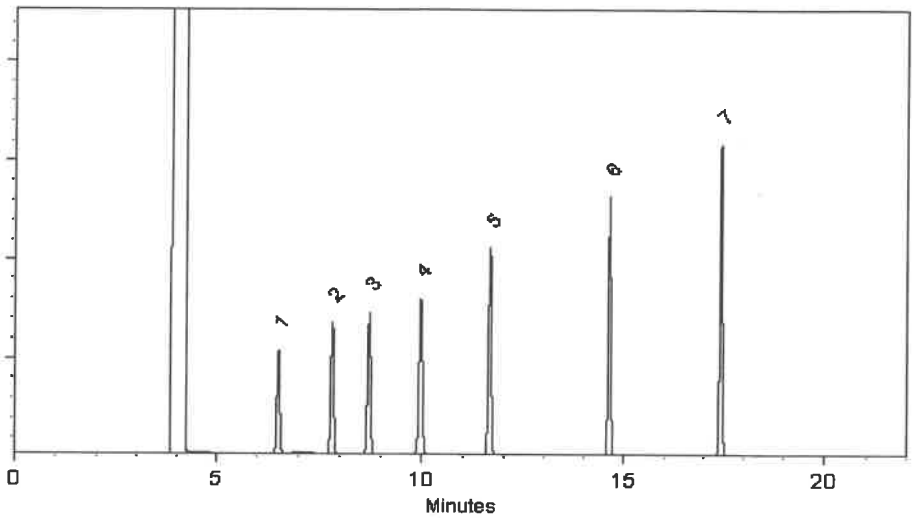
**Inj. Temp:**
200°C

**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:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  $k$ 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.

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

***gravimetric***

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. :** 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:

- 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.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

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.)

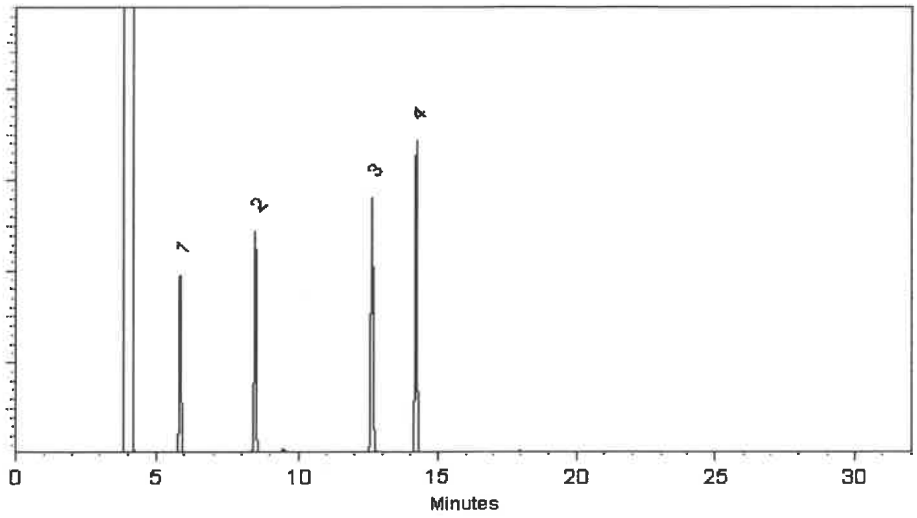
**Inj. Temp:**
200°C

**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.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

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.)

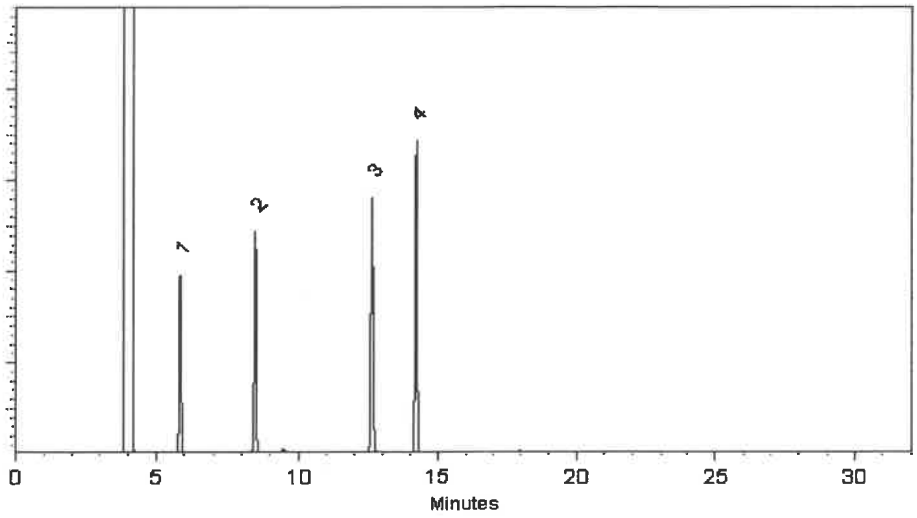
**Inj. Temp:**
200°C

**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.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

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.)

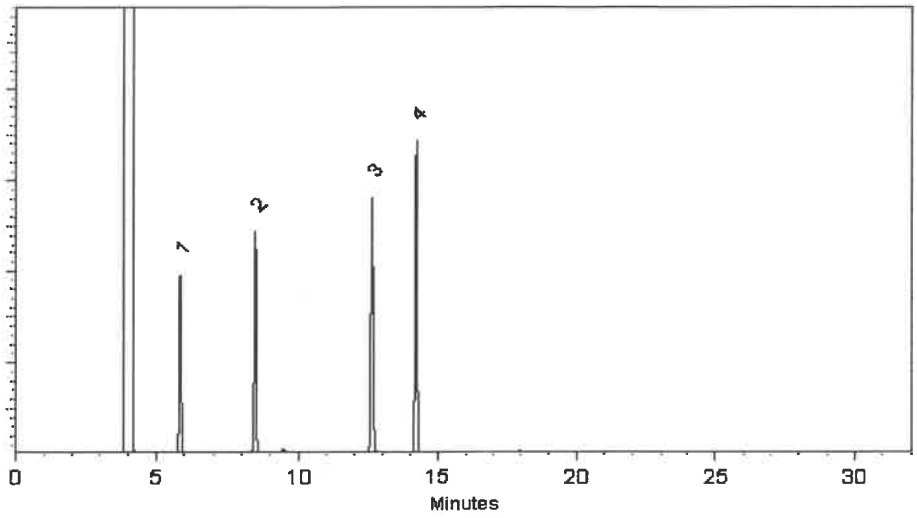
**Inj. Temp:**
200°C

**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.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

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.

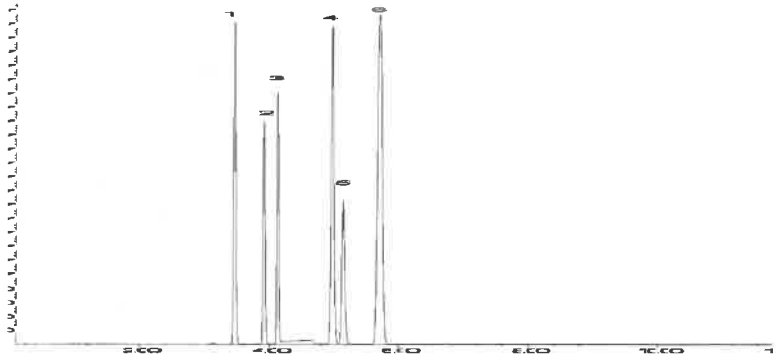
**Inj. Temp:**
200°C

**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.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

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.

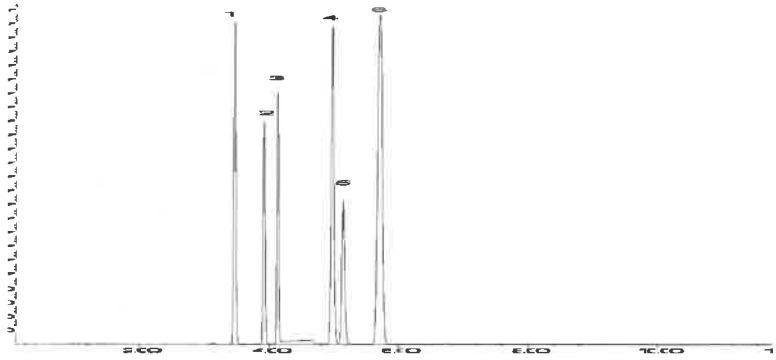
**Inj. Temp:**
200°C

**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.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

Zoviy Rec 01/08/21

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.)

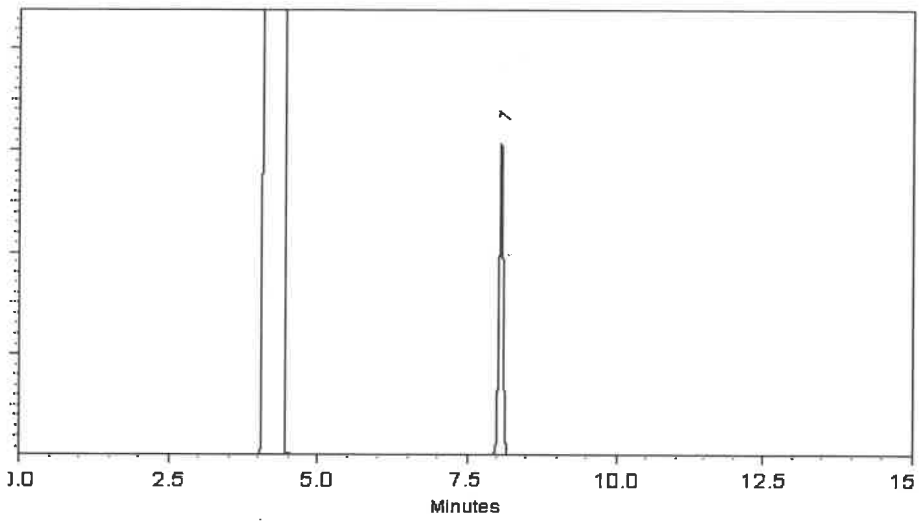
**Inj. Temp:**
200°C

**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.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

10 vial Rec 01/08/25

RESTEK

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

# Certificate of Analysis

*chromatographic*

V14793 to 14802

**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-FL **Lot No.:** A0220563

**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% | 8,060.0 µg/mL | +/- 278.5905 |

* 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.)

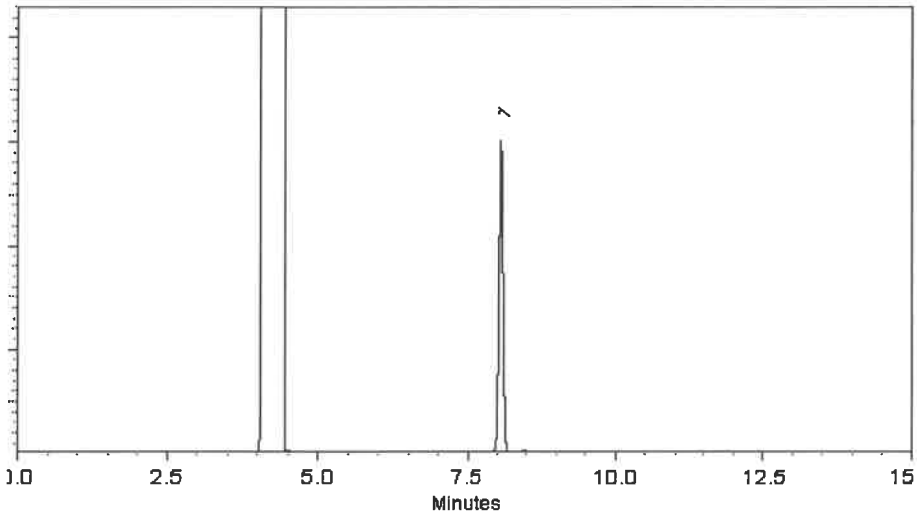
**Inj. Temp:**
200°C

**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.

Tom Suckar - Mix Technician

**Date Mixed:** 30-Dec-2024 **Balance Serial #** B345965662

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.
- 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

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

# CHEMTECH
## CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO. Q1241
QUOTE NO.
COC Number 2041692

### CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: RU2 Engineering LLC
ADDRESS: 2 Melinda Drive, Monroe Twp, NJ 08831
CITY: ZIP:
ATTENTION: Rutu Manani
PHONE: 609-409-4564 FAX:

### CLIENT PROJECT INFORMATION

PROJECT NAME: SANDTWOBR BMCR Project
PROJECT NO.: LOCATION: Brooklyn, NYC
PROJECT MANAGER: Rutu Manani
e-mail: Rmanani@Ru2eng.com
PHONE: FAX:

### CLIENT BILLING INFORMATION

BILL TO: Same as company address PO#:
ADDRESS:
CITY STATE: ZIP:
ATTENTION: PHONE:

### DATA TURNAROUND INFORMATION

FAX (RUSH) Standard 10 days DAYS*
HARDCOPY (DATA PACKAGE): Standard 10 days DAYS*
EDD: Standard 10 days DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS

### 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 TCL VOCs + MTBE/TBA
2 TCLP VOCs
3 TPH GRO-DRO
4 TCL SVOCs + TICs
5 TAL Metals
6 Pesticides, PCBs
7 RCRA characteristics
8 Paint filter
9 full TCLP

| CHEMTECH 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | JPP-3.5-013025 | Soil | | G | 1/30/25 | 8:11 | 3 | X | X | X | RA | X | | | | | |
| 2. | JPP-3.5-013025 | Soil | C | | 1/30/25 | 8:20 | 8 | | | X | X | X | X | X | X | X | |
| 3. | JPP-5.3-013025 | Soil | | G | 1/30/25 | 8:52 | 3 | X | X | X | | | | | | | |
| 4. | JPP-5.3-013025 | Soil | C | | 1/30/25 | 9:00 | 8 | | | X | X | X | X | X | X | X | |
| 5. | JPP-5.2-013025 | Soil | | G | 1/30/25 | 9:46 | 3 | X | X | X | | | | | | | |
| 6. | JPP-5.2-013025 | Soil | C | | 1/30/25 | 9:54 | 8 | | | X | X | X | X | X | X | X | |
| 7. | JPP-5.4-013025 | Soil | | G | 1/30/25 | 10:43 | 3 | X | X | X | | | | | | | |
| 8. | JPP-5.4-013025 | Soil | C | | 1/30/25 | 10:51 | 8 | | | X | X | X | X | X | X | X | |
| 9. | JPP-5.4-013025 | Soil | | G | 1/30/25 | 11:48 | 3 | X | X | X | | | | | | | |
| 10. | JPP-5.4-013025 | Soil | C | | 1/30/25 | 11:56 | 8 | | | X | X | X | X | X | X | X | |

COMMENTS: ← Specify Preservatives
A-HCl D-NaOH
B-HN03 E-ICE
C-H2SO4 F-OTHER

### SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

| RELINQUISHED BY SAMPLER: | DATE/TIME: | RECEIVED BY: |
|---|---|---|
| 1. RA | 1-30-25 1453 | 1. |
| 2. | | 2. |
| 3. | | 3. |

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 4.1 °C
Comments: Preserve extra Sample Jar if additional analysis is Required.
1 Cooler #

Page 1 of 2

CLIENT: ☐ Hand Delivered ☐ Other
CHEMTECH: ☐ Picked Up ☐ Field Sampling

Shipment Complete ☐ YES ☐ NO

Copyright © 2023

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

CHEMTECH 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 :** Q1241 RUTW01
**Client Name :** RU2 Engineering, LLC
**Client Contact :** Rutu Manani
**Invoice Name :** RU2 Engineering, LLC
**Invoice Contact :** Rutu Manani

**Order Date :** 1/30/2025 2:58:00 PM
**Project Name :** NYCDDC SANTWOBR Bı
**Receive DateTime :** 1/30/2025 2:53:00 PM
**Purchase Order :**

**Project Mgr :**
**Report Type :** NYS ASP B
**EDD Type :** Excel NY
**Hard Copy Date :**
**Date Signoff :**

| LAB ID | CLIENT ID | MATRIX | SAMPLE DATE | SAMPLE TIME | TEST | TEST GROUP | METHOD | FAX DATE | DUE DATES |
|---|---|---|---|---|---|---|---|---|---|
| Q1241-01 | JPP-3.5-013025 | Solid | 01/30/2025 | 08:11 | | | | | |
| | | | | | VOCMS Group1 | | 8260D | | 10 Bus. Days |
| Q1241-05 | JPP-5.3-013025 | Solid | 01/30/2025 | 08:52 | | | | | |
| | | | | | VOCMS Group1 | | 8260D | | 10 Bus. Days |
| Q1241-09 | JPP-5.2-013025 | Solid | 01/30/2025 | 09:46 | | | | | |
| | | | | | VOCMS Group1 | | 8260D | | 10 Bus. Days |
| Q1241-13 | JPP-5.4-013025 | Solid | 01/30/2025 | 10:43 | | | | | |
| | | | | | VOCMS Group1 | | 8260D | | 10 Bus. Days |
| Q1241-17 | JPP-51.4-013025 | Solid | 01/30/2025 | 11:48 | | | | | |
| | | | | | VOCMS Group1 | | 8260D | | 10 Bus. Days |

**Relinguished By :** [signature]
**Date / Time :** 1-30-25 1550

**Received By :** JC
**Date / Time :** 1/30/25 1550

**Storage Area :** VOA Refridgerator Room

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

# LOGIN REPORT/SAMPLE TRANSFER

**Order ID :** Q1241 RUTW01
**Client Name :** RU2 Engineering, LLC
**Client Contact :** Rutu Manani
**Invoice Name :** RU2 Engineering, LLC
**Invoice Contact :** Rutu Manani

**Order Date :** 1/30/2025 2:58:00 PM
**Project Name :** NYCDDC SANTWOBR B1
**Receive DateTime :** 1/30/2025 2:53:00 PM
**Purchase Order :**

**Project Mgr :**
**Report Type :** NYS ASP B
**EDD Type :** Excel NY
**Hard Copy Date :**
**Date Signoff :**

| LAB ID | CLIENT ID | MATRIX | SAMPLE DATE | SAMPLE TIME | TEST | TEST GROUP | METHOD | FAX DATE | DUE DATES |
|---|---|---|---|---|---|---|---|---|---|
| Q1241-01 | JPP-3.5-013025 | Solid | 01/30/2025 | 08:11 | | | | | |
| | | | | | Gasoline Range Organics | | 8015D | | 10 Bus. Days |
| Q1241-05 | JPP-5.3-013025 | Solid | 01/30/2025 | 08:52 | | | | | |
| | | | | | Gasoline Range Organics | | 8015D | | 10 Bus. Days |
| Q1241-09 | JPP-5.2-013025 | Solid | 01/30/2025 | 09:46 | | | | | |
| | | | | | Gasoline Range Organics | | 8015D | | 10 Bus. Days |
| Q1241-13 | JPP-5.4-013025 | Solid | 01/30/2025 | 10:43 | | | | | |
| | | | | | Gasoline Range Organics | | 8015D | | 10 Bus. Days |
| Q1241-17 | JPP-51.4-013025 | Solid | 01/30/2025 | 11:48 | | | | | |
| | | | | | Gasoline Range Organics | | 8015D | | 10 Bus. Days |

**Relinguished By :** cl
**Date / Time :** 1-30-25 1550

**Received By :** JC
**Date / Time :** 1/30/25 1550

**Storage Area :** VOA Refridgerator Room