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# Cover Page

**Order ID :** Q2250

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

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

| Lab Sample Number | Client Sample Number |
|---|---|
| Q2250-01 | MW-11A-13.5-060525 |
| Q2250-02 | MW-11A-13.5-060525MS |
| Q2250-03 | MW-11A-13.5-060525MSD |
| Q2250-04 | MW-06-6.5-060525 |
| Q2250-05 | EB02-060525 |
| Q2250-06 | TB-01-060525 |
| Q2250-07 | EB02-060525 |

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 : _____

Date: 6/18/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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# CASE NARRATIVE

**JACOBS Engineering Group, Inc.**
**Project Name: Former Schlumberger STC PTC Site D3868221**
**Project # N/A**
**Order ID # Q2250**
**Test Name: VOCMS Group3**

**A. Number of Samples and Date of Receipt:**
7 Water samples were received on 06/05/2025.

**B. Parameters**
According to the Chain of Custody document, the following analyses were requested: Alkalinity, Anions Group1, Dissolved ICP-Group2, Dissolved Metals Group3, Mercury, Metals ICP-TAL, METALS-TAL, SVOC-SIMGroup1, TDS and VOCMS Group3. This data package contains results for VOCMS Group3.

**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 VOCMS Group3 was based on method 8260D.

**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 MS {Q2250-02MS} with File ID: VN086922.D recoveries met the requirements for all compounds except for cis-1,2-Dichloroethene[2100%] and Trichloroethene[3000%] these compounds did not meet the NJDKQP criteria and in-house criteria due to matrix interference.

The MSD {Q2250-03MSD} with File ID: VN086923.D recoveries met the acceptable requirements except for cis-1,2-Dichloroethene[2500%] and Trichloroethene[3800%] these compounds did not meet the NJDKQP criteria and in-house criteria due to matrix interference.

The RPD for {Q2250-03MSD} with File ID: VN086923.D met criteria except for Trichloroethene[24%] due to difference in results of MS and MSD.

The Blank Spike met requirements for all samples.
The Blank Spike Duplicate met requirements for all samples.
The Blank analysis did not indicate the presence of lab contamination.

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The Initial Calibration met the requirements.
The Continuous Calibration met the requirements.
The Tuning criteria met requirements.

Sample MW-11A-13.5-060525 was diluted due to high concentration.

**E. Additional Comments:**

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

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

---

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

Signature_____

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# DATA REPORTING QUALIFIERS- ORGANIC

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

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

# 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

ORDER ID: Q2250 MATRIX: Water

METHOD: 8260D

| | | 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>The Continuous Calibration met the requirements. | | | ✓ |
| 6. | Blank Contamination - If yes, list compounds and concentrations in each blank: | | ✓ | |
| 7. | Surrogate Recoveries Meet Criteria<br>If not met, list those compounds and their recoveries which fall outside the acceptable ranges. | | | ✓ |
| 8. | Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria<br>If not met, list those compounds and their recoveries which fall outside the acceptable range.<br>The MS {Q2250-02MS} with File ID: VN086922.D recoveries met the requirements for all compounds except for cis-1,2-Dichloroethene[2100%] and Trichloroethene[3000%] these compounds did not meet the NJDKQP criteria and in-house criteria due to matrix interference.<br>The MSD {Q2250-03MSD} with File ID: VN086923.D recoveries met the acceptable requirements except for cis-1,2-Dichloroethene[2500%] and Trichloroethene[3800%] these compounds did not meet the NJDKQP criteria and in-house criteria due to matrix interference.<br>The RPD for {Q2250-03MSD} with File ID: VN086923.D met criteria except for Trichloroethene[24%] due to difference in results of MS and MSD. | | ✓ | |
| 9. | Internal Standard Area/Retention Time Shift Meet Criteria<br>Comments: | | | ✓ |

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

| | | NA | NO | YES |
|---|---|---|---|---|
| 10. | Analysis Holding Time Met | | | ✓ |
| | If not met, list number of days exceeded for each sample: | | | |

ADDITIONAL COMMENTS:
Sample MW-11A-13.5-060525 was diluted due to high concentration.

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 Date

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**APPENDIX A**

**QA REVIEW GENERAL DOCUMENTATION**

**Project #:** **Q2250**

| | 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:** **06/18/2025**

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# LAB CHRONICLE

| | | | |
|---|---|---|---|
| **OrderID:** | Q2250 | **OrderDate:** | 6/5/2025 4:22:00 PM |
| **Client:** | JACOBS Engineering Group, Inc. | **Project:** | Former Schlumberger STC PTC Site D3868221 |
| **Contact:** | John Ynfante | **Location:** | D22,N31,VOA Ref. #3 Water |

| LabID | ClientID | Matrix | Test | Method | Sample Date | Prep Date | Anal Date | Received |
|---|---|---|---|---|---|---|---|---|
| **Q2250-01** | **MW-11A-13.5-060525** | **Water** | | | **06/05/25** | | | **06/05/25** |
| | | | VOCMS Group3 | 8260-Low | | | 06/10/25 | |
| **Q2250-01DL** | **MW-11A-13.5-060525 DL** | **Water** | | | **06/05/25** | | | **06/05/25** |
| | | | VOCMS Group3 | 8260-Low | | | 06/11/25 | |
| **Q2250-05** | **EB02-060525** | **Water** | | | **06/05/25** | | | **06/05/25** |
| | | | VOCMS Group3 | 8260-Low | | | 06/10/25 | |
| **Q2250-06** | **TB-01-060525** | **Water** | | | **06/05/25** | | | **06/05/25** |
| | | | VOCMS Group3 | 8260-Low | | | 06/10/25 | |

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# Hit Summary Sheet
**SW-846**

**SDG No.:** Q2250

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

| Sample ID | Client ID | Matrix | Parameter | Concentration | C | MDL | RDL | Units |
|---|---|---|---|---|---|---|---|---|
| **Client ID:** | **MW-11A-13.5-060525** | | | | | | | |
| Q2250-01 | MW-11A-13.5-0605 | Water | Vinyl Chloride | 5.00 | | 0.26 | 1.00 | ug/L |
| Q2250-01 | MW-11A-13.5-0605 | Water | 1,1-Dichloroethene | 4.20 | | 0.23 | 1.00 | ug/L |
| Q2250-01 | MW-11A-13.5-0605 | Water | 1,1-Dichloroethane | 2.80 | | 0.23 | 1.00 | ug/L |
| Q2250-01 | MW-11A-13.5-0605 | Water | cis-1,2-Dichloroethene | 850 | E | 0.19 | 1.00 | ug/L |
| Q2250-01 | MW-11A-13.5-0605 | Water | Benzene | 0.42 | J | 0.15 | 1.00 | ug/L |
| Q2250-01 | MW-11A-13.5-0605 | Water | Trichloroethene | 1400 | E | 0.090 | 1.00 | ug/L |
| Q2250-01 | MW-11A-13.5-0605 | Water | 1,1,2-Trichloroethane | 0.50 | J | 0.21 | 1.00 | ug/L |
| Q2250-01 | MW-11A-13.5-0605 | Water | Tetrachloroethene | 9.40 | | 0.23 | 1.00 | ug/L |
| | | | **Total Voc :** | 2270 | | | | |
| | | | **Total Concentration:** | 2270 | | | | |
| **Client ID:** | **MW-11A-13.5-060525DL** | | | | | | | |
| Q2250-01DL | MW-11A-13.5-0605 | Water | Vinyl Chloride | 6.60 | JD | 5.20 | 20.0 | ug/L |
| Q2250-01DL | MW-11A-13.5-0605 | Water | cis-1,2-Dichloroethene | 1000 | D | 3.80 | 20.0 | ug/L |
| Q2250-01DL | MW-11A-13.5-0605 | Water | Trichloroethene | 1700 | D | 1.90 | 20.0 | ug/L |
| Q2250-01DL | MW-11A-13.5-0605 | Water | Tetrachloroethene | 12.2 | JD | 4.60 | 20.0 | ug/L |
| | | | **Total Voc :** | 2720 | | | | |
| | | | **Total Concentration:** | 2720 | | | | |

# QC
# SUMMARY

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# Surrogate Summary

**SDG No.:** Q2250

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

**Analytical Method:** SW8260-Low

| Lab Sample ID | Client ID | Parameter | Spike | Result | RecoveryQual | Limits Low | Limits High |
|---|---|---|---|---|---|---|---|
| Q2250-01 | MW-11A-13.5-060525 | 1,2-Dichloroethane-d4 | 50 | 47.8 | 96 | 70 (74) | 130 (125) |
| | | Dibromofluoromethane | 50 | 49.4 | 99 | 70 (75) | 130 (124) |
| | | Toluene-d8 | 50 | 51.3 | 103 | 70 (86) | 130 (113) |
| | | 4-Bromofluorobenzene | 50 | 50.0 | 100 | 70 (77) | 130 (121) |
| Q2250-01DL | MW-11A-13.5-060525DL | 1,2-Dichloroethane-d4 | 50 | 46.3 | 93 | 70 (74) | 130 (125) |
| | | Dibromofluoromethane | 50 | 48.4 | 97 | 70 (75) | 130 (124) |
| | | Toluene-d8 | 50 | 51.1 | 102 | 70 (86) | 130 (113) |
| | | 4-Bromofluorobenzene | 50 | 49.1 | 98 | 70 (77) | 130 (121) |
| Q2250-02MS | MW-11A-13.5-060525MS | 1,2-Dichloroethane-d4 | 50 | 49.9 | 100 | 70 (74) | 130 (125) |
| | | Dibromofluoromethane | 50 | 52.4 | 105 | 70 (75) | 130 (124) |
| | | Toluene-d8 | 50 | 51.2 | 102 | 70 (86) | 130 (113) |
| | | 4-Bromofluorobenzene | 50 | 50.9 | 102 | 70 (77) | 130 (121) |
| Q2250-03MSD | MW-11A-13.5-060525MSD | 1,2-Dichloroethane-d4 | 50 | 52.7 | 105 | 70 (74) | 130 (125) |
| | | Dibromofluoromethane | 50 | 56.6 | 113 | 70 (75) | 130 (124) |
| | | Toluene-d8 | 50 | 54.8 | 110 | 70 (86) | 130 (113) |
| | | 4-Bromofluorobenzene | 50 | 55.3 | 111 | 70 (77) | 130 (121) |
| Q2250-05 | EB02-060525 | 1,2-Dichloroethane-d4 | 50 | 47.9 | 96 | 70 (74) | 130 (125) |
| | | Dibromofluoromethane | 50 | 48.8 | 98 | 70 (75) | 130 (124) |
| | | Toluene-d8 | 50 | 51.5 | 103 | 70 (86) | 130 (113) |
| | | 4-Bromofluorobenzene | 50 | 48.9 | 98 | 70 (77) | 130 (121) |
| Q2250-06 | TB-01-060525 | 1,2-Dichloroethane-d4 | 50 | 47.2 | 94 | 70 (74) | 130 (125) |
| | | Dibromofluoromethane | 50 | 48.8 | 98 | 70 (75) | 130 (124) |
| | | Toluene-d8 | 50 | 51.1 | 102 | 70 (86) | 130 (113) |
| | | 4-Bromofluorobenzene | 50 | 49.1 | 98 | 70 (77) | 130 (121) |
| VN0610WBL01 | VN0610WBL01 | 1,2-Dichloroethane-d4 | 50 | 46.7 | 93 | 70 (74) | 130 (125) |
| | | Dibromofluoromethane | 50 | 49.0 | 98 | 70 (75) | 130 (124) |
| | | Toluene-d8 | 50 | 51.5 | 103 | 70 (86) | 130 (113) |
| | | 4-Bromofluorobenzene | 50 | 49.0 | 98 | 70 (77) | 130 (121) |
| VN0610WBS01 | VN0610WBS01 | 1,2-Dichloroethane-d4 | 50 | 45.4 | 91 | 70 (74) | 130 (125) |
| | | Dibromofluoromethane | 50 | 49.5 | 99 | 70 (75) | 130 (124) |
| | | Toluene-d8 | 50 | 48.6 | 97 | 70 (86) | 130 (113) |
| | | 4-Bromofluorobenzene | 50 | 48.3 | 97 | 70 (77) | 130 (121) |
| VN0611WBL01 | VN0611WBL01 | 1,2-Dichloroethane-d4 | 50 | 48.3 | 97 | 70 (74) | 130 (125) |
| | | Dibromofluoromethane | 50 | 49.3 | 99 | 70 (75) | 130 (124) |
| | | Toluene-d8 | 50 | 51.7 | 103 | 70 (86) | 130 (113) |
| | | 4-Bromofluorobenzene | 50 | 49.4 | 99 | 70 (77) | 130 (121) |
| VN0611WBS02 | VN0611WBS02 | 1,2-Dichloroethane-d4 | 50 | 47.1 | 94 | 70 (74) | 130 (125) |
| | | Dibromofluoromethane | 50 | 51.1 | 102 | 70 (75) | 130 (124) |
| | | Toluene-d8 | 50 | 48.7 | 97 | 70 (86) | 130 (113) |
| | | 4-Bromofluorobenzene | 50 | 50.0 | 100 | 70 (77) | 130 (121) |

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## Matrix Spike/Matrix Spike Duplicate Summary

### SW-846

**SDG No.:** Q2250

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

**Analytical Method:** SW8260-Low

| Parameter | Spike | Sample Result | Result | Units | Rec | Rec Qual | RPD | RPD Qual | Limits Low | Limits High | Limits RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Lab Sample ID :** Q2250-02MS | | **Client Sample ID :** MW-11A-13.5-060525MS | | | | | | **Datafile :** VN086922.D | | | |
| Vinyl chloride | 50 | 5.00 | 50.4 | ug/L | 91 | | | | 70 (69) | 130 (125) | |
| 1,1-Dichloroethene | 50 | 4.20 | 47.9 | ug/L | 87 | | | | 70 (53) | 130 (162) | |
| 1,1-Dichloroethane | 50 | 2.80 | 45.2 | ug/L | 85 | | | | 70 (78) | 130 (122) | |
| cis-1,2-Dichloroethene | 50 | 850 | 1900 | ug/L | 2100 | * | | | 70 (82) | 130 (124) | |
| 1,1,1-Trichloroethane | 50 | 0 | 37.2 | ug/L | 74 | | | | 70 (83) | 130 (117) | |
| Benzene | 50 | 0.42 | 39.1 | ug/L | 77 | | | | 70 (81) | 130 (128) | |
| 1,2-Dichloroethane | 50 | 0 | 39.3 | ug/L | 79 | | | | 70 (76) | 130 (120) | |
| Trichloroethene | 50 | 1400 | 2900 | ug/L | 3000 | * | | | 70 (28) | 130 (175) | |
| 1,1,2-Trichloroethane | 50 | 0.50 | 40.0 | ug/L | 79 | | | | 70 (27) | 130 (175) | |
| Tetrachloroethene | 50 | 9.40 | 57.0 | ug/L | 95 | | | | 70 (48) | 130 (153) | |

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## Matrix Spike/Matrix Spike Duplicate Summary

### SW-846

**SDG No.:** Q2250

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

**Analytical Method:** SW8260-Low

| Parameter | Spike | Sample Result | Result | Units | Rec | Rec Qual | RPD | RPD Qual | Limits Low | Limits High | Limits RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Lab Sample ID :** | **Q2250-03MSD** | **Client Sample ID :** | **MW-11A-13.5-060525MSD** | | | | | **Datafile :** | VN086923.D | | |
| Vinyl chloride | 50 | 5.00 | 57.2 | ug/L | 104 | | 13 | | 70 (69) | 130 (125) | 20 (20) |
| 1,1-Dichloroethene | 50 | 4.20 | 53.1 | ug/L | 98 | | 12 | | 70 (53) | 130 (162) | 20 (20) |
| 1,1-Dichloroethane | 50 | 2.80 | 49.5 | ug/L | 93 | | 9 | | 70 (78) | 130 (122) | 20 (20) |
| cis-1,2-Dichloroethene | 50 | 850 | 2100 | ug/L | 2500 | * | 17 | | 70 (82) | 130 (124) | 20 (20) |
| 1,1,1-Trichloroethane | 50 | 0 | 41.4 | ug/L | 83 | | 11 | | 70 (83) | 130 (117) | 20 (20) |
| Benzene | 50 | 0.42 | 43.0 | ug/L | 85 | | 10 | | 70 (81) | 130 (128) | 20 (20) |
| 1,2-Dichloroethane | 50 | 0 | 43.1 | ug/L | 86 | | 9 | | 70 (76) | 130 (120) | 20 (20) |
| Trichloroethene | 50 | 1400 | 3300 | ug/L | 3800 | * | 24 | * | 70 (28) | 130 (175) | 20 (20) |
| 1,1,2-Trichloroethane | 50 | 0.50 | 44.5 | ug/L | 88 | | 11 | | 70 (27) | 130 (175) | 20 (20) |
| Tetrachloroethene | 50 | 9.40 | 66.0 | ug/L | 113 | | 17 | | 70 (48) | 130 (153) | 20 (20) |

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## Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

**SW-846**

**SDG No.:** Q2250

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

**Analytical Method:** SW8260-Low **Datafile :** VN086916.D

| Lab Sample ID | Parameter | Spike | Result | Unit | Rec | RPD | Qual | Limits Low | Limits High | RPD |
|---|---|---|---|---|---|---|---|---|---|---|
| VN0610WBS01 | Vinyl chloride | 20 | 18.0 | ug/L | 90 | | | 70 (65) | 130 (117) | |
| | 1,1-Dichloroethene | 20 | 18.7 | ug/L | 94 | | | 70 (74) | 130 (110) | |
| | 1,1-Dichloroethane | 20 | 18.2 | ug/L | 91 | | | 70 (78) | 130 (112) | |
| | cis-1,2-Dichloroethene | 20 | 18.7 | ug/L | 94 | | | 70 (77) | 130 (110) | |
| | 1,1,1-Trichloroethane | 20 | 18.1 | ug/L | 91 | | | 70 (80) | 130 (108) | |
| | Benzene | 20 | 18.5 | ug/L | 93 | | | 70 (82) | 130 (109) | |
| | 1,2-Dichloroethane | 20 | 18.7 | ug/L | 94 | | | 70 (80) | 130 (115) | |
| | Trichloroethene | 20 | 19.3 | ug/L | 97 | | | 70 (77) | 130 (113) | |
| | 1,1,2-Trichloroethane | 20 | 19.5 | ug/L | 98 | | | 70 (83) | 130 (112) | |
| | Tetrachloroethene | 20 | 17.9 | ug/L | 90 | | | 70 (67) | 130 (123) | |

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## Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

**SW-846**

**SDG No.:** Q2250

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

**Analytical Method:** SW8260-Low **Datafile :** VN086944.D

| Lab Sample ID | Parameter | Spike | Result | Unit | Rec | RPD | Qual | Limits Low | Limits High | RPD |
|---|---|---|---|---|---|---|---|---|---|---|
| VN0611WBS02 | Vinyl chloride | 20 | 18.9 | ug/L | 95 | | | 70 (65) | 130 (117) | |
| | 1,1-Dichloroethene | 20 | 19.2 | ug/L | 96 | | | 70 (74) | 130 (110) | |
| | 1,1-Dichloroethane | 20 | 19.4 | ug/L | 97 | | | 70 (78) | 130 (112) | |
| | cis-1,2-Dichloroethene | 20 | 19.5 | ug/L | 98 | | | 70 (77) | 130 (110) | |
| | 1,1,1-Trichloroethane | 20 | 19.0 | ug/L | 95 | | | 70 (80) | 130 (108) | |
| | Benzene | 20 | 19.3 | ug/L | 97 | | | 70 (82) | 130 (109) | |
| | 1,2-Dichloroethane | 20 | 19.5 | ug/L | 98 | | | 70 (80) | 130 (115) | |
| | Trichloroethene | 20 | 19.9 | ug/L | 100 | | | 70 (77) | 130 (113) | |
| | 1,1,2-Trichloroethane | 20 | 20.4 | ug/L | 102 | | | 70 (83) | 130 (112) | |
| | Tetrachloroethene | 20 | 19.2 | ug/L | 96 | | | 70 (67) | 130 (123) | |

( ) = LABORATORY INHOUSE LIMIT

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# VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VN0610WBL01

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q2250 SAS No.: Q2250 SDG NO.: Q2250

Lab File ID: VN086915.D Lab Sample ID: VN0610WBL01

Date Analyzed: 06/10/2025 Time Analyzed: 10:09

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 |
|---|---|---|---|
| VN0610WBS01 | VN0610WBS01 | VN086916.D | 06/10/2025 |
| EB02-060525 | Q2250-05 | VN086919.D | 06/10/2025 |
| TB-01-060525 | Q2250-06 | VN086920.D | 06/10/2025 |
| MW-11A-13.5-060525 | Q2250-01 | VN086921.D | 06/10/2025 |
| MW-11A-13.5-060525MS | Q2250-02MS | VN086922.D | 06/10/2025 |
| MW-11A-13.5-060525MSD | Q2250-03MSD | VN086923.D | 06/10/2025 |

COMMENTS:

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# VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VN0611WBL01

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q2250 SAS No.: Q2250 SDG NO.: Q2250

Lab File ID: VN086942.D Lab Sample ID: VN0611WBL01

Date Analyzed: 06/11/2025 Time Analyzed: 12:28

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 |
|---|---|---|---|
| VN0611WBS02 | VN0611WBS02 | VN086944.D | 06/11/2025 |
| MW-11A-13.5-060525DL | Q2250-01DL | VN086948.D | 06/11/2025 |

COMMENTS:

Raw Data: **VN086861.D**

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

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q2250 SAS No.: Q2250 SDG NO.: Q2250

Lab File ID: VN086861.D BFB Injection Date: 06/06/2025

Instrument ID: MSVOA_N BFB Injection Time: 07:59

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 | 17.3 |
| 75 | 30.0 - 60.0% of mass 95 | 48.1 |
| 95 | Base Peak, 100% relative abundance | 100 |
| 96 | 5.0 - 9.0% of mass 95 | 6.4 |
| 173 | Less than 2.0% of mass 174 | 0.7 ( 1 ) 1 |
| 174 | 50.0 - 100.0% of mass 95 | 66.6 |
| 175 | 5.0 - 9.0% of mass 174 | 4.7 ( 7.1 ) 1 |
| 176 | 95.0 - 101.0% of mass 174 | 65.3 ( 98.1 ) 1 |
| 177 | 5.0 - 9.0% of mass 176 | 4.4 ( 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 |
|---|---|---|---|---|
| VSTDICC001 | VSTDICC001 | VN086862.D | 06/06/2025 | 12:44 |
| VSTDICC005 | VSTDICC005 | VN086863.D | 06/06/2025 | 13:17 |
| VSTDICC020 | VSTDICC020 | VN086864.D | 06/06/2025 | 13:40 |
| VSTDICCC050 | VSTDICCC050 | VN086865.D | 06/06/2025 | 14:03 |
| VSTDICC100 | VSTDICC100 | VN086866.D | 06/06/2025 | 14:26 |
| VSTDICC150 | VSTDICC150 | VN086867.D | 06/06/2025 | 14:49 |

Raw Data: **VN086912.D**

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

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q2250 SAS No.: Q2250 SDG NO.: Q2250

Lab File ID: VN086912.D BFB Injection Date: 06/10/2025

Instrument ID: MSVOA_N BFB Injection Time: 08:39

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 | 16.1 |
| 75 | 30.0 - 60.0% of mass 95 | 47.3 |
| 95 | Base Peak, 100% relative abundance | 100 |
| 96 | 5.0 - 9.0% of mass 95 | 7 |
| 173 | Less than 2.0% of mass 174 | 0.6 ( 0.8 ) 1 |
| 174 | 50.0 - 100.0% of mass 95 | 73.1 |
| 175 | 5.0 - 9.0% of mass 174 | 5.3 ( 7.2 ) 1 |
| 176 | 95.0 - 101.0% of mass 174 | 71.3 ( 97.5 ) 1 |
| 177 | 5.0 - 9.0% of mass 176 | 4.9 ( 6.9 ) 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 | VN086913.D | 06/10/2025 | 09:13 |
| VN0610WBL01 | VN0610WBL01 | VN086915.D | 06/10/2025 | 10:09 |
| VN0610WBS01 | VN0610WBS01 | VN086916.D | 06/10/2025 | 10:30 |
| EB02-060525 | Q2250-05 | VN086919.D | 06/10/2025 | 11:47 |
| TB-01-060525 | Q2250-06 | VN086920.D | 06/10/2025 | 12:08 |
| MW-11A-13.5-060525 | Q2250-01 | VN086921.D | 06/10/2025 | 12:30 |
| MW-11A-13.5-060525MS | Q2250-02MS | VN086922.D | 06/10/2025 | 12:51 |
| MW-11A-13.5-060525MSD | Q2250-03MSD | VN086923.D | 06/10/2025 | 13:12 |

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

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q2250 SAS No.: Q2250 SDG NO.: Q2250

Lab File ID: VN086939.D BFB Injection Date: 06/11/2025

Instrument ID: MSVOA_N BFB Injection Time: 10:22

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 | 15.7 |
| 75 | 30.0 - 60.0% of mass 95 | 46.5 |
| 95 | Base Peak, 100% relative abundance | 100 |
| 96 | 5.0 - 9.0% of mass 95 | 7.1 |
| 173 | Less than 2.0% of mass 174 | 0.7 ( 1 ) 1 |
| 174 | 50.0 - 100.0% of mass 95 | 71.1 |
| 175 | 5.0 - 9.0% of mass 174 | 5.4 ( 7.5 ) 1 |
| 176 | 95.0 - 101.0% of mass 174 | 68.8 ( 96.8 ) 1 |
| 177 | 5.0 - 9.0% of mass 176 | 4.8 ( 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 | VN086940.D | 06/11/2025 | 11:32 |
| VN0611WBL01 | VN0611WBL01 | VN086942.D | 06/11/2025 | 12:28 |
| VN0611WBS02 | VN0611WBS02 | VN086944.D | 06/11/2025 | 13:27 |
| MW-11A-13.5-060525DL | Q2250-01DL | VN086948.D | 06/11/2025 | 15:06 |

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# VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q2250 SAS No.: Q2250 SDG NO.: Q2250

Lab File ID: VN086913.D Date Analyzed: 06/10/2025

Instrument ID: MSVOA_N Time Analyzed: 09:13

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 | 239452 | 8.23 | 422119 | 9.11 | 362285 | 11.87 |
| UPPER LIMIT | 478904 | 8.73 | 844238 | 9.606 | 724570 | 12.365 |
| LOWER LIMIT | 119726 | 7.73 | 211060 | 8.606 | 181143 | 11.365 |
| EPA SAMPLE NO. | | | | | | |
| MW-11A-13.5-060525 | 361832 | 8.23 | 672514 | 9.11 | 593044 | 11.87 |
| MW-11A-13.5-060525MS | 174378 | 8.23 | 310932 | 9.11 | 270945 | 11.87 |
| MW-11A-13.5-060525MSD | 172955 | 8.23 | 309901 | 9.11 | 266637 | 11.87 |
| EB02-060525 | 232754 | 8.23 | 433385 | 9.11 | 381245 | 11.87 |
| TB-01-060525 | 350151 | 8.23 | 648560 | 9.11 | 563762 | 11.87 |
| VN0610WBL01 | 241251 | 8.23 | 440901 | 9.11 | 386425 | 11.87 |
| VN0610WBS01 | 249843 | 8.23 | 443174 | 9.11 | 389297 | 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.

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# VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q2250 SAS No.: Q2250 SDG NO.: Q2250

Lab File ID: VN086913.D Date Analyzed: 06/10/2025

Instrument ID: MSVOA_N Time Analyzed: 09:13

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

| | IS4 AREA # | RT # | | | | |
|---|---|---|---|---|---|---|
| 12 HOUR STD | 170987 | 13.788 | | | | |
| UPPER LIMIT | 341974 | 14.288 | | | | |
| LOWER LIMIT | 85493.5 | 13.288 | | | | |
| EPA SAMPLE NO. | | | | | | |
| MW-11A-13.5-060525 | 281220 | 13.79 | | | | |
| MW-11A-13.5-060525MS | 132628 | 13.79 | | | | |
| MW-11A-13.5-060525MSD | 129873 | 13.79 | | | | |
| EB02-060525 | 180063 | 13.79 | | | | |
| TB-01-060525 | 266280 | 13.79 | | | | |
| VN0610WBL01 | 183380 | 13.79 | | | | |
| VN0610WBS01 | 189620 | 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.

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# VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q2250 SAS No.: Q2250 SDG NO.: Q2250

Lab File ID: VN086940.D Date Analyzed: 06/11/2025

Instrument ID: MSVOA_N Time Analyzed: 11:32

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 | 205098 | 8.23 | 357643 | 9.11 | 312173 | 11.87 |
| UPPER LIMIT | 410196 | 8.73 | 715286 | 9.606 | 624346 | 12.365 |
| LOWER LIMIT | 102549 | 7.73 | 178822 | 8.606 | 156087 | 11.365 |
| EPA SAMPLE NO. | | | | | | |
| MW-11A-13.5-060525DL | 272350 | 8.24 | 500042 | 9.11 | 434591 | 11.87 |
| VN0611WBL01 | 328120 | 8.23 | 618651 | 9.11 | 543433 | 11.87 |
| VN0611WBS02 | 206799 | 8.24 | 370524 | 9.11 | 321188 | 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.

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# VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q2250 SAS No.: Q2250 SDG NO.: Q2250

Lab File ID: VN086940.D Date Analyzed: 06/11/2025

Instrument ID: MSVOA_N Time Analyzed: 11:32

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

| | IS4 AREA # | RT # | | | | |
|---|---|---|---|---|---|---|
| 12 HOUR STD | 152136 | 13.788 | | | | |
| UPPER LIMIT | 304272 | 14.288 | | | | |
| LOWER LIMIT | 76068 | 13.288 | | | | |
| EPA SAMPLE NO. | | | | | | |
| MW-11A-13.5-060525DL | 208257 | 13.79 | | | | |
| VN0611WBL01 | 257257 | 13.79 | | | | |
| VN0611WBS02 | 157403 | 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.

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# SAMPLE DATA

Raw Data: **VN086921.D**

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | 06/05/25 |
| Project: | Former Schlumberger STC PTC Site D3868221 | Date Received: | 06/05/25 |
| Client Sample ID: | MW-11A-13.5-060525 | SDG No.: | Q2250 |
| Lab Sample ID: | Q2250-01 | Matrix: | Water |
| Analytical Method: | 8260D | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group3 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN086921.D | 1 | | 06/10/25 12:30 | VN061025 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-01-4 | Vinyl Chloride | 5.00 | | 0.26 | 1.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 4.20 | | 0.23 | 1.00 | ug/L |
| 75-34-3 | 1,1-Dichloroethane | 2.80 | | 0.23 | 1.00 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 850 | E | 0.19 | 1.00 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 0.20 | U | 0.20 | 1.00 | ug/L |
| 71-43-2 | Benzene | 0.42 | J | 0.15 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 0.22 | U | 0.22 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 1400 | E | 0.090 | 1.00 | ug/L |
| 79-00-5 | 1,1,2-Trichloroethane | 0.50 | J | 0.21 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 9.40 | | 0.23 | 1.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 47.8 | | 70 (74) - 130 (125) | 96% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 49.4 | | 70 (75) - 130 (124) | 99% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 51.3 | | 70 (86) - 130 (113) | 103% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 50.1 | | 70 (77) - 130 (121) | 100% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 362000 | 8.23 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 673000 | 9.106 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 593000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 281000 | 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\VN061025\
Data File : VN086921.D
Acq On : 10 Jun 2025 12:30
Operator : JC\MD
Sample : Q2250-01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525

Quant Time: Jun 11 01:52:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.230 | 168 | 361832 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.106 | 114 | 672514 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 593044 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 281220 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.582 | 65 | 231529 | 47.792 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 95.580% | | | |
| 35) Dibromofluoromethane | 8.177 | 113 | 196952 | 49.417 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 98.840% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 809307 | 51.295 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 102.600% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 293403 | 50.054 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 100.100% | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Vinyl Chloride | 2.559 | 62 | 24226 | 5.041 | ug/l | 96 |
| 9) 1,1,2-Trichlorotrifluo... | 4.400 | 101 | 302235 | 76.617 | ug/l | 99 |
| 12) 1,1-Dichloroethene | 4.371 | 96 | 16986 | 4.218 | ug/l | 100 |
| 21) trans-1,2-Dichloroethene | 5.812 | 96 | 16472 | 3.676 | ug/l | 88 |
| 24) 1,1-Dichloroethane | 6.594 | 63 | 22723 | 2.805 | ug/l | 96 |
| 27) cis-1,2-Dichloroethene | 7.500 | 96 | 4534458 | 846.190 | ug/l | 90 |
| 29) Tetrahydrofuran | 7.853 | 42 | 9084 | 3.339 | ug/l | 95 |
| 40) Benzene | 8.612 | 78 | 8119 | 0.418 | ug/l | 95 |
| 44) Trichloroethene | 9.359 | 130 | 6309047 | 1370.098 | ug/l | 98 |
| 55) 1,1,2-Trichloroethane | 11.018 | 97 | 2269 | 0.497 | ug/l | 95 |
| 64) Tetrachloroethene | 11.106 | 164 | 35442 | 9.443 | ug/l | 96 |

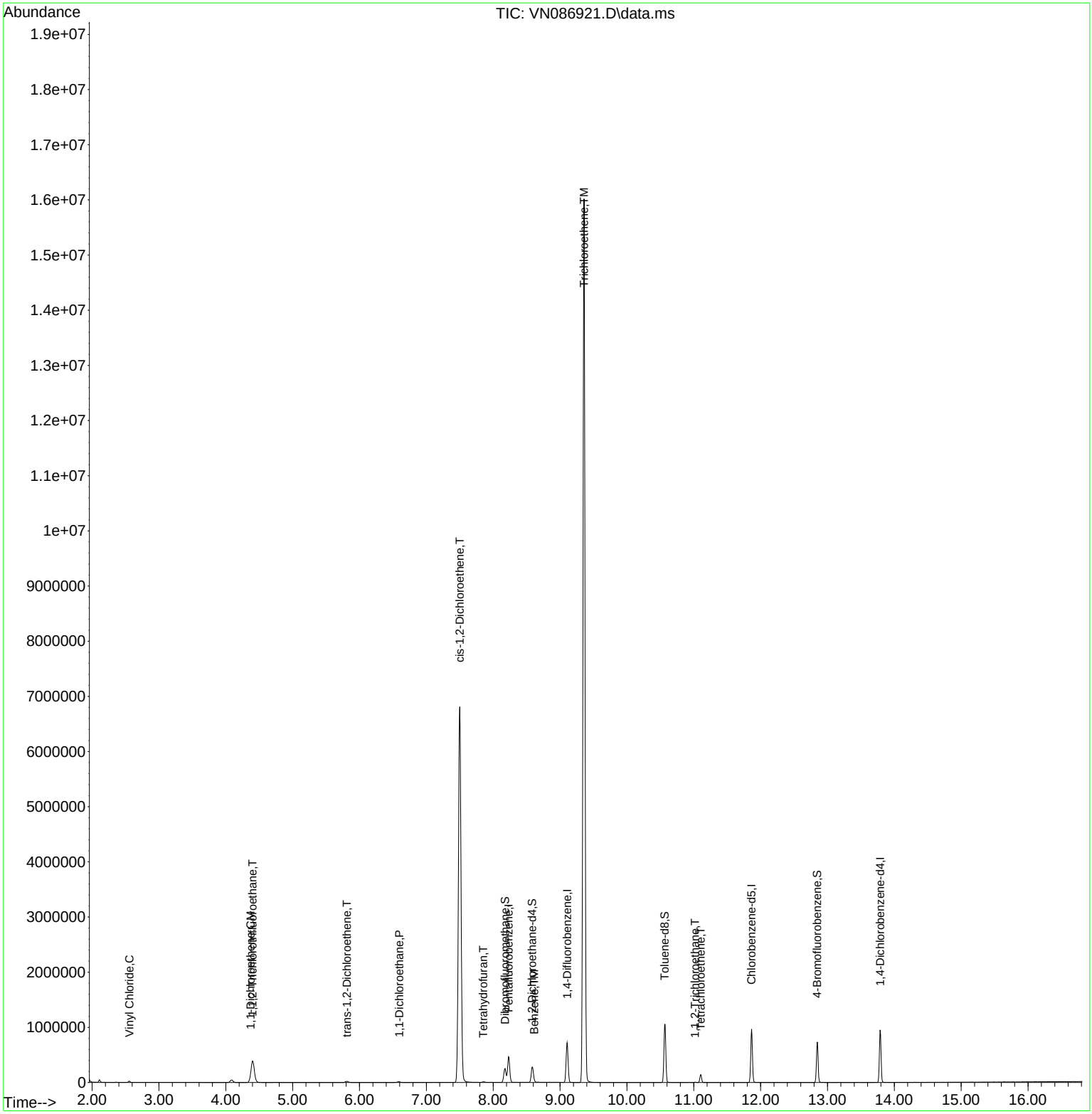
(#) = qualifier out of range (m) = manual integration (+) = signals summed

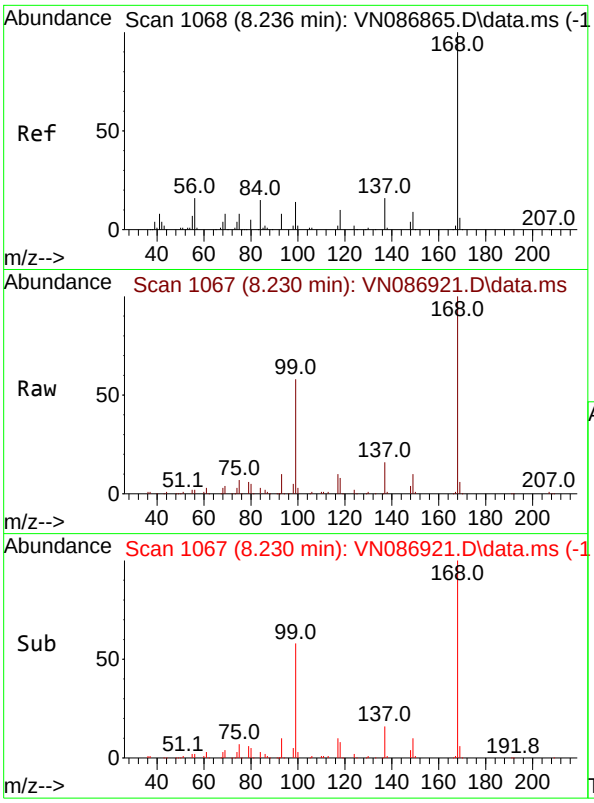
Sample Results: **VN086921.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061025\
Data File : VN086921.D
Acq On : 10 Jun 2025 12:30
Operator : JC\MD
Sample : Q2250-01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525

Quant Time: Jun 11 01:52:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration



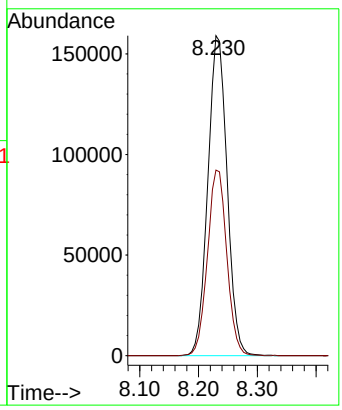


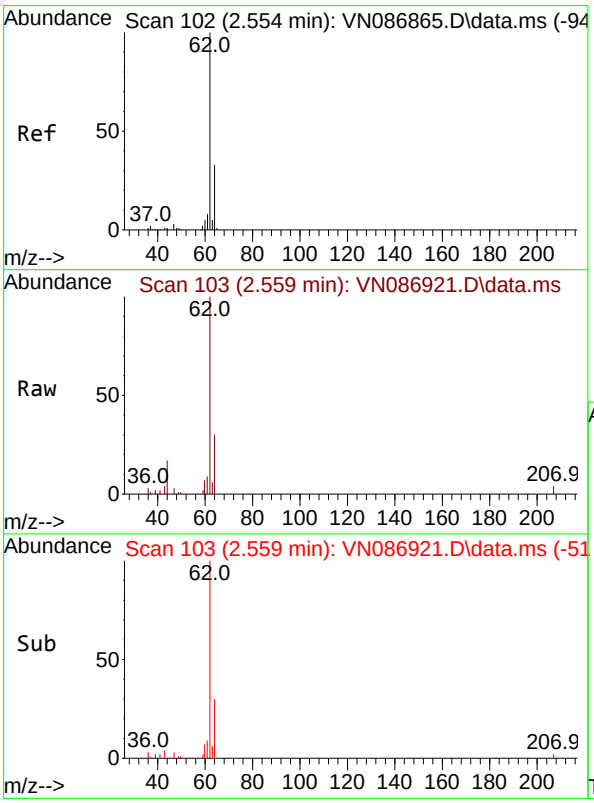

#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.230 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086921.D
Acq: 10 Jun 2025 12:30

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525

Tgt Ion:168 Resp: 361832

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 58.0 | 49.1 | 73.7 |

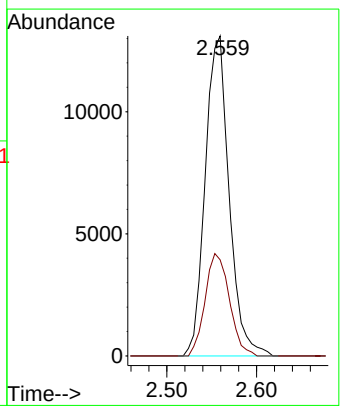


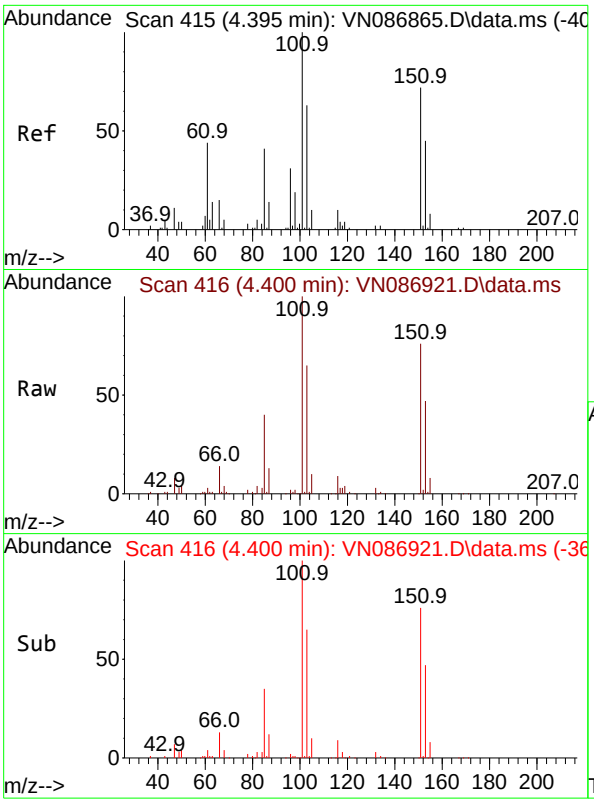




#4
Vinyl Chloride
Concen: 5.041 ug/l
RT: 2.559 min Scan# 103
Delta R.T. 0.006 min
Lab File: VN086921.D
Acq: 10 Jun 2025 12:30

Tgt Ion: 62 Resp: 24226

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 30.0 | 26.0 | 39.0 |



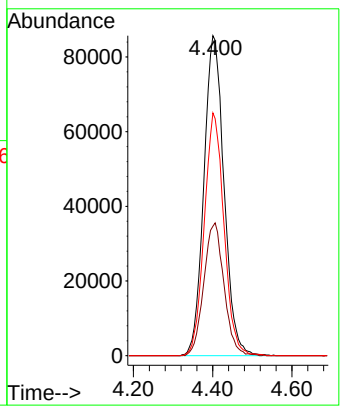


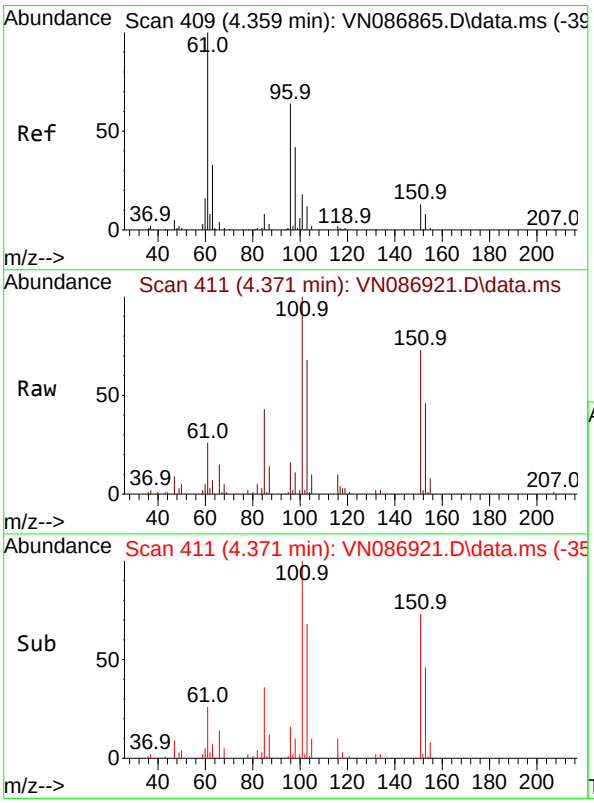

#9
1,1,2-Trichlorotrifluoroethane
Concen: 76.617 ug/l
RT: 4.400 min Scan# 41
Delta R.T. 0.006 min
Lab File: VN086921.D
Acq: 10 Jun 2025 12:30

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525

Tgt Ion:101 Resp: 302235

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 41.6 | 33.8 | 50.8 |
| 151 | 74.1 | 58.7 | 88.1 |

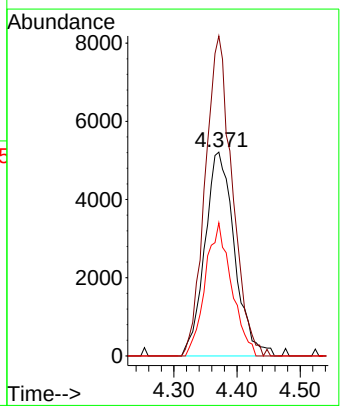


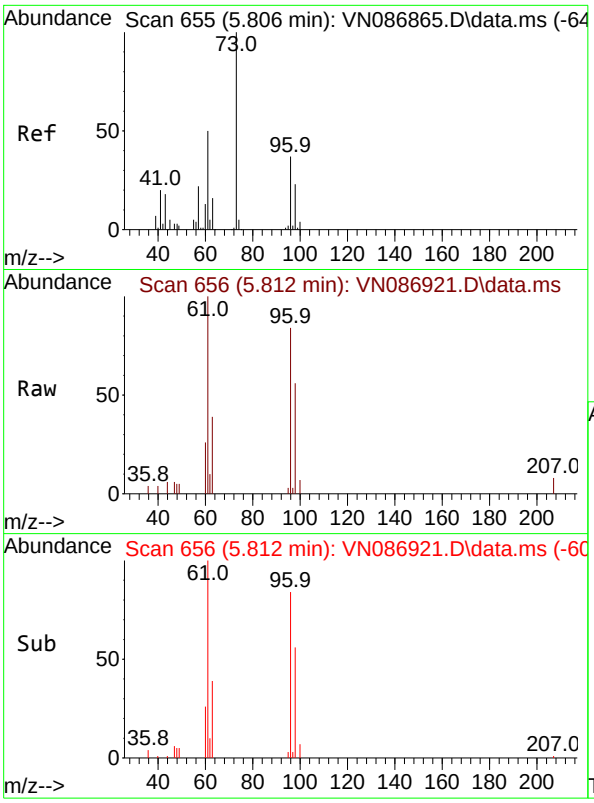




#12
1,1-Dichloroethene
Concen: 4.218 ug/l
RT: 4.371 min Scan# 411
Delta R.T. 0.012 min
Lab File: VN086921.D
Acq: 10 Jun 2025 12:30

Tgt Ion: 96 Resp: 16986

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 157.0 | 125.8 | 188.6 |
| 98 | 65.3 | 52.5 | 78.7 |



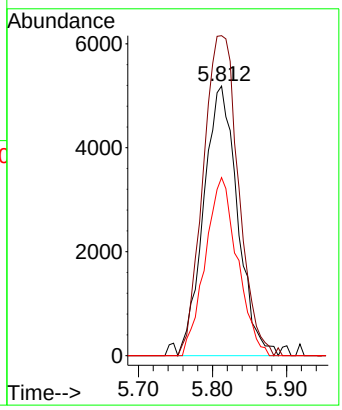


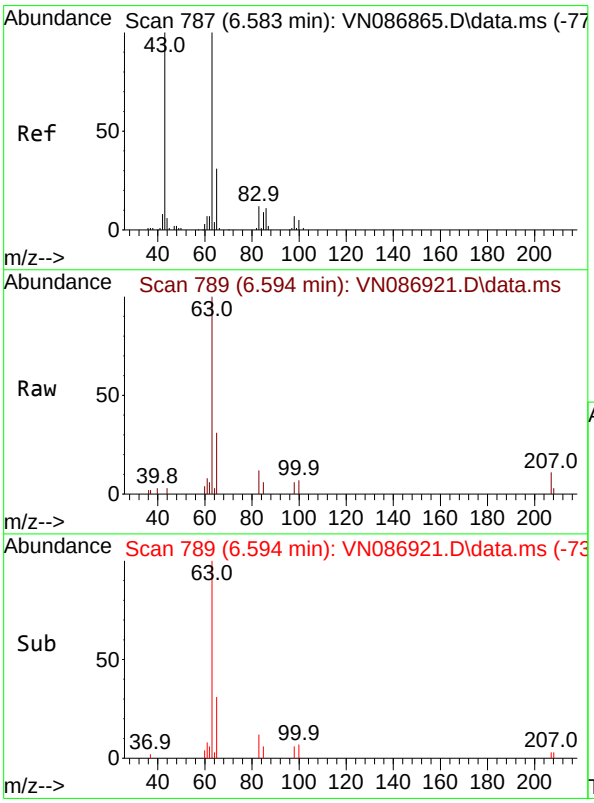

#21
trans-1,2-Dichloroethene
Concen: 3.676 ug/l
RT: 5.812 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN086921.D
Acq: 10 Jun 2025 12:30

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525

Tgt Ion: 96 Resp: 16472

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 118.7 | 109.2 | 163.8 |
| 98 | 66.1 | 49.8 | 74.8 |

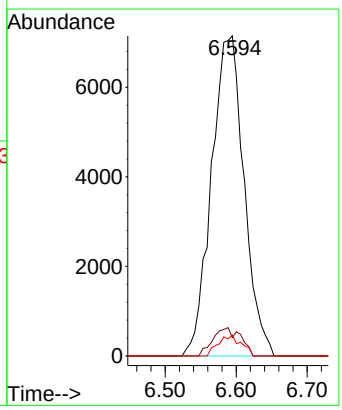


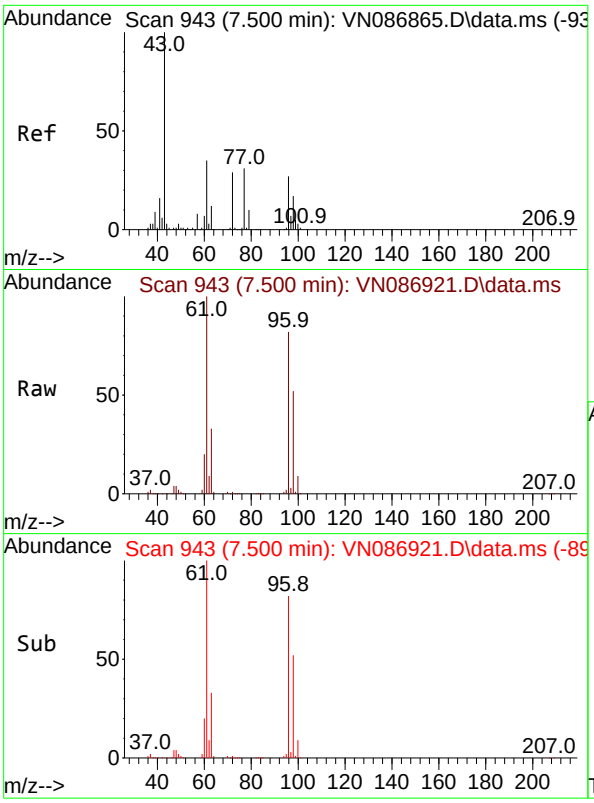




#24
1,1-Dichloroethane
Concen: 2.805 ug/l
RT: 6.594 min Scan# 789
Delta R.T. 0.012 min
Lab File: VN086921.D
Acq: 10 Jun 2025 12:30

Tgt Ion: 63 Resp: 22723

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 5.8 | 3.6 | 10.8 |
| 100 | 6.6 | 2.6 | 7.8 |



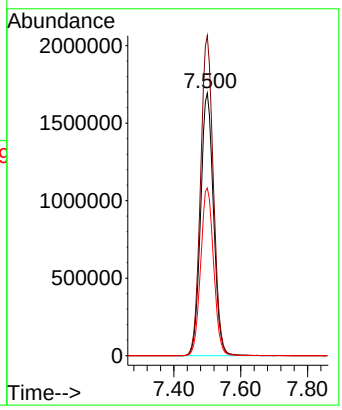


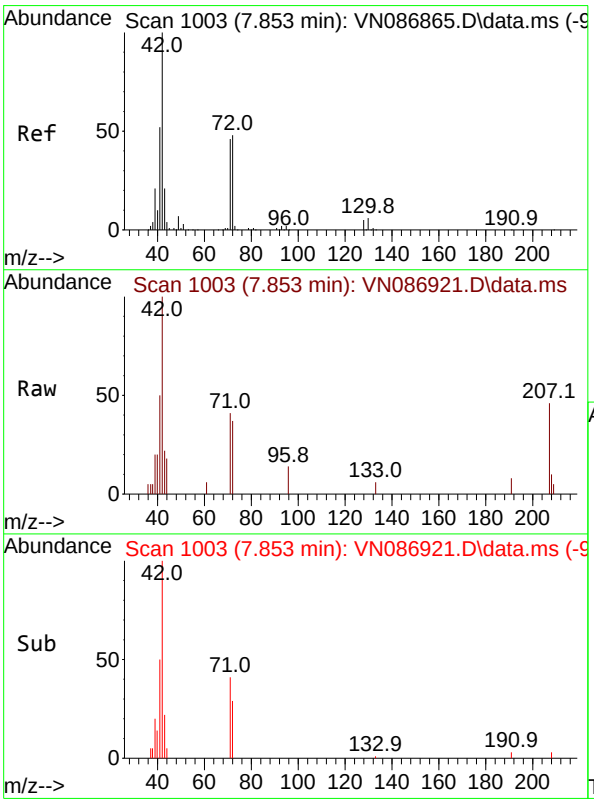

#27
cis-1,2-Dichloroethene
Concen: 846.190 ug/l
RT: 7.500 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN086921.D
Acq: 10 Jun 2025 12:30

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525

Tgt Ion: 96 Resp: 4534458

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 121.3 | 0.0 | 278.0 |
| 98 | 64.3 | 0.0 | 128.2 |

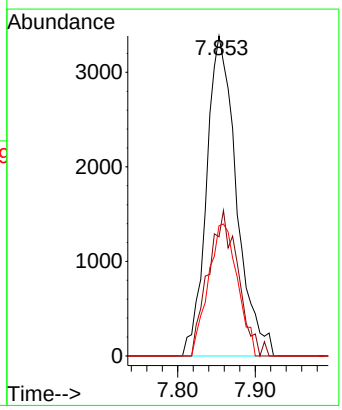


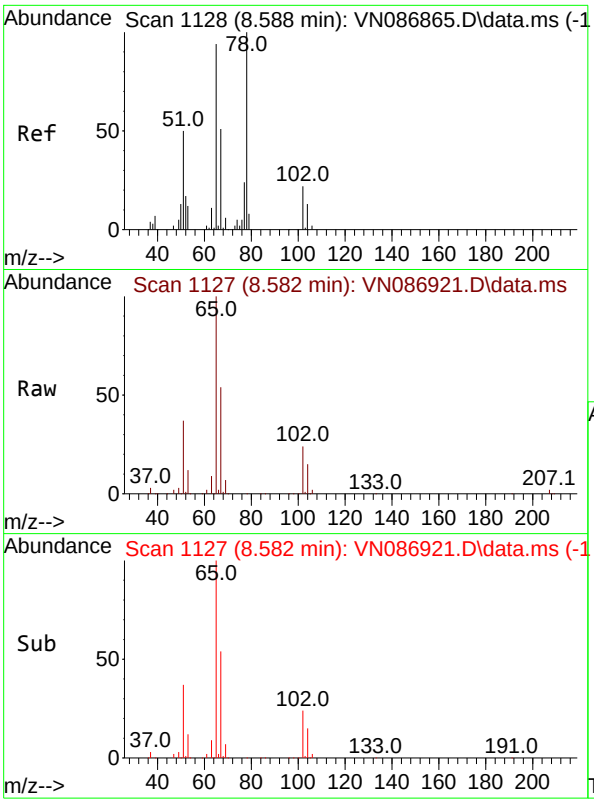




#29
Tetrahydrofuran
Concen: 3.339 ug/l
RT: 7.853 min Scan# 1003
Delta R.T. -0.000 min
Lab File: VN086921.D
Acq: 10 Jun 2025 12:30

Tgt Ion: 42 Resp: 9084

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 45.2 | 37.8 | 56.6 |
| 71 | 40.1 | 35.6 | 53.4 |



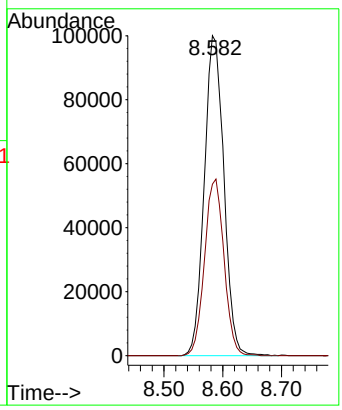


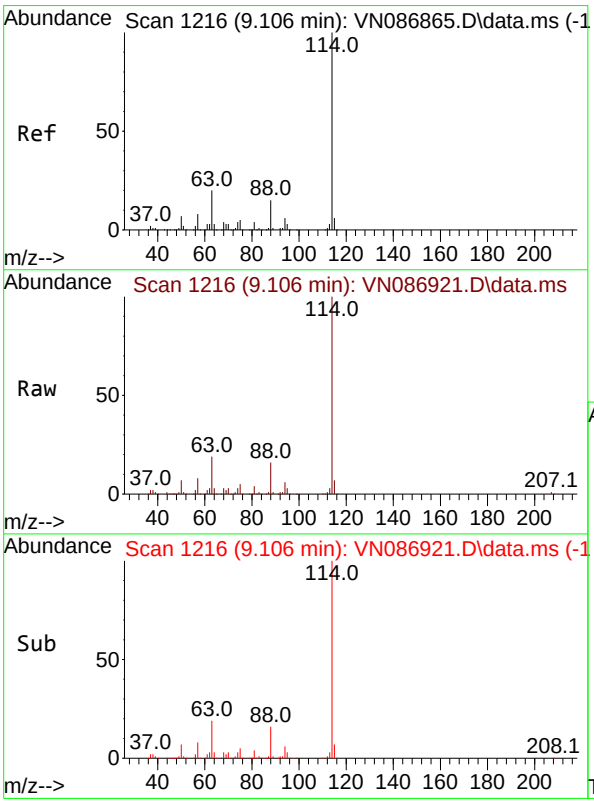

#33
1,2-Dichloroethane-d4
Concen: 47.792 ug/l
RT: 8.582 min Scan# 11
Delta R.T. -0.006 min
Lab File: VN086921.D
Acq: 10 Jun 2025 12:30

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525

Tgt Ion: 65 Resp: 231529

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 54.8 | 0.0 | 105.6 |

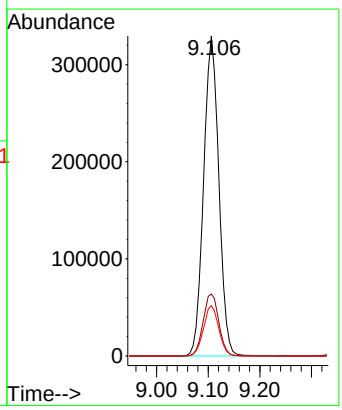


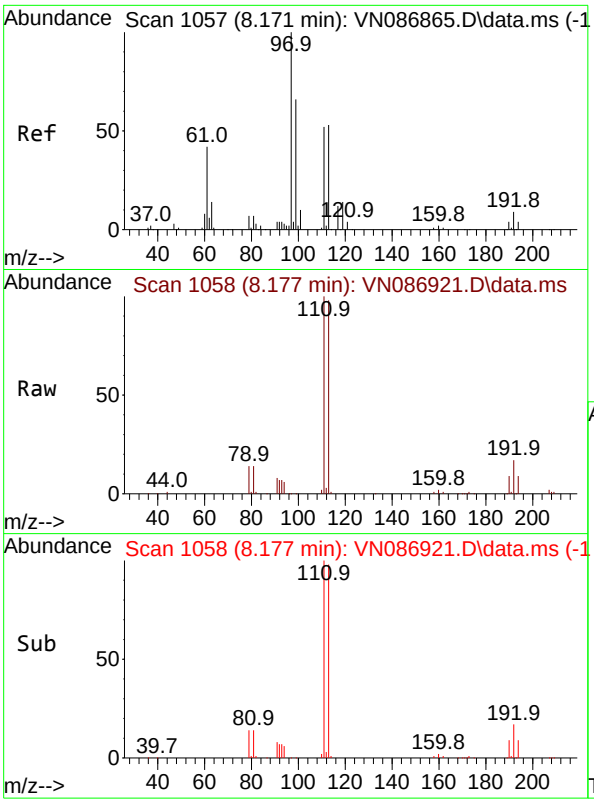




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.106 min Scan# 1216
Delta R.T. -0.000 min
Lab File: VN086921.D
Acq: 10 Jun 2025 12:30

Tgt Ion:114 Resp: 672514

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 19.4 | 0.0 | 39.6 |
| 88 | 15.7 | 0.0 | 30.2 |



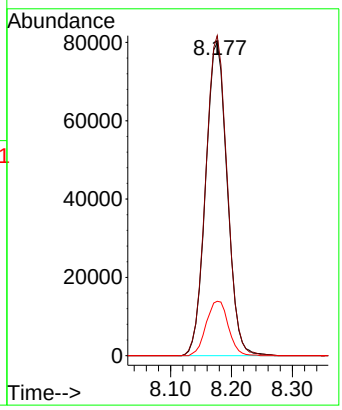


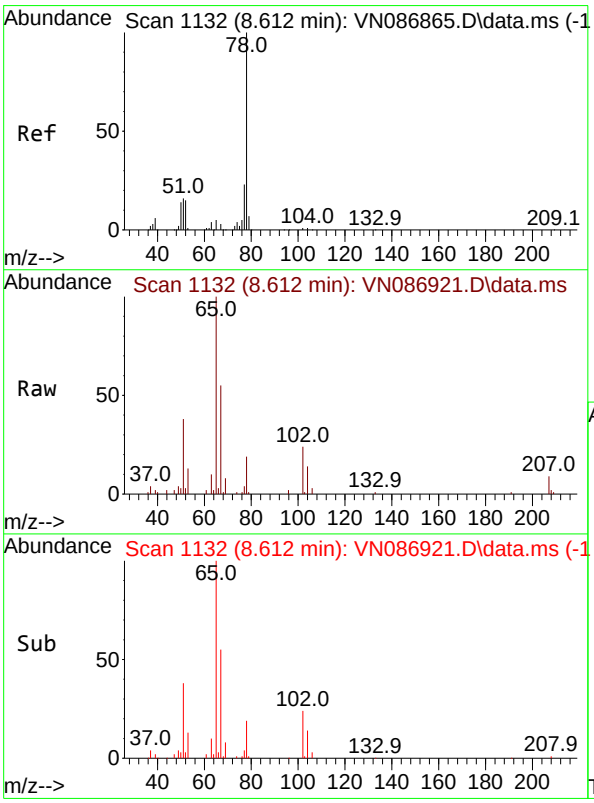

#35
Dibromofluoromethane
Concen: 49.417 ug/l
RT: 8.177 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086921.D
Acq: 10 Jun 2025 12:30

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525

Tgt Ion:113 Resp: 196952

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 101.7 | 84.2 | 126.2 |
| 192 | 17.8 | 14.2 | 21.4 |

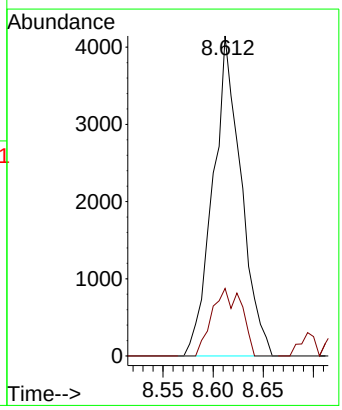


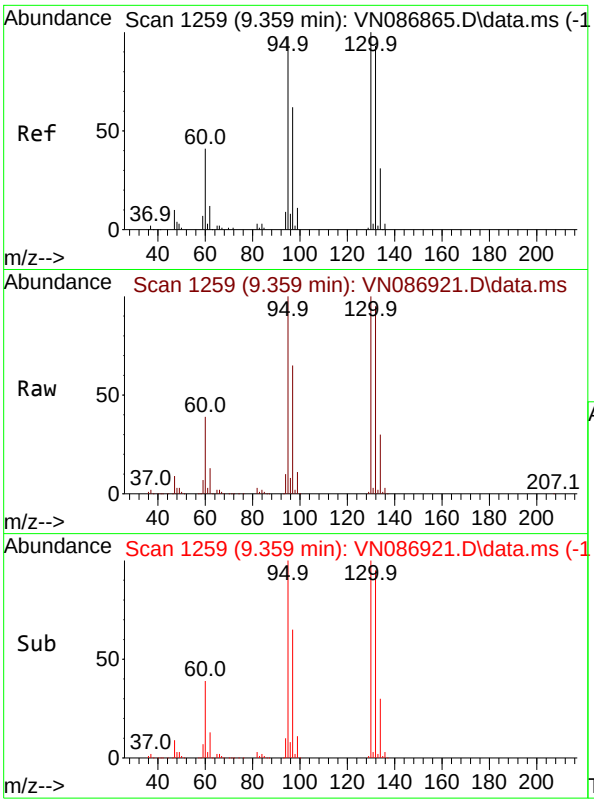




#40
Benzene
Concen: 0.418 ug/l
RT: 8.612 min Scan# 1132
Delta R.T. -0.000 min
Lab File: VN086921.D
Acq: 10 Jun 2025 12:30

Tgt Ion: 78 Resp: 8119

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 21.1 | 18.7 | 28.1 |



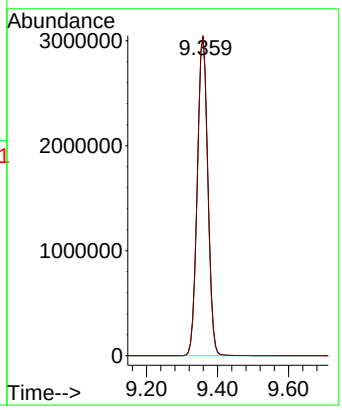


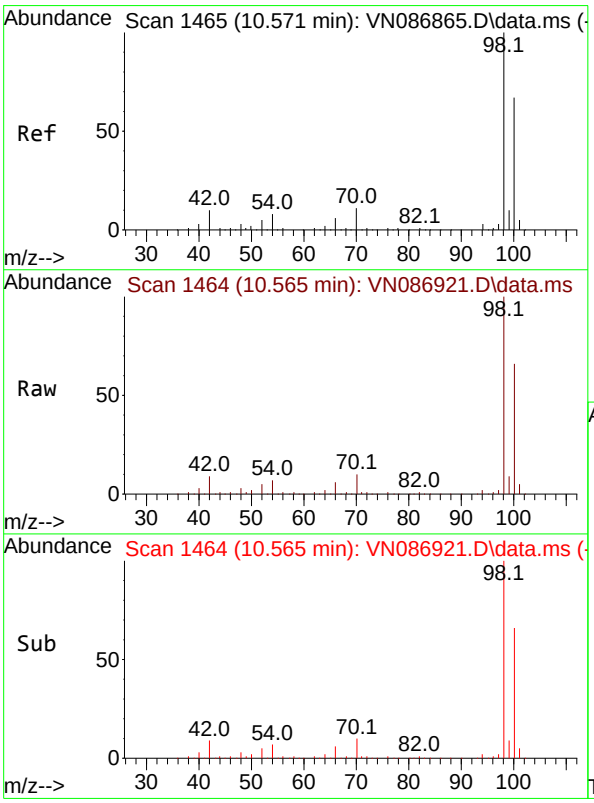

#44
Trichloroethene
Concen: 1370.098 ug/l
RT: 9.359 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086921.D
Acq: 10 Jun 2025 12:30

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525

Tgt Ion:130 Resp: 6309047

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 100.4 | 0.0 | 196.2 |

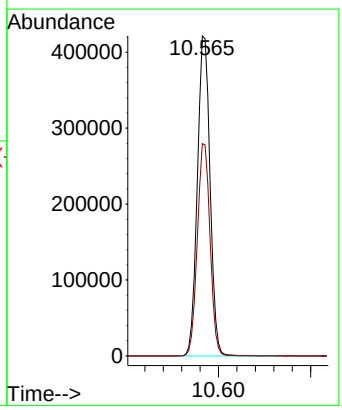


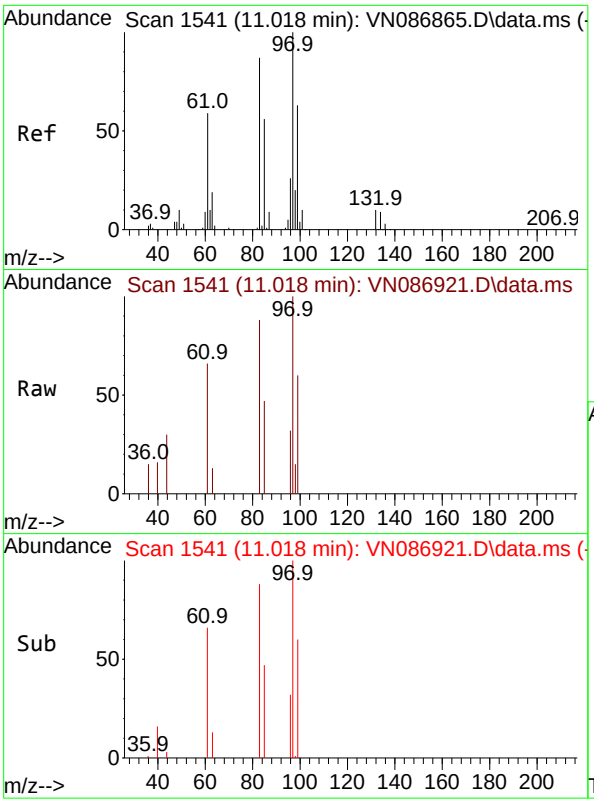




#50
Toluene-d8
Concen: 51.295 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.006 min
Lab File: VN086921.D
Acq: 10 Jun 2025 12:30

Tgt Ion: 98 Resp: 809307

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 66.5 | 53.4 | 80.0 |



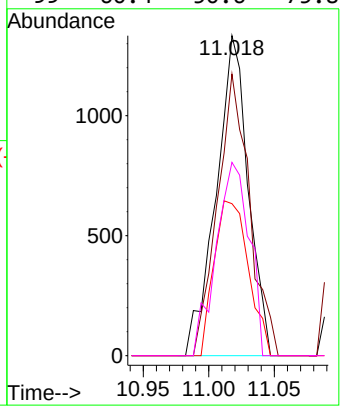


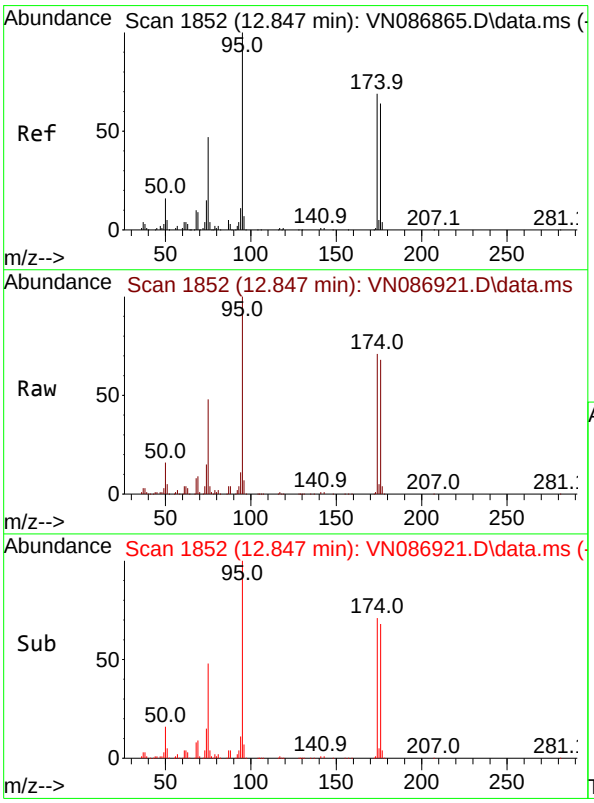

#55
1,1,2-Trichloroethane
Concen: 0.497 ug/l
RT: 11.018 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086921.D
Acq: 10 Jun 2025 12:30

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525

Tgt Ion: 97 Resp: 2269

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 88.0 | 69.7 | 104.5 |
| 85 | 47.5 | 45.1 | 67.7 |
| 99 | 60.4 | 50.6 | 75.8 |

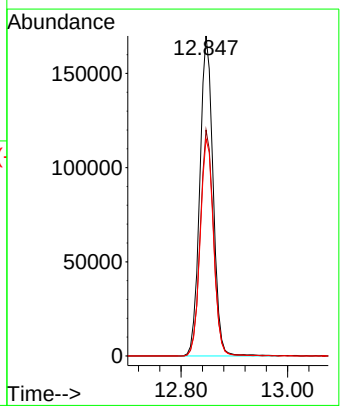


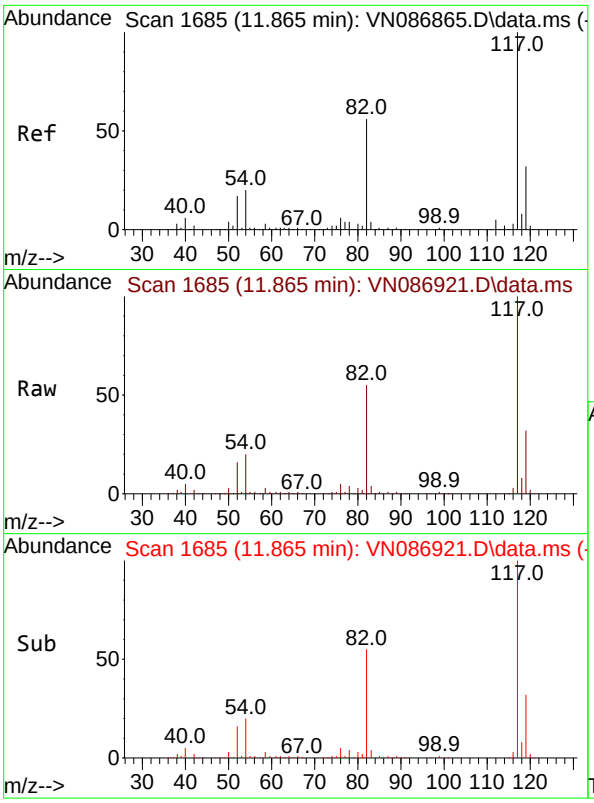




#62
4-Bromofluorobenzene
Concen: 50.054 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN086921.D
Acq: 10 Jun 2025 12:30

Tgt Ion: 95 Resp: 293403

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 70.2 | 0.0 | 141.8 |
| 176 | 68.2 | 0.0 | 132.6 |



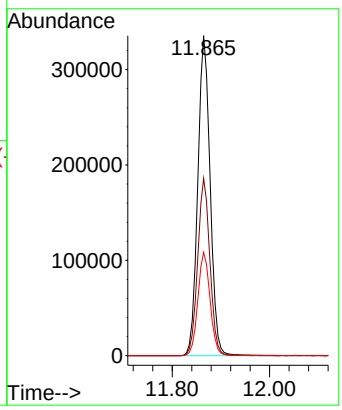


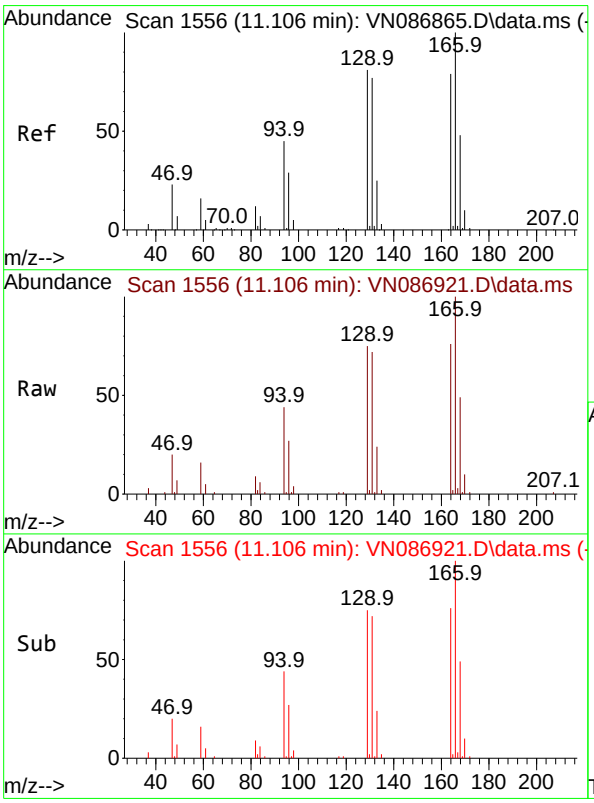

#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086921.D
Acq: 10 Jun 2025 12:30

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525

Tgt Ion:117 Resp: 593044

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 55.4 | 44.6 | 67.0 |
| 119 | 32.3 | 25.5 | 38.3 |

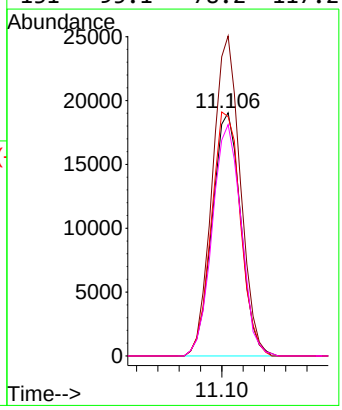


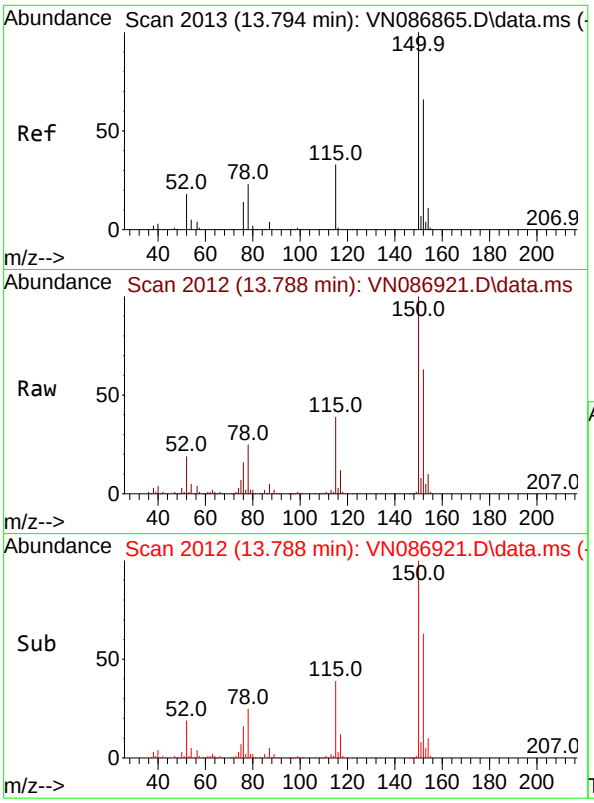




#64
Tetrachloroethene
Concen: 9.443 ug/l
RT: 11.106 min Scan# 1556
Delta R.T. -0.000 min
Lab File: VN086921.D
Acq: 10 Jun 2025 12:30

Tgt Ion:164 Resp: 35442

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 131.5 | 101.8 | 152.8 |
| 129 | 98.4 | 83.0 | 124.4 |
| 131 | 95.1 | 78.2 | 117.2 |



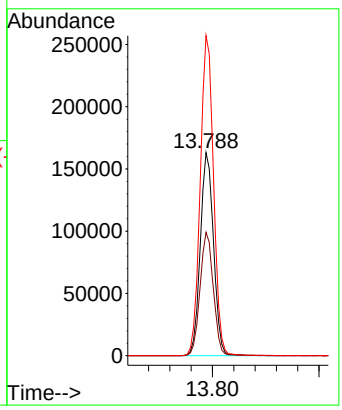



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN086921.D
Acq: 10 Jun 2025 12:30

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525

Tgt Ion:152 Resp: 281220

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 60.9 | 30.1 | 90.5 |
| 150 | 158.4 | 0.0 | 345.0 |



Raw Data: **VN086948.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | 06/05/25 |
| Project: | Former Schlumberger STC PTC Site D3868221 | Date Received: | 06/05/25 |
| Client Sample ID: | MW-11A-13.5-060525DL | SDG No.: | Q2250 |
| Lab Sample ID: | Q2250-01DL | Matrix: | Water |
| Analytical Method: | 8260D | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group3 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN086948.D | 20 | | 06/11/25 15:06 | VN061125 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-01-4 | Vinyl Chloride | 6.60 | JD | 5.20 | 20.0 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 4.60 | UD | 4.60 | 20.0 | ug/L |
| 75-34-3 | 1,1-Dichloroethane | 4.60 | UD | 4.60 | 20.0 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 1000 | D | 3.80 | 20.0 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 4.00 | UD | 4.00 | 20.0 | ug/L |
| 71-43-2 | Benzene | 3.00 | UD | 3.00 | 20.0 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 4.40 | UD | 4.40 | 20.0 | ug/L |
| 79-01-6 | Trichloroethene | 1700 | D | 1.90 | 20.0 | ug/L |
| 79-00-5 | 1,1,2-Trichloroethane | 4.20 | UD | 4.20 | 20.0 | ug/L |
| 127-18-4 | Tetrachloroethene | 12.2 | JD | 4.60 | 20.0 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 46.3 | | 70 (74) - 130 (125) | 93% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 48.4 | | 70 (75) - 130 (124) | 97% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 51.1 | | 70 (86) - 130 (113) | 102% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 49.1 | | 70 (77) - 130 (121) | 98% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 272000 | 8.236 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 500000 | 9.106 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 435000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 208000 | 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\VN061125\
Data File : VN086948.D
Acq On : 11 Jun 2025 15:06
Operator : JC\MD
Sample : Q2250-01DL 20X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525DL

Quant Time: Jun 12 01:33:54 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

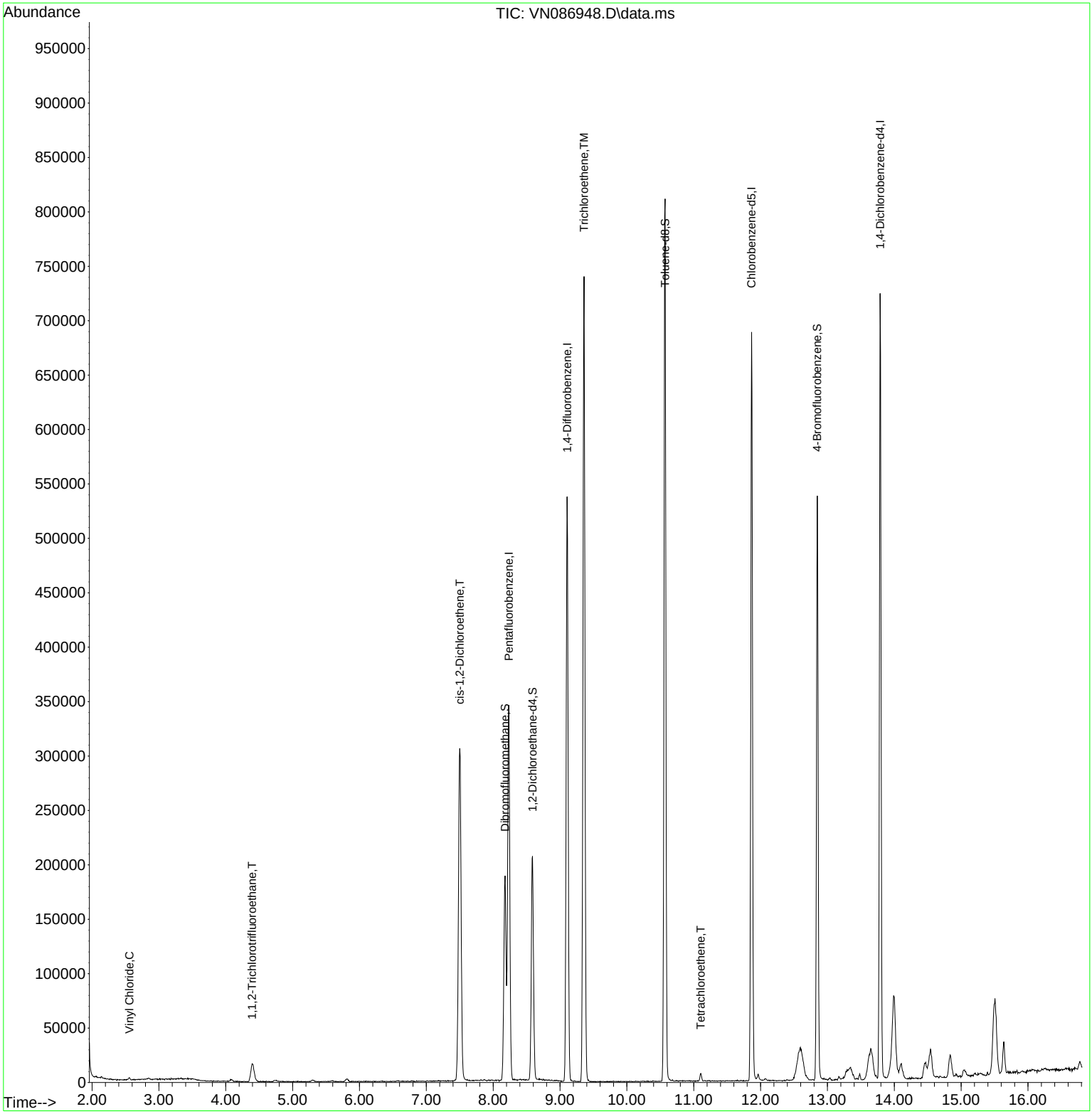
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.236 | 168 | 272350 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.106 | 114 | 500042 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 434591 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 208257 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.588 | 65 | 168991 | 46.344 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 92.680% | | | |
| 35) Dibromofluoromethane | 8.177 | 113 | 143354 | 48.375 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 96.760% | | | |
| 50) Toluene-d8 | 10.571 | 98 | 599641 | 51.115 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 102.240% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 214176 | 49.140 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 98.280% | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Vinyl Chloride | 2.559 | 62 | 1187 | 0.328 | ug/l | 90 |
| 9) 1,1,2-Trichlorotrifluo... | 4.395 | 101 | 13861 | 4.668 | ug/l | 97 |
| 27) cis-1,2-Dichloroethene | 7.500 | 96 | 208706 | 51.744 | ug/l | 89 |
| 44) Trichloroethene | 9.359 | 130 | 290594 | 84.873 | ug/l | 98 |
| 64) Tetrachloroethene | 11.106 | 164 | 1673 | 0.608 | ug/l # | 78 |

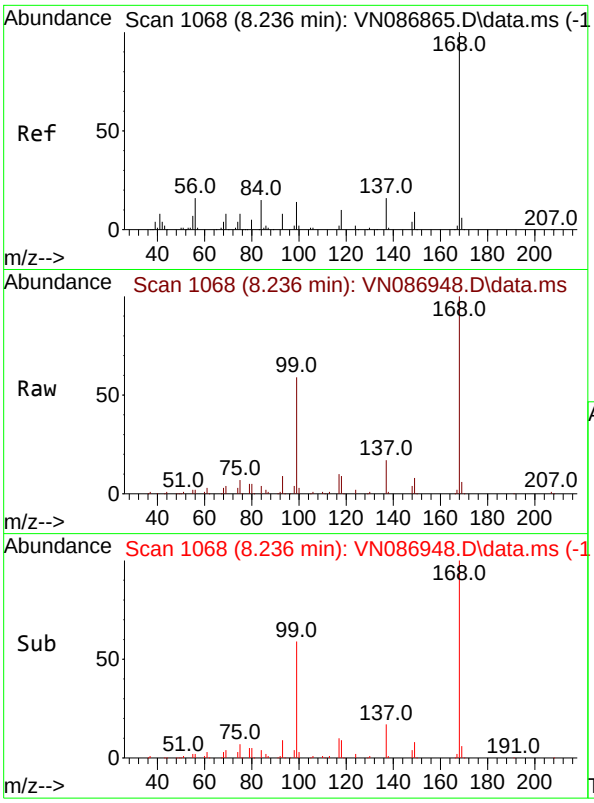
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061125\
Data File : VN086948.D
Acq On : 11 Jun 2025 15:06
Operator : JC\MD
Sample : Q2250-01DL 20X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525DL

Quant Time: Jun 12 01:33:54 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration



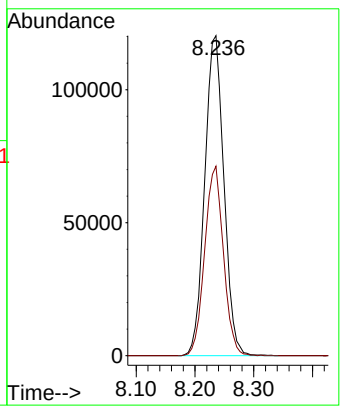


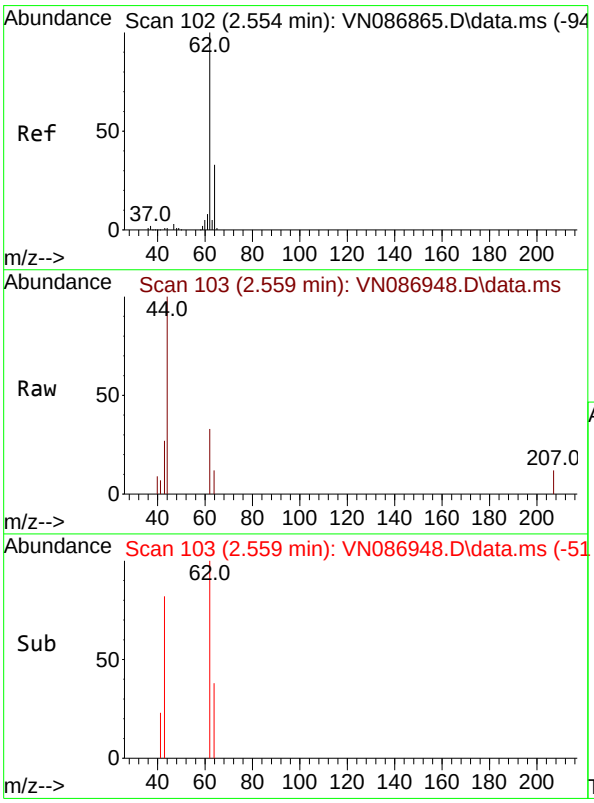

#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.236 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086948.D
Acq: 11 Jun 2025 15:06

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525DL

Tgt Ion:168 Resp: 272350

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 59.2 | 49.1 | 73.7 |

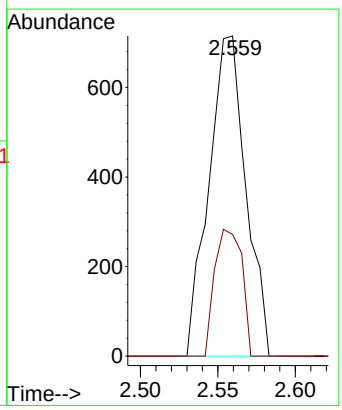


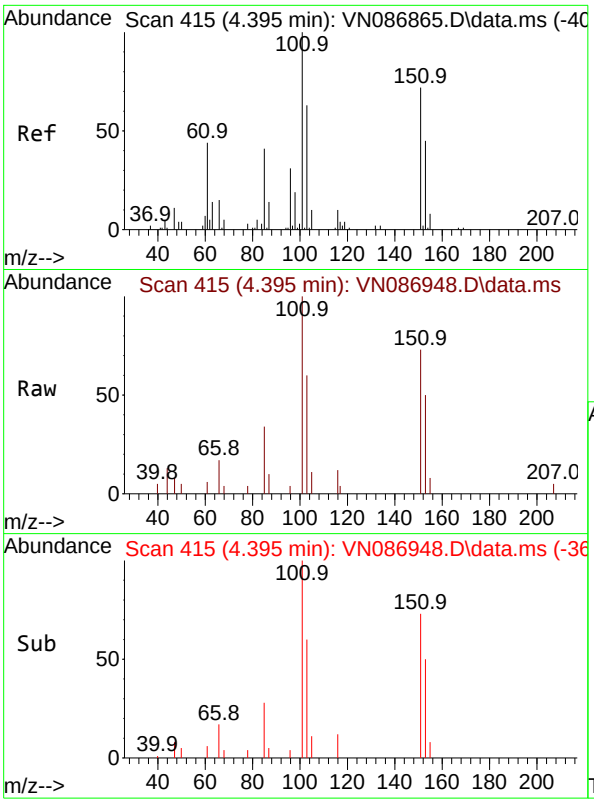




#4
Vinyl Chloride
Concen: 0.328 ug/l
RT: 2.559 min Scan# 103
Delta R.T. 0.006 min
Lab File: VN086948.D
Acq: 11 Jun 2025 15:06

Tgt Ion: 62 Resp: 1187

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 38.0 | 26.0 | 39.0 |



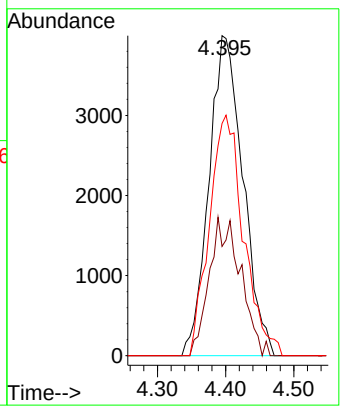


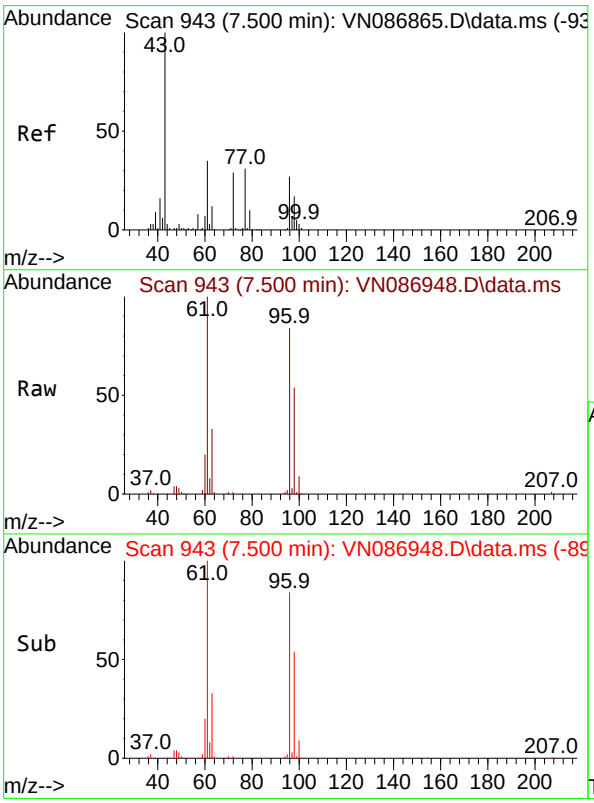

#9
1,1,2-Trichlorotrifluoroethane
Concen: 4.668 ug/l
RT: 4.395 min Scan# 41
Delta R.T. -0.000 min
Lab File: VN086948.D
Acq: 11 Jun 2025 15:06

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525DL

Tgt Ion:101 Resp: 13861

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 39.8 | 33.8 | 50.8 |
| 151 | 75.5 | 58.7 | 88.1 |

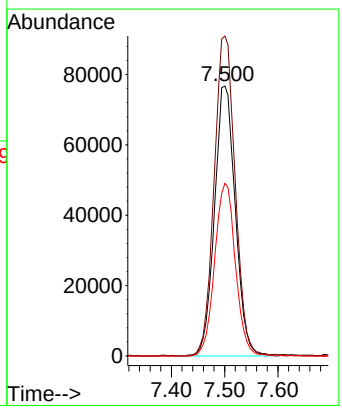


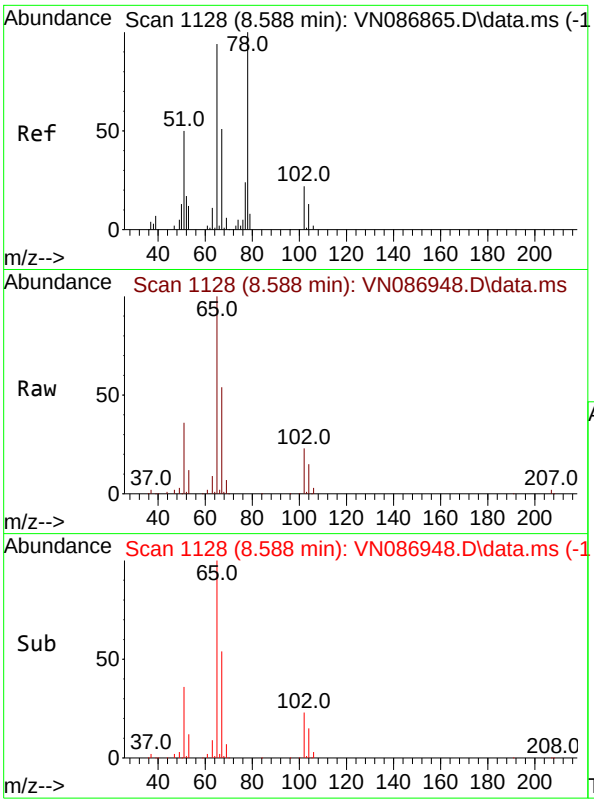




#27
cis-1,2-Dichloroethene
Concen: 51.744 ug/l
RT: 7.500 min Scan# 943
Delta R.T. 0.000 min
Lab File: VN086948.D
Acq: 11 Jun 2025 15:06

Tgt Ion: 96 Resp: 208706

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 120.1 | 0.0 | 278.0 |
| 98 | 63.6 | 0.0 | 128.2 |



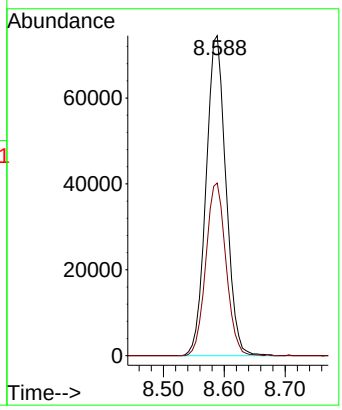


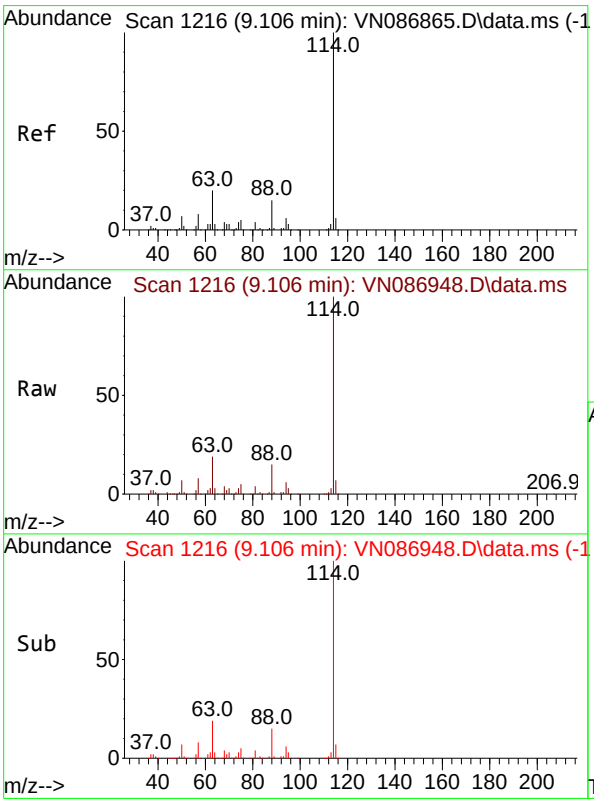

#33
1,2-Dichloroethane-d4
Concen: 46.344 ug/l
RT: 8.588 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN086948.D
Acq: 11 Jun 2025 15:06

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525DL

Tgt Ion: 65 Resp: 168991

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 54.6 | 0.0 | 105.6 |

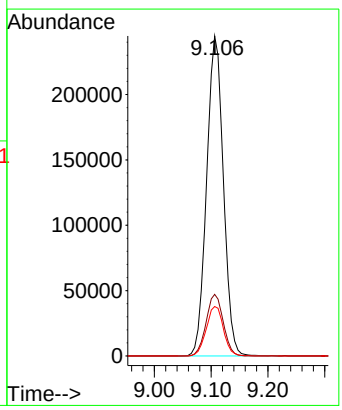


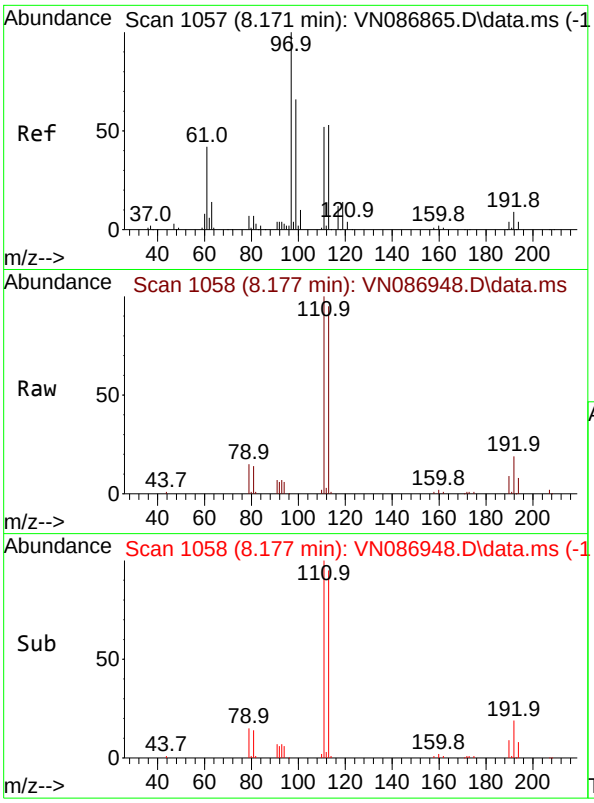




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.106 min Scan# 1216
Delta R.T. 0.000 min
Lab File: VN086948.D
Acq: 11 Jun 2025 15:06

Tgt Ion:114 Resp: 500042

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 19.2 | 0.0 | 39.6 |
| 88 | 15.4 | 0.0 | 30.2 |



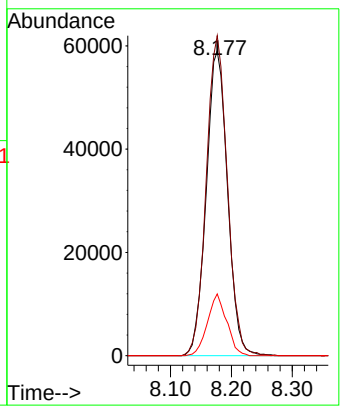


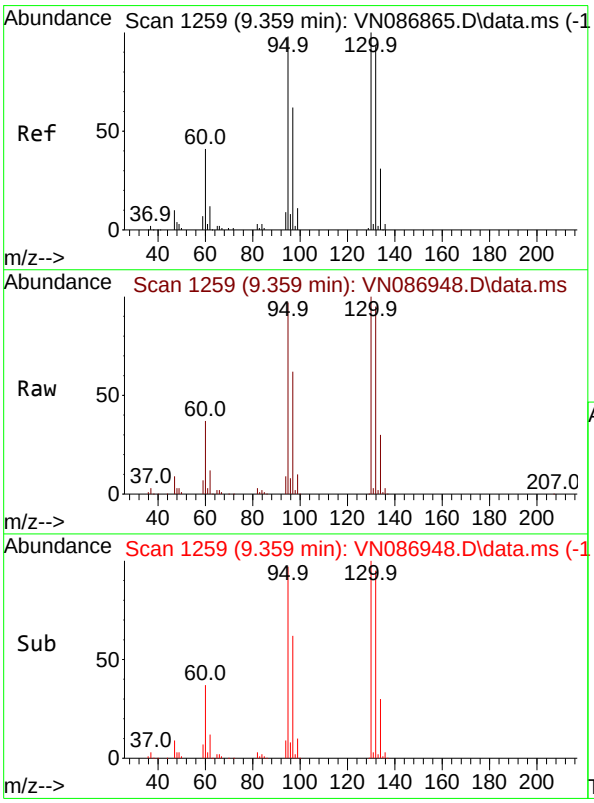

#35
Dibromofluoromethane
Concen: 48.375 ug/l
RT: 8.177 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086948.D
Acq: 11 Jun 2025 15:06

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525DL

Tgt Ion:113 Resp: 143354

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 103.8 | 84.2 | 126.2 |
| 192 | 18.3 | 14.2 | 21.4 |

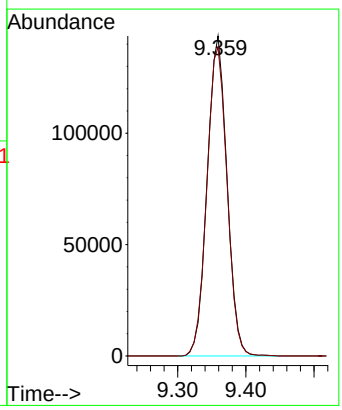


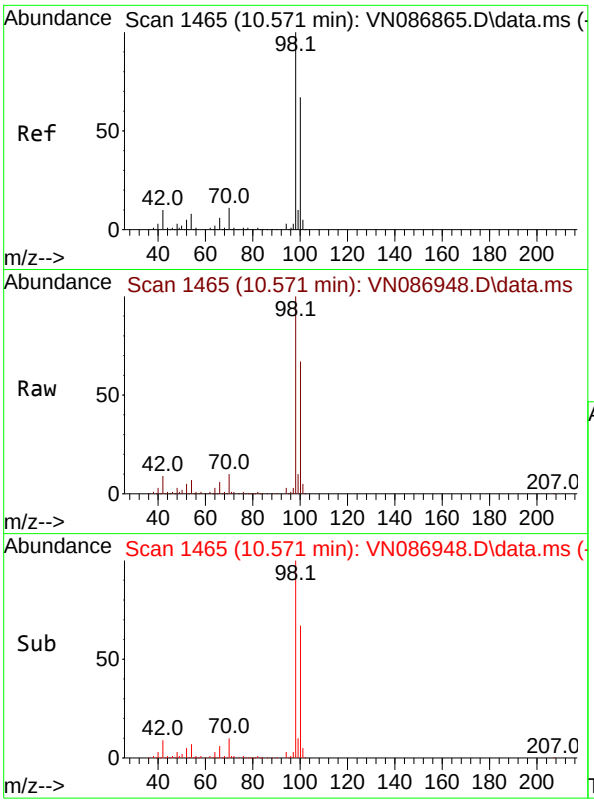




#44
Trichloroethene
Concen: 84.873 ug/l
RT: 9.359 min Scan# 1259
Delta R.T. 0.000 min
Lab File: VN086948.D
Acq: 11 Jun 2025 15:06

Tgt Ion:130 Resp: 290594

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 96.5 | 0.0 | 196.2 |



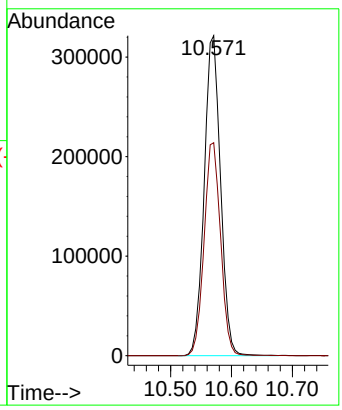


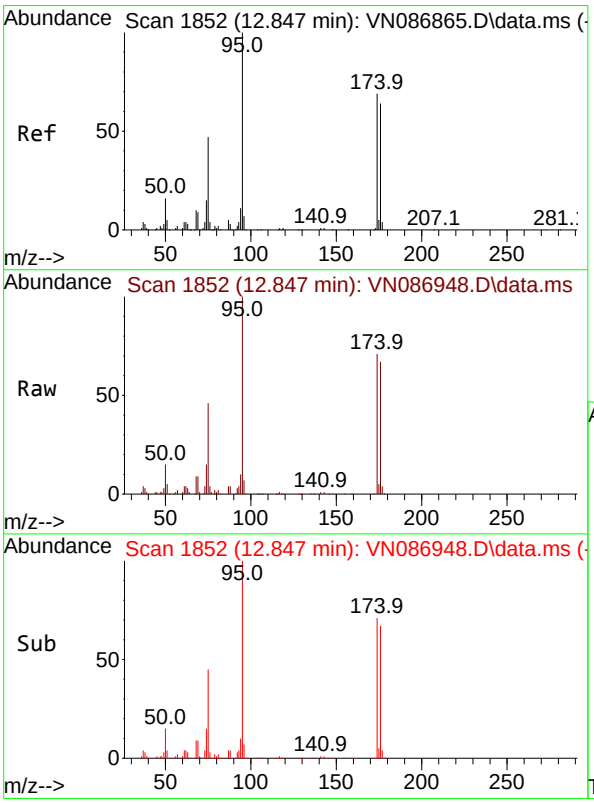

#50
Toluene-d8
Concen: 51.115 ug/l
RT: 10.571 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN086948.D
Acq: 11 Jun 2025 15:06

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525DL

Tgt Ion: 98 Resp: 599641

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 67.1 | 53.4 | 80.0 |

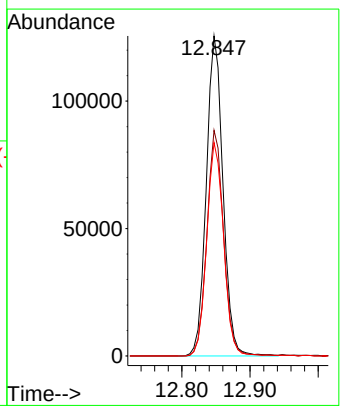


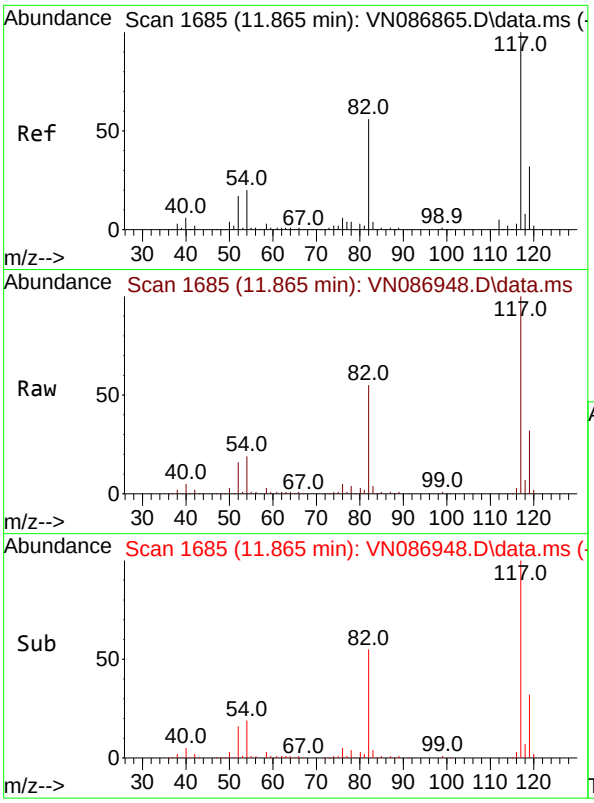




#62
4-Bromofluorobenzene
Concen: 49.140 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN086948.D
Acq: 11 Jun 2025 15:06

Tgt Ion: 95 Resp: 214176

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 70.6 | 0.0 | 141.8 |
| 176 | 67.6 | 0.0 | 132.6 |



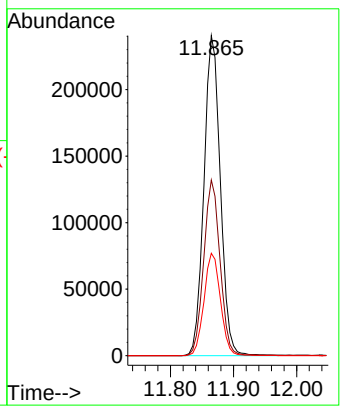


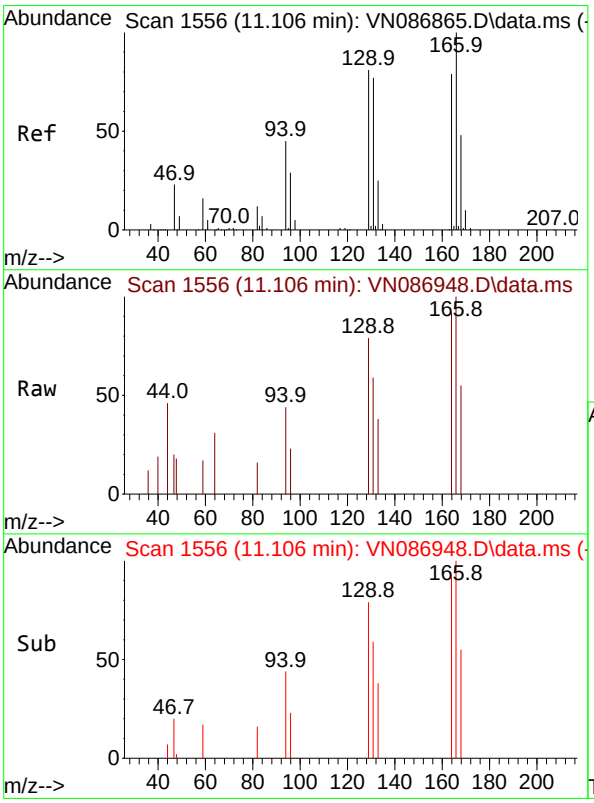

#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086948.D
Acq: 11 Jun 2025 15:06

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525DL

Tgt Ion:117 Resp: 434591

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 54.9 | 44.6 | 67.0 |
| 119 | 32.0 | 25.5 | 38.3 |

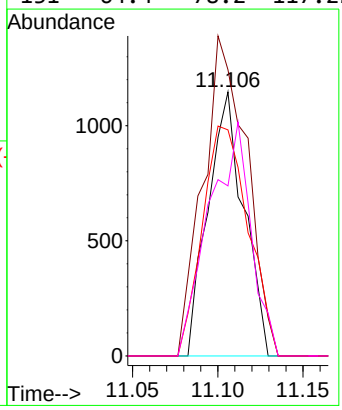


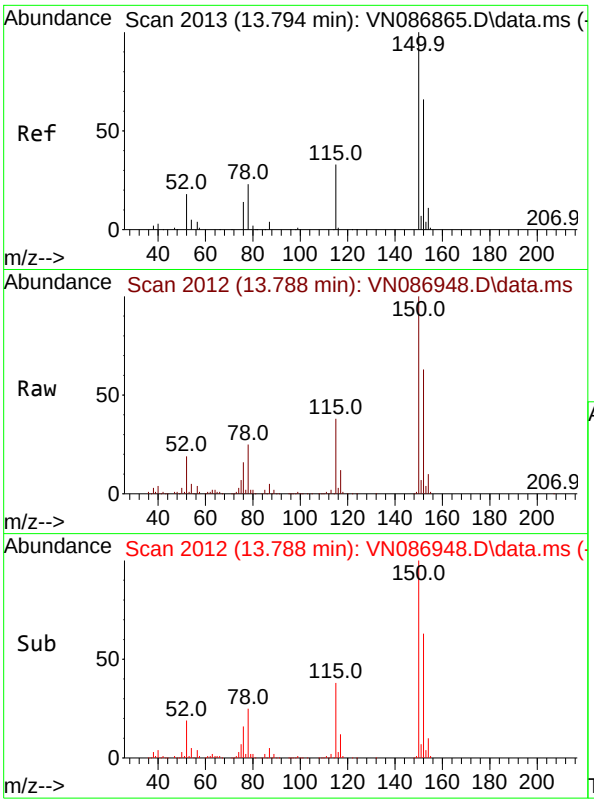




#64
Tetrachloroethene
Concen: 0.608 ug/l
RT: 11.106 min Scan# 1556
Delta R.T. 0.000 min
Lab File: VN086948.D
Acq: 11 Jun 2025 15:06

Tgt Ion:164 Resp: 1673

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 108.4 | 101.8 | 152.8 |
| 129 | 85.6 | 83.0 | 124.4 |
| 131 | 64.4 | 78.2 | 117.2# |



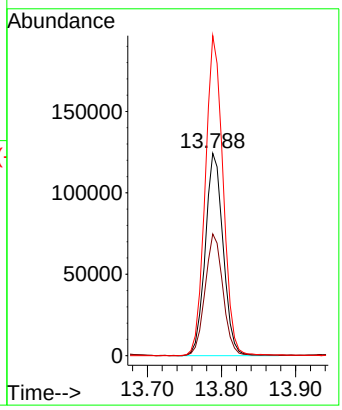



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN086948.D
Acq: 11 Jun 2025 15:06

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525DL

Tgt Ion:152 Resp: 208257

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 60.5 | 30.1 | 90.5 |
| 150 | 157.5 | 0.0 | 345.0 |



Raw Data: **VN086919.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | 06/05/25 |
| Project: | Former Schlumberger STC PTC Site D3868221 | Date Received: | 06/05/25 |
| Client Sample ID: | EB02-060525 | SDG No.: | Q2250 |
| Lab Sample ID: | Q2250-05 | Matrix: | Water |
| Analytical Method: | 8260D | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group3 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN086919.D | 1 | | 06/10/25 11:47 | VN061025 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-01-4 | Vinyl Chloride | 0.26 | U | 0.26 | 1.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 0.23 | U | 0.23 | 1.00 | ug/L |
| 75-34-3 | 1,1-Dichloroethane | 0.23 | U | 0.23 | 1.00 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 0.19 | U | 0.19 | 1.00 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 0.20 | U | 0.20 | 1.00 | ug/L |
| 71-43-2 | Benzene | 0.15 | U | 0.15 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 0.22 | U | 0.22 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 0.090 | U | 0.090 | 1.00 | ug/L |
| 79-00-5 | 1,1,2-Trichloroethane | 0.21 | U | 0.21 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 0.23 | U | 0.23 | 1.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 47.9 | | 70 (74) - 130 (125) | 96% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 48.8 | | 70 (75) - 130 (124) | 98% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 51.5 | | 70 (86) - 130 (113) | 103% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 48.9 | | 70 (77) - 130 (121) | 98% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 233000 | 8.23 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 433000 | 9.106 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 381000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 180000 | 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\VN061025\
Data File : VN086919.D
Acq On : 10 Jun 2025 11:47
Operator : JC\MD
Sample : Q2250-05
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
EB02-060525

Quant Time: Jun 11 01:51:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

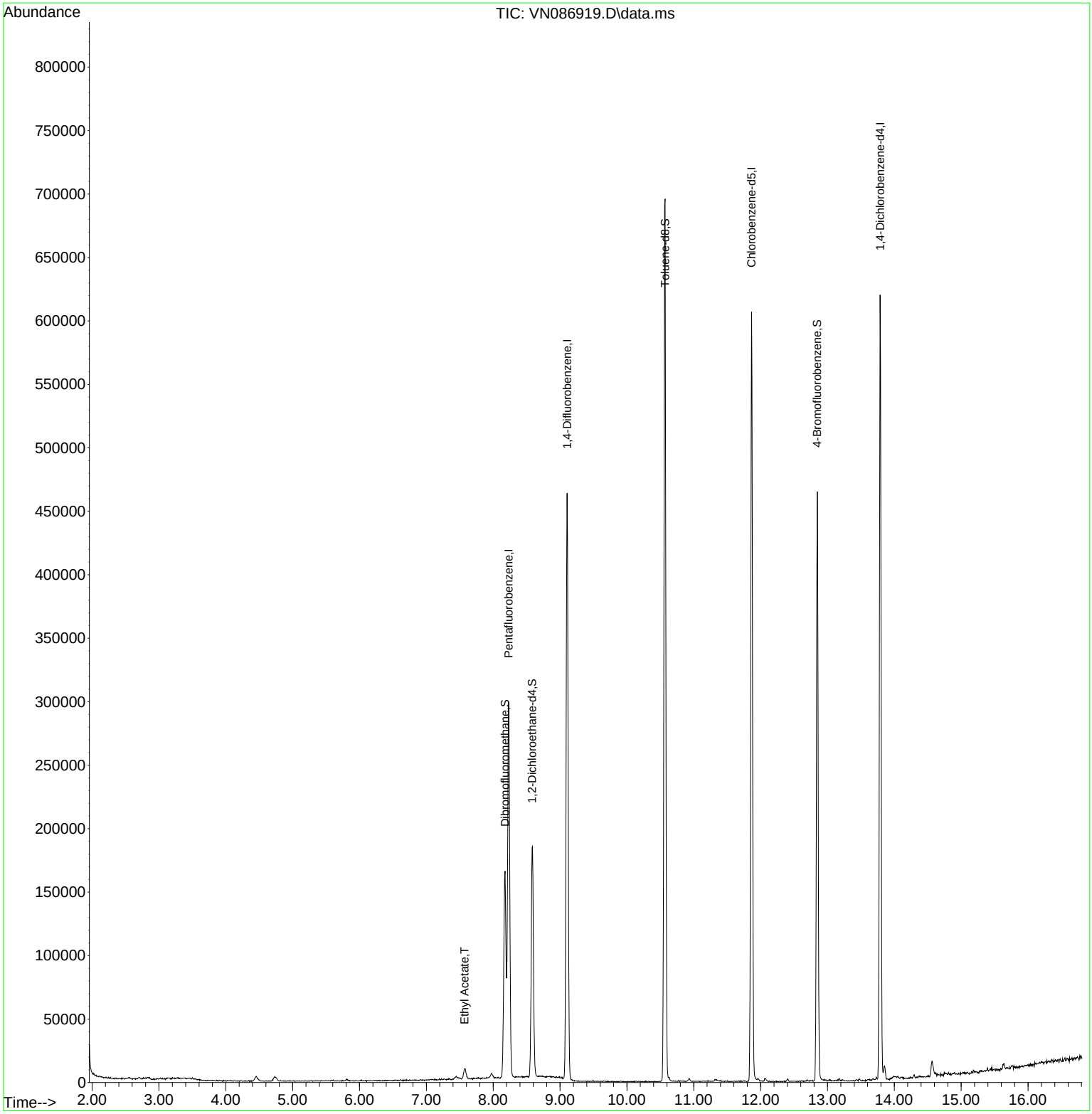
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.230 | 168 | 232754 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.106 | 114 | 433385 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 381245 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 180063 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.583 | 65 | 149250 | 47.893 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 95.780% | | | |
| 35) Dibromofluoromethane | 8.177 | 113 | 125229 | 48.759 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 97.520% | | | |
| 50) Toluene-d8 | 10.571 | 98 | 523905 | 51.528 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 103.060% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 184714 | 48.899 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 97.800% | | | |
| Target Compounds | | | | | | Qvalue |
| 37) Ethyl Acetate | 7.571 | 43 | 12844 | 2.636 | ug/l | 98 |

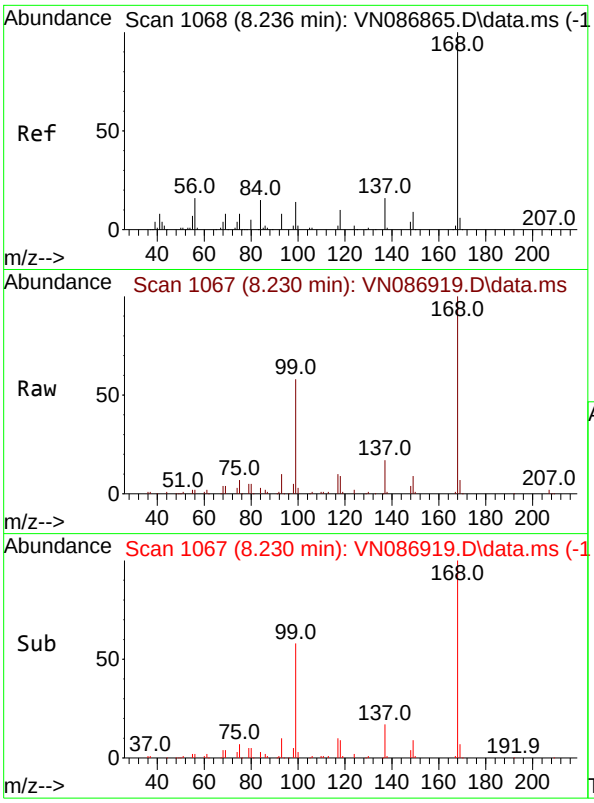
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061025\
Data File : VN086919.D
Acq On : 10 Jun 2025 11:47
Operator : JC\MD
Sample : Q2250-05
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
EB02-060525

Quant Time: Jun 11 01:51:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration



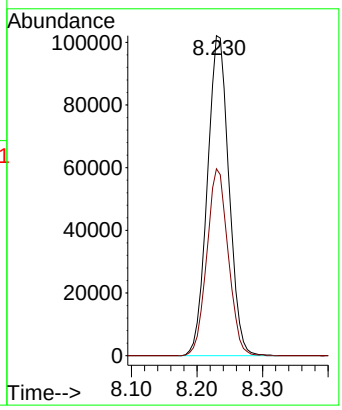


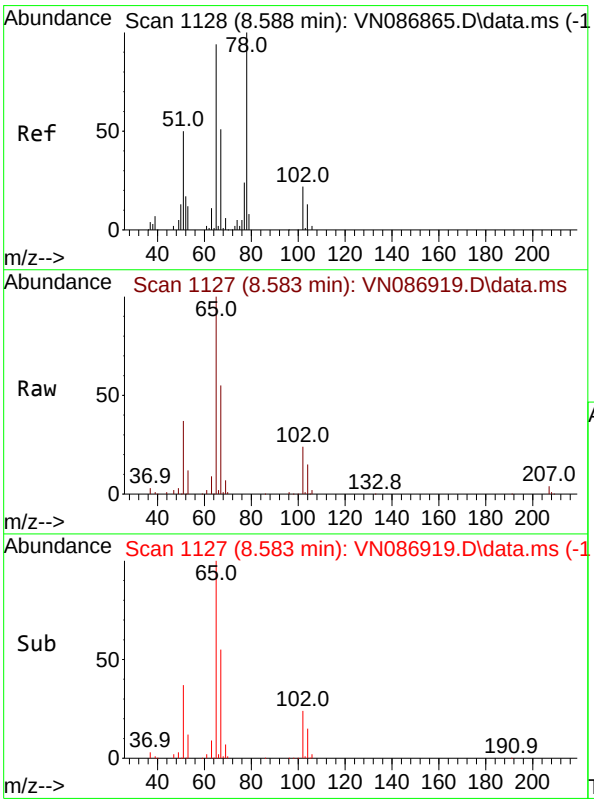

#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.230 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086919.D
Acq: 10 Jun 2025 11:47

**Instrument :**
MSVOA_N
**ClientSampleId :**
EB02-060525

Tgt Ion:168 Resp: 232754

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 58.4 | 49.1 | 73.7 |

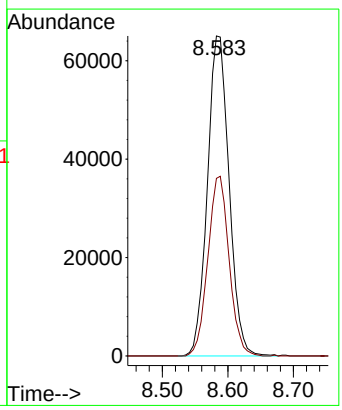


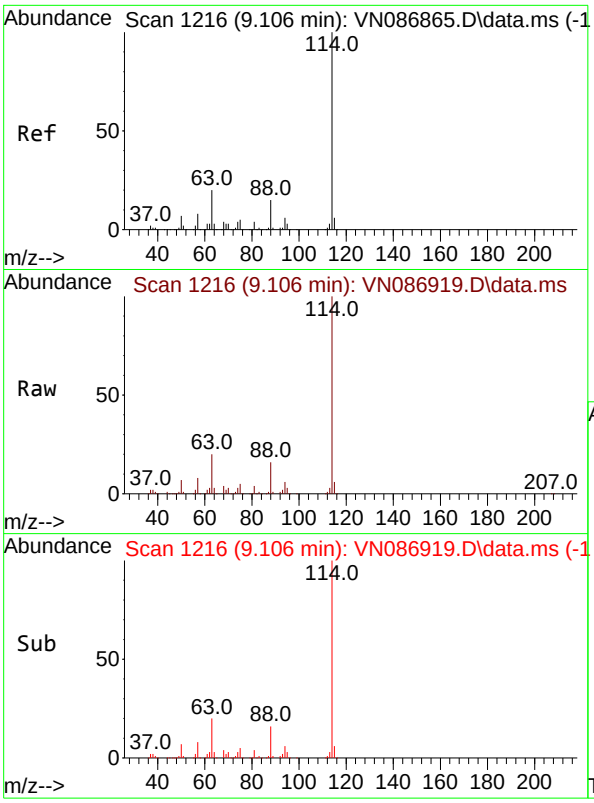




#33
1,2-Dichloroethane-d4
Concen: 47.893 ug/l
RT: 8.583 min Scan# 1127
Delta R.T. -0.006 min
Lab File: VN086919.D
Acq: 10 Jun 2025 11:47

Tgt Ion: 65 Resp: 149250

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 55.1 | 0.0 | 105.6 |



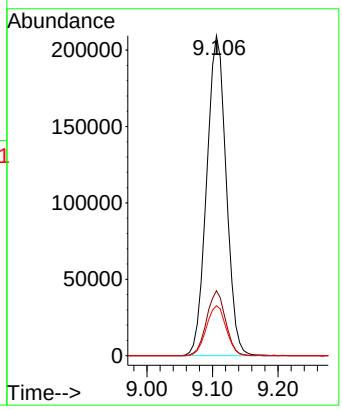


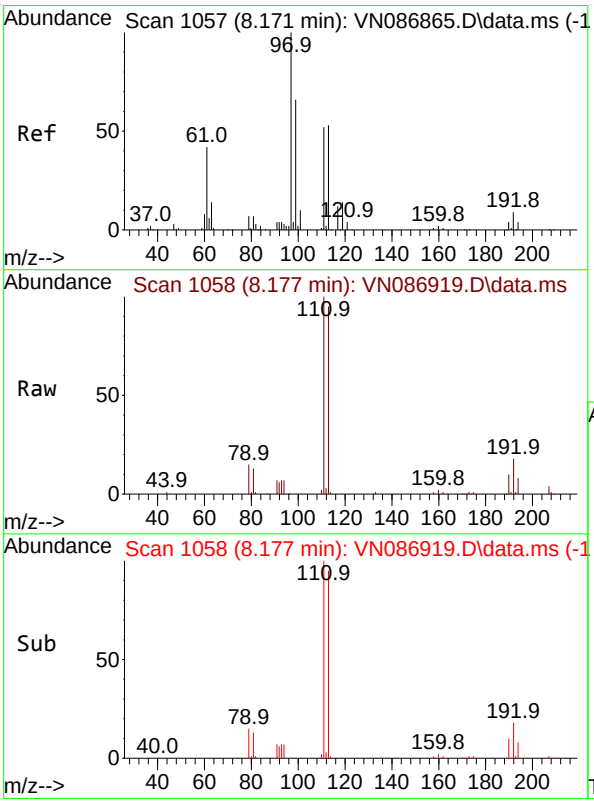

#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.106 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086919.D
Acq: 10 Jun 2025 11:47

**Instrument :**
MSVOA_N
**ClientSampleId :**
EB02-060525

Tgt Ion:114 Resp: 433385

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 20.3 | 0.0 | 39.6 |
| 88 | 15.6 | 0.0 | 30.2 |

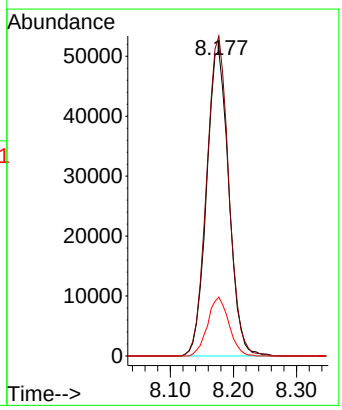


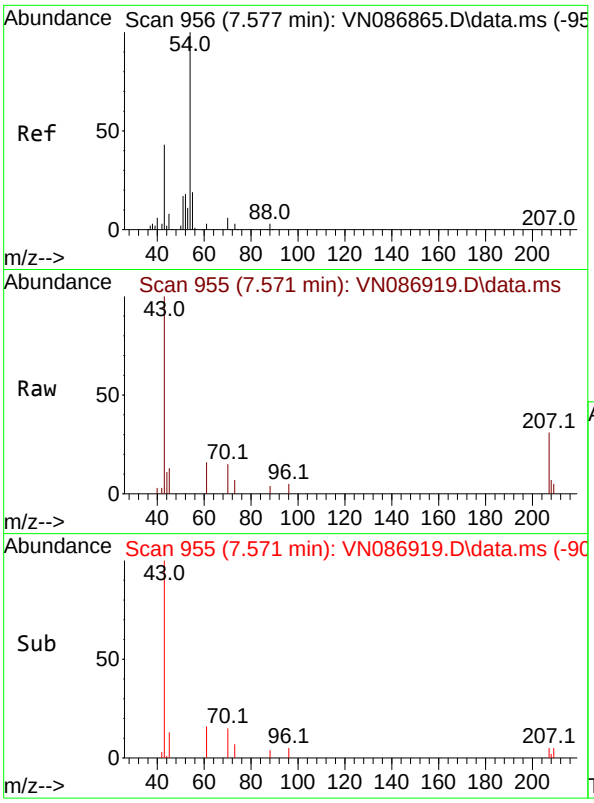




#35
Dibromofluoromethane
Concen: 48.759 ug/l
RT: 8.177 min Scan# 1058
Delta R.T. 0.006 min
Lab File: VN086919.D
Acq: 10 Jun 2025 11:47

Tgt Ion:113 Resp: 125229

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 103.7 | 84.2 | 126.2 |
| 192 | 18.4 | 14.2 | 21.4 |



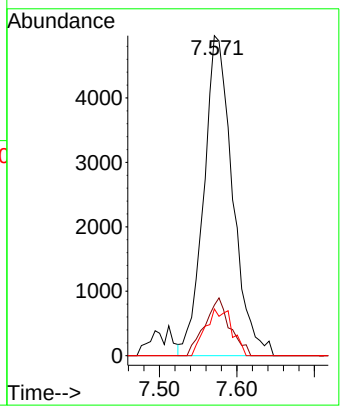


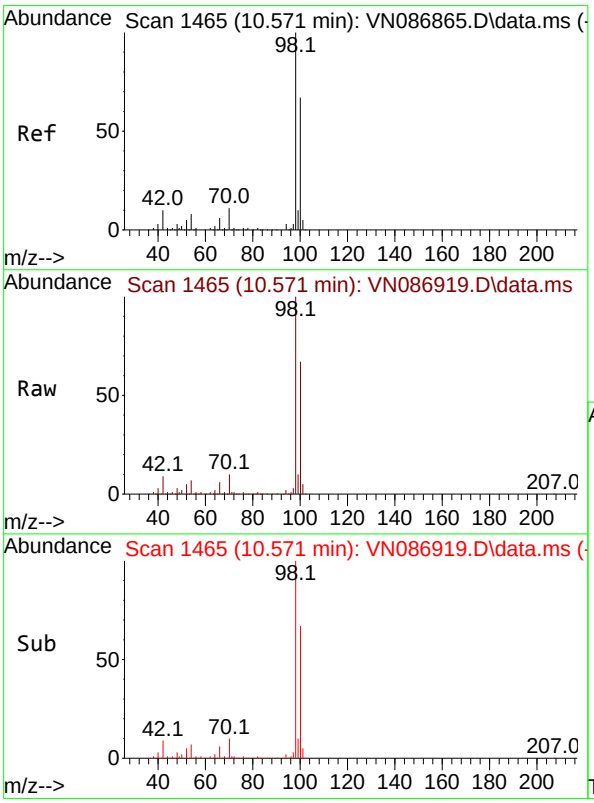

#37
Ethyl Acetate
Concen: 2.636 ug/l
RT: 7.571 min Scan# 9
Delta R.T. -0.006 min
Lab File: VN086919.D
Acq: 10 Jun 2025 11:47

**Instrument :**
MSVOA_N
**ClientSampleId :**
EB02-060525

Tgt Ion: 43 Resp: 12844

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 15.8 | 12.1 | 18.1 |
| 70 | 13.4 | 9.8 | 14.6 |

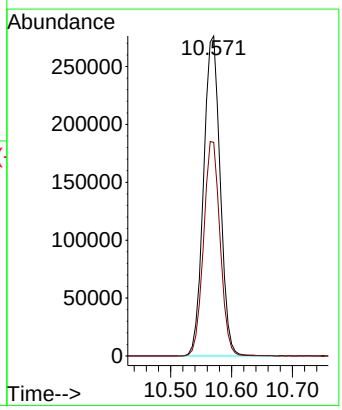


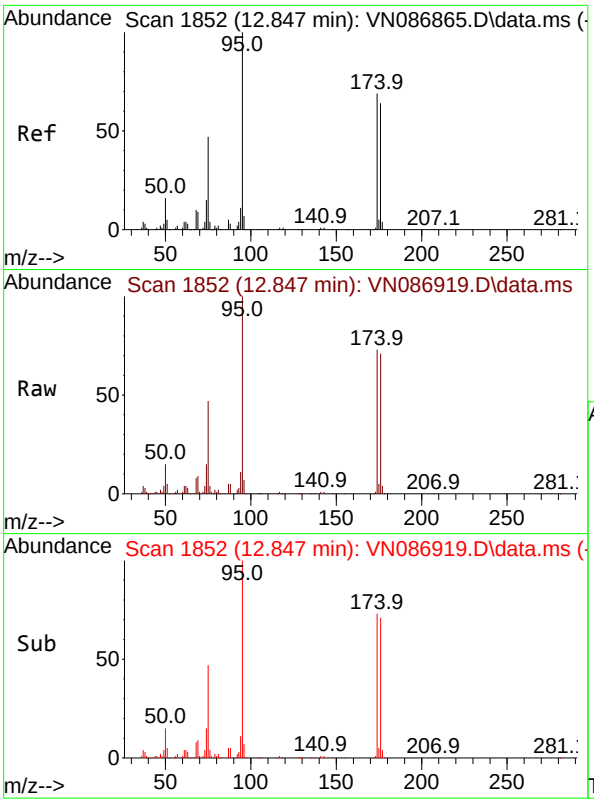




#50
Toluene-d8
Concen: 51.528 ug/l
RT: 10.571 min Scan# 1465
Delta R.T. -0.000 min
Lab File: VN086919.D
Acq: 10 Jun 2025 11:47

Tgt Ion: 98 Resp: 523905

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 66.5 | 53.4 | 80.0 |



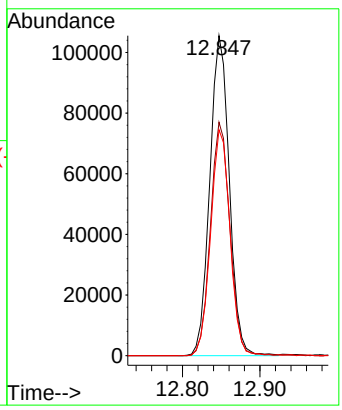


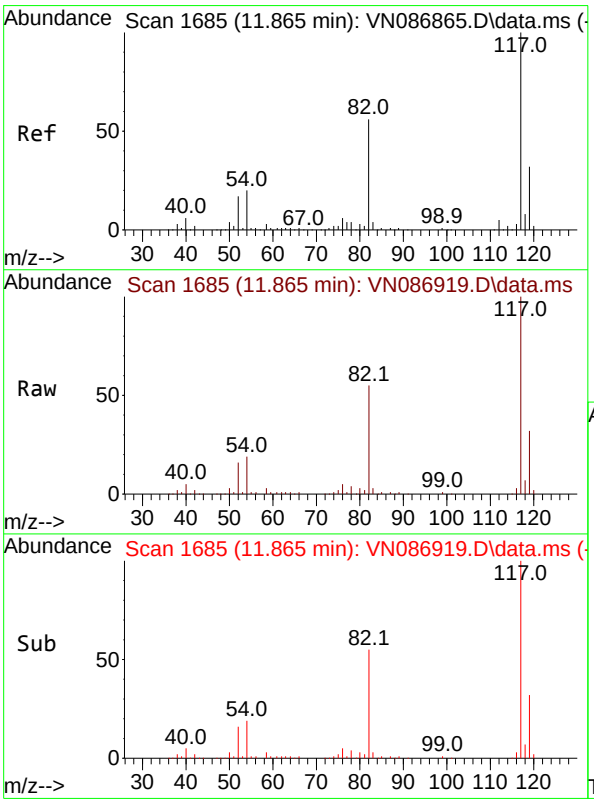

#62
4-Bromofluorobenzene
Concen: 48.899 ug/l
RT: 12.847 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086919.D
Acq: 10 Jun 2025 11:47

**Instrument :**
MSVOA_N
**ClientSampleId :**
EB02-060525

Tgt Ion: 95 Resp: 184714

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 73.1 | 0.0 | 141.8 |
| 176 | 70.0 | 0.0 | 132.6 |

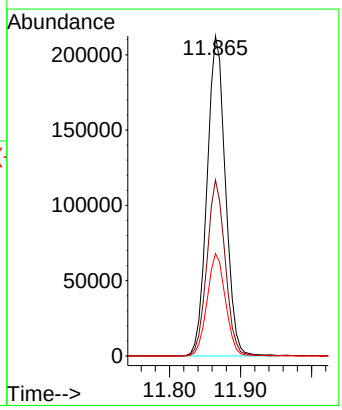


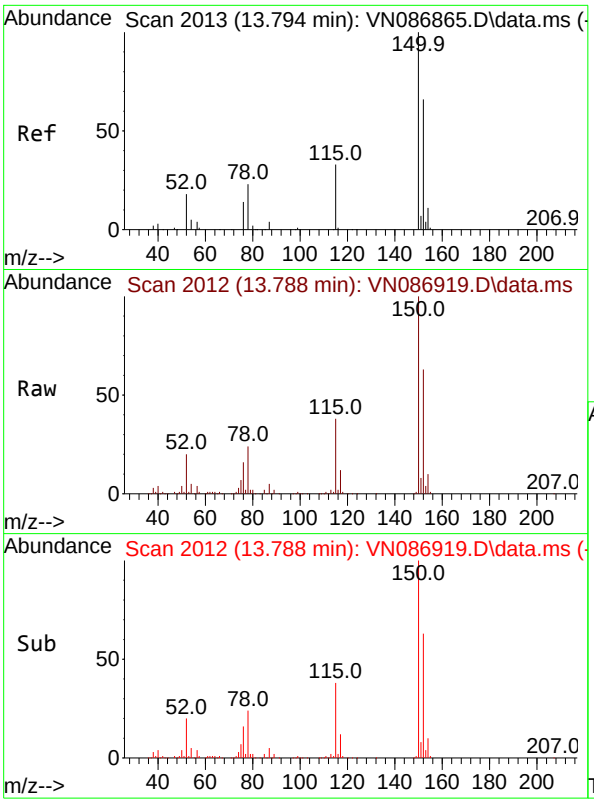




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. -0.000 min
Lab File: VN086919.D
Acq: 10 Jun 2025 11:47

Tgt Ion:117 Resp: 381245

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 55.0 | 44.6 | 67.0 |
| 119 | 32.0 | 25.5 | 38.3 |



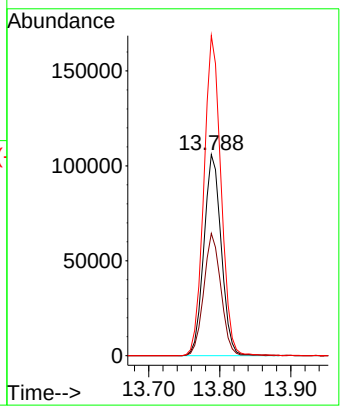



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN086919.D
Acq: 10 Jun 2025 11:47

**Instrument :**
MSVOA_N
**ClientSampleId :**
EB02-060525

Tgt Ion:152 Resp: 180063

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 60.2 | 30.1 | 90.5 |
| 150 | 157.3 | 0.0 | 345.0 |



Raw Data: **VN086920.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | 06/05/25 |
| Project: | Former Schlumberger STC PTC Site D3868221 | Date Received: | 06/05/25 |
| Client Sample ID: | TB-01-060525 | SDG No.: | Q2250 |
| Lab Sample ID: | Q2250-06 | Matrix: | Water |
| Analytical Method: | 8260D | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group3 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN086920.D | 1 | | 06/10/25 12:08 | VN061025 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-01-4 | Vinyl Chloride | 0.26 | U | 0.26 | 1.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 0.23 | U | 0.23 | 1.00 | ug/L |
| 75-34-3 | 1,1-Dichloroethane | 0.23 | U | 0.23 | 1.00 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 0.19 | U | 0.19 | 1.00 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 0.20 | U | 0.20 | 1.00 | ug/L |
| 71-43-2 | Benzene | 0.15 | U | 0.15 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 0.22 | U | 0.22 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 0.090 | U | 0.090 | 1.00 | ug/L |
| 79-00-5 | 1,1,2-Trichloroethane | 0.21 | U | 0.21 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 0.23 | U | 0.23 | 1.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 47.2 | | 70 (74) - 130 (125) | 94% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 48.8 | | 70 (75) - 130 (124) | 98% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 51.1 | | 70 (86) - 130 (113) | 102% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 49.1 | | 70 (77) - 130 (121) | 98% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 350000 | 8.23 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 649000 | 9.106 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 564000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 266000 | 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\VN061025\
Data File : VN086920.D
Acq On : 10 Jun 2025 12:08
Operator : JC\MD
Sample : Q2250-06
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
TB-01-060525

Quant Time: Jun 11 01:51:43 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.230 | 168 | 350151 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.106 | 114 | 648560 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 563762 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 266280 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.583 | 65 | 221297 | 47.204 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 94.400% | | | |
| 35) Dibromofluoromethane | 8.177 | 113 | 187512 | 48.787 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 97.580% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 777698 | 51.112 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 102.220% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 277459 | 49.082 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 98.160% | | | |

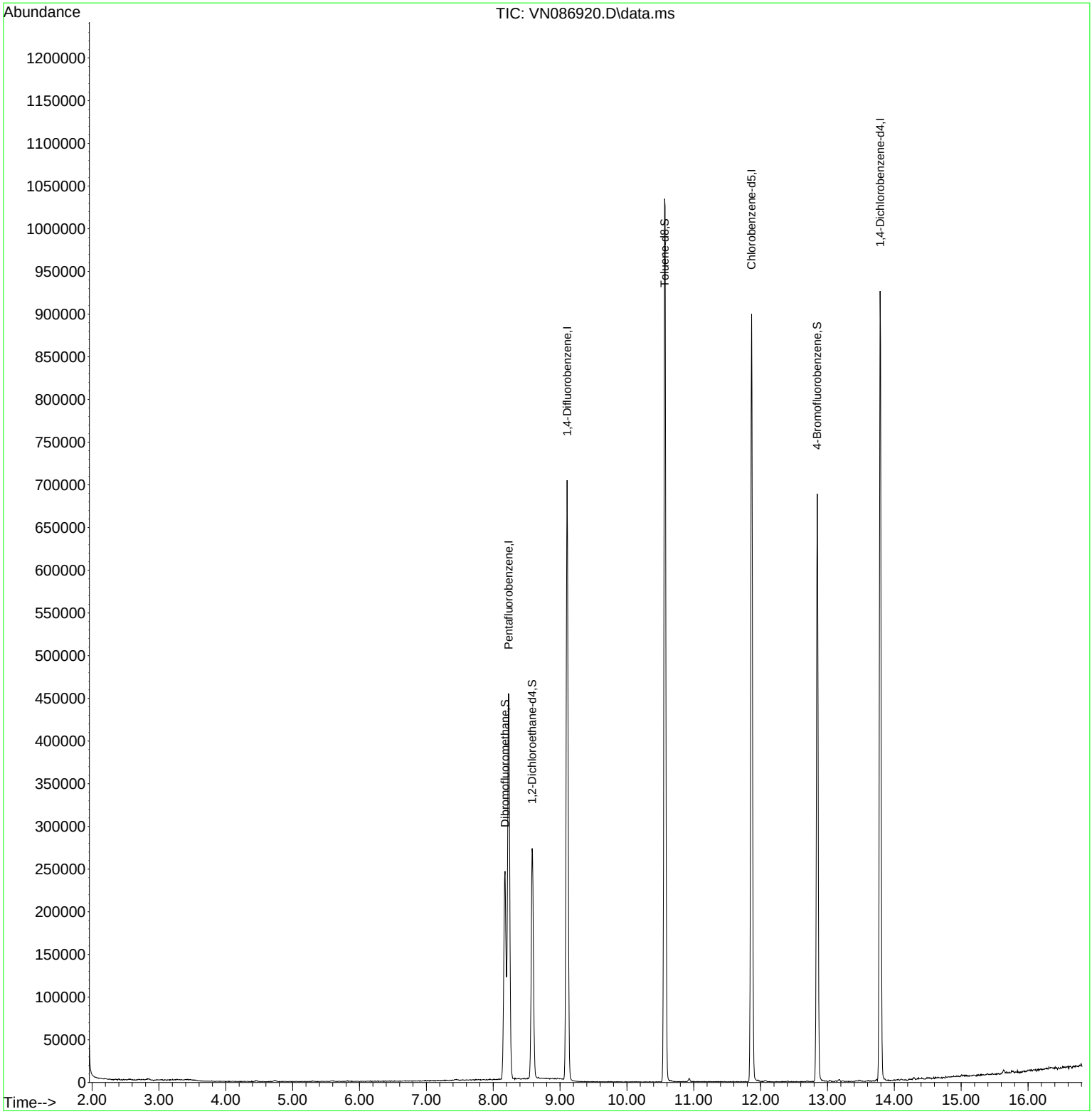
Target Compounds Qvalue

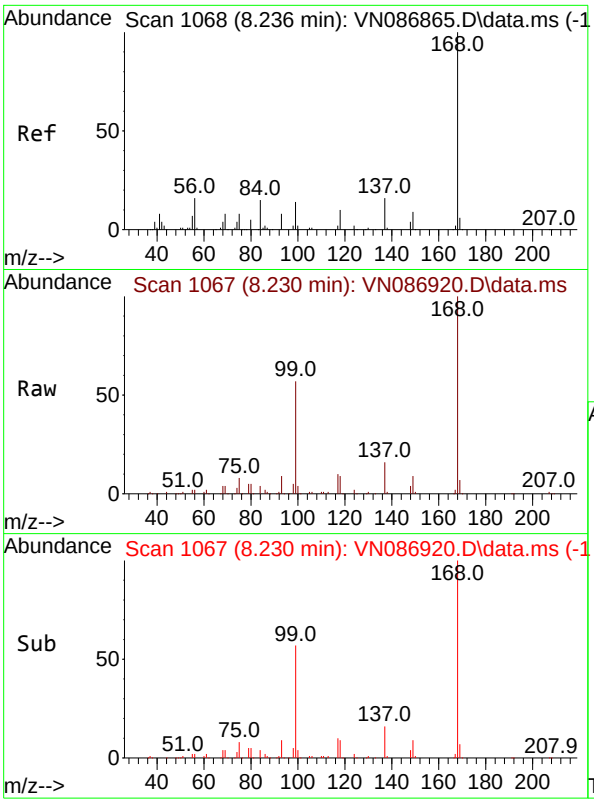
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061025\
Data File : VN086920.D
Acq On : 10 Jun 2025 12:08
Operator : JC\MD
Sample : Q2250-06
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
TB-01-060525

Quant Time: Jun 11 01:51:43 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration



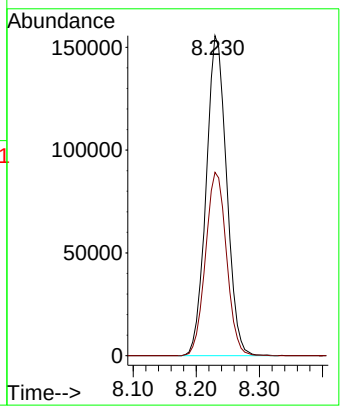


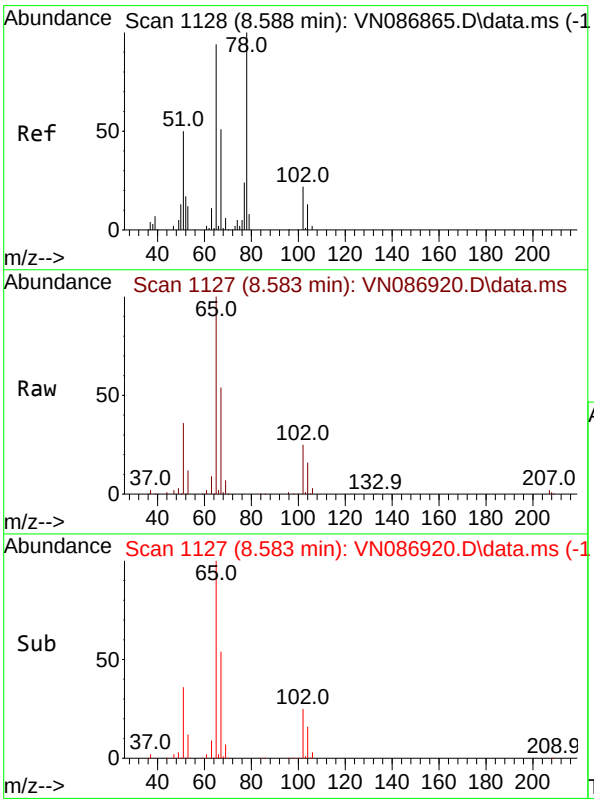

#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.230 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086920.D
Acq: 10 Jun 2025 12:08

**Instrument :**
MSVOA_N
**ClientSampleId :**
TB-01-060525

Tgt Ion:168 Resp: 350151

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 57.3 | 49.1 | 73.7 |

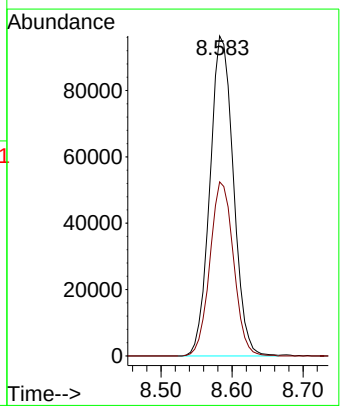


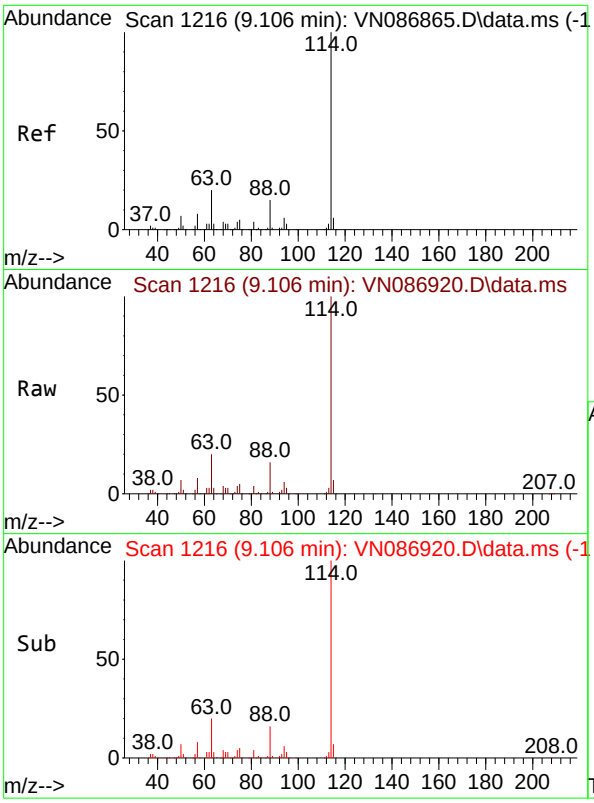




#33
1,2-Dichloroethane-d4
Concen: 47.204 ug/l
RT: 8.583 min Scan# 1127
Delta R.T. -0.006 min
Lab File: VN086920.D
Acq: 10 Jun 2025 12:08

Tgt Ion: 65 Resp: 221297

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 54.6 | 0.0 | 105.6 |



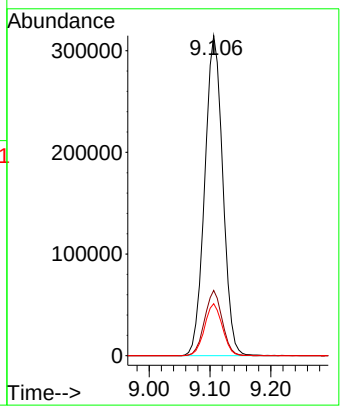


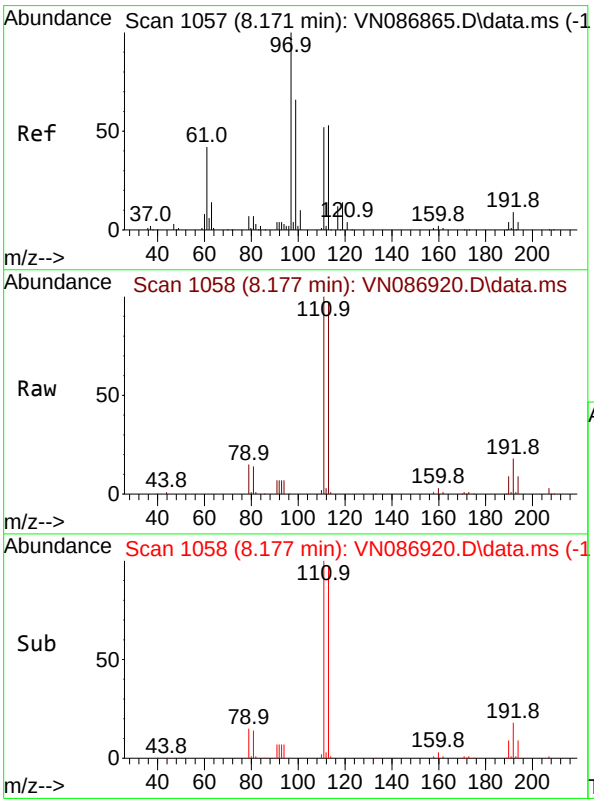

#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.106 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086920.D
Acq: 10 Jun 2025 12:08

**Instrument :**
MSVOA_N
**ClientSampleId :**
TB-01-060525

Tgt Ion:114 Resp: 648560

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 20.4 | 0.0 | 39.6 |
| 88 | 16.2 | 0.0 | 30.2 |

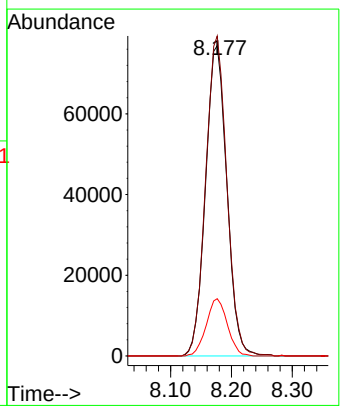


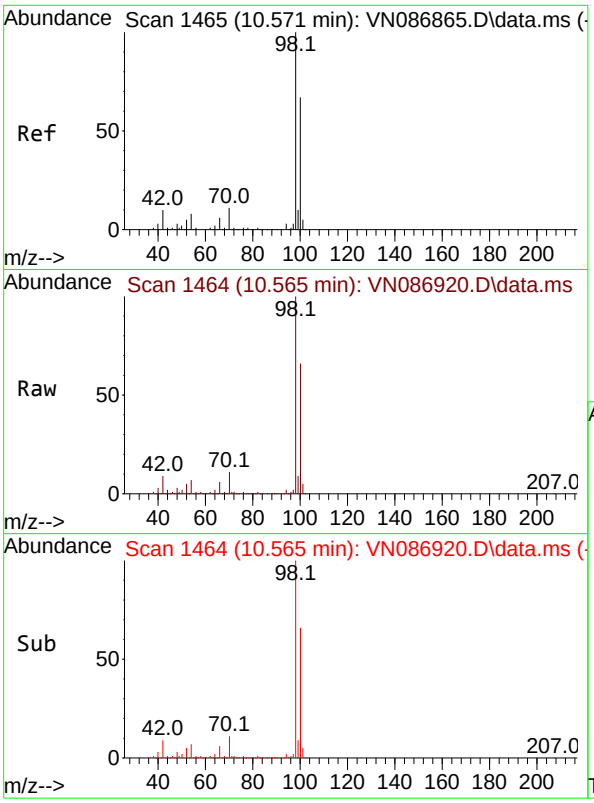




#35
Dibromofluoromethane
Concen: 48.787 ug/l
RT: 8.177 min Scan# 1058
Delta R.T. 0.006 min
Lab File: VN086920.D
Acq: 10 Jun 2025 12:08

Tgt Ion:113 Resp: 187512

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 102.2 | 84.2 | 126.2 |
| 192 | 18.2 | 14.2 | 21.4 |



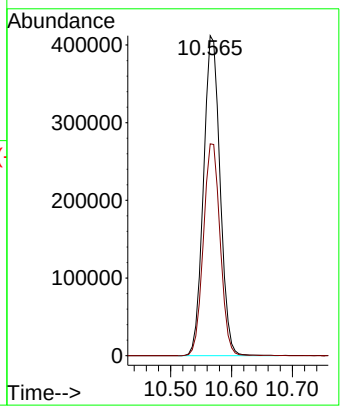


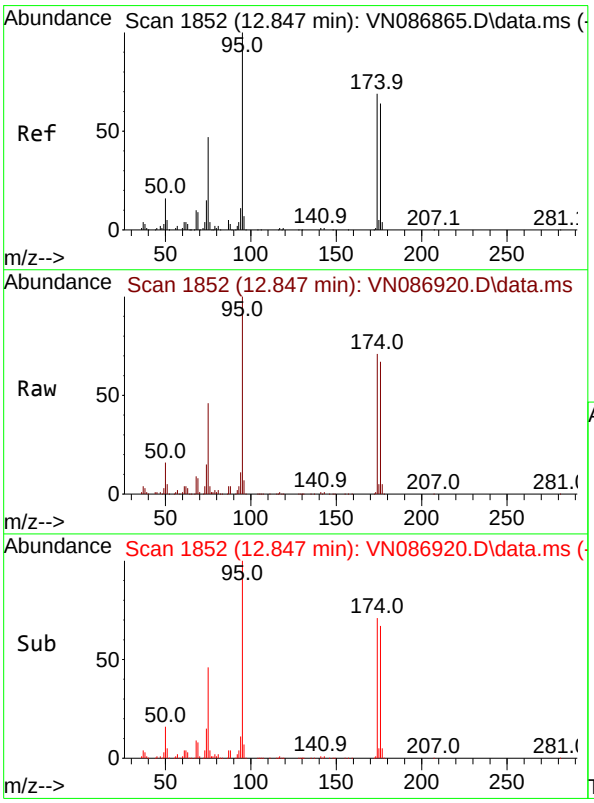

#50
Toluene-d8
Concen: 51.112 ug/l
RT: 10.565 min Scan# 14
Delta R.T. -0.006 min
Lab File: VN086920.D
Acq: 10 Jun 2025 12:08

**Instrument :**
MSVOA_N
**ClientSampleId :**
TB-01-060525

Tgt Ion: 98 Resp: 777698

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 66.9 | 53.4 | 80.0 |

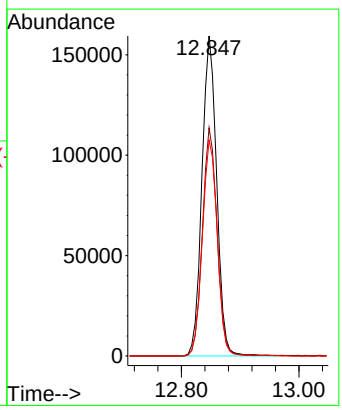


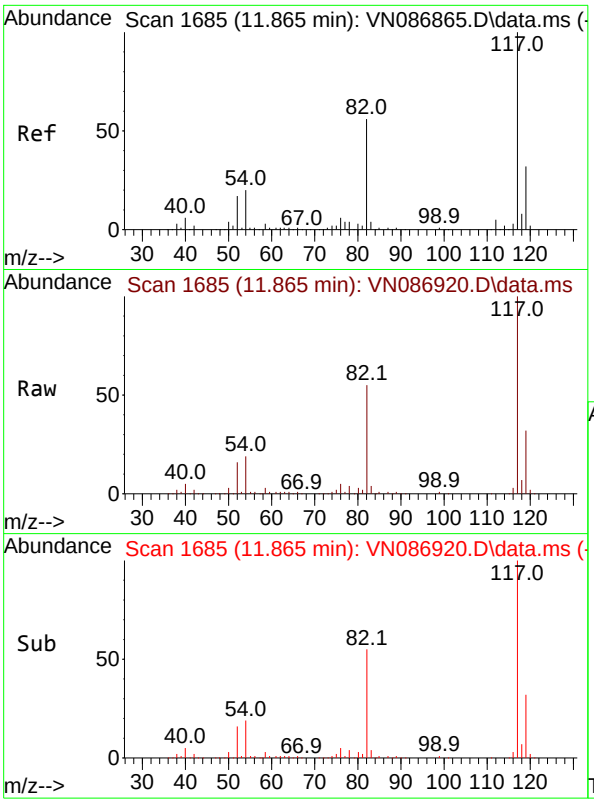




#62
4-Bromofluorobenzene
Concen: 49.082 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN086920.D
Acq: 10 Jun 2025 12:08

Tgt Ion: 95 Resp: 277459

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 70.9 | 0.0 | 141.8 |
| 176 | 67.9 | 0.0 | 132.6 |



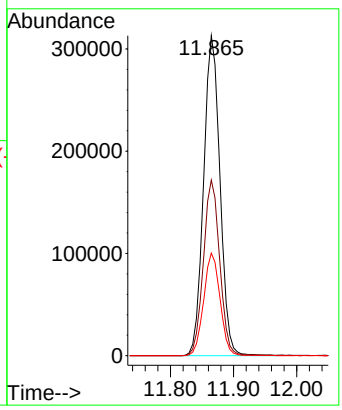


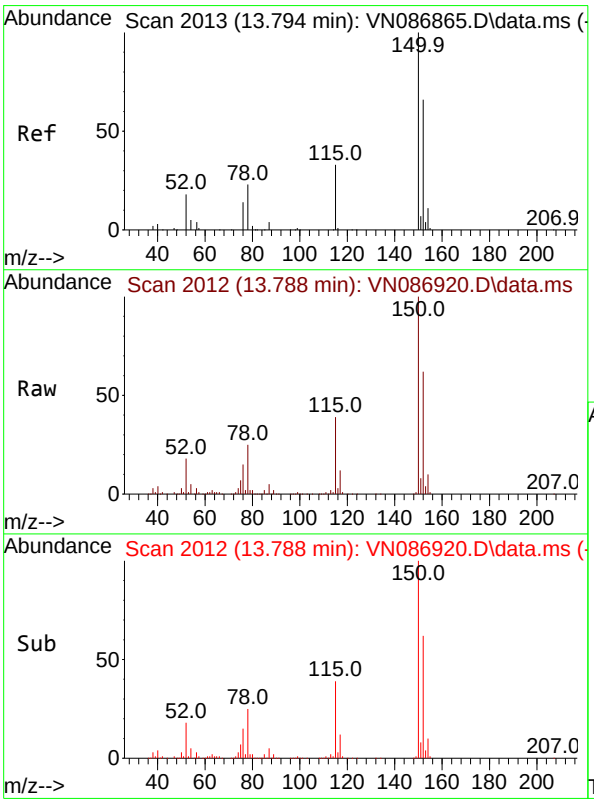

#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086920.D
Acq: 10 Jun 2025 12:08

**Instrument :**
MSVOA_N
**ClientSampleId :**
TB-01-060525

Tgt Ion:117 Resp: 563762

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 54.9 | 44.6 | 67.0 |
| 119 | 32.1 | 25.5 | 38.3 |

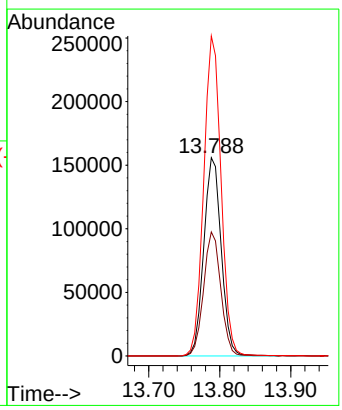



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.006 min
Lab File: VN086920.D
Acq: 10 Jun 2025 12:08

Tgt Ion:152 Resp: 266280

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 61.7 | 30.1 | 90.5 |
| 150 | 160.6 | 0.0 | 345.0 |



# CALIBRATION SUMMARY

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

# VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q2250 SAS No.: Q2250 SDG No.: Q2250

Instrument ID: MSVOA_N Calibration Date(s): 06/06/2025 06/06/2025

Heated Purge: (Y/N) N Calibration Time(s): 12:44 14:49

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

LAB FILE ID: RRF001 = VN086862.D RRF005 = VN086863.D RRF020 = VN086864.D
RRF050 = VN086865.D RRF100 = VN086866.D RRF150 = VN086867.D

| COMPOUND | RRF001 | RRF005 | RRF020 | RRF050 | RRF100 | RRF150 | $\overline{RRF}$ | % RSD |
|---|---|---|---|---|---|---|---|---|
| Vinyl Chloride | 0.670 | 0.670 | 0.684 | 0.640 | 0.673 | 0.648 | 0.664 | 2.5 |
| 1,1-Dichloroethene | 0.573 | 0.593 | 0.563 | 0.533 | 0.550 | 0.527 | 0.557 | 4.4 |
| 1,1-Dichloroethane | 1.192 | 1.153 | 1.156 | 1.063 | 1.110 | 1.043 | 1.120 | 5.2 |
| cis-1,2-Dichloroethene | 0.786 | 0.766 | 0.762 | 0.699 | 0.729 | 0.701 | 0.740 | 4.9 |
| 1,1,1-Trichloroethane | 1.029 | 0.995 | 0.969 | 0.895 | 0.925 | 0.893 | 0.951 | 5.9 |
| Benzene | 1.588 | 1.501 | 1.444 | 1.345 | 1.414 | 1.371 | 1.444 | 6.2 |
| 1,2-Dichloroethane | 0.473 | 0.456 | 0.444 | 0.411 | 0.430 | 0.413 | 0.438 | 5.6 |
| Trichloroethene | 0.359 | 0.360 | 0.341 | 0.327 | 0.340 | 0.328 | 0.342 | 4.2 |
| 1,1,2-Trichloroethane | 0.359 | 0.355 | 0.342 | 0.322 | 0.335 | 0.323 | 0.340 | 4.7 |
| Tetrachloroethene | 0.355 | 0.331 | 0.312 | 0.294 | 0.313 | 0.293 | 0.316 | 7.5 |
| 1,2-Dichloroethane-d4 | | 0.732 | 0.707 | 0.500 | 0.656 | 0.751 | 0.669 | 15.1 |
| Dibromofluoromethane | | 0.303 | 0.310 | 0.219 | 0.298 | 0.351 | 0.296 | 16.2 |
| Toluene-d8 | | 1.245 | 1.203 | 0.861 | 1.178 | 1.377 | 1.173 | 16.2 |
| 4-Bromofluorobenzene | | 0.441 | 0.446 | 0.325 | 0.446 | 0.521 | 0.436 | 16.2 |

* 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 : 82N060625W.M
Title : SW846 8260
Last Update : Sat Jun 07 02:12:50 2025
Response Via : Initial Calibration

Calibration Files
1 =VN086862.D 5 =VN086863.D 20 =VN086864.D 50 =VN086865.D 100 =VN086866.D 150 =VN086867.D

| | | Compound | 1 | 5 | 20 | 50 | 100 | 150 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|
| 1) | I | Pentafluorobenzene | ----------ISTD---------- | | | | | | | |
| 2) | T | Dichlorodifluo... | 0.467 | 0.444 | 0.539 | 0.501 | 0.535 | 0.506 | 0.499 | 7.51 |
| 3) | P | Chloromethane | 0.762 | 0.654 | 0.645 | 0.597 | 0.617 | 0.587 | 0.644 | 9.85 |
| 4) | C | Vinyl Chloride | 0.670 | 0.670 | 0.684 | 0.640 | 0.673 | 0.648 | 0.664 | 2.49# |
| 5) | T | Bromomethane | | 0.375 | 0.380 | 0.357 | 0.379 | 0.368 | 0.372 | 2.57 |
| 6) | T | Chloroethane | 0.460 | 0.444 | 0.442 | 0.408 | 0.418 | 0.402 | 0.429 | 5.37 |
| 7) | T | Trichlorofluor... | 0.882 | 0.903 | 0.904 | 0.834 | 0.858 | 0.825 | 0.868 | 3.93 |
| 8) | T | Diethyl Ether | 0.372 | 0.397 | 0.383 | 0.363 | 0.384 | 0.369 | 0.378 | 3.28 |
| 9) | T | 1,1,2-Trichlor... | 0.554 | 0.567 | 0.563 | 0.519 | 0.546 | 0.520 | 0.545 | 3.83 |
| 10) | T | Methyl Iodide | | 0.720 | 0.729 | 0.683 | 0.722 | 0.679 | 0.707 | 3.35 |
| 11) | T | Tert butyl alc... | | 0.192 | 0.194 | 0.176 | 0.180 | 0.166 | 0.182 | 6.37 |
| 12) | CM | 1,1-Dichloroet... | 0.573 | 0.593 | 0.563 | 0.533 | 0.550 | 0.527 | 0.557 | 4.44# |
| 13) | T | Acrolein | | 0.073 | 0.051 | 0.045 | 0.052 | 0.066 | 0.057 | 20.26 |
| 14) | T | Allyl chloride | 0.985 | 0.911 | 0.925 | 0.865 | 0.905 | 0.947 | 0.923 | 4.40 |
| 15) | T | Acrylonitrile | 0.434 | 0.434 | 0.445 | 0.407 | 0.423 | 0.404 | 0.425 | 3.82 |
| 16) | T | Acetone | 0.426 | 0.366 | 0.366 | 0.322 | 0.334 | 0.316 | 0.355 | 11.53 |
| 17) | T | Carbon Disulfide | 1.718 | 1.621 | 1.542 | 1.426 | 1.496 | 1.433 | 1.539 | 7.38 |
| 18) | T | Methyl Acetate | 1.035 | 1.049 | 1.078 | 0.986 | 1.049 | 1.011 | 1.035 | 3.10 |
| 19) | T | Methyl tert-bu... | 2.120 | 2.038 | 2.051 | 1.933 | 2.021 | 1.926 | 2.015 | 3.69 |
| 20) | T | Methylene Chlo... | 0.822 | 0.688 | 0.643 | 0.605 | 0.629 | 0.601 | 0.665 | 12.52 |
| 21) | T | trans-1,2-Dich... | 0.700 | 0.674 | 0.621 | 0.567 | 0.591 | 0.561 | 0.619 | 9.25 |
| 22) | T | Diisopropyl ether | 2.018 | 2.020 | 2.036 | 1.856 | 1.915 | 1.828 | 1.945 | 4.70 |
| 23) | T | Vinyl Acetate | 1.743 | 1.692 | 1.715 | 1.591 | 1.604 | 1.517 | 1.644 | 5.29 |
| 24) | P | 1,1-Dichloroet... | 1.192 | 1.152 | 1.156 | 1.063 | 1.110 | 1.043 | 1.120 | 5.17 |
| 25) | T | 2-Butanone | 0.604 | 0.598 | 0.604 | 0.551 | 0.573 | 0.533 | 0.577 | 5.18 |
| 26) | T | 2,2-Dichloropr... | 0.967 | 0.796 | 0.778 | 0.905 | 0.912 | 0.868 | 0.871 | 8.32 |
| 27) | T | cis-1,2-Dichlo... | 0.786 | 0.766 | 0.762 | 0.699 | 0.729 | 0.701 | 0.740 | 4.93 |
| 28) | T | Bromochloromet... | 0.579 | 0.564 | 0.616 | 0.466 | 0.517 | 0.560 | 0.550 | 9.48 |
| 29) | T | Tetrahydrofuran | 0.390 | 0.390 | 0.399 | 0.358 | 0.372 | 0.346 | 0.376 | 5.46 |
| 30) | C | Chloroform | 1.235 | 1.151 | 1.145 | 1.061 | 1.085 | 1.030 | 1.118 | 6.66# |
| 31) | T | Cyclohexane | | 1.303 | 1.116 | 1.004 | 1.030 | 0.976 | 1.086 | 12.21 |
| 32) | T | 1,1,1-Trichlor... | 1.029 | 0.995 | 0.969 | 0.895 | 0.925 | 0.893 | 0.951 | 5.88 |
| 33) | S | 1,2-Dichloroet... | | 0.732 | 0.707 | 0.500 | 0.656 | 0.751 | 0.669 | 15.08 |
| 34) | I | 1,4-Difluorobenzene | ----------ISTD---------- | | | | | | | |
| 35) | S | Dibromofluorom... | | 0.303 | 0.310 | 0.219 | 0.298 | 0.351 | 0.296 | 16.15 |
| 36) | T | 1,1-Dichloropr... | 0.467 | 0.458 | 0.438 | 0.418 | 0.442 | 0.426 | 0.442 | 4.23 |
| 37) | T | Ethyl Acetate | 0.544 | 0.615 | 0.577 | 0.536 | 0.565 | 0.535 | 0.562 | 5.48 |
| 38) | T | Carbon Tetrach... | 0.453 | 0.449 | 0.434 | 0.409 | 0.435 | 0.421 | 0.433 | 3.88 |
| 39) | T | Methylcyclohexane | 0.633 | 0.645 | 0.588 | 0.570 | 0.603 | 0.589 | 0.605 | 4.75 |
| 40) | TM | Benzene | 1.588 | 1.501 | 1.444 | 1.345 | 1.414 | 1.371 | 1.444 | 6.20 |
| 41) | T | Methacrylonitrile | 0.356 | 0.319 | 0.318 | 0.303 | 0.299 | 0.299 | 0.316 | 6.84 |
| 42) | TM | 1,2-Dichloroet... | 0.473 | 0.456 | 0.444 | 0.411 | 0.430 | 0.413 | 0.438 | 5.60 |
| 43) | T | Isopropyl Acetate | 0.975 | 0.950 | 0.906 | 0.852 | 0.884 | 0.845 | 0.902 | 5.79 |
| 44) | TM | Trichloroethene | 0.359 | 0.360 | 0.341 | 0.327 | 0.340 | 0.327 | 0.342 | 4.17 |
| 45) | C | 1,2-Dichloropr... | 0.366 | 0.369 | 0.354 | 0.332 | 0.352 | 0.335 | 0.351 | 4.40# |
| 46) | T | Dibromomethane | 0.233 | 0.242 | 0.241 | 0.221 | 0.237 | 0.226 | 0.233 | 3.54 |
| 47) | T | Bromodichlorom... | 0.510 | 0.484 | 0.480 | 0.457 | 0.483 | 0.465 | 0.480 | 3.80 |
| 48) | T | Methyl methacr... | 0.444 | 0.415 | 0.421 | 0.394 | 0.421 | 0.397 | 0.415 | 4.40 |
| 49) | T | 1,4-Dioxane | 0.006 | 0.007 | 0.008 | 0.008 | 0.008 | 0.007 | 0.008 | 9.40 |
| 50) | S | Toluene-d8 | | 1.245 | 1.203 | 0.861 | 1.178 | 1.377 | 1.173 | 16.23 |
| 51) | T | 4-Methyl-2-Pen... | 0.505 | 0.549 | 0.576 | 0.538 | 0.562 | 0.528 | 0.543 | 4.64 |
| 52) | CM | Toluene | 0.918 | 0.914 | 0.885 | 0.835 | 0.883 | 0.859 | 0.882 | 3.61# |
| 53) | T | t-1,3-Dichloro... | 0.571 | 0.526 | 0.524 | 0.522 | 0.548 | 0.530 | 0.537 | 3.59 |
| 54) | T | cis-1,3-Dichlo... | 0.609 | 0.577 | 0.564 | 0.551 | 0.584 | 0.561 | 0.574 | 3.61 |
| 55) | T | 1,1,2-Trichlor... | 0.359 | 0.355 | 0.342 | 0.322 | 0.335 | 0.323 | 0.340 | 4.66 |
| 56) | T | Ethyl methacry... | 0.433 | 0.516 | 0.567 | 0.556 | 0.595 | 0.578 | 0.541 | 10.92 |

Method Path : Z:\voasrv\HPCHEM1\MSVOA_N\methods\
Method File : 82N060625W.M

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 57) | T | 1,3-Dichloropr... | 0.643 | 0.600 | 0.587 | 0.561 | 0.583 | 0.559 | 0.589 | 5.27 |
| 58) | T | 2-Chloroethyl ... | 0.278 | 0.305 | 0.334 | 0.274 | 0.340 | 0.405 | 0.323 | 15.07 |
| 59) | T | 2-Hexanone | 0.312 | 0.282 | 0.363 | 0.368 | 0.397 | 0.376 | 0.350 | 12.36 |
| 60) | T | Dibromochlorom... | 0.361 | 0.351 | 0.358 | 0.340 | 0.363 | 0.349 | 0.354 | 2.49 |
| 61) | T | 1,2-Dibromoethane | 0.353 | 0.358 | 0.354 | 0.329 | 0.354 | 0.341 | 0.348 | 3.18 |
| 62) | S | 4-Bromofluorob... | | 0.441 | 0.446 | 0.325 | 0.446 | 0.521 | 0.436 | 16.16 |
| 63) | I | Chlorobenzene-d5 | ----------ISTD---------- | | | | | | | |
| 64) | T | Tetrachloroethene | 0.355 | 0.331 | 0.312 | 0.294 | 0.313 | 0.293 | 0.316 | 7.51 |
| 65) | PM | Chlorobenzene | 1.233 | 1.135 | 1.107 | 1.023 | 1.089 | 1.030 | 1.103 | 7.01 |
| 66) | T | 1,1,1,2-Tetrac... | 0.362 | 0.374 | 0.358 | 0.338 | 0.356 | 0.338 | 0.354 | 3.99 |
| 67) | C | Ethyl Benzene | 1.989 | 1.975 | 1.907 | 1.796 | 1.913 | 1.816 | 1.899 | 4.19# |
| 68) | T | m/p-Xylenes | 0.730 | 0.751 | 0.741 | 0.701 | 0.736 | 0.703 | 0.727 | 2.82 |
| 69) | T | o-Xylene | 0.714 | 0.699 | 0.702 | 0.674 | 0.711 | 0.678 | 0.696 | 2.42 |
| 70) | T | Styrene | 1.177 | 1.193 | 1.226 | 1.162 | 1.229 | 1.164 | 1.192 | 2.51 |
| 71) | P | Bromoform | 0.217 | 0.266 | 0.276 | 0.265 | 0.286 | 0.267 | 0.263 | 9.09 |
| 72) | I | 1,4-Dichlorobenzen... | ----------ISTD---------- | | | | | | | |
| 73) | T | Isopropylbenzene | 3.864 | 3.749 | 3.649 | 3.426 | 3.621 | 3.546 | 3.643 | 4.21 |
| 74) | T | N-amyl acetate | 1.376 | 1.110 | 1.187 | 1.266 | 1.372 | 1.327 | 1.273 | 8.42 |
| 75) | P | 1,1,2,2-Tetrac... | 1.292 | 1.299 | 1.273 | 1.178 | 1.205 | 1.157 | 1.234 | 4.99 |
| 76) | T | 1,2,3-Trichlor... | 1.297 | 1.189 | 1.129 | 1.173 | 1.201 | 1.142 | 1.189 | 5.03 |
| 77) | T | Bromobenzene | 0.870 | 0.855 | 0.840 | 0.790 | 0.838 | 0.819 | 0.835 | 3.36 |
| 78) | T | n-propylbenzene | 4.530 | 4.627 | 4.449 | 4.211 | 4.424 | 4.317 | 4.427 | 3.35 |
| 79) | T | 2-Chlorotoluene | 2.852 | 2.723 | 2.674 | 2.507 | 2.618 | 2.554 | 2.655 | 4.69 |
| 80) | T | 1,3,5-Trimethy... | 3.004 | 3.091 | 3.035 | 2.898 | 3.064 | 2.953 | 3.007 | 2.39 |
| 81) | T | trans-1,4-Dich... | | 0.510 | 0.522 | 0.476 | 0.546 | 0.528 | 0.516 | 5.06 |
| 82) | T | 4-Chlorotoluene | 2.899 | 2.757 | 2.671 | 2.531 | 2.664 | 2.595 | 2.686 | 4.81 |
| 83) | T | tert-Butylbenzene | 2.942 | 2.810 | 2.736 | 2.617 | 2.745 | 2.668 | 2.753 | 4.14 |
| 84) | T | 1,2,4-Trimethy... | 2.952 | 3.122 | 3.063 | 2.914 | 3.075 | 2.968 | 3.016 | 2.73 |
| 85) | T | sec-Butylbenzene | 4.114 | 4.126 | 4.037 | 3.829 | 4.018 | 3.861 | 3.998 | 3.15 |
| 86) | T | p-Isopropyltol... | 3.305 | 3.425 | 3.321 | 3.184 | 3.366 | 3.227 | 3.305 | 2.68 |
| 87) | T | 1,3-Dichlorobe... | 1.763 | 1.709 | 1.657 | 1.554 | 1.612 | 1.566 | 1.644 | 5.01 |
| 88) | T | 1,4-Dichlorobe... | 1.820 | 1.786 | 1.657 | 1.572 | 1.642 | 1.576 | 1.676 | 6.27 |
| 89) | T | n-Butylbenzene | 3.473 | 3.292 | 3.140 | 3.059 | 3.188 | 3.054 | 3.201 | 4.99 |
| 90) | T | Hexachloroethane | 0.580 | 0.537 | 0.569 | 0.537 | 0.577 | 0.562 | 0.560 | 3.43 |
| 91) | T | 1,2-Dichlorobe... | 1.675 | 1.651 | 1.596 | 1.500 | 1.557 | 1.496 | 1.579 | 4.77 |
| 92) | T | 1,2-Dibromo-3-... | 0.339 | 0.317 | 0.290 | 0.272 | 0.283 | 0.270 | 0.295 | 9.29 |
| 93) | T | 1,2,4-Trichlor... | 1.042 | 1.037 | 0.991 | 0.969 | 1.016 | 0.994 | 1.008 | 2.82 |
| 94) | T | Hexachlorobuta... | 0.364 | 0.391 | 0.385 | 0.363 | 0.382 | 0.369 | 0.376 | 3.11 |
| 95) | T | Naphthalene | 3.820 | 3.727 | 3.761 | 3.600 | 3.839 | 3.772 | 3.753 | 2.27 |
| 96) | T | 1,2,3-Trichlor... | 1.073 | 1.009 | 0.993 | 0.950 | 1.000 | 0.987 | 1.002 | 4.05 |

(#) = Out of Range

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086862.D
Acq On : 06 Jun 2025 12:44
Operator : JC\MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

Quant Time: Jun 07 01:54:26 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 01:51:02 2025
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) Pentafluorobenzene | 8.235 | 168 | 212682 | 50.000 | ug/l | | 0.00 |
| 34) 1,4-Difluorobenzene | 9.106 | 114 | 393457 | 50.000 | ug/l | | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 348010 | 50.000 | ug/l | | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.794 | 152 | 167399 | 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 | 2.153 | 85 | 1985 | 0.936 | ug/l | | 72 |
| 3) Chloromethane | 2.400 | 50 | 3241 | 1.184 | ug/l | | 98 |
| 4) Vinyl Chloride | 2.559 | 62 | 2848 | 1.008 | ug/l | # | 88 |
| 6) Chloroethane | 3.159 | 64 | 1957 | 1.073 | ug/l | # | 79 |
| 7) Trichlorofluoromethane | 3.530 | 101 | 3752 | 1.017 | ug/l | | 97 |
| 8) Diethyl Ether | 3.994 | 74 | 1583 | 0.984 | ug/l | | 76 |
| 9) 1,1,2-Trichlorotrifluo... | 4.377 | 101 | 2358m | 1.017 | ug/l | | |
| 12) 1,1-Dichloroethene | 4.365 | 96 | 2436 | 1.029 | ug/l | | 85 |
| 14) Allyl chloride | 5.041 | 41 | 4189 | 1.067 | ug/l | # | 75 |
| 15) Acrylonitrile | 5.735 | 53 | 9222 | 5.106 | ug/l | | 96 |
| 16) Acetone | 4.459 | 43 | 9069 | 6.006 | ug/l | | 95 |
| 17) Carbon Disulfide | 4.730 | 76 | 7306 | 1.116 | ug/l | | 97 |
| 18) Methyl Acetate | 5.053 | 43 | 4402 | 1.000 | ug/l | # | 66 |
| 19) Methyl tert-butyl Ether | 5.824 | 73 | 9019 | 1.052 | ug/l | | 92 |
| 20) Methylene Chloride | 5.294 | 84 | 3496 | 1.237 | ug/l | | 93 |
| 21) trans-1,2-Dichloroethene | 5.800 | 96 | 2979 | 1.131 | ug/l | | 87 |
| 22) Diisopropyl ether | 6.682 | 45 | 8584 | 1.037 | ug/l | # | 96 |
| 23) Vinyl Acetate | 6.618 | 43 | 37075 | 5.303 | ug/l | | 95 |
| 24) 1,1-Dichloroethane | 6.588 | 63 | 5071 | 1.065 | ug/l | # | 81 |
| 25) 2-Butanone | 7.500 | 43 | 12841 | 5.231 | ug/l | | 93 |
| 26) 2,2-Dichloropropane | 7.500 | 77 | 4112 | 1.110 | ug/l | | 94 |
| 27) cis-1,2-Dichloroethene | 7.494 | 96 | 3345 | 1.062 | ug/l | | 95 |
| 28) Bromochloromethane | 7.824 | 49 | 2464 | 1.052 | ug/l | # | 88 |
| 29) Tetrahydrofuran | 7.853 | 42 | 8301 | 5.191 | ug/l | | 100 |
| 30) Chloroform | 7.971 | 83 | 5255 | 1.105 | ug/l | | 97 |
| 32) 1,1,1-Trichloroethane | 8.171 | 97 | 4378 | 1.082 | ug/l | # | 50 |
| 36) 1,1-Dichloropropene | 8.376 | 75 | 3678 | 1.059 | ug/l | | 96 |
| 37) Ethyl Acetate | 7.577 | 43 | 4282 | 0.968 | ug/l | # | 78 |
| 38) Carbon Tetrachloride | 8.376 | 117 | 3563 | 1.045 | ug/l | # | 93 |
| 39) Methylcyclohexane | 9.606 | 83 | 4981 | 1.046 | ug/l | # | 90 |
| 40) Benzene | 8.612 | 78 | 12498 | 1.100 | ug/l | | 100 |
| 41) Methacrylonitrile | 7.782 | 41 | 2799 | 1.127 | ug/l | | 89 |
| 42) 1,2-Dichloroethane | 8.682 | 62 | 3725 | 1.081 | ug/l | | 82 |
| 43) Isopropyl Acetate | 8.694 | 43 | 7673 | 1.081 | ug/l | # | 96 |
| 44) Trichloroethene | 9.365 | 130 | 2822 | 1.047 | ug/l | | 71 |
| 45) 1,2-Dichloropropane | 9.629 | 63 | 2883 | 1.043 | ug/l | | 95 |

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086862.D
Acq On : 06 Jun 2025 12:44
Operator : JC\MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 07 01:54:26 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 01:51:02 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 46) Dibromomethane | 9.712 | 93 | 1835 | 0.999 | ug/l | | 94 |
| 47) Bromodichloromethane | 9.888 | 83 | 4017 | 1.063 | ug/l | # | 96 |
| 48) Methyl methacrylate | 9.688 | 41 | 3492 | 1.069 | ug/l | | 88 |
| 49) 1,4-Dioxane | 9.706 | 88 | 1004 | 16.891 | ug/l | # | 74 |
| 51) 4-Methyl-2-Pentanone | 10.453 | 43 | 19886 | 4.653 | ug/l | | 99 |
| 52) Toluene | 10.635 | 92 | 7227 | 1.041 | ug/l | | 95 |
| 53) t-1,3-Dichloropropene | 10.841 | 75 | 4494 | 1.064 | ug/l | | 97 |
| 54) cis-1,3-Dichloropropene | 10.312 | 75 | 4792 | 1.060 | ug/l | | 97 |
| 55) 1,1,2-Trichloroethane | 11.023 | 97 | 2828 | 1.058 | ug/l | | 89 |
| 56) Ethyl methacrylate | 10.882 | 69 | 3406 | 0.800 | ug/l | # | 85 |
| 57) 1,3-Dichloropropane | 11.170 | 76 | 5062 | 1.092 | ug/l | | 98 |
| 58) 2-Chloroethyl Vinyl ether | 10.165 | 63 | 10924 | 4.304 | ug/l | | 97 |
| 59) 2-Hexanone | 11.235 | 43 | 12295m | 4.466 | ug/l | | |
| 60) Dibromochloromethane | 11.359 | 129 | 2843 | 1.021 | ug/l | | 96 |
| 61) 1,2-Dibromoethane | 11.470 | 107 | 2777 | 1.014 | ug/l | | 96 |
| 64) Tetrachloroethene | 11.106 | 164 | 2473 | 1.123 | ug/l | | 94 |
| 65) Chlorobenzene | 11.894 | 112 | 8581 | 1.118 | ug/l | # | 87 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 2523 | 1.023 | ug/l | # | 63 |
| 67) Ethyl Benzene | 11.970 | 91 | 13845 | 1.047 | ug/l | | 94 |
| 68) m/p-Xylenes | 12.070 | 106 | 10163 | 2.008 | ug/l | | 95 |
| 69) o-Xylene | 12.400 | 106 | 4970 | 1.025 | ug/l | | 93 |
| 70) Styrene | 12.417 | 104 | 8189 | 0.987 | ug/l | | 98 |
| 71) Bromoform | 12.582 | 173 | 1508 | 0.825 | ug/l | # | 78 |
| 73) Isopropylbenzene | 12.694 | 105 | 12938 | 1.061 | ug/l | | 98 |
| 74) N-amyl acetate | 12.647 | 43 | 4608m | 1.138 | ug/l | | |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 4326 | 1.047 | ug/l | # | 93 |
| 76) 1,2,3-Trichloropropane | 13.000 | 75 | 4343m | 1.088 | ug/l | | |
| 77) Bromobenzene | 12.982 | 156 | 2913 | 1.042 | ug/l | | 96 |
| 78) n-propylbenzene | 13.035 | 91 | 15168 | 1.023 | ug/l | | 98 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 9550 | 1.074 | ug/l | | 97 |
| 80) 1,3,5-Trimethylbenzene | 13.170 | 105 | 10058 | 0.999 | ug/l | | 96 |
| 82) 4-Chlorotoluene | 13.223 | 91 | 9706 | 1.079 | ug/l | | 96 |
| 83) tert-Butylbenzene | 13.435 | 119 | 9849 | 1.069 | ug/l | | 98 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 9882 | 0.979 | ug/l | | 99 |
| 85) sec-Butylbenzene | 13.617 | 105 | 13775 | 1.029 | ug/l | | 100 |
| 86) p-Isopropyltoluene | 13.729 | 119 | 11065 | 1.000 | ug/l | | 97 |
| 87) 1,3-Dichlorobenzene | 13.735 | 146 | 5903 | 1.073 | ug/l | | 94 |
| 88) 1,4-Dichlorobenzene | 13.811 | 146 | 6094m | 1.086 | ug/l | | |
| 89) n-Butylbenzene | 14.058 | 91 | 11627 | 1.085 | ug/l | | 94 |
| 90) Hexachloroethane | 14.329 | 117 | 1942 | 1.036 | ug/l | | 93 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 5607 | 1.061 | ug/l | | 99 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75 | 1136 | 1.150 | ug/l | | 78 |
| 93) 1,2,4-Trichlorobenzene | 15.388 | 180 | 3489 | 1.034 | ug/l | | 98 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 1219 | 0.969 | ug/l | | 88 |
| 95) Naphthalene | 15.635 | 128 | 12789 | 1.018 | ug/l | | 98 |
| 96) 1,2,3-Trichlorobenzene | 15.835 | 180 | 3594 | 1.072 | ug/l | | 96 |

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

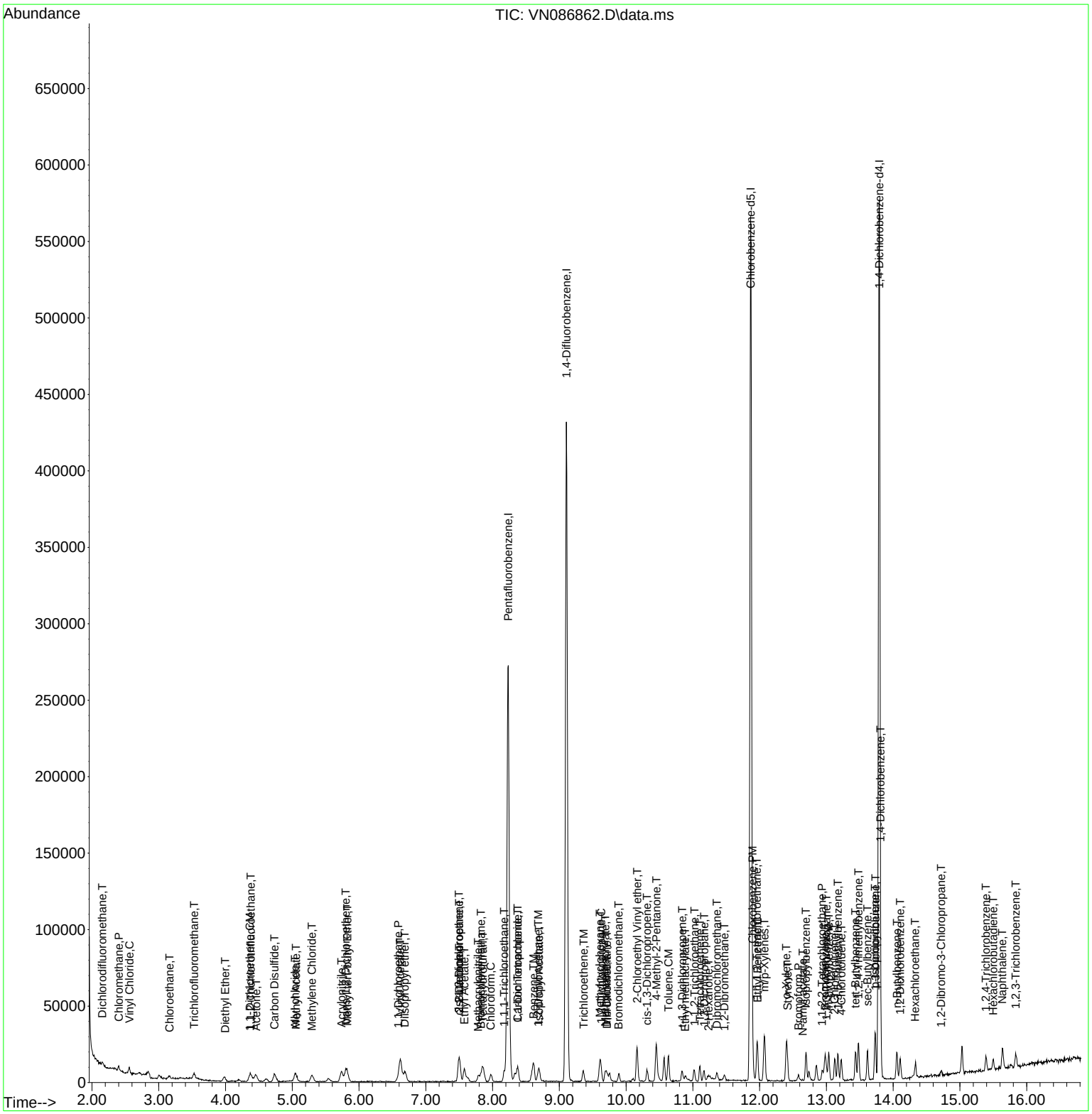
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086862.D
Acq On : 06 Jun 2025 12:44
Operator : JC\MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

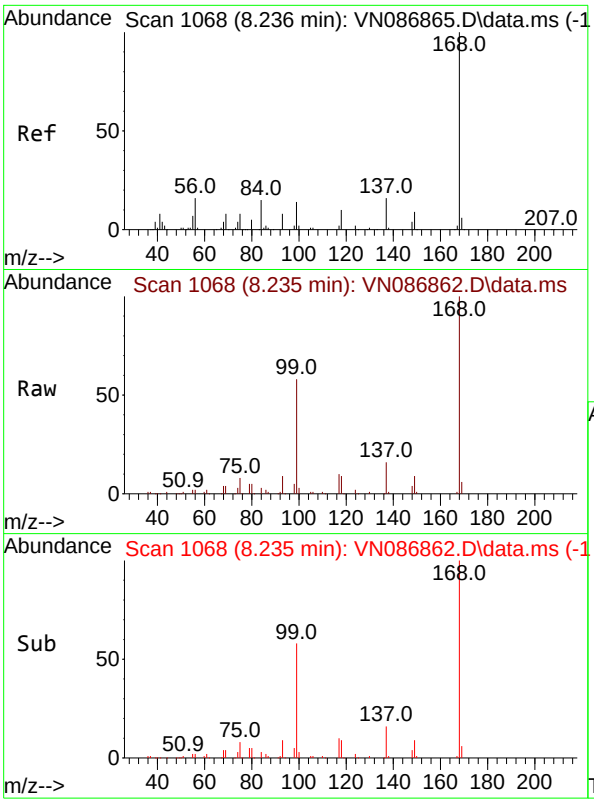
Quant Time: Jun 07 01:54:26 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 01:51:02 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

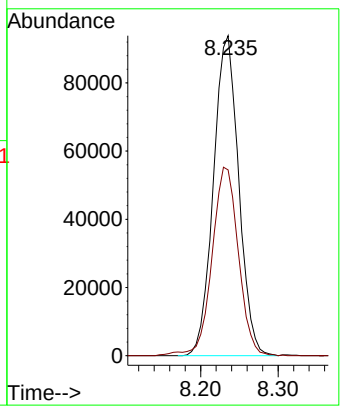





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.235 min Scan# 1
Delta R.T. -0.001 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion:168 Resp: 21268

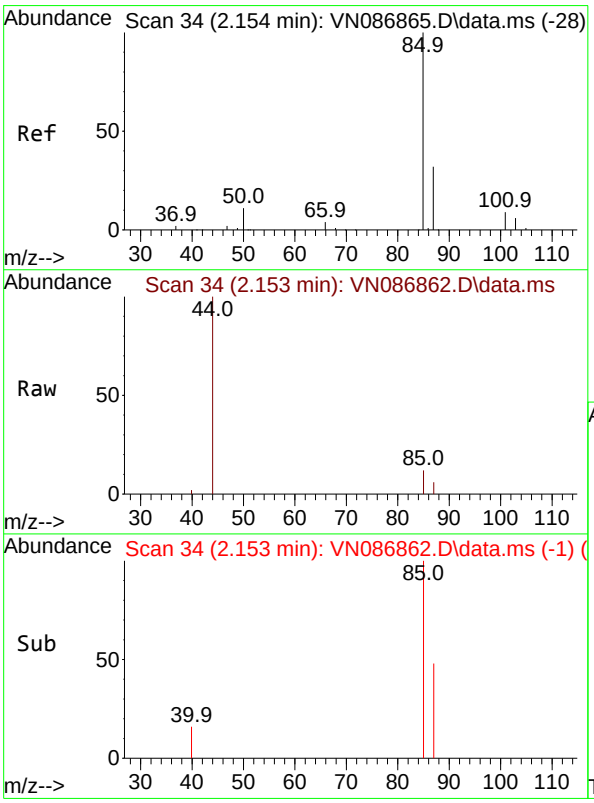
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 58.1 | 49.1 | 73.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

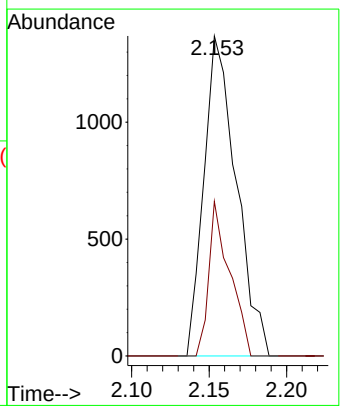
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

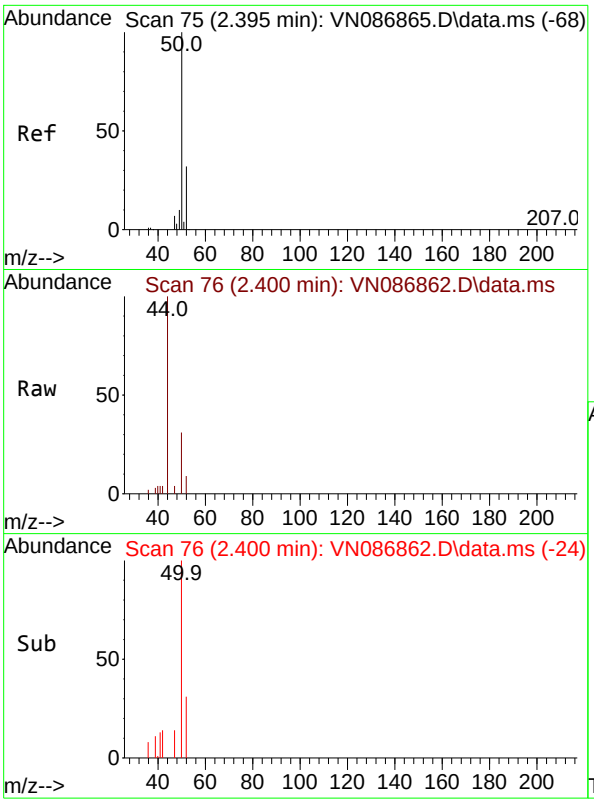



#2
Dichlorodifluoromethane
Concen: 0.936 ug/l
RT: 2.153 min Scan# 34
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 85 Resp: 1985

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 48.3 | 16.2 | 48.6 |

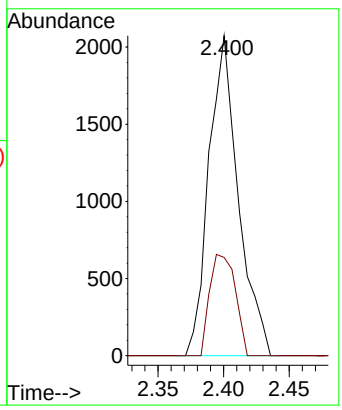





#3
Chloromethane
Concen: 1.184 ug/l
RT: 2.400 min Scan# 7
Delta R.T. 0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 50 Resp: 324

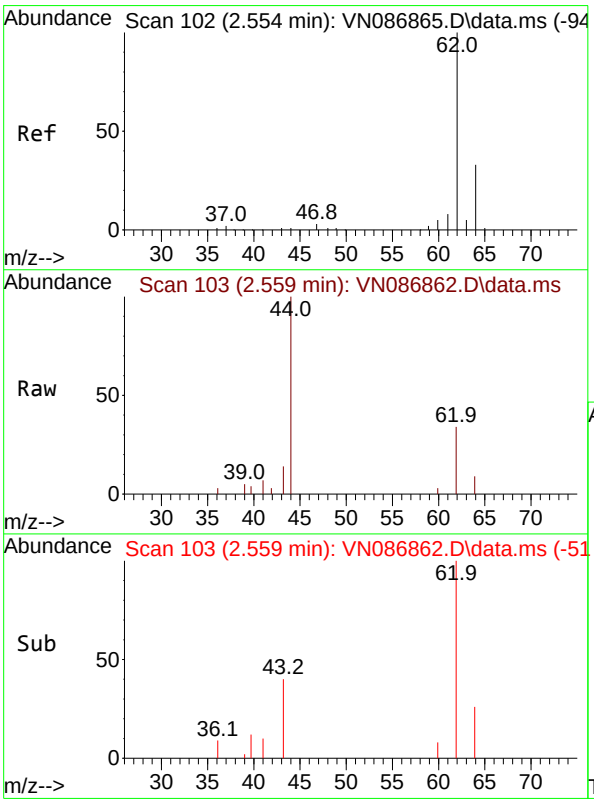
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 30.7 | 25.7 | 38.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

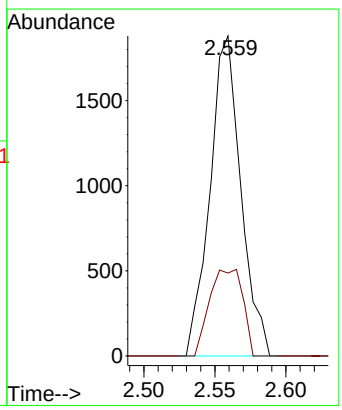
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

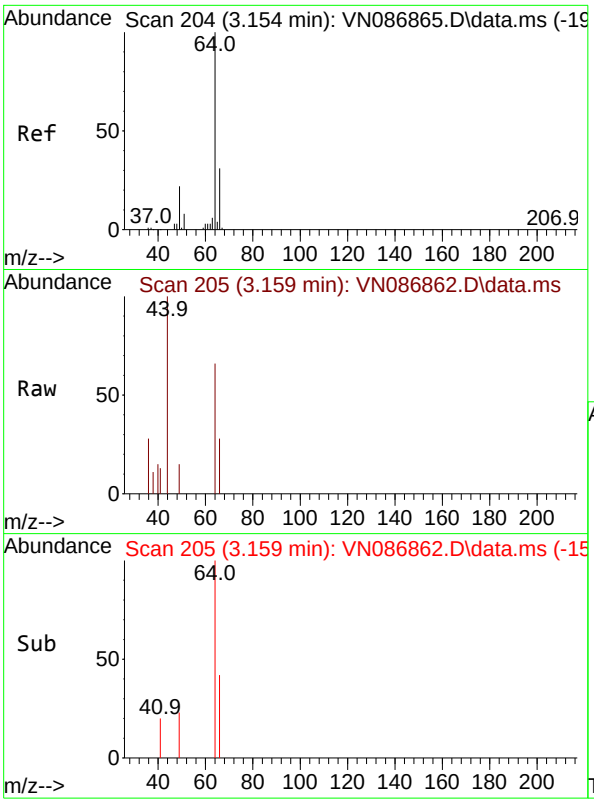



#4
Vinyl Chloride
Concen: 1.008 ug/l
RT: 2.559 min Scan# 103
Delta R.T. 0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 62 Resp: 2848

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 25.9 | 26.0 | 39.0# |






#6
Chloroethane
Concen: 1.073 ug/l
RT: 3.159 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

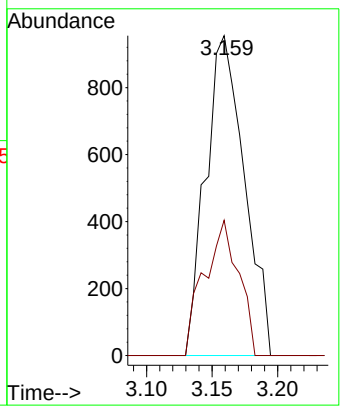
Tgt Ion: 64 Resp: 195

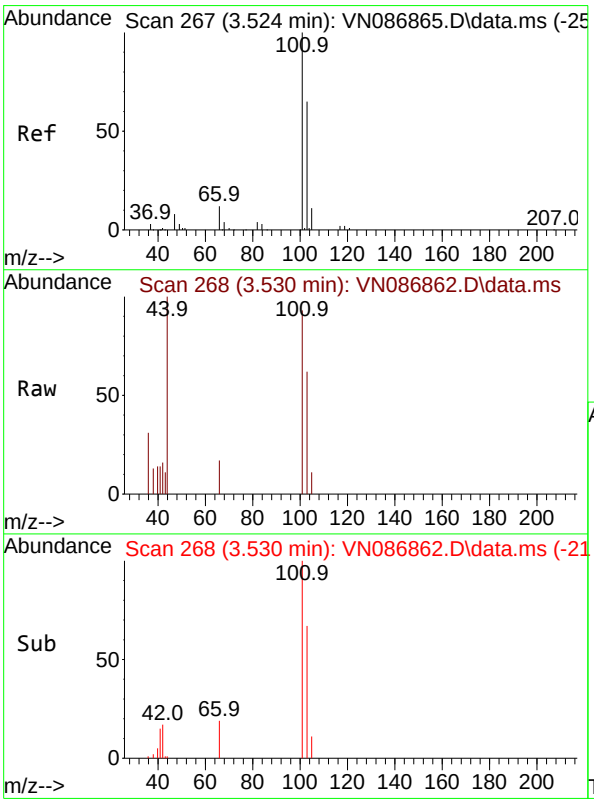
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 42.3 | 24.6 | 36.8# |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

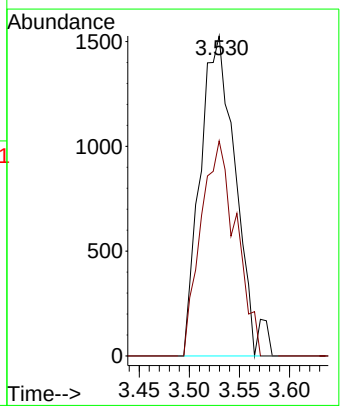


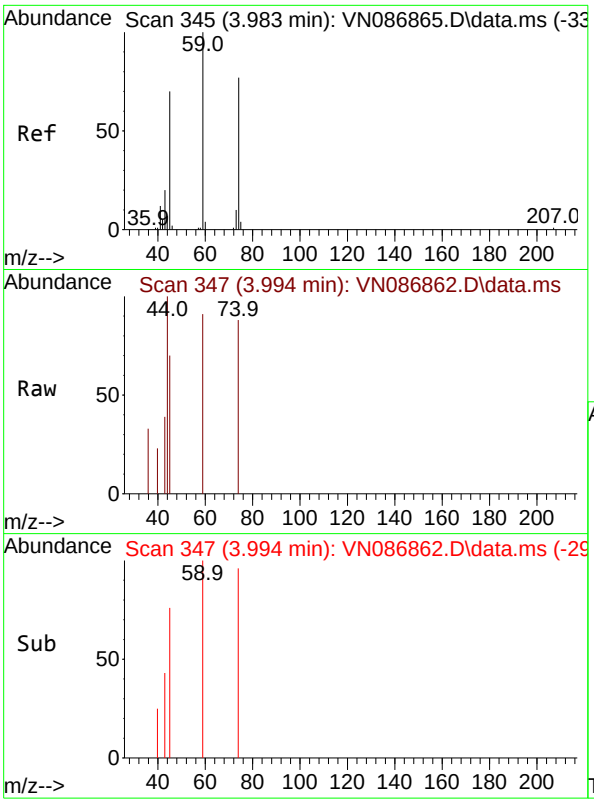




#7
Trichlorofluoromethane
Concen: 1.017 ug/l
RT: 3.530 min Scan# 268
Delta R.T. 0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion:101 Resp: 3752

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 67.2 | 52.2 | 78.2 |






#8
Diethyl Ether
Concen: 0.984 ug/l
RT: 3.994 min Scan# 34
Delta R.T. 0.011 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

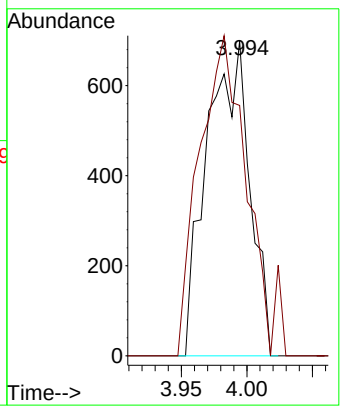
Tgt Ion: 74 Resp: 158

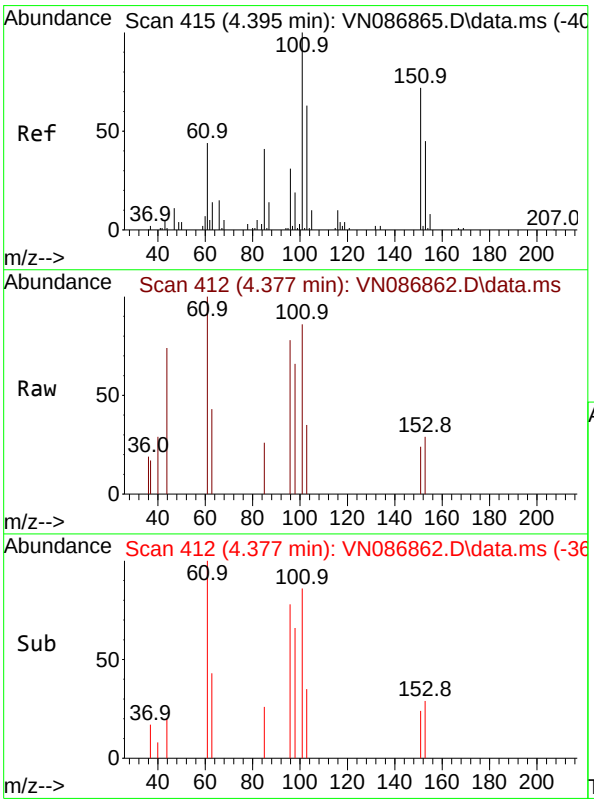
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 113.8 | 45.5 | 136.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

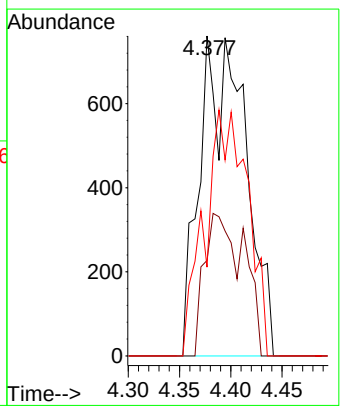


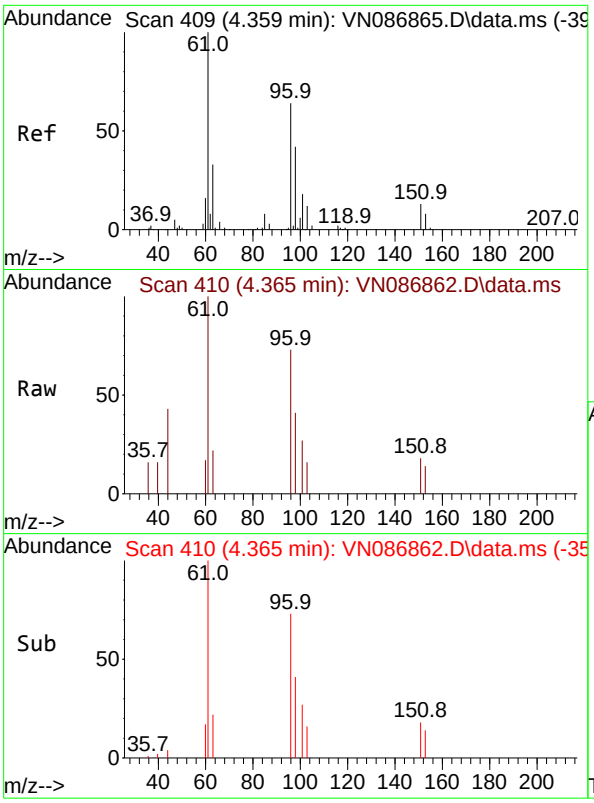




#9
1,1,2-Trichlorotrifluoroethane
Concen: 1.017 ug/l m
RT: 4.377 min Scan# 412
Delta R.T. -0.018 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion:101 Resp: 2358

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 27.8 | 33.8 | 50.8# |
| 151 | 72.1 | 58.7 | 88.1 |

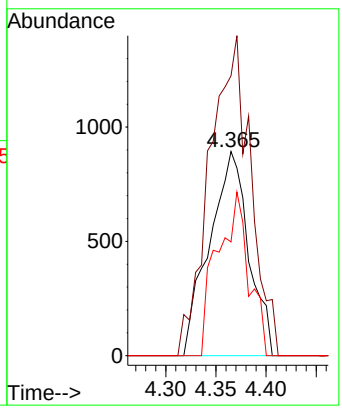





#12
1,1-Dichloroethene
Concen: 1.029 ug/l
RT: 4.365 min Scan# 4
Delta R.T. 0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 96 Resp: 243

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 137.1 | 125.8 | 188.6 |
| 98 | 55.8 | 52.5 | 78.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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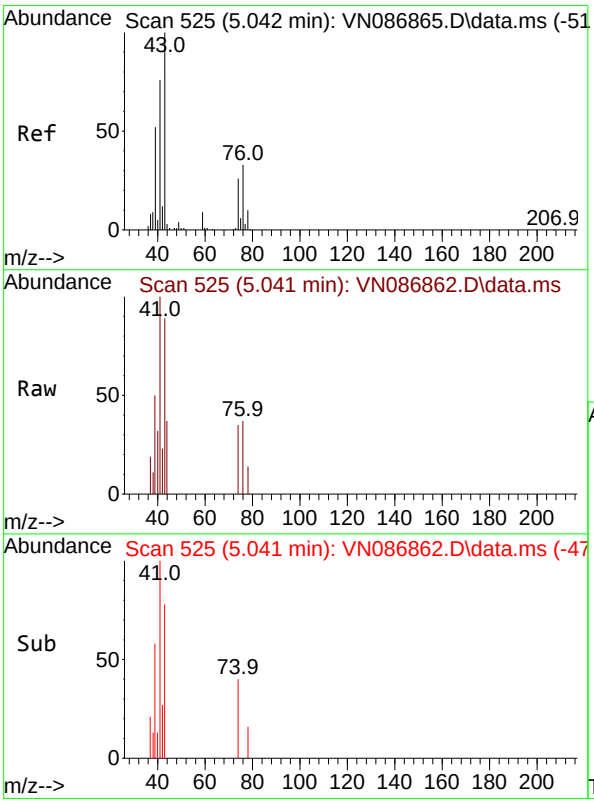
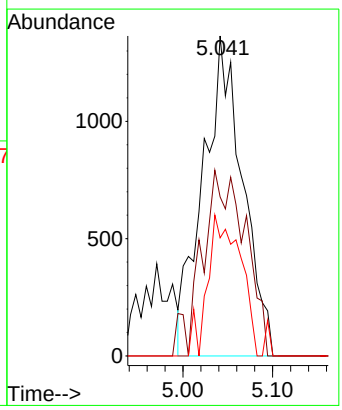
Supervised By :Mahesh Dadoda 06/09/2025

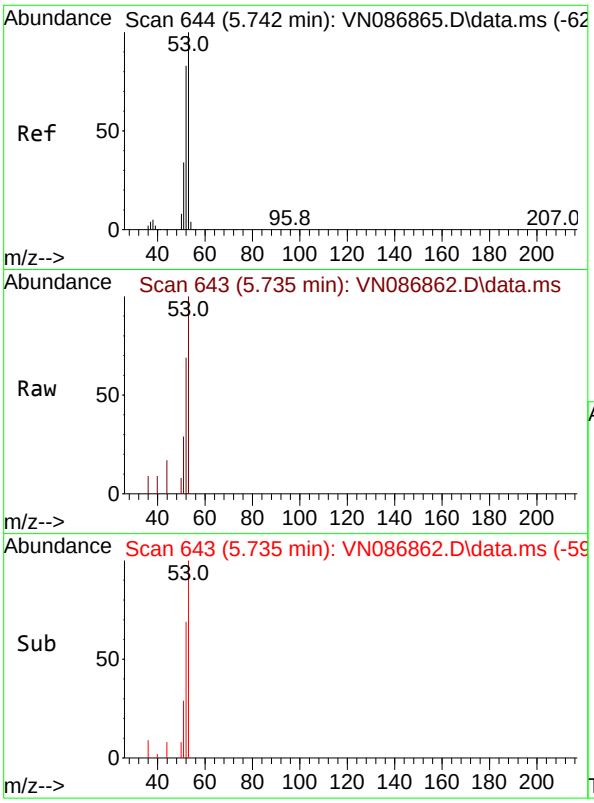



#14
Allyl chloride
Concen: 1.067 ug/l
RT: 5.041 min Scan# 525
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 41 Resp: 4189

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 35.3 | 51.3 | 76.9# |
| 76 | 36.4 | 31.4 | 47.0 |






#15
Acrylonitrile
Concen: 5.106 ug/l
RT: 5.735 min Scan# 64
Delta R.T. -0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 53 Resp: 922

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 85.4 | 65.0 | 97.6 |
| 51 | 32.7 | 27.2 | 40.8 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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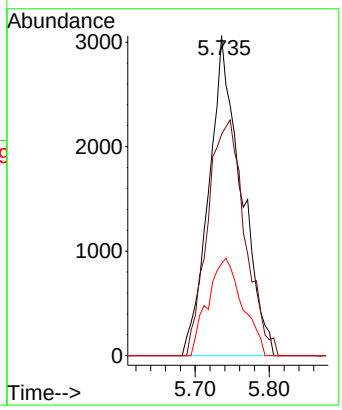
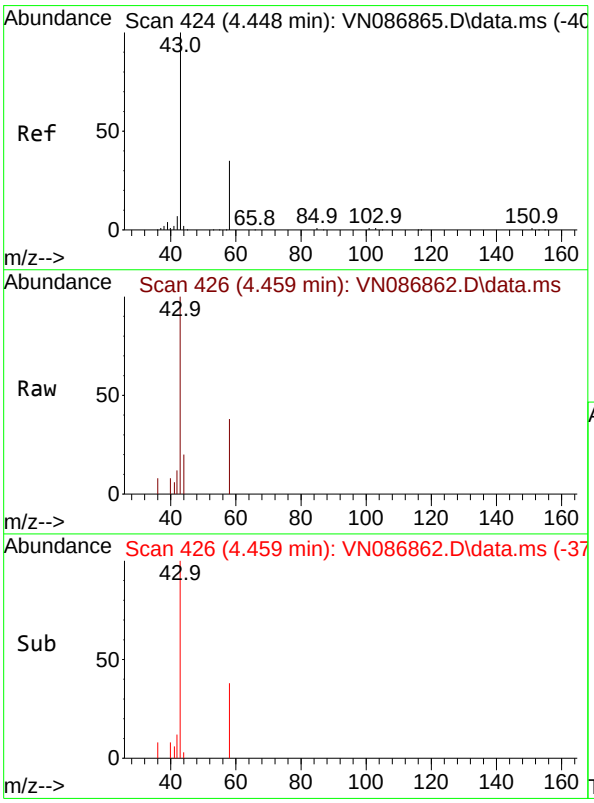
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

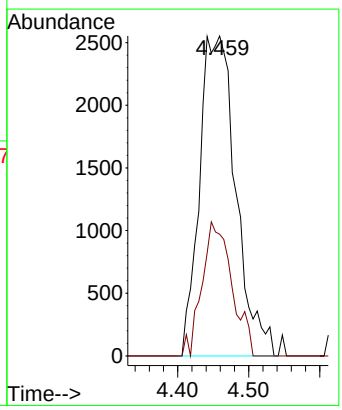


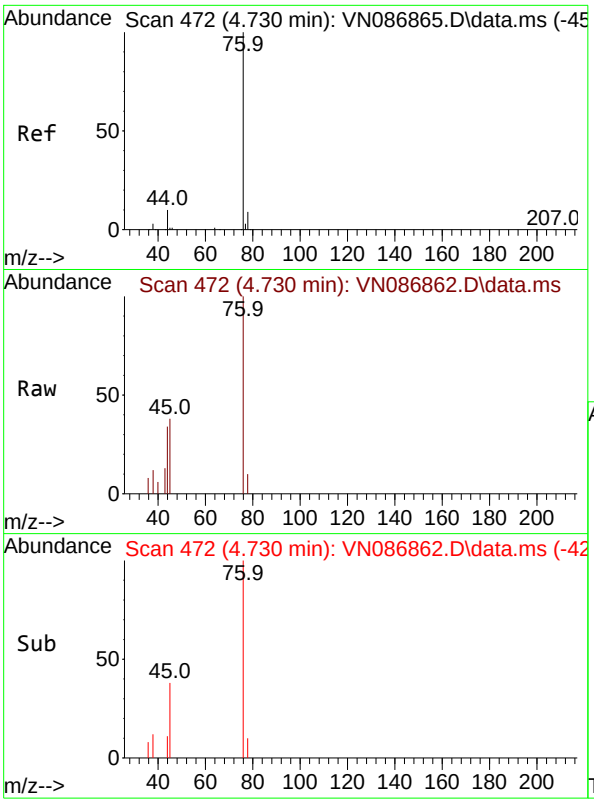




#16
Acetone
Concen: 6.006 ug/l
RT: 4.459 min Scan# 426
Delta R.T. 0.011 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 43 Resp: 9069

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 38.0 | 28.0 | 42.0 |

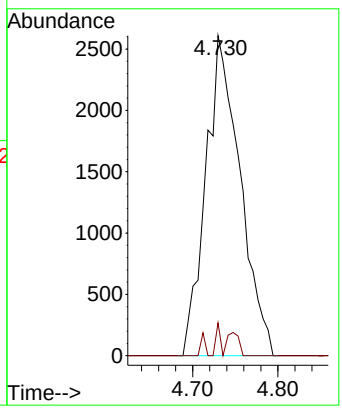





#17
Carbon Disulfide
Concen: 1.116 ug/l
RT: 4.730 min Scan# 4
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 76 Resp: 730

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 10.3 | 7.3 | 10.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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Reviewed By :John Carlone 06/09/2025
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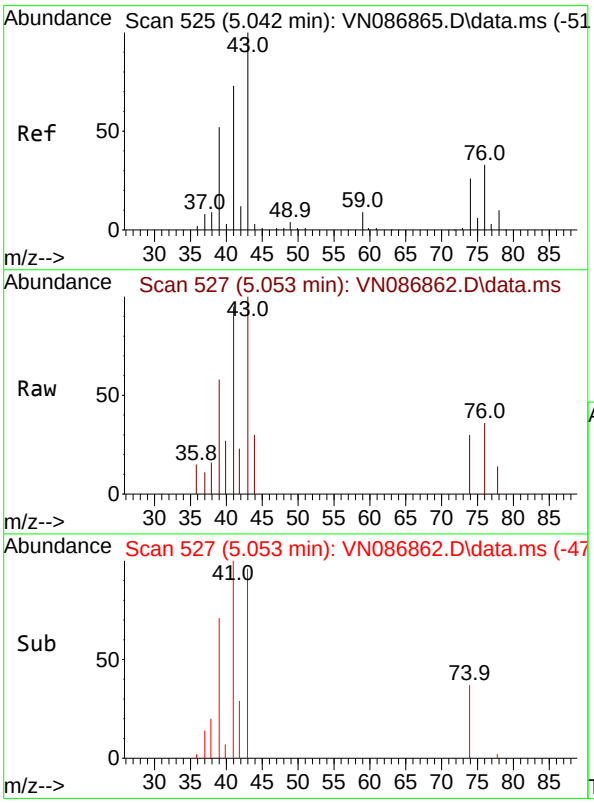
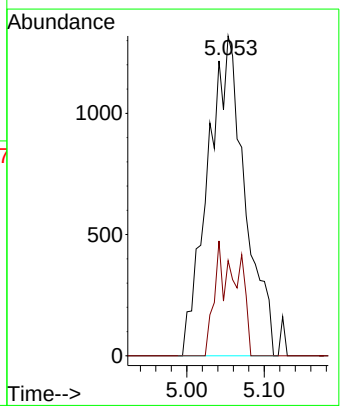
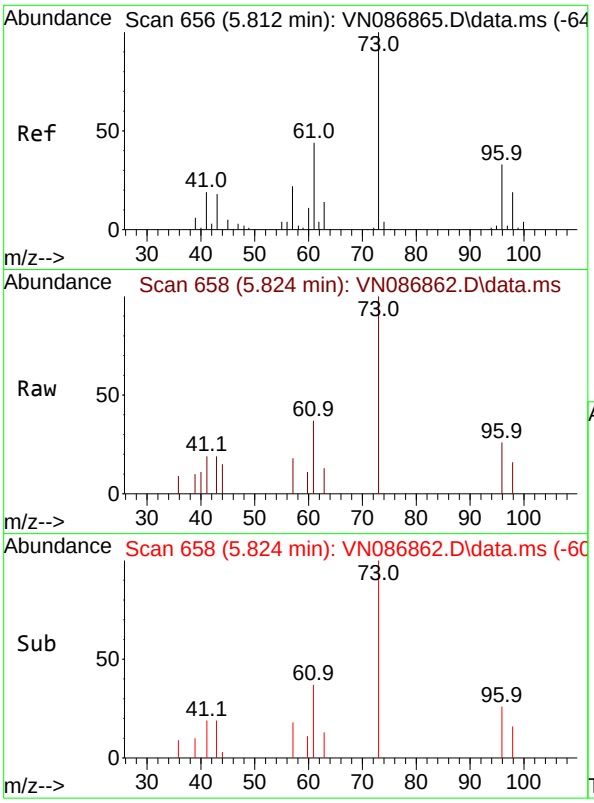



#18
Methyl Acetate
Concen: 1.000 ug/l
RT: 5.053 min Scan# 527
Delta R.T. 0.011 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 43 Resp: 4402

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 8.7 | 20.7 | 31.1# |

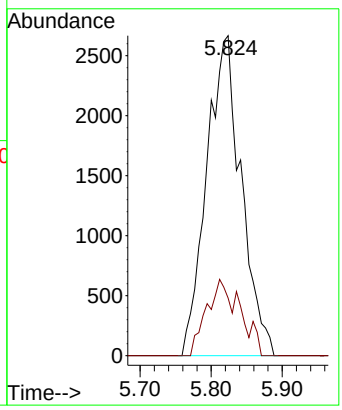





#19
Methyl tert-butyl Ether
Concen: 1.052 ug/l
RT: 5.824 min Scan# 6
Delta R.T. 0.011 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 73 Resp: 901

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 18.0 | 17.4 | 26.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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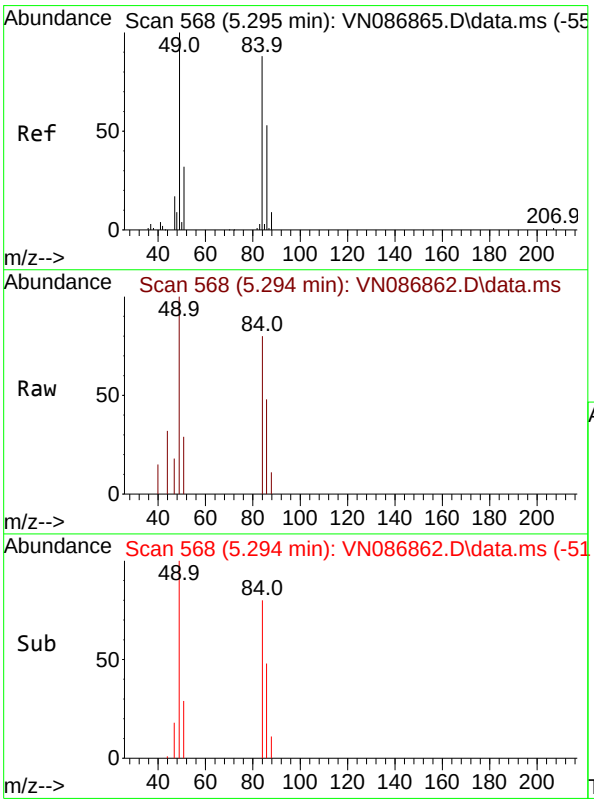
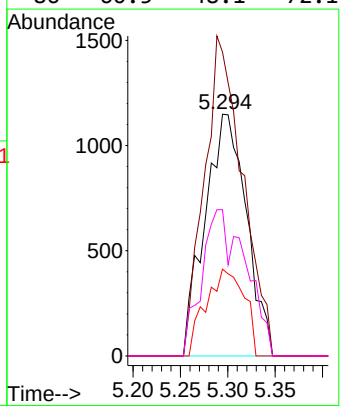
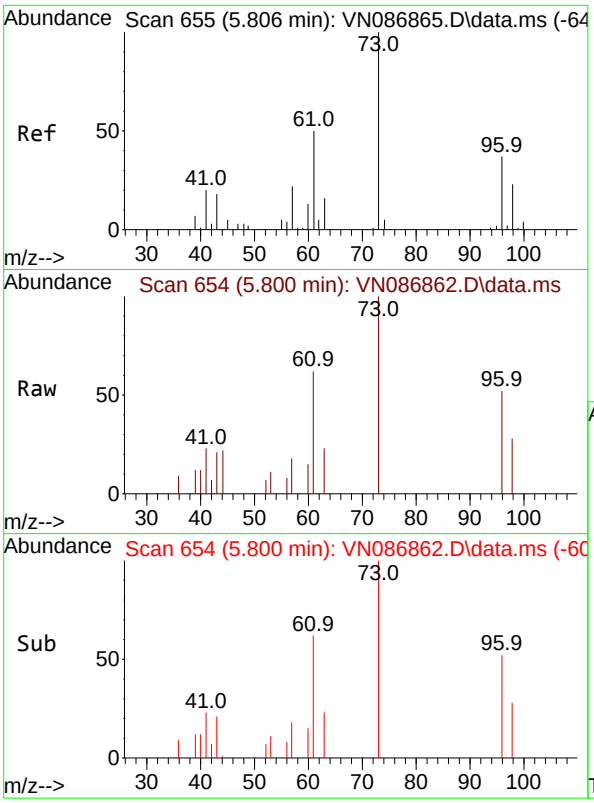



#20
Methylene Chloride
Concen: 1.237 ug/l
RT: 5.294 min Scan# 568
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 84 Resp: 3496

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 125.7 | 90.5 | 135.7 |
| 51 | 35.9 | 28.5 | 42.7 |
| 86 | 60.5 | 48.1 | 72.1 |

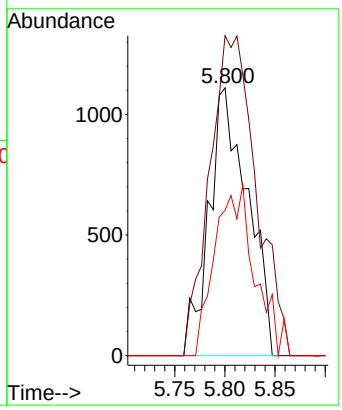





#21
trans-1,2-Dichloroethene
Concen: 1.131 ug/l
RT: 5.800 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 96 Resp: 297

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 119.4 | 109.2 | 163.8 |
| 98 | 54.3 | 49.8 | 74.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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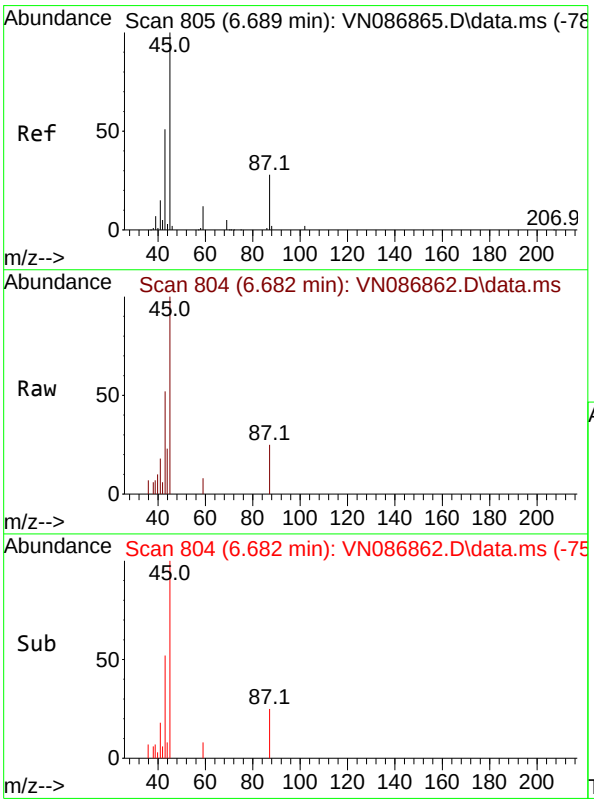
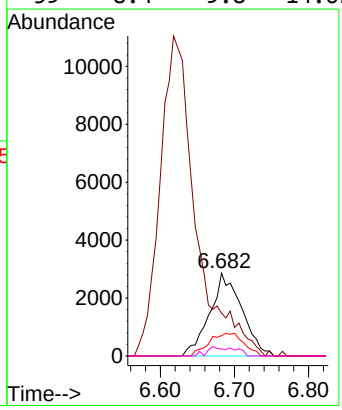
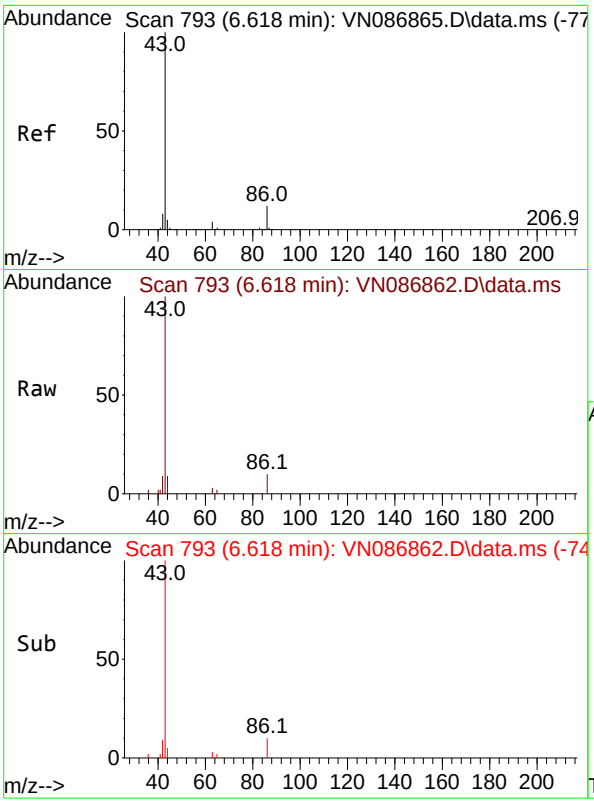



#22
Diisopropyl ether
Concen: 1.037 ug/l
RT: 6.682 min Scan# 804
Delta R.T. -0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 45 Resp: 8584

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 51.5 | 41.9 | 62.9 |
| 87 | 24.5 | 22.4 | 33.6 |
| 59 | 8.4 | 9.8 | 14.6# |






#23
Vinyl Acetate
Concen: 5.303 ug/l
RT: 6.618 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 43 Resp: 3707

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 10.0 | 9.5 | 14.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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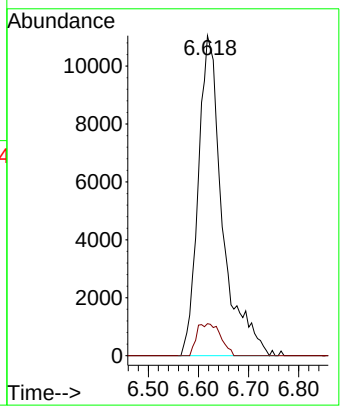
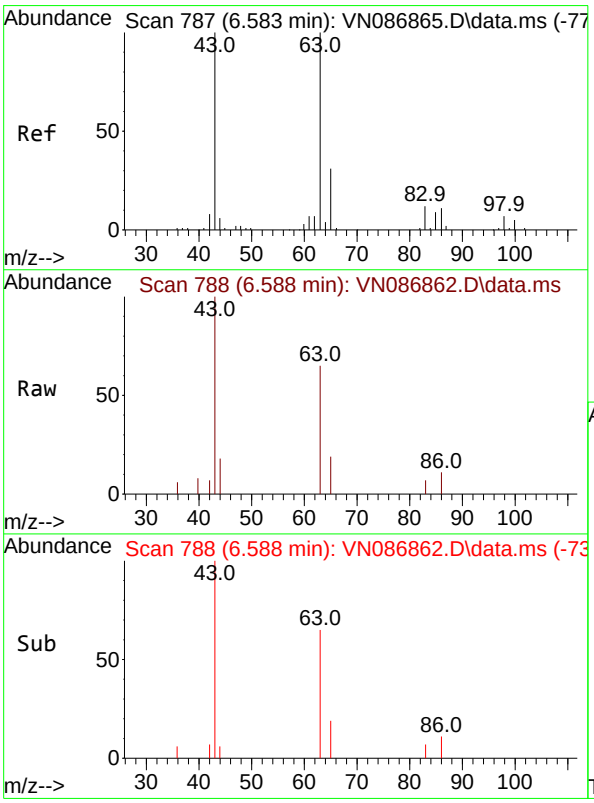
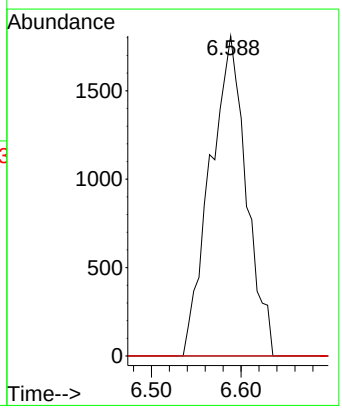


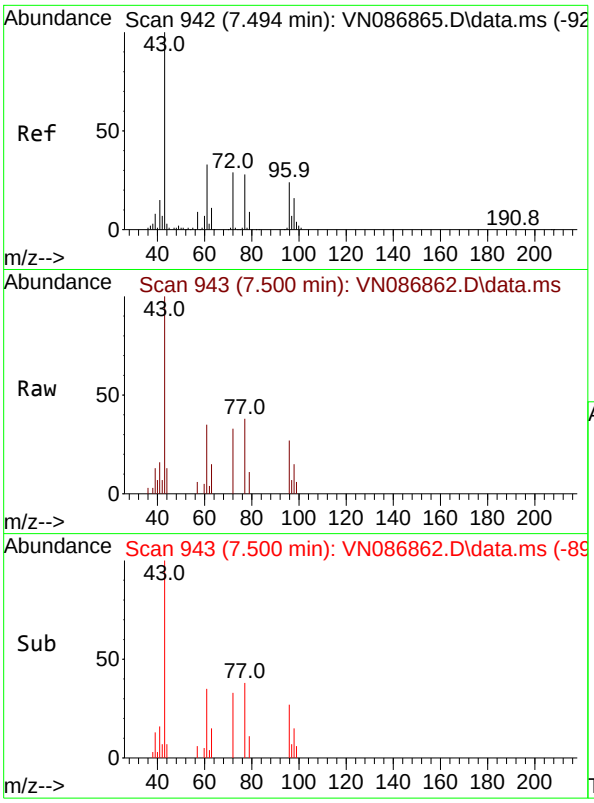




#24
1,1-Dichloroethane
Concen: 1.065 ug/l
RT: 6.588 min Scan# 788
Delta R.T. 0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 63 Resp: 5071

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 0.0 | 3.6 | 10.8# |
| 100 | 0.0 | 2.6 | 7.8# |






#25
2-Butanone
Concen: 5.231 ug/l
RT: 7.500 min Scan# 94
Delta R.T. 0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 43 Resp: 1284

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 32.7 | 23.0 | 34.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

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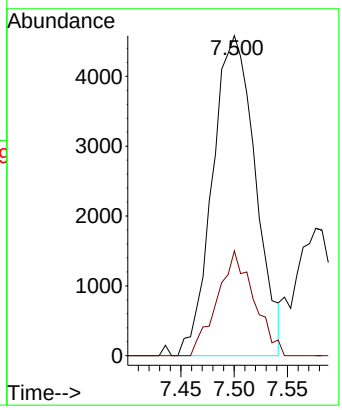
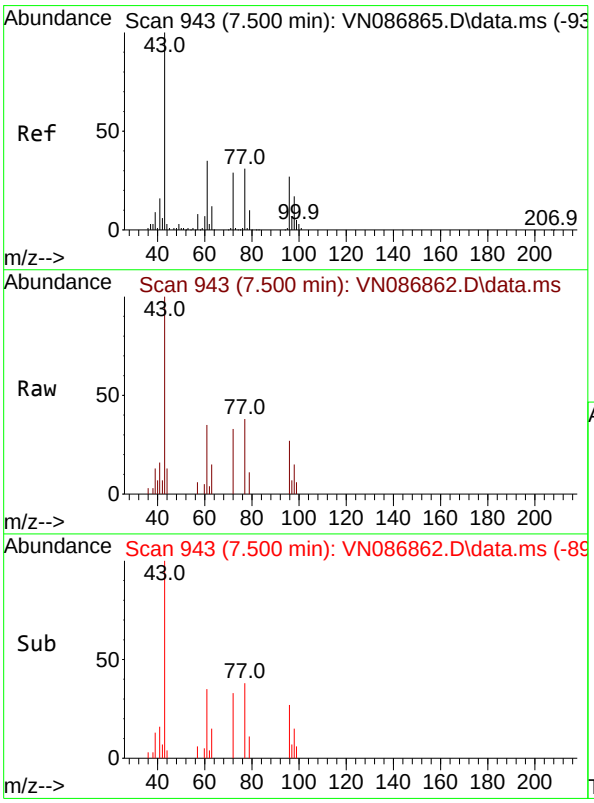
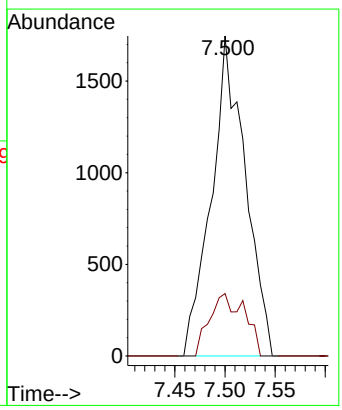


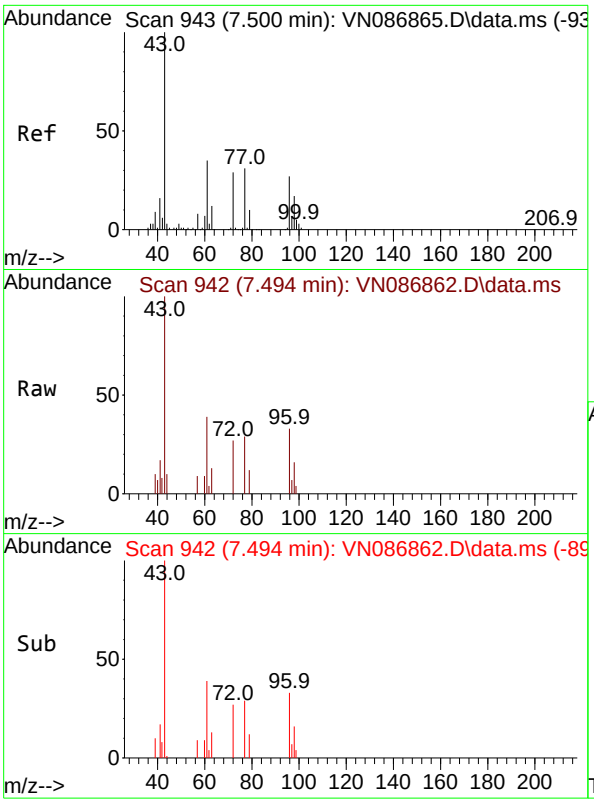




#26
2,2-Dichloropropane
Concen: 1.110 ug/l
RT: 7.500 min Scan# 943
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 77 Resp: 4112

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 20.1 | 11.6 | 34.7 |






#27
cis-1,2-Dichloroethene
Concen: 1.062 ug/l
RT: 7.494 min Scan# 94
Delta R.T. -0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

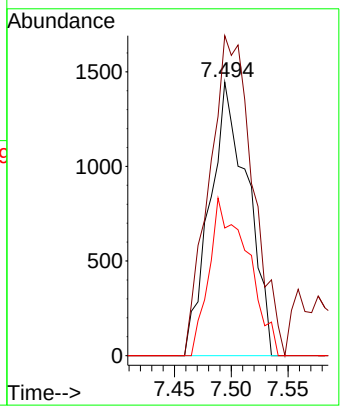
Tgt Ion: 96 Resp: 334

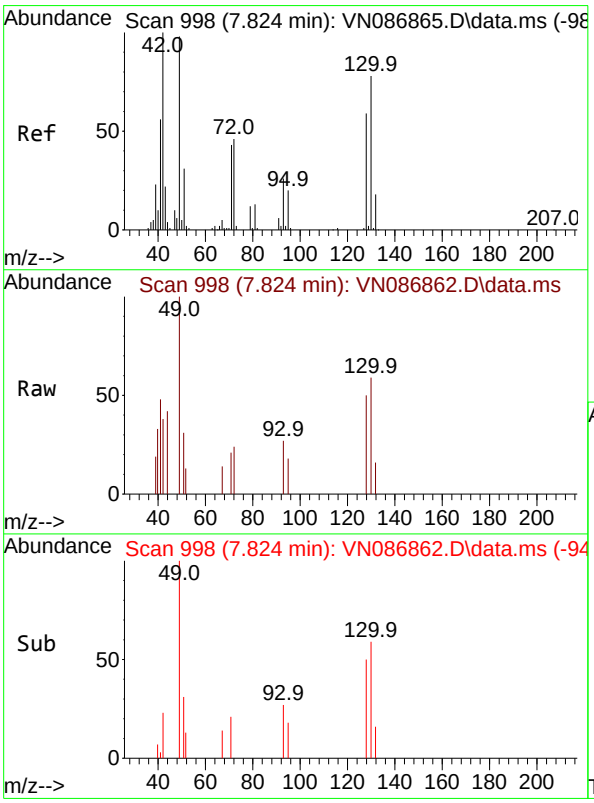
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 134.6 | 0.0 | 278.0 |
| 98 | 58.7 | 0.0 | 128.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

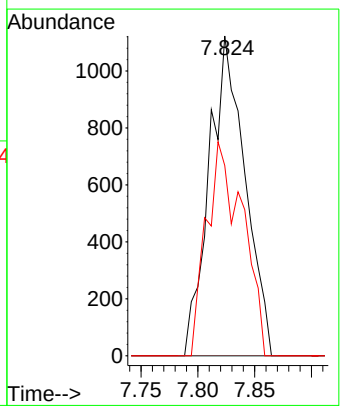


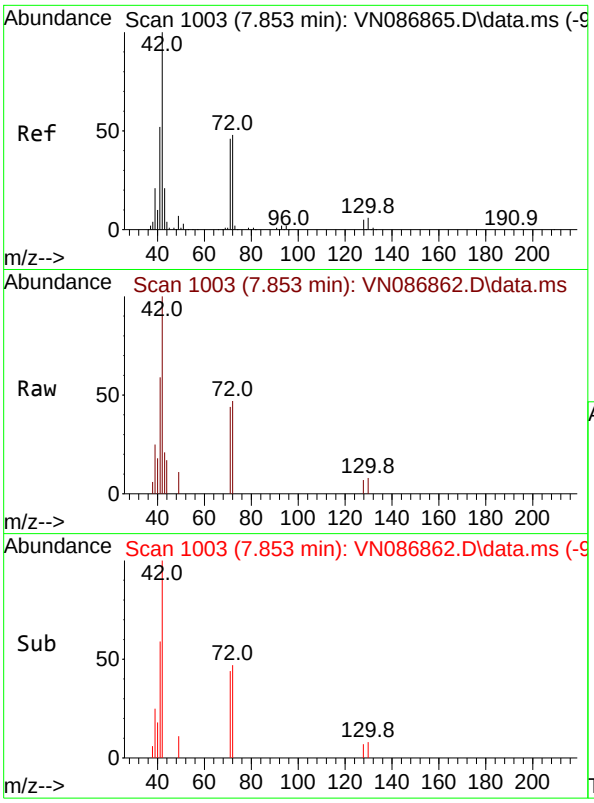




#28
Bromochloromethane
Concen: 1.052 ug/l
RT: 7.824 min Scan# 998
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 49 Resp: 2464

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 0.0 | 0.0 | 3.8 |
| 130 | 67.5 | 62.2 | 93.2 |

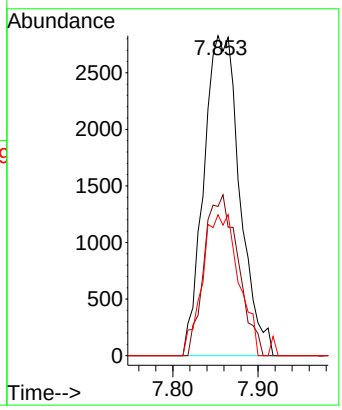





#29
Tetrahydrofuran
Concen: 5.191 ug/l
RT: 7.853 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 42 Resp: 830

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 47.2 | 37.8 | 56.6 |
| 71 | 44.4 | 35.6 | 53.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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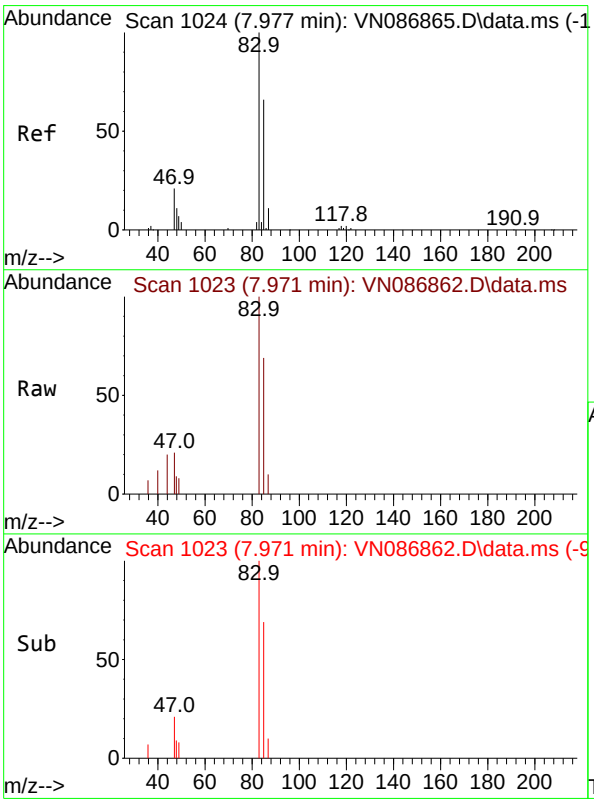
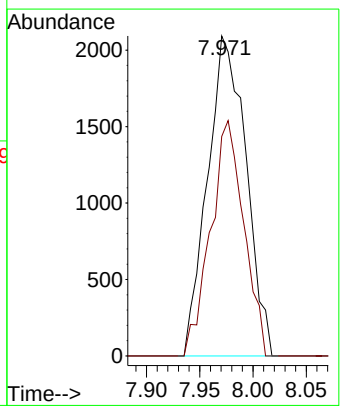
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

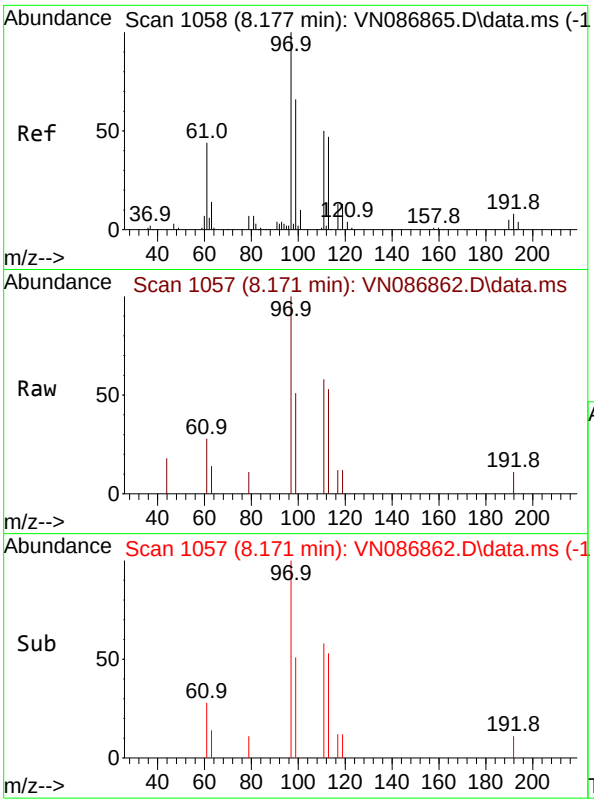



#30
Chloroform
Concen: 1.105 ug/l
RT: 7.971 min Scan# 1023
Delta R.T. -0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 83 Resp: 5255

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 68.6 | 52.9 | 79.3 |

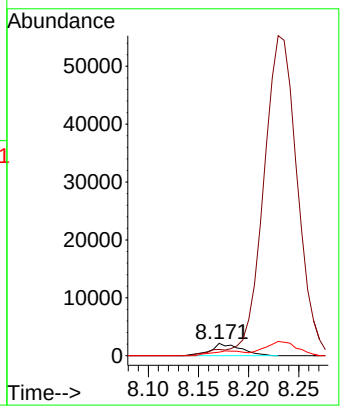





#32
1,1,1-Trichloroethane
Concen: 1.082 ug/l
RT: 8.171 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 97 Resp: 437

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 0.0 | 52.0 | 78.0# |
| 61 | 42.5 | 35.9 | 53.9 |




**Instrument :**
MSVOA_N
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VSTDICC001

**Manual Integrations**
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Reviewed By :John Carlone 06/09/2025
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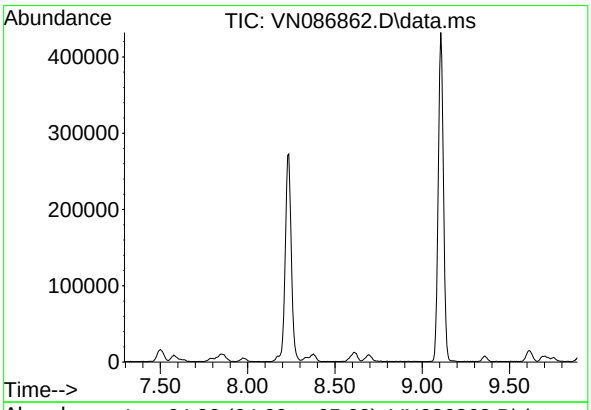
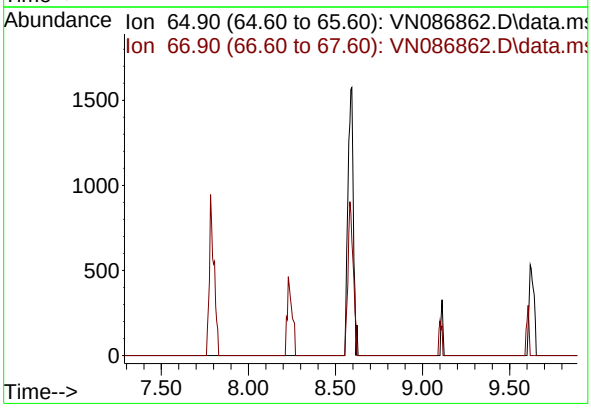


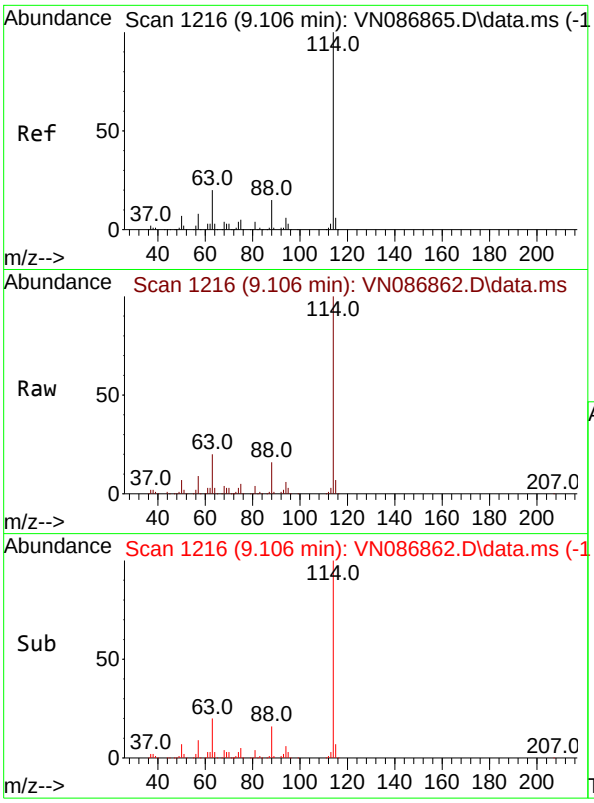

#33
1,2-Dichloroethane-d4
Concen: 0.000 ug/l
Expected RT: 8.59 min

Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 65

| Sig | Exp Ratio |
|---|---|
| 65 | 100 |
| 67 | 52.8 |






#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.106 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion:114 Resp: 39345

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 20.2 | 0.0 | 39.6 |
| 88 | 16.0 | 0.0 | 30.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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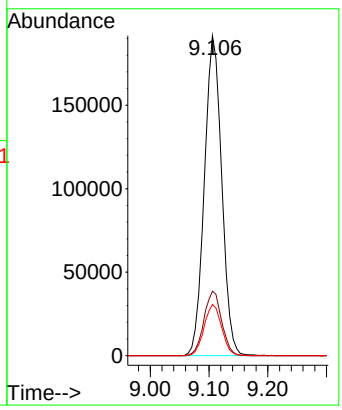
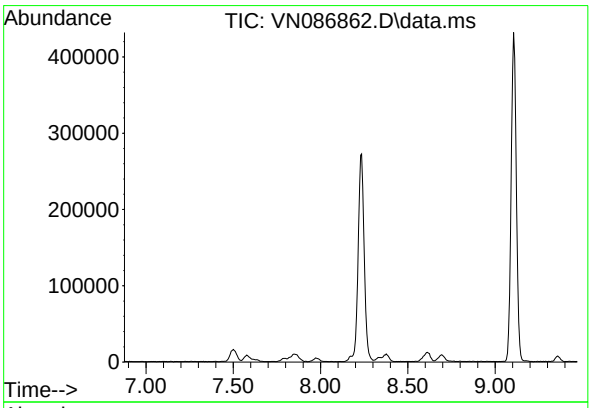


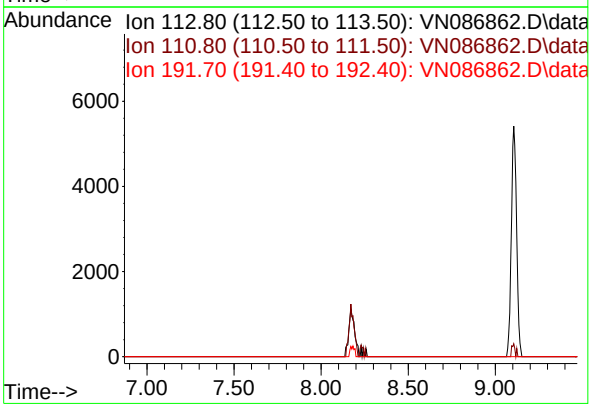



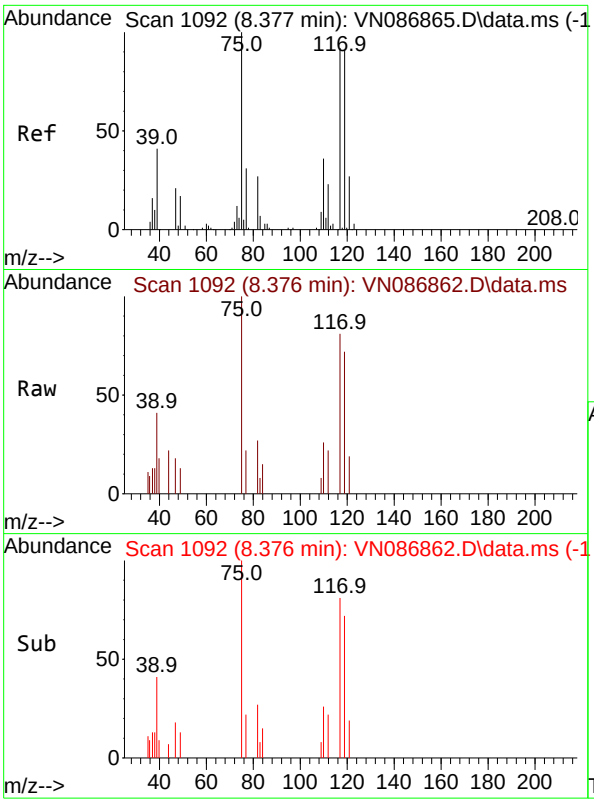

#35
Dibromofluoromethane
Concen: 0.000 ug/l
Expected RT: 8.17 min

Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 113

| Sig | Exp Ratio |
|---|---|
| 113 | 100 |
| 111 | 105.2 |
| 192 | 17.8 |

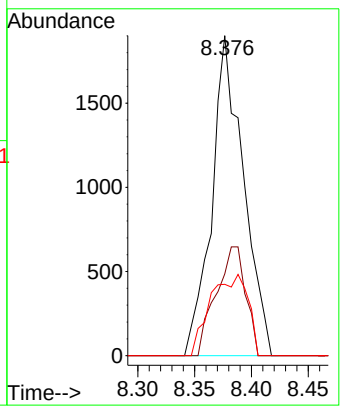





#36
1,1-Dichloropropene
Concen: 1.059 ug/l
RT: 8.376 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 75 Resp: 367

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 31.8 | 17.6 | 52.9 |
| 77 | 30.2 | 25.3 | 37.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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Reviewed By :John Carlone 06/09/2025
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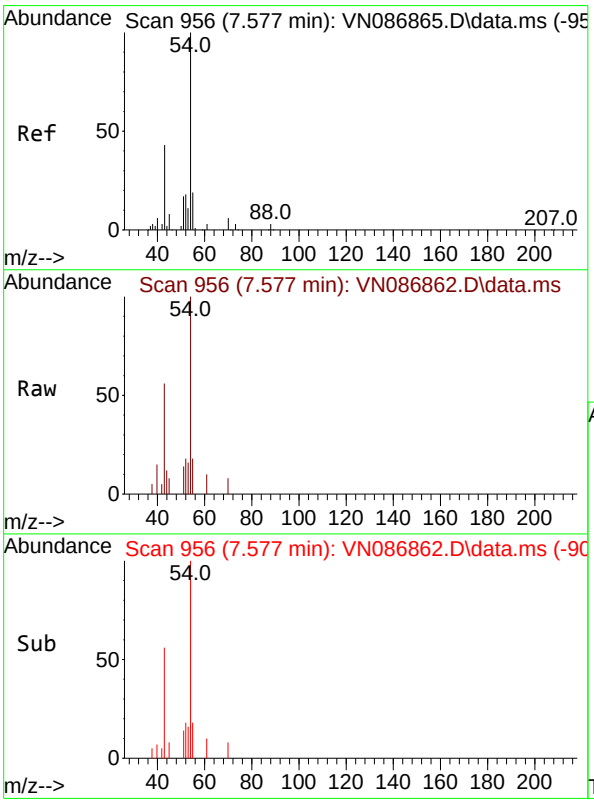
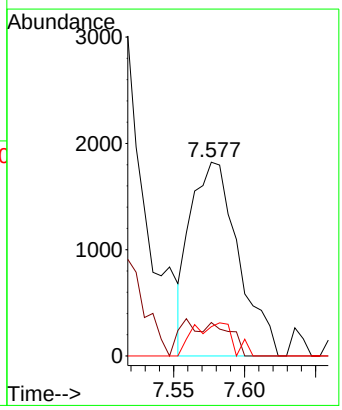
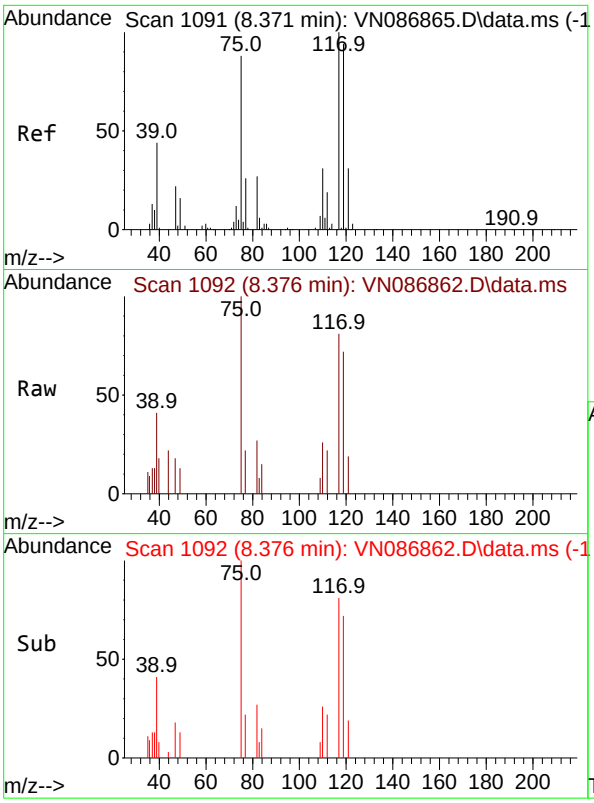



#37
Ethyl Acetate
Concen: 0.968 ug/l
RT: 7.577 min Scan# 956
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 43 Resp: 4282

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 0.0 | 12.1 | 18.1# |
| 70 | 14.1 | 9.8 | 14.6 |

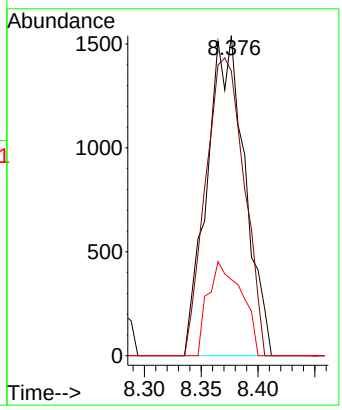





#38
Carbon Tetrachloride
Concen: 1.045 ug/l
RT: 8.376 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion:117 Resp: 356

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 89.0 | 75.0 | 112.6 |
| 121 | 23.8 | 24.9 | 37.3# |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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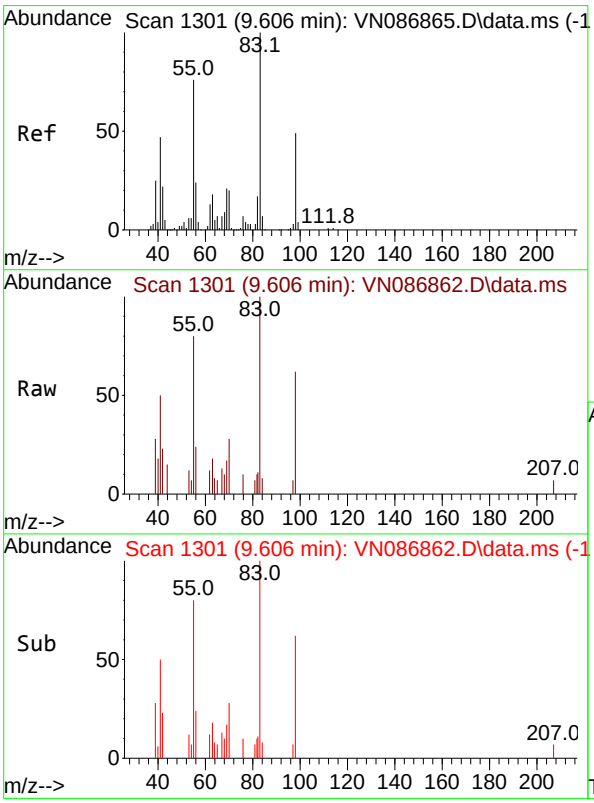
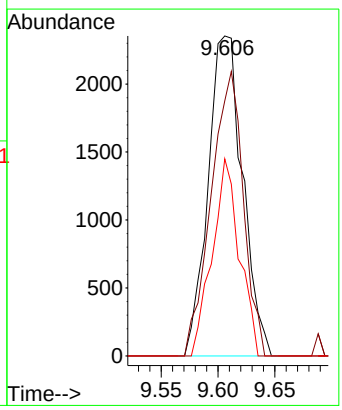
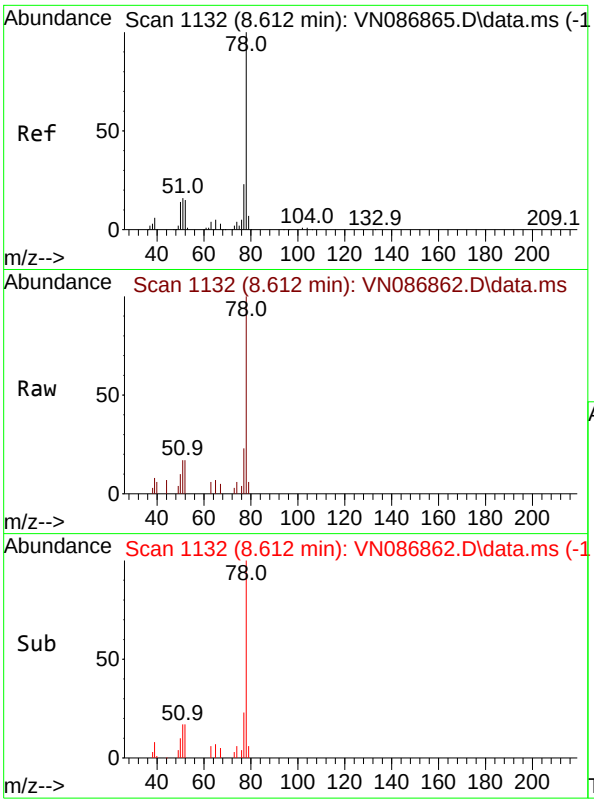



#39
Methylcyclohexane
Concen: 1.046 ug/l
RT: 9.606 min Scan# 1301
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 83 Resp: 4981

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 79.7 | 61.0 | 91.6 |
| 98 | 61.6 | 38.9 | 58.3# |

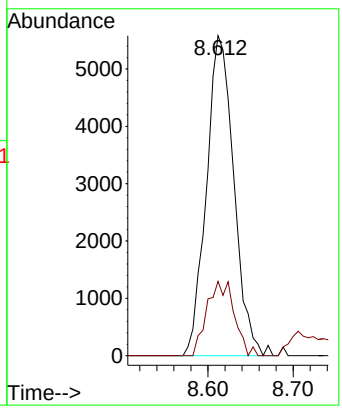





#40
Benzene
Concen: 1.100 ug/l
RT: 8.612 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 78 Resp: 1249

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.2 | 18.7 | 28.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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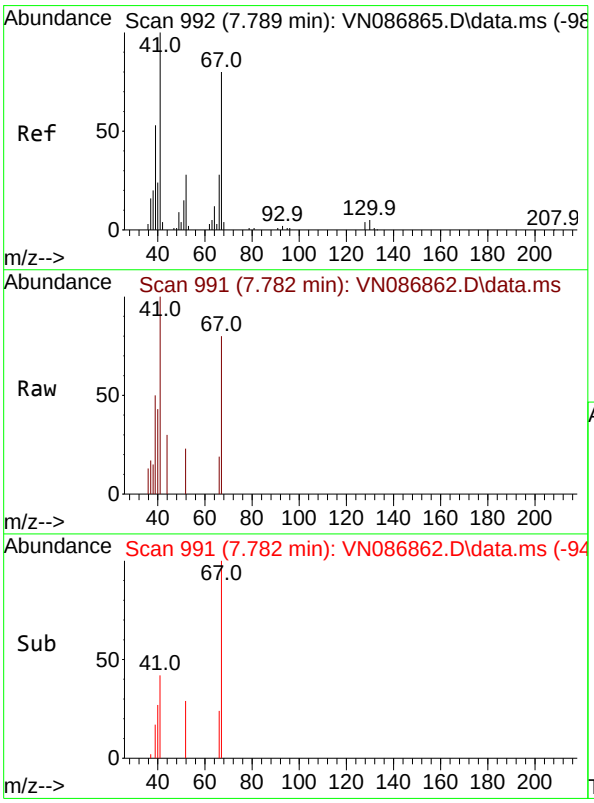
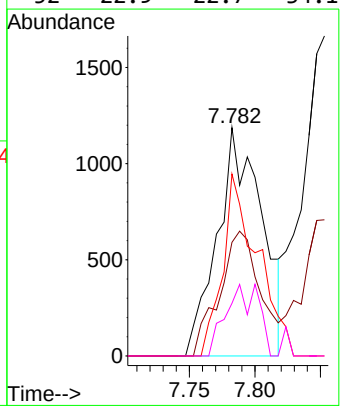
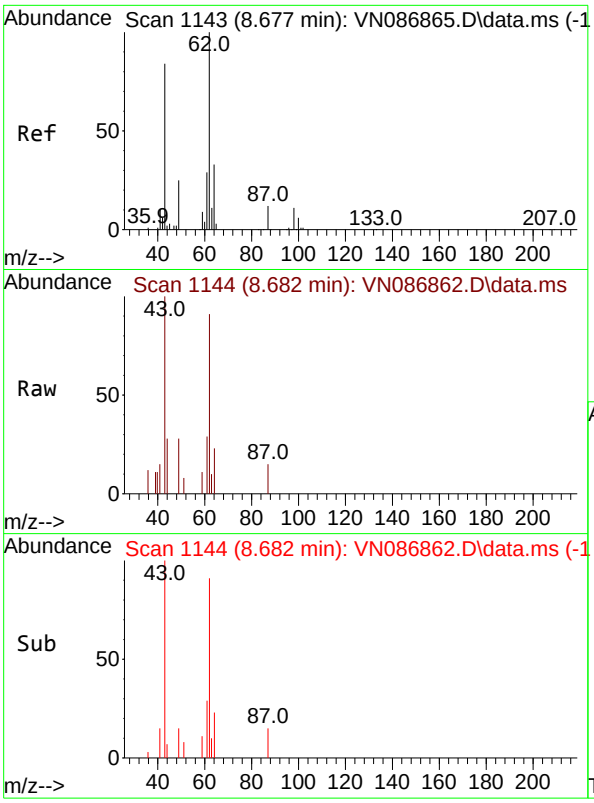



#41
Methacrylonitrile
Concen: 1.127 ug/l
RT: 7.782 min Scan# 991
Delta R.T. -0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 41 Resp: 2799

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 50.3 | 41.2 | 61.8 |
| 67 | 62.4 | 61.4 | 92.2 |
| 52 | 22.9 | 22.7 | 34.1 |






#42
1,2-Dichloroethane
Concen: 1.081 ug/l
RT: 8.682 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 62 Resp: 372

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 3.9 | 0.0 | 21.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

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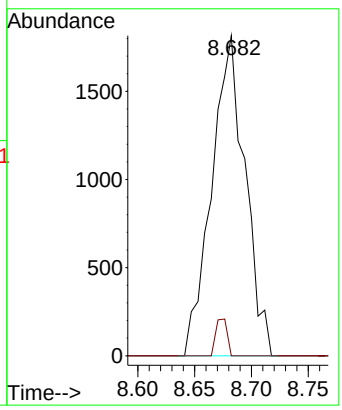
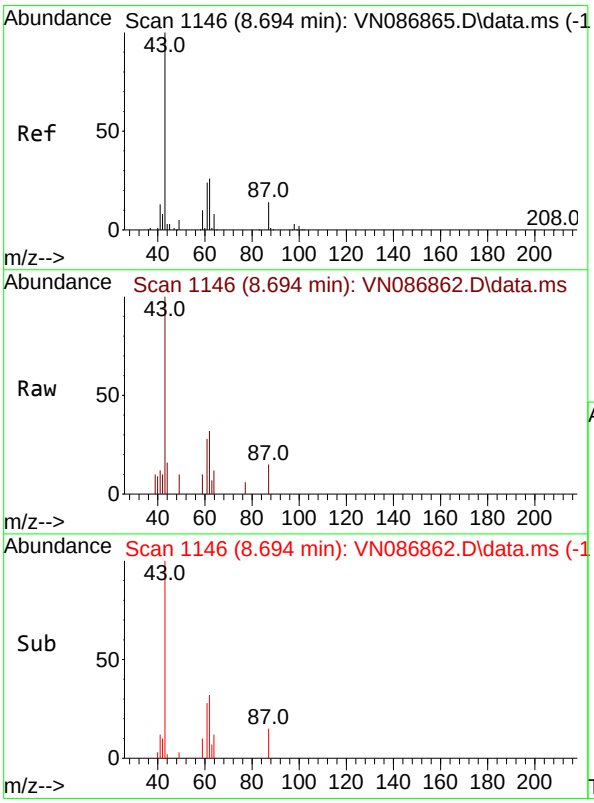
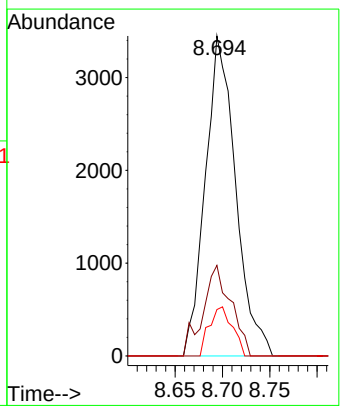


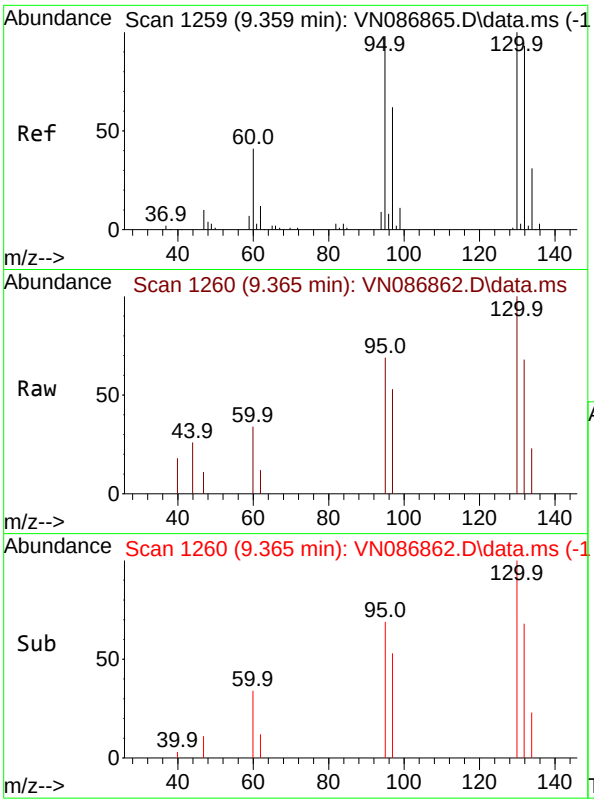




#43
Isopropyl Acetate
Concen: 1.081 ug/l
RT: 8.694 min Scan# 1146
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 43 Resp: 7673

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 26.2 | 22.1 | 33.1 |
| 87 | 11.7 | 11.8 | 17.6# |

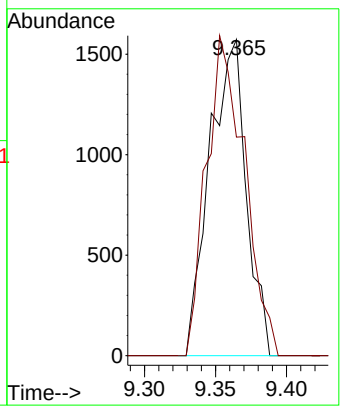





#44
Trichloroethene
Concen: 1.047 ug/l
RT: 9.365 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion:130 Resp: 282

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 69.1 | 0.0 | 196.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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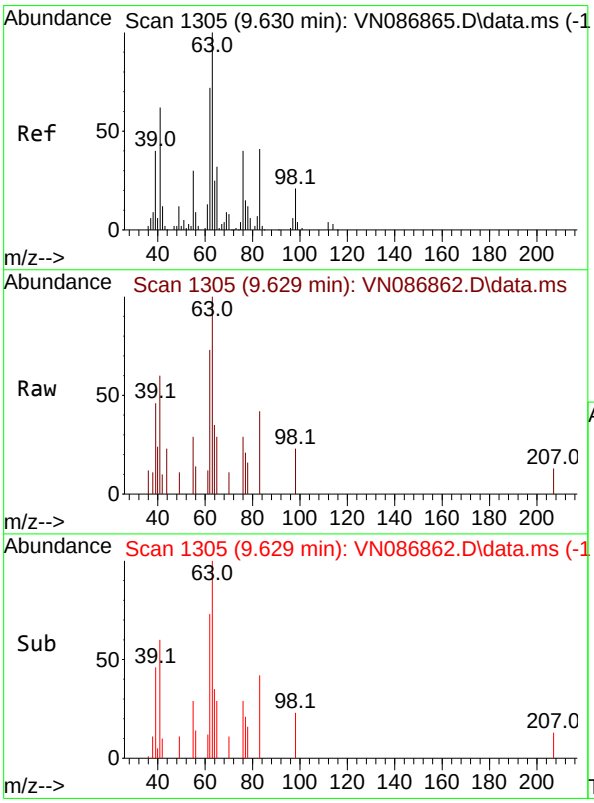
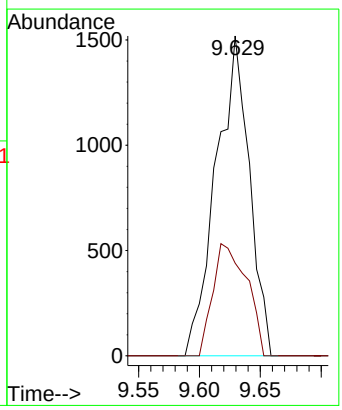
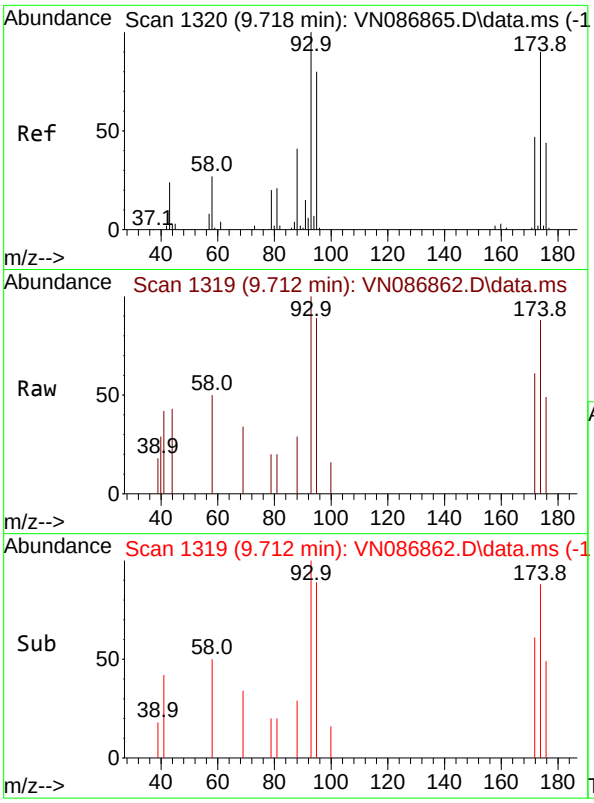



#45
1,2-Dichloropropane
Concen: 1.043 ug/l
RT: 9.629 min Scan# 1305
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 63 Resp: 2883

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 29.0 | 25.5 | 38.3 |

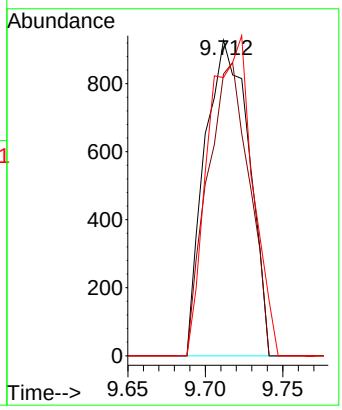





#46
Dibromomethane
Concen: 0.999 ug/l
RT: 9.712 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 93 Resp: 183

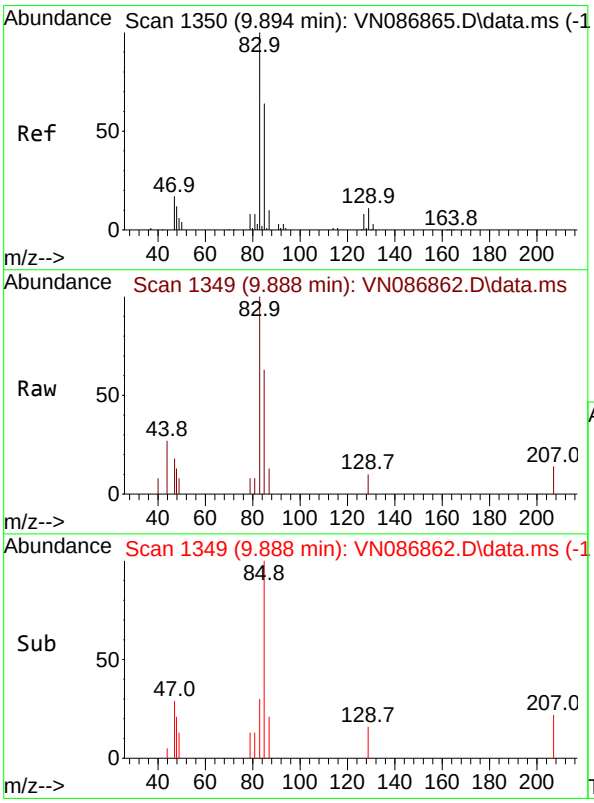
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 87.6 | 67.1 | 100.7 |
| 174 | 100.5 | 74.2 | 111.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

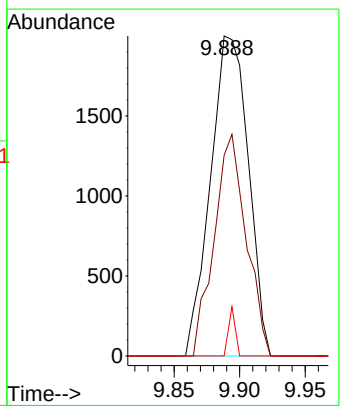
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

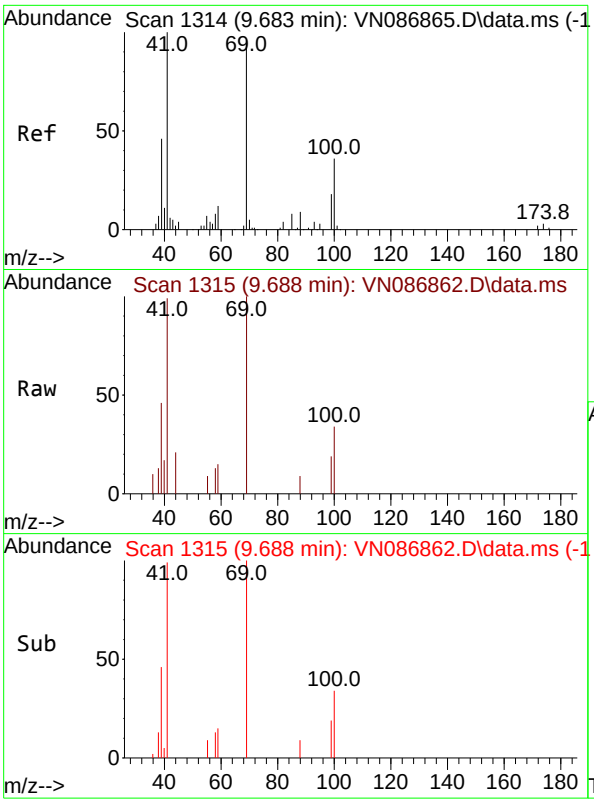



#47
Bromodichloromethane
Concen: 1.063 ug/l
RT: 9.888 min Scan# 1349
Delta R.T. -0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 83 Resp: 4017

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 62.7 | 50.9 | 76.3 |
| 127 | 0.0 | 6.6 | 10.0# |






#48
Methyl methacrylate
Concen: 1.069 ug/l
RT: 9.688 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

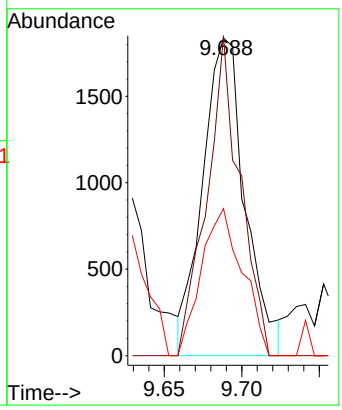
Tgt Ion: 41 Resp: 349

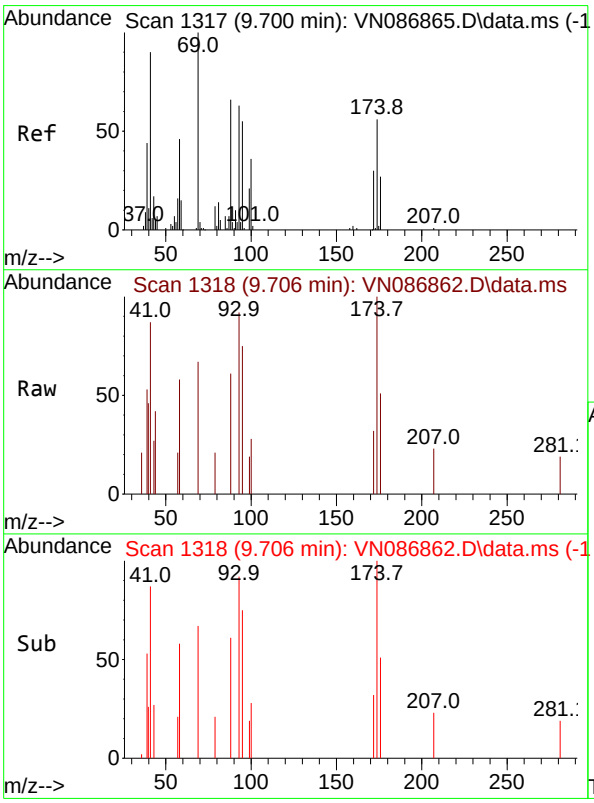
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 79.4 | 74.6 | 112.0 |
| 39 | 44.9 | 40.2 | 60.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

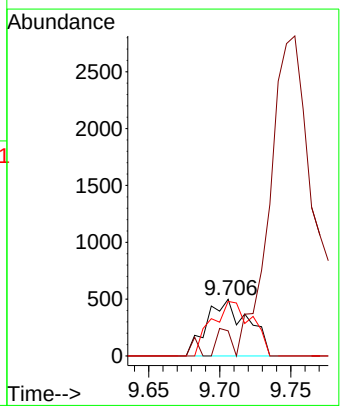


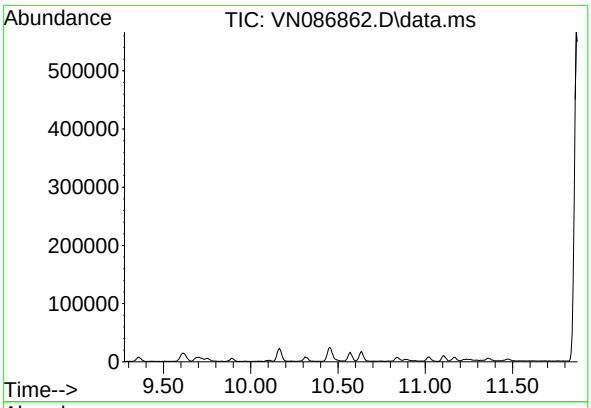




#49
1,4-Dioxane
Concen: 16.891 ug/l
RT: 9.706 min Scan# 1318
Delta R.T. 0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 88 Resp: 1004

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 0.0 | 0.0 | 0.0 |
| 58 | 94.0 | 57.7 | 86.5# |






#50
Toluene-d8
Concen: 0.000 ug/l
Expected RT: 10.57 min

Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 98

| Sig | Exp Ratio |
|---|---|
| 98 | 100 |
| 100 | 66.7 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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Reviewed By :John Carlone 06/09/2025
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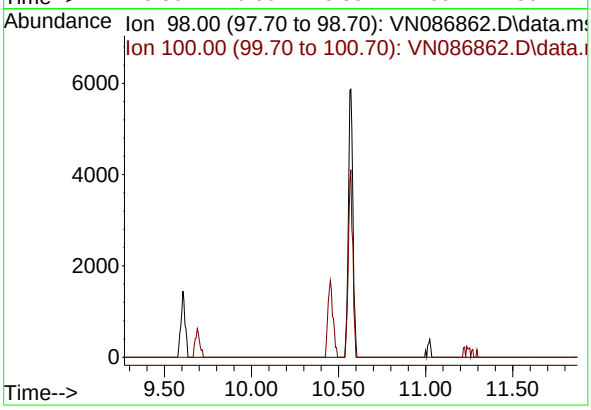
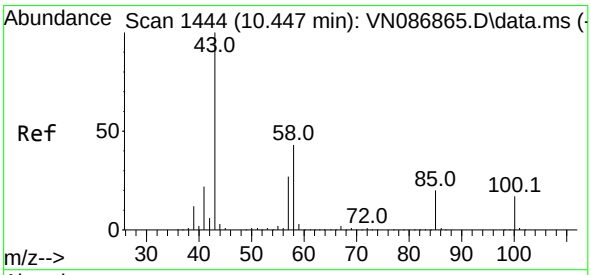
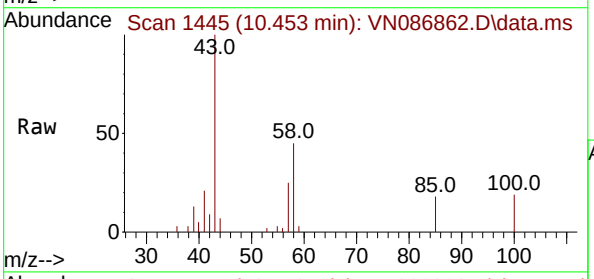
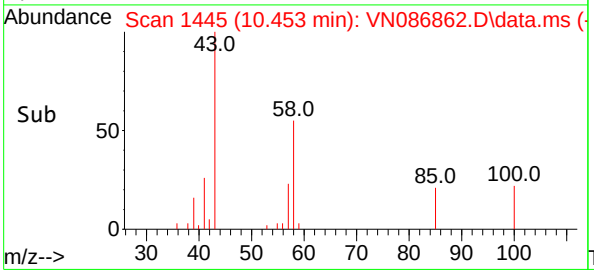


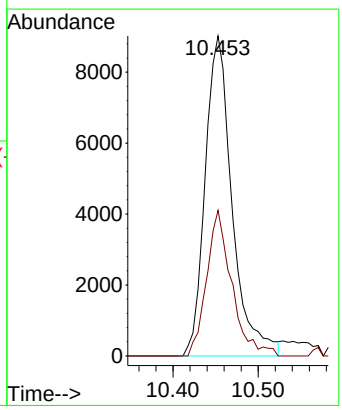



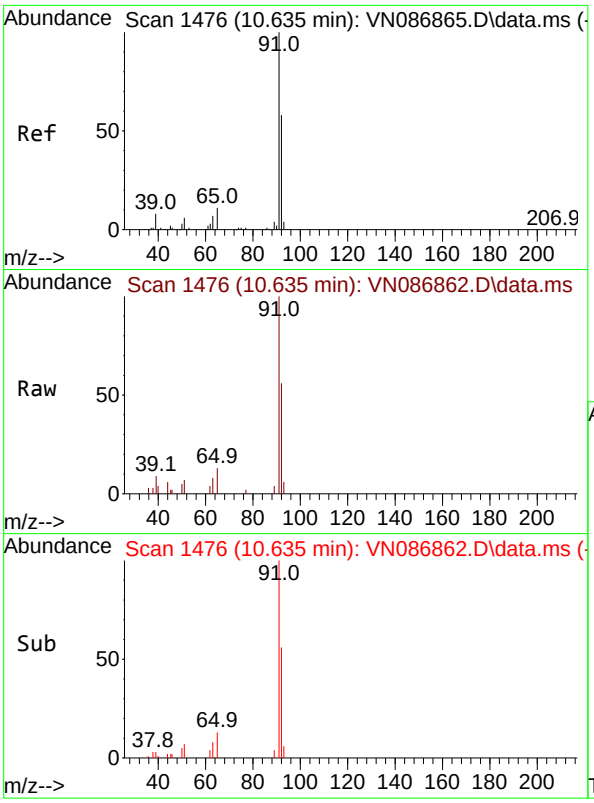




#51
4-Methyl-2-Pentanone
Concen: 4.653 ug/l
RT: 10.453 min Scan# 1445
Delta R.T. 0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 43 Resp: 19886

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 42.3 | 34.2 | 51.4 |

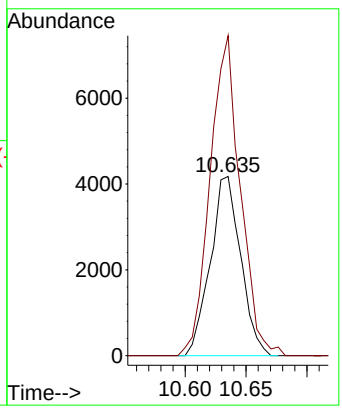





#52
Toluene
Concen: 1.041 ug/l
RT: 10.635 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 92 Resp: 722

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 178.1 | 136.5 | 204.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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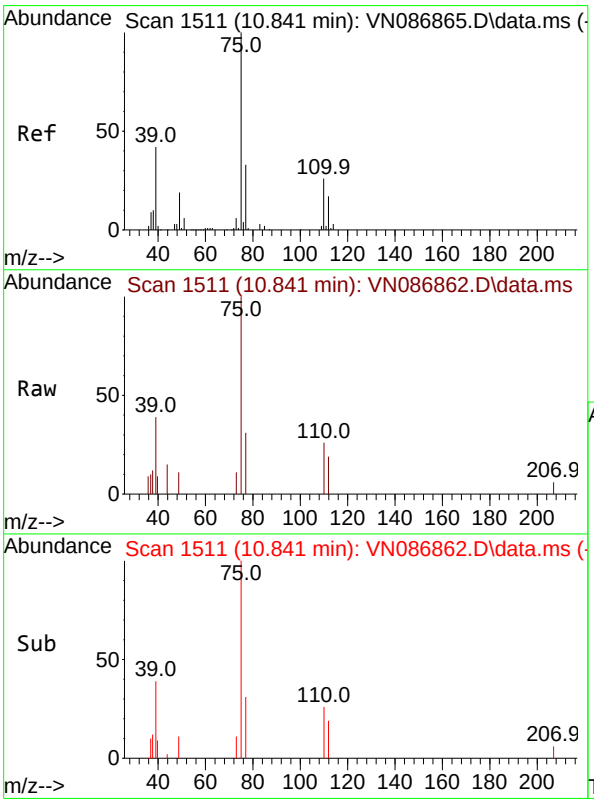
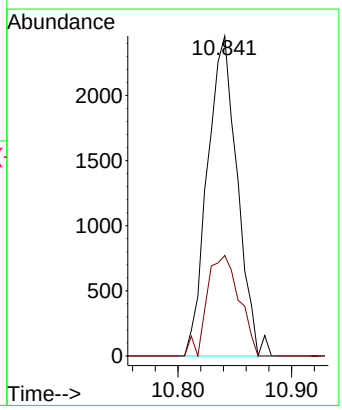
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

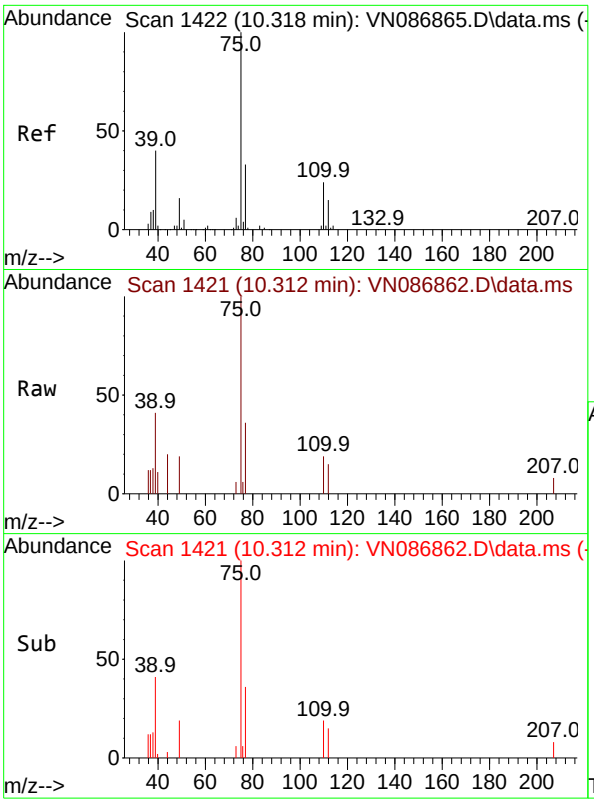



#53
t-1,3-Dichloropropene
Concen: 1.064 ug/l
RT: 10.841 min Scan# 1511
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 75 Resp: 4494

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.4 | 26.4 | 39.6 |

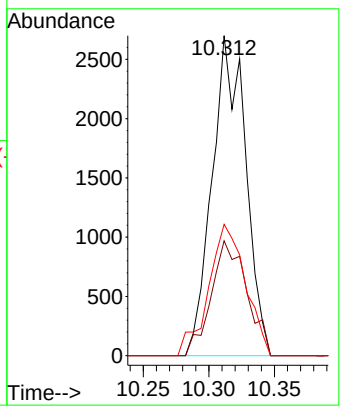





#54
cis-1,3-Dichloropropene
Concen: 1.060 ug/l
RT: 10.312 min Scan# 14
Delta R.T. -0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 75 Resp: 479

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 35.9 | 26.2 | 39.4 |
| 39 | 41.1 | 32.3 | 48.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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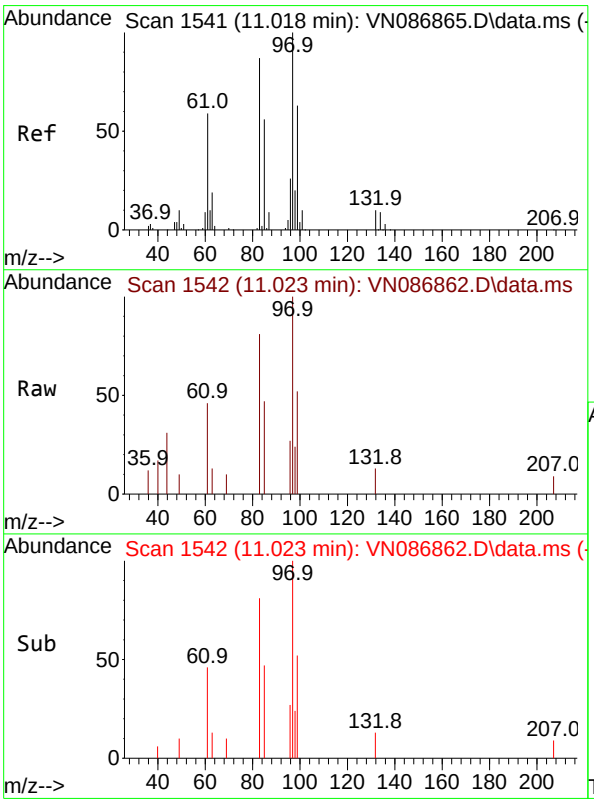
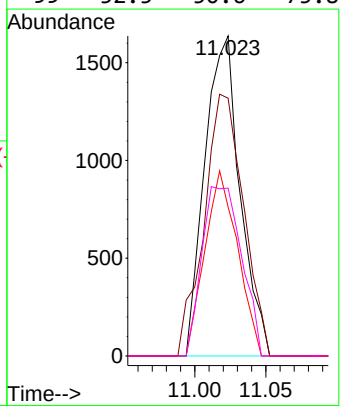
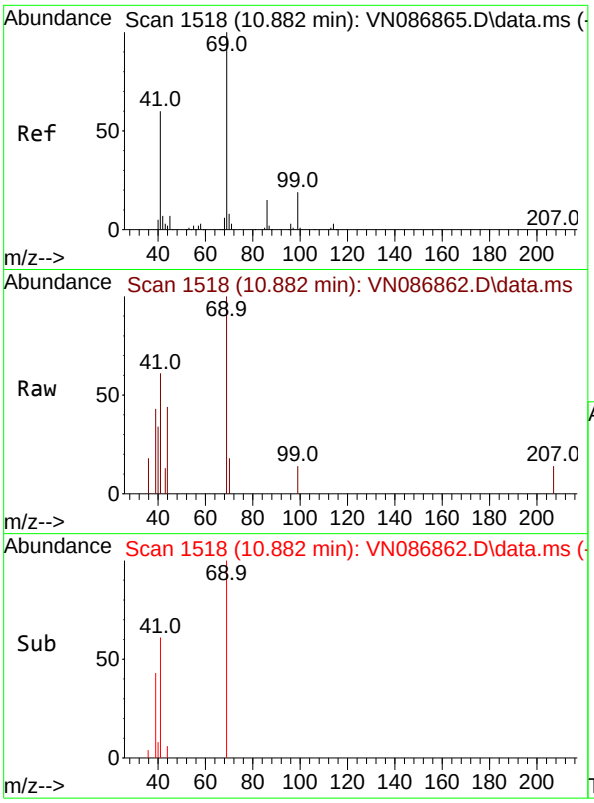



#55
1,1,2-Trichloroethane
Concen: 1.058 ug/l
RT: 11.023 min Scan# 1542
Delta R.T. 0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 97 Resp: 2828

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 80.6 | 69.7 | 104.5 |
| 85 | 46.5 | 45.1 | 67.7 |
| 99 | 52.5 | 50.6 | 75.8 |






#56
Ethyl methacrylate
Concen: 0.800 ug/l
RT: 10.882 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 69 Resp: 340

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 73.5 | 47.2 | 70.8 |
| 39 | 31.6 | 23.0 | 34.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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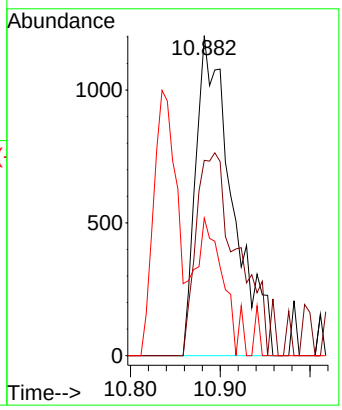
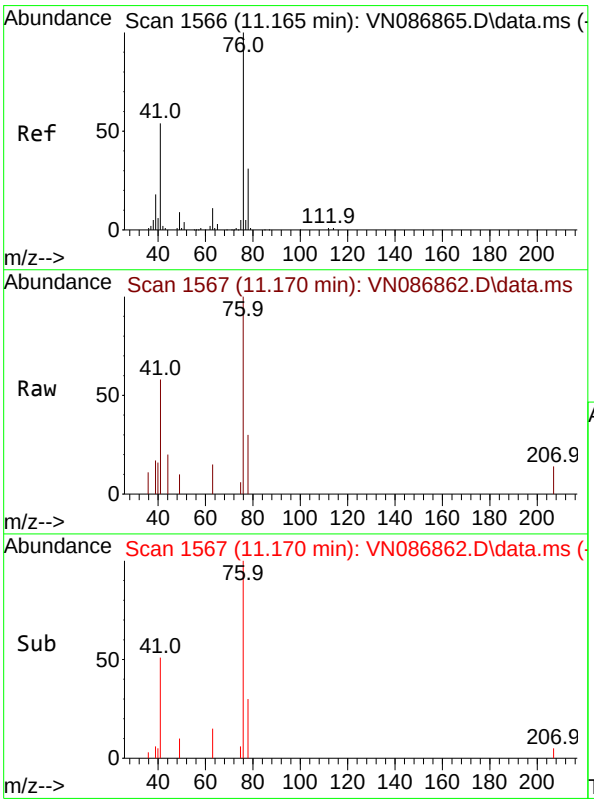
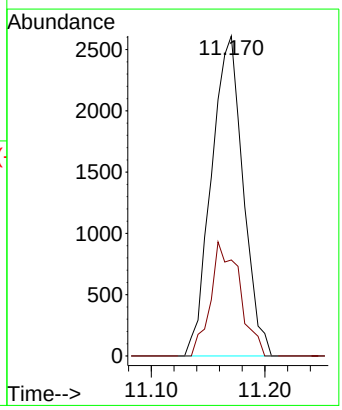


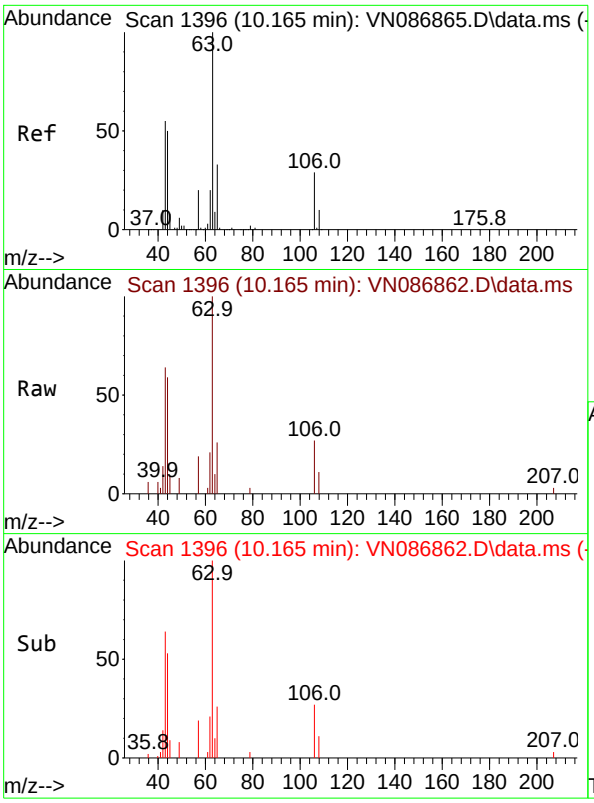




#57
1,3-Dichloropropane
Concen: 1.092 ug/l
RT: 11.170 min Scan# 1567
Delta R.T. 0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 76 Resp: 5062

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.8 | 25.3 | 37.9 |

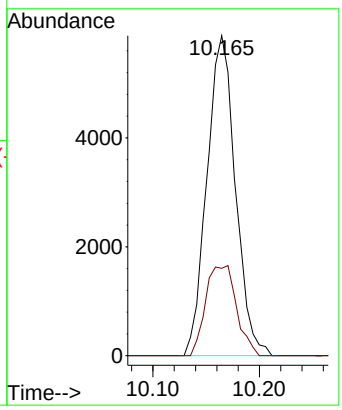





#58
2-Chloroethyl Vinyl ether
Concen: 4.304 ug/l
RT: 10.165 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 63 Resp: 1092

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 30.4 | 23.0 | 34.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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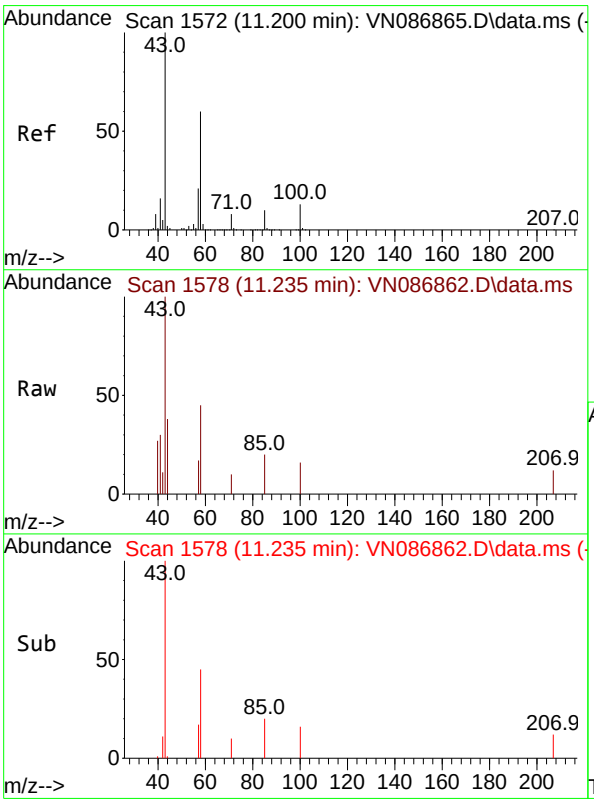
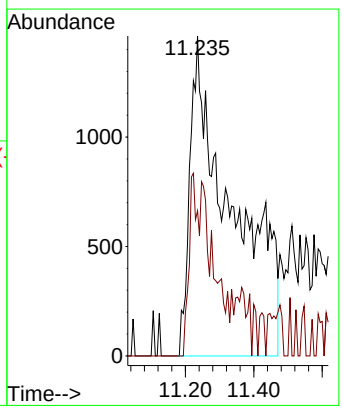
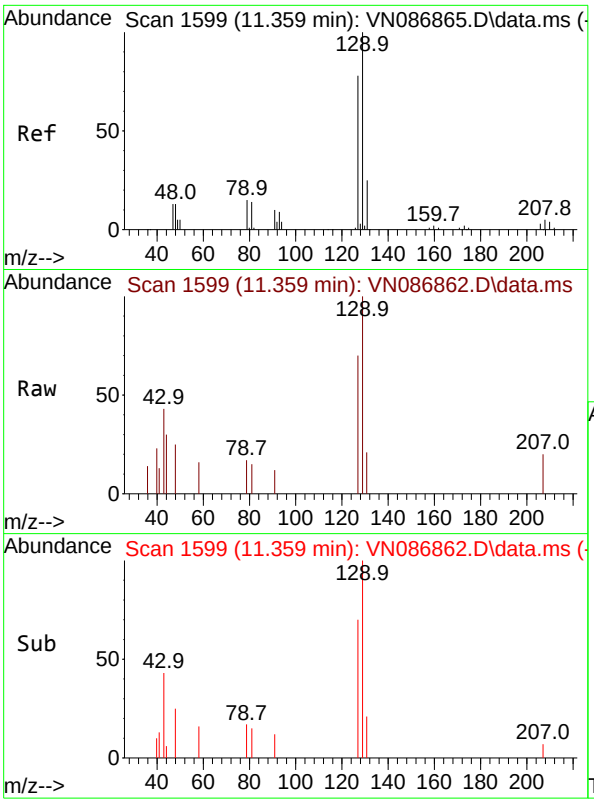



#59
2-Hexanone
Concen: 4.466 ug/l m
RT: 11.235 min Scan# 1578
Delta R.T. 0.035 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 43 Resp: 12295

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 4.7 | 30.4 | 91.3# |

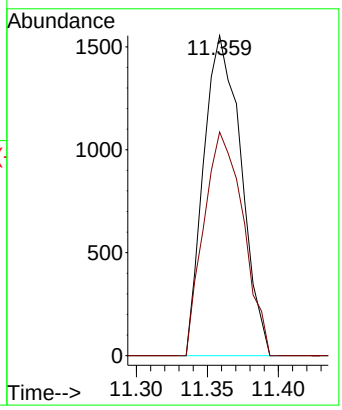





#60
Dibromochloromethane
Concen: 1.021 ug/l
RT: 11.359 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion:129 Resp: 284

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 73.8 | 38.6 | 115.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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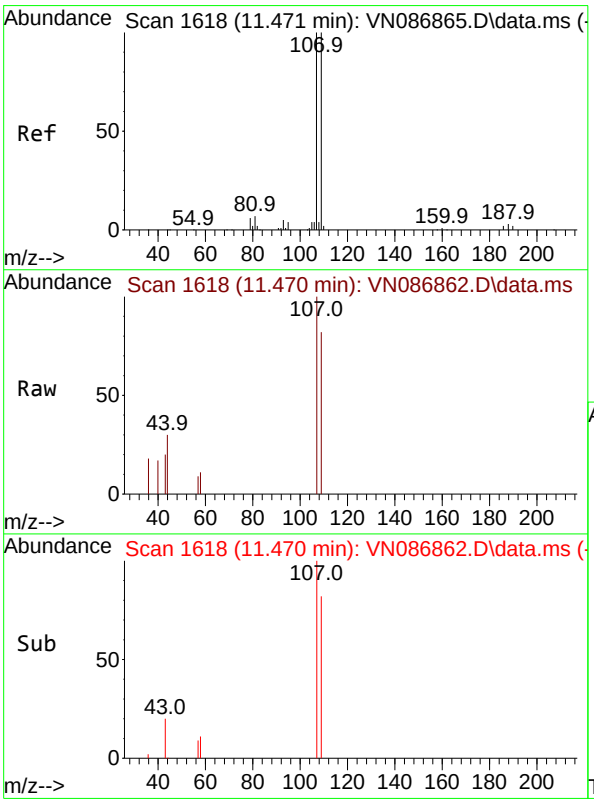
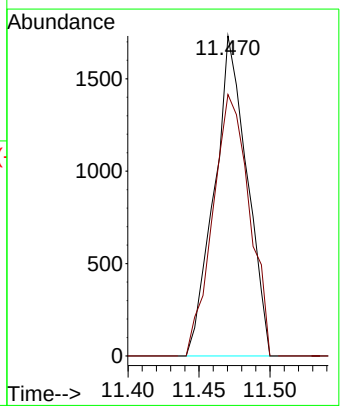
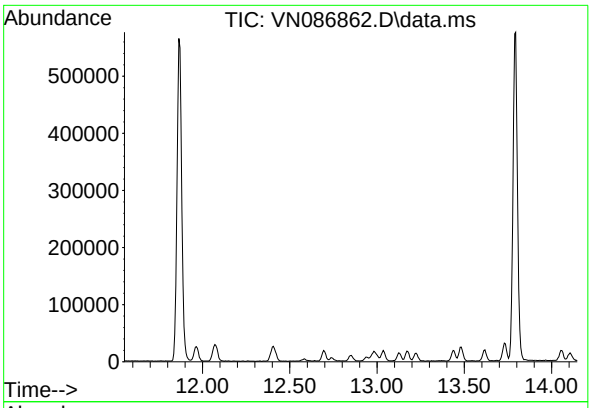



#61
1,2-Dibromoethane
Concen: 1.014 ug/l
RT: 11.470 min Scan# 1618
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion:107 Resp: 2777

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 91.2 | 76.3 | 114.5 |






#62
4-Bromofluorobenzene
Concen: 0.000 ug/l
Expected RT: 12.85 min

Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

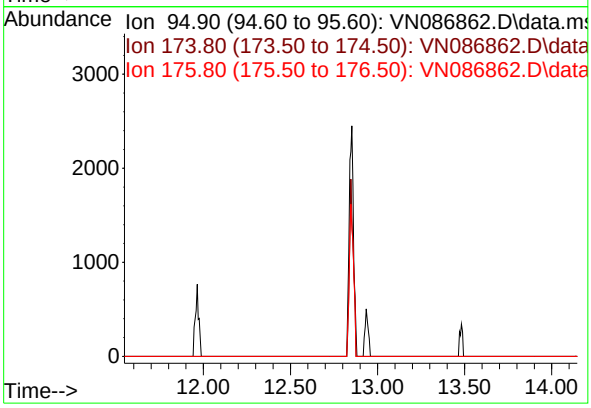
Tgt Ion: 95

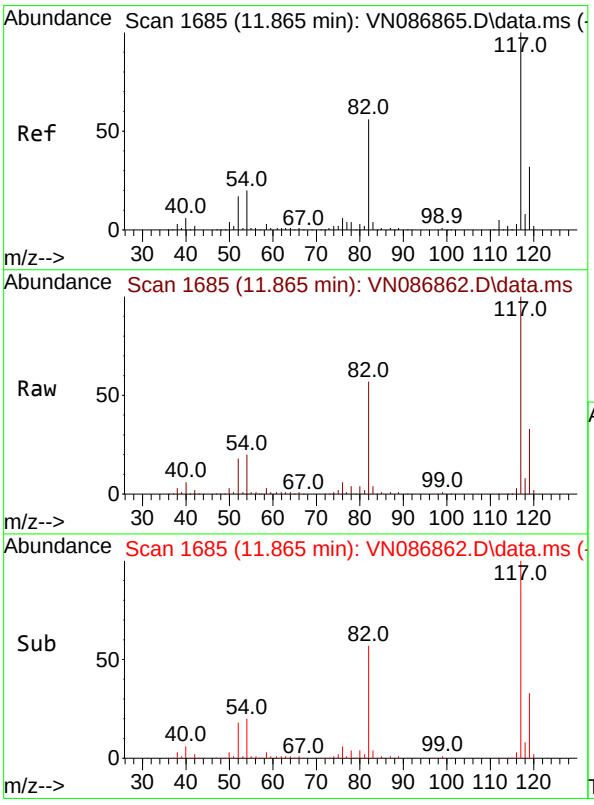
| Sig | Exp Ratio |
|---|---|
| 95 | 100 |
| 174 | 70.9 |
| 176 | 66.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

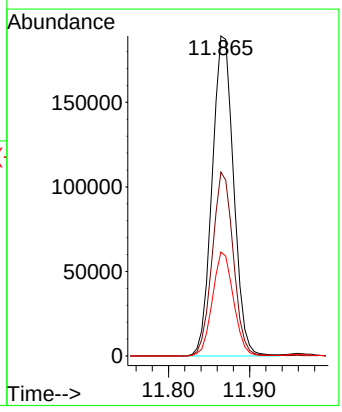


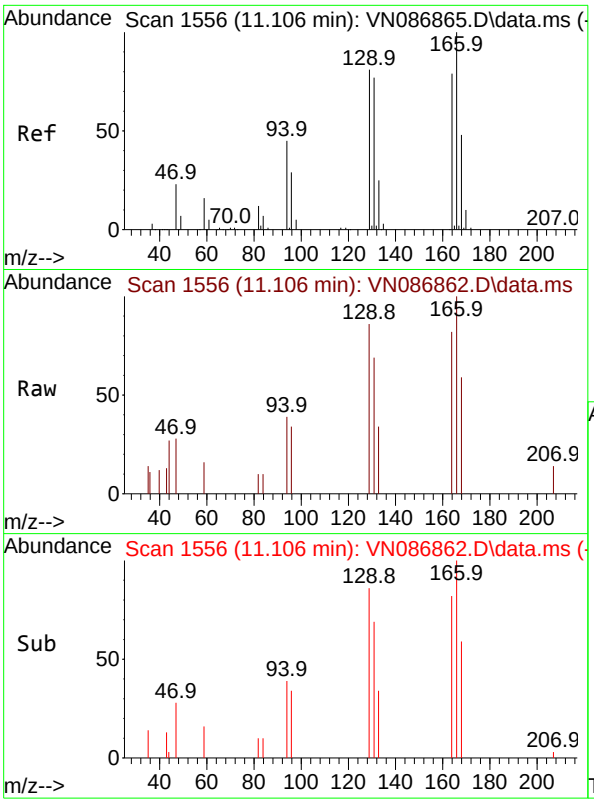




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion:117 Resp: 348010

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 57.5 | 44.6 | 67.0 |
| 119 | 32.5 | 25.5 | 38.3 |

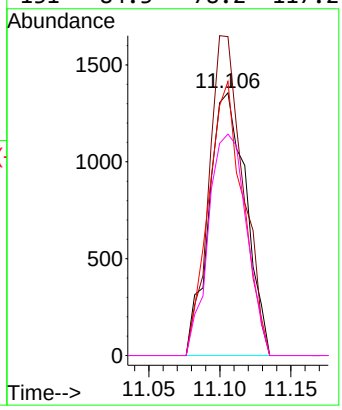





#64
Tetrachloroethene
Concen: 1.123 ug/l
RT: 11.106 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion:164 Resp: 247

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 121.4 | 101.8 | 152.8 |
| 129 | 104.4 | 83.0 | 124.4 |
| 131 | 84.3 | 78.2 | 117.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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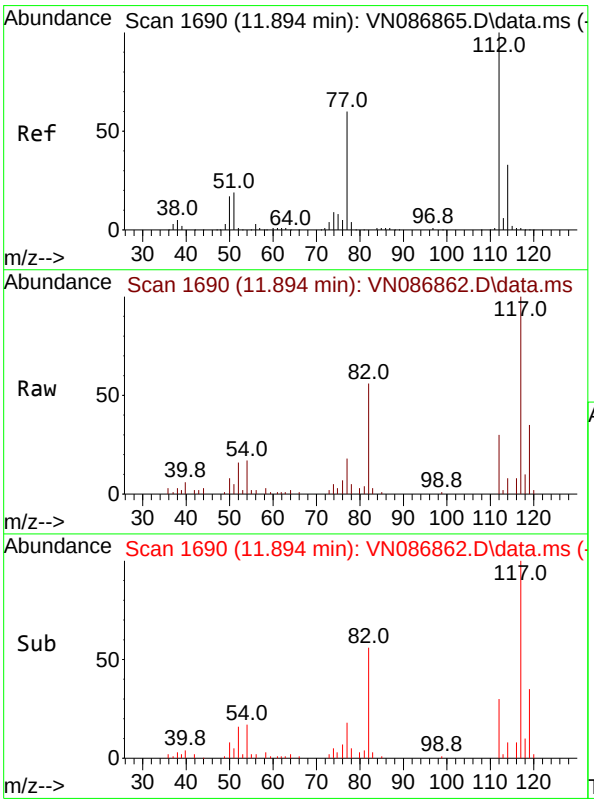
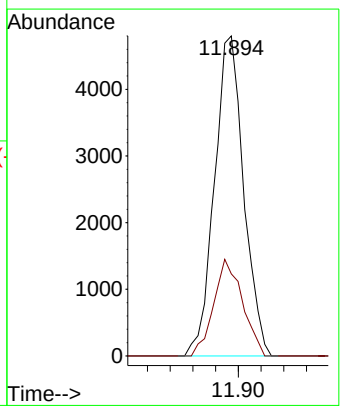
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

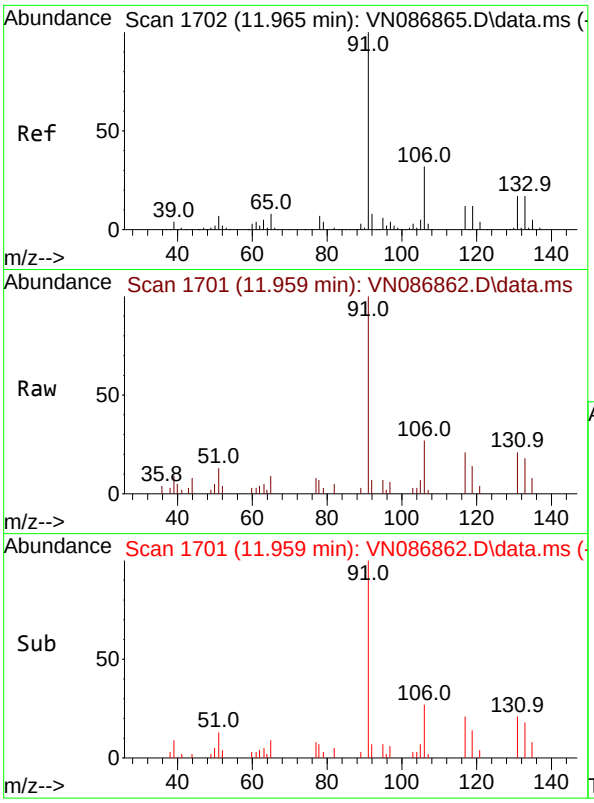



#65
Chlorobenzene
Concen: 1.118 ug/l
RT: 11.894 min Scan# 1690
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion:112 Resp: 8581

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 25.7 | 26.2 | 39.2# |






#66
1,1,1,2-Tetrachloroethane
Concen: 1.023 ug/l
RT: 11.959 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion:131 Resp: 252

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 100.9 | 48.3 | 144.8 |
| 119 | 0.0 | 34.0 | 101.8# |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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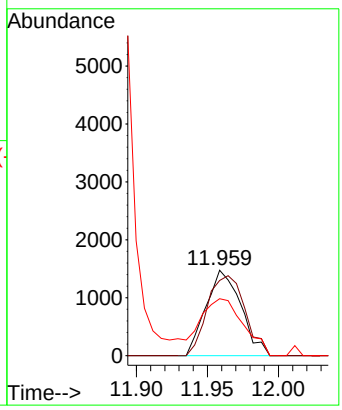
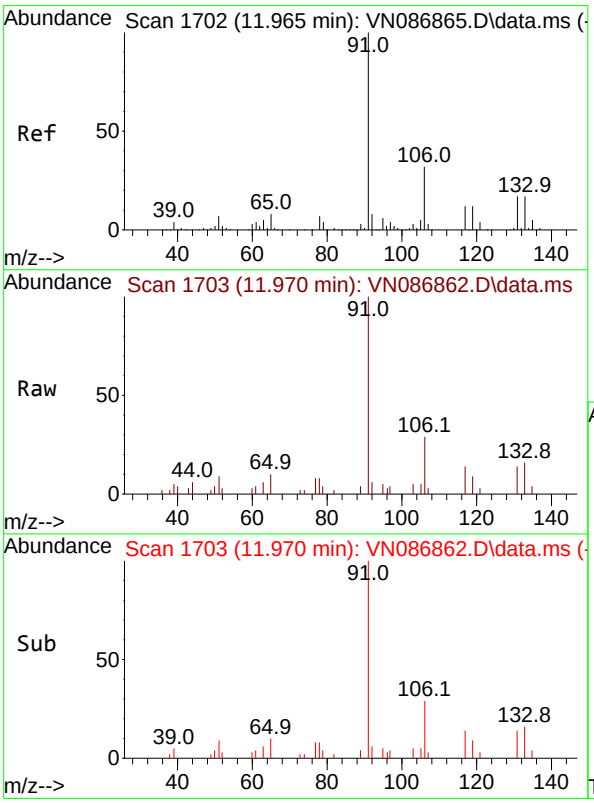
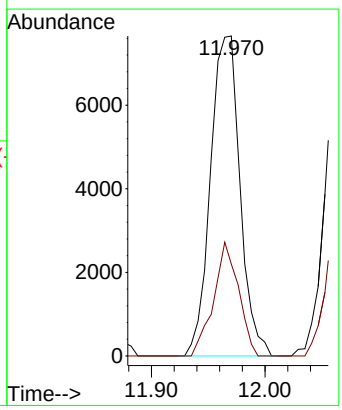


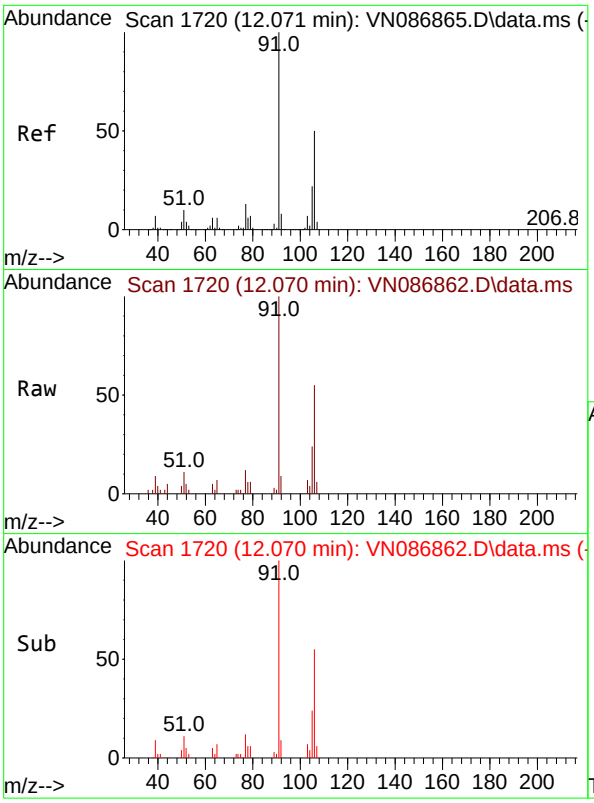




#67
Ethyl Benzene
Concen: 1.047 ug/l
RT: 11.970 min Scan# 1703
Delta R.T. 0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 91 Resp: 13845

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 28.7 | 25.4 | 38.2 |






#68
m/p-Xylenes
Concen: 2.008 ug/l
RT: 12.070 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion:106 Resp: 1016

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 207.3 | 159.4 | 239.0 |

**Instrument :**
MSVOA_N
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VSTDICC001

**Manual Integrations**
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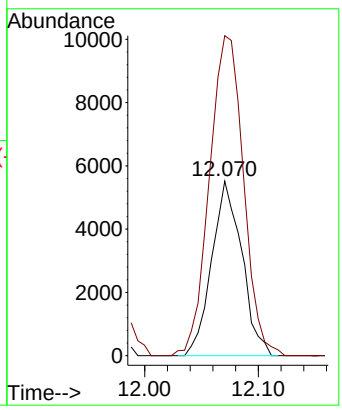
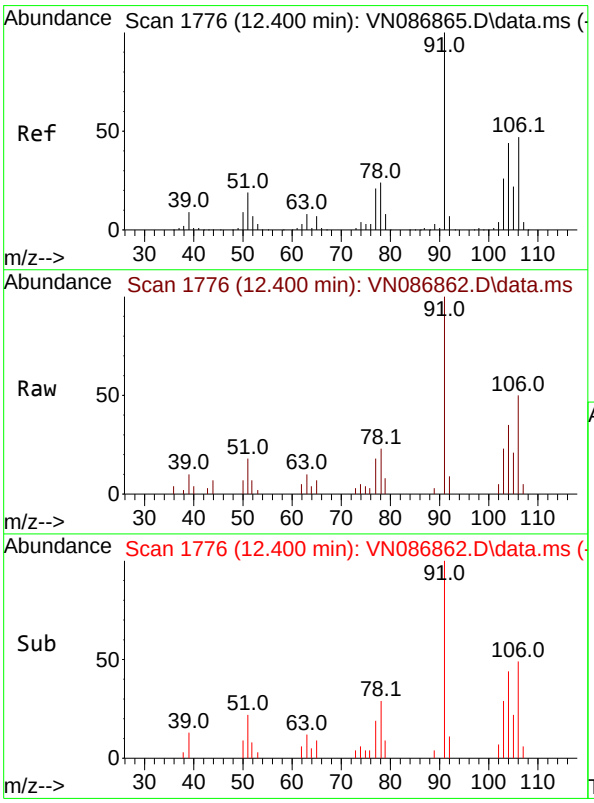
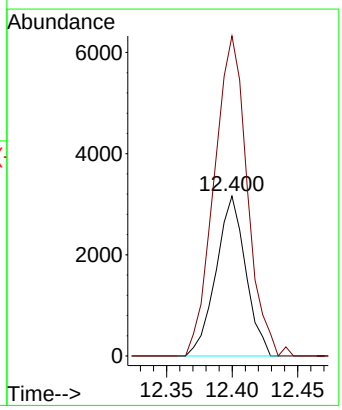


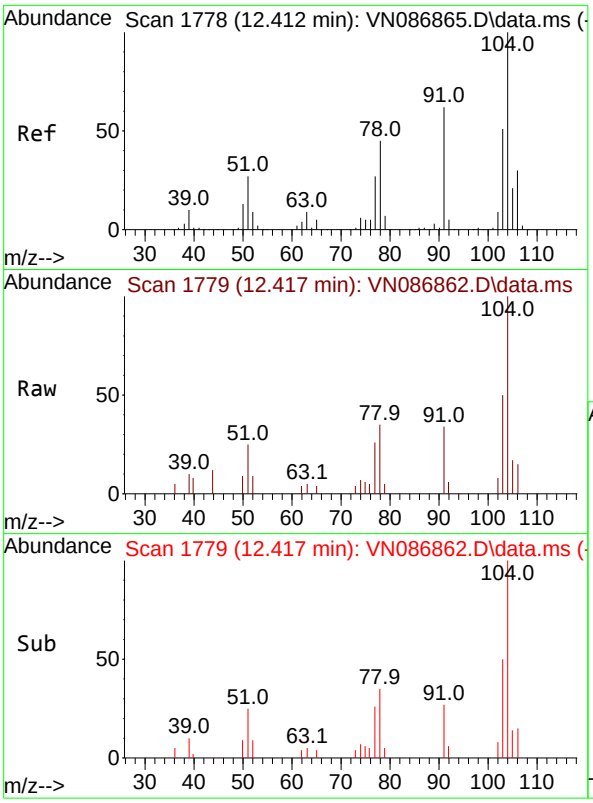




#69
o-Xylene
Concen: 1.025 ug/l
RT: 12.400 min Scan# 1776
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion:106 Resp: 4970

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 223.6 | 106.1 | 318.1 |

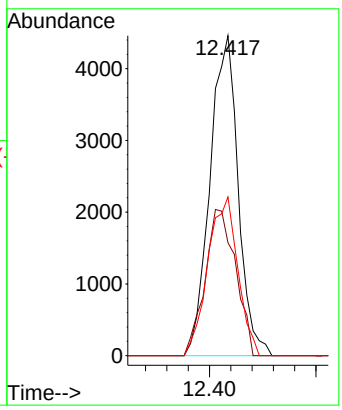





#70
Styrene
Concen: 0.987 ug/l
RT: 12.417 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion:104 Resp: 818

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 49.6 | 38.5 | 57.7 |
| 103 | 52.5 | 43.1 | 64.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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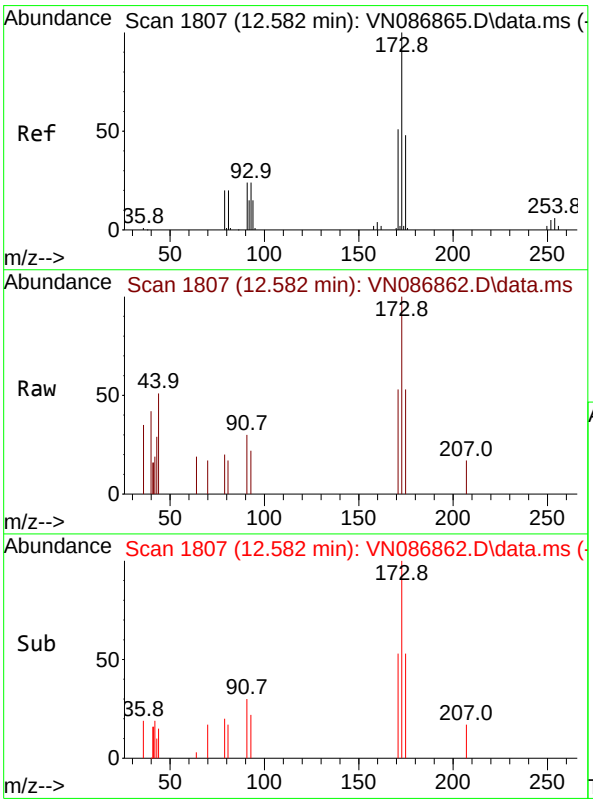
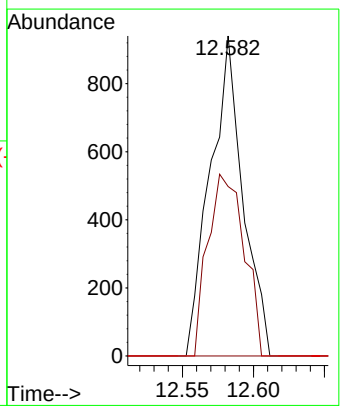
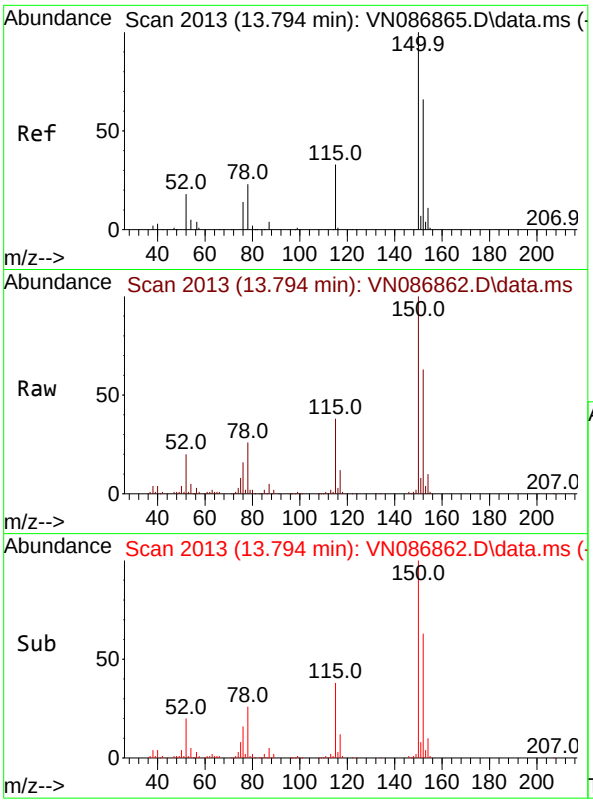



#71
Bromoform
Concen: 0.825 ug/l
RT: 12.582 min Scan# 1807
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion:173 Resp: 1508

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 63.1 | 24.1 | 72.4 |
| 254 | 0.0 | 0.0 | 0.0 |

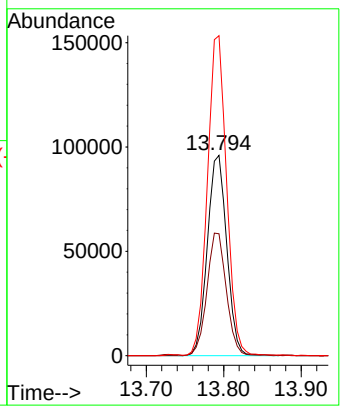





#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion:152 Resp: 16739

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 61.1 | 30.1 | 90.5 |
| 150 | 158.0 | 0.0 | 345.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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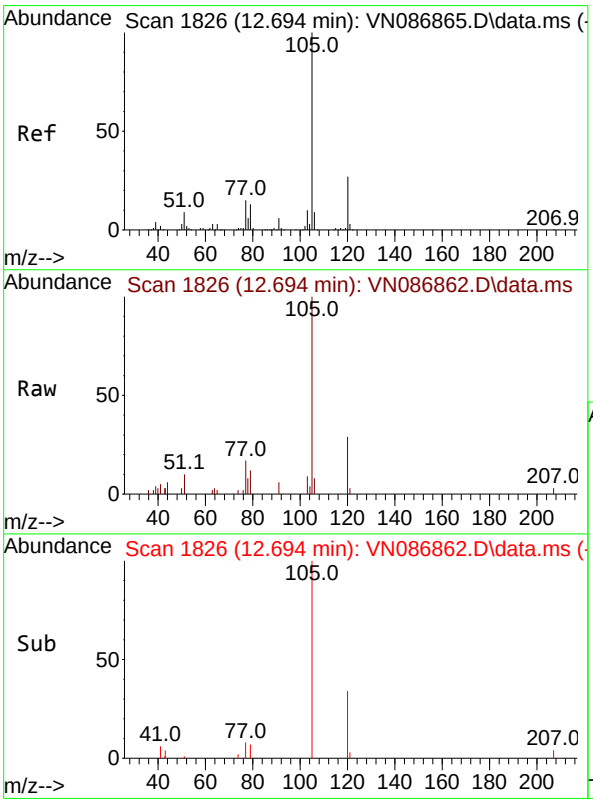
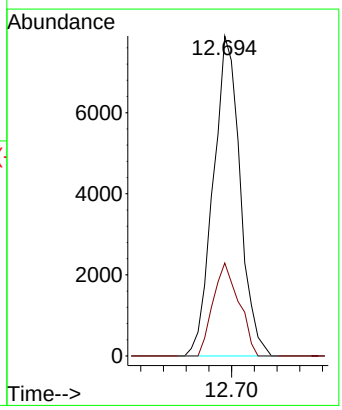
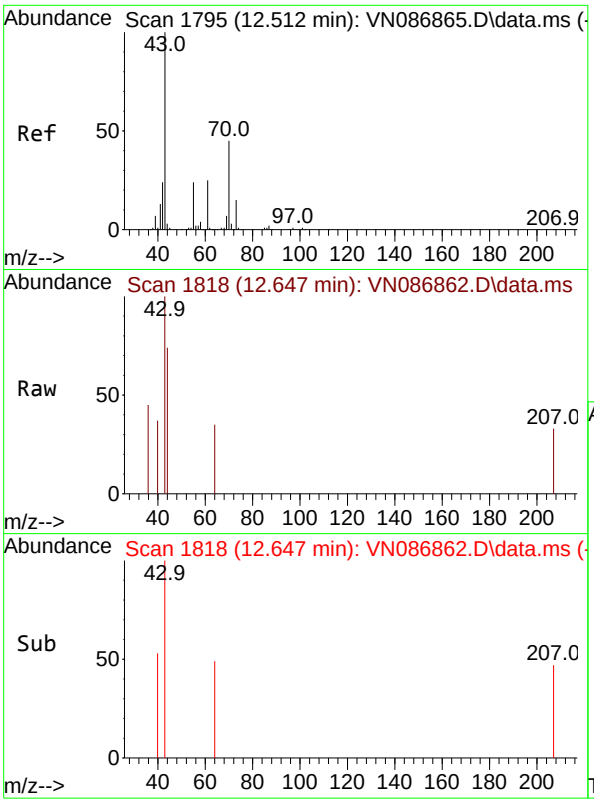



#73
Isopropylbenzene
Concen: 1.061 ug/l
RT: 12.694 min Scan# 1826
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion:105 Resp: 12938

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 28.1 | 13.5 | 40.4 |

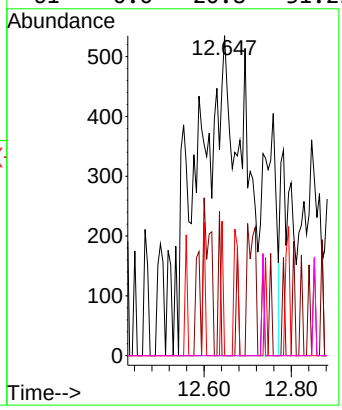





#74
N-amyl acetate
Concen: 1.138 ug/l m
RT: 12.647 min Scan# 1
Delta R.T. 0.135 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 43 Resp: 460

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 0.0 | 37.6 | 56.4# |
| 55 | 0.0 | 19.0 | 28.6# |
| 61 | 0.0 | 20.8 | 31.2# |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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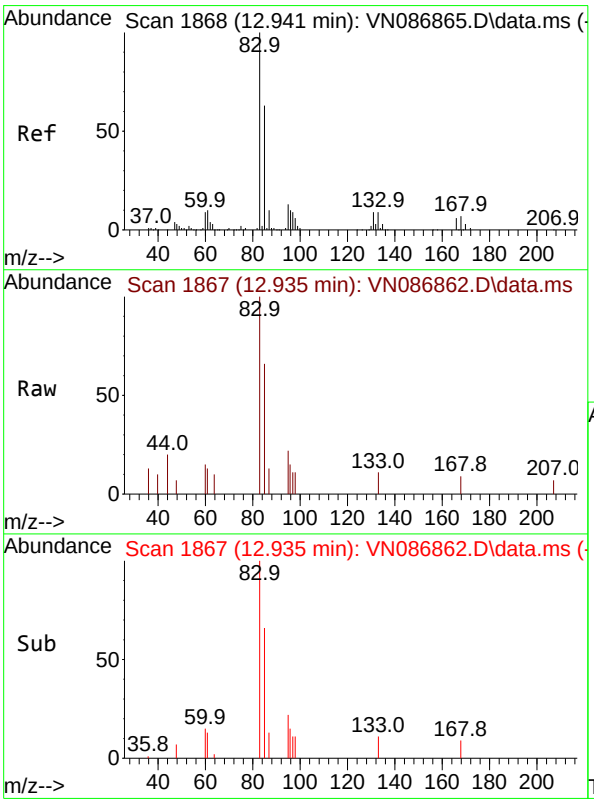
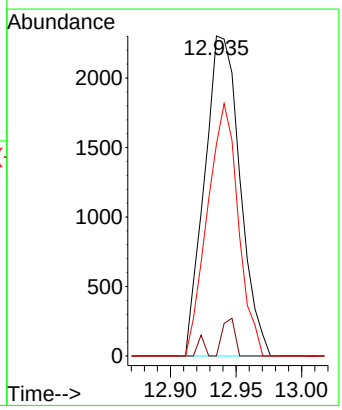
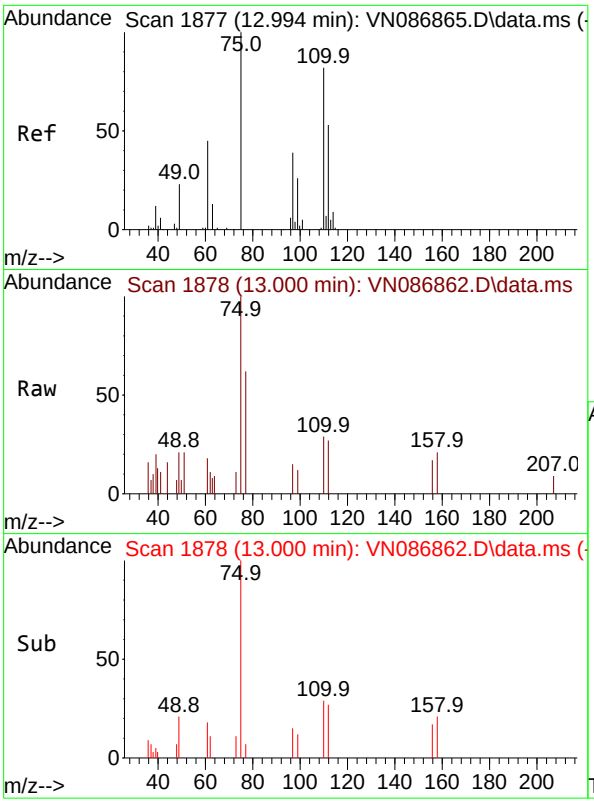



#75
1,1,2,2-Tetrachloroethane
Concen: 1.047 ug/l
RT: 12.935 min Scan# 1867
Delta R.T. -0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 83 Resp: 4326

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 4.1 | 4.9 | 14.7# |
| 85 | 68.6 | 32.0 | 96.0 |






#76
1,2,3-Trichloropropane
Concen: 1.088 ug/l m
RT: 13.000 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 75 Resp: 434

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 154.4 | 79.3 | 237.9 |

**Instrument :**
MSVOA_N
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VSTDICC001

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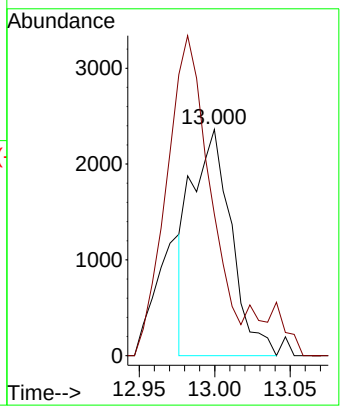
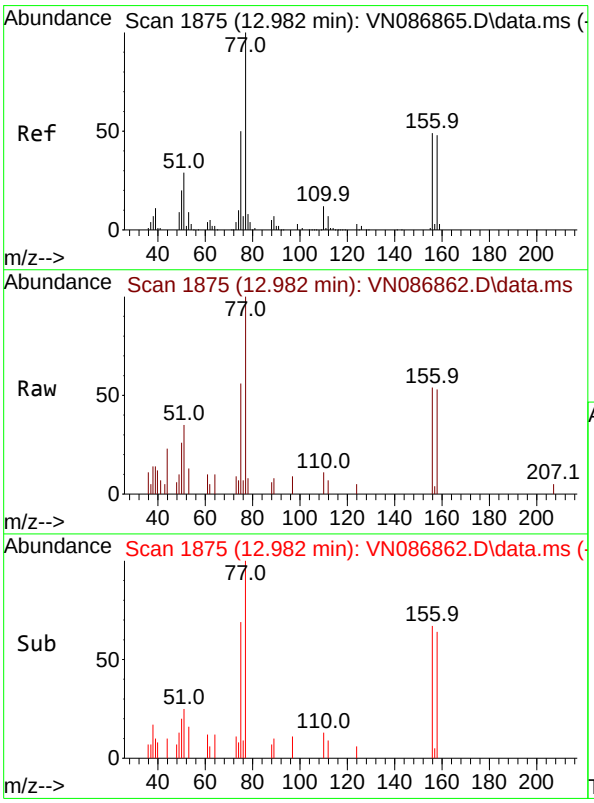
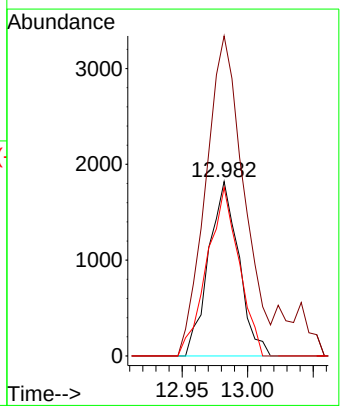


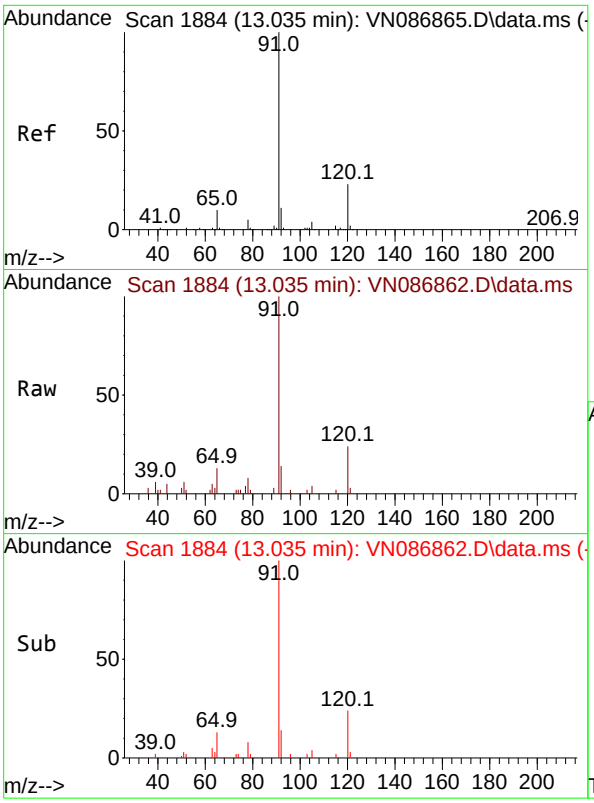




#77
Bromobenzene
Concen: 1.042 ug/l
RT: 12.982 min Scan# 1875
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion:156 Resp: 2913

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 230.2 | 117.7 | 353.1 |
| 158 | 102.5 | 48.1 | 144.4 |

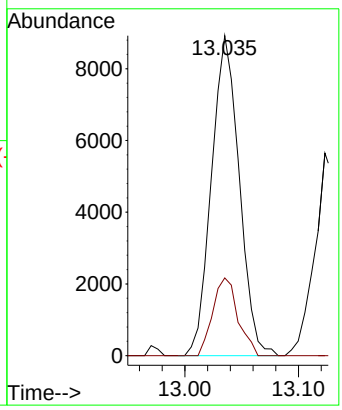





#78
n-propylbenzene
Concen: 1.023 ug/l
RT: 13.035 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 91 Resp: 1516

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 21.9 | 11.4 | 34.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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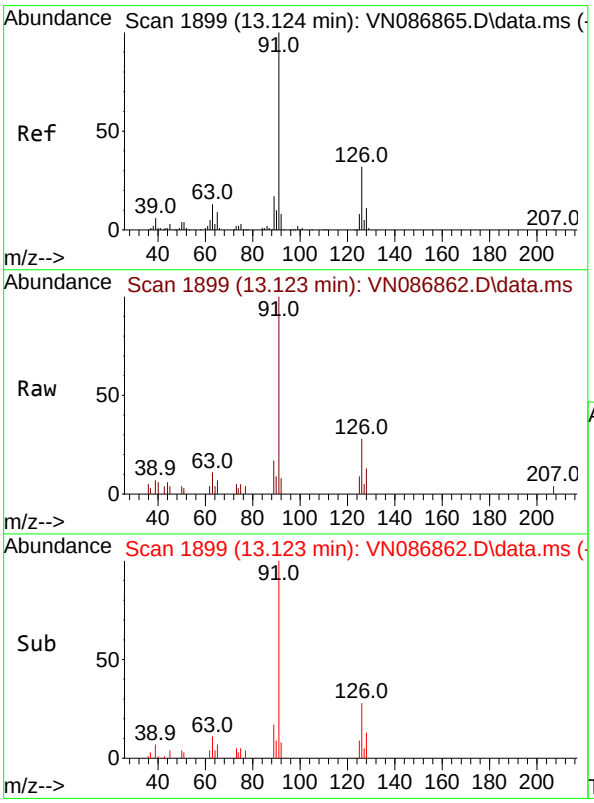
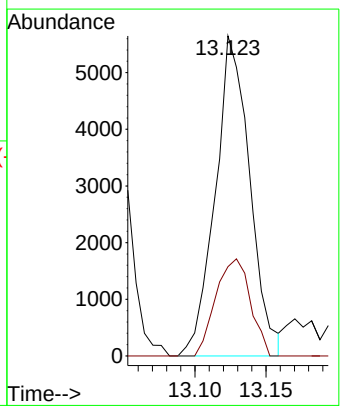
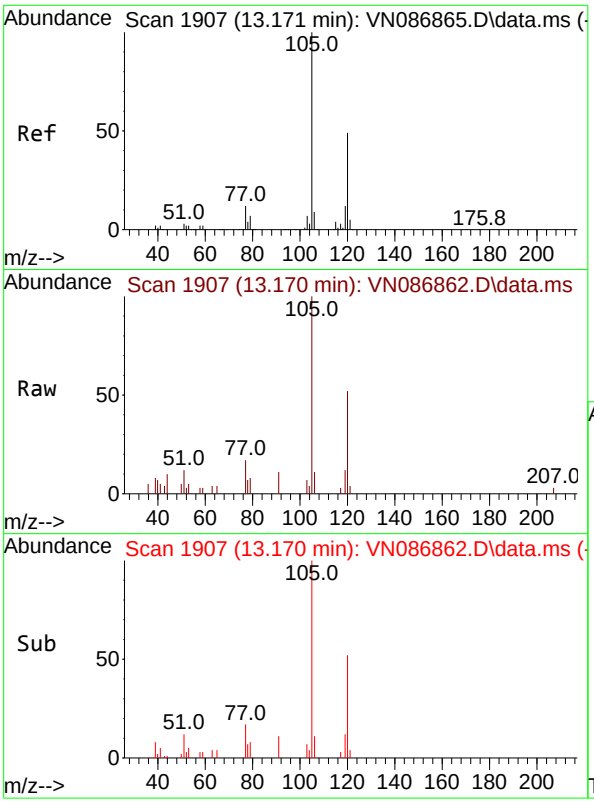



#79
2-Chlorotoluene
Concen: 1.074 ug/l
RT: 13.123 min Scan# 1899
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 91 Resp: 9550

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 30.4 | 16.2 | 48.5 |

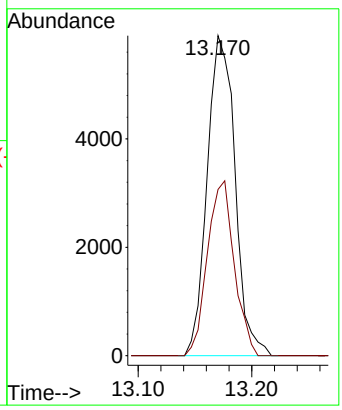





#80
1,3,5-Trimethylbenzene
Concen: 0.999 ug/l
RT: 13.170 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion:105 Resp: 1005

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 52.7 | 24.9 | 74.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

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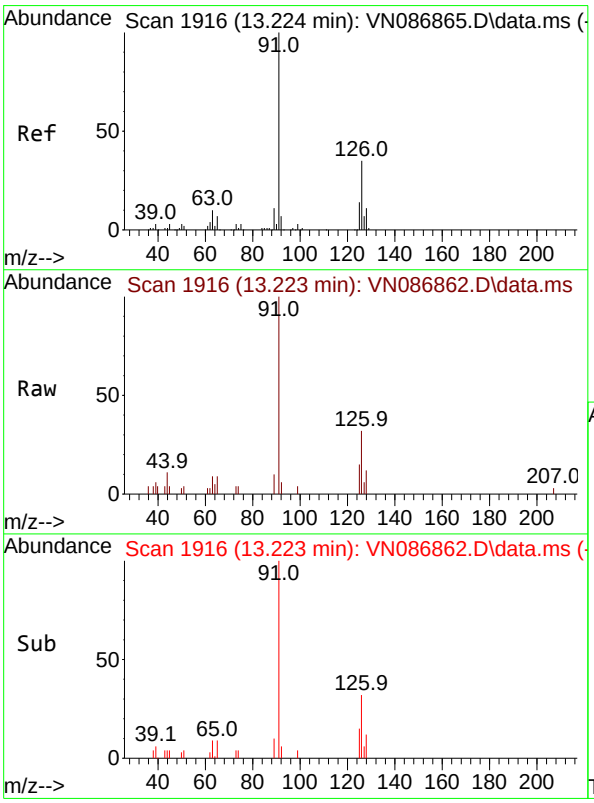
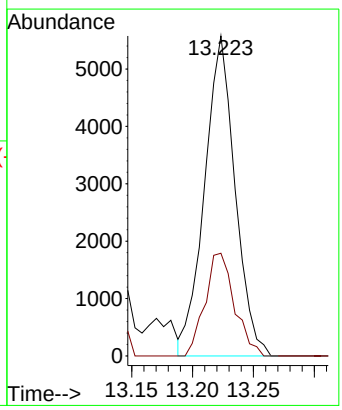
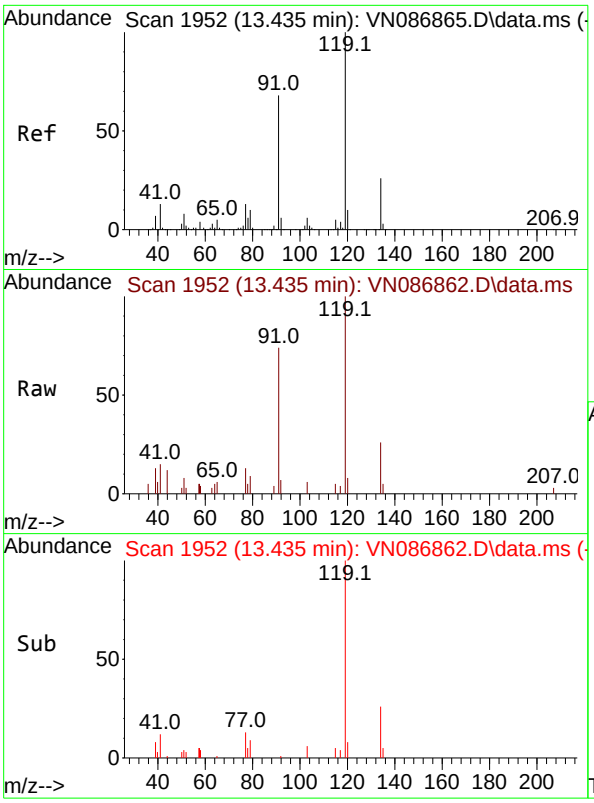



#82
4-Chlorotoluene
Concen: 1.079 ug/l
RT: 13.223 min Scan# 1916
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 91 Resp: 9706

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 31.1 | 16.7 | 50.1 |

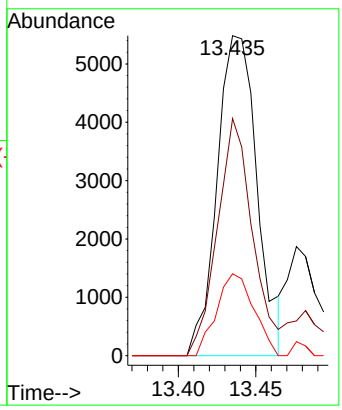





#83
tert-Butylbenzene
Concen: 1.069 ug/l
RT: 13.435 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion:119 Resp: 984

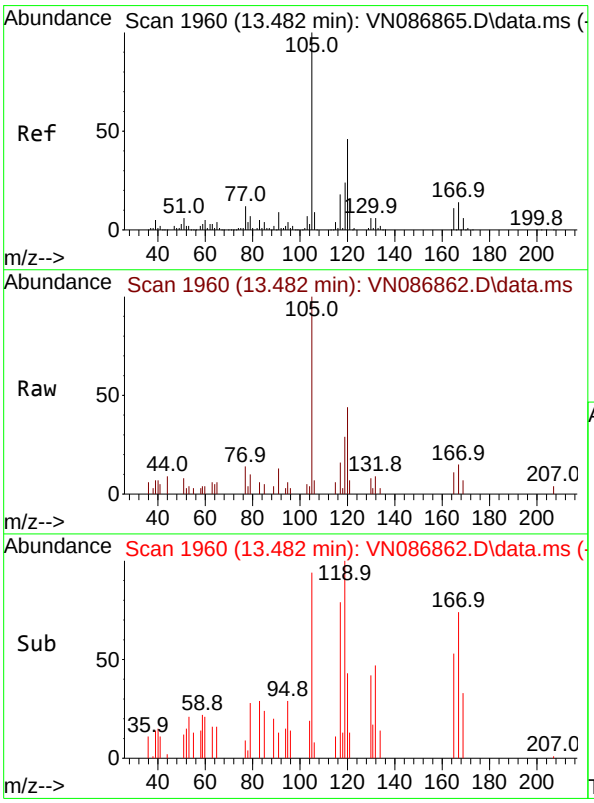
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 65.3 | 32.1 | 96.5 |
| 134 | 23.9 | 13.4 | 40.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

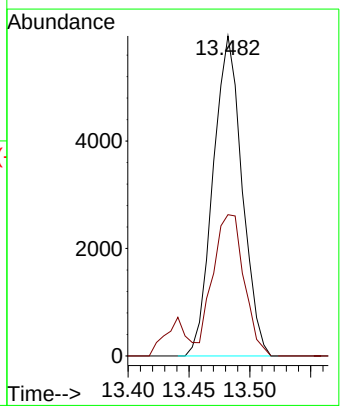
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

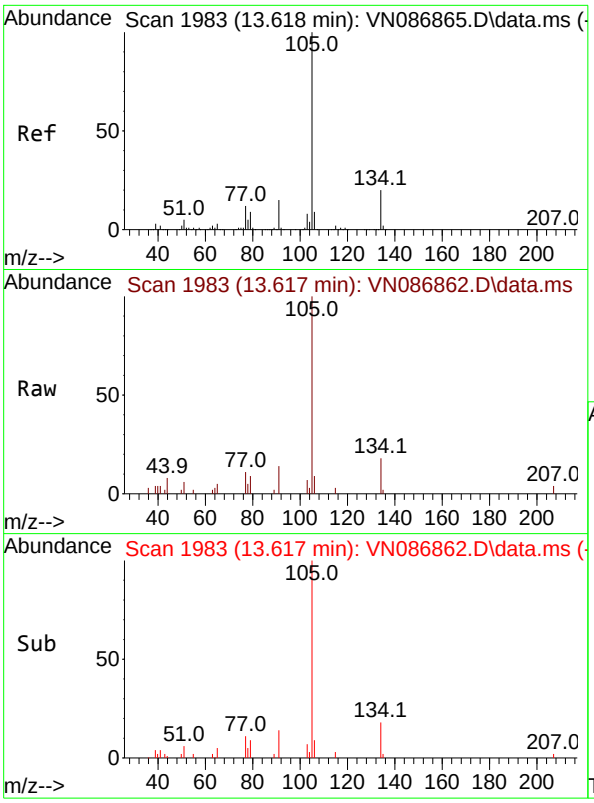



#84
1,2,4-Trimethylbenzene
Concen: 0.979 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion:105 Resp: 9882

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 47.2 | 23.2 | 69.6 |

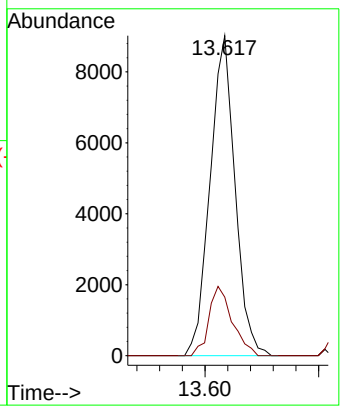





#85
sec-Butylbenzene
Concen: 1.029 ug/l
RT: 13.617 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion:105 Resp: 1377

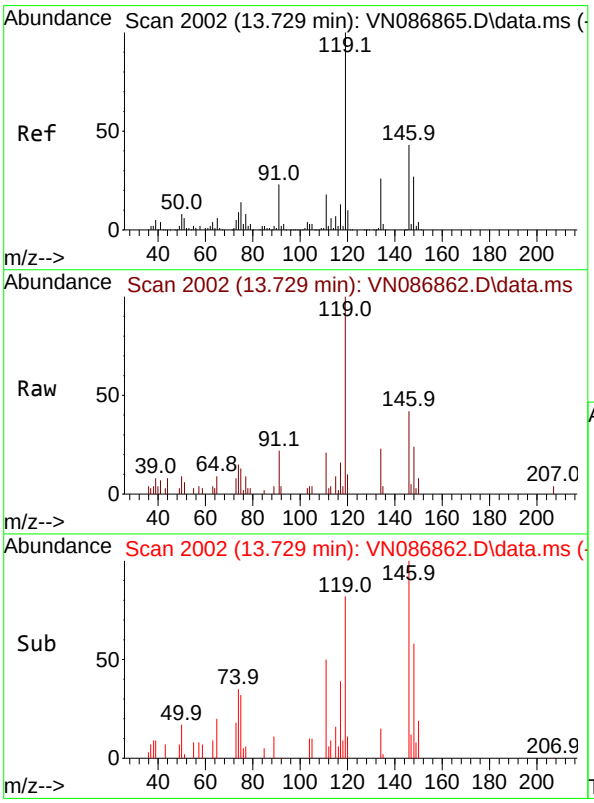
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 20.2 | 10.0 | 30.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

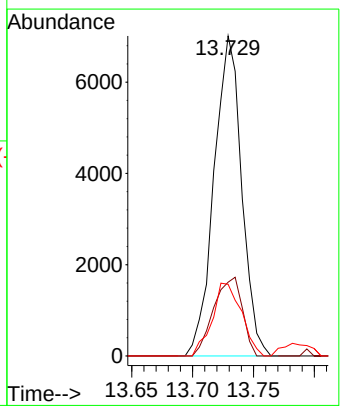
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

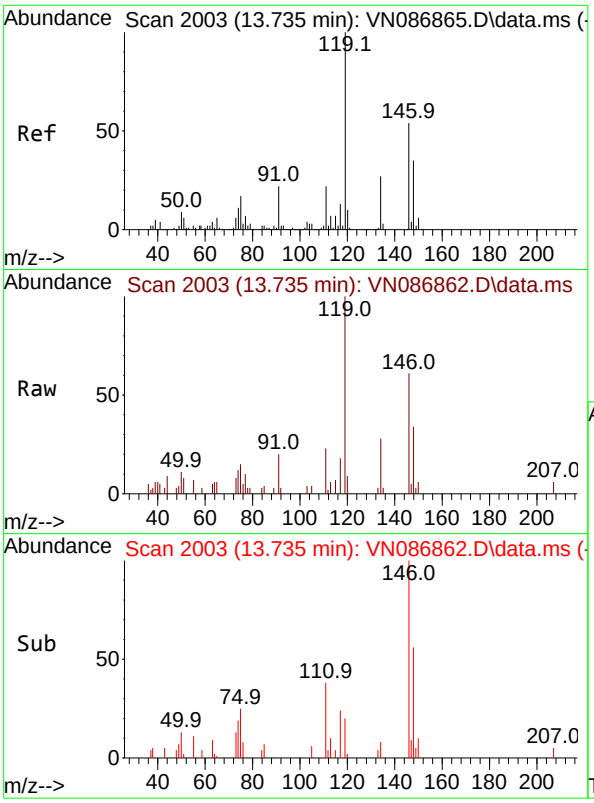



#86
p-Isopropyltoluene
Concen: 1.000 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion:119 Resp: 11065

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.4 | 13.5 | 40.4 |
| 91 | 24.1 | 11.5 | 34.4 |

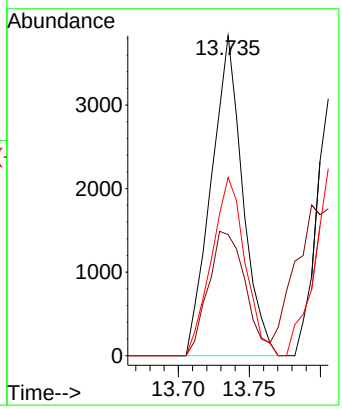





#87
1,3-Dichlorobenzene
Concen: 1.073 ug/l
RT: 13.735 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion:146 Resp: 590

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 45.8 | 20.9 | 62.8 |
| 148 | 59.7 | 32.0 | 96.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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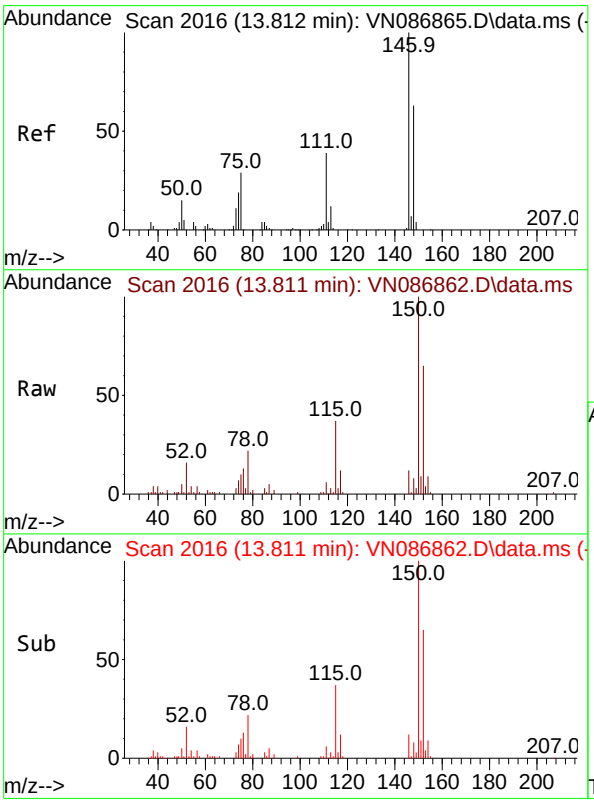
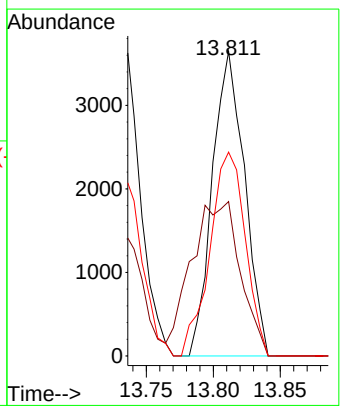
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

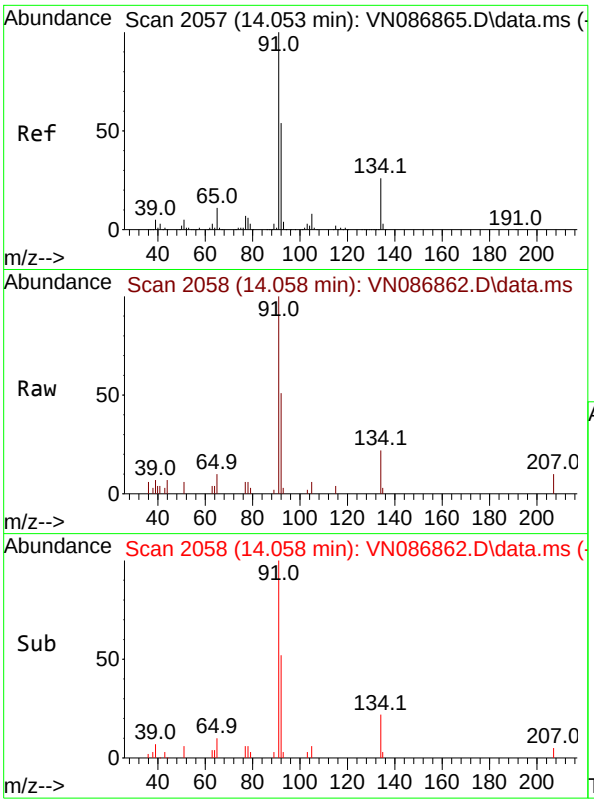



#88
1,4-Dichlorobenzene
Concen: 1.086 ug/l m
RT: 13.811 min Scan# 2016
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion:146 Resp: 6094

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 44.4 | 19.9 | 59.7 |
| 148 | 57.8 | 31.8 | 95.4 |

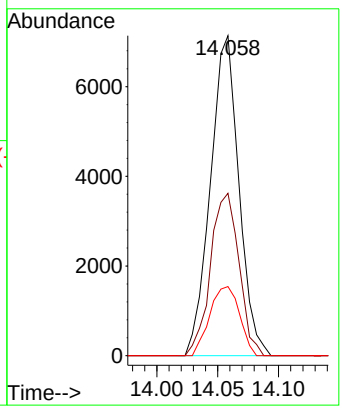





#89
n-Butylbenzene
Concen: 1.085 ug/l
RT: 14.058 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 91 Resp: 1162

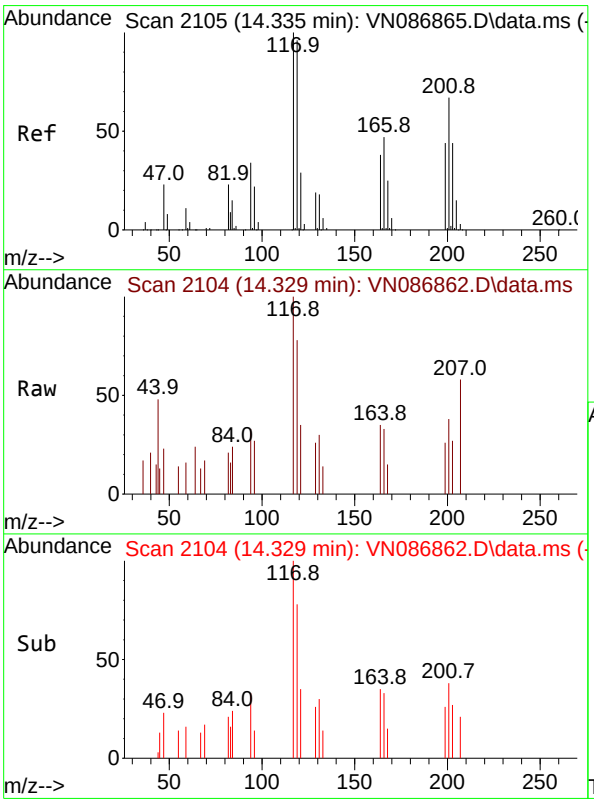
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 50.8 | 27.5 | 82.4 |
| 134 | 22.6 | 13.0 | 39.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

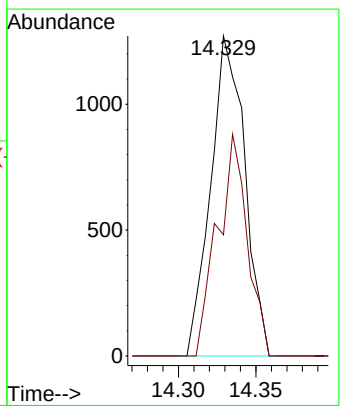
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

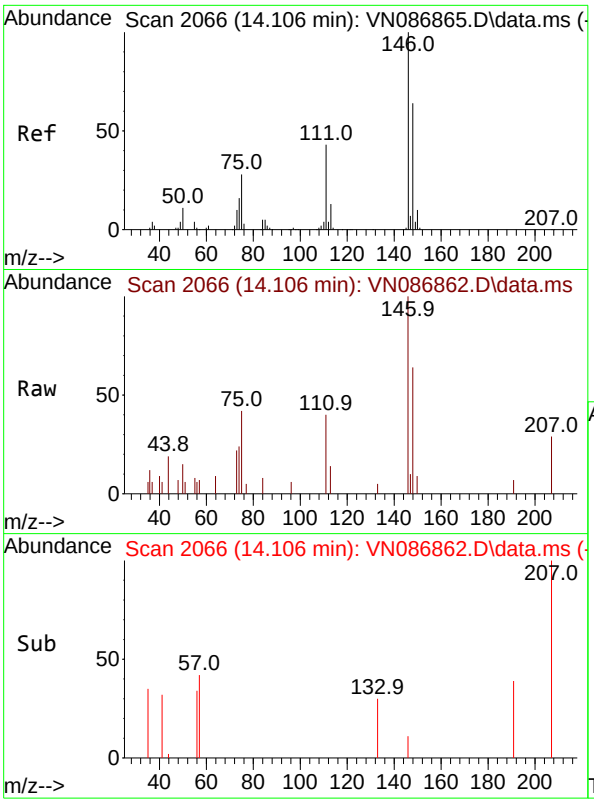



#90
Hexachloroethane
Concen: 1.036 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. -0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion:117 Resp: 1942

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 60.6 | 33.2 | 99.6 |

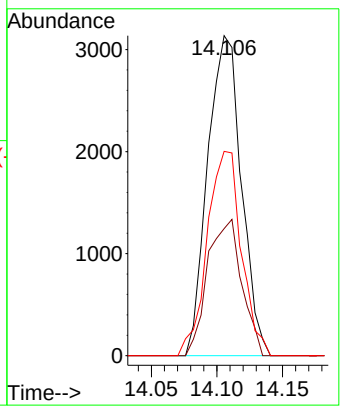





#91
1,2-Dichlorobenzene
Concen: 1.061 ug/l
RT: 14.106 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion:146 Resp: 560

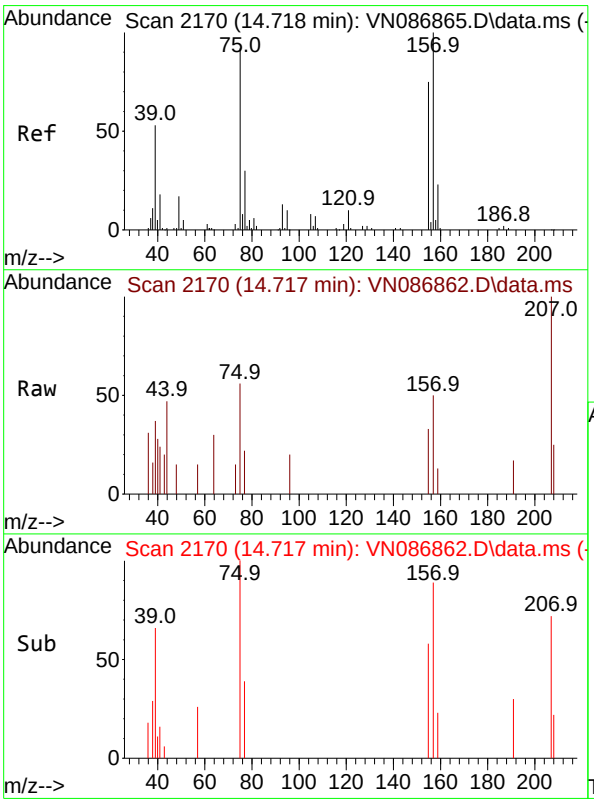
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.1 | 21.6 | 64.6 |
| 148 | 64.7 | 31.7 | 95.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

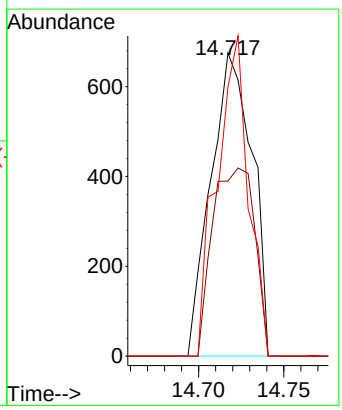
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

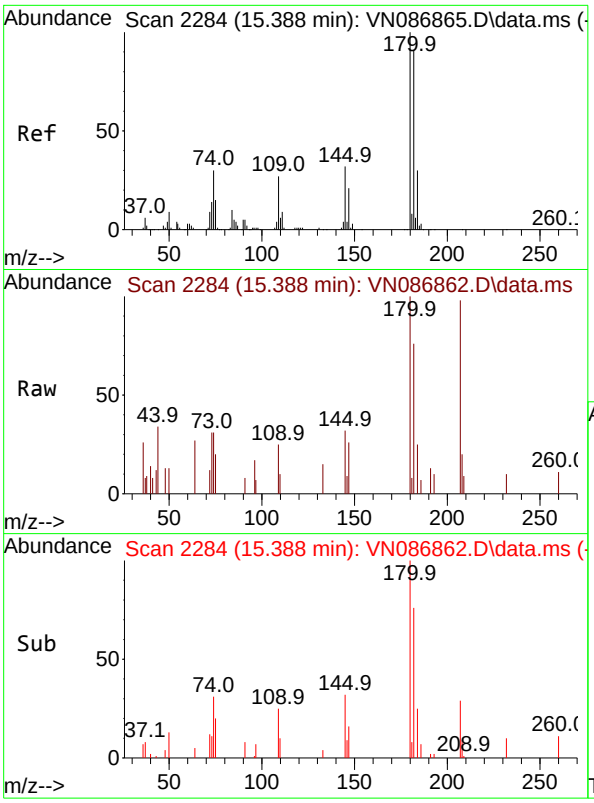



#92
1,2-Dibromo-3-Chloropropane
Concen: 1.150 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion: 75 Resp: 1136

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 63.6 | 41.1 | 123.4 |
| 157 | 81.0 | 52.7 | 158.1 |

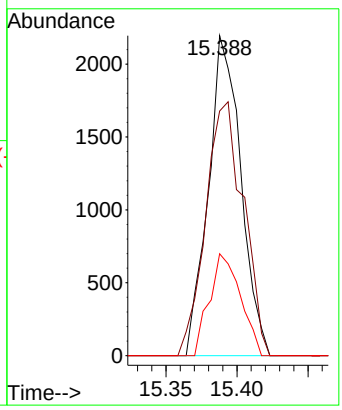





#93
1,2,4-Trichlorobenzene
Concen: 1.034 ug/l
RT: 15.388 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion:180 Resp: 348

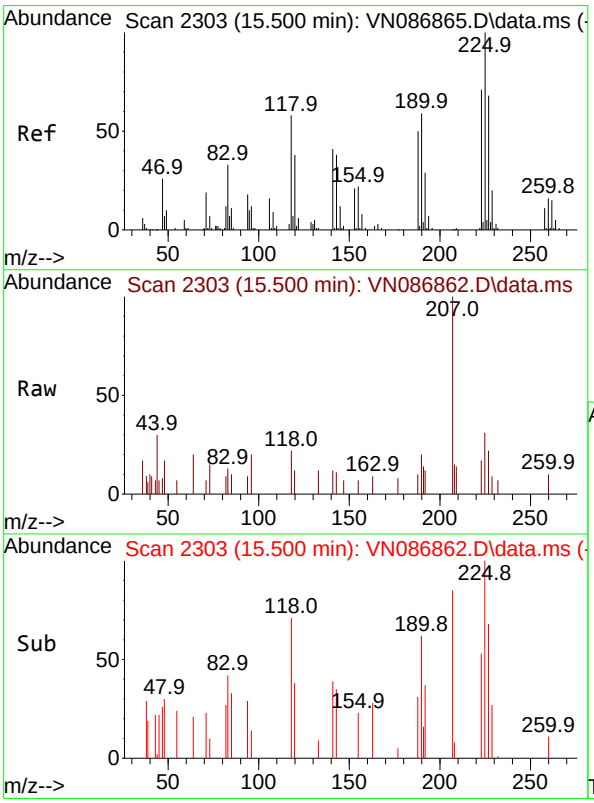
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 92.1 | 46.9 | 140.7 |
| 145 | 30.4 | 16.0 | 47.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

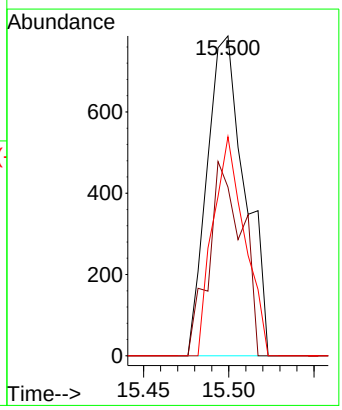
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

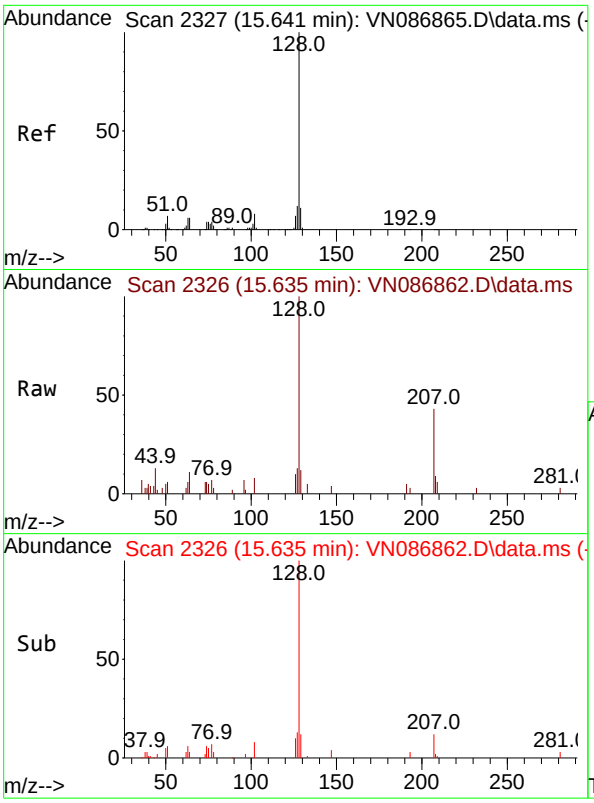



#94
Hexachlorobutadiene
Concen: 0.969 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion:225 Resp: 1219

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 53.6 | 33.5 | 100.4 |
| 227 | 57.5 | 31.1 | 93.5 |

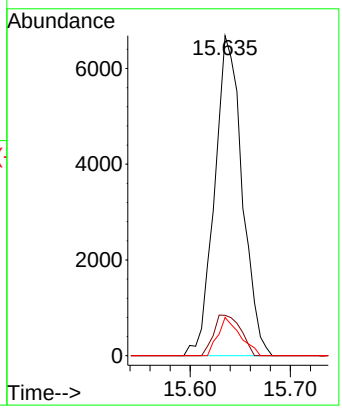





#95
Naphthalene
Concen: 1.018 ug/l
RT: 15.635 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion:128 Resp: 1278

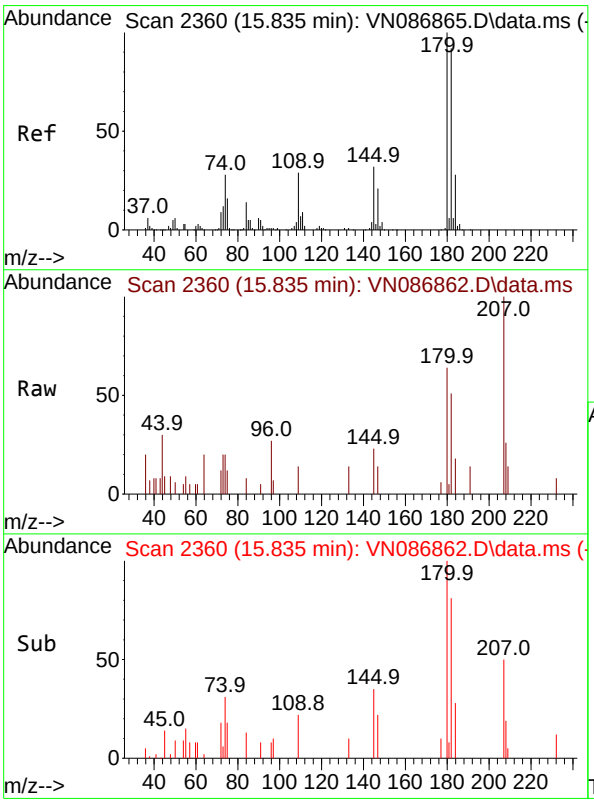
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.4 | 10.2 | 15.2 |
| 129 | 9.5 | 8.8 | 13.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

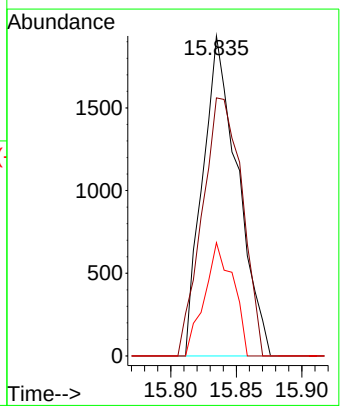
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025




#96
1,2,3-Trichlorobenzene
Concen: 1.072 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. -0.000 min
Lab File: VN086862.D
Acq: 06 Jun 2025 12:44

Tgt Ion:180 Resp: 3594

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 91.6 | 47.0 | 141.0 |
| 145 | 29.0 | 16.6 | 49.8 |



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086863.D
Acq On : 06 Jun 2025 13:17
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

Quant Time: Jun 07 01:55:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 01:51:02 2025
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) Pentafluorobenzene | 8.230 | 168 | 229701 | 50.000 | ug/l | | 0.00 |
| 34) 1,4-Difluorobenzene | 9.106 | 114 | 423980 | 50.000 | ug/l | | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 371851 | 50.000 | ug/l | | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.794 | 152 | 181065 | 50.000 | ug/l | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.588 | 65 | 16818 | 5.468 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = | 10.940%# | | | |
| 35) Dibromofluoromethane | 8.177 | 113 | 12867 | 5.121 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = | 10.240%# | | | |
| 50) Toluene-d8 | 10.571 | 98 | 52794 | 5.308 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = | 10.620%# | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 18697 | 5.059 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = | 10.120%# | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.154 | 85 | 10196 | 4.452 | ug/l | | 93 |
| 3) Chloromethane | 2.395 | 50 | 15025 | 5.080 | ug/l | | 98 |
| 4) Vinyl Chloride | 2.554 | 62 | 15384 | 5.043 | ug/l | | 97 |
| 5) Bromomethane | 2.989 | 94 | 8606 | 5.041 | ug/l | | 97 |
| 6) Chloroethane | 3.154 | 64 | 10190 | 5.171 | ug/l | | 96 |
| 7) Trichlorofluoromethane | 3.518 | 101 | 20740 | 5.203 | ug/l | | 99 |
| 8) Diethyl Ether | 3.971 | 74 | 9121 | 5.252 | ug/l | | 95 |
| 9) 1,1,2-Trichlorotrifluo... | 4.401 | 101 | 13034 | 5.205 | ug/l | | 97 |
| 10) Methyl Iodide | 4.606 | 142 | 16530 | 5.092 | ug/l | | 98 |
| 11) Tert butyl alcohol | 5.542 | 59 | 22000 | 26.363 | ug/l | | 99 |
| 12) 1,1-Dichloroethene | 4.359 | 96 | 13610 | 5.323 | ug/l | | 94 |
| 13) Acrolein | 4.195 | 56 | 8401 | 31.804 | ug/l | | 99 |
| 14) Allyl chloride | 5.042 | 41 | 20925 | 4.935 | ug/l | | 99 |
| 15) Acrylonitrile | 5.736 | 53 | 49826 | 25.545 | ug/l | | 99 |
| 16) Acetone | 4.448 | 43 | 41981 | 25.741 | ug/l | | 99 |
| 17) Carbon Disulfide | 4.736 | 76 | 37246 | 5.267 | ug/l | | 97 |
| 18) Methyl Acetate | 5.048 | 43 | 24096 | 5.070 | ug/l | | 97 |
| 19) Methyl tert-butyl Ether | 5.812 | 73 | 46823 | 5.058 | ug/l | | 95 |
| 20) Methylene Chloride | 5.300 | 84 | 15809 | 5.178 | ug/l | | 96 |
| 21) trans-1,2-Dichloroethene | 5.806 | 96 | 15480 | 5.442 | ug/l | # | 81 |
| 22) Diisopropyl ether | 6.689 | 45 | 46396 | 5.191 | ug/l | | 99 |
| 23) Vinyl Acetate | 6.618 | 43 | 194334 | 25.735 | ug/l | | 100 |
| 24) 1,1-Dichloroethane | 6.583 | 63 | 26473 | 5.147 | ug/l | | 99 |
| 25) 2-Butanone | 7.494 | 43 | 68629 | 25.888 | ug/l | | 99 |
| 26) 2,2-Dichloropropane | 7.500 | 77 | 18288 | 4.571 | ug/l | | 100 |
| 27) cis-1,2-Dichloroethene | 7.500 | 96 | 17594 | 5.172 | ug/l | | 98 |
| 28) Bromochloromethane | 7.830 | 49 | 12958 | 5.124 | ug/l | # | 97 |
| 29) Tetrahydrofuran | 7.853 | 42 | 44749 | 25.912 | ug/l | | 98 |
| 30) Chloroform | 7.977 | 83 | 26450 | 5.149 | ug/l | | 95 |
| 31) Cyclohexane | 8.271 | 56 | 29938 | 6.002 | ug/l | | 95 |
| 32) 1,1,1-Trichloroethane | 8.177 | 97 | 22857 | 5.232 | ug/l | # | 50 |
| 36) 1,1-Dichloropropene | 8.377 | 75 | 19410 | 5.184 | ug/l | | 98 |
| 37) Ethyl Acetate | 7.571 | 43 | 26073 | 5.470 | ug/l | | 97 |
| 38) Carbon Tetrachloride | 8.371 | 117 | 19056 | 5.184 | ug/l | | 99 |
| 39) Methylcyclohexane | 9.606 | 83 | 27353 | 5.333 | ug/l | | 95 |
| 40) Benzene | 8.612 | 78 | 63646 | 5.199 | ug/l | | 98 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086863.D
Acq On : 06 Jun 2025 13:17
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

Quant Time: Jun 07 01:55:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 01:51:02 2025
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.783 | 41 | 13518 | 5.050 | ug/l | | 99 |
| 42) 1,2-Dichloroethane | 8.683 | 62 | 19329 | 5.205 | ug/l | | 98 |
| 43) Isopropyl Acetate | 8.700 | 43 | 40268 | 5.264 | ug/l | | 98 |
| 44) Trichloroethene | 9.359 | 130 | 15245 | 5.251 | ug/l | | 96 |
| 45) 1,2-Dichloropropane | 9.624 | 63 | 15632 | 5.248 | ug/l | | 99 |
| 46) Dibromomethane | 9.718 | 93 | 10241 | 5.176 | ug/l | | 99 |
| 47) Bromodichloromethane | 9.888 | 83 | 20512 | 5.039 | ug/l | | 97 |
| 48) Methyl methacrylate | 9.688 | 41 | 17591 | 4.996 | ug/l | | 94 |
| 49) 1,4-Dioxane | 9.700 | 88 | 6141 | 95.874 | ug/l | # | 93 |
| 51) 4-Methyl-2-Pentanone | 10.447 | 43 | 116434 | 25.283 | ug/l | | 97 |
| 52) Toluene | 10.630 | 92 | 38744 | 5.178 | ug/l | | 99 |
| 53) t-1,3-Dichloropropene | 10.841 | 75 | 22285 | 4.896 | ug/l | | 98 |
| 54) cis-1,3-Dichloropropene | 10.318 | 75 | 24477 | 5.026 | ug/l | | 93 |
| 55) 1,1,2-Trichloroethane | 11.018 | 97 | 15068 | 5.234 | ug/l | | 97 |
| 56) Ethyl methacrylate | 10.888 | 69 | 21893 | 4.774 | ug/l | | 95 |
| 57) 1,3-Dichloropropane | 11.165 | 76 | 25452 | 5.096 | ug/l | | 98 |
| 58) 2-Chloroethyl Vinyl ether | 10.165 | 63 | 64722 | 23.664 | ug/l | | 98 |
| 59) 2-Hexanone | 11.212 | 43 | 59884 | 20.188 | ug/l | | 99 |
| 60) Dibromochloromethane | 11.359 | 129 | 14884 | 4.962 | ug/l | | 98 |
| 61) 1,2-Dibromoethane | 11.471 | 107 | 15172 | 5.141 | ug/l | | 99 |
| 64) Tetrachloroethene | 11.106 | 164 | 12322 | 5.236 | ug/l | | 92 |
| 65) Chlorobenzene | 11.894 | 112 | 42195 | 5.145 | ug/l | | 98 |
| 66) 1,1,1,2-Tetrachloroethane | 11.965 | 131 | 13897 | 5.271 | ug/l | | 97 |
| 67) Ethyl Benzene | 11.965 | 91 | 73443 | 5.199 | ug/l | | 97 |
| 68) m/p-Xylenes | 12.071 | 106 | 55859 | 10.330 | ug/l | | 100 |
| 69) o-Xylene | 12.400 | 106 | 26004 | 5.021 | ug/l | | 96 |
| 70) Styrene | 12.412 | 104 | 44380 | 5.008 | ug/l | | 98 |
| 71) Bromoform | 12.582 | 173 | 9890 | 5.063 | ug/l | # | 96 |
| 73) Isopropylbenzene | 12.694 | 105 | 67878 | 5.146 | ug/l | | 100 |
| 74) N-amyl acetate | 12.559 | 43 | 20096m | 4.590 | ug/l | | |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 23516 | 5.262 | ug/l | | 98 |
| 76) 1,2,3-Trichloropropane | 12.994 | 75 | 21527m | 4.986 | ug/l | | |
| 77) Bromobenzene | 12.976 | 156 | 15485 | 5.119 | ug/l | | 92 |
| 78) n-propylbenzene | 13.035 | 91 | 83781 | 5.226 | ug/l | | 99 |
| 79) 2-Chlorotoluene | 13.124 | 91 | 49297 | 5.128 | ug/l | | 100 |
| 80) 1,3,5-Trimethylbenzene | 13.171 | 105 | 55961 | 5.139 | ug/l | | 100 |
| 81) trans-1,4-Dichloro-2-b... | 12.741 | 75 | 9234 | 4.939 | ug/l | | 94 |
| 82) 4-Chlorotoluene | 13.223 | 91 | 49924 | 5.132 | ug/l | | 100 |
| 83) tert-Butylbenzene | 13.435 | 119 | 50874 | 5.103 | ug/l | | 98 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 56525 | 5.176 | ug/l | | 100 |
| 85) sec-Butylbenzene | 13.618 | 105 | 74711 | 5.161 | ug/l | | 99 |
| 86) p-Isopropyltoluene | 13.729 | 119 | 62016 | 5.182 | ug/l | | 99 |
| 87) 1,3-Dichlorobenzene | 13.735 | 146 | 30949 | 5.200 | ug/l | | 98 |
| 88) 1,4-Dichlorobenzene | 13.812 | 146 | 32342 | 5.330 | ug/l | | 96 |
| 89) n-Butylbenzene | 14.053 | 91 | 59601 | 5.142 | ug/l | | 99 |
| 90) Hexachloroethane | 14.335 | 117 | 9725 | 4.794 | ug/l | | 95 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 29897 | 5.228 | ug/l | | 99 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75 | 5731 | 5.363 | ug/l | | 93 |
| 93) 1,2,4-Trichlorobenzene | 15.394 | 180 | 18778 | 5.143 | ug/l | | 99 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 7072 | 5.199 | ug/l | | 99 |
| 95) Naphthalene | 15.641 | 128 | 67481 | 4.965 | ug/l | | 99 |
| 96) 1,2,3-Trichlorobenzene | 15.841 | 180 | 18262 | 5.034 | ug/l | | 97 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086863.D
Acq On : 06 Jun 2025 13:17
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

Quant Time: Jun 07 01:55:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 01:51:02 2025
Response via : Initial Calibration

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

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

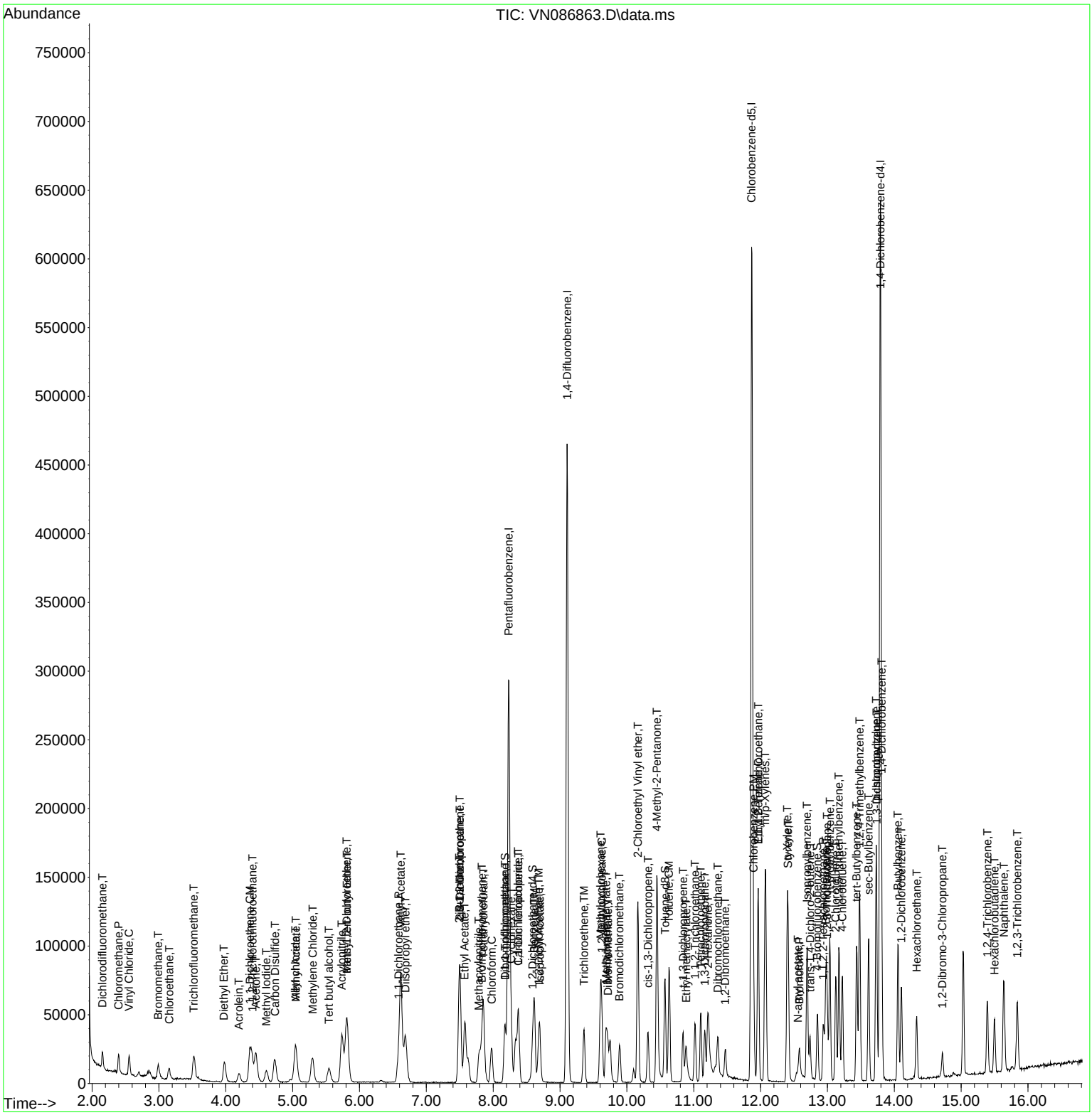
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086863.D
Acq On : 06 Jun 2025 13:17
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

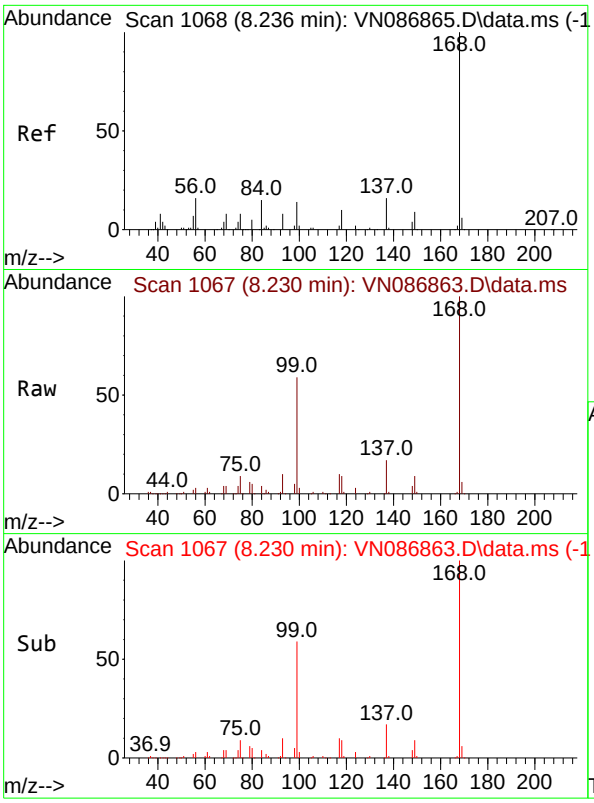
Quant Time: Jun 07 01:55:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 01:51:02 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

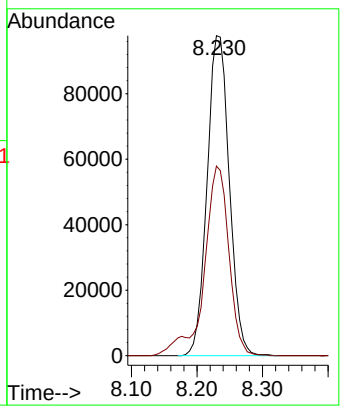





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.230 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion:168 Resp: 22970

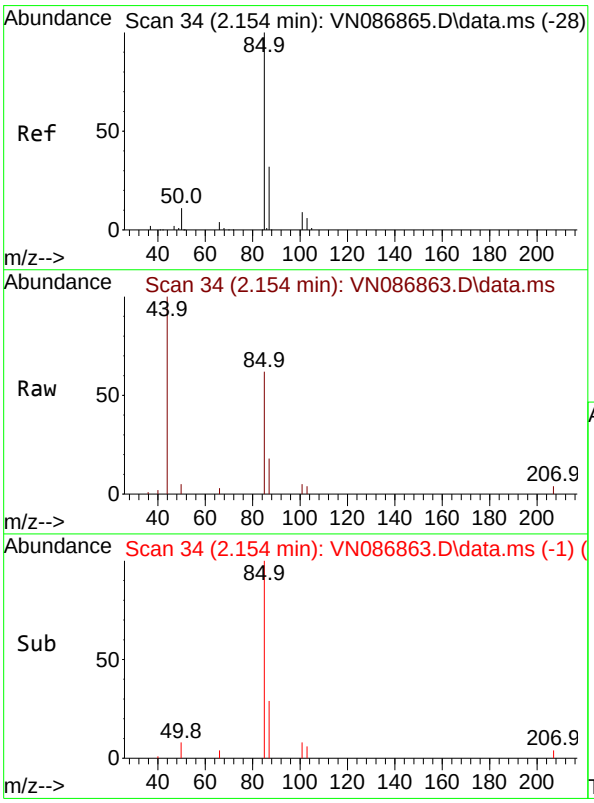
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 59.2 | 49.1 | 73.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

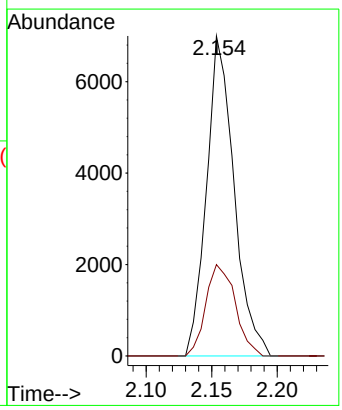
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

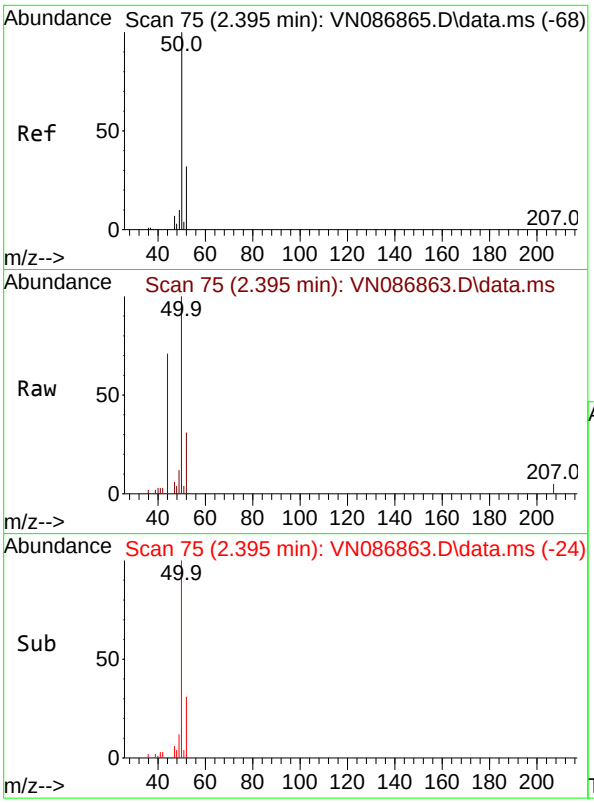



#2
Dichlorodifluoromethane
Concen: 4.452 ug/l
RT: 2.154 min Scan# 34
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 85 Resp: 10196

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 28.6 | 16.2 | 48.6 |

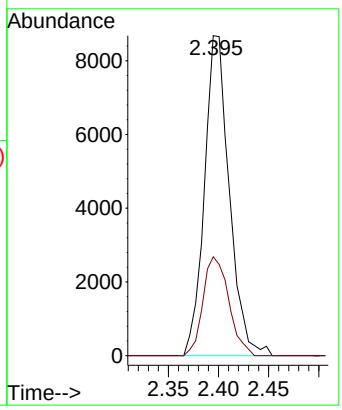





#3
Chloromethane
Concen: 5.080 ug/l
RT: 2.395 min Scan# 7
Delta R.T. 0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 50 Resp: 1502

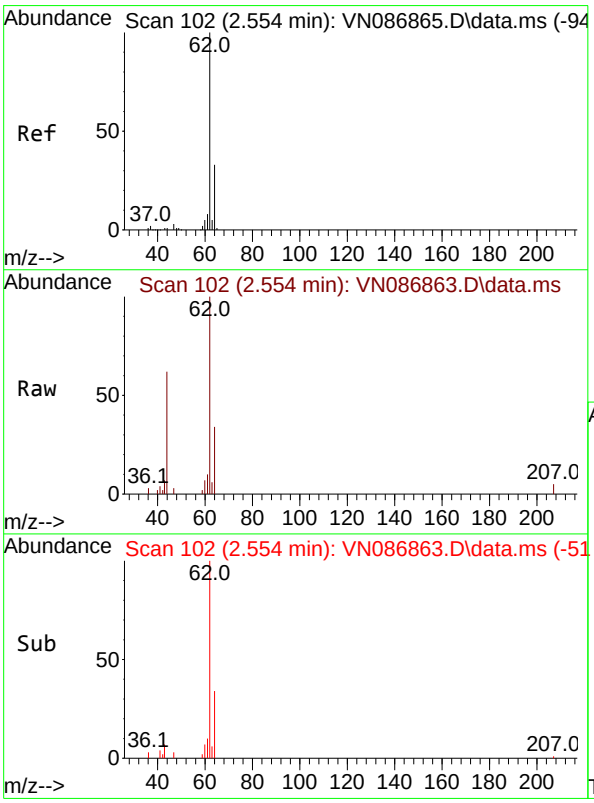
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 30.9 | 25.7 | 38.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

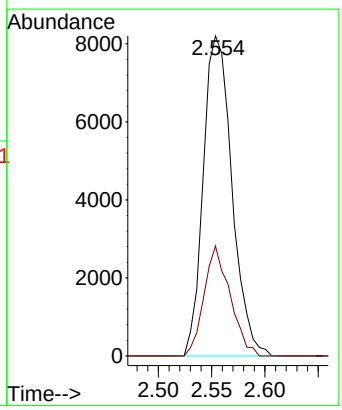
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

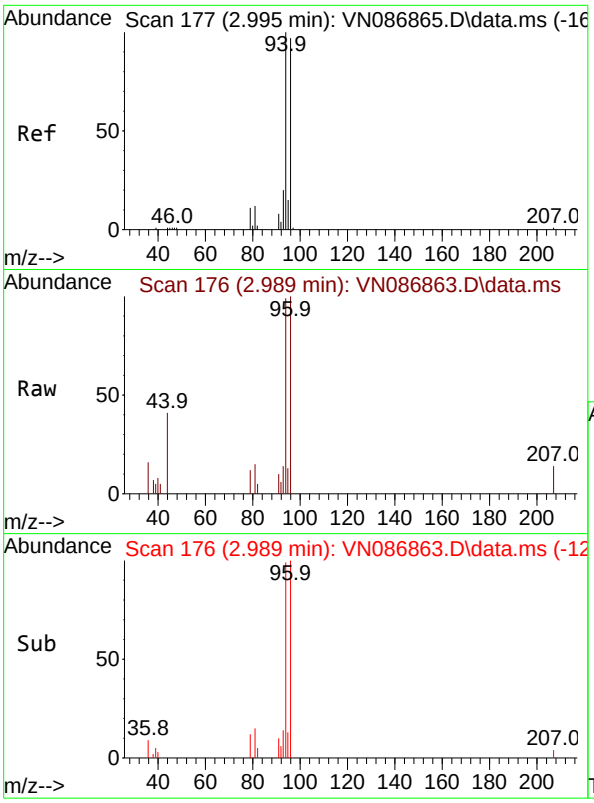



#4
Vinyl Chloride
Concen: 5.043 ug/l
RT: 2.554 min Scan# 102
Delta R.T. 0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 62 Resp: 15384

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 34.3 | 26.0 | 39.0 |






#5
Bromomethane
Concen: 5.041 ug/l
RT: 2.989 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

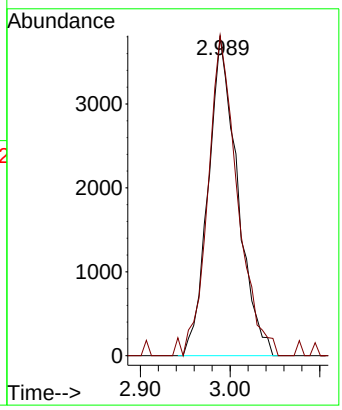
Tgt Ion: 94 Resp: 860

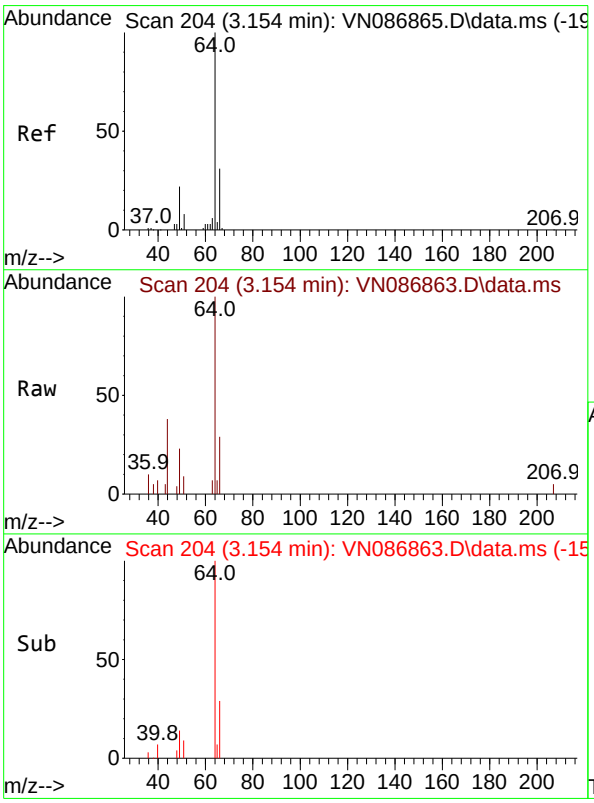
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 100.6 | 77.9 | 116.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

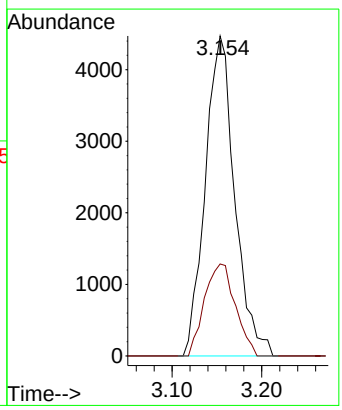


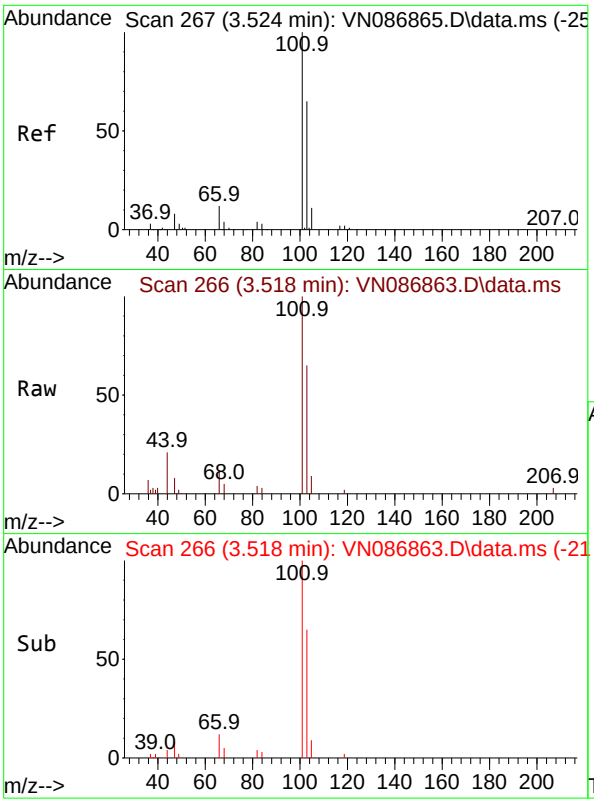




#6
Chloroethane
Concen: 5.171 ug/l
RT: 3.154 min Scan# 204
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 64 Resp: 10190

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 28.8 | 24.6 | 36.8 |

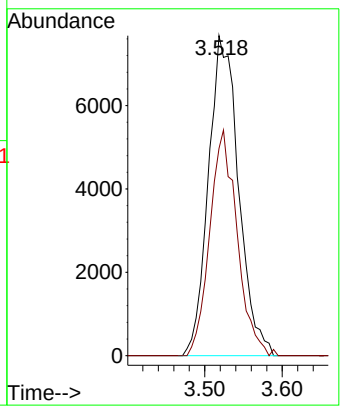





#7
Trichlorofluoromethane
Concen: 5.203 ug/l
RT: 3.518 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion:101 Resp: 2074

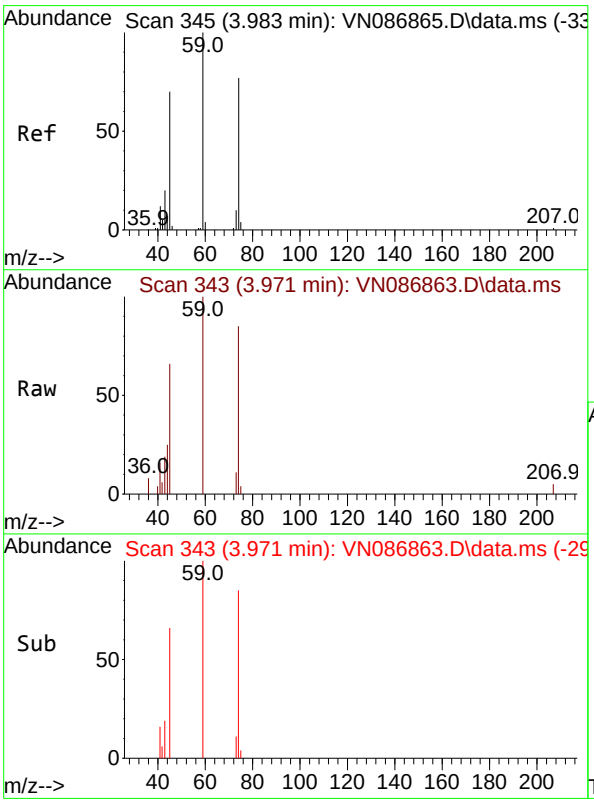
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 64.8 | 52.2 | 78.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

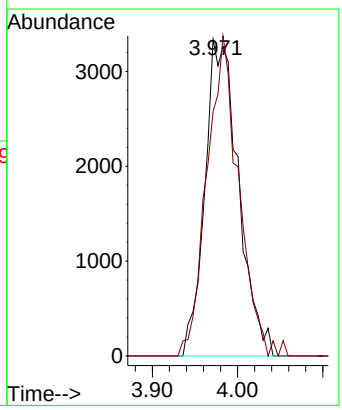
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

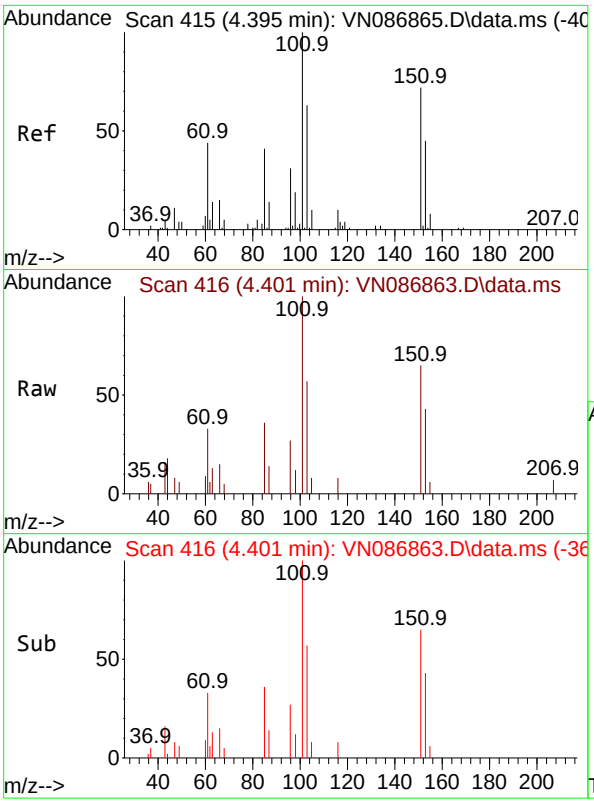



#8
Diethyl Ether
Concen: 5.252 ug/l
RT: 3.971 min Scan# 343
Delta R.T. -0.012 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 74 Resp: 9121

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 95.8 | 45.5 | 136.5 |






#9
1,1,2-Trichlorotrifluoroethane
Concen: 5.205 ug/l
RT: 4.401 min Scan# 41
Delta R.T. 0.006 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

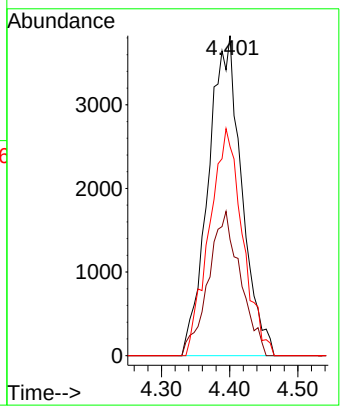
Tgt Ion:101 Resp: 1303

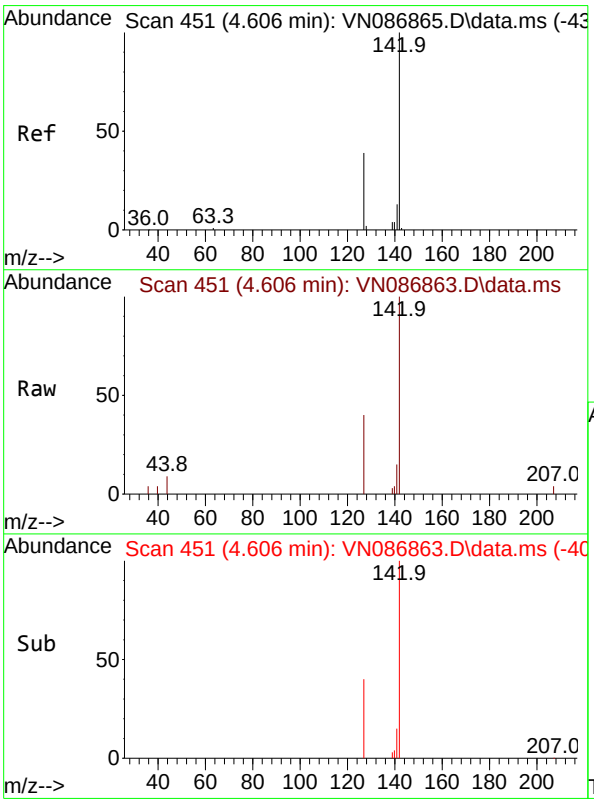
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 43.3 | 33.8 | 50.8 |
| 151 | 70.8 | 58.7 | 88.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

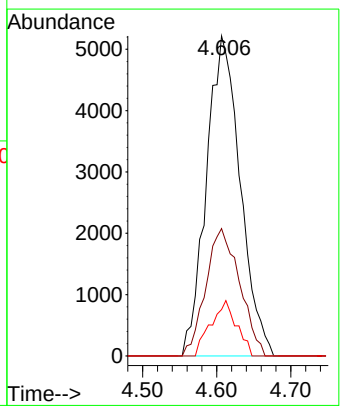


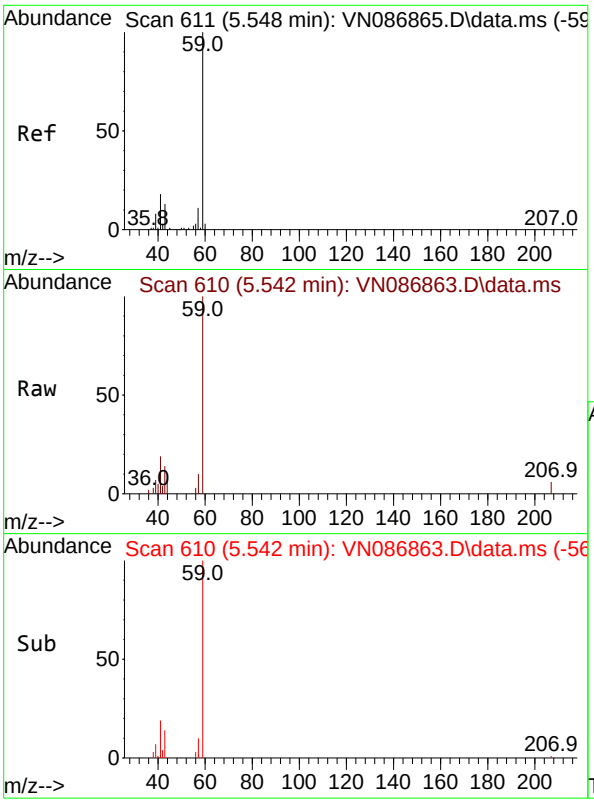




#10
Methyl Iodide
Concen: 5.092 ug/l
RT: 4.606 min Scan# 451
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion:142 Resp: 16530

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 39.8 | 30.9 | 46.3 |
| 141 | 14.5 | 10.4 | 15.6 |






#11
Tert butyl alcohol
Concen: 26.363 ug/l
RT: 5.542 min Scan# 61
Delta R.T. -0.006 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

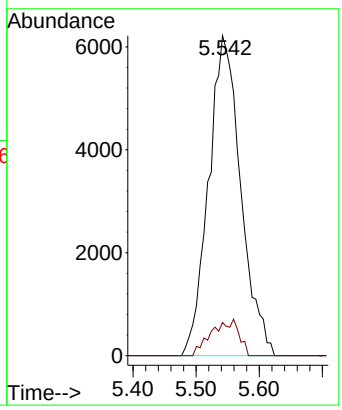
Tgt Ion: 59 Resp: 2200

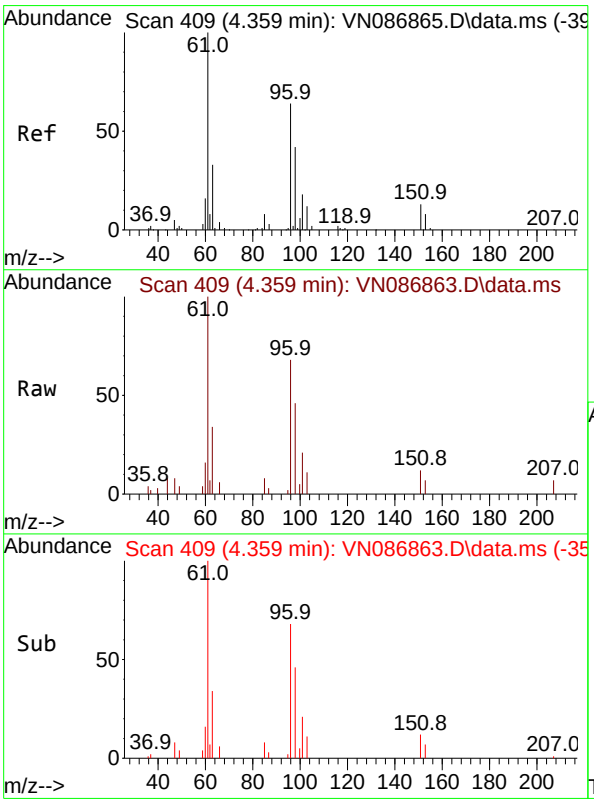
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 9.6 | 8.1 | 12.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

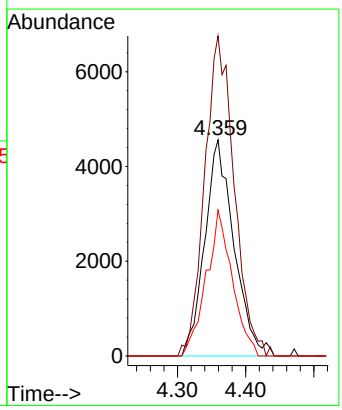


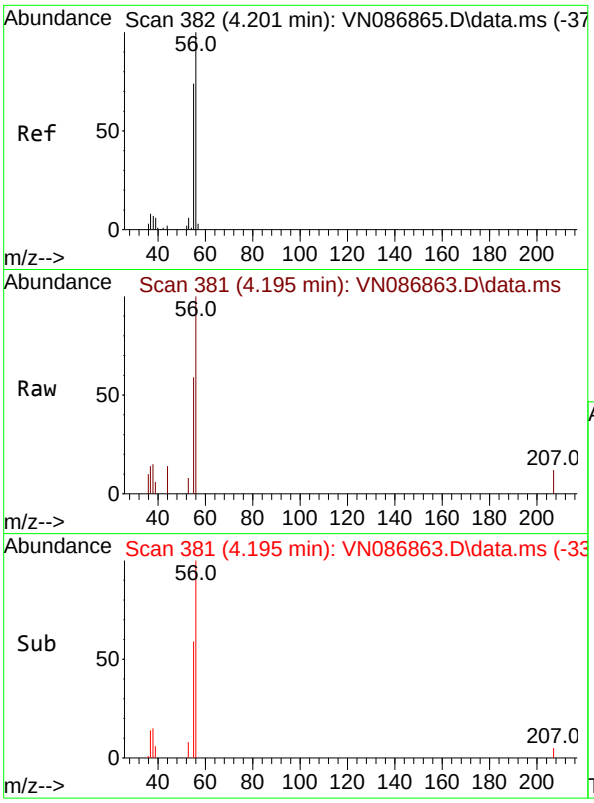




#12
1,1-Dichloroethene
Concen: 5.323 ug/l
RT: 4.359 min Scan# 409
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 96 Resp: 13610

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 148.1 | 125.8 | 188.6 |
| 98 | 67.5 | 52.5 | 78.7 |

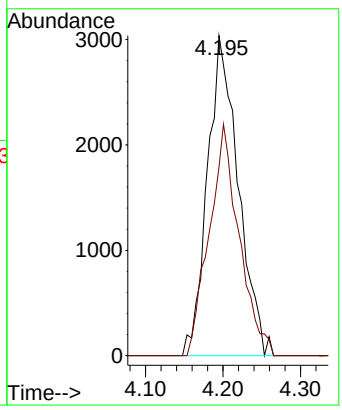





#13
Acrolein
Concen: 31.804 ug/l
RT: 4.195 min Scan# 3
Delta R.T. -0.006 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 56 Resp: 840

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 70.2 | 55.6 | 83.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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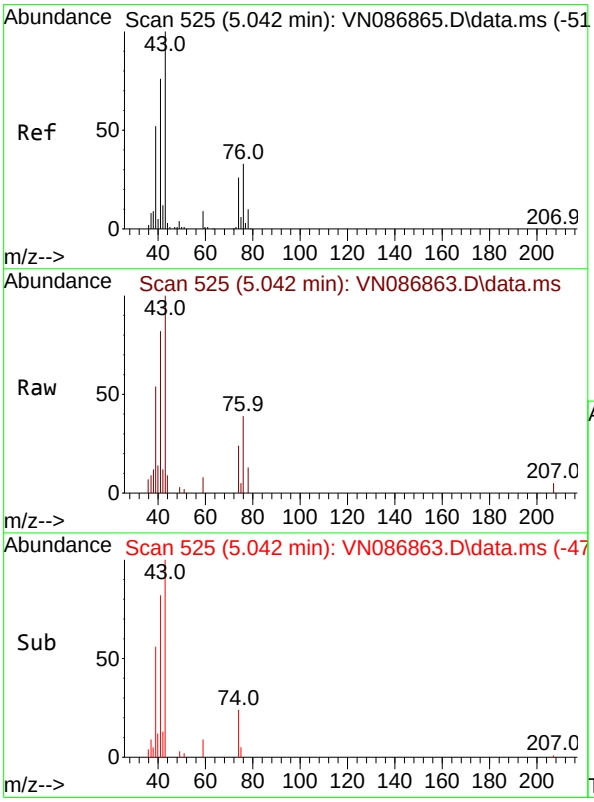
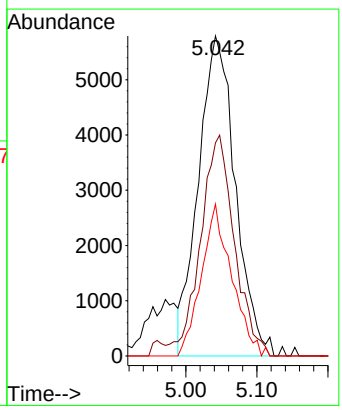
Supervised By :Mahesh Dadoda 06/09/2025

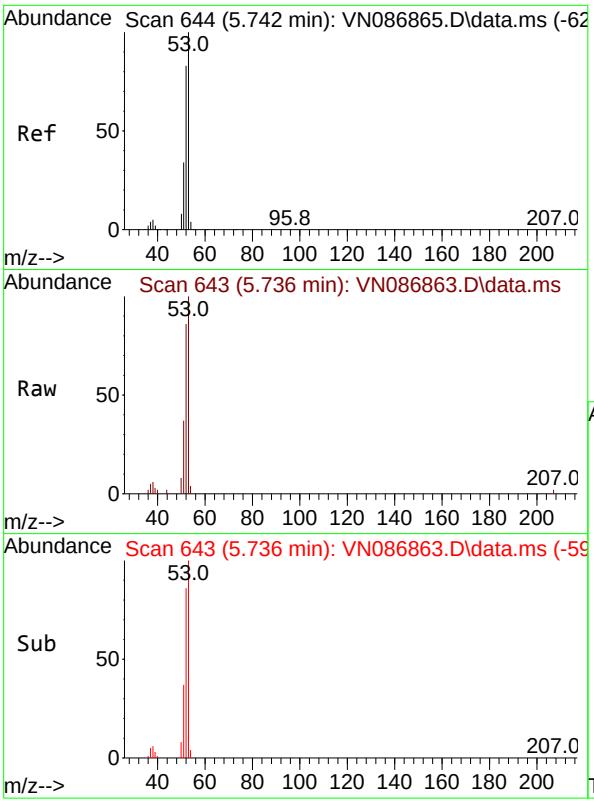



#14
Allyl chloride
Concen: 4.935 ug/l
RT: 5.042 min Scan# 525
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 41 Resp: 20925

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 63.2 | 51.3 | 76.9 |
| 76 | 39.0 | 31.4 | 47.0 |

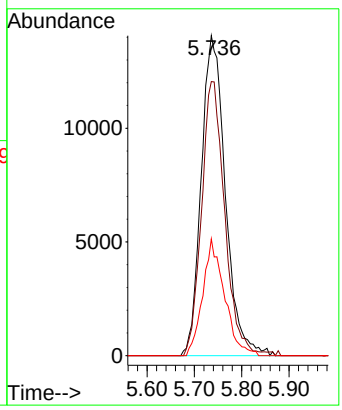





#15
Acrylonitrile
Concen: 25.545 ug/l
RT: 5.736 min Scan# 64
Delta R.T. -0.006 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 53 Resp: 4982

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 82.4 | 65.0 | 97.6 |
| 51 | 32.9 | 27.2 | 40.8 |




**Instrument :**
MSVOA_N
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VSTDICC005

**Manual Integrations**
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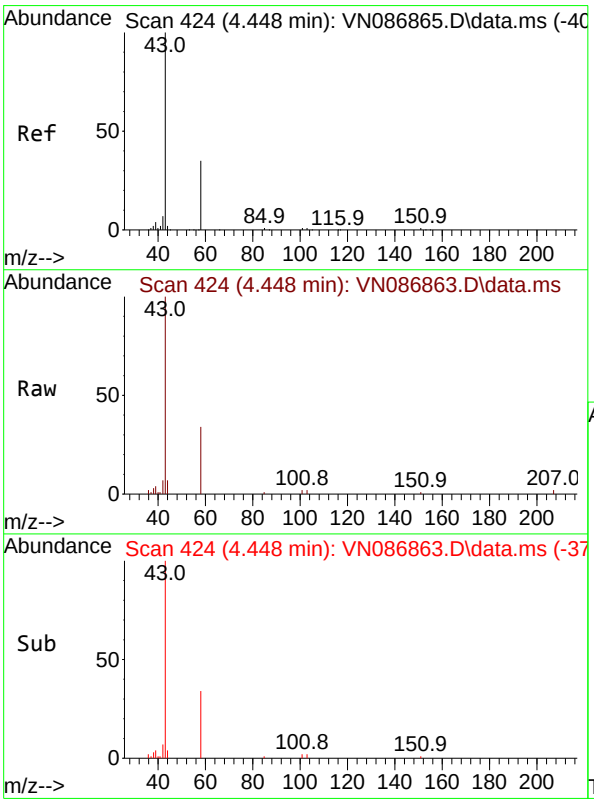
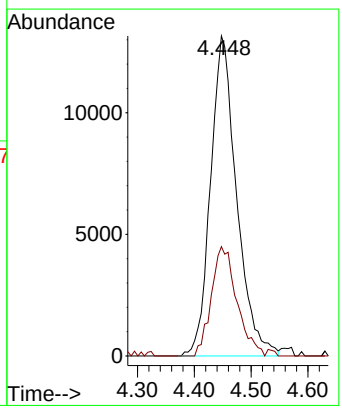
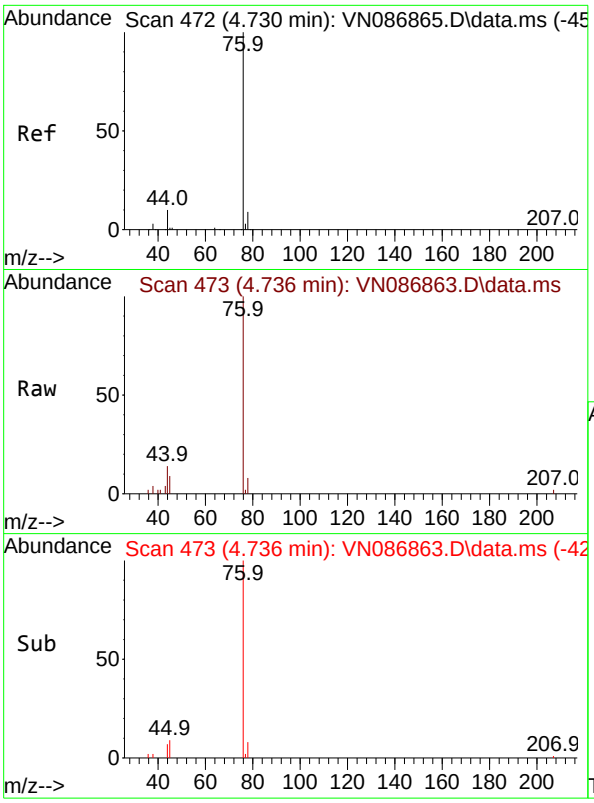



#16
Acetone
Concen: 25.741 ug/l
RT: 4.448 min Scan# 424
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 43 Resp: 41981

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 34.1 | 28.0 | 42.0 |

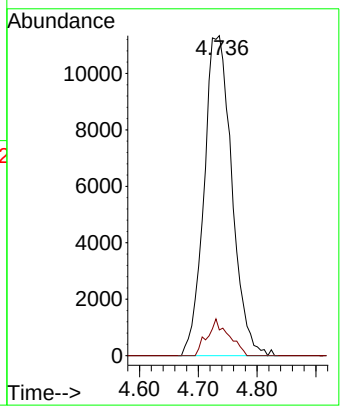





#17
Carbon Disulfide
Concen: 5.267 ug/l
RT: 4.736 min Scan# 4
Delta R.T. 0.006 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 76 Resp: 3724

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 8.0 | 7.3 | 10.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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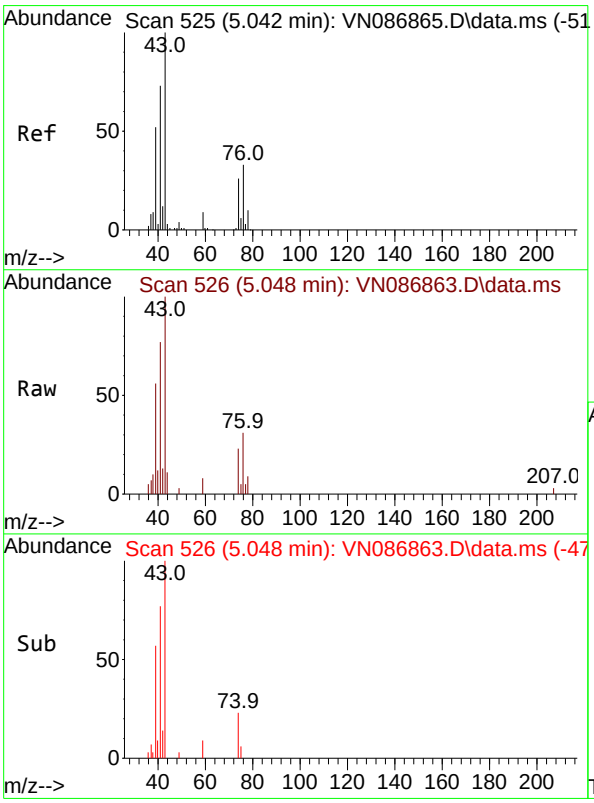
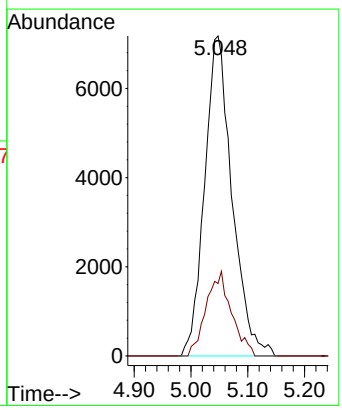
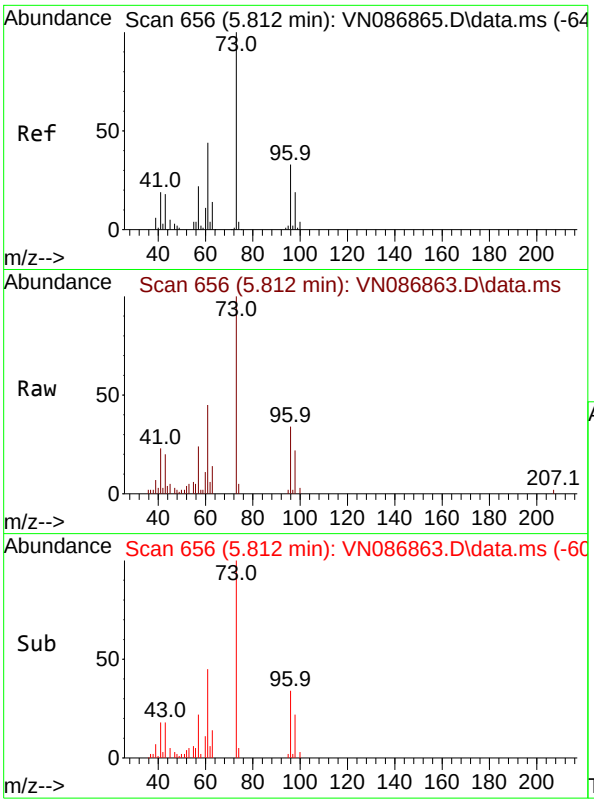



#18
Methyl Acetate
Concen: 5.070 ug/l
RT: 5.048 min Scan# 526
Delta R.T. 0.006 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 43 Resp: 24096

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 24.4 | 20.7 | 31.1 |

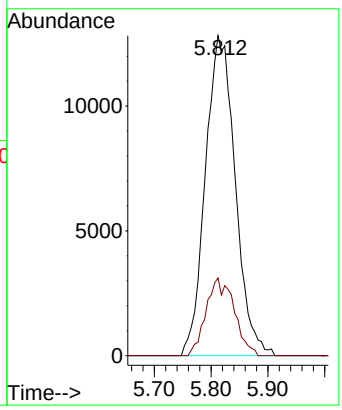





#19
Methyl tert-butyl Ether
Concen: 5.058 ug/l
RT: 5.812 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 73 Resp: 4682

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 24.3 | 17.4 | 26.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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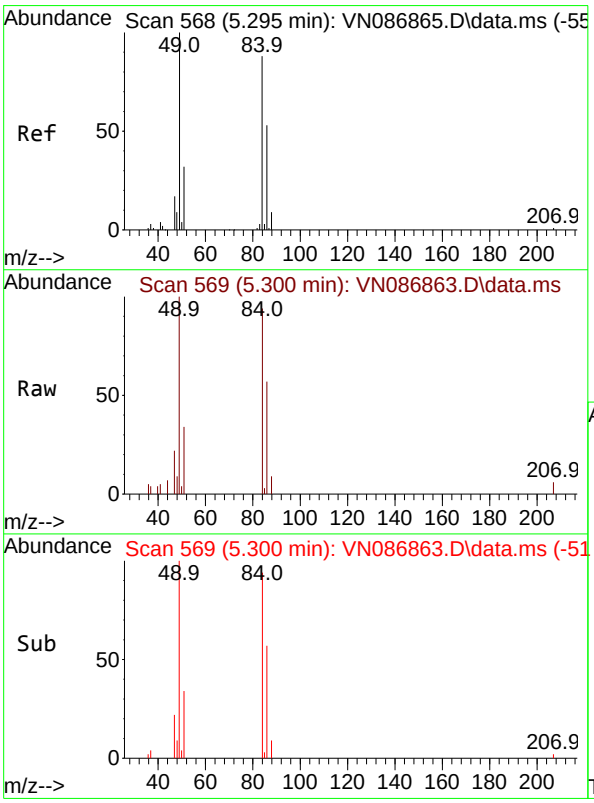
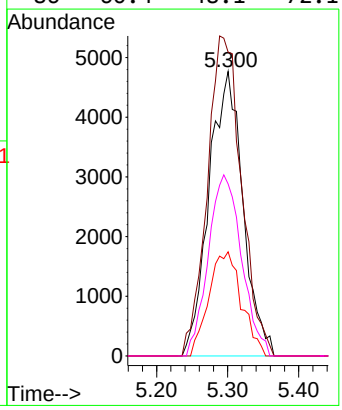
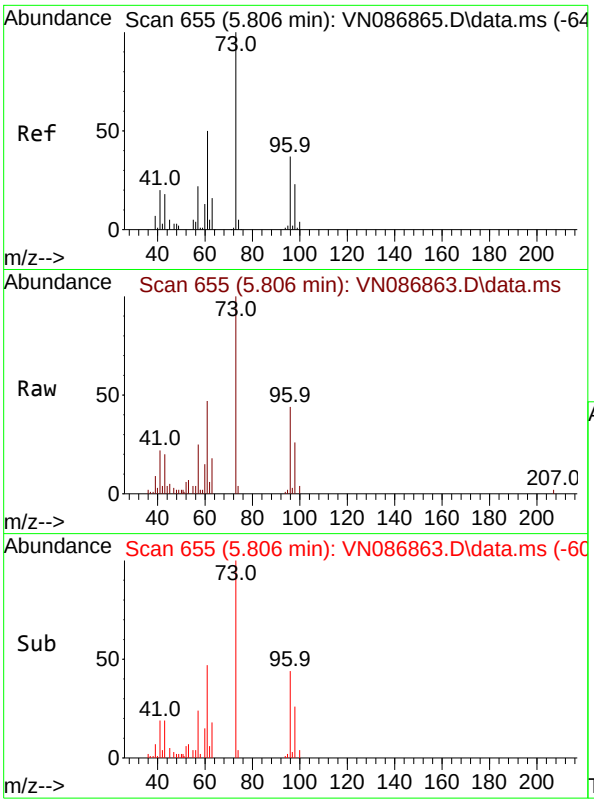



#20
Methylene Chloride
Concen: 5.178 ug/l
RT: 5.300 min Scan# 569
Delta R.T. 0.006 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 84 Resp: 15809

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 106.8 | 90.5 | 135.7 |
| 51 | 36.6 | 28.5 | 42.7 |
| 86 | 60.4 | 48.1 | 72.1 |

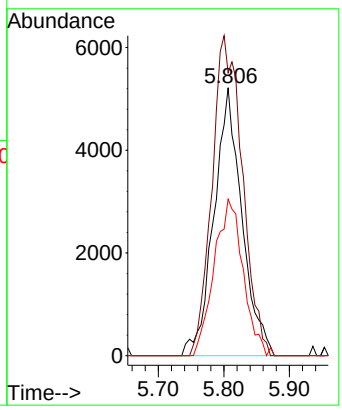





#21
trans-1,2-Dichloroethene
Concen: 5.442 ug/l
RT: 5.806 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 96 Resp: 1548

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 105.6 | 109.2 | 163.8 |
| 98 | 58.4 | 49.8 | 74.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

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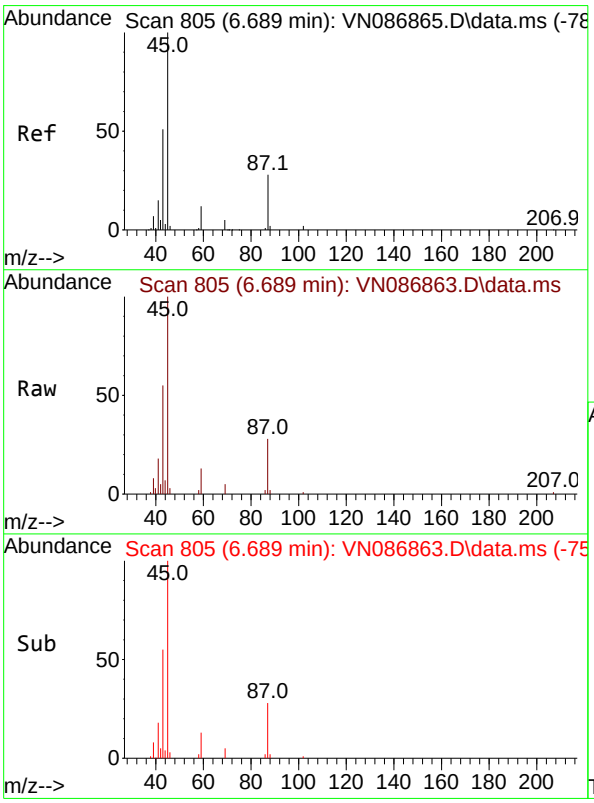
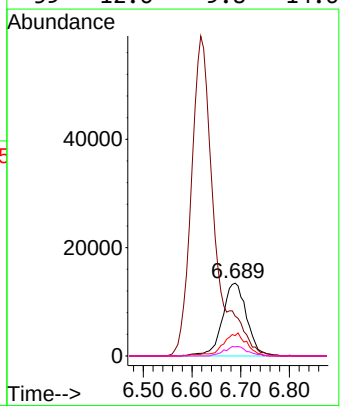
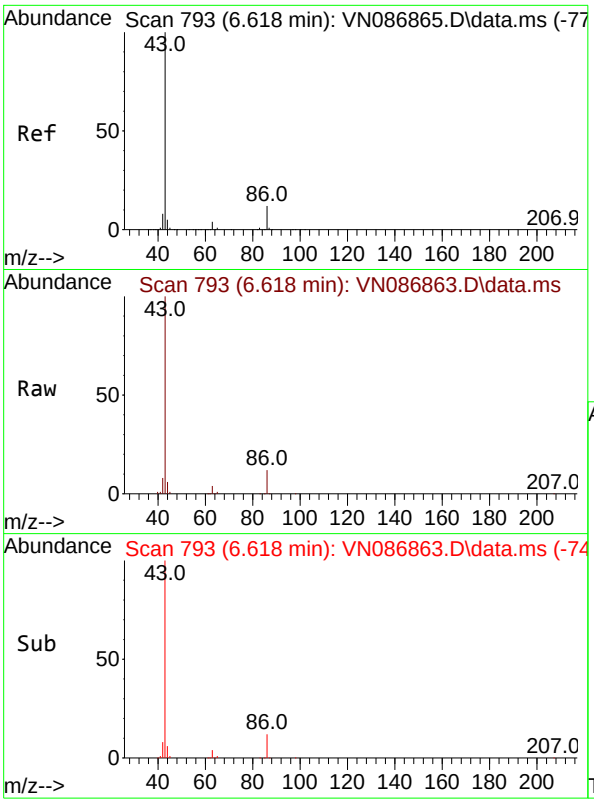



#22
Diisopropyl ether
Concen: 5.191 ug/l
RT: 6.689 min Scan# 805
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 45 Resp: 46396

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 53.2 | 41.9 | 62.9 |
| 87 | 27.9 | 22.4 | 33.6 |
| 59 | 12.6 | 9.8 | 14.6 |






#23
Vinyl Acetate
Concen: 25.735 ug/l
RT: 6.618 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 43 Resp: 19433

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 11.8 | 9.5 | 14.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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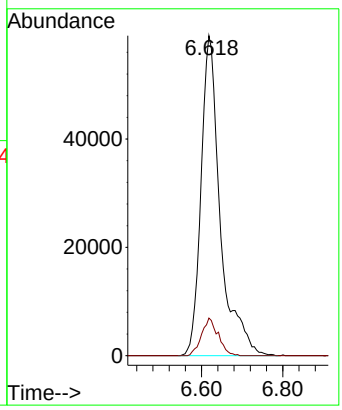
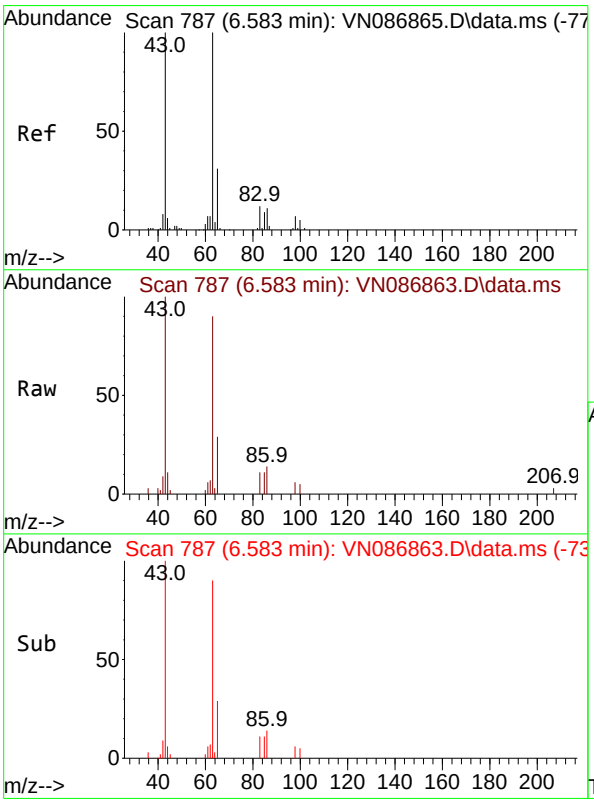
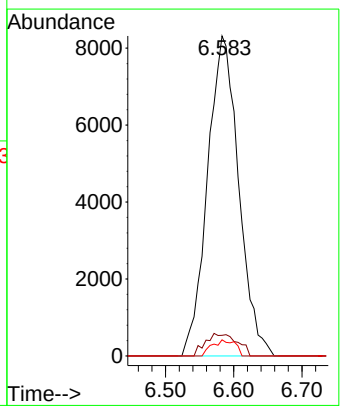


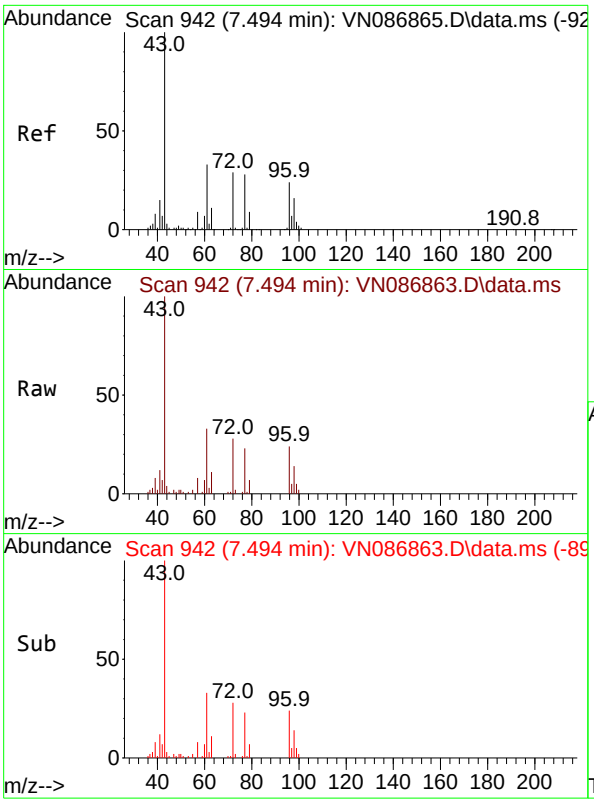




#24
1,1-Dichloroethane
Concen: 5.147 ug/l
RT: 6.583 min Scan# 787
Delta R.T. 0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 63 Resp: 26473

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 6.4 | 3.6 | 10.8 |
| 100 | 5.1 | 2.6 | 7.8 |






#25
2-Butanone
Concen: 25.888 ug/l
RT: 7.494 min Scan# 94
Delta R.T. 0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 43 Resp: 6862

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 28.1 | 23.0 | 34.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

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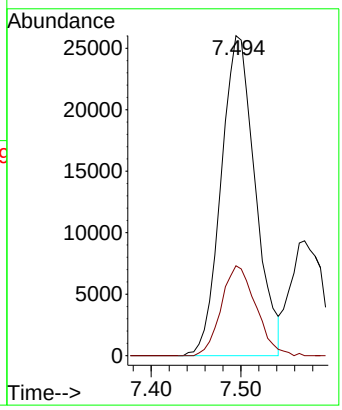
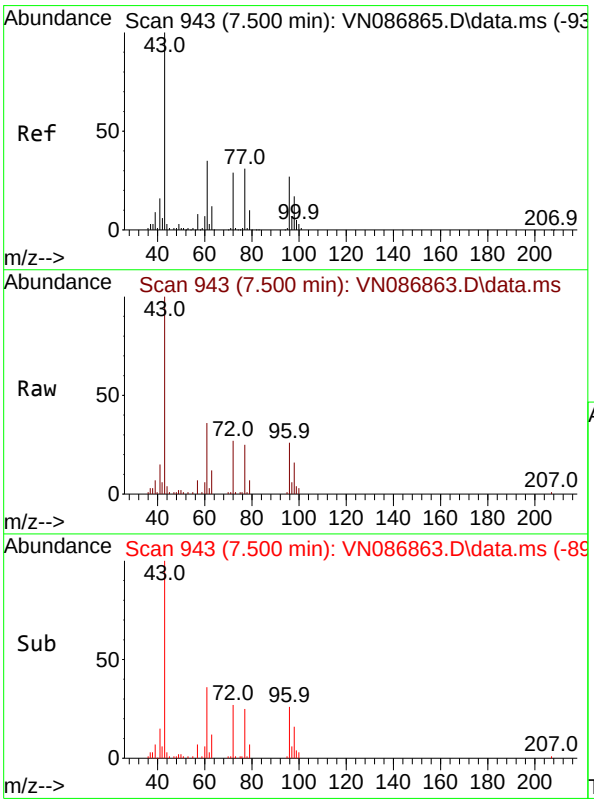
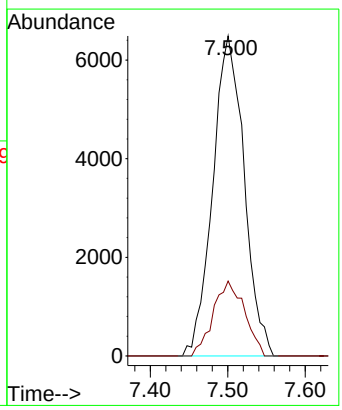


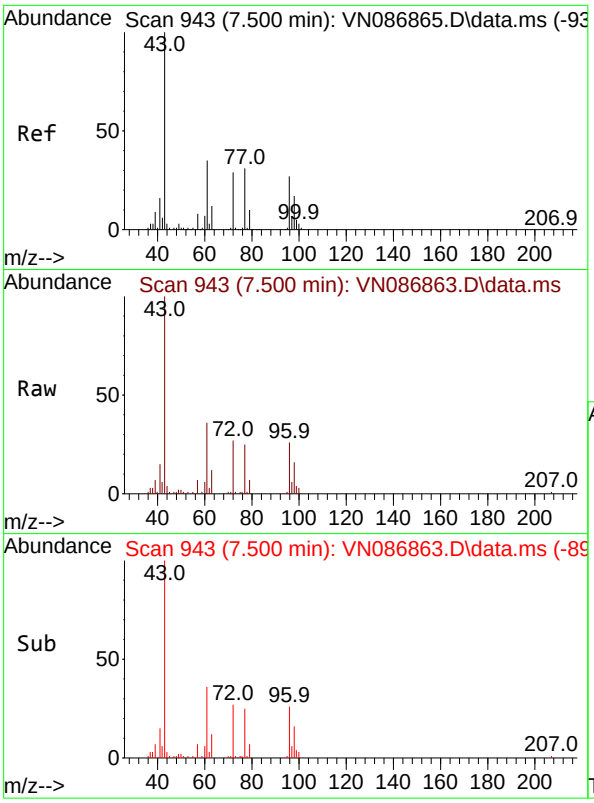




#26
2,2-Dichloropropane
Concen: 4.571 ug/l
RT: 7.500 min Scan# 943
Delta R.T. 0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 77 Resp: 18288

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 23.3 | 11.6 | 34.7 |






#27
cis-1,2-Dichloroethene
Concen: 5.172 ug/l
RT: 7.500 min Scan# 94
Delta R.T. 0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 96 Resp: 1759

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 136.0 | 0.0 | 278.0 |
| 98 | 64.0 | 0.0 | 128.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

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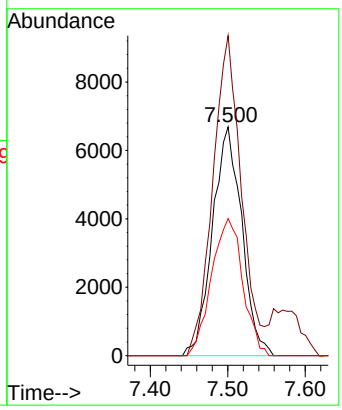
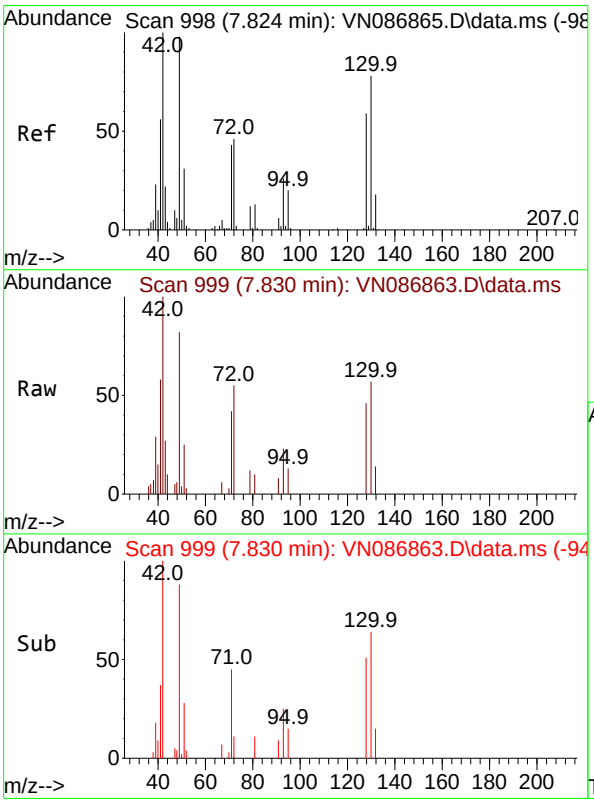
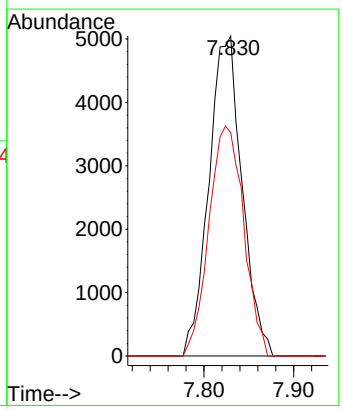


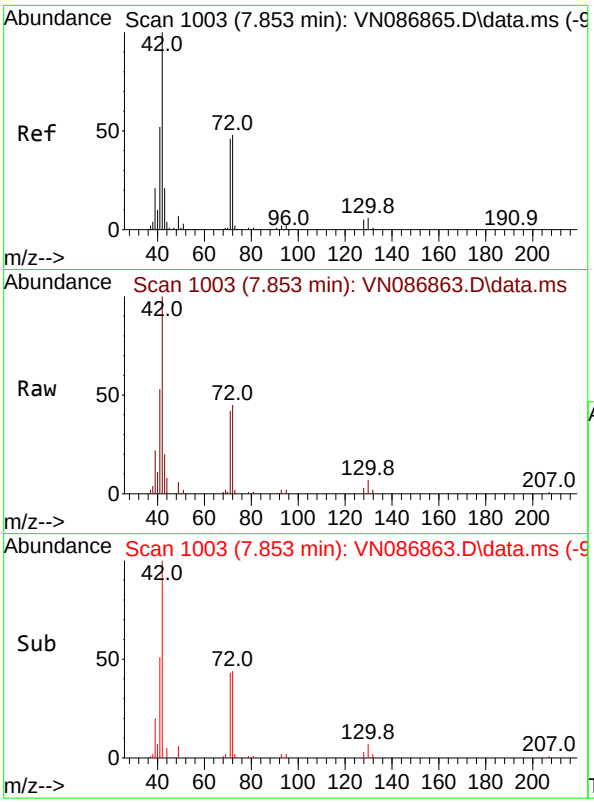




#28
Bromochloromethane
Concen: 5.124 ug/l
RT: 7.830 min Scan# 999
Delta R.T. 0.006 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 49 Resp: 12958

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 0.0 | 0.0 | 3.8 |
| 130 | 75.2 | 62.2 | 93.2 |






#29
Tetrahydrofuran
Concen: 25.912 ug/l
RT: 7.853 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 42 Resp: 4474

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 48.6 | 37.8 | 56.6 |
| 71 | 43.5 | 35.6 | 53.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

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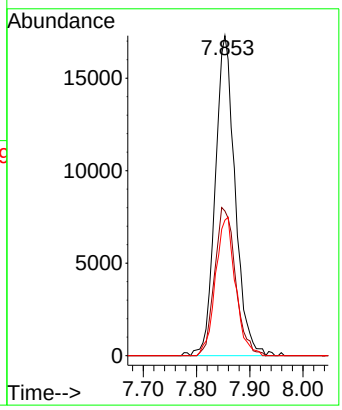
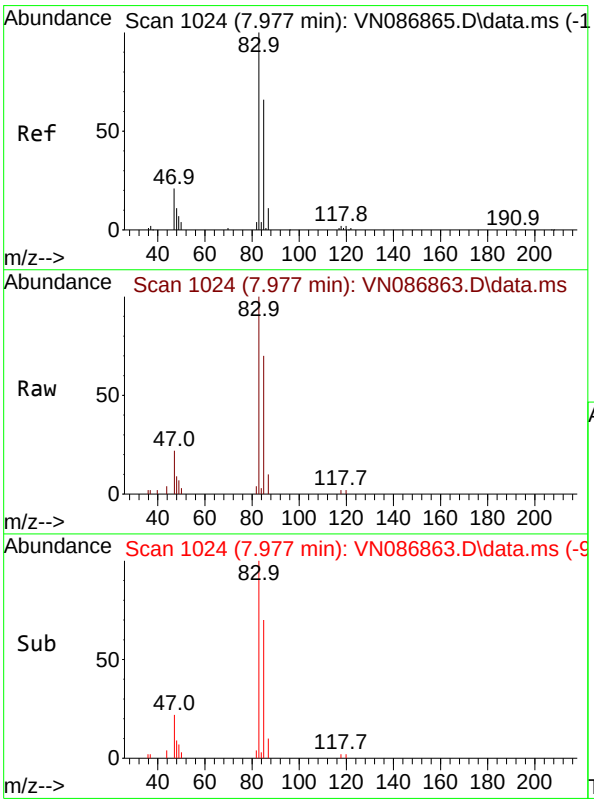
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

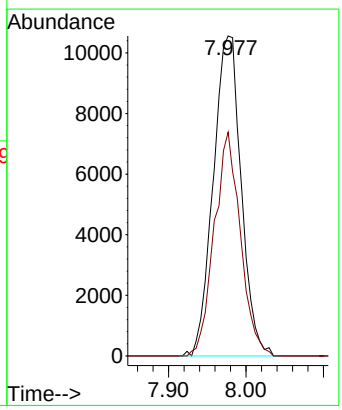


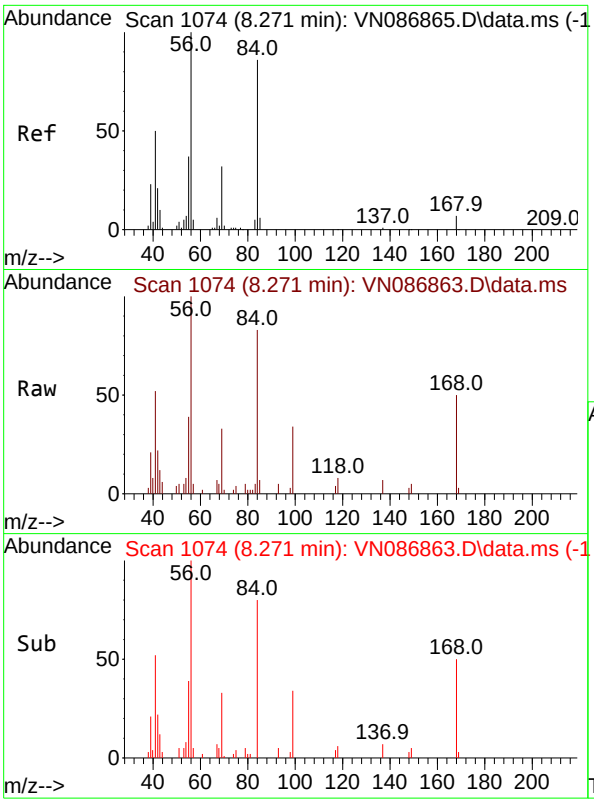




#30
Chloroform
Concen: 5.149 ug/l
RT: 7.977 min Scan# 1024
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 83 Resp: 26450

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 69.9 | 52.9 | 79.3 |






#31
Cyclohexane
Concen: 6.002 ug/l
RT: 8.271 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 56 Resp: 2993

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 33.2 | 25.4 | 38.0 |
| 84 | 81.1 | 68.8 | 103.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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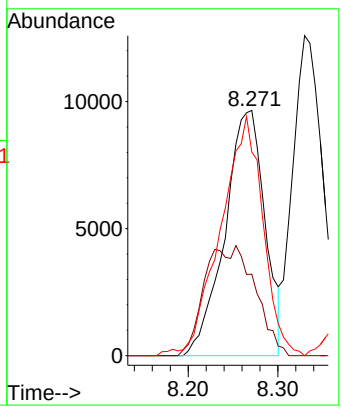
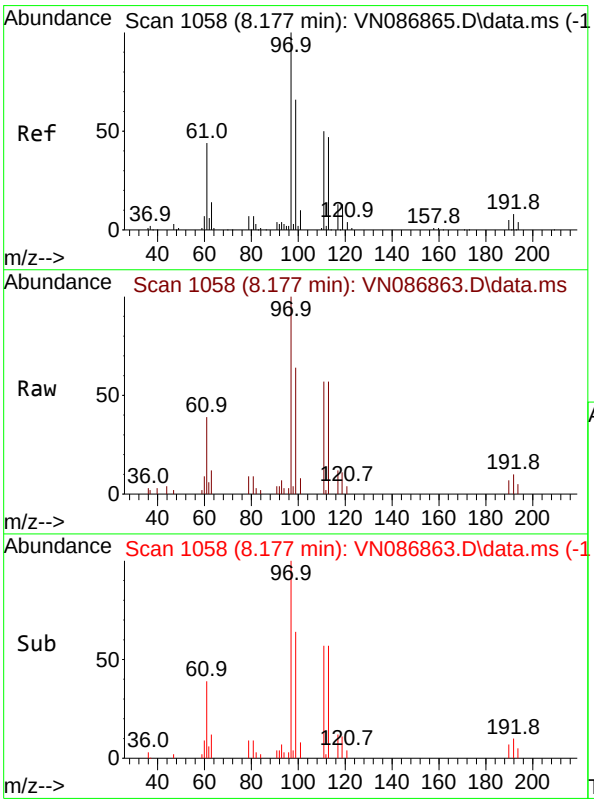
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

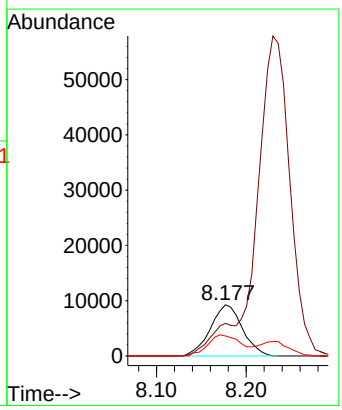


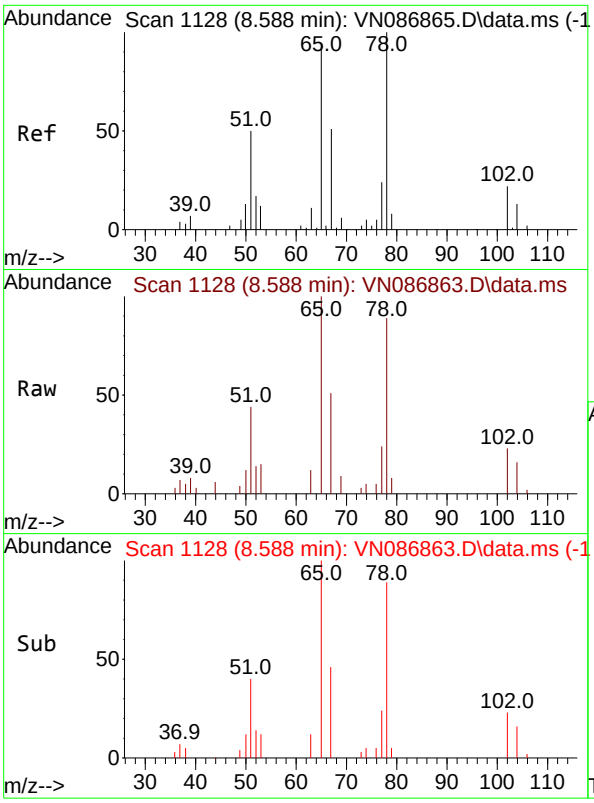




#32
1,1,1-Trichloroethane
Concen: 5.232 ug/l
RT: 8.177 min Scan# 1058
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 97 Resp: 22857

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 0.0 | 52.0 | 78.0# |
| 61 | 42.9 | 35.9 | 53.9 |

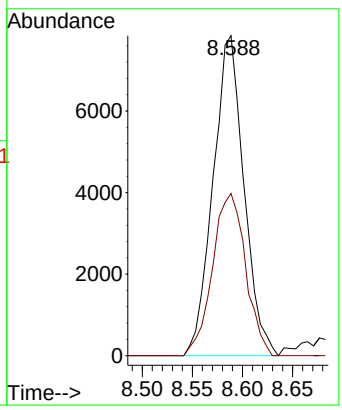





#33
1,2-Dichloroethane-d4
Concen: 5.468 ug/l
RT: 8.588 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 65 Resp: 1681

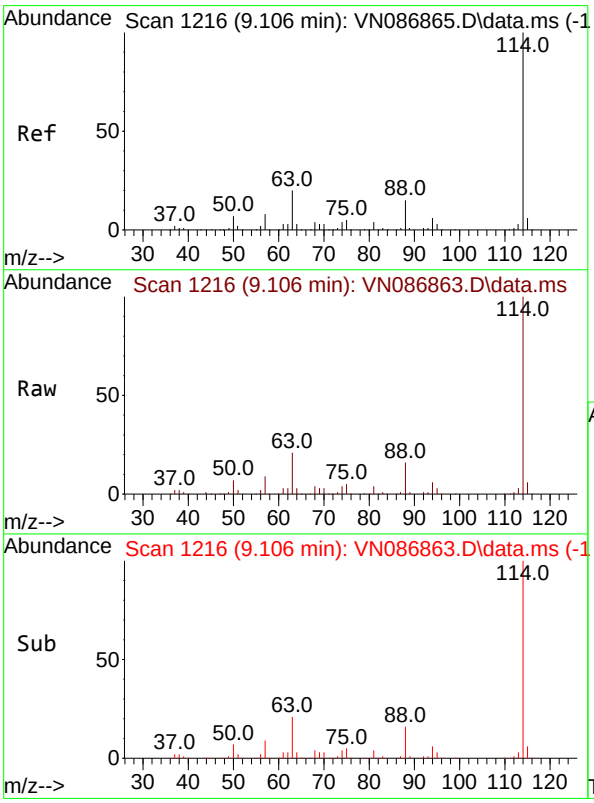
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 54.4 | 0.0 | 105.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

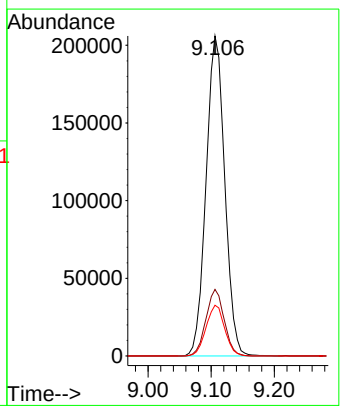
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

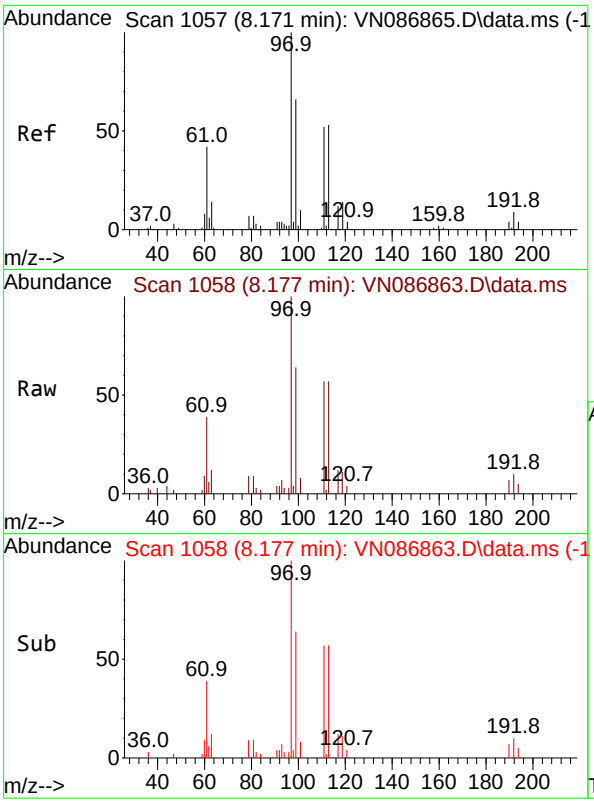



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.106 min Scan# 1216
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion:114 Resp: 423980

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 20.8 | 0.0 | 39.6 |
| 88 | 15.9 | 0.0 | 30.2 |

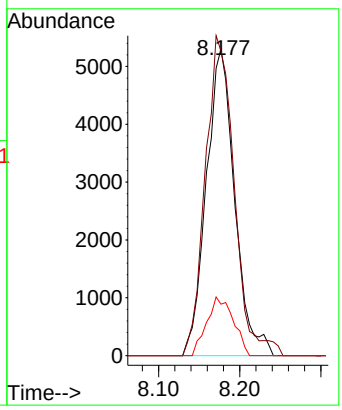





#35
Dibromofluoromethane
Concen: 5.121 ug/l
RT: 8.177 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion:113 Resp: 1286

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 106.5 | 84.2 | 126.2 |
| 192 | 18.0 | 14.2 | 21.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
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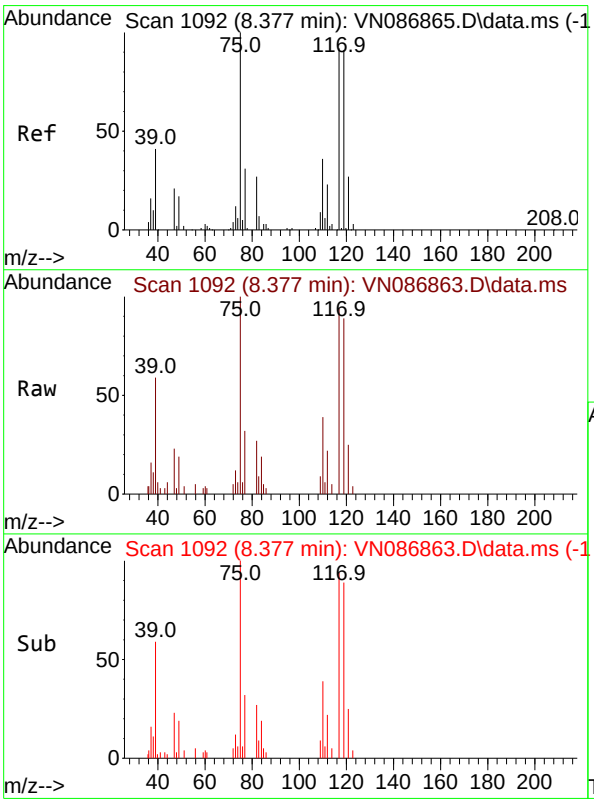
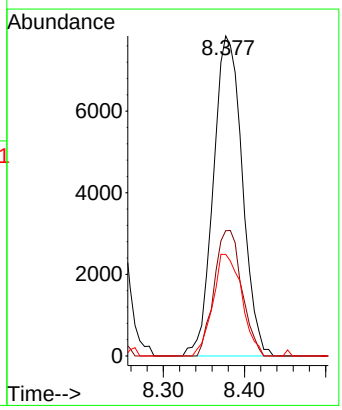
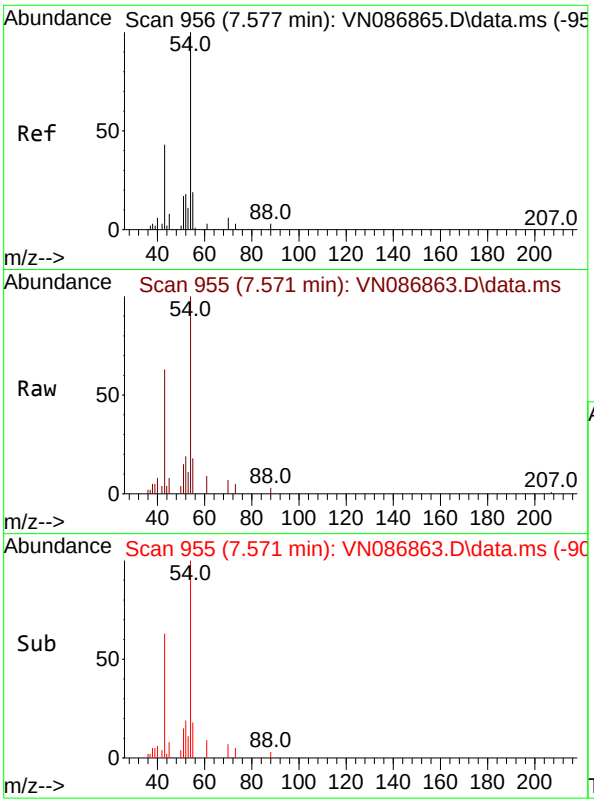



#36
1,1-Dichloropropene
Concen: 5.184 ug/l
RT: 8.377 min Scan# 1092
Delta R.T. 0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 75 Resp: 19410

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 37.4 | 17.6 | 52.9 |
| 77 | 31.7 | 25.3 | 37.9 |






#37
Ethyl Acetate
Concen: 5.470 ug/l
RT: 7.571 min Scan# 9
Delta R.T. -0.006 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 43 Resp: 2607

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 14.1 | 12.1 | 18.1 |
| 70 | 10.9 | 9.8 | 14.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

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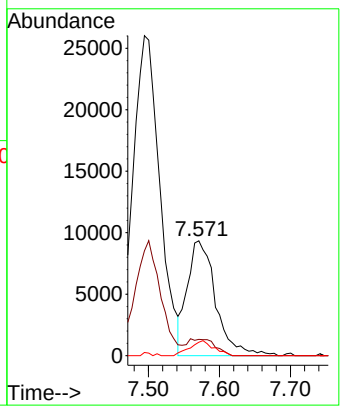
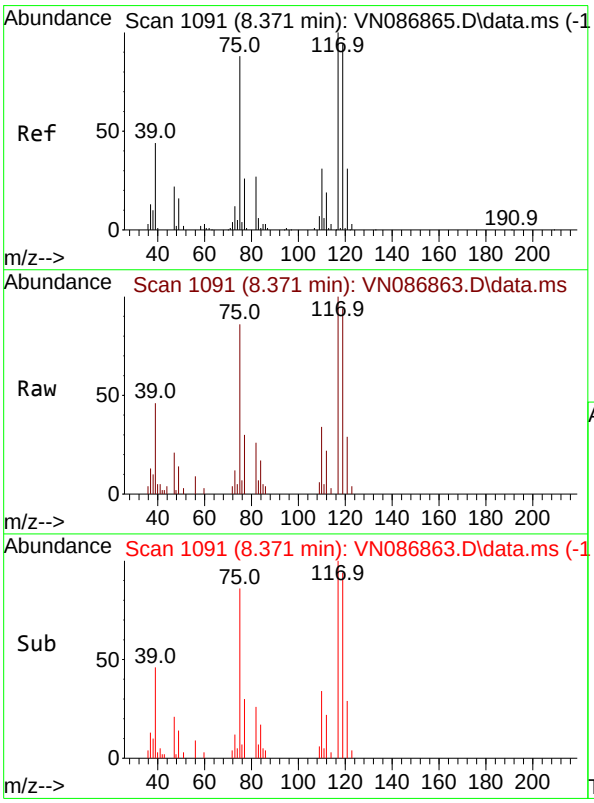
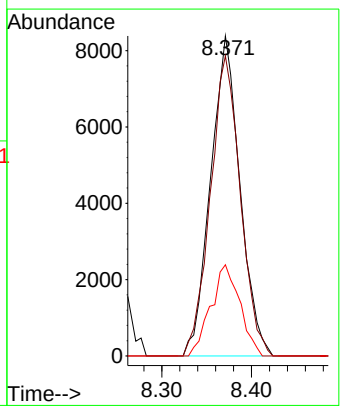


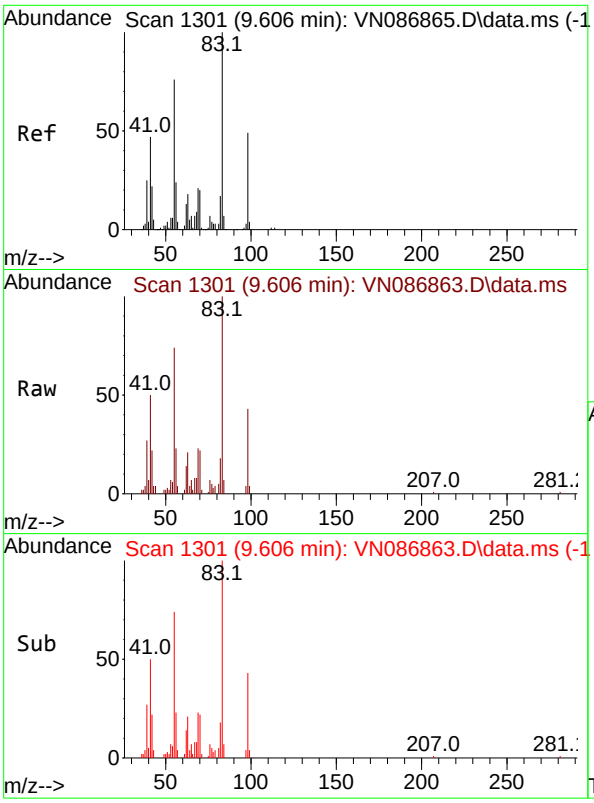




#38
Carbon Tetrachloride
Concen: 5.184 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. 0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion:117 Resp: 19056

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 93.8 | 75.0 | 112.6 |
| 121 | 28.5 | 24.9 | 37.3 |






#39
Methylcyclohexane
Concen: 5.333 ug/l
RT: 9.606 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 83 Resp: 2735

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 73.6 | 61.0 | 91.6 |
| 98 | 42.6 | 38.9 | 58.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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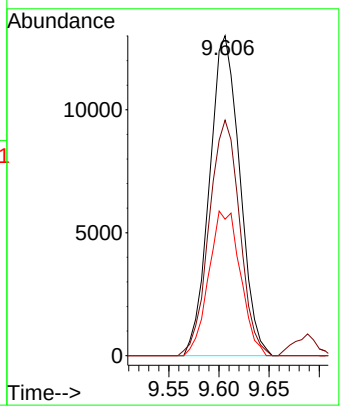
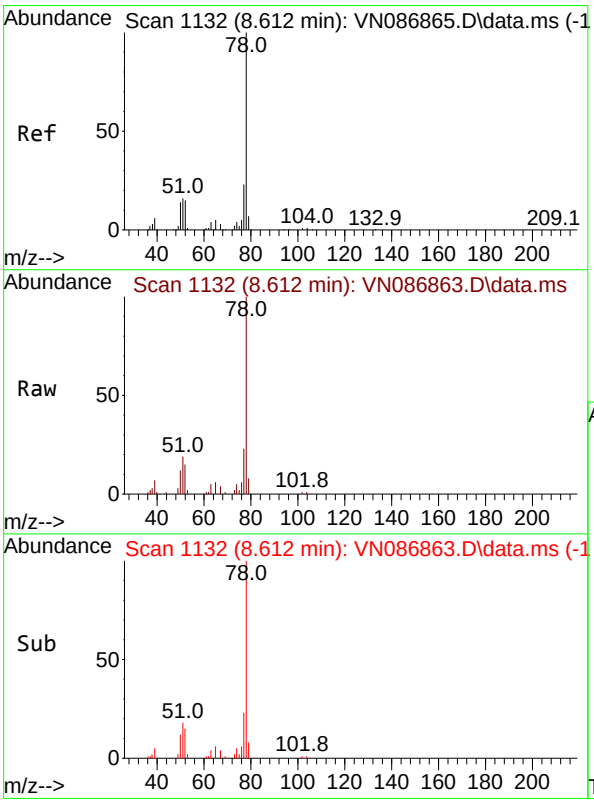
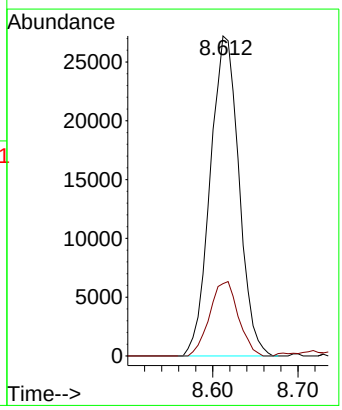


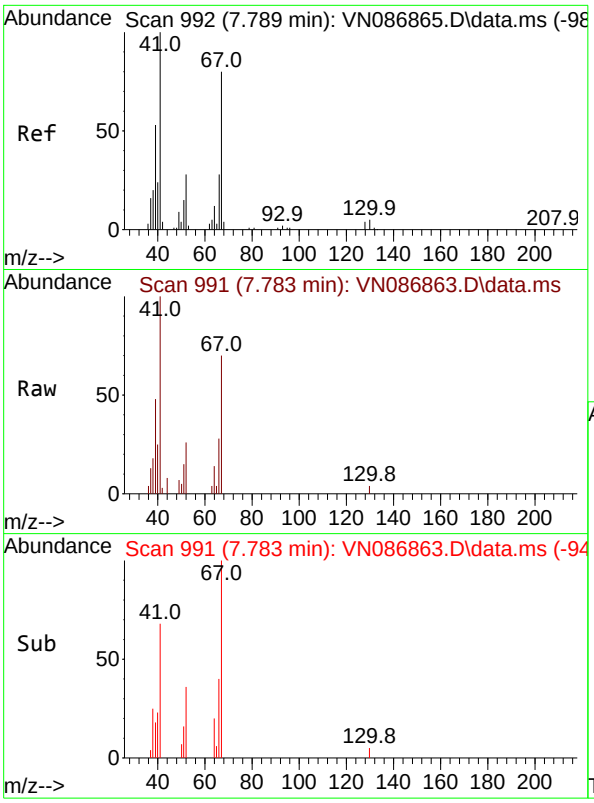




#40
Benzene
Concen: 5.199 ug/l
RT: 8.612 min Scan# 1132
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 78 Resp: 63646

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 22.6 | 18.7 | 28.1 |

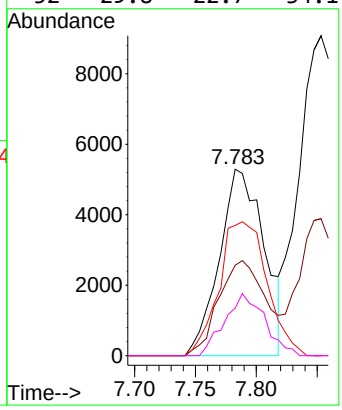





#41
Methacrylonitrile
Concen: 5.050 ug/l
RT: 7.783 min Scan# 9
Delta R.T. -0.006 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 41 Resp: 1351

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 53.1 | 41.2 | 61.8 |
| 67 | 77.0 | 61.4 | 92.2 |
| 52 | 29.8 | 22.7 | 34.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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Reviewed By :John Carlone 06/09/2025
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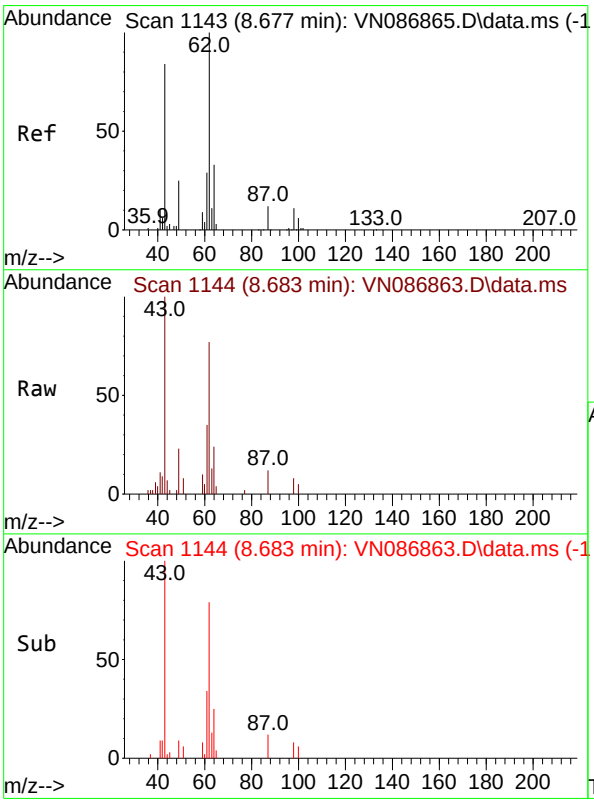
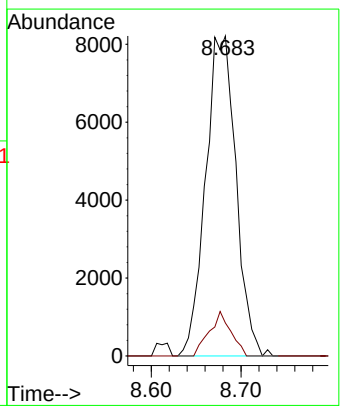
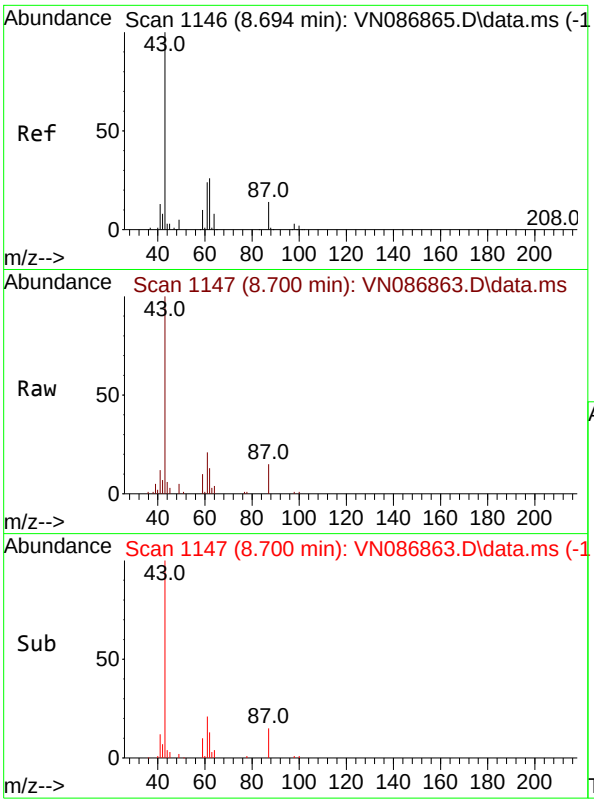



#42
1,2-Dichloroethane
Concen: 5.205 ug/l
RT: 8.683 min Scan# 1144
Delta R.T. 0.006 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 62 Resp: 19329

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 9.9 | 0.0 | 21.2 |






#43
Isopropyl Acetate
Concen: 5.264 ug/l
RT: 8.700 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 43 Resp: 4026

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 26.2 | 22.1 | 33.1 |
| 87 | 14.1 | 11.8 | 17.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

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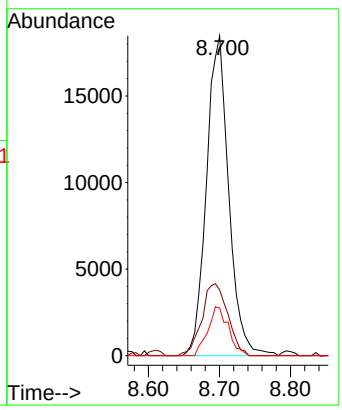
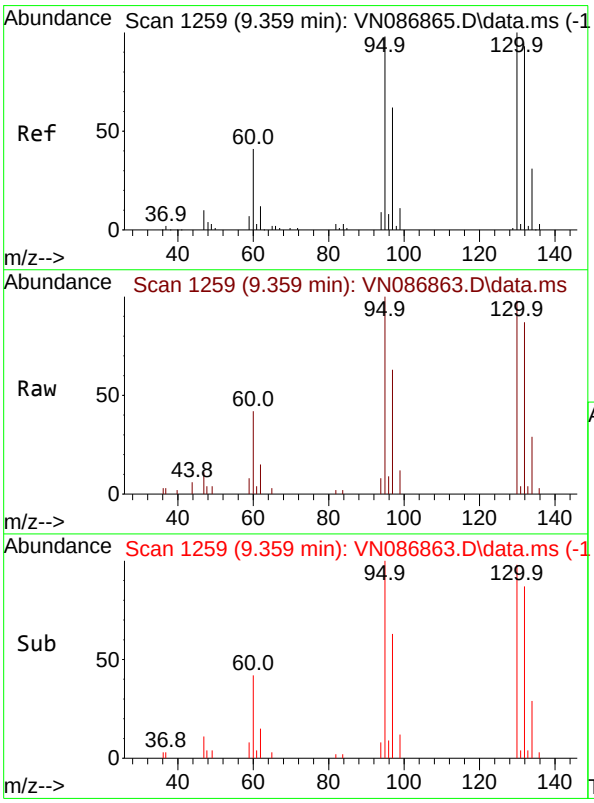
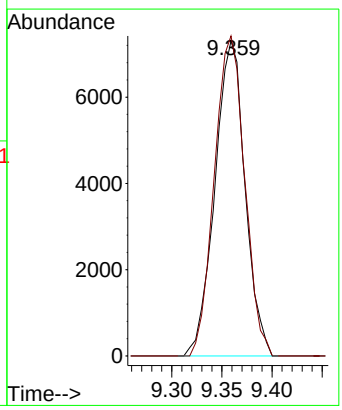


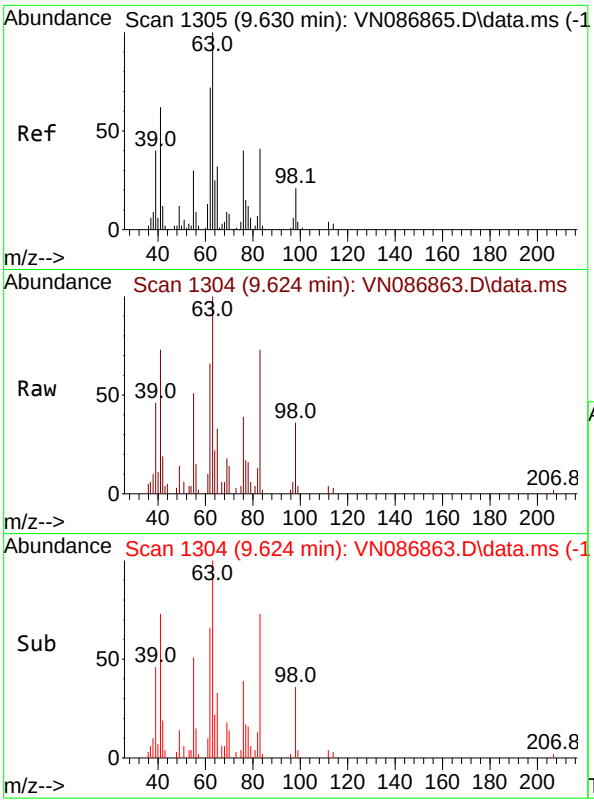




#44
Trichloroethene
Concen: 5.251 ug/l
RT: 9.359 min Scan# 1259
Delta R.T. 0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion:130 Resp: 15245

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 101.6 | 0.0 | 196.2 |






#45
1,2-Dichloropropane
Concen: 5.248 ug/l
RT: 9.624 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 63 Resp: 1563

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 32.7 | 25.5 | 38.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

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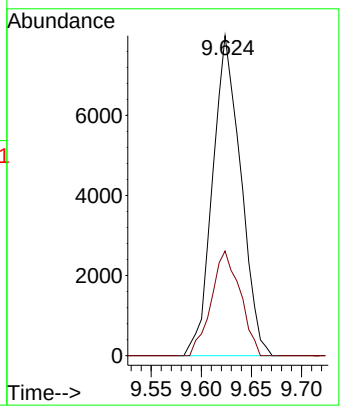
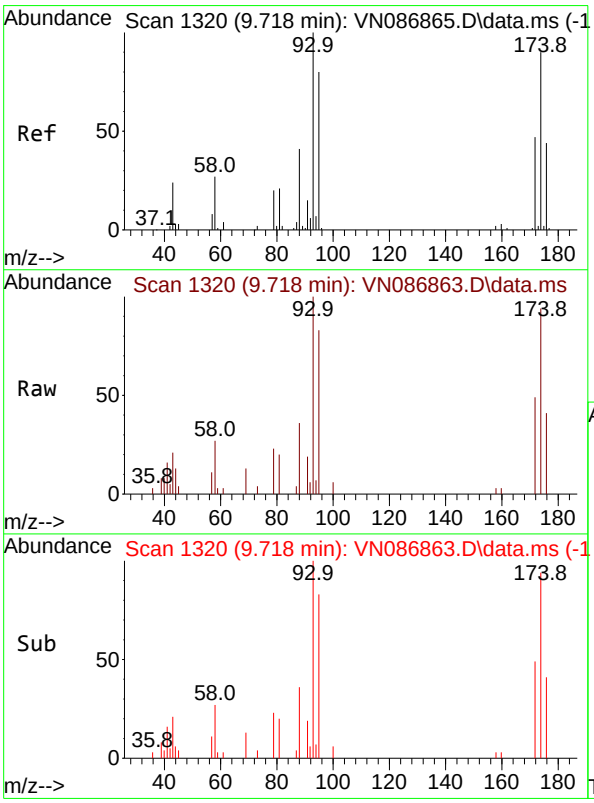
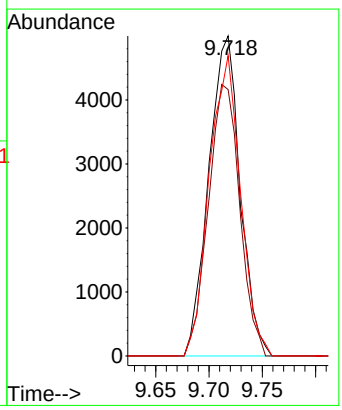


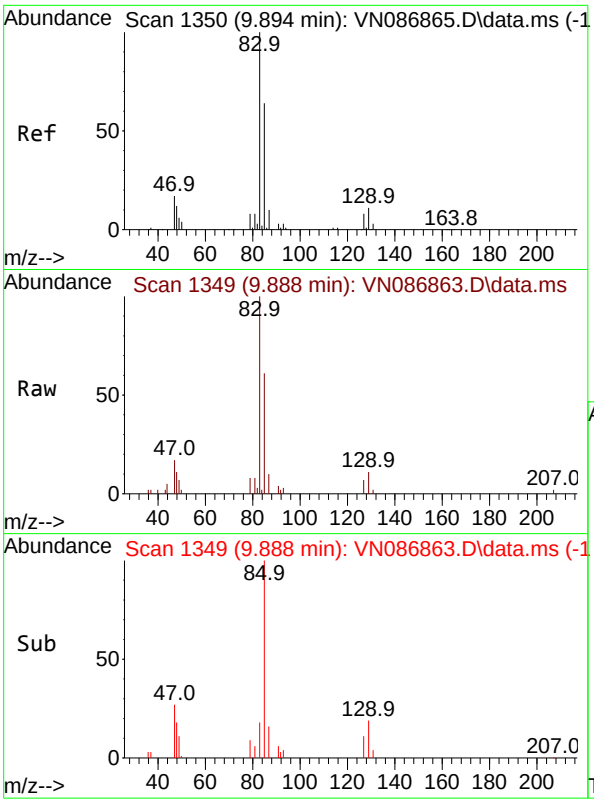




#46
Dibromomethane
Concen: 5.176 ug/l
RT: 9.718 min Scan# 1320
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 93 Resp: 10241

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 84.9 | 67.1 | 100.7 |
| 174 | 93.4 | 74.2 | 111.4 |

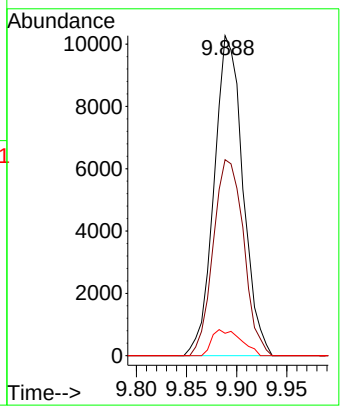





#47
Bromodichloromethane
Concen: 5.039 ug/l
RT: 9.888 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 83 Resp: 2051

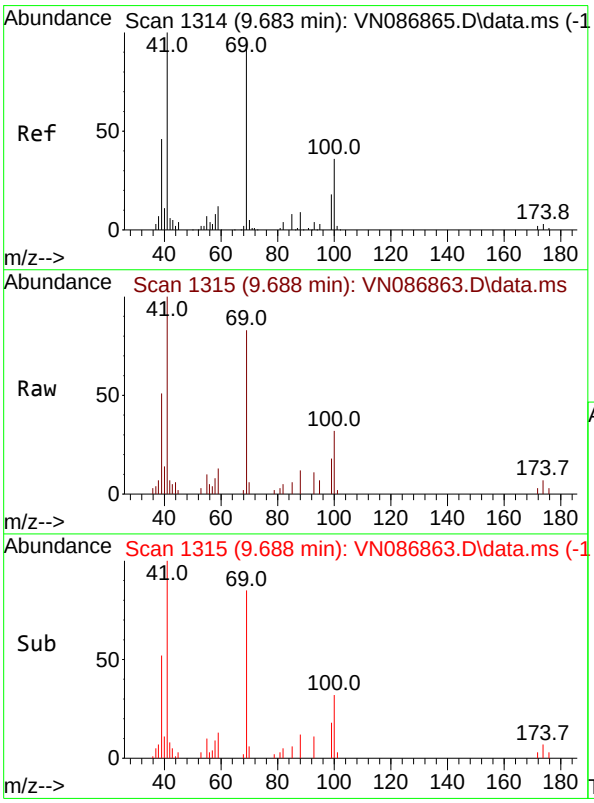
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 61.3 | 50.9 | 76.3 |
| 127 | 7.0 | 6.6 | 10.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

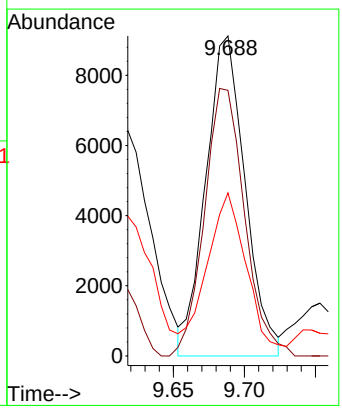
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

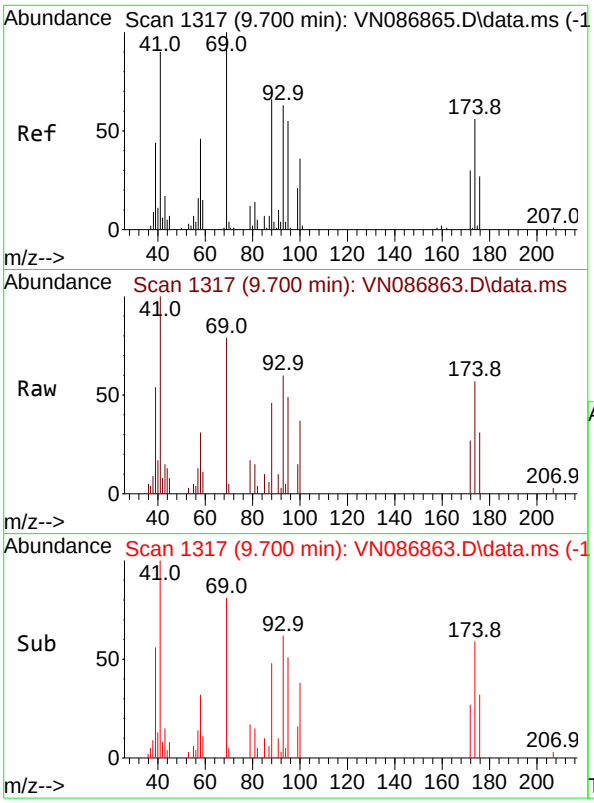



#48
Methyl methacrylate
Concen: 4.996 ug/l
RT: 9.688 min Scan# 1315
Delta R.T. 0.006 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 41 Resp: 17591

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 85.2 | 74.6 | 112.0 |
| 39 | 52.3 | 40.2 | 60.4 |

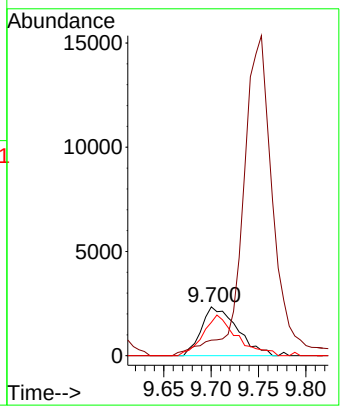





#49
1,4-Dioxane
Concen: 95.874 ug/l
RT: 9.700 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 88 Resp: 614

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 0.0 | 0.0 | 0.0 |
| 58 | 77.9 | 57.7 | 86.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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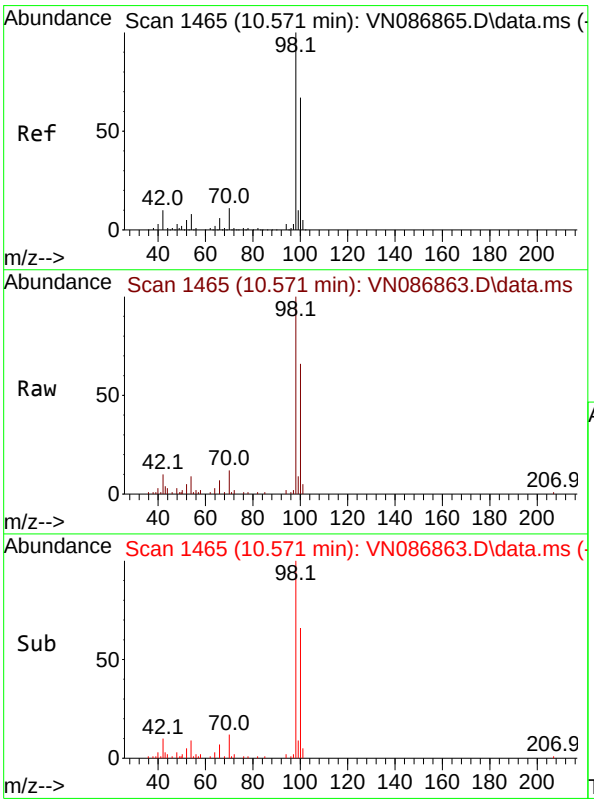
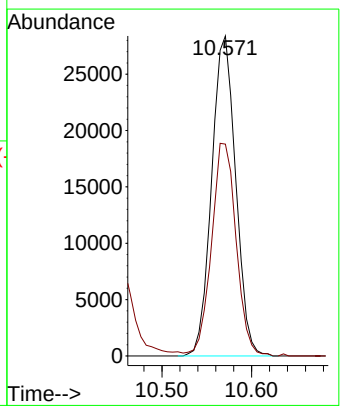
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

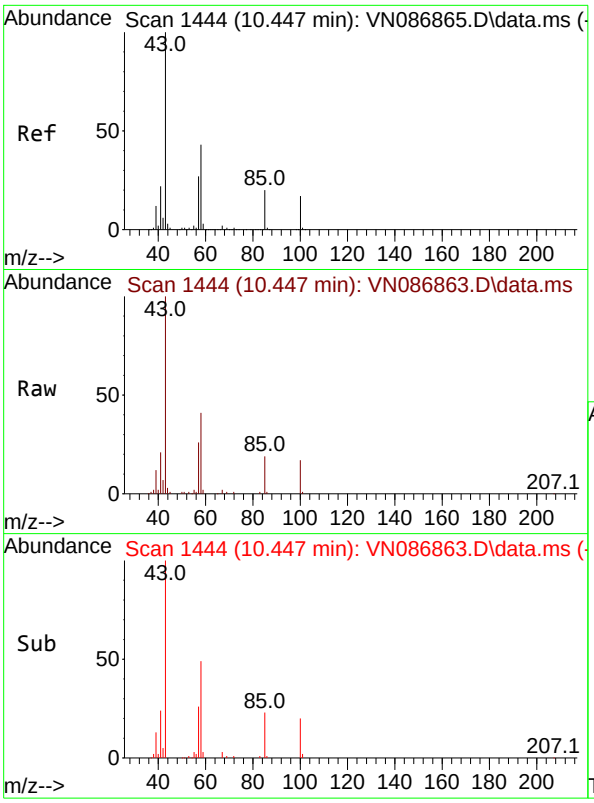



#50
Toluene-d8
Concen: 5.308 ug/l
RT: 10.571 min Scan# 1465
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 98 Resp: 52794

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 68.1 | 53.4 | 80.0 |

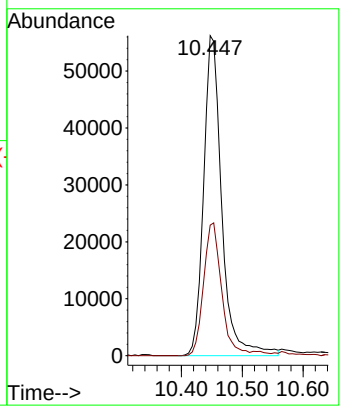





#51
4-Methyl-2-Pentanone
Concen: 25.283 ug/l
RT: 10.447 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 43 Resp: 11643

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 40.9 | 34.2 | 51.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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Reviewed By :John Carlone 06/09/2025
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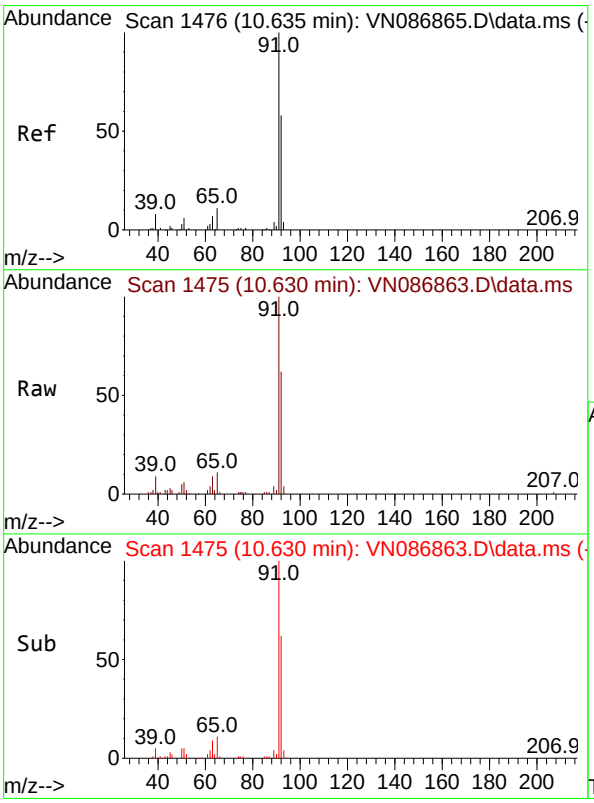
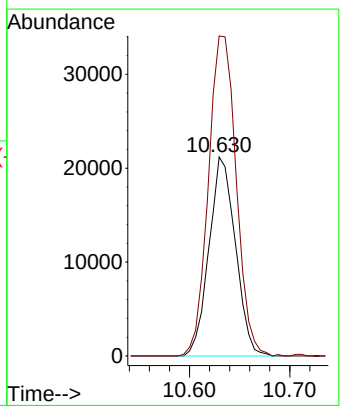
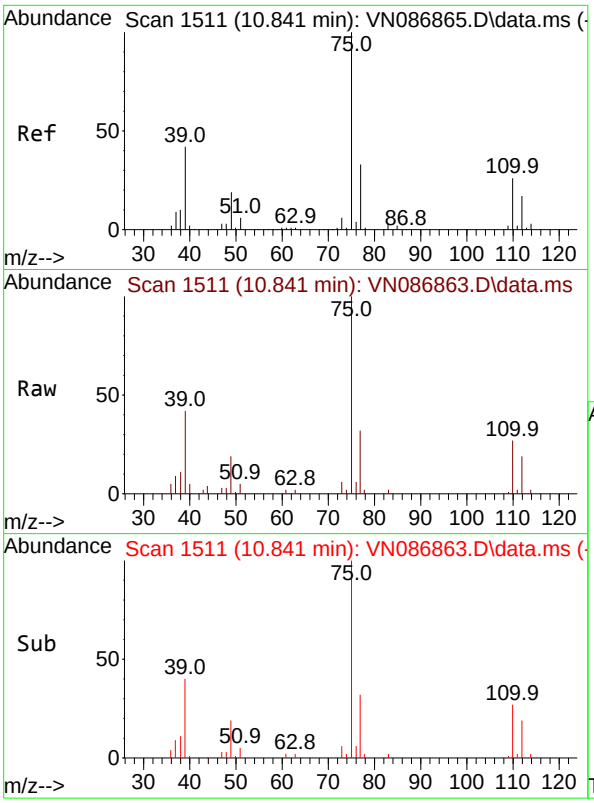



#52
Toluene
Concen: 5.178 ug/l
RT: 10.630 min Scan# 1475
Delta R.T. -0.006 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 92 Resp: 38744

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 169.5 | 136.5 | 204.7 |






#53
t-1,3-Dichloropropene
Concen: 4.896 ug/l
RT: 10.841 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 75 Resp: 2228

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.9 | 26.4 | 39.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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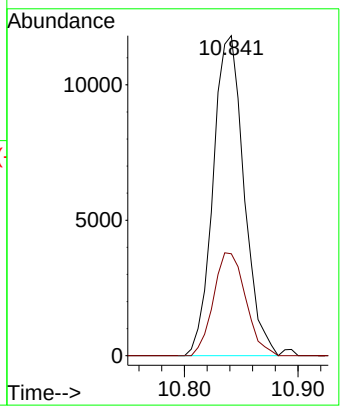
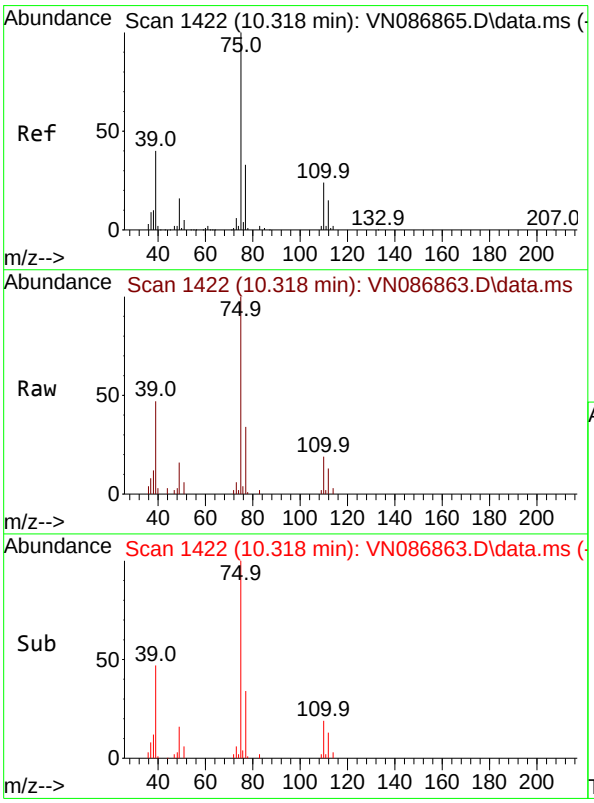
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

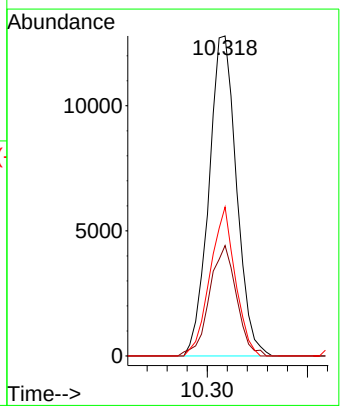


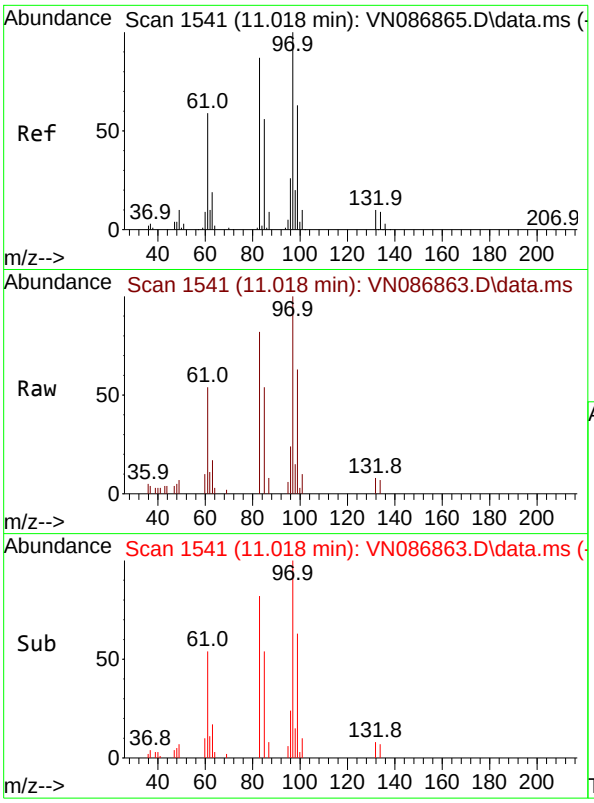




#54
cis-1,3-Dichloropropene
Concen: 5.026 ug/l
RT: 10.318 min Scan# 1422
Delta R.T. 0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 75 Resp: 24477

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 34.5 | 26.2 | 39.4 |
| 39 | 46.5 | 32.3 | 48.5 |

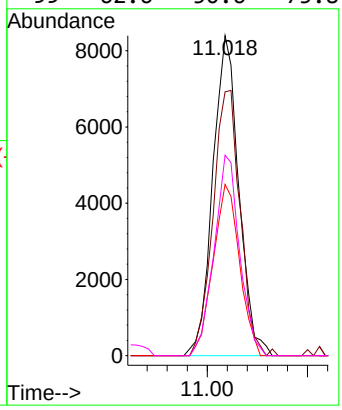





#55
1,1,2-Trichloroethane
Concen: 5.234 ug/l
RT: 11.018 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 97 Resp: 1506

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 82.5 | 69.7 | 104.5 |
| 85 | 53.5 | 45.1 | 67.7 |
| 99 | 62.6 | 50.6 | 75.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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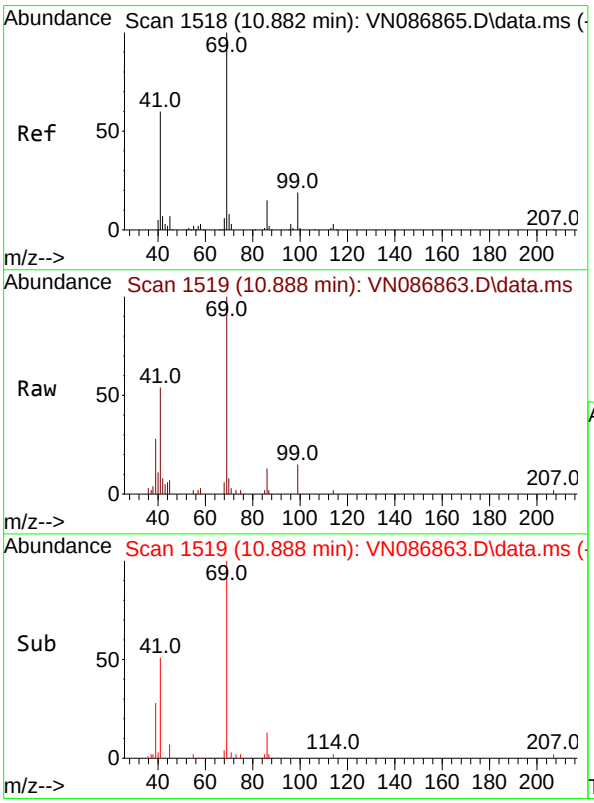
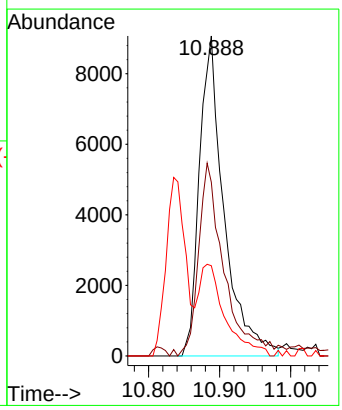
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

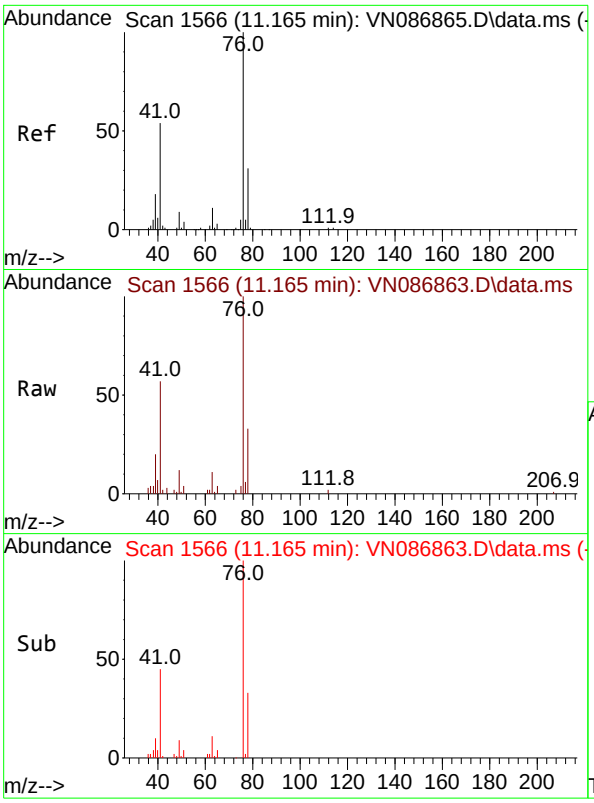



#56
Ethyl methacrylate
Concen: 4.774 ug/l
RT: 10.888 min Scan# 1519
Delta R.T. 0.006 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 69 Resp: 21893

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 63.5 | 47.2 | 70.8 |
| 39 | 29.9 | 23.0 | 34.6 |






#57
1,3-Dichloropropane
Concen: 5.096 ug/l
RT: 11.165 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 76 Resp: 2545

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.8 | 25.3 | 37.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
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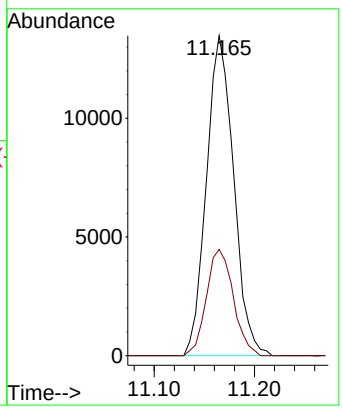
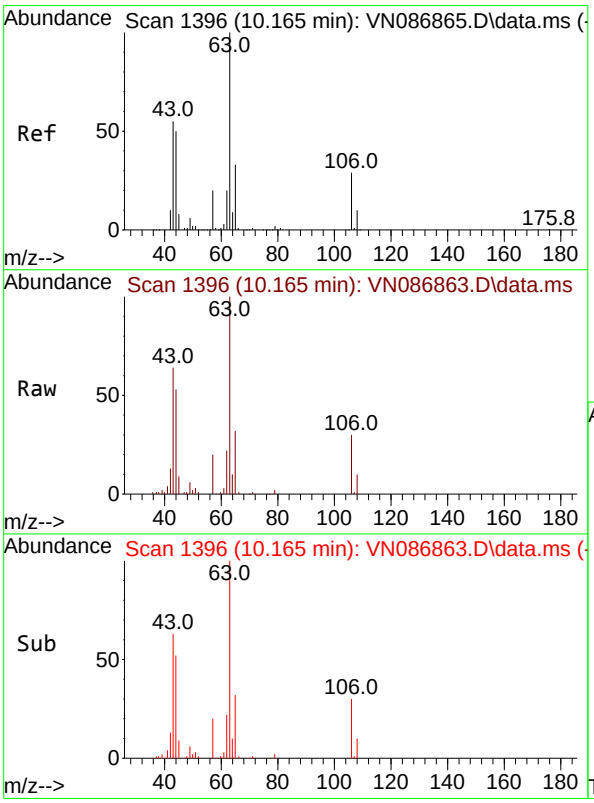
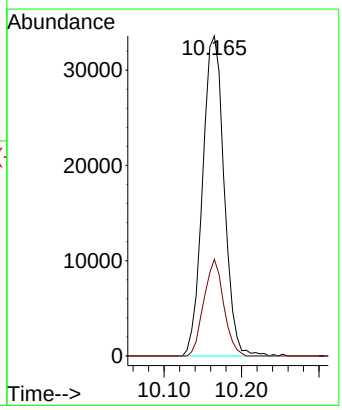


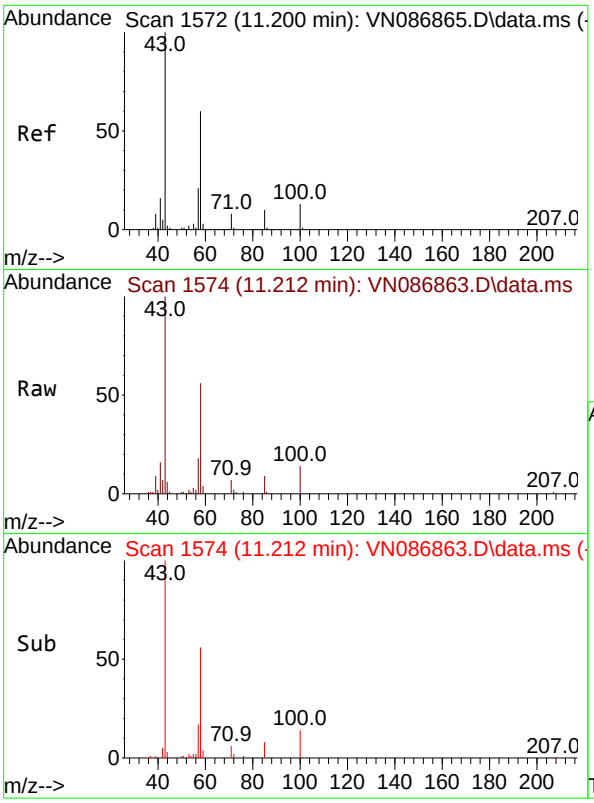




#58
2-Chloroethyl Vinyl ether
Concen: 23.664 ug/l
RT: 10.165 min Scan# 1396
Delta R.T. 0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 63 Resp: 64722

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 27.9 | 23.0 | 34.6 |






#59
2-Hexanone
Concen: 20.188 ug/l
RT: 11.212 min Scan# 1
Delta R.T. 0.012 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 43 Resp: 5988

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 60.5 | 30.4 | 91.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
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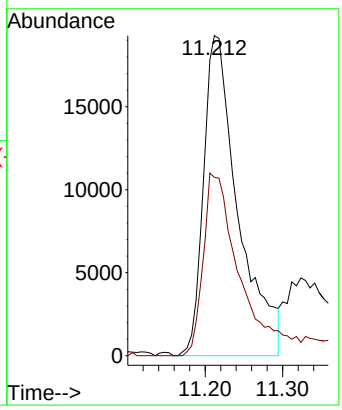
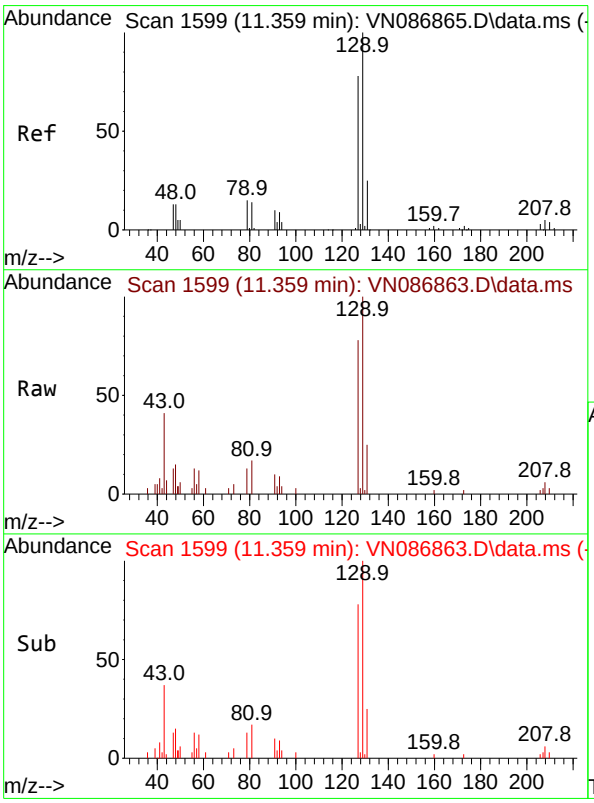
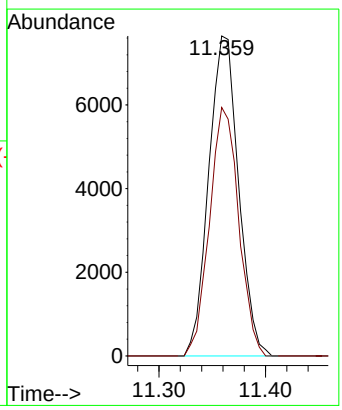


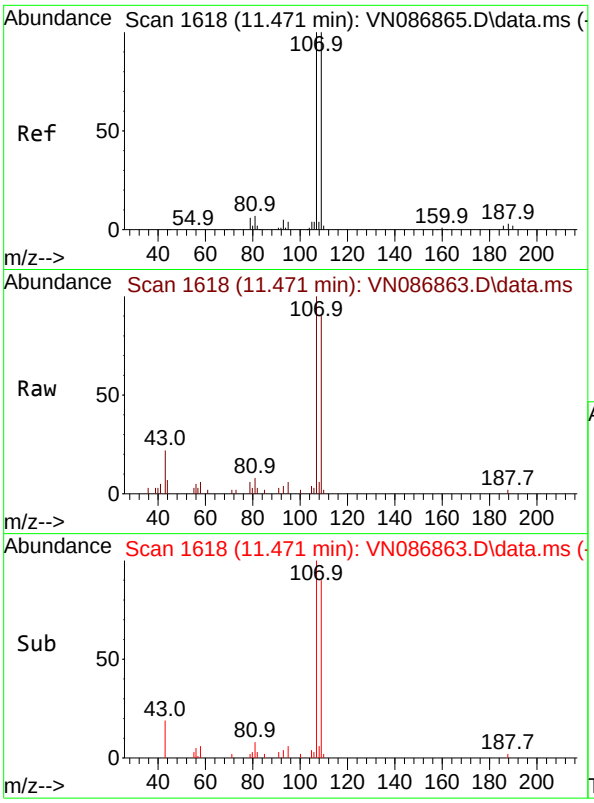




#60
Dibromochloromethane
Concen: 4.962 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion:129 Resp: 14884

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 75.9 | 38.6 | 115.8 |






#61
1,2-Dibromoethane
Concen: 5.141 ug/l
RT: 11.471 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion:107 Resp: 1517

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 94.2 | 76.3 | 114.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
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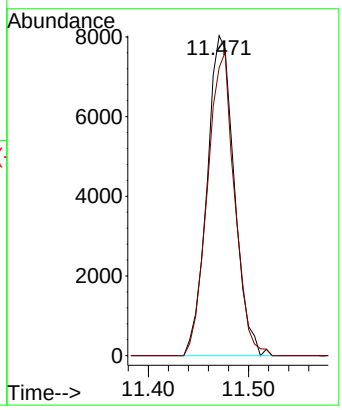
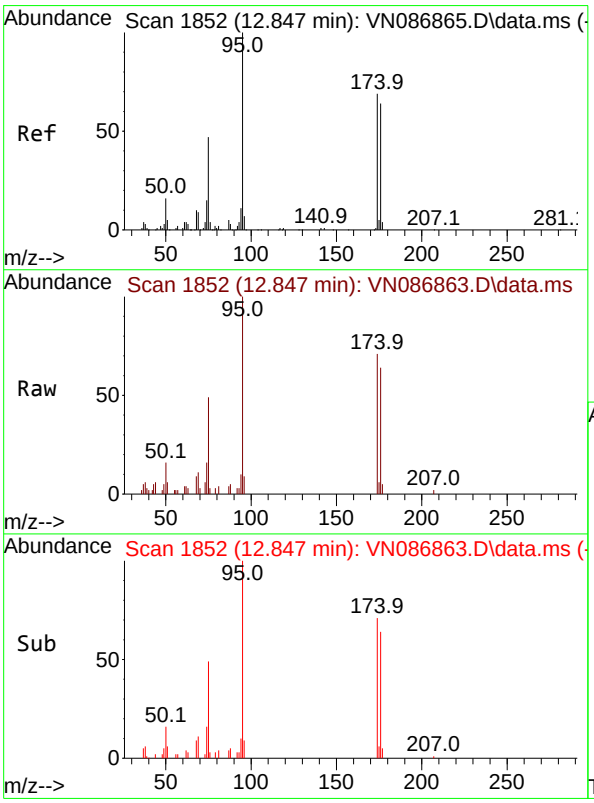
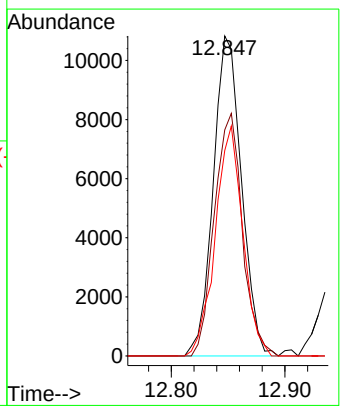


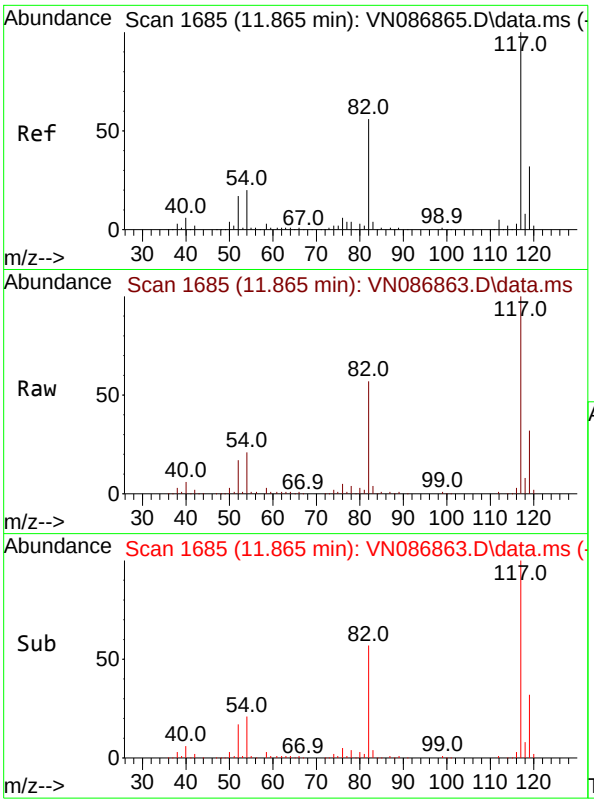




#62
4-Bromofluorobenzene
Concen: 5.059 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 95 Resp: 18697

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 75.5 | 0.0 | 141.8 |
| 176 | 70.2 | 0.0 | 132.6 |

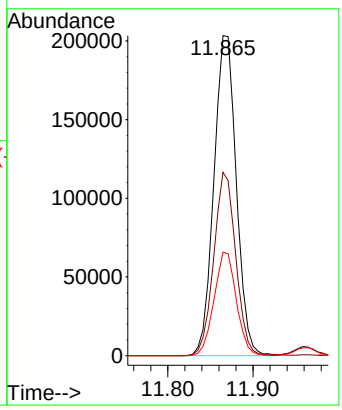





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion:117 Resp: 37185

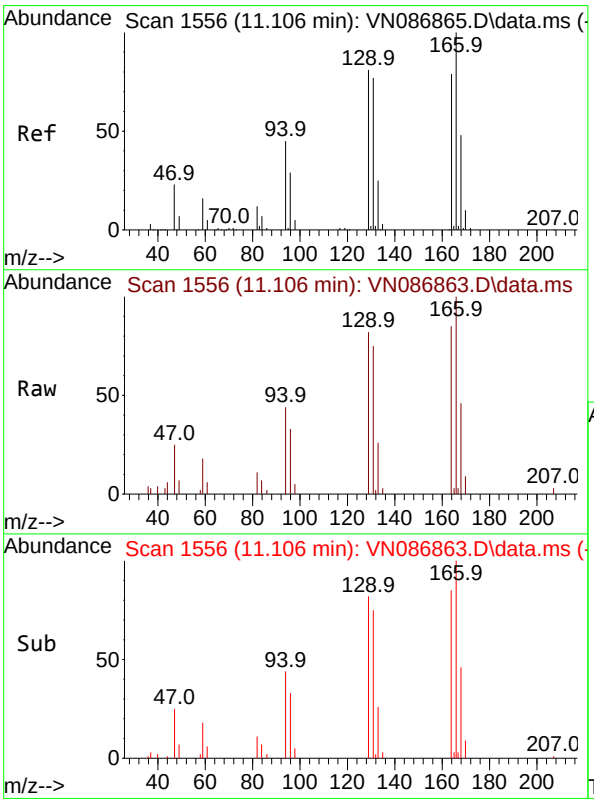
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 57.3 | 44.6 | 67.0 |
| 119 | 32.3 | 25.5 | 38.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

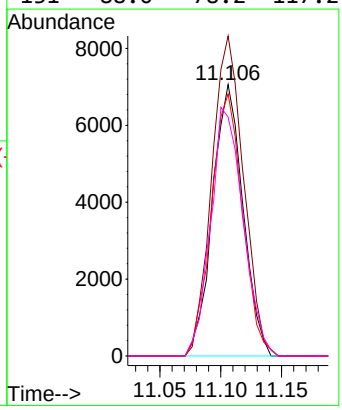
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

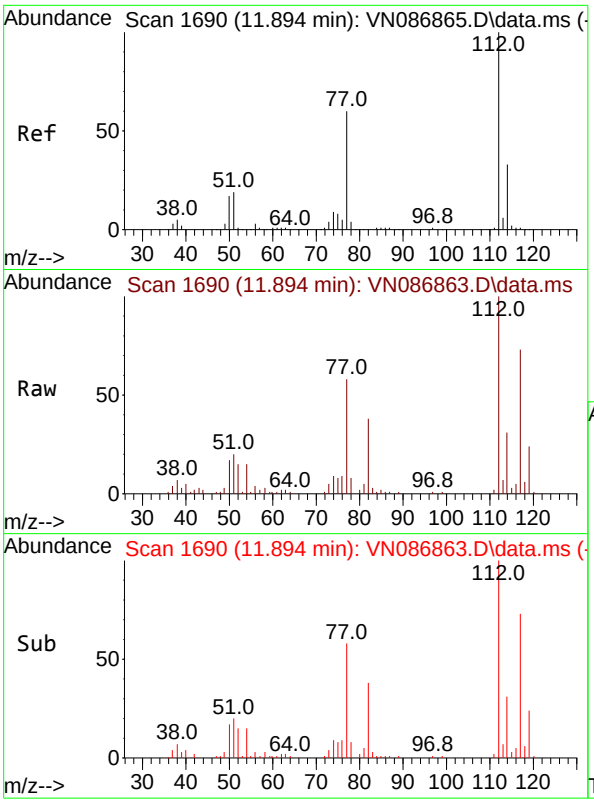



#64
Tetrachloroethene
Concen: 5.236 ug/l
RT: 11.106 min Scan# 1556
Delta R.T. 0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion:164 Resp: 12322

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 117.9 | 101.8 | 152.8 |
| 129 | 96.6 | 83.0 | 124.4 |
| 131 | 88.0 | 78.2 | 117.2 |

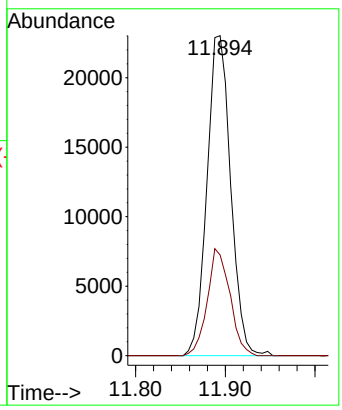





#65
Chlorobenzene
Concen: 5.145 ug/l
RT: 11.894 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion:112 Resp: 4219

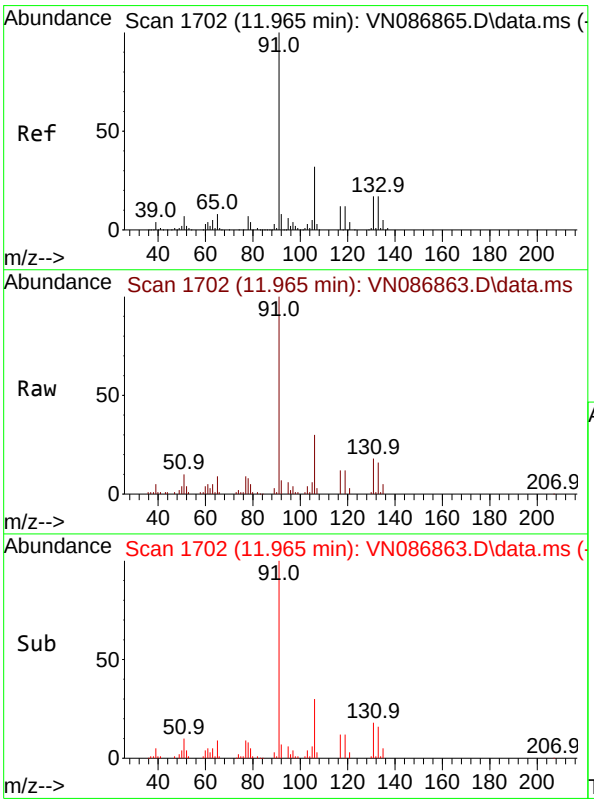
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 31.5 | 26.2 | 39.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

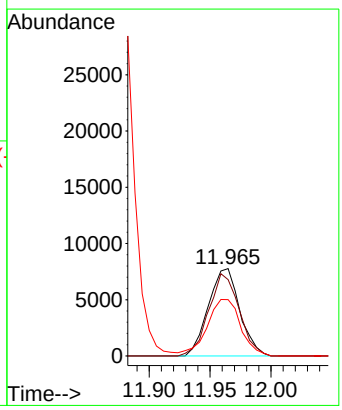
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

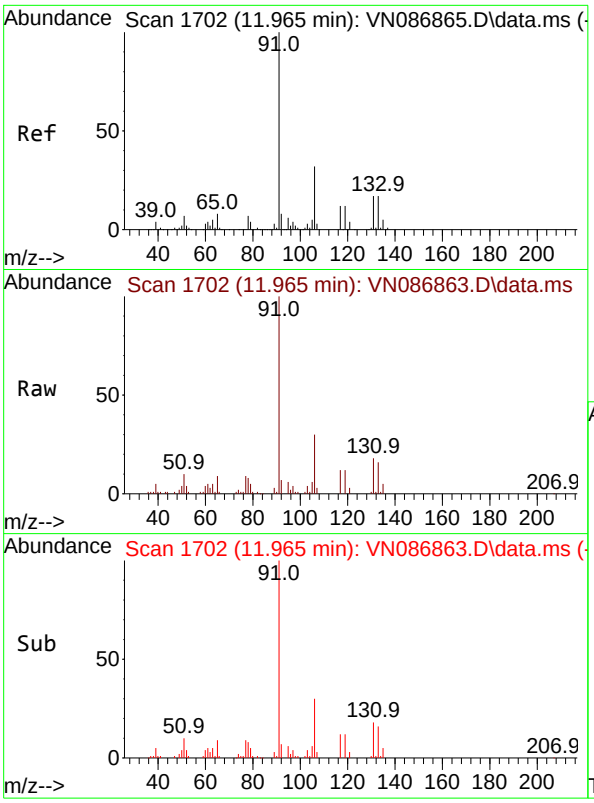



#66
1,1,1,2-Tetrachloroethane
Concen: 5.271 ug/l
RT: 11.965 min Scan# 1702
Delta R.T. 0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion:131 Resp: 13897

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 91.7 | 48.3 | 144.8 |
| 119 | 69.1 | 34.0 | 101.8 |






#67
Ethyl Benzene
Concen: 5.199 ug/l
RT: 11.965 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

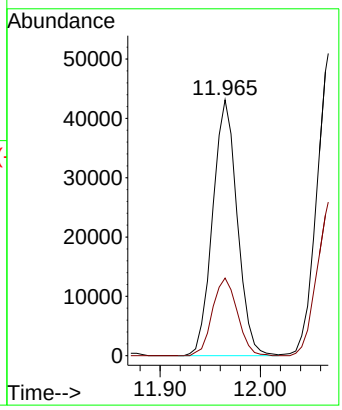
Tgt Ion: 91 Resp: 7344

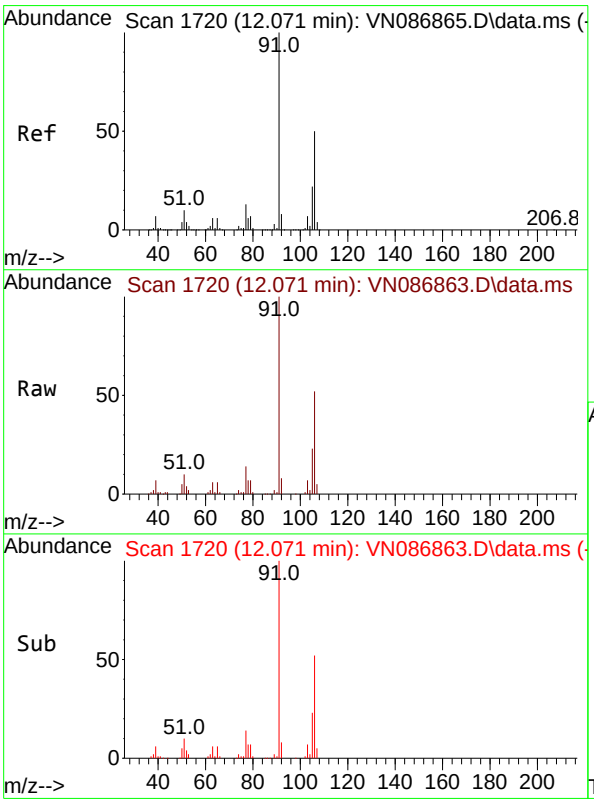
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 30.3 | 25.4 | 38.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

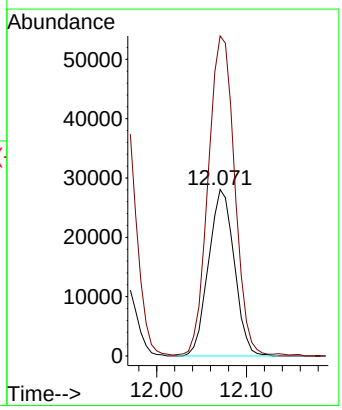


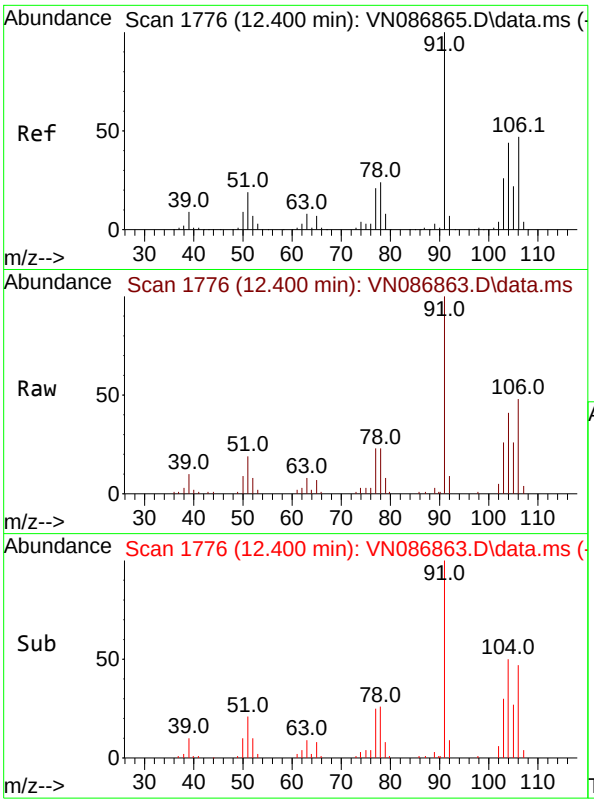




#68
m/p-Xylenes
Concen: 10.330 ug/l
RT: 12.071 min Scan# 1720
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion:106 Resp: 55859

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 199.0 | 159.4 | 239.0 |

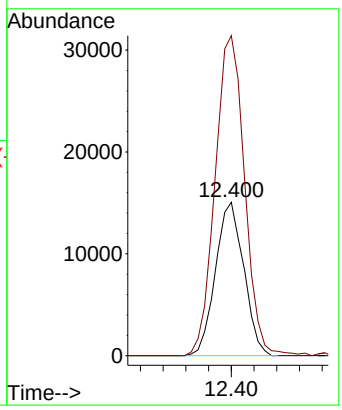





#69
o-Xylene
Concen: 5.021 ug/l
RT: 12.400 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion:106 Resp: 2600

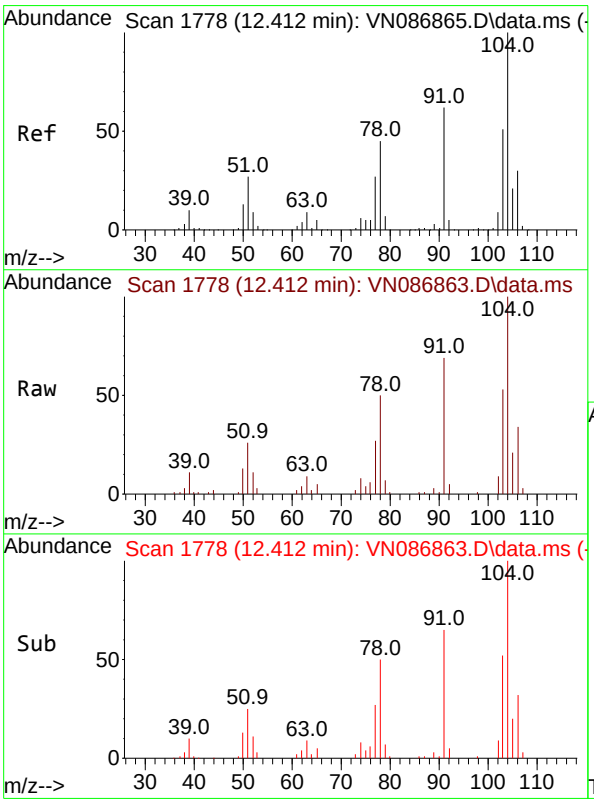
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 218.1 | 106.1 | 318.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

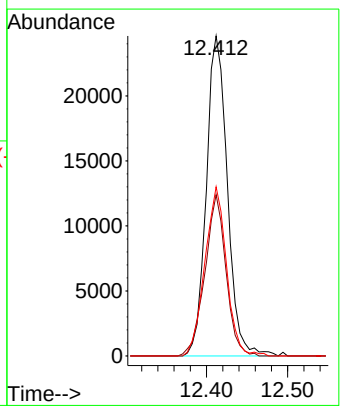
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

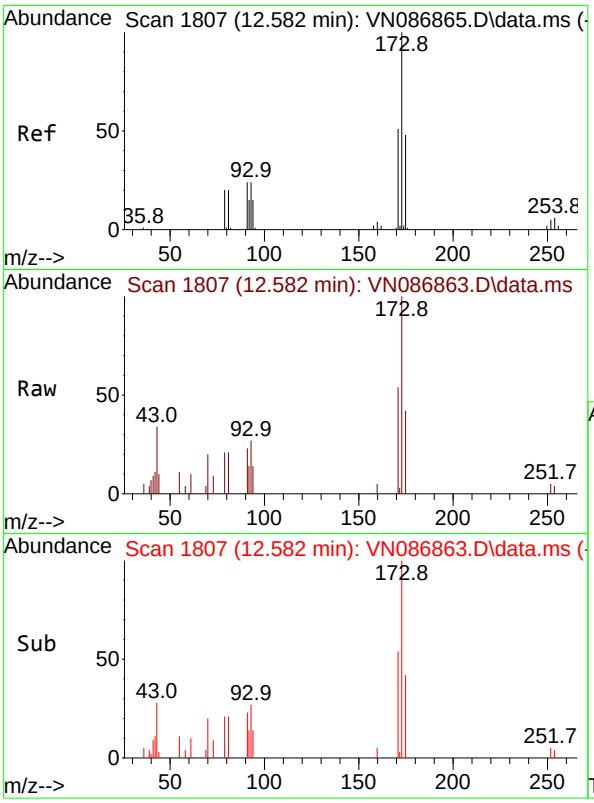



#70
Styrene
Concen: 5.008 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion:104 Resp: 44380

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 50.4 | 38.5 | 57.7 |
| 103 | 54.4 | 43.1 | 64.7 |






#71
Bromoform
Concen: 5.063 ug/l
RT: 12.582 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

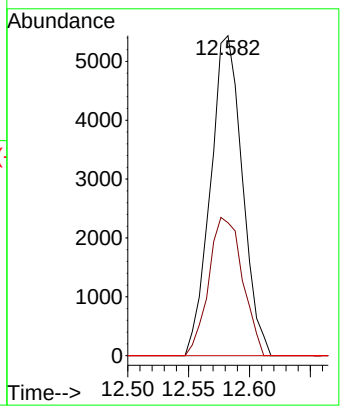
Tgt Ion:173 Resp: 989

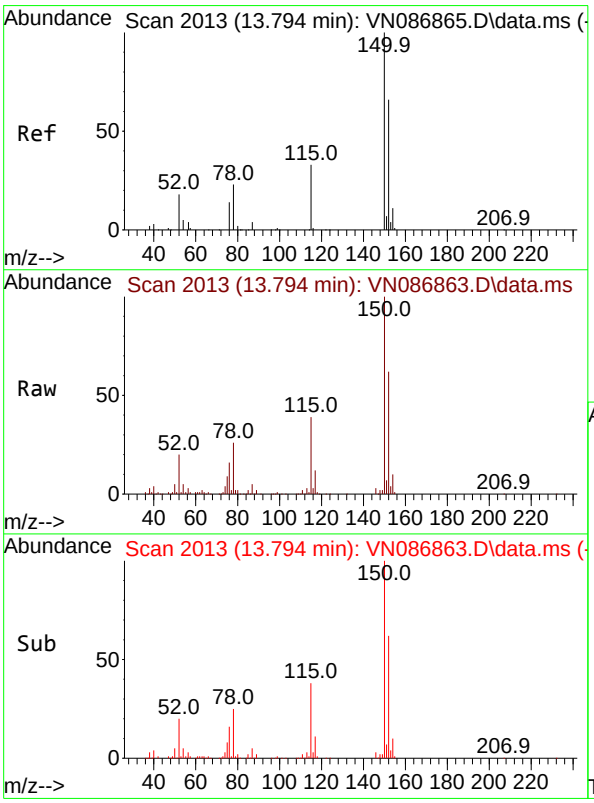
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 45.8 | 24.1 | 72.4 |
| 254 | 0.0 | 0.0 | 0.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

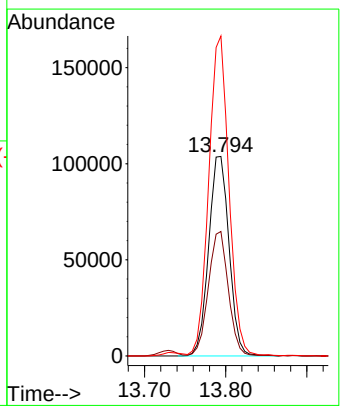


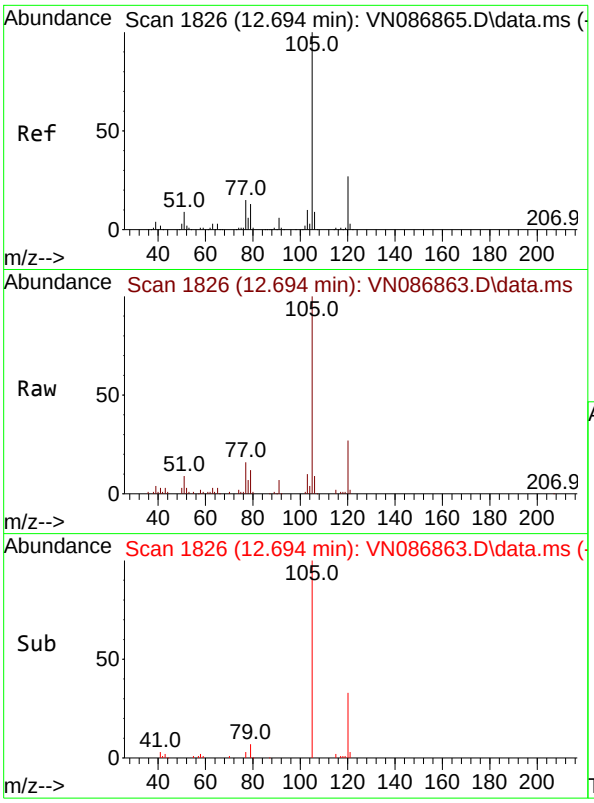




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion:152 Resp: 181065

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 61.2 | 30.1 | 90.5 |
| 150 | 157.8 | 0.0 | 345.0 |






#73
Isopropylbenzene
Concen: 5.146 ug/l
RT: 12.694 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

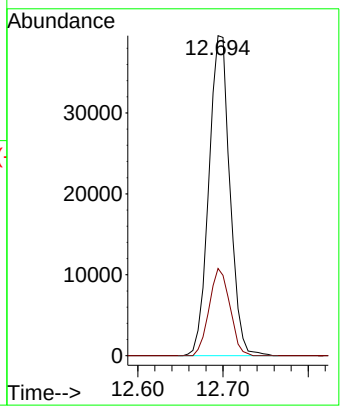
Tgt Ion:105 Resp: 6787

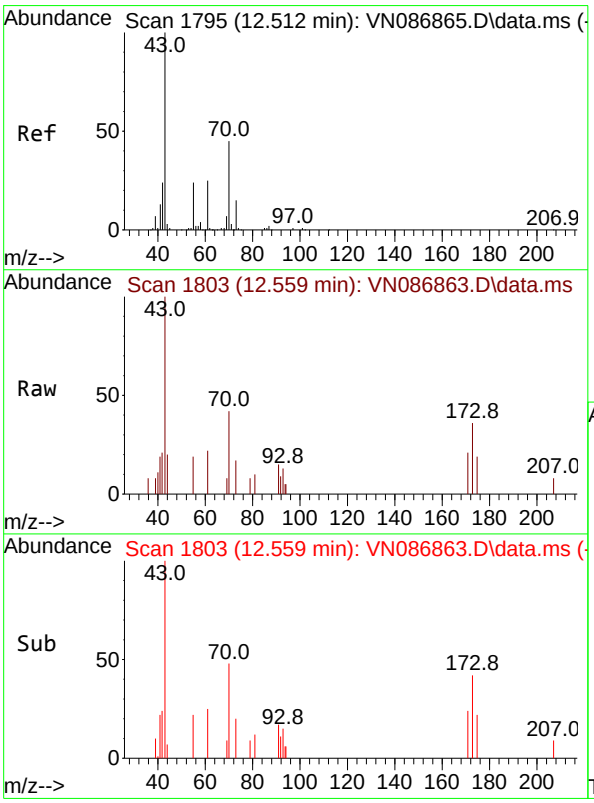
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.8 | 13.5 | 40.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

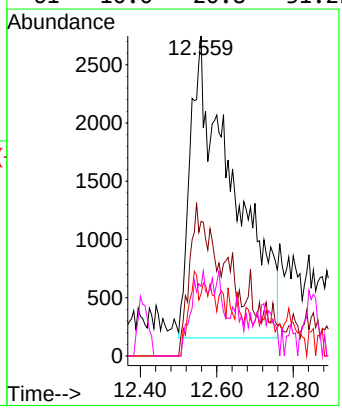


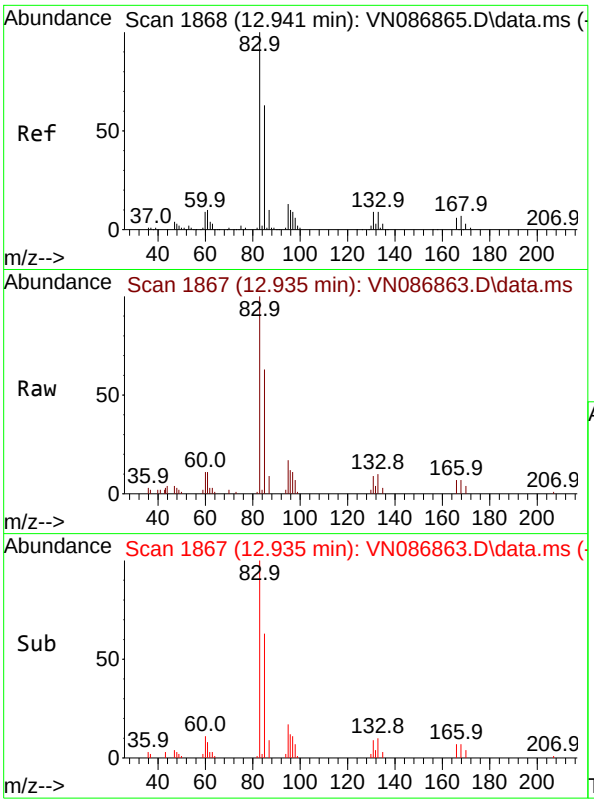




#74
N-amyl acetate
Concen: 4.590 ug/l m
RT: 12.559 min Scan# 1803
Delta R.T. 0.047 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 43 Resp: 20096

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 0.0 | 37.6 | 56.4# |
| 55 | 0.0 | 19.0 | 28.6# |
| 61 | 10.0 | 20.8 | 31.2# |






#75
1,1,2,2-Tetrachloroethane
Concen: 5.262 ug/l
RT: 12.935 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

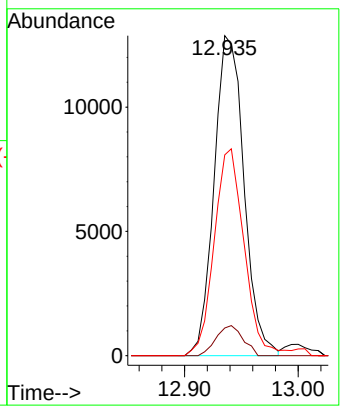
Tgt Ion: 83 Resp: 2351

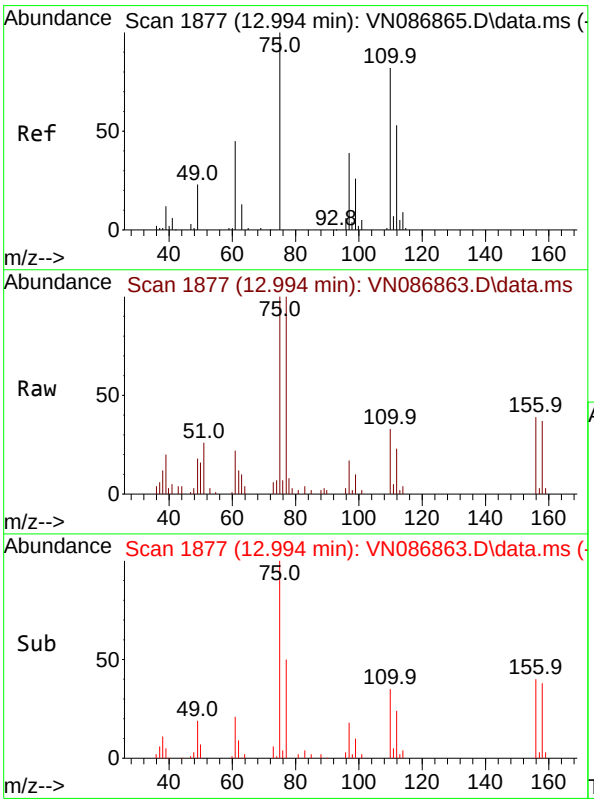
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 8.4 | 4.9 | 14.7 |
| 85 | 65.1 | 32.0 | 96.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

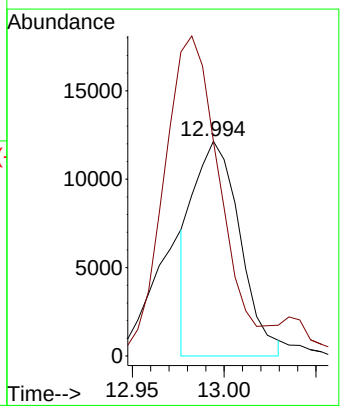


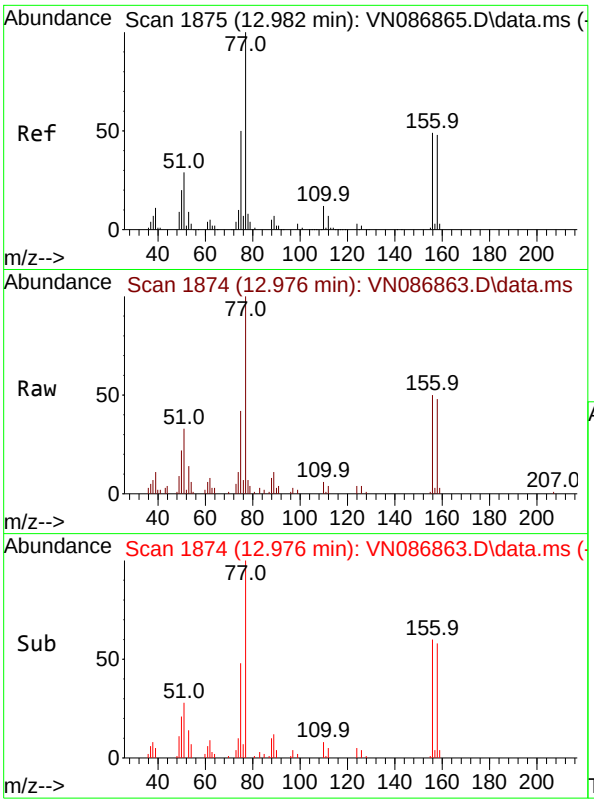




#76
1,2,3-Trichloropropane
Concen: 4.986 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 75 Resp: 21527

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 179.7 | 79.3 | 237.9 |

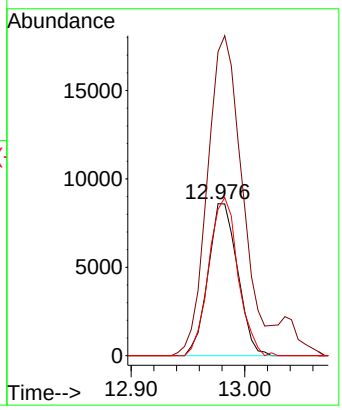





#77
Bromobenzene
Concen: 5.119 ug/l
RT: 12.976 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion:156 Resp: 1548

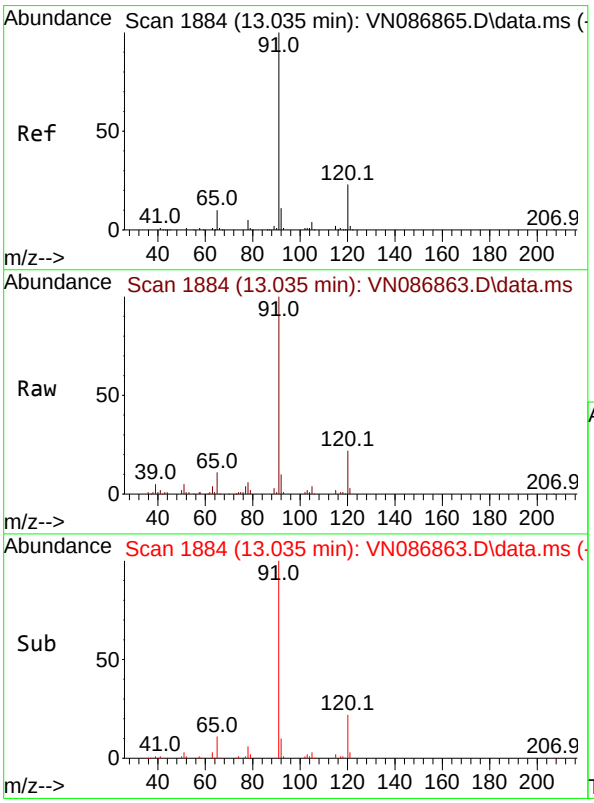
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 249.9 | 117.7 | 353.1 |
| 158 | 102.9 | 48.1 | 144.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

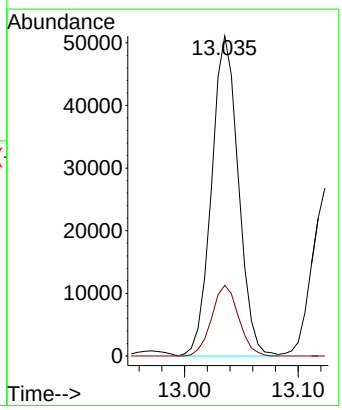
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

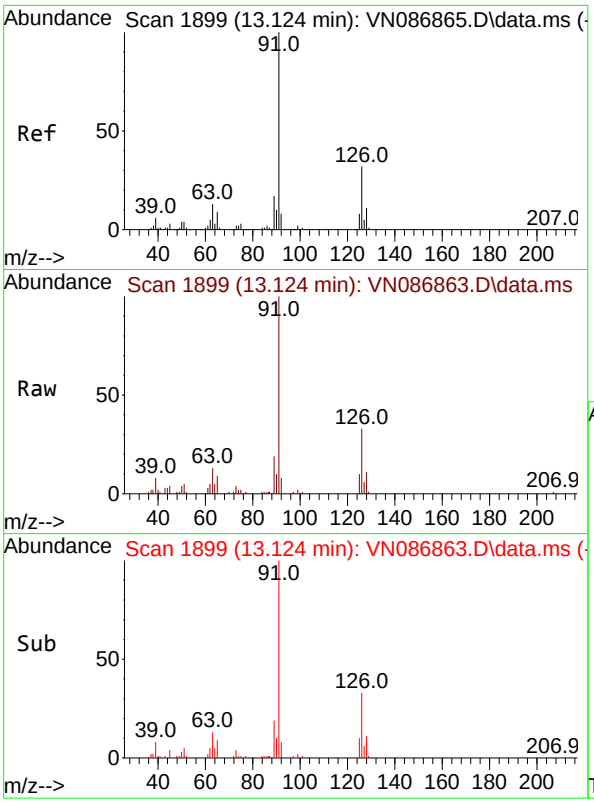



#78
n-propylbenzene
Concen: 5.226 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 91 Resp: 83781

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.1 | 11.4 | 34.2 |






#79
2-Chlorotoluene
Concen: 5.128 ug/l
RT: 13.124 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 91 Resp: 4929

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 32.5 | 16.2 | 48.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

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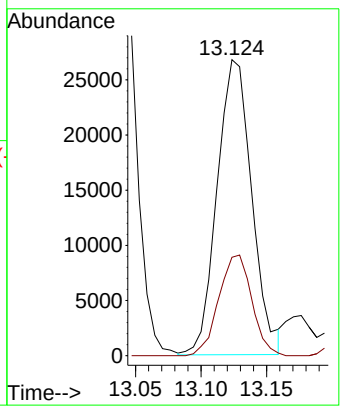
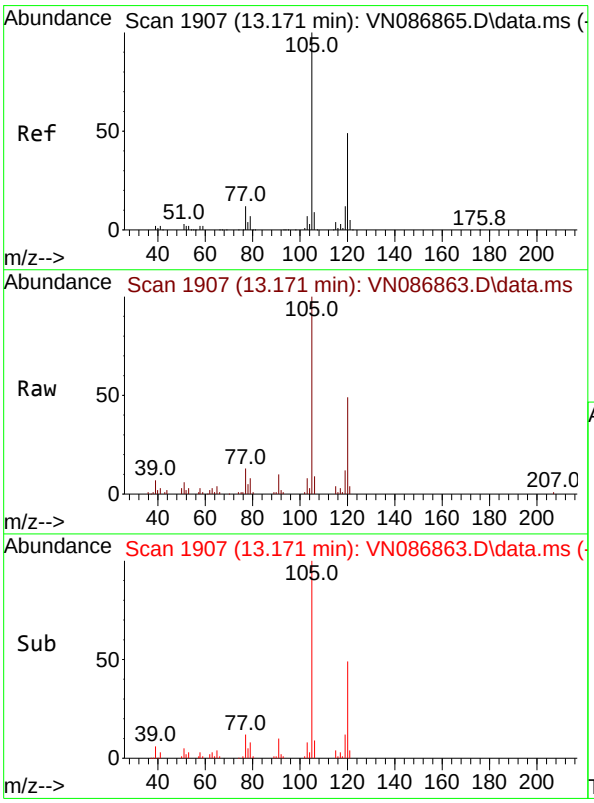
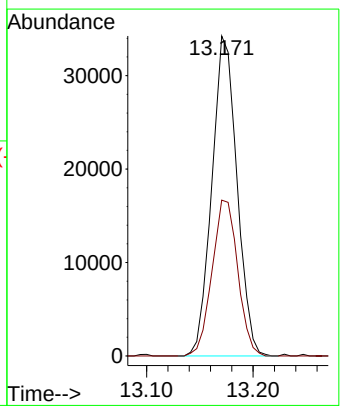


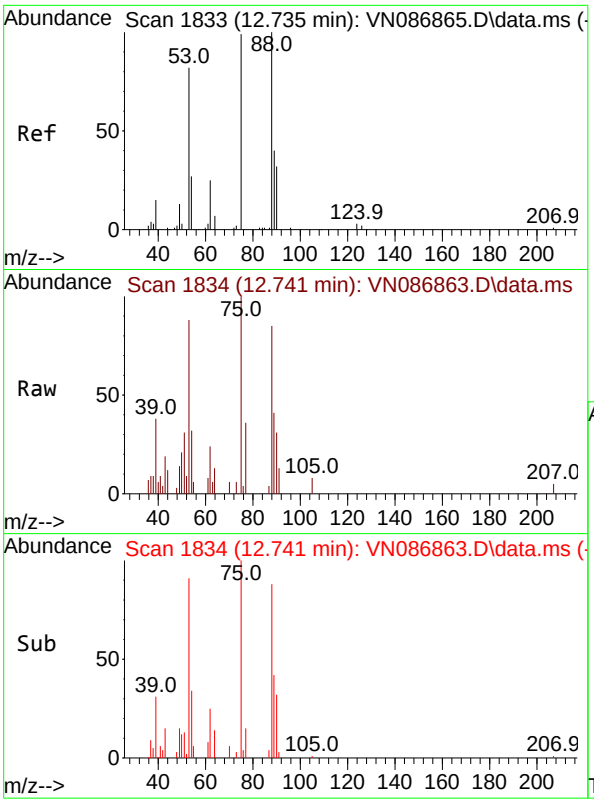




#80
1,3,5-Trimethylbenzene
Concen: 5.139 ug/l
RT: 13.171 min Scan# 1907
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion:105 Resp: 55961

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 49.8 | 24.9 | 74.6 |






#81
trans-1,4-Dichloro-2-butene
Concen: 4.939 ug/l
RT: 12.741 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

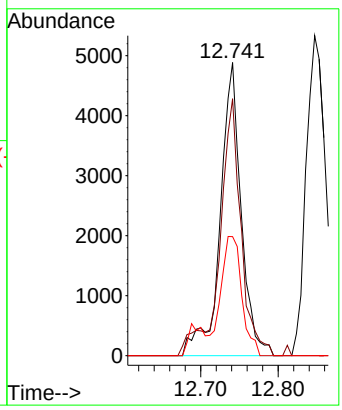
Tgt Ion: 75 Resp: 923

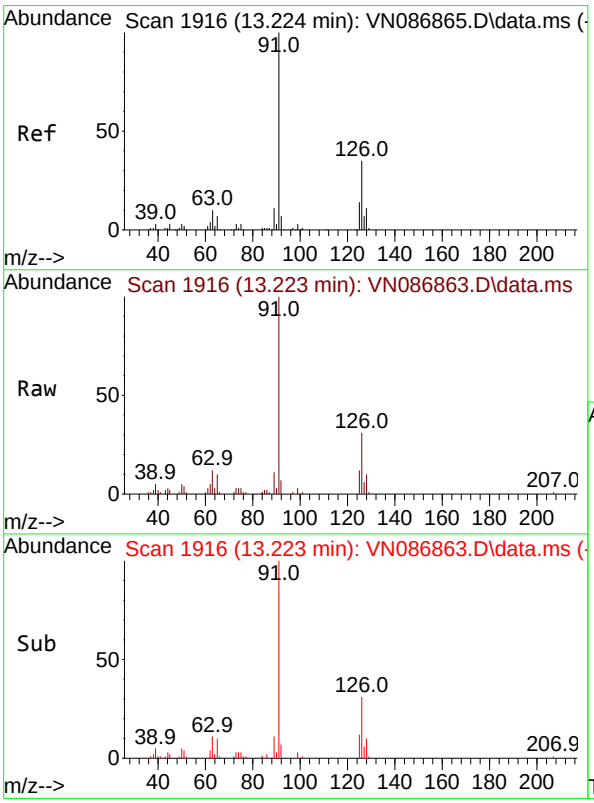
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 88.6 | 66.6 | 99.8 |
| 89 | 41.4 | 36.7 | 55.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

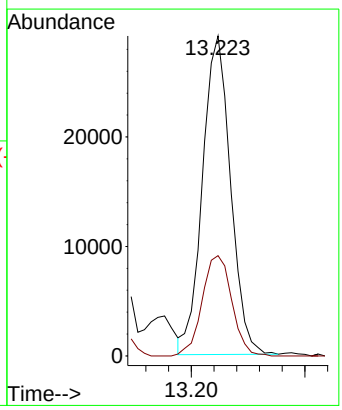


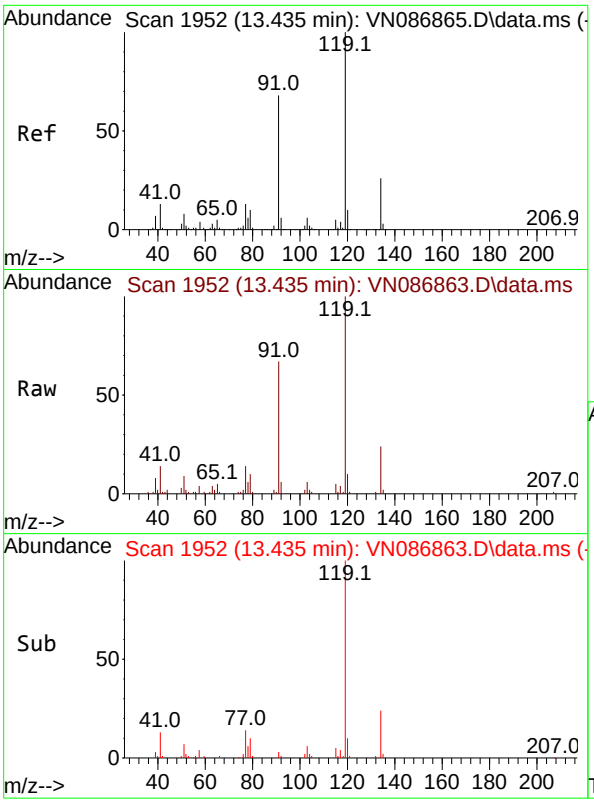




#82
4-Chlorotoluene
Concen: 5.132 ug/l
RT: 13.223 min Scan# 1916
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 91 Resp: 49924

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 33.3 | 16.7 | 50.1 |

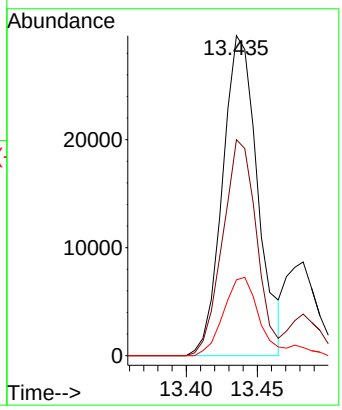





#83
tert-Butylbenzene
Concen: 5.103 ug/l
RT: 13.435 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion:119 Resp: 5087

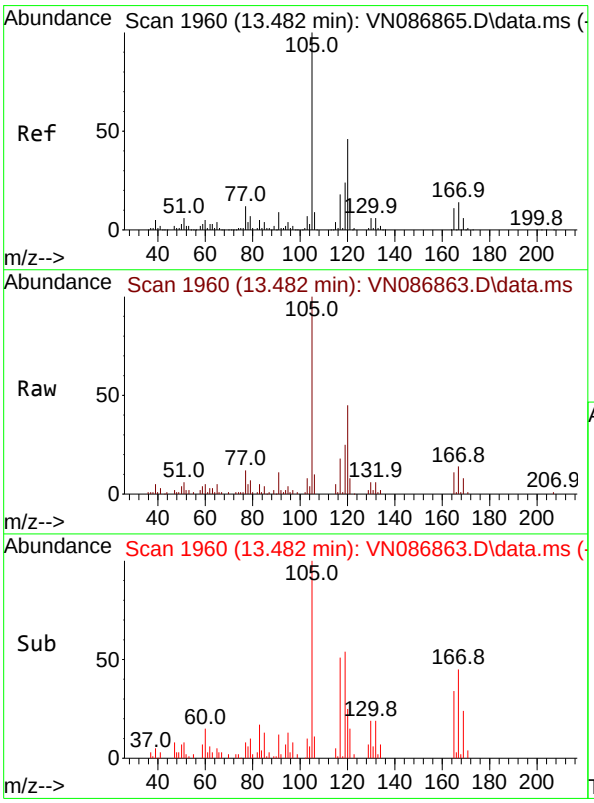
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 65.3 | 32.1 | 96.5 |
| 134 | 24.5 | 13.4 | 40.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

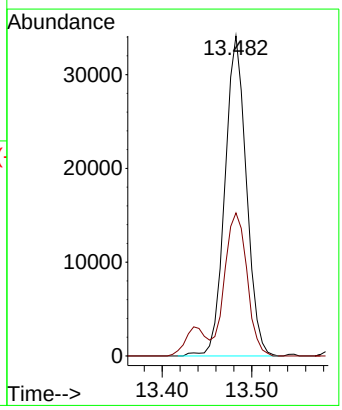
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

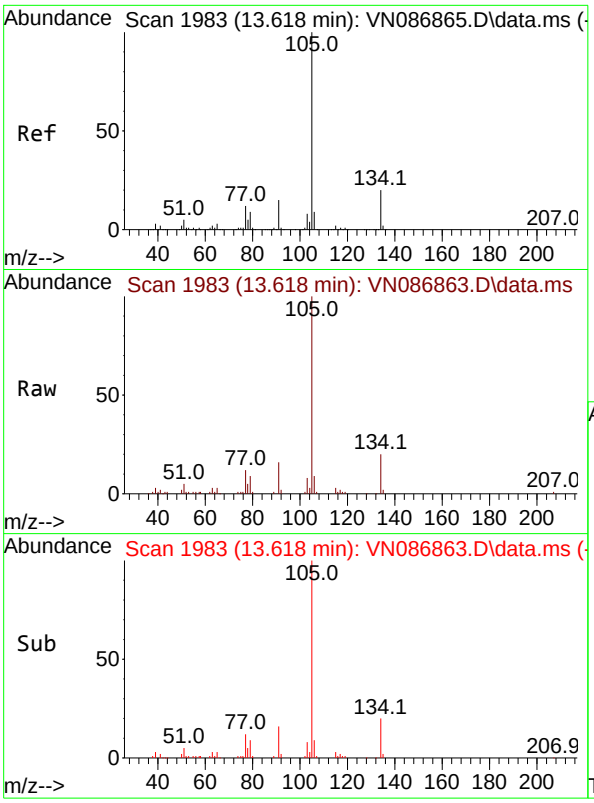



#84
1,2,4-Trimethylbenzene
Concen: 5.176 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. 0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion:105 Resp: 56525

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 46.6 | 23.2 | 69.6 |






#85
sec-Butylbenzene
Concen: 5.161 ug/l
RT: 13.618 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

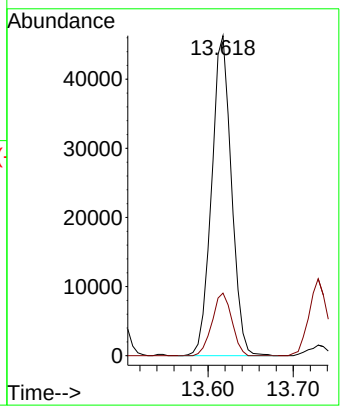
Tgt Ion:105 Resp: 7471

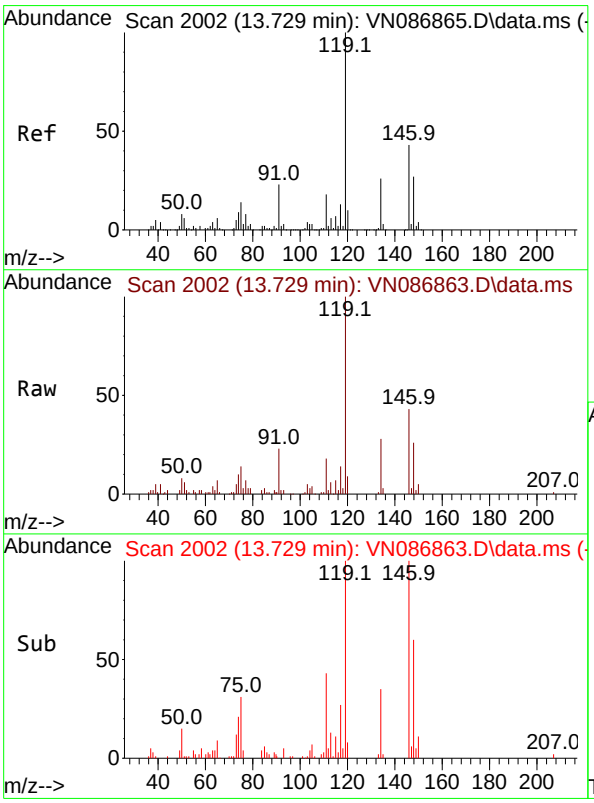
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.5 | 10.0 | 30.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

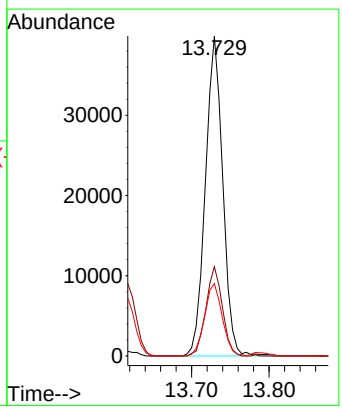


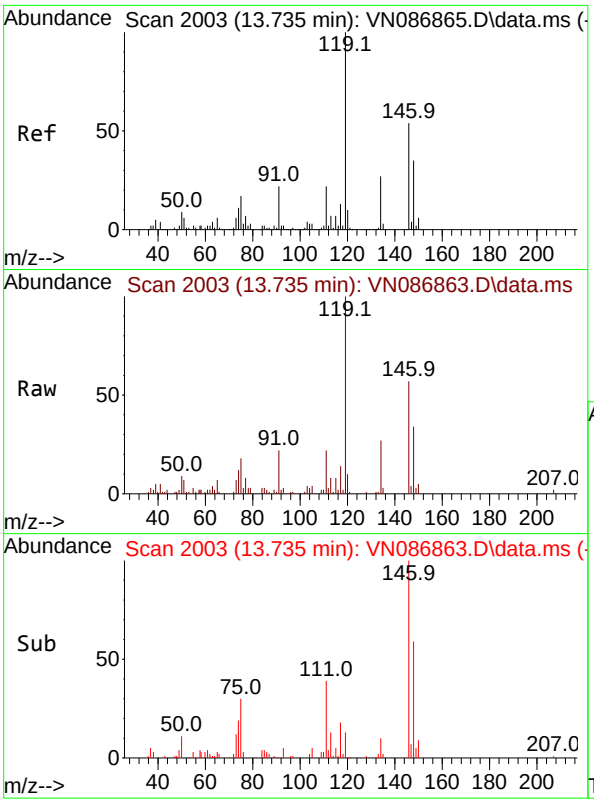




#86
p-Isopropyltoluene
Concen: 5.182 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion:119 Resp: 62016

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 26.4 | 13.5 | 40.4 |
| 91 | 22.9 | 11.5 | 34.4 |






#87
1,3-Dichlorobenzene
Concen: 5.200 ug/l
RT: 13.735 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

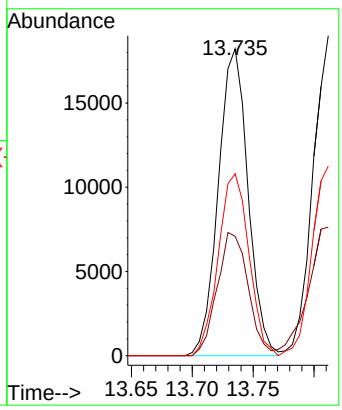
Tgt Ion:146 Resp: 3094

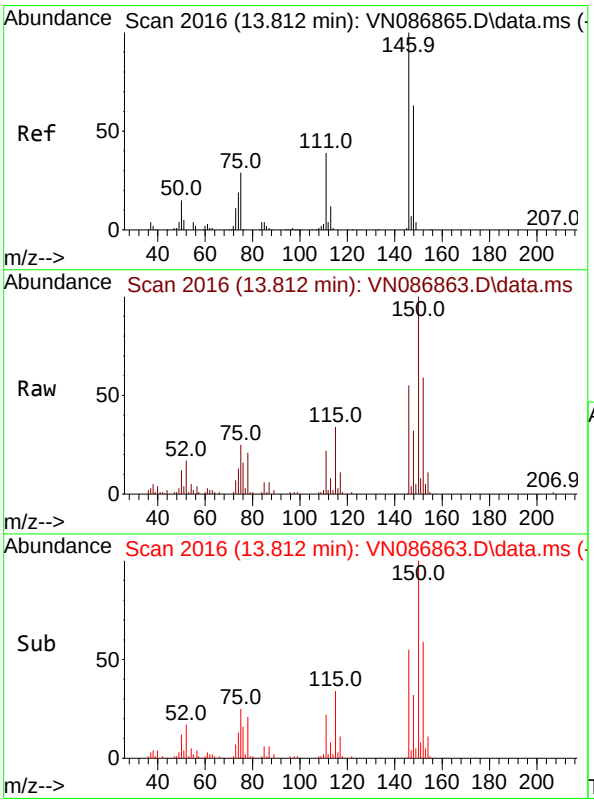
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 41.6 | 20.9 | 62.8 |
| 148 | 61.1 | 32.0 | 96.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

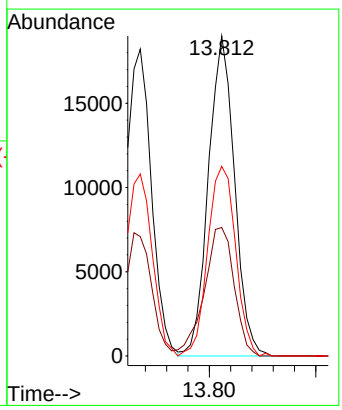


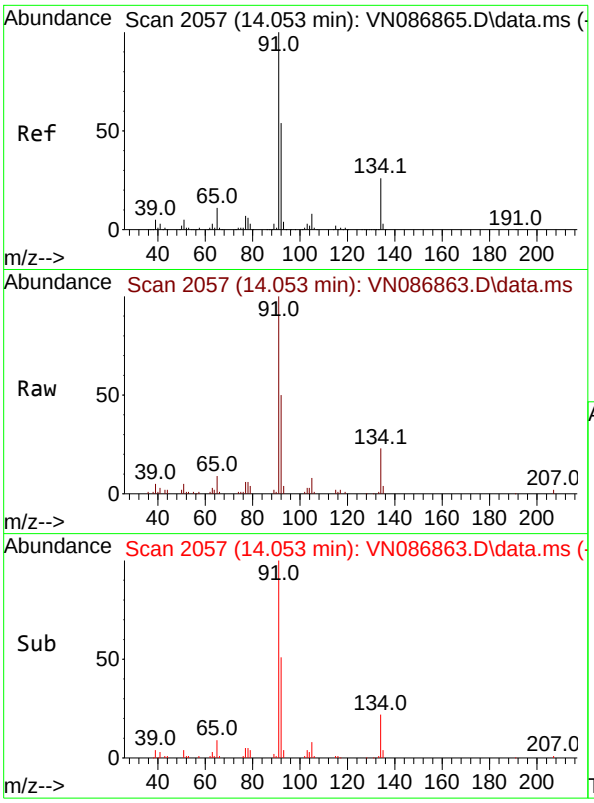




#88
1,4-Dichlorobenzene
Concen: 5.330 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion:146 Resp: 32342

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 46.1 | 19.9 | 59.7 |
| 148 | 63.3 | 31.8 | 95.4 |

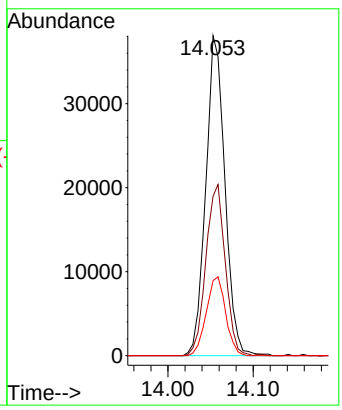





#89
n-Butylbenzene
Concen: 5.142 ug/l
RT: 14.053 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 91 Resp: 5960

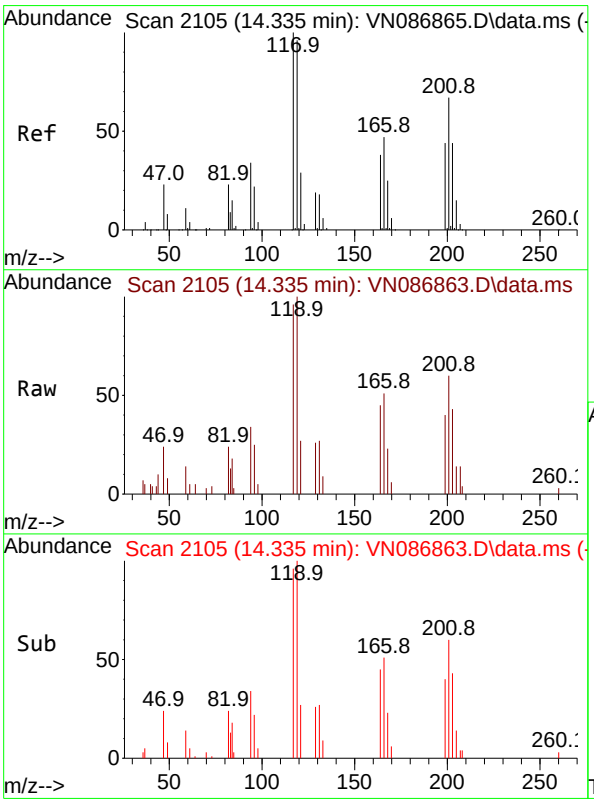
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 54.1 | 27.5 | 82.4 |
| 134 | 24.9 | 13.0 | 39.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

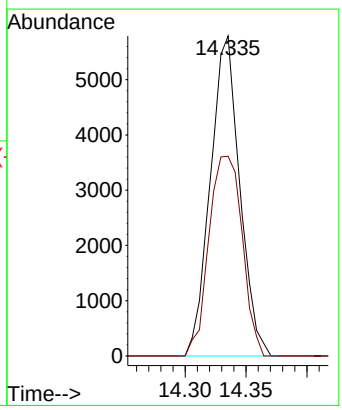
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

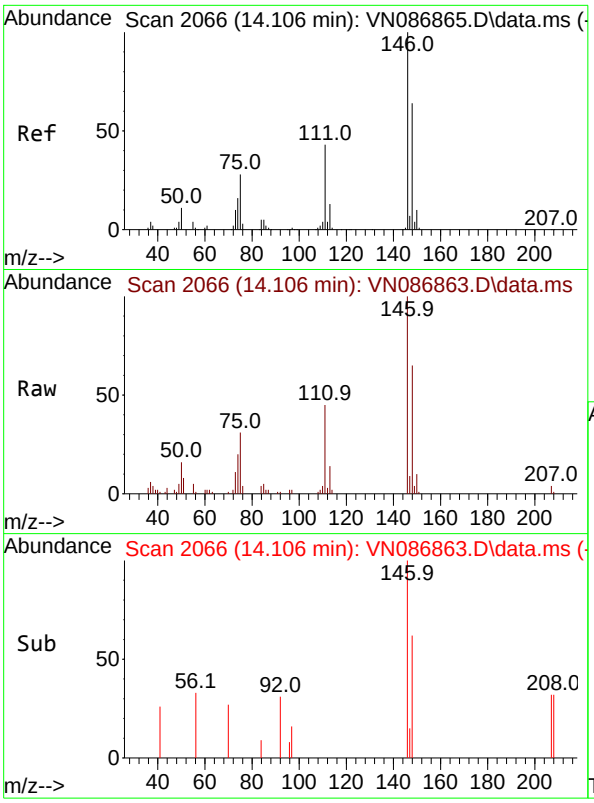



#90
Hexachloroethane
Concen: 4.794 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. 0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion:117 Resp: 9725

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 70.6 | 33.2 | 99.6 |

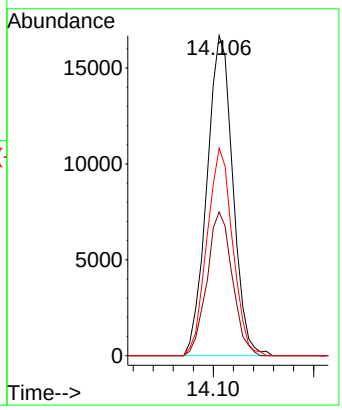





#91
1,2-Dichlorobenzene
Concen: 5.228 ug/l
RT: 14.106 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion:146 Resp: 2989

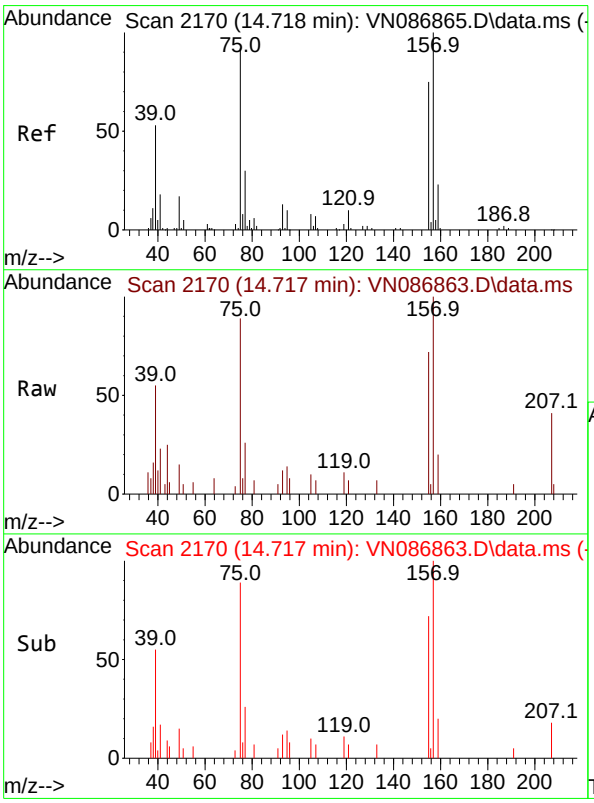
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 44.0 | 21.6 | 64.6 |
| 148 | 64.3 | 31.7 | 95.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

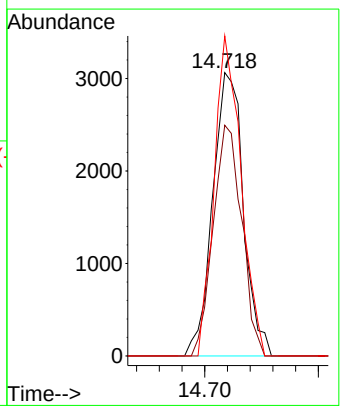
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

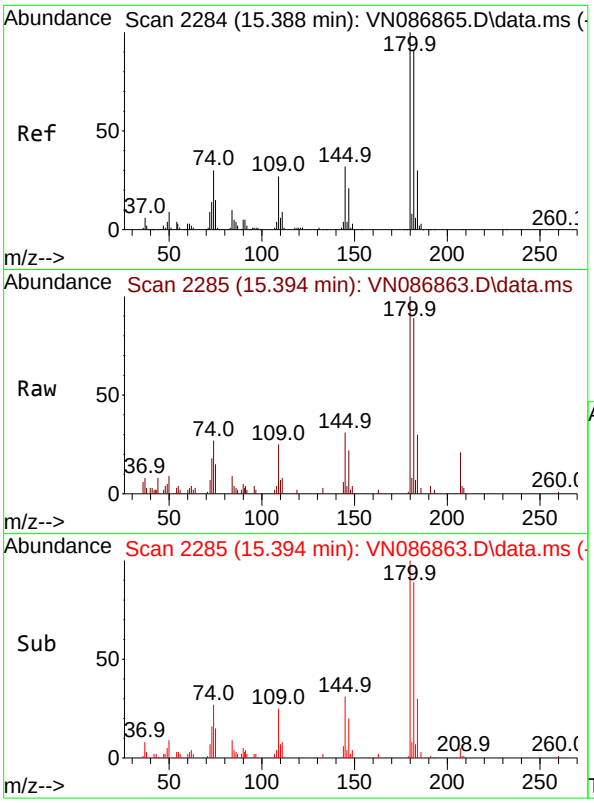



#92
1,2-Dibromo-3-Chloropropane
Concen: 5.363 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. -0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion: 75 Resp: 5731

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 76.0 | 41.1 | 123.4 |
| 157 | 98.8 | 52.7 | 158.1 |

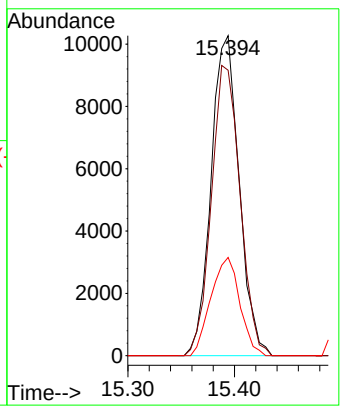





#93
1,2,4-Trichlorobenzene
Concen: 5.143 ug/l
RT: 15.394 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion:180 Resp: 1877

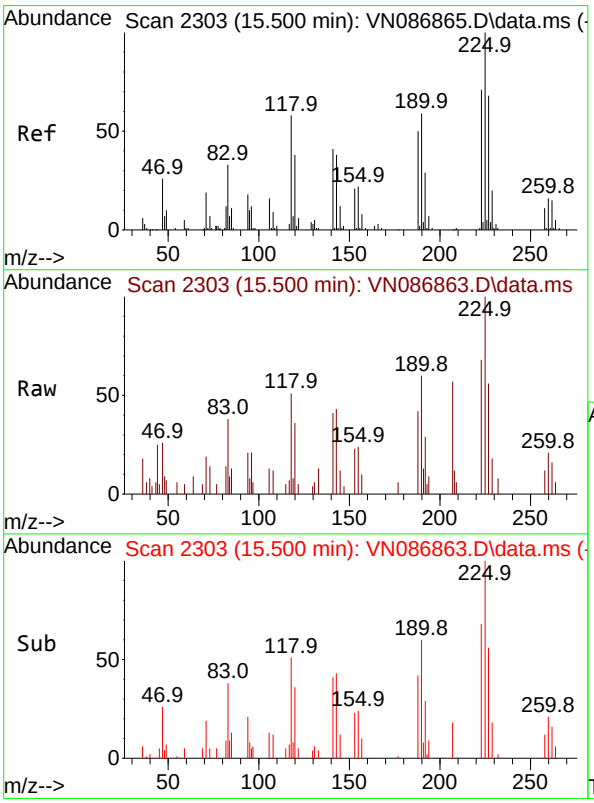
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 92.6 | 46.9 | 140.7 |
| 145 | 31.7 | 16.0 | 47.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

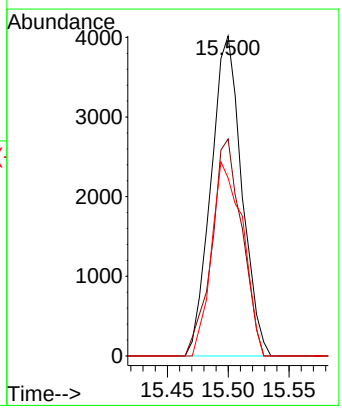
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

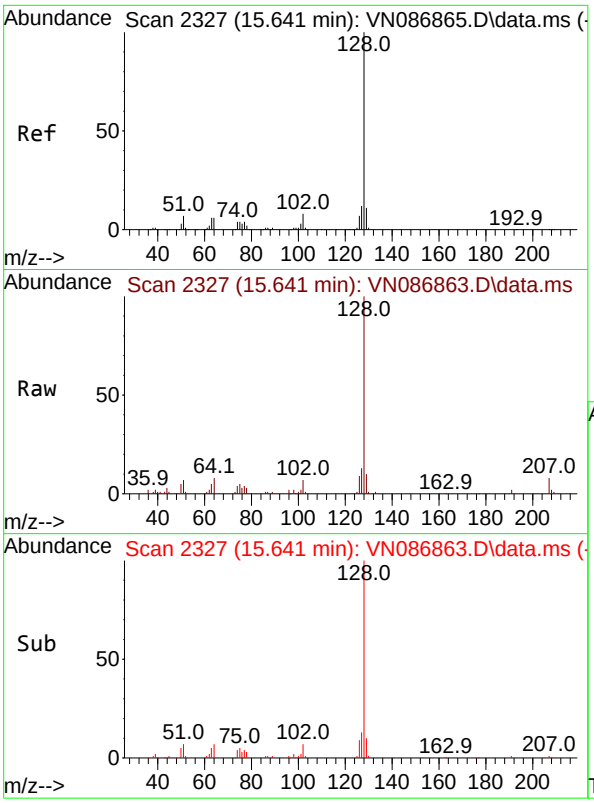



#94
Hexachlorobutadiene
Concen: 5.199 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. 0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion:225 Resp: 7072

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 66.4 | 33.5 | 100.4 |
| 227 | 61.7 | 31.1 | 93.5 |

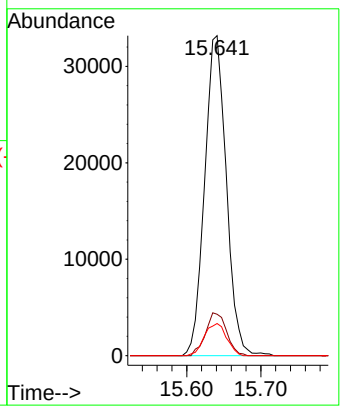





#95
Naphthalene
Concen: 4.965 ug/l
RT: 15.641 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion:128 Resp: 6748

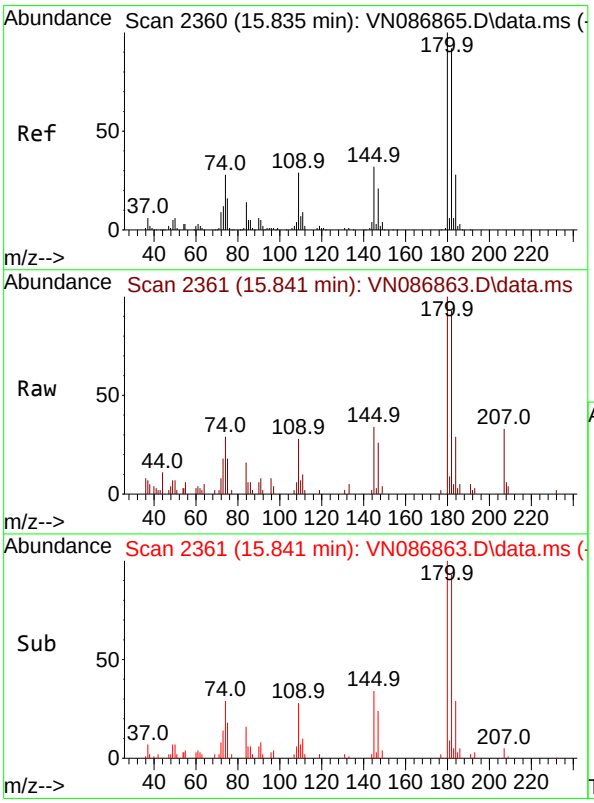
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 13.0 | 10.2 | 15.2 |
| 129 | 10.3 | 8.8 | 13.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

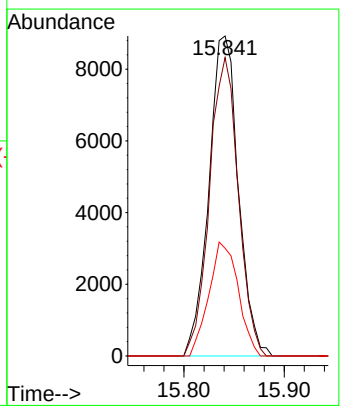
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025




#96
1,2,3-Trichlorobenzene
Concen: 5.034 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. 0.006 min
Lab File: VN086863.D
Acq: 06 Jun 2025 13:17

Tgt Ion:180 Resp: 18262

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 90.9 | 47.0 | 141.0 |
| 145 | 35.3 | 16.6 | 49.8 |



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086864.D
Acq On : 06 Jun 2025 13:40
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

Quant Time: Jun 07 01:56:20 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 01:51:02 2025
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.235 | 168 | 224006 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.106 | 114 | 418154 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 363172 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 181178 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.588 | 65 | 63390 | 21.136 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = | 42.280%# | | |
| 35) Dibromofluoromethane | 8.177 | 113 | 51797 | 20.902 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = | 41.800%# | | |
| 50) Toluene-d8 | 10.571 | 98 | 201268 | 20.516 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = | 41.040%# | | |
| 62) 4-Bromofluorobenzene | 12.853 | 95 | 74622 | 20.474 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = | 40.940%# | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.159 | 85 | 48254 | 21.605 | ug/l | 92 |
| 3) Chloromethane | 2.401 | 50 | 57778 | 20.033 | ug/l | 93 |
| 4) Vinyl Chloride | 2.559 | 62 | 61254 | 20.589 | ug/l | 99 |
| 5) Bromomethane | 3.006 | 94 | 34022 | 20.435 | ug/l | 95 |
| 6) Chloroethane | 3.159 | 64 | 39625 | 20.619 | ug/l | 99 |
| 7) Trichlorofluoromethane | 3.524 | 101 | 80978 | 20.832 | ug/l | 94 |
| 8) Diethyl Ether | 3.983 | 74 | 34288 | 20.245 | ug/l | 98 |
| 9) 1,1,2-Trichlorotrifluo... | 4.395 | 101 | 50458 | 20.661 | ug/l | 98 |
| 10) Methyl Iodide | 4.612 | 142 | 65360 | 20.646 | ug/l | 98 |
| 11) Tert butyl alcohol | 5.547 | 59 | 87102 | 107.031 | ug/l | 99 |
| 12) 1,1-Dichloroethene | 4.359 | 96 | 50485 | 20.249 | ug/l | 96 |
| 13) Acrolein | 4.200 | 56 | 22866 | 88.767 | ug/l | 97 |
| 14) Allyl chloride | 5.047 | 41 | 82924 | 20.055 | ug/l | 98 |
| 15) Acrylonitrile | 5.742 | 53 | 199498 | 104.881 | ug/l | 99 |
| 16) Acetone | 4.447 | 43 | 163979 | 103.099 | ug/l | 98 |
| 17) Carbon Disulfide | 4.736 | 76 | 138195 | 20.038 | ug/l | 97 |
| 18) Methyl Acetate | 5.047 | 43 | 96547 | 20.830 | ug/l | 99 |
| 19) Methyl tert-butyl Ether | 5.818 | 73 | 183780 | 20.358 | ug/l | 98 |
| 20) Methylene Chloride | 5.294 | 84 | 57611 | 19.348 | ug/l | 98 |
| 21) trans-1,2-Dichloroethene | 5.806 | 96 | 55643 | 20.059 | ug/l | 94 |
| 22) Diisopropyl ether | 6.689 | 45 | 182472 | 20.935 | ug/l | 98 |
| 23) Vinyl Acetate | 6.624 | 43 | 768556 | 104.365 | ug/l | 99 |
| 24) 1,1-Dichloroethane | 6.583 | 63 | 103578 | 20.650 | ug/l | 99 |
| 25) 2-Butanone | 7.494 | 43 | 270477 | 104.621 | ug/l | 100 |
| 26) 2,2-Dichloropropane | 7.506 | 77 | 69692 | 17.862 | ug/l | 99 |
| 27) cis-1,2-Dichloroethene | 7.500 | 96 | 68292 | 20.585 | ug/l | 98 |
| 28) Bromochloromethane | 7.824 | 49 | 55196 | 22.381 | ug/l | 99 |
| 29) Tetrahydrofuran | 7.853 | 42 | 178571 | 106.031 | ug/l | 99 |
| 30) Chloroform | 7.977 | 83 | 102615 | 20.485 | ug/l | 93 |
| 31) Cyclohexane | 8.271 | 56 | 100026 | 20.563 | ug/l | 98 |
| 32) 1,1,1-Trichloroethane | 8.177 | 97 | 86810 | 20.376 | ug/l | 98 |
| 36) 1,1-Dichloropropene | 8.383 | 75 | 73252 | 19.838 | ug/l | 100 |
| 37) Ethyl Acetate | 7.571 | 43 | 96467 | 20.522 | ug/l | 98 |
| 38) Carbon Tetrachloride | 8.377 | 117 | 72628 | 20.034 | ug/l | 97 |
| 39) Methylcyclohexane | 9.606 | 83 | 98425 | 19.455 | ug/l | 99 |
| 40) Benzene | 8.612 | 78 | 241444 | 19.996 | ug/l | 99 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086864.D
Acq On : 06 Jun 2025 13:40
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 07 01:56:20 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 01:51:02 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.788 | 41 | 53244 | 20.169 | ug/l | | 98 |
| 42) 1,2-Dichloroethane | 8.677 | 62 | 74238 | 20.270 | ug/l | | 100 |
| 43) Isopropyl Acetate | 8.694 | 43 | 151601 | 20.094 | ug/l | | 99 |
| 44) Trichloroethene | 9.359 | 130 | 57110 | 19.946 | ug/l | | 96 |
| 45) 1,2-Dichloropropane | 9.630 | 63 | 59293 | 20.184 | ug/l | | 97 |
| 46) Dibromomethane | 9.712 | 93 | 40290 | 20.648 | ug/l | | 98 |
| 47) Bromodichloromethane | 9.894 | 83 | 80353 | 20.015 | ug/l | | 98 |
| 48) Methyl methacrylate | 9.682 | 41 | 70457 | 20.290 | ug/l | | 97 |
| 49) 1,4-Dioxane | 9.706 | 88 | 28231 | 446.886 | ug/l | # | 98 |
| 51) 4-Methyl-2-Pentanone | 10.447 | 43 | 481741 | 106.066 | ug/l | | 99 |
| 52) Toluene | 10.635 | 92 | 148000 | 20.056 | ug/l | | 98 |
| 53) t-1,3-Dichloropropene | 10.841 | 75 | 87683 | 19.532 | ug/l | | 99 |
| 54) cis-1,3-Dichloropropene | 10.318 | 75 | 94315 | 19.636 | ug/l | | 99 |
| 55) 1,1,2-Trichloroethane | 11.018 | 97 | 57195 | 20.143 | ug/l | | 99 |
| 56) Ethyl methacrylate | 10.882 | 69 | 94829 | 20.968 | ug/l | | 98 |
| 57) 1,3-Dichloropropane | 11.165 | 76 | 98205 | 19.938 | ug/l | | 98 |
| 58) 2-Chloroethyl Vinyl ether | 10.165 | 63 | 278986 | 103.426 | ug/l | | 99 |
| 59) 2-Hexanone | 11.206 | 43 | 303686 | 103.803 | ug/l | | 95 |
| 60) Dibromochloromethane | 11.359 | 129 | 59961 | 20.268 | ug/l | | 99 |
| 61) 1,2-Dibromoethane | 11.471 | 107 | 59139 | 20.320 | ug/l | | 97 |
| 64) Tetrachloroethene | 11.106 | 164 | 45374 | 19.742 | ug/l | | 96 |
| 65) Chlorobenzene | 11.894 | 112 | 160803 | 20.076 | ug/l | | 97 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 52069 | 20.223 | ug/l | | 99 |
| 67) Ethyl Benzene | 11.965 | 91 | 277087 | 20.083 | ug/l | | 98 |
| 68) m/p-Xylenes | 12.071 | 106 | 215378 | 40.780 | ug/l | | 100 |
| 69) o-Xylene | 12.400 | 106 | 102050 | 20.175 | ug/l | | 98 |
| 70) Styrene | 12.412 | 104 | 178061 | 20.572 | ug/l | | 99 |
| 71) Bromoform | 12.576 | 173 | 40070 | 21.004 | ug/l | # | 99 |
| 73) Isopropylbenzene | 12.694 | 105 | 264442 | 20.035 | ug/l | | 100 |
| 74) N-amyl acetate | 12.523 | 43 | 86003 | 19.633 | ug/l | | 98 |
| 75) 1,1,2,2-Tetrachloroethane | 12.941 | 83 | 92264 | 20.634 | ug/l | | 99 |
| 76) 1,2,3-Trichloropropane | 12.994 | 75 | 81846m | 18.945 | ug/l | | |
| 77) Bromobenzene | 12.982 | 156 | 60877 | 20.111 | ug/l | | 98 |
| 78) n-propylbenzene | 13.035 | 91 | 322436 | 20.102 | ug/l | | 100 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 193774 | 20.144 | ug/l | | 100 |
| 80) 1,3,5-Trimethylbenzene | 13.170 | 105 | 219937 | 20.183 | ug/l | | 100 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 37808 | 20.209 | ug/l | | 92 |
| 82) 4-Chlorotoluene | 13.223 | 91 | 193544 | 19.885 | ug/l | | 99 |
| 83) tert-Butylbenzene | 13.435 | 119 | 198303 | 19.880 | ug/l | | 99 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 221990 | 20.315 | ug/l | | 100 |
| 85) sec-Butylbenzene | 13.617 | 105 | 292563 | 20.196 | ug/l | | 100 |
| 86) p-Isopropyltoluene | 13.729 | 119 | 240682 | 20.099 | ug/l | | 100 |
| 87) 1,3-Dichlorobenzene | 13.735 | 146 | 120099 | 20.166 | ug/l | | 99 |
| 88) 1,4-Dichlorobenzene | 13.812 | 146 | 120102 | 19.780 | ug/l | | 97 |
| 89) n-Butylbenzene | 14.053 | 91 | 227536 | 19.617 | ug/l | | 100 |
| 90) Hexachloroethane | 14.335 | 117 | 41202 | 20.299 | ug/l | | 100 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 115645 | 20.212 | ug/l | | 99 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75 | 21025 | 19.661 | ug/l | | 98 |
| 93) 1,2,4-Trichlorobenzene | 15.388 | 180 | 71826 | 19.659 | ug/l | | 98 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 27887 | 20.486 | ug/l | | 97 |
| 95) Naphthalene | 15.641 | 128 | 272584 | 20.043 | ug/l | | 100 |
| 96) 1,2,3-Trichlorobenzene | 15.841 | 180 | 71929 | 19.815 | ug/l | | 99 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086864.D
Acq On : 06 Jun 2025 13:40
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

Quant Time: Jun 07 01:56:20 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 01:51:02 2025
Response via : Initial Calibration

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

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

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086864.D
Acq On : 06 Jun 2025 13:40
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 07 01:56:20 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 01:51:02 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/09/2025
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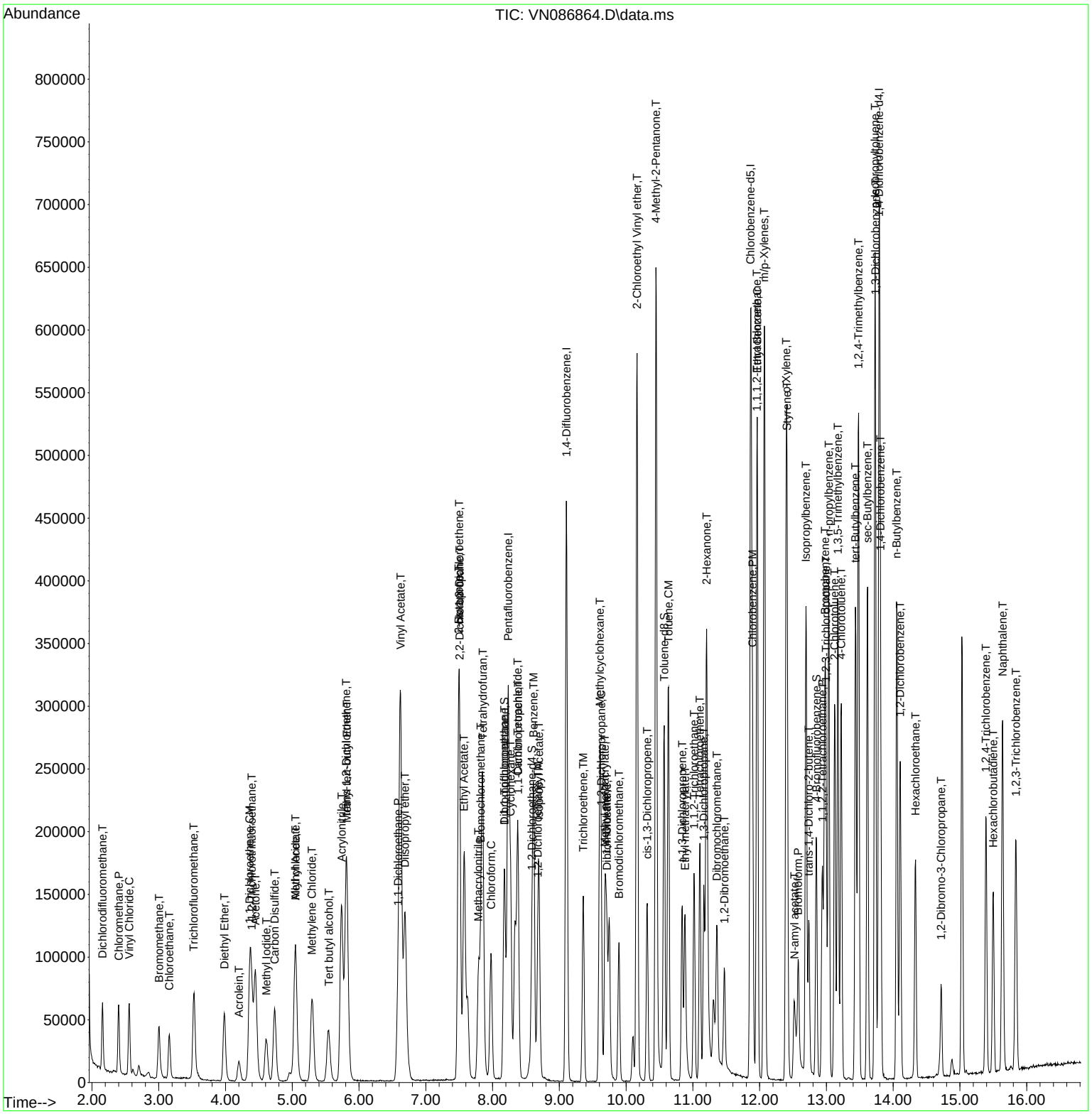
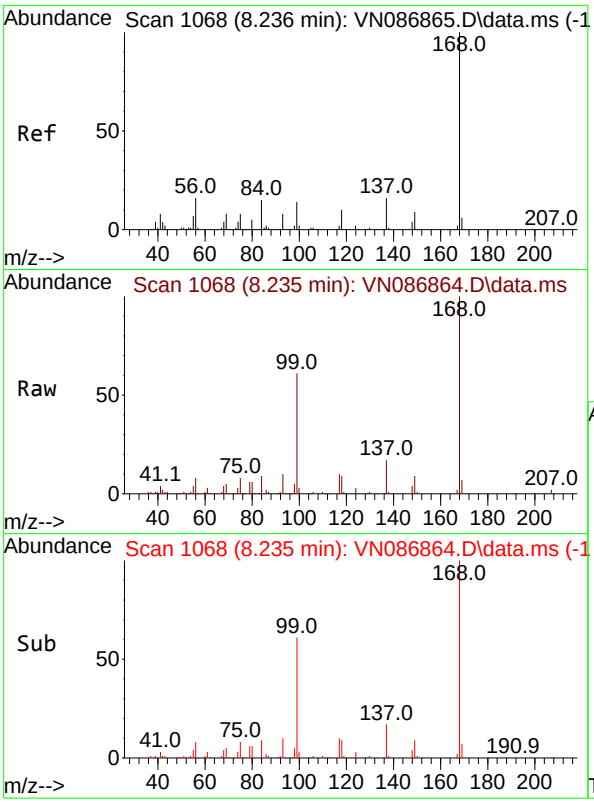
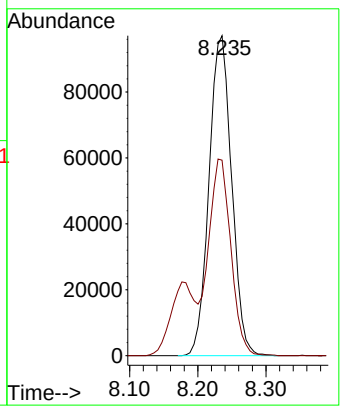





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.235 min Scan# 1
Delta R.T. -0.001 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion:168 Resp: 22400

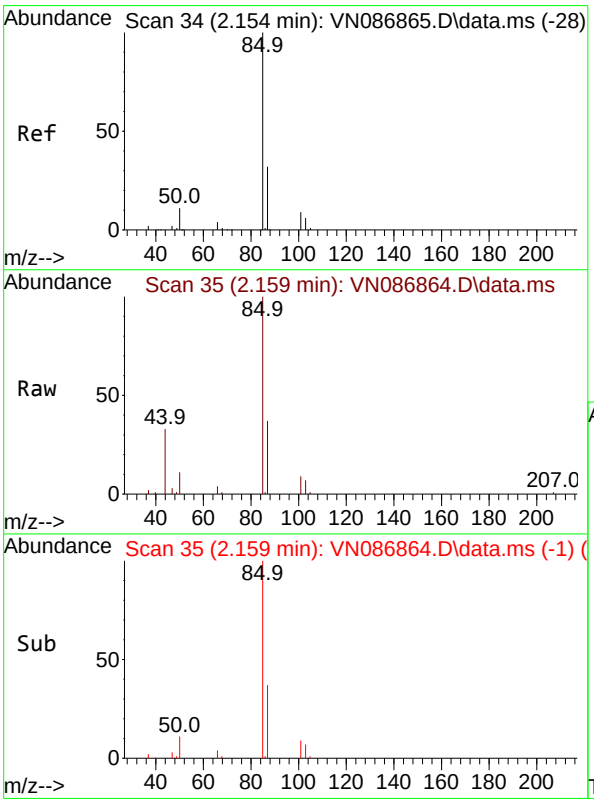
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 61.1 | 49.1 | 73.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
**APPROVED**

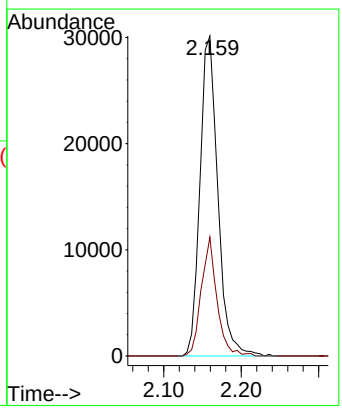
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

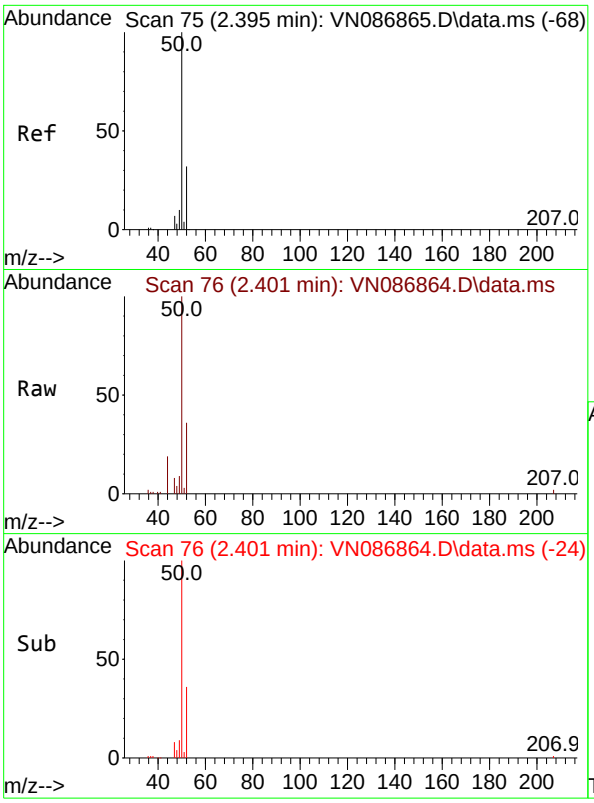



#2
Dichlorodifluoromethane
Concen: 21.605 ug/l
RT: 2.159 min Scan# 35
Delta R.T. 0.006 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 85 Resp: 48254

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 37.1 | 16.2 | 48.6 |

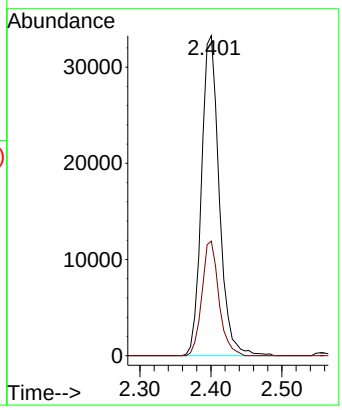





#3
Chloromethane
Concen: 20.033 ug/l
RT: 2.401 min Scan# 7
Delta R.T. 0.006 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 50 Resp: 5777

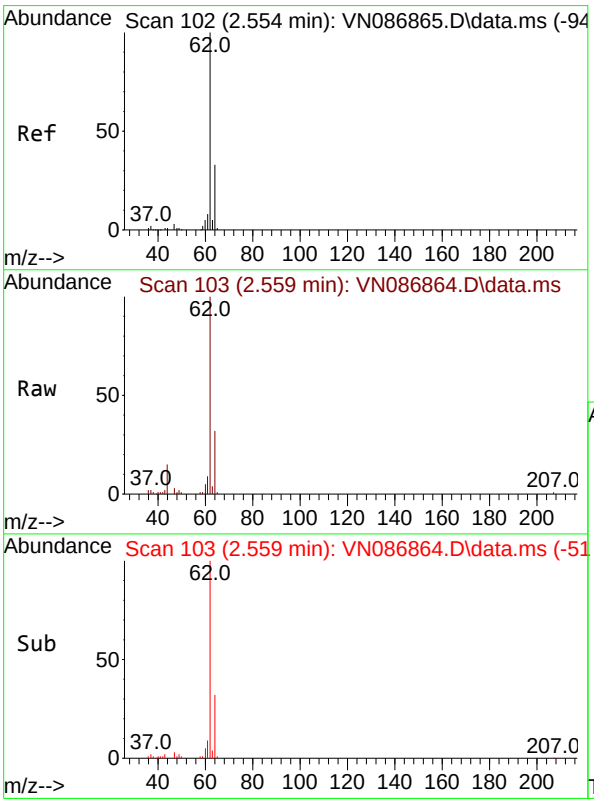
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 35.8 | 25.7 | 38.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
**APPROVED**

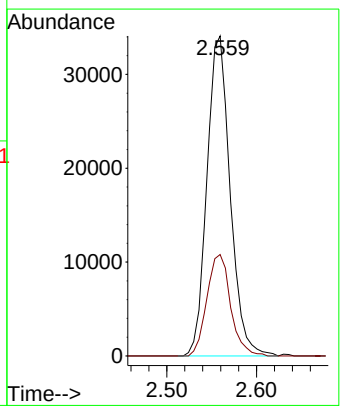
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

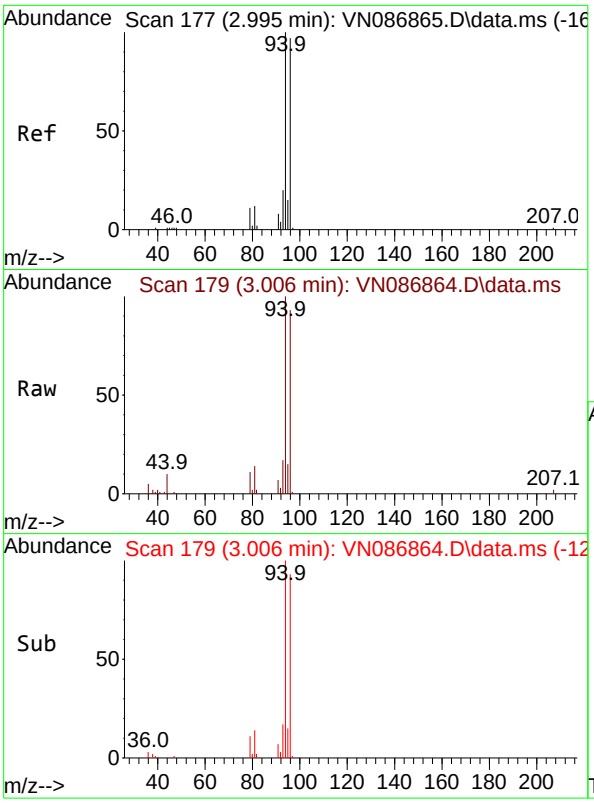



#4
Vinyl Chloride
Concen: 20.589 ug/l
RT: 2.559 min Scan# 103
Delta R.T. 0.006 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 62 Resp: 61254

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 31.7 | 26.0 | 39.0 |

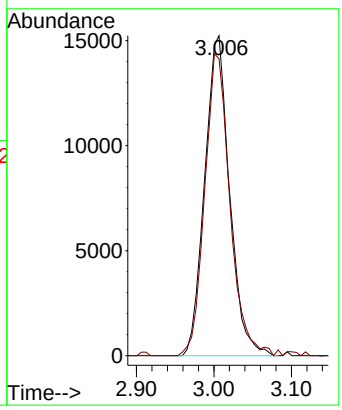





#5
Bromomethane
Concen: 20.435 ug/l
RT: 3.006 min Scan# 1
Delta R.T. 0.012 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 94 Resp: 3402

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 92.9 | 77.9 | 116.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
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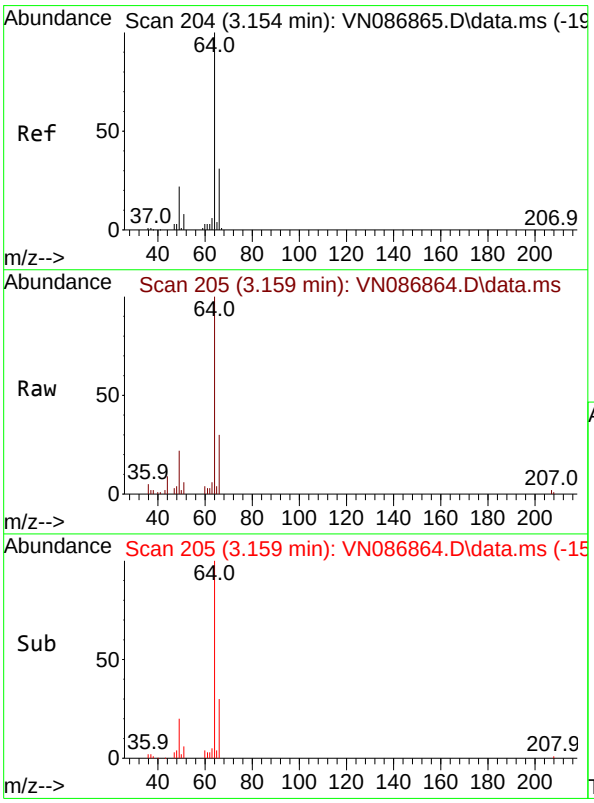
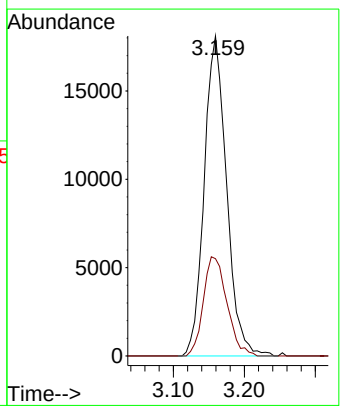
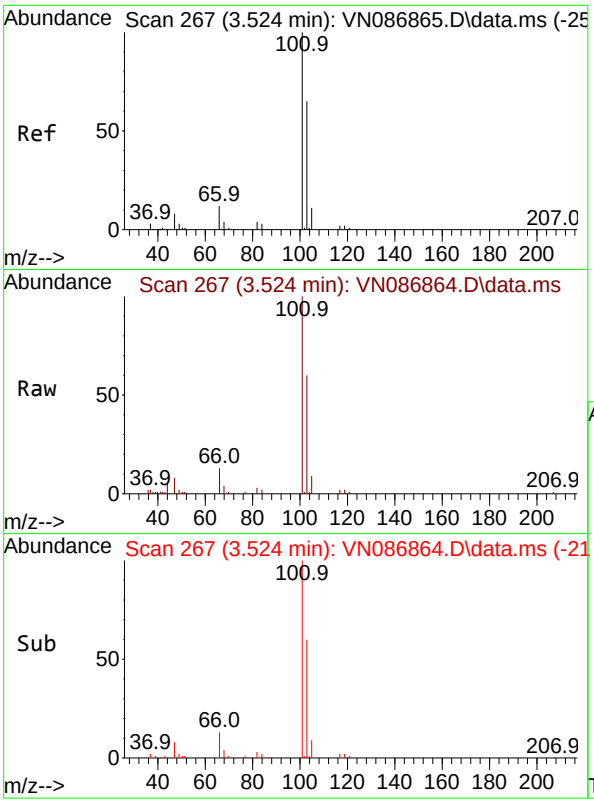



#6
Chloroethane
Concen: 20.619 ug/l
RT: 3.159 min Scan# 205
Delta R.T. 0.006 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 64 Resp: 39625

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 30.4 | 24.6 | 36.8 |

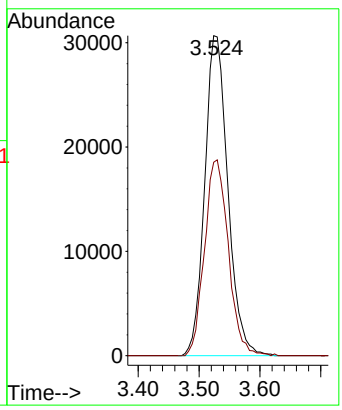





#7
Trichlorofluoromethane
Concen: 20.832 ug/l
RT: 3.524 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion:101 Resp: 8097

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 60.4 | 52.2 | 78.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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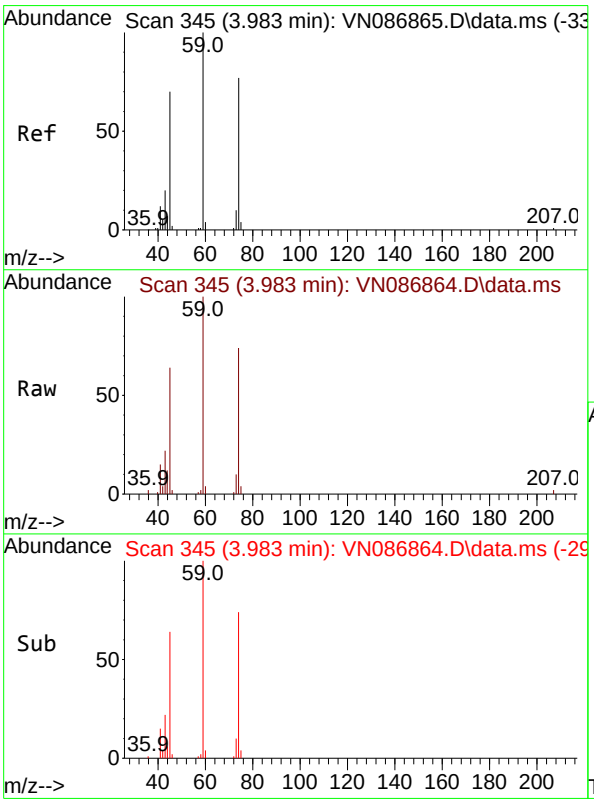
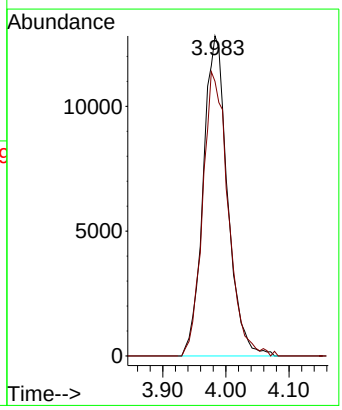
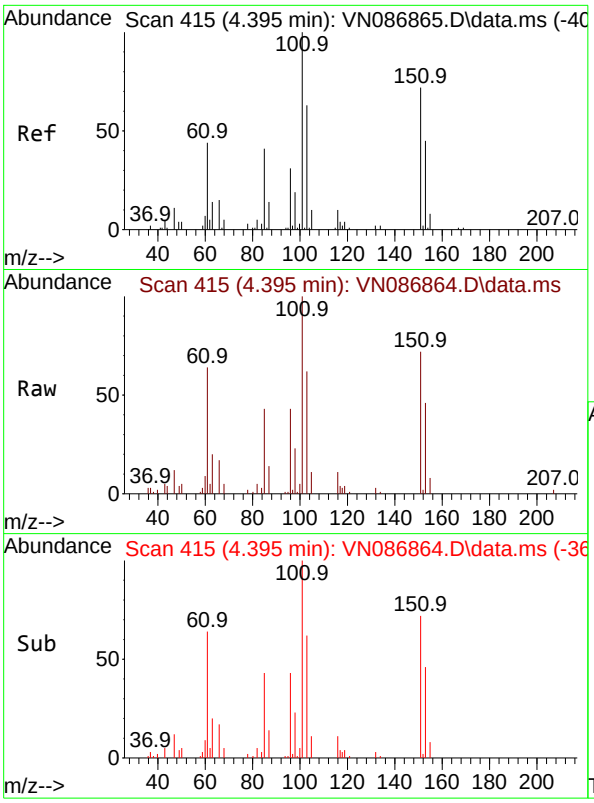



#8
Diethyl Ether
Concen: 20.245 ug/l
RT: 3.983 min Scan# 345
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 74 Resp: 34288

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 92.9 | 45.5 | 136.5 |






#9
1,1,2-Trichlorotrifluoroethane
Concen: 20.661 ug/l
RT: 4.395 min Scan# 4
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

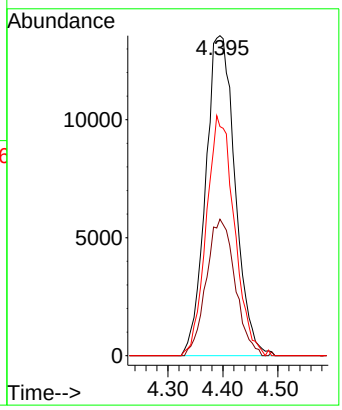
Tgt Ion:101 Resp: 5045

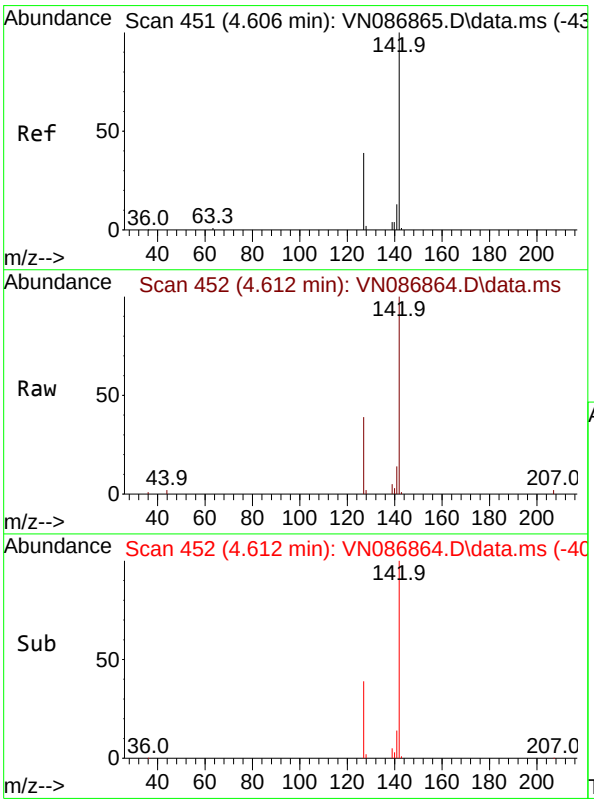
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 41.7 | 33.8 | 50.8 |
| 151 | 71.3 | 58.7 | 88.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

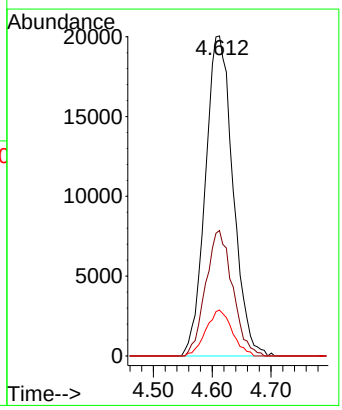


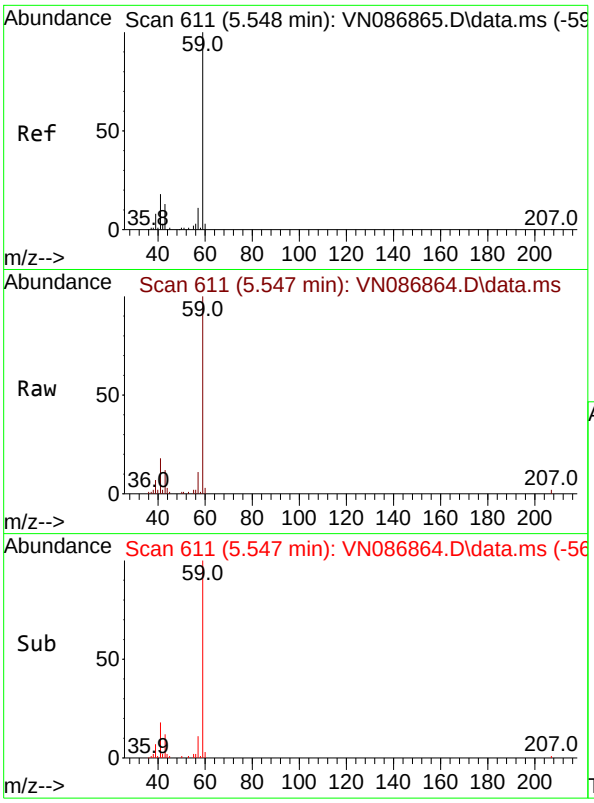




#10
Methyl Iodide
Concen: 20.646 ug/l
RT: 4.612 min Scan# 452
Delta R.T. 0.006 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion:142 Resp: 65360

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 39.2 | 30.9 | 46.3 |
| 141 | 14.3 | 10.4 | 15.6 |

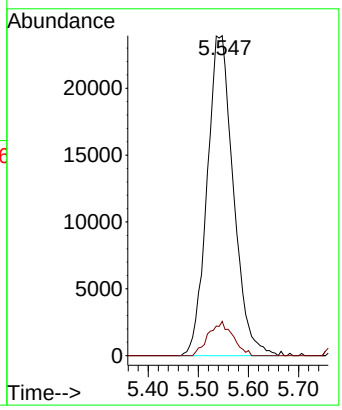





#11
Tert butyl alcohol
Concen: 107.031 ug/l
RT: 5.547 min Scan# 61
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 59 Resp: 8710

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 9.9 | 8.1 | 12.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
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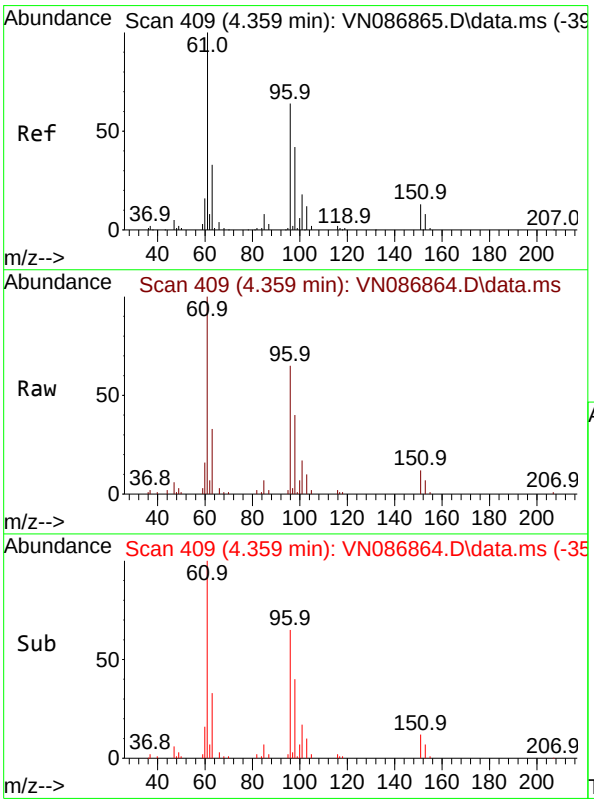
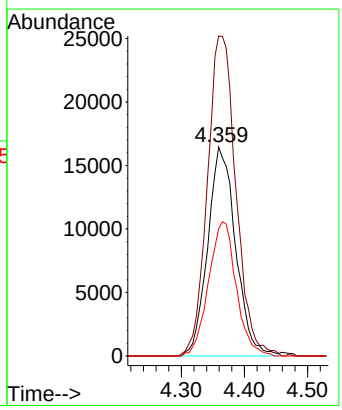
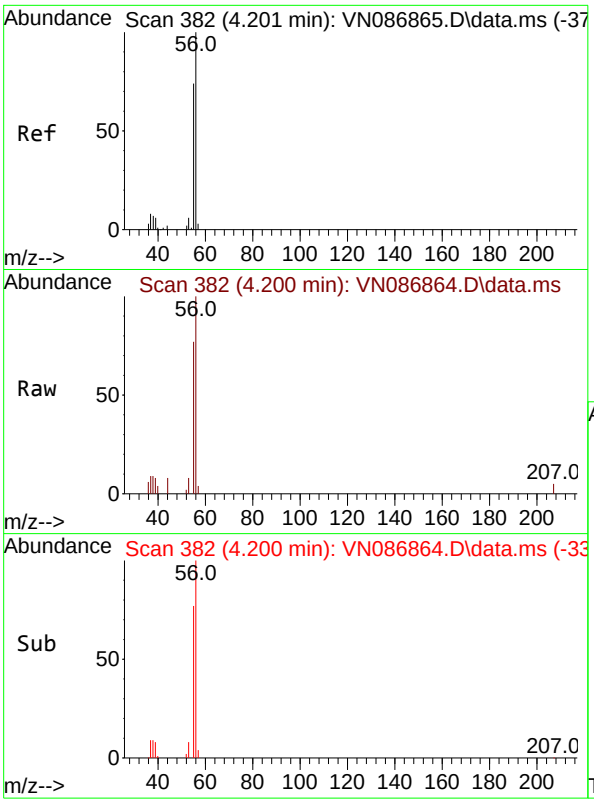



#12
1,1-Dichloroethene
Concen: 20.249 ug/l
RT: 4.359 min Scan# 409
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 96 Resp: 50485

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 153.1 | 125.8 | 188.6 |
| 98 | 61.0 | 52.5 | 78.7 |

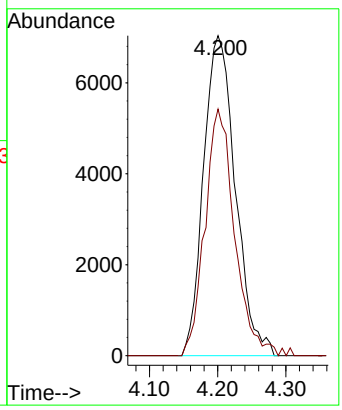





#13
Acrolein
Concen: 88.767 ug/l
RT: 4.200 min Scan# 3
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 56 Resp: 2286

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 71.6 | 55.6 | 83.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

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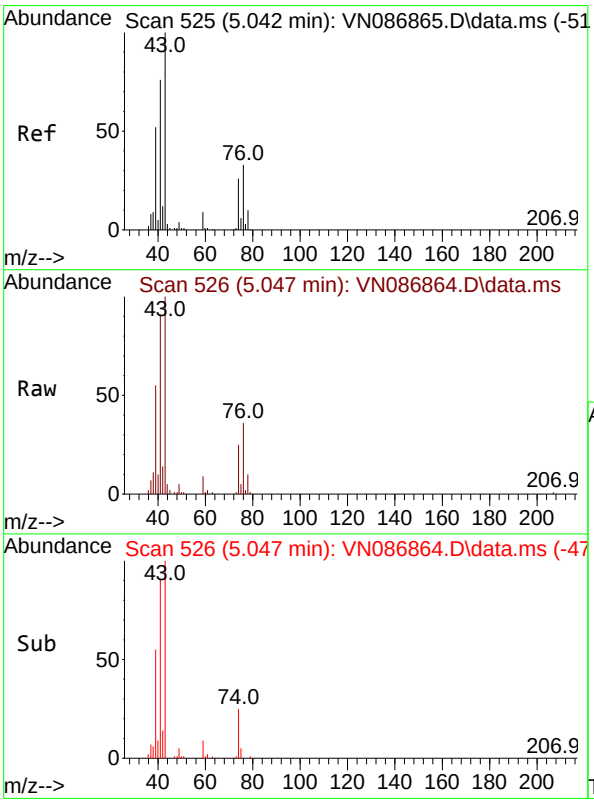
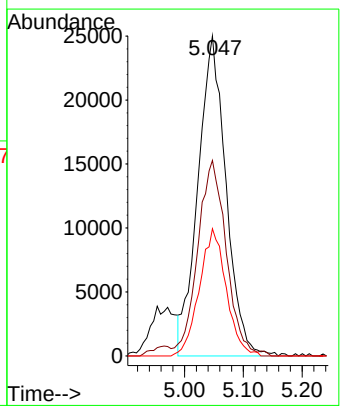
Supervised By :Mahesh Dadoda 06/09/2025

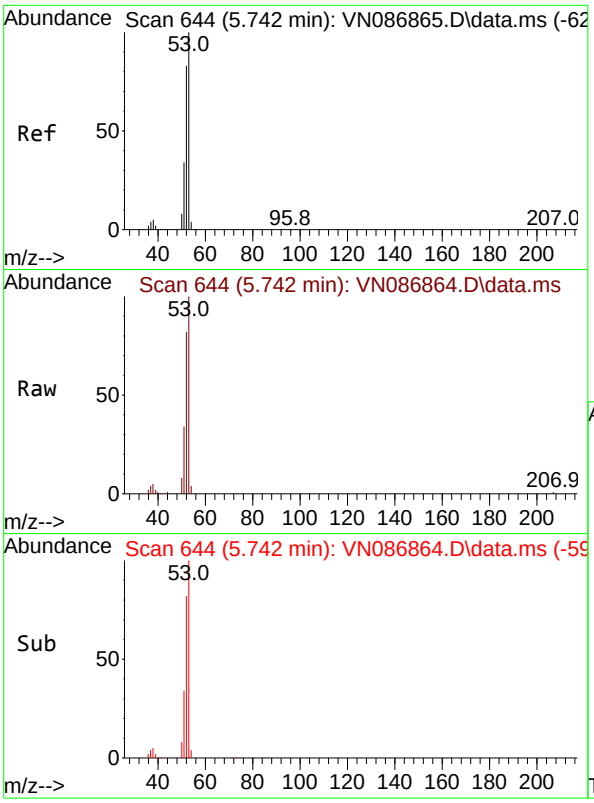



#14
Allyl chloride
Concen: 20.055 ug/l
RT: 5.047 min Scan# 526
Delta R.T. 0.006 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 41 Resp: 82924

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 62.6 | 51.3 | 76.9 |
| 76 | 38.1 | 31.4 | 47.0 |






#15
Acrylonitrile
Concen: 104.881 ug/l
RT: 5.742 min Scan# 64
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 53 Resp: 19949

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 80.3 | 65.0 | 97.6 |
| 51 | 33.7 | 27.2 | 40.8 |

**Instrument :**
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VSTDICC020

**Manual Integrations**
**APPROVED**

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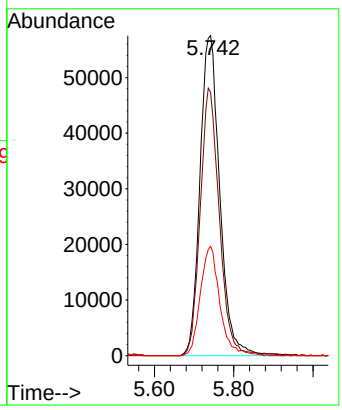
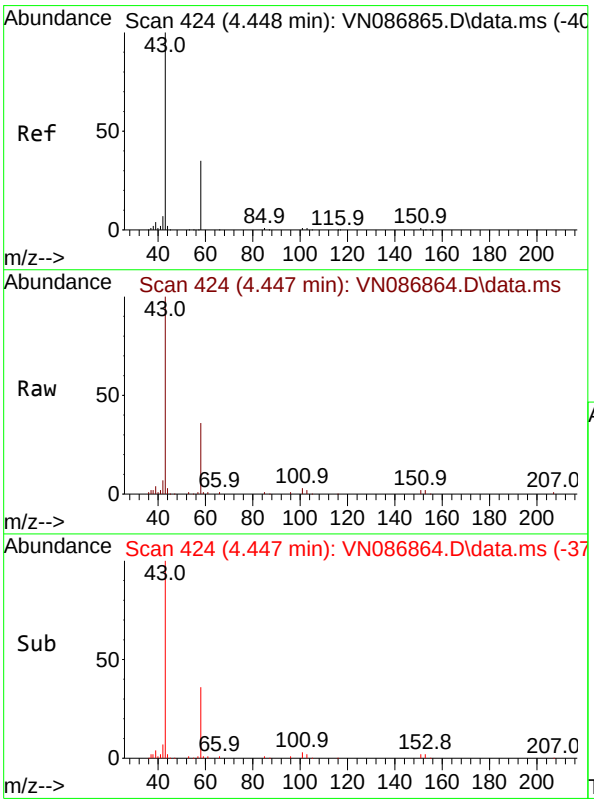
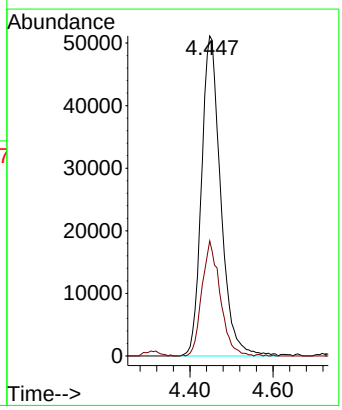


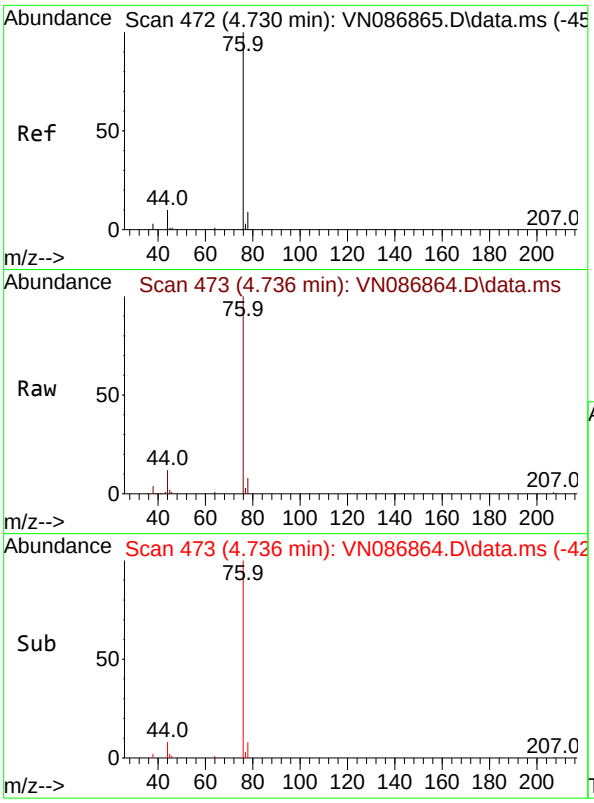




#16
Acetone
Concen: 103.099 ug/l
RT: 4.447 min Scan# 424
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 43 Resp: 163979

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 35.9 | 28.0 | 42.0 |

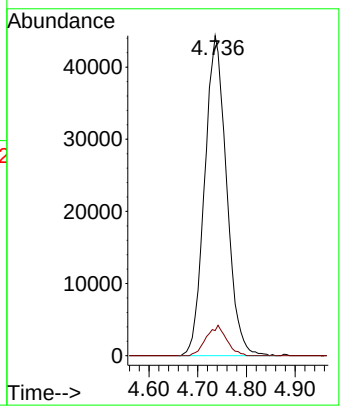





#17
Carbon Disulfide
Concen: 20.038 ug/l
RT: 4.736 min Scan# 4
Delta R.T. 0.006 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 76 Resp: 13819

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 7.8 | 7.3 | 10.9 |




**Instrument :**
MSVOA_N
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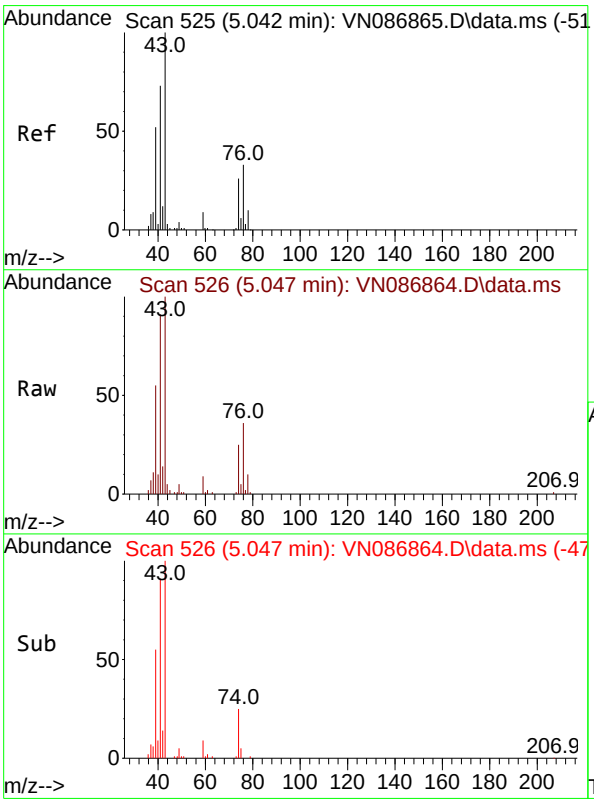
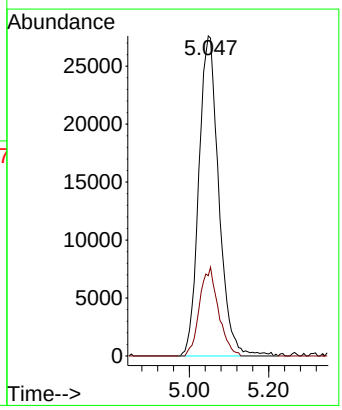
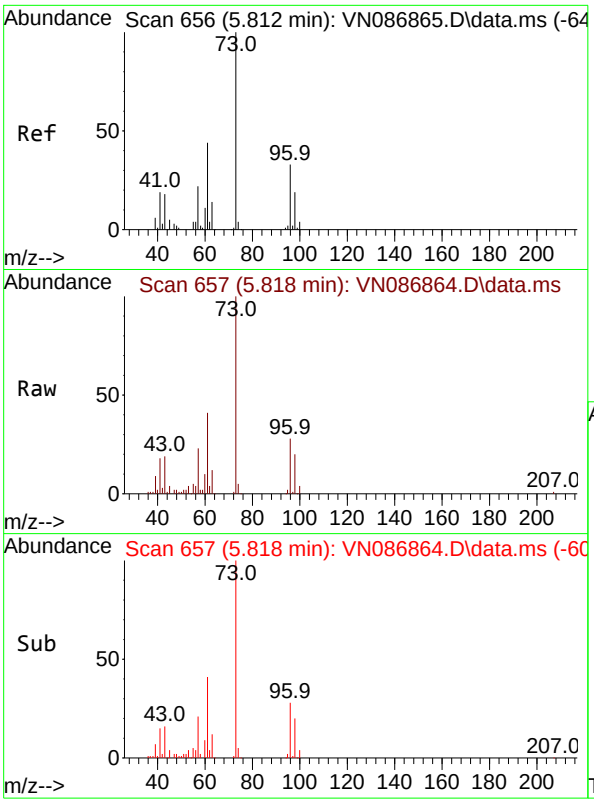



#18
Methyl Acetate
Concen: 20.830 ug/l
RT: 5.047 min Scan# 526
Delta R.T. 0.006 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 43 Resp: 96547

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 26.2 | 20.7 | 31.1 |

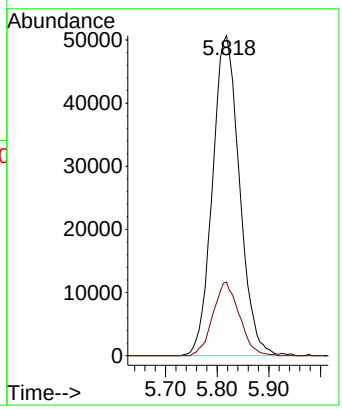





#19
Methyl tert-butyl Ether
Concen: 20.358 ug/l
RT: 5.818 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 73 Resp: 18378

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 22.9 | 17.4 | 26.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

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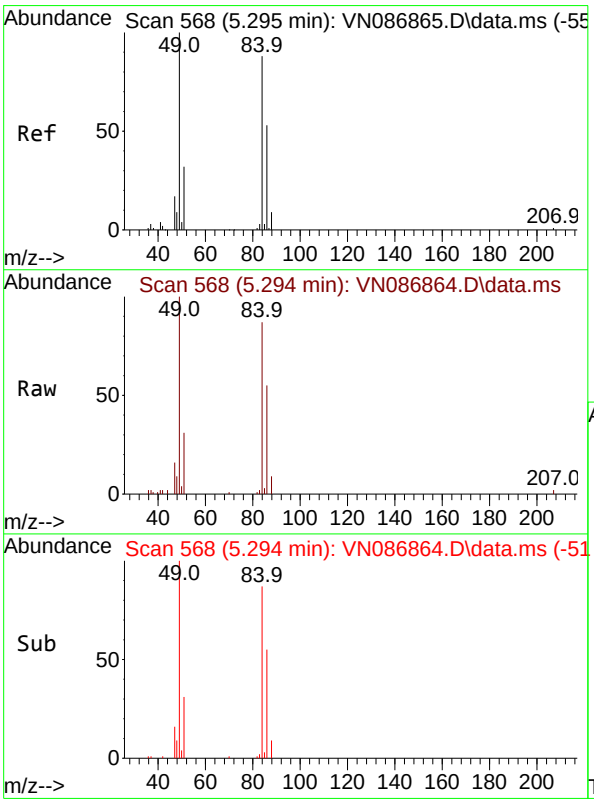
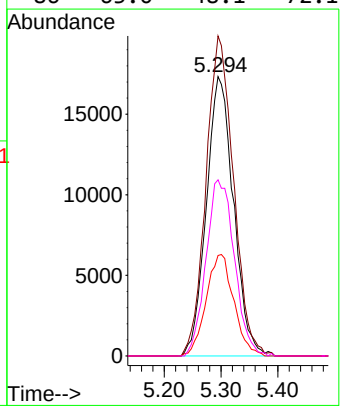
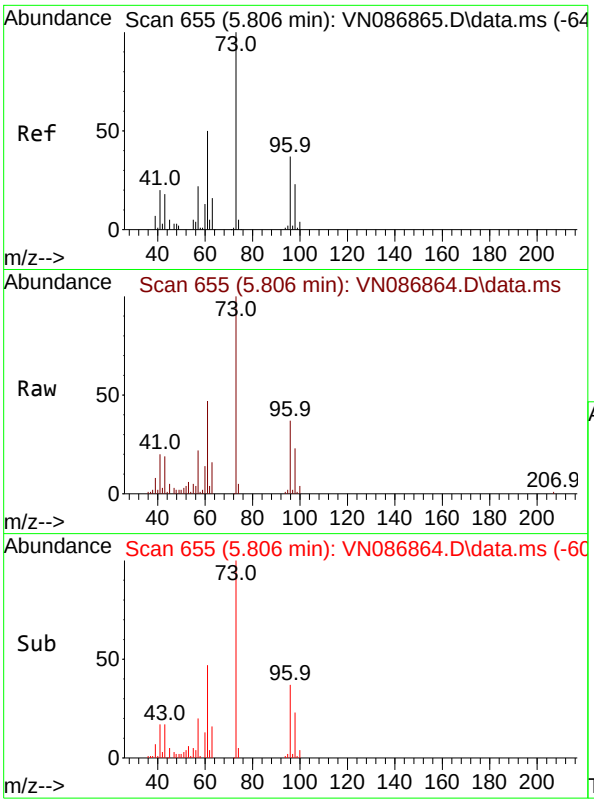



#20
Methylene Chloride
Concen: 19.348 ug/l
RT: 5.294 min Scan# 568
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 84 Resp: 57611

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 114.5 | 90.5 | 135.7 |
| 51 | 35.9 | 28.5 | 42.7 |
| 86 | 63.0 | 48.1 | 72.1 |

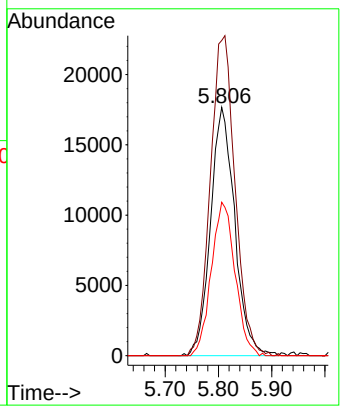





#21
trans-1,2-Dichloroethene
Concen: 20.059 ug/l
RT: 5.806 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 96 Resp: 5564

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 126.9 | 109.2 | 163.8 |
| 98 | 61.8 | 49.8 | 74.8 |




**Instrument :**
MSVOA_N
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VSTDICC020

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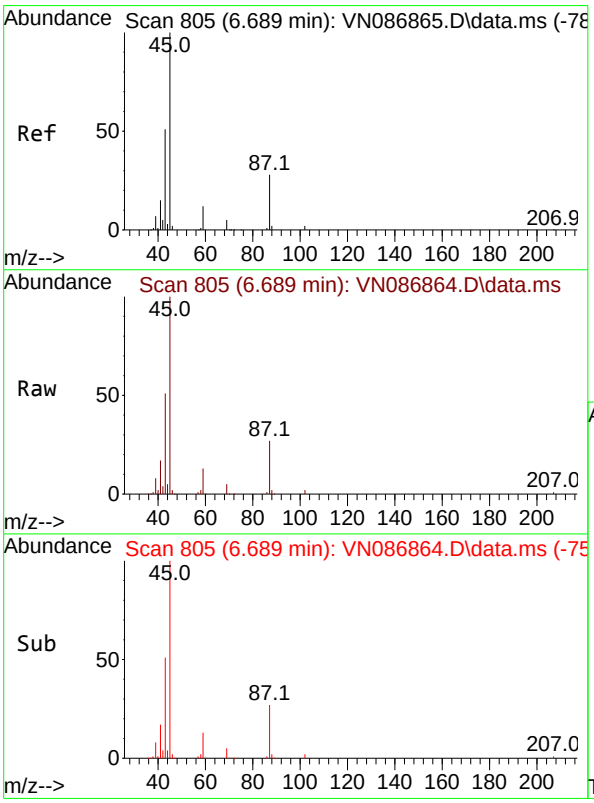
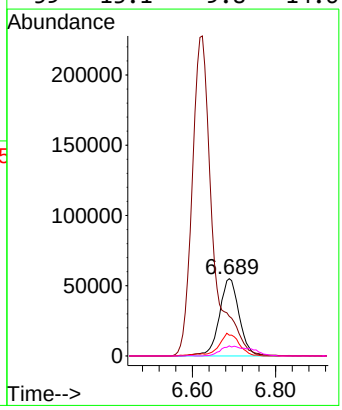
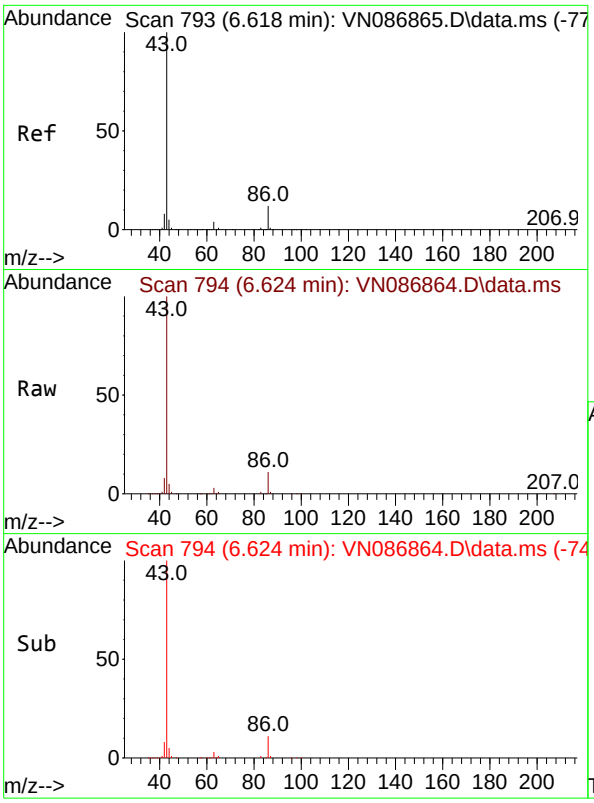



#22
Diisopropyl ether
Concen: 20.935 ug/l
RT: 6.689 min Scan# 805
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 45 Resp: 182472

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 50.7 | 41.9 | 62.9 |
| 87 | 27.0 | 22.4 | 33.6 |
| 59 | 13.1 | 9.8 | 14.6 |

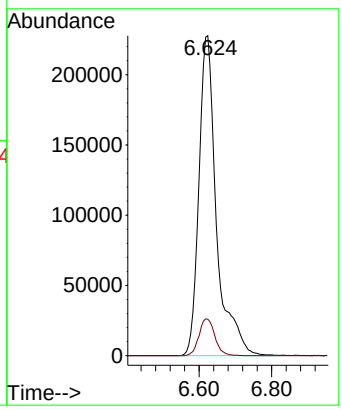





#23
Vinyl Acetate
Concen: 104.365 ug/l
RT: 6.624 min Scan# 7
Delta R.T. 0.006 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 43 Resp: 76855

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 11.4 | 9.5 | 14.3 |




**Instrument :**
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VSTDICC020

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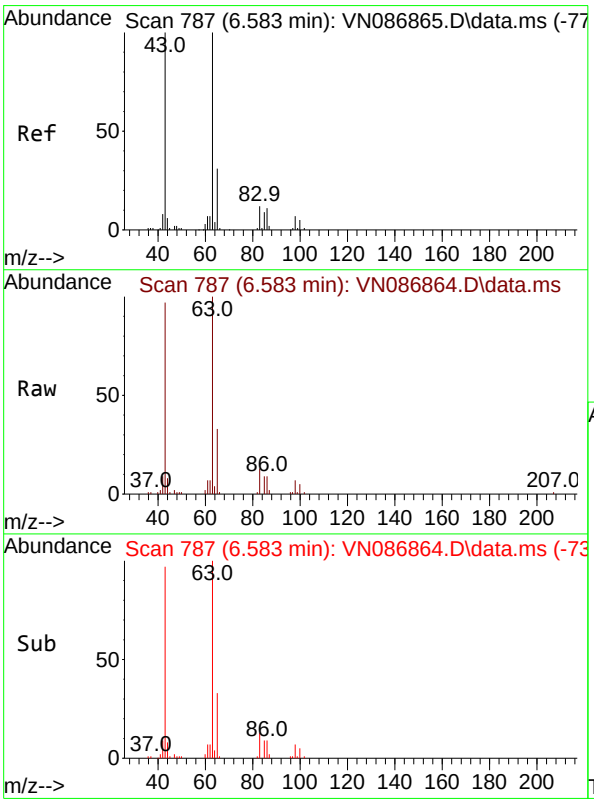
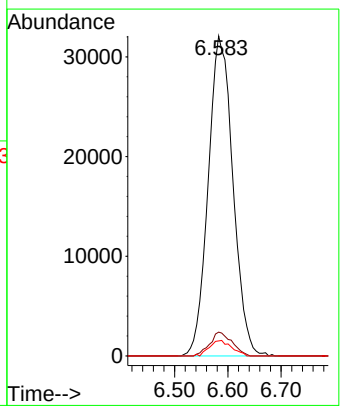
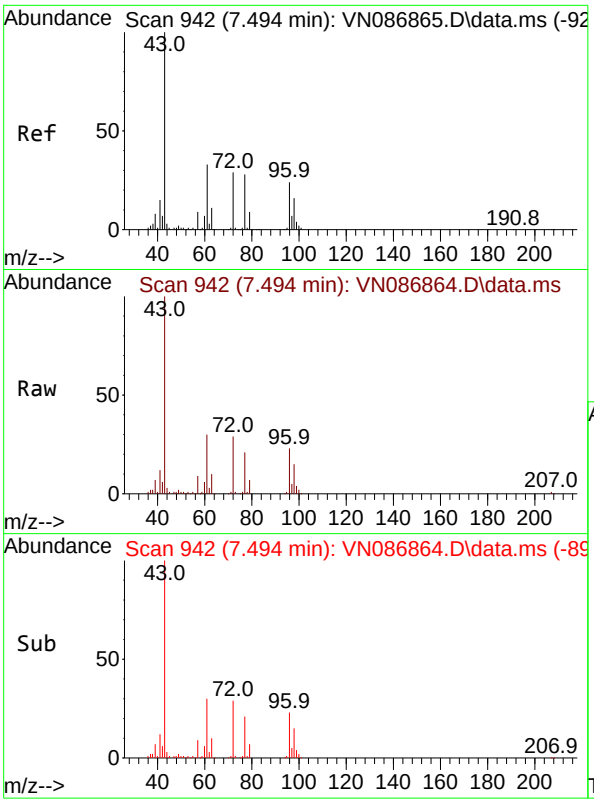



#24
1,1-Dichloroethane
Concen: 20.650 ug/l
RT: 6.583 min Scan# 787
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 63 Resp: 103578

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 7.5 | 3.6 | 10.8 |
| 100 | 4.7 | 2.6 | 7.8 |






#25
2-Butanone
Concen: 104.621 ug/l
RT: 7.494 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 43 Resp: 27047

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 28.6 | 23.0 | 34.6 |

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

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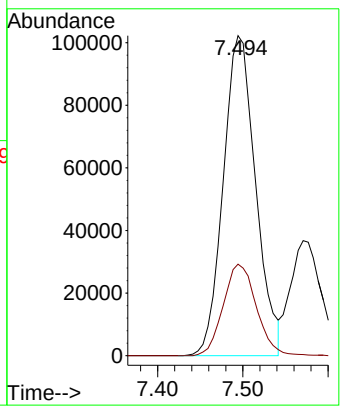
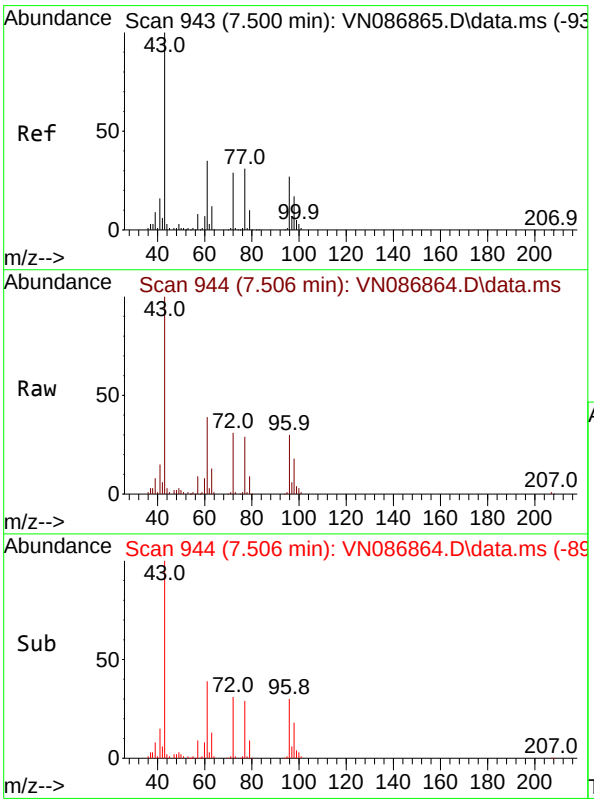
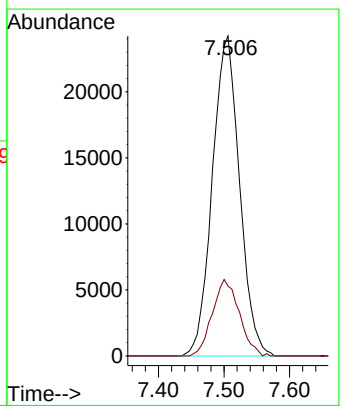


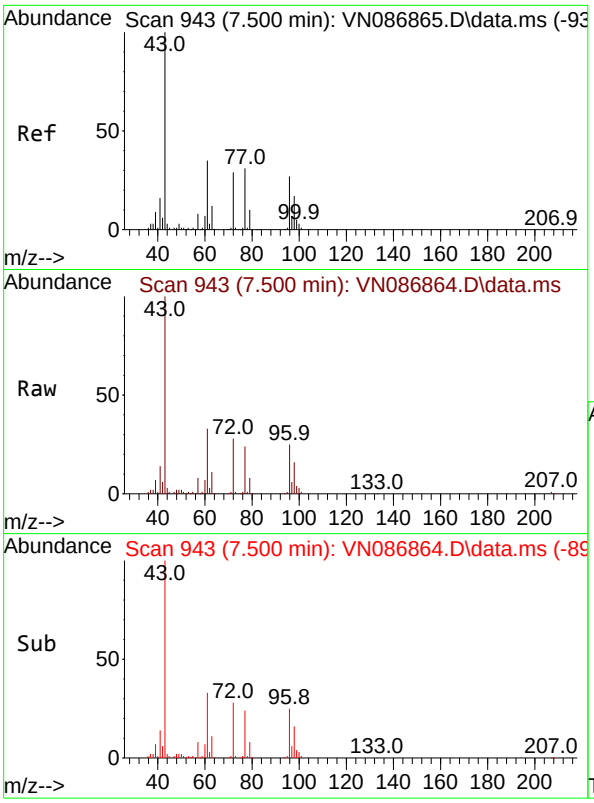




#26
2,2-Dichloropropane
Concen: 17.862 ug/l
RT: 7.506 min Scan# 944
Delta R.T. 0.006 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 77 Resp: 69692

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 23.7 | 11.6 | 34.7 |






#27
cis-1,2-Dichloroethene
Concen: 20.585 ug/l
RT: 7.500 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 96 Resp: 6829

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 135.5 | 0.0 | 278.0 |
| 98 | 63.0 | 0.0 | 128.2 |

**Instrument :**
MSVOA_N
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VSTDICC020

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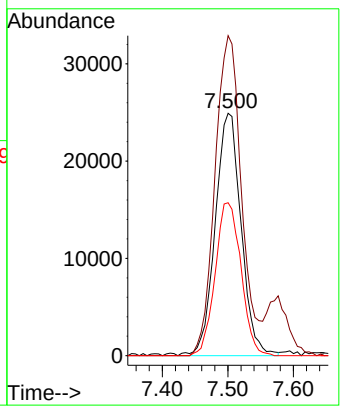
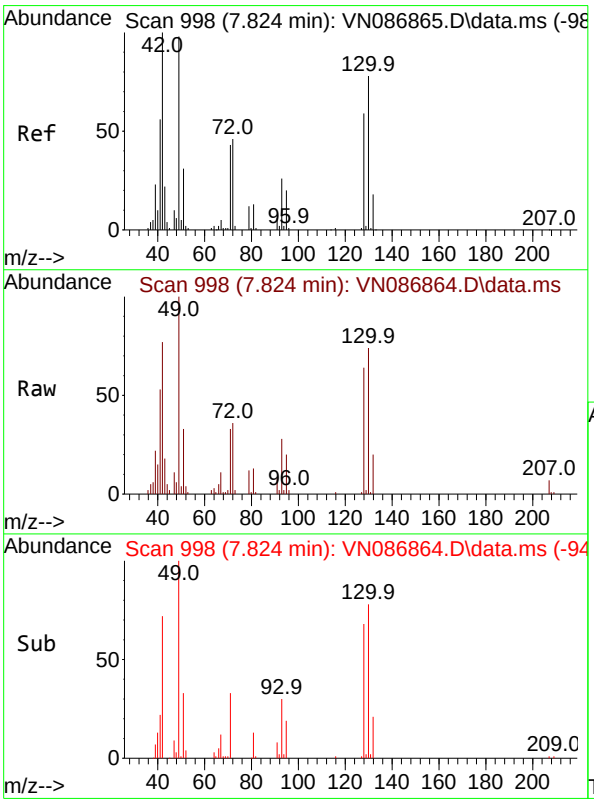
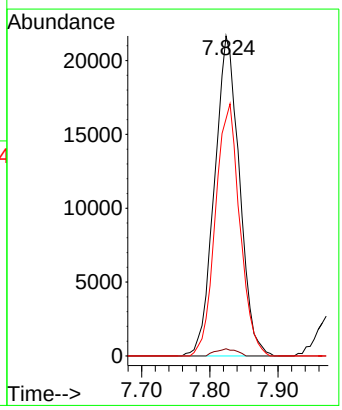


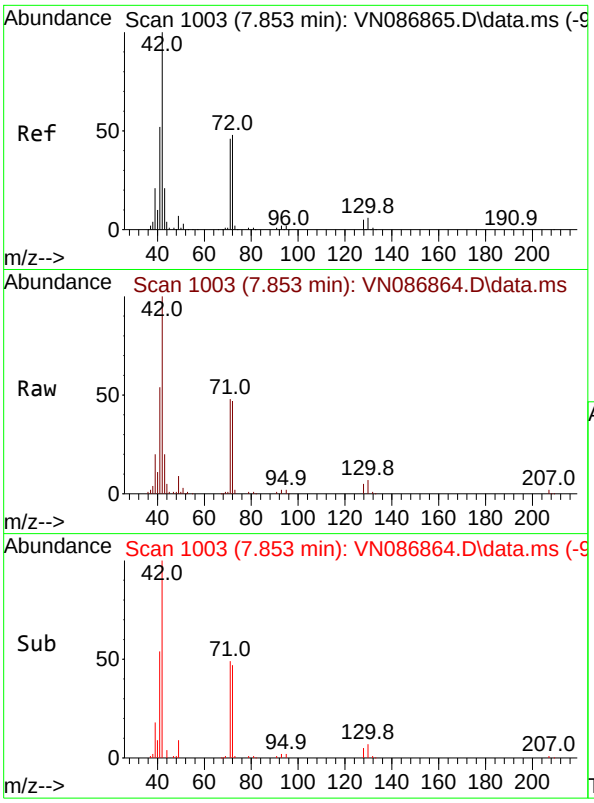




#28
Bromochloromethane
Concen: 22.381 ug/l
RT: 7.824 min Scan# 998
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 49 Resp: 55196

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.9 | 0.0 | 3.8 |
| 130 | 77.1 | 62.2 | 93.2 |






#29
Tetrahydrofuran
Concen: 106.031 ug/l
RT: 7.853 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 42 Resp: 17857

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 46.6 | 37.8 | 56.6 |
| 71 | 43.5 | 35.6 | 53.4 |

**Instrument :**
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VSTDICC020

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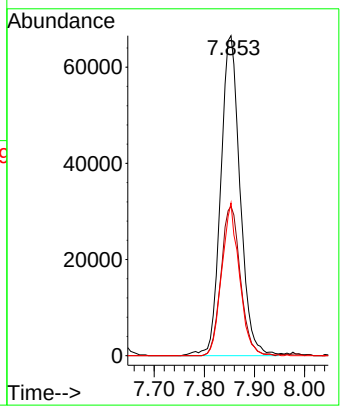
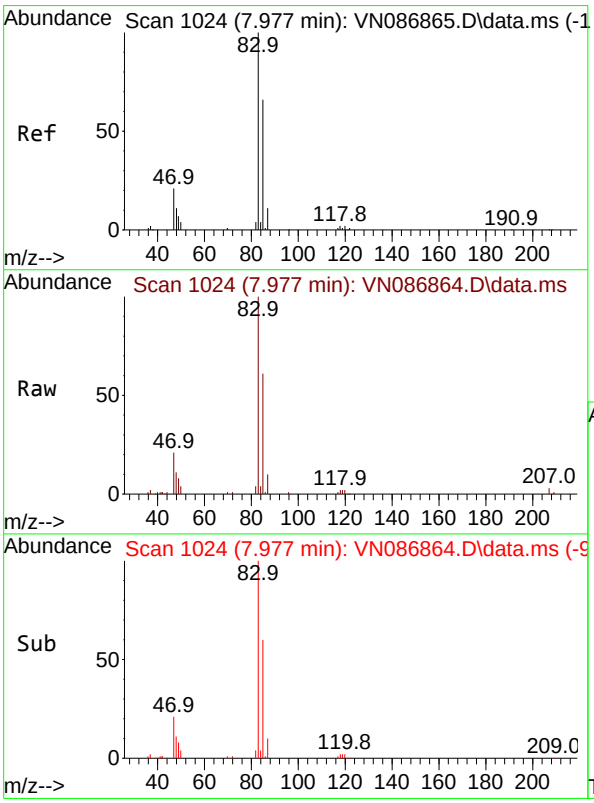
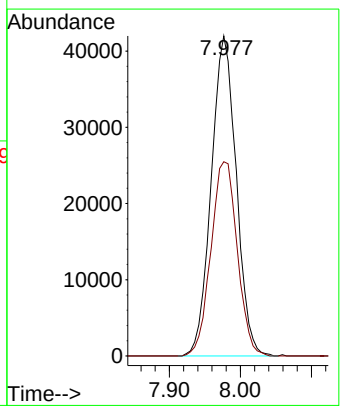


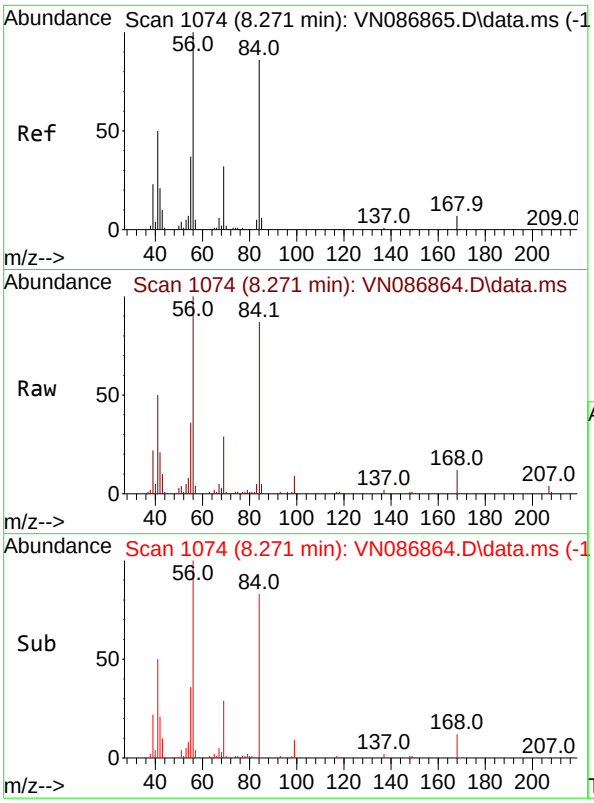




#30
Chloroform
Concen: 20.485 ug/l
RT: 7.977 min Scan# 1024
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 83 Resp: 102615

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 60.7 | 52.9 | 79.3 |

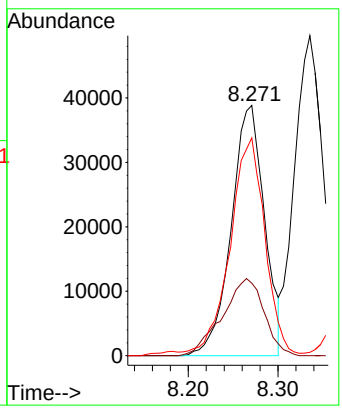





#31
Cyclohexane
Concen: 20.563 ug/l
RT: 8.271 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 56 Resp: 10002

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 29.0 | 25.4 | 38.0 |
| 84 | 85.6 | 68.8 | 103.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

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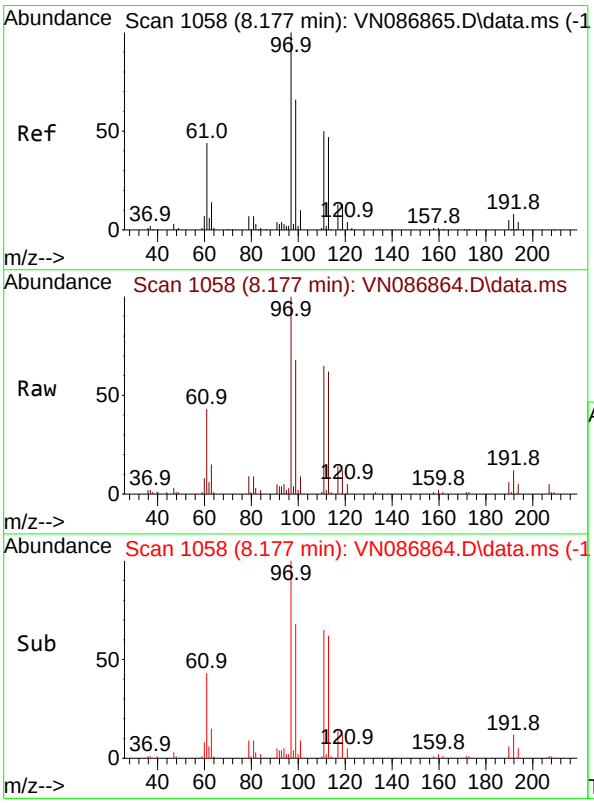
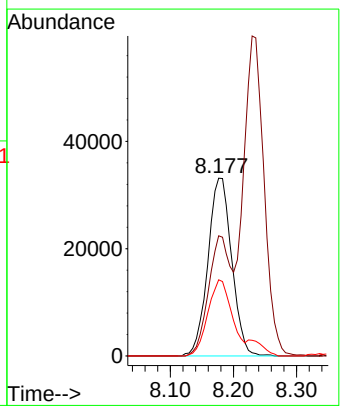
Supervised By :Mahesh Dadoda 06/09/2025

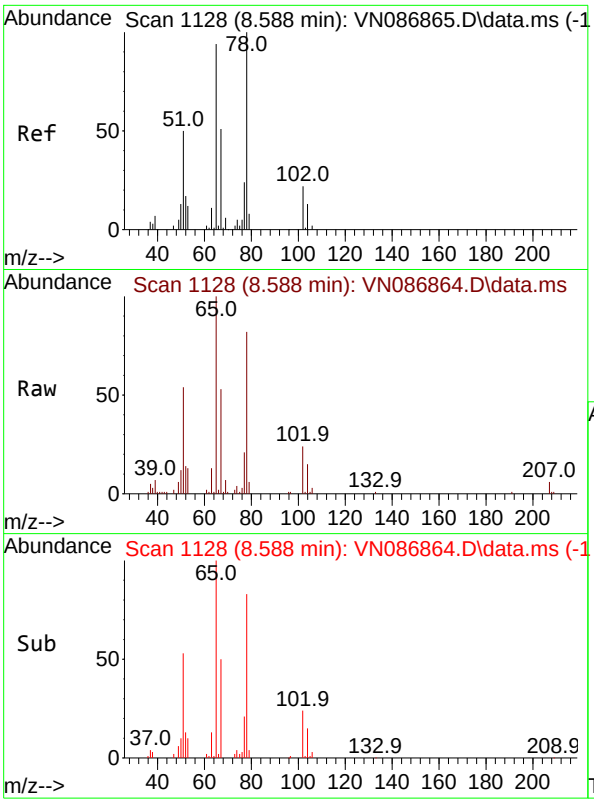



#32
1,1,1-Trichloroethane
Concen: 20.376 ug/l
RT: 8.177 min Scan# 1058
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 97 Resp: 86810

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 63.8 | 52.0 | 78.0 |
| 61 | 43.3 | 35.9 | 53.9 |






#33
1,2-Dichloroethane-d4
Concen: 21.136 ug/l
RT: 8.588 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 65 Resp: 6339

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 55.3 | 0.0 | 105.6 |

**Instrument :**
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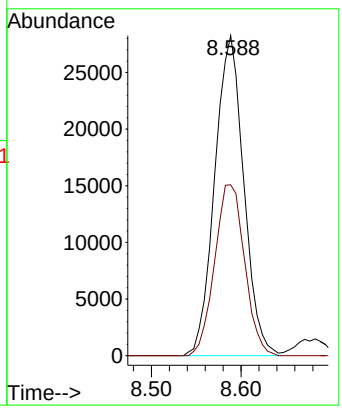
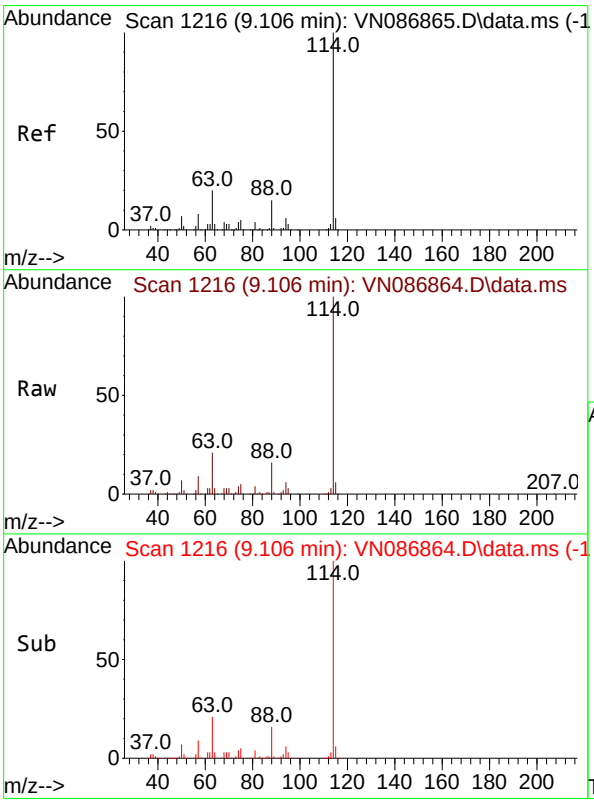
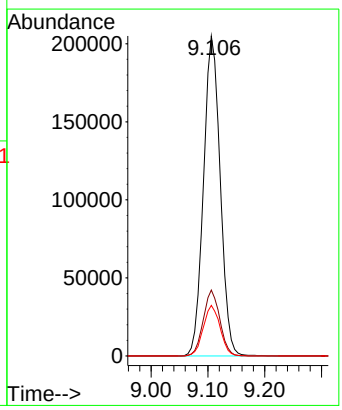


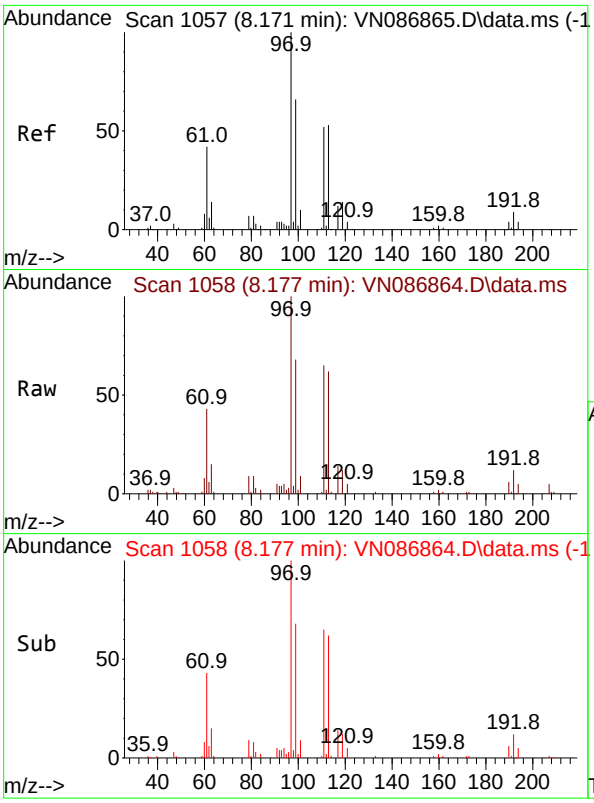




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.106 min Scan# 1216
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion:114 Resp: 418154

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 20.6 | 0.0 | 39.6 |
| 88 | 15.8 | 0.0 | 30.2 |

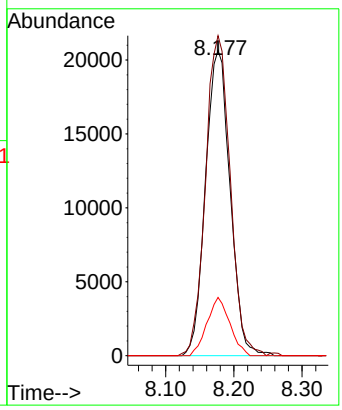





#35
Dibromofluoromethane
Concen: 20.902 ug/l
RT: 8.177 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion:113 Resp: 5179

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 105.1 | 84.2 | 126.2 |
| 192 | 17.7 | 14.2 | 21.4 |

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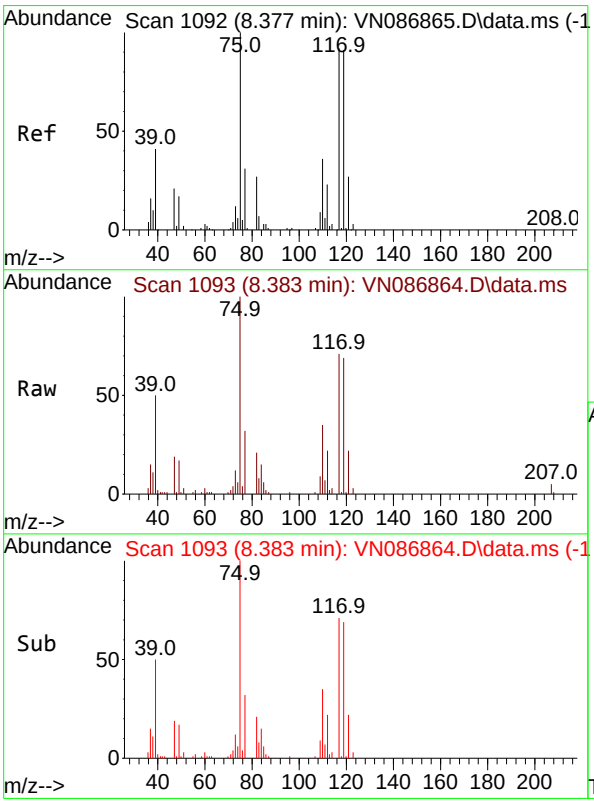
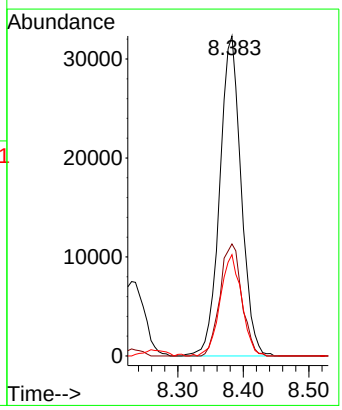
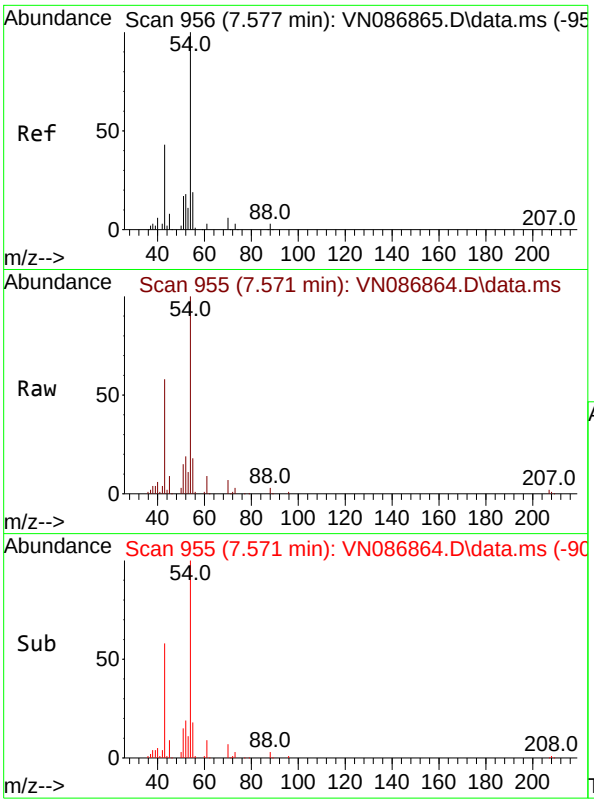



#36
1,1-Dichloropropene
Concen: 19.838 ug/l
RT: 8.383 min Scan# 1093
Delta R.T. 0.006 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 75 Resp: 73252

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 35.6 | 17.6 | 52.9 |
| 77 | 31.8 | 25.3 | 37.9 |

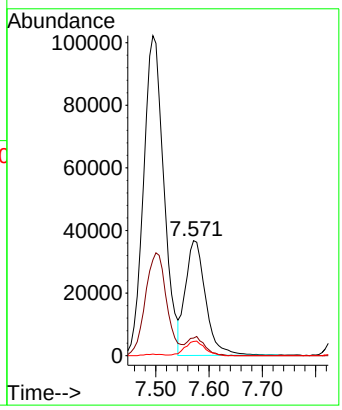





#37
Ethyl Acetate
Concen: 20.522 ug/l
RT: 7.571 min Scan# 9
Delta R.T. -0.006 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 43 Resp: 9646

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 13.9 | 12.1 | 18.1 |
| 70 | 12.6 | 9.8 | 14.6 |




**Instrument :**
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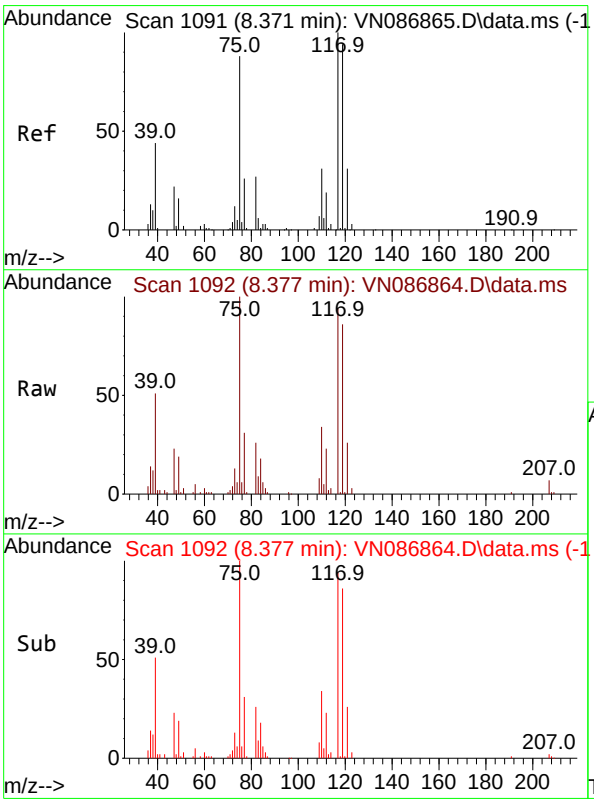
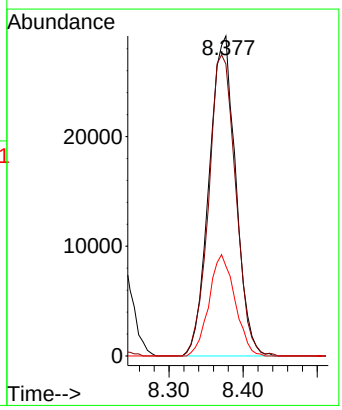
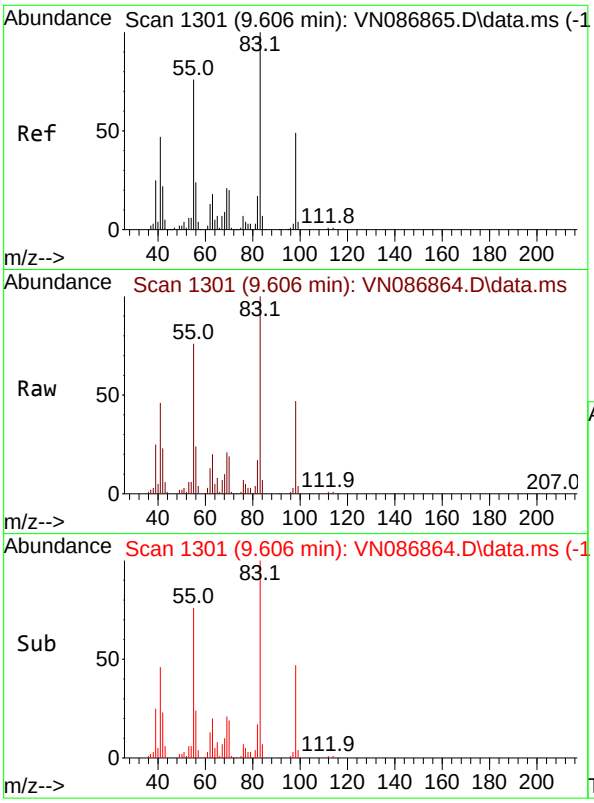



#38
Carbon Tetrachloride
Concen: 20.034 ug/l
RT: 8.377 min Scan# 1092
Delta R.T. 0.006 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion:117 Resp: 72628

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 91.3 | 75.0 | 112.6 |
| 121 | 28.1 | 24.9 | 37.3 |






#39
Methylcyclohexane
Concen: 19.455 ug/l
RT: 9.606 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 83 Resp: 9842

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 75.7 | 61.0 | 91.6 |
| 98 | 47.4 | 38.9 | 58.3 |

**Instrument :**
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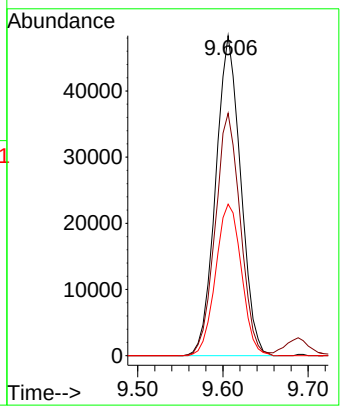
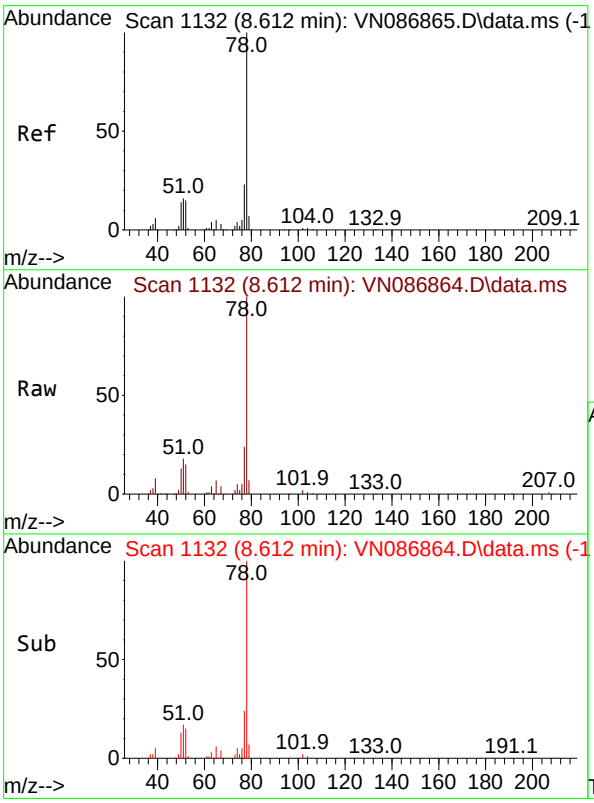
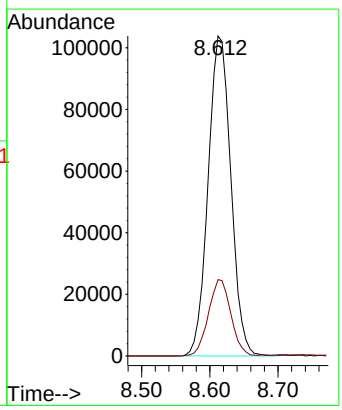


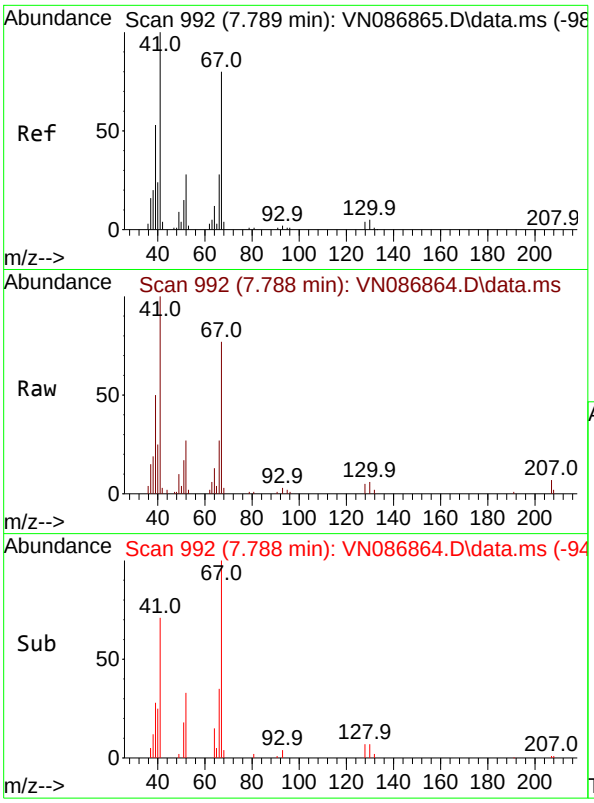




#40
Benzene
Concen: 19.996 ug/l
RT: 8.612 min Scan# 1132
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 78 Resp: 241444

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.8 | 18.7 | 28.1 |

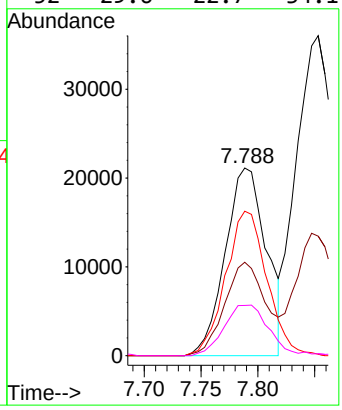





#41
Methacrylonitrile
Concen: 20.169 ug/l
RT: 7.788 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 41 Resp: 5324

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 49.5 | 41.2 | 61.8 |
| 67 | 77.3 | 61.4 | 92.2 |
| 52 | 29.6 | 22.7 | 34.1 |




**Instrument :**
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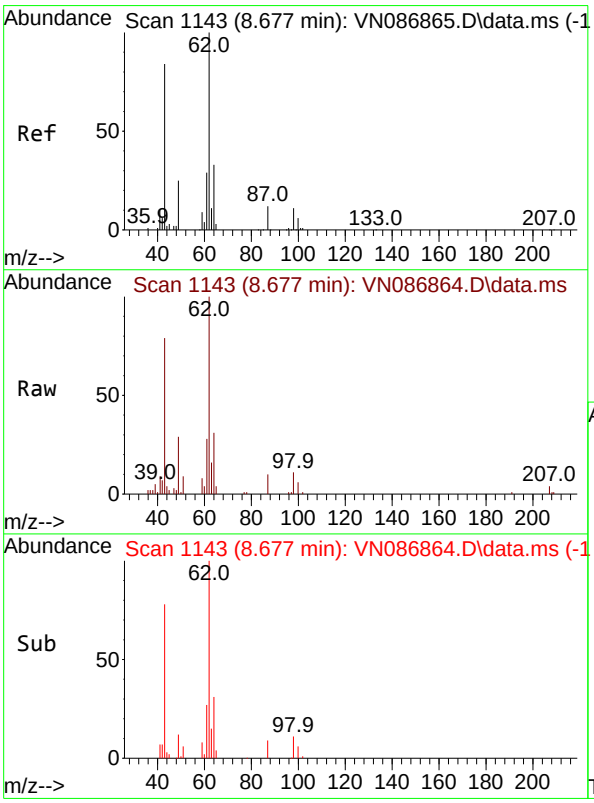
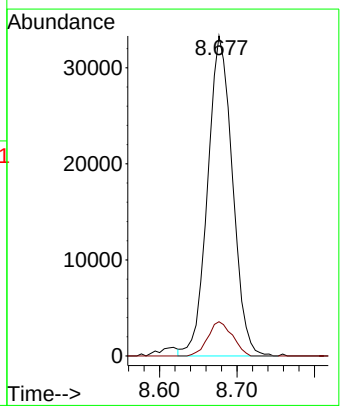
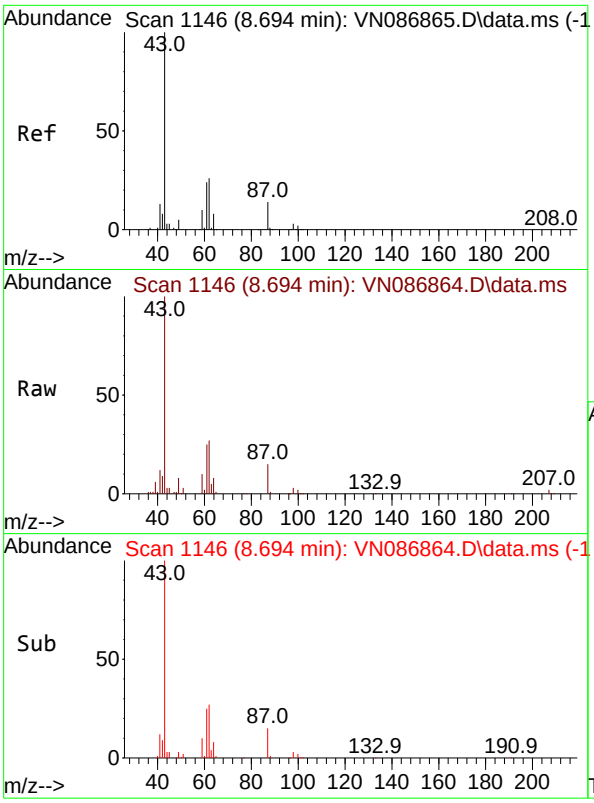



#42
1,2-Dichloroethane
Concen: 20.270 ug/l
RT: 8.677 min Scan# 1143
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 62 Resp: 74238

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 10.6 | 0.0 | 21.2 |






#43
Isopropyl Acetate
Concen: 20.094 ug/l
RT: 8.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 43 Resp: 15160

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 27.9 | 22.1 | 33.1 |
| 87 | 14.4 | 11.8 | 17.6 |

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VSTDICC020

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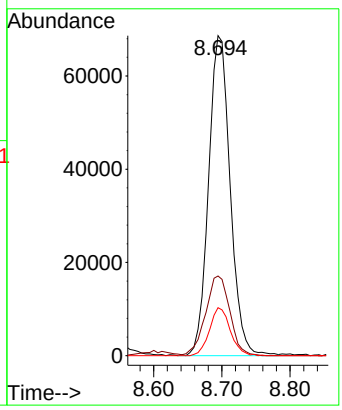
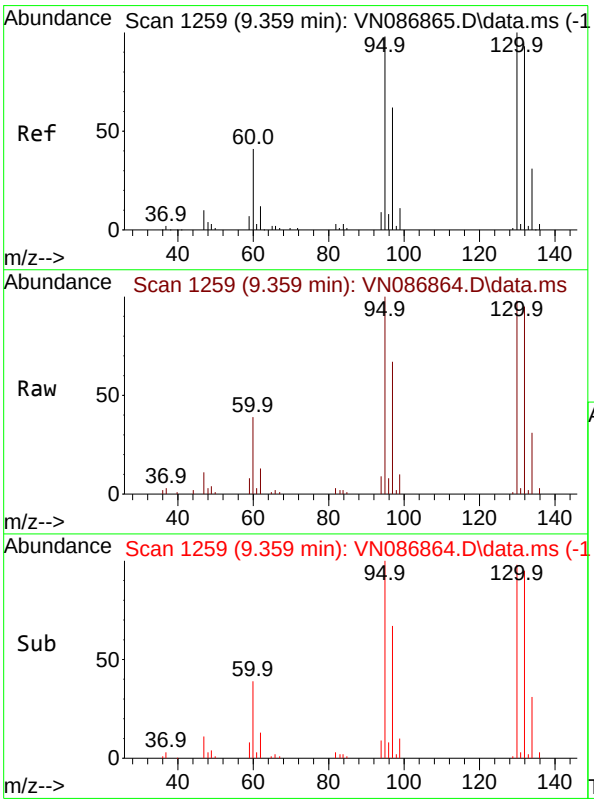
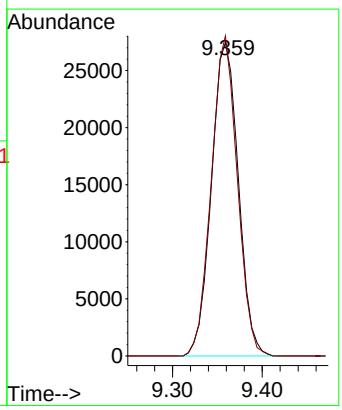


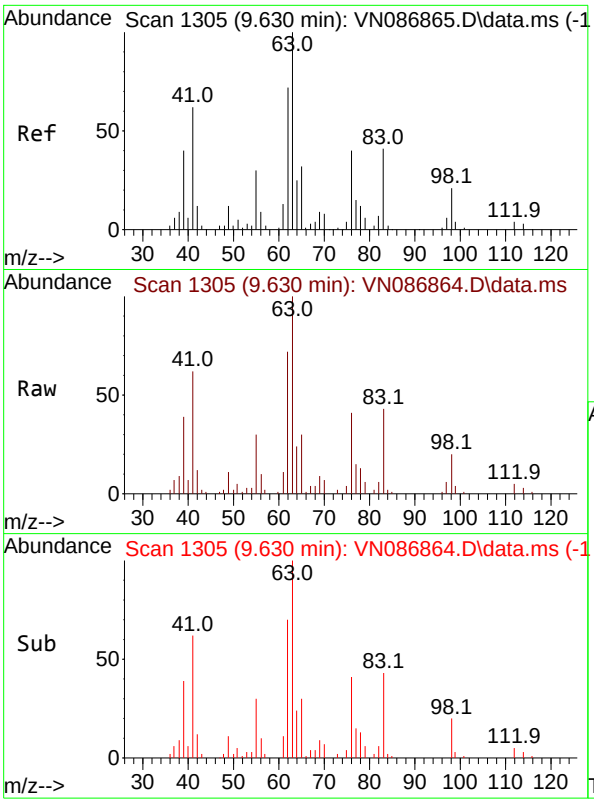




#44
Trichloroethene
Concen: 19.946 ug/l
RT: 9.359 min Scan# 1259
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion:130 Resp: 57110

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 102.1 | 0.0 | 196.2 |

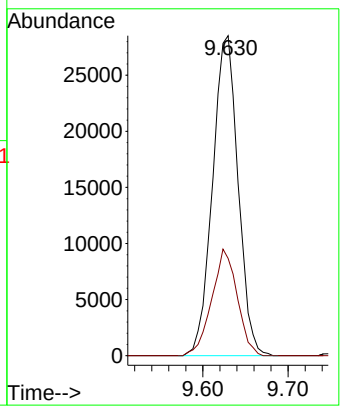





#45
1,2-Dichloropropane
Concen: 20.184 ug/l
RT: 9.630 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 63 Resp: 5929

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 30.4 | 25.5 | 38.3 |

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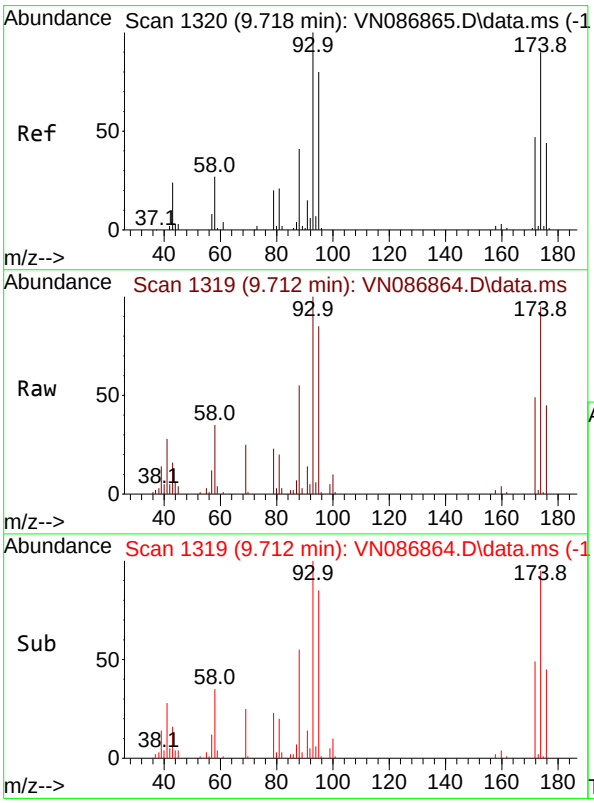
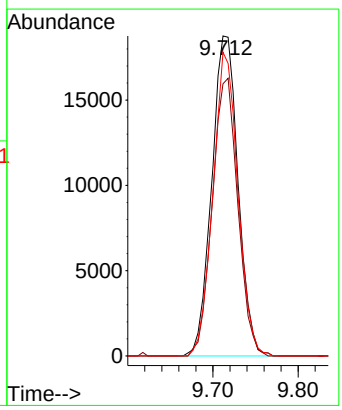
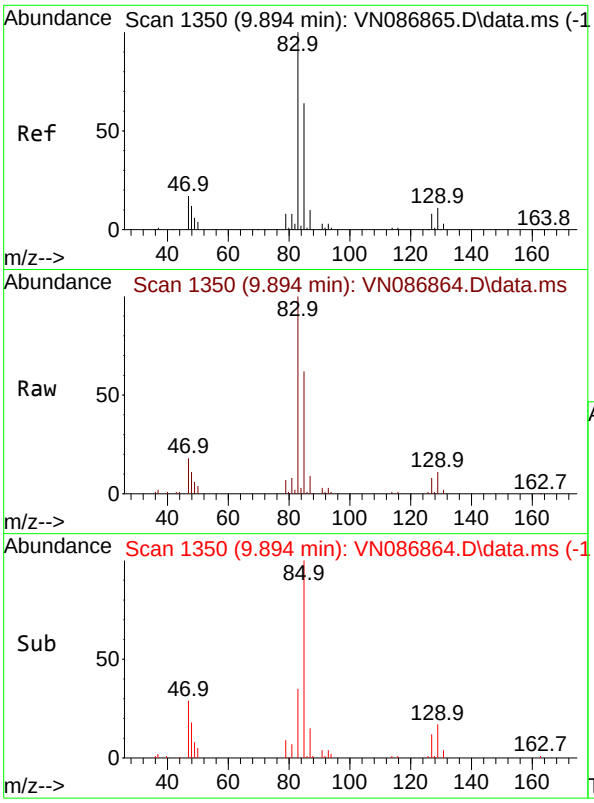



#46
Dibromomethane
Concen: 20.648 ug/l
RT: 9.712 min Scan# 1319
Delta R.T. -0.006 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 93 Resp: 40290

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 84.1 | 67.1 | 100.7 |
| 174 | 90.1 | 74.2 | 111.4 |

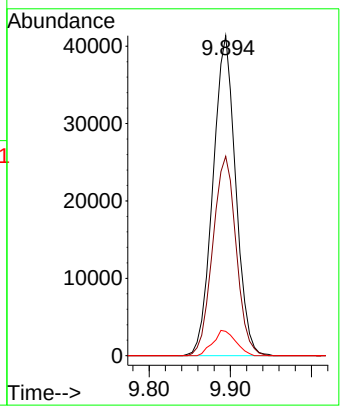





#47
Bromodichloromethane
Concen: 20.015 ug/l
RT: 9.894 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 83 Resp: 8035

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 62.3 | 50.9 | 76.3 |
| 127 | 7.6 | 6.6 | 10.0 |

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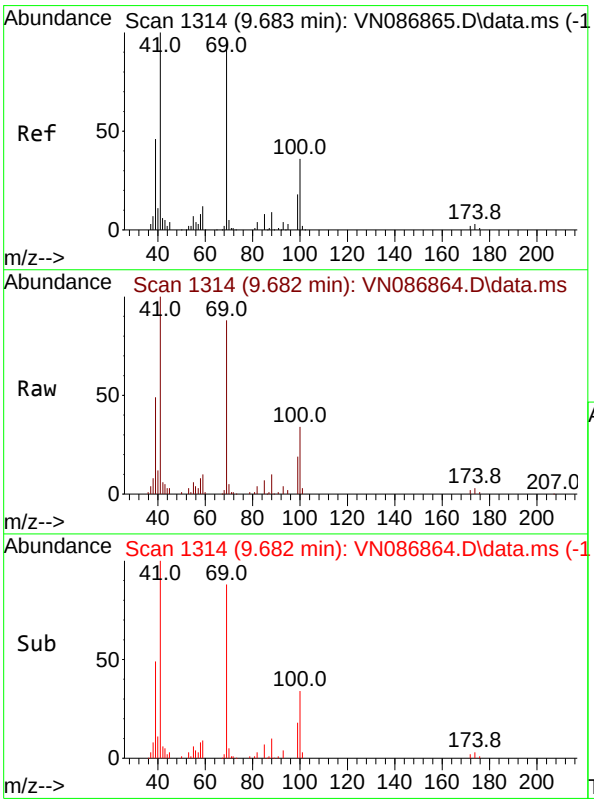
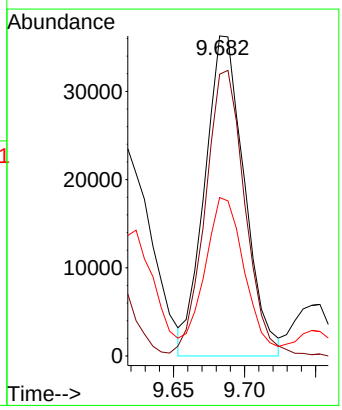
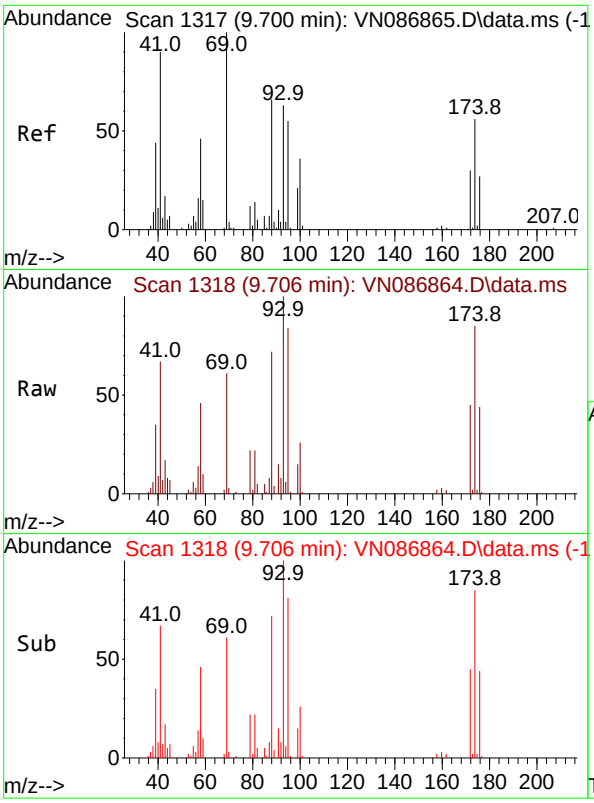



#48
Methyl methacrylate
Concen: 20.290 ug/l
RT: 9.682 min Scan# 1314
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 41 Resp: 70457

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 89.4 | 74.6 | 112.0 |
| 39 | 50.3 | 40.2 | 60.4 |






#49
1,4-Dioxane
Concen: 446.886 ug/l
RT: 9.706 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 88 Resp: 2823

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 19.7 | 0.0 | 0.0 |
| 58 | 70.1 | 57.7 | 86.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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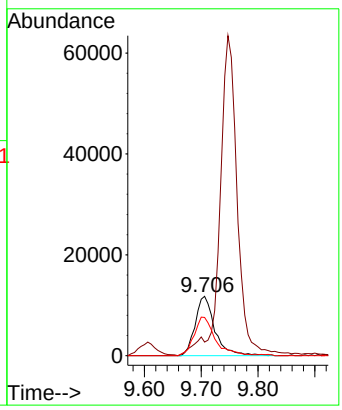
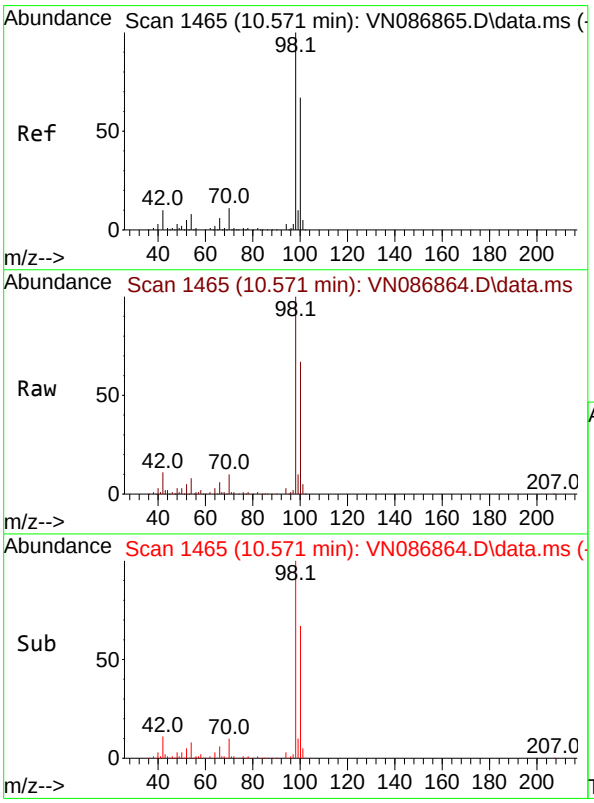
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

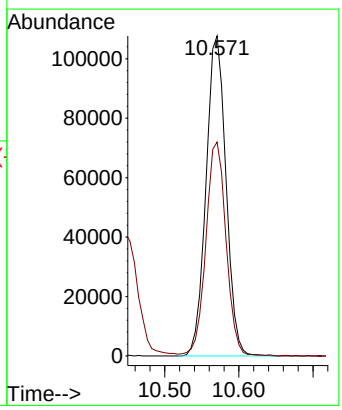


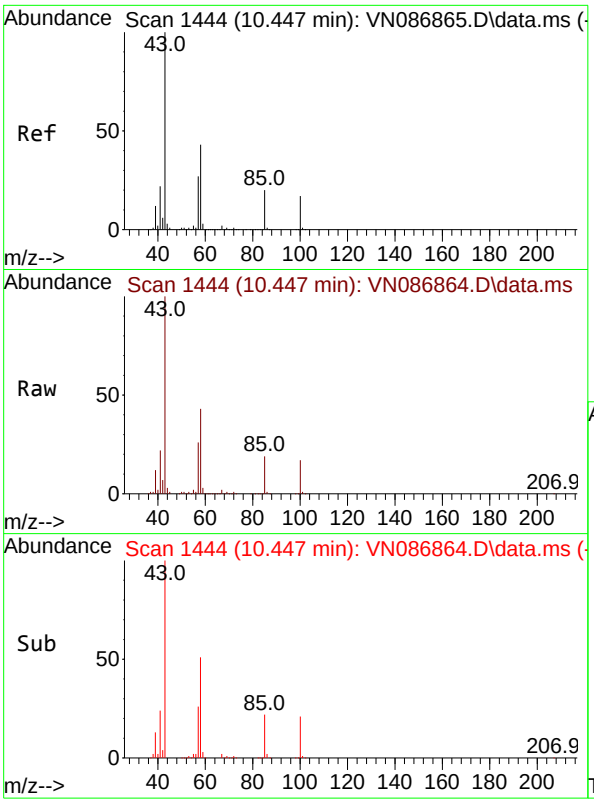




#50
Toluene-d8
Concen: 20.516 ug/l
RT: 10.571 min Scan# 1465
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 98 Resp: 201268

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 67.8 | 53.4 | 80.0 |

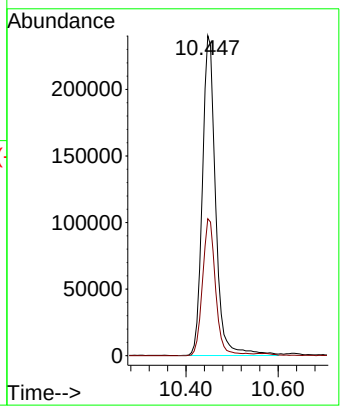





#51
4-Methyl-2-Pentanone
Concen: 106.066 ug/l
RT: 10.447 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 43 Resp: 48174

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 42.0 | 34.2 | 51.4 |




**Instrument :**
MSVOA_N
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VSTDICC020

**Manual Integrations**
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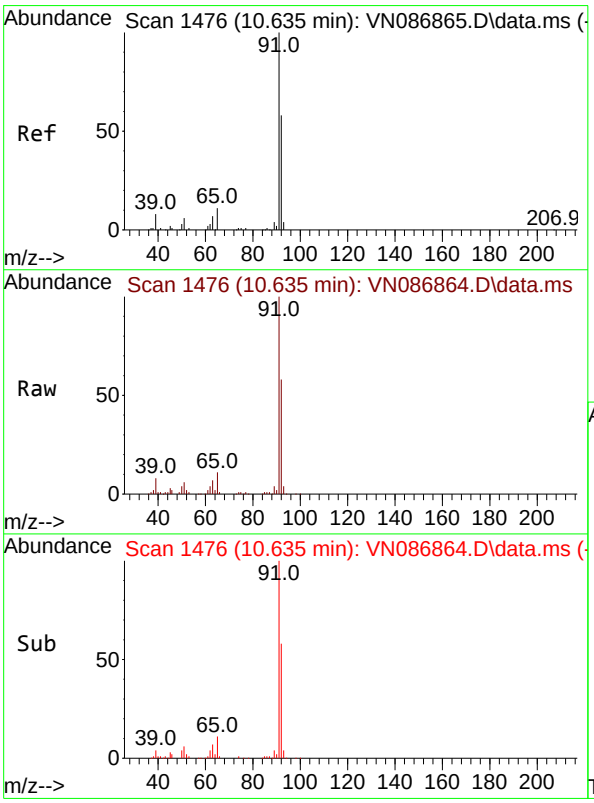
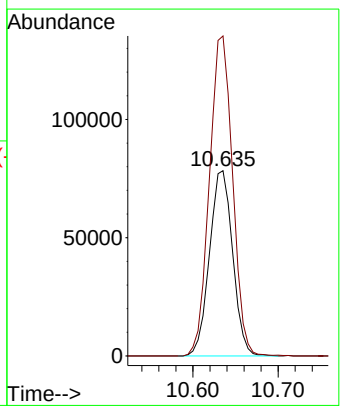
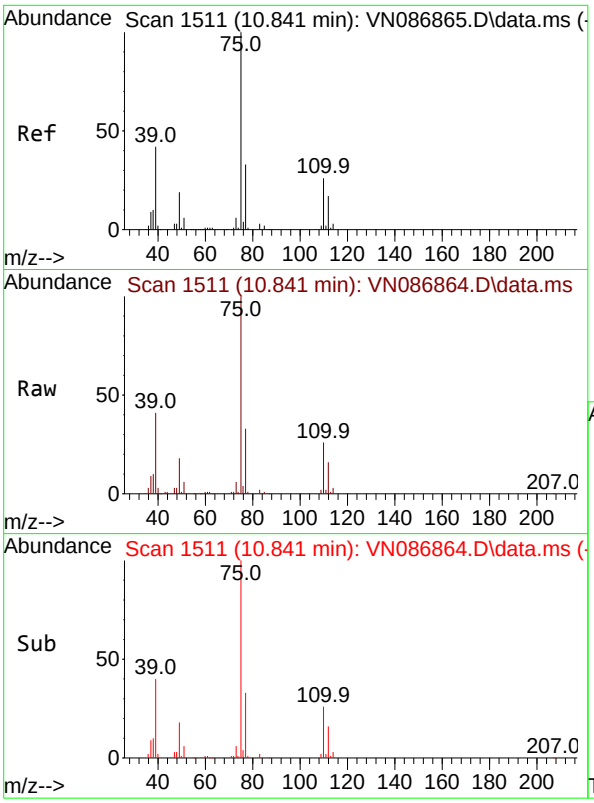



#52
Toluene
Concen: 20.056 ug/l
RT: 10.635 min Scan# 1476
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 92 Resp: 148000

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 172.9 | 136.5 | 204.7 |

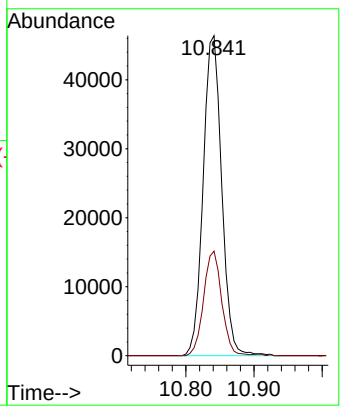





#53
t-1,3-Dichloropropene
Concen: 19.532 ug/l
RT: 10.841 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 75 Resp: 8768

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.7 | 26.4 | 39.6 |




**Instrument :**
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VSTDICC020

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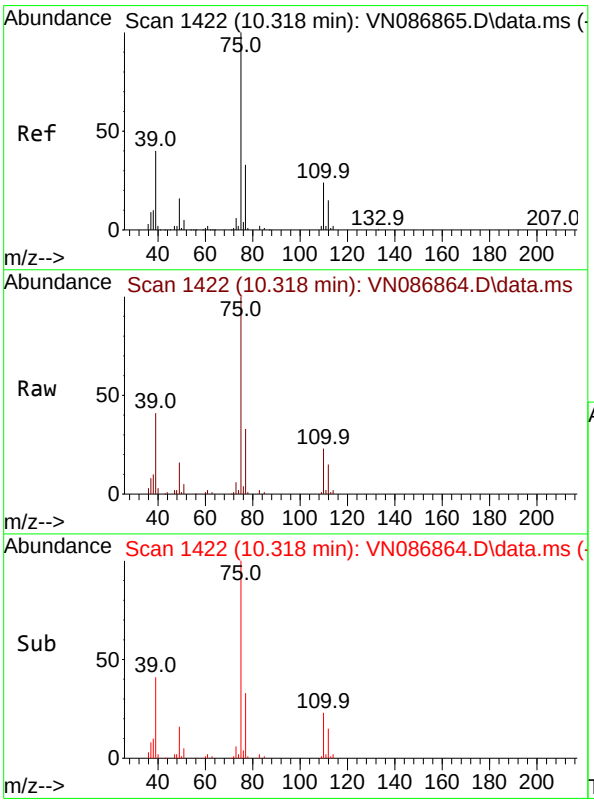
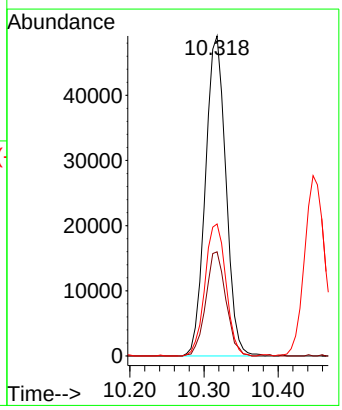
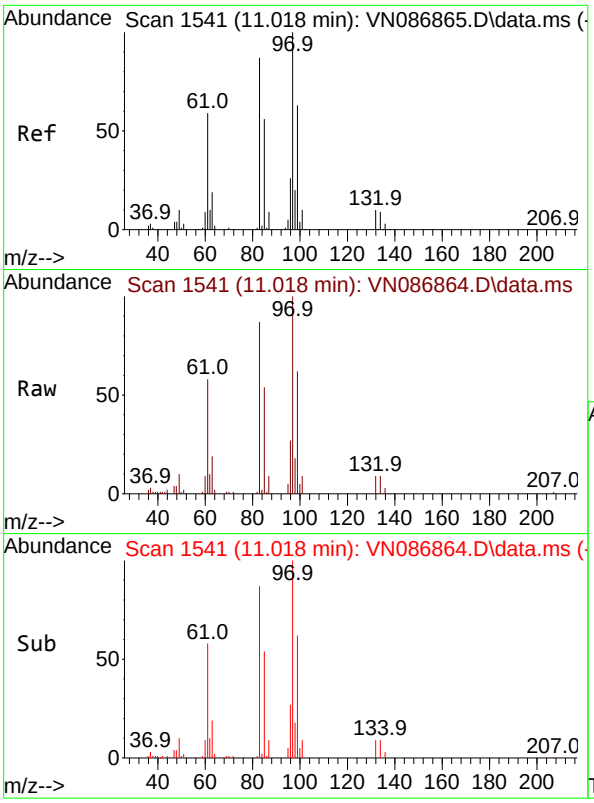



#54
cis-1,3-Dichloropropene
Concen: 19.636 ug/l
RT: 10.318 min Scan# 1422
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 75 Resp: 94315

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.5 | 26.2 | 39.4 |
| 39 | 41.3 | 32.3 | 48.5 |

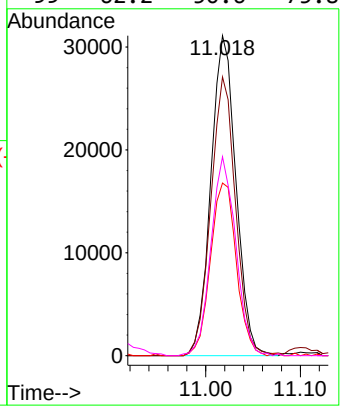





#55
1,1,2-Trichloroethane
Concen: 20.143 ug/l
RT: 11.018 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 97 Resp: 5719

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 87.1 | 69.7 | 104.5 |
| 85 | 54.0 | 45.1 | 67.7 |
| 99 | 62.2 | 50.6 | 75.8 |




**Instrument :**
MSVOA_N
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VSTDICC020

**Manual Integrations**
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Reviewed By :John Carlone 06/09/2025
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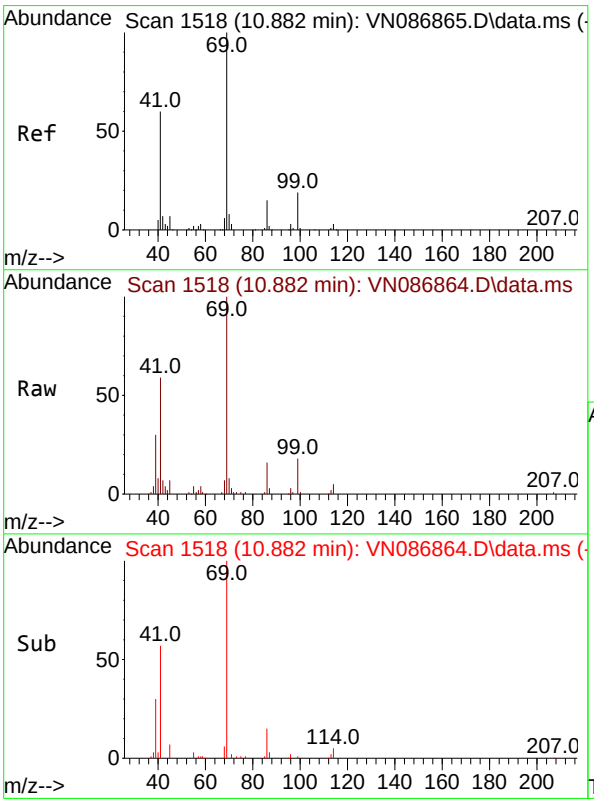
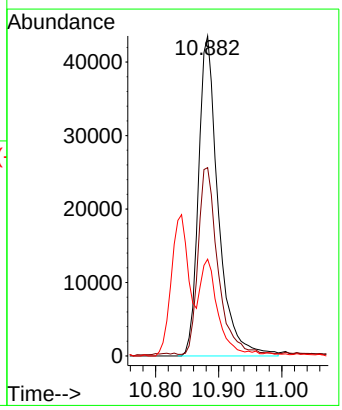
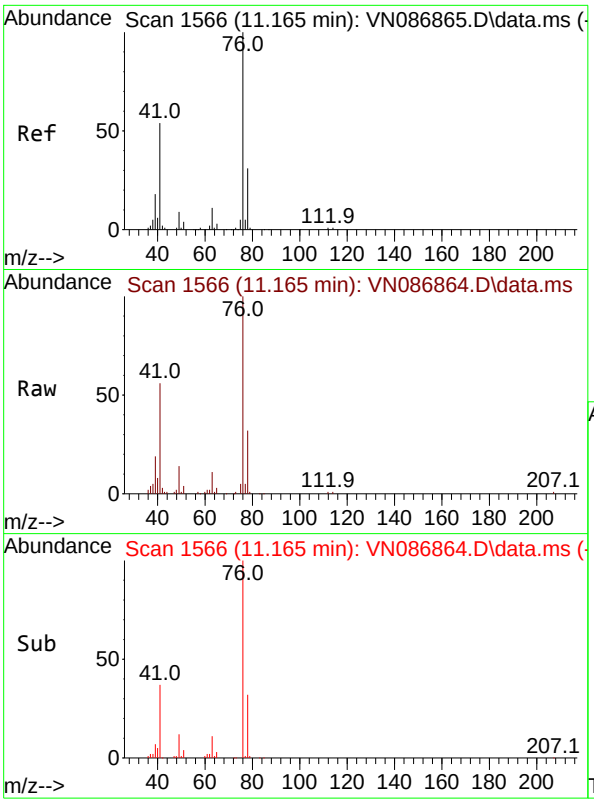



#56
Ethyl methacrylate
Concen: 20.968 ug/l
RT: 10.882 min Scan# 1518
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 69 Resp: 94829

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 58.9 | 47.2 | 70.8 |
| 39 | 25.9 | 23.0 | 34.6 |

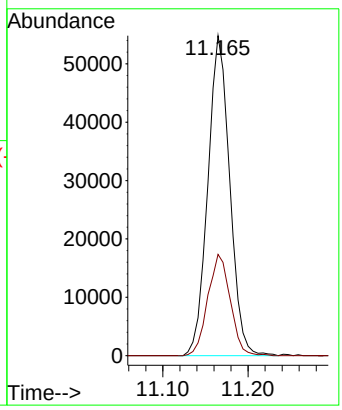





#57
1,3-Dichloropropane
Concen: 19.938 ug/l
RT: 11.165 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 76 Resp: 9820

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.4 | 25.3 | 37.9 |




**Instrument :**
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VSTDICC020

**Manual Integrations**
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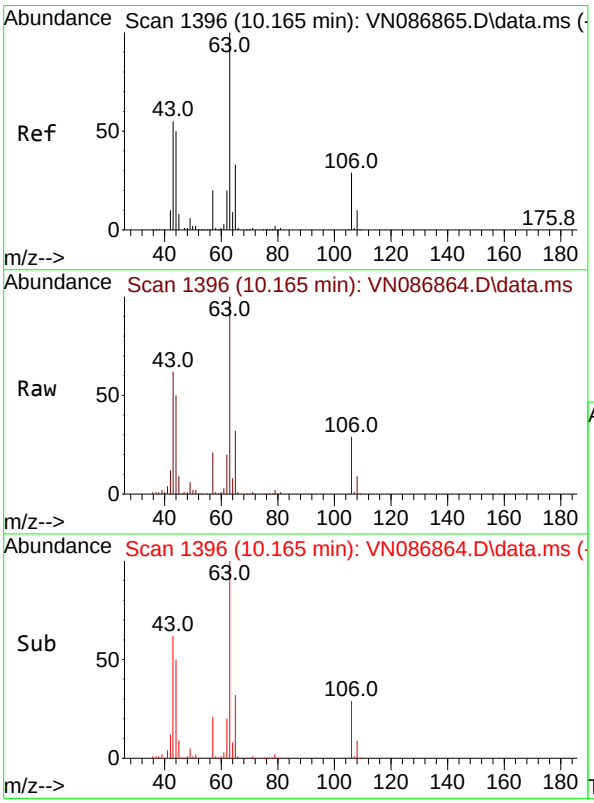
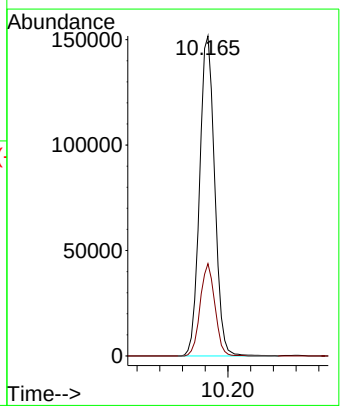
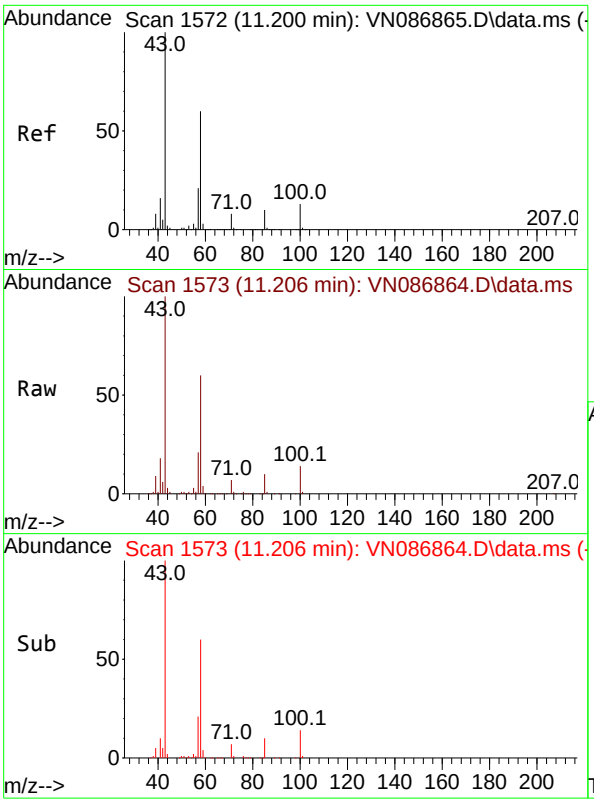



#58
2-Chloroethyl Vinyl ether
Concen: 103.426 ug/l
RT: 10.165 min Scan# 1396
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 63 Resp: 278986

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 28.1 | 23.0 | 34.6 |






#59
2-Hexanone
Concen: 103.803 ug/l
RT: 11.206 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 43 Resp: 30368

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 64.8 | 30.4 | 91.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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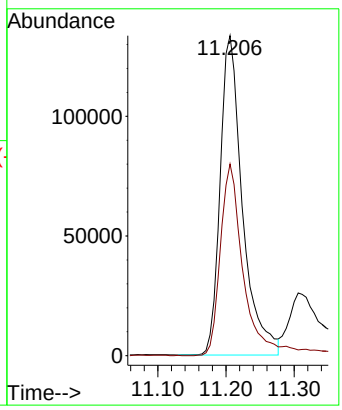
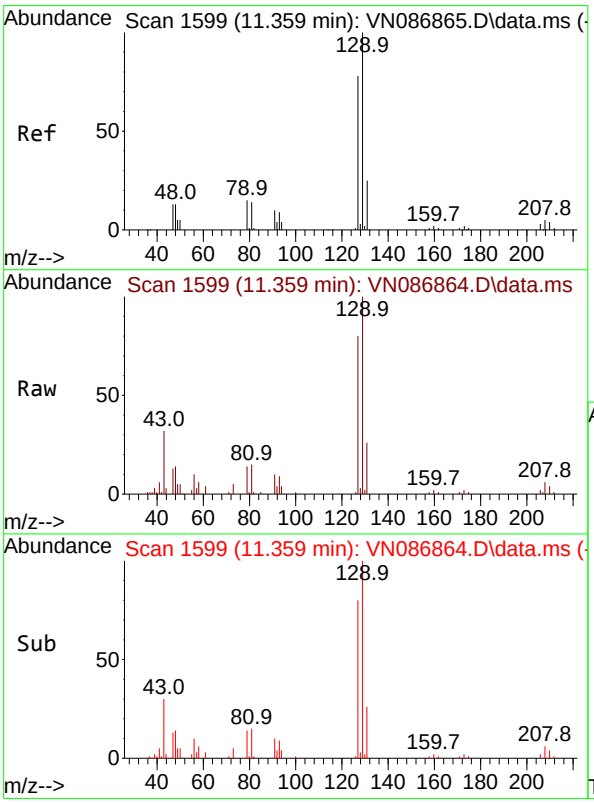
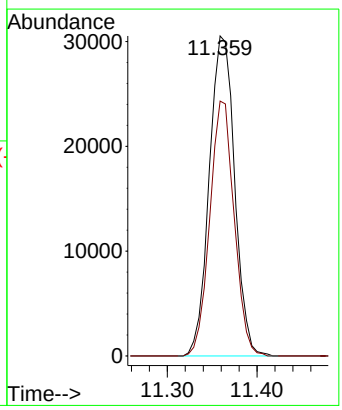


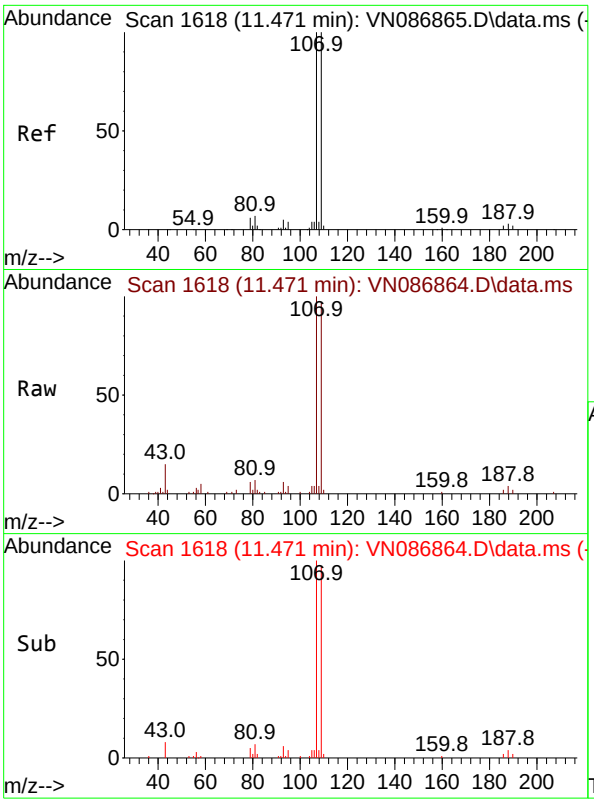




#60
Dibromochloromethane
Concen: 20.268 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion:129 Resp: 59961

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 76.3 | 38.6 | 115.8 |






#61
1,2-Dibromoethane
Concen: 20.320 ug/l
RT: 11.471 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion:107 Resp: 5913

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 93.0 | 76.3 | 114.5 |

**Instrument :**
MSVOA_N
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VSTDICC020

**Manual Integrations**
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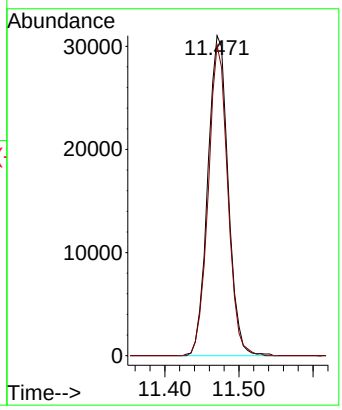
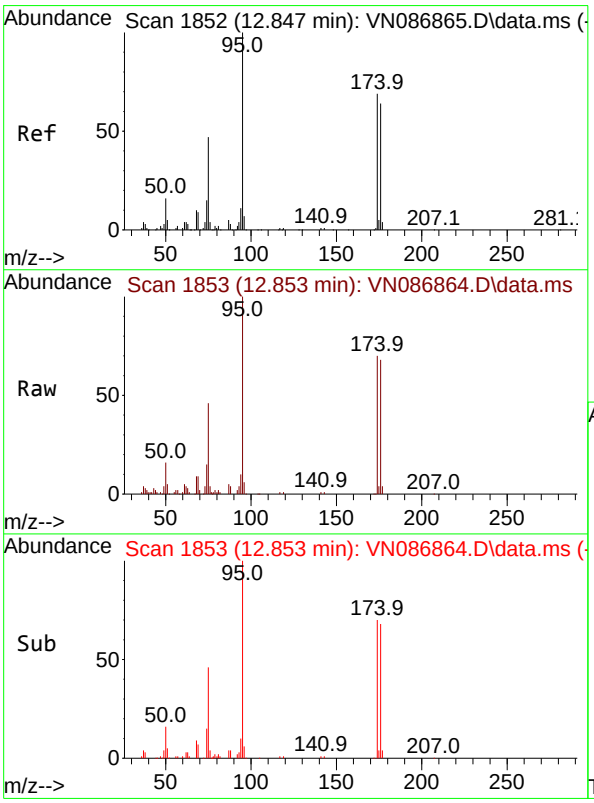
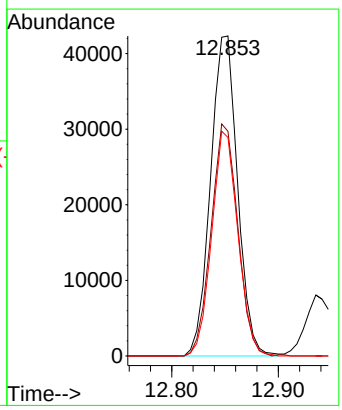


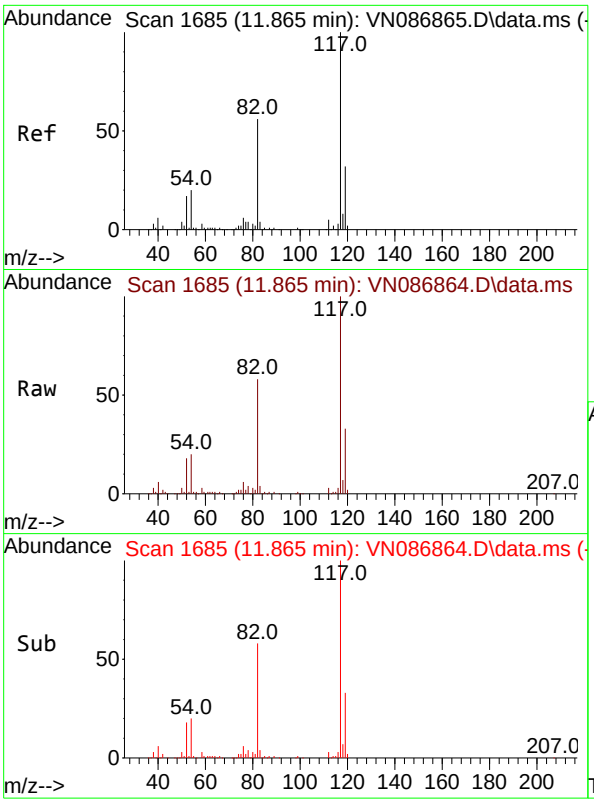




#62
4-Bromofluorobenzene
Concen: 20.474 ug/l
RT: 12.853 min Scan# 1853
Delta R.T. 0.006 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 95 Resp: 74622

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 71.7 | 0.0 | 141.8 |
| 176 | 68.0 | 0.0 | 132.6 |

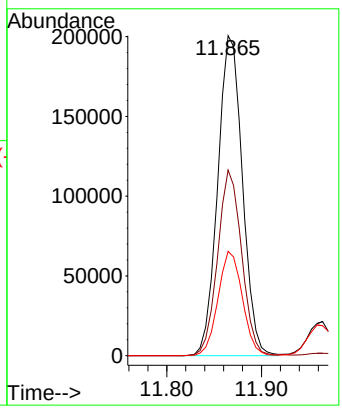





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion:117 Resp: 36317

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 58.0 | 44.6 | 67.0 |
| 119 | 32.6 | 25.5 | 38.3 |

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MSVOA_N
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VSTDICC020

**Manual Integrations**
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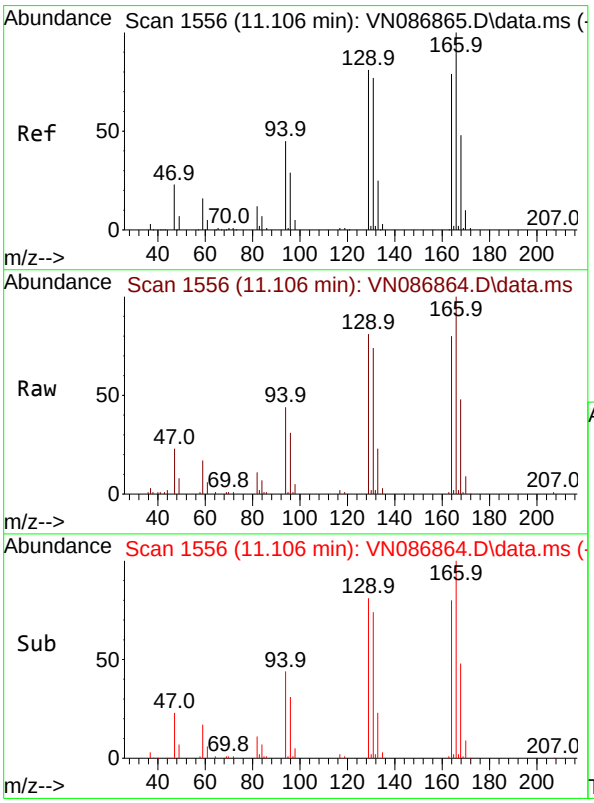
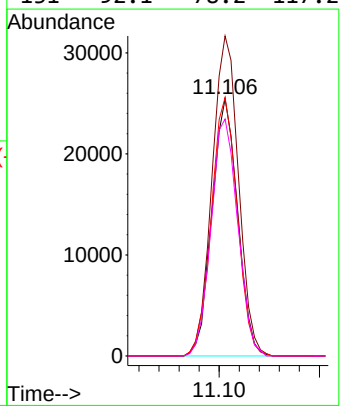
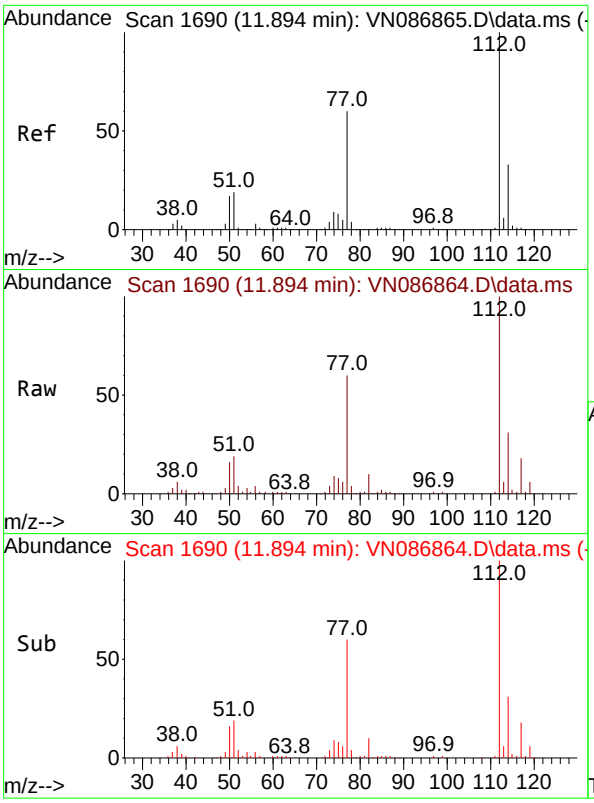



#64
Tetrachloroethene
Concen: 19.742 ug/l
RT: 11.106 min Scan# 1556
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion:164 Resp: 45374

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 124.4 | 101.8 | 152.8 |
| 129 | 100.4 | 83.0 | 124.4 |
| 131 | 92.1 | 78.2 | 117.2 |

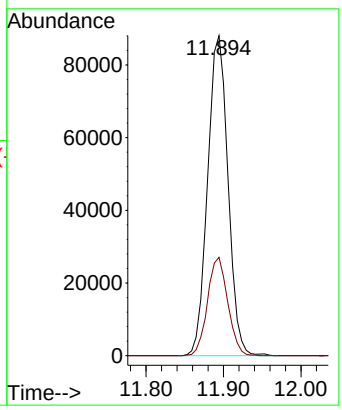





#65
Chlorobenzene
Concen: 20.076 ug/l
RT: 11.894 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion:112 Resp: 16080

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 30.8 | 26.2 | 39.2 |




**Instrument :**
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VSTDICC020

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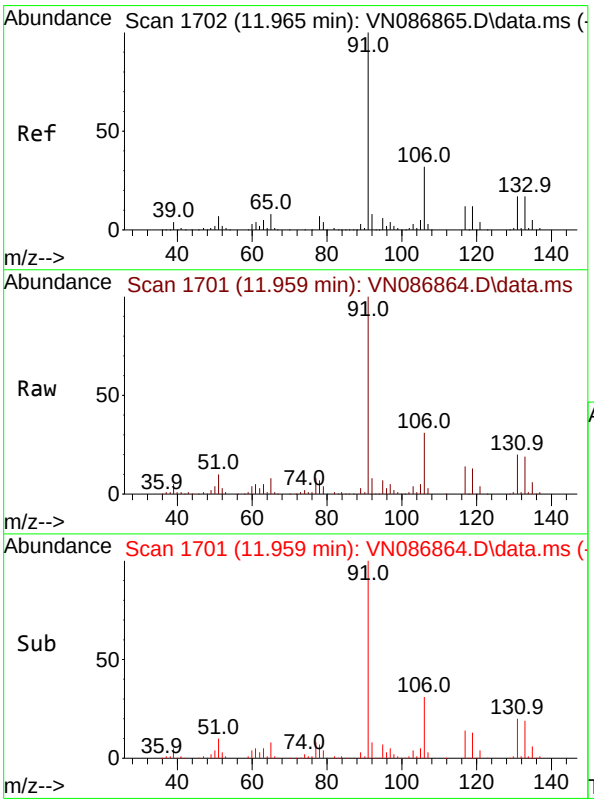
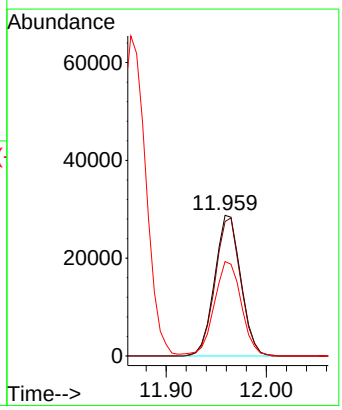
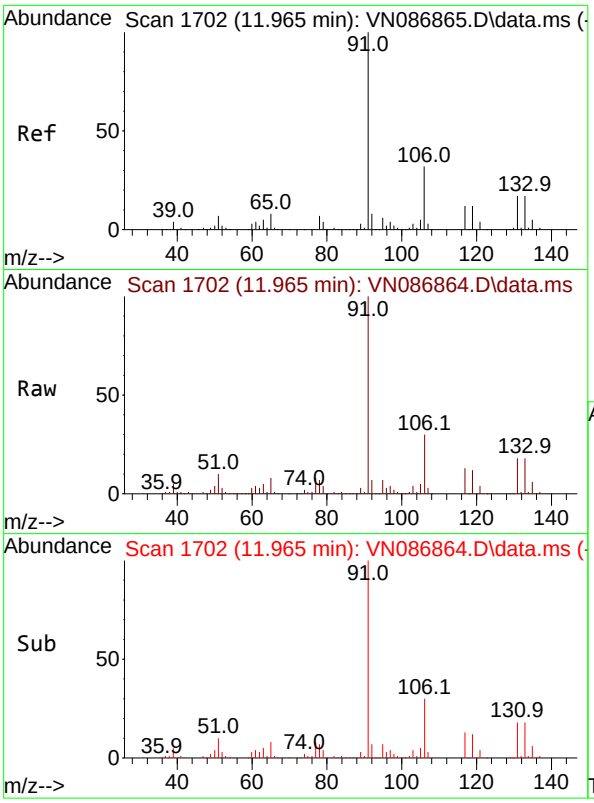



#66
1,1,1,2-Tetrachloroethane
Concen: 20.223 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.006 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion:131 Resp: 52069

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 96.3 | 48.3 | 144.8 |
| 119 | 69.6 | 34.0 | 101.8 |






#67
Ethyl Benzene
Concen: 20.083 ug/l
RT: 11.965 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

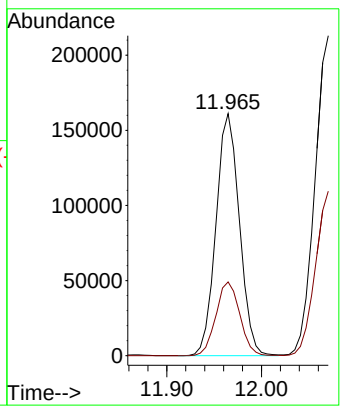
Tgt Ion: 91 Resp: 27708

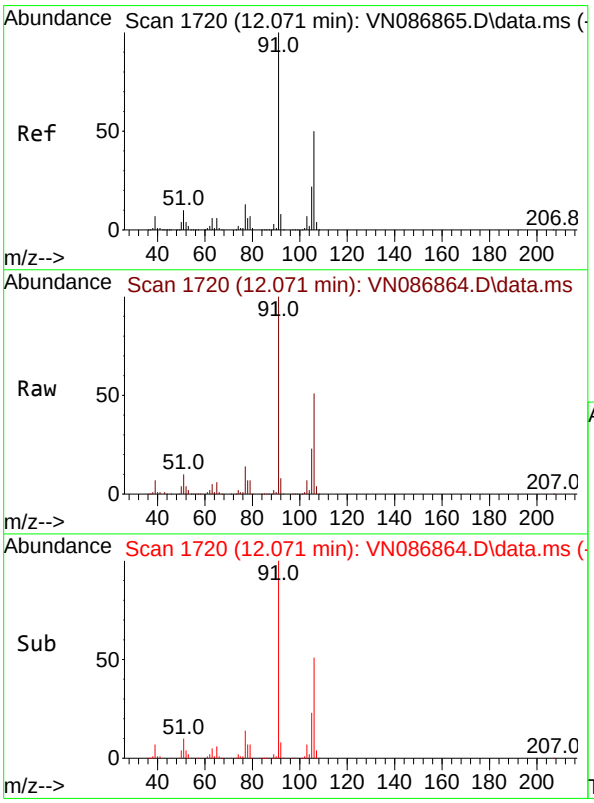
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 30.5 | 25.4 | 38.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

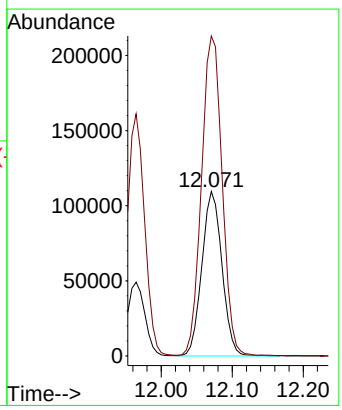


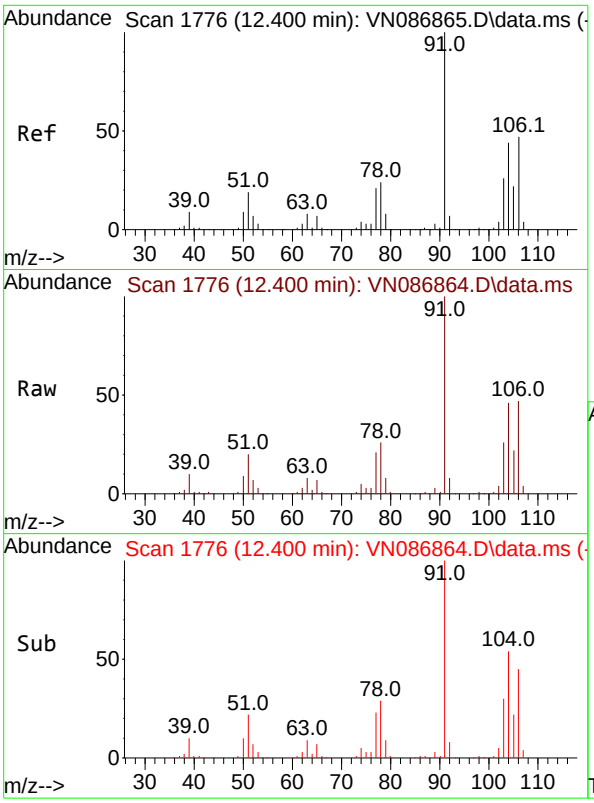




#68
m/p-Xylenes
Concen: 40.780 ug/l
RT: 12.071 min Scan# 1720
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion:106 Resp: 215378

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 199.8 | 159.4 | 239.0 |






#69
o-Xylene
Concen: 20.175 ug/l
RT: 12.400 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion:106 Resp: 10205

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 215.9 | 106.1 | 318.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
**APPROVED**

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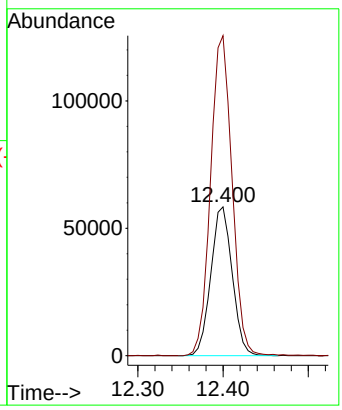
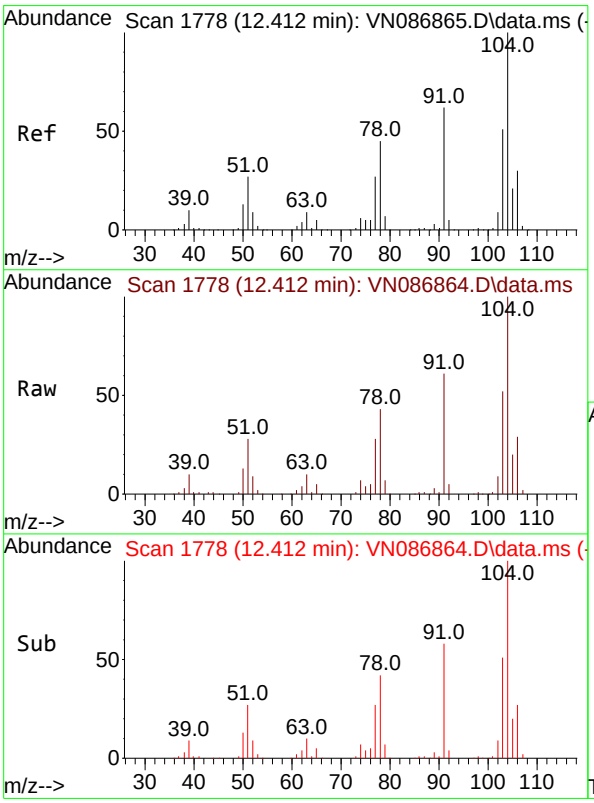
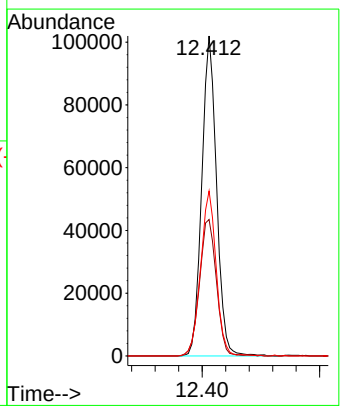


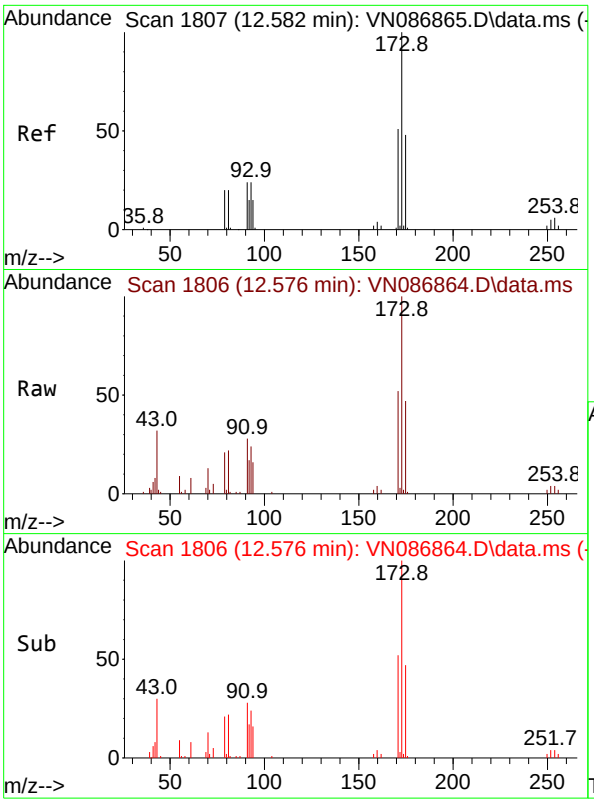




#70
Styrene
Concen: 20.572 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion:104 Resp: 178061

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 48.3 | 38.5 | 57.7 |
| 103 | 54.4 | 43.1 | 64.7 |

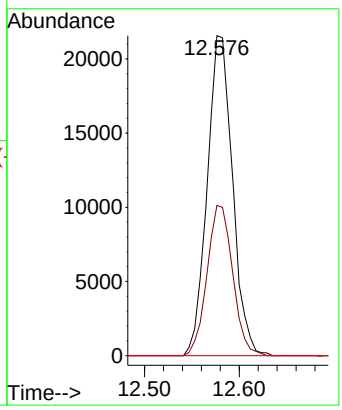





#71
Bromoform
Concen: 21.004 ug/l
RT: 12.576 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion:173 Resp: 4007

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 47.6 | 24.1 | 72.4 |
| 254 | 0.0 | 0.0 | 0.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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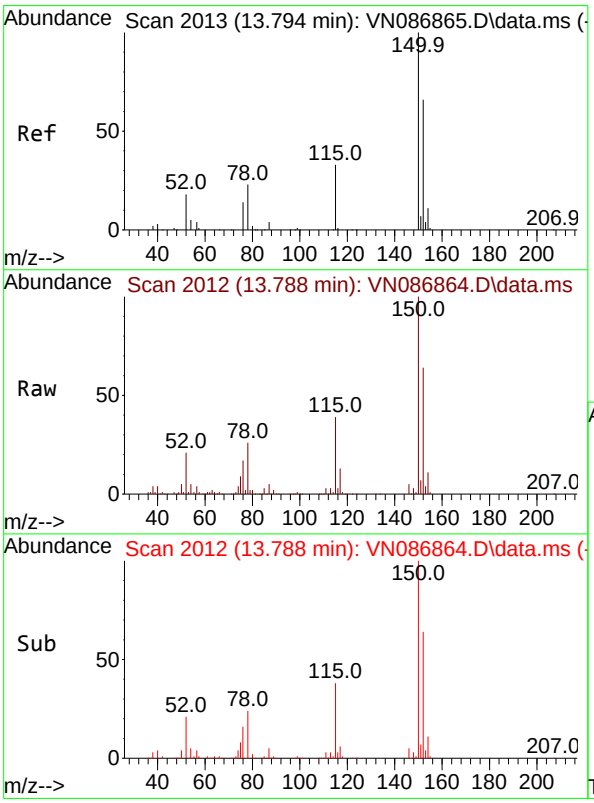
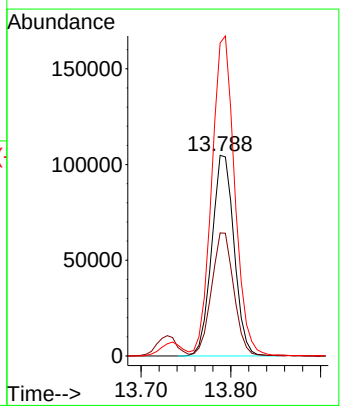
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

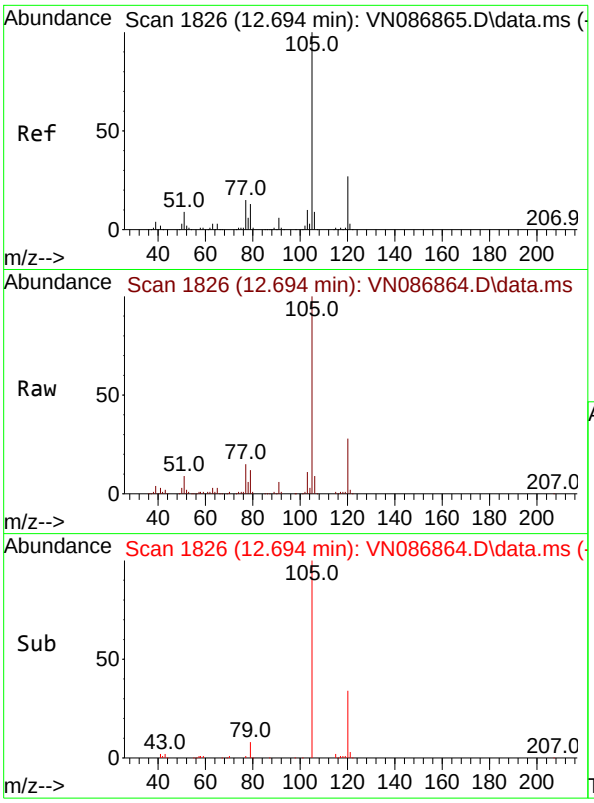



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.006 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion:152 Resp: 181178

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 61.4 | 30.1 | 90.5 |
| 150 | 164.5 | 0.0 | 345.0 |

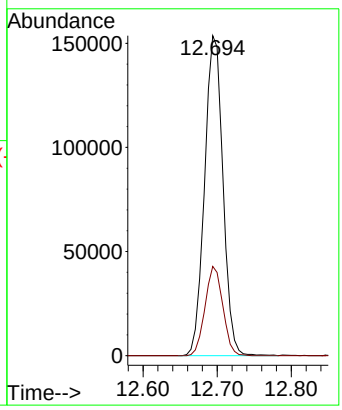





#73
Isopropylbenzene
Concen: 20.035 ug/l
RT: 12.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion:105 Resp: 26444

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 27.0 | 13.5 | 40.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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Reviewed By :John Carlone 06/09/2025
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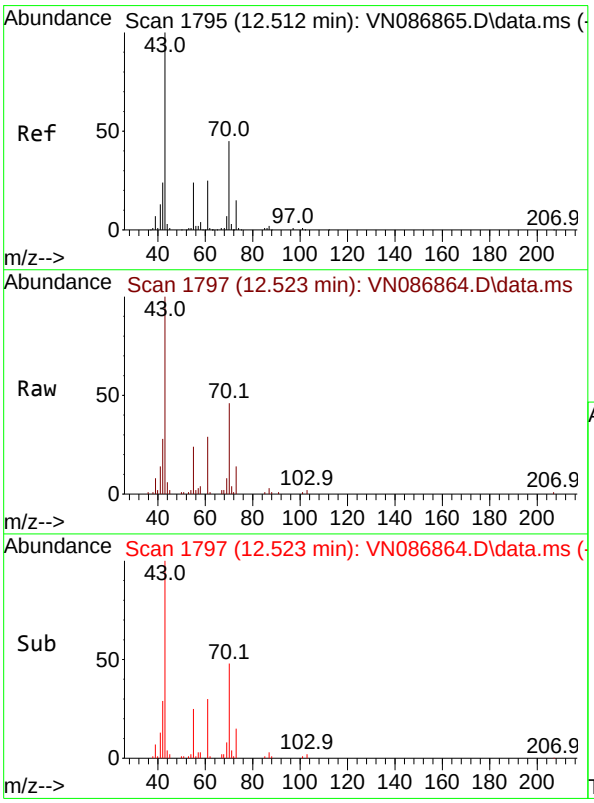
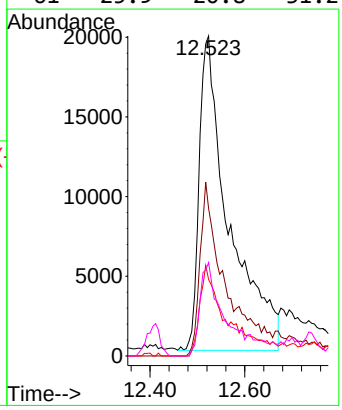
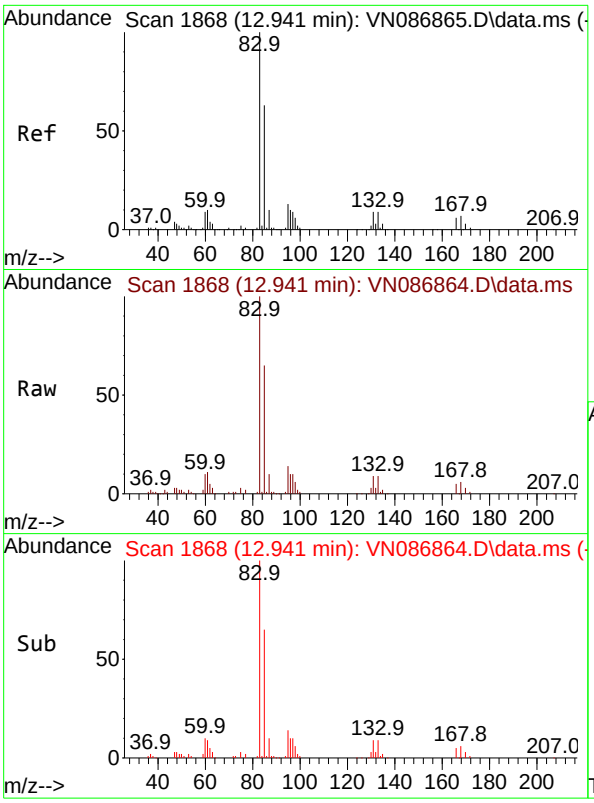



#74
N-amyl acetate
Concen: 19.633 ug/l
RT: 12.523 min Scan# 1797
Delta R.T. 0.012 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 43 Resp: 86003

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 47.7 | 37.6 | 56.4 |
| 55 | 26.6 | 19.0 | 28.6 |
| 61 | 25.9 | 20.8 | 31.2 |






#75
1,1,2,2-Tetrachloroethane
Concen: 20.634 ug/l
RT: 12.941 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 83 Resp: 9226

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 9.8 | 4.9 | 14.7 |
| 85 | 64.5 | 32.0 | 96.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
**APPROVED**

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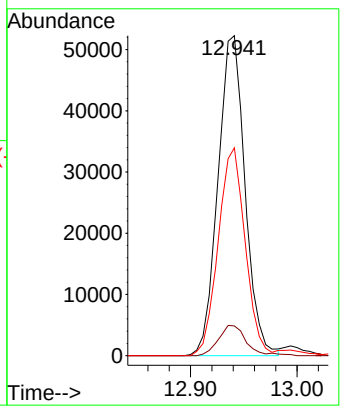
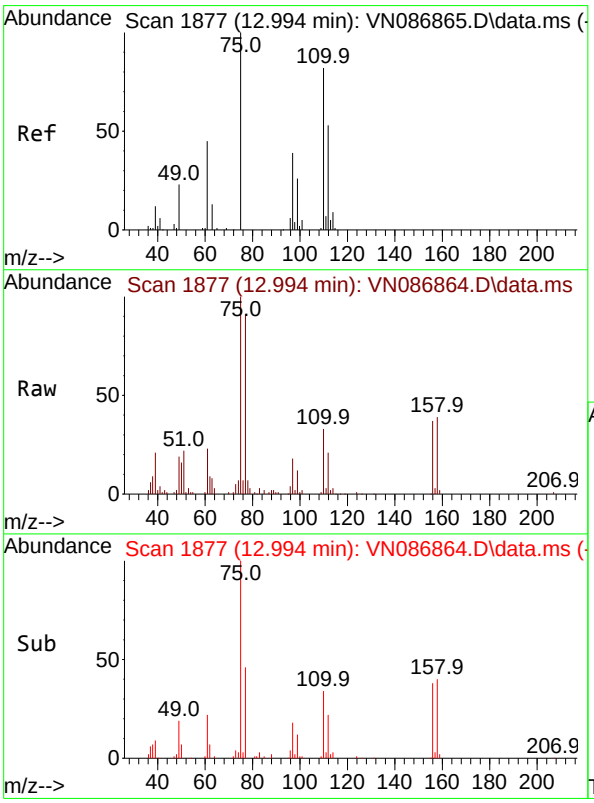
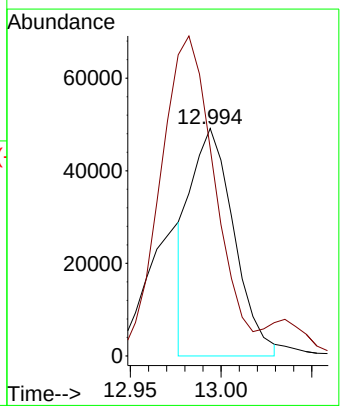


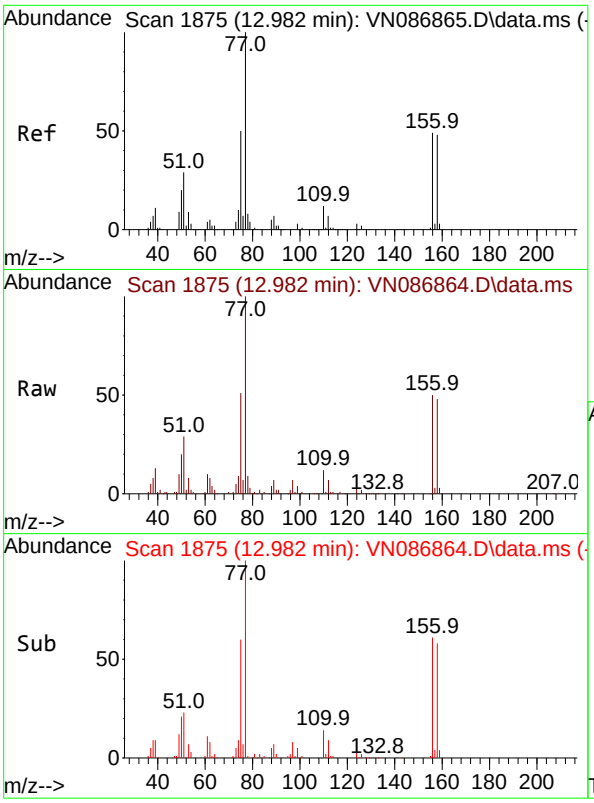




#76
1,2,3-Trichloropropane
Concen: 18.945 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 75 Resp: 81846

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 176.5 | 79.3 | 237.9 |






#77
Bromobenzene
Concen: 20.111 ug/l
RT: 12.982 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion:156 Resp: 6087

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 237.3 | 117.7 | 353.1 |
| 158 | 99.0 | 48.1 | 144.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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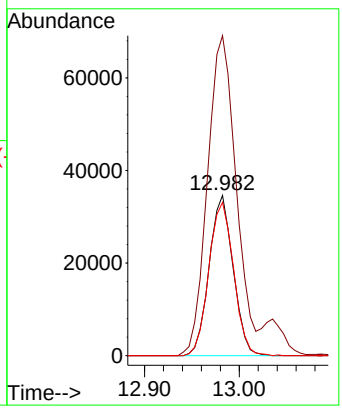
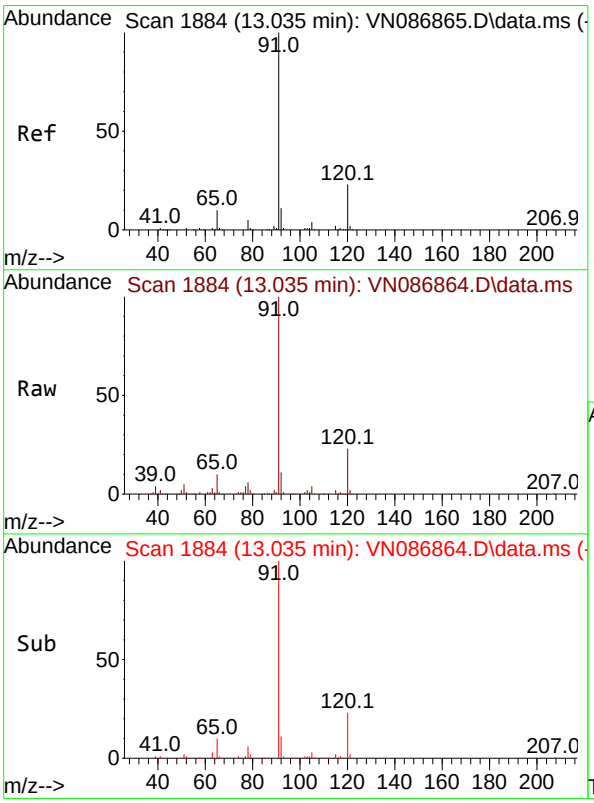
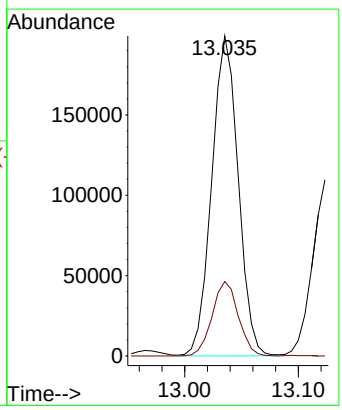


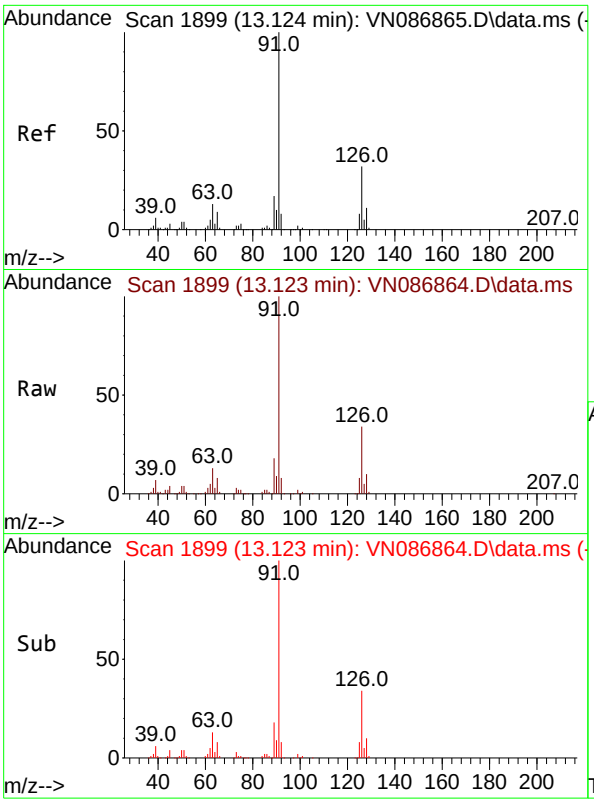




#78
n-propylbenzene
Concen: 20.102 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 91 Resp: 322436

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.9 | 11.4 | 34.2 |

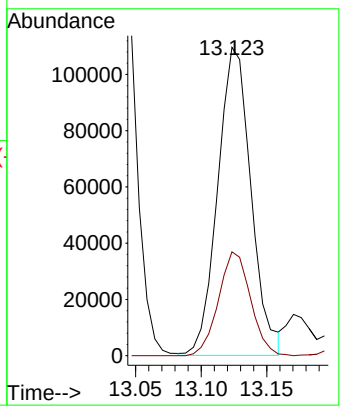





#79
2-Chlorotoluene
Concen: 20.144 ug/l
RT: 13.123 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 91 Resp: 19377

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 32.3 | 16.2 | 48.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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Reviewed By :John Carlone 06/09/2025
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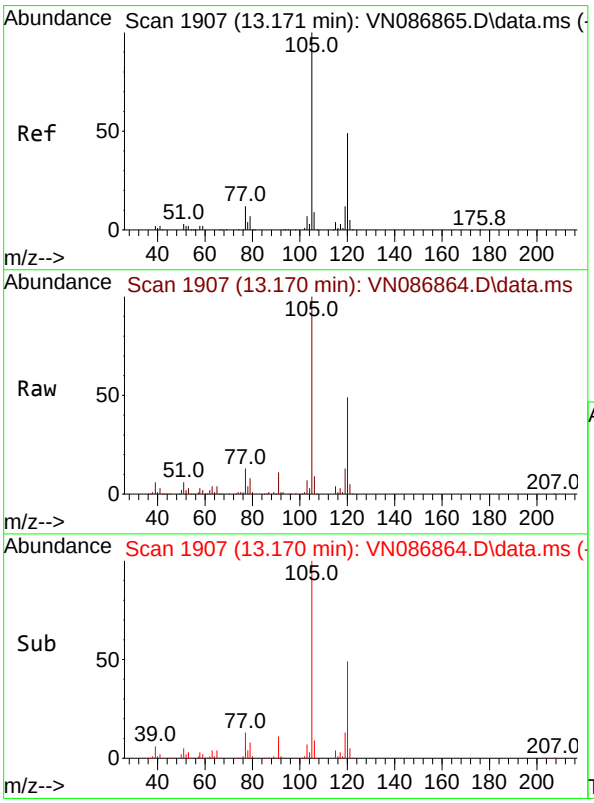
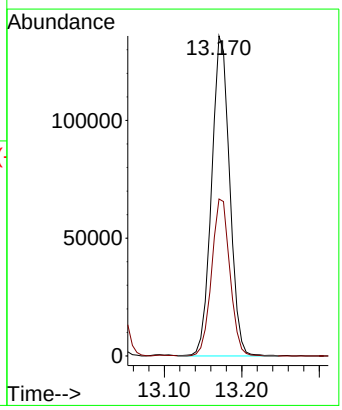
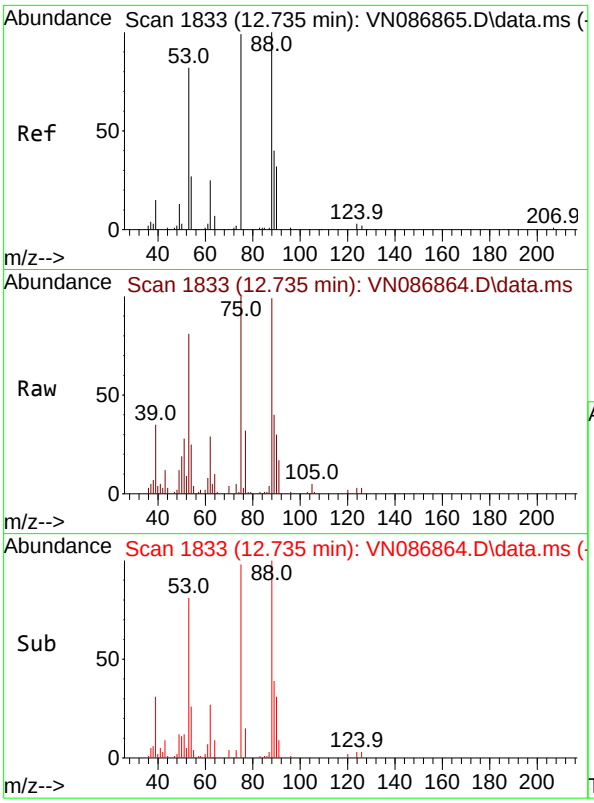



#80
1,3,5-Trimethylbenzene
Concen: 20.183 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion:105 Resp: 219937

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 49.6 | 24.9 | 74.6 |






#81
trans-1,4-Dichloro-2-butene
Concen: 20.209 ug/l
RT: 12.735 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 75 Resp: 3780

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 77.3 | 66.6 | 99.8 |
| 89 | 39.6 | 36.7 | 55.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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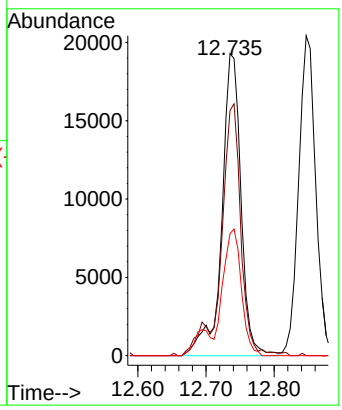
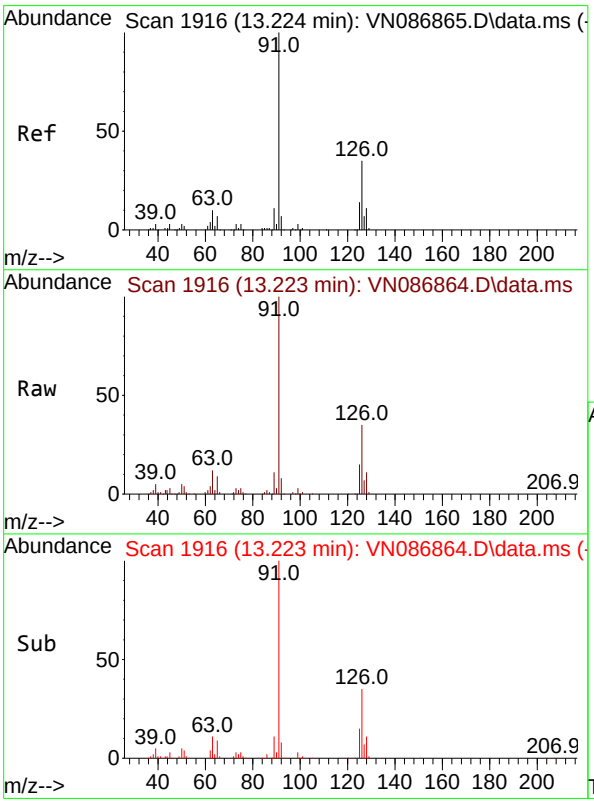
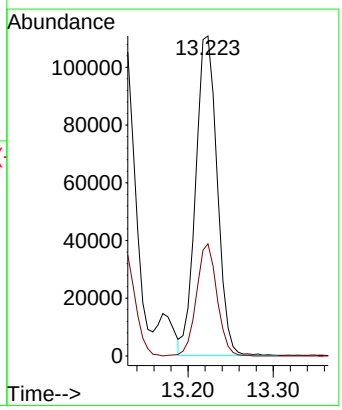


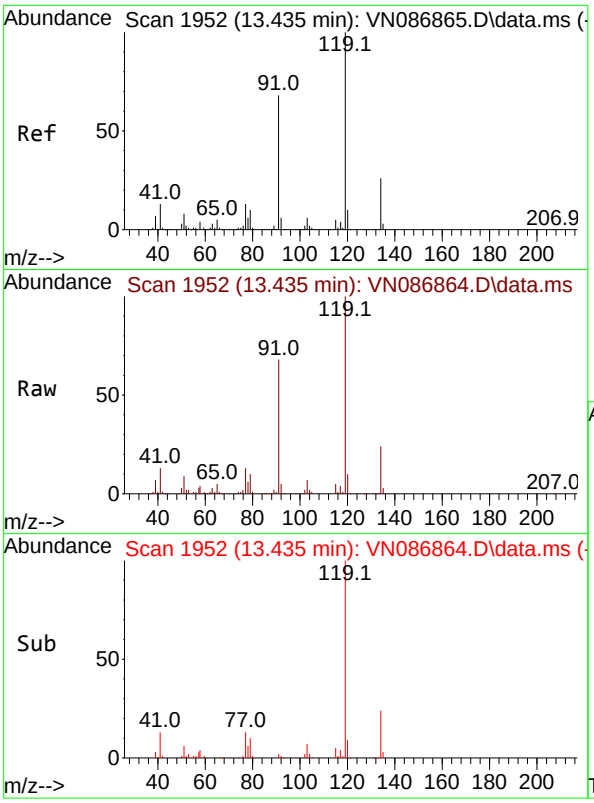




#82
4-Chlorotoluene
Concen: 19.885 ug/l
RT: 13.223 min Scan# 1916
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 91 Resp: 193544

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 33.7 | 16.7 | 50.1 |






#83
tert-Butylbenzene
Concen: 19.880 ug/l
RT: 13.435 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion:119 Resp: 19830

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 65.2 | 32.1 | 96.5 |
| 134 | 26.5 | 13.4 | 40.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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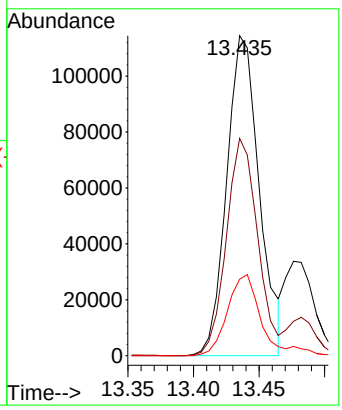
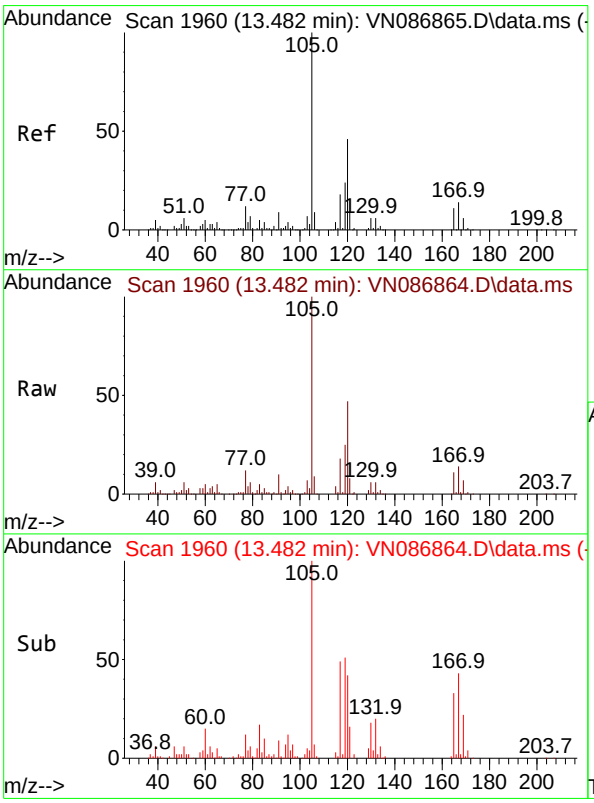
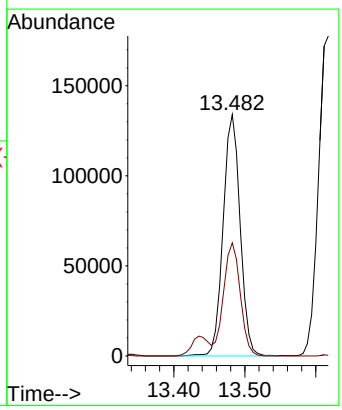


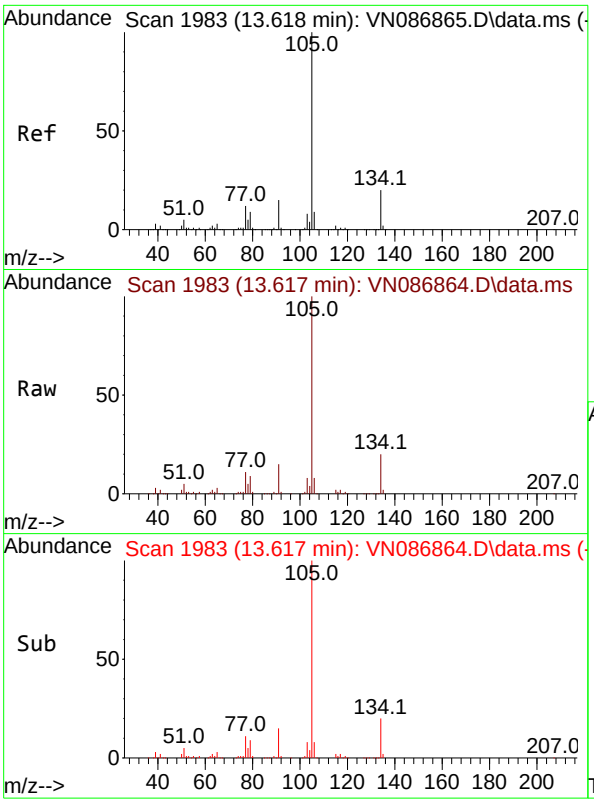




#84
1,2,4-Trimethylbenzene
Concen: 20.315 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion:105 Resp: 221990

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 46.1 | 23.2 | 69.6 |

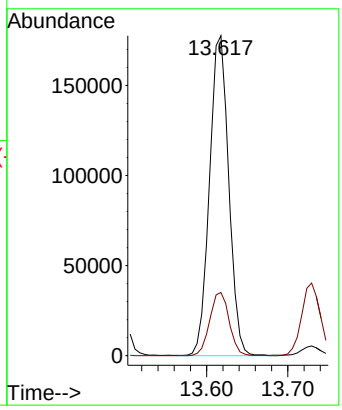





#85
sec-Butylbenzene
Concen: 20.196 ug/l
RT: 13.617 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion:105 Resp: 29256

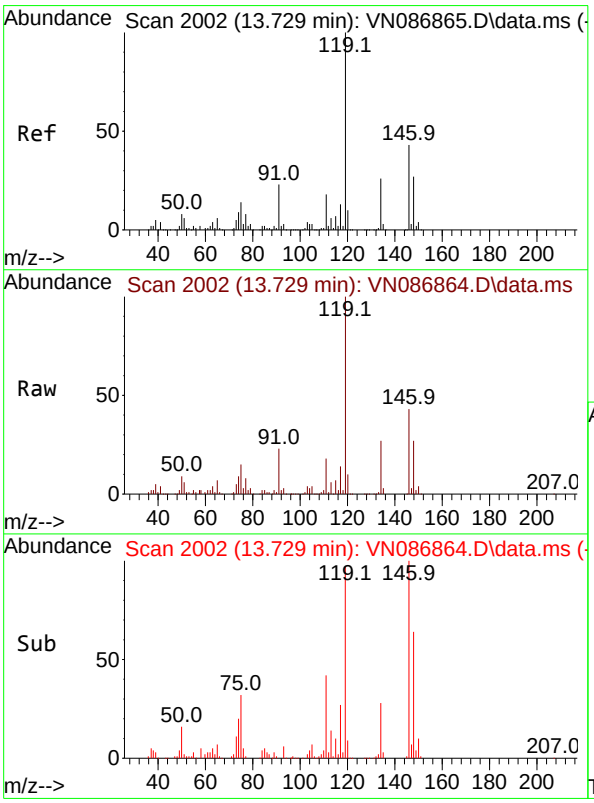
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 20.0 | 10.0 | 30.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
**APPROVED**

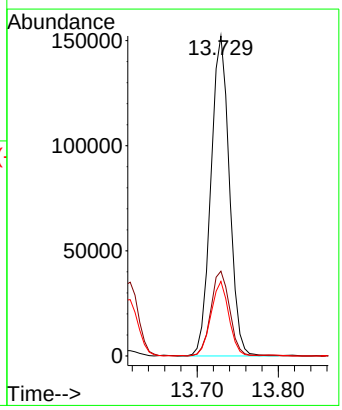
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

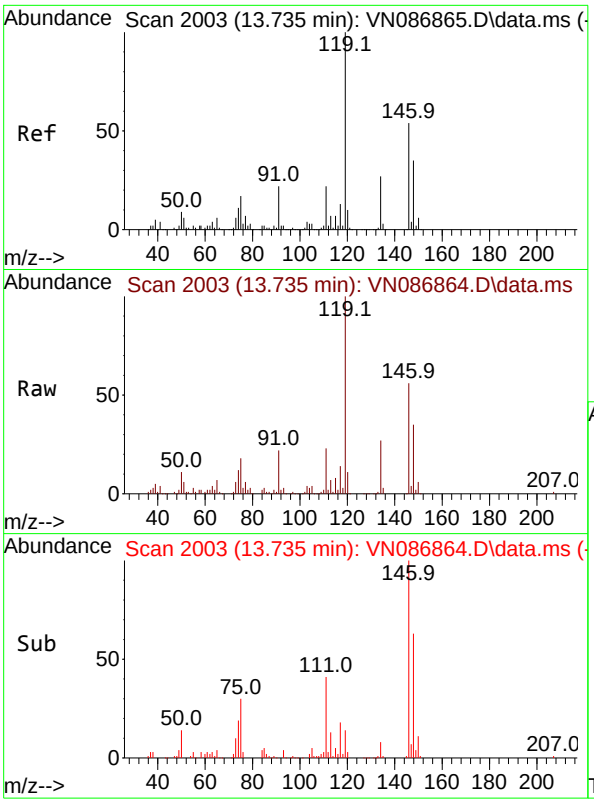



#86
p-Isopropyltoluene
Concen: 20.099 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion:119 Resp: 240682

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 27.1 | 13.5 | 40.4 |
| 91 | 22.7 | 11.5 | 34.4 |

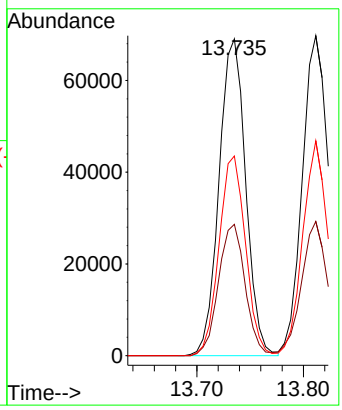





#87
1,3-Dichlorobenzene
Concen: 20.166 ug/l
RT: 13.735 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion:146 Resp: 12009

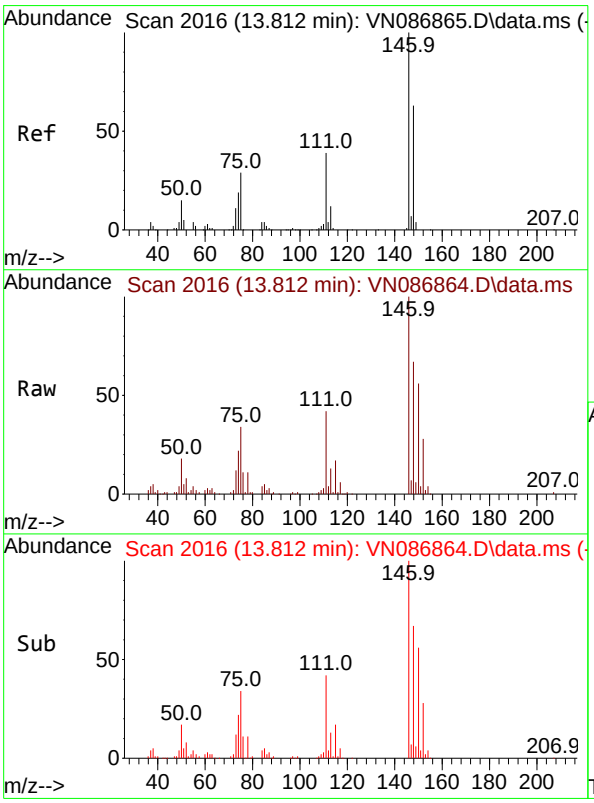
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 41.5 | 20.9 | 62.8 |
| 148 | 62.5 | 32.0 | 96.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
**APPROVED**

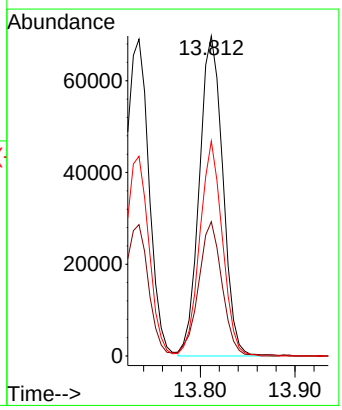
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

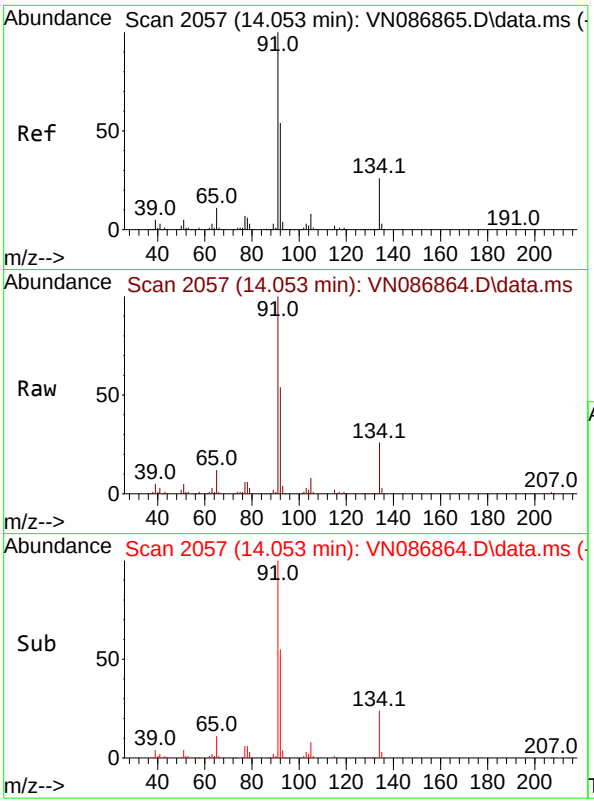



#88
1,4-Dichlorobenzene
Concen: 19.780 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion:146 Resp: 120102

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.5 | 19.9 | 59.7 |
| 148 | 64.7 | 31.8 | 95.4 |

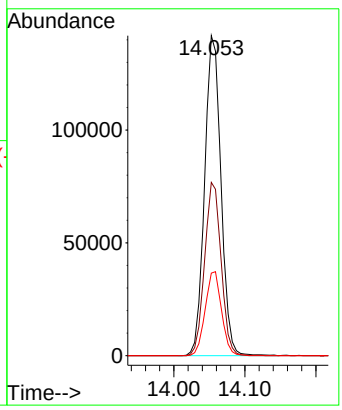





#89
n-Butylbenzene
Concen: 19.617 ug/l
RT: 14.053 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 91 Resp: 22753

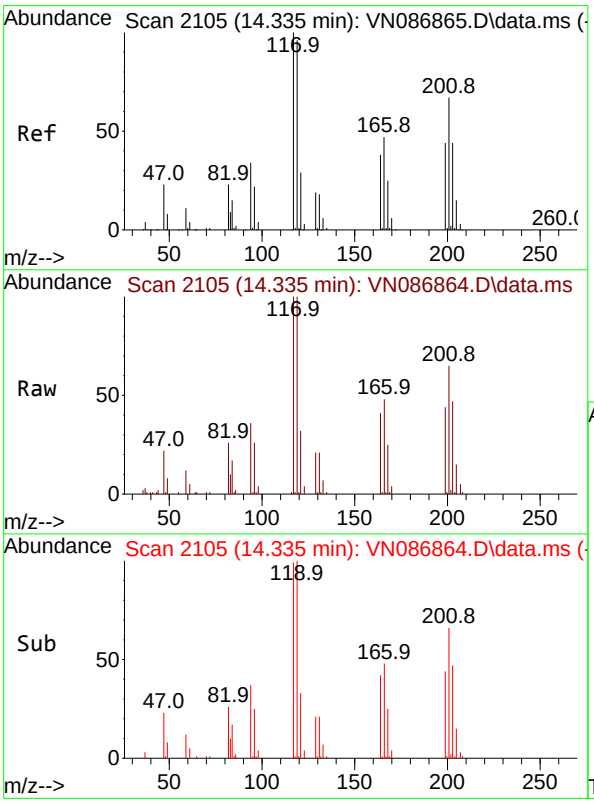
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 54.5 | 27.5 | 82.4 |
| 134 | 26.2 | 13.0 | 39.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
**APPROVED**

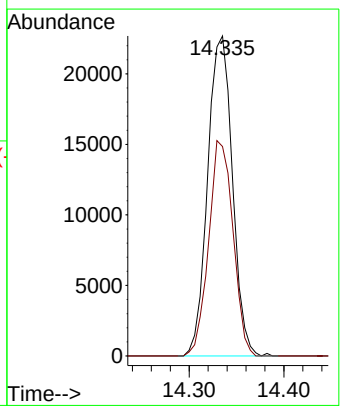
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

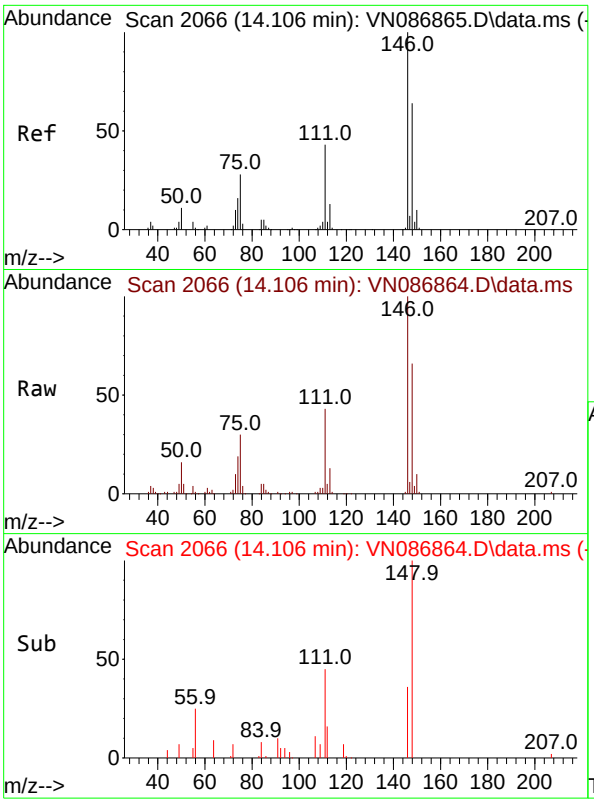



#90
Hexachloroethane
Concen: 20.299 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion:117 Resp: 41202

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 66.2 | 33.2 | 99.6 |






#91
1,2-Dichlorobenzene
Concen: 20.212 ug/l
RT: 14.106 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

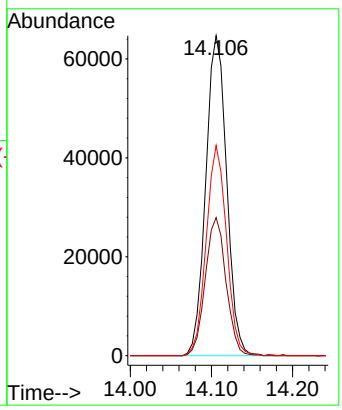
Tgt Ion:146 Resp: 11564

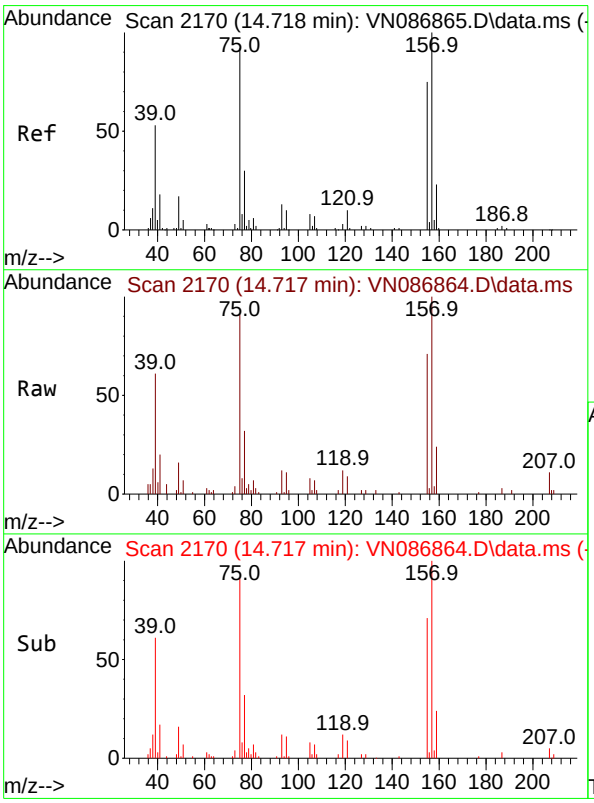
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.9 | 21.6 | 64.6 |
| 148 | 63.9 | 31.7 | 95.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

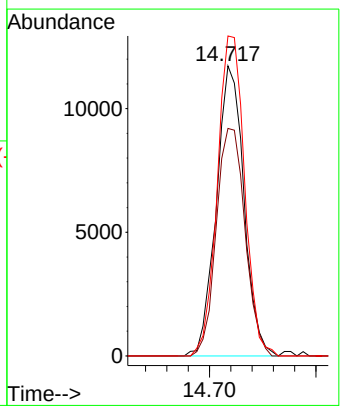


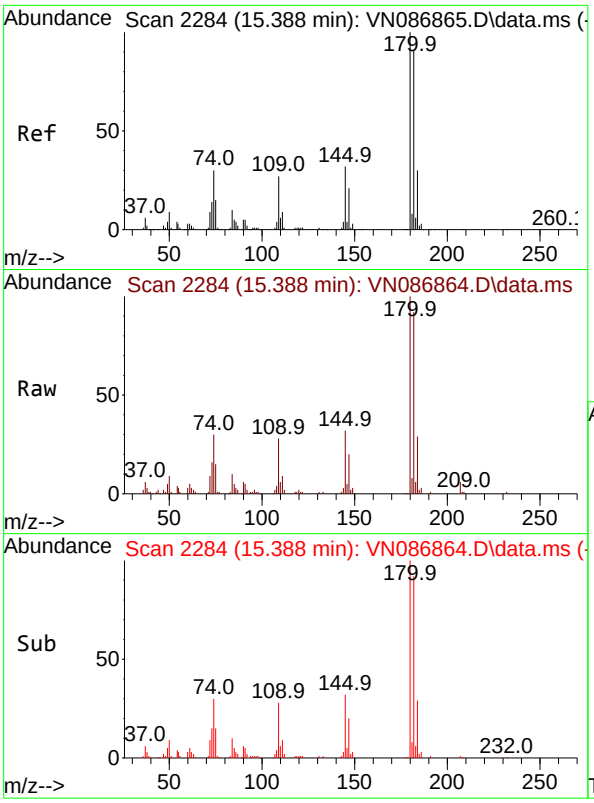




#92
1,2-Dibromo-3-Chloropropane
Concen: 19.661 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion: 75 Resp: 21025

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 81.8 | 41.1 | 123.4 |
| 157 | 109.0 | 52.7 | 158.1 |

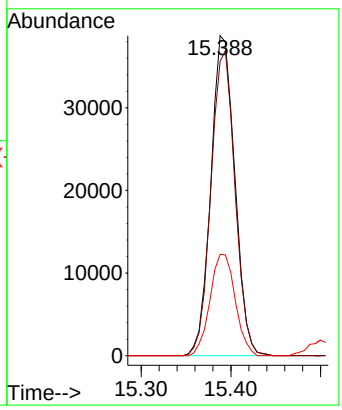





#93
1,2,4-Trichlorobenzene
Concen: 19.659 ug/l
RT: 15.388 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion:180 Resp: 7182

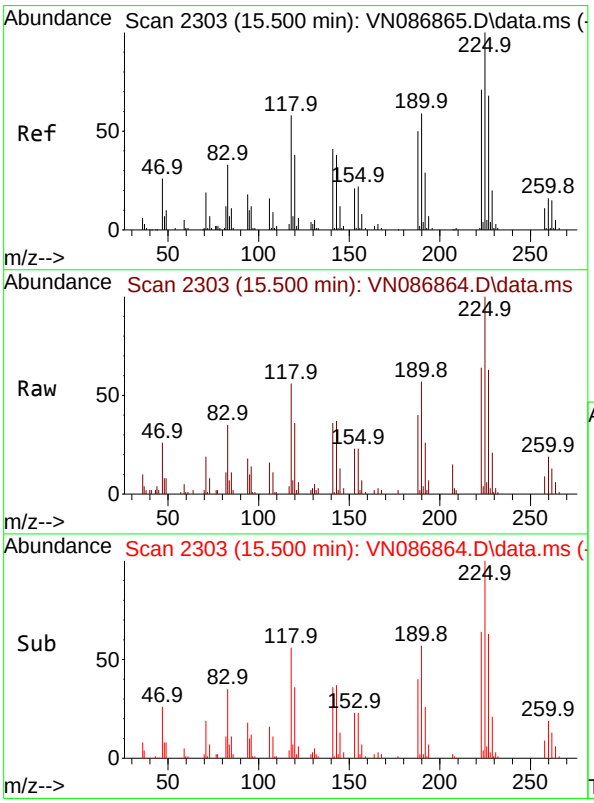
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.4 | 46.9 | 140.7 |
| 145 | 33.3 | 16.0 | 47.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
**APPROVED**

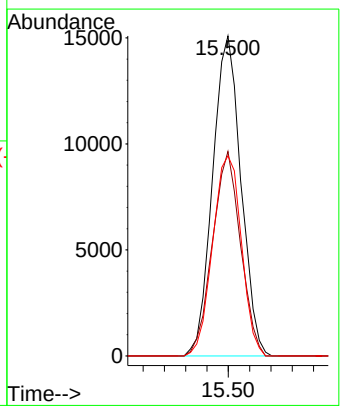
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

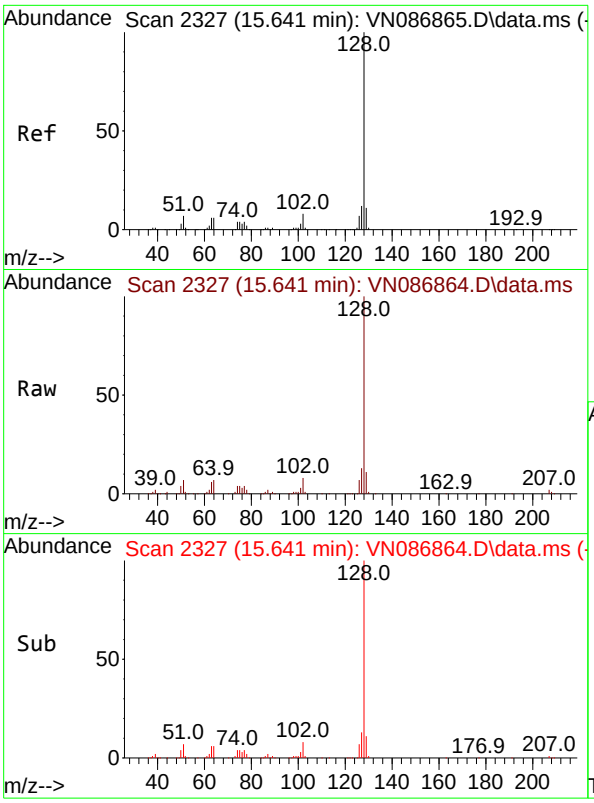



#94
Hexachlorobutadiene
Concen: 20.486 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion:225 Resp: 27887

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 63.0 | 33.5 | 100.4 |
| 227 | 63.3 | 31.1 | 93.5 |

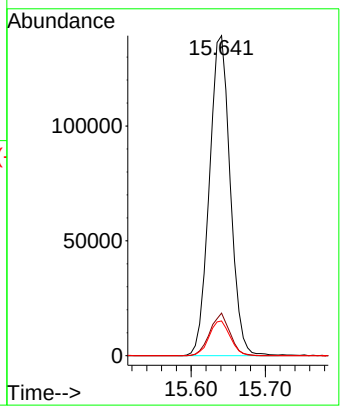





#95
Naphthalene
Concen: 20.043 ug/l
RT: 15.641 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion:128 Resp: 27258

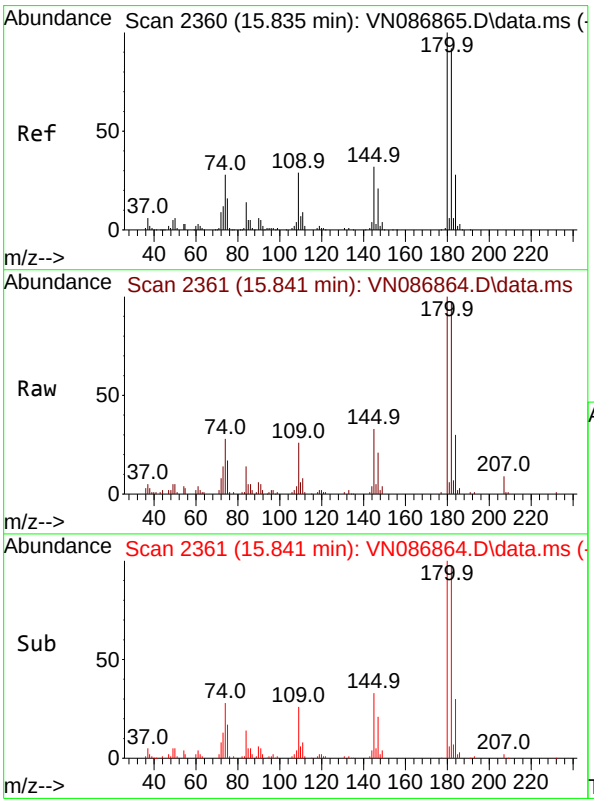
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.7 | 10.2 | 15.2 |
| 129 | 11.0 | 8.8 | 13.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
**APPROVED**

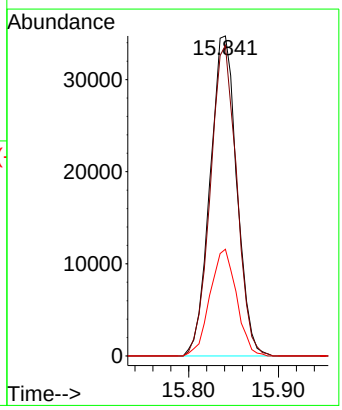
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025




#96
1,2,3-Trichlorobenzene
Concen: 19.815 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. 0.006 min
Lab File: VN086864.D
Acq: 06 Jun 2025 13:40

Tgt Ion:180 Resp: 71929

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.3 | 47.0 | 141.0 |
| 145 | 33.1 | 16.6 | 49.8 |



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086865.D
Acq On : 06 Jun 2025 14:03
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 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

Quant Time: Jun 07 01:57:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 01:51:02 2025
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.236 | 168 | 207354 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.106 | 114 | 378587 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 332766 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.794 | 152 | 167532 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.588 | 65 | 103736 | 37.366 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 74.740% | | | |
| 35) Dibromofluoromethane | 8.171 | 113 | 83058 | 37.020 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 74.040%# | | | |
| 50) Toluene-d8 | 10.571 | 98 | 326105 | 36.716 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 73.440%# | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 122965 | 37.264 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 74.520%# | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.154 | 85 | 103958 | 50.283 | ug/l | 100 |
| 3) Chloromethane | 2.395 | 50 | 123866 | 46.397 | ug/l | 100 |
| 4) Vinyl Chloride | 2.554 | 62 | 132783 | 48.215 | ug/l | 100 |
| 5) Bromomethane | 2.995 | 94 | 73974 | 47.999 | ug/l | 100 |
| 6) Chloroethane | 3.154 | 64 | 84505 | 47.504 | ug/l | 100 |
| 7) Trichlorofluoromethane | 3.524 | 101 | 172860 | 48.041 | ug/l | 100 |
| 8) Diethyl Ether | 3.983 | 74 | 75193 | 47.963 | ug/l | 100 |
| 9) 1,1,2-Trichlorotrifluo... | 4.395 | 101 | 107695 | 47.640 | ug/l | 100 |
| 10) Methyl Iodide | 4.606 | 142 | 141678 | 48.346 | ug/l | 100 |
| 11) Tert butyl alcohol | 5.548 | 59 | 182315 | 242.020 | ug/l | 100 |
| 12) 1,1-Dichloroethene | 4.359 | 96 | 110549 | 47.900 | ug/l | 100 |
| 13) Acrolein | 4.201 | 56 | 47026 | 197.217 | ug/l | 100 |
| 14) Allyl chloride | 5.042 | 41 | 179313 | 46.848 | ug/l | 100 |
| 15) Acrylonitrile | 5.742 | 53 | 421941 | 239.638 | ug/l | 100 |
| 16) Acetone | 4.448 | 43 | 333857 | 226.765 | ug/l | 100 |
| 17) Carbon Disulfide | 4.730 | 76 | 295753 | 46.328 | ug/l | 100 |
| 18) Methyl Acetate | 5.042 | 43 | 204538 | 47.673 | ug/l | 100 |
| 19) Methyl tert-butyl Ether | 5.812 | 73 | 400775 | 47.960 | ug/l | 100 |
| 20) Methylene Chloride | 5.295 | 84 | 125498 | 45.531 | ug/l | 100 |
| 21) trans-1,2-Dichloroethene | 5.806 | 96 | 117660 | 45.822 | ug/l | 100 |
| 22) Diisopropyl ether | 6.689 | 45 | 384939 | 47.711 | ug/l | 100 |
| 23) Vinyl Acetate | 6.618 | 43 | 1649023 | 241.910 | ug/l | 100 |
| 24) 1,1-Dichloroethane | 6.583 | 63 | 220477 | 47.485 | ug/l | 100 |
| 25) 2-Butanone | 7.494 | 43 | 571221 | 238.693 | ug/l | 100 |
| 26) 2,2-Dichloropropane | 7.500 | 77 | 187567 | 51.933 | ug/l | 100 |
| 27) cis-1,2-Dichloroethene | 7.500 | 96 | 144911 | 47.189 | ug/l | 100 |
| 28) Bromochloromethane | 7.824 | 49 | 96707 | 42.362 | ug/l | 100 |
| 29) Tetrahydrofuran | 7.853 | 42 | 371357 | 238.210 | ug/l | 100 |
| 30) Chloroform | 7.977 | 83 | 220093 | 47.467 | ug/l | 100 |
| 31) Cyclohexane | 8.271 | 56 | 208105 | 46.217 | ug/l | 100 |
| 32) 1,1,1-Trichloroethane | 8.177 | 97 | 185502 | 47.037 | ug/l | 100 |
| 36) 1,1-Dichloropropene | 8.377 | 75 | 158341 | 47.362 | ug/l | 100 |
| 37) Ethyl Acetate | 7.577 | 43 | 203091 | 47.720 | ug/l | 100 |
| 38) Carbon Tetrachloride | 8.371 | 117 | 154677 | 47.126 | ug/l | 100 |
| 39) Methylcyclohexane | 9.606 | 83 | 215849 | 47.126 | ug/l | 100 |
| 40) Benzene | 8.612 | 78 | 509334 | 46.590 | ug/l | 100 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086865.D
Acq On : 06 Jun 2025 14:03
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 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

Quant Time: Jun 07 01:57:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 01:51:02 2025
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.789 | 41 | 114727 | 48.000 | ug/l | | 100 |
| 42) 1,2-Dichloroethane | 8.677 | 62 | 155713 | 46.960 | ug/l | | 100 |
| 43) Isopropyl Acetate | 8.694 | 43 | 322741 | 47.248 | ug/l | | 100 |
| 44) Trichloroethene | 9.359 | 130 | 123847 | 47.776 | ug/l | | 100 |
| 45) 1,2-Dichloropropane | 9.630 | 63 | 125673 | 47.251 | ug/l | | 100 |
| 46) Dibromomethane | 9.718 | 93 | 83811 | 47.442 | ug/l | | 100 |
| 47) Bromodichloromethane | 9.894 | 83 | 173200 | 47.651 | ug/l | | 100 |
| 48) Methyl methacrylate | 9.683 | 41 | 149019 | 47.399 | ug/l | | 100 |
| 49) 1,4-Dioxane | 9.700 | 88 | 59060 | 1032.607 | ug/l | # | 100 |
| 51) 4-Methyl-2-Pentanone | 10.447 | 43 | 1017688 | 247.484 | ug/l | | 100 |
| 52) Toluene | 10.635 | 92 | 316219 | 47.331 | ug/l | | 100 |
| 53) t-1,3-Dichloropropene | 10.841 | 75 | 197475 | 48.587 | ug/l | | 100 |
| 54) cis-1,3-Dichloropropene | 10.318 | 75 | 208523 | 47.950 | ug/l | | 100 |
| 55) 1,1,2-Trichloroethane | 11.018 | 97 | 121969 | 47.445 | ug/l | | 100 |
| 56) Ethyl methacrylate | 10.882 | 69 | 210467 | 51.401 | ug/l | | 100 |
| 57) 1,3-Dichloropropane | 11.165 | 76 | 212243 | 47.593 | ug/l | | 100 |
| 58) 2-Chloroethyl Vinyl ether | 10.165 | 63 | 519139 | 212.570 | ug/l | | 100 |
| 59) 2-Hexanone | 11.200 | 43 | 696567 | 262.977 | ug/l | | 100 |
| 60) Dibromochloromethane | 11.359 | 129 | 128715 | 48.056 | ug/l | | 100 |
| 61) 1,2-Dibromoethane | 11.471 | 107 | 124522 | 47.258 | ug/l | | 100 |
| 64) Tetrachloroethene | 11.106 | 164 | 97679 | 46.382 | ug/l | | 100 |
| 65) Chlorobenzene | 11.894 | 112 | 340439 | 46.386 | ug/l | | 100 |
| 66) 1,1,1,2-Tetrachloroethane | 11.965 | 131 | 112333 | 47.615 | ug/l | | 100 |
| 67) Ethyl Benzene | 11.965 | 91 | 597593 | 47.271 | ug/l | | 100 |
| 68) m/p-Xylenes | 12.071 | 106 | 466620 | 96.424 | ug/l | | 100 |
| 69) o-Xylene | 12.400 | 106 | 224299 | 48.395 | ug/l | | 100 |
| 70) Styrene | 12.412 | 104 | 386596 | 48.745 | ug/l | | 100 |
| 71) Bromoform | 12.582 | 173 | 88127 | 50.415 | ug/l | # | 100 |
| 73) Isopropylbenzene | 12.694 | 105 | 573905 | 47.023 | ug/l | | 100 |
| 74) N-amyl acetate | 12.512 | 43 | 212064 | 52.353 | ug/l | | 100 |
| 75) 1,1,2,2-Tetrachloroethane | 12.941 | 83 | 197360 | 47.732 | ug/l | | 100 |
| 76) 1,2,3-Trichloropropane | 12.994 | 75 | 196473m | 49.183 | ug/l | | |
| 77) Bromobenzene | 12.982 | 156 | 132381 | 47.296 | ug/l | | 100 |
| 78) n-propylbenzene | 13.035 | 91 | 705524 | 47.567 | ug/l | | 100 |
| 79) 2-Chlorotoluene | 13.124 | 91 | 419986 | 47.216 | ug/l | | 100 |
| 80) 1,3,5-Trimethylbenzene | 13.171 | 105 | 485499 | 48.181 | ug/l | | 100 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 79732 | 46.089 | ug/l | | 100 |
| 82) 4-Chlorotoluene | 13.224 | 91 | 424066 | 47.117 | ug/l | | 100 |
| 83) tert-Butylbenzene | 13.435 | 119 | 438417 | 47.531 | ug/l | | 100 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 488189 | 48.314 | ug/l | | 100 |
| 85) sec-Butylbenzene | 13.618 | 105 | 641523 | 47.893 | ug/l | | 100 |
| 86) p-Isopropyltoluene | 13.729 | 119 | 533366 | 48.169 | ug/l | | 100 |
| 87) 1,3-Dichlorobenzene | 13.735 | 146 | 260310 | 47.269 | ug/l | | 100 |
| 88) 1,4-Dichlorobenzene | 13.812 | 146 | 263358 | 46.907 | ug/l | | 100 |
| 89) n-Butylbenzene | 14.053 | 91 | 512519 | 47.787 | ug/l | | 100 |
| 90) Hexachloroethane | 14.335 | 117 | 89896 | 47.896 | ug/l | | 100 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 251235 | 47.486 | ug/l | | 100 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.718 | 75 | 45535 | 46.049 | ug/l | | 100 |
| 93) 1,2,4-Trichlorobenzene | 15.388 | 180 | 162374 | 48.061 | ug/l | | 100 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 60866 | 48.356 | ug/l | | 100 |
| 95) Naphthalene | 15.641 | 128 | 603088 | 47.958 | ug/l | | 100 |
| 96) 1,2,3-Trichlorobenzene | 15.835 | 180 | 159113 | 47.402 | ug/l | | 100 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086865.D
Acq On : 06 Jun 2025 14:03
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 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

Quant Time: Jun 07 01:57:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 01:51:02 2025
Response via : Initial Calibration

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

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

ICAL Form

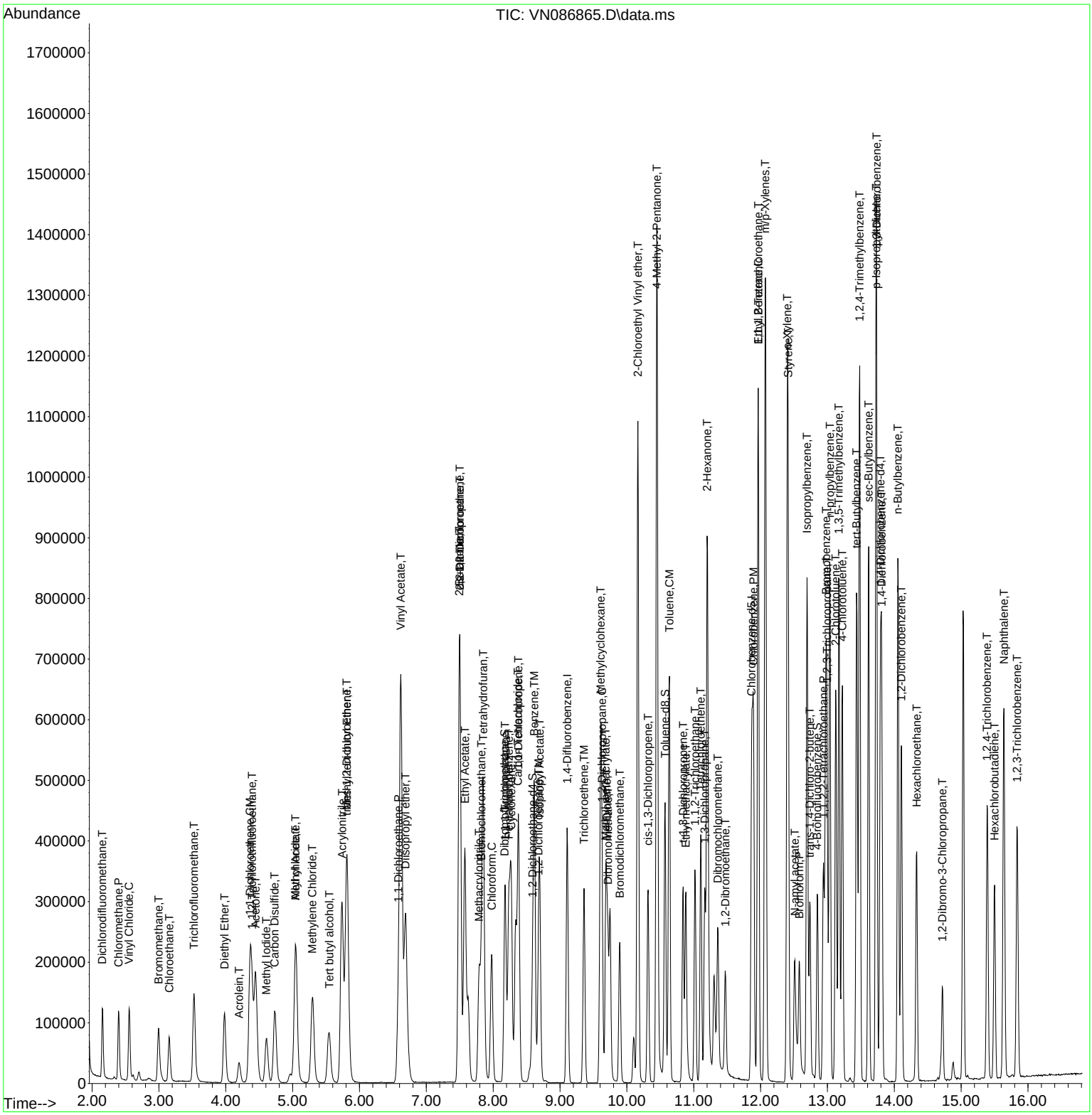
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086865.D
Acq On : 06 Jun 2025 14:03
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

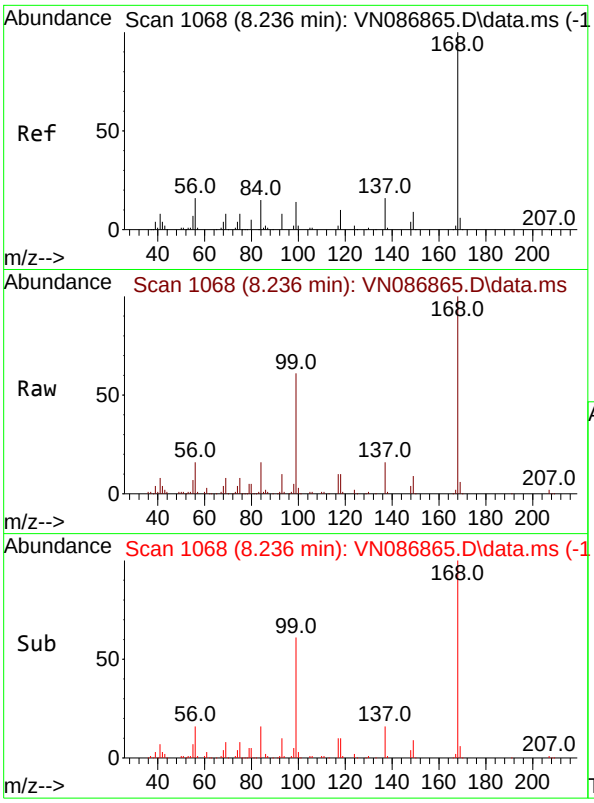
Quant Time: Jun 07 01:57:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 01:51:02 2025
Response via : Initial Calibration

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

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

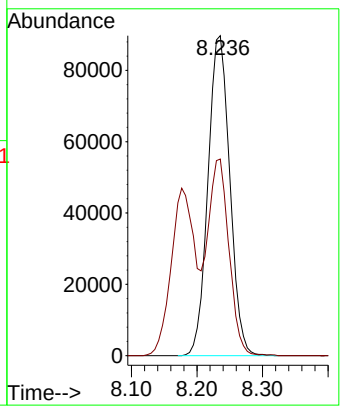





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.236 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:168 Resp: 20735

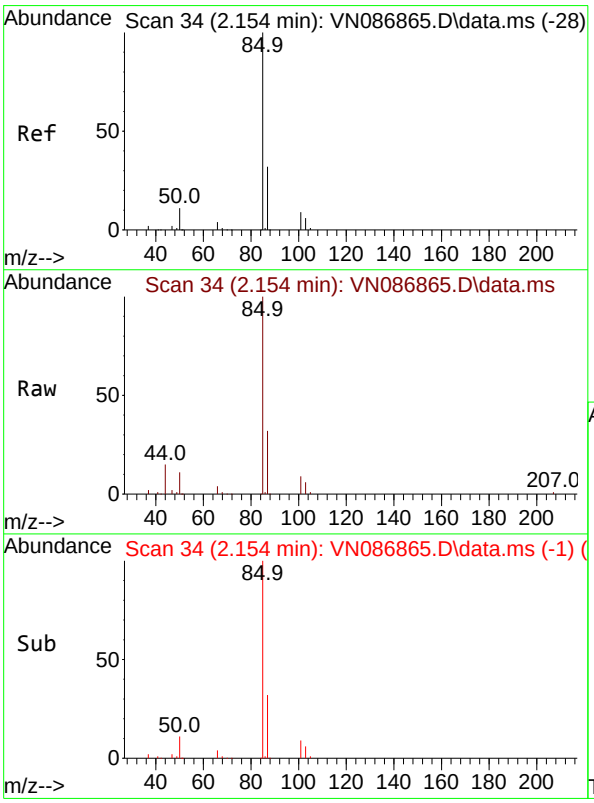
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 61.4 | 49.1 | 73.7 |




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

**Manual Integrations**
**APPROVED**

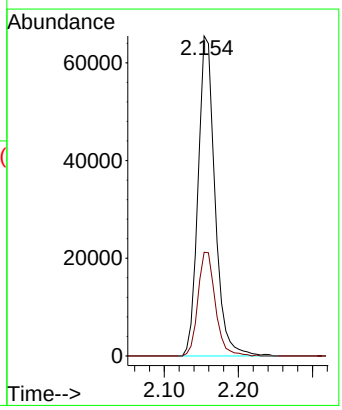
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

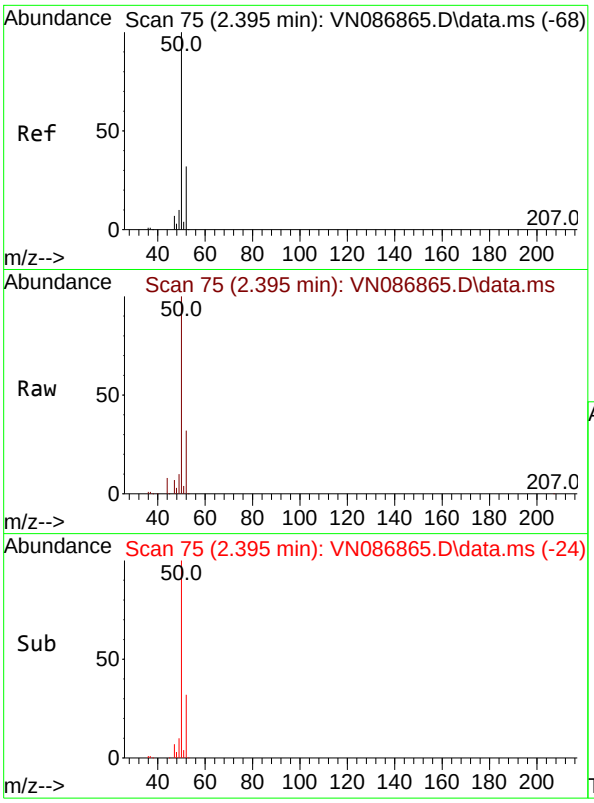



#2
Dichlorodifluoromethane
Concen: 50.283 ug/l
RT: 2.154 min Scan# 34
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 85 Resp: 103958

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.4 | 16.2 | 48.6 |

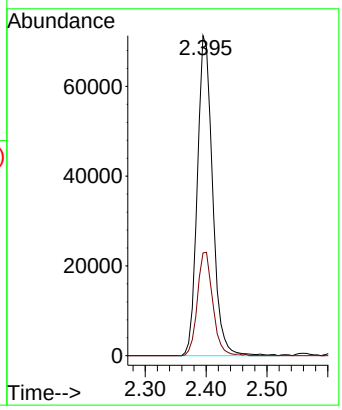





#3
Chloromethane
Concen: 46.397 ug/l
RT: 2.395 min Scan# 7
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 50 Resp: 12386

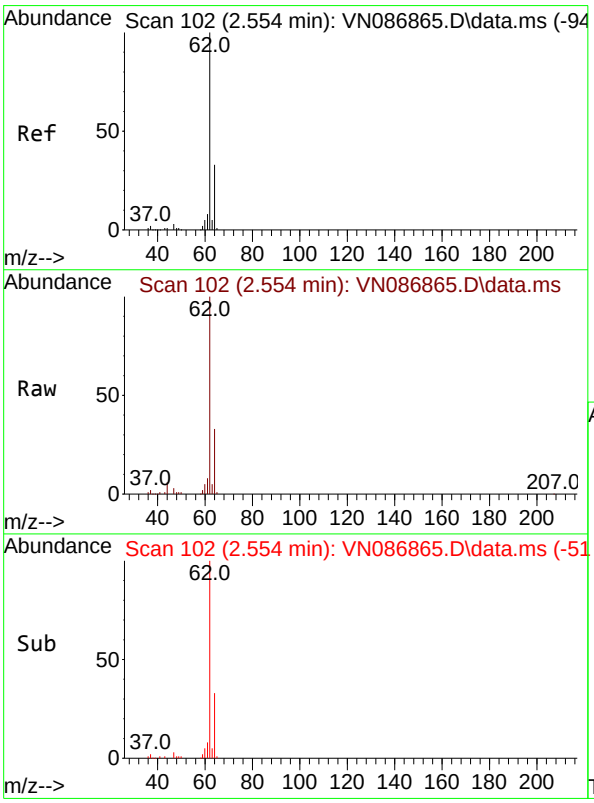
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 32.1 | 25.7 | 38.5 |




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

**Manual Integrations**
**APPROVED**

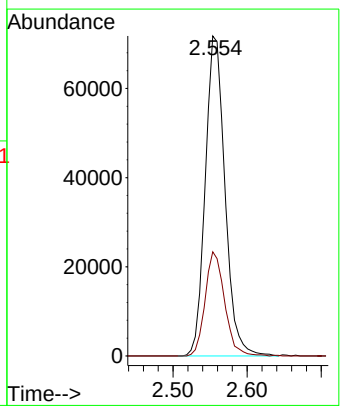
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

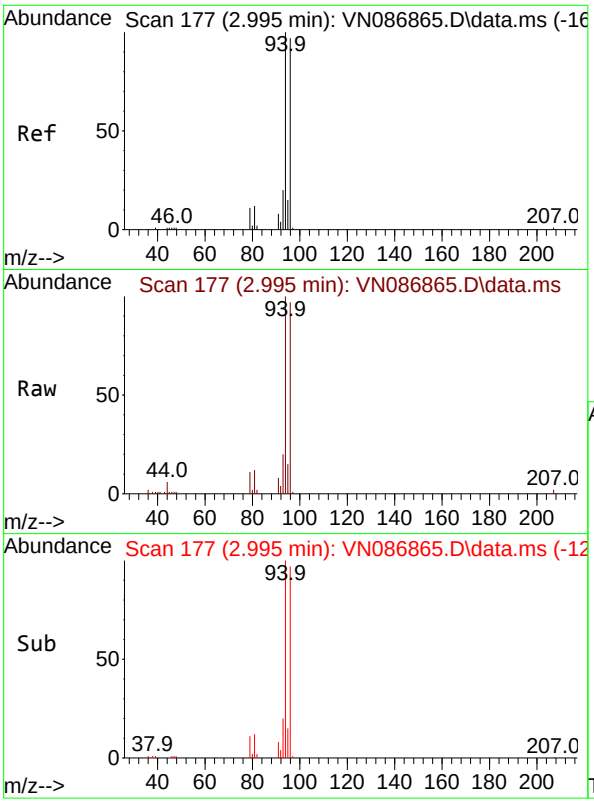



#4
Vinyl Chloride
Concen: 48.215 ug/l
RT: 2.554 min Scan# 102
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 62 Resp: 132783

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 32.5 | 26.0 | 39.0 |

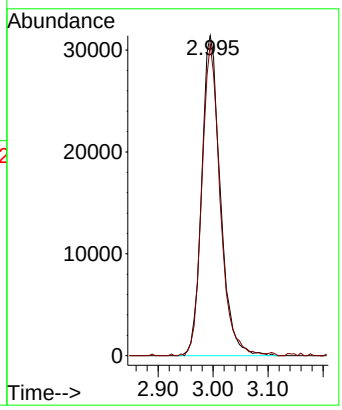





#5
Bromomethane
Concen: 47.999 ug/l
RT: 2.995 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 94 Resp: 7397

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 97.4 | 77.9 | 116.9 |




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

**Manual Integrations**
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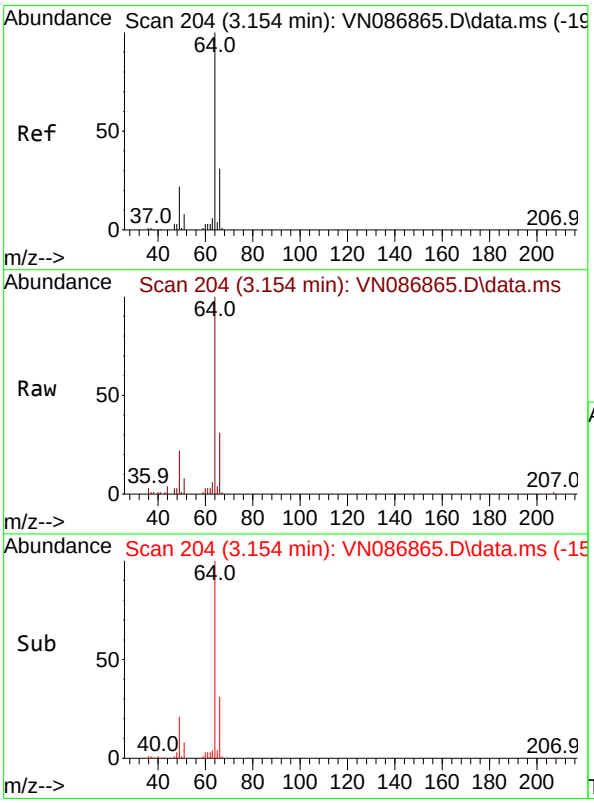
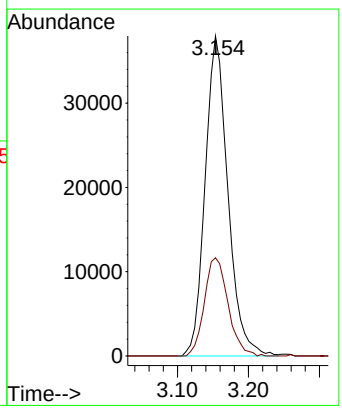
Supervised By :Mahesh Dadoda 06/09/2025

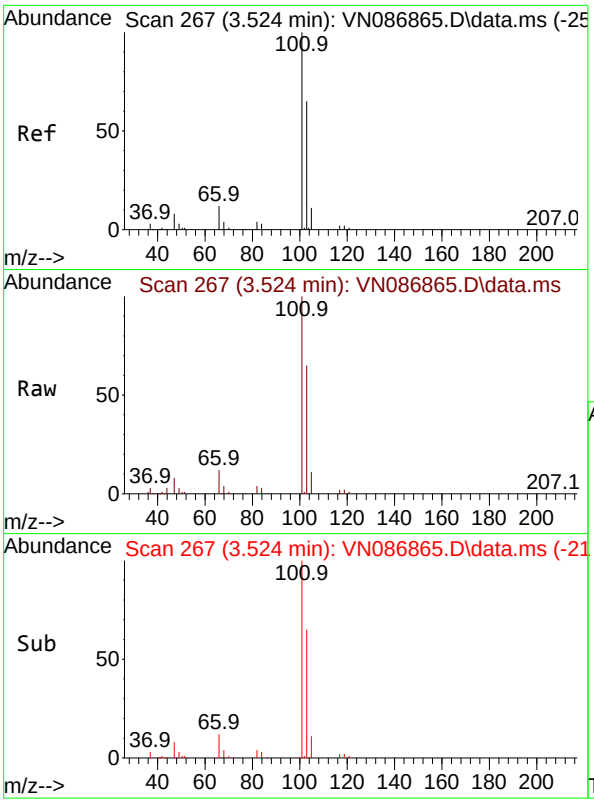



#6
Chloroethane
Concen: 47.504 ug/l
RT: 3.154 min Scan# 204
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 64 Resp: 84505

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

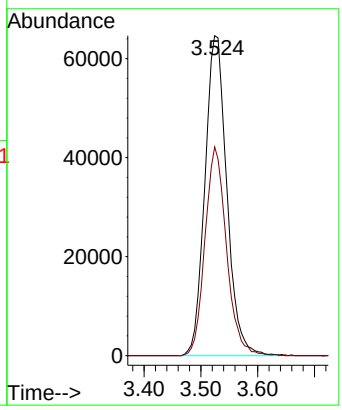





#7
Trichlorofluoromethane
Concen: 48.041 ug/l
RT: 3.524 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:101 Resp: 17286

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 65.2 | 52.2 | 78.2 |




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

**Manual Integrations**
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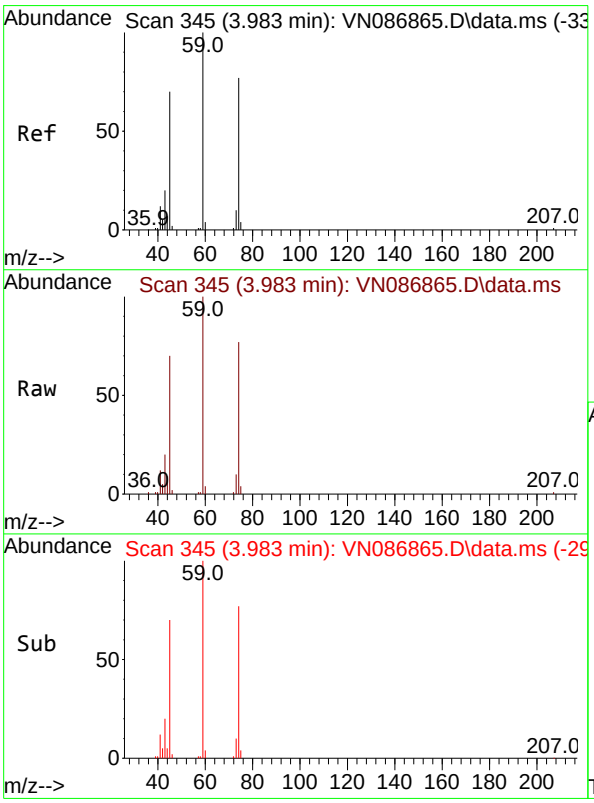
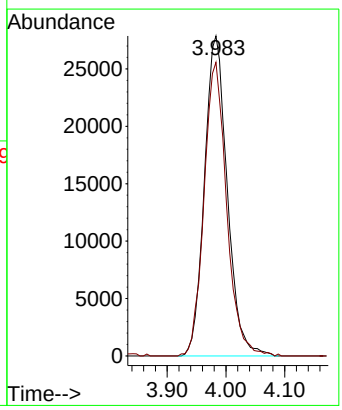
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

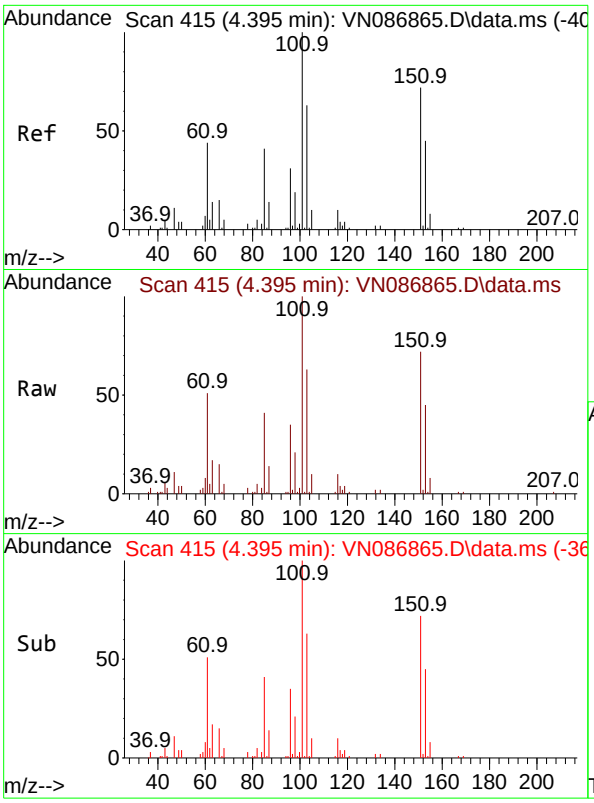



#8
Diethyl Ether
Concen: 47.963 ug/l
RT: 3.983 min Scan# 345
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 74 Resp: 75193

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 91.0 | 45.5 | 136.5 |

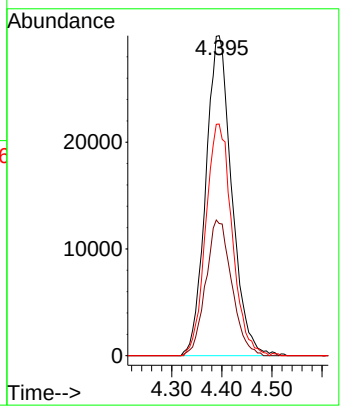





#9
1,1,2-Trichlorotrifluoroethane
Concen: 47.640 ug/l
RT: 4.395 min Scan# 41
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:101 Resp: 10769

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 42.3 | 33.8 | 50.8 |
| 151 | 73.4 | 58.7 | 88.1 |




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

**Manual Integrations**
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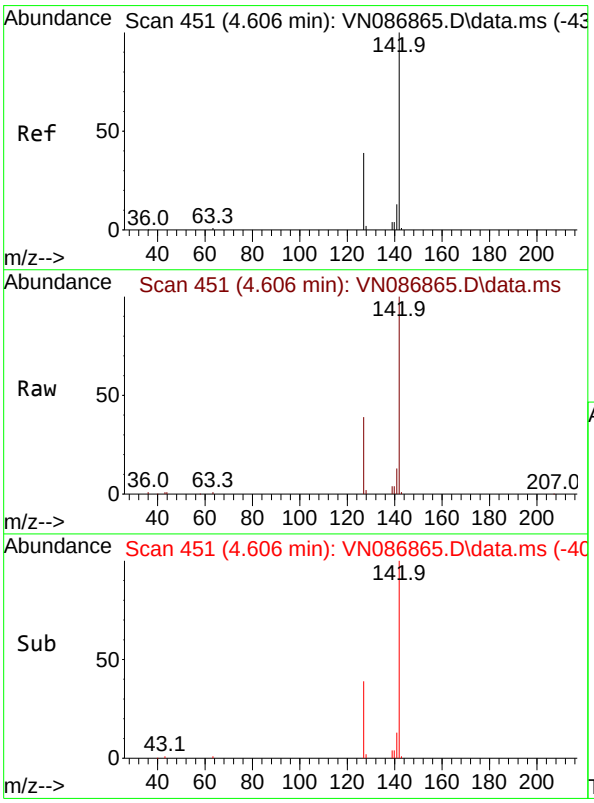
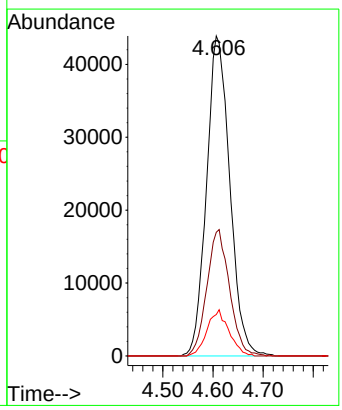
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

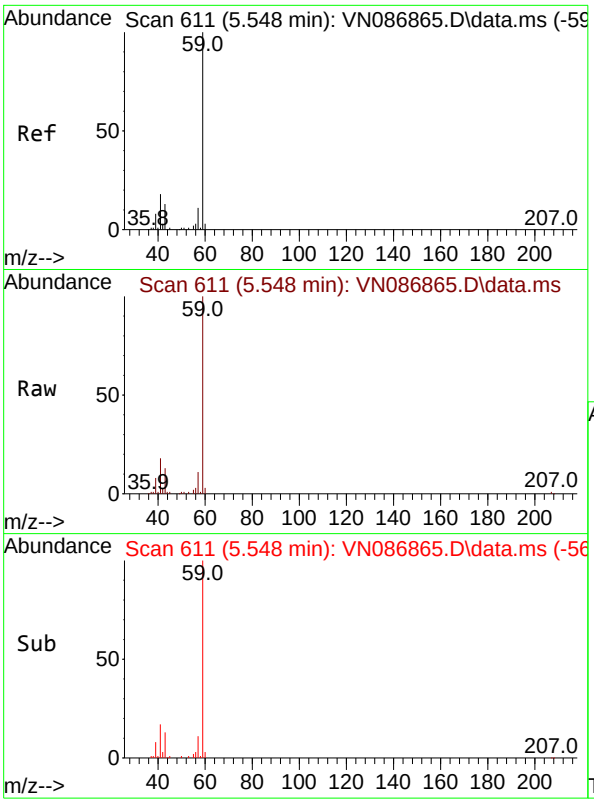



#10
Methyl Iodide
Concen: 48.346 ug/l
RT: 4.606 min Scan# 451
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:142 Resp: 141678

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 38.6 | 30.9 | 46.3 |
| 141 | 13.0 | 10.4 | 15.6 |

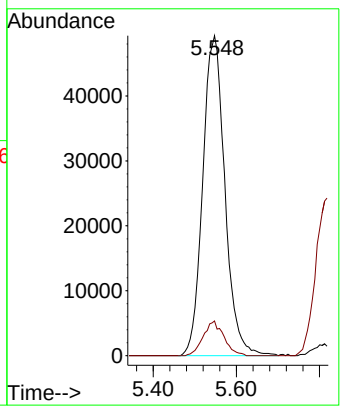





#11
Tert butyl alcohol
Concen: 242.020 ug/l
RT: 5.548 min Scan# 61
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 59 Resp: 18231

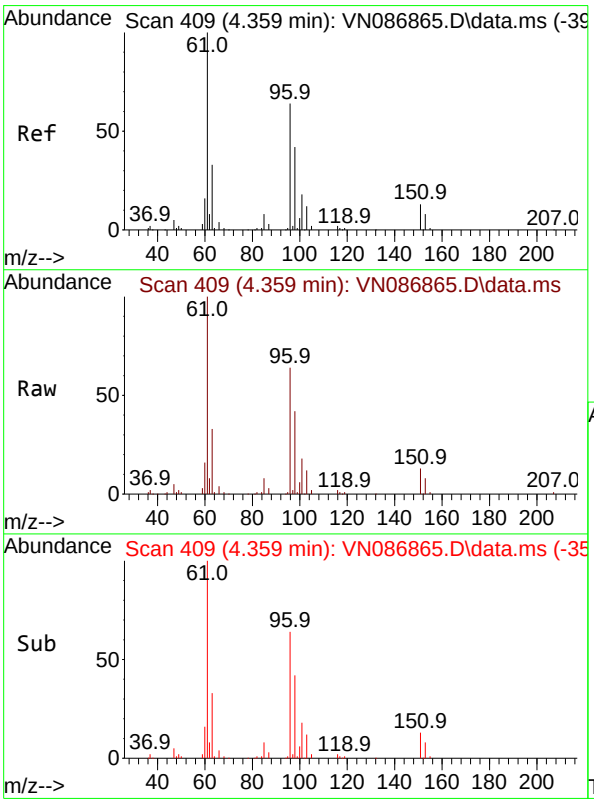
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 10.1 | 8.1 | 12.1 |




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

**Manual Integrations**
**APPROVED**

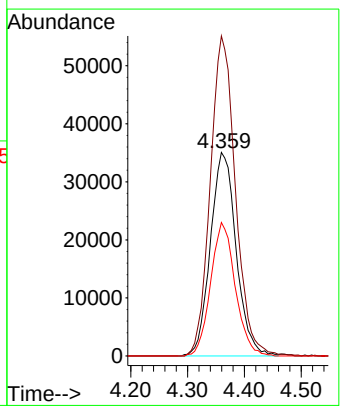
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

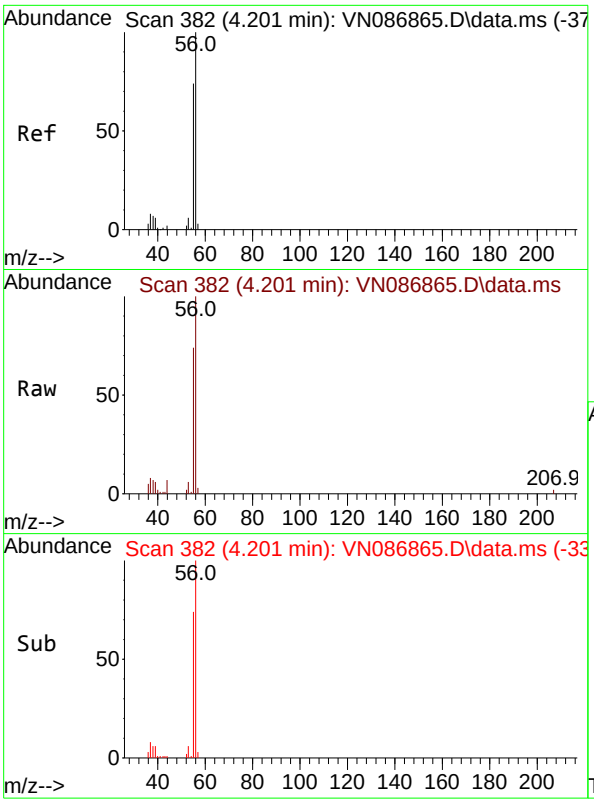



#12
1,1-Dichloroethene
Concen: 47.900 ug/l
RT: 4.359 min Scan# 409
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 96 Resp: 110549

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 157.2 | 125.8 | 188.6 |
| 98 | 65.6 | 52.5 | 78.7 |

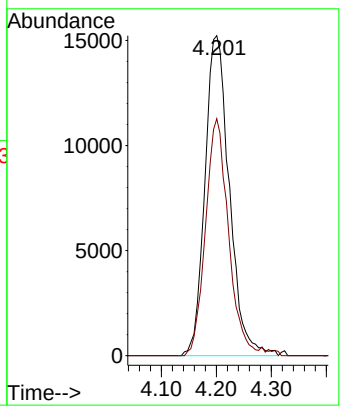





#13
Acrolein
Concen: 197.217 ug/l
RT: 4.201 min Scan# 3
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 56 Resp: 4702

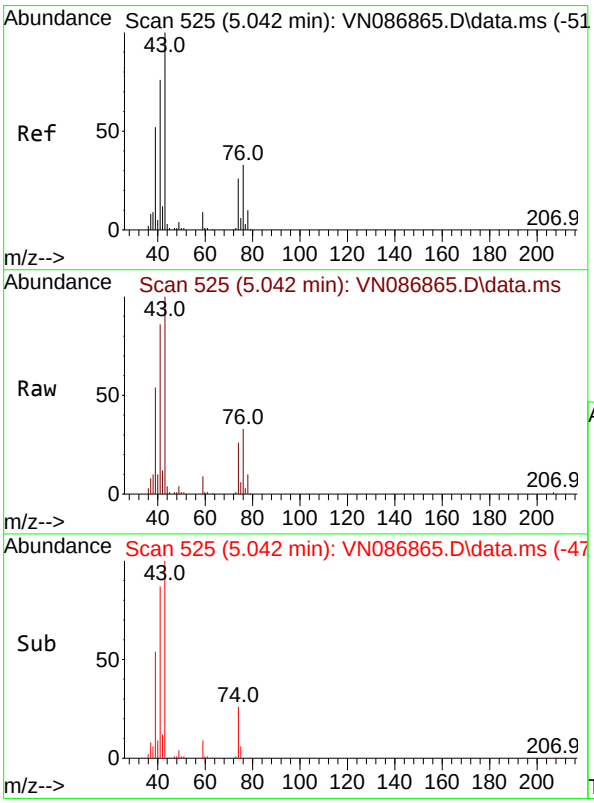
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 69.5 | 55.6 | 83.4 |




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

**Manual Integrations**
**APPROVED**

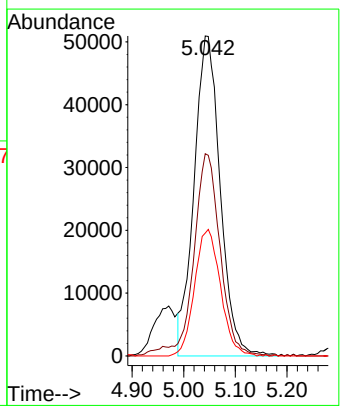
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

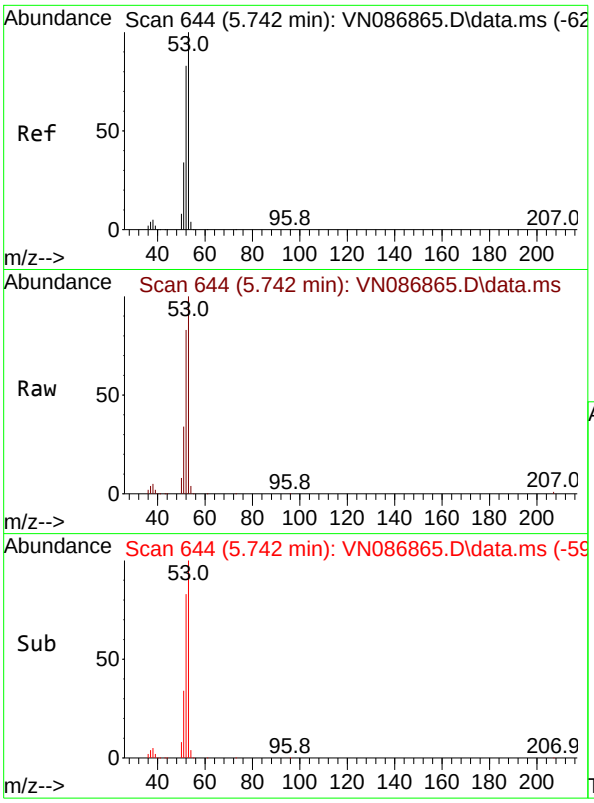



#14
Allyl chloride
Concen: 46.848 ug/l
RT: 5.042 min Scan# 525
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 41 Resp: 179313

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 64.1 | 51.3 | 76.9 |
| 76 | 39.2 | 31.4 | 47.0 |

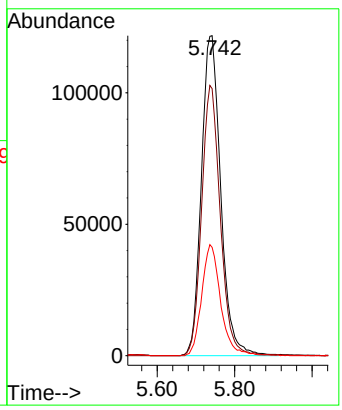





#15
Acrylonitrile
Concen: 239.638 ug/l
RT: 5.742 min Scan# 64
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 53 Resp: 42194

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 81.3 | 65.0 | 97.6 |
| 51 | 34.0 | 27.2 | 40.8 |




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

**Manual Integrations**
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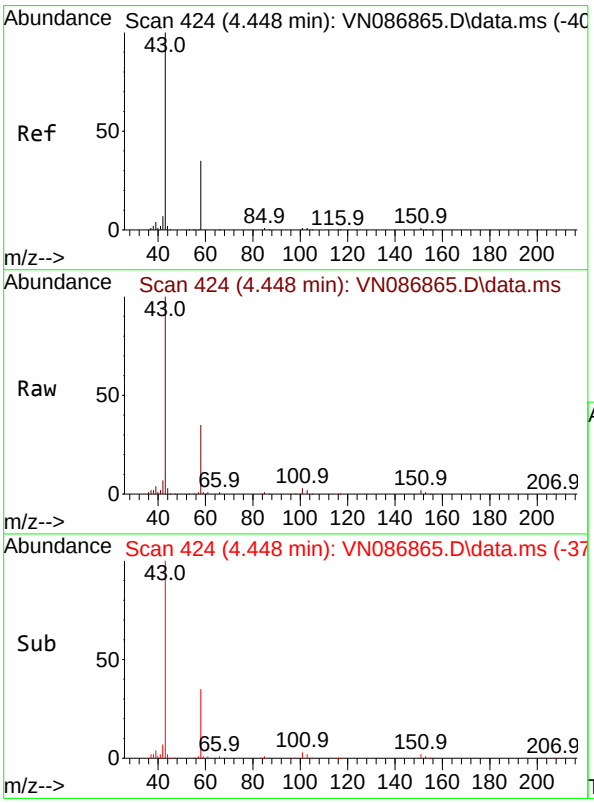
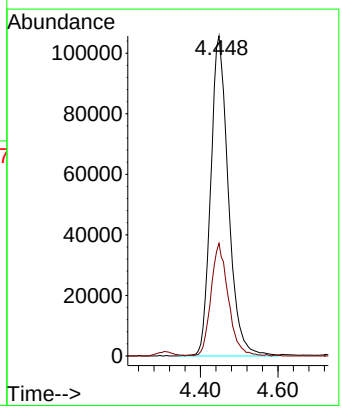
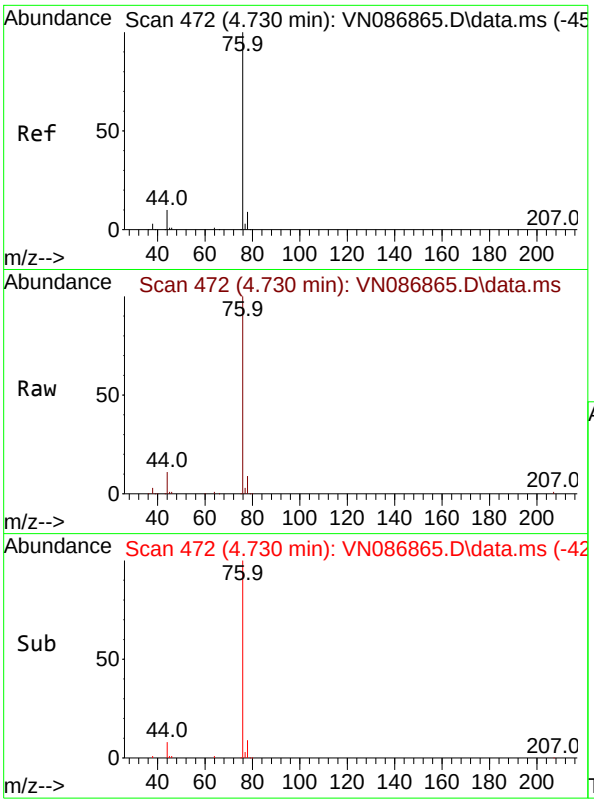



#16
Acetone
Concen: 226.765 ug/l
RT: 4.448 min Scan# 424
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 43 Resp: 333857

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 35.0 | 28.0 | 42.0 |

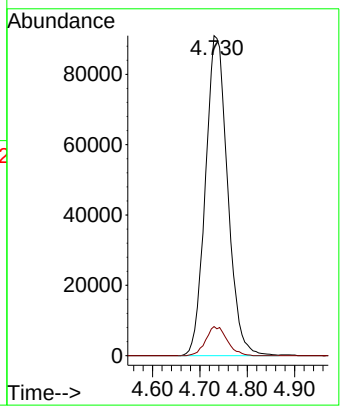





#17
Carbon Disulfide
Concen: 46.328 ug/l
RT: 4.730 min Scan# 4
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 76 Resp: 29575

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.1 | 7.3 | 10.9 |

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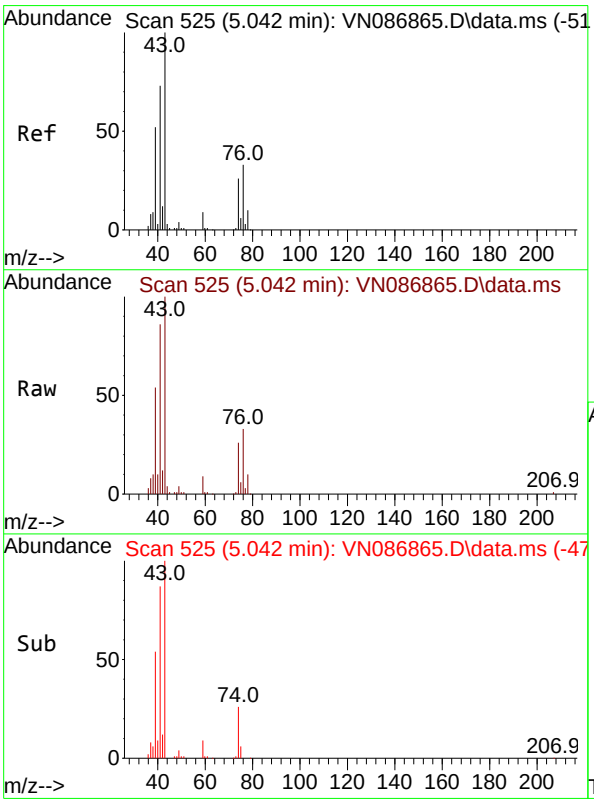
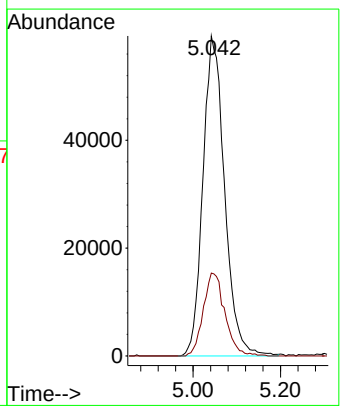
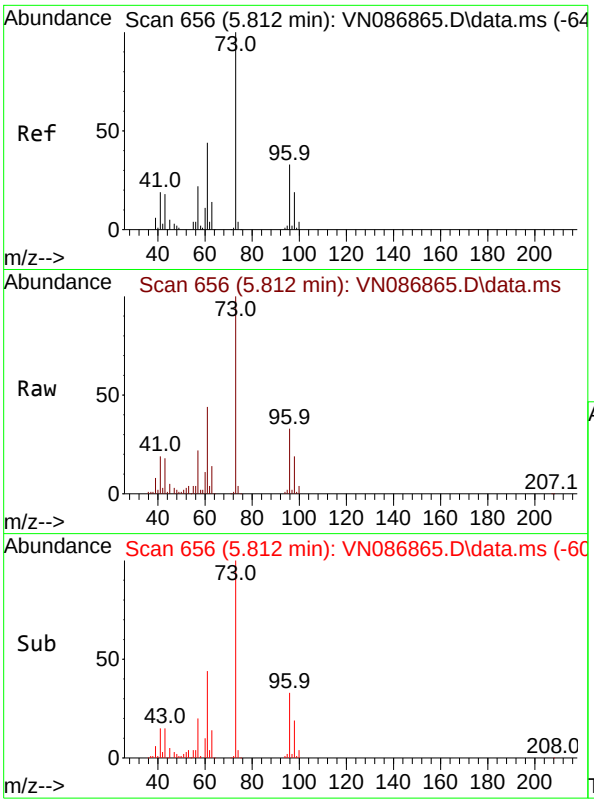



#18
Methyl Acetate
Concen: 47.673 ug/l
RT: 5.042 min Scan# 525
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 43 Resp: 204538

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 25.9 | 20.7 | 31.1 |

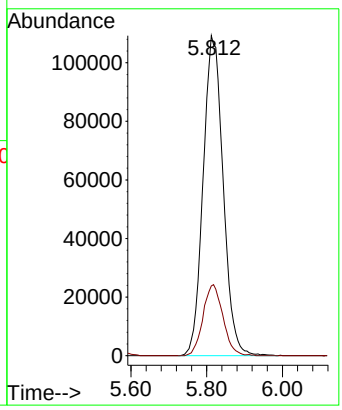





#19
Methyl tert-butyl Ether
Concen: 47.960 ug/l
RT: 5.812 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 73 Resp: 40077

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 21.8 | 17.4 | 26.2 |

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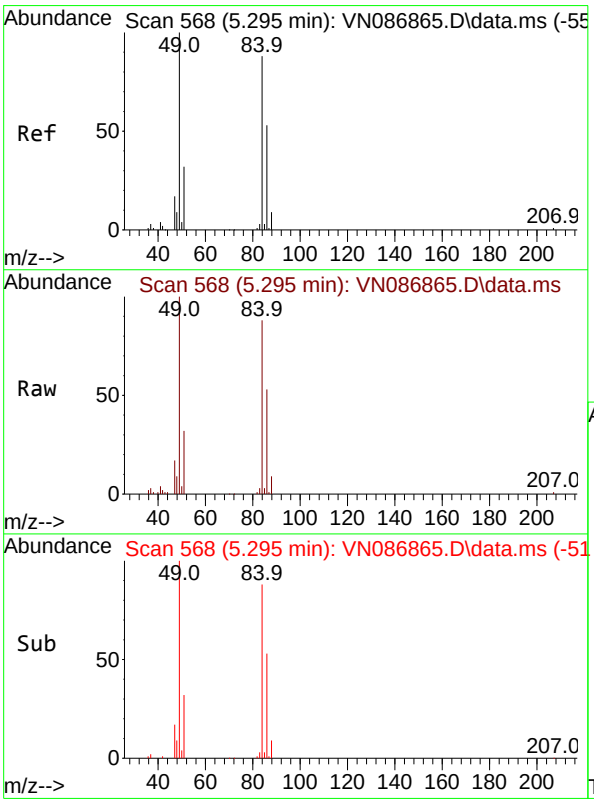
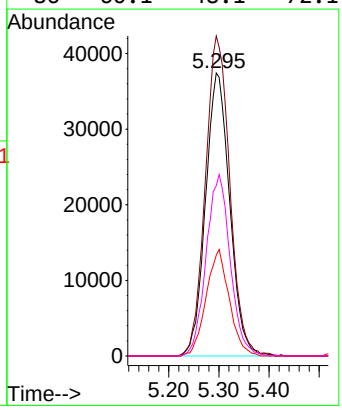
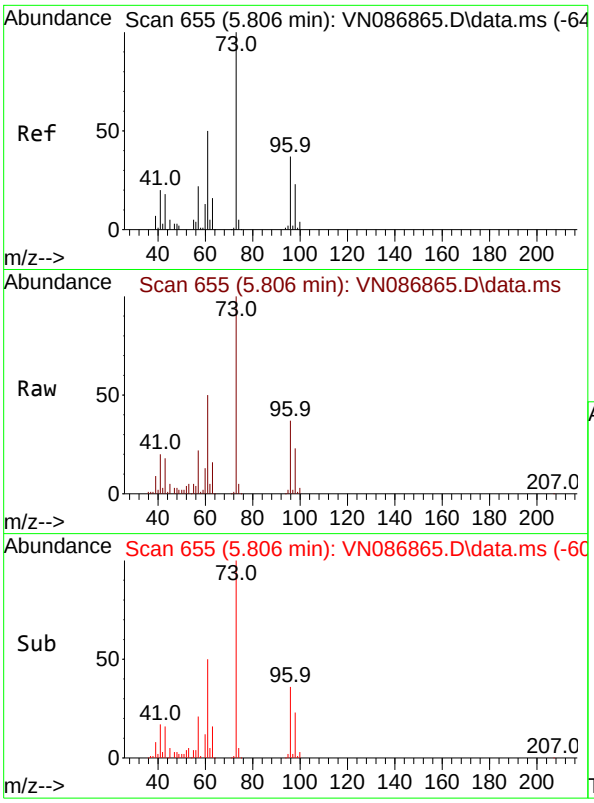



#20
Methylene Chloride
Concen: 45.531 ug/l
RT: 5.295 min Scan# 568
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 84 Resp: 125498

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 113.1 | 90.5 | 135.7 |
| 51 | 35.6 | 28.5 | 42.7 |
| 86 | 60.1 | 48.1 | 72.1 |

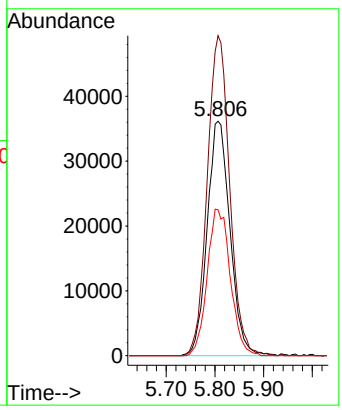





#21
trans-1,2-Dichloroethene
Concen: 45.822 ug/l
RT: 5.806 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 96 Resp: 11766

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 136.5 | 109.2 | 163.8 |
| 98 | 62.3 | 49.8 | 74.8 |

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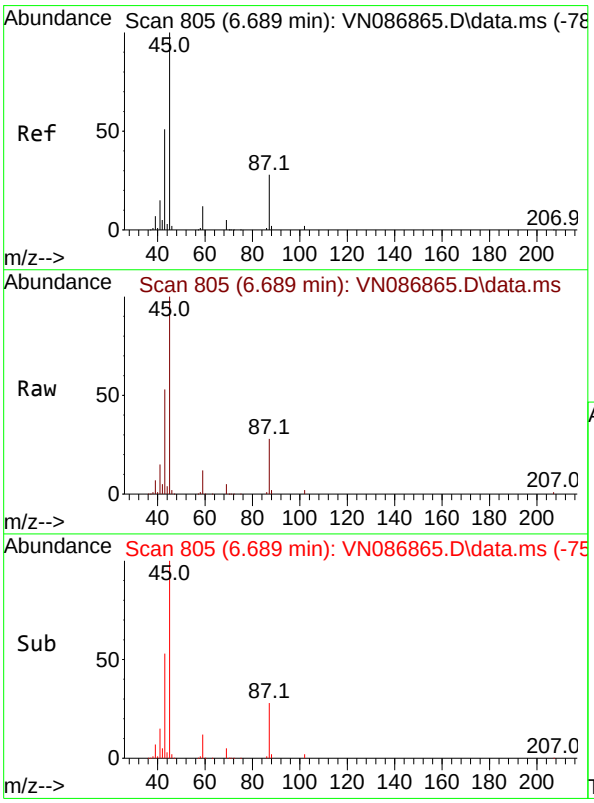
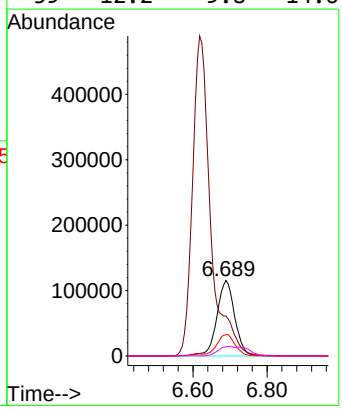
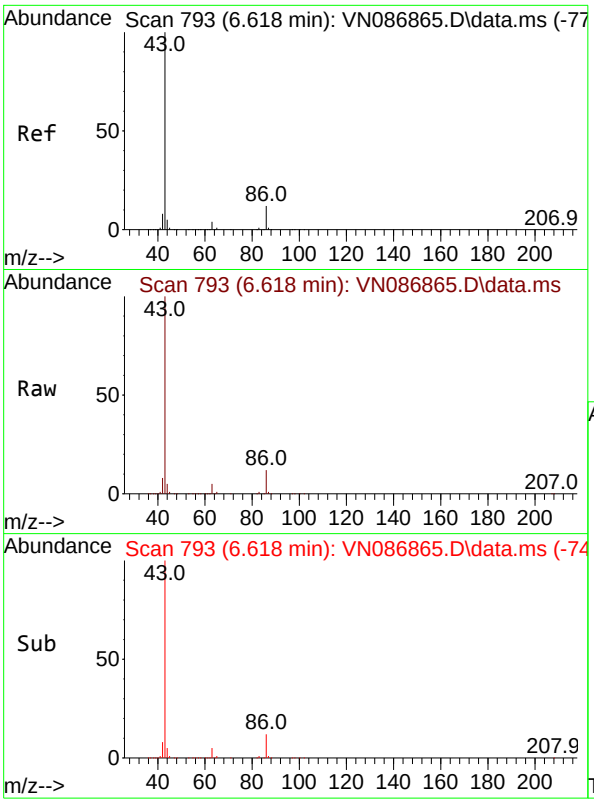



#22
Diisopropyl ether
Concen: 47.711 ug/l
RT: 6.689 min Scan# 805
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 45 Resp: 384939

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 52.4 | 41.9 | 62.9 |
| 87 | 28.0 | 22.4 | 33.6 |
| 59 | 12.2 | 9.8 | 14.6 |






#23
Vinyl Acetate
Concen: 241.910 ug/l
RT: 6.618 min Scan# 7
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 43 Resp: 164902

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 11.9 | 9.5 | 14.3 |

**Instrument :**
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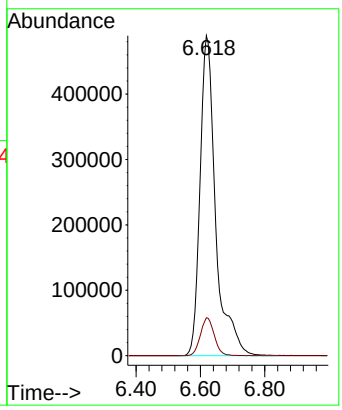
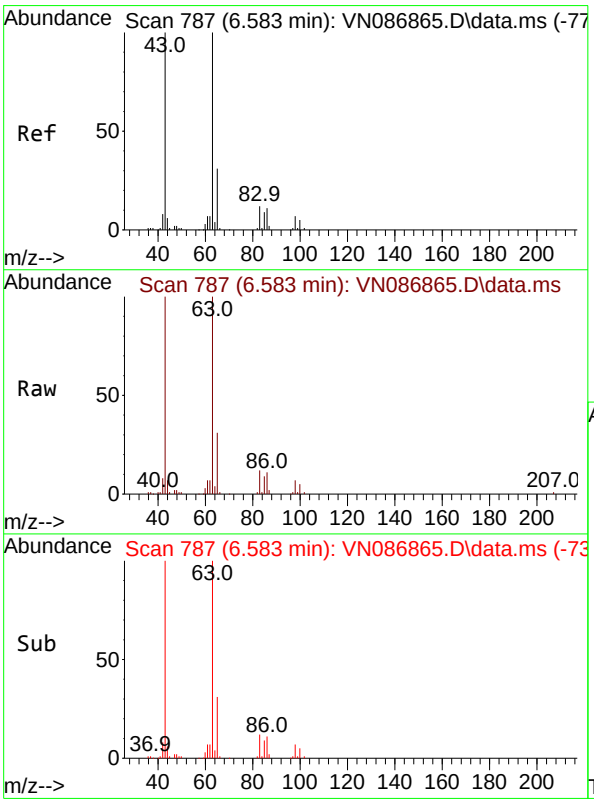
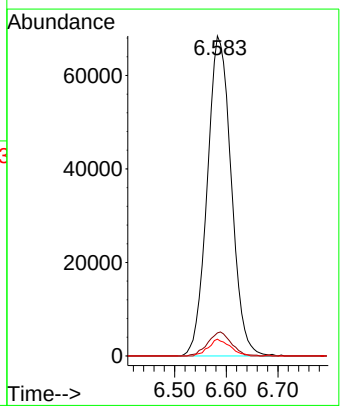


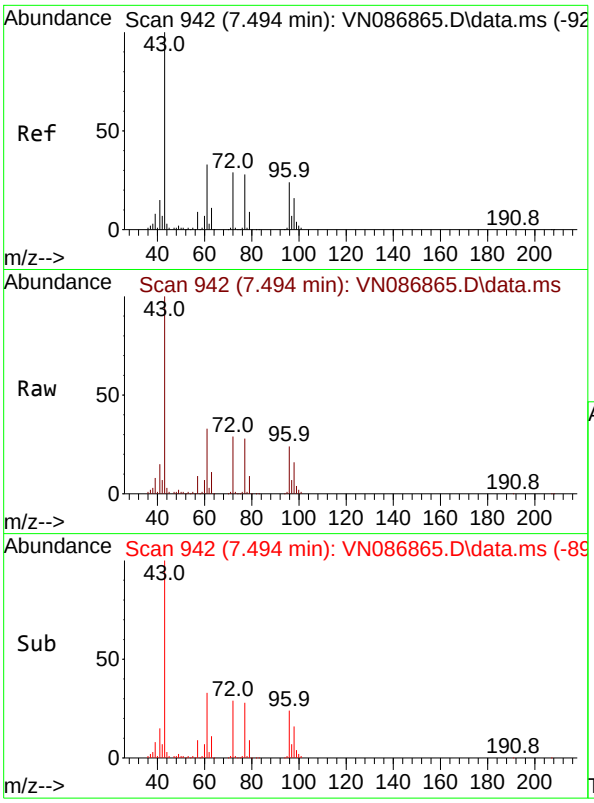




#24
1,1-Dichloroethane
Concen: 47.485 ug/l
RT: 6.583 min Scan# 787
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 63 Resp: 220477

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 7.2 | 3.6 | 10.8 |
| 100 | 5.2 | 2.6 | 7.8 |






#25
2-Butanone
Concen: 238.693 ug/l
RT: 7.494 min Scan# 94
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 43 Resp: 57122

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 28.8 | 23.0 | 34.6 |

**Instrument :**
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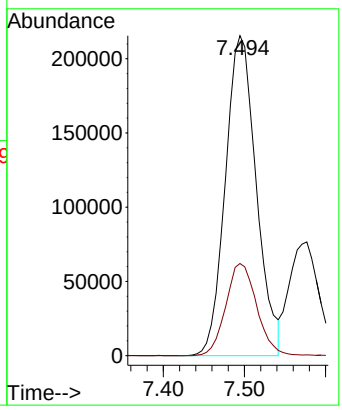
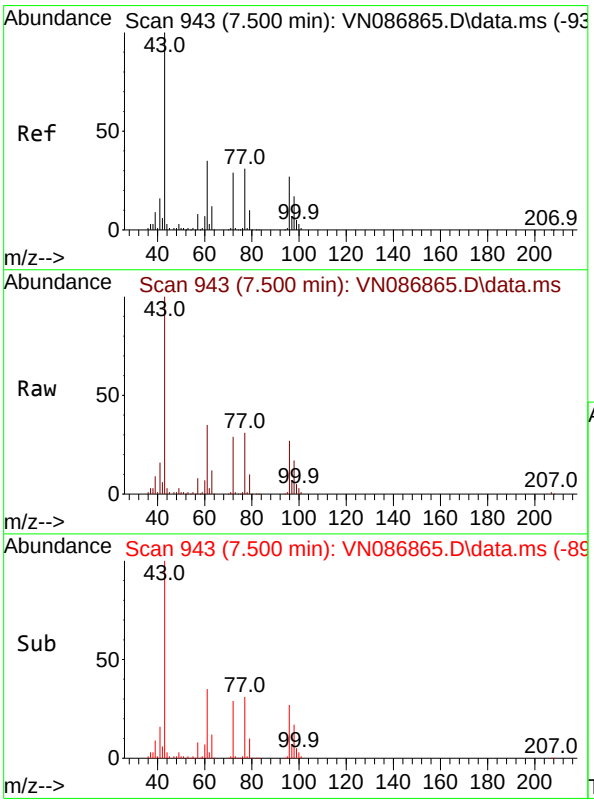
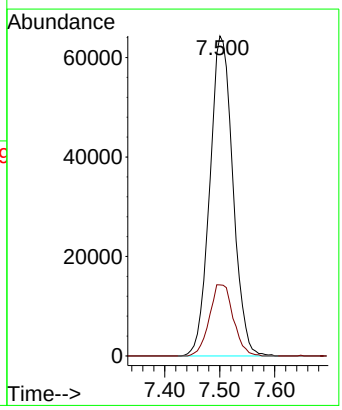


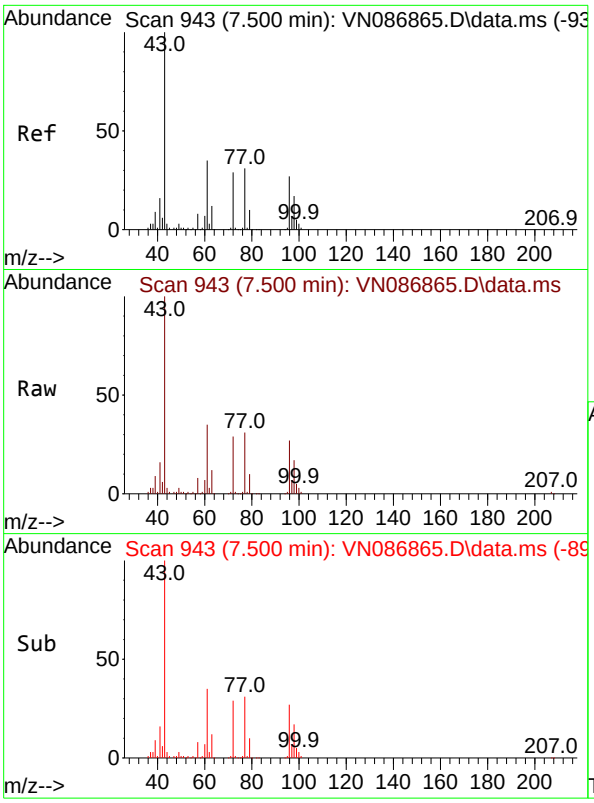




#26
2,2-Dichloropropane
Concen: 51.933 ug/l
RT: 7.500 min Scan# 943
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 77 Resp: 187567

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 23.1 | 11.6 | 34.7 |

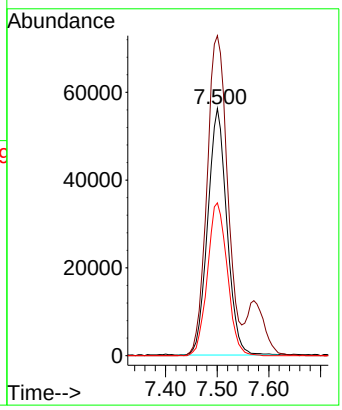





#27
cis-1,2-Dichloroethene
Concen: 47.189 ug/l
RT: 7.500 min Scan# 94
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 96 Resp: 14491

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 139.0 | 0.0 | 278.0 |
| 98 | 64.1 | 0.0 | 128.2 |

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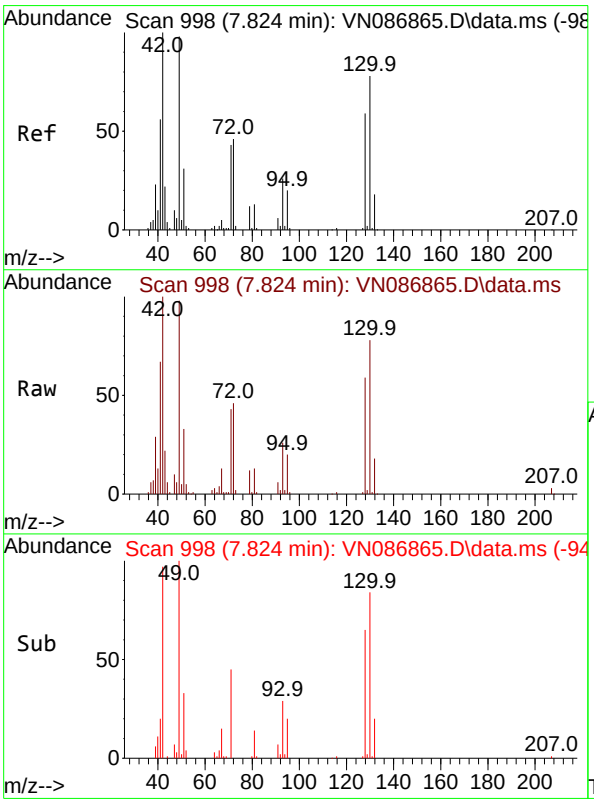
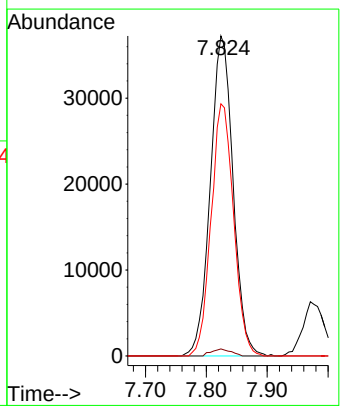
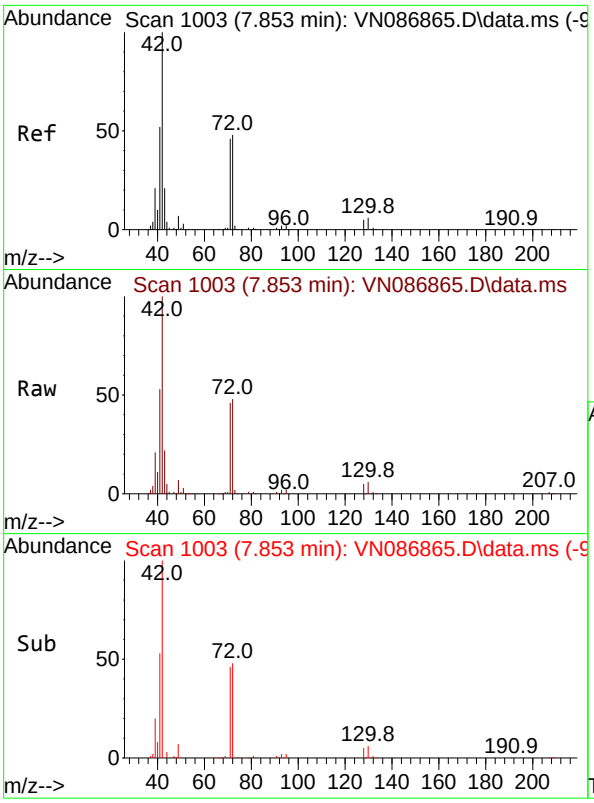



#28
Bromochloromethane
Concen: 42.362 ug/l
RT: 7.824 min Scan# 998
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 49 Resp: 96707

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.9 | 0.0 | 3.8 |
| 130 | 77.7 | 62.2 | 93.2 |






#29
Tetrahydrofuran
Concen: 238.210 ug/l
RT: 7.853 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 42 Resp: 37135

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 47.2 | 37.8 | 56.6 |
| 71 | 44.5 | 35.6 | 53.4 |

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VSTDICCC050

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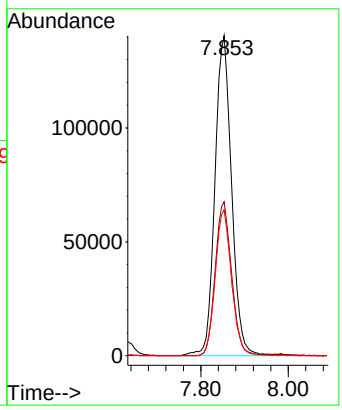
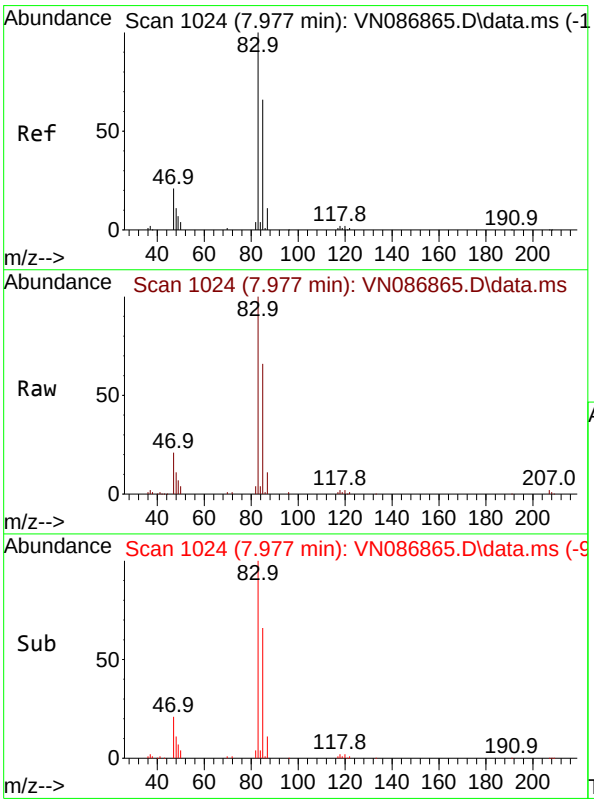
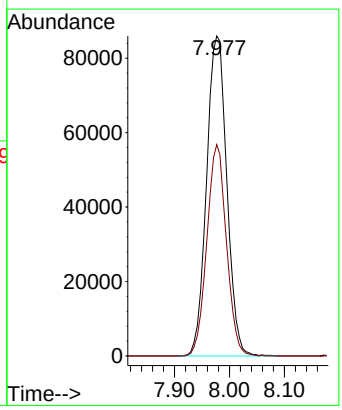


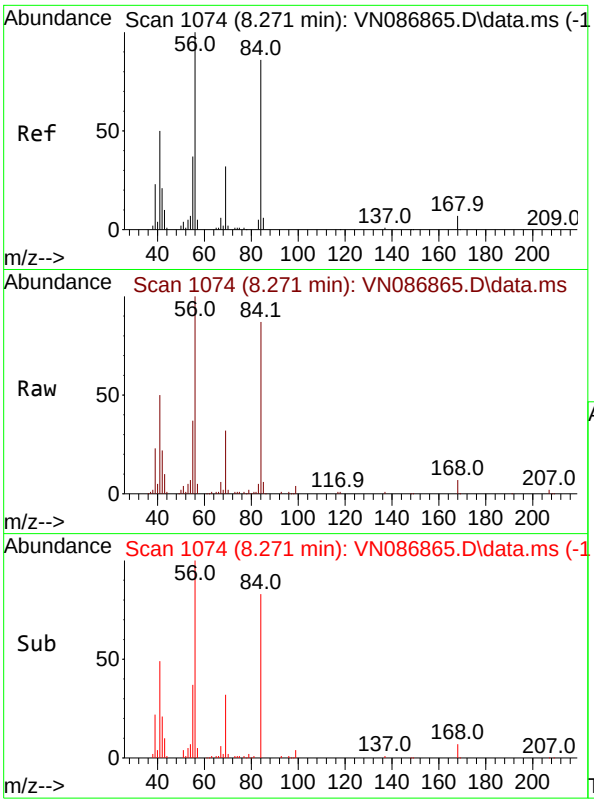




#30
Chloroform
Concen: 47.467 ug/l
RT: 7.977 min Scan# 1024
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 83 Resp: 220093

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 66.1 | 52.9 | 79.3 |

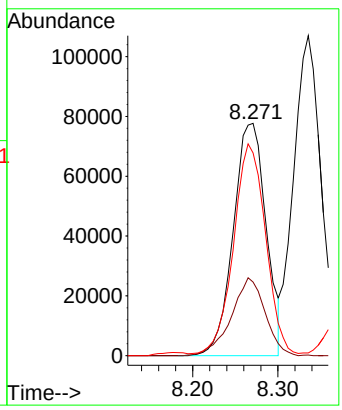





#31
Cyclohexane
Concen: 46.217 ug/l
RT: 8.271 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 56 Resp: 20810

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 31.7 | 25.4 | 38.0 |
| 84 | 86.0 | 68.8 | 103.2 |

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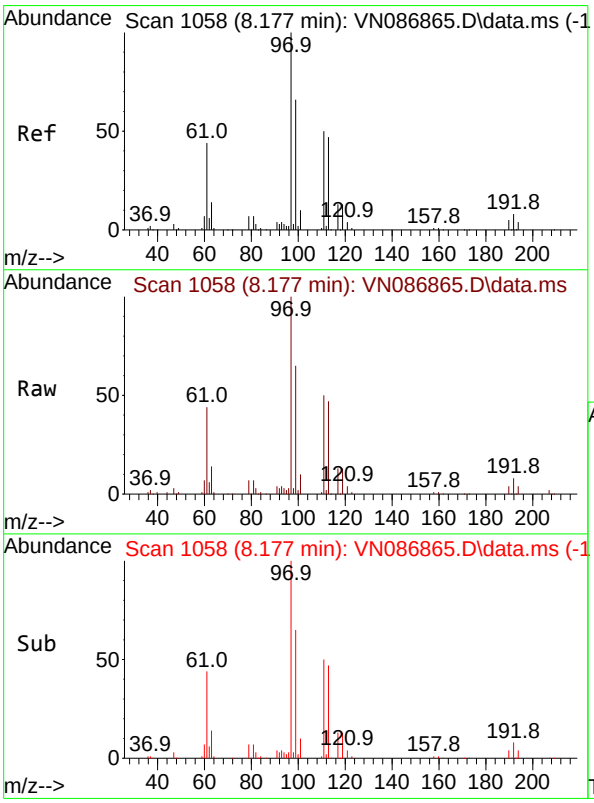
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
**APPROVED**

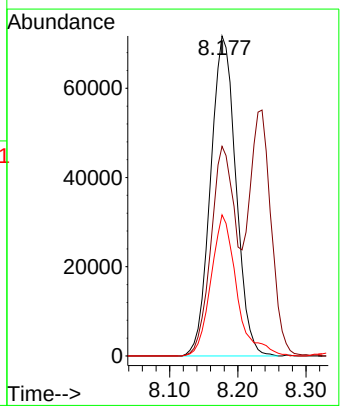
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

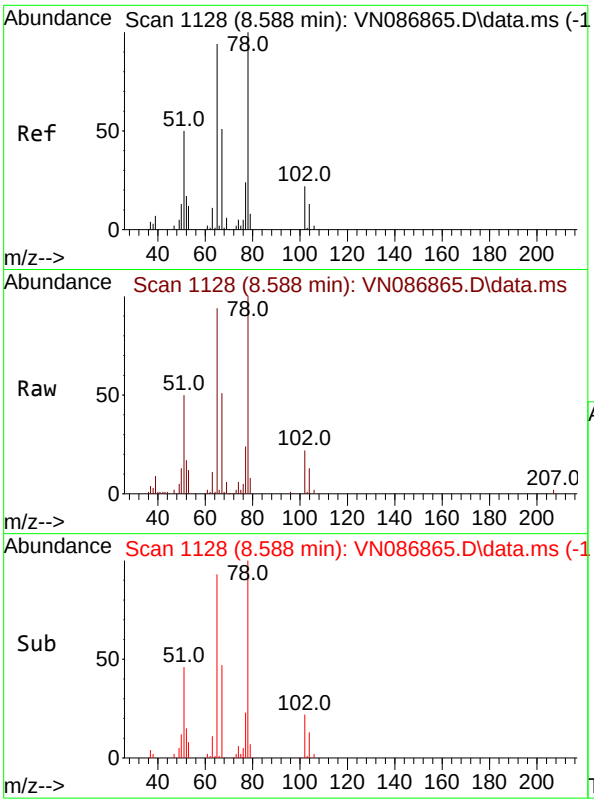



#32
1,1,1-Trichloroethane
Concen: 47.037 ug/l
RT: 8.177 min Scan# 1058
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 97 Resp: 185502

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 65.0 | 52.0 | 78.0 |
| 61 | 44.9 | 35.9 | 53.9 |

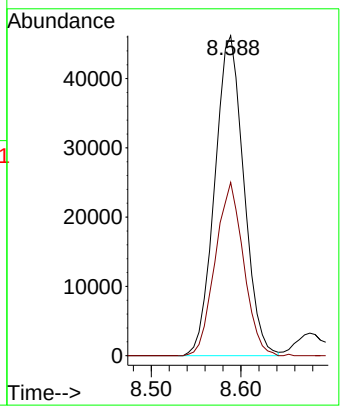





#33
1,2-Dichloroethane-d4
Concen: 37.366 ug/l
RT: 8.588 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 65 Resp: 10373

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 52.8 | 0.0 | 105.6 |




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

**Manual Integrations**
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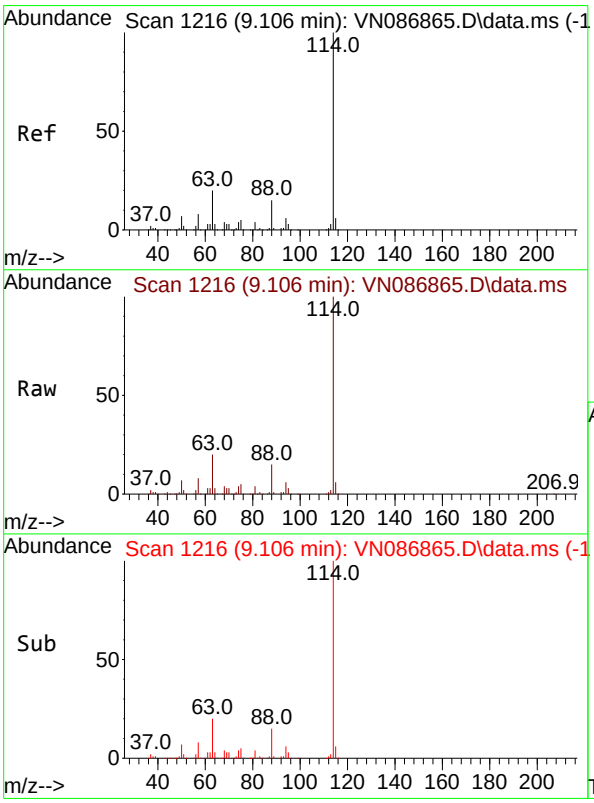
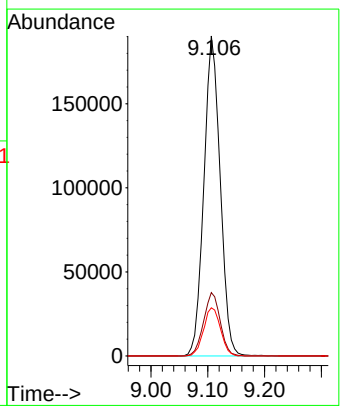
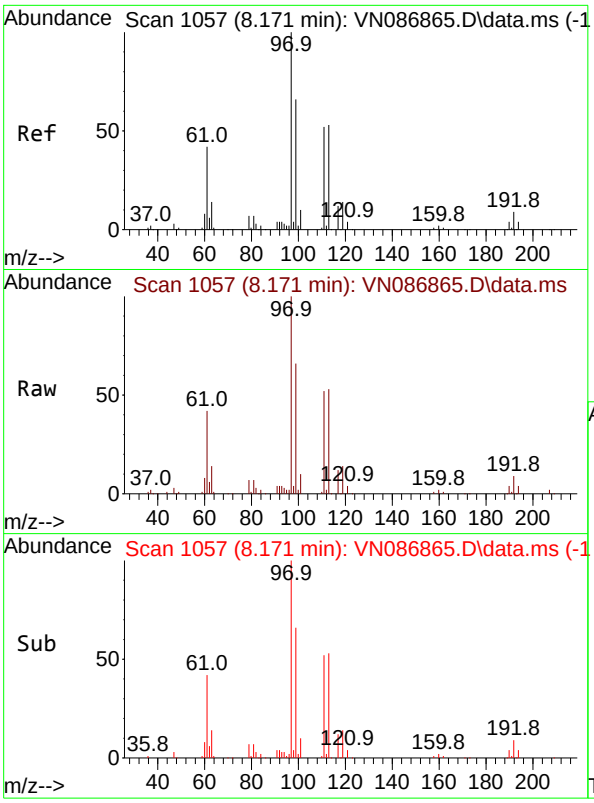



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.106 min Scan# 1216
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:114 Resp: 378587

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 19.8 | 0.0 | 39.6 |
| 88 | 15.1 | 0.0 | 30.2 |

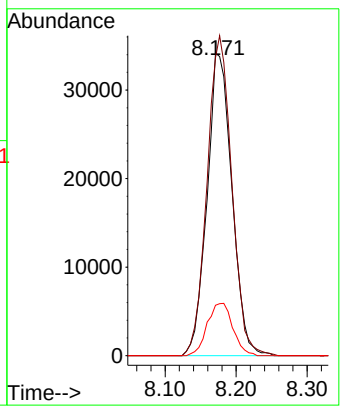





#35
Dibromofluoromethane
Concen: 37.020 ug/l
RT: 8.171 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:113 Resp: 8305

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 105.2 | 84.2 | 126.2 |
| 192 | 17.8 | 14.2 | 21.4 |




**Instrument :**
MSVOA_N
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VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/09/2025
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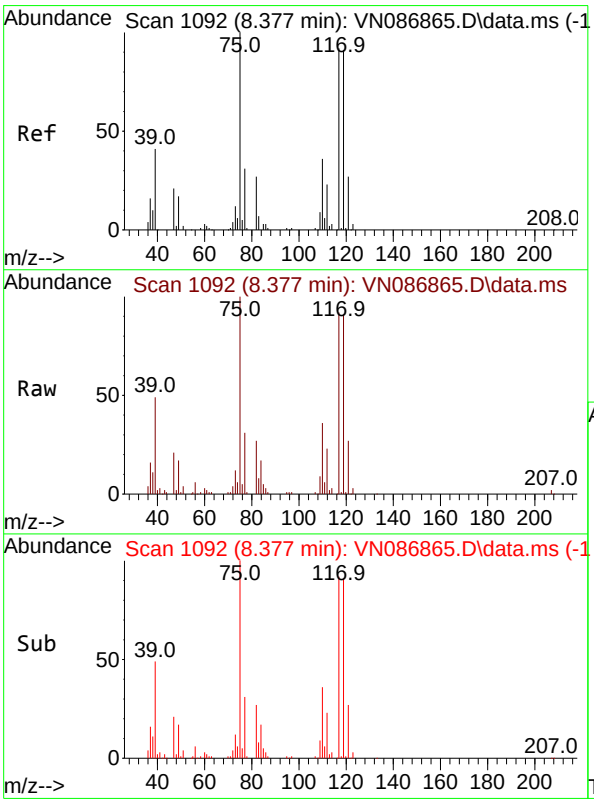
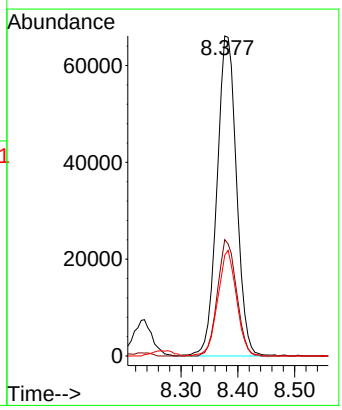
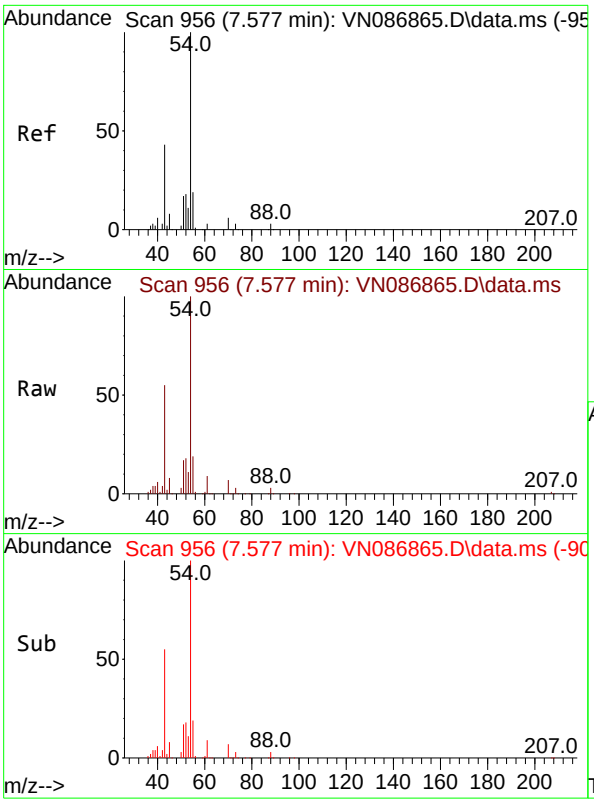



#36
1,1-Dichloropropene
Concen: 47.362 ug/l
RT: 8.377 min Scan# 1092
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 75 Resp: 158341

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 35.3 | 17.6 | 52.9 |
| 77 | 31.6 | 25.3 | 37.9 |

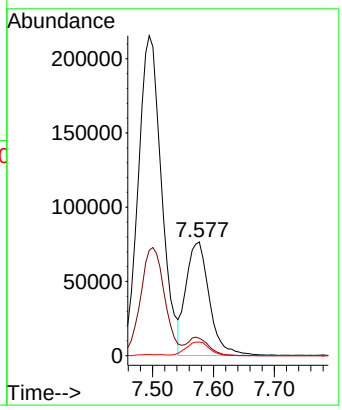





#37
Ethyl Acetate
Concen: 47.720 ug/l
RT: 7.577 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 43 Resp: 20309

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 15.1 | 12.1 | 18.1 |
| 70 | 12.2 | 9.8 | 14.6 |




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

**Manual Integrations**
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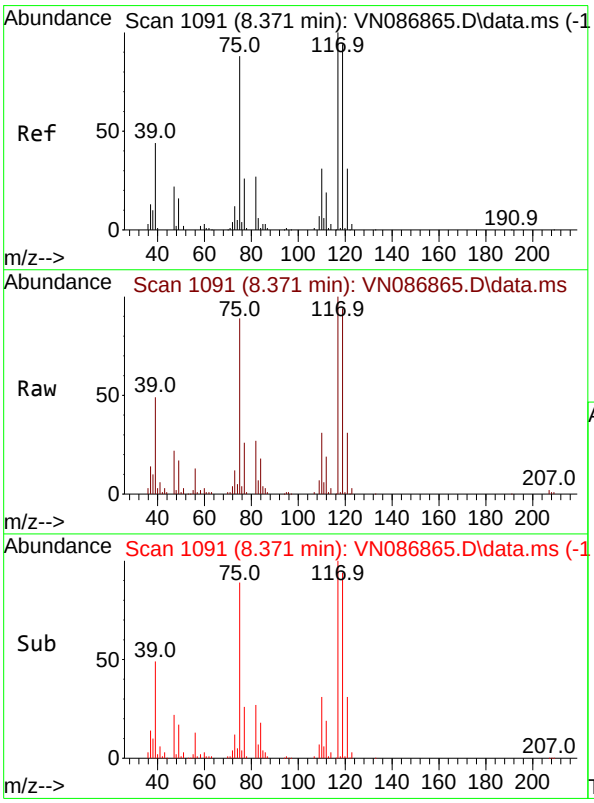
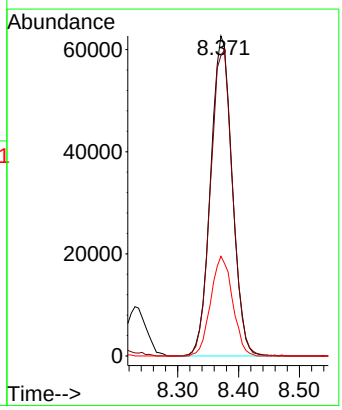
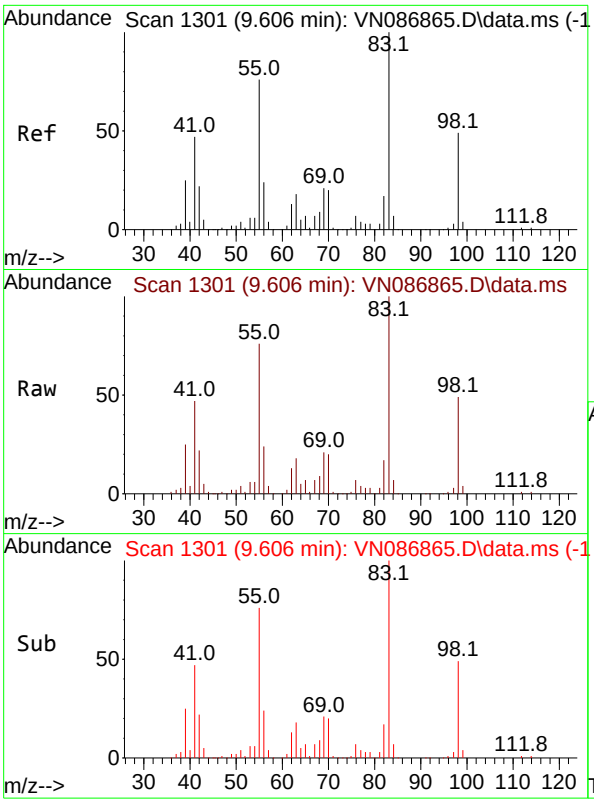



#38
Carbon Tetrachloride
Concen: 47.126 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:117 Resp: 154677

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 93.8 | 75.0 | 112.6 |
| 121 | 31.1 | 24.9 | 37.3 |






#39
Methylcyclohexane
Concen: 47.126 ug/l
RT: 9.606 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 83 Resp: 21584

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 76.3 | 61.0 | 91.6 |
| 98 | 48.6 | 38.9 | 58.3 |

**Instrument :**
MSVOA_N
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VSTDICCC050

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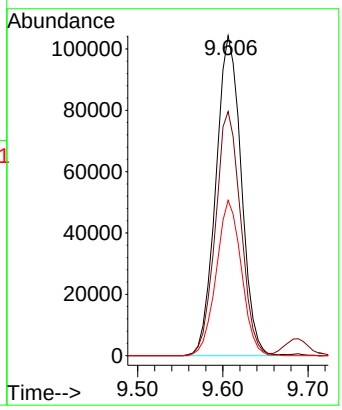
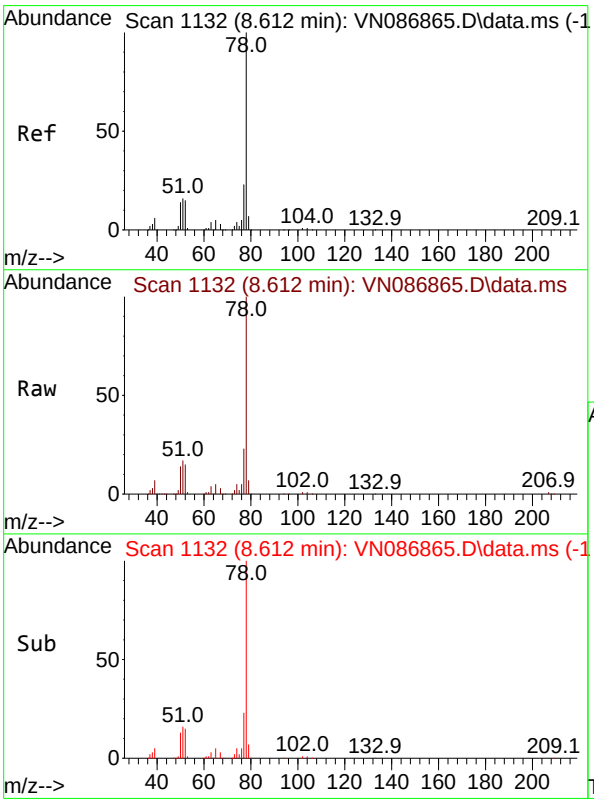
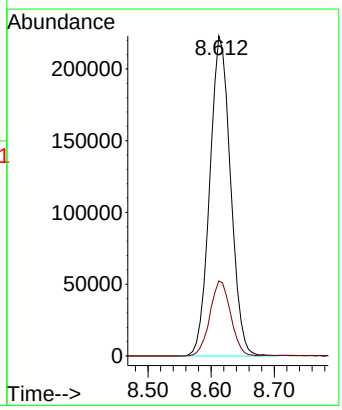


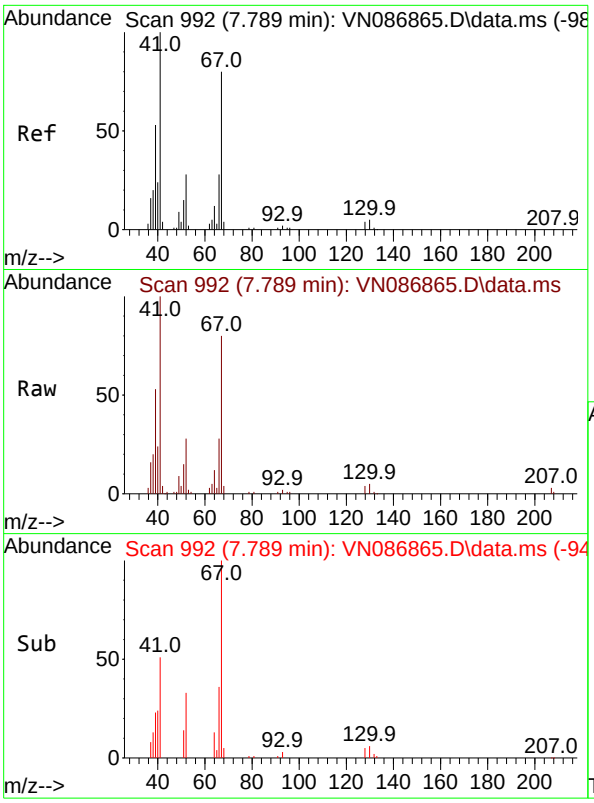




#40
Benzene
Concen: 46.590 ug/l
RT: 8.612 min Scan# 1132
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 78 Resp: 509334

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.4 | 18.7 | 28.1 |

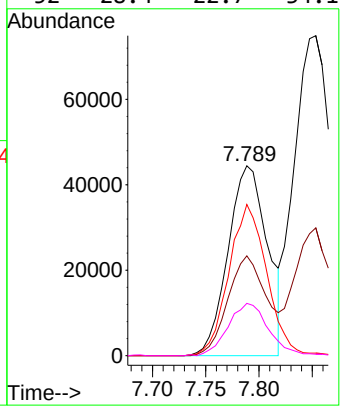





#41
Methacrylonitrile
Concen: 48.000 ug/l
RT: 7.789 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 41 Resp: 11472

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 51.5 | 41.2 | 61.8 |
| 67 | 76.8 | 61.4 | 92.2 |
| 52 | 28.4 | 22.7 | 34.1 |




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

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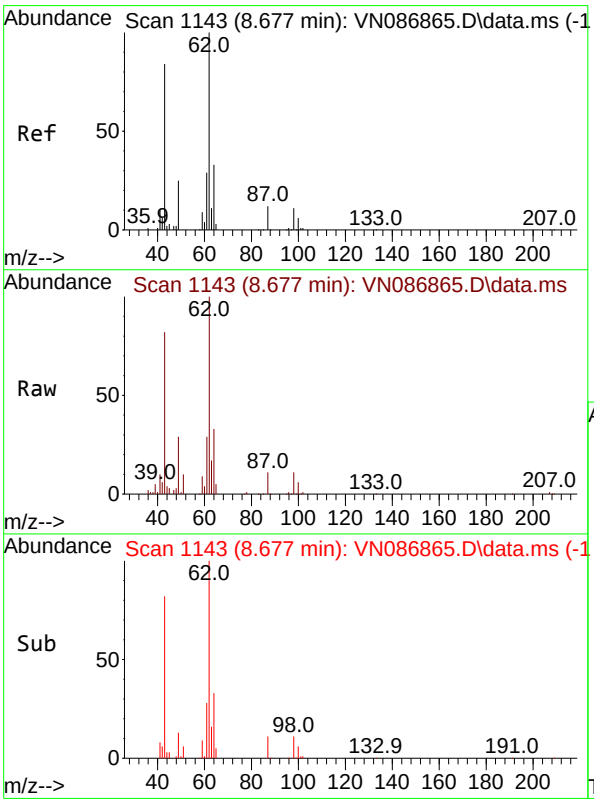
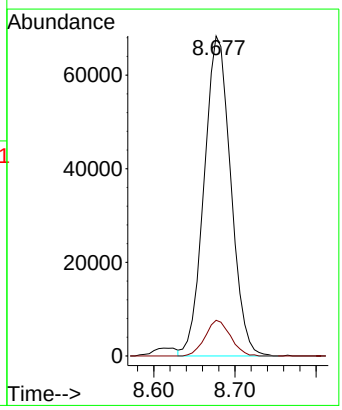
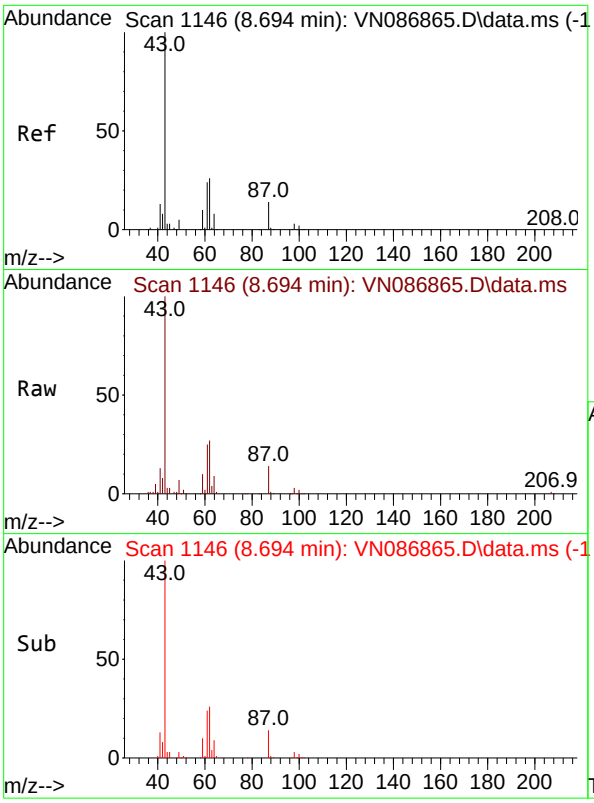



#42
1,2-Dichloroethane
Concen: 46.960 ug/l
RT: 8.677 min Scan# 1143
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 62 Resp: 155713

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 10.6 | 0.0 | 21.2 |






#43
Isopropyl Acetate
Concen: 47.248 ug/l
RT: 8.694 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 43 Resp: 32274

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 27.6 | 22.1 | 33.1 |
| 87 | 14.7 | 11.8 | 17.6 |

**Instrument :**
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VSTDICCC050

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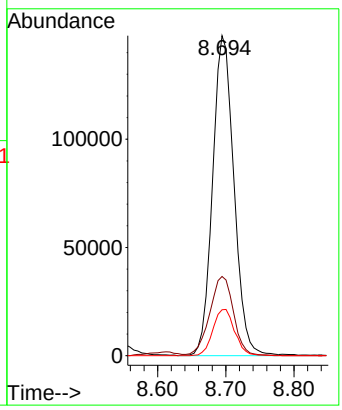
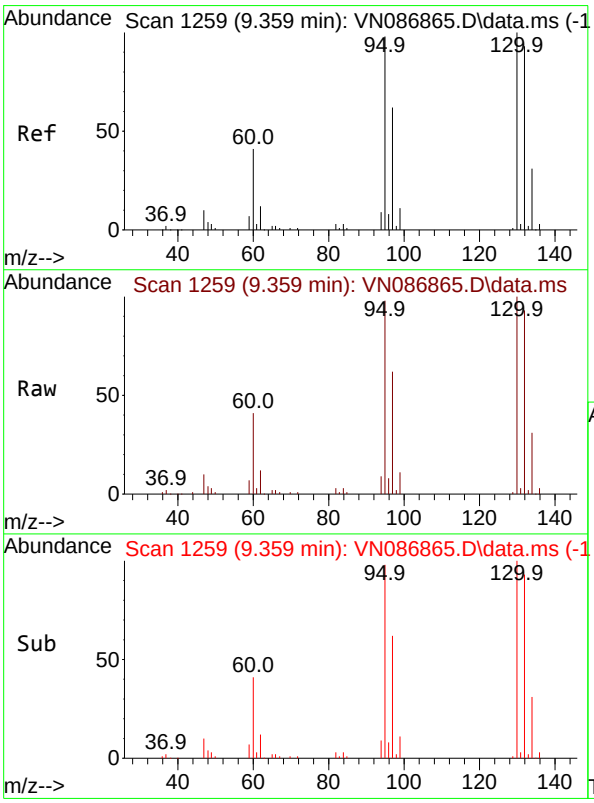
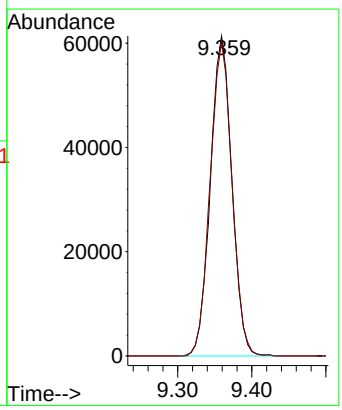


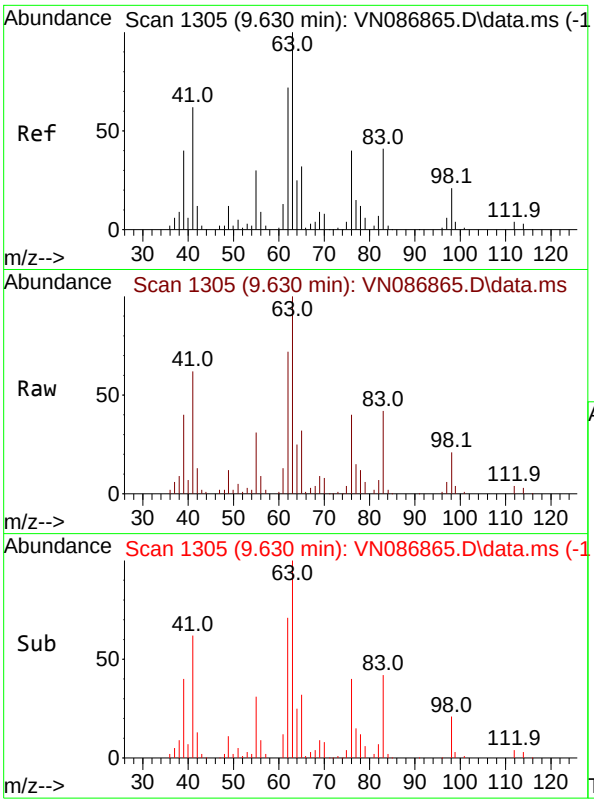




#44
Trichloroethene
Concen: 47.776 ug/l
RT: 9.359 min Scan# 1259
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:130 Resp: 123847

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 98.1 | 0.0 | 196.2 |






#45
1,2-Dichloropropane
Concen: 47.251 ug/l
RT: 9.630 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 63 Resp: 12567

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 31.9 | 25.5 | 38.3 |

**Instrument :**
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VSTDICCC050

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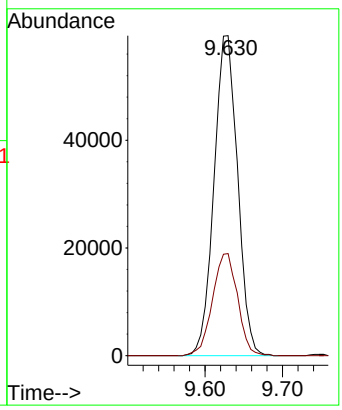
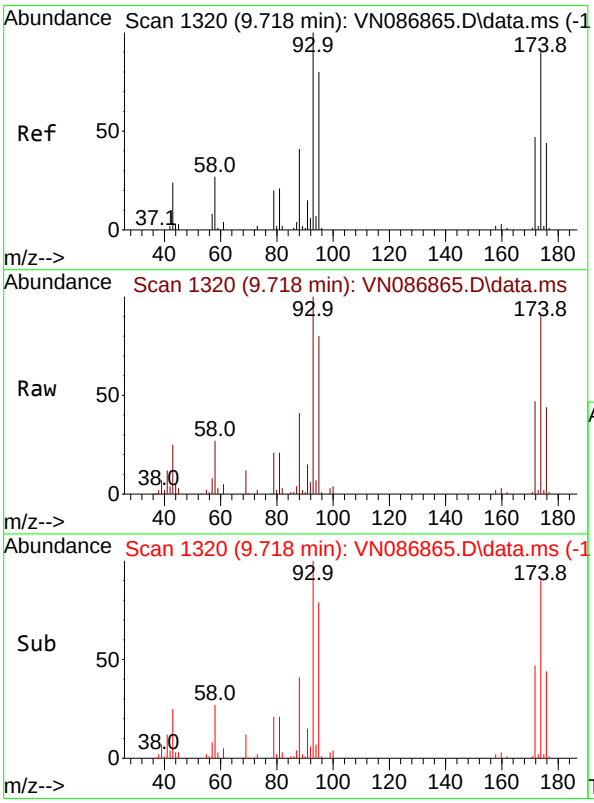
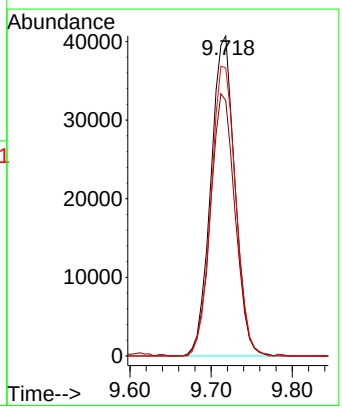


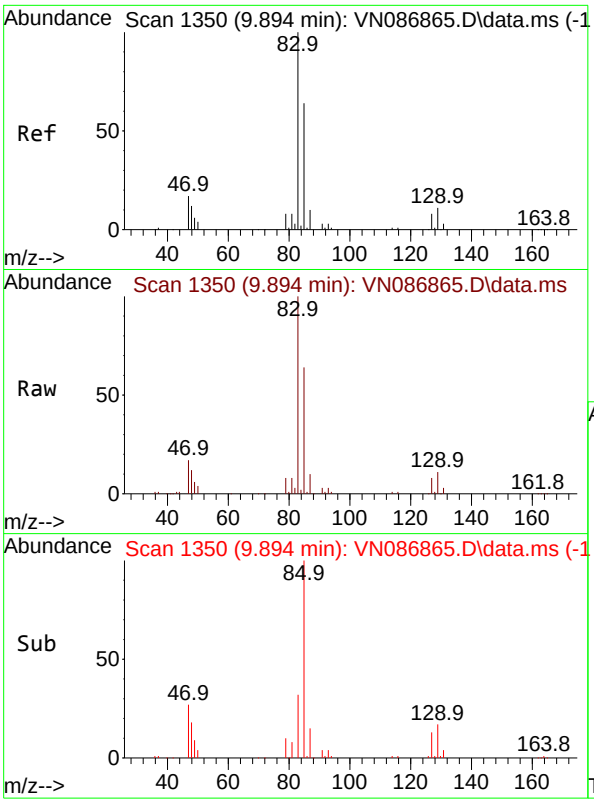




#46
Dibromomethane
Concen: 47.442 ug/l
RT: 9.718 min Scan# 1320
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 93 Resp: 83811

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 83.9 | 67.1 | 100.7 |
| 174 | 92.8 | 74.2 | 111.4 |

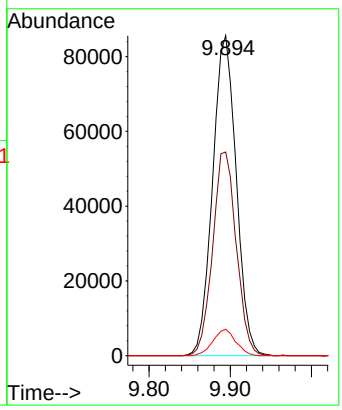





#47
Bromodichloromethane
Concen: 47.651 ug/l
RT: 9.894 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 83 Resp: 17320

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 63.6 | 50.9 | 76.3 |
| 127 | 8.3 | 6.6 | 10.0 |




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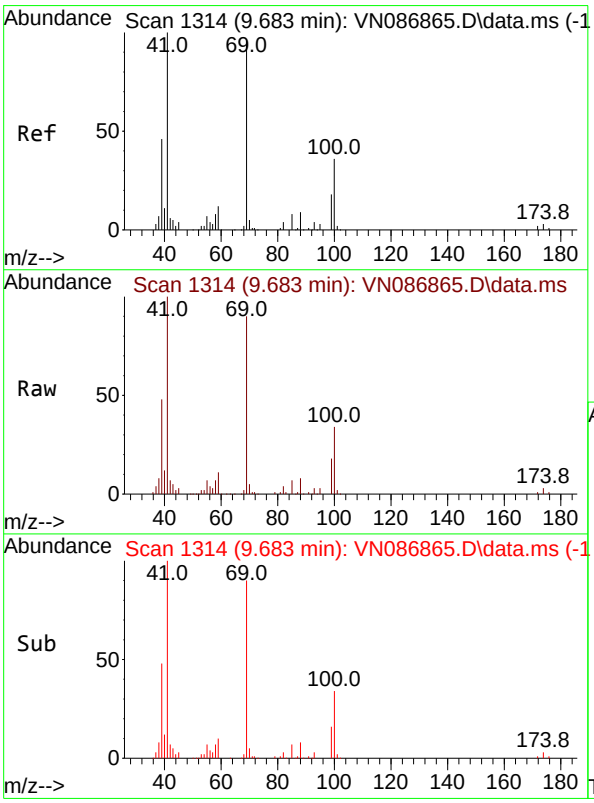
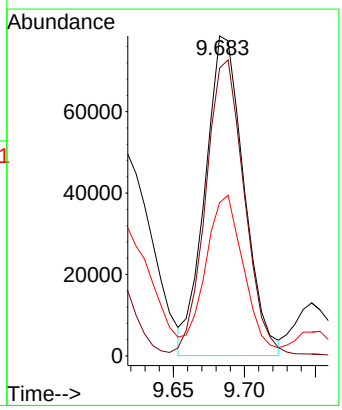
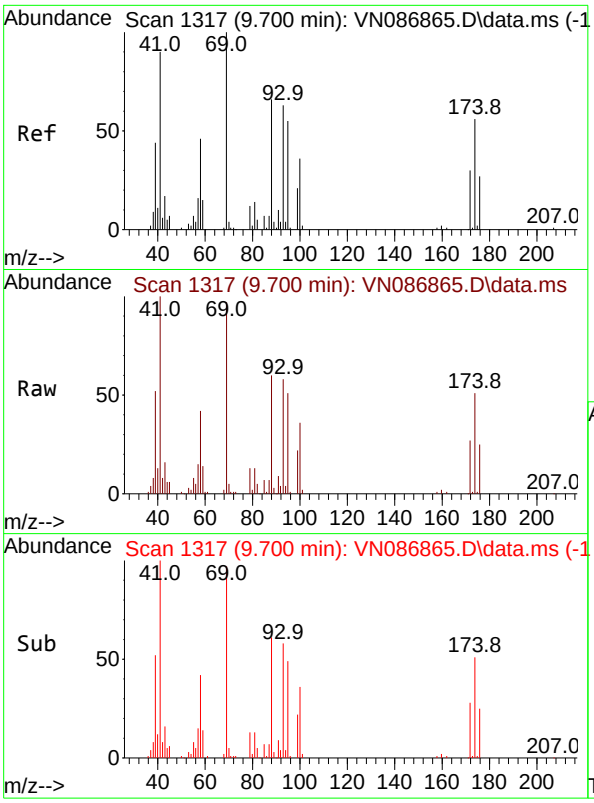



#48
Methyl methacrylate
Concen: 47.399 ug/l
RT: 9.683 min Scan# 1314
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 41 Resp: 149019

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 93.3 | 74.6 | 112.0 |
| 39 | 50.3 | 40.2 | 60.4 |

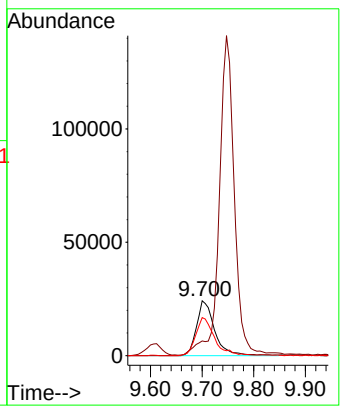





#49
1,4-Dioxane
Concen: 1032.607 ug/l
RT: 9.700 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 88 Resp: 5906

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 0.0 | 0.0 | 0.0 |
| 58 | 72.1 | 57.7 | 86.5 |




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

**Manual Integrations**
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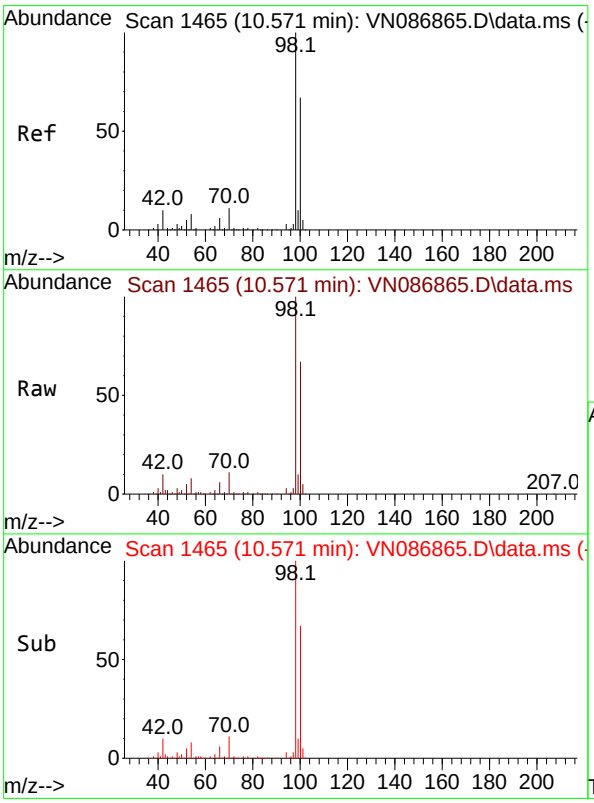
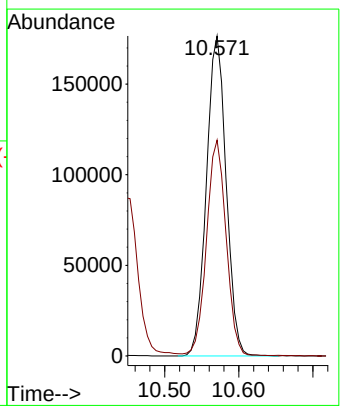
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

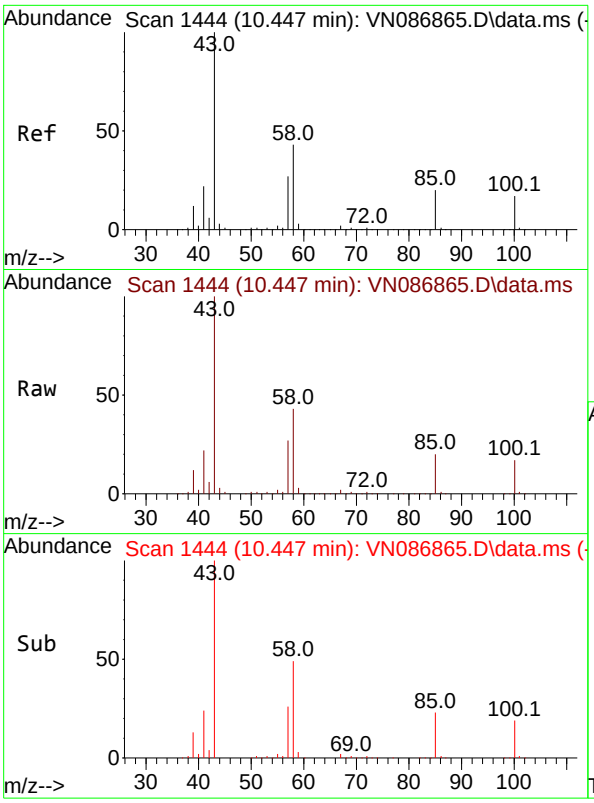



#50
Toluene-d8
Concen: 36.716 ug/l
RT: 10.571 min Scan# 1465
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 98 Resp: 326105

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 66.7 | 53.4 | 80.0 |






#51
4-Methyl-2-Pentanone
Concen: 247.484 ug/l
RT: 10.447 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

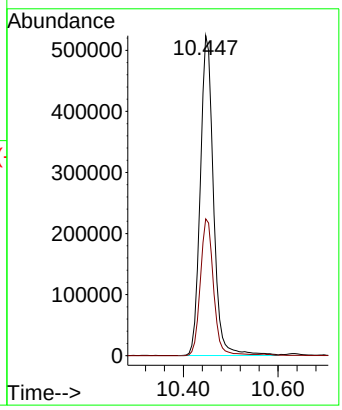
Tgt Ion: 43 Resp: 101768

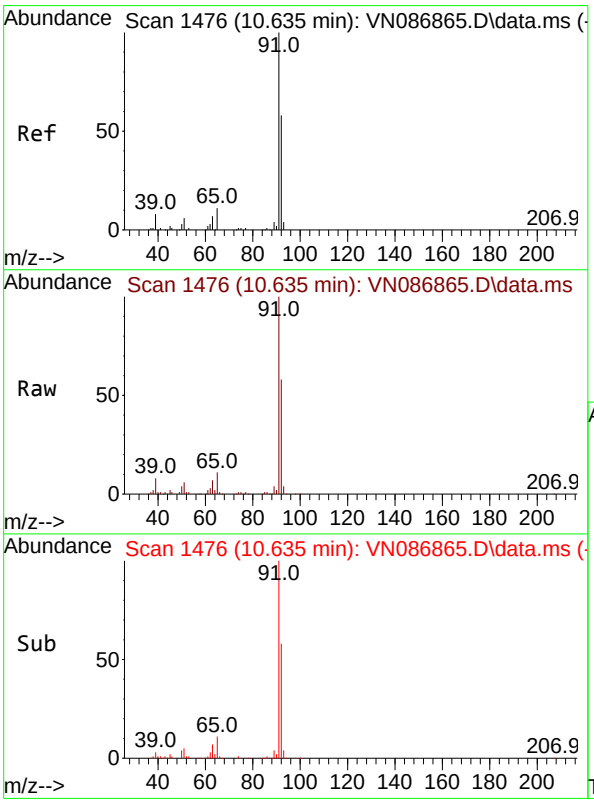
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 42.8 | 34.2 | 51.4 |

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

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

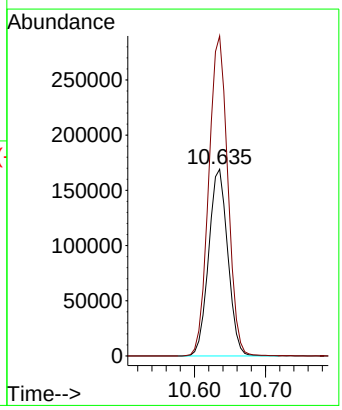


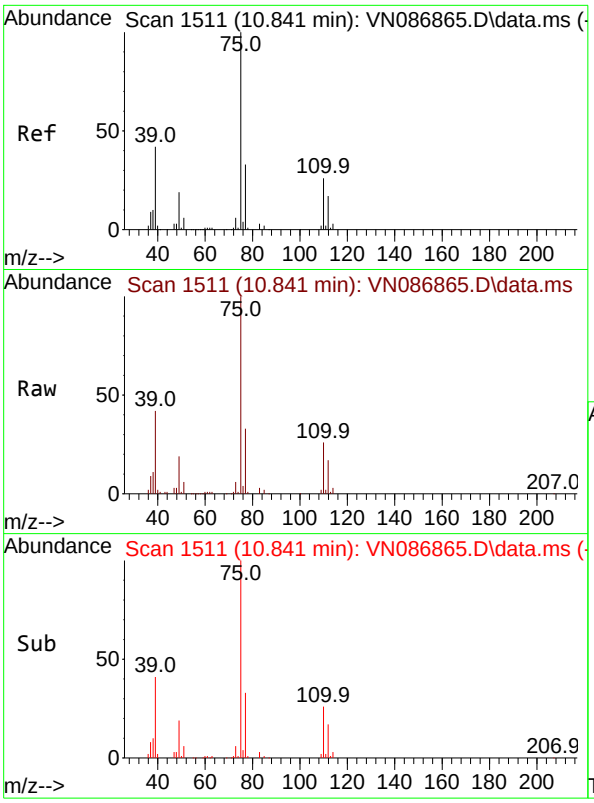




#52
Toluene
Concen: 47.331 ug/l
RT: 10.635 min Scan# 1476
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 92 Resp: 316219

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 170.6 | 136.5 | 204.7 |






#53
t-1,3-Dichloropropene
Concen: 48.587 ug/l
RT: 10.841 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 75 Resp: 19747

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 33.0 | 26.4 | 39.6 |

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

**Manual Integrations**
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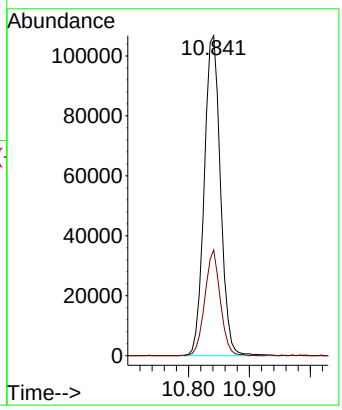
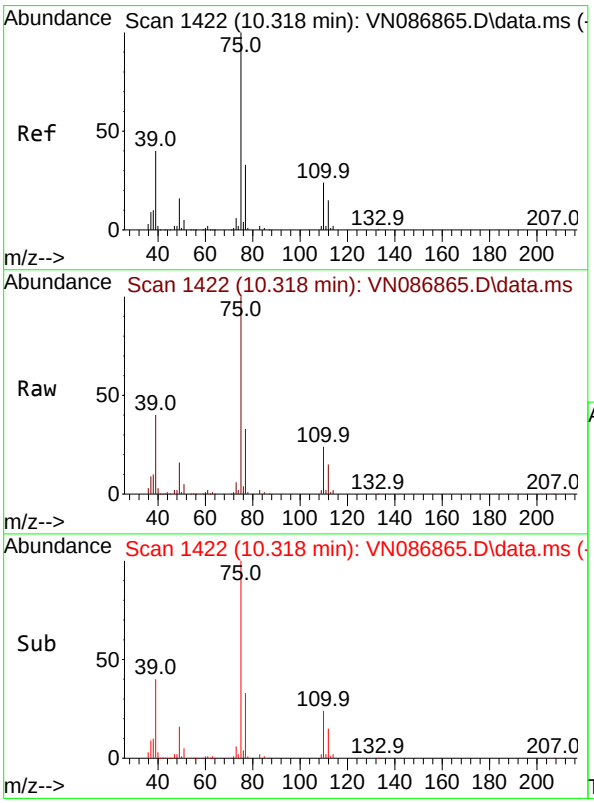
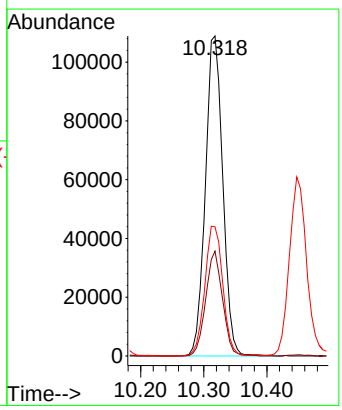


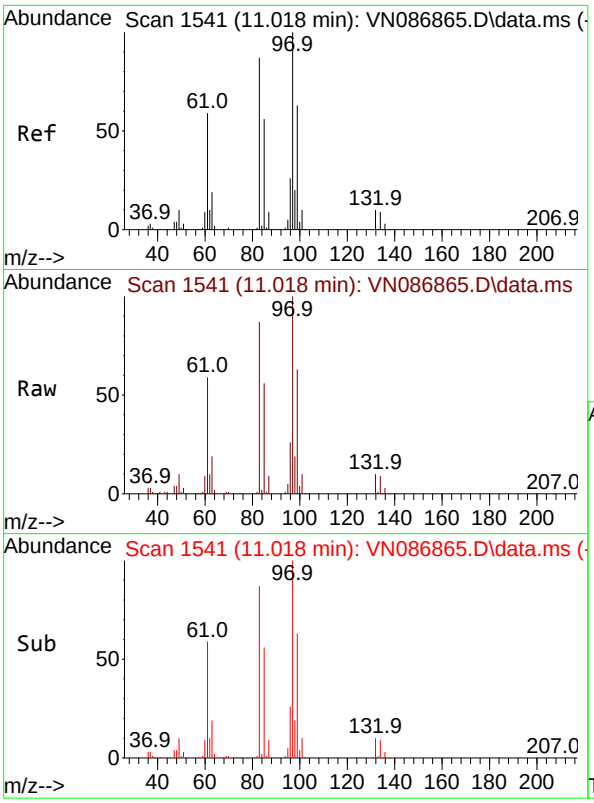




#54
cis-1,3-Dichloropropene
Concen: 47.950 ug/l
RT: 10.318 min Scan# 1422
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 75 Resp: 208523

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.8 | 26.2 | 39.4 |
| 39 | 40.4 | 32.3 | 48.5 |

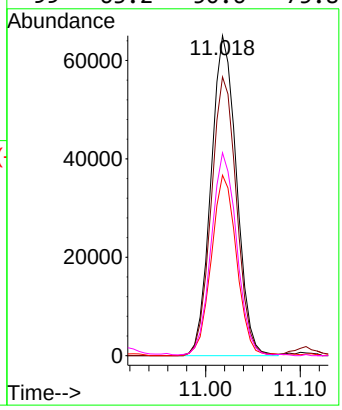





#55
1,1,2-Trichloroethane
Concen: 47.445 ug/l
RT: 11.018 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 97 Resp: 12196

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 87.1 | 69.7 | 104.5 |
| 85 | 56.4 | 45.1 | 67.7 |
| 99 | 63.2 | 50.6 | 75.8 |




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

**Manual Integrations**
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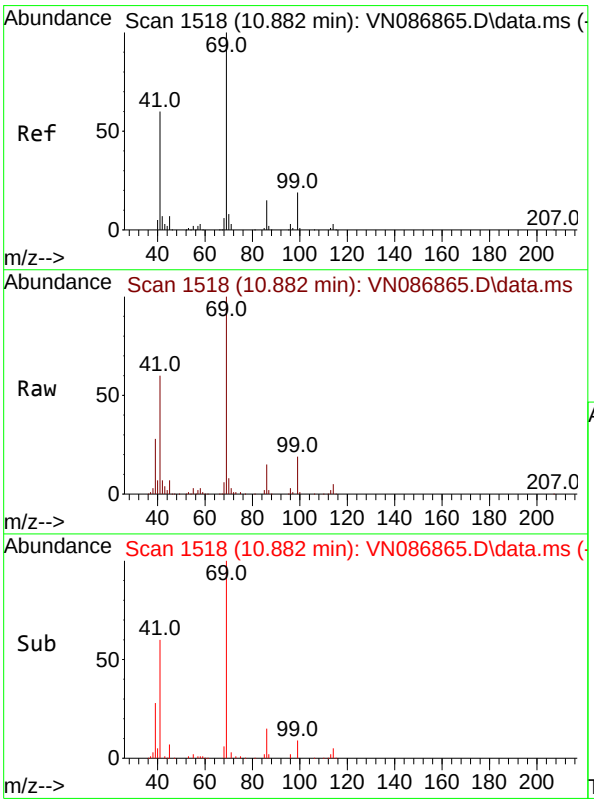
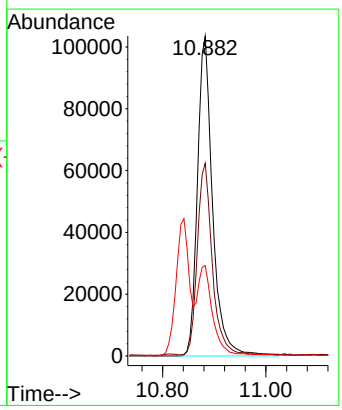
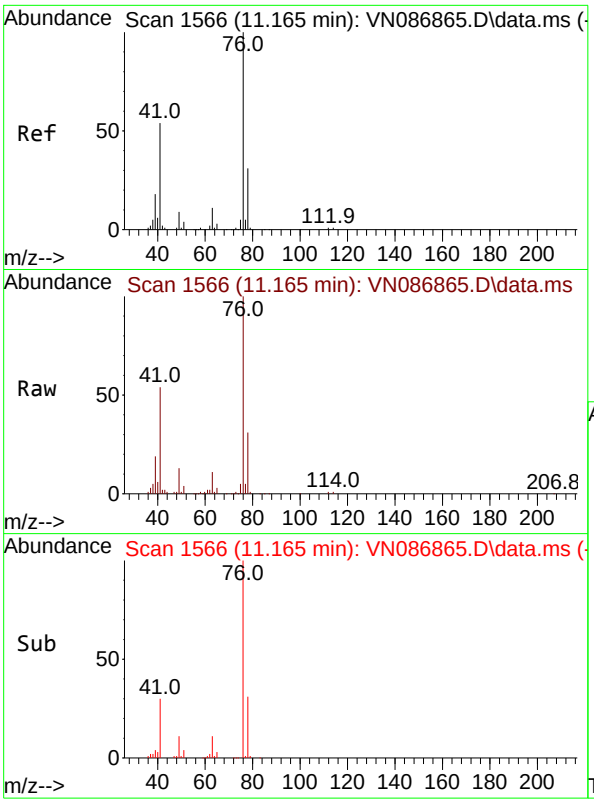



#56
Ethyl methacrylate
Concen: 51.401 ug/l
RT: 10.882 min Scan# 1518
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 69 Resp: 210467

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 59.0 | 47.2 | 70.8 |
| 39 | 28.8 | 23.0 | 34.6 |






#57
1,3-Dichloropropane
Concen: 47.593 ug/l
RT: 11.165 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 76 Resp: 21224

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 31.6 | 25.3 | 37.9 |

**Instrument :**
MSVOA_N
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VSTDICCC050

**Manual Integrations**
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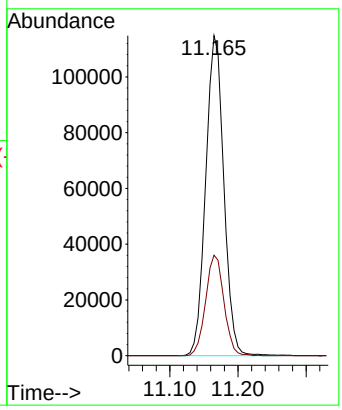
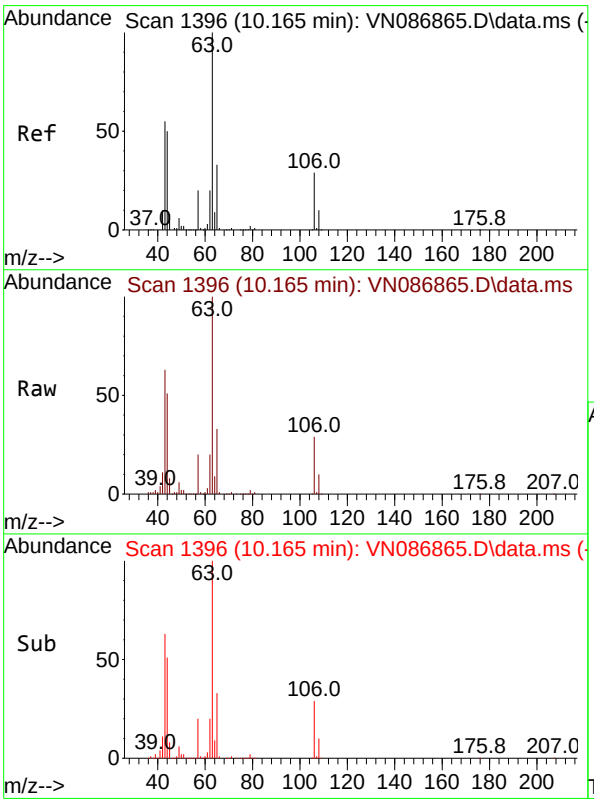
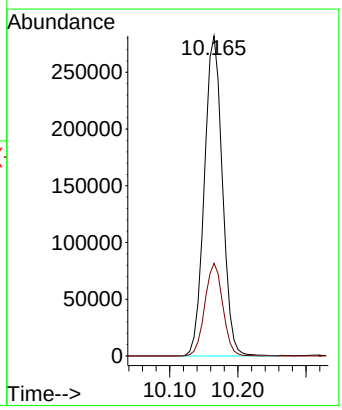


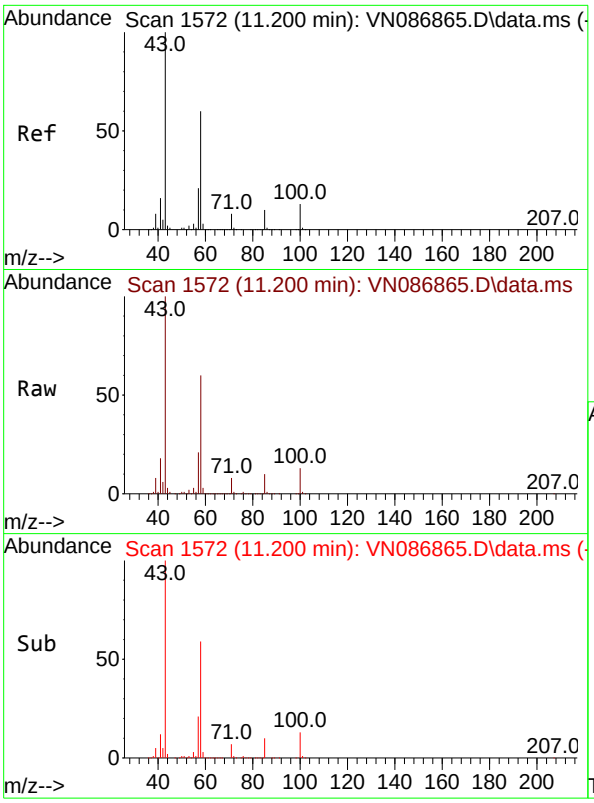




#58
2-Chloroethyl Vinyl ether
Concen: 212.570 ug/l
RT: 10.165 min Scan# 1396
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 63 Resp: 519139

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 28.8 | 23.0 | 34.6 |






#59
2-Hexanone
Concen: 262.977 ug/l
RT: 11.200 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 43 Resp: 69656

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 60.9 | 30.4 | 91.3 |

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

**Manual Integrations**
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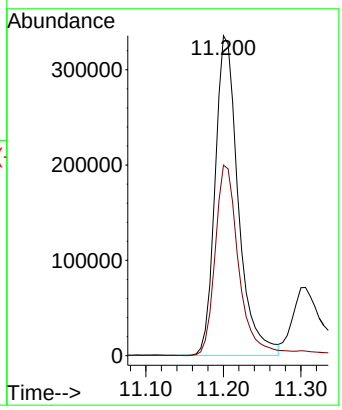
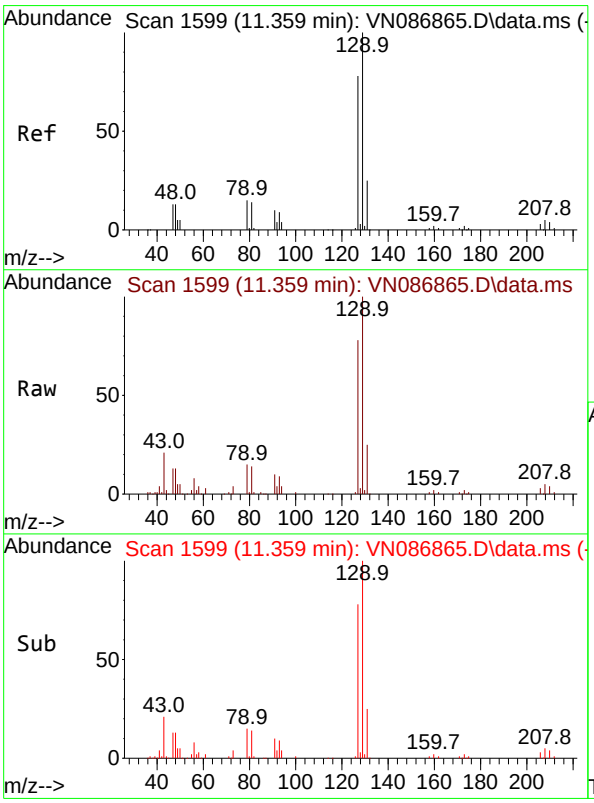
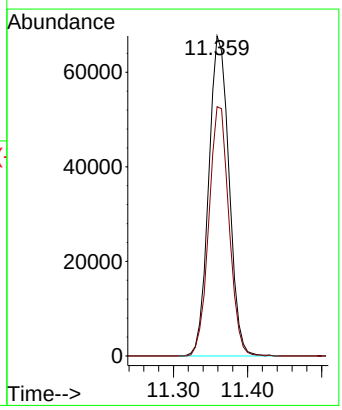


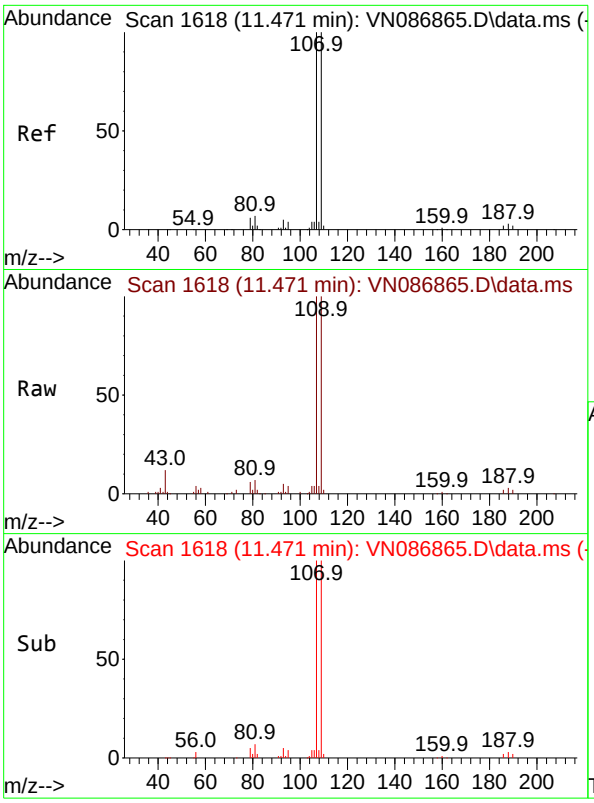




#60
Dibromochloromethane
Concen: 48.056 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:129 Resp: 128715

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 77.2 | 38.6 | 115.8 |






#61
1,2-Dibromoethane
Concen: 47.258 ug/l
RT: 11.471 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:107 Resp: 12452

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 95.4 | 76.3 | 114.5 |

**Instrument :**
MSVOA_N
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VSTDICCC050

**Manual Integrations**
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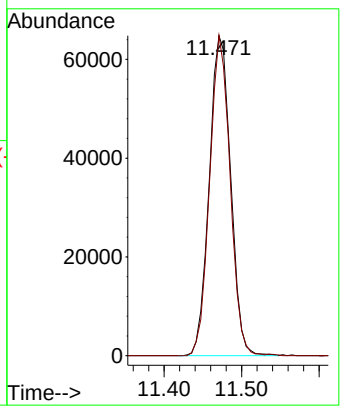
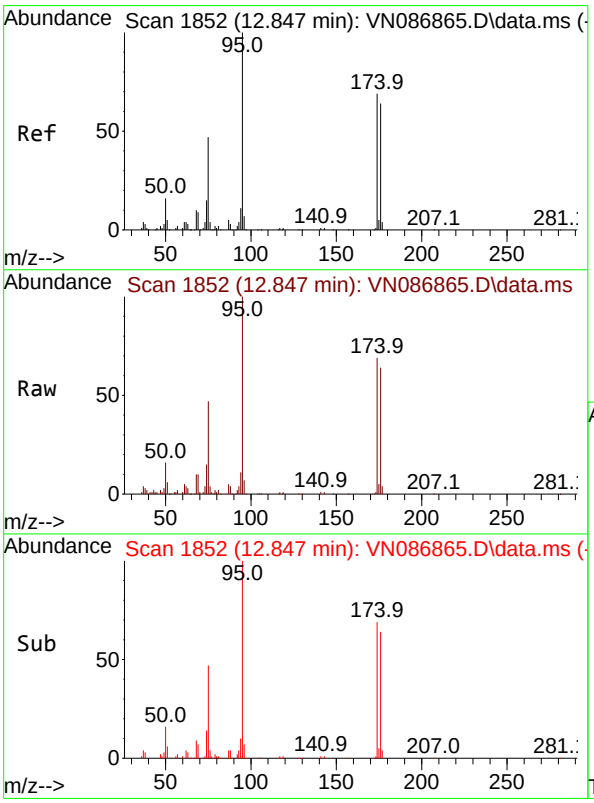
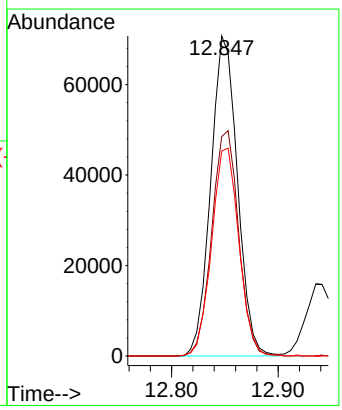


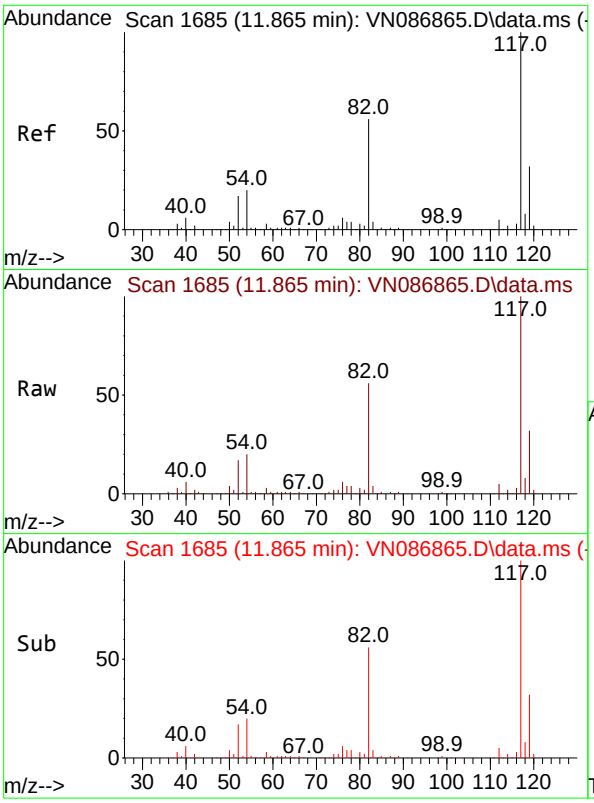




#62
4-Bromofluorobenzene
Concen: 37.264 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 95 Resp: 122965

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 70.9 | 0.0 | 141.8 |
| 176 | 66.3 | 0.0 | 132.6 |

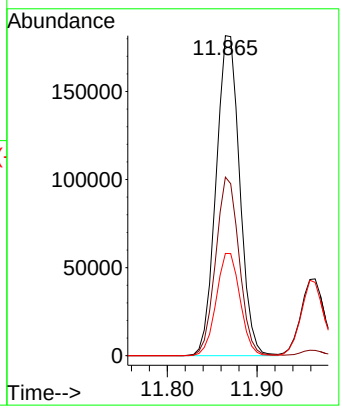





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:117 Resp: 33276

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 55.8 | 44.6 | 67.0 |
| 119 | 31.9 | 25.5 | 38.3 |




**Instrument :**
MSVOA_N
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VSTDICCC050

**Manual Integrations**
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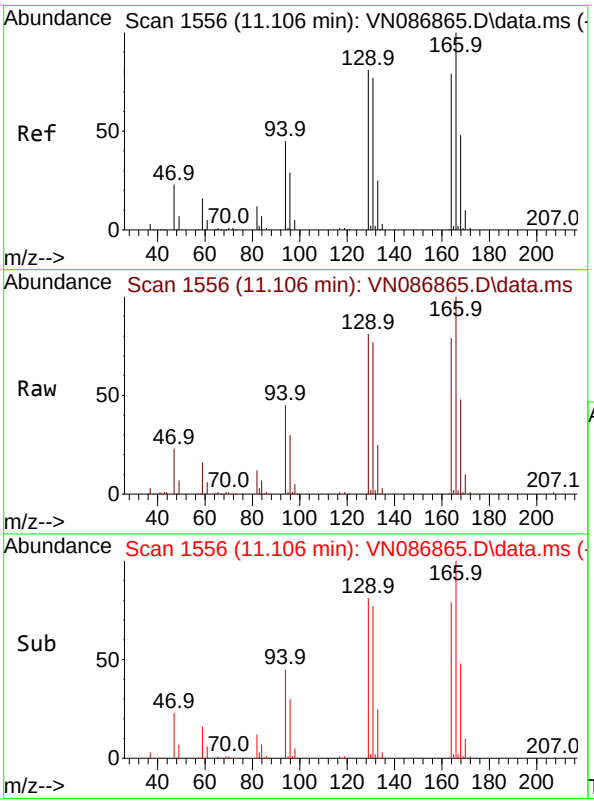
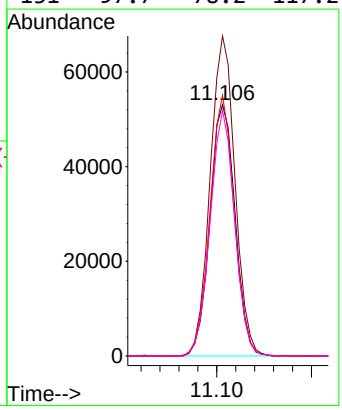
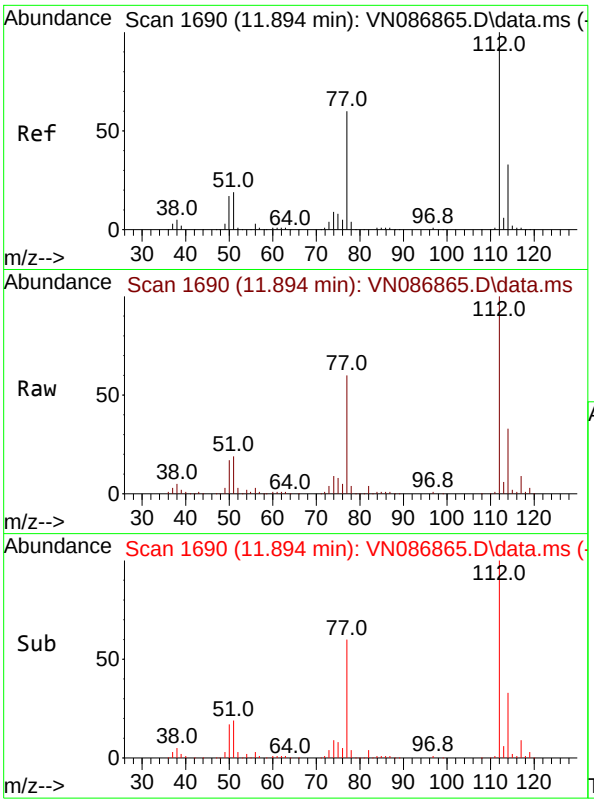



#64
Tetrachloroethene
Concen: 46.382 ug/l
RT: 11.106 min Scan# 1556
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:164 Resp: 97679

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 127.3 | 101.8 | 152.8 |
| 129 | 103.7 | 83.0 | 124.4 |
| 131 | 97.7 | 78.2 | 117.2 |






#65
Chlorobenzene
Concen: 46.386 ug/l
RT: 11.894 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:112 Resp: 34043

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 32.7 | 26.2 | 39.2 |

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

**Manual Integrations**
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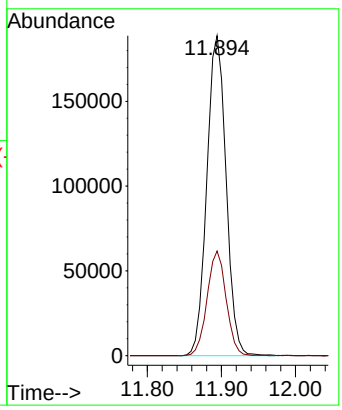
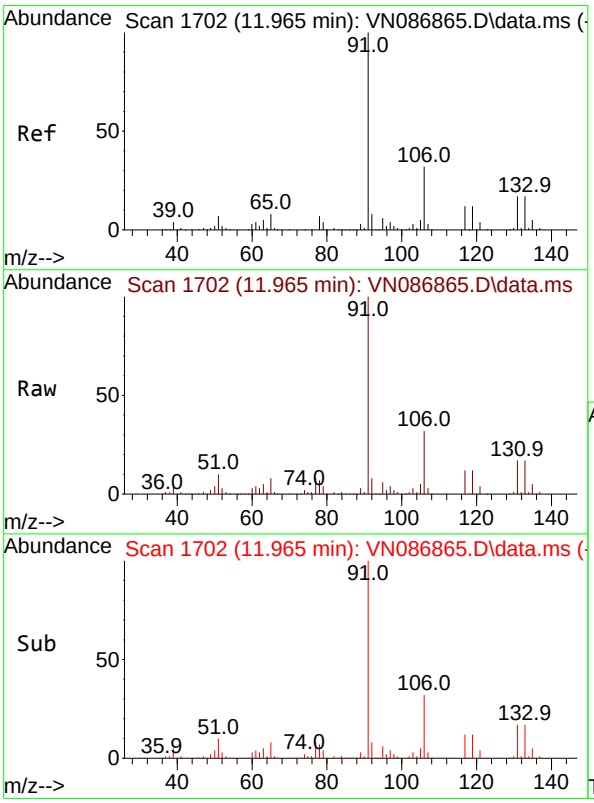
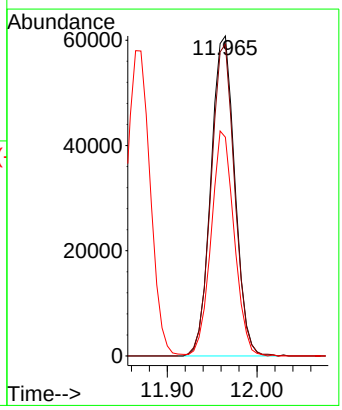


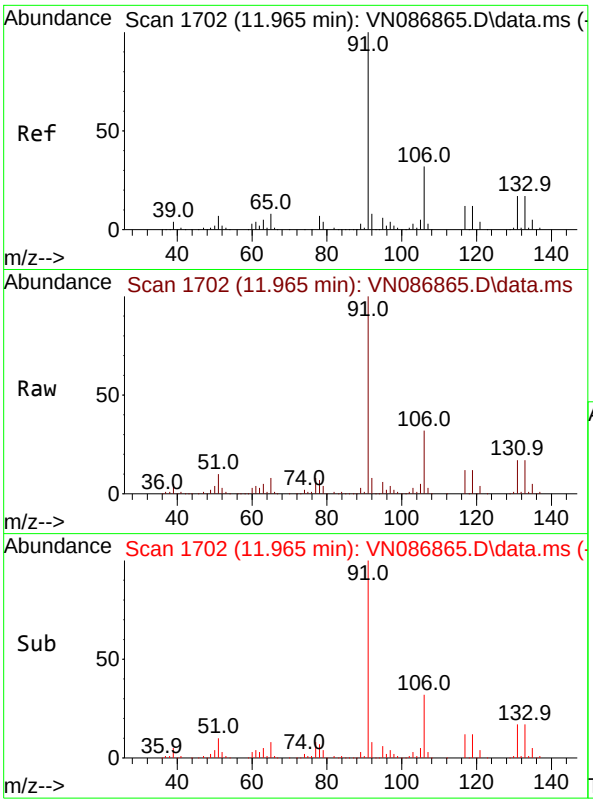




#66
1,1,1,2-Tetrachloroethane
Concen: 47.615 ug/l
RT: 11.965 min Scan# 1702
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:131 Resp: 112333

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 96.5 | 48.3 | 144.8 |
| 119 | 67.9 | 34.0 | 101.8 |






#67
Ethyl Benzene
Concen: 47.271 ug/l
RT: 11.965 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

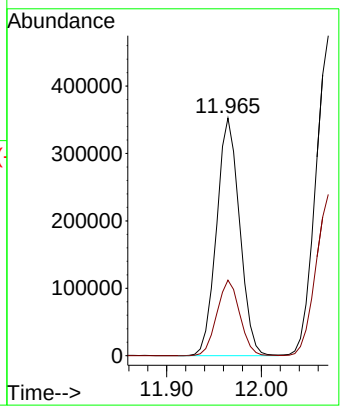
Tgt Ion: 91 Resp: 59759

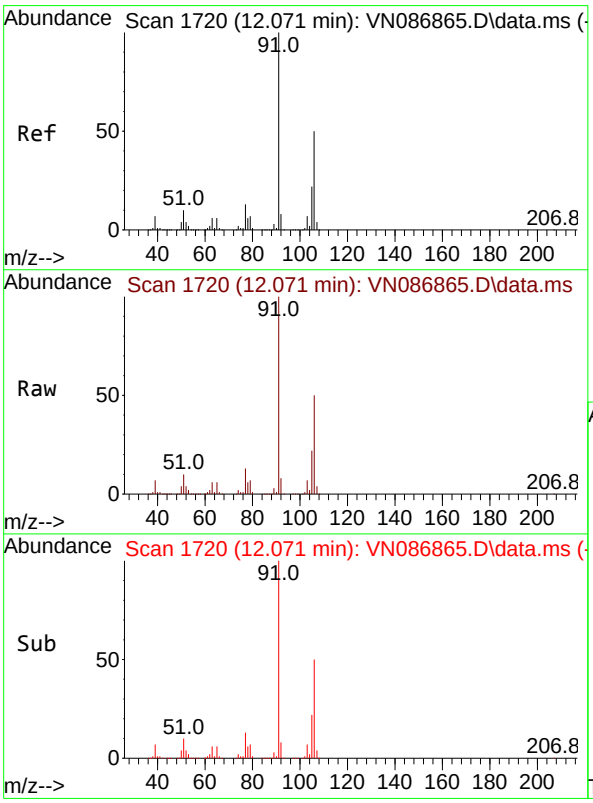
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 31.8 | 25.4 | 38.2 |

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

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

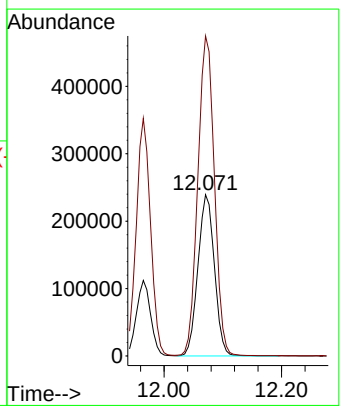


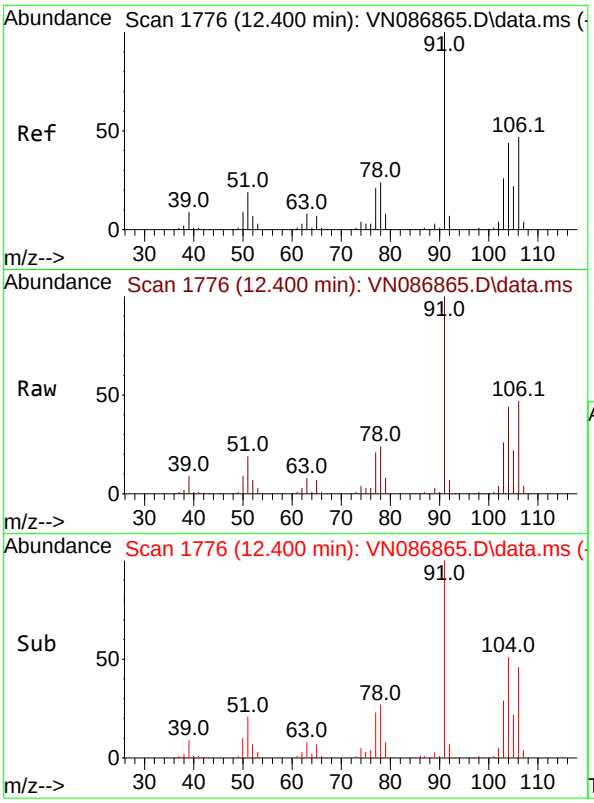




#68
m/p-Xylenes
Concen: 96.424 ug/l
RT: 12.071 min Scan# 1720
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:106 Resp: 466620

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 199.2 | 159.4 | 239.0 |






#69
o-Xylene
Concen: 48.395 ug/l
RT: 12.400 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

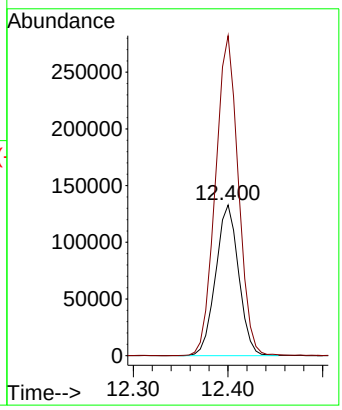
Tgt Ion:106 Resp: 22429

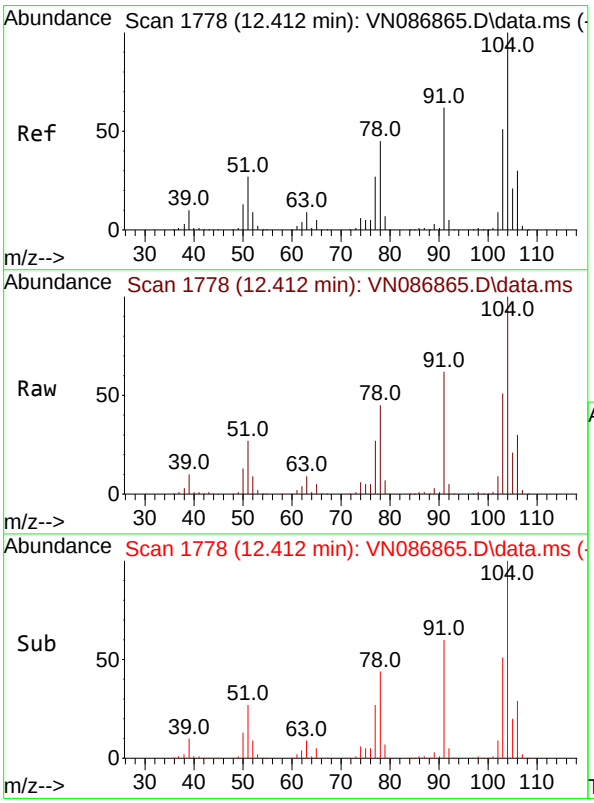
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 212.1 | 106.1 | 318.1 |

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

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

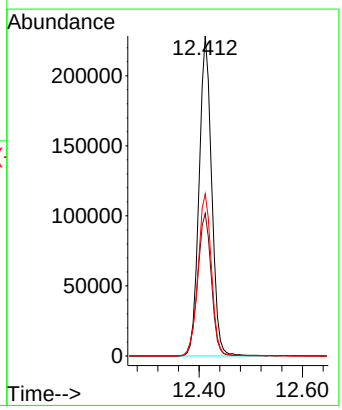


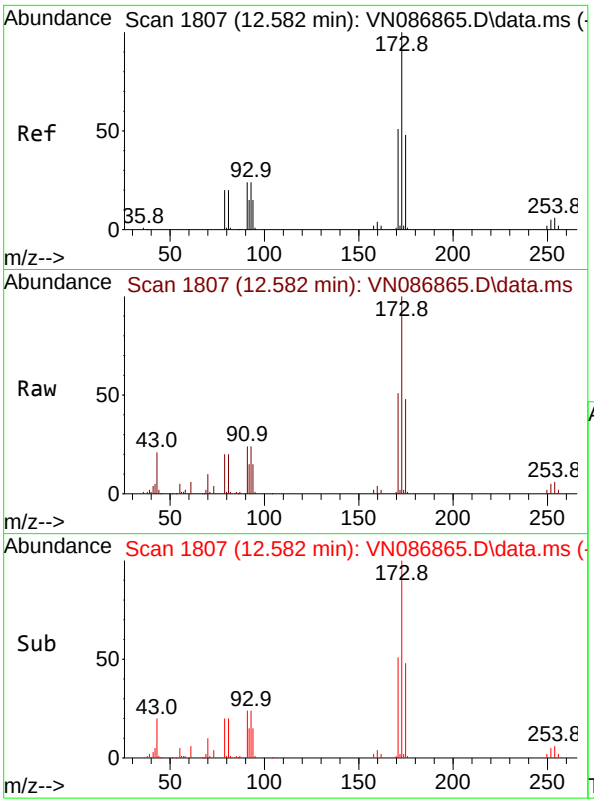




#70
Styrene
Concen: 48.745 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:104 Resp: 386596

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 48.1 | 38.5 | 57.7 |
| 103 | 53.9 | 43.1 | 64.7 |






#71
Bromoform
Concen: 50.415 ug/l
RT: 12.582 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:173 Resp: 8812

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 48.3 | 24.1 | 72.4 |
| 254 | 0.0 | 0.0 | 0.0 |

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

**Manual Integrations**
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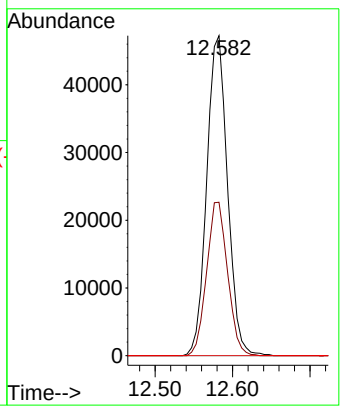
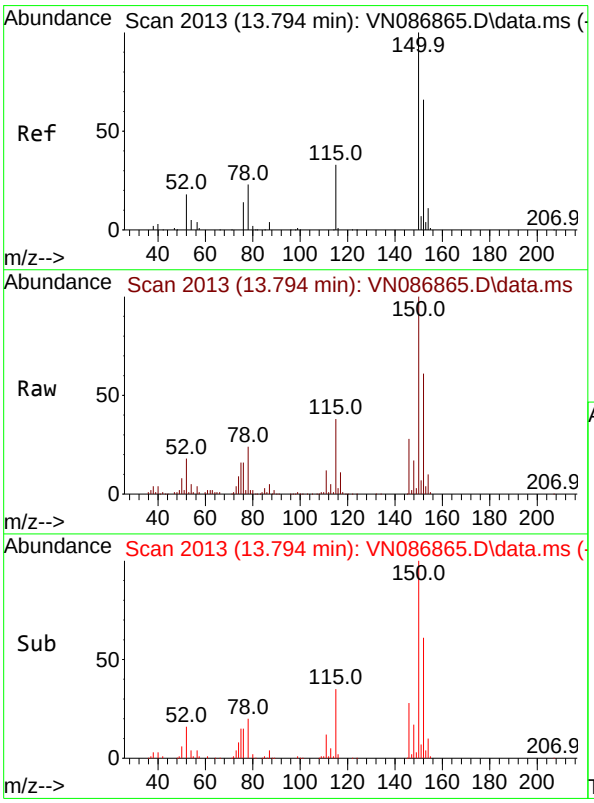
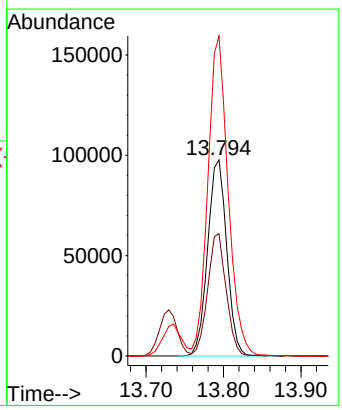


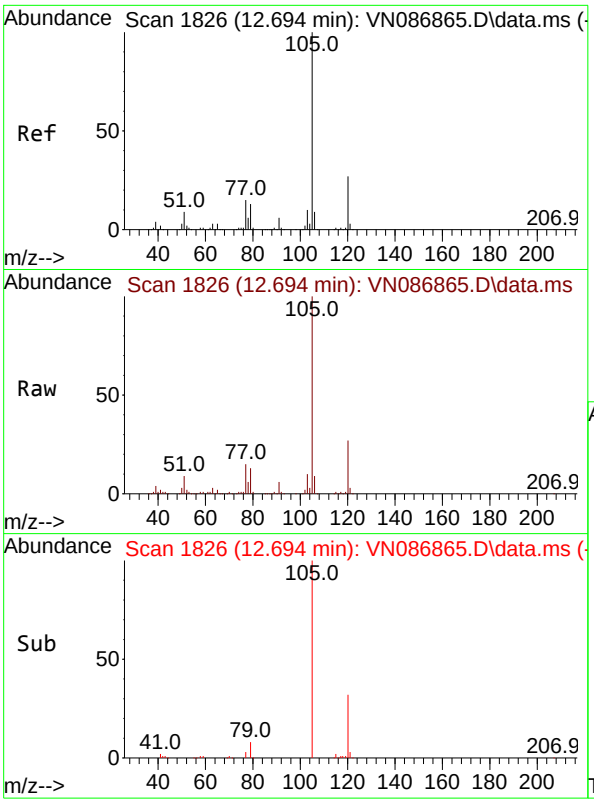




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:152 Resp: 167532

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 60.3 | 30.1 | 90.5 |
| 150 | 172.5 | 0.0 | 345.0 |

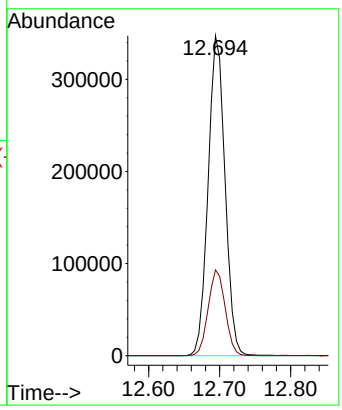





#73
Isopropylbenzene
Concen: 47.023 ug/l
RT: 12.694 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:105 Resp: 57390

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.9 | 13.5 | 40.4 |




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

**Manual Integrations**
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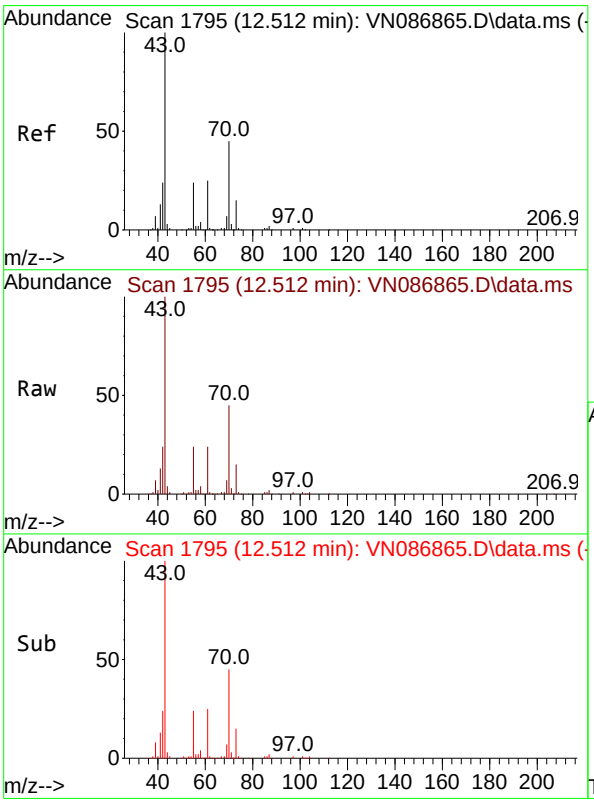
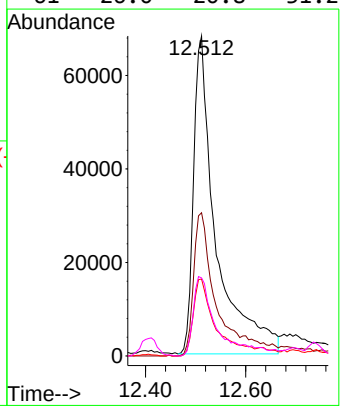
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

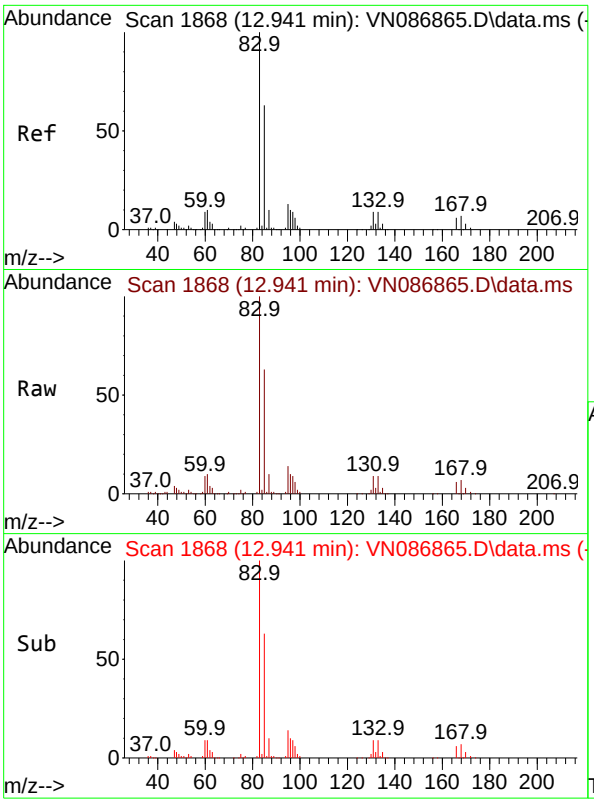



#74
N-amyl acetate
Concen: 52.353 ug/l
RT: 12.512 min Scan# 1795
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 43 Resp: 212064

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 47.0 | 37.6 | 56.4 |
| 55 | 23.8 | 19.0 | 28.6 |
| 61 | 26.0 | 20.8 | 31.2 |

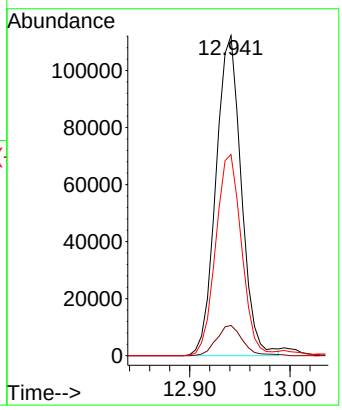





#75
1,1,2,2-Tetrachloroethane
Concen: 47.732 ug/l
RT: 12.941 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 83 Resp: 19736

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 9.8 | 4.9 | 14.7 |
| 85 | 64.0 | 32.0 | 96.0 |




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

**Manual Integrations**
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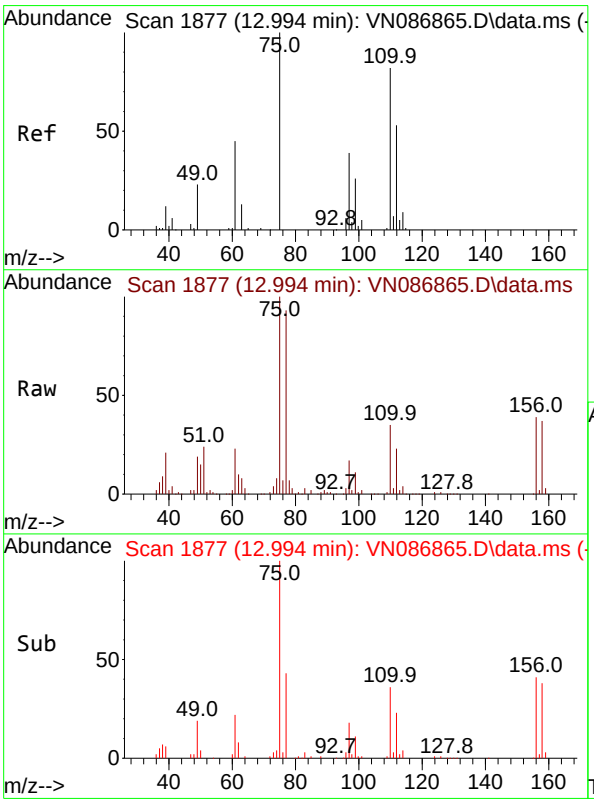
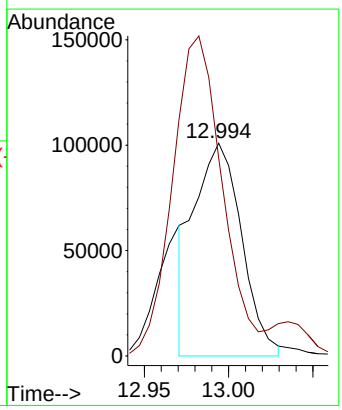
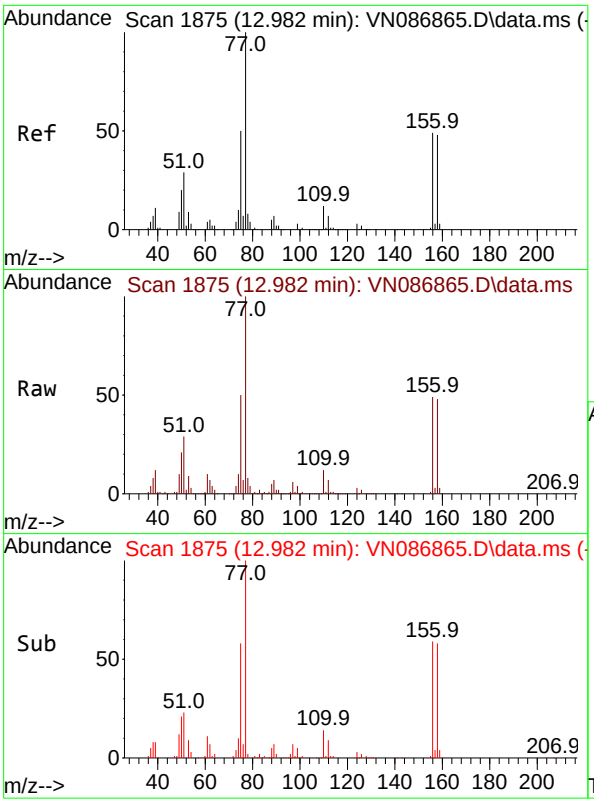



#76
1,2,3-Trichloropropane
Concen: 49.183 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 75 Resp: 196473

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 158.6 | 79.3 | 237.9 |






#77
Bromobenzene
Concen: 47.296 ug/l
RT: 12.982 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:156 Resp: 13238

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 235.4 | 117.7 | 353.1 |
| 158 | 96.3 | 48.1 | 144.4 |

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

**Manual Integrations**
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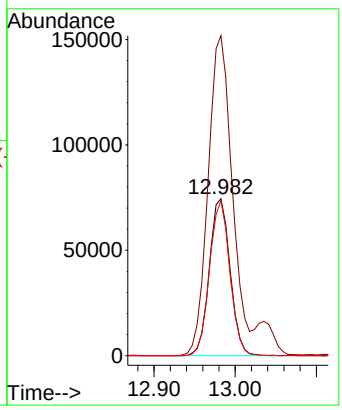
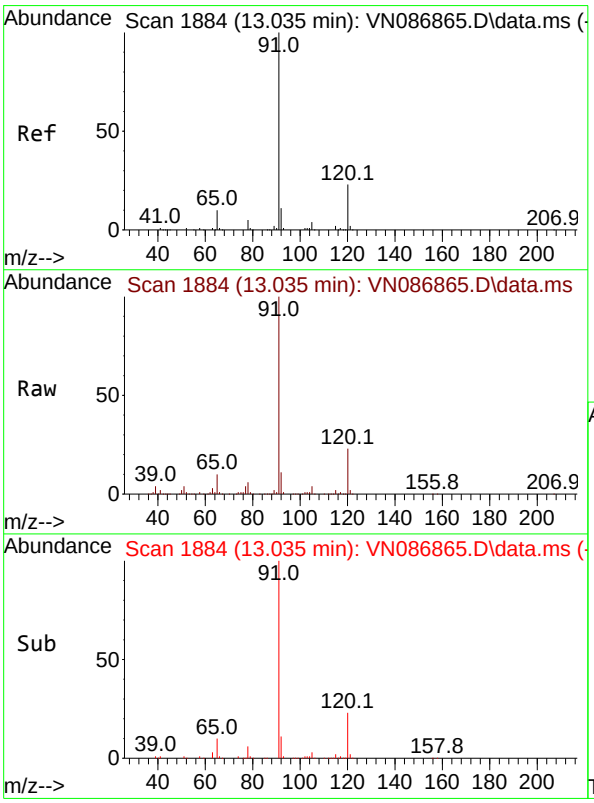
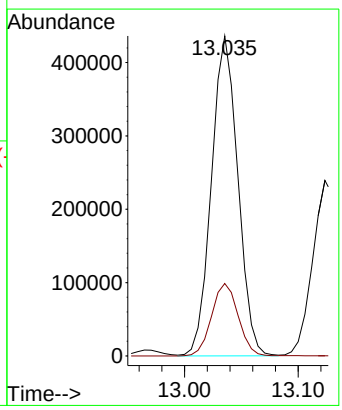


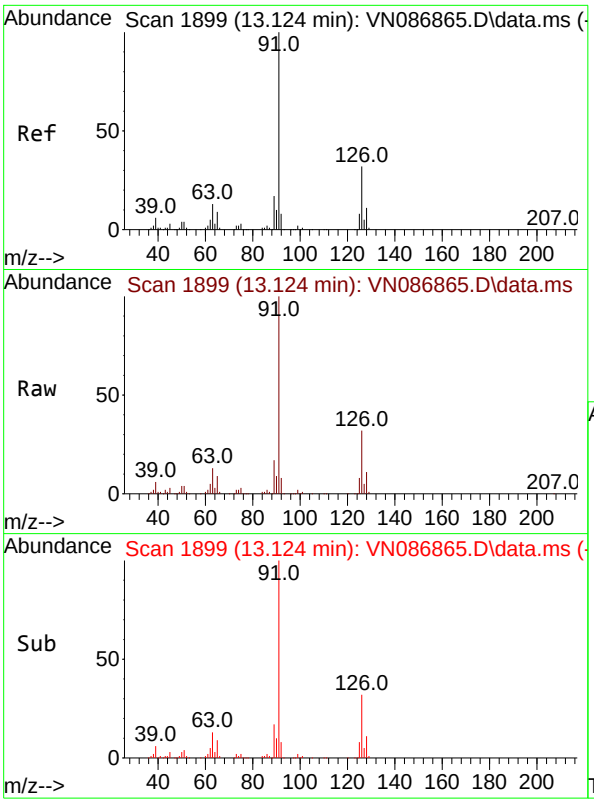




#78
n-propylbenzene
Concen: 47.567 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 91 Resp: 705524

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.8 | 11.4 | 34.2 |

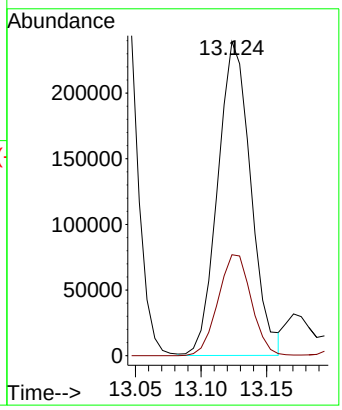





#79
2-Chlorotoluene
Concen: 47.216 ug/l
RT: 13.124 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 91 Resp: 41998

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 32.3 | 16.2 | 48.5 |




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

**Manual Integrations**
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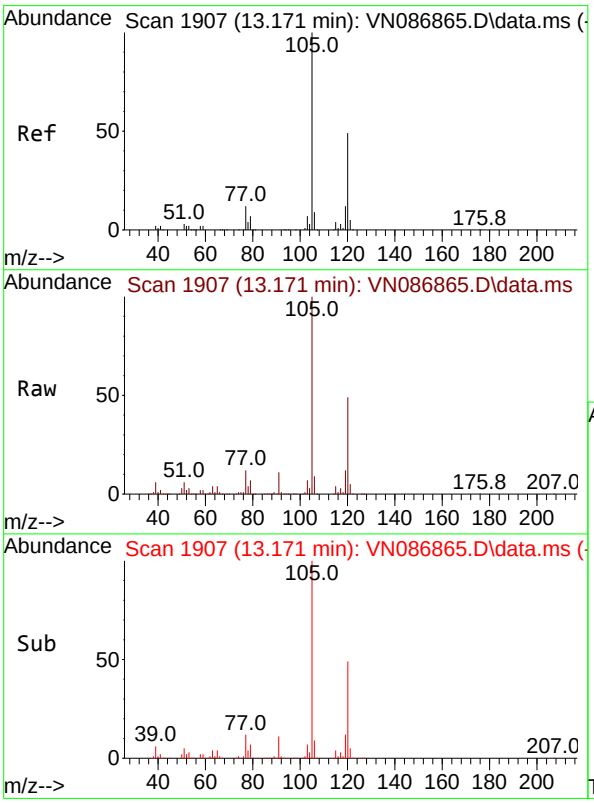
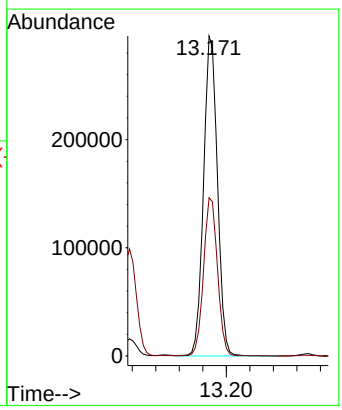
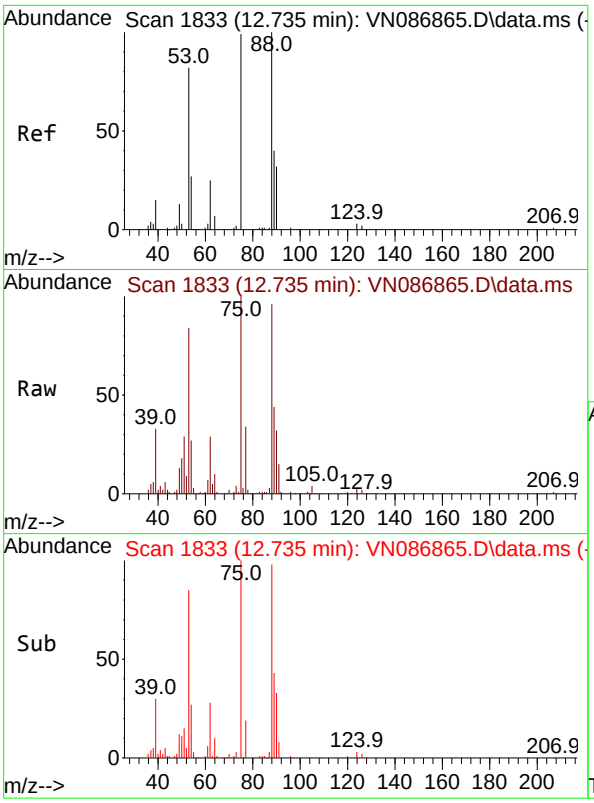



#80
1,3,5-Trimethylbenzene
Concen: 48.181 ug/l
RT: 13.171 min Scan# 1907
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:105 Resp: 485499

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 49.7 | 24.9 | 74.6 |






#81
trans-1,4-Dichloro-2-butene
Concen: 46.089 ug/l
RT: 12.735 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 75 Resp: 7973

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 83.2 | 66.6 | 99.8 |
| 89 | 45.9 | 36.7 | 55.1 |

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

**Manual Integrations**
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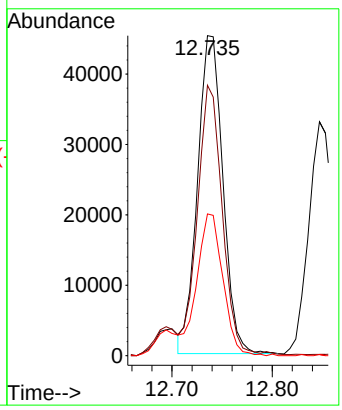
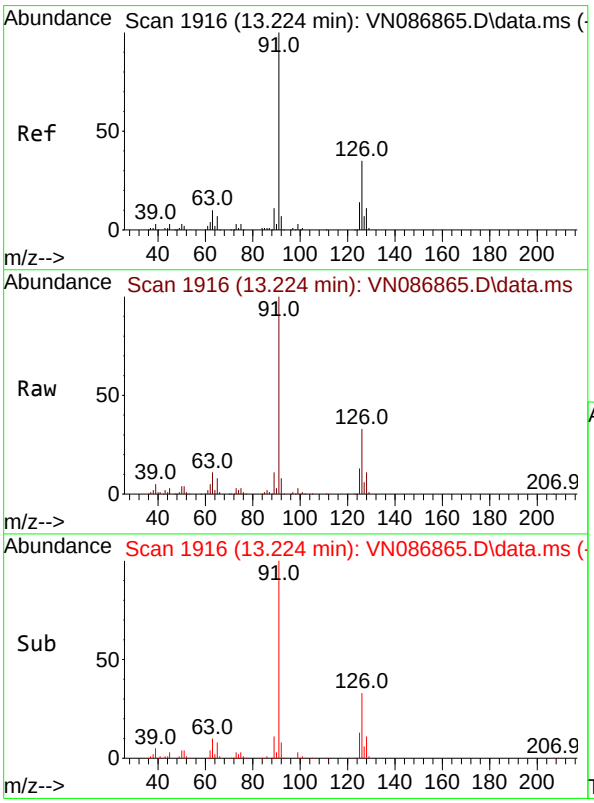
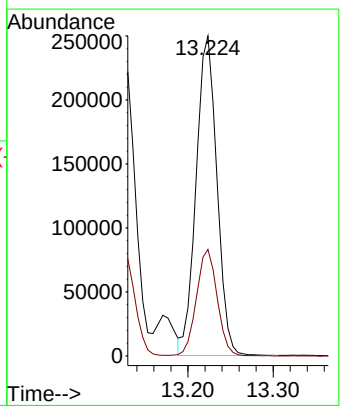


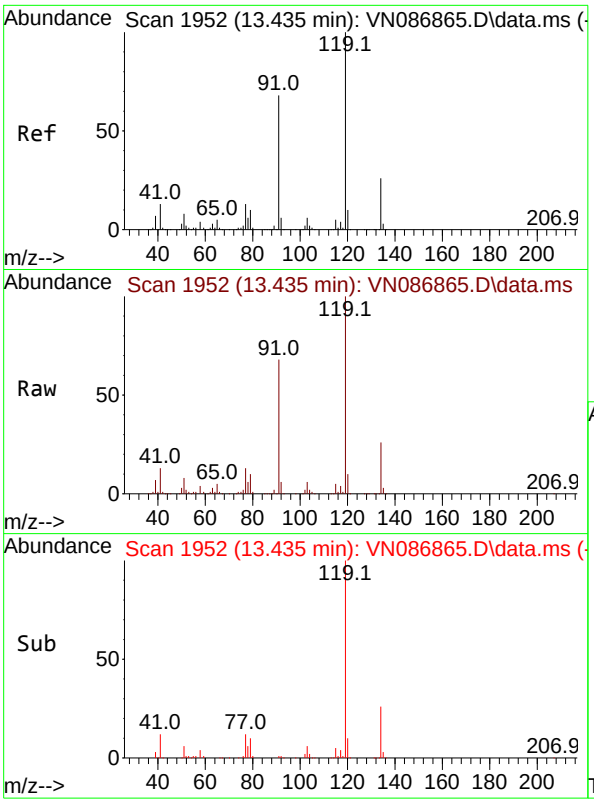




#82
4-Chlorotoluene
Concen: 47.117 ug/l
RT: 13.224 min Scan# 1916
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 91 Resp: 424066

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 33.4 | 16.7 | 50.1 |

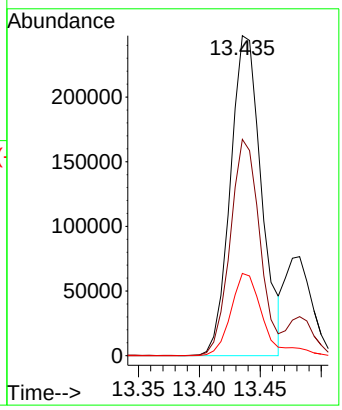





#83
tert-Butylbenzene
Concen: 47.531 ug/l
RT: 13.435 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:119 Resp: 43841

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 64.3 | 32.1 | 96.5 |
| 134 | 26.7 | 13.4 | 40.1 |




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

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
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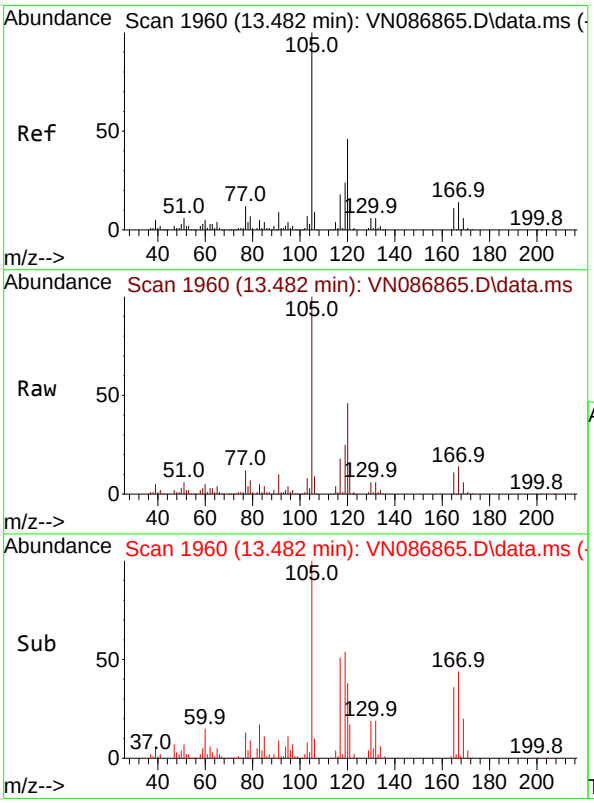
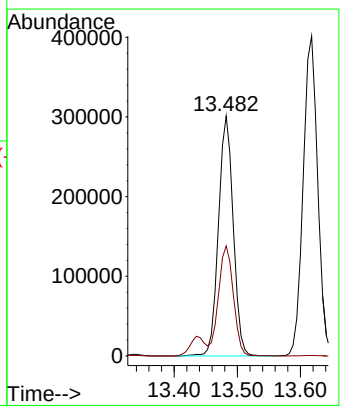
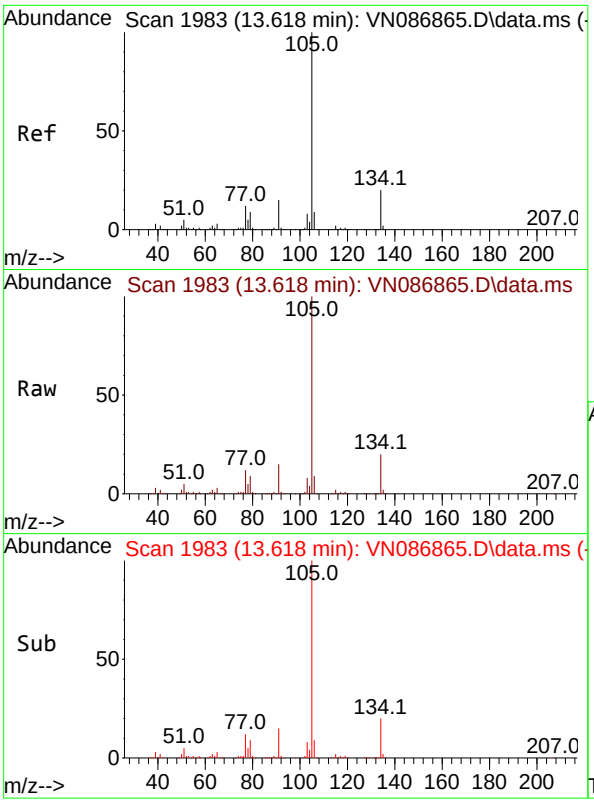



#84
1,2,4-Trimethylbenzene
Concen: 48.314 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:105 Resp: 488189

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 46.4 | 23.2 | 69.6 |

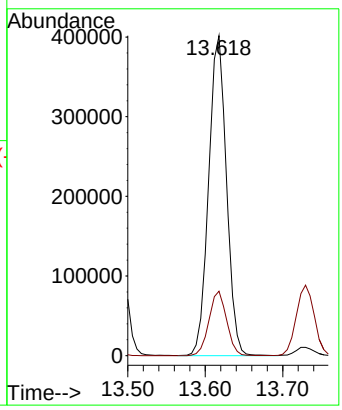





#85
sec-Butylbenzene
Concen: 47.893 ug/l
RT: 13.618 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:105 Resp: 64152

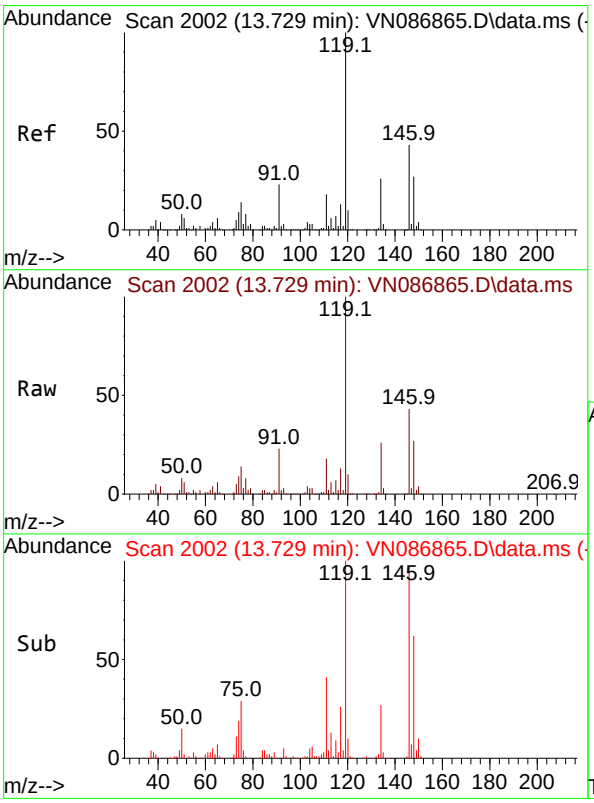
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 20.0 | 10.0 | 30.0 |




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

**Manual Integrations**
**APPROVED**

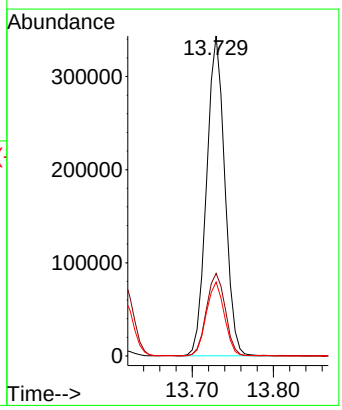
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

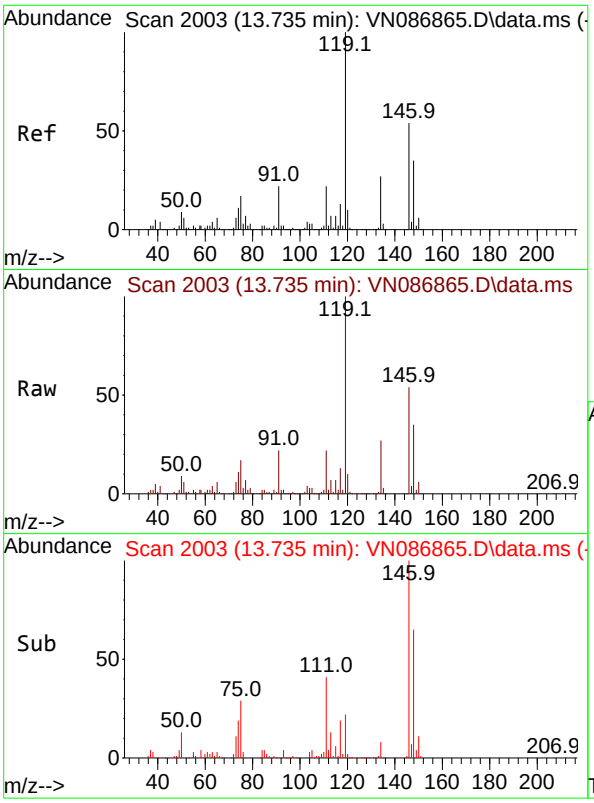



#86
p-Isopropyltoluene
Concen: 48.169 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:119 Resp: 533366

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 26.9 | 13.5 | 40.4 |
| 91 | 22.9 | 11.5 | 34.4 |

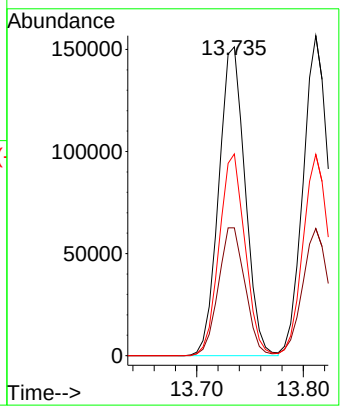





#87
1,3-Dichlorobenzene
Concen: 47.269 ug/l
RT: 13.735 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:146 Resp: 26031

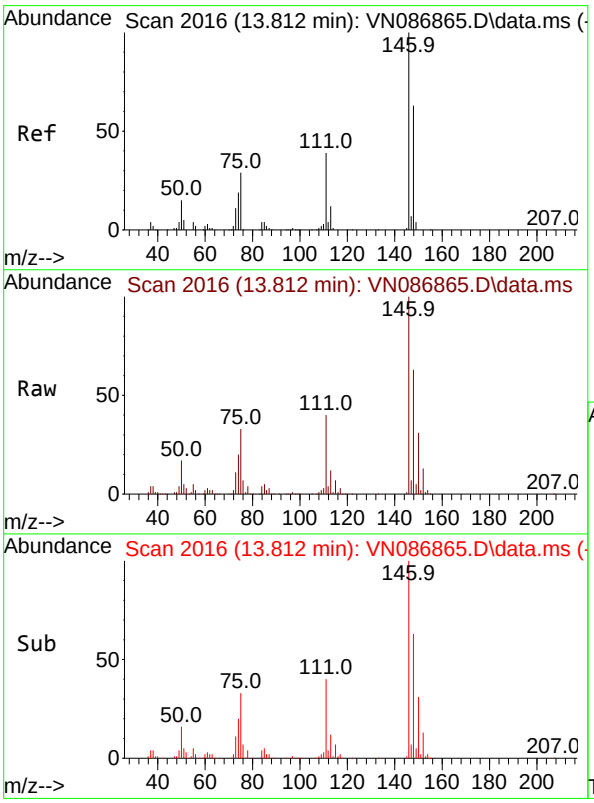
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 41.9 | 20.9 | 62.8 |
| 148 | 64.1 | 32.0 | 96.2 |




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

**Manual Integrations**
**APPROVED**

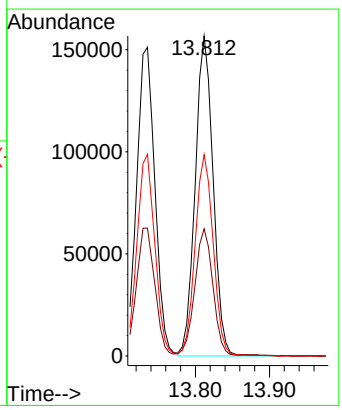
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

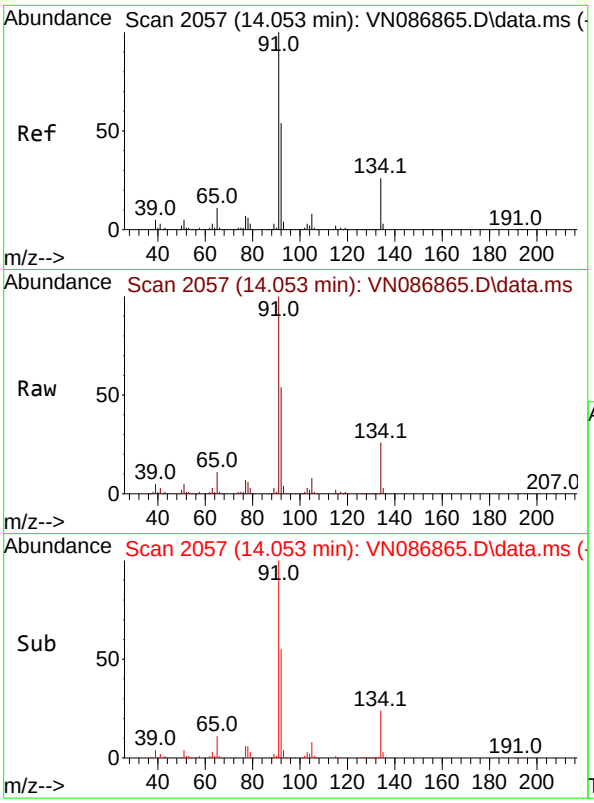



#88
1,4-Dichlorobenzene
Concen: 46.907 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:146 Resp: 263358

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 39.8 | 19.9 | 59.7 |
| 148 | 63.6 | 31.8 | 95.4 |

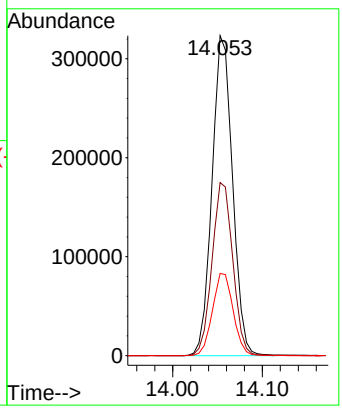





#89
n-Butylbenzene
Concen: 47.787 ug/l
RT: 14.053 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 91 Resp: 51251

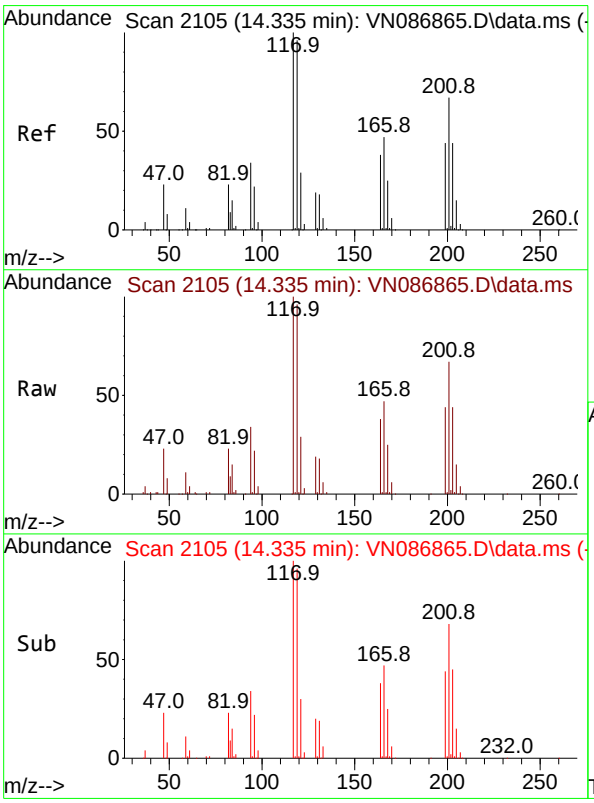
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 54.9 | 27.5 | 82.4 |
| 134 | 26.0 | 13.0 | 39.0 |




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

**Manual Integrations**
**APPROVED**

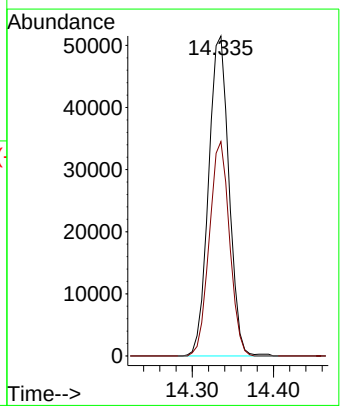
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

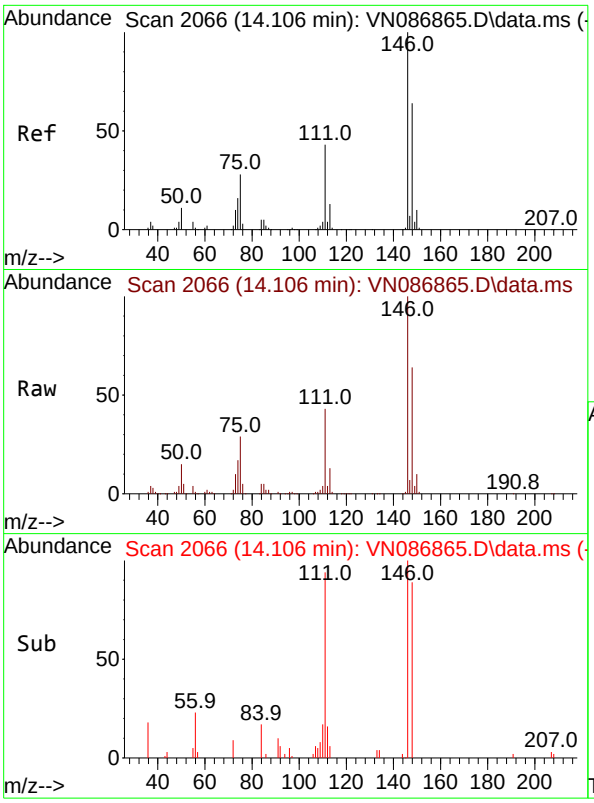



#90
Hexachloroethane
Concen: 47.896 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:117 Resp: 89896

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 66.4 | 33.2 | 99.6 |

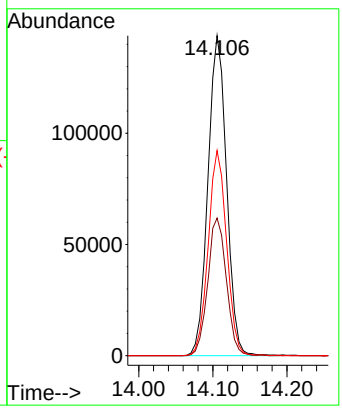





#91
1,2-Dichlorobenzene
Concen: 47.486 ug/l
RT: 14.106 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:146 Resp: 25123

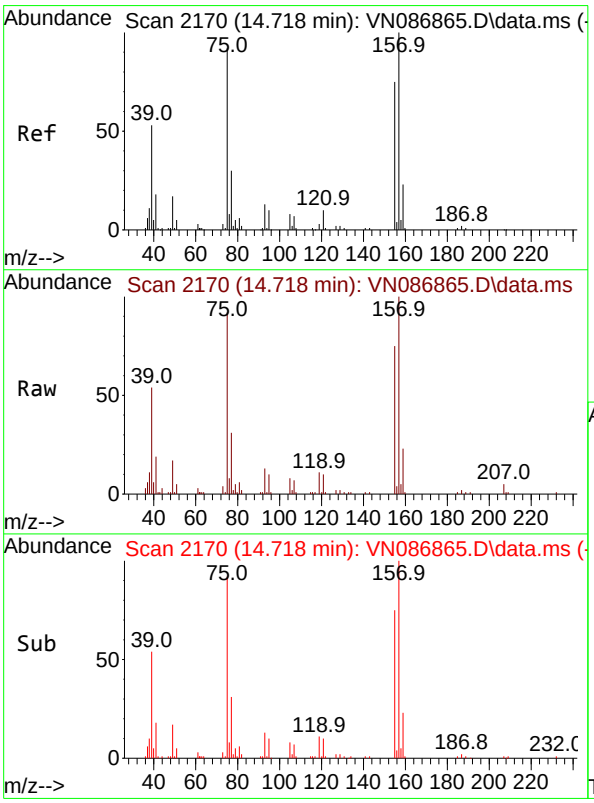
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.1 | 21.6 | 64.6 |
| 148 | 63.4 | 31.7 | 95.1 |




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

**Manual Integrations**
**APPROVED**

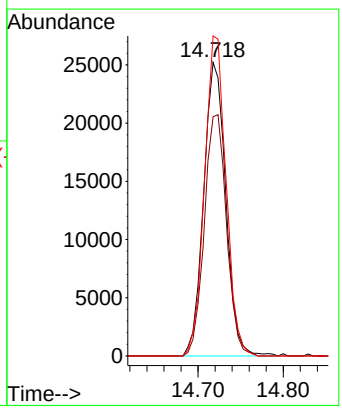
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

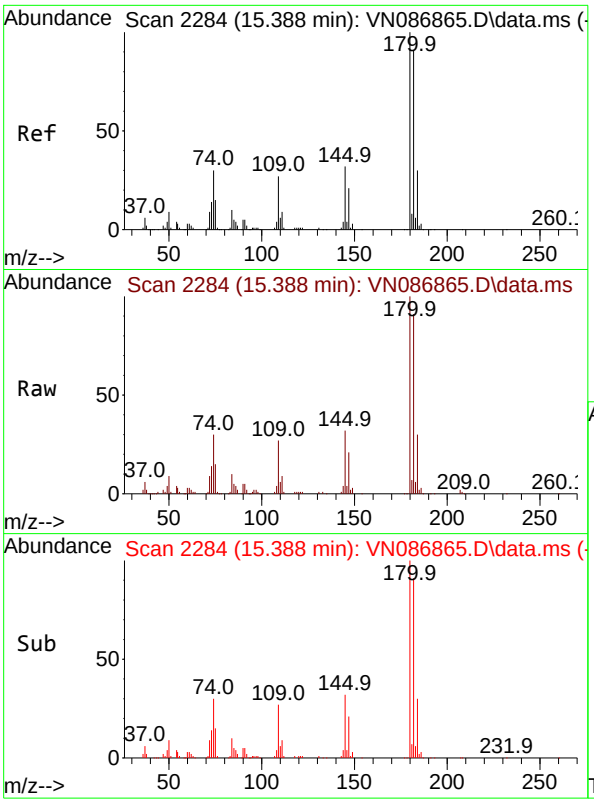



#92
1,2-Dibromo-3-Chloropropane
Concen: 46.049 ug/l
RT: 14.718 min Scan# 2170
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion: 75 Resp: 45535

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 82.3 | 41.1 | 123.4 |
| 157 | 105.4 | 52.7 | 158.1 |

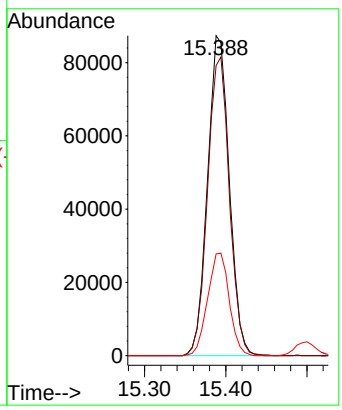





#93
1,2,4-Trichlorobenzene
Concen: 48.061 ug/l
RT: 15.388 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:180 Resp: 16237

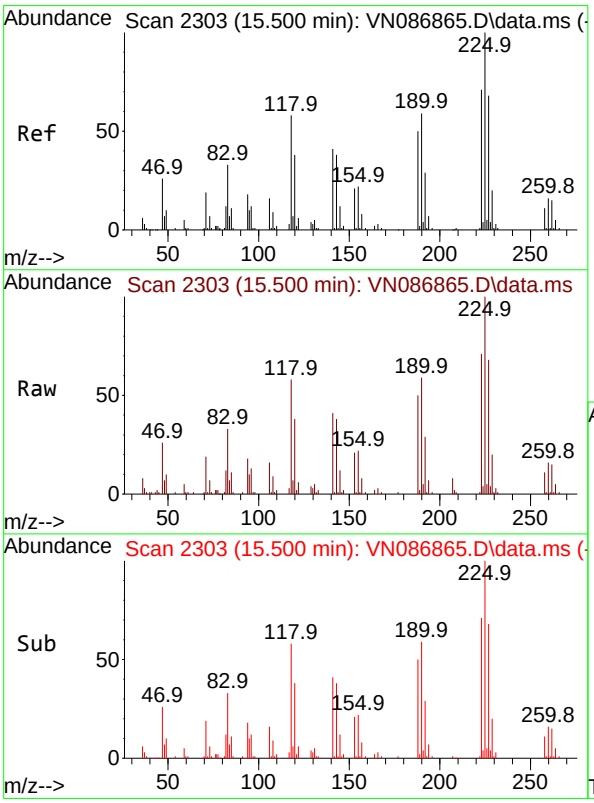
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 93.8 | 46.9 | 140.7 |
| 145 | 31.9 | 16.0 | 47.9 |




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

**Manual Integrations**
**APPROVED**

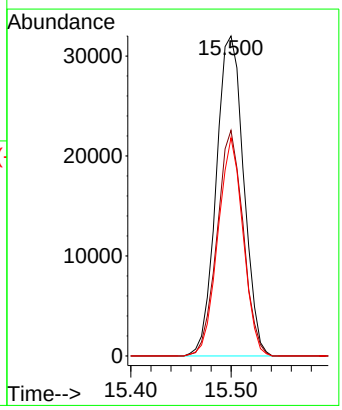
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

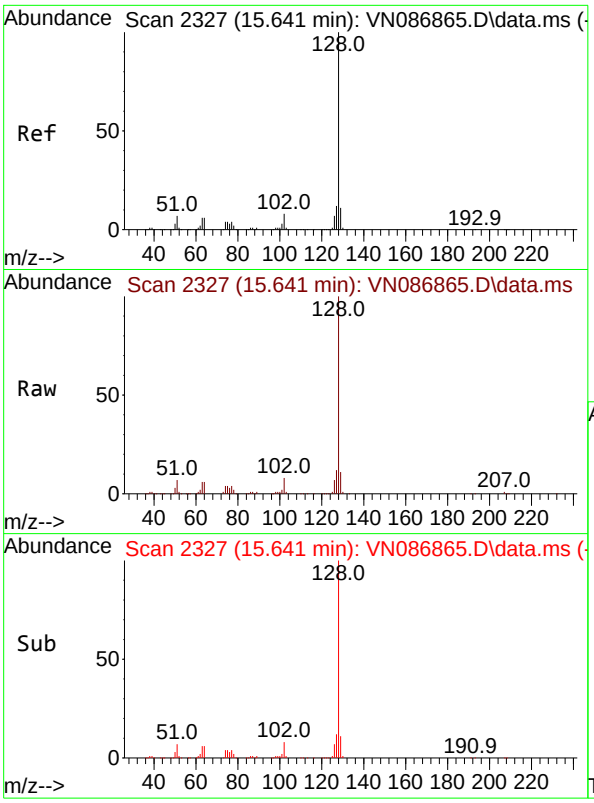



#94
Hexachlorobutadiene
Concen: 48.356 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:225 Resp: 60866

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 66.9 | 33.5 | 100.4 |
| 227 | 62.3 | 31.1 | 93.5 |

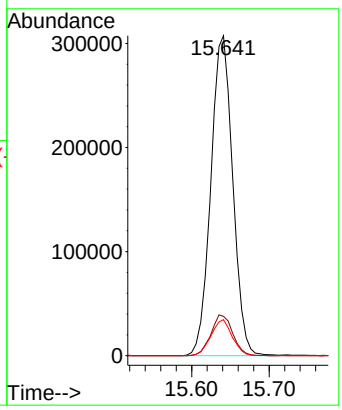





#95
Naphthalene
Concen: 47.958 ug/l
RT: 15.641 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:128 Resp: 60308

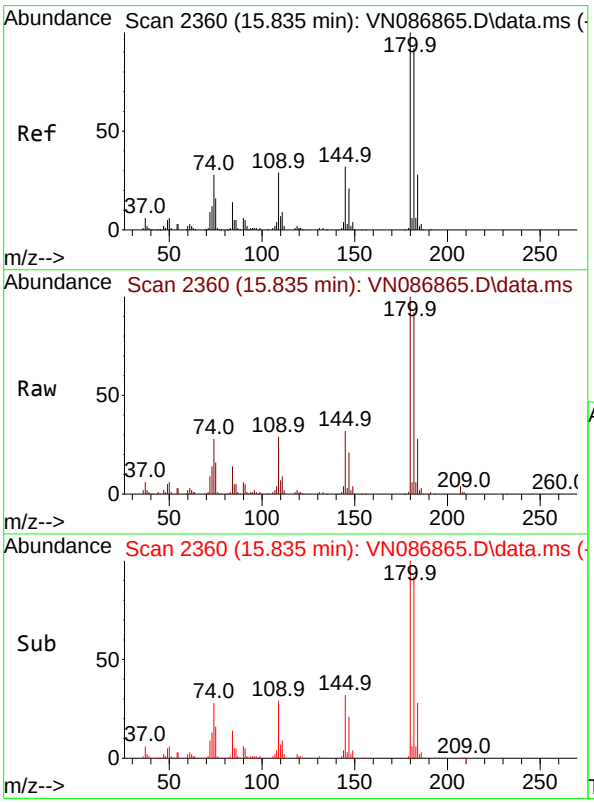
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.7 | 10.2 | 15.2 |
| 129 | 11.0 | 8.8 | 13.2 |




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

**Manual Integrations**
**APPROVED**

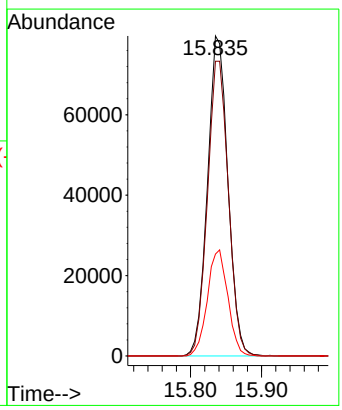
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025




#96
1,2,3-Trichlorobenzene
Concen: 47.402 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. 0.000 min
Lab File: VN086865.D
Acq: 06 Jun 2025 14:03

Tgt Ion:180 Resp: 159113

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 94.0 | 47.0 | 141.0 |
| 145 | 33.2 | 16.6 | 49.8 |



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086866.D
Acq On : 06 Jun 2025 14:26
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

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

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

Quant Time: Jun 07 01:58:16 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 01:51:02 2025
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.235 | 168 | 181996 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.106 | 114 | 327782 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.870 | 117 | 290313 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.794 | 152 | 147098 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.588 | 65 | 238957 | 98.065 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 196.120%# | | | |
| 35) Dibromofluoromethane | 8.177 | 113 | 195212 | 100.495 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 200.980%# | | | |
| 50) Toluene-d8 | 10.570 | 98 | 772210 | 100.419 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 200.840%# | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 292385 | 102.339 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 204.680%# | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.153 | 85 | 194799 | 107.350 | ug/l | 100 |
| 3) Chloromethane | 2.395 | 50 | 224558 | 95.833 | ug/l | 98 |
| 4) Vinyl Chloride | 2.553 | 62 | 245135 | 101.414 | ug/l | 98 |
| 5) Bromomethane | 2.977 | 94 | 137967 | 101.996 | ug/l | 99 |
| 6) Chloroethane | 3.147 | 64 | 152150 | 97.447 | ug/l | 97 |
| 7) Trichlorofluoromethane | 3.524 | 101 | 312394 | 98.917 | ug/l | 99 |
| 8) Diethyl Ether | 3.983 | 74 | 139844 | 101.631 | ug/l | 98 |
| 9) 1,1,2-Trichlorotrifluo... | 4.389 | 101 | 198739 | 100.163 | ug/l | 99 |
| 10) Methyl Iodide | 4.612 | 142 | 262771 | 102.162 | ug/l | 99 |
| 11) Tert butyl alcohol | 5.547 | 59 | 327987 | 496.062 | ug/l | 99 |
| 12) 1,1-Dichloroethene | 4.359 | 96 | 200212 | 98.838 | ug/l | 99 |
| 13) Acrolein | 4.200 | 56 | 94171 | 449.961 | ug/l | 98 |
| 14) Allyl chloride | 5.047 | 41 | 329412 | 98.055 | ug/l | 99 |
| 15) Acrylonitrile | 5.735 | 53 | 770470 | 498.552 | ug/l | 99 |
| 16) Acetone | 4.447 | 43 | 608178 | 470.648 | ug/l | 98 |
| 17) Carbon Disulfide | 4.736 | 76 | 544511 | 97.179 | ug/l | 100 |
| 18) Methyl Acetate | 5.047 | 43 | 381808 | 101.390 | ug/l | 100 |
| 19) Methyl tert-butyl Ether | 5.818 | 73 | 735694 | 100.306 | ug/l | 100 |
| 20) Methylene Chloride | 5.294 | 84 | 228800 | 94.575 | ug/l | 97 |
| 21) trans-1,2-Dichloroethene | 5.806 | 96 | 215177 | 95.476 | ug/l | 99 |
| 22) Diisopropyl ether | 6.688 | 45 | 696881 | 98.409 | ug/l | 98 |
| 23) Vinyl Acetate | 6.618 | 43 | 2919350 | 487.936 | ug/l | 100 |
| 24) 1,1-Dichloroethane | 6.588 | 63 | 404207 | 99.186 | ug/l | 99 |
| 25) 2-Butanone | 7.494 | 43 | 1043385 | 496.743 | ug/l | 100 |
| 26) 2,2-Dichloropropane | 7.500 | 77 | 331995 | 104.729 | ug/l | 99 |
| 27) cis-1,2-Dichloroethene | 7.500 | 96 | 265248 | 98.410 | ug/l | 99 |
| 28) Bromochloromethane | 7.824 | 49 | 188050 | 93.851 | ug/l | 99 |
| 29) Tetrahydrofuran | 7.847 | 42 | 677636 | 495.240 | ug/l | 99 |
| 30) Chloroform | 7.977 | 83 | 394927 | 97.040 | ug/l | 99 |
| 31) Cyclohexane | 8.265 | 56 | 374933 | 94.869 | ug/l | 99 |
| 32) 1,1,1-Trichloroethane | 8.177 | 97 | 336819 | 97.306 | ug/l | 99 |
| 36) 1,1-Dichloropropene | 8.382 | 75 | 289907 | 100.156 | ug/l | 99 |
| 37) Ethyl Acetate | 7.571 | 43 | 370652 | 100.591 | ug/l | 99 |
| 38) Carbon Tetrachloride | 8.371 | 117 | 285325 | 100.404 | ug/l | 98 |
| 39) Methylcyclohexane | 9.606 | 83 | 395603 | 99.758 | ug/l | 99 |
| 40) Benzene | 8.612 | 78 | 927083 | 97.946 | ug/l | 100 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086866.D
Acq On : 06 Jun 2025 14:26
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 07 01:58:16 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 01:51:02 2025
Response via : Initial Calibration

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

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.794 | 41 | 195946 | 94.688 | ug/l | | 95 |
| 42) 1,2-Dichloroethane | 8.676 | 62 | 282015 | 98.232 | ug/l | | 100 |
| 43) Isopropyl Acetate | 8.694 | 43 | 579464 | 97.981 | ug/l | | 99 |
| 44) Trichloroethene | 9.359 | 130 | 222822 | 99.280 | ug/l | | 97 |
| 45) 1,2-Dichloropropane | 9.629 | 63 | 230454 | 100.077 | ug/l | | 98 |
| 46) Dibromomethane | 9.712 | 93 | 155530 | 101.685 | ug/l | | 99 |
| 47) Bromodichloromethane | 9.894 | 83 | 316375 | 100.533 | ug/l | | 100 |
| 48) Methyl methacrylate | 9.682 | 41 | 275710 | 101.288 | ug/l | | 99 |
| 49) 1,4-Dioxane | 9.706 | 88 | 104771 | 2115.744 | ug/l | # | 99 |
| 51) 4-Methyl-2-Pentanone | 10.447 | 43 | 1843274 | 517.729 | ug/l | | 99 |
| 52) Toluene | 10.635 | 92 | 578978 | 100.092 | ug/l | | 100 |
| 53) t-1,3-Dichloropropene | 10.841 | 75 | 359200 | 102.077 | ug/l | | 99 |
| 54) cis-1,3-Dichloropropene | 10.318 | 75 | 383030 | 101.730 | ug/l | | 99 |
| 55) 1,1,2-Trichloroethane | 11.017 | 97 | 219922 | 98.808 | ug/l | | 98 |
| 56) Ethyl methacrylate | 10.882 | 69 | 389802 | 109.955 | ug/l | | 99 |
| 57) 1,3-Dichloropropane | 11.165 | 76 | 382510 | 99.069 | ug/l | | 99 |
| 58) 2-Chloroethyl Vinyl ether | 10.165 | 63 | 1113523 | 526.621 | ug/l | | 100 |
| 59) 2-Hexanone | 11.200 | 43 | 1301539 | 567.535 | ug/l | | 99 |
| 60) Dibromochloromethane | 11.359 | 129 | 237965 | 102.616 | ug/l | | 100 |
| 61) 1,2-Dibromoethane | 11.470 | 107 | 232214 | 101.787 | ug/l | | 98 |
| 64) Tetrachloroethene | 11.106 | 164 | 181568 | 98.824 | ug/l | | 94 |
| 65) Chlorobenzene | 11.894 | 112 | 632563 | 98.793 | ug/l | | 98 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 206895 | 100.521 | ug/l | | 100 |
| 67) Ethyl Benzene | 11.964 | 91 | 1110803 | 100.717 | ug/l | | 99 |
| 68) m/p-Xylenes | 12.070 | 106 | 854557 | 202.411 | ug/l | | 99 |
| 69) o-Xylene | 12.400 | 106 | 412719 | 102.070 | ug/l | | 100 |
| 70) Styrene | 12.412 | 104 | 713548 | 103.127 | ug/l | | 100 |
| 71) Bromoform | 12.576 | 173 | 165781 | 108.707 | ug/l | # | 99 |
| 73) Isopropylbenzene | 12.694 | 105 | 1065297 | 99.410 | ug/l | | 100 |
| 74) N-amyl acetate | 12.506 | 43 | 403587 | 113.475 | ug/l | | 98 |
| 75) 1,1,2,2-Tetrachloroethane | 12.941 | 83 | 354386 | 97.616 | ug/l | | 99 |
| 76) 1,2,3-Trichloropropane | 12.994 | 75 | 353334m | 100.738 | ug/l | | |
| 77) Bromobenzene | 12.982 | 156 | 246413 | 100.266 | ug/l | | 99 |
| 78) n-propylbenzene | 13.035 | 91 | 1301631 | 99.948 | ug/l | | 100 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 770308 | 98.630 | ug/l | | 99 |
| 80) 1,3,5-Trimethylbenzene | 13.170 | 105 | 901317 | 101.873 | ug/l | | 100 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 160736 | 105.820 | ug/l | | 92 |
| 82) 4-Chlorotoluene | 13.223 | 91 | 783657 | 99.166 | ug/l | | 100 |
| 83) tert-Butylbenzene | 13.435 | 119 | 807528 | 99.710 | ug/l | | 100 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 904794 | 101.983 | ug/l | | 100 |
| 85) sec-Butylbenzene | 13.617 | 105 | 1182155 | 100.513 | ug/l | | 99 |
| 86) p-Isopropyltoluene | 13.729 | 119 | 990273 | 101.857 | ug/l | | 100 |
| 87) 1,3-Dichlorobenzene | 13.735 | 146 | 474162 | 98.063 | ug/l | | 100 |
| 88) 1,4-Dichlorobenzene | 13.811 | 146 | 483003 | 97.978 | ug/l | | 99 |
| 89) n-Butylbenzene | 14.053 | 91 | 937913 | 99.598 | ug/l | | 100 |
| 90) Hexachloroethane | 14.335 | 117 | 169772 | 103.019 | ug/l | | 99 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 458049 | 98.602 | ug/l | | 100 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75 | 83243 | 95.877 | ug/l | | 96 |
| 93) 1,2,4-Trichlorobenzene | 15.394 | 180 | 298870 | 100.751 | ug/l | | 99 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 112496 | 101.789 | ug/l | | 98 |
| 95) Naphthalene | 15.641 | 128 | 1129434 | 102.290 | ug/l | | 100 |
| 96) 1,2,3-Trichlorobenzene | 15.841 | 180 | 294127 | 99.796 | ug/l | | 99 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086866.D
Acq On : 06 Jun 2025 14:26
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

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

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

Quant Time: Jun 07 01:58:16 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 01:51:02 2025
Response via : Initial Calibration

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

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

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086866.D
Acq On : 06 Jun 2025 14:26
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 07 01:58:16 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 01:51:02 2025
Response via : Initial Calibration

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

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/09/2025
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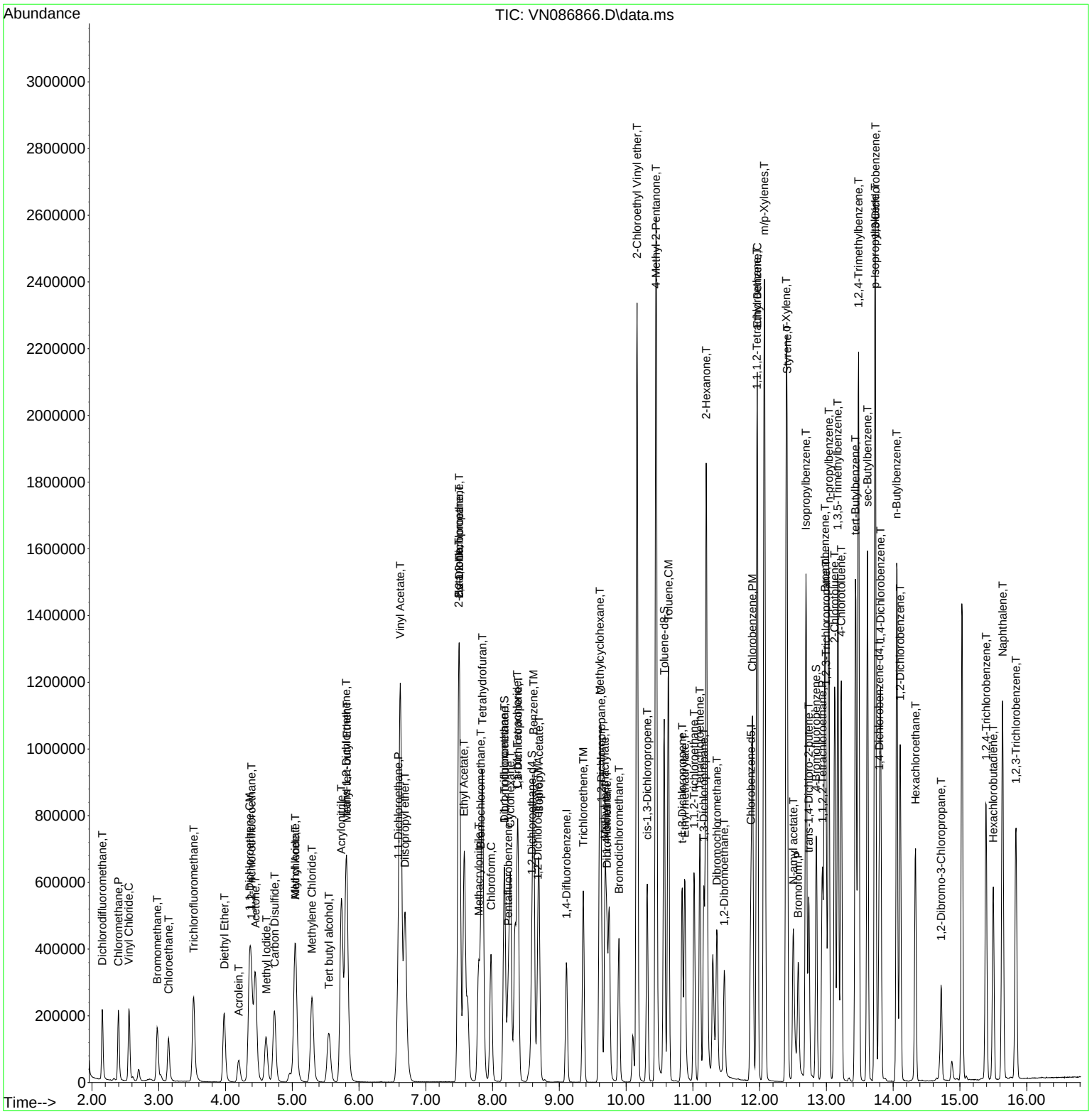
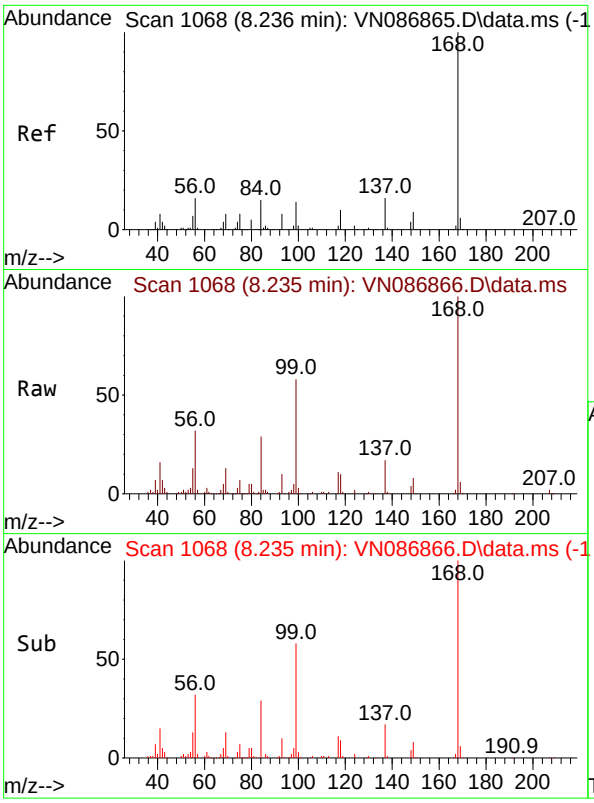
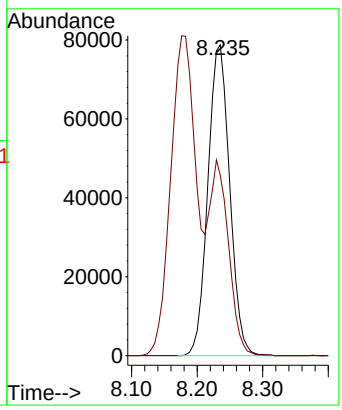





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.235 min Scan# 1
Delta R.T. -0.001 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:168 Resp: 18199

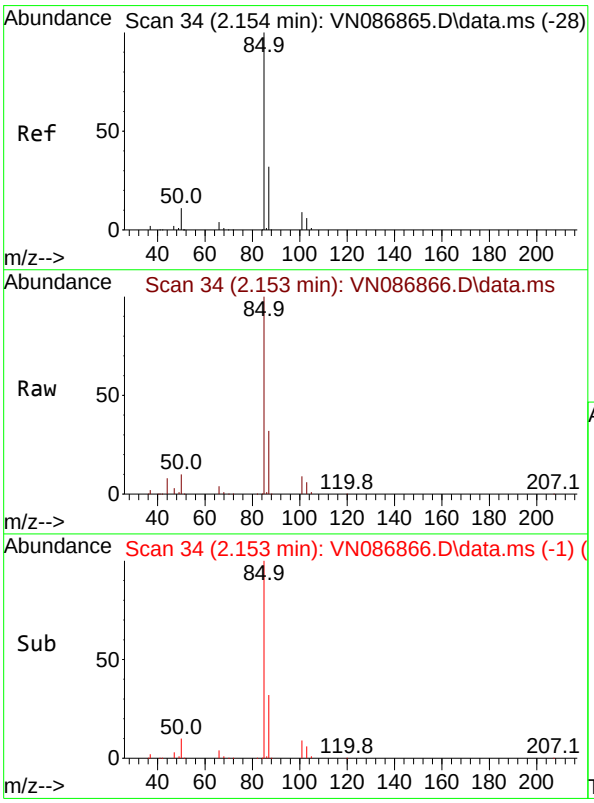
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 57.9 | 49.1 | 73.7 |




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

**Manual Integrations**
**APPROVED**

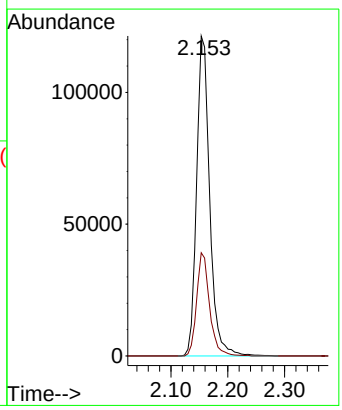
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

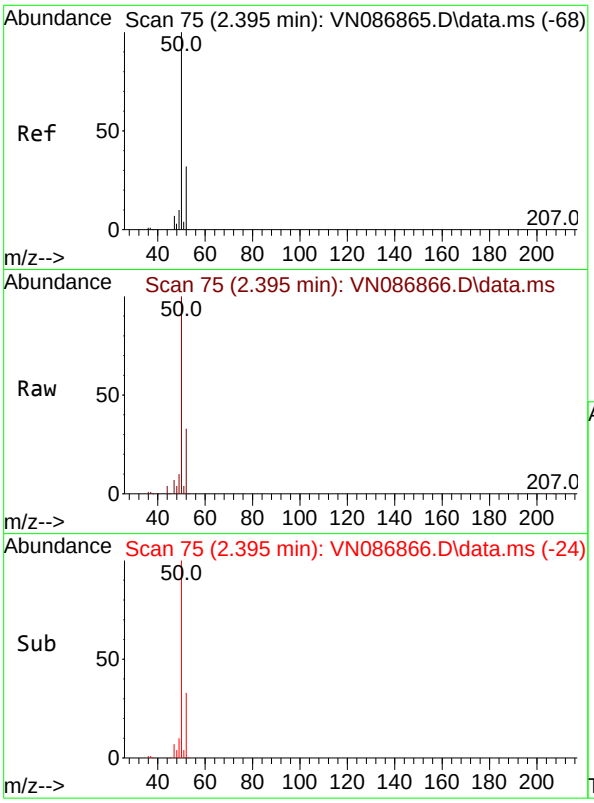



#2
Dichlorodifluoromethane
Concen: 107.350 ug/l
RT: 2.153 min Scan# 34
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 85 Resp: 194799

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.3 | 16.2 | 48.6 |

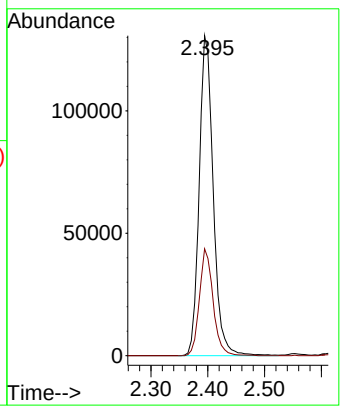





#3
Chloromethane
Concen: 95.833 ug/l
RT: 2.395 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 50 Resp: 22455

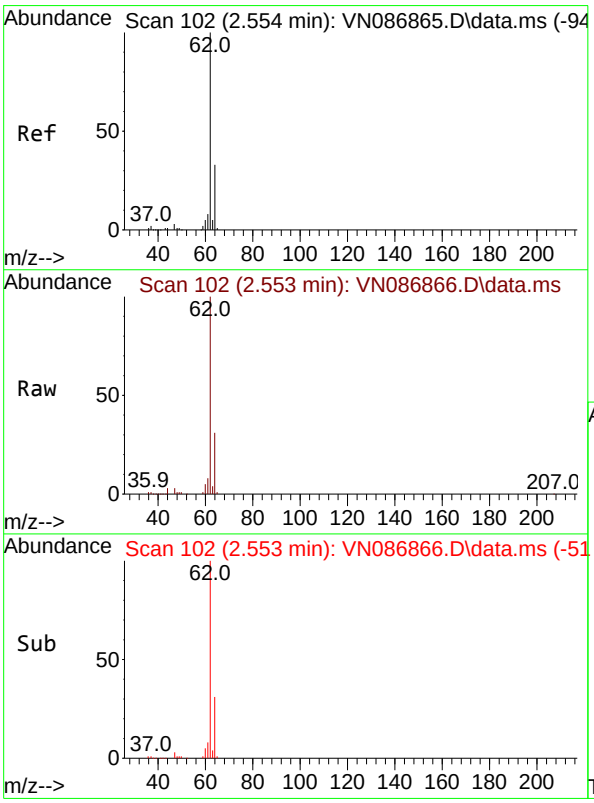
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 33.4 | 25.7 | 38.5 |




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

**Manual Integrations**
**APPROVED**

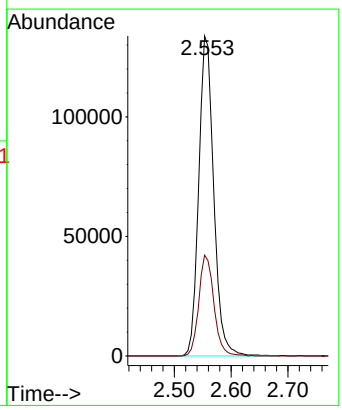
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

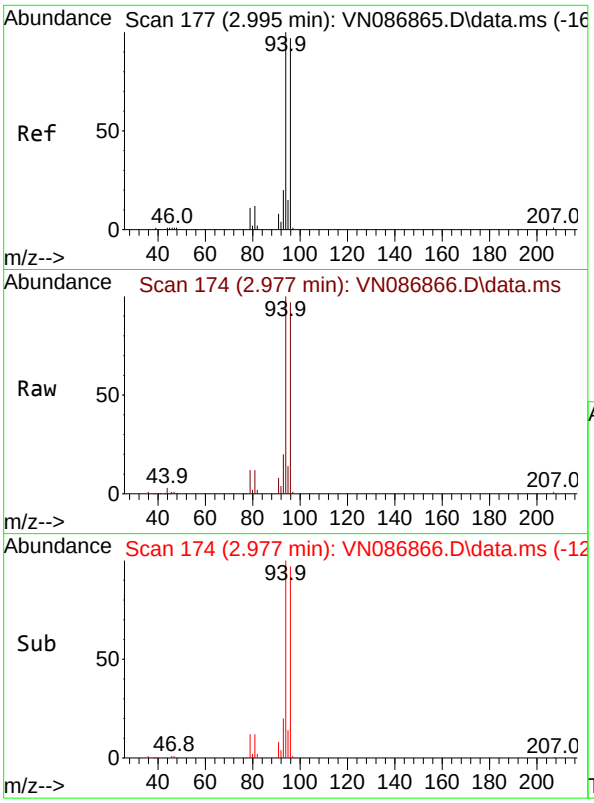



#4
Vinyl Chloride
Concen: 101.414 ug/l
RT: 2.553 min Scan# 102
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 62 Resp: 245135

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 31.5 | 26.0 | 39.0 |

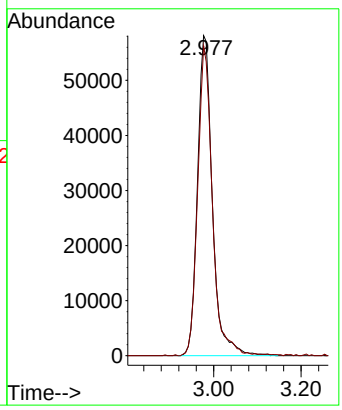





#5
Bromomethane
Concen: 101.996 ug/l
RT: 2.977 min Scan# 1
Delta R.T. -0.018 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 94 Resp: 13796

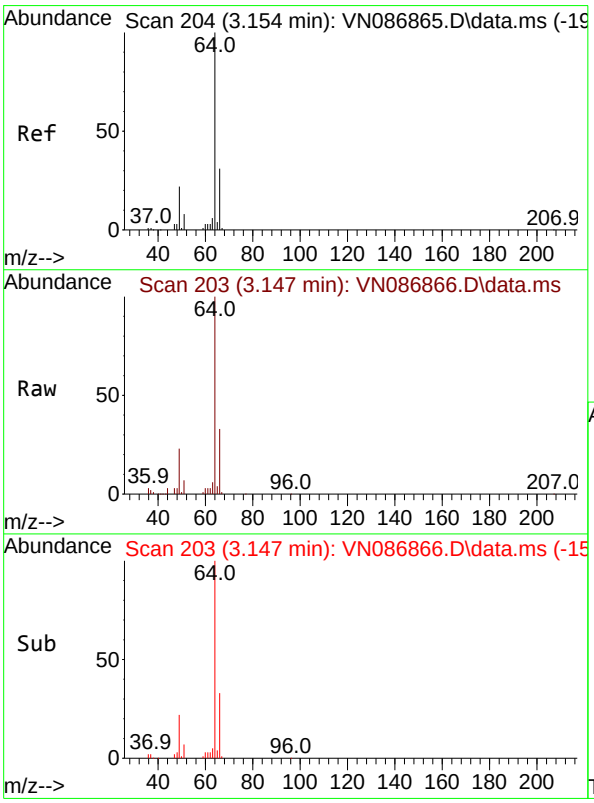
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 96.8 | 77.9 | 116.9 |




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

**Manual Integrations**
**APPROVED**

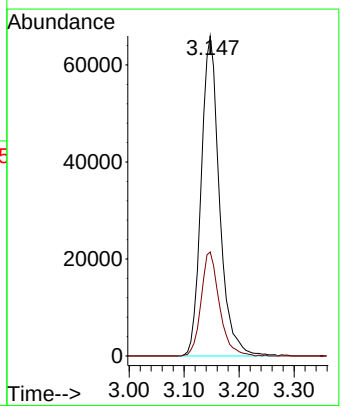
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

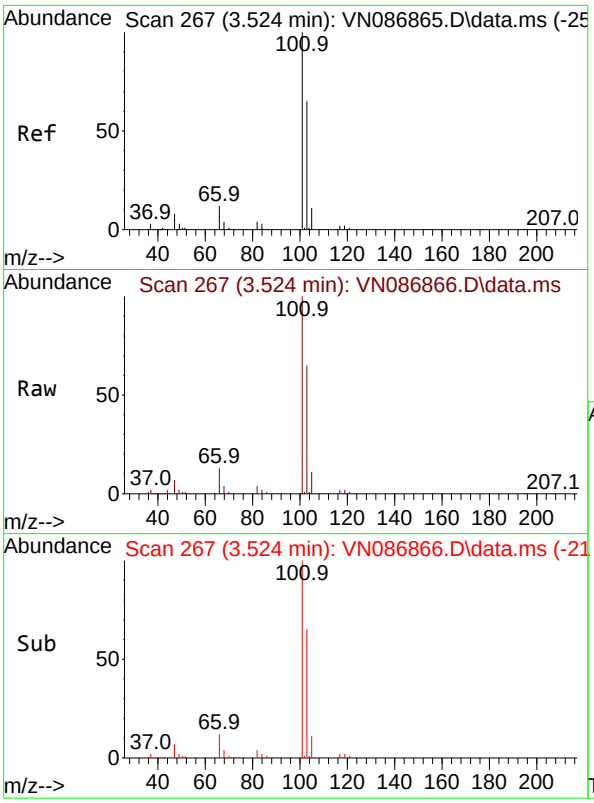



#6
Chloroethane
Concen: 97.447 ug/l
RT: 3.147 min Scan# 203
Delta R.T. -0.006 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 64 Resp: 152150

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 32.5 | 24.6 | 36.8 |

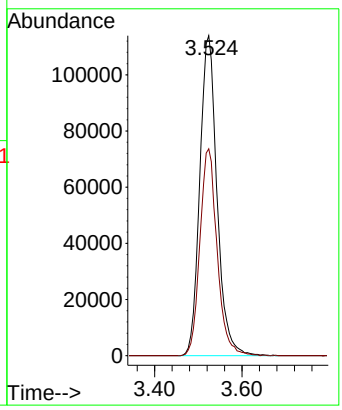





#7
Trichlorofluoromethane
Concen: 98.917 ug/l
RT: 3.524 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:101 Resp: 31239

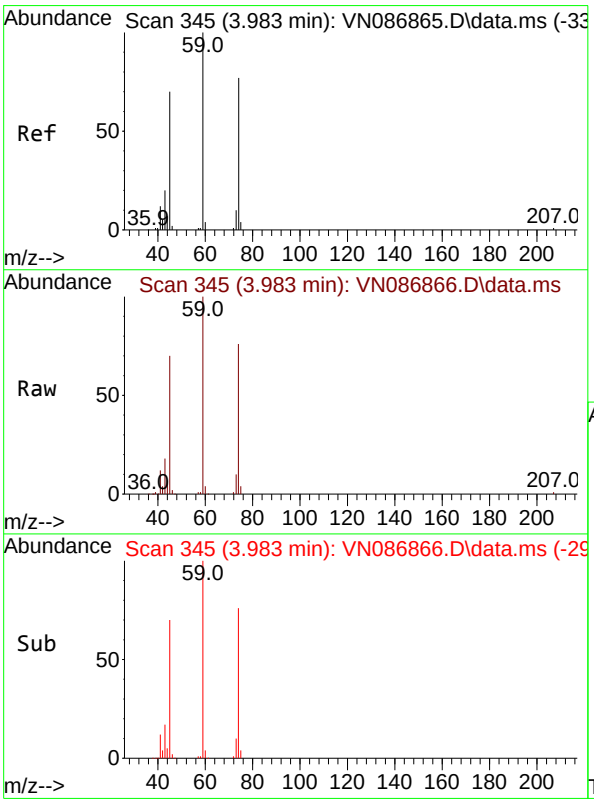
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 64.7 | 52.2 | 78.2 |




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

**Manual Integrations**
**APPROVED**

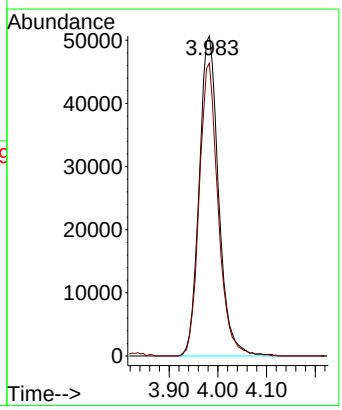
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

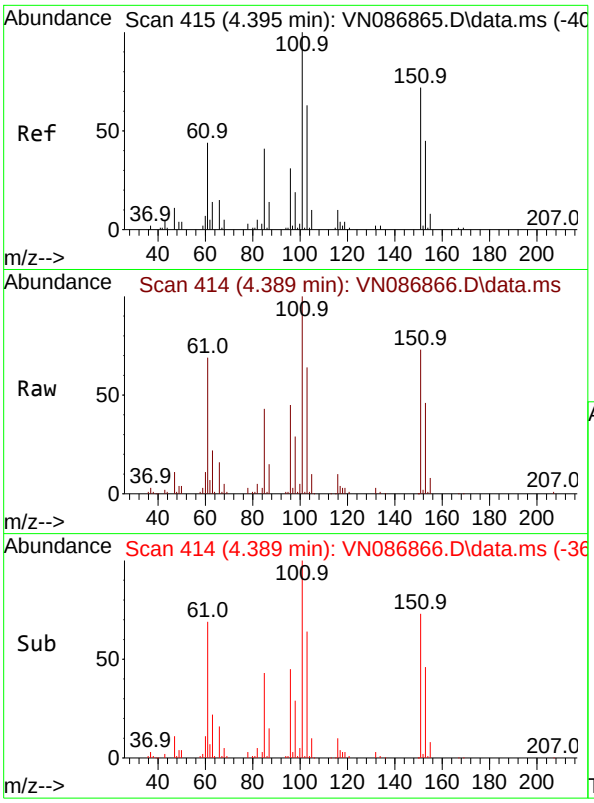



#8
Diethyl Ether
Concen: 101.631 ug/l
RT: 3.983 min Scan# 345
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 74 Resp: 139844

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 89.5 | 45.5 | 136.5 |

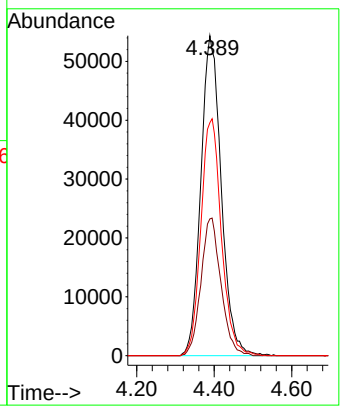





#9
1,1,2-Trichlorotrifluoroethane
Concen: 100.163 ug/l
RT: 4.389 min Scan# 4
Delta R.T. -0.006 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:101 Resp: 19873

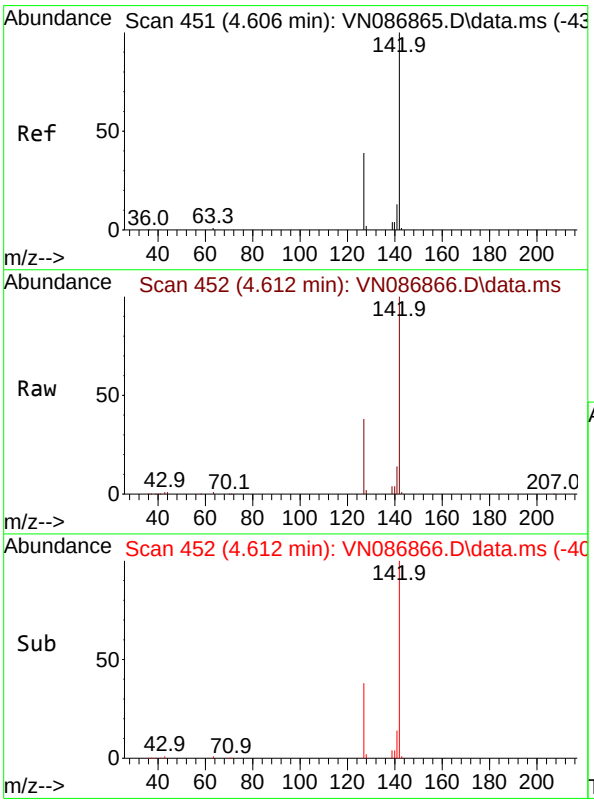
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 42.2 | 33.8 | 50.8 |
| 151 | 74.2 | 58.7 | 88.1 |




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

**Manual Integrations**
**APPROVED**

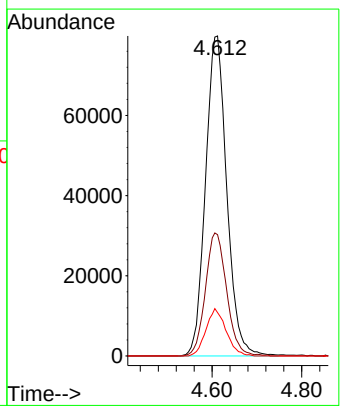
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

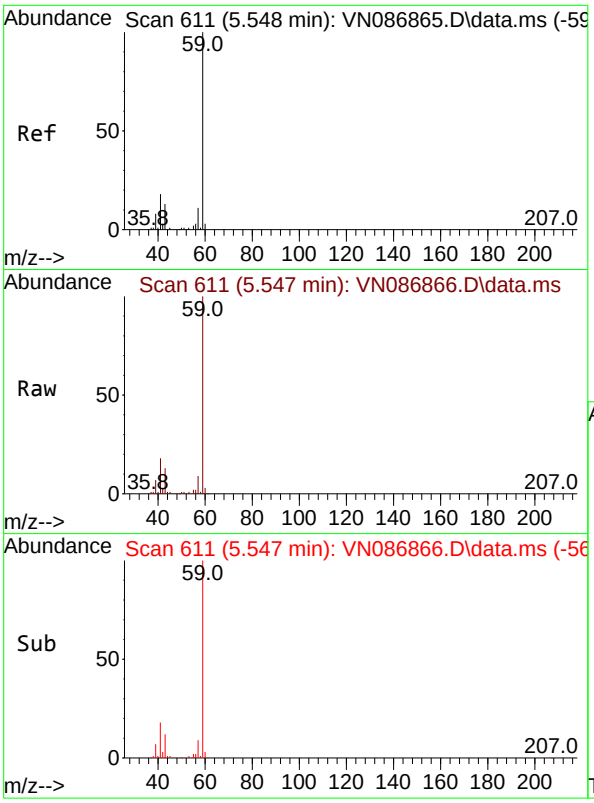



#10
Methyl Iodide
Concen: 102.162 ug/l
RT: 4.612 min Scan# 452
Delta R.T. 0.006 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:142 Resp: 262771

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 37.9 | 30.9 | 46.3 |
| 141 | 13.6 | 10.4 | 15.6 |






#11
Tert butyl alcohol
Concen: 496.062 ug/l
RT: 5.547 min Scan# 61
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 59 Resp: 32798

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 9.7 | 8.1 | 12.1 |

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

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
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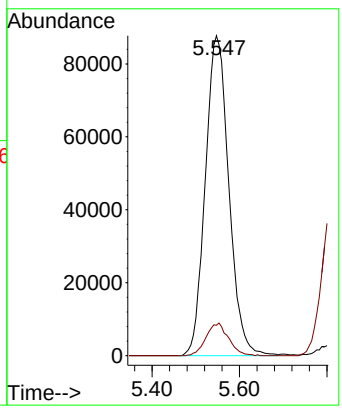
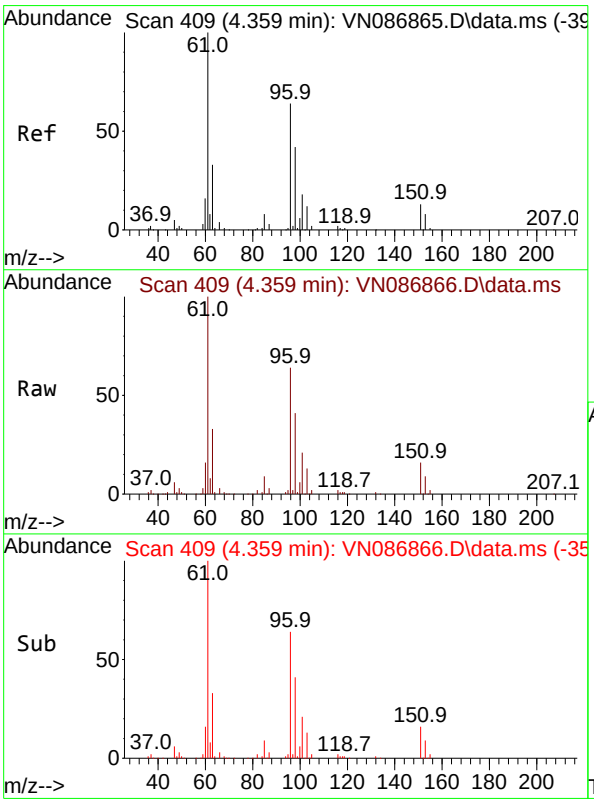
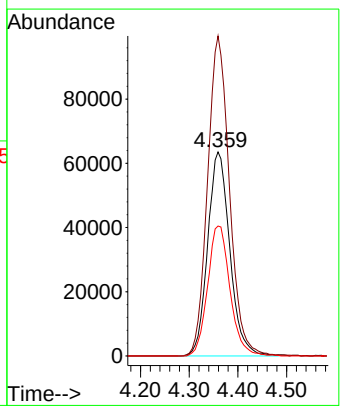


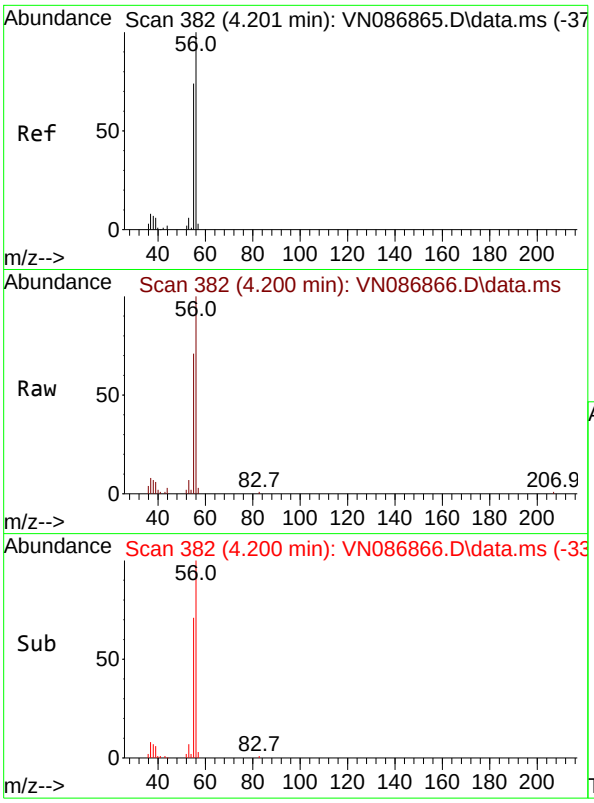




#12
1,1-Dichloroethene
Concen: 98.838 ug/l
RT: 4.359 min Scan# 409
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 96 Resp: 200212

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 156.9 | 125.8 | 188.6 |
| 98 | 63.7 | 52.5 | 78.7 |

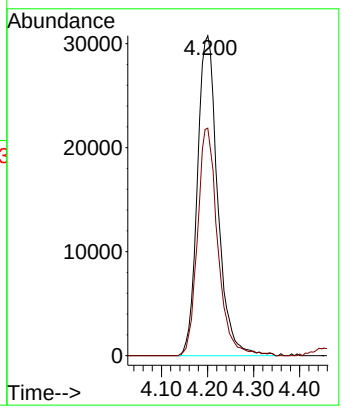





#13
Acrolein
Concen: 449.961 ug/l
RT: 4.200 min Scan# 3
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 56 Resp: 9417

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 70.9 | 55.6 | 83.4 |




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

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
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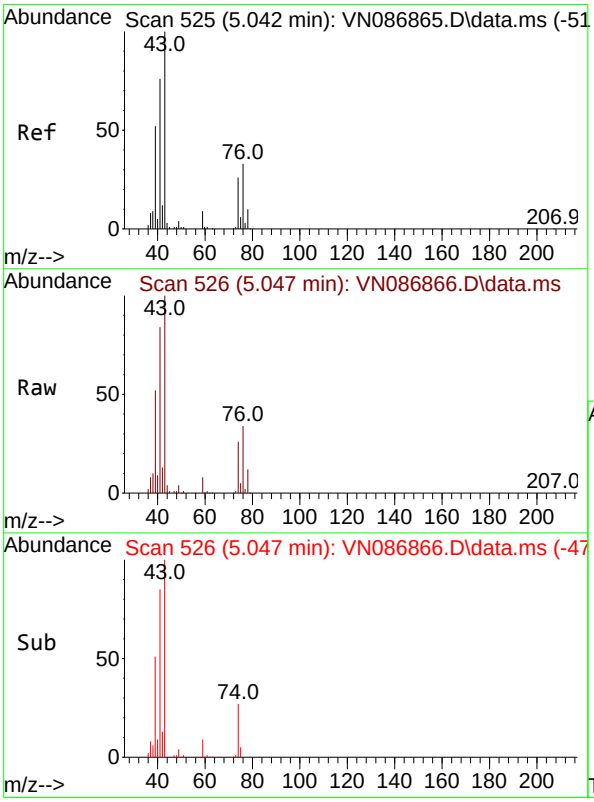
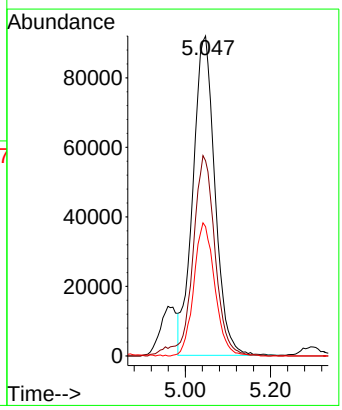
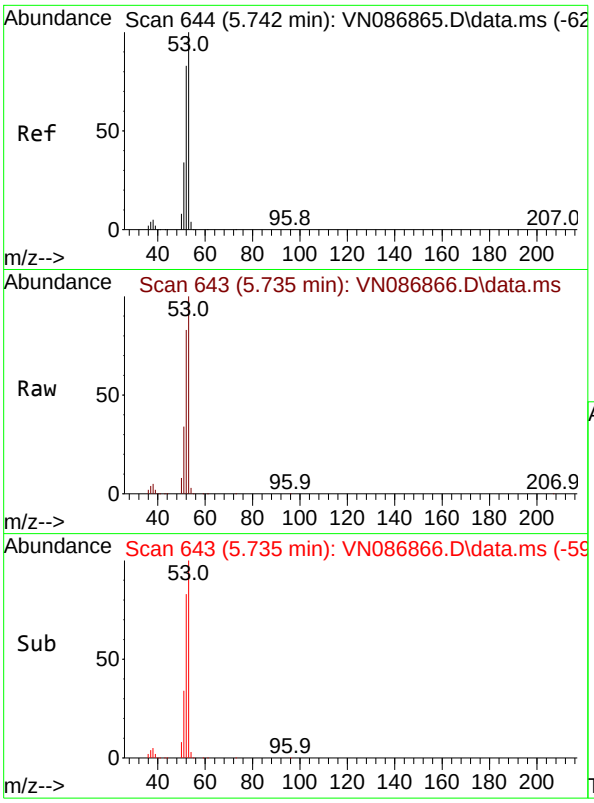



#14
Allyl chloride
Concen: 98.055 ug/l
RT: 5.047 min Scan# 526
Delta R.T. 0.006 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 41 Resp: 329412

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 63.7 | 51.3 | 76.9 |
| 76 | 39.7 | 31.4 | 47.0 |

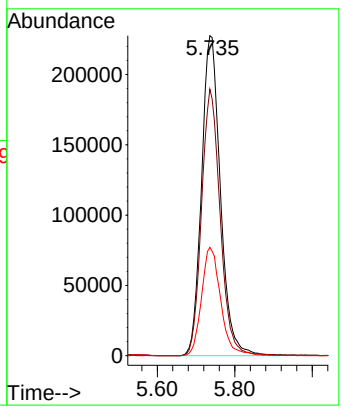





#15
Acrylonitrile
Concen: 498.552 ug/l
RT: 5.735 min Scan# 64
Delta R.T. -0.006 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 53 Resp: 77047

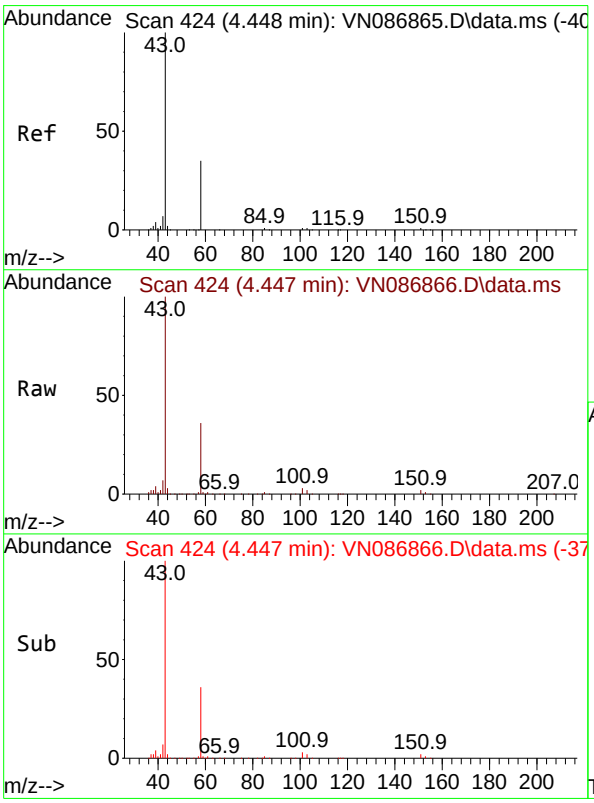
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 82.2 | 65.0 | 97.6 |
| 51 | 34.4 | 27.2 | 40.8 |




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

**Manual Integrations**
**APPROVED**

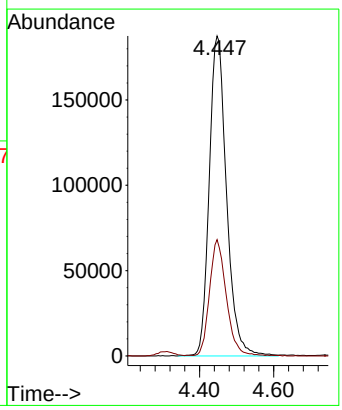
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

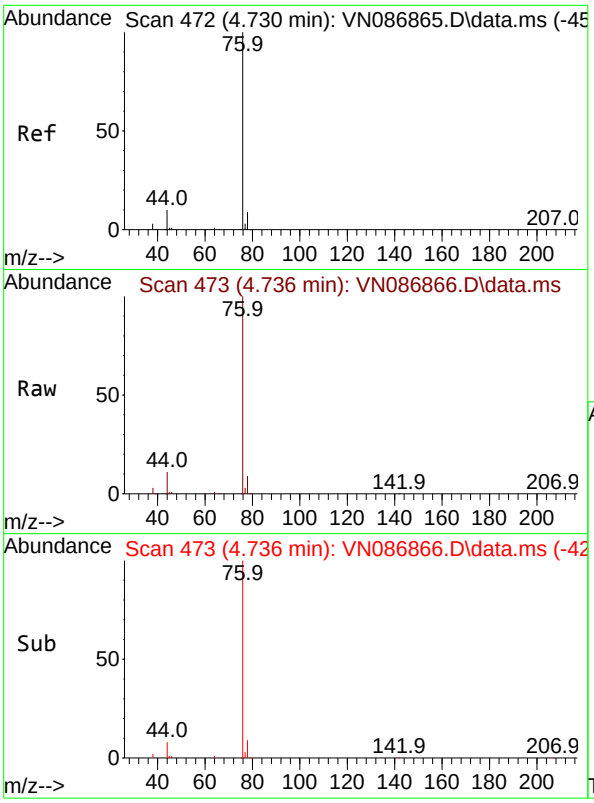



#16
Acetone
Concen: 470.648 ug/l
RT: 4.447 min Scan# 424
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 43 Resp: 608178

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 36.2 | 28.0 | 42.0 |

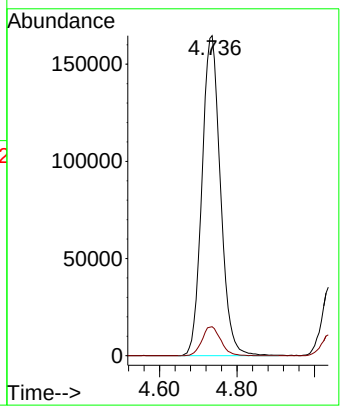





#17
Carbon Disulfide
Concen: 97.179 ug/l
RT: 4.736 min Scan# 4
Delta R.T. 0.006 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 76 Resp: 54451

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.1 | 7.3 | 10.9 |




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

**Manual Integrations**
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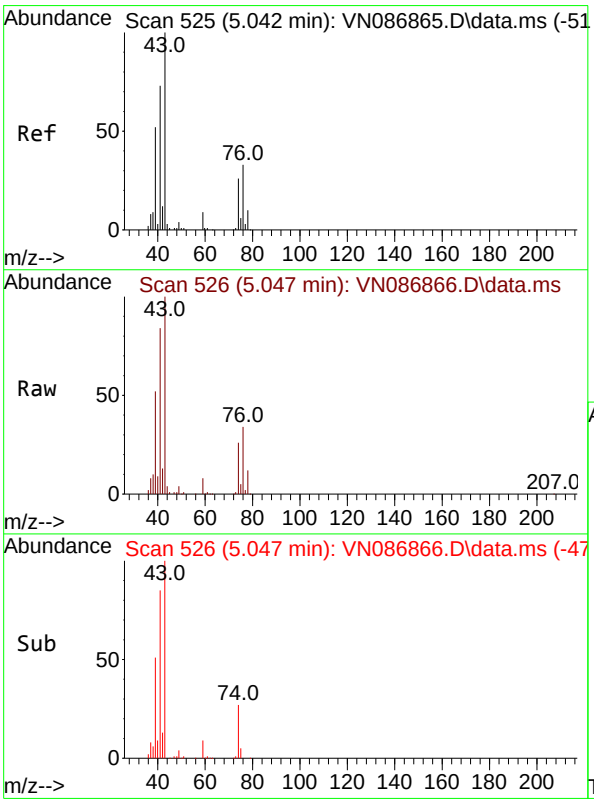
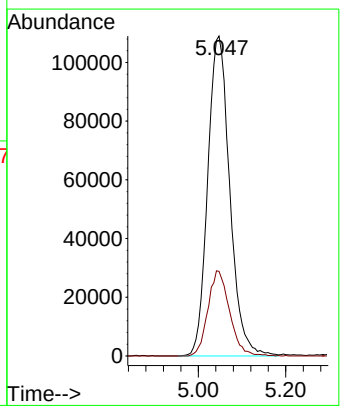
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

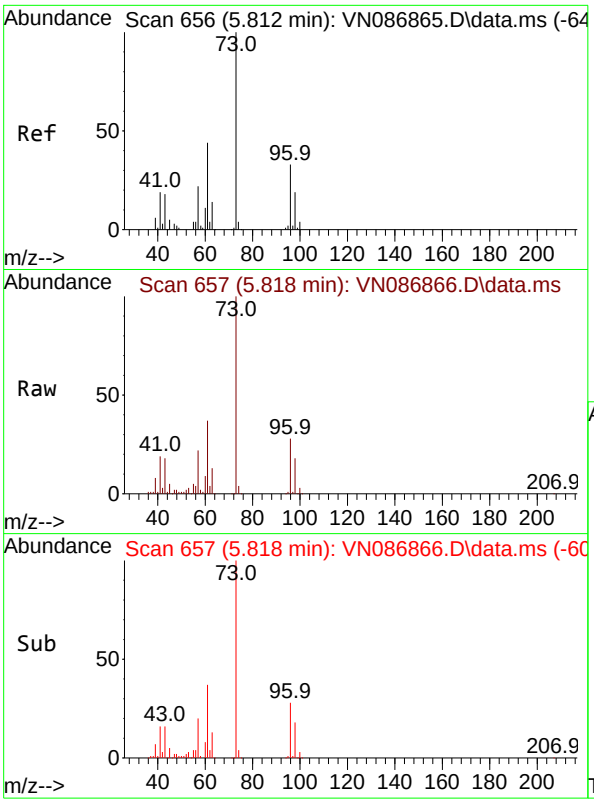



#18
Methyl Acetate
Concen: 101.390 ug/l
RT: 5.047 min Scan# 526
Delta R.T. 0.006 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 43 Resp: 381808

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 26.1 | 20.7 | 31.1 |

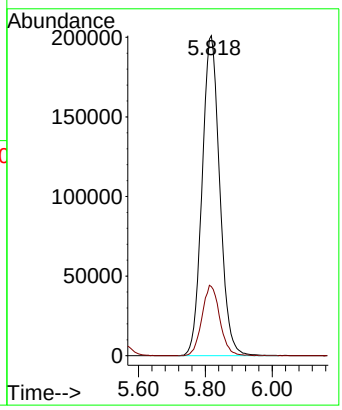





#19
Methyl tert-butyl Ether
Concen: 100.306 ug/l
RT: 5.818 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 73 Resp: 73569

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 21.6 | 17.4 | 26.2 |




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

**Manual Integrations**
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Reviewed By :John Carlone 06/09/2025
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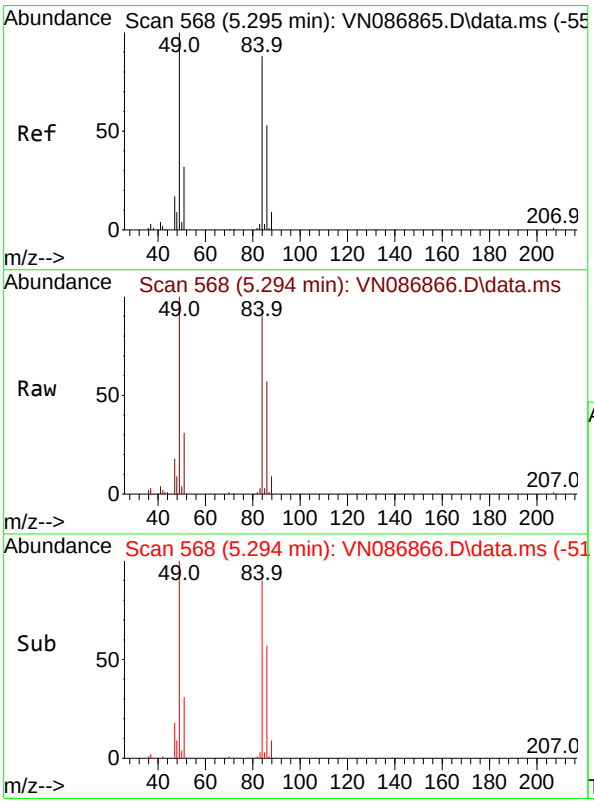
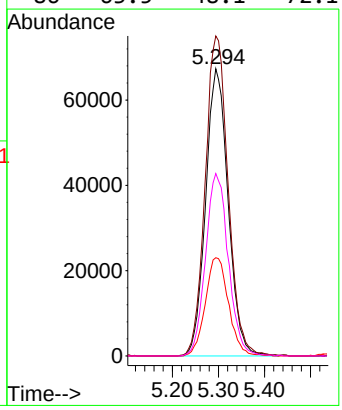
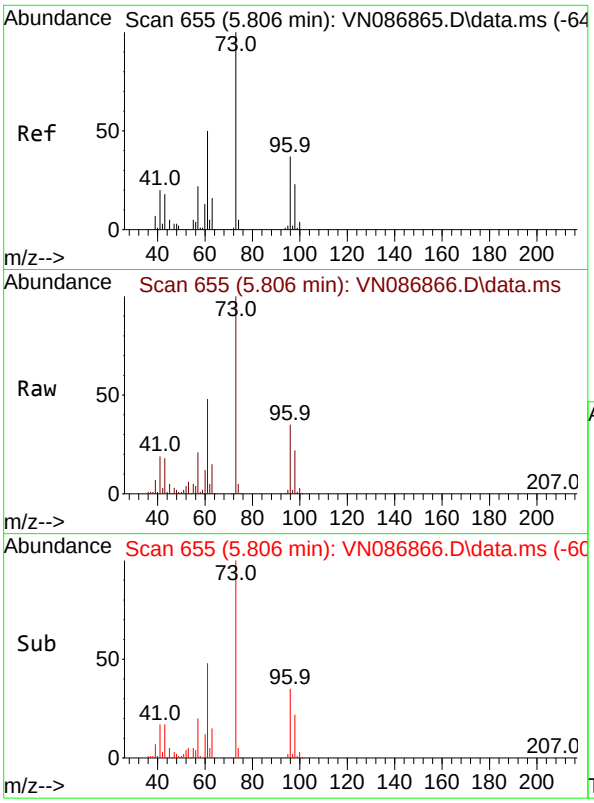



#20
Methylene Chloride
Concen: 94.575 ug/l
RT: 5.294 min Scan# 568
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 84 Resp: 228800

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 111.4 | 90.5 | 135.7 |
| 51 | 34.2 | 28.5 | 42.7 |
| 86 | 63.5 | 48.1 | 72.1 |

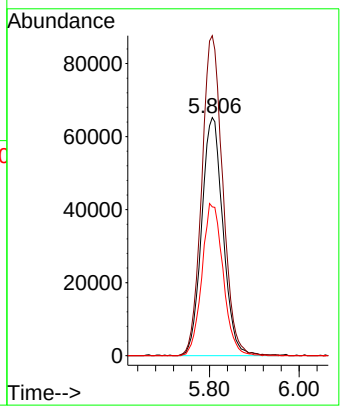





#21
trans-1,2-Dichloroethene
Concen: 95.476 ug/l
RT: 5.806 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 96 Resp: 21517

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 134.4 | 109.2 | 163.8 |
| 98 | 62.5 | 49.8 | 74.8 |




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

**Manual Integrations**
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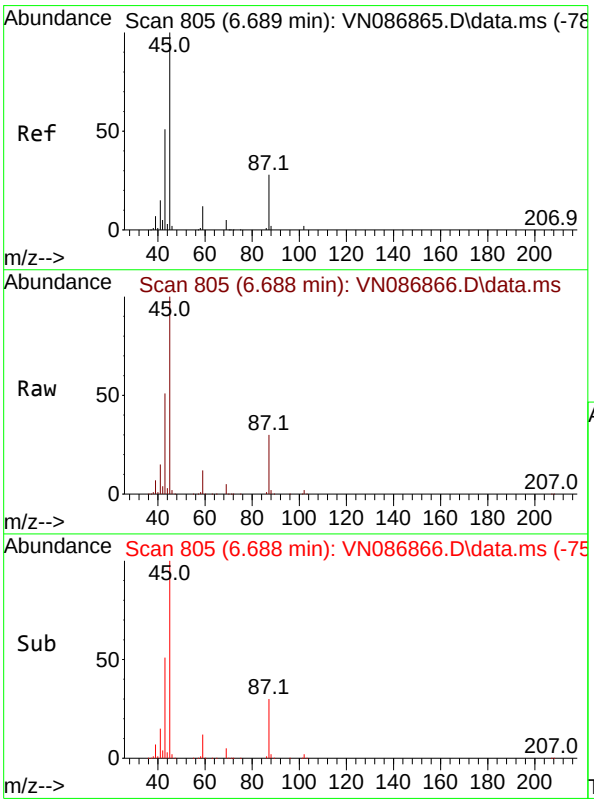
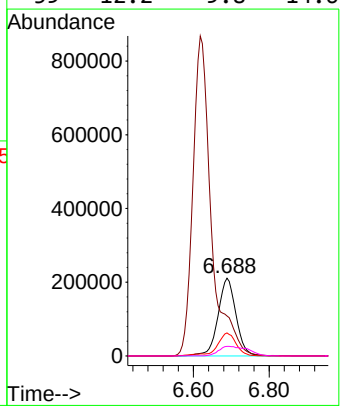
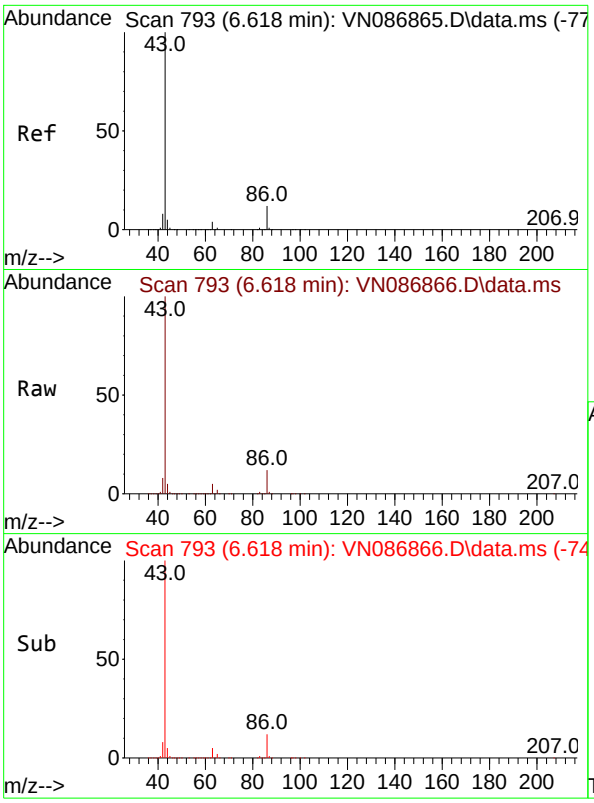



#22
Diisopropyl ether
Concen: 98.409 ug/l
RT: 6.688 min Scan# 805
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 45 Resp: 696881

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 51.1 | 41.9 | 62.9 |
| 87 | 29.6 | 22.4 | 33.6 |
| 59 | 12.2 | 9.8 | 14.6 |






#23
Vinyl Acetate
Concen: 487.936 ug/l
RT: 6.618 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

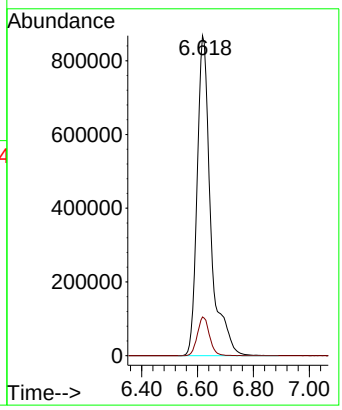
Tgt Ion: 43 Resp: 291935

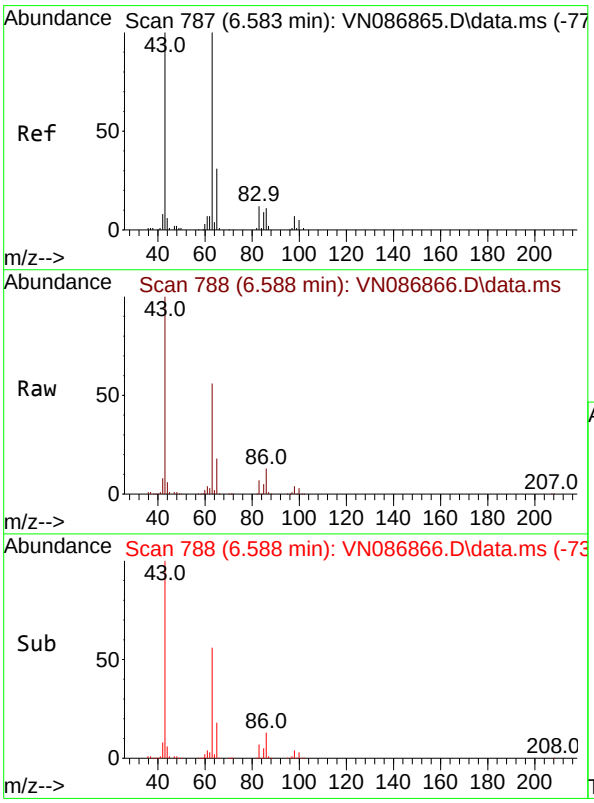
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 12.1 | 9.5 | 14.3 |

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

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

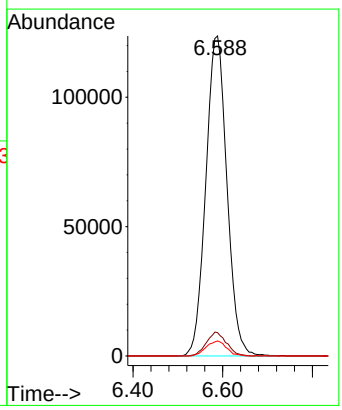


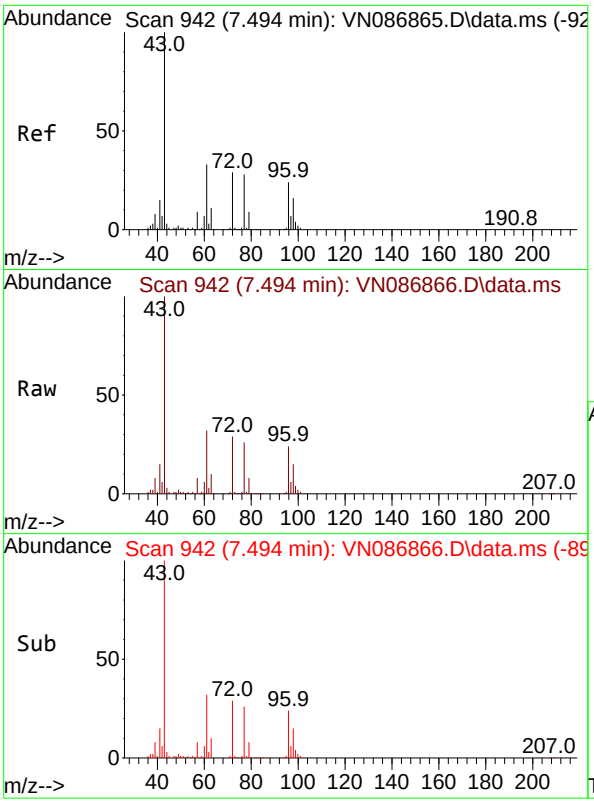




#24
1,1-Dichloroethane
Concen: 99.186 ug/l
RT: 6.588 min Scan# 788
Delta R.T. 0.006 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 63 Resp: 404207

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 7.3 | 3.6 | 10.8 |
| 100 | 4.7 | 2.6 | 7.8 |






#25
2-Butanone
Concen: 496.743 ug/l
RT: 7.494 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

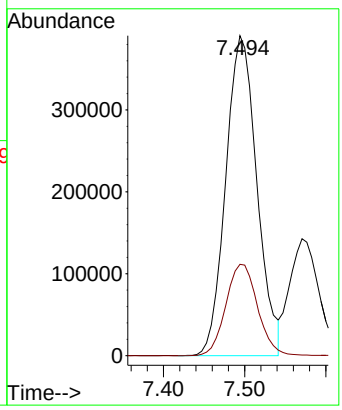
Tgt Ion: 43 Resp: 104338

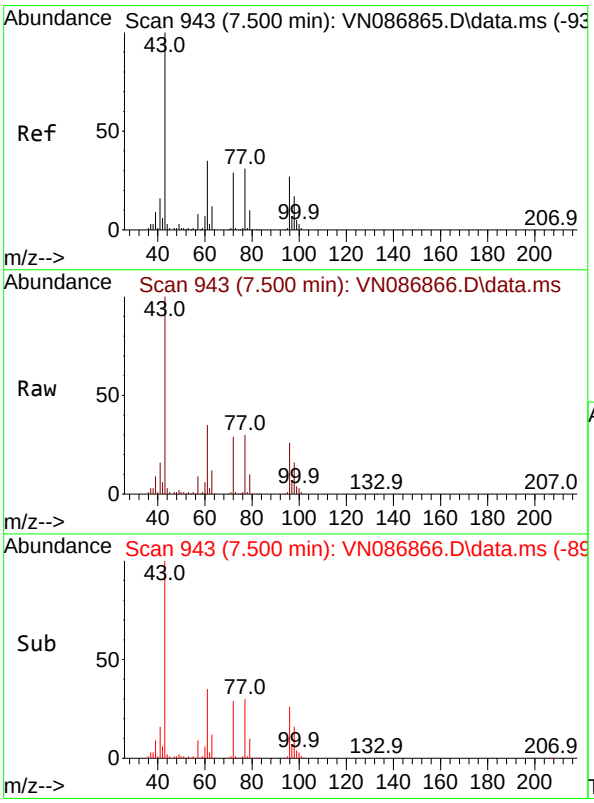
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 28.5 | 23.0 | 34.6 |

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

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

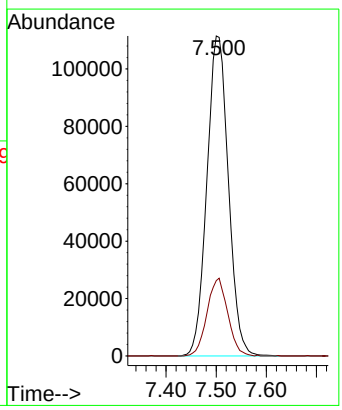


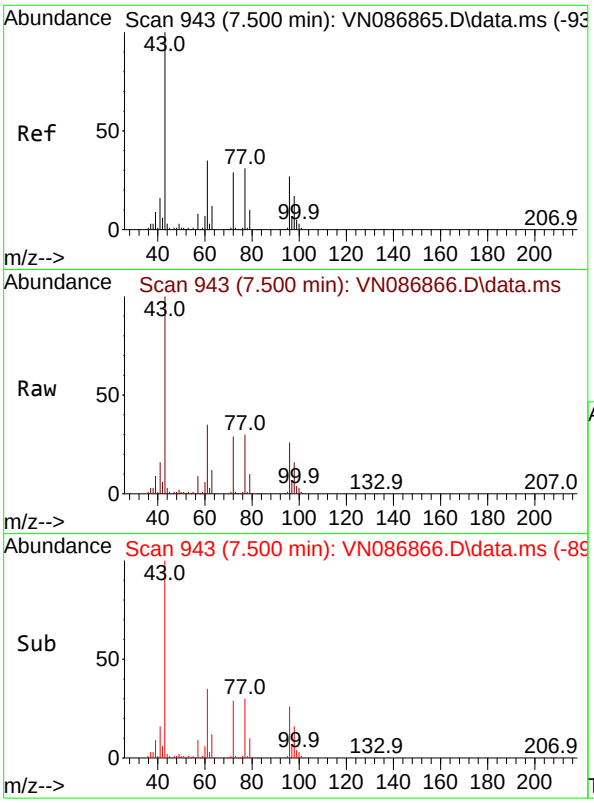




#26
2,2-Dichloropropane
Concen: 104.729 ug/l
RT: 7.500 min Scan# 943
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 77 Resp: 331995

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 23.4 | 11.6 | 34.7 |






#27
cis-1,2-Dichloroethene
Concen: 98.410 ug/l
RT: 7.500 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 96 Resp: 26524

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 137.9 | 0.0 | 278.0 |
| 98 | 64.0 | 0.0 | 128.2 |

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

**Manual Integrations**
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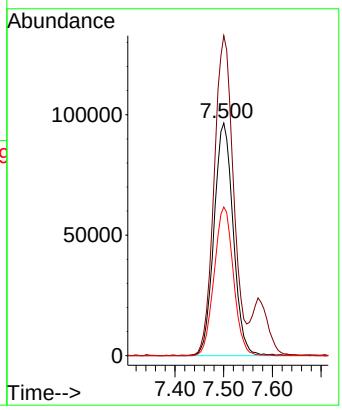
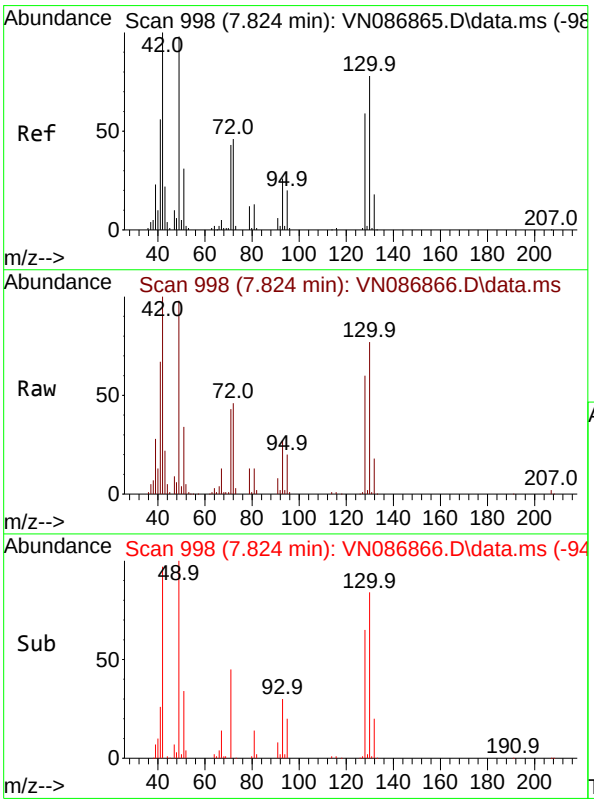
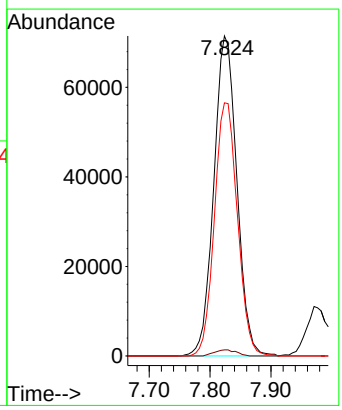


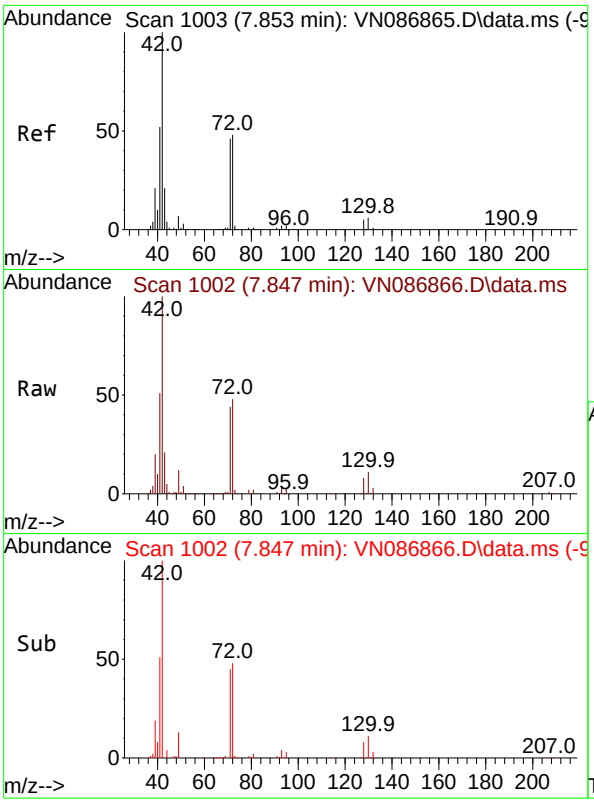




#28
Bromochloromethane
Concen: 93.851 ug/l
RT: 7.824 min Scan# 998
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 49 Resp: 188050

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.8 | 0.0 | 3.8 |
| 130 | 78.9 | 62.2 | 93.2 |

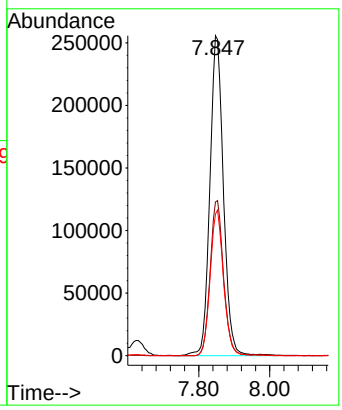





#29
Tetrahydrofuran
Concen: 495.240 ug/l
RT: 7.847 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 42 Resp: 67763

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 47.9 | 37.8 | 56.6 |
| 71 | 44.8 | 35.6 | 53.4 |




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

**Manual Integrations**
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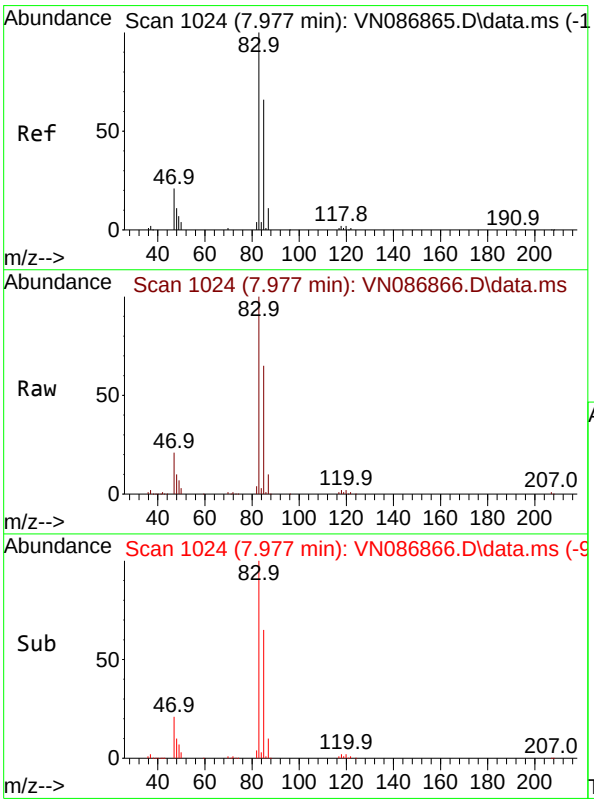
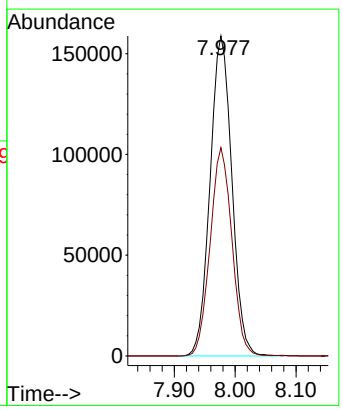
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

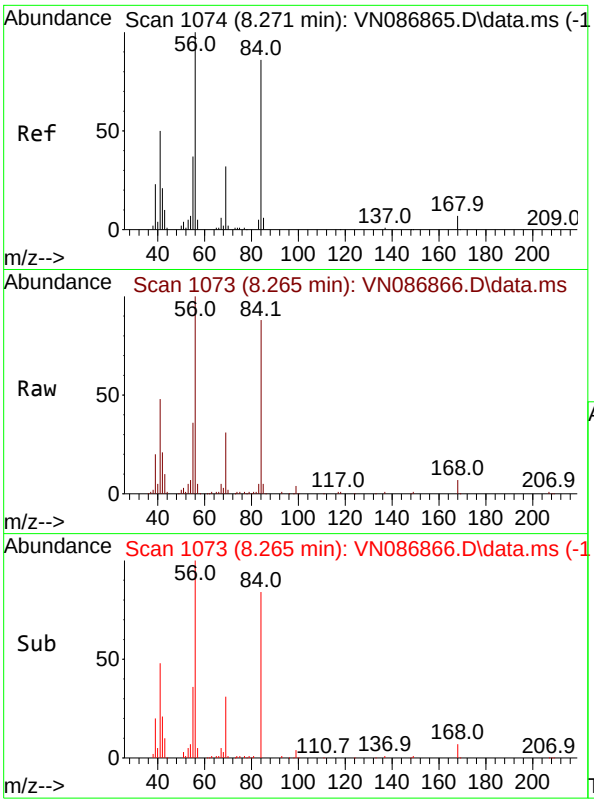



#30
Chloroform
Concen: 97.040 ug/l
RT: 7.977 min Scan# 1024
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 83 Resp: 394927

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 65.1 | 52.9 | 79.3 |

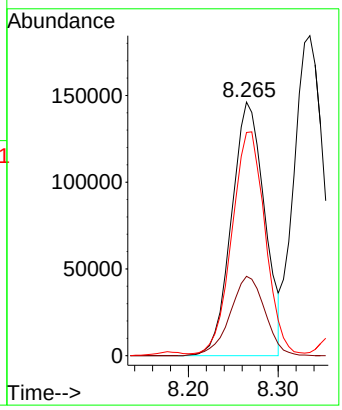





#31
Cyclohexane
Concen: 94.869 ug/l
RT: 8.265 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 56 Resp: 37493

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 31.3 | 25.4 | 38.0 |
| 84 | 86.8 | 68.8 | 103.2 |




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

**Manual Integrations**
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Reviewed By :John Carlone 06/09/2025
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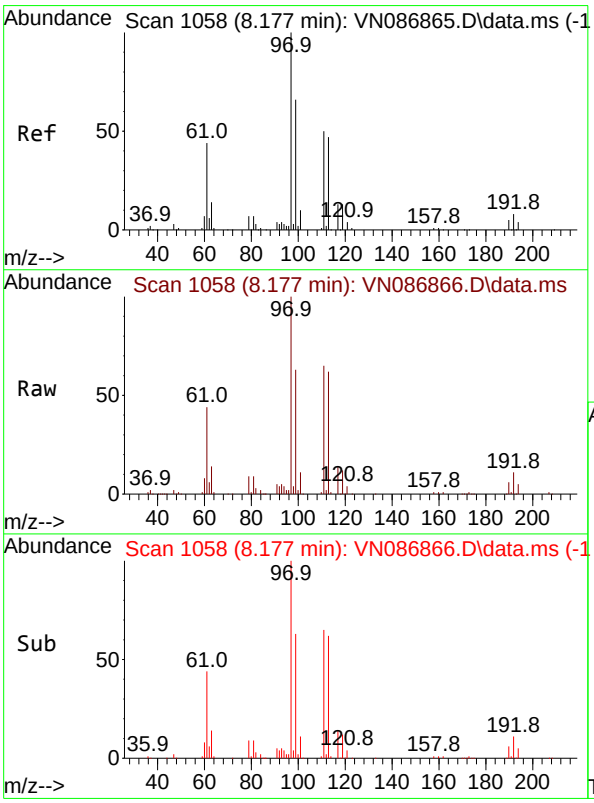
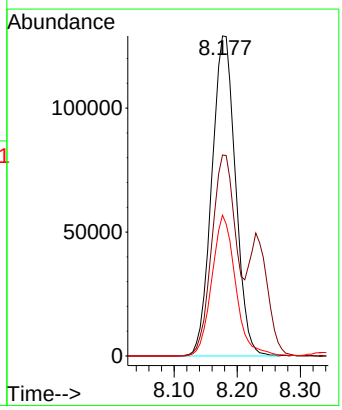
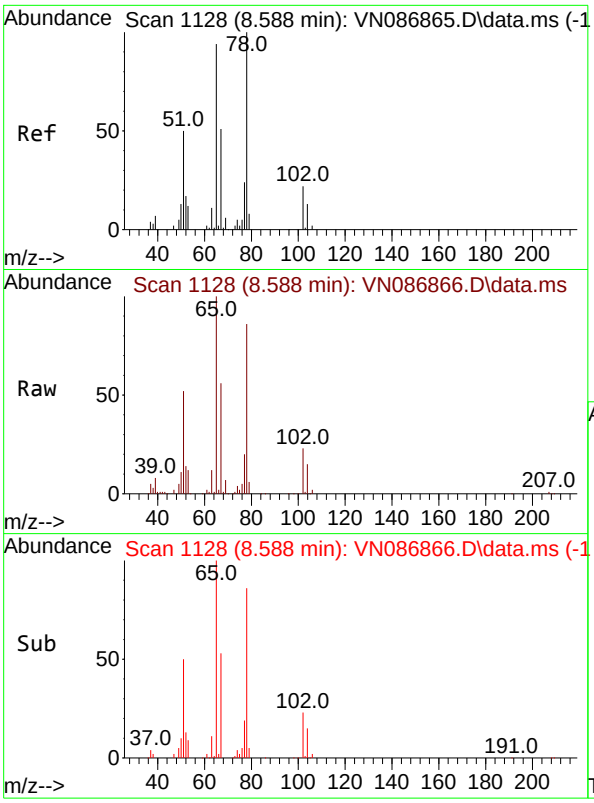



#32
1,1,1-Trichloroethane
Concen: 97.306 ug/l
RT: 8.177 min Scan# 1058
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 97 Resp: 336819

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 65.7 | 52.0 | 78.0 |
| 61 | 44.2 | 35.9 | 53.9 |

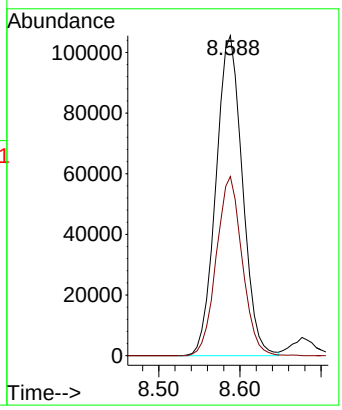





#33
1,2-Dichloroethane-d4
Concen: 98.065 ug/l
RT: 8.588 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 65 Resp: 23895

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 54.8 | 0.0 | 105.6 |




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

**Manual Integrations**
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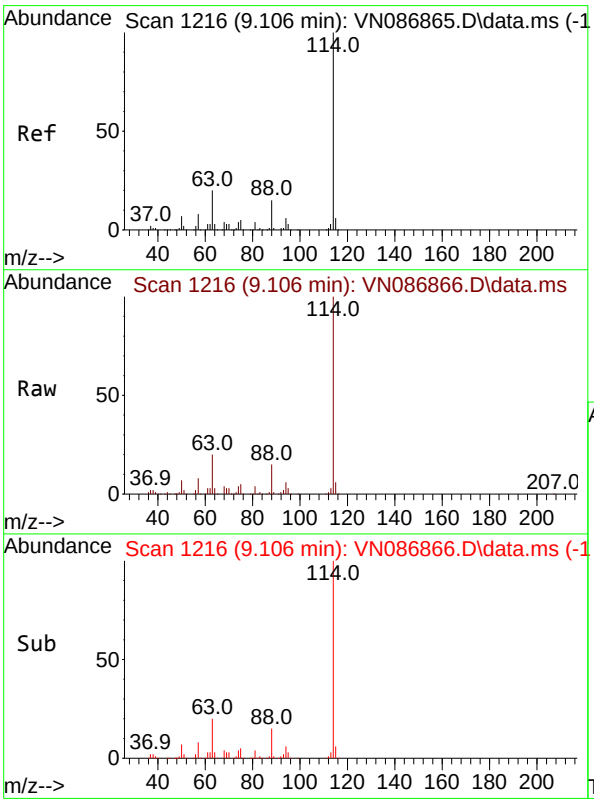
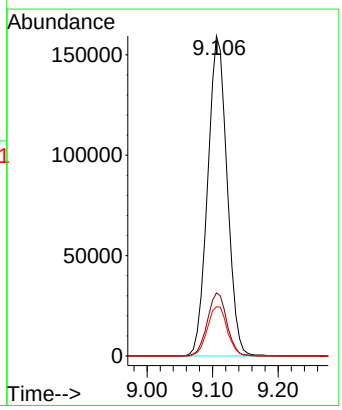
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

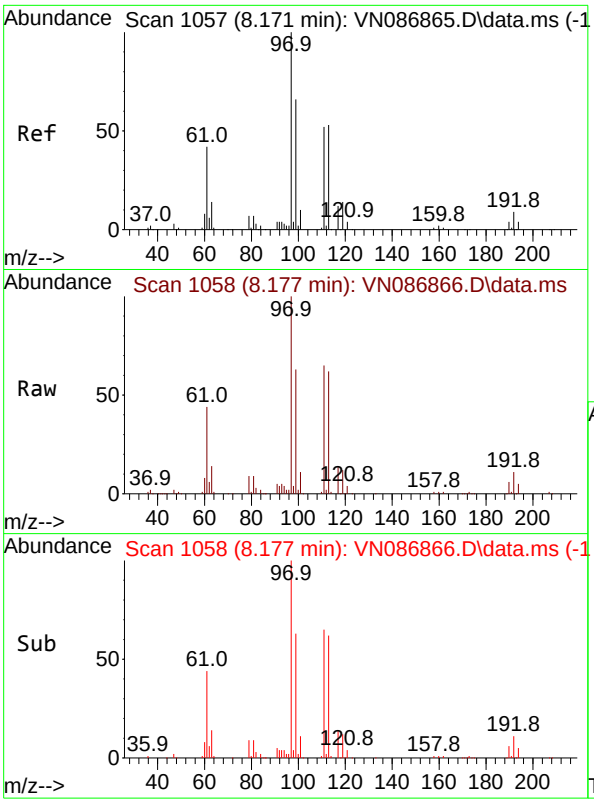



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.106 min Scan# 1216
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:114 Resp: 327782

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 19.7 | 0.0 | 39.6 |
| 88 | 15.4 | 0.0 | 30.2 |

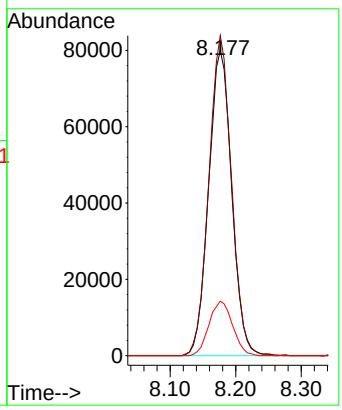





#35
Dibromofluoromethane
Concen: 100.495 ug/l
RT: 8.177 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:113 Resp: 19521

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 102.9 | 84.2 | 126.2 |
| 192 | 18.2 | 14.2 | 21.4 |




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

**Manual Integrations**
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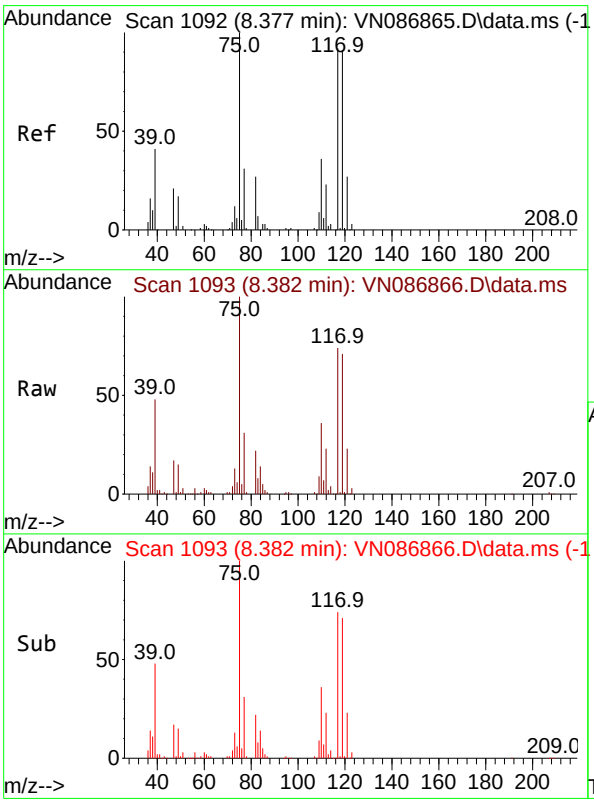
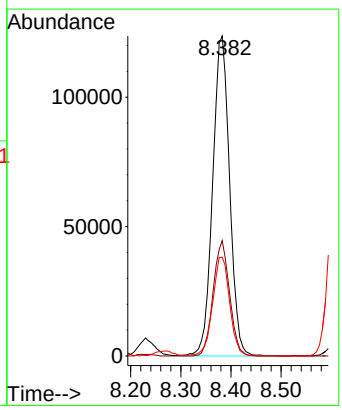
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

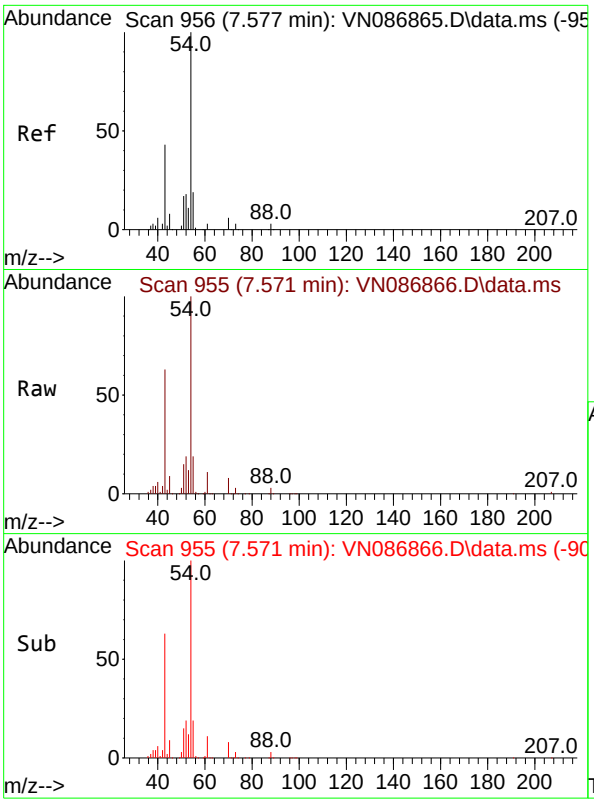



#36
1,1-Dichloropropene
Concen: 100.156 ug/l
RT: 8.382 min Scan# 1093
Delta R.T. 0.006 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 75 Resp: 289907

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 34.9 | 17.6 | 52.9 |
| 77 | 31.1 | 25.3 | 37.9 |

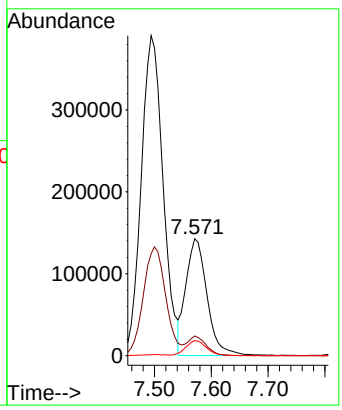





#37
Ethyl Acetate
Concen: 100.591 ug/l
RT: 7.571 min Scan# 9
Delta R.T. -0.006 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 43 Resp: 37065

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 15.3 | 12.1 | 18.1 |
| 70 | 12.6 | 9.8 | 14.6 |




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

**Manual Integrations**
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Reviewed By :John Carlone 06/09/2025
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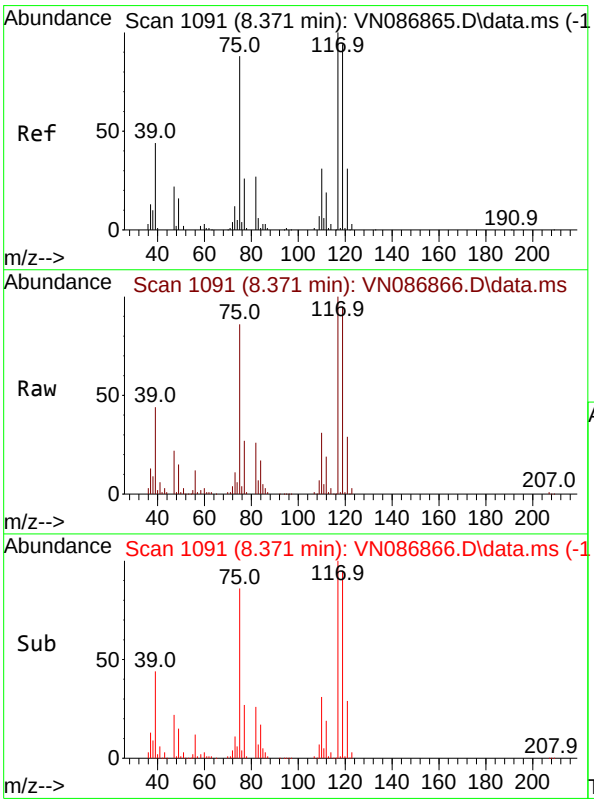
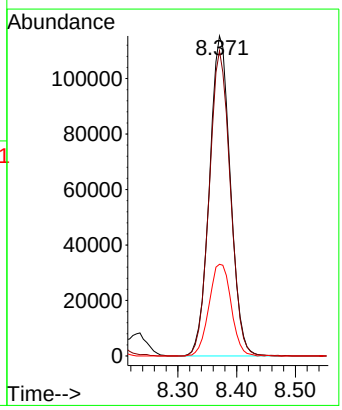
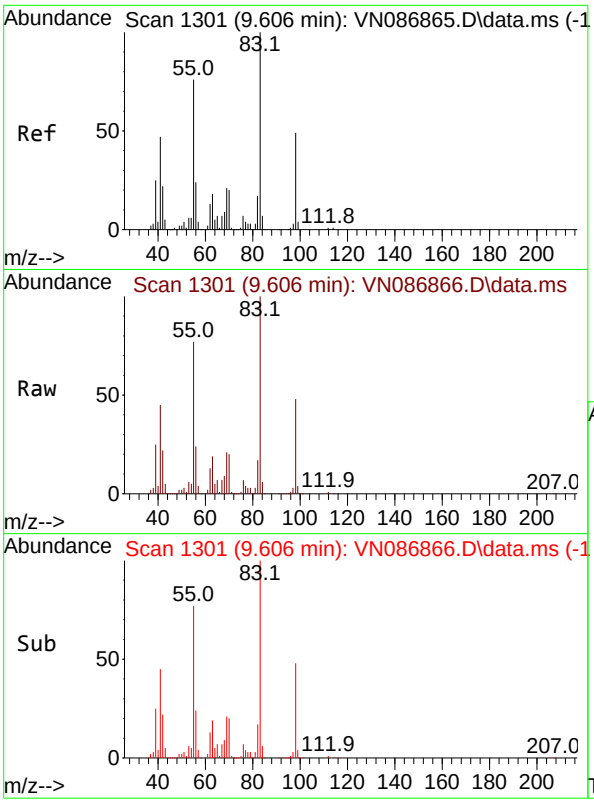



#38
Carbon Tetrachloride
Concen: 100.404 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:117 Resp: 285325

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 95.4 | 75.0 | 112.6 |
| 121 | 28.6 | 24.9 | 37.3 |






#39
Methylcyclohexane
Concen: 99.758 ug/l
RT: 9.606 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 83 Resp: 39560

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 76.8 | 61.0 | 91.6 |
| 98 | 47.6 | 38.9 | 58.3 |

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

**Manual Integrations**
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Reviewed By :John Carlone 06/09/2025
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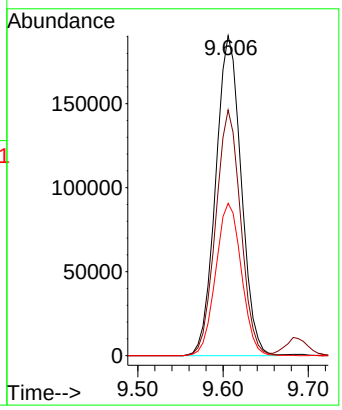
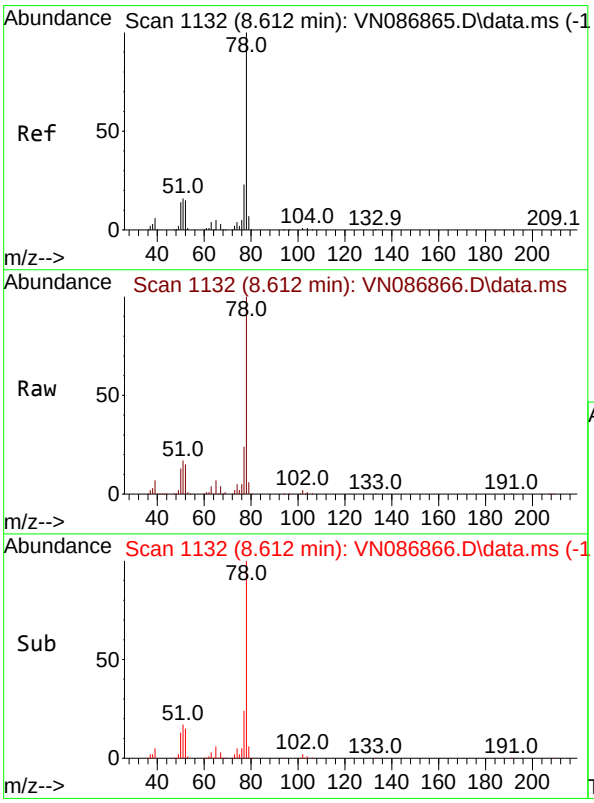
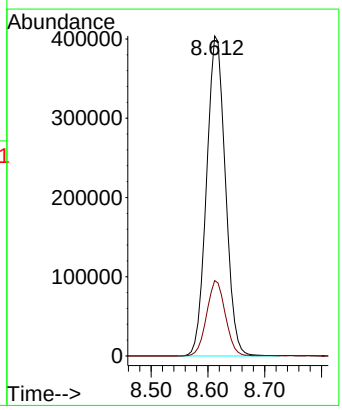


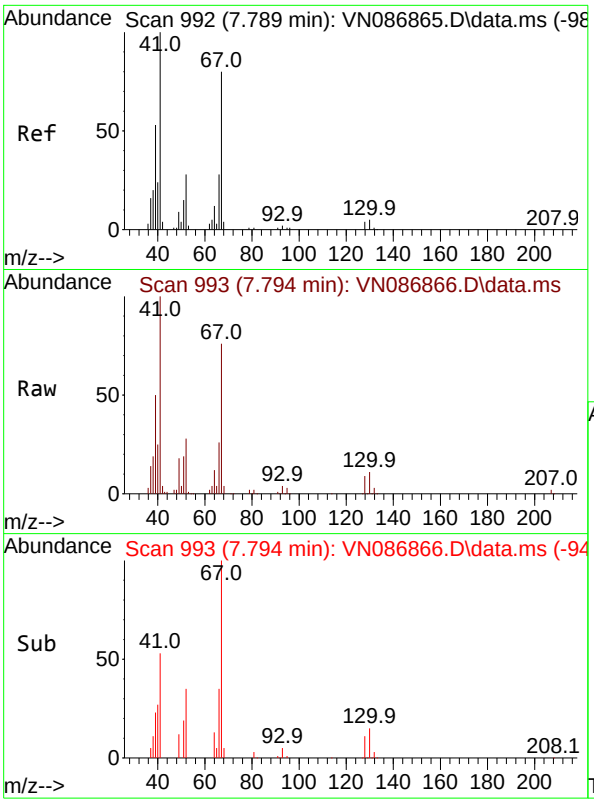




#40
Benzene
Concen: 97.946 ug/l
RT: 8.612 min Scan# 1132
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 78 Resp: 927083

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.6 | 18.7 | 28.1 |

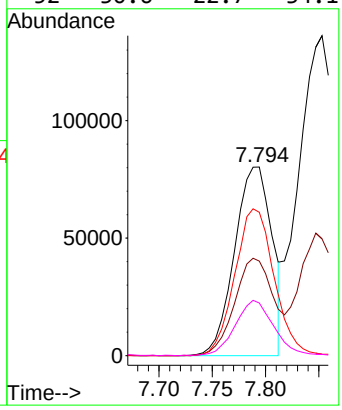





#41
Methacrylonitrile
Concen: 94.688 ug/l
RT: 7.794 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 41 Resp: 19594

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 54.3 | 41.2 | 61.8 |
| 67 | 82.5 | 61.4 | 92.2 |
| 52 | 30.6 | 22.7 | 34.1 |




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

**Manual Integrations**
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Reviewed By :John Carlone 06/09/2025
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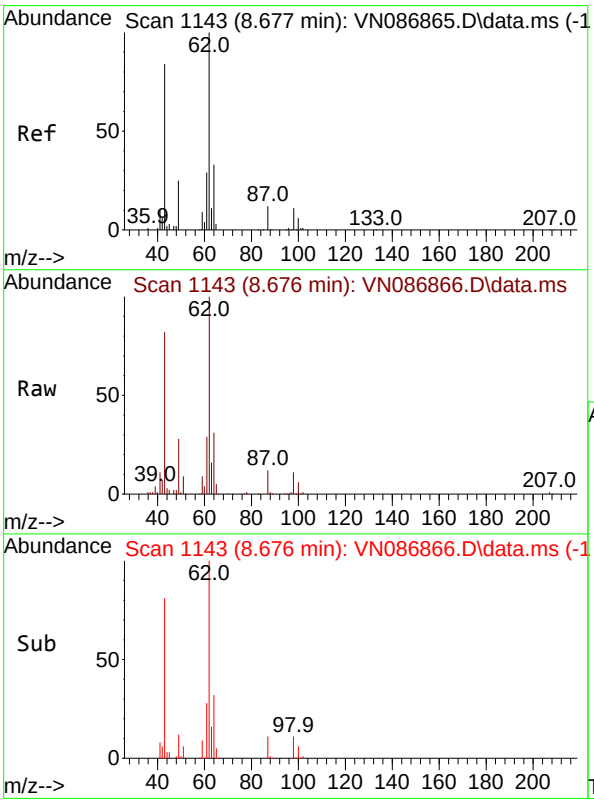
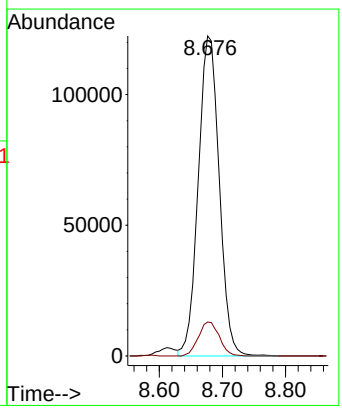
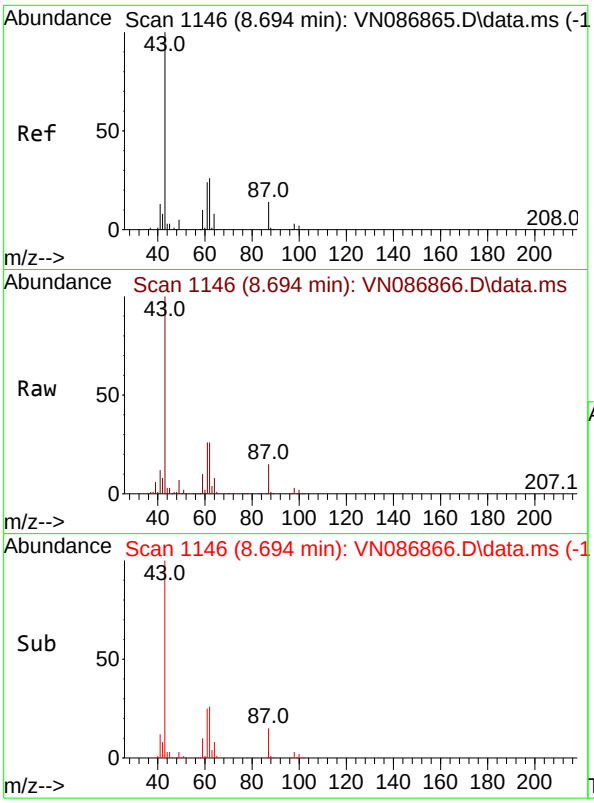



#42
1,2-Dichloroethane
Concen: 98.232 ug/l
RT: 8.676 min Scan# 1143
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 62 Resp: 282015

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 10.6 | 0.0 | 21.2 |






#43
Isopropyl Acetate
Concen: 97.981 ug/l
RT: 8.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 43 Resp: 57946

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 28.1 | 22.1 | 33.1 |
| 87 | 15.0 | 11.8 | 17.6 |

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

**Manual Integrations**
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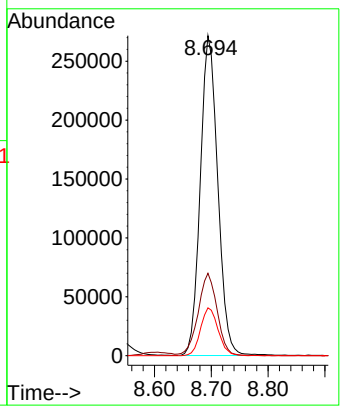
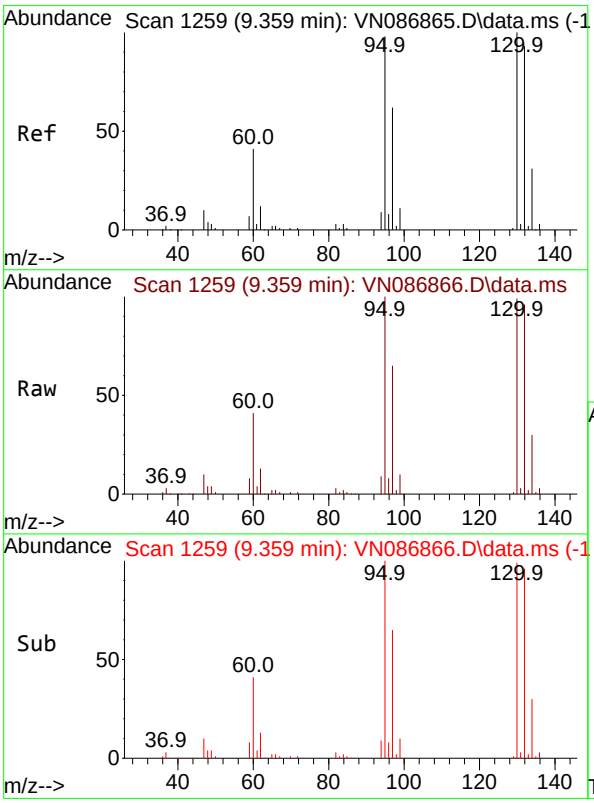
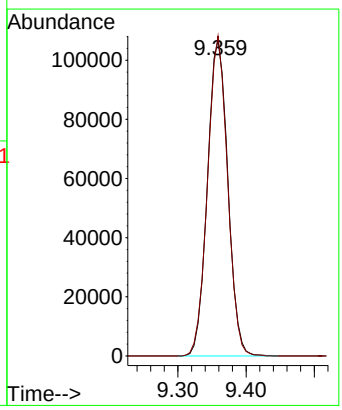


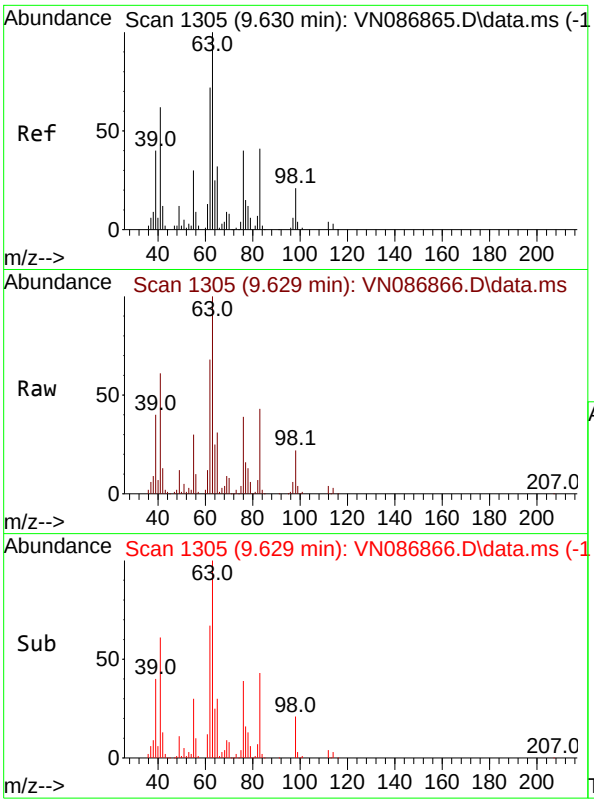




#44
Trichloroethene
Concen: 99.280 ug/l
RT: 9.359 min Scan# 1259
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:130 Resp: 222822

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 101.4 | 0.0 | 196.2 |

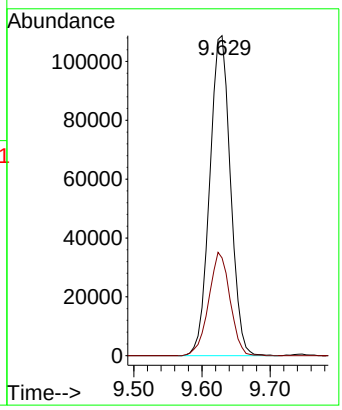





#45
1,2-Dichloropropane
Concen: 100.077 ug/l
RT: 9.629 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 63 Resp: 23045

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 30.6 | 25.5 | 38.3 |




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

**Manual Integrations**
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Reviewed By :John Carlone 06/09/2025
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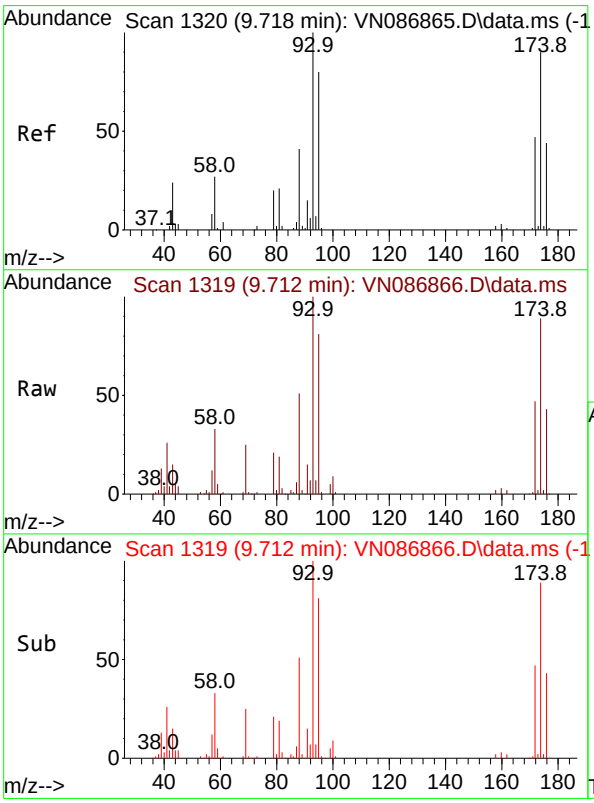
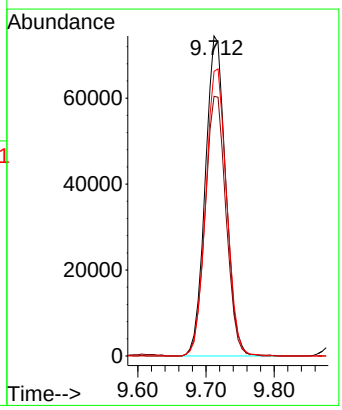
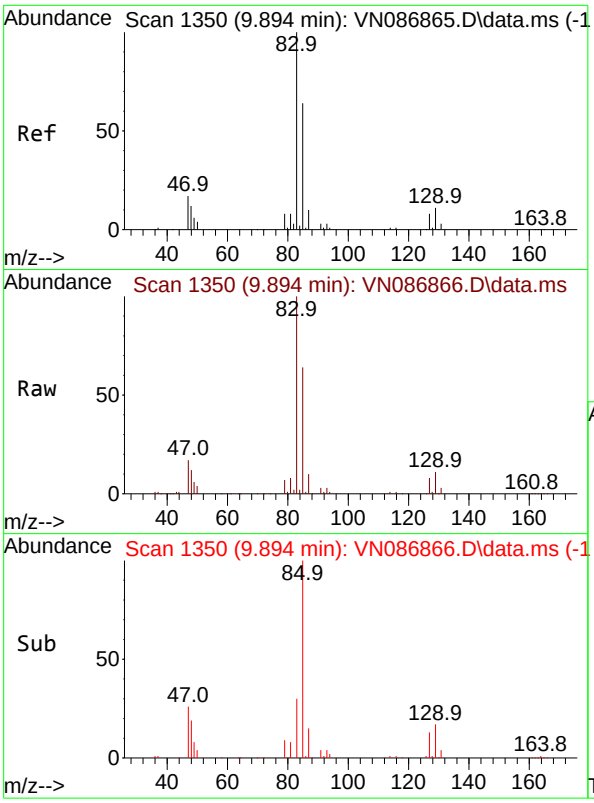



#46
Dibromomethane
Concen: 101.685 ug/l
RT: 9.712 min Scan# 1319
Delta R.T. -0.006 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 93 Resp: 155530

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 82.9 | 67.1 | 100.7 |
| 174 | 91.6 | 74.2 | 111.4 |

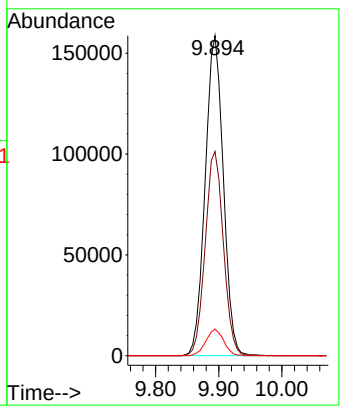





#47
Bromodichloromethane
Concen: 100.533 ug/l
RT: 9.894 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 83 Resp: 31637

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 63.8 | 50.9 | 76.3 |
| 127 | 8.3 | 6.6 | 10.0 |




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

**Manual Integrations**
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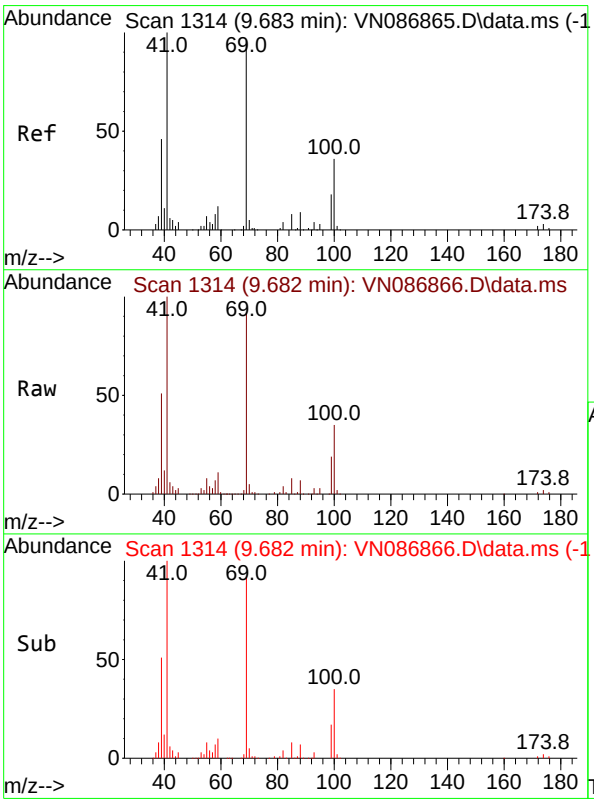
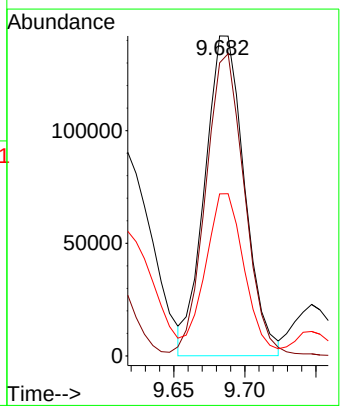
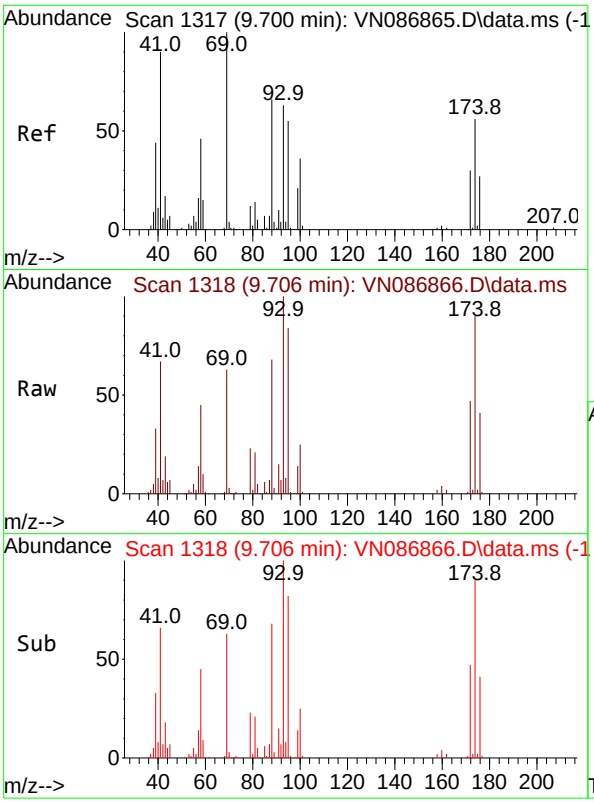



#48
Methyl methacrylate
Concen: 101.288 ug/l
RT: 9.682 min Scan# 1314
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 41 Resp: 275710

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 92.4 | 74.6 | 112.0 |
| 39 | 50.1 | 40.2 | 60.4 |






#49
1,4-Dioxane
Concen: 2115.744 ug/l
RT: 9.706 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 88 Resp: 10477

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 0.0 | 0.0 | 0.0 |
| 58 | 71.5 | 57.7 | 86.5 |

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

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
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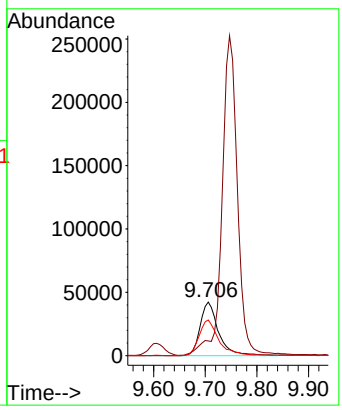
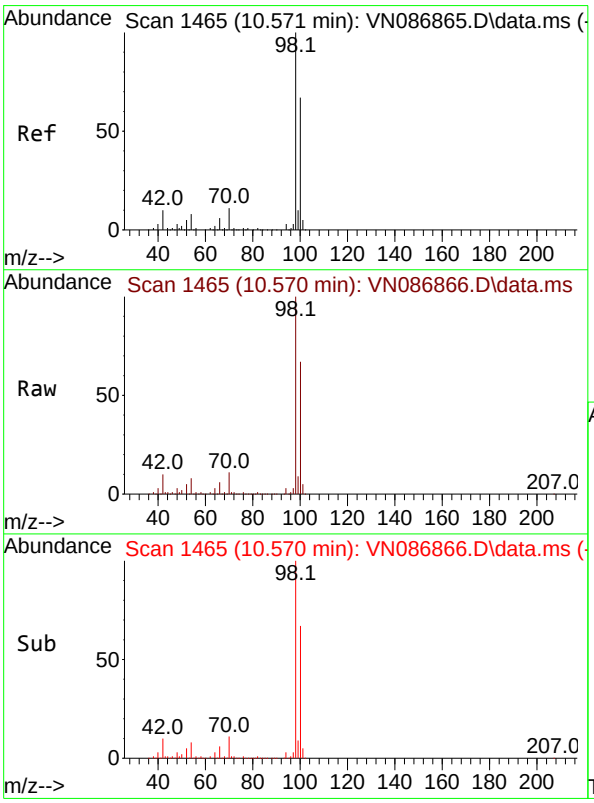
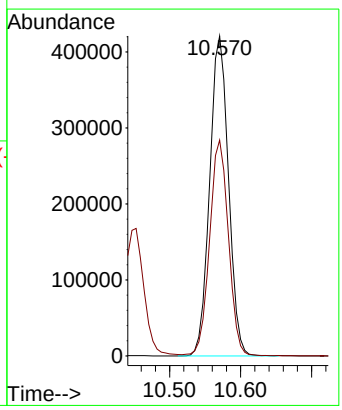


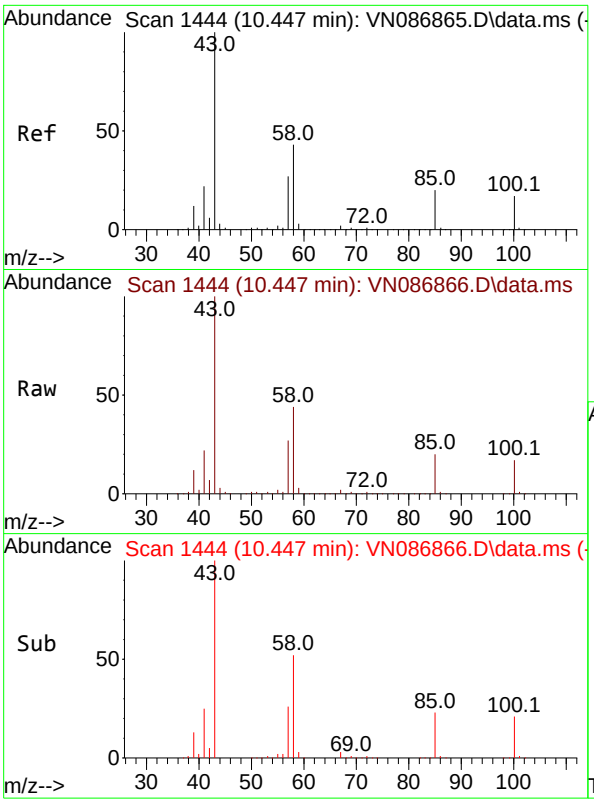




#50
Toluene-d8
Concen: 100.419 ug/l
RT: 10.570 min Scan# 1465
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 98 Resp: 772210

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 67.6 | 53.4 | 80.0 |






#51
4-Methyl-2-Pentanone
Concen: 517.729 ug/l
RT: 10.447 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

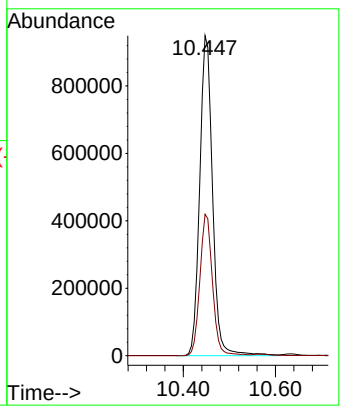
Tgt Ion: 43 Resp: 184327

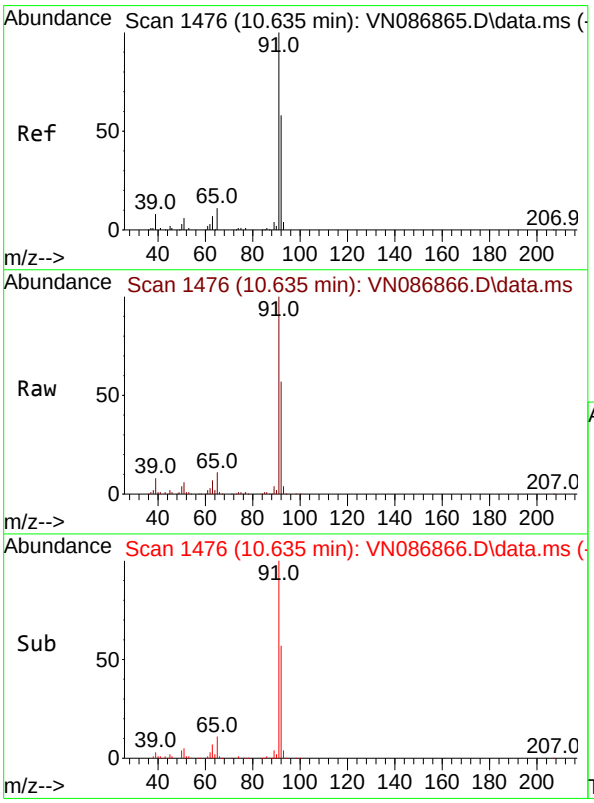
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 43.6 | 34.2 | 51.4 |

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

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

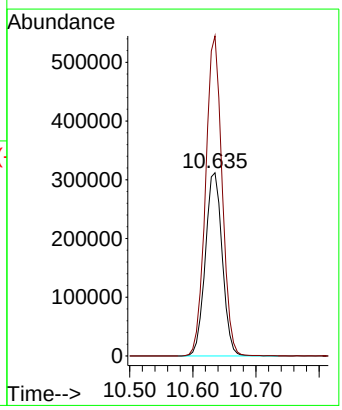


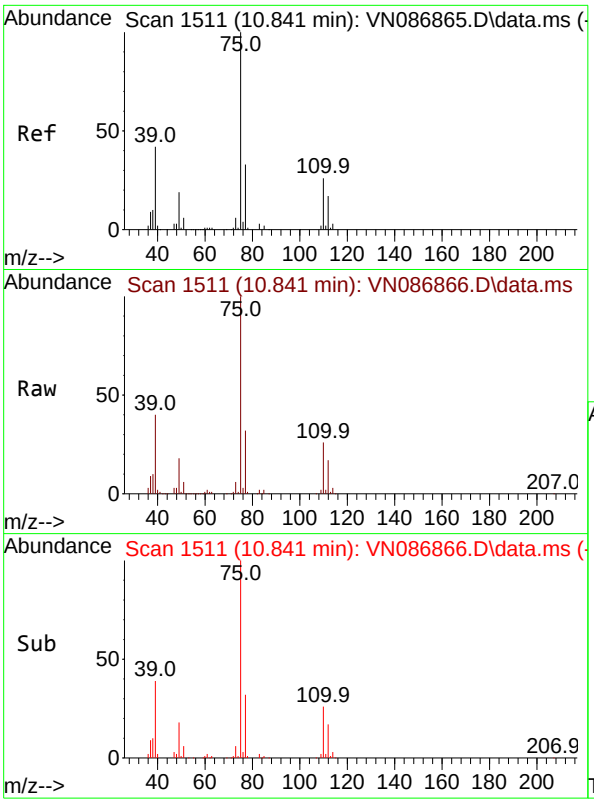




#52
Toluene
Concen: 100.092 ug/l
RT: 10.635 min Scan# 1476
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 92 Resp: 578978

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 170.6 | 136.5 | 204.7 |

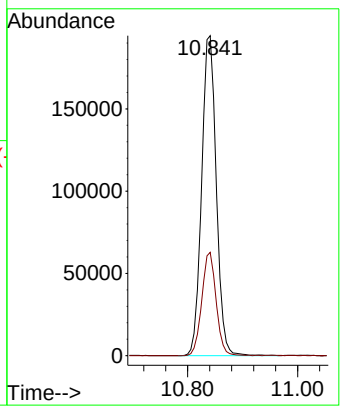





#53
t-1,3-Dichloropropene
Concen: 102.077 ug/l
RT: 10.841 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 75 Resp: 35920

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.3 | 26.4 | 39.6 |




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

**Manual Integrations**
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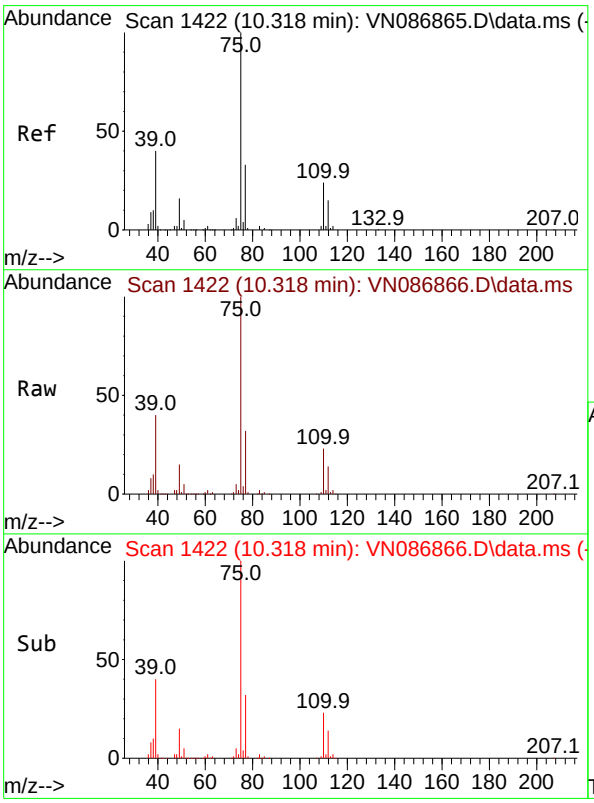
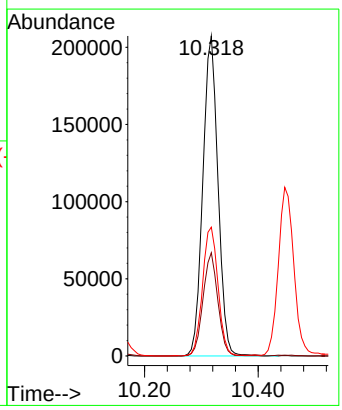
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

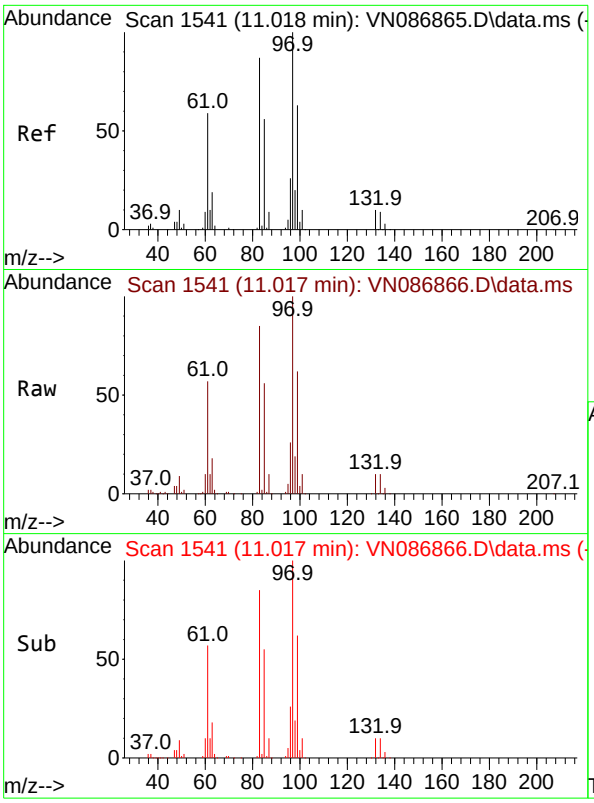



#54
cis-1,3-Dichloropropene
Concen: 101.730 ug/l
RT: 10.318 min Scan# 1422
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 75 Resp: 383030

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.3 | 26.2 | 39.4 |
| 39 | 40.1 | 32.3 | 48.5 |

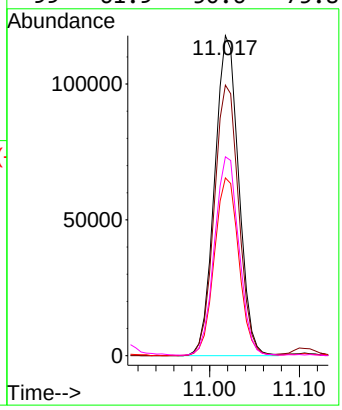





#55
1,1,2-Trichloroethane
Concen: 98.808 ug/l
RT: 11.017 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 97 Resp: 21992

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 84.5 | 69.7 | 104.5 |
| 85 | 55.6 | 45.1 | 67.7 |
| 99 | 61.9 | 50.6 | 75.8 |




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

**Manual Integrations**
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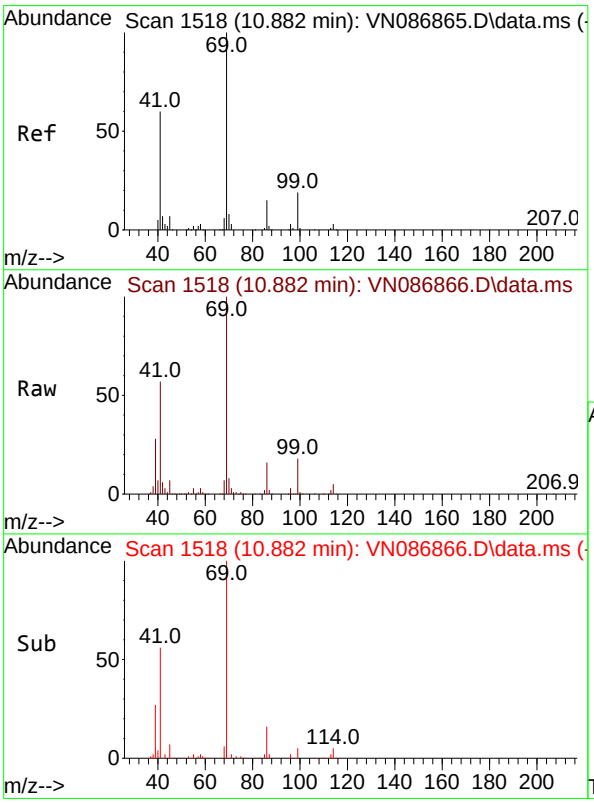
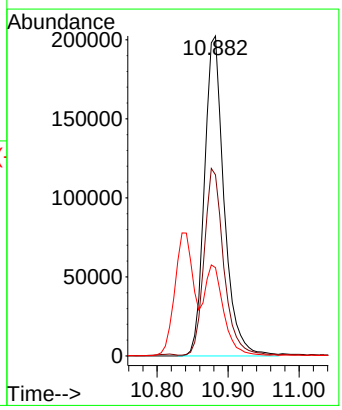
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

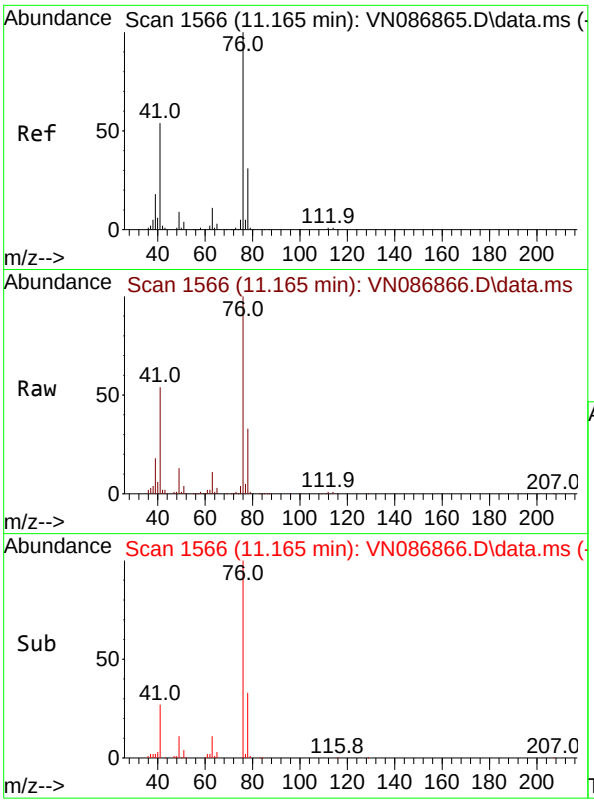



#56
Ethyl methacrylate
Concen: 109.955 ug/l
RT: 10.882 min Scan# 1518
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 69 Resp: 389802

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 58.3 | 47.2 | 70.8 |
| 39 | 27.5 | 23.0 | 34.6 |

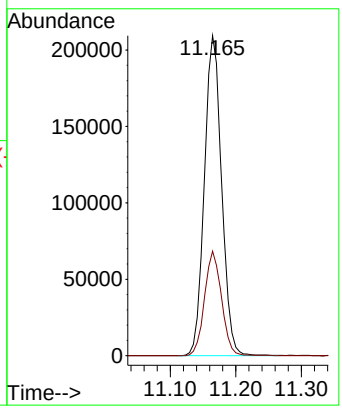





#57
1,3-Dichloropropane
Concen: 99.069 ug/l
RT: 11.165 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 76 Resp: 38251

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.2 | 25.3 | 37.9 |




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

**Manual Integrations**
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Reviewed By :John Carlone 06/09/2025
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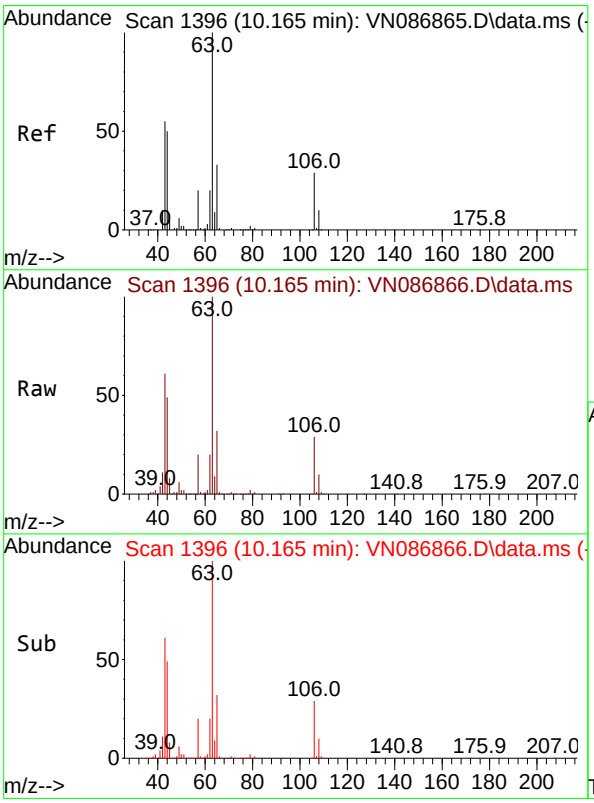
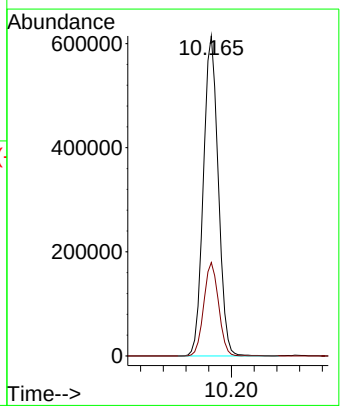
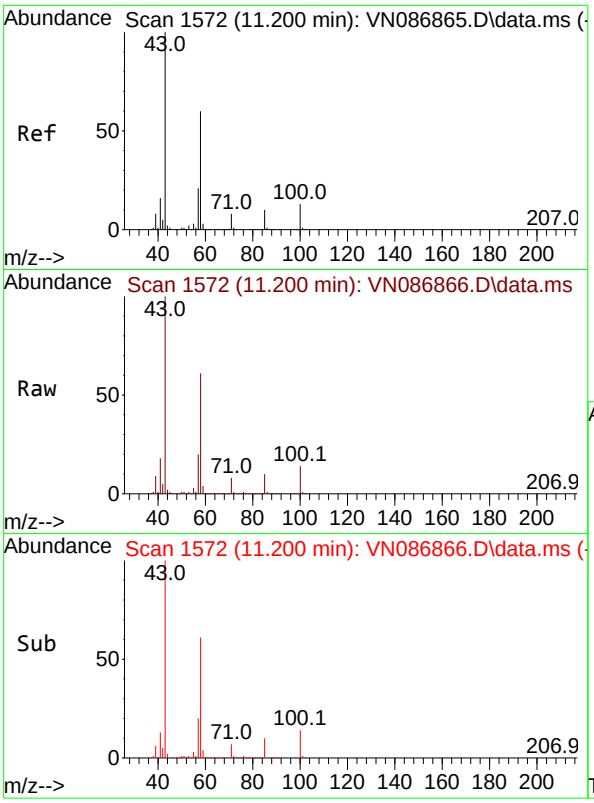



#58
2-Chloroethyl Vinyl ether
Concen: 526.621 ug/l
RT: 10.165 min Scan# 1396
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 63 Resp: 1113523

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 29.1 | 23.0 | 34.6 |

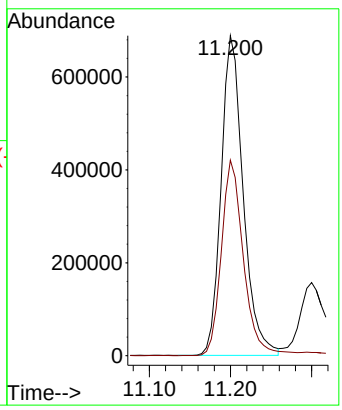





#59
2-Hexanone
Concen: 567.535 ug/l
RT: 11.200 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 43 Resp: 130153

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 61.4 | 30.4 | 91.3 |




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

**Manual Integrations**
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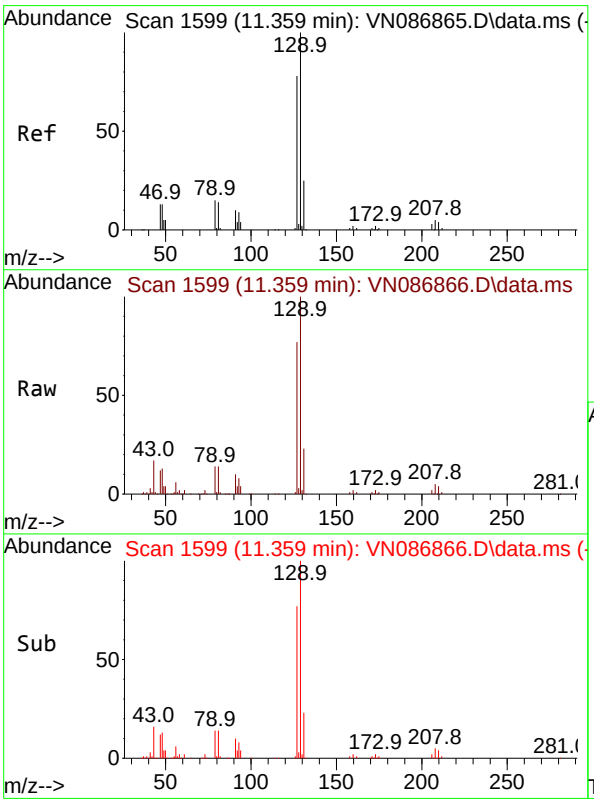
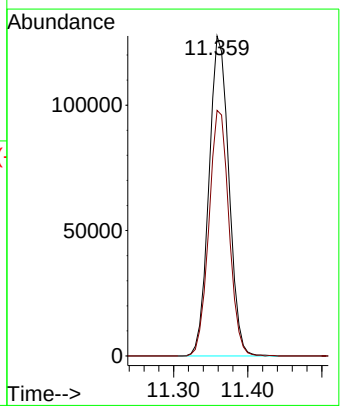
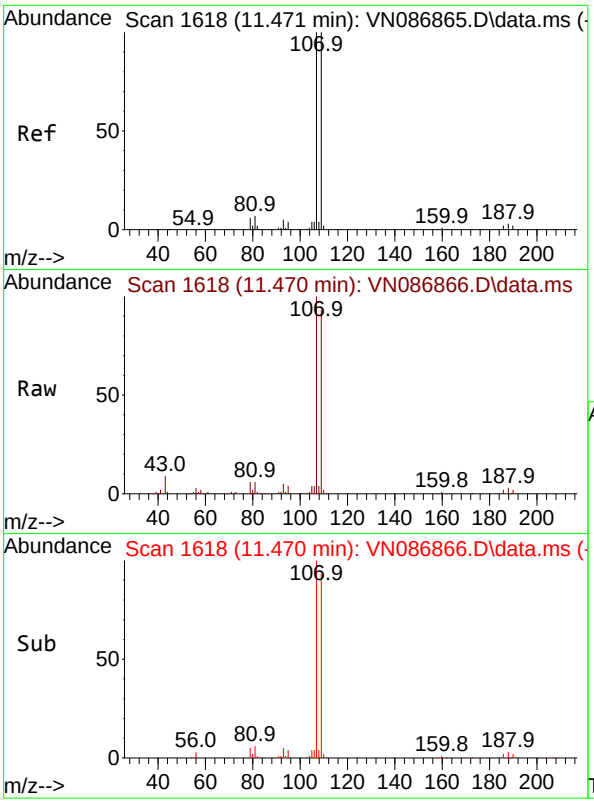



#60
Dibromochloromethane
Concen: 102.616 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:129 Resp: 237965

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 77.1 | 38.6 | 115.8 |

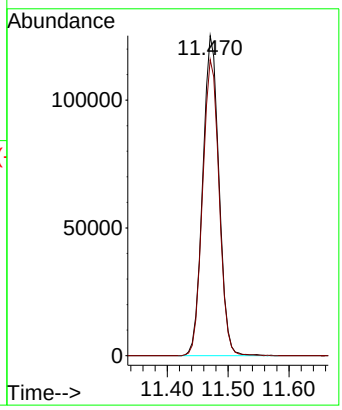





#61
1,2-Dibromoethane
Concen: 101.787 ug/l
RT: 11.470 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:107 Resp: 23221

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 93.8 | 76.3 | 114.5 |




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

**Manual Integrations**
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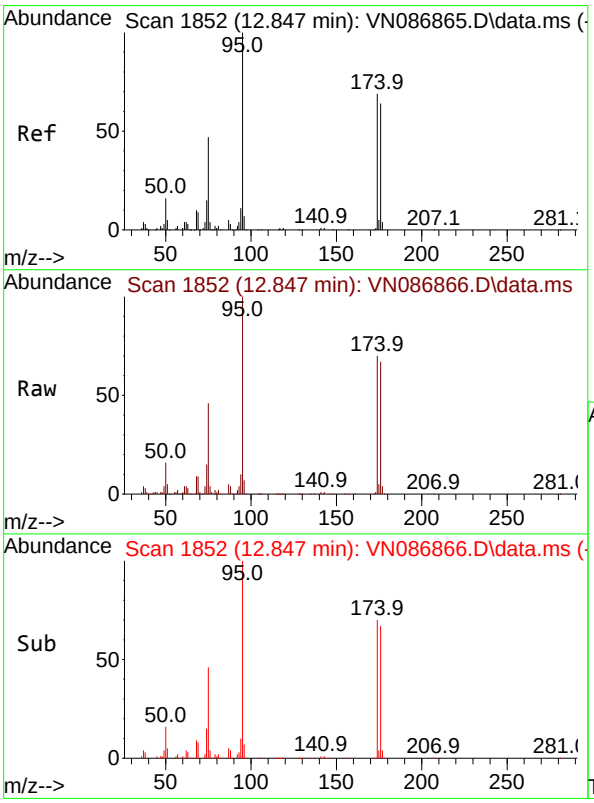
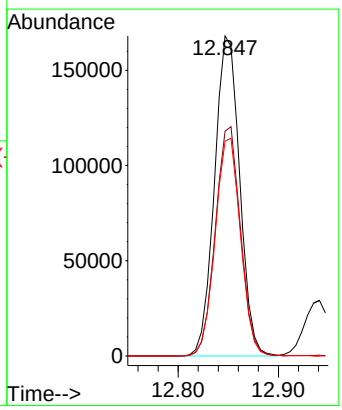
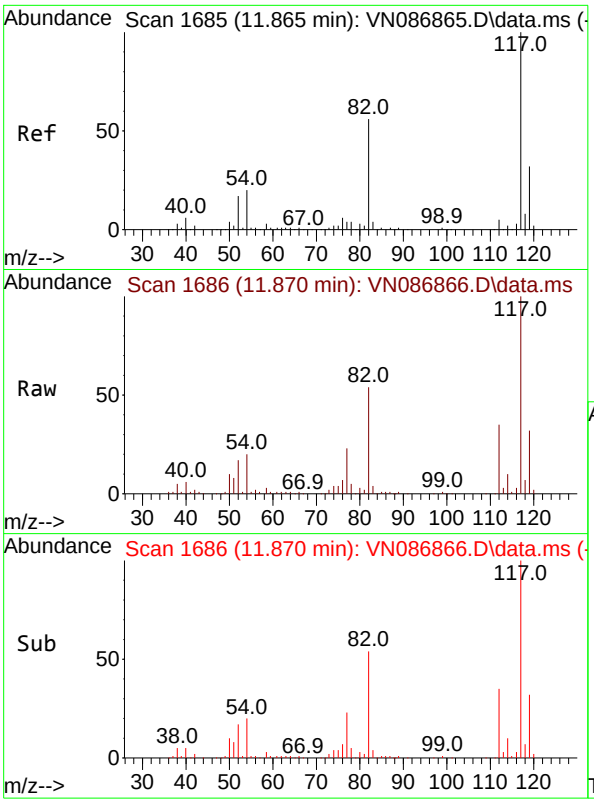



#62
4-Bromofluorobenzene
Concen: 102.339 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 95 Resp: 292385

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 71.6 | 0.0 | 141.8 |
| 176 | 68.6 | 0.0 | 132.6 |






#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.870 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:117 Resp: 29031

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 54.3 | 44.6 | 67.0 |
| 119 | 31.9 | 25.5 | 38.3 |

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

**Manual Integrations**
**APPROVED**

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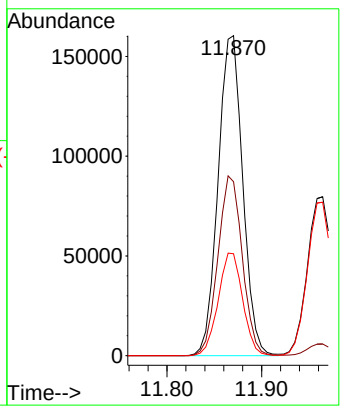
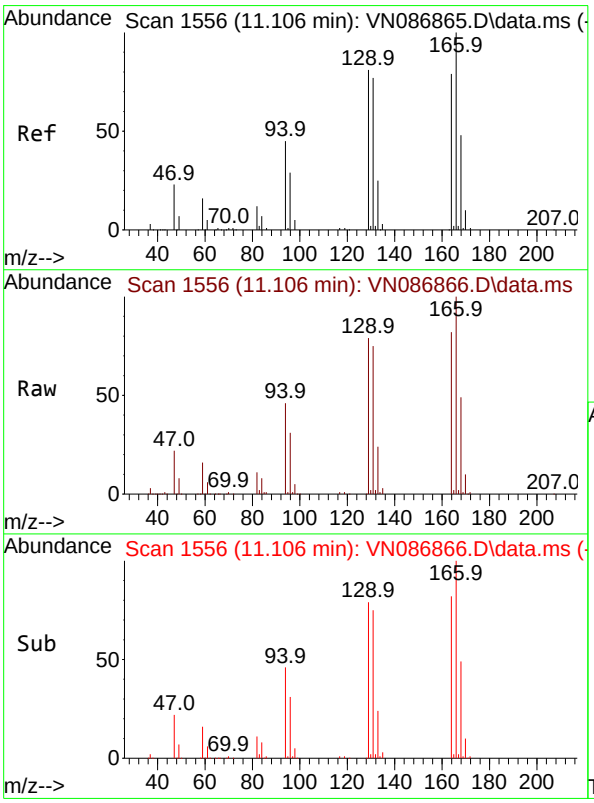
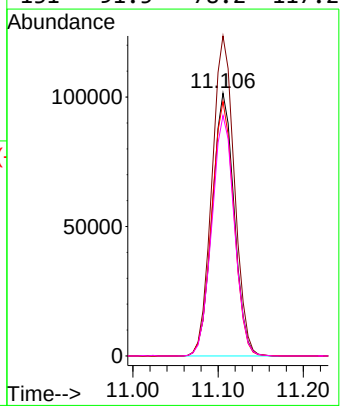


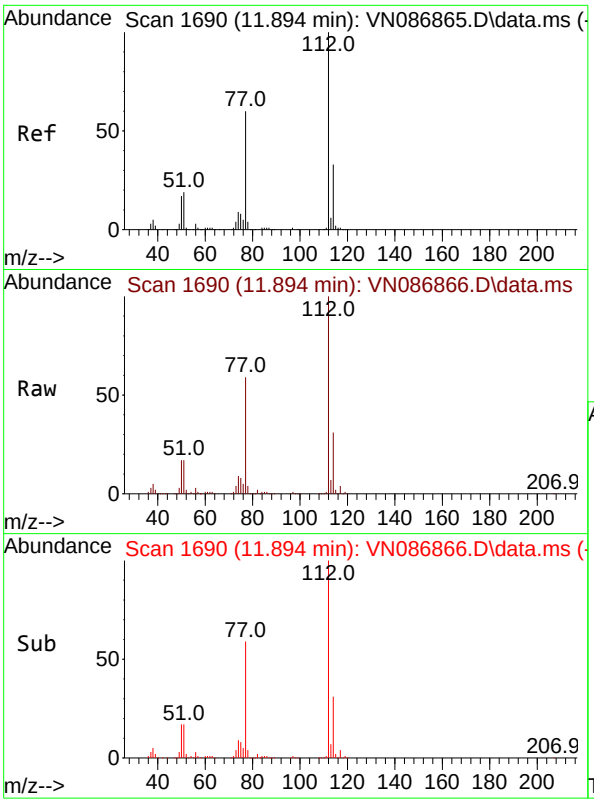




#64
Tetrachloroethene
Concen: 98.824 ug/l
RT: 11.106 min Scan# 1556
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:164 Resp: 181568

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 121.8 | 101.8 | 152.8 |
| 129 | 96.8 | 83.0 | 124.4 |
| 131 | 91.5 | 78.2 | 117.2 |

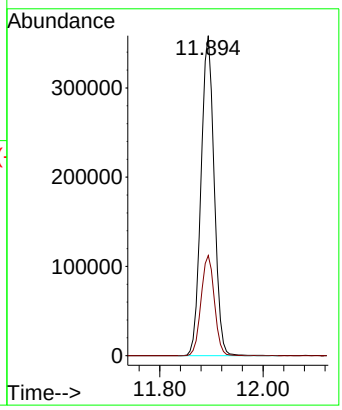





#65
Chlorobenzene
Concen: 98.793 ug/l
RT: 11.894 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:112 Resp: 63256

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 31.3 | 26.2 | 39.2 |




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

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
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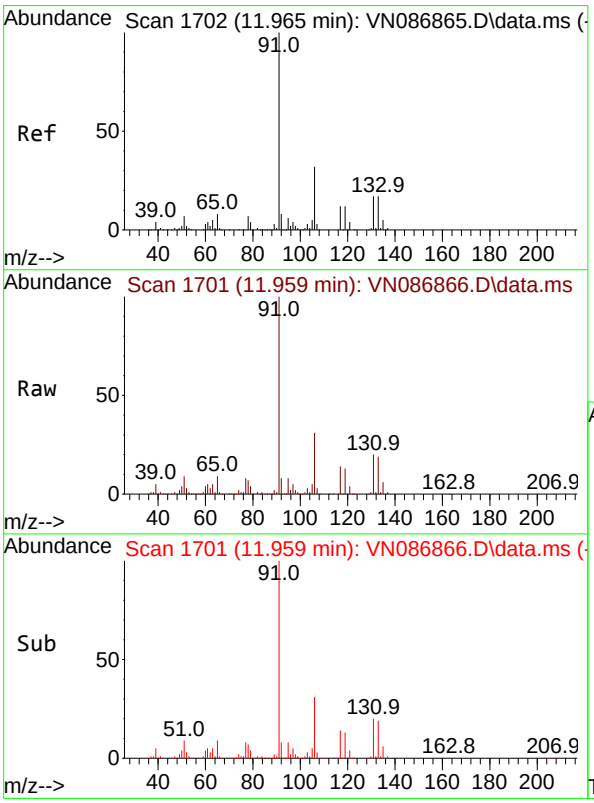
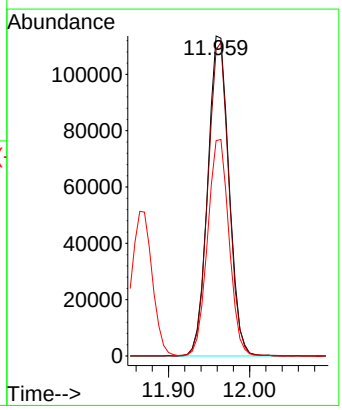
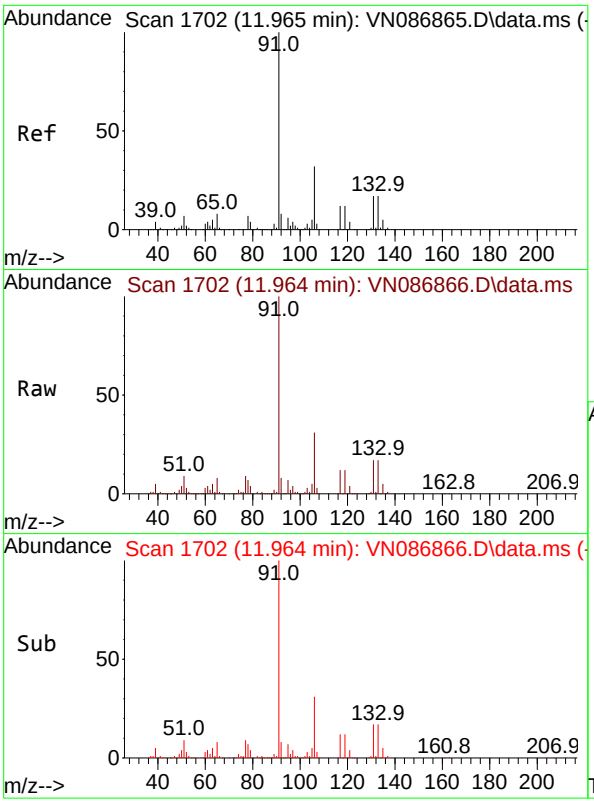



#66
1,1,1,2-Tetrachloroethane
Concen: 100.521 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.006 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:131 Resp: 206895

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 96.4 | 48.3 | 144.8 |
| 119 | 68.2 | 34.0 | 101.8 |

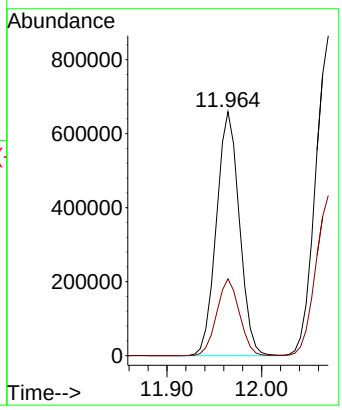





#67
Ethyl Benzene
Concen: 100.717 ug/l
RT: 11.964 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 91 Resp: 111080

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 31.5 | 25.4 | 38.2 |




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

**Manual Integrations**
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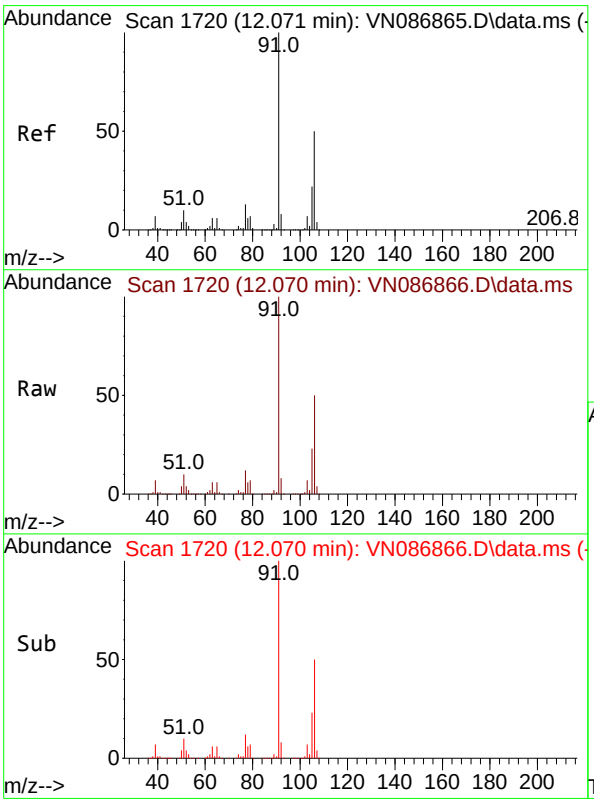
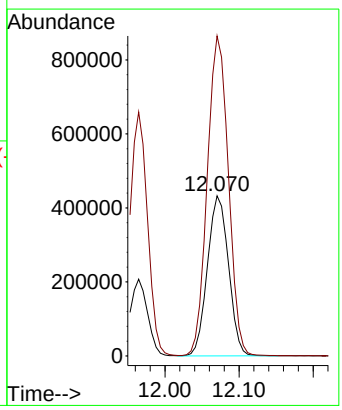
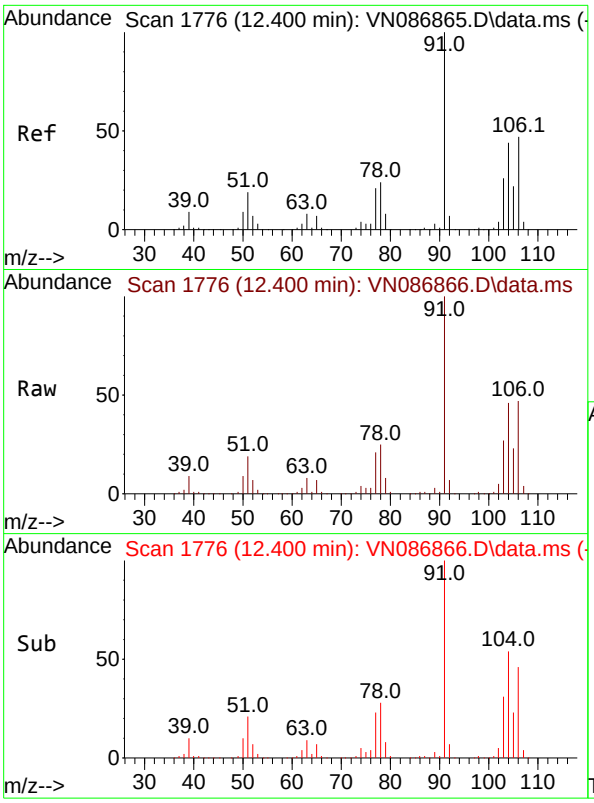



#68
m/p-Xylenes
Concen: 202.411 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:106 Resp: 854557

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 200.4 | 159.4 | 239.0 |






#69
o-Xylene
Concen: 102.070 ug/l
RT: 12.400 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

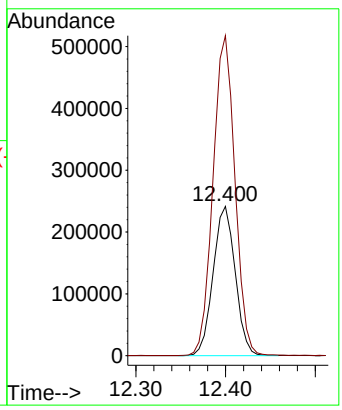
Tgt Ion:106 Resp: 41271

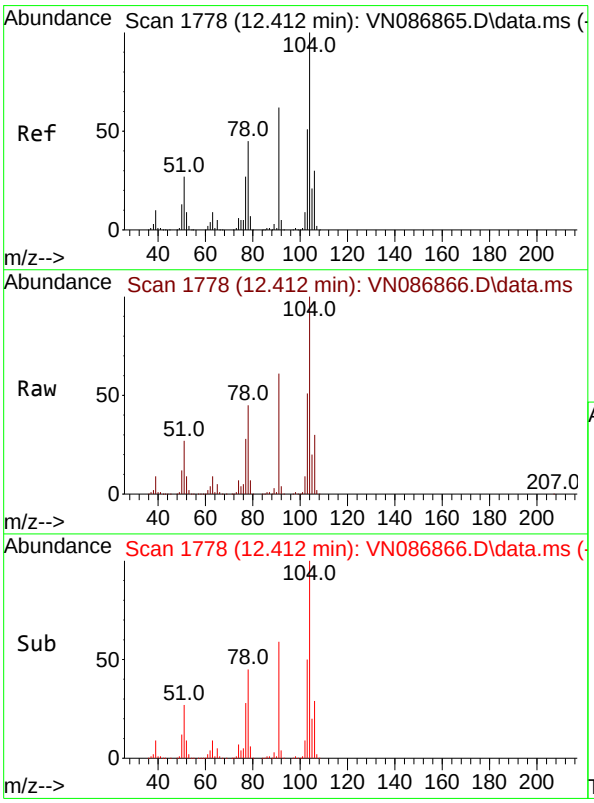
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 212.8 | 106.1 | 318.1 |

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

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

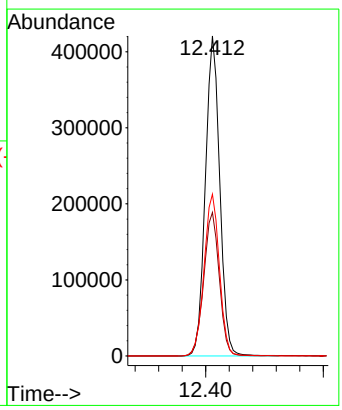


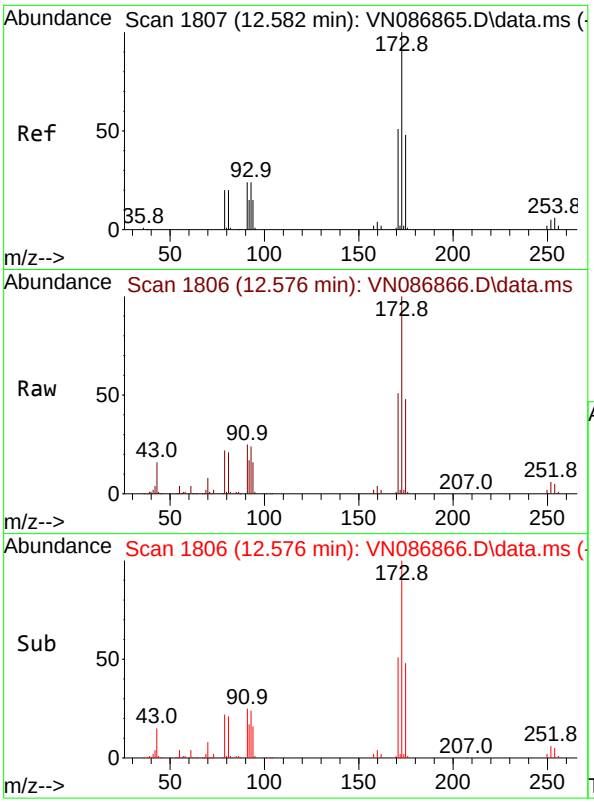




#70
Styrene
Concen: 103.127 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:104 Resp: 713548

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 48.4 | 38.5 | 57.7 |
| 103 | 54.0 | 43.1 | 64.7 |






#71
Bromoform
Concen: 108.707 ug/l
RT: 12.576 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:173 Resp: 16578

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 47.9 | 24.1 | 72.4 |
| 254 | 0.0 | 0.0 | 0.0 |

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

**Manual Integrations**
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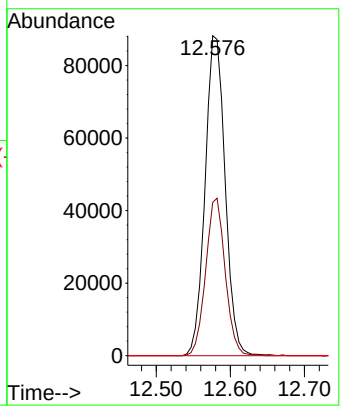
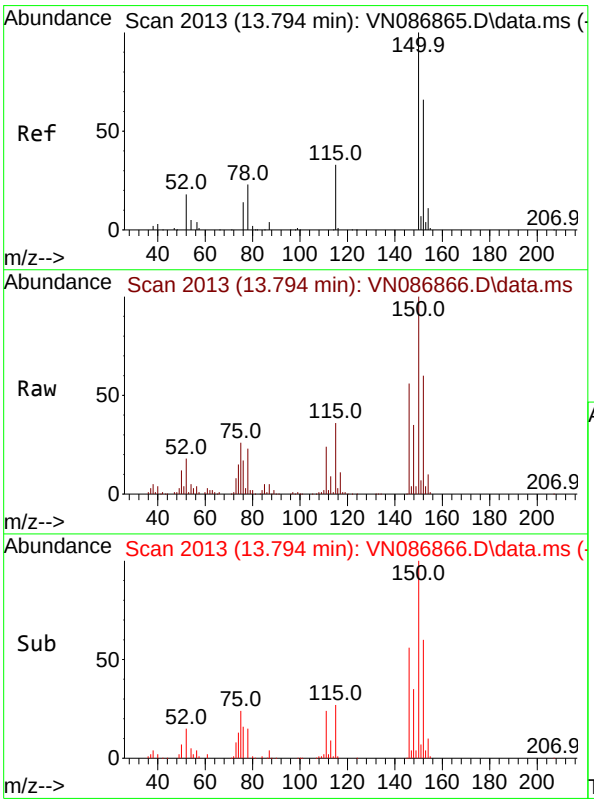
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

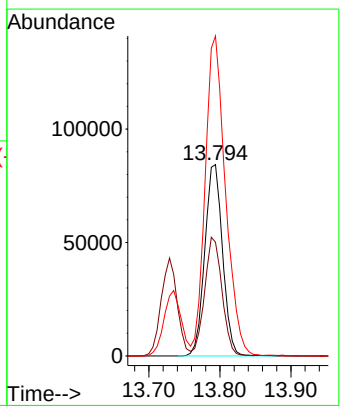


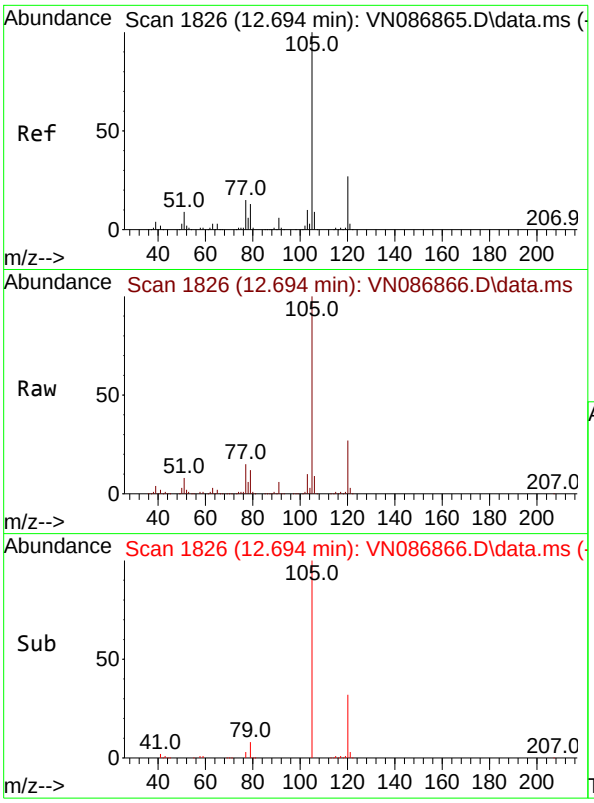




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:152 Resp: 147098

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 60.1 | 30.1 | 90.5 |
| 150 | 190.4 | 0.0 | 345.0 |

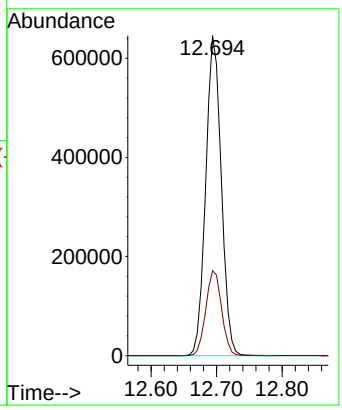





#73
Isopropylbenzene
Concen: 99.410 ug/l
RT: 12.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:105 Resp: 106529

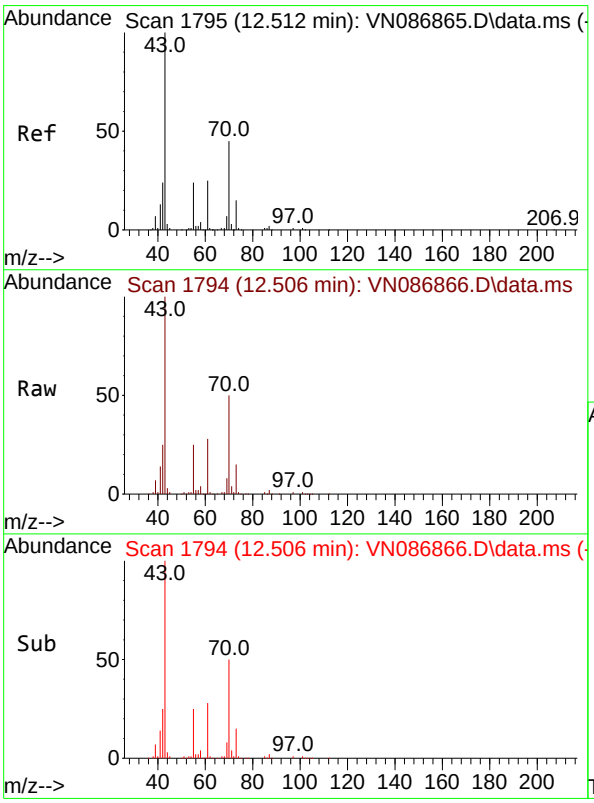
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 27.0 | 13.5 | 40.4 |




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

**Manual Integrations**
**APPROVED**

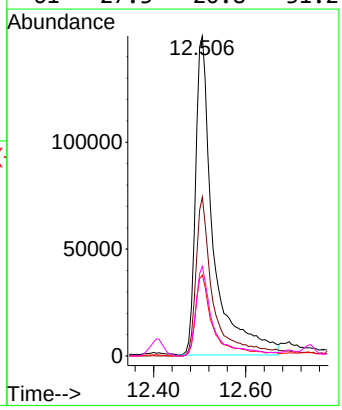
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

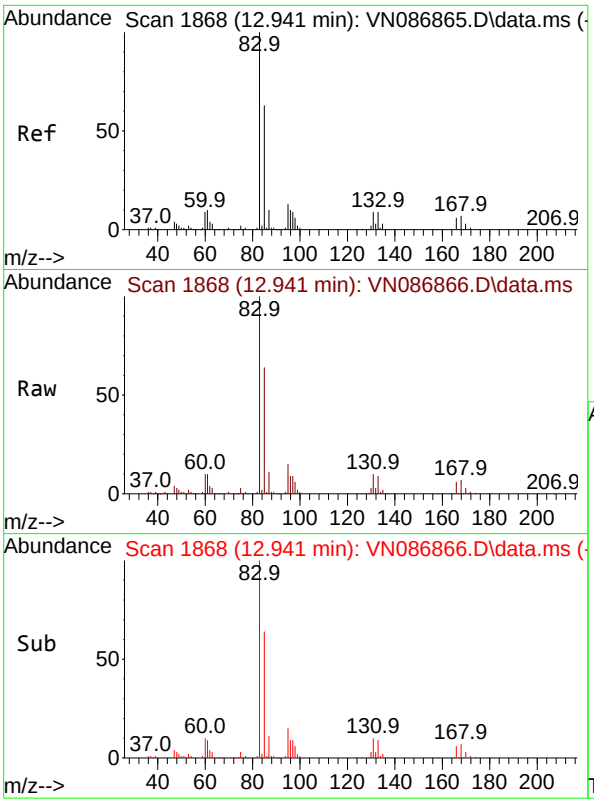



#74
N-amyl acetate
Concen: 113.475 ug/l
RT: 12.506 min Scan# 1794
Delta R.T. -0.006 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 43 Resp: 403587

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 47.7 | 37.6 | 56.4 |
| 55 | 25.0 | 19.0 | 28.6 |
| 61 | 27.3 | 20.8 | 31.2 |






#75
1,1,2,2-Tetrachloroethane
Concen: 97.616 ug/l
RT: 12.941 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 83 Resp: 35438

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 9.9 | 4.9 | 14.7 |
| 85 | 64.9 | 32.0 | 96.0 |

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

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
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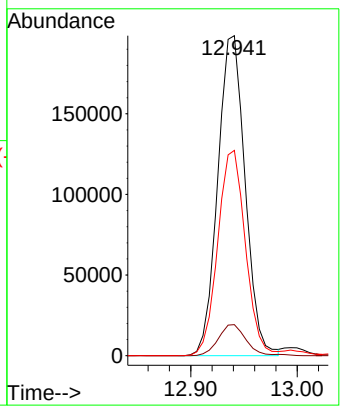
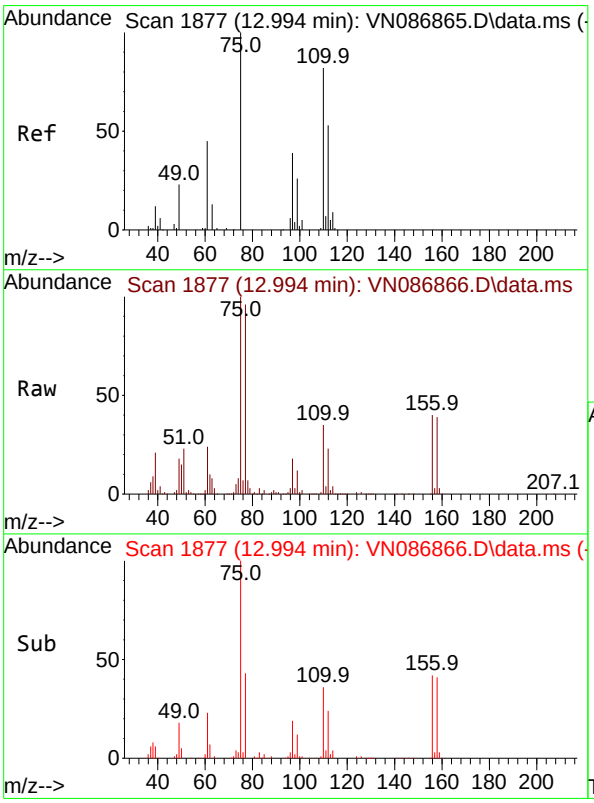
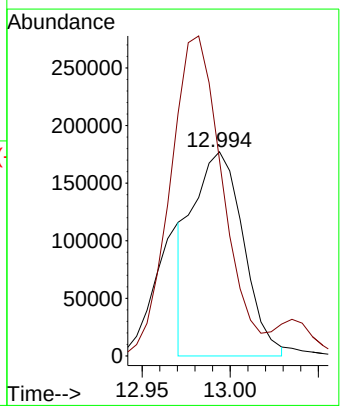


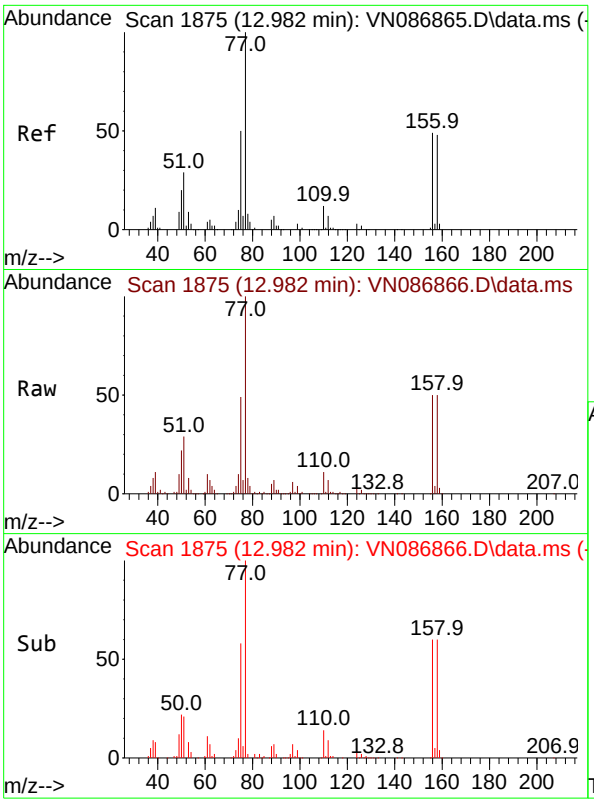




#76
1,2,3-Trichloropropane
Concen: 100.738 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 75 Resp: 353334

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 162.2 | 79.3 | 237.9 |

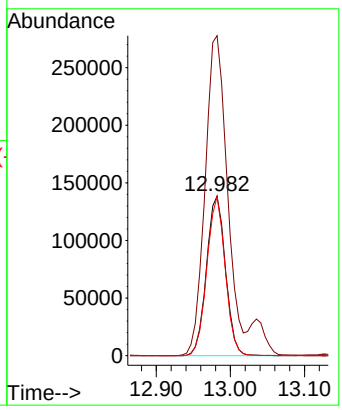





#77
Bromobenzene
Concen: 100.266 ug/l
RT: 12.982 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:156 Resp: 24641

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 232.6 | 117.7 | 353.1 |
| 158 | 96.4 | 48.1 | 144.4 |




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

**Manual Integrations**
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Reviewed By :John Carlone 06/09/2025
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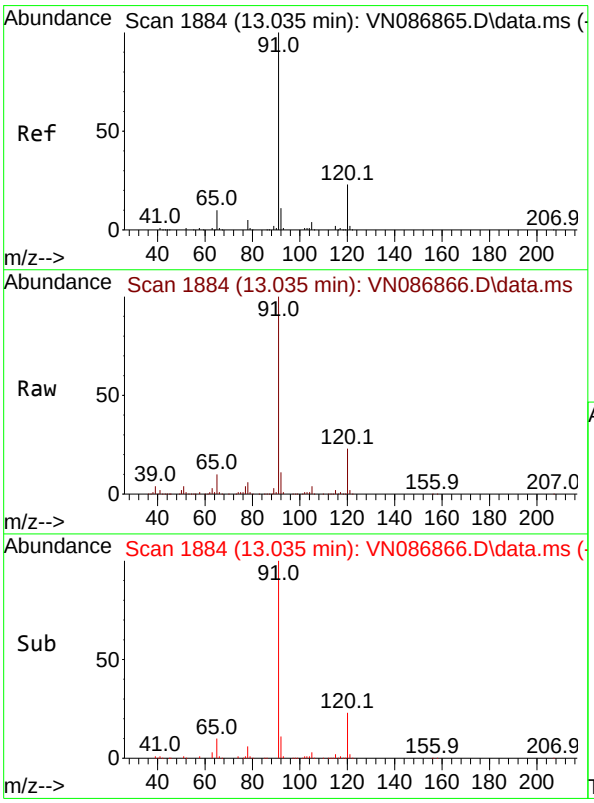
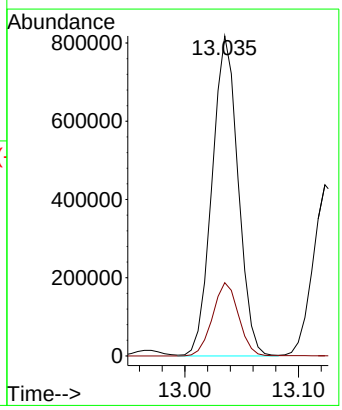
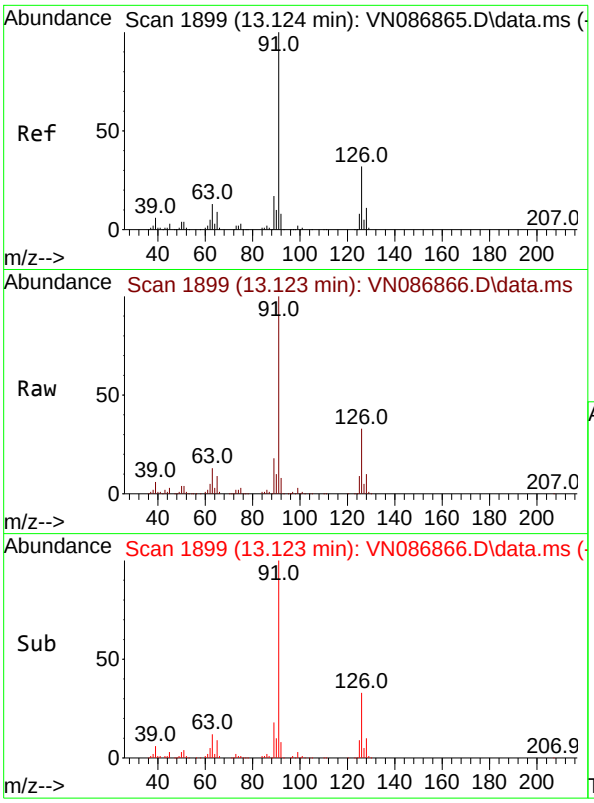



#78
n-propylbenzene
Concen: 99.948 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 91 Resp: 1301631

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.9 | 11.4 | 34.2 |






#79
2-Chlorotoluene
Concen: 98.630 ug/l
RT: 13.123 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 91 Resp: 77030

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 32.8 | 16.2 | 48.5 |

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

**Manual Integrations**
**APPROVED**

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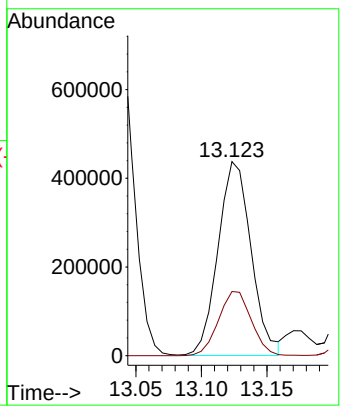
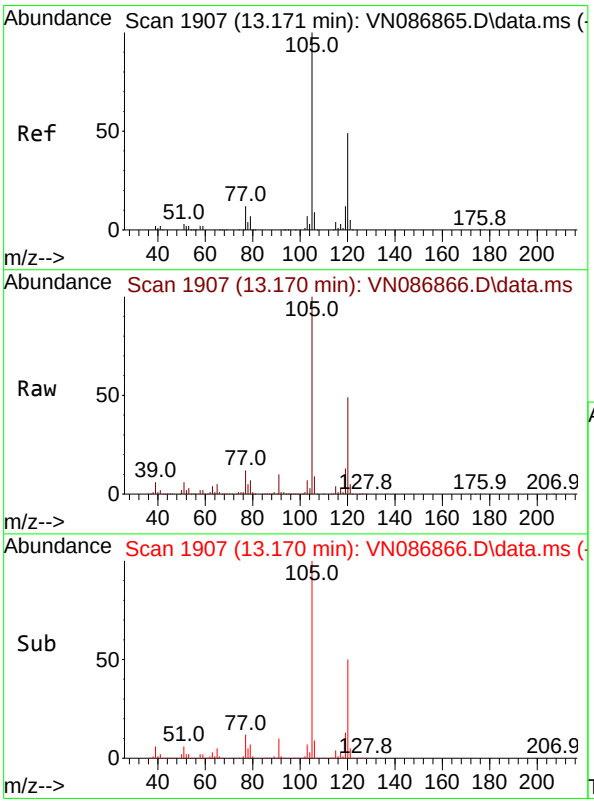
Supervised By :Mahesh Dadoda 06/09/2025

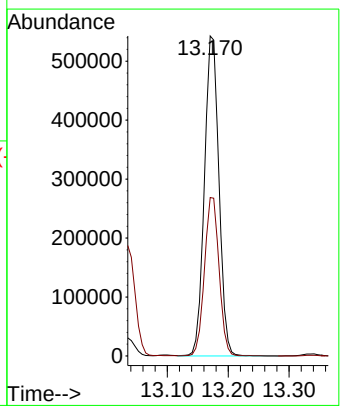


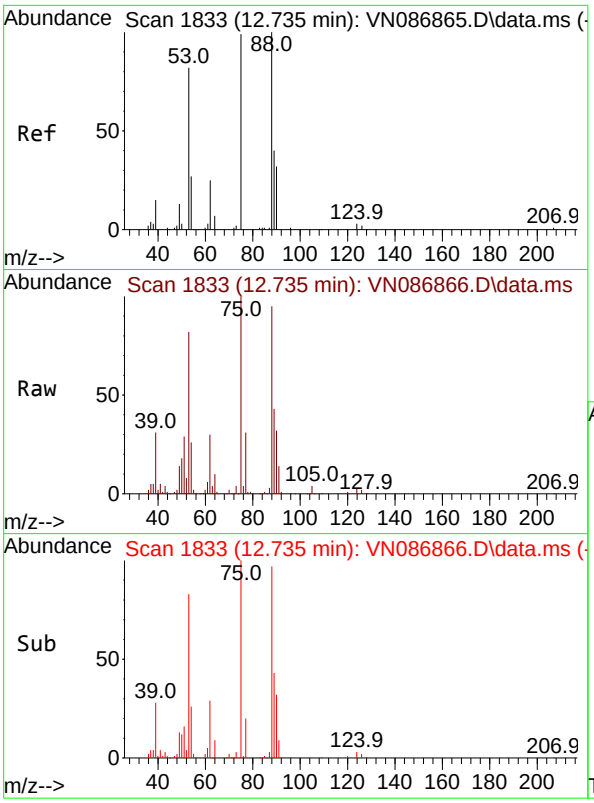




#80
1,3,5-Trimethylbenzene
Concen: 101.873 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:105 Resp: 901317

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 49.7 | 24.9 | 74.6 |

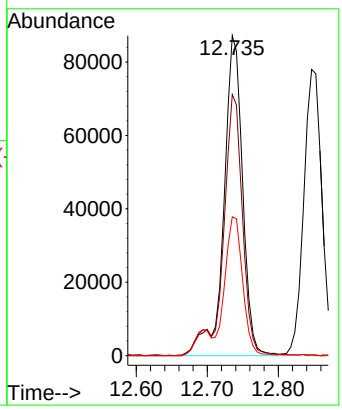





#81
trans-1,4-Dichloro-2-butene
Concen: 105.820 ug/l
RT: 12.735 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 75 Resp: 16073

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 76.0 | 66.6 | 99.8 |
| 89 | 41.1 | 36.7 | 55.1 |




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

**Manual Integrations**
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Reviewed By :John Carlone 06/09/2025
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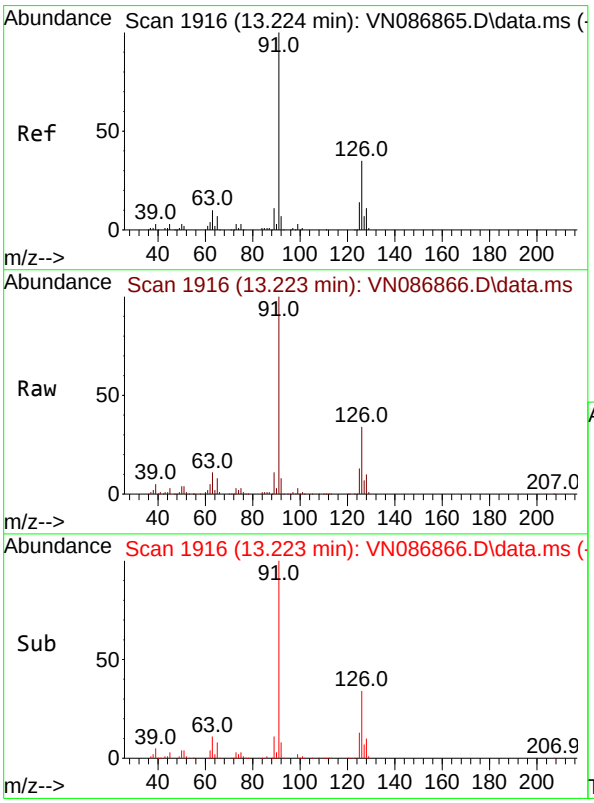
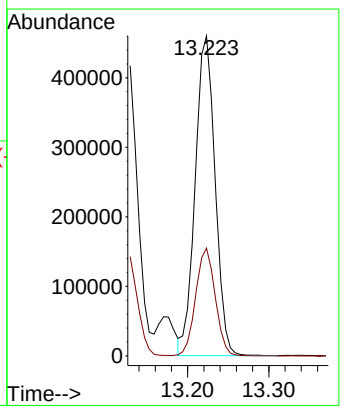
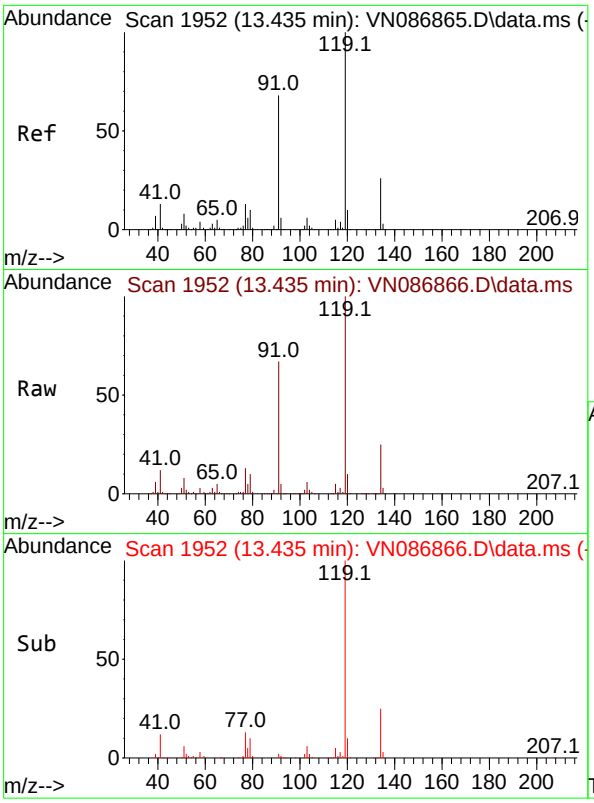



#82
4-Chlorotoluene
Concen: 99.166 ug/l
RT: 13.223 min Scan# 1916
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 91 Resp: 783657

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 33.2 | 16.7 | 50.1 |

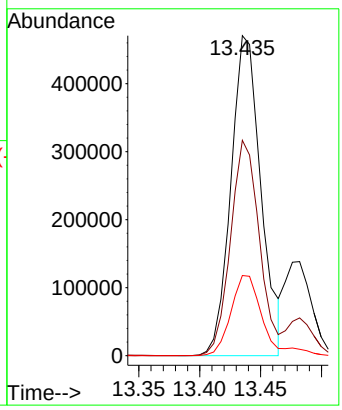





#83
tert-Butylbenzene
Concen: 99.710 ug/l
RT: 13.435 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:119 Resp: 80752

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 64.6 | 32.1 | 96.5 |
| 134 | 26.6 | 13.4 | 40.1 |




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

**Manual Integrations**
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Reviewed By :John Carlone 06/09/2025
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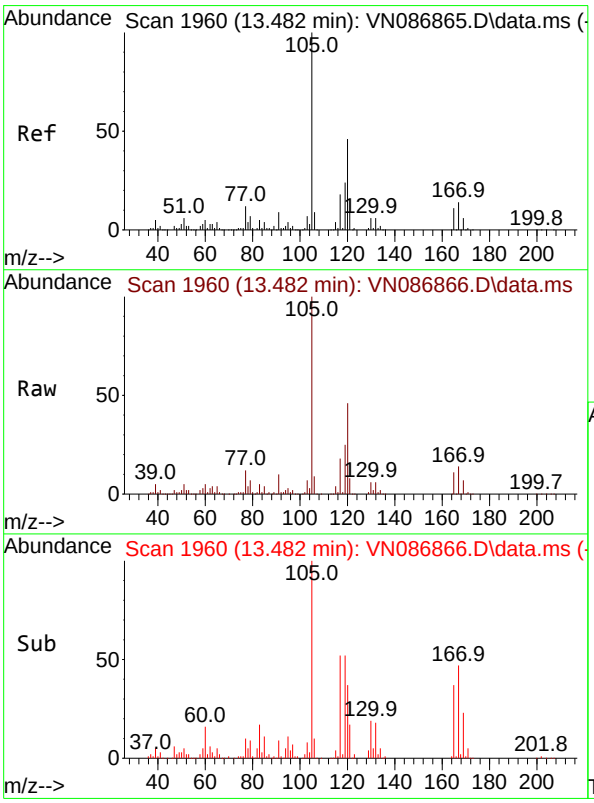
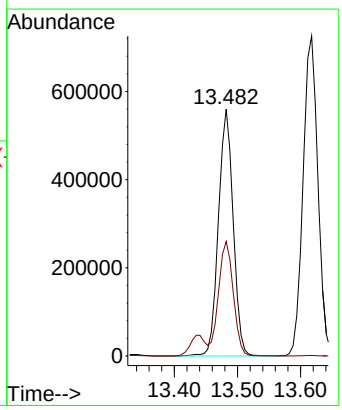
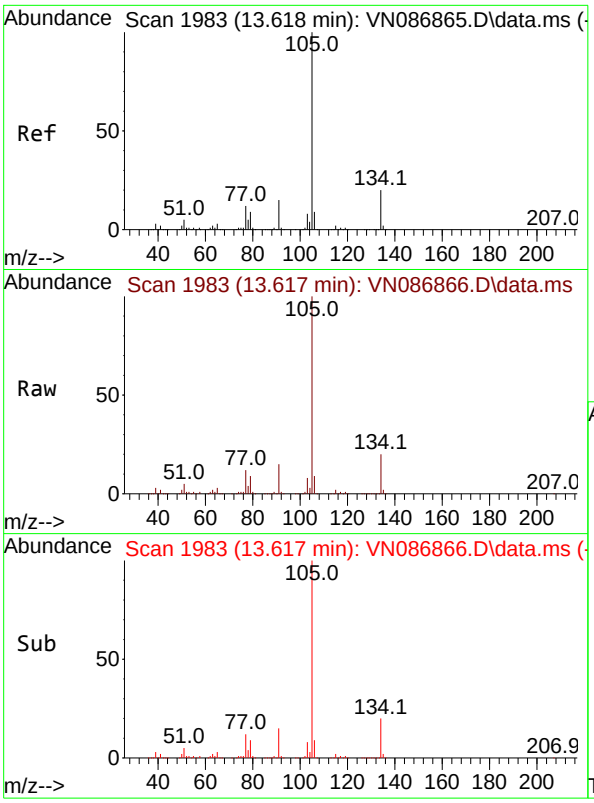



#84
1,2,4-Trimethylbenzene
Concen: 101.983 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:105 Resp: 904794

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 46.7 | 23.2 | 69.6 |

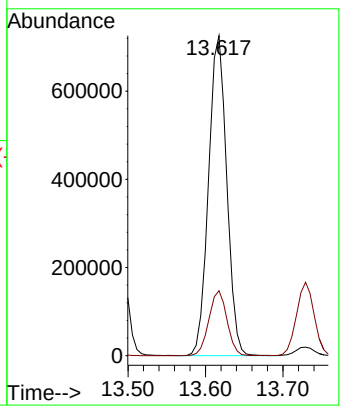





#85
sec-Butylbenzene
Concen: 100.513 ug/l
RT: 13.617 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:105 Resp: 118215

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 20.2 | 10.0 | 30.0 |




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

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
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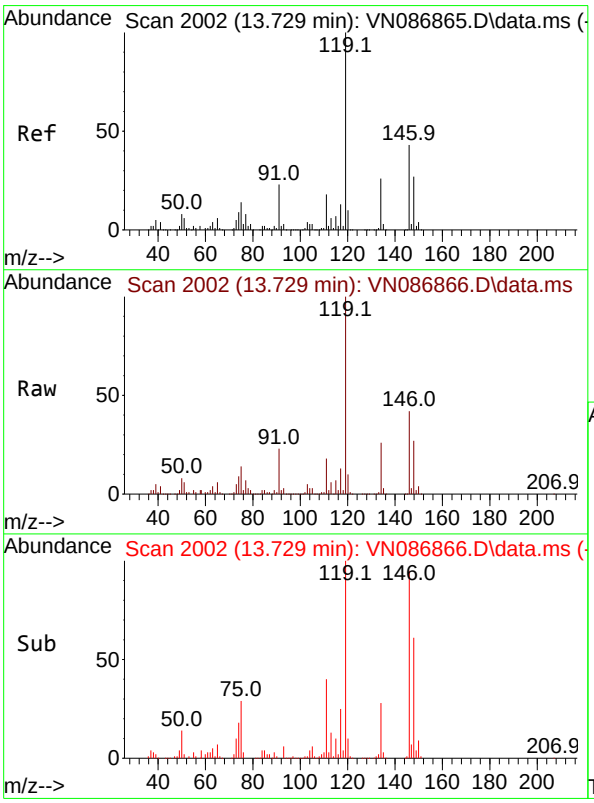
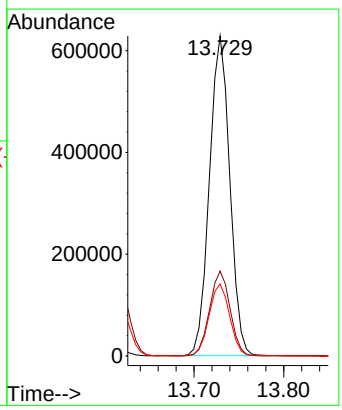
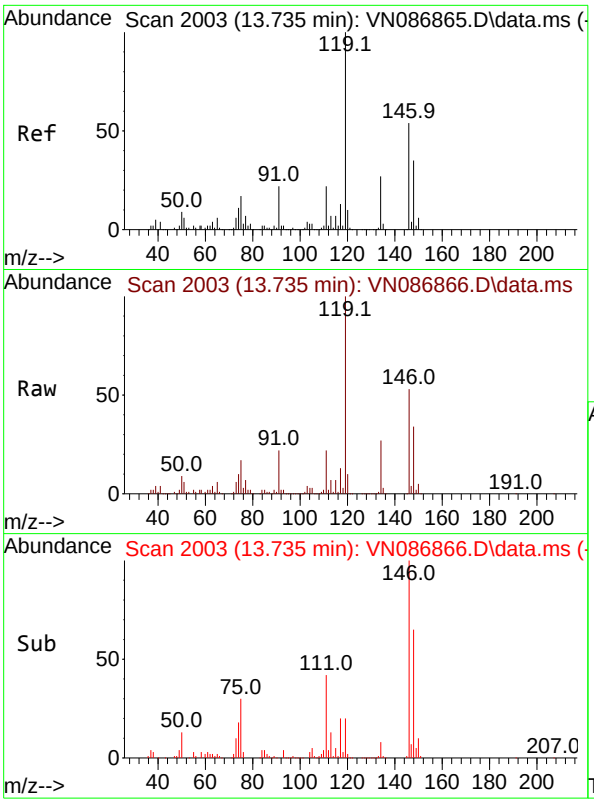



#86
p-Isopropyltoluene
Concen: 101.857 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:119 Resp: 990273

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 26.7 | 13.5 | 40.4 |
| 91 | 22.6 | 11.5 | 34.4 |

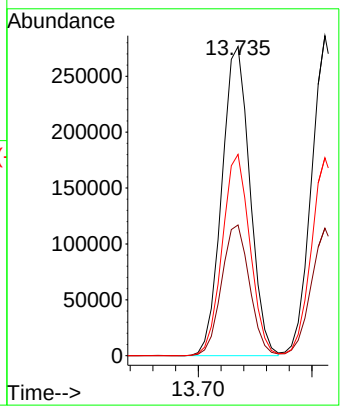





#87
1,3-Dichlorobenzene
Concen: 98.063 ug/l
RT: 13.735 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:146 Resp: 47416

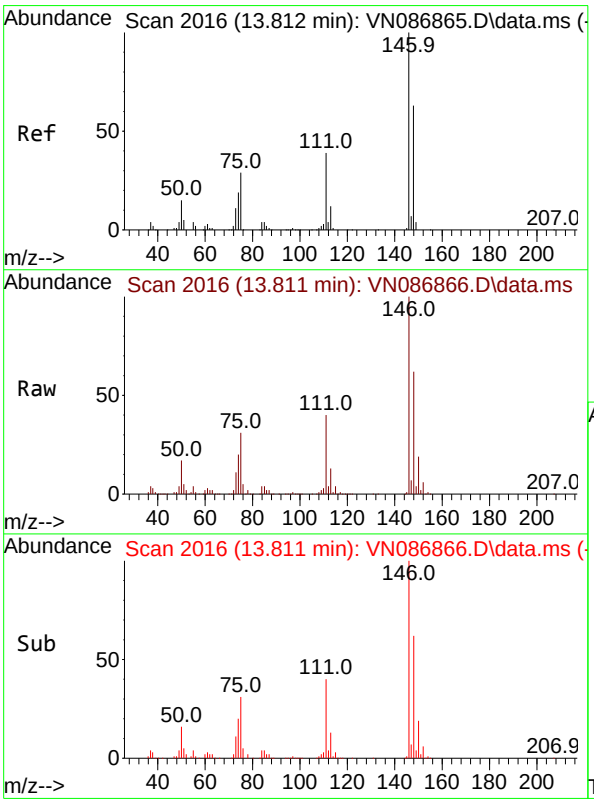
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.3 | 20.9 | 62.8 |
| 148 | 64.4 | 32.0 | 96.2 |




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

**Manual Integrations**
**APPROVED**

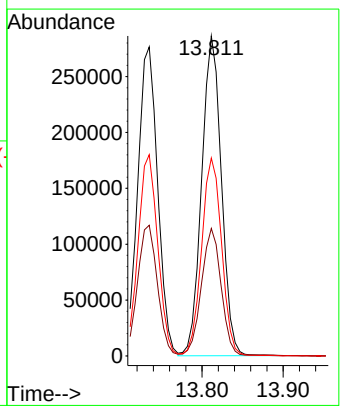
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

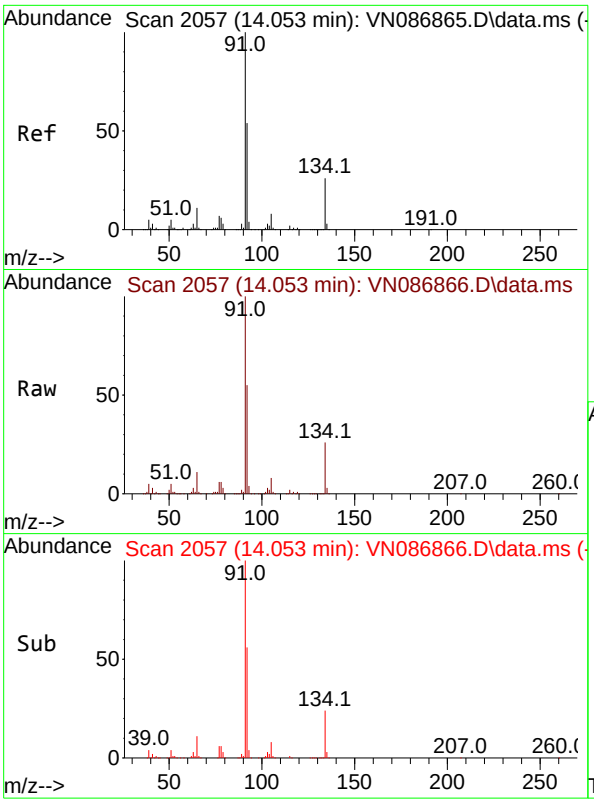



#88
1,4-Dichlorobenzene
Concen: 97.978 ug/l
RT: 13.811 min Scan# 2016
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:146 Resp: 483003

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 39.3 | 19.9 | 59.7 |
| 148 | 63.0 | 31.8 | 95.4 |

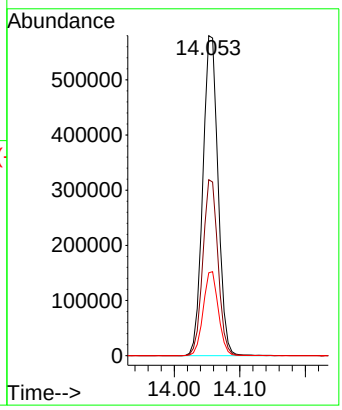





#89
n-Butylbenzene
Concen: 99.598 ug/l
RT: 14.053 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 91 Resp: 93791

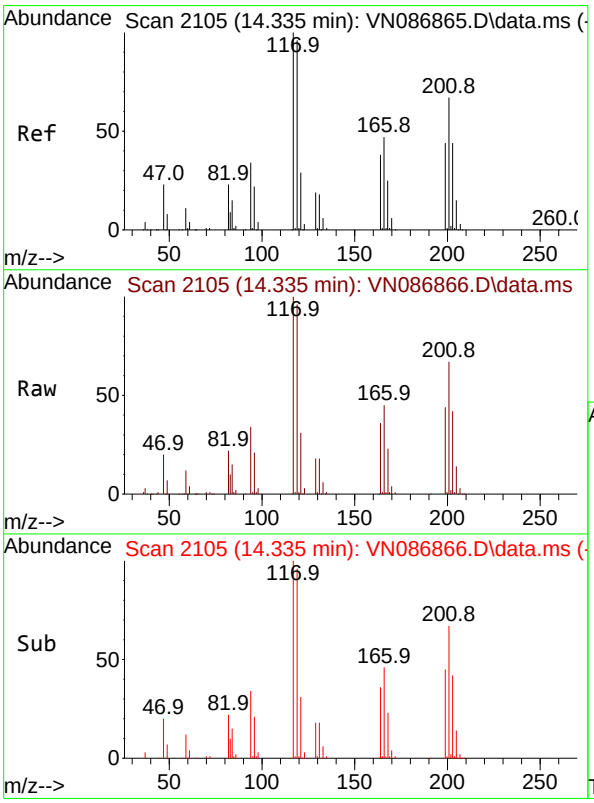
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 54.7 | 27.5 | 82.4 |
| 134 | 26.2 | 13.0 | 39.0 |




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

**Manual Integrations**
**APPROVED**

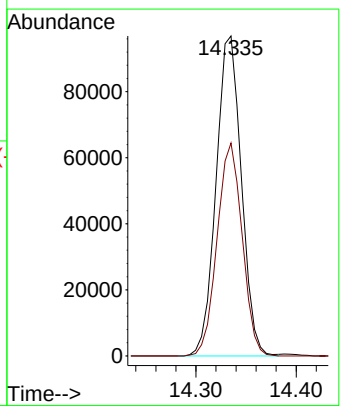
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

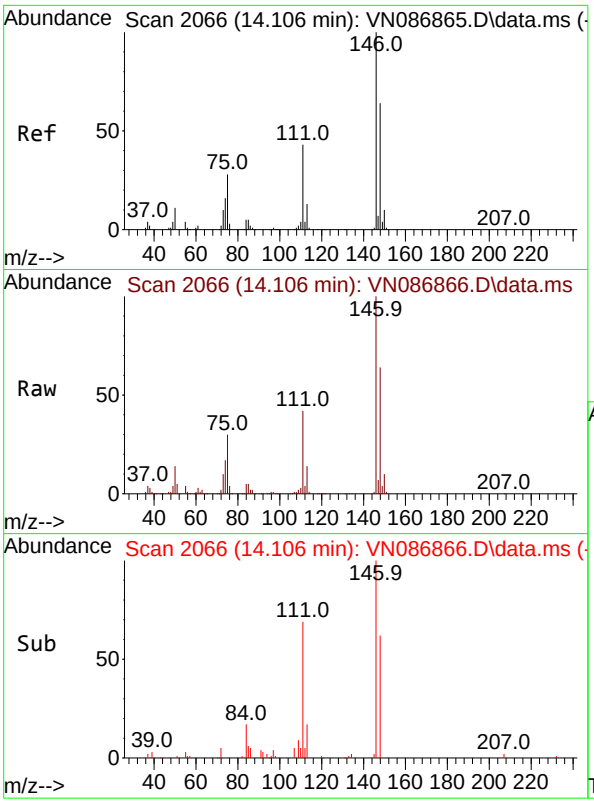



#90
Hexachloroethane
Concen: 103.019 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:117 Resp: 169772

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 65.8 | 33.2 | 99.6 |

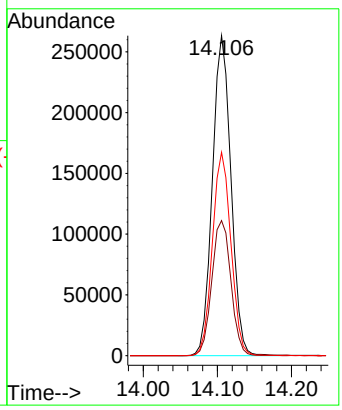





#91
1,2-Dichlorobenzene
Concen: 98.602 ug/l
RT: 14.106 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:146 Resp: 45804

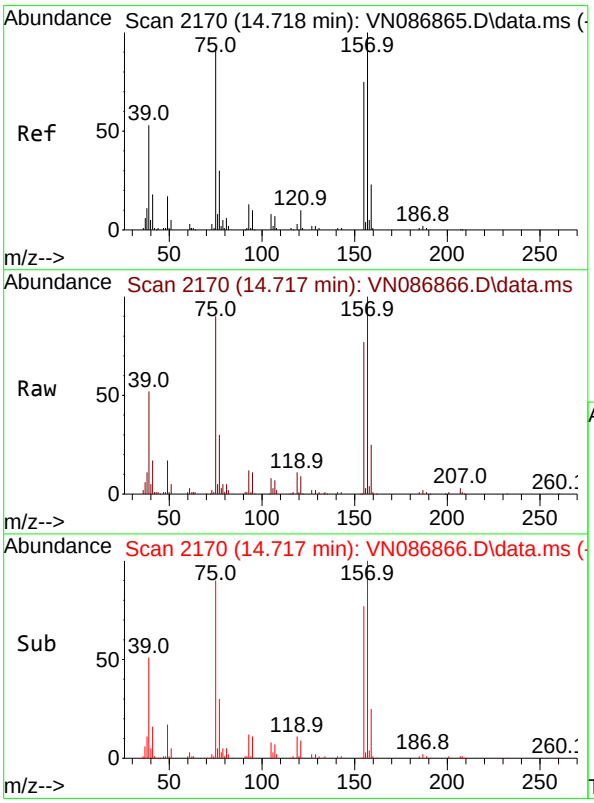
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.5 | 21.6 | 64.6 |
| 148 | 63.5 | 31.7 | 95.1 |




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

**Manual Integrations**
**APPROVED**

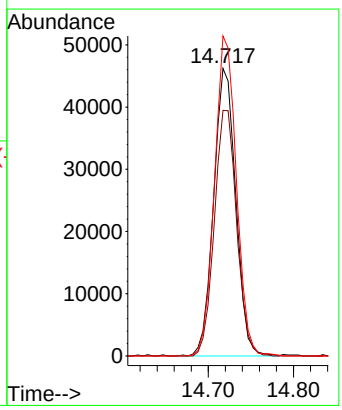
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

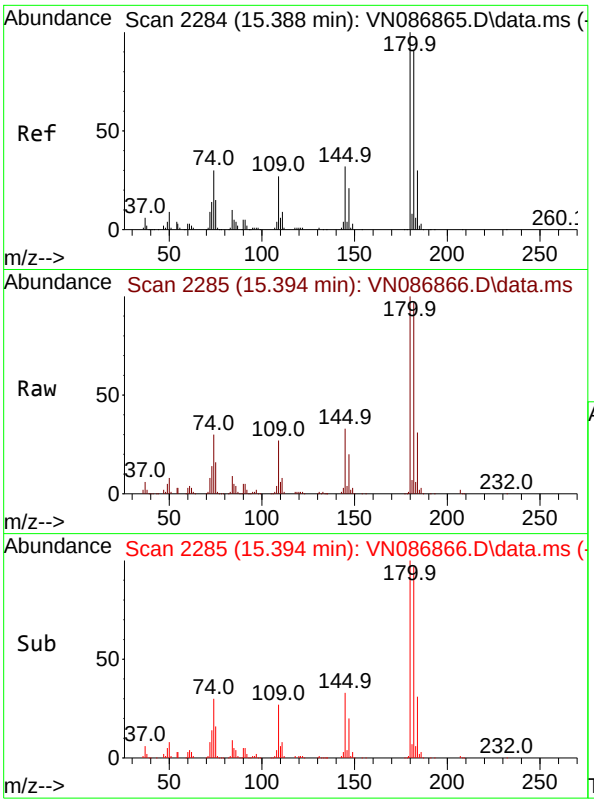



#92
1,2-Dibromo-3-Chloropropane
Concen: 95.877 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion: 75 Resp: 83243

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 86.1 | 41.1 | 123.4 |
| 157 | 109.8 | 52.7 | 158.1 |

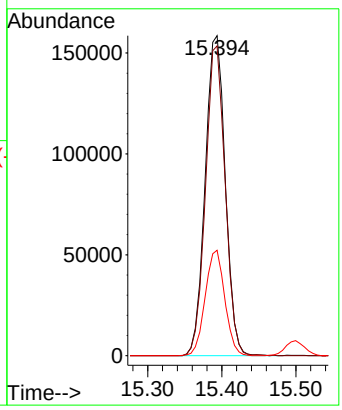





#93
1,2,4-Trichlorobenzene
Concen: 100.751 ug/l
RT: 15.394 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:180 Resp: 29887

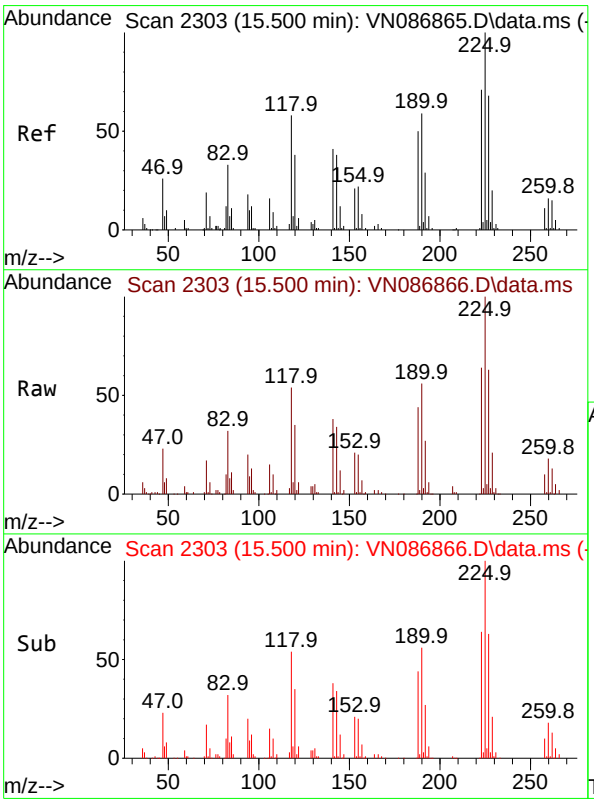
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 94.6 | 46.9 | 140.7 |
| 145 | 32.2 | 16.0 | 47.9 |




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

**Manual Integrations**
**APPROVED**

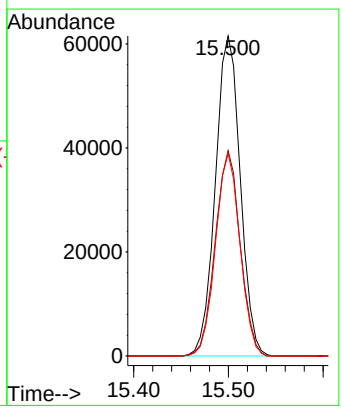
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

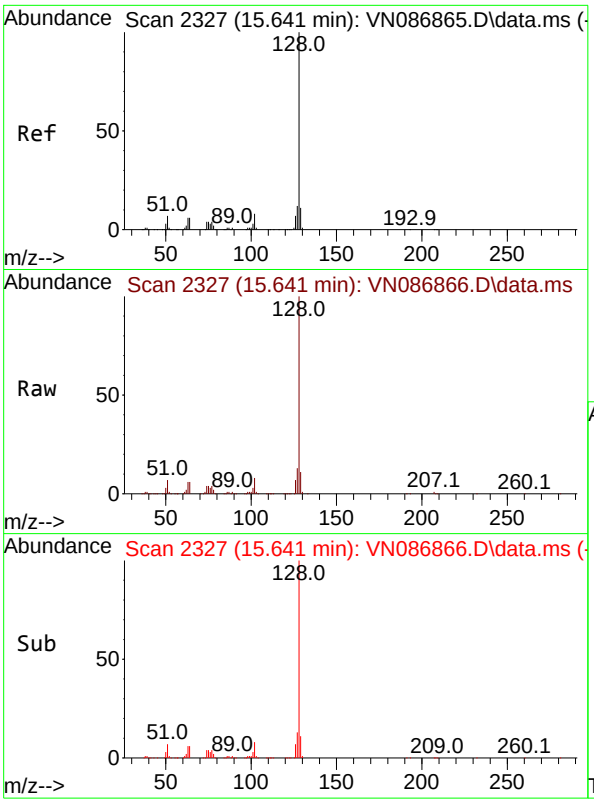



#94
Hexachlorobutadiene
Concen: 101.789 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:225 Resp: 112496

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 64.2 | 33.5 | 100.4 |
| 227 | 62.1 | 31.1 | 93.5 |

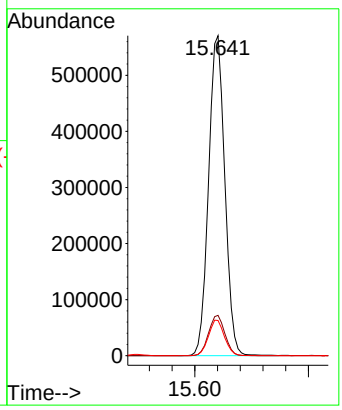





#95
Naphthalene
Concen: 102.290 ug/l
RT: 15.641 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:128 Resp: 112943

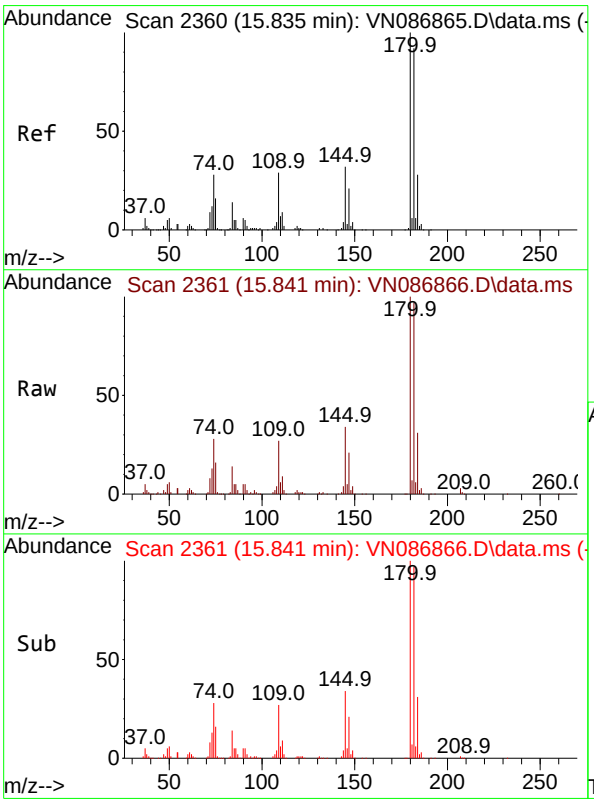
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.6 | 10.2 | 15.2 |
| 129 | 11.0 | 8.8 | 13.2 |




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

**Manual Integrations**
**APPROVED**

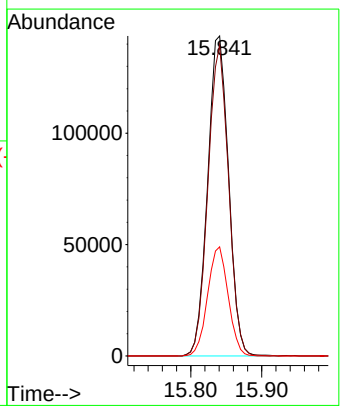
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025




#96
1,2,3-Trichlorobenzene
Concen: 99.796 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. 0.006 min
Lab File: VN086866.D
Acq: 06 Jun 2025 14:26

Tgt Ion:180 Resp: 294127

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.3 | 47.0 | 141.0 |
| 145 | 33.5 | 16.6 | 49.8 |



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086867.D
Acq On : 06 Jun 2025 14:49
Operator : JC\MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 07 01:59:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 01:51:02 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.229 | 168 | 172832 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.106 | 114 | 307937 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.864 | 117 | 278552 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.794 | 152 | 136630 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.588 | 65 | 389297 | 168.233 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 336.460%# | | | |
| 35) Dibromofluoromethane | 8.176 | 113 | 324474 | 177.803 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 355.600%# | | | |
| 50) Toluene-d8 | 10.570 | 98 | 1272348 | 176.120 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 352.240%# | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 481421 | 179.364 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 358.720%# | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.153 | 85 | 262143 | 152.122 | ug/l | 100 |
| 3) Chloromethane | 2.394 | 50 | 304558 | 136.865 | ug/l | 100 |
| 4) Vinyl Chloride | 2.553 | 62 | 335834 | 146.303 | ug/l | 100 |
| 5) Bromomethane | 2.965 | 94 | 190786 | 148.522 | ug/l | 98 |
| 6) Chloroethane | 3.136 | 64 | 208568 | 140.664 | ug/l | 96 |
| 7) Trichlorofluoromethane | 3.518 | 101 | 427871 | 142.666 | ug/l | 100 |
| 8) Diethyl Ether | 3.983 | 74 | 191555 | 146.593 | ug/l | 99 |
| 9) 1,1,2-Trichlorotrifluo... | 4.388 | 101 | 269810 | 143.192 | ug/l | 100 |
| 10) Methyl Iodide | 4.606 | 142 | 352020 | 144.118 | ug/l | 99 |
| 11) Tert butyl alcohol | 5.553 | 59 | 430866 | 686.213 | ug/l | 100 |
| 12) 1,1-Dichloroethene | 4.353 | 96 | 273388 | 142.118 | ug/l | 98 |
| 13) Acrolein | 4.194 | 56 | 171625 | 863.526 | ug/l | 99 |
| 14) Allyl chloride | 5.035 | 41 | 490852 | 153.858 | ug/l | 92 |
| 15) Acrylonitrile | 5.735 | 53 | 1048372 | 714.344 | ug/l | 99 |
| 16) Acetone | 4.447 | 43 | 819041 | 667.435 | ug/l | 100 |
| 17) Carbon Disulfide | 4.730 | 76 | 742788 | 139.594 | ug/l | 100 |
| 18) Methyl Acetate | 5.041 | 43 | 523996 | 146.527 | ug/l | 100 |
| 19) Methyl tert-butyl Ether | 5.818 | 73 | 998781 | 143.396 | ug/l | 99 |
| 20) Methylene Chloride | 5.300 | 84 | 311597 | 135.628 | ug/l | 99 |
| 21) trans-1,2-Dichloroethene | 5.806 | 96 | 290960 | 135.947 | ug/l | 97 |
| 22) Diisopropyl ether | 6.688 | 45 | 947638 | 140.915 | ug/l | 98 |
| 23) Vinyl Acetate | 6.618 | 43 | 3932872 | 692.189 | ug/l | 99 |
| 24) 1,1-Dichloroethane | 6.582 | 63 | 540881 | 139.761 | ug/l | 99 |
| 25) 2-Butanone | 7.494 | 43 | 1381940 | 692.809 | ug/l | 99 |
| 26) 2,2-Dichloropropane | 7.500 | 77 | 450112 | 149.519 | ug/l | 99 |
| 27) cis-1,2-Dichloroethene | 7.500 | 96 | 363398 | 141.974 | ug/l | 99 |
| 28) Bromochloromethane | 7.824 | 49 | 290594 | 152.718 | ug/l | 98 |
| 29) Tetrahydrofuran | 7.847 | 42 | 898159 | 691.211 | ug/l | 98 |
| 30) Chloroform | 7.976 | 83 | 534038 | 138.179 | ug/l | 97 |
| 31) Cyclohexane | 8.265 | 56 | 505795 | 134.766 | ug/l | 96 |
| 32) 1,1,1-Trichloroethane | 8.176 | 97 | 462854 | 140.807 | ug/l | 99 |
| 36) 1,1-Dichloropropene | 8.376 | 75 | 393166 | 144.584 | ug/l | 100 |
| 37) Ethyl Acetate | 7.571 | 43 | 494000 | 142.706 | ug/l | 99 |
| 38) Carbon Tetrachloride | 8.371 | 117 | 388595 | 145.557 | ug/l | 98 |
| 39) Methylcyclohexane | 9.606 | 83 | 544437 | 146.136 | ug/l | 97 |
| 40) Benzene | 8.612 | 78 | 1266139 | 142.388 | ug/l | 100 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086867.D
Acq On : 06 Jun 2025 14:49
Operator : JC\MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 07 01:59:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 01:51:02 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.788 | 41 | 276400 | 142.174 | ug/l | | 98 |
| 42) 1,2-Dichloroethane | 8.676 | 62 | 381516 | 141.455 | ug/l | | 100 |
| 43) Isopropyl Acetate | 8.694 | 43 | 780791 | 140.531 | ug/l | | 99 |
| 44) Trichloroethene | 9.359 | 130 | 302548 | 143.490 | ug/l | | 96 |
| 45) 1,2-Dichloropropane | 9.623 | 63 | 309047 | 142.856 | ug/l | | 100 |
| 46) Dibromomethane | 9.712 | 93 | 208461 | 145.074 | ug/l | | 100 |
| 47) Bromodichloromethane | 9.894 | 83 | 430011 | 145.449 | ug/l | | 100 |
| 48) Methyl methacrylate | 9.688 | 41 | 366967 | 143.502 | ug/l | | 99 |
| 49) 1,4-Dioxane | 9.712 | 88 | 138035 | 2967.116 | ug/l | # | 100 |
| 51) 4-Methyl-2-Pentanone | 10.447 | 43 | 2438311 | 728.995 | ug/l | | 98 |
| 52) Toluene | 10.635 | 92 | 793270 | 145.976 | ug/l | | 100 |
| 53) t-1,3-Dichloropropene | 10.841 | 75 | 489809 | 148.163 | ug/l | | 97 |
| 54) cis-1,3-Dichloropropene | 10.318 | 75 | 518092 | 146.469 | ug/l | | 99 |
| 55) 1,1,2-Trichloroethane | 11.017 | 97 | 298151 | 142.588 | ug/l | | 99 |
| 56) Ethyl methacrylate | 10.876 | 69 | 533912 | 160.311 | ug/l | | 98 |
| 57) 1,3-Dichloropropane | 11.165 | 76 | 516391 | 142.363 | ug/l | | 98 |
| 58) 2-Chloroethyl Vinyl ether | 10.165 | 63 | 1869543 | 941.147 | ug/l | | 99 |
| 59) 2-Hexanone | 11.200 | 43 | 1735777 | 805.662 | ug/l | | 99 |
| 60) Dibromochloromethane | 11.365 | 129 | 322064 | 147.832 | ug/l | | 98 |
| 61) 1,2-Dibromoethane | 11.470 | 107 | 314606 | 146.790 | ug/l | | 99 |
| 64) Tetrachloroethene | 11.106 | 164 | 245122 | 139.048 | ug/l | | 97 |
| 65) Chlorobenzene | 11.894 | 112 | 860345 | 140.041 | ug/l | | 98 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 282739 | 143.171 | ug/l | | 99 |
| 67) Ethyl Benzene | 11.964 | 91 | 1517883 | 143.438 | ug/l | | 98 |
| 68) m/p-Xylenes | 12.070 | 106 | 1175378 | 290.155 | ug/l | | 99 |
| 69) o-Xylene | 12.400 | 106 | 566301 | 145.966 | ug/l | | 100 |
| 70) Styrene | 12.411 | 104 | 972318 | 146.459 | ug/l | | 100 |
| 71) Bromoform | 12.582 | 173 | 223200 | 152.538 | ug/l | # | 99 |
| 73) Isopropylbenzene | 12.694 | 105 | 1453651 | 146.042 | ug/l | | 100 |
| 74) N-amyl acetate | 12.500 | 43 | 543747 | 164.596 | ug/l | | 96 |
| 75) 1,1,2,2-Tetrachloroethane | 12.941 | 83 | 474426 | 140.693 | ug/l | | 100 |
| 76) 1,2,3-Trichloropropane | 12.994 | 75 | 468041m | 143.665 | ug/l | | |
| 77) Bromobenzene | 12.982 | 156 | 335734 | 147.077 | ug/l | | 98 |
| 78) n-propylbenzene | 13.035 | 91 | 1769694 | 146.301 | ug/l | | 99 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 1046916 | 144.317 | ug/l | | 99 |
| 80) 1,3,5-Trimethylbenzene | 13.170 | 105 | 1210325 | 147.279 | ug/l | | 100 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 216253 | 153.277 | ug/l | | 95 |
| 82) 4-Chlorotoluene | 13.223 | 91 | 1063581 | 144.900 | ug/l | | 100 |
| 83) tert-Butylbenzene | 13.435 | 119 | 1093406 | 145.352 | ug/l | | 100 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 1216529 | 147.626 | ug/l | | 100 |
| 85) sec-Butylbenzene | 13.617 | 105 | 1582762 | 144.885 | ug/l | | 99 |
| 86) p-Isopropyltoluene | 13.729 | 119 | 1322780 | 146.482 | ug/l | | 99 |
| 87) 1,3-Dichlorobenzene | 13.735 | 146 | 641966 | 142.939 | ug/l | | 100 |
| 88) 1,4-Dichlorobenzene | 13.811 | 146 | 646188 | 141.124 | ug/l | | 99 |
| 89) n-Butylbenzene | 14.053 | 91 | 1251819 | 143.117 | ug/l | | 100 |
| 90) Hexachloroethane | 14.335 | 117 | 230195 | 150.387 | ug/l | | 98 |
| 91) 1,2-Dichlorobenzene | 14.105 | 146 | 613177 | 142.108 | ug/l | | 100 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75 | 110677 | 137.242 | ug/l | | 96 |
| 93) 1,2,4-Trichlorobenzene | 15.394 | 180 | 407621 | 147.940 | ug/l | | 99 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 151172 | 147.264 | ug/l | | 98 |
| 95) Naphthalene | 15.641 | 128 | 1545981 | 150.743 | ug/l | | 100 |
| 96) 1,2,3-Trichlorobenzene | 15.841 | 180 | 404450 | 147.743 | ug/l | | 99 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086867.D
Acq On : 06 Jun 2025 14:49
Operator : JC\MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

Quant Time: Jun 07 01:59:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 01:51:02 2025
Response via : Initial Calibration

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

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

ICAL Form

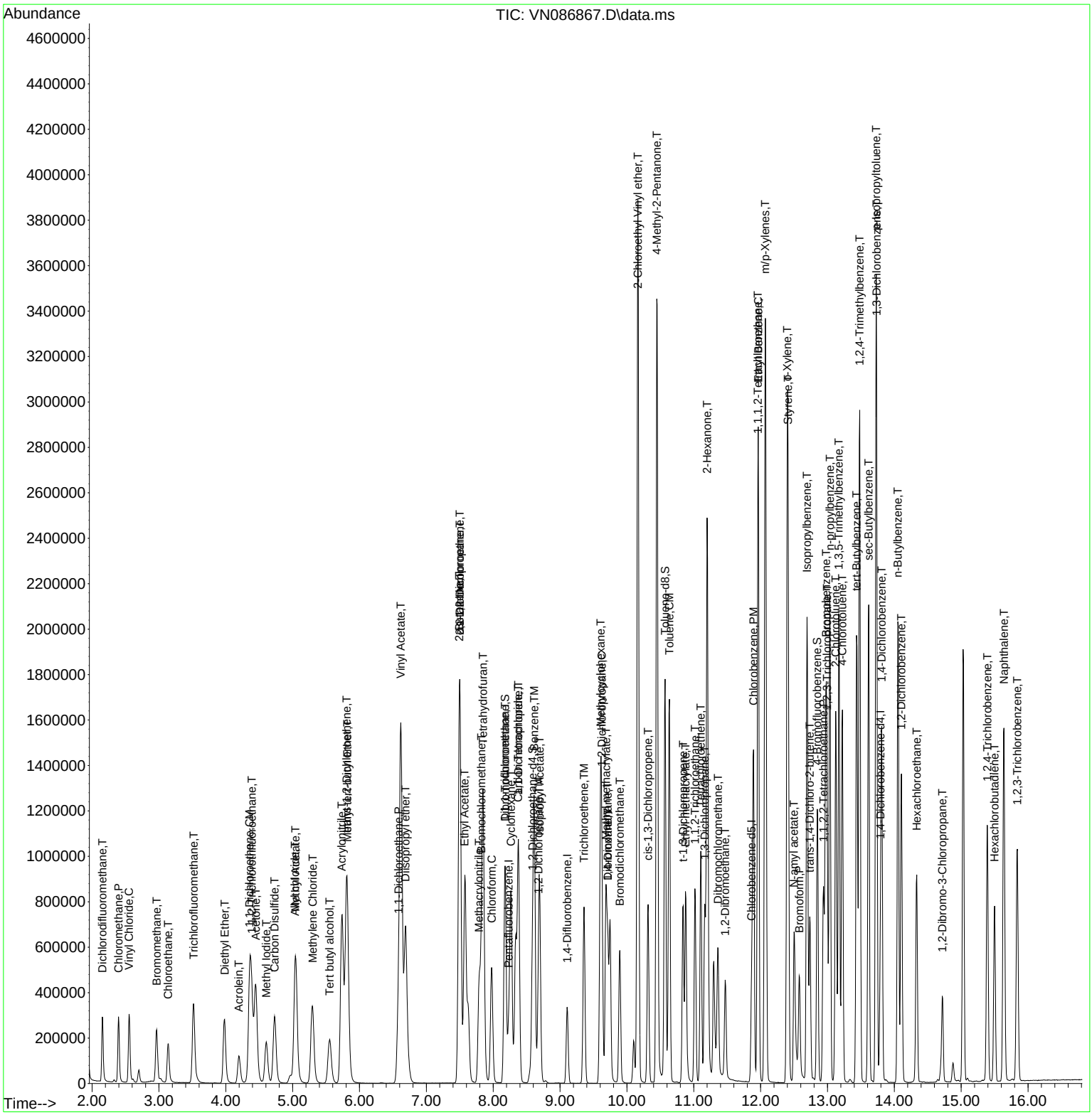
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086867.D
Acq On : 06 Jun 2025 14:49
Operator : JC\MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

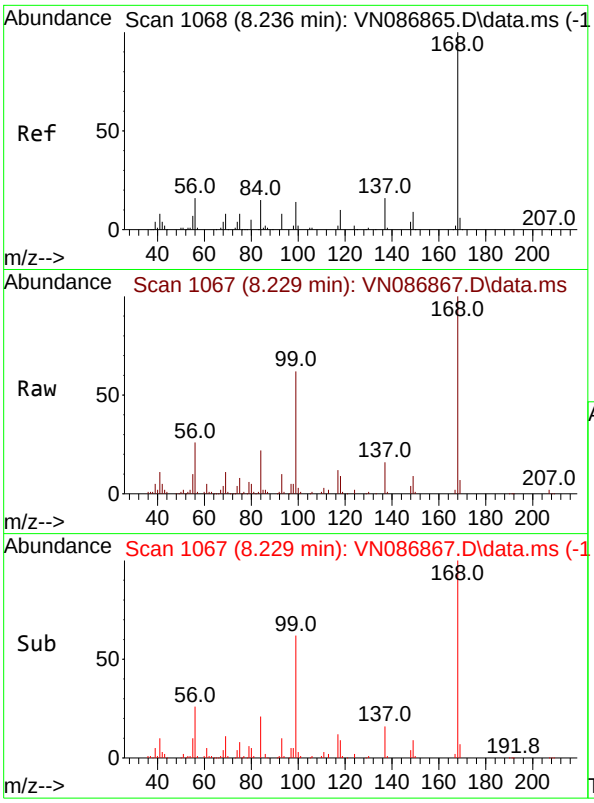
Quant Time: Jun 07 01:59:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 01:51:02 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

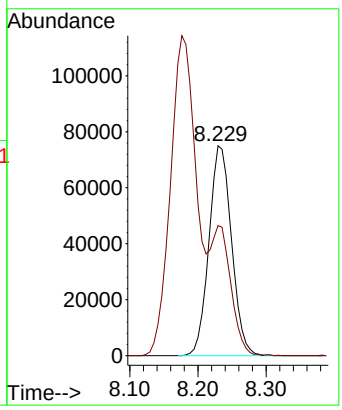





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.229 min Scan# 1
Delta R.T. -0.007 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion:168 Resp: 17283

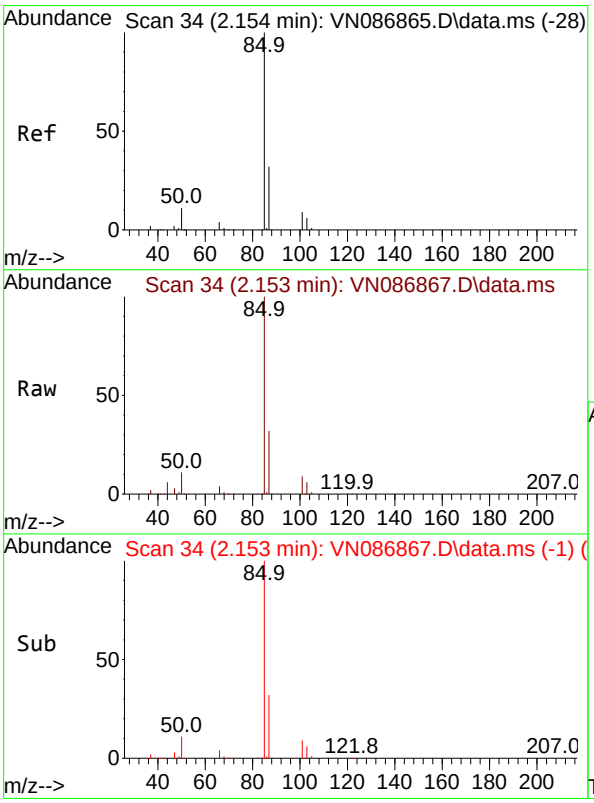
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 61.8 | 49.1 | 73.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
**APPROVED**

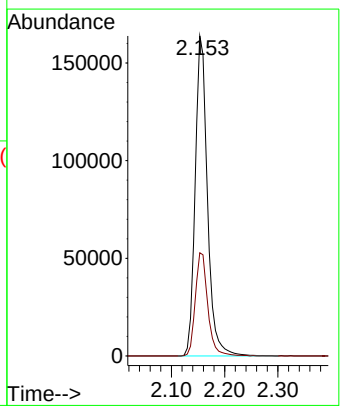
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

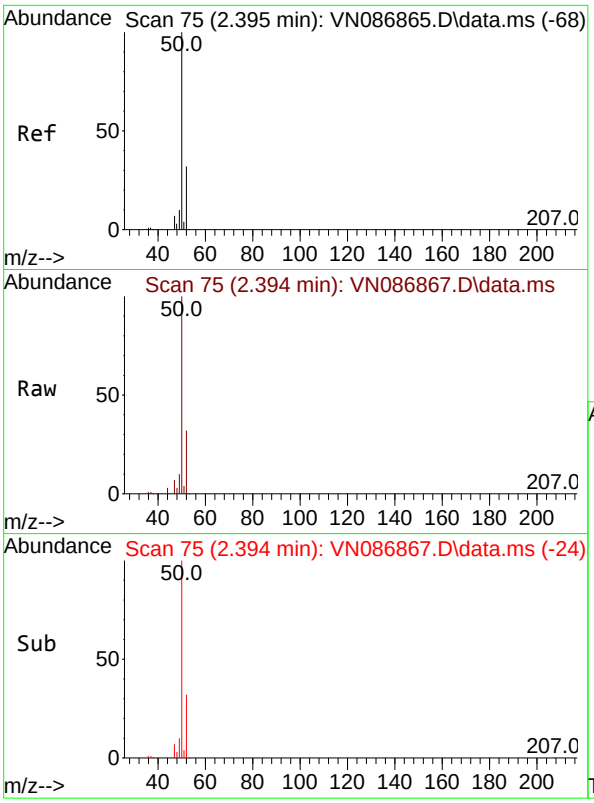



#2
Dichlorodifluoromethane
Concen: 152.122 ug/l
RT: 2.153 min Scan# 34
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 85 Resp: 262143

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.3 | 16.2 | 48.6 |

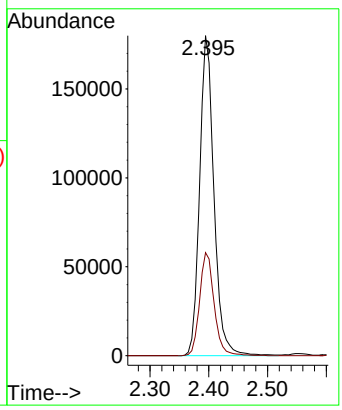





#3
Chloromethane
Concen: 136.865 ug/l
RT: 2.394 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 50 Resp: 30455

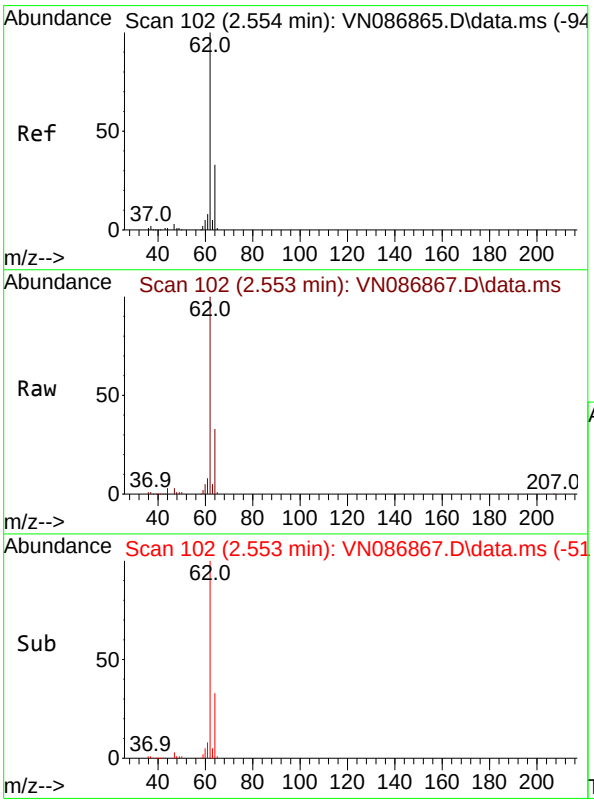
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 32.2 | 25.7 | 38.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
**APPROVED**

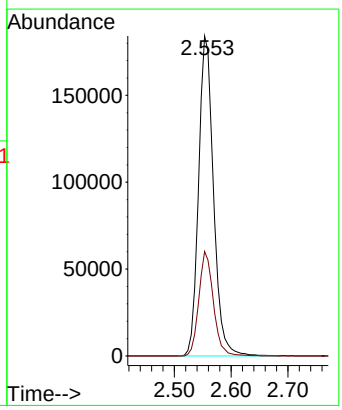
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

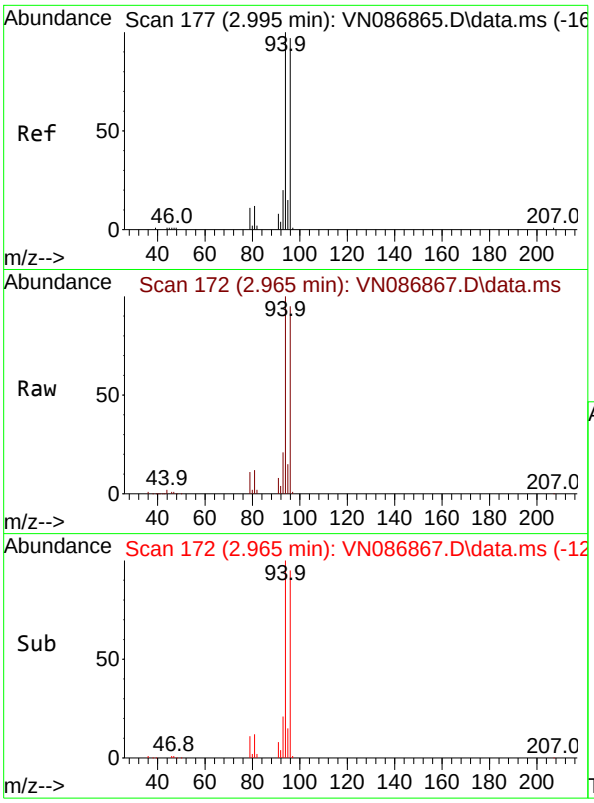



#4
Vinyl Chloride
Concen: 146.303 ug/l
RT: 2.553 min Scan# 102
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 62 Resp: 335834

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 32.6 | 26.0 | 39.0 |

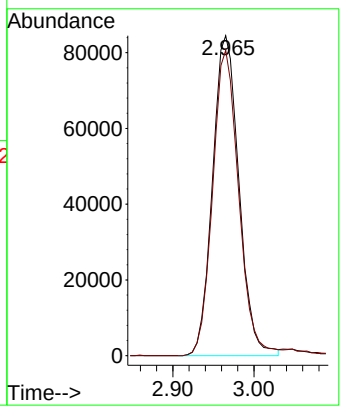





#5
Bromomethane
Concen: 148.522 ug/l
RT: 2.965 min Scan# 1
Delta R.T. -0.030 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 94 Resp: 19078

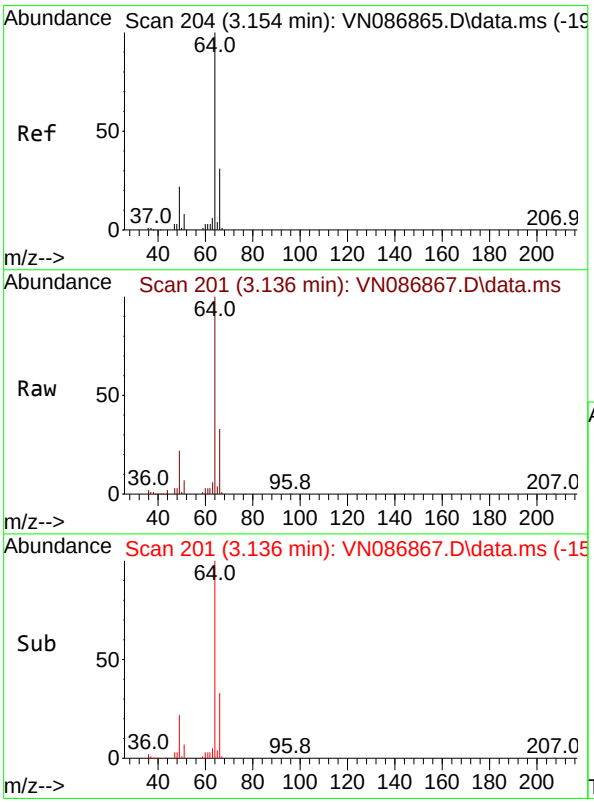
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 95.5 | 77.9 | 116.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
**APPROVED**

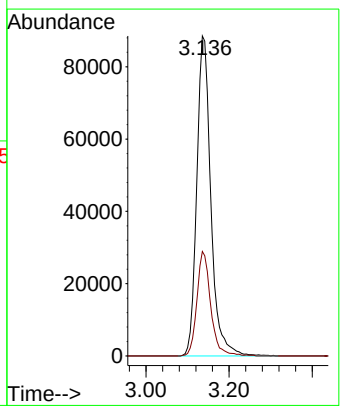
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

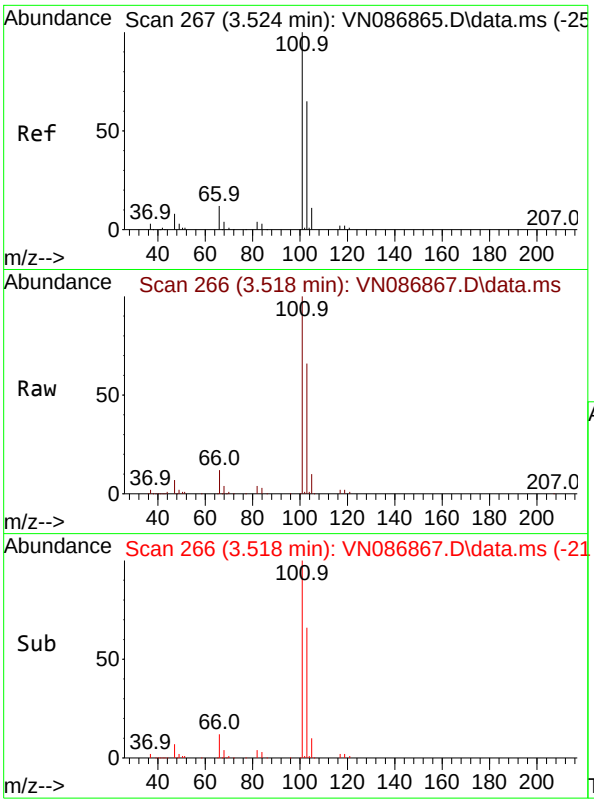



#6
Chloroethane
Concen: 140.664 ug/l
RT: 3.136 min Scan# 201
Delta R.T. -0.018 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 64 Resp: 208568

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 32.7 | 24.6 | 36.8 |

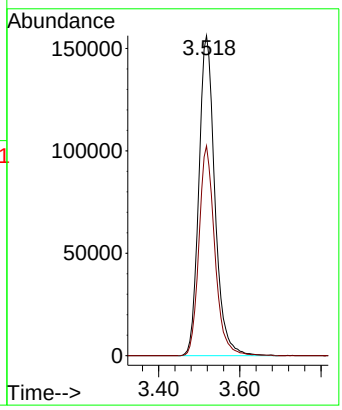





#7
Trichlorofluoromethane
Concen: 142.666 ug/l
RT: 3.518 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion:101 Resp: 42787

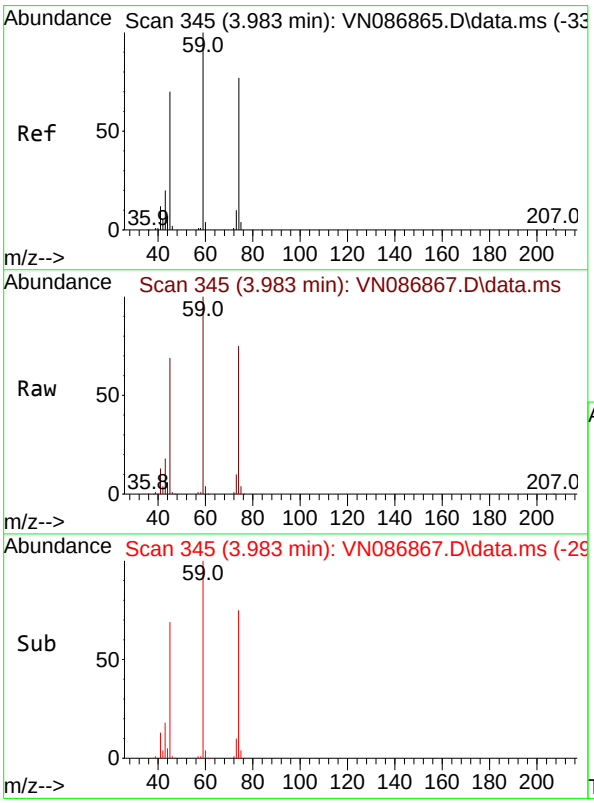
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 65.5 | 52.2 | 78.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
**APPROVED**

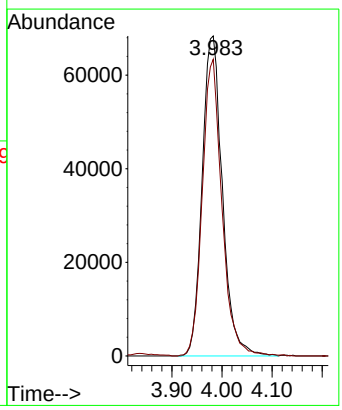
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

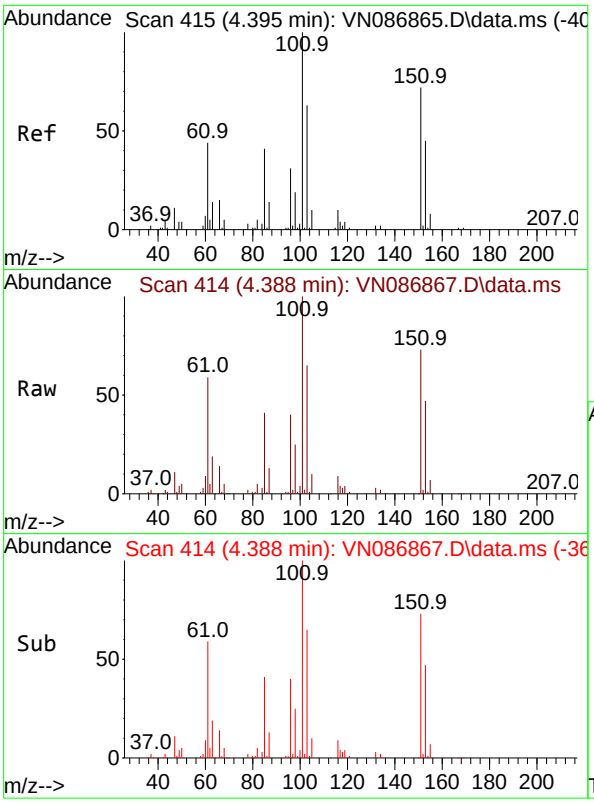



#8
Diethyl Ether
Concen: 146.593 ug/l
RT: 3.983 min Scan# 345
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 74 Resp: 191555

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 90.3 | 45.5 | 136.5 |






#9
1,1,2-Trichlorotrifluoroethane
Concen: 143.192 ug/l
RT: 4.388 min Scan# 4
Delta R.T. -0.006 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

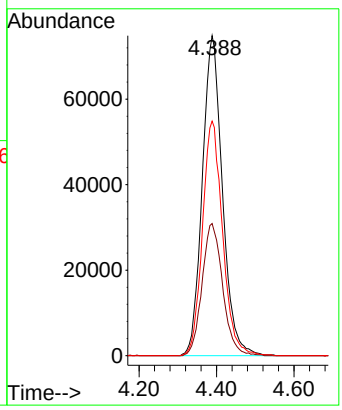
Tgt Ion:101 Resp: 26981

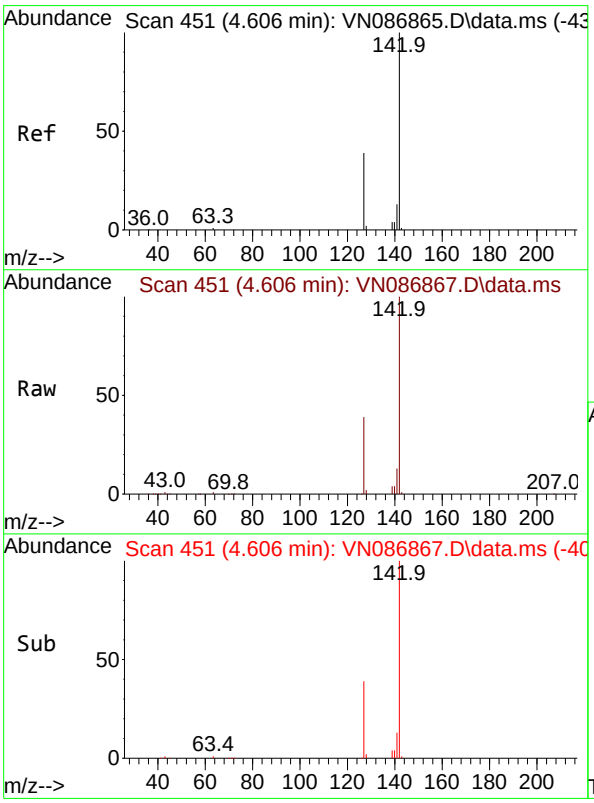
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 42.3 | 33.8 | 50.8 |
| 151 | 73.5 | 58.7 | 88.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

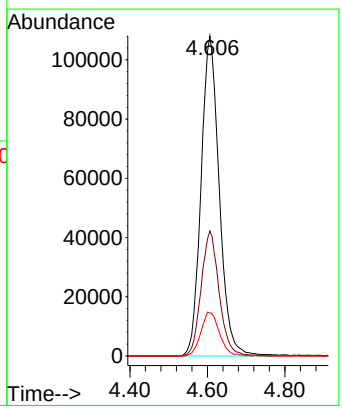


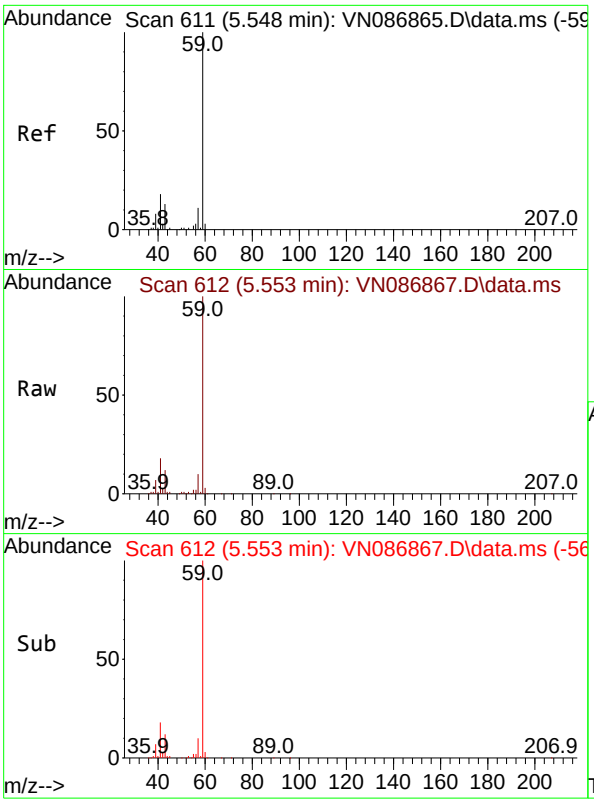




#10
Methyl Iodide
Concen: 144.118 ug/l
RT: 4.606 min Scan# 451
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion:142 Resp: 352020

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 39.1 | 30.9 | 46.3 |
| 141 | 13.5 | 10.4 | 15.6 |

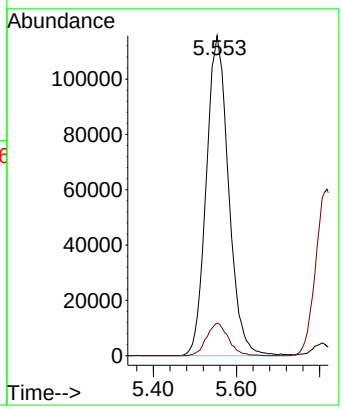





#11
Tert butyl alcohol
Concen: 686.213 ug/l
RT: 5.553 min Scan# 61
Delta R.T. 0.006 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 59 Resp: 43086

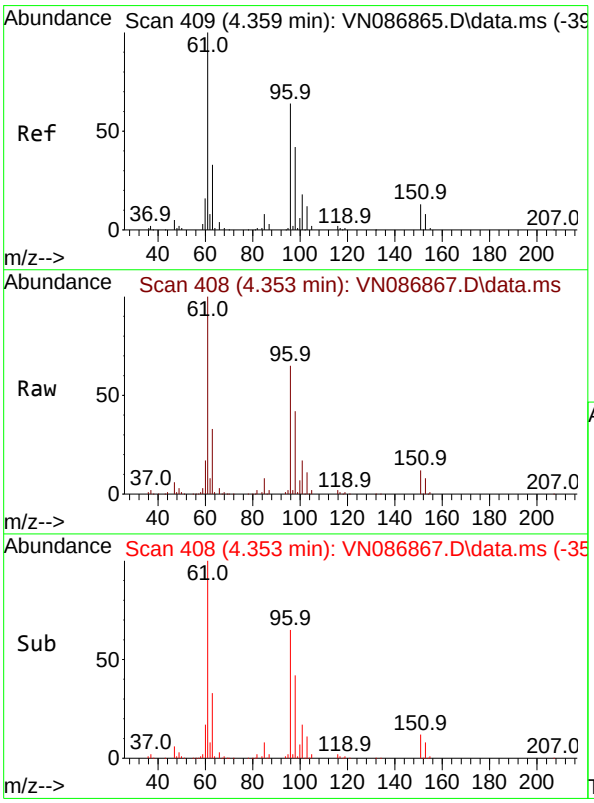
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 9.9 | 8.1 | 12.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
**APPROVED**

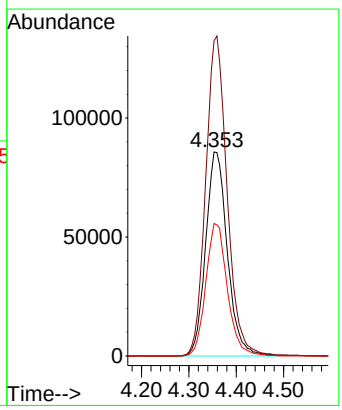
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

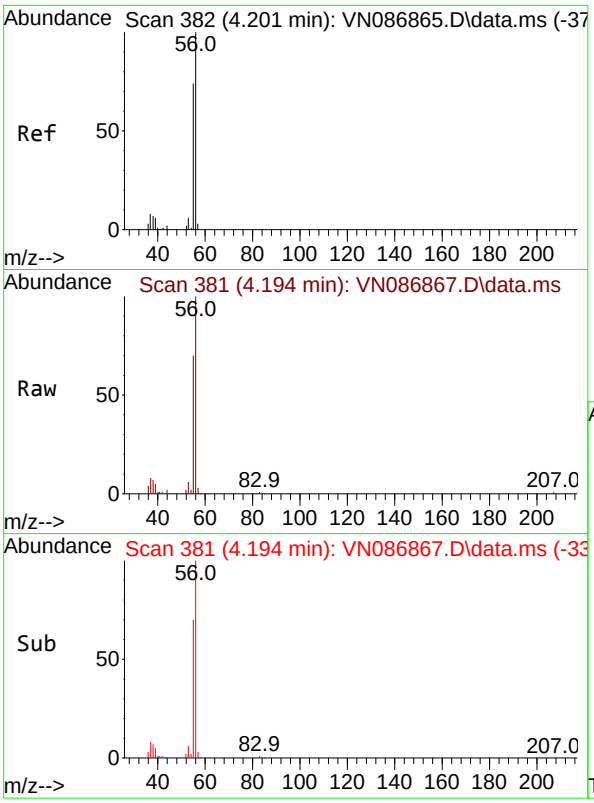



#12
1,1-Dichloroethene
Concen: 142.118 ug/l
RT: 4.353 min Scan# 408
Delta R.T. -0.006 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 96 Resp: 273388

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 154.5 | 125.8 | 188.6 |
| 98 | 64.9 | 52.5 | 78.7 |

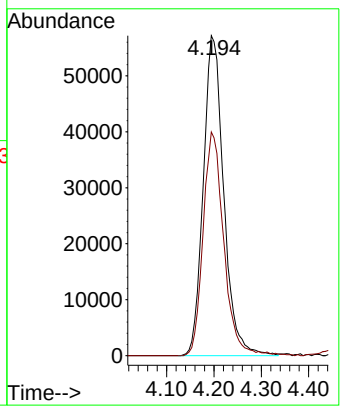





#13
Acrolein
Concen: 863.526 ug/l
RT: 4.194 min Scan# 3
Delta R.T. -0.006 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 56 Resp: 17162

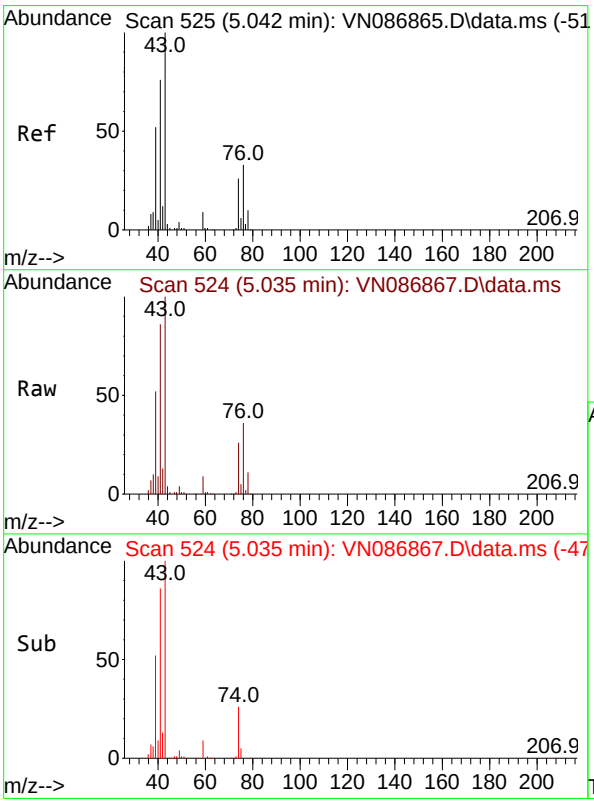
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 70.4 | 55.6 | 83.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
**APPROVED**

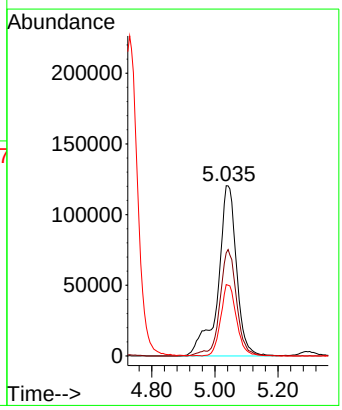
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

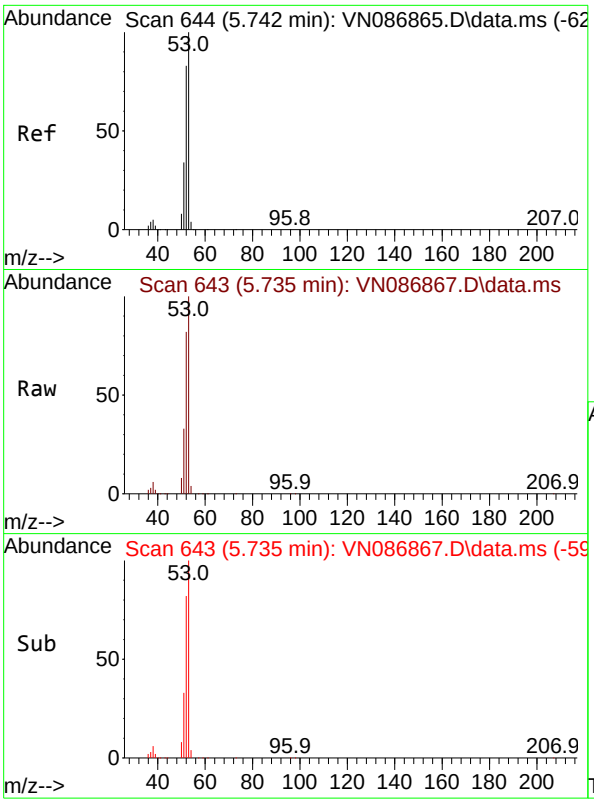



#14
Allyl chloride
Concen: 153.858 ug/l
RT: 5.035 min Scan# 524
Delta R.T. -0.006 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 41 Resp: 490852

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 56.4 | 51.3 | 76.9 |
| 76 | 35.7 | 31.4 | 47.0 |

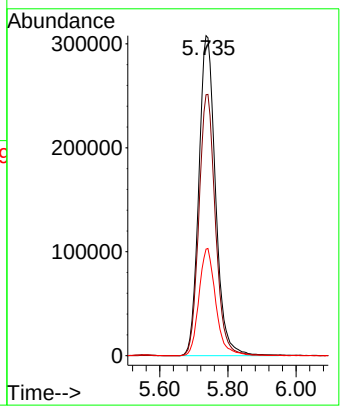





#15
Acrylonitrile
Concen: 714.344 ug/l
RT: 5.735 min Scan# 64
Delta R.T. -0.006 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 53 Resp: 104837

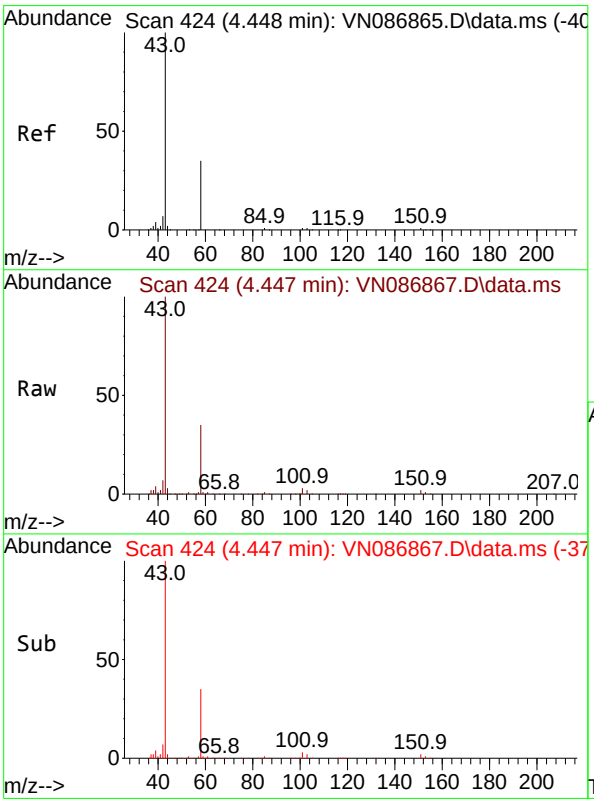
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 80.7 | 65.0 | 97.6 |
| 51 | 33.8 | 27.2 | 40.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
**APPROVED**

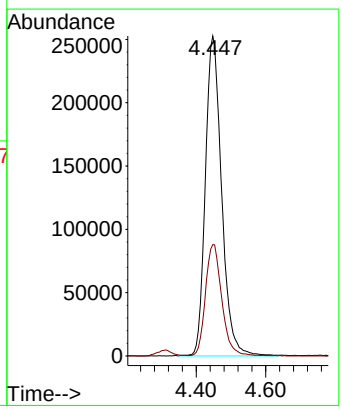
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

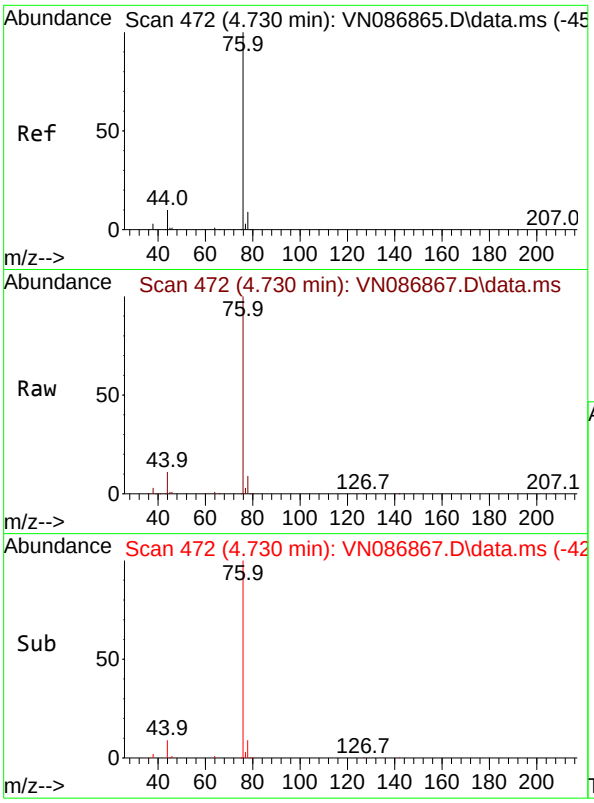



#16
Acetone
Concen: 667.435 ug/l
RT: 4.447 min Scan# 424
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 43 Resp: 819041

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 34.7 | 28.0 | 42.0 |

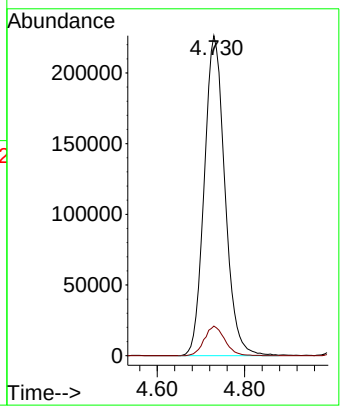





#17
Carbon Disulfide
Concen: 139.594 ug/l
RT: 4.730 min Scan# 4
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 76 Resp: 74278

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.3 | 7.3 | 10.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

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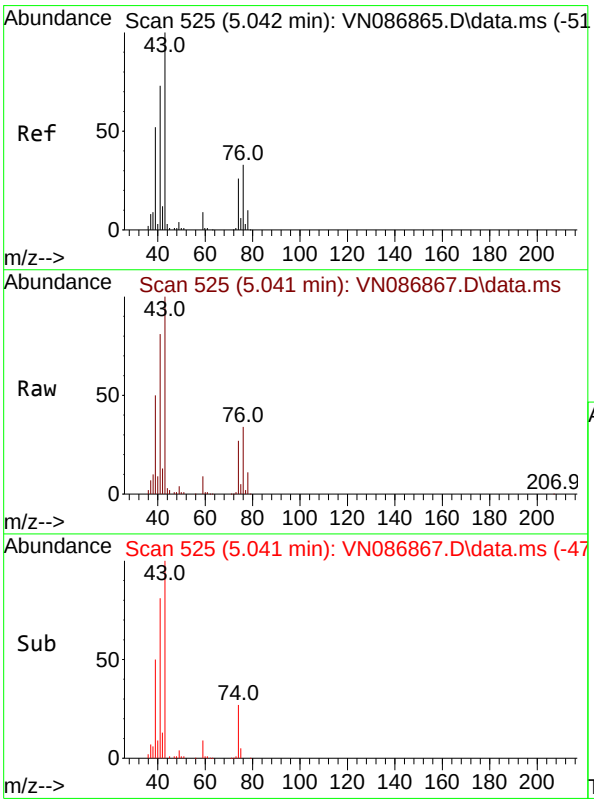
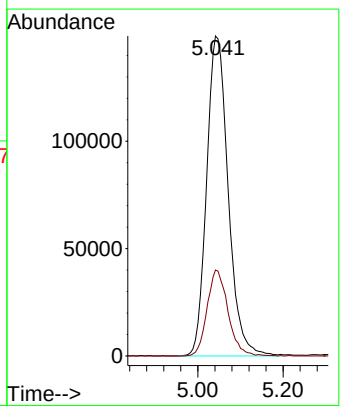
Supervised By :Mahesh Dadoda 06/09/2025

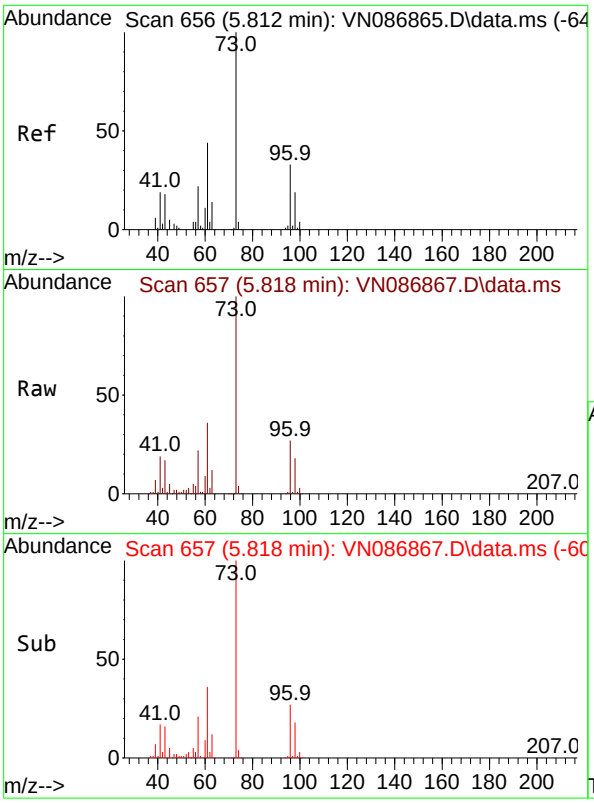



#18
Methyl Acetate
Concen: 146.527 ug/l
RT: 5.041 min Scan# 525
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 43 Resp: 523996

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 26.1 | 20.7 | 31.1 |

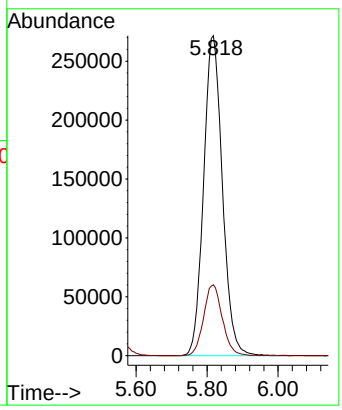





#19
Methyl tert-butyl Ether
Concen: 143.396 ug/l
RT: 5.818 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 73 Resp: 99878

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 22.2 | 17.4 | 26.2 |




**Instrument :**
MSVOA_N
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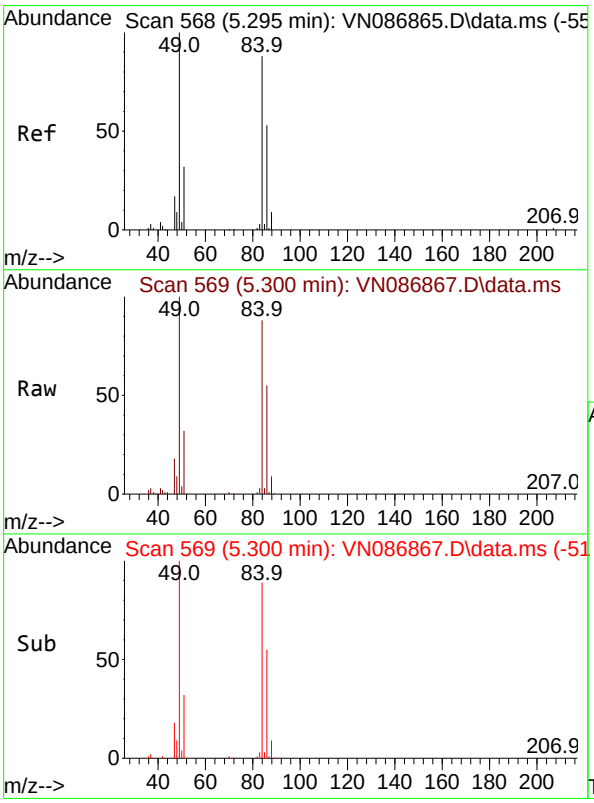
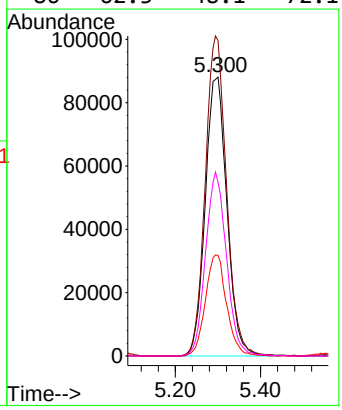
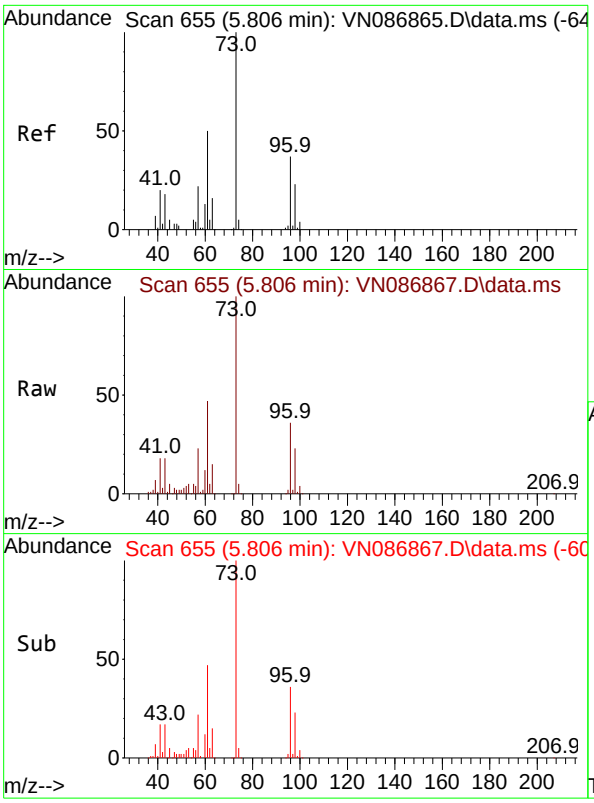



#20
Methylene Chloride
Concen: 135.628 ug/l
RT: 5.300 min Scan# 569
Delta R.T. 0.006 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 84 Resp: 311597

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 113.0 | 90.5 | 135.7 |
| 51 | 36.1 | 28.5 | 42.7 |
| 86 | 62.3 | 48.1 | 72.1 |

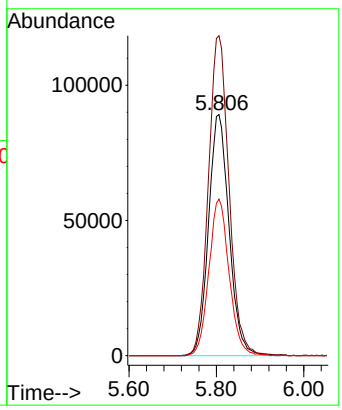





#21
trans-1,2-Dichloroethene
Concen: 135.947 ug/l
RT: 5.806 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 96 Resp: 29096

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 132.7 | 109.2 | 163.8 |
| 98 | 65.0 | 49.8 | 74.8 |




**Instrument :**
MSVOA_N
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VSTDICC150

**Manual Integrations**
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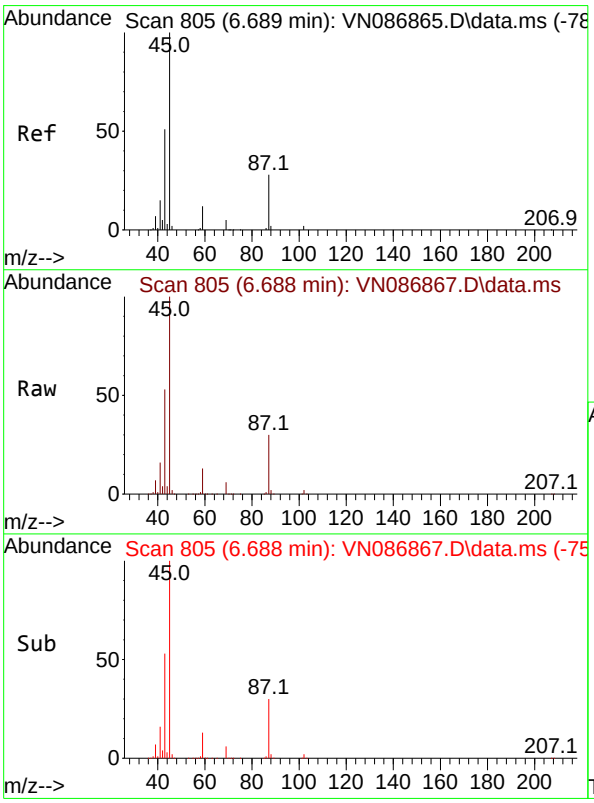
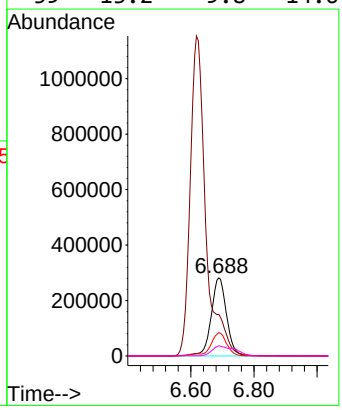
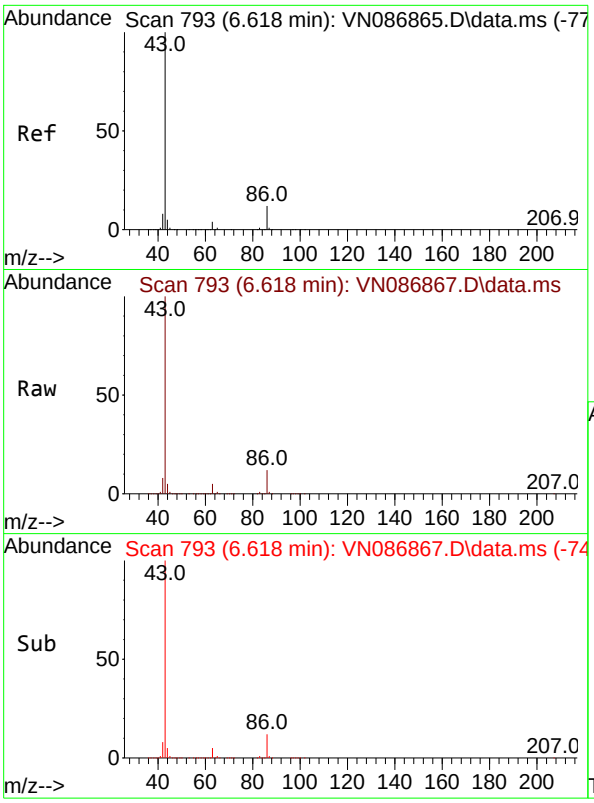



#22
Diisopropyl ether
Concen: 140.915 ug/l
RT: 6.688 min Scan# 805
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 45 Resp: 947638

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 53.1 | 41.9 | 62.9 |
| 87 | 29.9 | 22.4 | 33.6 |
| 59 | 13.2 | 9.8 | 14.6 |

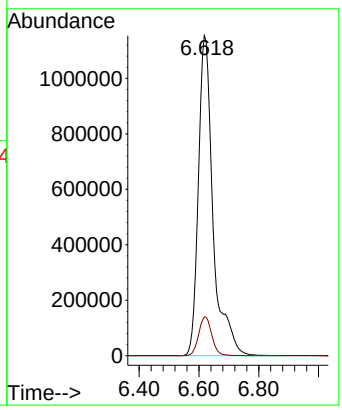





#23
Vinyl Acetate
Concen: 692.189 ug/l
RT: 6.618 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 43 Resp: 393287

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 12.1 | 9.5 | 14.3 |




**Instrument :**
MSVOA_N
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VSTDICC150

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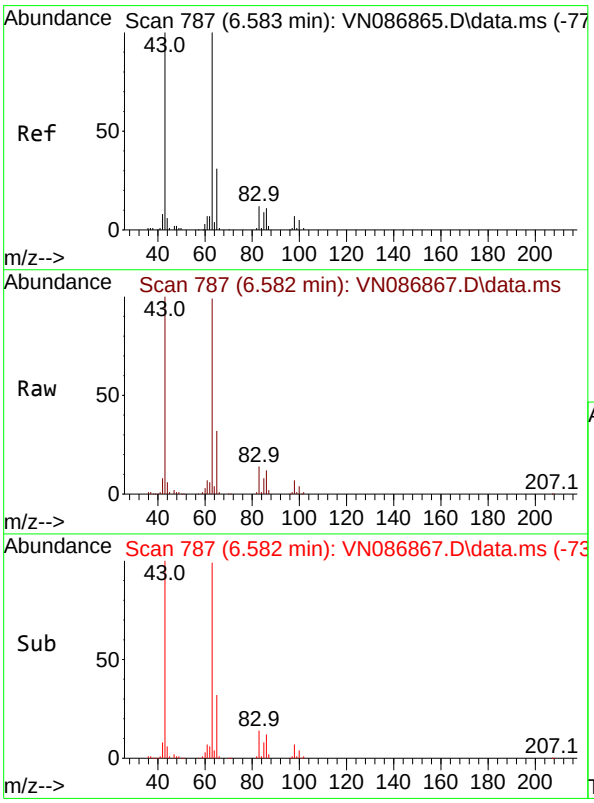
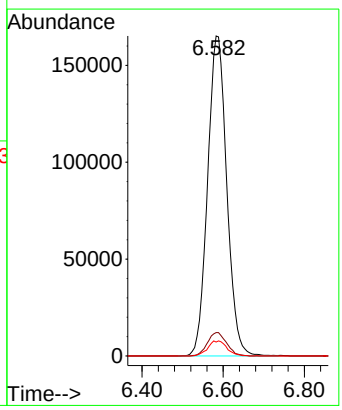
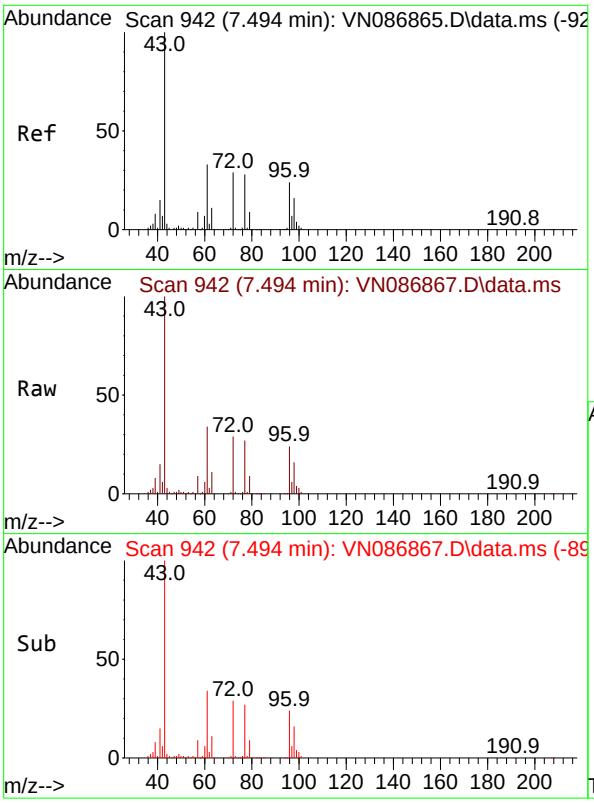



#24
1,1-Dichloroethane
Concen: 139.761 ug/l
RT: 6.582 min Scan# 787
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 63 Resp: 540881

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 7.3 | 3.6 | 10.8 |
| 100 | 4.4 | 2.6 | 7.8 |






#25
2-Butanone
Concen: 692.809 ug/l
RT: 7.494 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 43 Resp: 138194

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 29.4 | 23.0 | 34.6 |

**Instrument :**
MSVOA_N
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VSTDICC150

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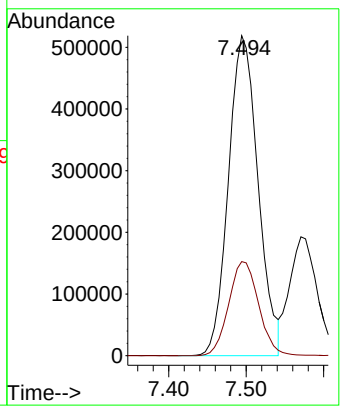
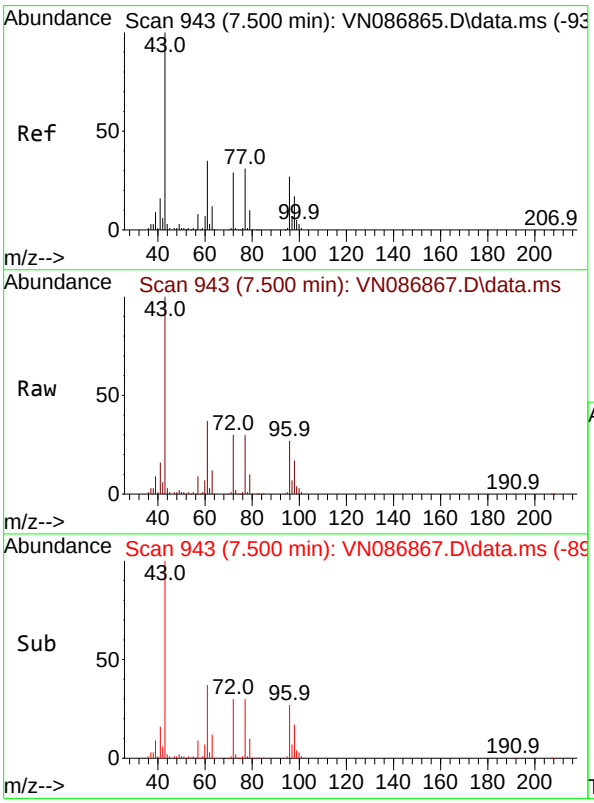
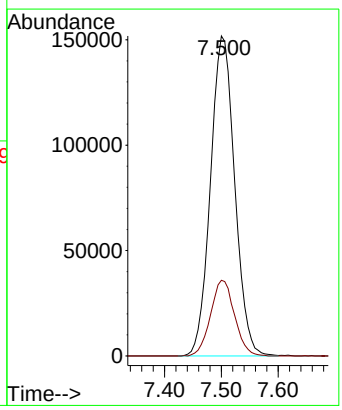


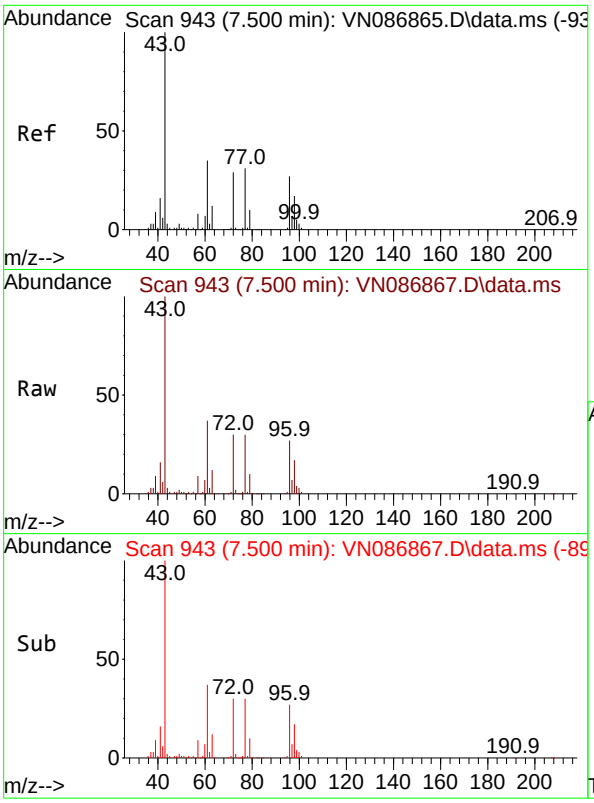




#26
2,2-Dichloropropane
Concen: 149.519 ug/l
RT: 7.500 min Scan# 943
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 77 Resp: 450112

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 23.4 | 11.6 | 34.7 |






#27
cis-1,2-Dichloroethene
Concen: 141.974 ug/l
RT: 7.500 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 96 Resp: 36339

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 138.0 | 0.0 | 278.0 |
| 98 | 64.5 | 0.0 | 128.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
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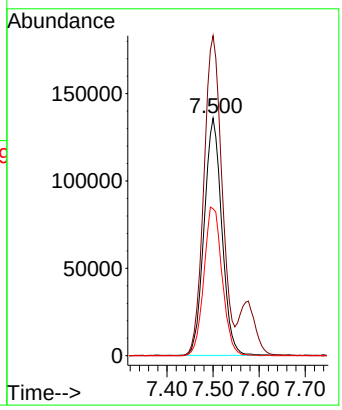
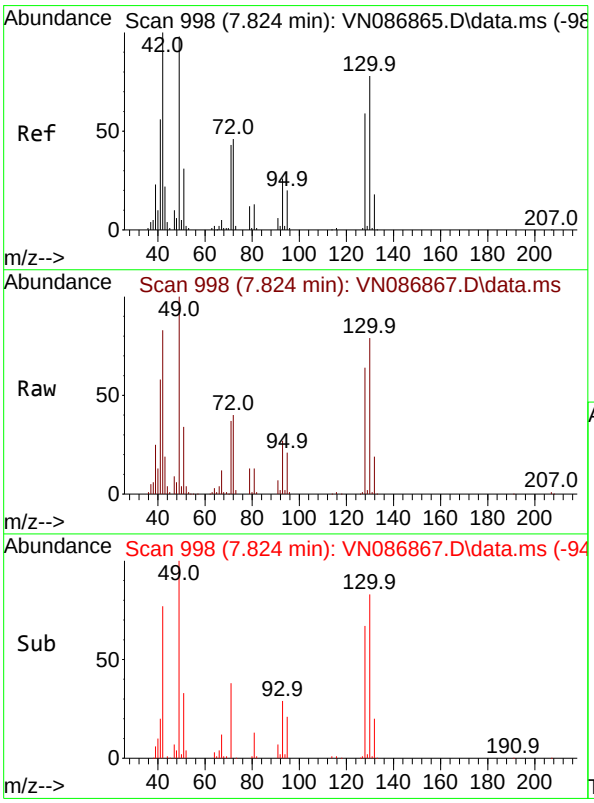
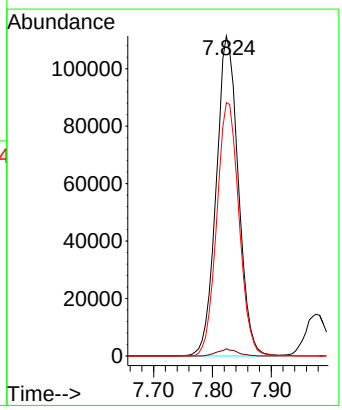


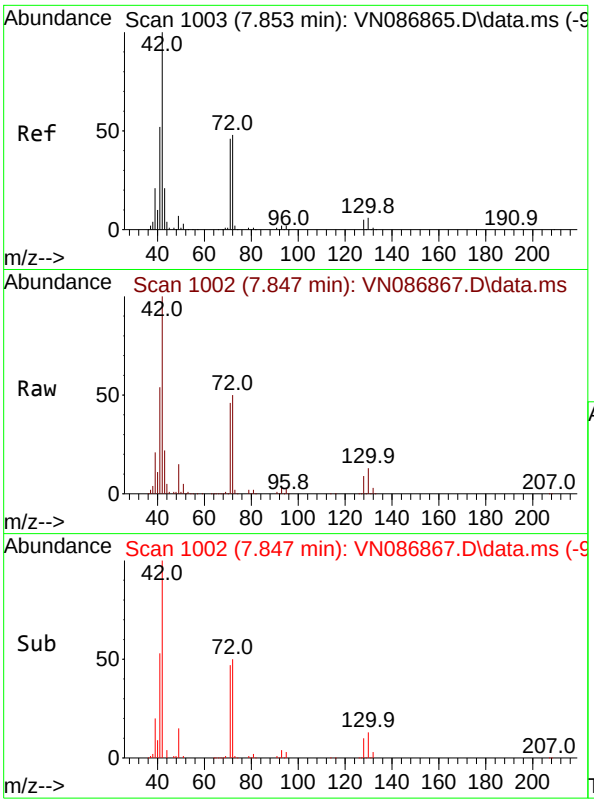




#28
Bromochloromethane
Concen: 152.718 ug/l
RT: 7.824 min Scan# 998
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 49 Resp: 290594

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 2.0 | 0.0 | 3.8 |
| 130 | 79.8 | 62.2 | 93.2 |

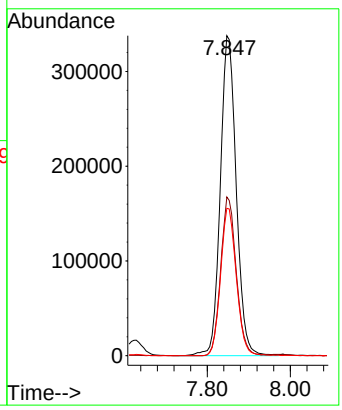





#29
Tetrahydrofuran
Concen: 691.211 ug/l
RT: 7.847 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 42 Resp: 89815

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 48.5 | 37.8 | 56.6 |
| 71 | 45.4 | 35.6 | 53.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

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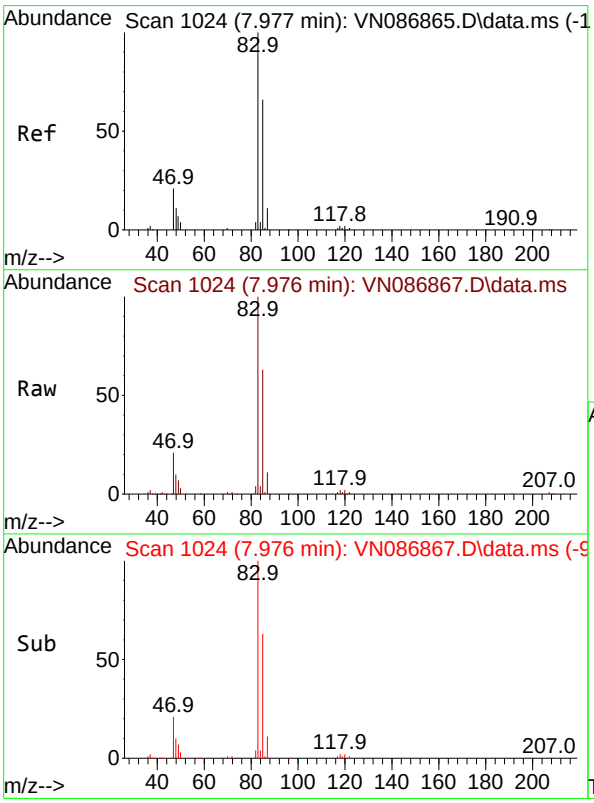
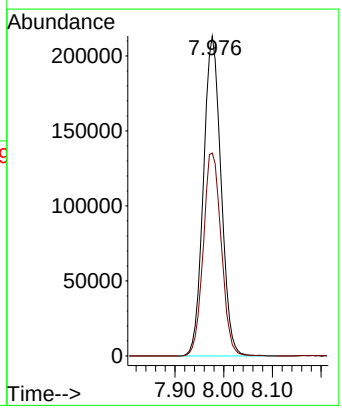
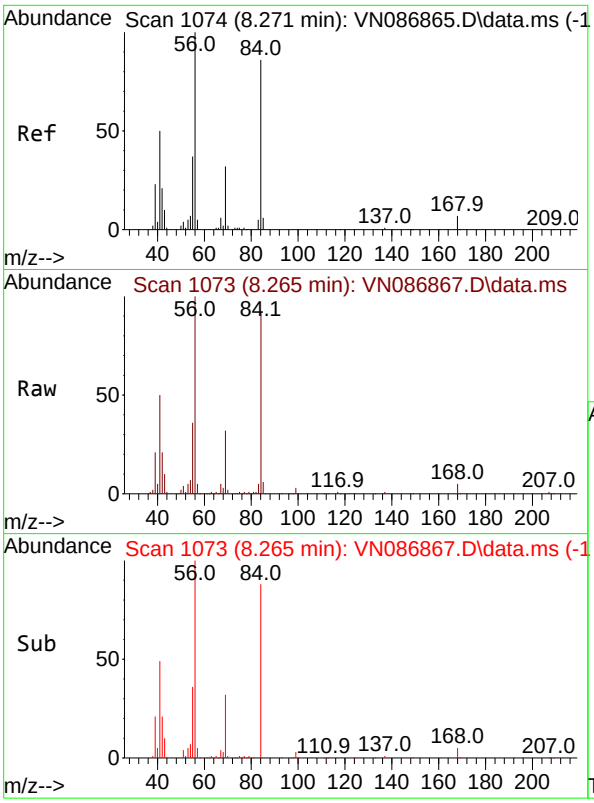



#30
Chloroform
Concen: 138.179 ug/l
RT: 7.976 min Scan# 1024
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 83 Resp: 534038

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 63.4 | 52.9 | 79.3 |






#31
Cyclohexane
Concen: 134.766 ug/l
RT: 8.265 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 56 Resp: 50579

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 32.0 | 25.4 | 38.0 |
| 84 | 90.6 | 68.8 | 103.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

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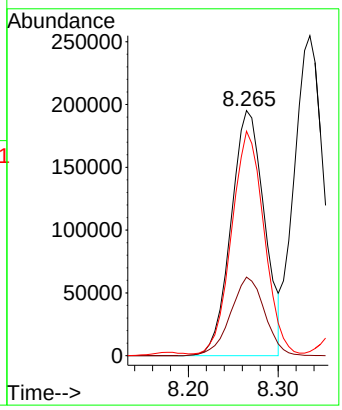
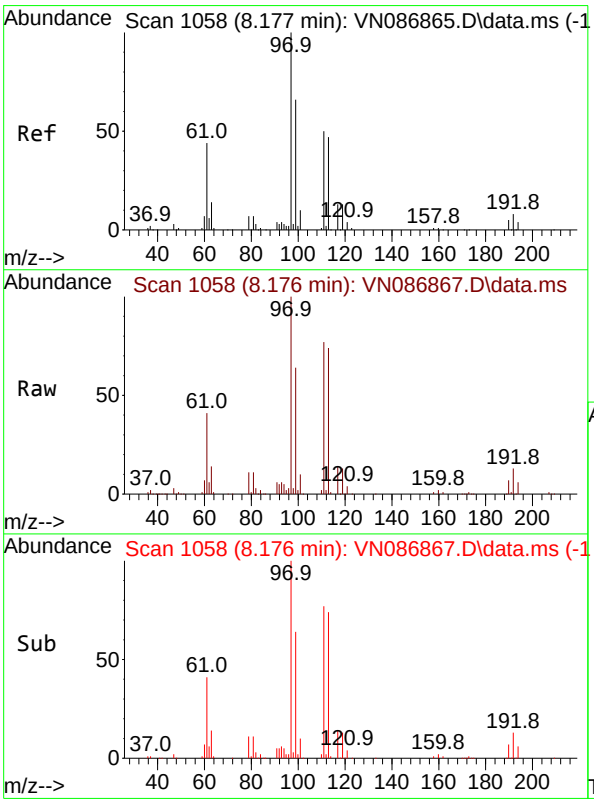
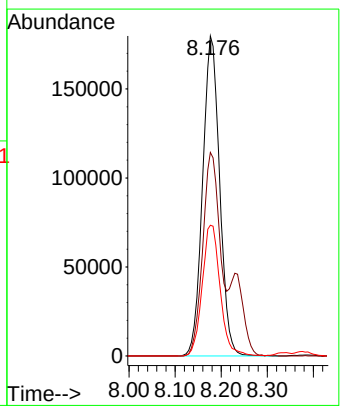


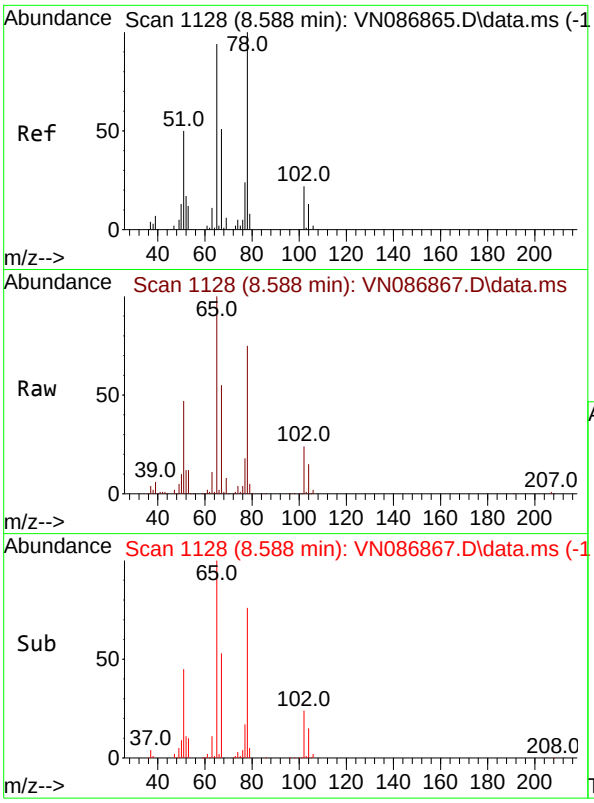




#32
1,1,1-Trichloroethane
Concen: 140.807 ug/l
RT: 8.176 min Scan# 1058
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 97 Resp: 462854

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 64.9 | 52.0 | 78.0 |
| 61 | 43.2 | 35.9 | 53.9 |






#33
1,2-Dichloroethane-d4
Concen: 168.233 ug/l
RT: 8.588 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 65 Resp: 38929

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 54.9 | 0.0 | 105.6 |

**Instrument :**
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VSTDICC150

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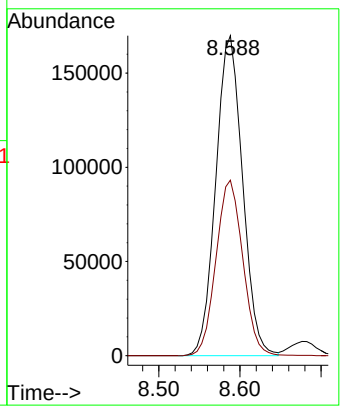
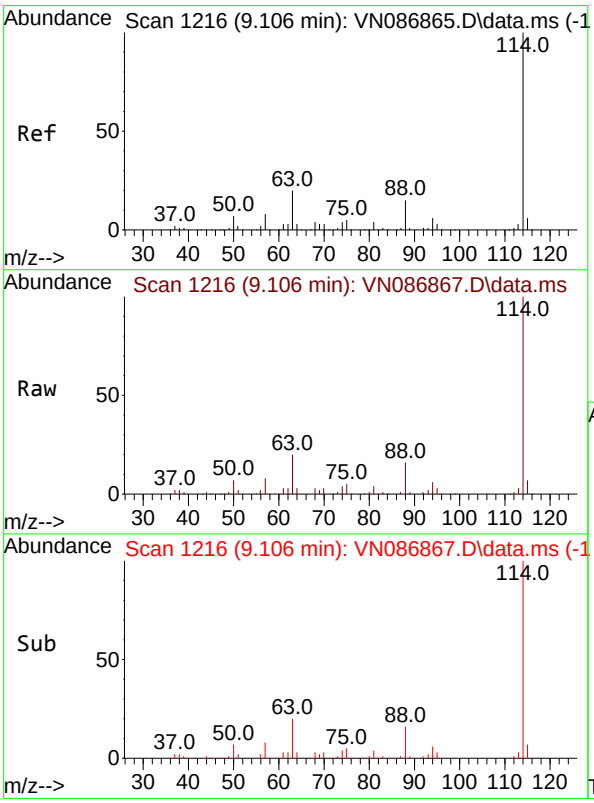
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

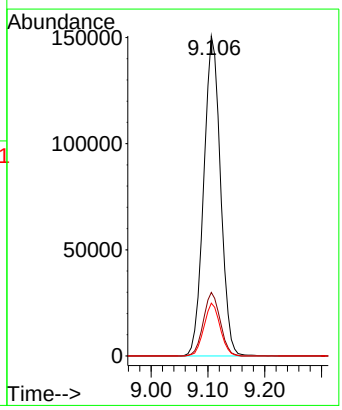


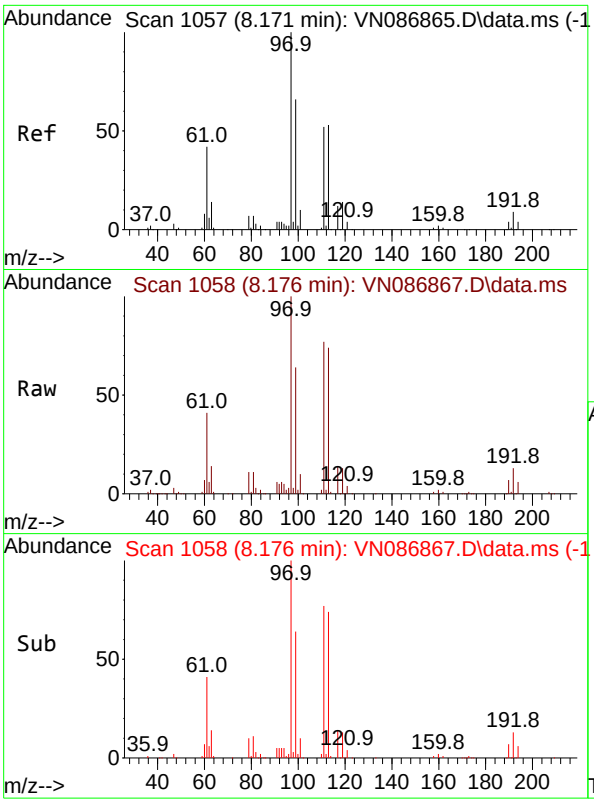




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.106 min Scan# 1216
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion:114 Resp: 307937

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 19.8 | 0.0 | 39.6 |
| 88 | 16.5 | 0.0 | 30.2 |

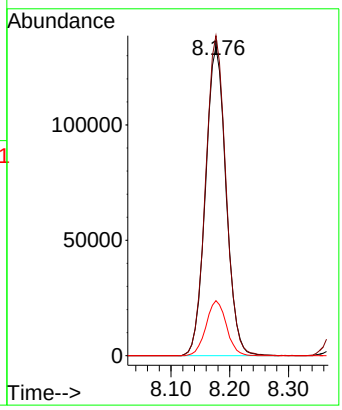





#35
Dibromofluoromethane
Concen: 177.803 ug/l
RT: 8.176 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion:113 Resp: 32447

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 102.5 | 84.2 | 126.2 |
| 192 | 17.7 | 14.2 | 21.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
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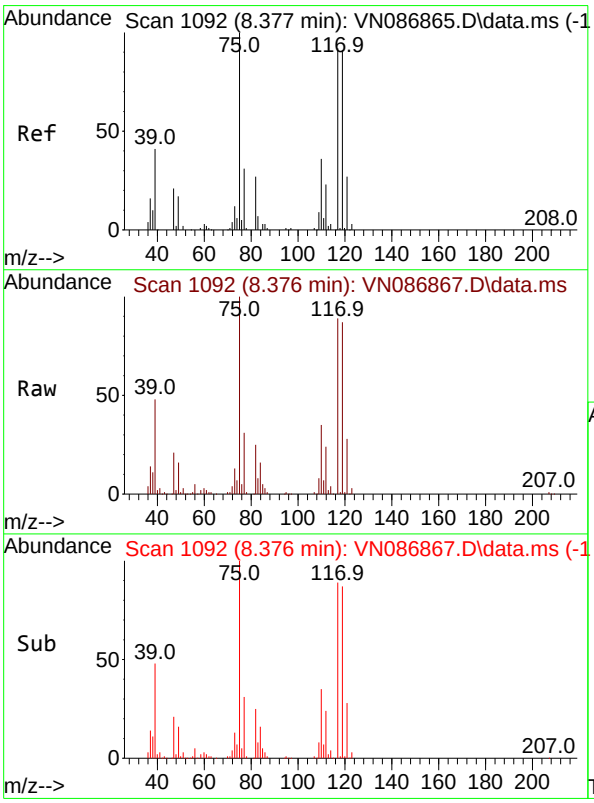
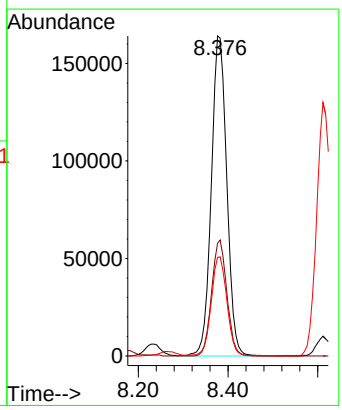
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

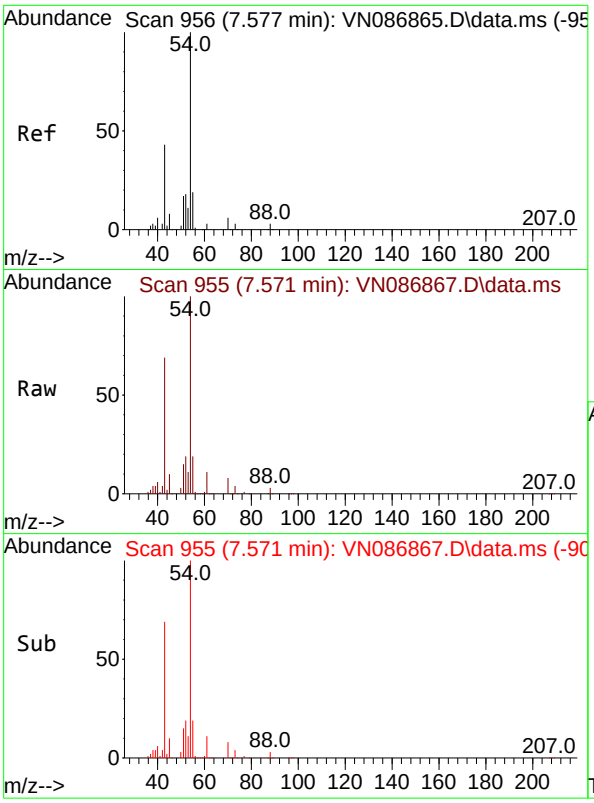



#36
1,1-Dichloropropene
Concen: 144.584 ug/l
RT: 8.376 min Scan# 1092
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 75 Resp: 393166

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 35.6 | 17.6 | 52.9 |
| 77 | 31.4 | 25.3 | 37.9 |

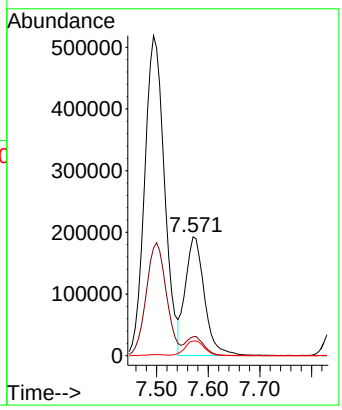





#37
Ethyl Acetate
Concen: 142.706 ug/l
RT: 7.571 min Scan# 9
Delta R.T. -0.006 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 43 Resp: 49400

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 15.4 | 12.1 | 18.1 |
| 70 | 12.7 | 9.8 | 14.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
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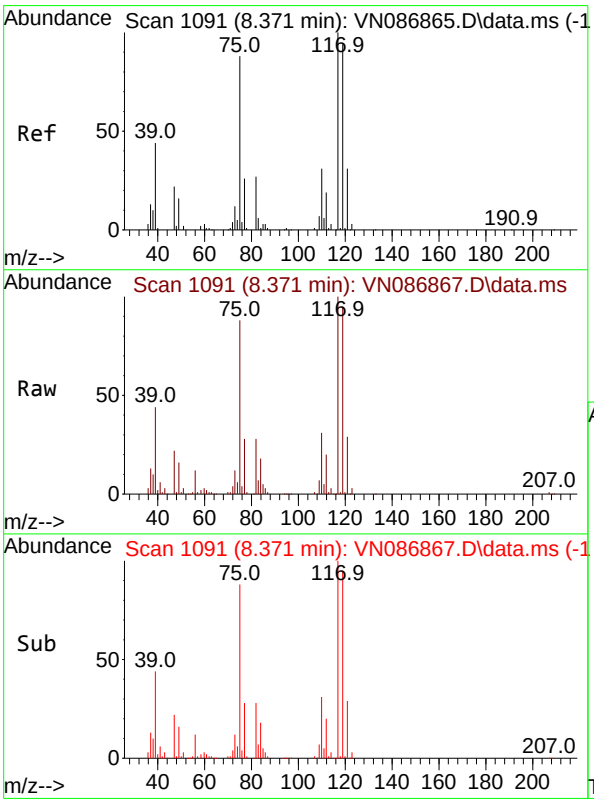
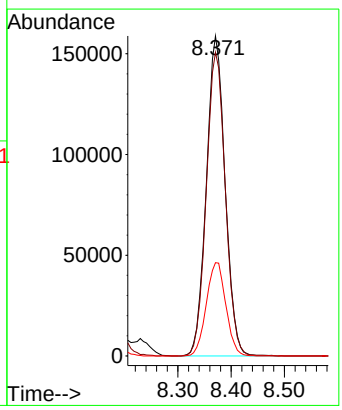
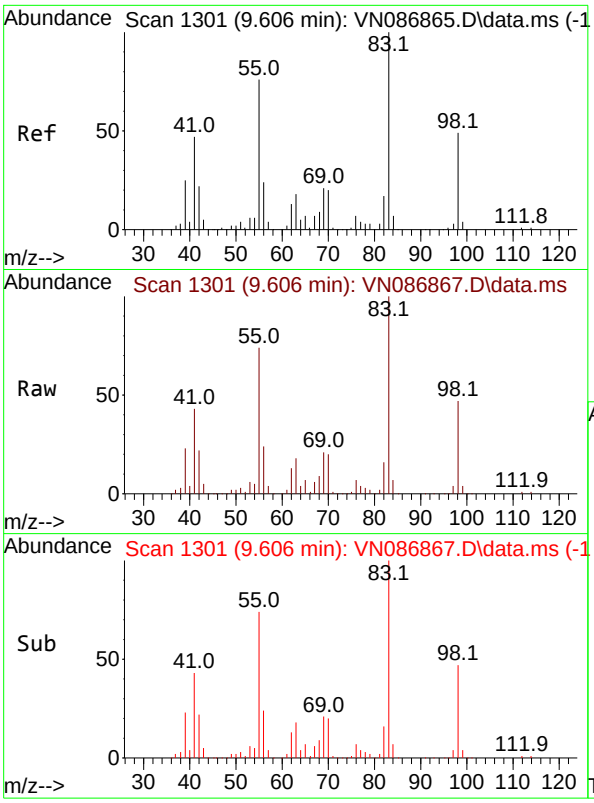



#38
Carbon Tetrachloride
Concen: 145.557 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion:117 Resp: 388595

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 94.9 | 75.0 | 112.6 |
| 121 | 29.1 | 24.9 | 37.3 |

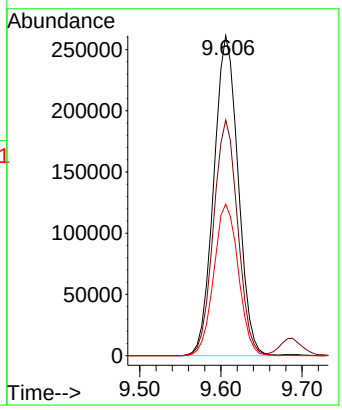





#39
Methylcyclohexane
Concen: 146.136 ug/l
RT: 9.606 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 83 Resp: 54443

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 73.6 | 61.0 | 91.6 |
| 98 | 47.4 | 38.9 | 58.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
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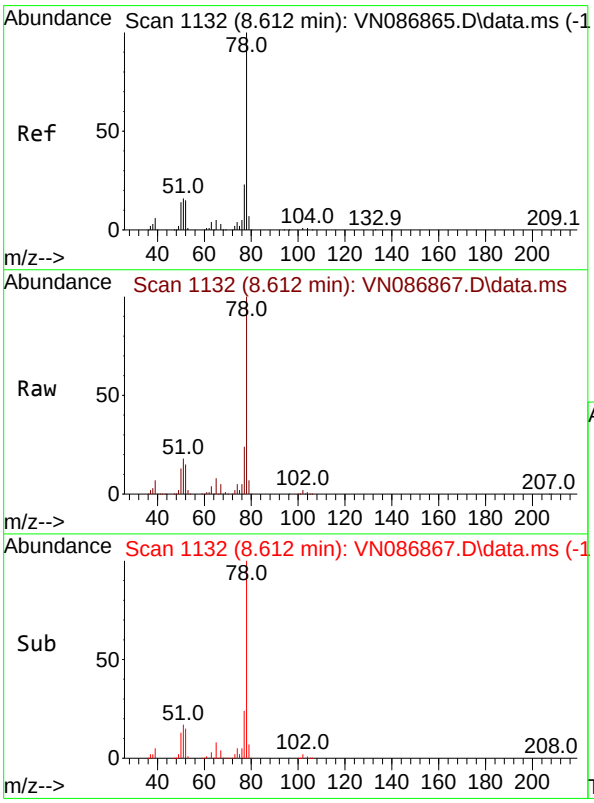
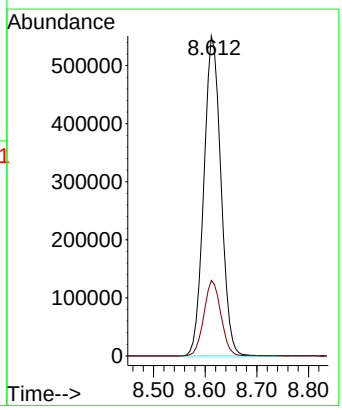
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

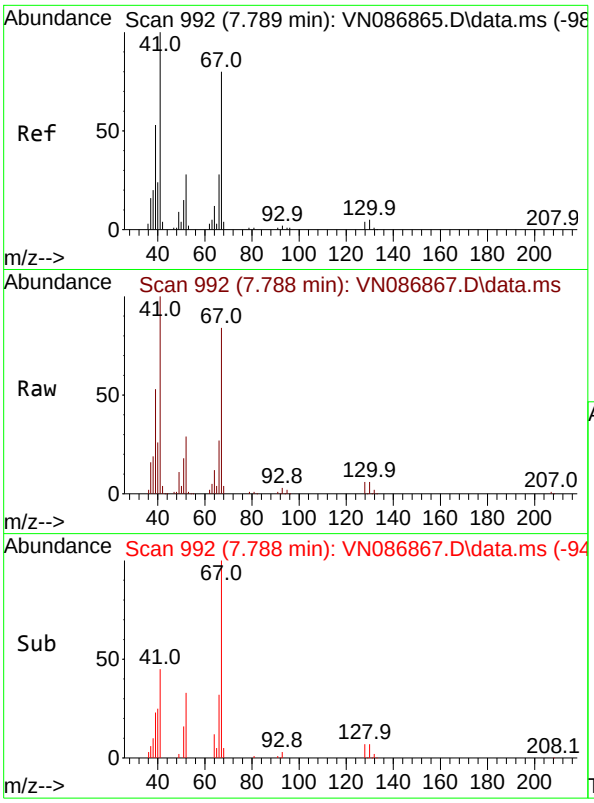



#40
Benzene
Concen: 142.388 ug/l
RT: 8.612 min Scan# 1132
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 78 Resp: 1266139

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.6 | 18.7 | 28.1 |

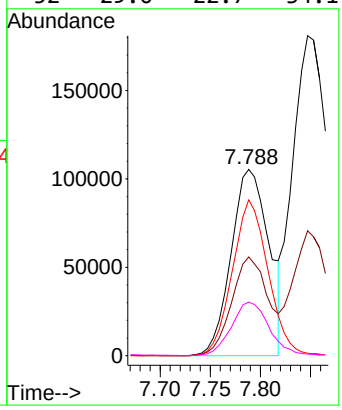





#41
Methacrylonitrile
Concen: 142.174 ug/l
RT: 7.788 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 41 Resp: 27640

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 50.9 | 41.2 | 61.8 |
| 67 | 79.4 | 61.4 | 92.2 |
| 52 | 29.0 | 22.7 | 34.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
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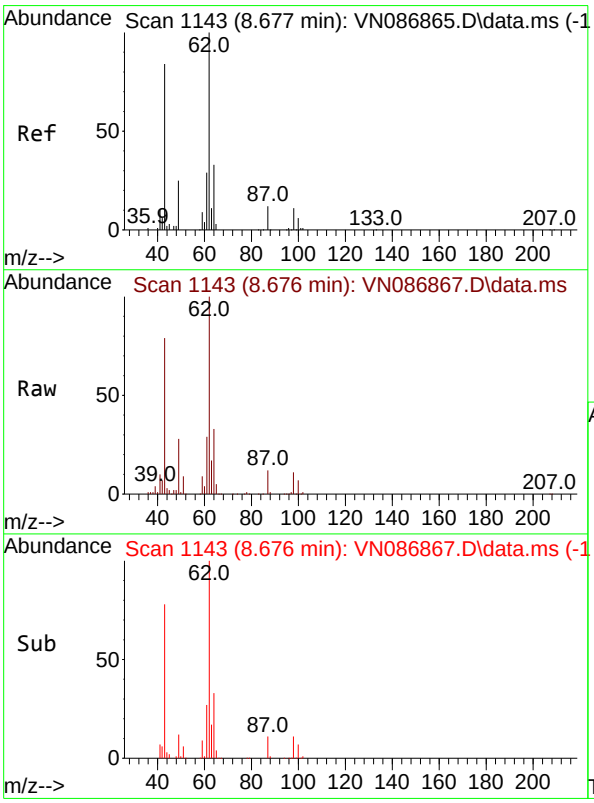
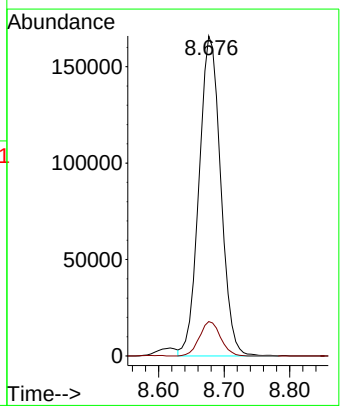
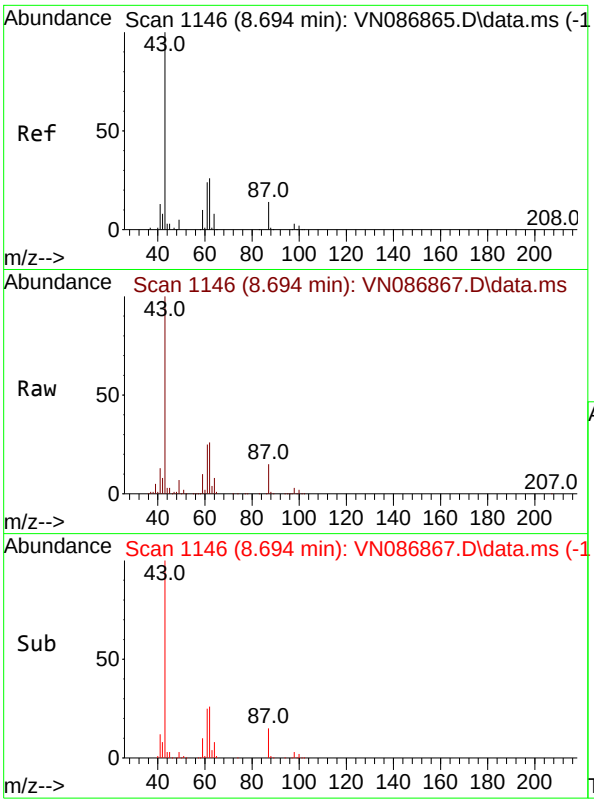



#42
1,2-Dichloroethane
Concen: 141.455 ug/l
RT: 8.676 min Scan# 1143
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 62 Resp: 381516

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 10.5 | 0.0 | 21.2 |






#43
Isopropyl Acetate
Concen: 140.531 ug/l
RT: 8.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 43 Resp: 78079

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 28.3 | 22.1 | 33.1 |
| 87 | 15.3 | 11.8 | 17.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

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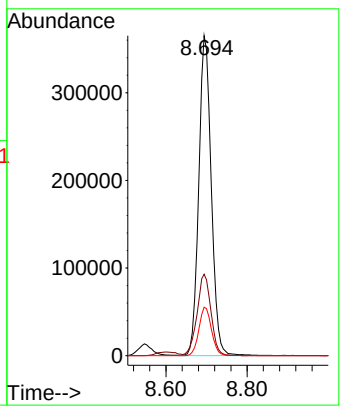
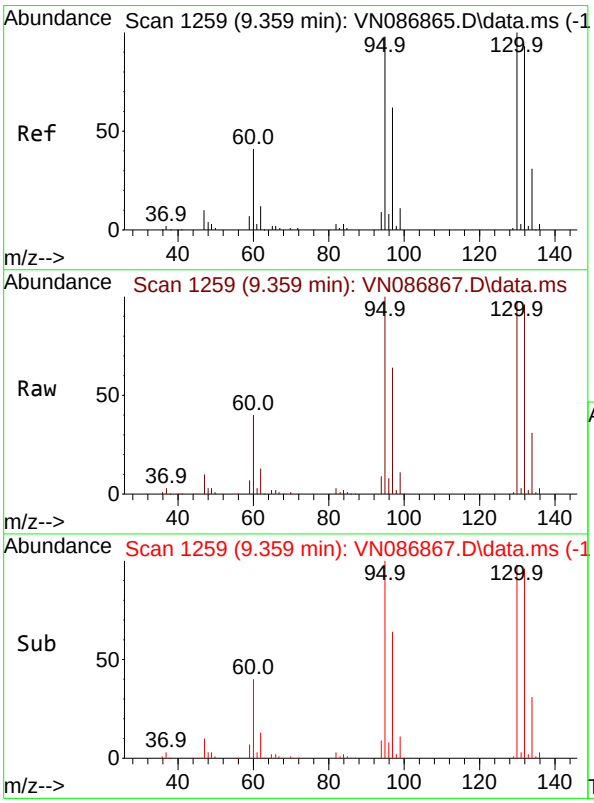
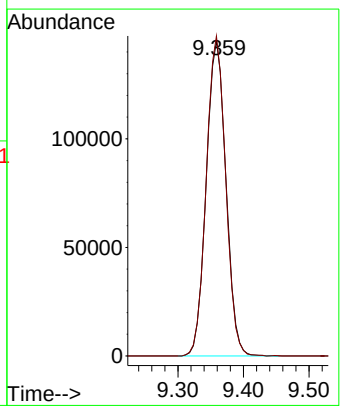


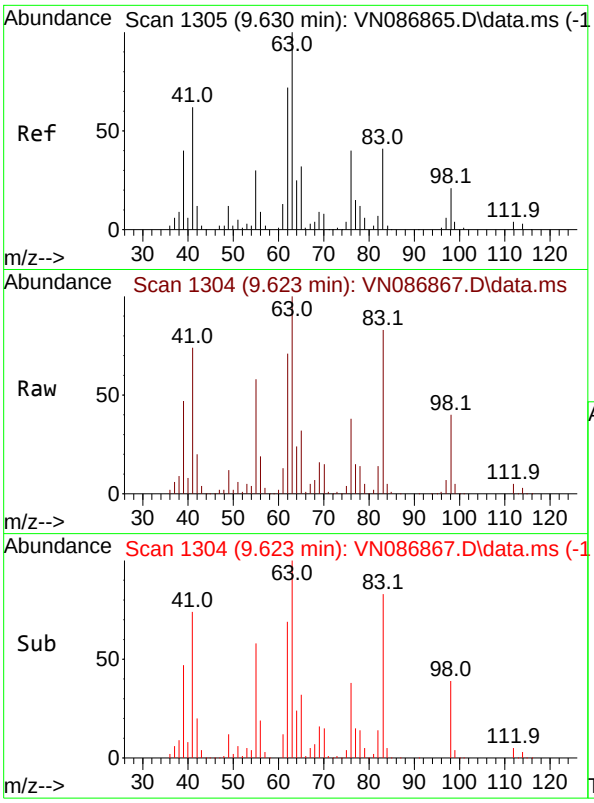




#44
Trichloroethene
Concen: 143.490 ug/l
RT: 9.359 min Scan# 1259
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion:130 Resp: 302548

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 101.6 | 0.0 | 196.2 |

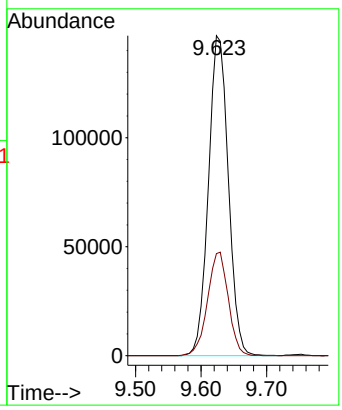





#45
1,2-Dichloropropane
Concen: 142.856 ug/l
RT: 9.623 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 63 Resp: 30904

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 31.9 | 25.5 | 38.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
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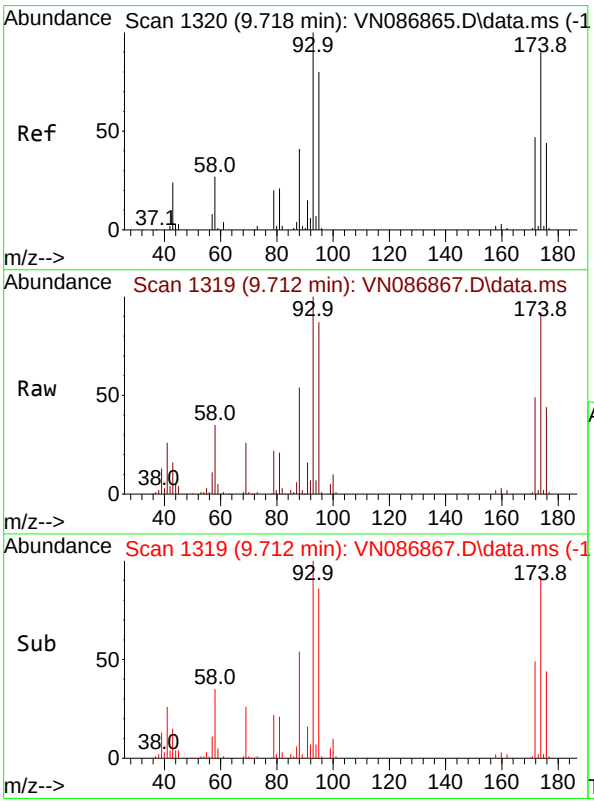
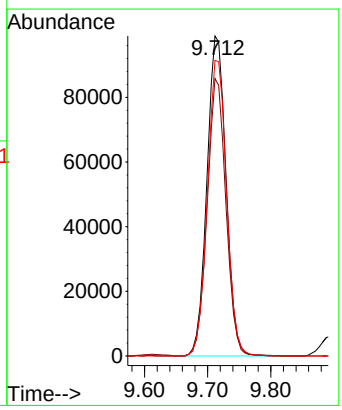
Supervised By :Mahesh Dadoda 06/09/2025

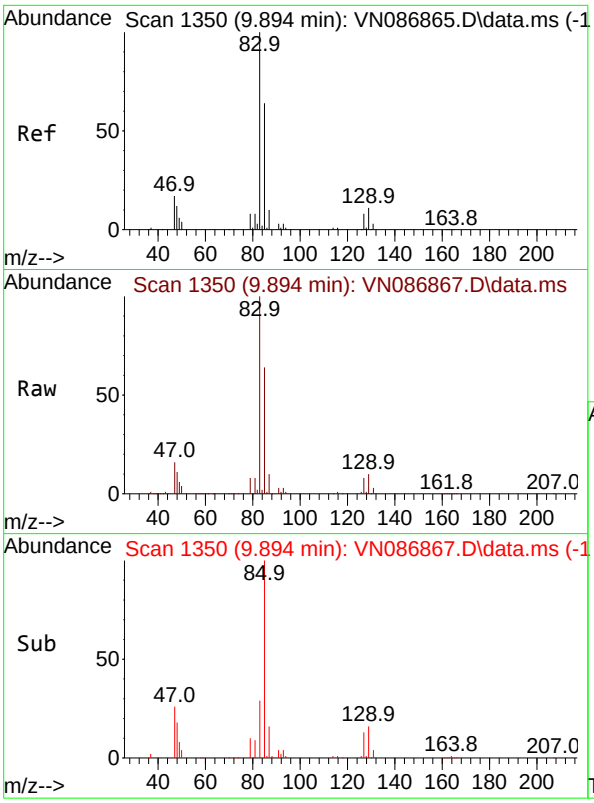



#46
Dibromomethane
Concen: 145.074 ug/l
RT: 9.712 min Scan# 1319
Delta R.T. -0.006 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 93 Resp: 208461

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 84.8 | 67.1 | 100.7 |
| 174 | 92.8 | 74.2 | 111.4 |

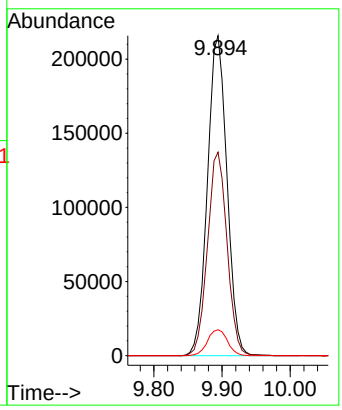





#47
Bromodichloromethane
Concen: 145.449 ug/l
RT: 9.894 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 83 Resp: 43001

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 63.6 | 50.9 | 76.3 |
| 127 | 8.1 | 6.6 | 10.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
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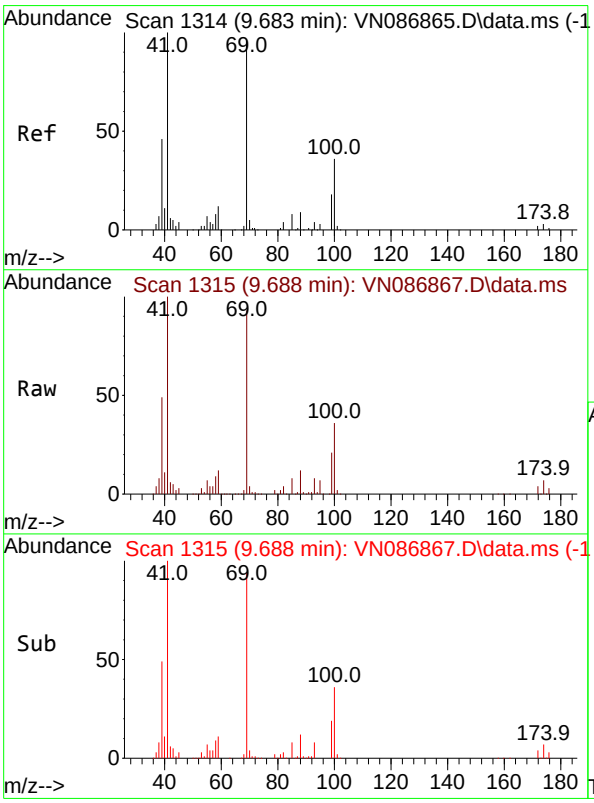
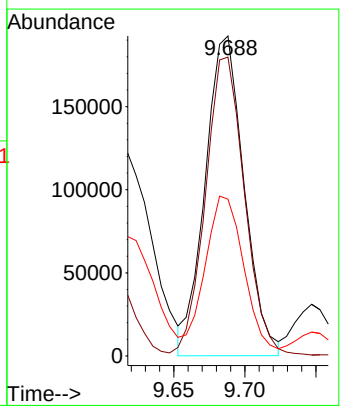
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

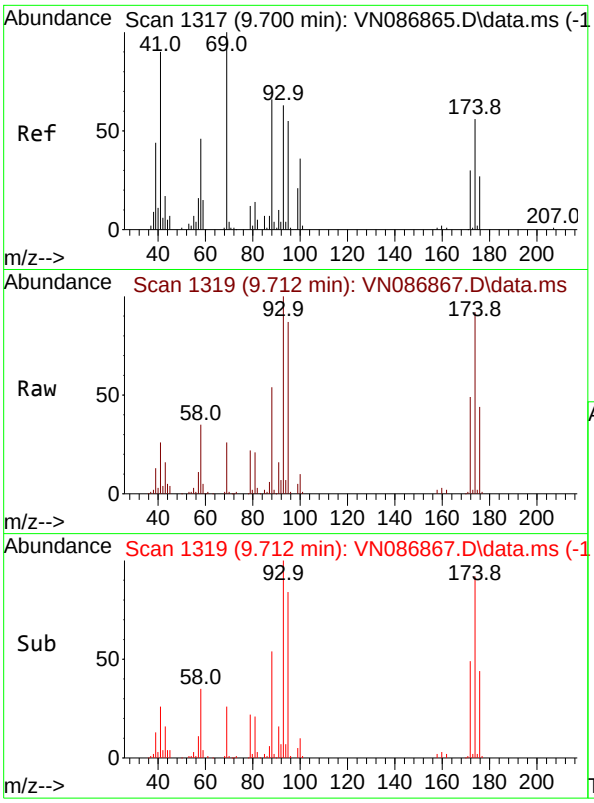



#48
Methyl methacrylate
Concen: 143.502 ug/l
RT: 9.688 min Scan# 1315
Delta R.T. 0.006 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 41 Resp: 366967

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 94.2 | 74.6 | 112.0 |
| 39 | 50.8 | 40.2 | 60.4 |

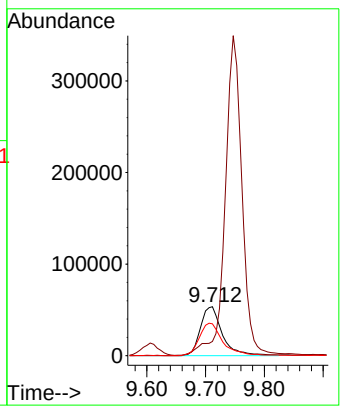





#49
1,4-Dioxane
Concen: 2967.116 ug/l
RT: 9.712 min Scan# 1
Delta R.T. 0.011 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 88 Resp: 13803

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 0.0 | 0.0 | 0.0 |
| 58 | 72.2 | 57.7 | 86.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
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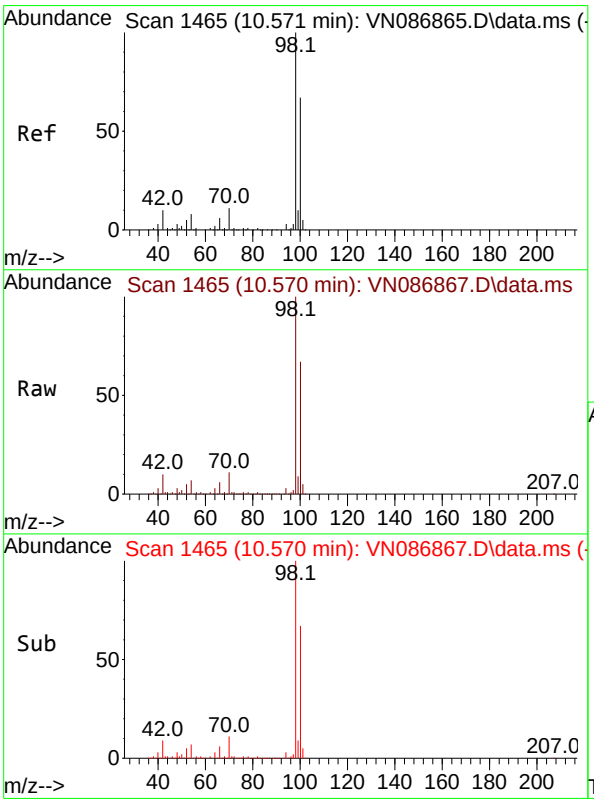
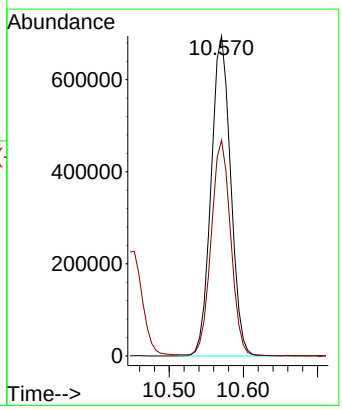
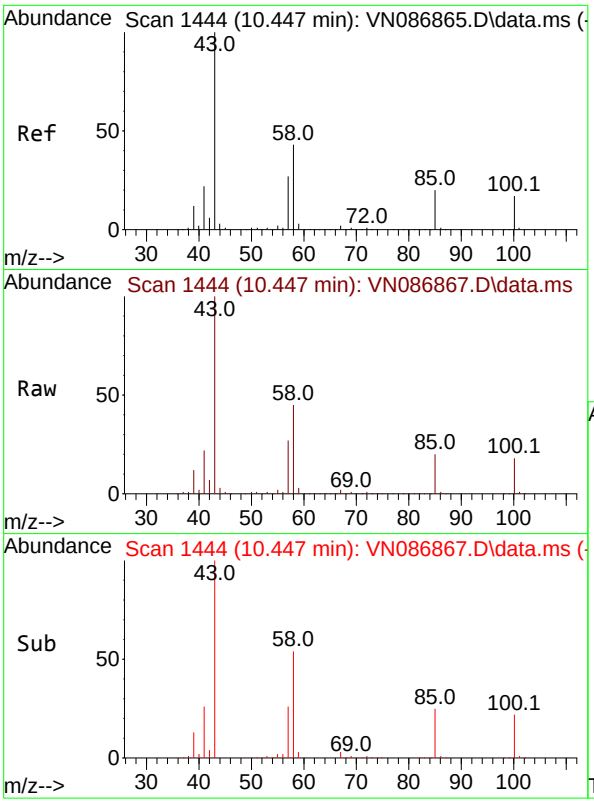



#50
Toluene-d8
Concen: 176.120 ug/l
RT: 10.570 min Scan# 1465
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 98 Resp: 1272348

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 67.5 | 53.4 | 80.0 |

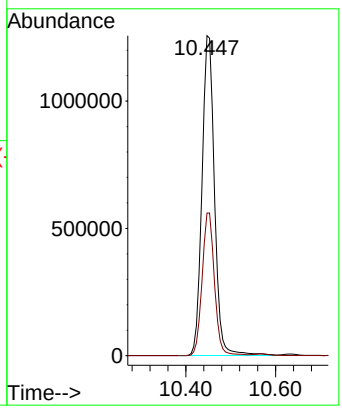





#51
4-Methyl-2-Pentanone
Concen: 728.995 ug/l
RT: 10.447 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 43 Resp: 243831

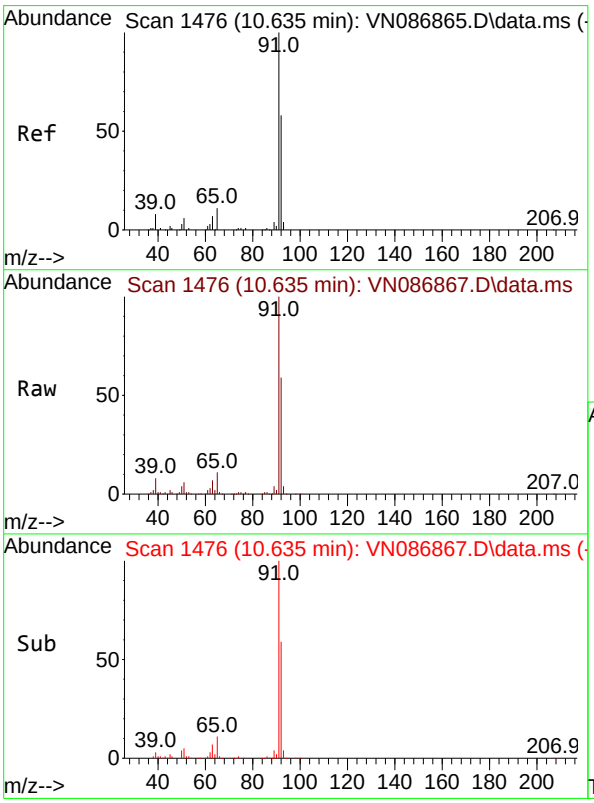
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 44.0 | 34.2 | 51.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
**APPROVED**

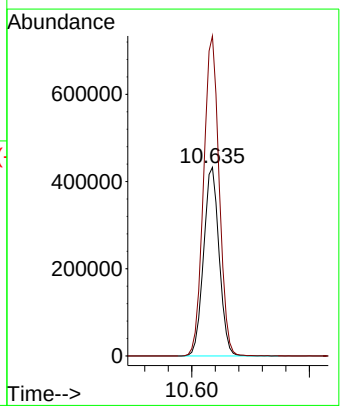
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

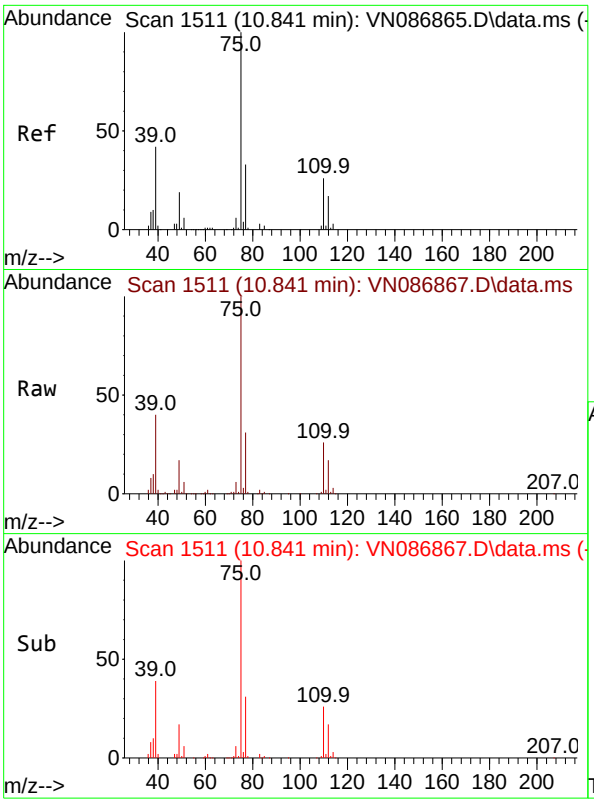



#52
Toluene
Concen: 145.976 ug/l
RT: 10.635 min Scan# 1476
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 92 Resp: 793270

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 170.2 | 136.5 | 204.7 |

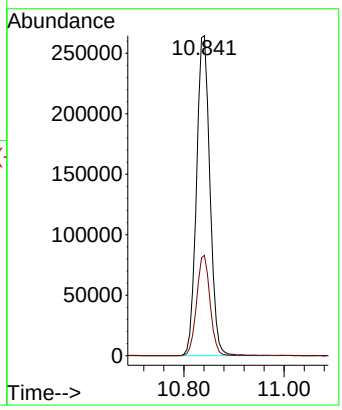





#53
t-1,3-Dichloropropene
Concen: 148.163 ug/l
RT: 10.841 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 75 Resp: 48980

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.4 | 26.4 | 39.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
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Reviewed By :John Carlone 06/09/2025
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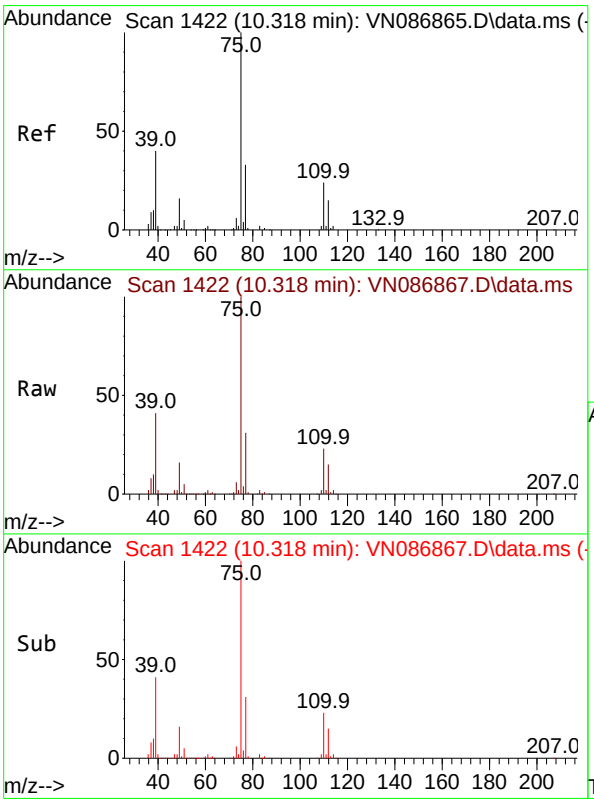
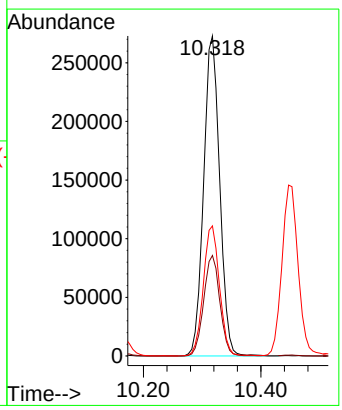
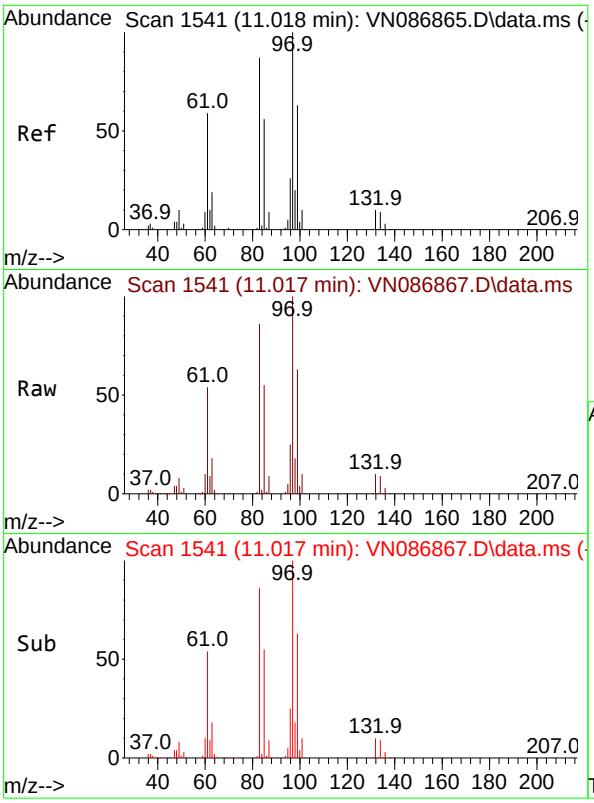



#54
cis-1,3-Dichloropropene
Concen: 146.469 ug/l
RT: 10.318 min Scan# 1422
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 75 Resp: 518092

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.4 | 26.2 | 39.4 |
| 39 | 40.6 | 32.3 | 48.5 |

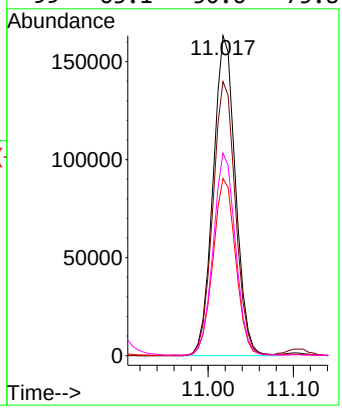





#55
1,1,2-Trichloroethane
Concen: 142.588 ug/l
RT: 11.017 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 97 Resp: 29815

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 85.6 | 69.7 | 104.5 |
| 85 | 55.2 | 45.1 | 67.7 |
| 99 | 63.1 | 50.6 | 75.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
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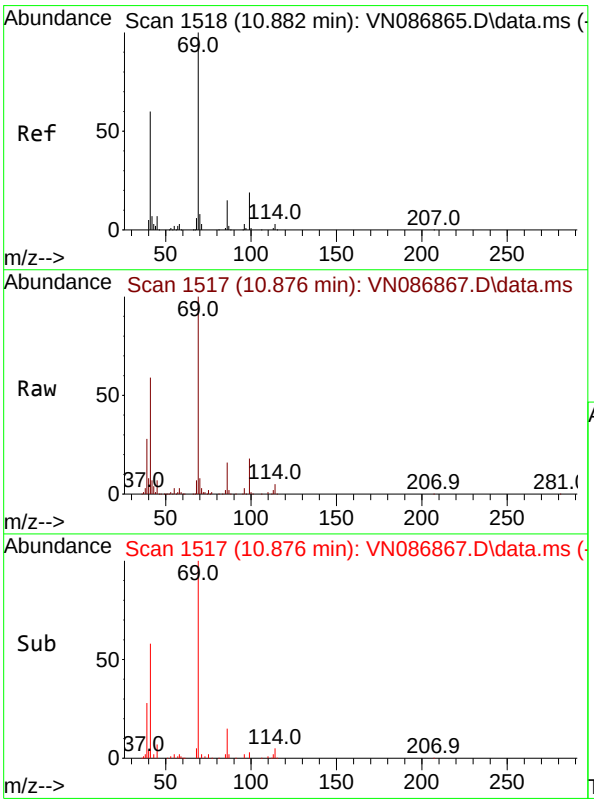
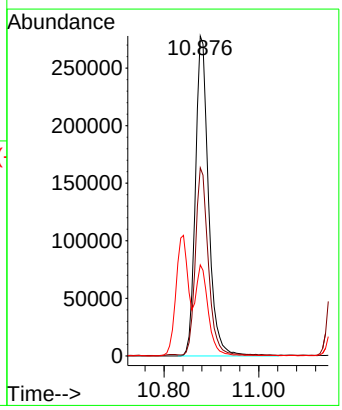
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

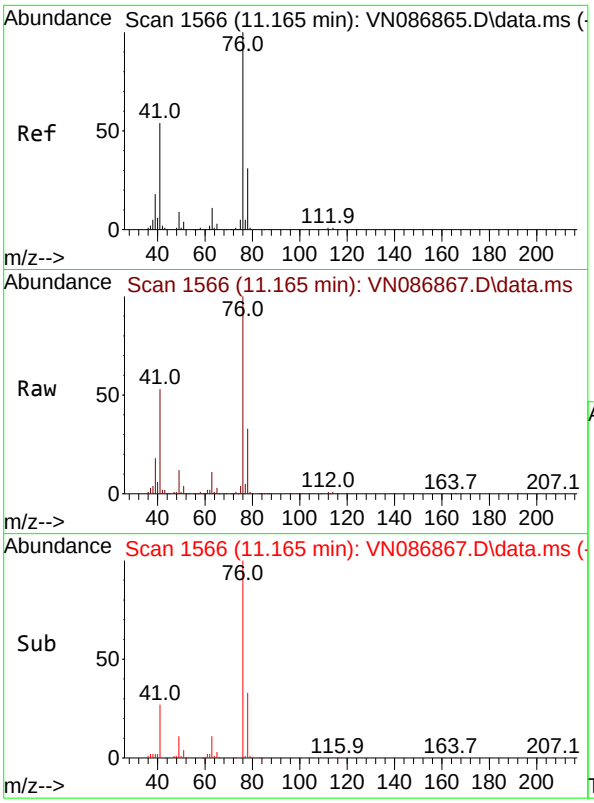



#56
Ethyl methacrylate
Concen: 160.311 ug/l
RT: 10.876 min Scan# 1517
Delta R.T. -0.006 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 69 Resp: 533912

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 57.5 | 47.2 | 70.8 |
| 39 | 27.0 | 23.0 | 34.6 |

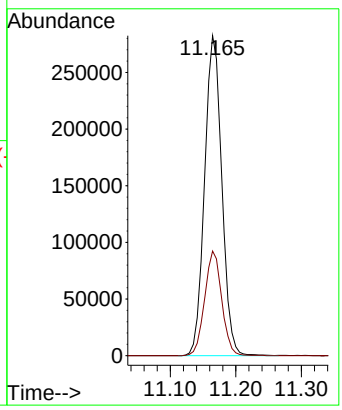





#57
1,3-Dichloropropane
Concen: 142.363 ug/l
RT: 11.165 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 76 Resp: 51639

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.5 | 25.3 | 37.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
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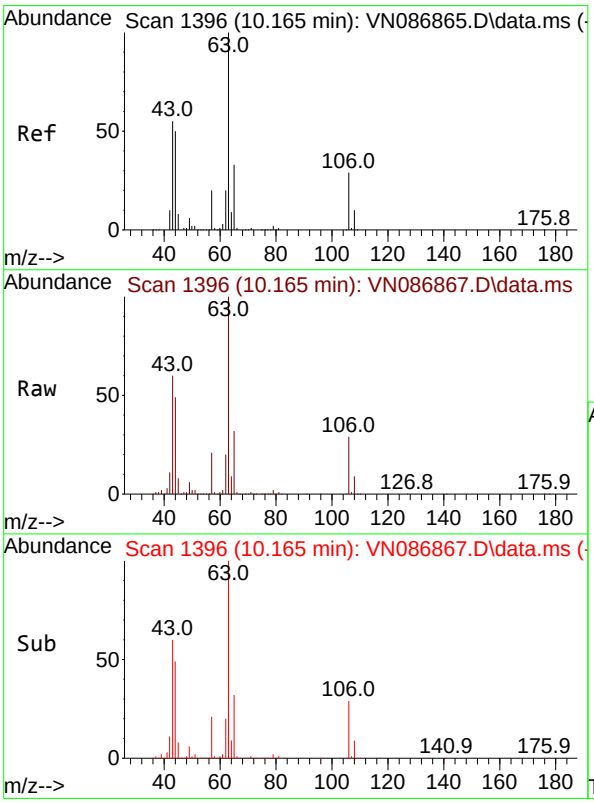
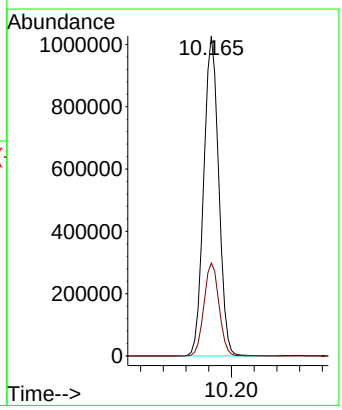
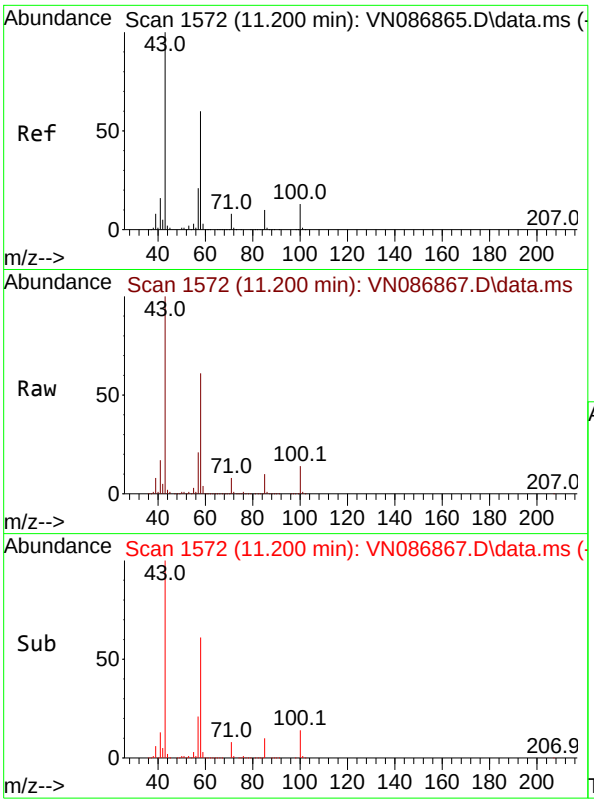



#58
2-Chloroethyl Vinyl ether
Concen: 941.147 ug/l
RT: 10.165 min Scan# 1396
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 63 Resp: 1869543

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 29.2 | 23.0 | 34.6 |






#59
2-Hexanone
Concen: 805.662 ug/l
RT: 11.200 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 43 Resp: 173577

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 61.6 | 30.4 | 91.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
**APPROVED**

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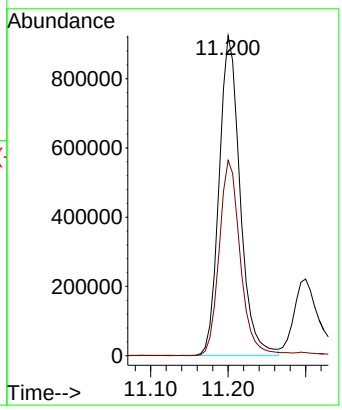
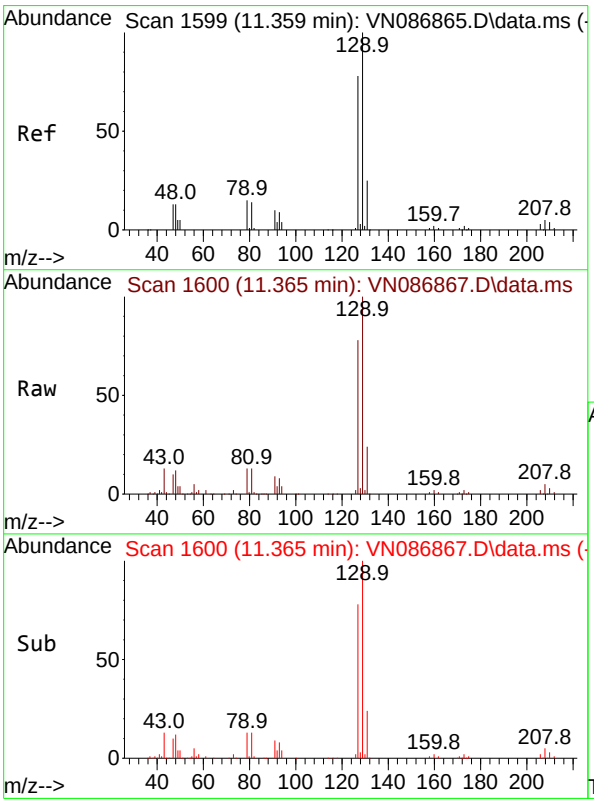
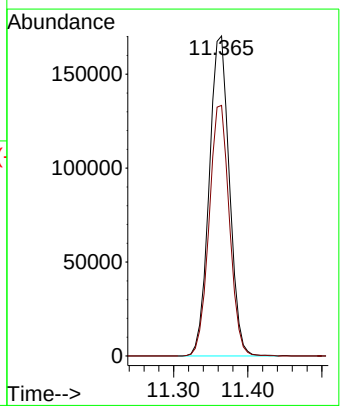


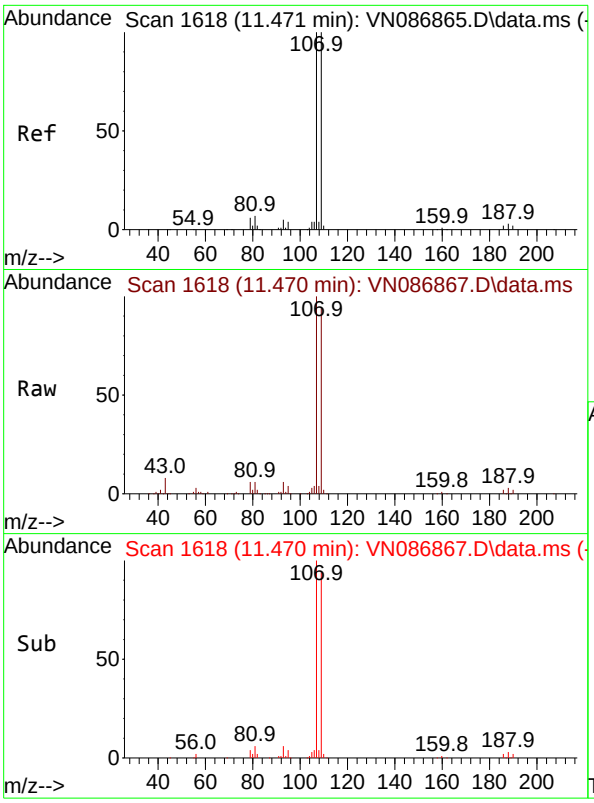




#60
Dibromochloromethane
Concen: 147.832 ug/l
RT: 11.365 min Scan# 1600
Delta R.T. 0.006 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion:129 Resp: 322064

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 78.6 | 38.6 | 115.8 |






#61
1,2-Dibromoethane
Concen: 146.790 ug/l
RT: 11.470 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion:107 Resp: 31460

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 94.0 | 76.3 | 114.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
**APPROVED**

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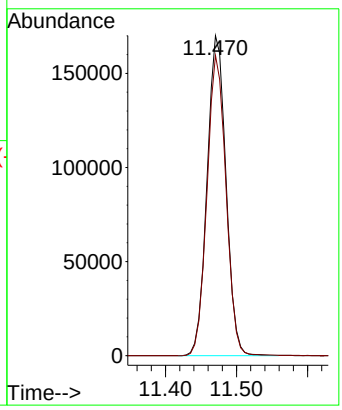
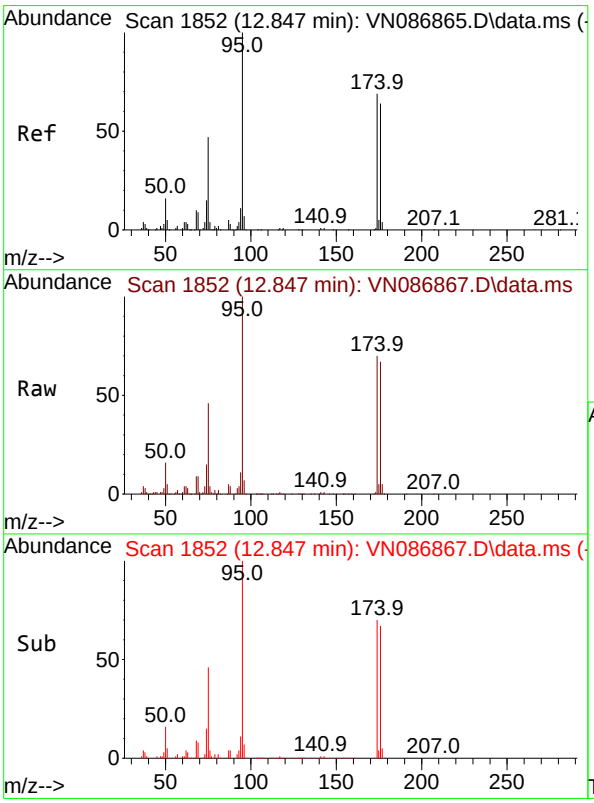
Supervised By :Mahesh Dadoda 06/09/2025

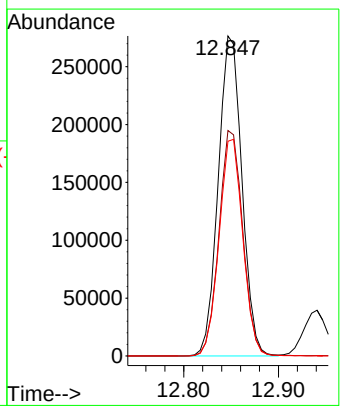


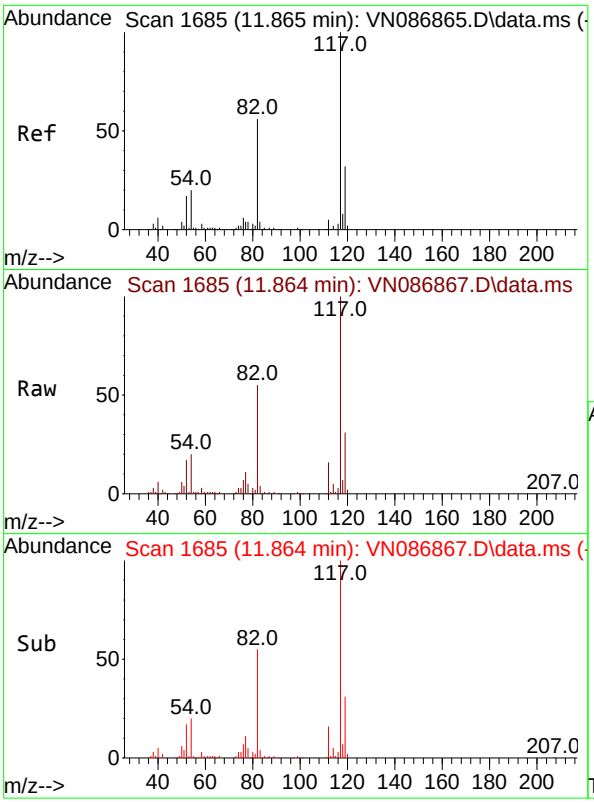




#62
4-Bromofluorobenzene
Concen: 179.364 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 95 Resp: 481421

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 70.7 | 0.0 | 141.8 |
| 176 | 67.8 | 0.0 | 132.6 |

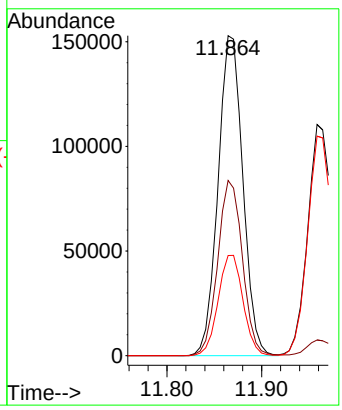





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.864 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion:117 Resp: 27855

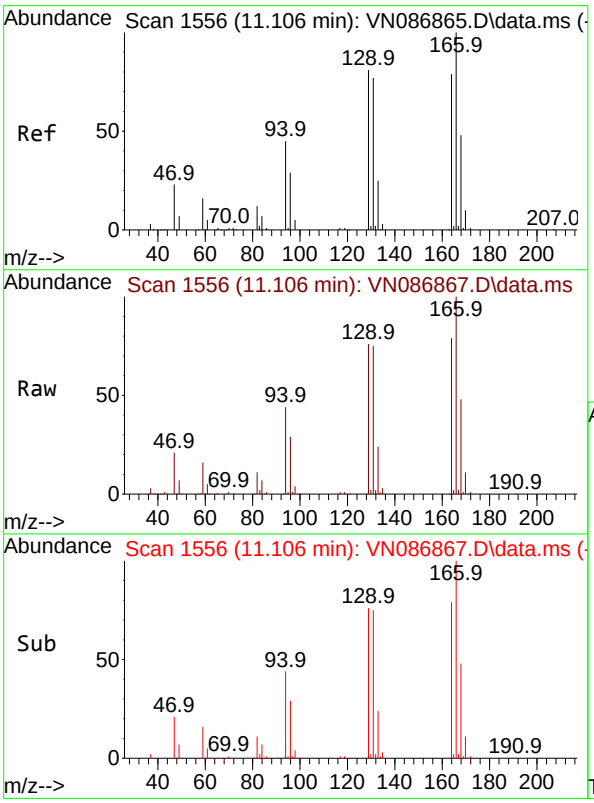
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 54.7 | 44.6 | 67.0 |
| 119 | 31.3 | 25.5 | 38.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
**APPROVED**

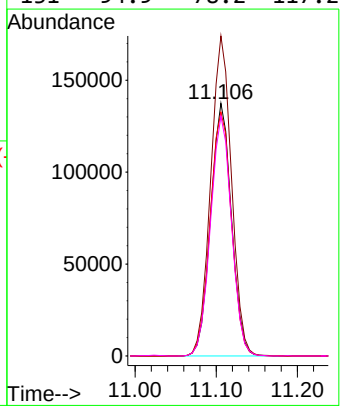
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

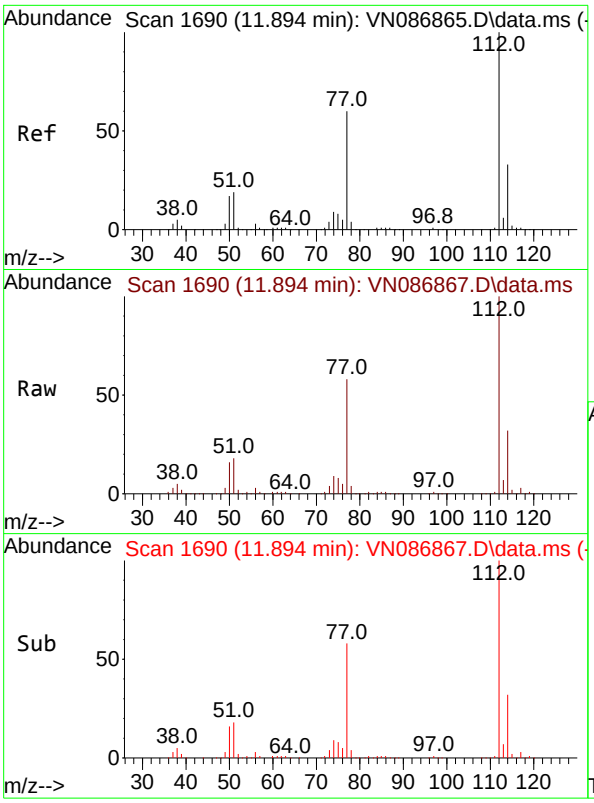



#64
Tetrachloroethene
Concen: 139.048 ug/l
RT: 11.106 min Scan# 1556
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion:164 Resp: 245122

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 126.7 | 101.8 | 152.8 |
| 129 | 96.6 | 83.0 | 124.4 |
| 131 | 94.9 | 78.2 | 117.2 |






#65
Chlorobenzene
Concen: 140.041 ug/l
RT: 11.894 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion:112 Resp: 86034

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 31.8 | 26.2 | 39.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
**APPROVED**

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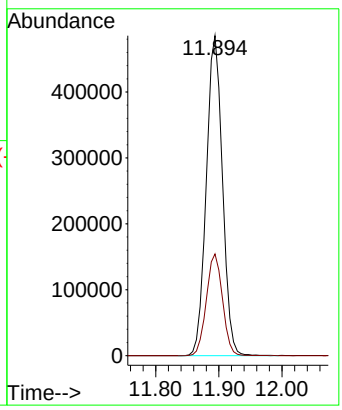
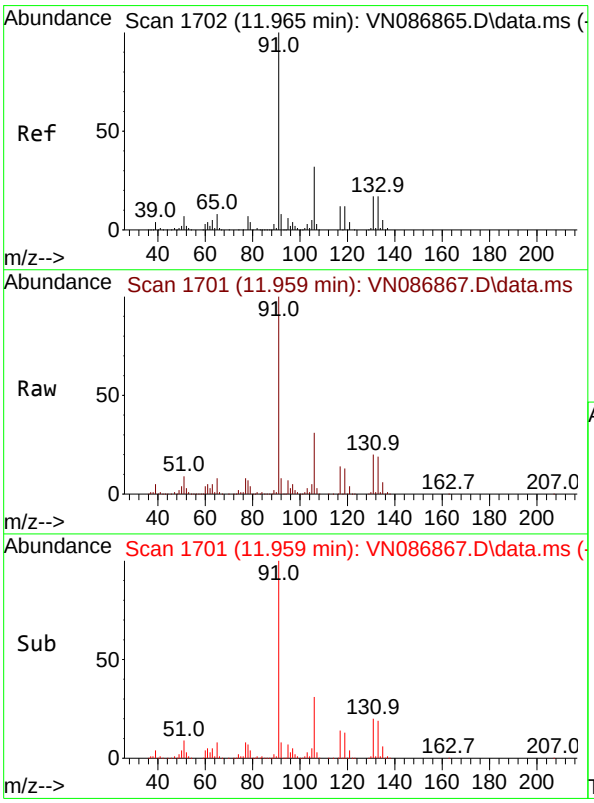
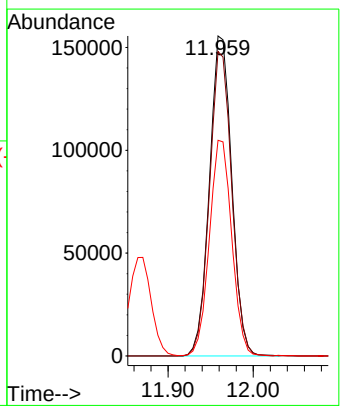


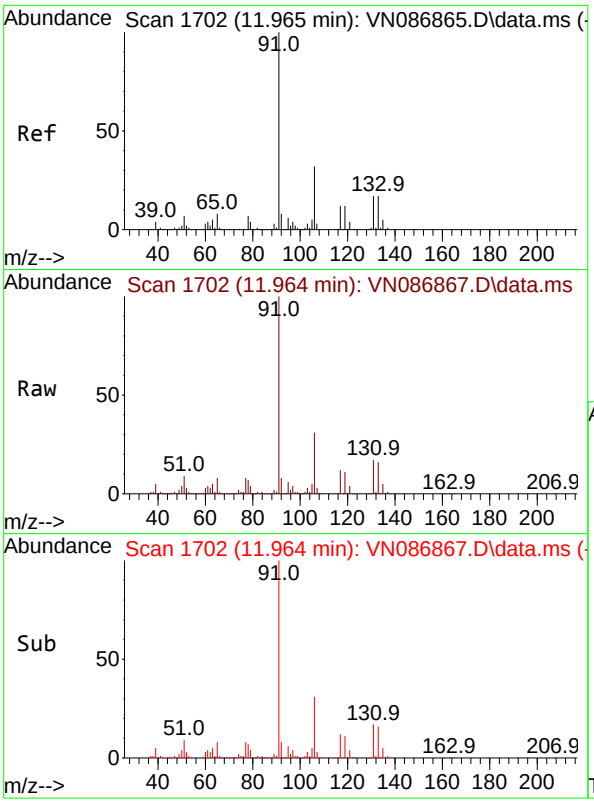




#66
1,1,1,2-Tetrachloroethane
Concen: 143.171 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.006 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion:131 Resp: 282739

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 95.2 | 48.3 | 144.8 |
| 119 | 67.8 | 34.0 | 101.8 |

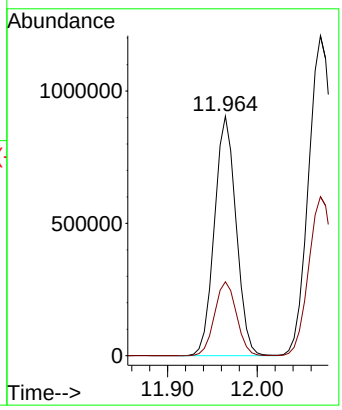





#67
Ethyl Benzene
Concen: 143.438 ug/l
RT: 11.964 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 91 Resp: 151788

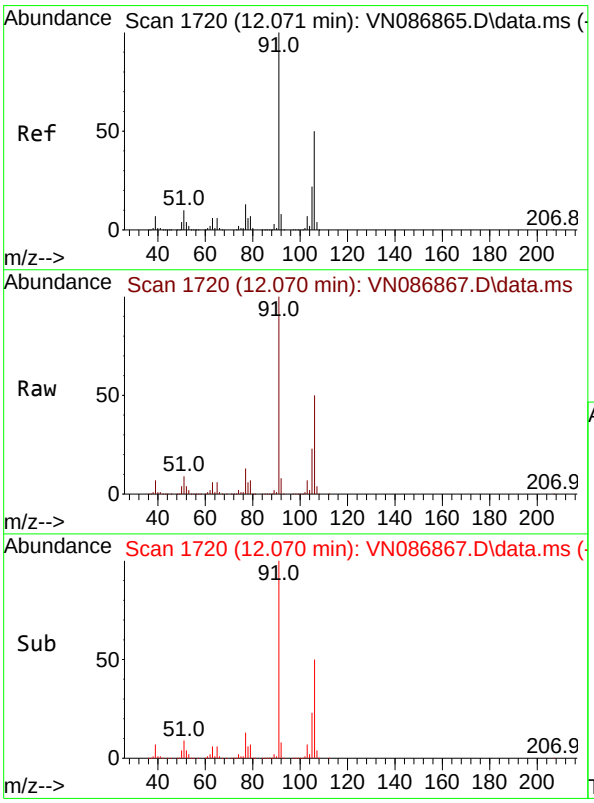
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 30.9 | 25.4 | 38.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
**APPROVED**

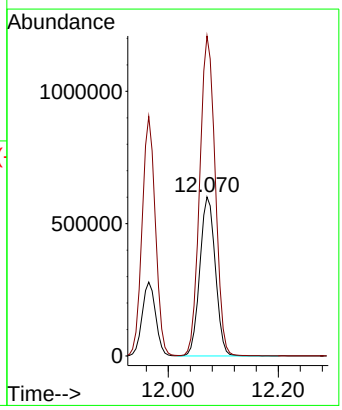
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

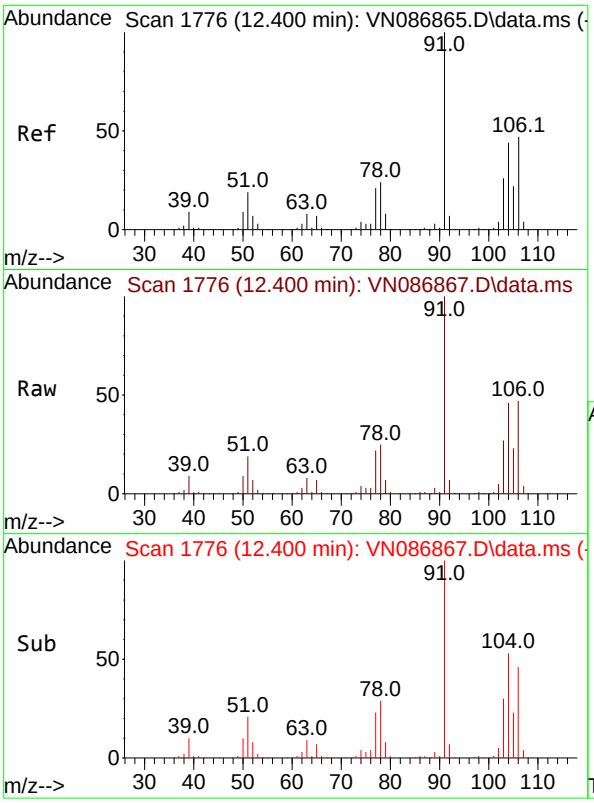



#68
m/p-Xylenes
Concen: 290.155 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion:106 Resp: 1175378

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 200.8 | 159.4 | 239.0 |






#69
o-Xylene
Concen: 145.966 ug/l
RT: 12.400 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

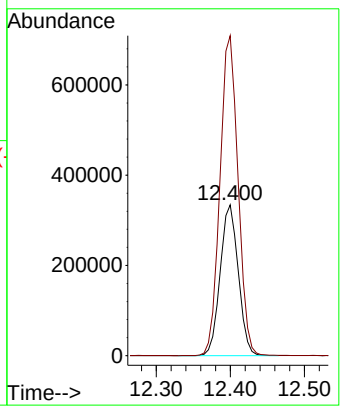
Tgt Ion:106 Resp: 56630

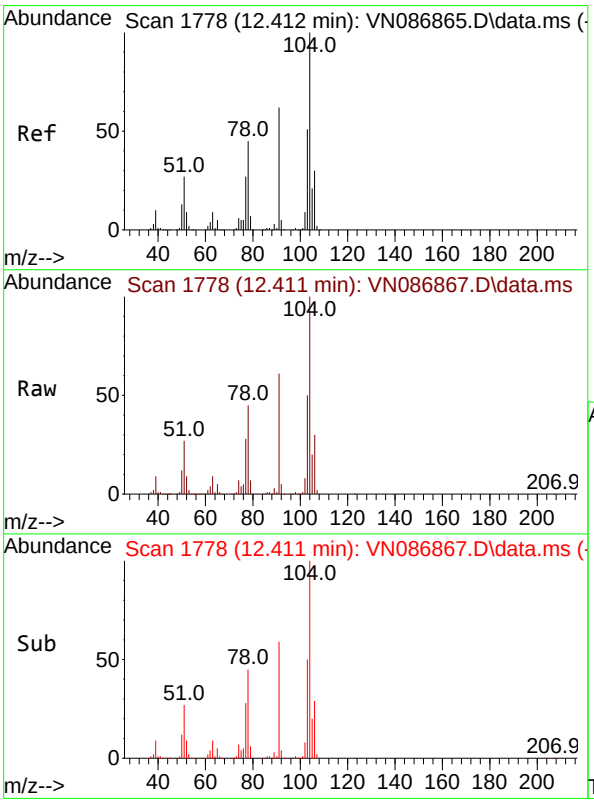
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 211.9 | 106.1 | 318.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

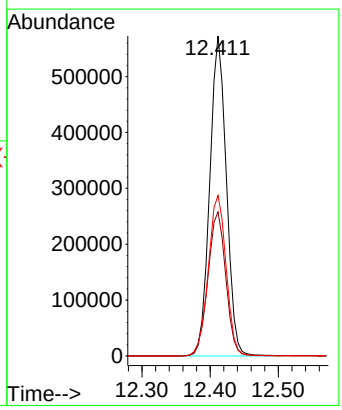


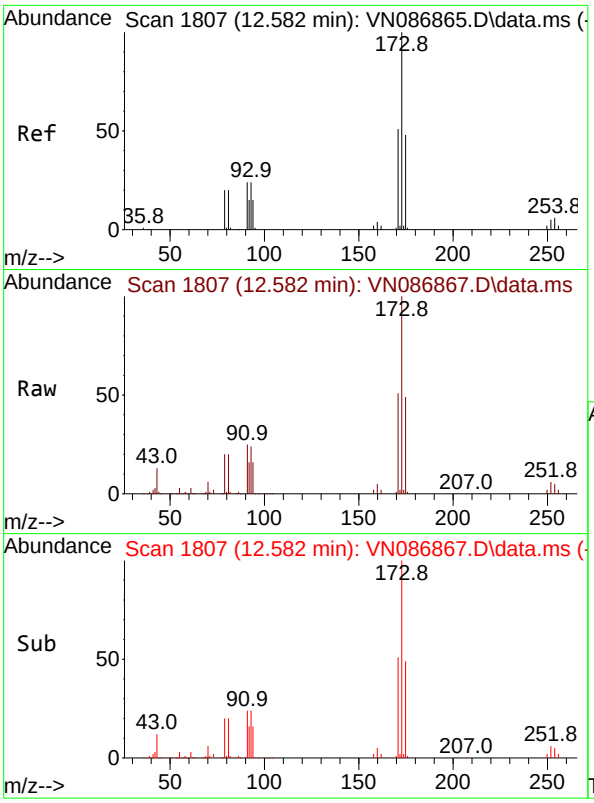




#70
Styrene
Concen: 146.459 ug/l
RT: 12.411 min Scan# 1778
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion:104 Resp: 972318

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 48.4 | 38.5 | 57.7 |
| 103 | 54.0 | 43.1 | 64.7 |

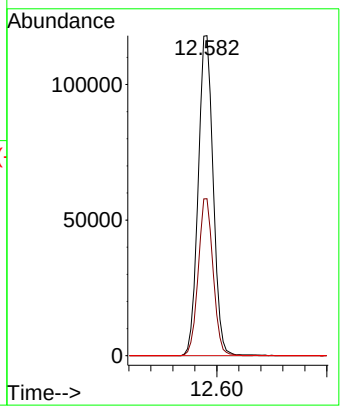





#71
Bromoform
Concen: 152.538 ug/l
RT: 12.582 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion:173 Resp: 22320

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 48.8 | 24.1 | 72.4 |
| 254 | 0.0 | 0.0 | 0.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
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Reviewed By :John Carlone 06/09/2025
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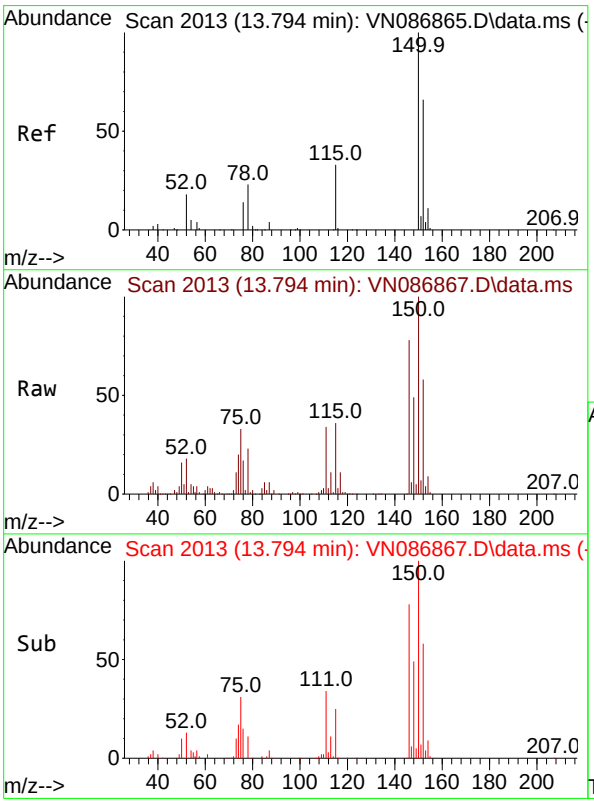
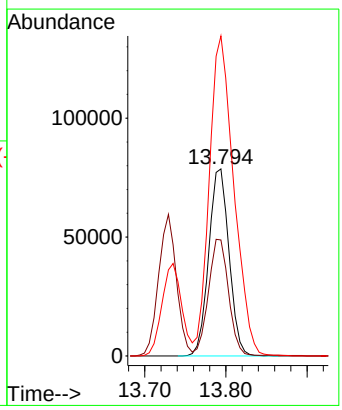
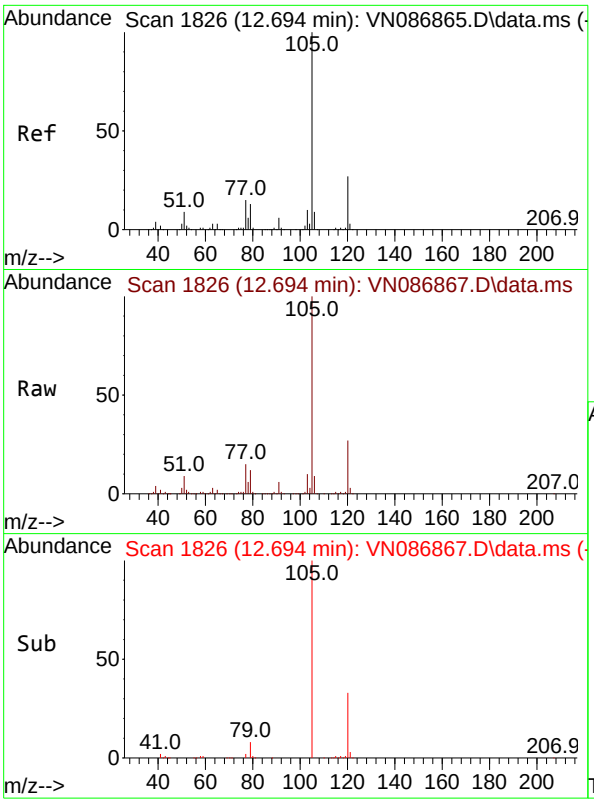



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion:152 Resp: 136630

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 61.1 | 30.1 | 90.5 |
| 150 | 206.7 | 0.0 | 345.0 |

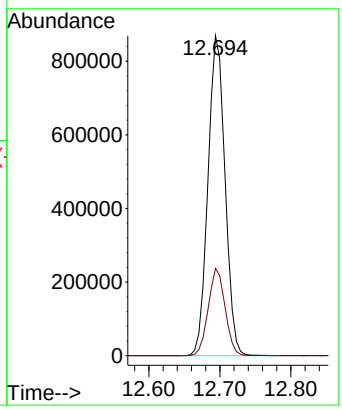





#73
Isopropylbenzene
Concen: 146.042 ug/l
RT: 12.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion:105 Resp: 145365

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.9 | 13.5 | 40.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/09/2025
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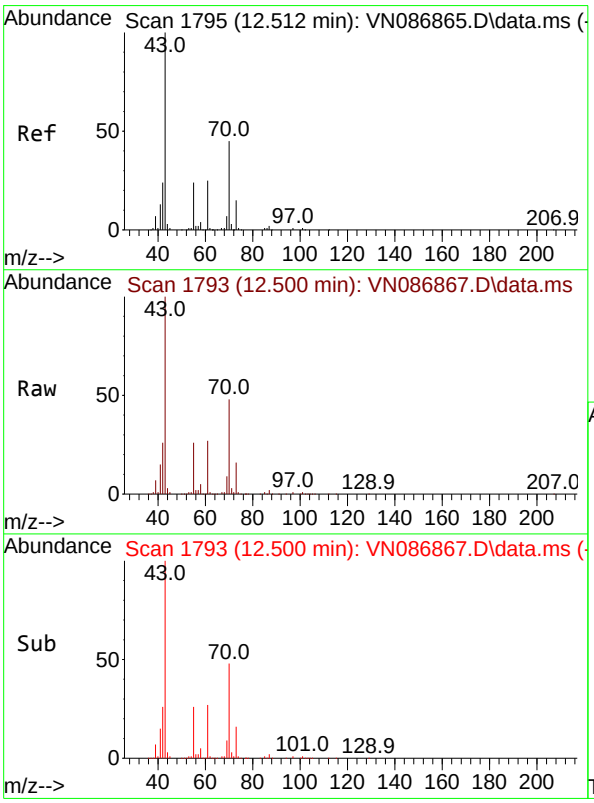
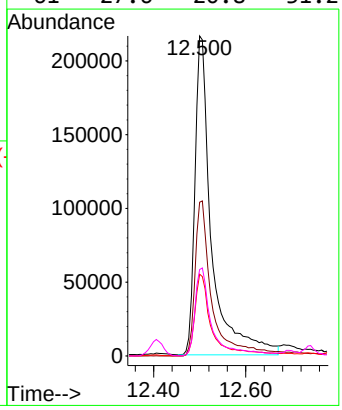
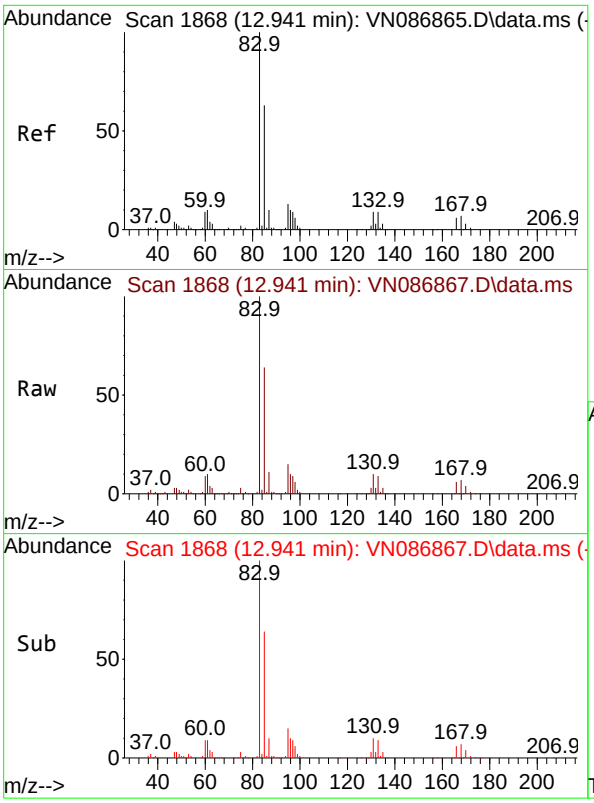



#74
N-amyl acetate
Concen: 164.596 ug/l
RT: 12.500 min Scan# 1793
Delta R.T. -0.012 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 43 Resp: 543747

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 50.0 | 37.6 | 56.4 |
| 55 | 26.1 | 19.0 | 28.6 |
| 61 | 27.6 | 20.8 | 31.2 |






#75
1,1,2,2-Tetrachloroethane
Concen: 140.693 ug/l
RT: 12.941 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 83 Resp: 47442

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 9.9 | 4.9 | 14.7 |
| 85 | 64.3 | 32.0 | 96.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
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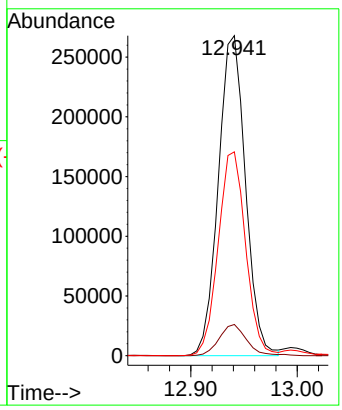
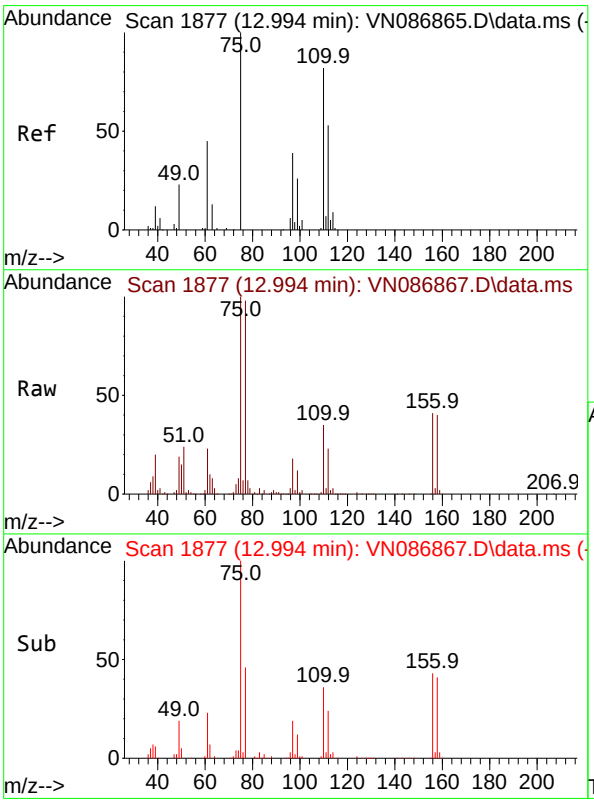
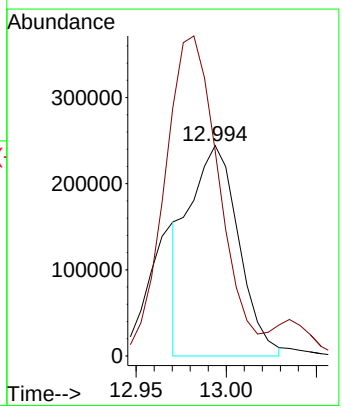


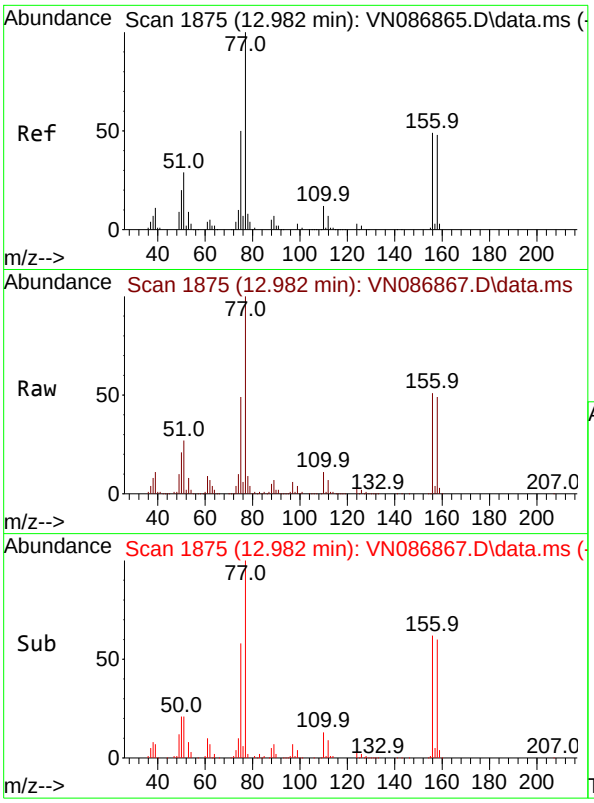




#76
1,2,3-Trichloropropane
Concen: 143.665 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 75 Resp: 468041

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 166.0 | 79.3 | 237.9 |

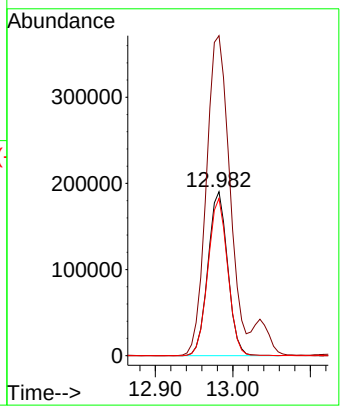





#77
Bromobenzene
Concen: 147.077 ug/l
RT: 12.982 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion:156 Resp: 33573

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 231.5 | 117.7 | 353.1 |
| 158 | 96.3 | 48.1 | 144.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
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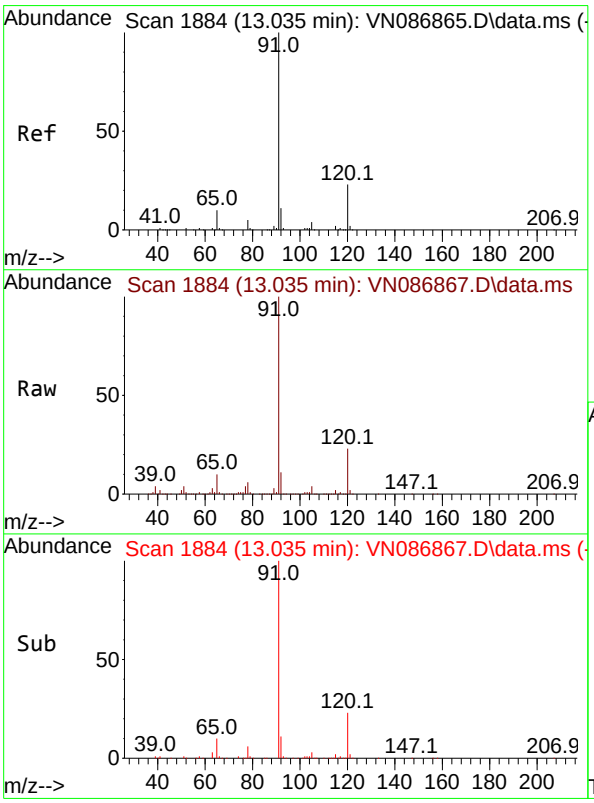
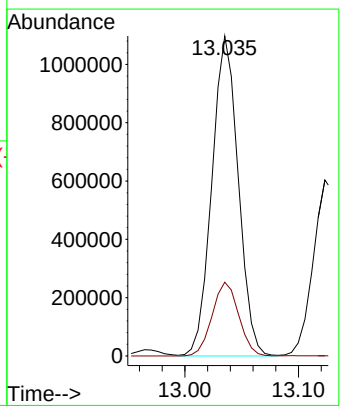
Supervised By :Mahesh Dadoda 06/09/2025

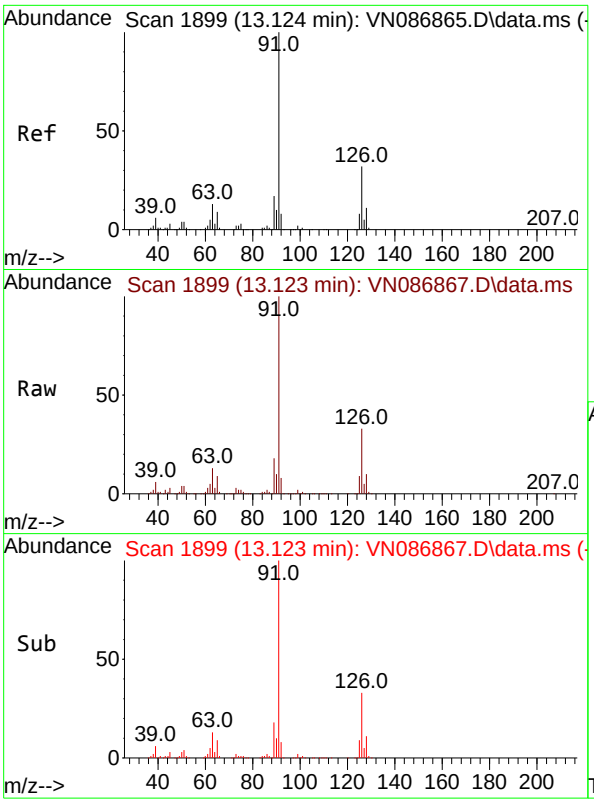



#78
n-propylbenzene
Concen: 146.301 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 91 Resp: 1769694

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 23.2 | 11.4 | 34.2 |

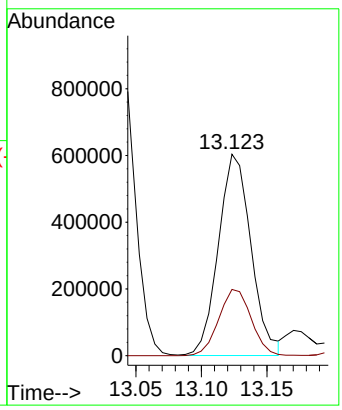





#79
2-Chlorotoluene
Concen: 144.317 ug/l
RT: 13.123 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 91 Resp: 104691

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 32.8 | 16.2 | 48.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
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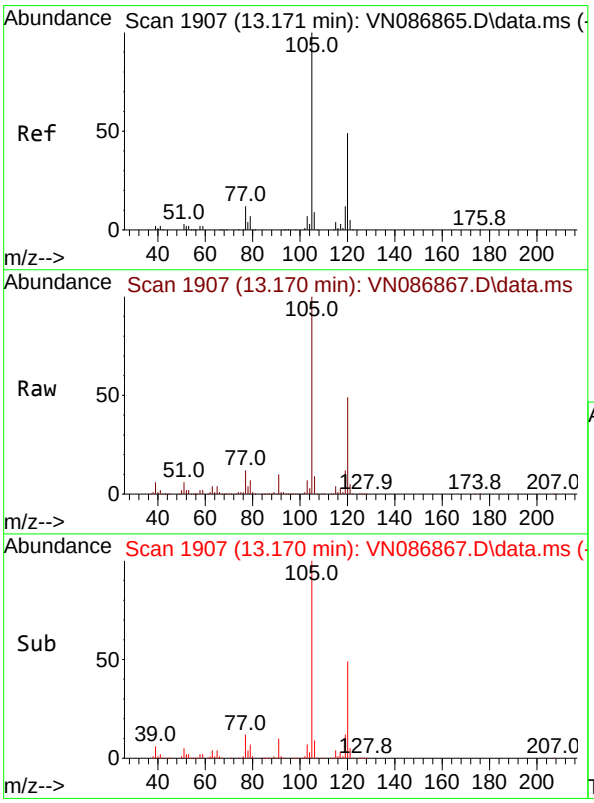
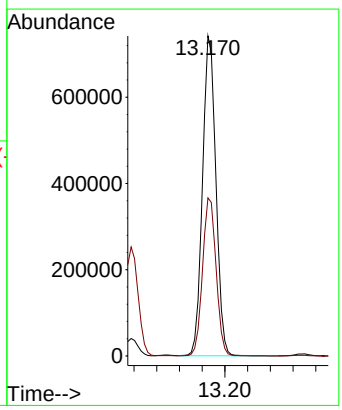
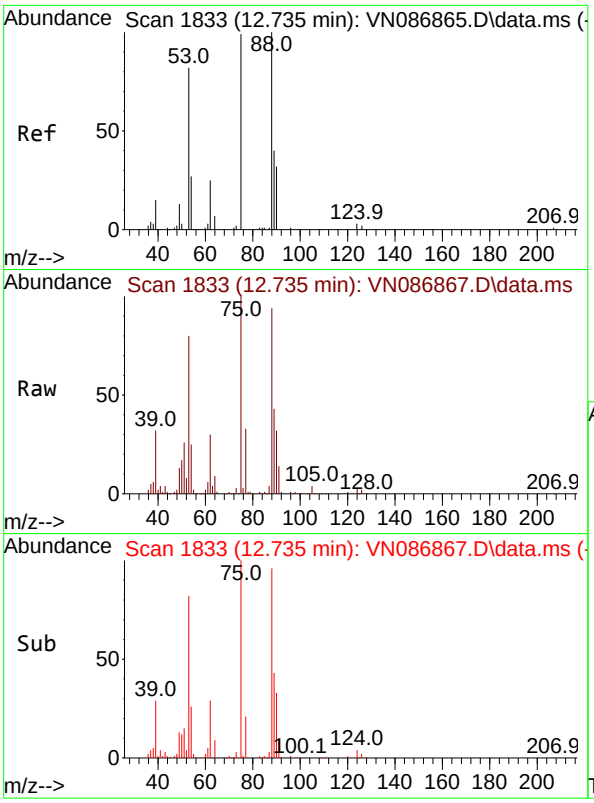



#80
1,3,5-Trimethylbenzene
Concen: 147.279 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion:105 Resp: 1210325

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 50.0 | 24.9 | 74.6 |






#81
trans-1,4-Dichloro-2-butene
Concen: 153.277 ug/l
RT: 12.735 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 75 Resp: 21625

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 81.3 | 66.6 | 99.8 |
| 89 | 40.0 | 36.7 | 55.1 |

**Instrument :**
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VSTDICC150

**Manual Integrations**
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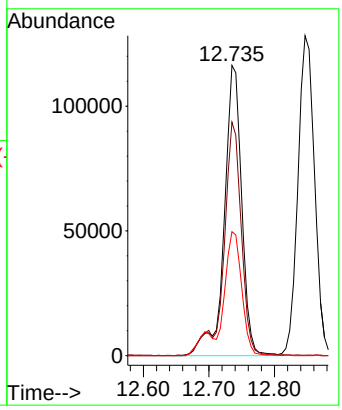
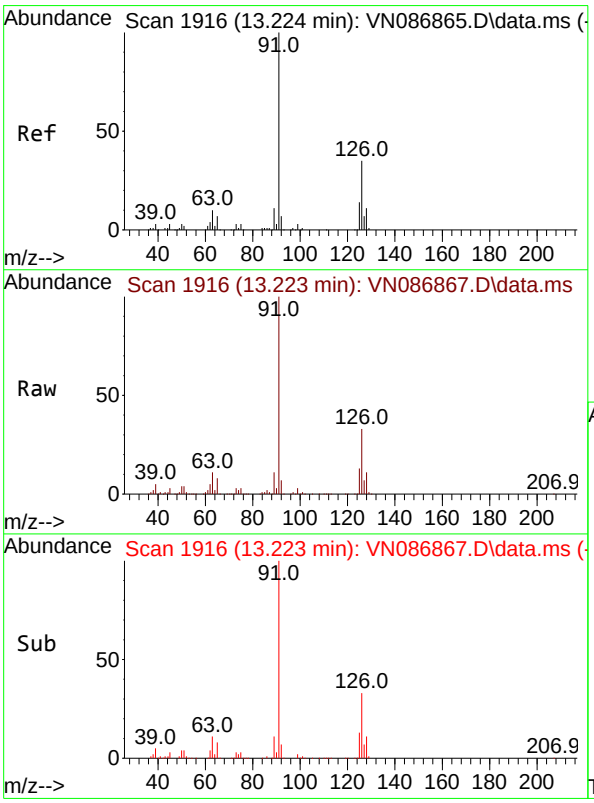
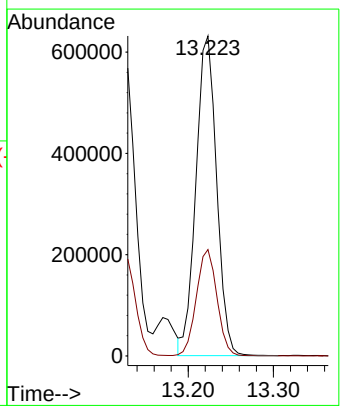


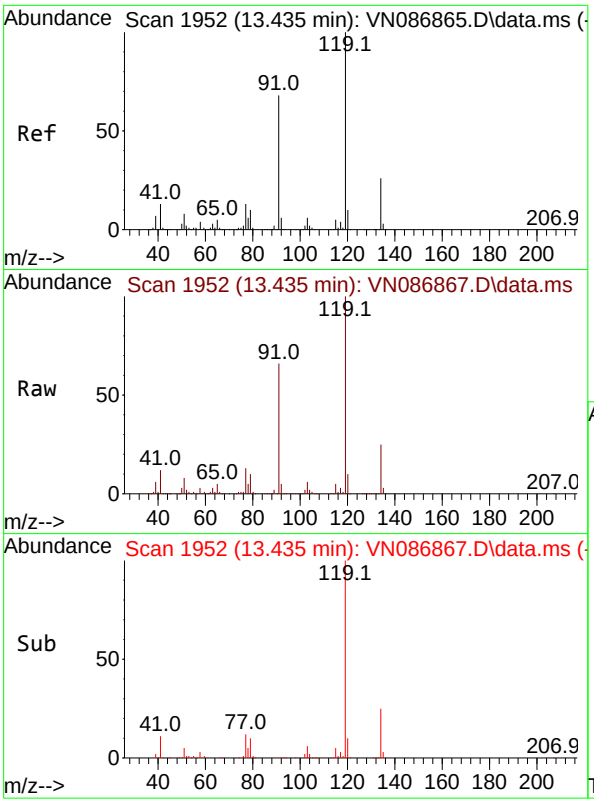




#82
4-Chlorotoluene
Concen: 144.900 ug/l
RT: 13.223 min Scan# 1916
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 91 Resp: 1063581

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 33.4 | 16.7 | 50.1 |

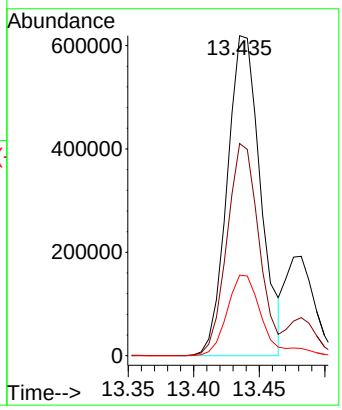





#83
tert-Butylbenzene
Concen: 145.352 ug/l
RT: 13.435 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion:119 Resp: 109340

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 63.8 | 32.1 | 96.5 |
| 134 | 26.7 | 13.4 | 40.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
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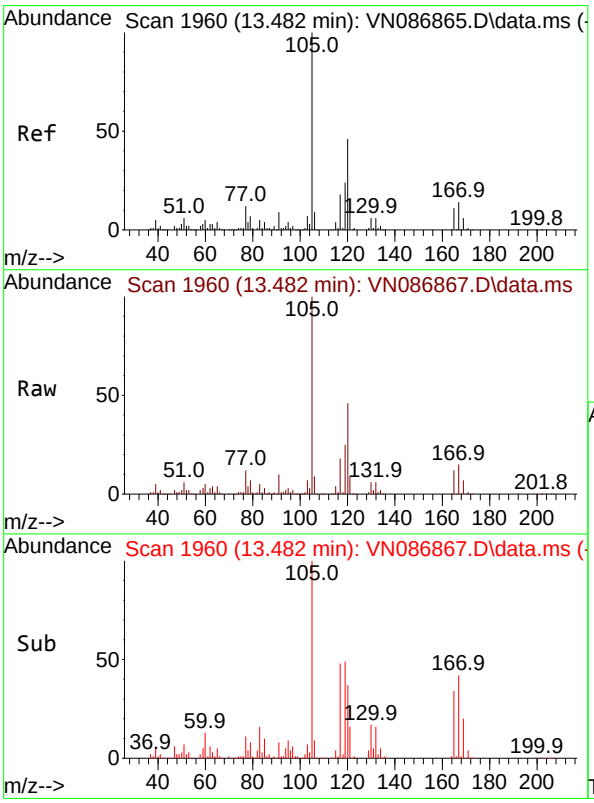
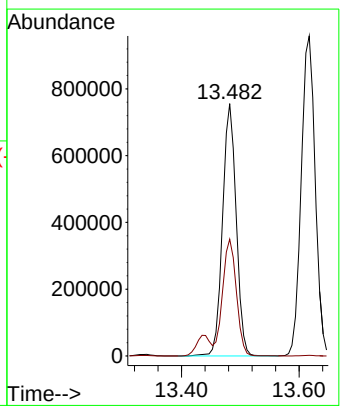
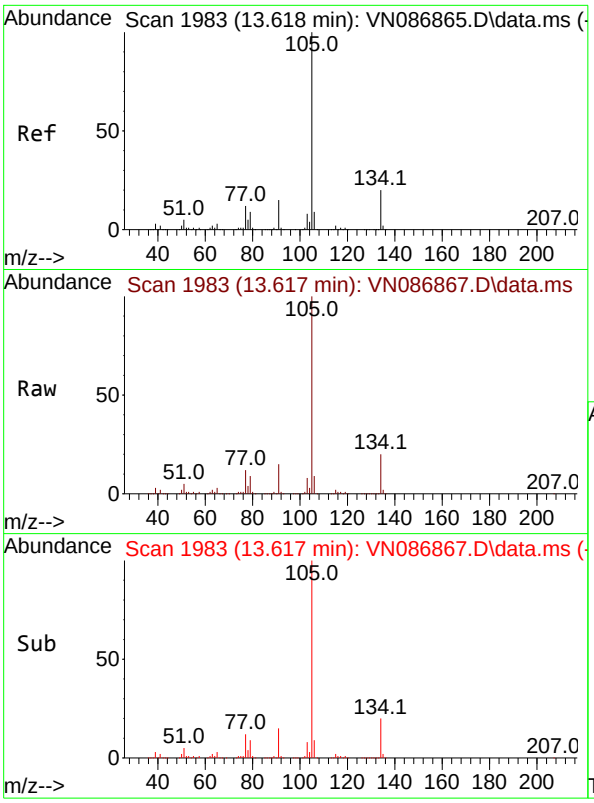



#84
1,2,4-Trimethylbenzene
Concen: 147.626 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion:105 Resp: 1216529

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 46.7 | 23.2 | 69.6 |






#85
sec-Butylbenzene
Concen: 144.885 ug/l
RT: 13.617 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion:105 Resp: 158276

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 20.3 | 10.0 | 30.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
**APPROVED**

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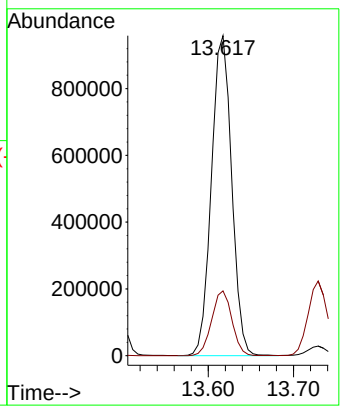
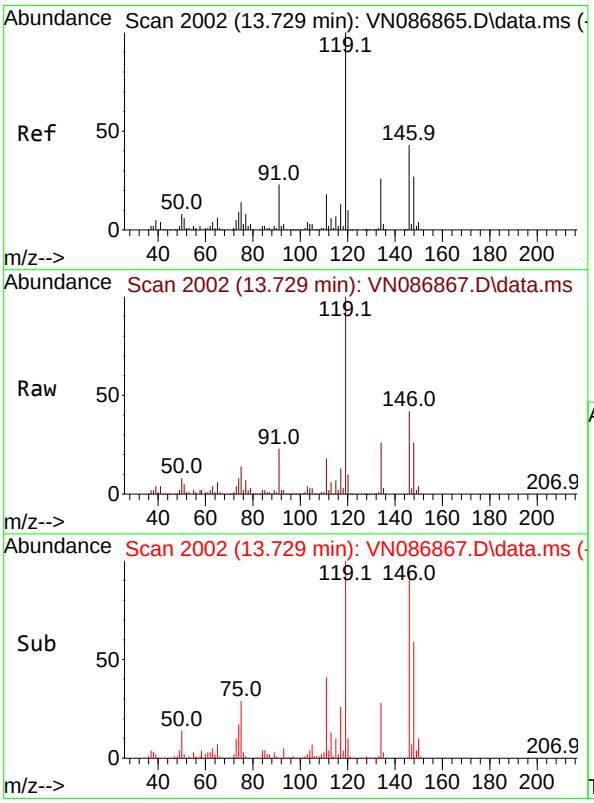
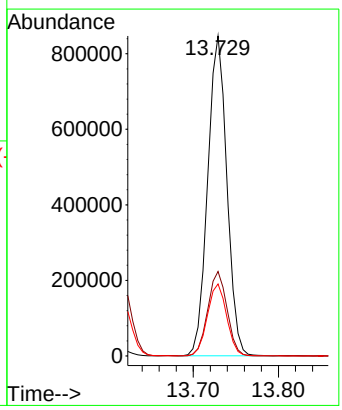


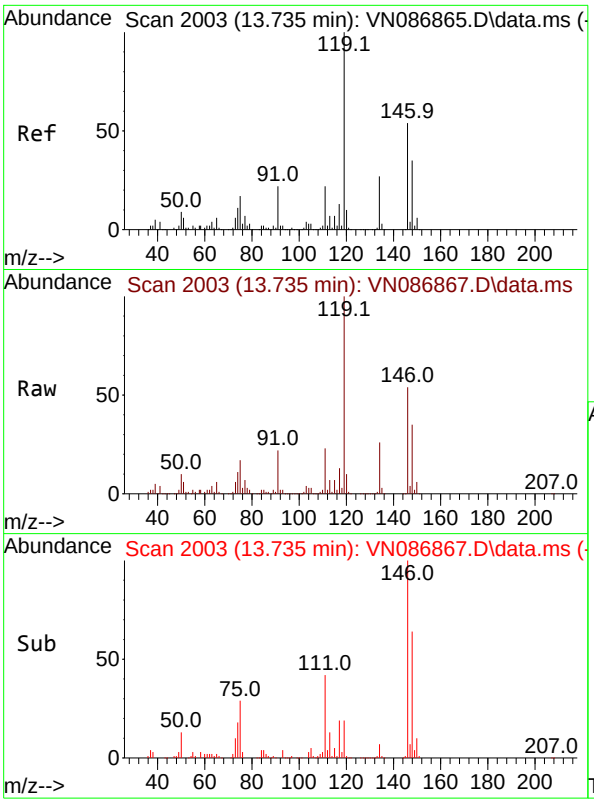




#86
p-Isopropyltoluene
Concen: 146.482 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion:119 Resp: 1322780

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 26.4 | 13.5 | 40.4 |
| 91 | 22.7 | 11.5 | 34.4 |






#87
1,3-Dichlorobenzene
Concen: 142.939 ug/l
RT: 13.735 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

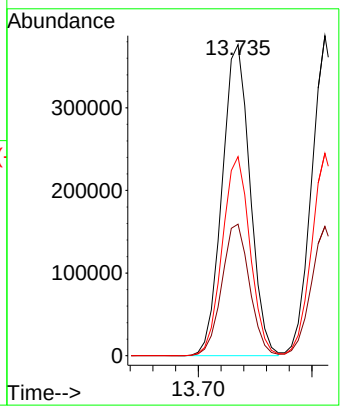
Tgt Ion:146 Resp: 64196

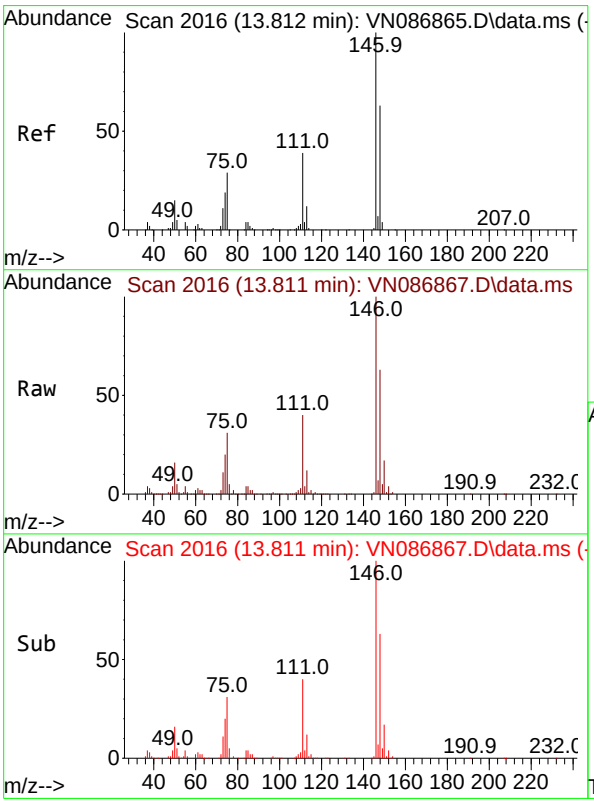
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.1 | 20.9 | 62.8 |
| 148 | 63.8 | 32.0 | 96.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

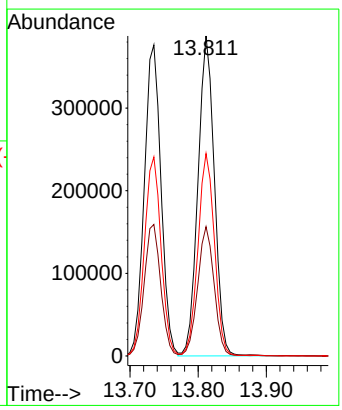


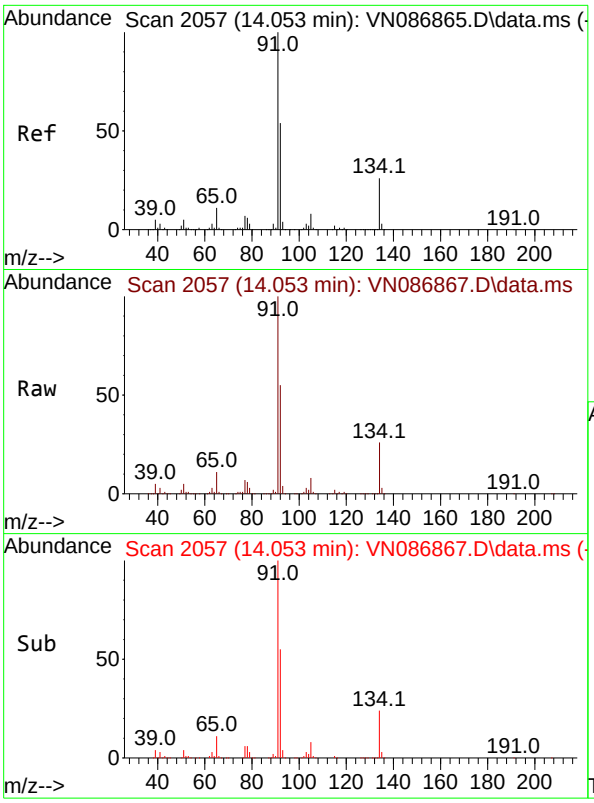




#88
1,4-Dichlorobenzene
Concen: 141.124 ug/l
RT: 13.811 min Scan# 2016
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion:146 Resp: 646188

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 40.2 | 19.9 | 59.7 |
| 148 | 63.2 | 31.8 | 95.4 |

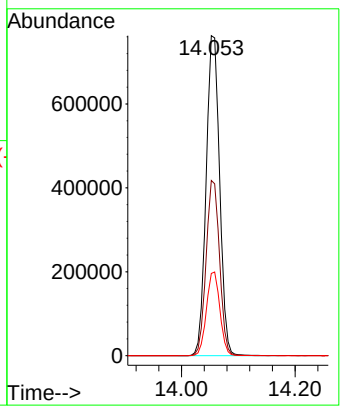





#89
n-Butylbenzene
Concen: 143.117 ug/l
RT: 14.053 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 91 Resp: 125181

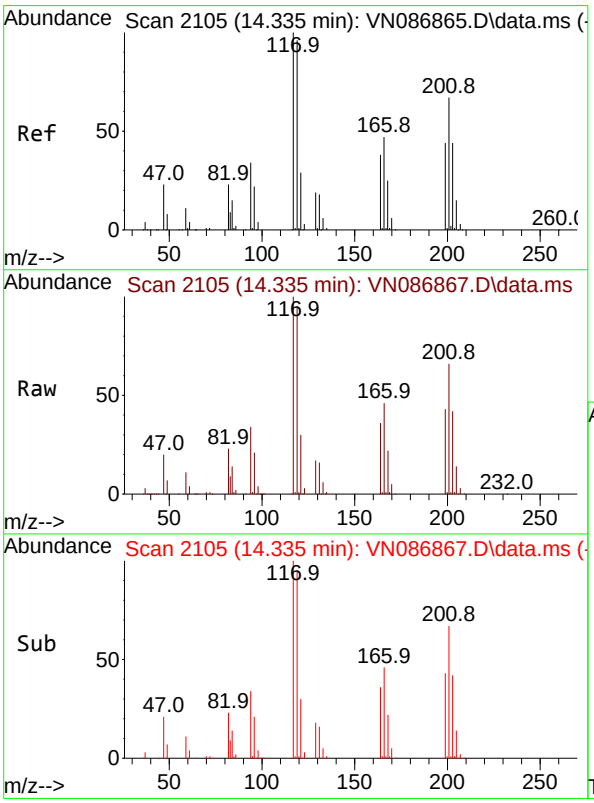
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 54.6 | 27.5 | 82.4 |
| 134 | 26.1 | 13.0 | 39.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
**APPROVED**

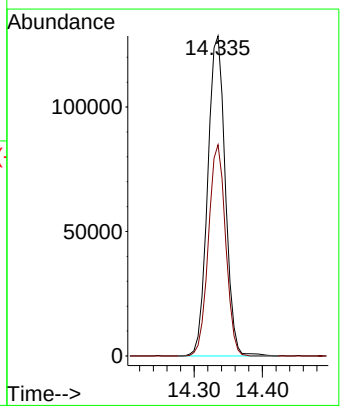
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

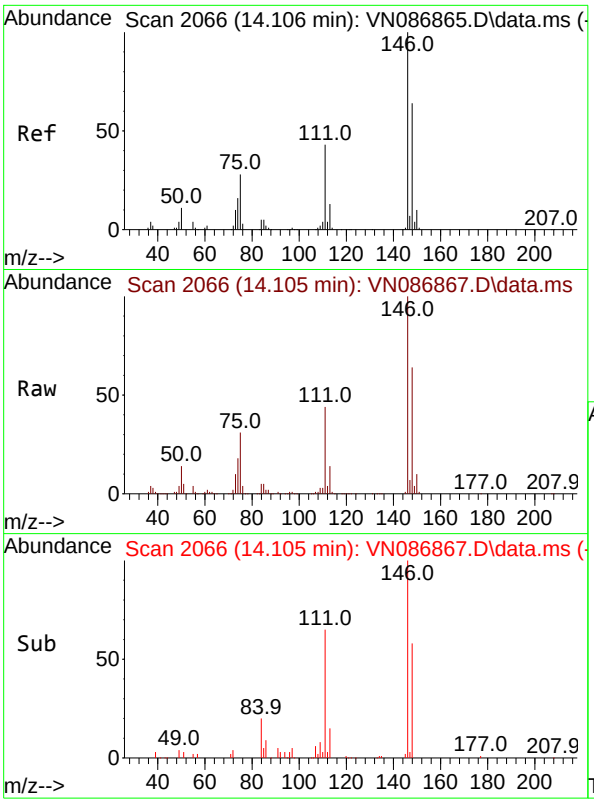



#90
Hexachloroethane
Concen: 150.387 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion:117 Resp: 230195

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 64.5 | 33.2 | 99.6 |

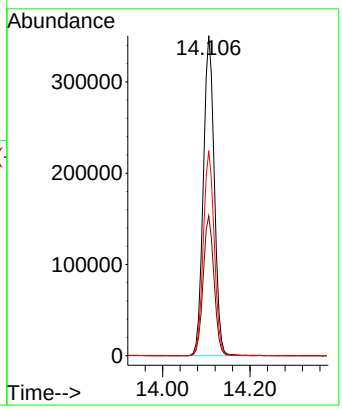





#91
1,2-Dichlorobenzene
Concen: 142.108 ug/l
RT: 14.105 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion:146 Resp: 61317

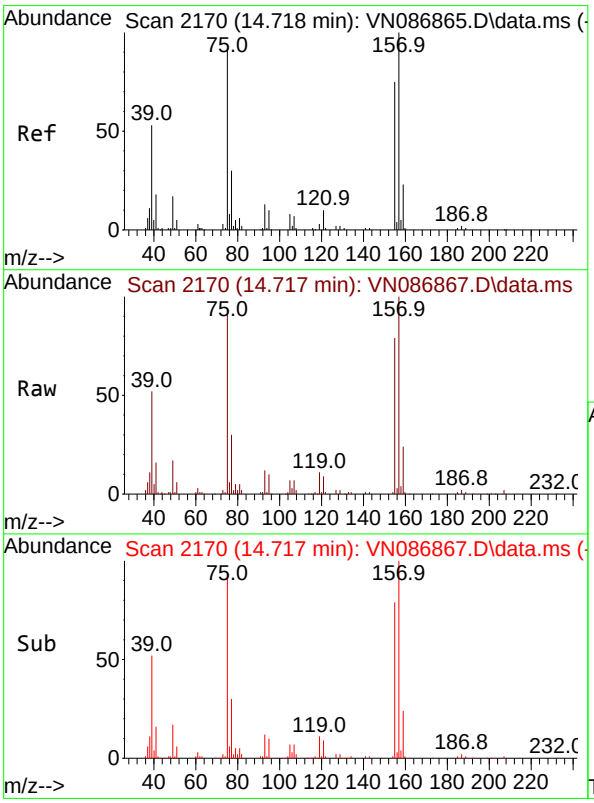
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.4 | 21.6 | 64.6 |
| 148 | 63.8 | 31.7 | 95.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
**APPROVED**

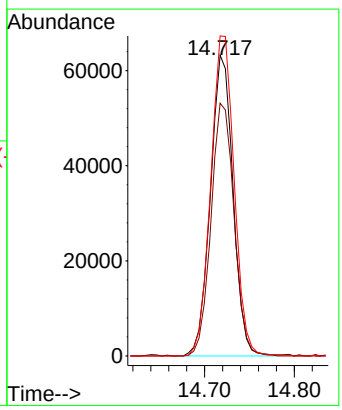
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

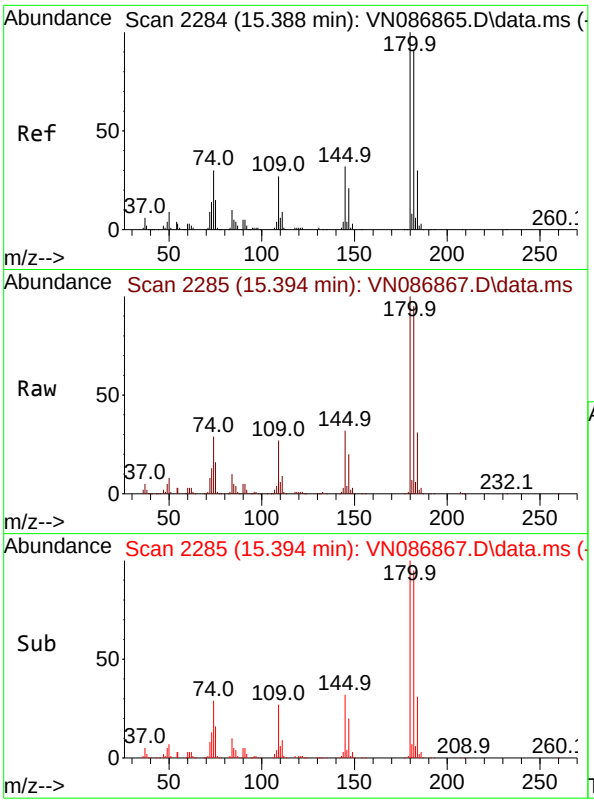



#92
1,2-Dibromo-3-Chloropropane
Concen: 137.242 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion: 75 Resp: 110677

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 85.5 | 41.1 | 123.4 |
| 157 | 110.2 | 52.7 | 158.1 |






#93
1,2,4-Trichlorobenzene
Concen: 147.940 ug/l
RT: 15.394 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

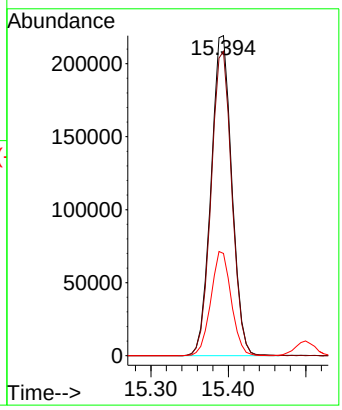
Tgt Ion:180 Resp: 40762

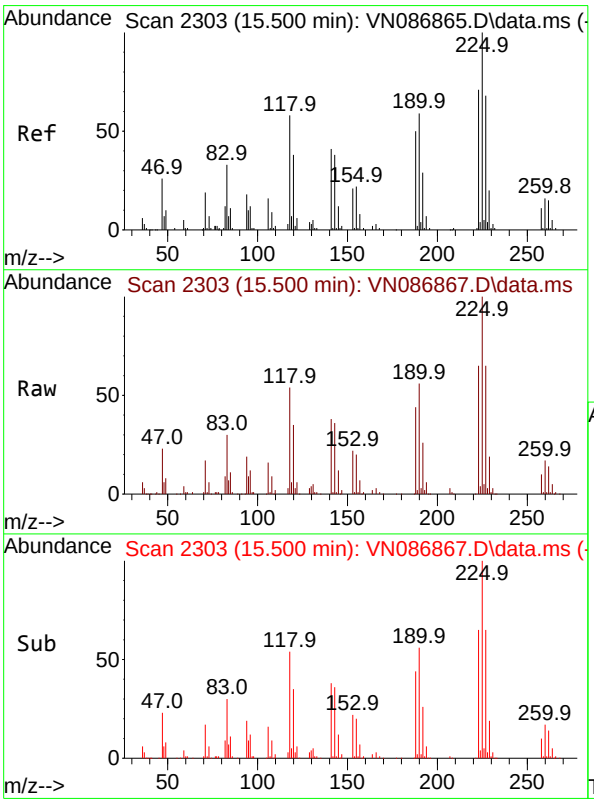
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.0 | 46.9 | 140.7 |
| 145 | 32.0 | 16.0 | 47.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

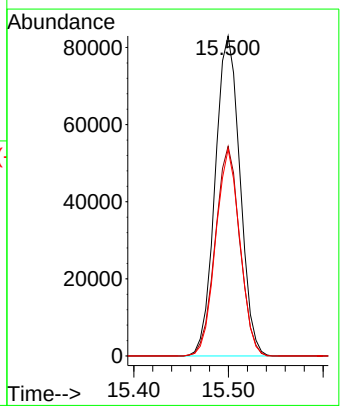


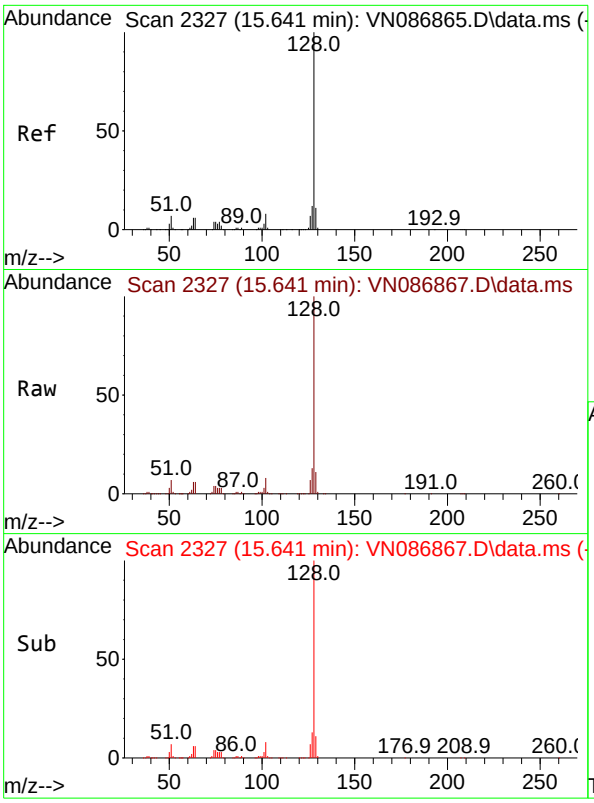




#94
Hexachlorobutadiene
Concen: 147.264 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion:225 Resp: 151172

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 64.8 | 33.5 | 100.4 |
| 227 | 63.0 | 31.1 | 93.5 |

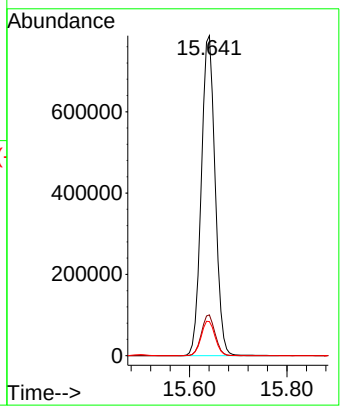





#95
Naphthalene
Concen: 150.743 ug/l
RT: 15.641 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion:128 Resp: 154598

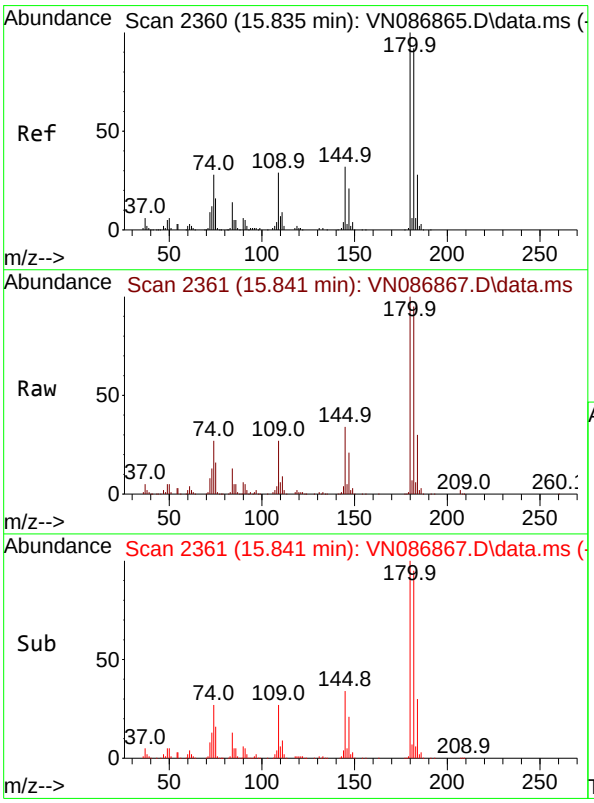
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.6 | 10.2 | 15.2 |
| 129 | 10.9 | 8.8 | 13.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC150

**Manual Integrations**
**APPROVED**

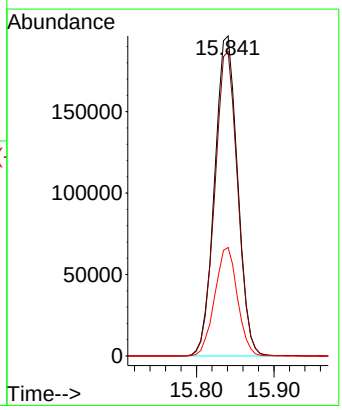
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025




#96
1,2,3-Trichlorobenzene
Concen: 147.743 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. 0.006 min
Lab File: VN086867.D
Acq: 06 Jun 2025 14:49

Tgt Ion:180 Resp: 404450

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 94.7 | 47.0 | 141.0 |
| 145 | 33.6 | 16.6 | 49.8 |



ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086869.D
Acq On : 06 Jun 2025 15:54
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN060625

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

Quant Time: Jun 07 02:16:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.230 | 168 | 218122 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.106 | 114 | 394140 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 348935 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.794 | 152 | 172710 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.588 | 65 | 152255 | 52.135 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 104.260% | | | |
| 35) Dibromofluoromethane | 8.177 | 113 | 127102 | 54.416 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 108.840% | | | |
| 50) Toluene-d8 | 10.571 | 98 | 491265 | 53.129 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 106.260% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 185792 | 54.081 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 108.160% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.154 | 85 | 120237 | 55.286 | ug/l | 99 |
| 3) Chloromethane | 2.401 | 50 | 139027 | 49.505 | ug/l | 99 |
| 4) Vinyl Chloride | 2.554 | 62 | 151951 | 52.451 | ug/l | 99 |
| 5) Bromomethane | 2.989 | 94 | 89638 | 55.292 | ug/l | 95 |
| 6) Chloroethane | 3.154 | 64 | 95654 | 51.117 | ug/l | 96 |
| 7) Trichlorofluoromethane | 3.524 | 101 | 196138 | 51.819 | ug/l | 97 |
| 8) Diethyl Ether | 3.983 | 74 | 87405 | 53.001 | ug/l | 100 |
| 9) 1,1,2-Trichlorotrifluo... | 4.395 | 101 | 127498 | 53.615 | ug/l | 99 |
| 10) Methyl Iodide | 4.612 | 142 | 164080 | 53.227 | ug/l | 97 |
| 11) Tert butyl alcohol | 5.542 | 59 | 207768 | 262.193 | ug/l | 99 |
| 12) 1,1-Dichloroethene | 4.359 | 96 | 125461 | 51.678 | ug/l | 99 |
| 13) Acrolein | 4.195 | 56 | 60336 | 240.545 | ug/l | 98 |
| 14) Allyl chloride | 5.042 | 41 | 203344 | 50.504 | ug/l | 98 |
| 15) Acrylonitrile | 5.736 | 53 | 479502 | 258.885 | ug/l | 100 |
| 16) Acetone | 4.448 | 43 | 382146 | 246.750 | ug/l | 98 |
| 17) Carbon Disulfide | 4.736 | 76 | 339466 | 50.550 | ug/l | 100 |
| 18) Methyl Acetate | 5.042 | 43 | 234290 | 51.912 | ug/l | 100 |
| 19) Methyl tert-butyl Ether | 5.818 | 73 | 454641 | 51.720 | ug/l | 100 |
| 20) Methylene Chloride | 5.295 | 84 | 143862 | 49.617 | ug/l | 97 |
| 21) trans-1,2-Dichloroethene | 5.806 | 96 | 133535 | 49.437 | ug/l | 99 |
| 22) Diisopropyl ether | 6.689 | 45 | 440080 | 51.853 | ug/l | 99 |
| 23) Vinyl Acetate | 6.618 | 43 | 1828919 | 255.055 | ug/l | 99 |
| 24) 1,1-Dichloroethane | 6.589 | 63 | 251473 | 51.487 | ug/l | 98 |
| 25) 2-Butanone | 7.494 | 43 | 644194 | 255.897 | ug/l | 99 |
| 26) 2,2-Dichloropropane | 7.500 | 77 | 216678 | 57.031 | ug/l | 99 |
| 27) cis-1,2-Dichloroethene | 7.500 | 96 | 164985 | 51.073 | ug/l | 99 |
| 28) Bromochloromethane | 7.824 | 49 | 108810 | 45.310 | ug/l | 99 |
| 29) Tetrahydrofuran | 7.847 | 42 | 420891 | 256.656 | ug/l | 100 |
| 30) Chloroform | 7.977 | 83 | 248429 | 50.933 | ug/l | 97 |
| 31) Cyclohexane | 8.265 | 56 | 237836 | 50.212 | ug/l | 97 |
| 32) 1,1,1-Trichloroethane | 8.177 | 97 | 209927 | 50.603 | ug/l | 97 |
| 36) 1,1-Dichloropropene | 8.377 | 75 | 181414 | 52.123 | ug/l | 99 |
| 37) Ethyl Acetate | 7.571 | 43 | 222090 | 50.125 | ug/l | 99 |
| 38) Carbon Tetrachloride | 8.371 | 117 | 179281 | 52.466 | ug/l | 98 |
| 39) Methylcyclohexane | 9.606 | 83 | 251231 | 52.686 | ug/l | 98 |
| 40) Benzene | 8.612 | 78 | 579667 | 50.931 | ug/l | 99 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086869.D
Acq On : 06 Jun 2025 15:54
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN060625

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

Quant Time: Jun 07 02:16:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.789 | 41 | 130903 | 52.607 | ug/l | | 100 |
| 42) 1,2-Dichloroethane | 8.677 | 62 | 177746 | 51.489 | ug/l | | 100 |
| 43) Isopropyl Acetate | 8.694 | 43 | 359378 | 50.536 | ug/l | | 100 |
| 44) Trichloroethene | 9.359 | 130 | 139763 | 51.788 | ug/l | | 100 |
| 45) 1,2-Dichloropropane | 9.624 | 63 | 142463 | 51.450 | ug/l | | 99 |
| 46) Dibromomethane | 9.712 | 93 | 97199 | 52.849 | ug/l | | 98 |
| 47) Bromodichloromethane | 9.894 | 83 | 196104 | 51.824 | ug/l | | 100 |
| 48) Methyl methacrylate | 9.688 | 41 | 168001 | 51.328 | ug/l | | 98 |
| 49) 1,4-Dioxane | 9.706 | 88 | 66102 | 1110.123 | ug/l | # | 99 |
| 51) 4-Methyl-2-Pentanone | 10.447 | 43 | 1146622 | 267.835 | ug/l | | 99 |
| 52) Toluene | 10.635 | 92 | 361963 | 52.040 | ug/l | | 99 |
| 53) t-1,3-Dichloropropene | 10.835 | 75 | 224839 | 53.137 | ug/l | | 99 |
| 54) cis-1,3-Dichloropropene | 10.318 | 75 | 237774 | 52.519 | ug/l | | 99 |
| 55) 1,1,2-Trichloroethane | 11.018 | 97 | 137998 | 51.562 | ug/l | | 99 |
| 56) Ethyl methacrylate | 10.882 | 69 | 241649 | 56.688 | ug/l | | 98 |
| 57) 1,3-Dichloropropane | 11.165 | 76 | 238572 | 51.386 | ug/l | | 99 |
| 58) 2-Chloroethyl Vinyl ether | 10.165 | 63 | 625479 | 246.006 | ug/l | | 100 |
| 59) 2-Hexanone | 11.200 | 43 | 781717 | 283.478 | ug/l | | 100 |
| 60) Dibromochloromethane | 11.359 | 129 | 146749 | 52.627 | ug/l | | 99 |
| 61) 1,2-Dibromoethane | 11.471 | 107 | 142338 | 51.887 | ug/l | | 99 |
| 64) Tetrachloroethene | 11.106 | 164 | 111409 | 50.450 | ug/l | | 98 |
| 65) Chlorobenzene | 11.894 | 112 | 391661 | 50.892 | ug/l | | 98 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 129045 | 52.164 | ug/l | | 99 |
| 67) Ethyl Benzene | 11.965 | 91 | 683879 | 51.590 | ug/l | | 98 |
| 68) m/p-Xylenes | 12.071 | 106 | 527293 | 103.912 | ug/l | | 98 |
| 69) o-Xylene | 12.400 | 106 | 254600 | 52.387 | ug/l | | 100 |
| 70) Styrene | 12.412 | 104 | 438751 | 52.758 | ug/l | | 99 |
| 71) Bromoform | 12.582 | 173 | 100357 | 54.751 | ug/l | # | 99 |
| 73) Isopropylbenzene | 12.694 | 105 | 652045 | 51.823 | ug/l | | 100 |
| 74) N-amyl acetate | 12.506 | 43 | 238355 | 54.212 | ug/l | | 97 |
| 75) 1,1,2,2-Tetrachloroethane | 12.941 | 83 | 220643 | 51.763 | ug/l | | 100 |
| 76) 1,2,3-Trichloropropane | 12.994 | 75 | 220957m | 53.821 | ug/l | | |
| 77) Bromobenzene | 12.982 | 156 | 150950 | 52.313 | ug/l | | 100 |
| 78) n-propylbenzene | 13.035 | 91 | 801180 | 52.397 | ug/l | | 100 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 473629 | 51.650 | ug/l | | 99 |
| 80) 1,3,5-Trimethylbenzene | 13.171 | 105 | 548347 | 52.787 | ug/l | | 99 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 99341 | 55.702 | ug/l | | 97 |
| 82) 4-Chlorotoluene | 13.223 | 91 | 481403 | 51.884 | ug/l | | 99 |
| 83) tert-Butylbenzene | 13.441 | 119 | 499519 | 52.532 | ug/l | | 99 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 552333 | 53.024 | ug/l | | 100 |
| 85) sec-Butylbenzene | 13.618 | 105 | 723986 | 52.428 | ug/l | | 100 |
| 86) p-Isopropyltoluene | 13.729 | 119 | 606979 | 53.174 | ug/l | | 99 |
| 87) 1,3-Dichlorobenzene | 13.735 | 146 | 290810 | 51.224 | ug/l | | 100 |
| 88) 1,4-Dichlorobenzene | 13.812 | 146 | 298412 | 51.557 | ug/l | | 100 |
| 89) n-Butylbenzene | 14.059 | 91 | 579636 | 52.424 | ug/l | | 100 |
| 90) Hexachloroethane | 14.335 | 117 | 102254 | 52.847 | ug/l | | 100 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 280025 | 51.340 | ug/l | | 100 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.723 | 75 | 50115 | 49.161 | ug/l | | 98 |
| 93) 1,2,4-Trichlorobenzene | 15.394 | 180 | 181064 | 51.986 | ug/l | | 99 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 68570 | 52.843 | ug/l | | 99 |
| 95) Naphthalene | 15.641 | 128 | 674187 | 52.005 | ug/l | | 100 |
| 96) 1,2,3-Trichlorobenzene | 15.841 | 180 | 174888 | 50.539 | ug/l | | 99 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086869.D
Acq On : 06 Jun 2025 15:54
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN060625

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

Quant Time: Jun 07 02:16:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

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

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

ICAL Form

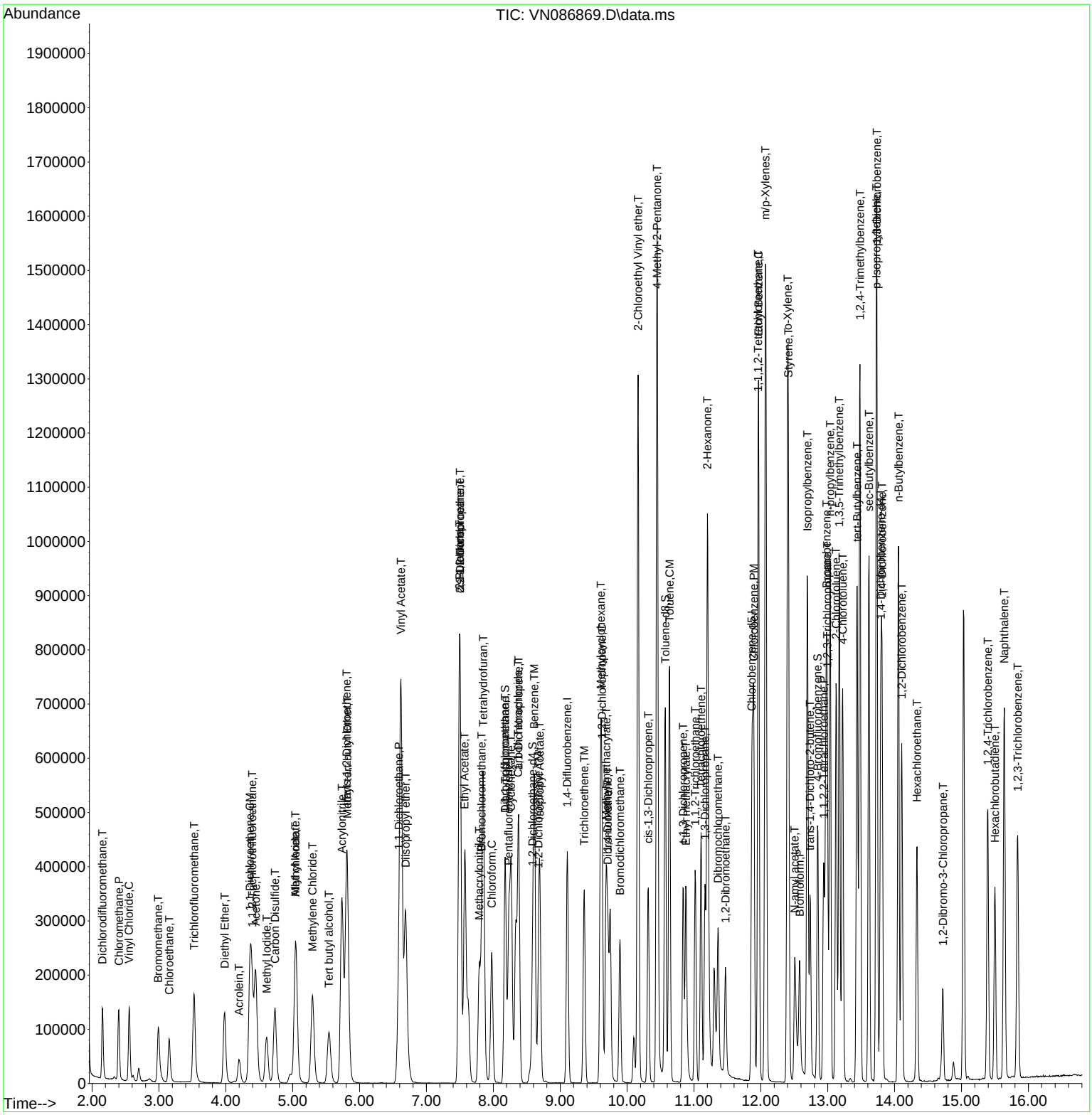
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086869.D
Acq On : 06 Jun 2025 15:54
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

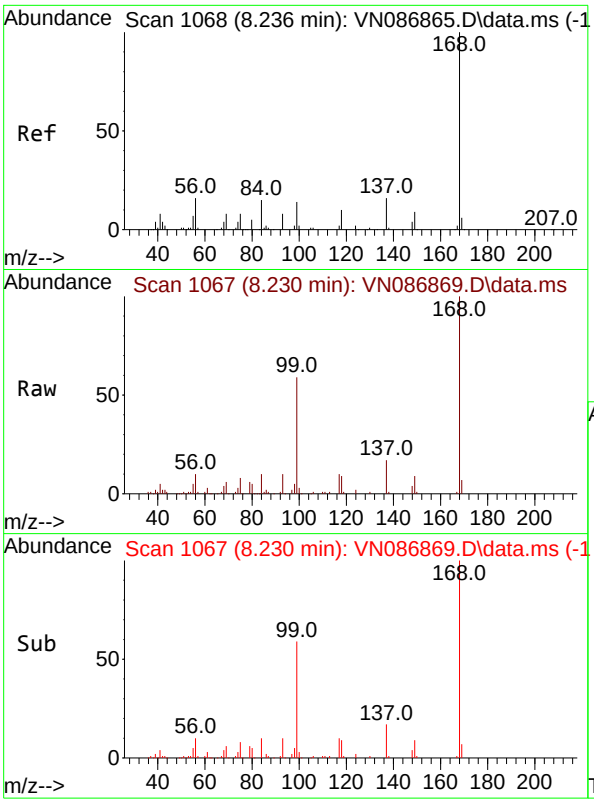
Quant Time: Jun 07 02:16:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN060625

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

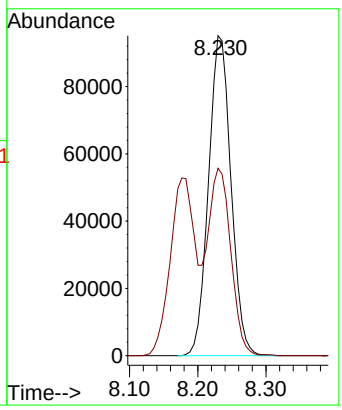





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.230 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion:168 Resp: 21812

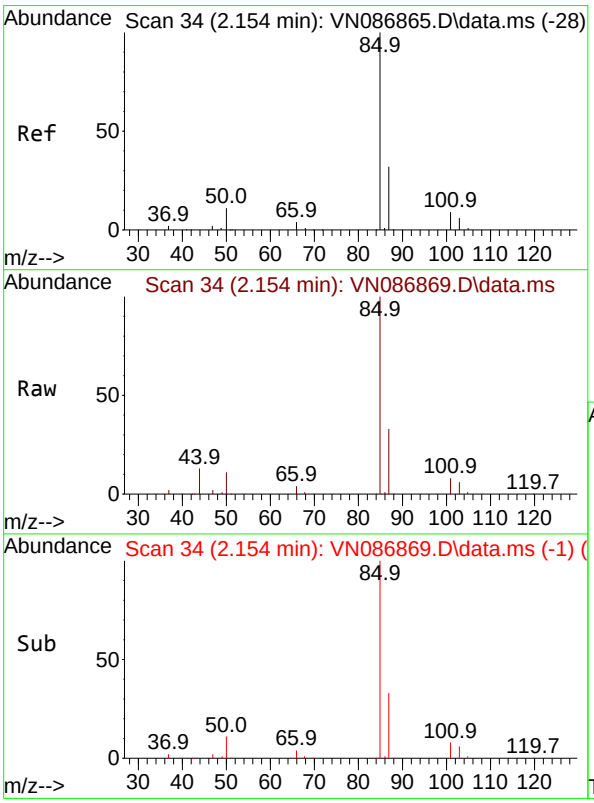
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 58.6 | 49.1 | 73.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN060625

**Manual Integrations**
**APPROVED**

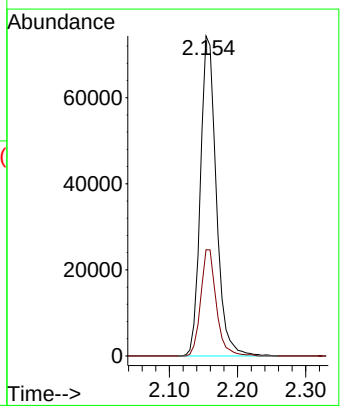
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

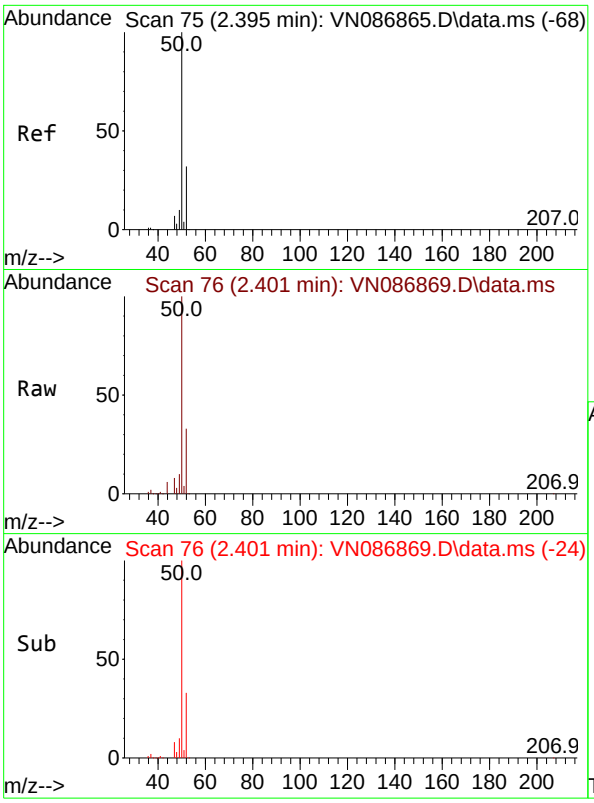



#2
Dichlorodifluoromethane
Concen: 55.286 ug/l
RT: 2.154 min Scan# 34
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 85 Resp: 120237

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 33.2 | 16.2 | 48.6 |

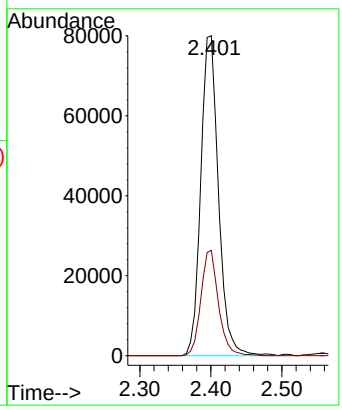





#3
Chloromethane
Concen: 49.505 ug/l
RT: 2.401 min Scan# 7
Delta R.T. 0.006 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 50 Resp: 13902

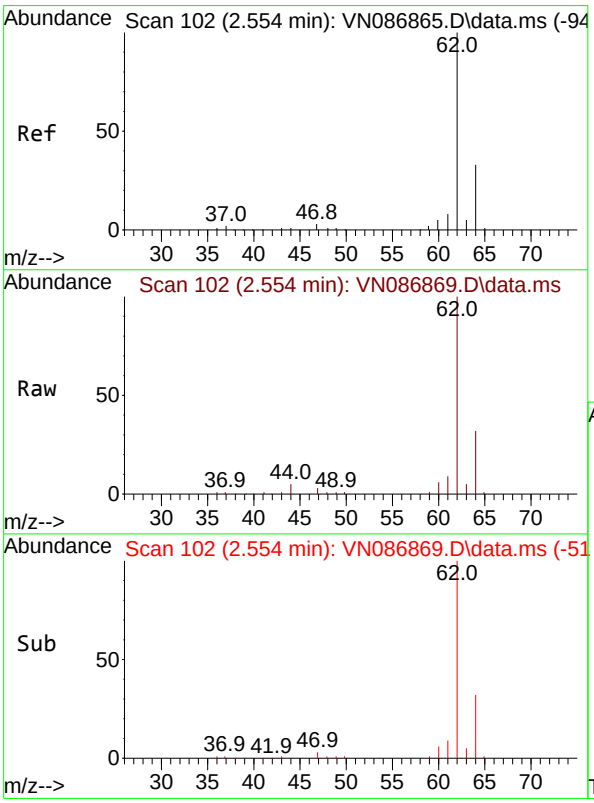
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 32.9 | 25.7 | 38.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN060625

**Manual Integrations**
**APPROVED**

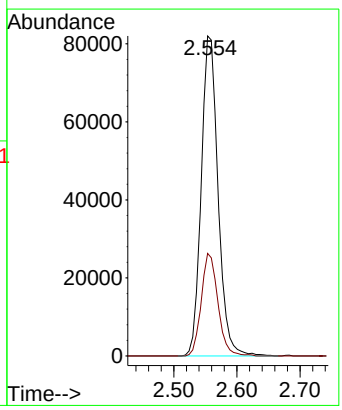
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

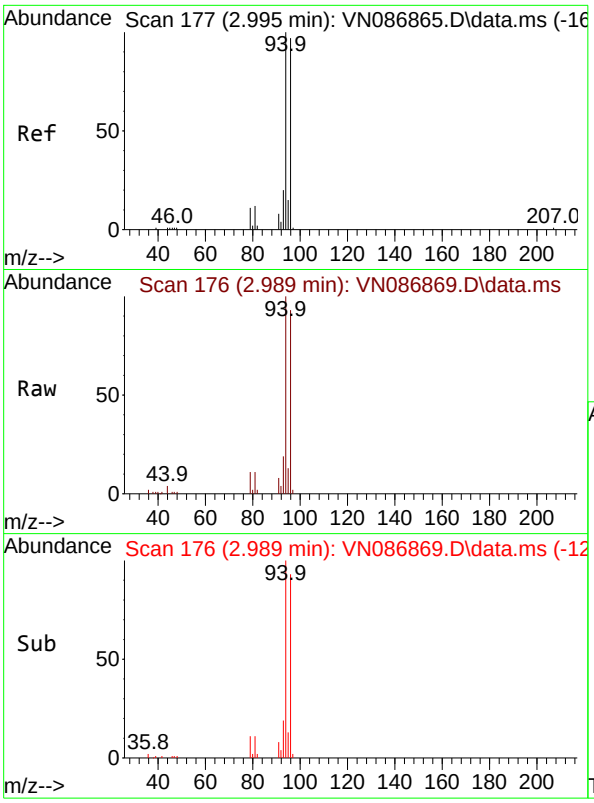



#4
Vinyl Chloride
Concen: 52.451 ug/l
RT: 2.554 min Scan# 102
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 62 Resp: 151951

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 32.0 | 26.0 | 39.0 |

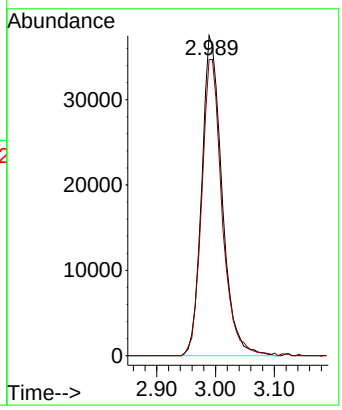





#5
Bromomethane
Concen: 55.292 ug/l
RT: 2.989 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 94 Resp: 8963

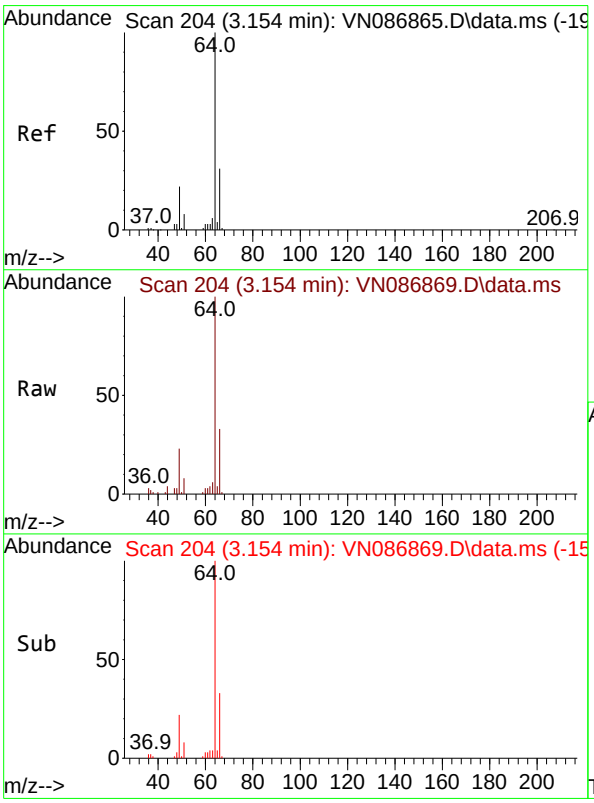
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 92.5 | 77.9 | 116.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN060625

**Manual Integrations**
**APPROVED**

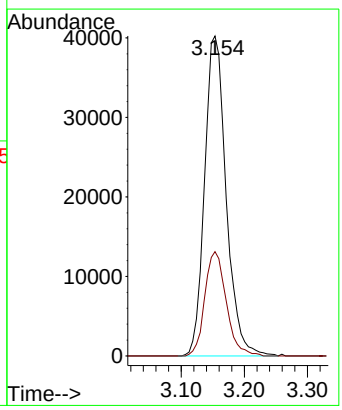
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

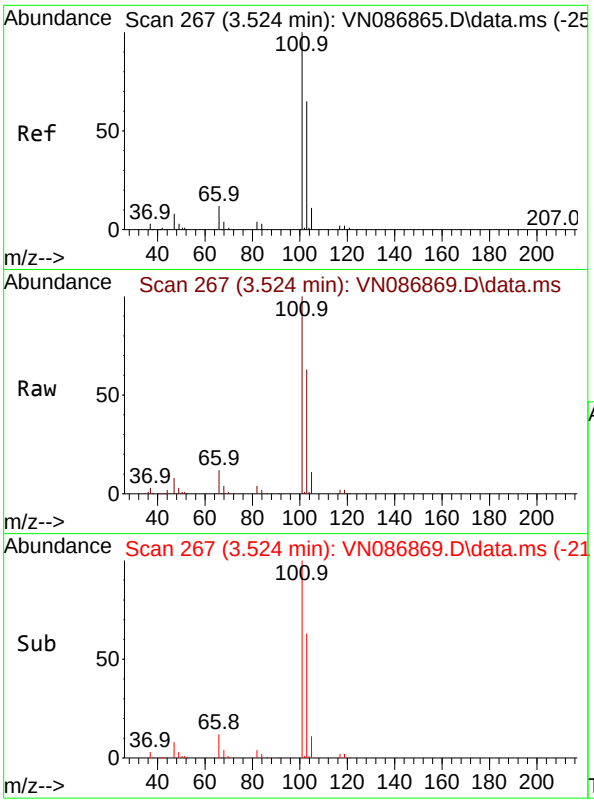



#6
Chloroethane
Concen: 51.117 ug/l
RT: 3.154 min Scan# 204
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 64 Resp: 95654

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 32.6 | 24.6 | 36.8 |

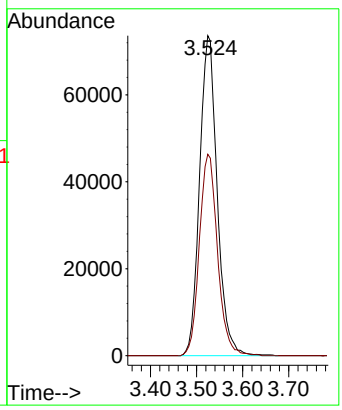





#7
Trichlorofluoromethane
Concen: 51.819 ug/l
RT: 3.524 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion:101 Resp: 19613

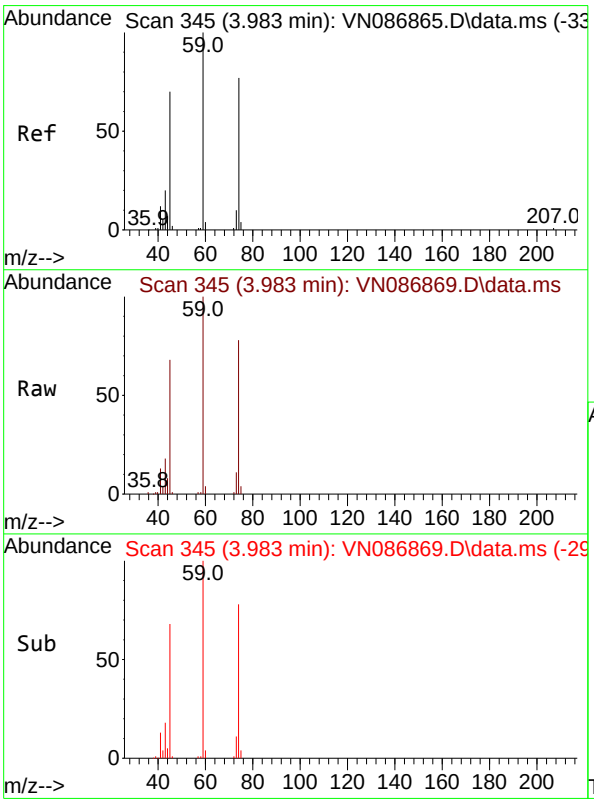
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 62.9 | 52.2 | 78.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN060625

**Manual Integrations**
**APPROVED**

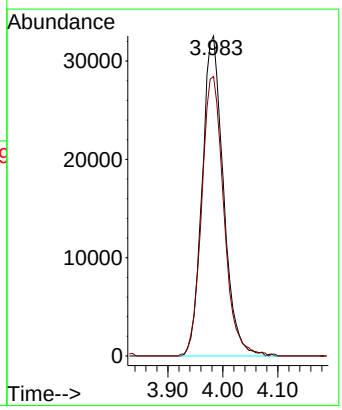
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

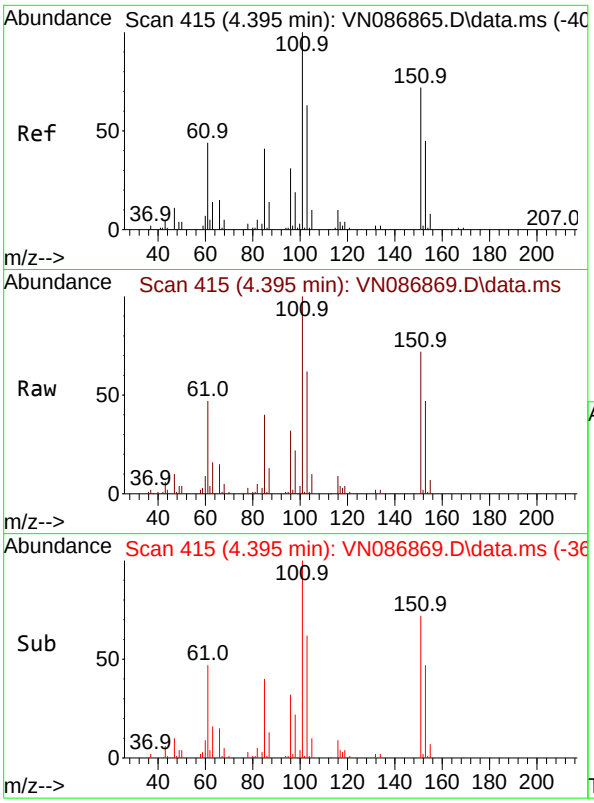



#8
Diethyl Ether
Concen: 53.001 ug/l
RT: 3.983 min Scan# 345
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 74 Resp: 87405

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 90.9 | 45.5 | 136.5 |






#9
1,1,2-Trichlorotrifluoroethane
Concen: 53.615 ug/l
RT: 4.395 min Scan# 4
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

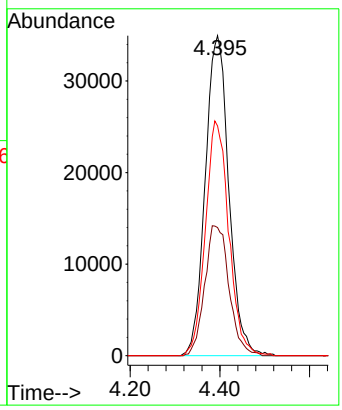
Tgt Ion:101 Resp: 12749

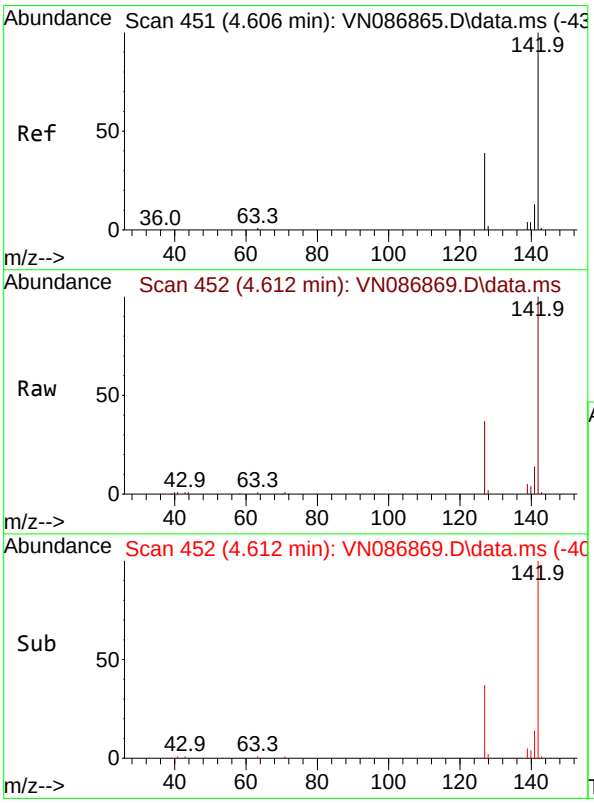
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 41.9 | 33.8 | 50.8 |
| 151 | 72.8 | 58.7 | 88.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN060625

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

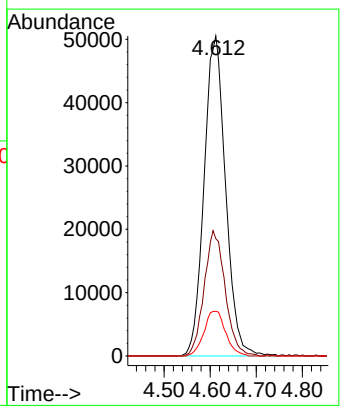


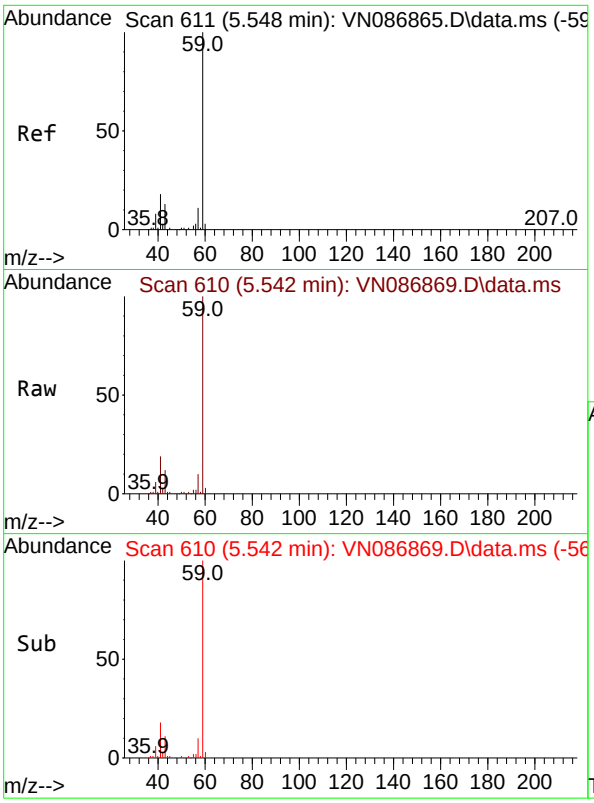




#10
Methyl Iodide
Concen: 53.227 ug/l
RT: 4.612 min Scan# 452
Delta R.T. 0.006 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion:142 Resp: 164080

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 36.6 | 30.9 | 46.3 |
| 141 | 14.0 | 10.4 | 15.6 |






#11
Tert butyl alcohol
Concen: 262.193 ug/l
RT: 5.542 min Scan# 61
Delta R.T. -0.006 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

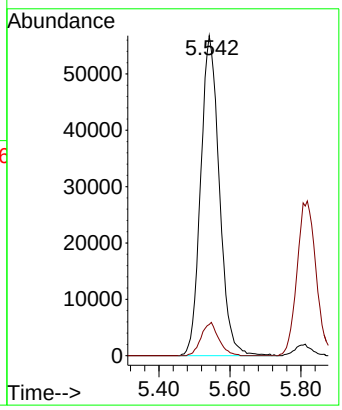
Tgt Ion: 59 Resp: 20776

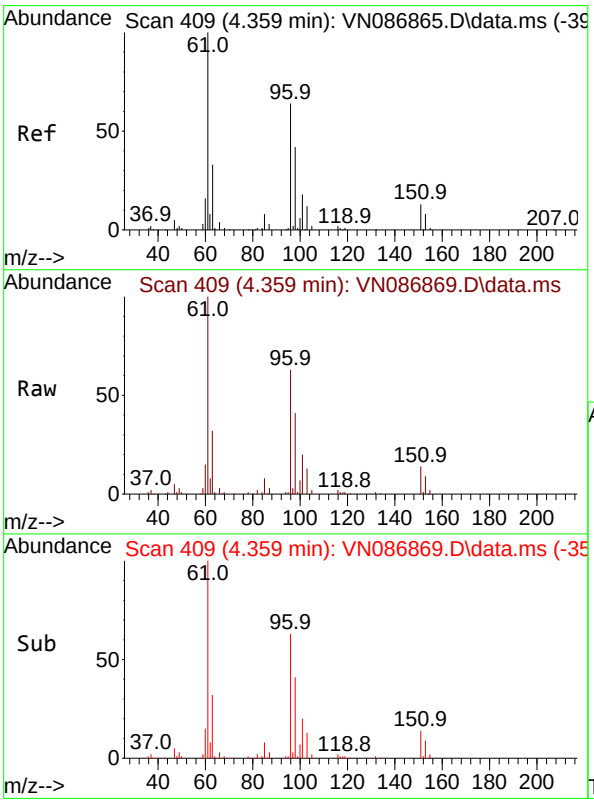
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 9.8 | 8.1 | 12.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN060625

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

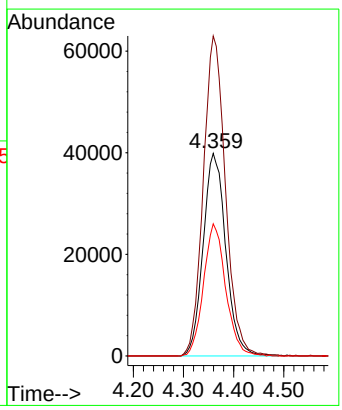


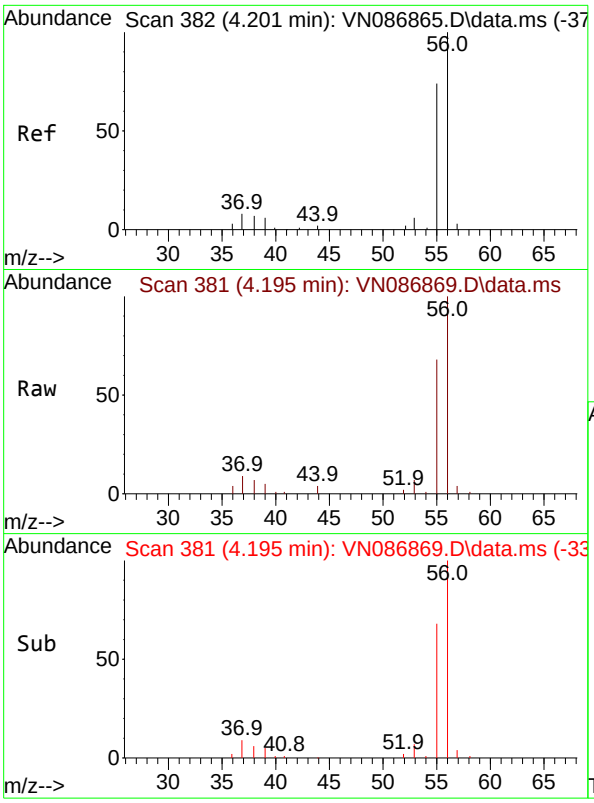




#12
1,1-Dichloroethene
Concen: 51.678 ug/l
RT: 4.359 min Scan# 409
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 96 Resp: 125461

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 158.0 | 125.8 | 188.6 |
| 98 | 65.2 | 52.5 | 78.7 |






#13
Acrolein
Concen: 240.545 ug/l
RT: 4.195 min Scan# 3
Delta R.T. -0.006 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 56 Resp: 6033

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 71.1 | 55.6 | 83.4 |

**Instrument :**
MSVOA_N
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ICVVN060625

**Manual Integrations**
**APPROVED**

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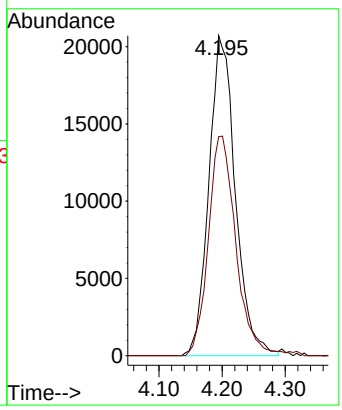
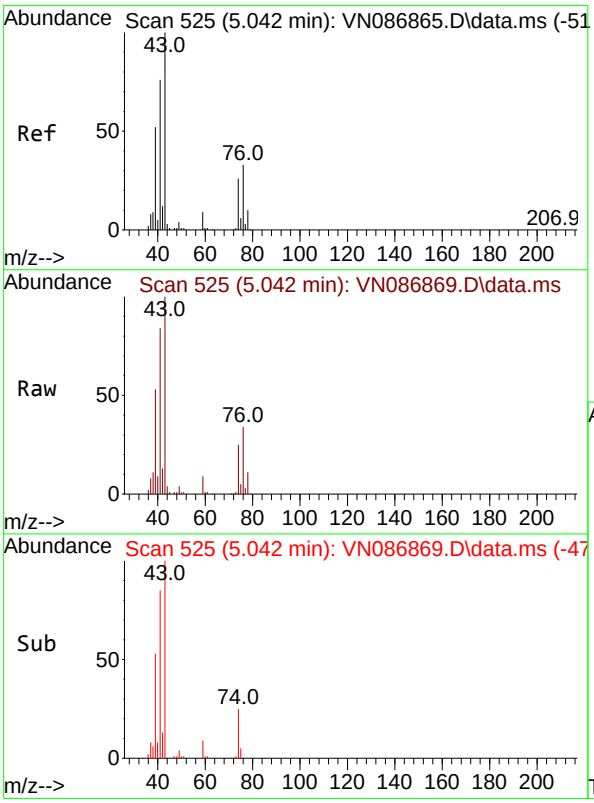
Supervised By :Mahesh Dadoda 06/09/2025

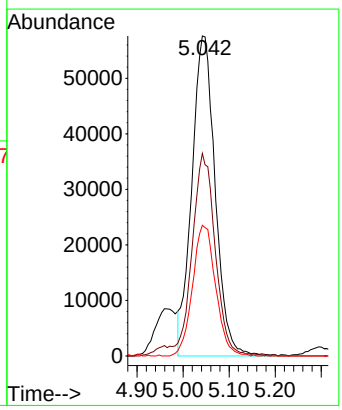


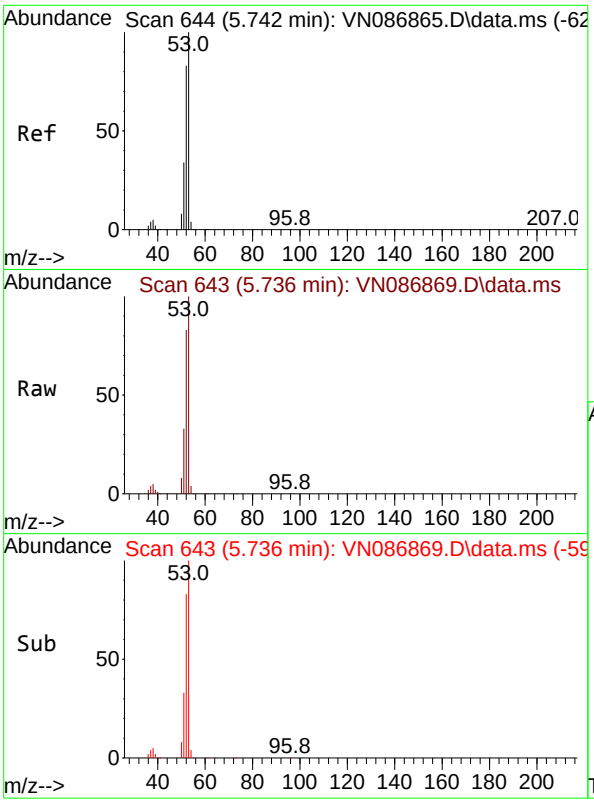




#14
Allyl chloride
Concen: 50.504 ug/l
RT: 5.042 min Scan# 525
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 41 Resp: 203344

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 62.3 | 51.3 | 76.9 |
| 76 | 40.4 | 31.4 | 47.0 |

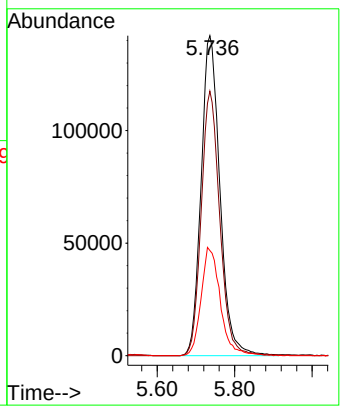





#15
Acrylonitrile
Concen: 258.885 ug/l
RT: 5.736 min Scan# 64
Delta R.T. -0.006 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 53 Resp: 47950

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 81.3 | 65.0 | 97.6 |
| 51 | 34.5 | 27.2 | 40.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN060625

**Manual Integrations**
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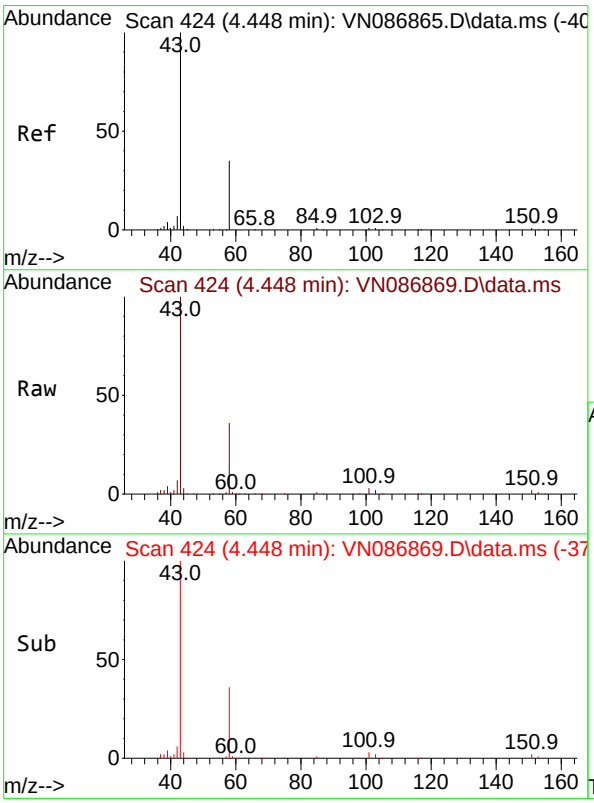
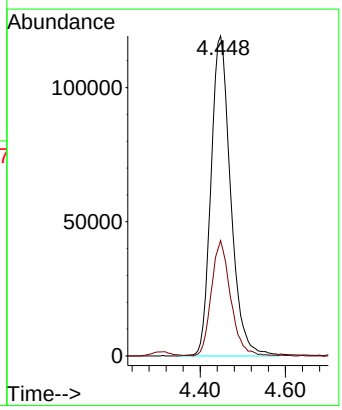
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

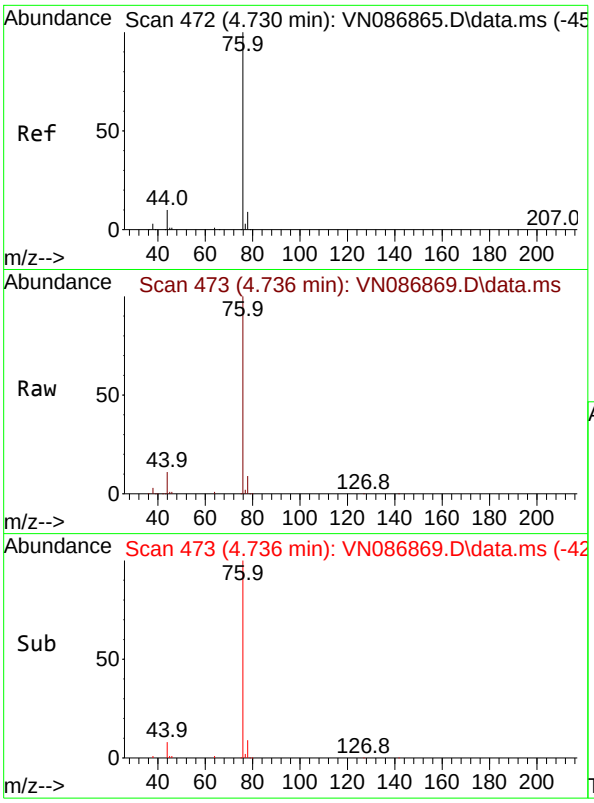



#16
Acetone
Concen: 246.750 ug/l
RT: 4.448 min Scan# 424
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 43 Resp: 382146

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 35.9 | 28.0 | 42.0 |

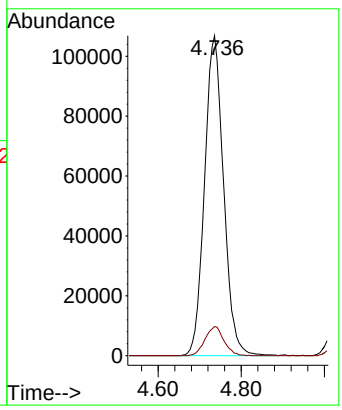





#17
Carbon Disulfide
Concen: 50.550 ug/l
RT: 4.736 min Scan# 4
Delta R.T. 0.006 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 76 Resp: 33946

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.1 | 7.3 | 10.9 |




**Instrument :**
MSVOA_N
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ICVVN060625

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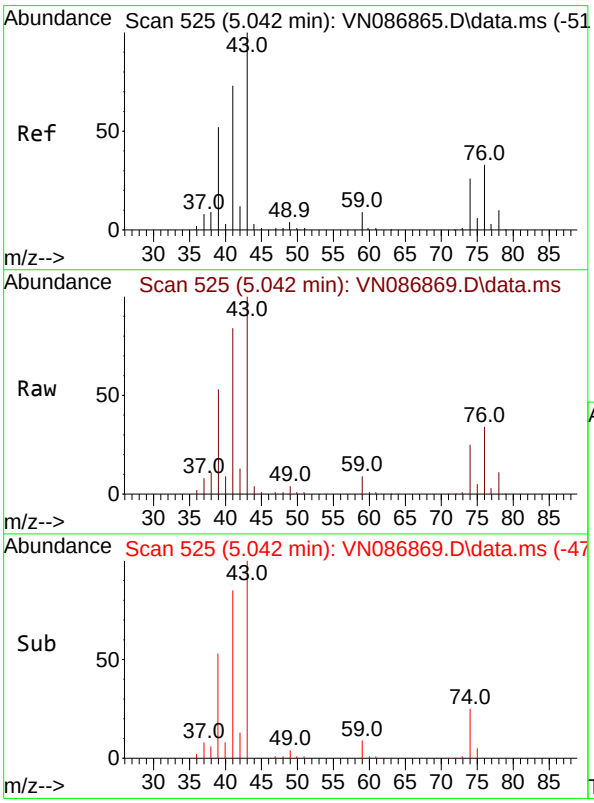
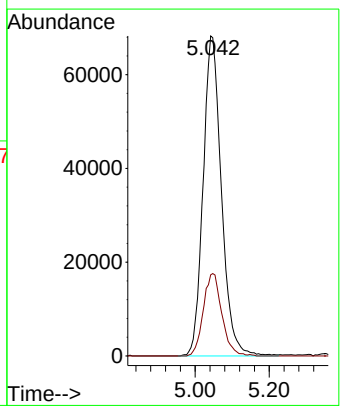
Supervised By :Mahesh Dadoda 06/09/2025

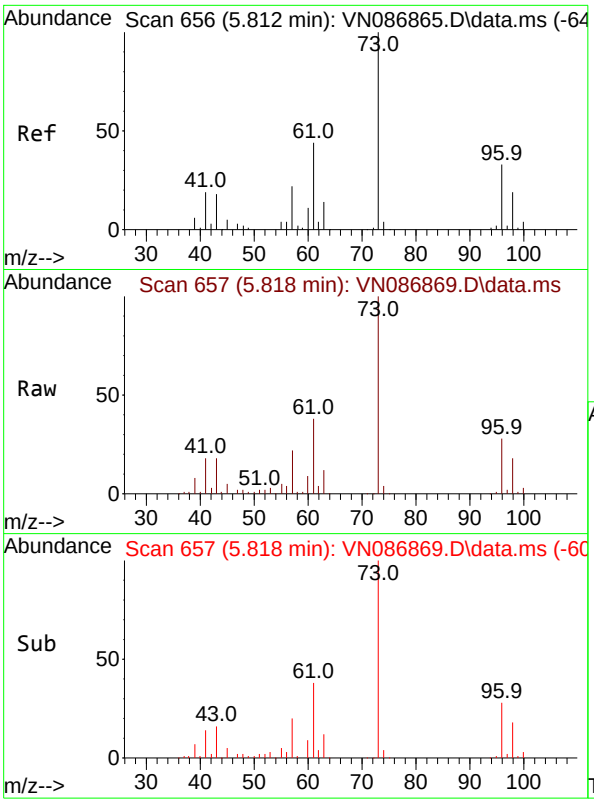



#18
Methyl Acetate
Concen: 51.912 ug/l
RT: 5.042 min Scan# 525
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 43 Resp: 234290

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 25.9 | 20.7 | 31.1 |

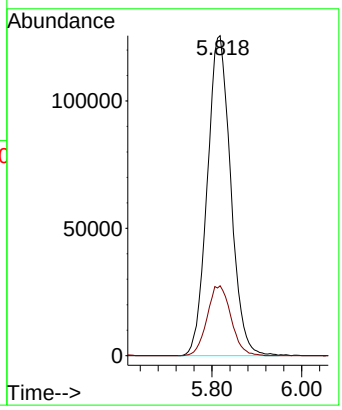





#19
Methyl tert-butyl Ether
Concen: 51.720 ug/l
RT: 5.818 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 73 Resp: 45464

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 21.8 | 17.4 | 26.2 |

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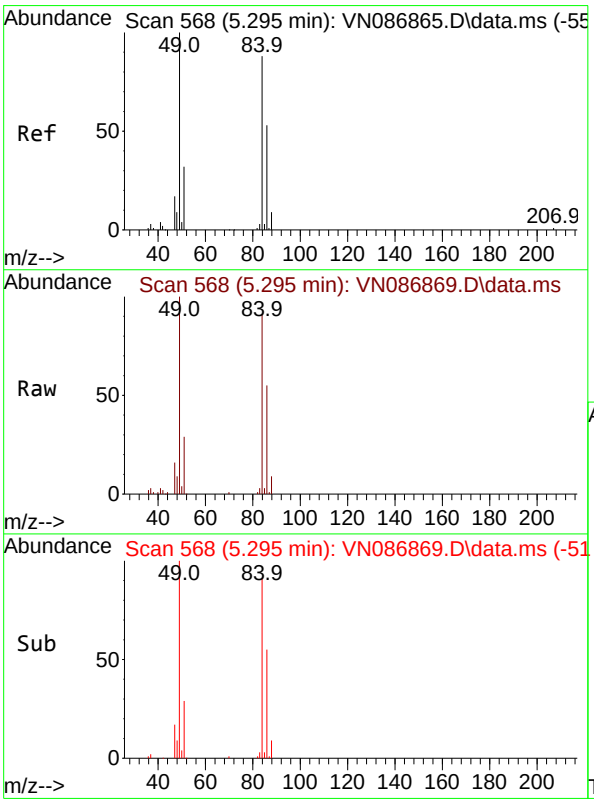
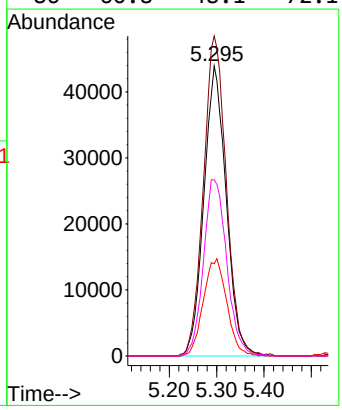
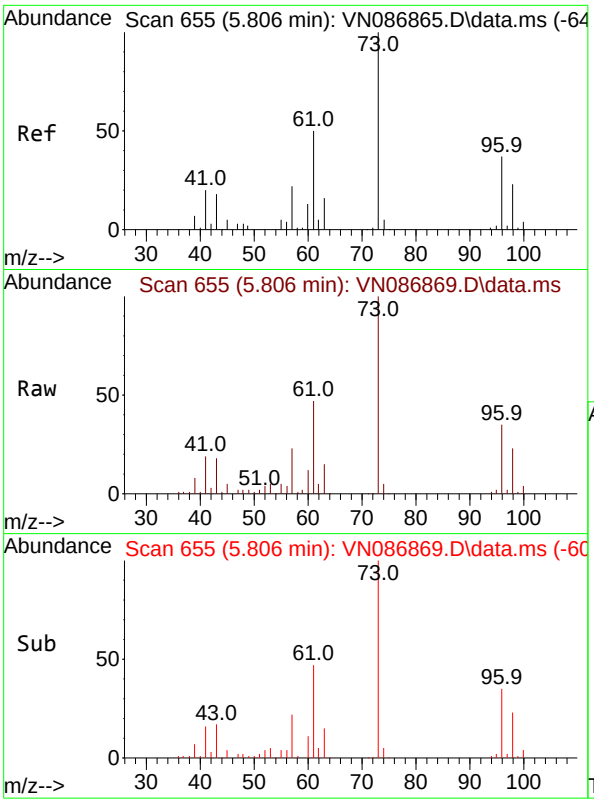



#20
Methylene Chloride
Concen: 49.617 ug/l
RT: 5.295 min Scan# 568
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 84 Resp: 143862

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 110.3 | 90.5 | 135.7 |
| 51 | 31.8 | 28.5 | 42.7 |
| 86 | 60.8 | 48.1 | 72.1 |

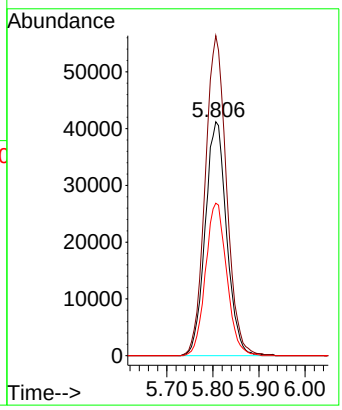





#21
trans-1,2-Dichloroethene
Concen: 49.437 ug/l
RT: 5.806 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 96 Resp: 13353

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 136.8 | 109.2 | 163.8 |
| 98 | 65.2 | 49.8 | 74.8 |

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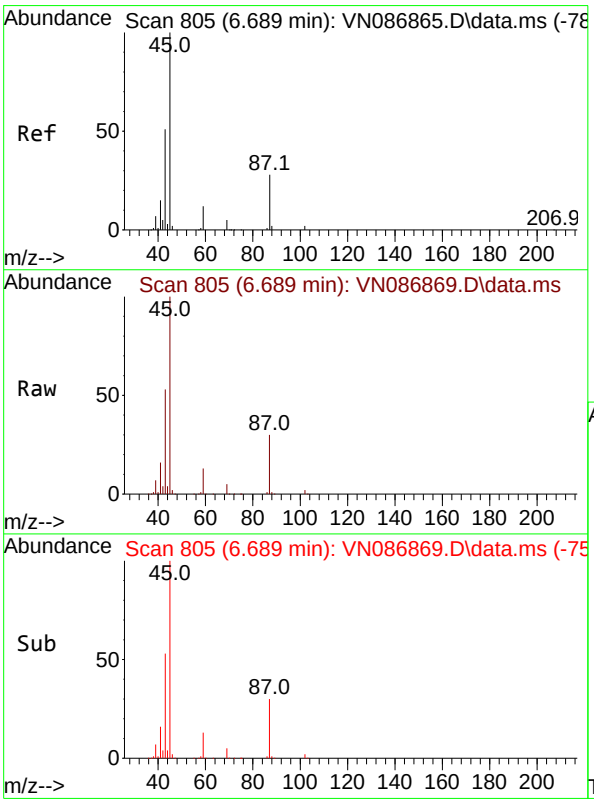
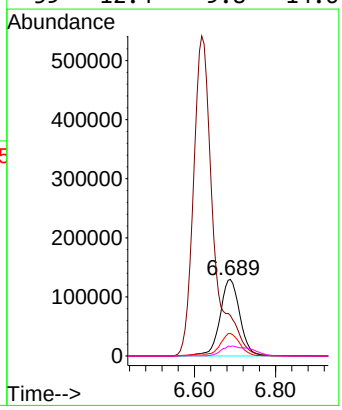
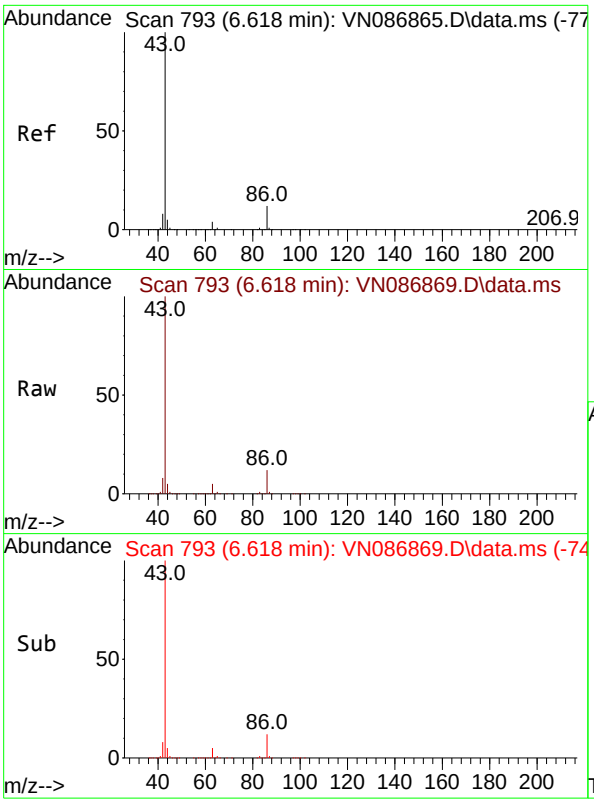



#22
Diisopropyl ether
Concen: 51.853 ug/l
RT: 6.689 min Scan# 805
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 45 Resp: 440080

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 52.4 | 41.9 | 62.9 |
| 87 | 29.5 | 22.4 | 33.6 |
| 59 | 12.4 | 9.8 | 14.6 |






#23
Vinyl Acetate
Concen: 255.055 ug/l
RT: 6.618 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 43 Resp: 182891

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 12.1 | 9.5 | 14.3 |

**Instrument :**
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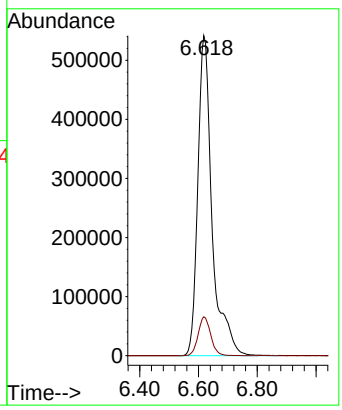
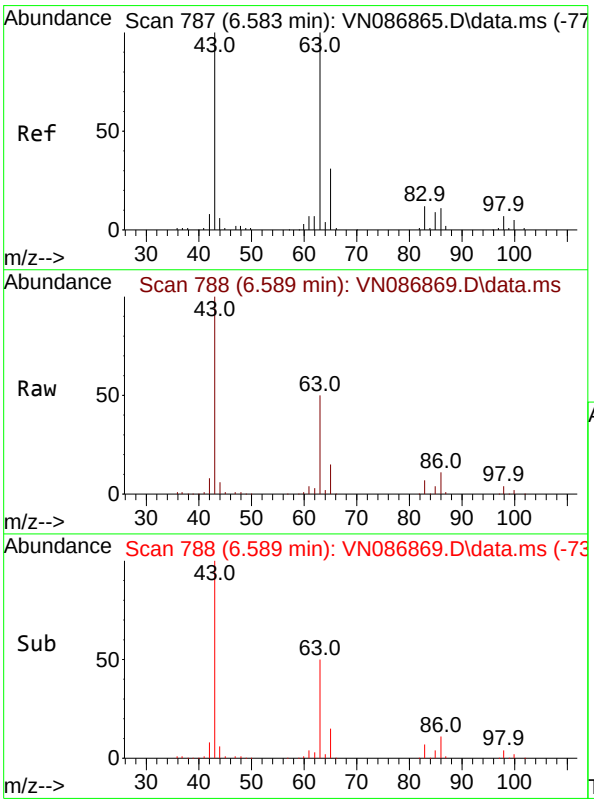
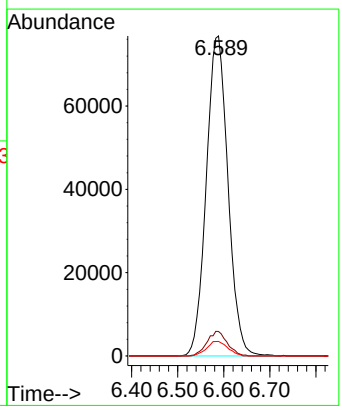


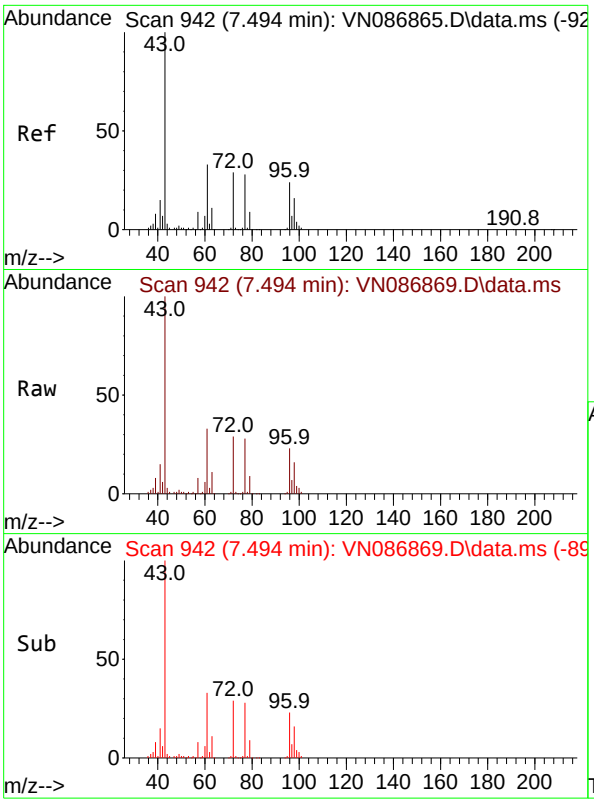




#24
1,1-Dichloroethane
Concen: 51.487 ug/l
RT: 6.589 min Scan# 788
Delta R.T. 0.006 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 63 Resp: 251473

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 7.7 | 3.6 | 10.8 |
| 100 | 4.6 | 2.6 | 7.8 |






#25
2-Butanone
Concen: 255.897 ug/l
RT: 7.494 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 43 Resp: 64419

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 29.5 | 23.0 | 34.6 |

**Instrument :**
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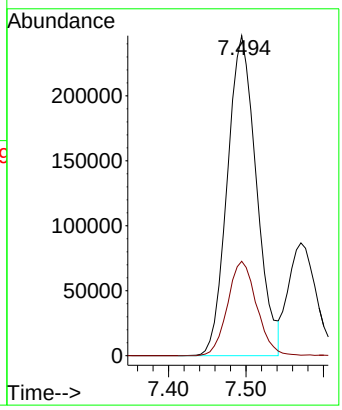
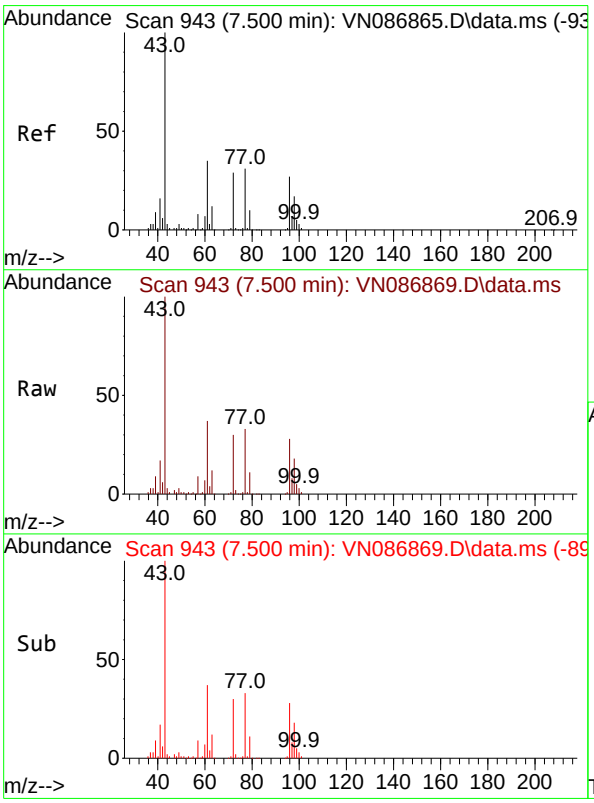
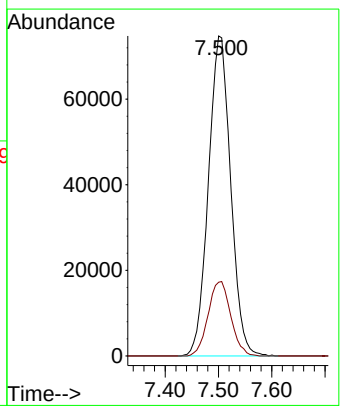


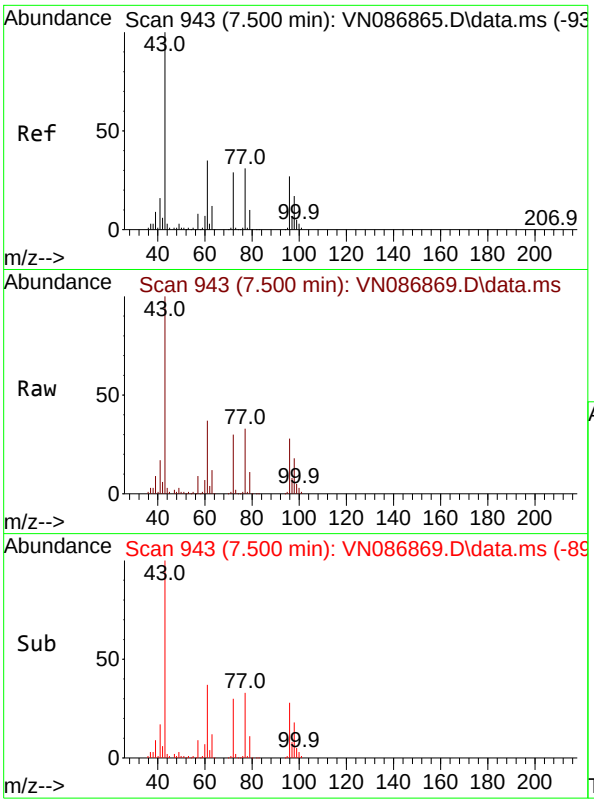




#26
2,2-Dichloropropane
Concen: 57.031 ug/l
RT: 7.500 min Scan# 943
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 77 Resp: 216678

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 23.7 | 11.6 | 34.7 |

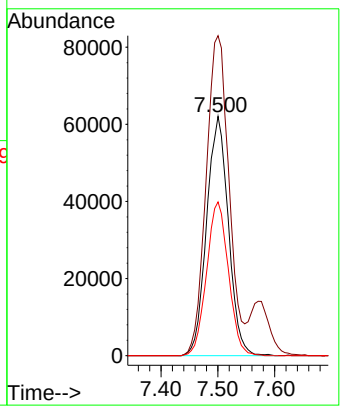





#27
cis-1,2-Dichloroethene
Concen: 51.073 ug/l
RT: 7.500 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 96 Resp: 16498

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 140.3 | 0.0 | 278.0 |
| 98 | 64.5 | 0.0 | 128.2 |

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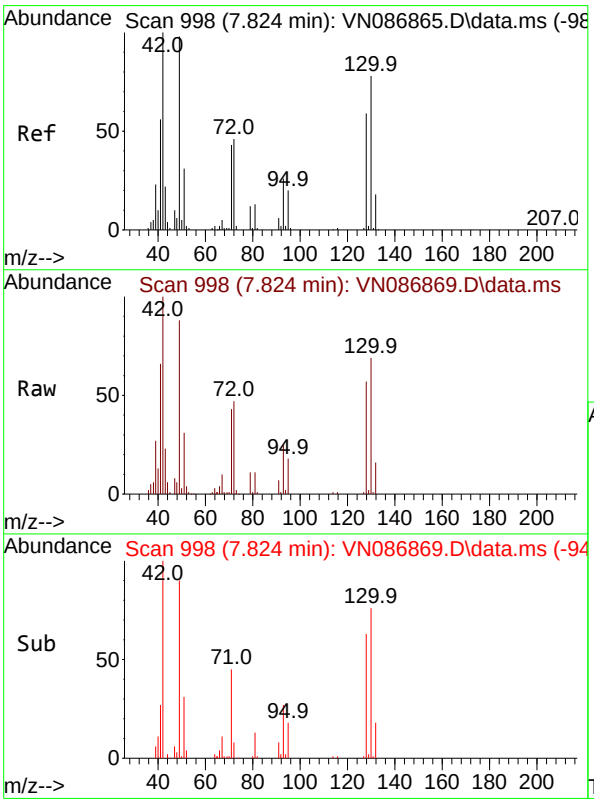
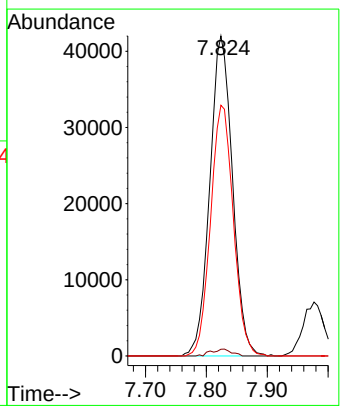
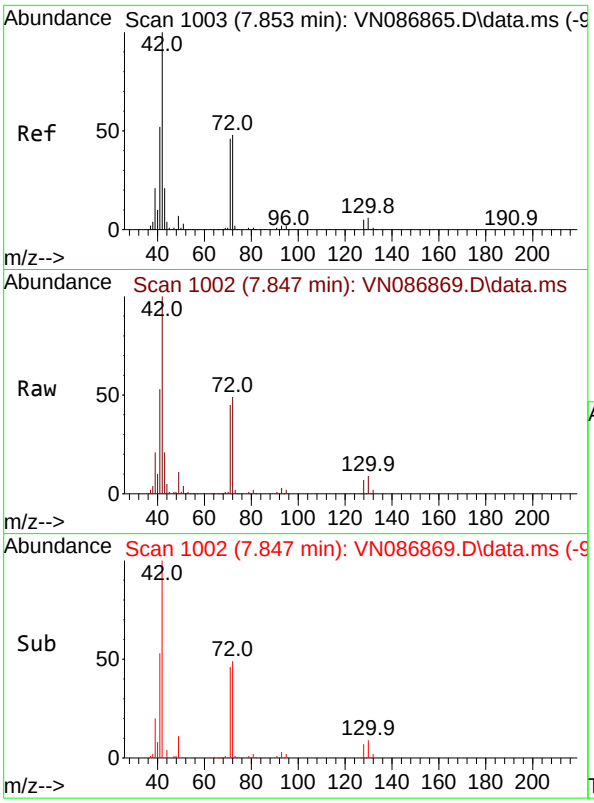



#28
Bromochloromethane
Concen: 45.310 ug/l
RT: 7.824 min Scan# 998
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 49 Resp: 108810

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.9 | 0.0 | 3.8 |
| 130 | 78.5 | 62.2 | 93.2 |






#29
Tetrahydrofuran
Concen: 256.656 ug/l
RT: 7.847 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 42 Resp: 42089

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 47.5 | 37.8 | 56.6 |
| 71 | 44.5 | 35.6 | 53.4 |

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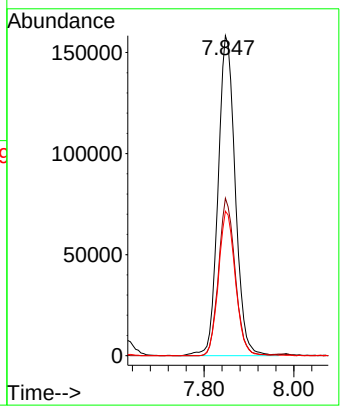
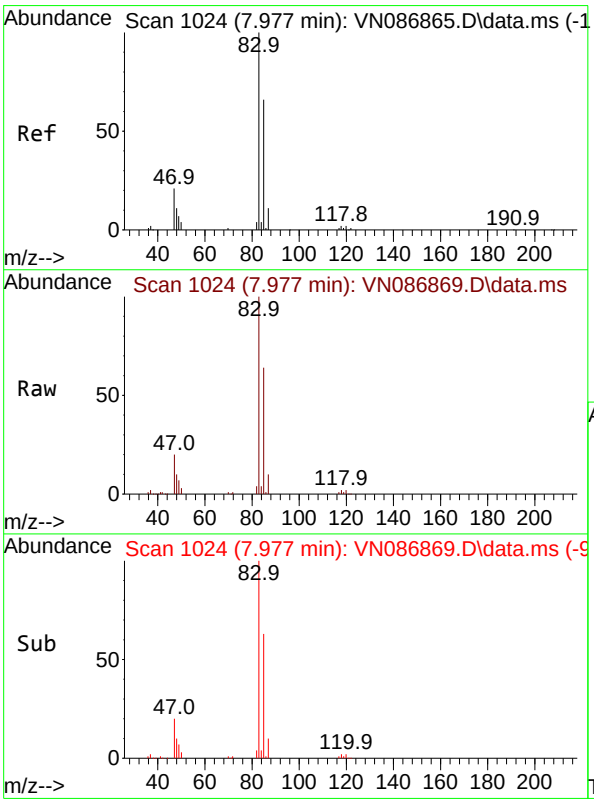
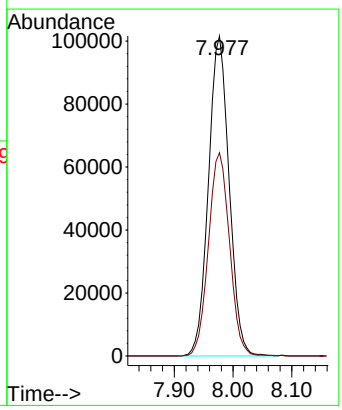


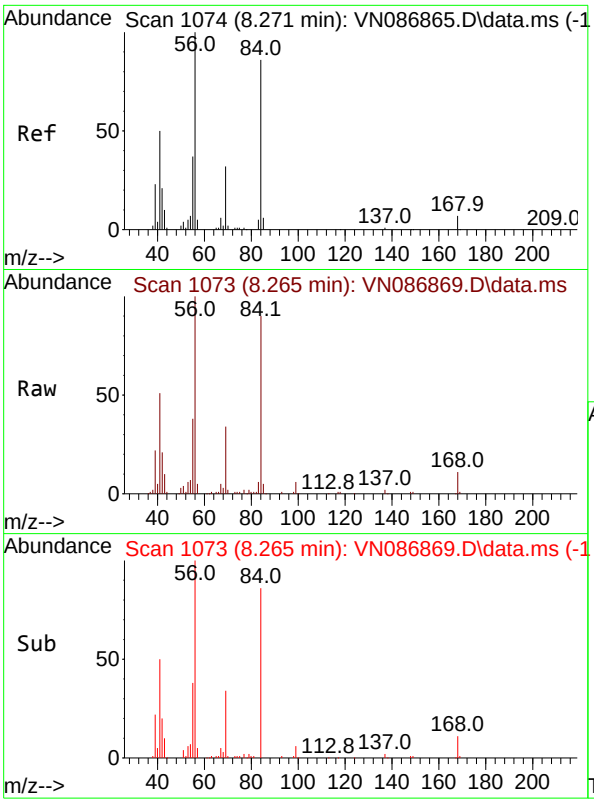




#30
Chloroform
Concen: 50.933 ug/l
RT: 7.977 min Scan# 1024
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 83 Resp: 248429

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 63.5 | 52.9 | 79.3 |

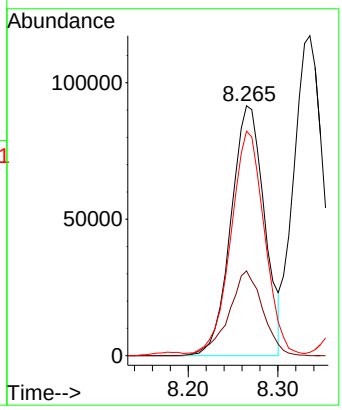





#31
Cyclohexane
Concen: 50.212 ug/l
RT: 8.265 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 56 Resp: 23783

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 33.9 | 25.4 | 38.0 |
| 84 | 88.4 | 68.8 | 103.2 |

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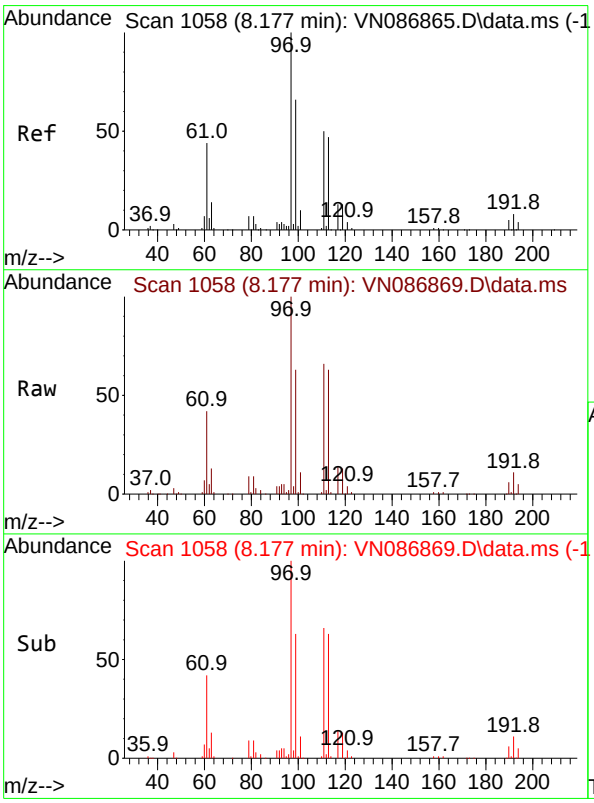
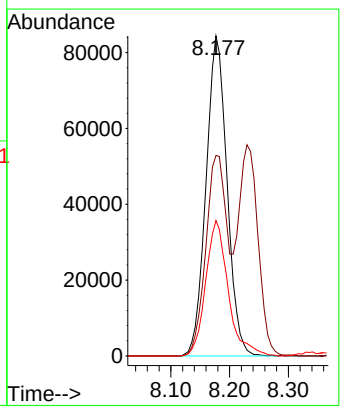
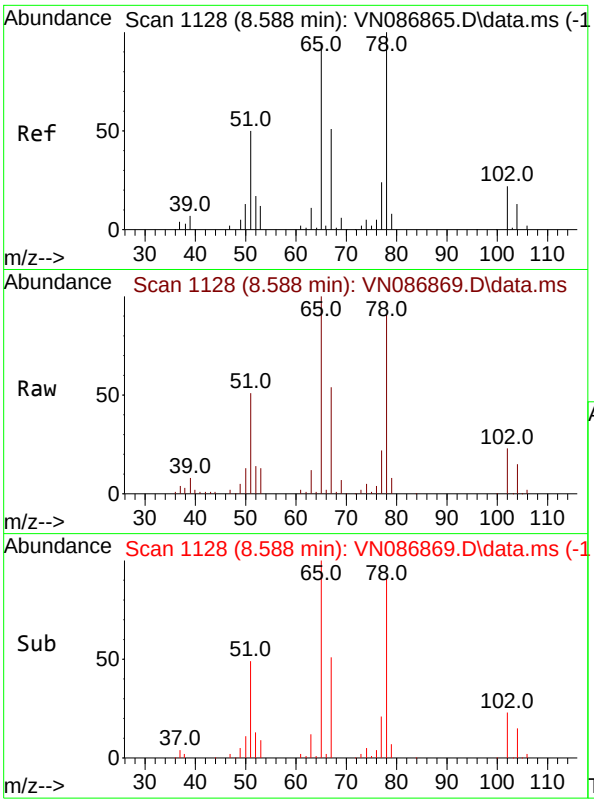



#32
1,1,1-Trichloroethane
Concen: 50.603 ug/l
RT: 8.177 min Scan# 1058
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 97 Resp: 209927

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 61.7 | 52.0 | 78.0 |
| 61 | 45.4 | 35.9 | 53.9 |






#33
1,2-Dichloroethane-d4
Concen: 52.135 ug/l
RT: 8.588 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 65 Resp: 15225

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 54.6 | 0.0 | 105.6 |

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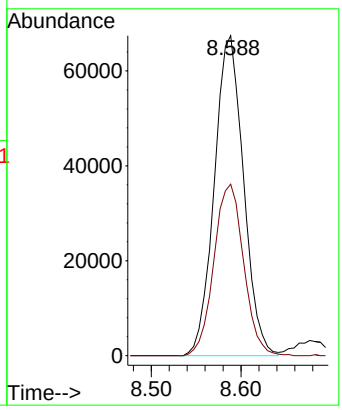
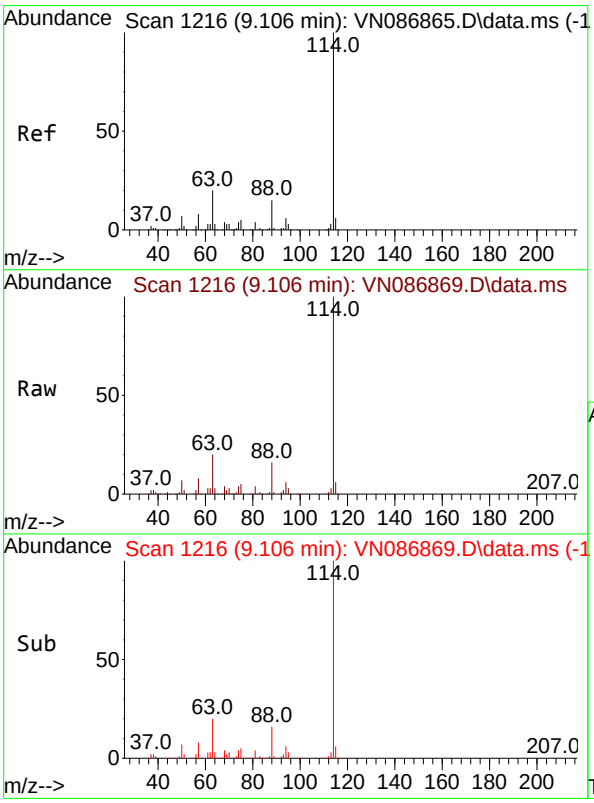
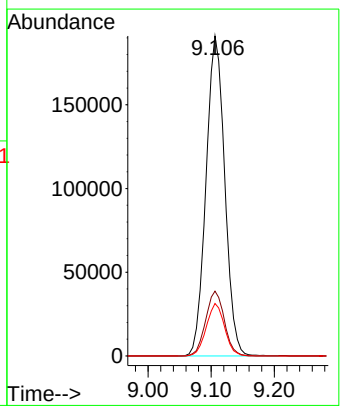


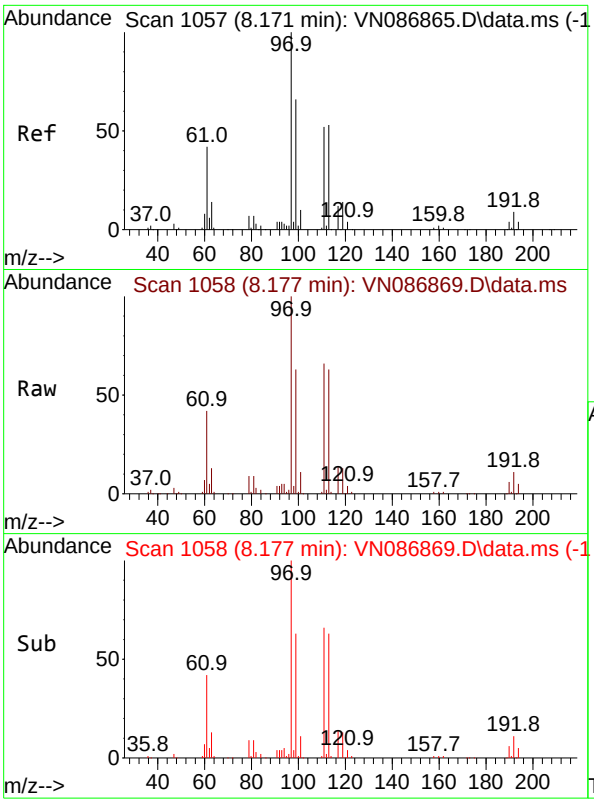




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.106 min Scan# 1216
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion:114 Resp: 394140

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 20.2 | 0.0 | 39.6 |
| 88 | 16.4 | 0.0 | 30.2 |

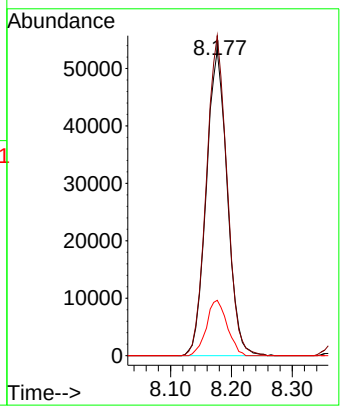





#35
Dibromofluoromethane
Concen: 54.416 ug/l
RT: 8.177 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion:113 Resp: 12710

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 103.4 | 84.2 | 126.2 |
| 192 | 18.0 | 14.2 | 21.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN060625

**Manual Integrations**
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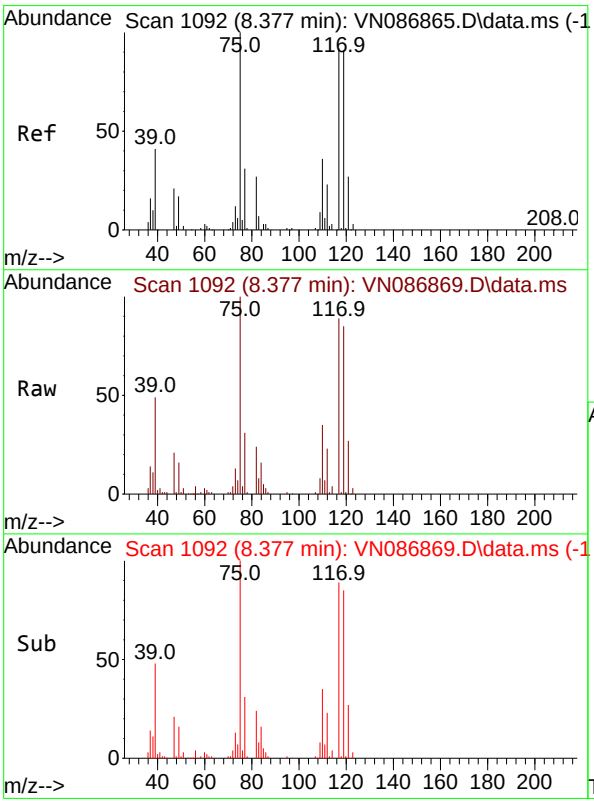
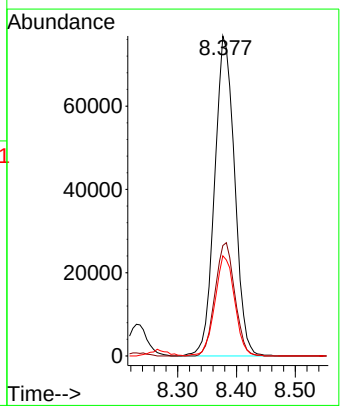
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

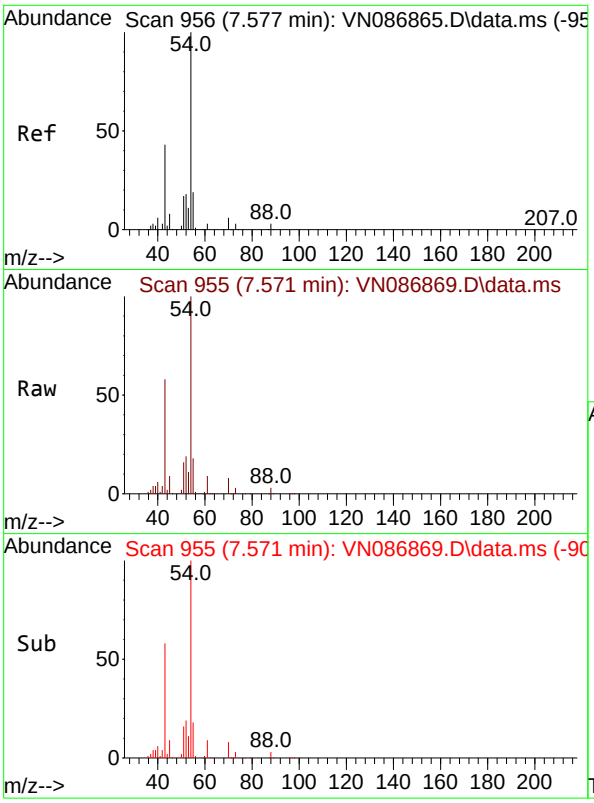



#36
1,1-Dichloropropene
Concen: 52.123 ug/l
RT: 8.377 min Scan# 1092
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 75 Resp: 181414

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 35.0 | 17.6 | 52.9 |
| 77 | 31.0 | 25.3 | 37.9 |

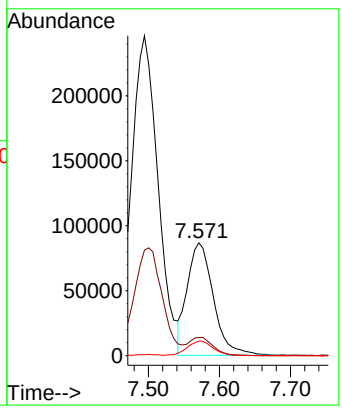





#37
Ethyl Acetate
Concen: 50.125 ug/l
RT: 7.571 min Scan# 9
Delta R.T. -0.006 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 43 Resp: 22209

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 15.6 | 12.1 | 18.1 |
| 70 | 12.9 | 9.8 | 14.6 |




**Instrument :**
MSVOA_N
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ICVVN060625

**Manual Integrations**
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Reviewed By :John Carlone 06/09/2025
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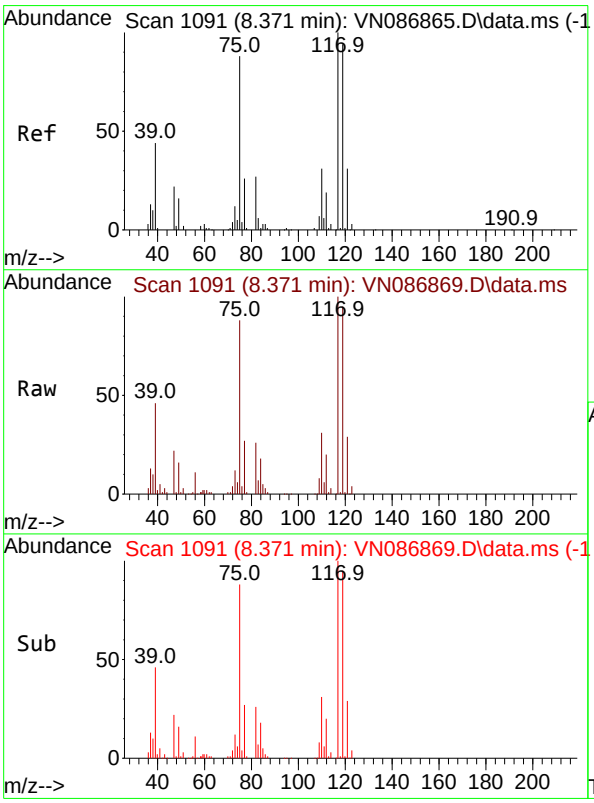
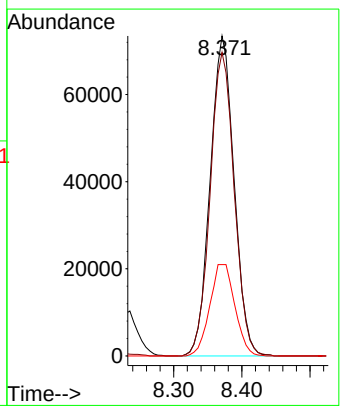
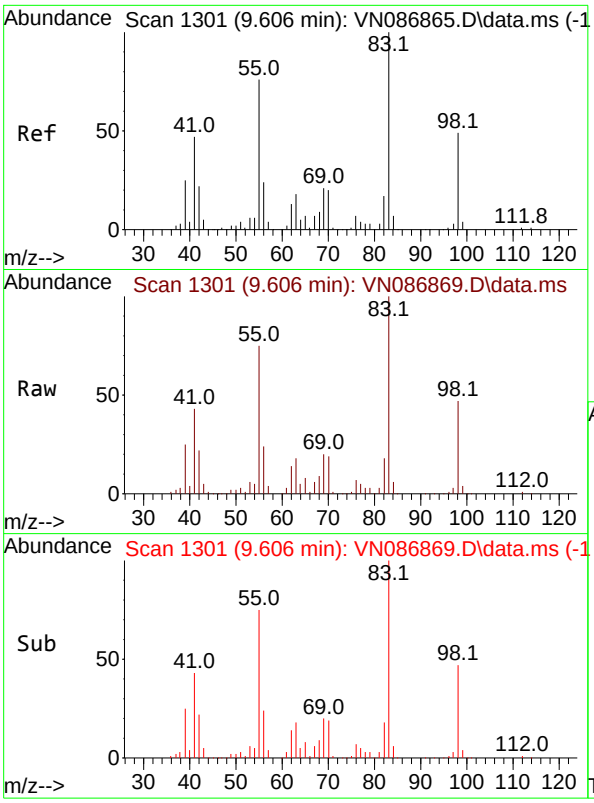



#38
Carbon Tetrachloride
Concen: 52.466 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion:117 Resp: 179281

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 94.8 | 75.0 | 112.6 |
| 121 | 28.5 | 24.9 | 37.3 |






#39
Methylcyclohexane
Concen: 52.686 ug/l
RT: 9.606 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 83 Resp: 25123

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 74.5 | 61.0 | 91.6 |
| 98 | 47.2 | 38.9 | 58.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN060625

**Manual Integrations**
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Reviewed By :John Carlone 06/09/2025
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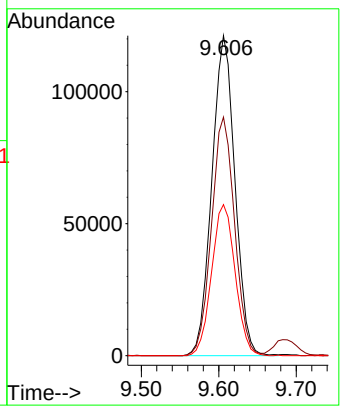
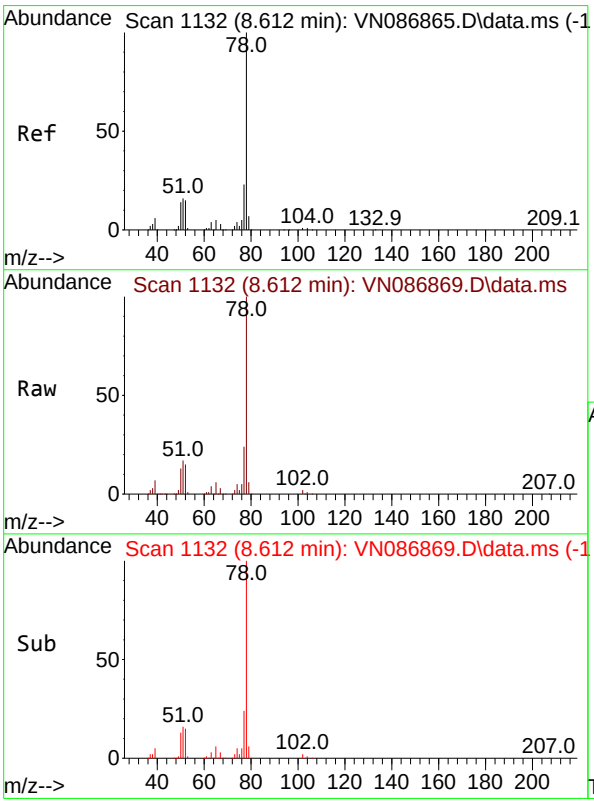
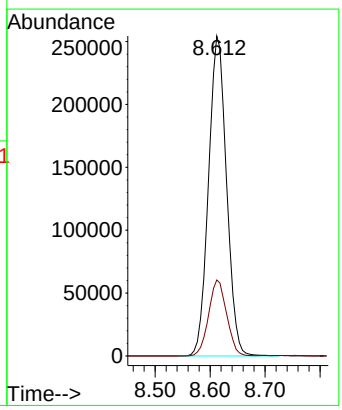


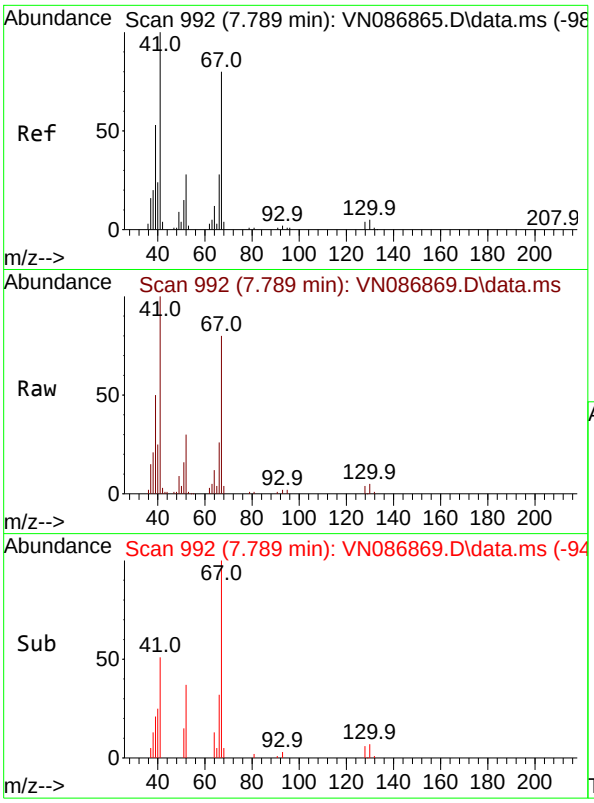




#40
Benzene
Concen: 50.931 ug/l
RT: 8.612 min Scan# 1132
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 78 Resp: 579667

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.7 | 18.7 | 28.1 |

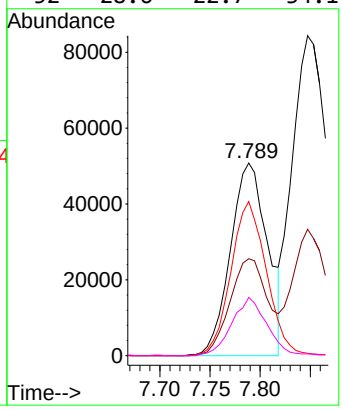





#41
Methacrylonitrile
Concen: 52.607 ug/l
RT: 7.789 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 41 Resp: 13090

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 51.3 | 41.2 | 61.8 |
| 67 | 76.9 | 61.4 | 92.2 |
| 52 | 28.6 | 22.7 | 34.1 |




**Instrument :**
MSVOA_N
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ICVVN060625

**Manual Integrations**
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Reviewed By :John Carlone 06/09/2025
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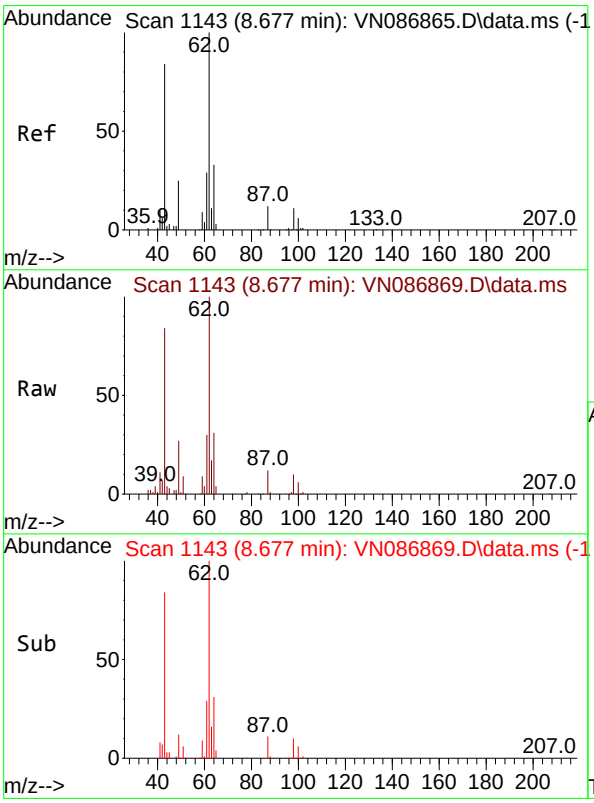
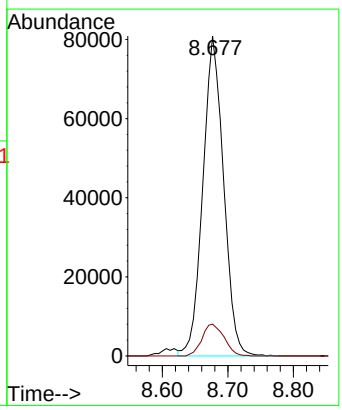
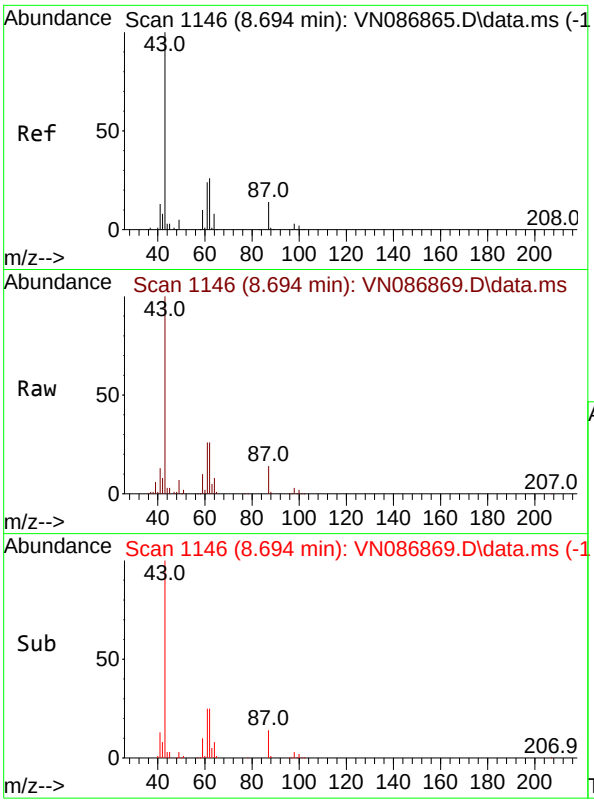



#42
1,2-Dichloroethane
Concen: 51.489 ug/l
RT: 8.677 min Scan# 1143
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 62 Resp: 177746

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 10.6 | 0.0 | 21.2 |






#43
Isopropyl Acetate
Concen: 50.536 ug/l
RT: 8.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 43 Resp: 35937

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 27.9 | 22.1 | 33.1 |
| 87 | 14.8 | 11.8 | 17.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN060625

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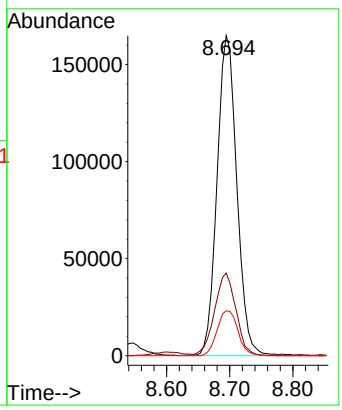
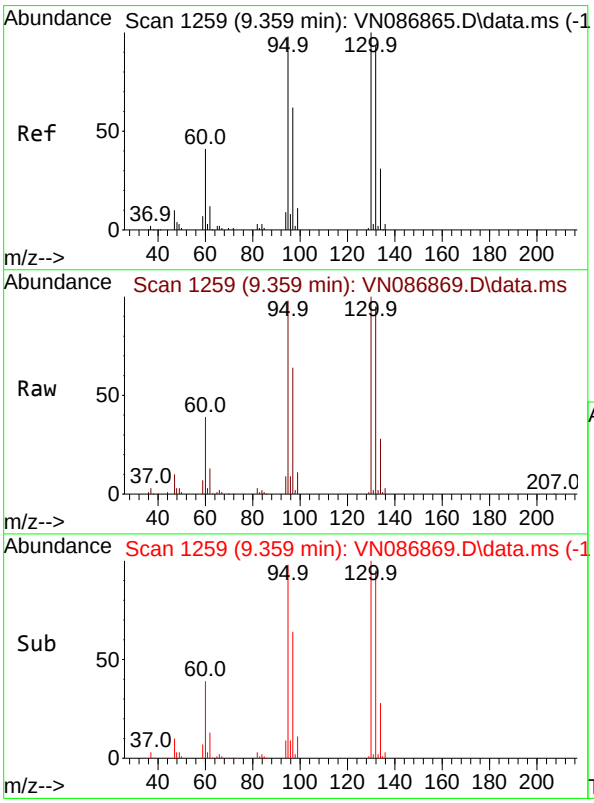
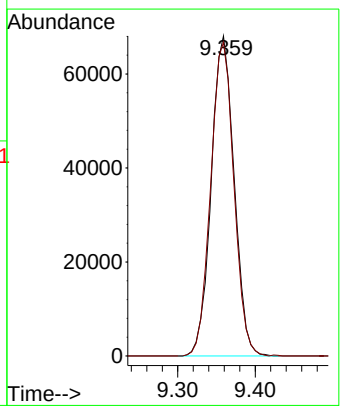


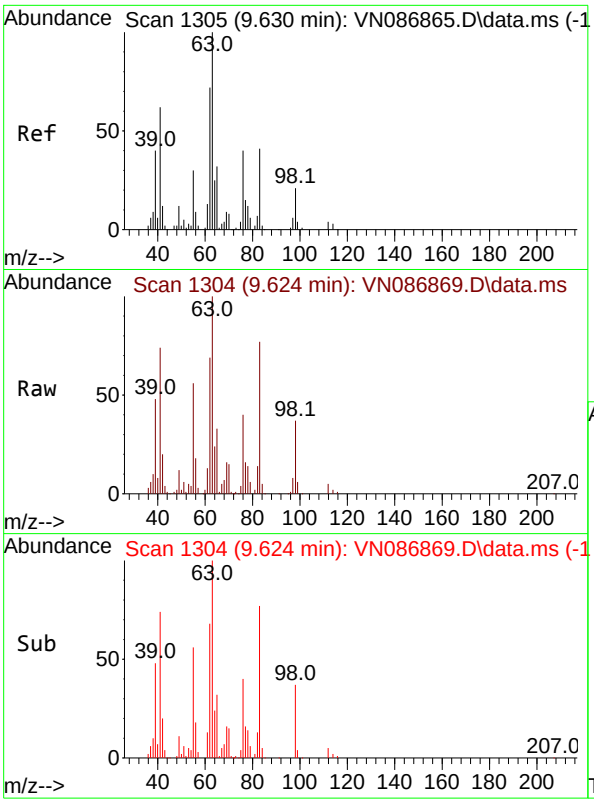




#44
Trichloroethene
Concen: 51.788 ug/l
RT: 9.359 min Scan# 1259
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion:130 Resp: 139763

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 98.0 | 0.0 | 196.2 |






#45
1,2-Dichloropropane
Concen: 51.450 ug/l
RT: 9.624 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 63 Resp: 14246

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 32.7 | 25.5 | 38.3 |

**Instrument :**
MSVOA_N
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ICVVN060625

**Manual Integrations**
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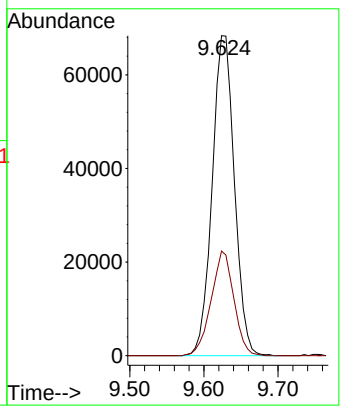
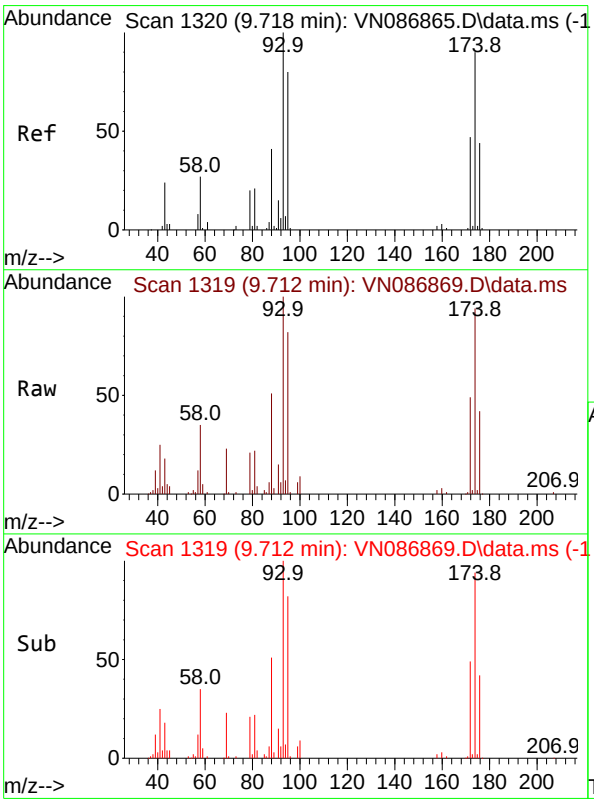
Supervised By :Mahesh Dadoda 06/09/2025

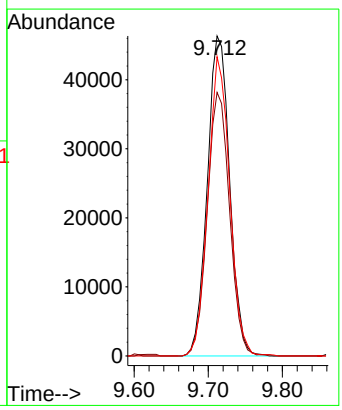


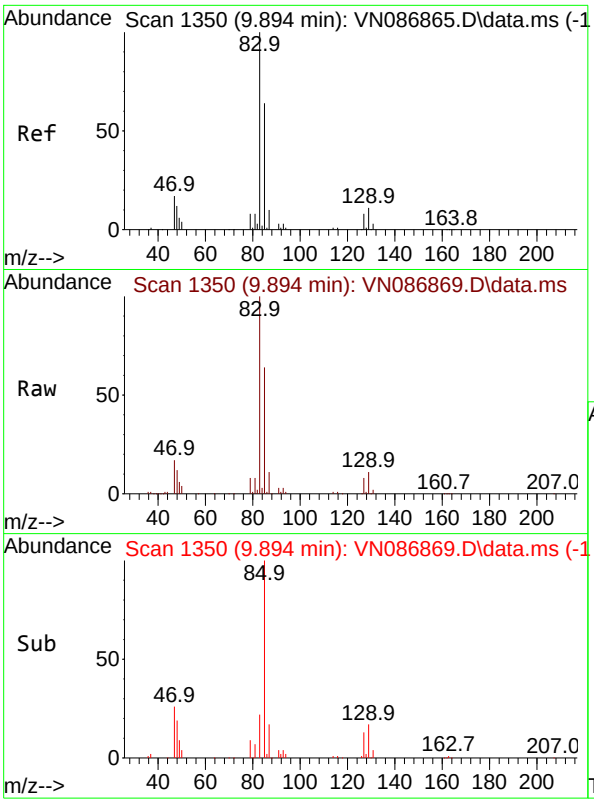




#46
Dibromomethane
Concen: 52.849 ug/l
RT: 9.712 min Scan# 1319
Delta R.T. -0.006 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 93 Resp: 97199

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 82.2 | 67.1 | 100.7 |
| 174 | 90.9 | 74.2 | 111.4 |

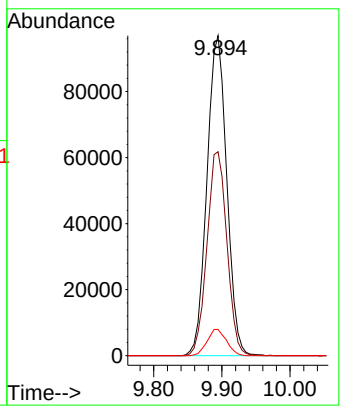





#47
Bromodichloromethane
Concen: 51.824 ug/l
RT: 9.894 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 83 Resp: 19610

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 63.8 | 50.9 | 76.3 |
| 127 | 8.2 | 6.6 | 10.0 |




**Instrument :**
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ICVVN060625

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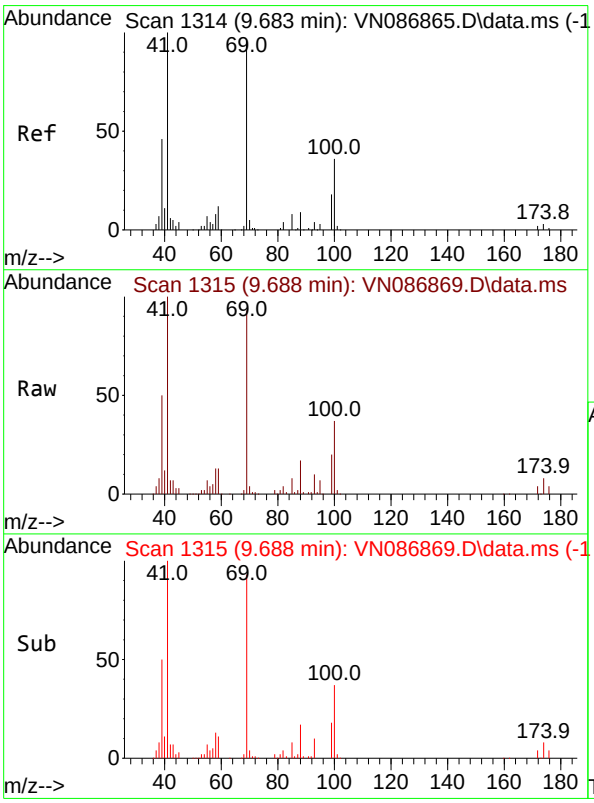
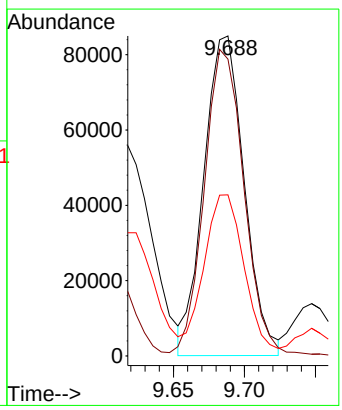
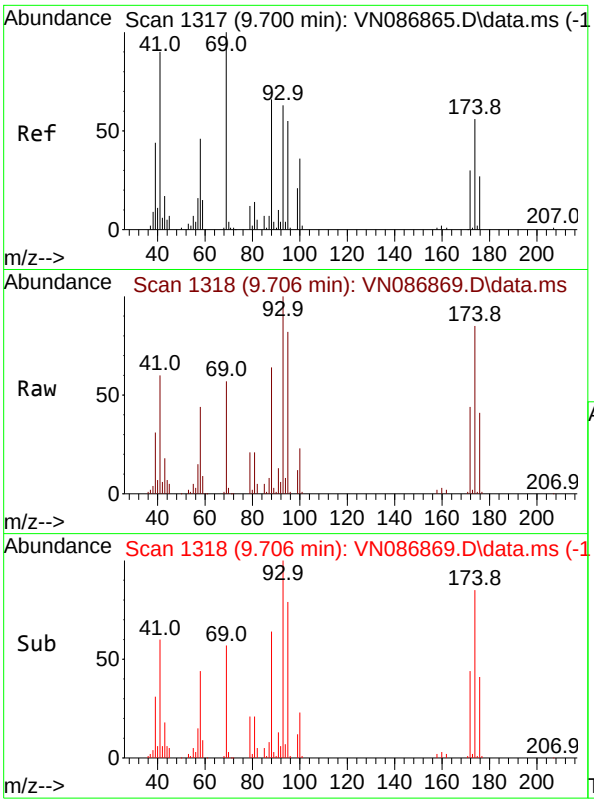



#48
Methyl methacrylate
Concen: 51.328 ug/l
RT: 9.688 min Scan# 1315
Delta R.T. 0.006 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 41 Resp: 168001

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 95.2 | 74.6 | 112.0 |
| 39 | 51.0 | 40.2 | 60.4 |






#49
1,4-Dioxane
Concen: 1110.123 ug/l
RT: 9.706 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 88 Resp: 6610

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 0.0 | 0.0 | 0.0 |
| 58 | 72.7 | 57.7 | 86.5 |

**Instrument :**
MSVOA_N
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ICVVN060625

**Manual Integrations**
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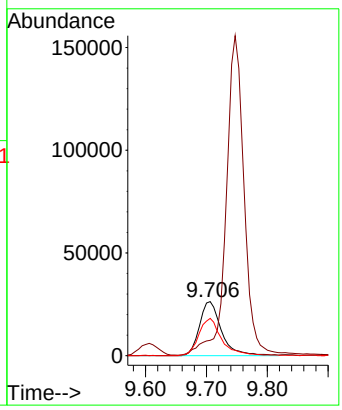
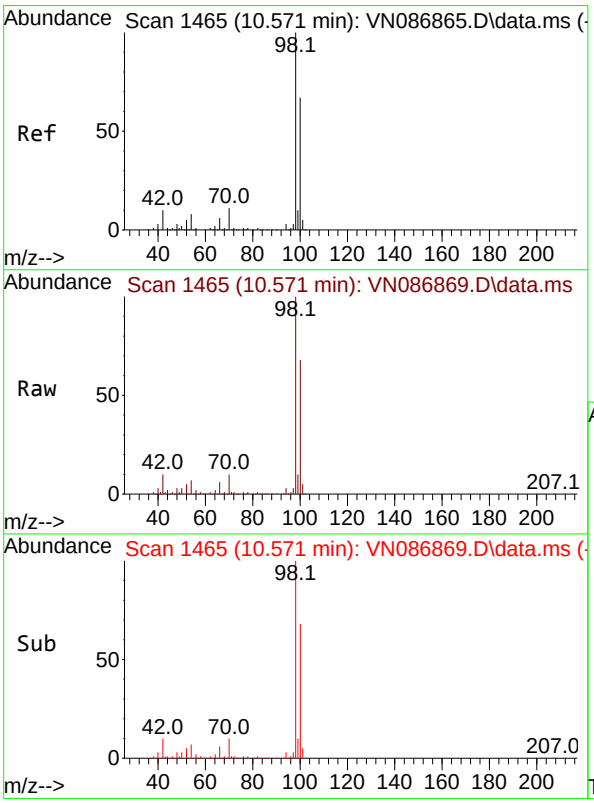
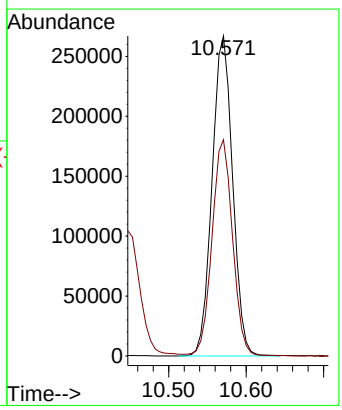


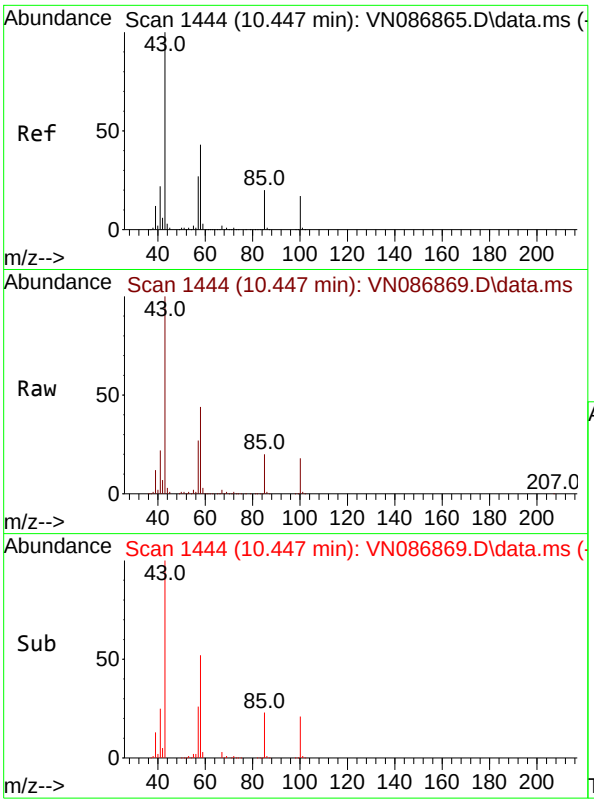




#50
Toluene-d8
Concen: 53.129 ug/l
RT: 10.571 min Scan# 1465
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 98 Resp: 491265

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 67.6 | 53.4 | 80.0 |






#51
4-Methyl-2-Pentanone
Concen: 267.835 ug/l
RT: 10.447 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 43 Resp: 114662

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 43.2 | 34.2 | 51.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN060625

**Manual Integrations**
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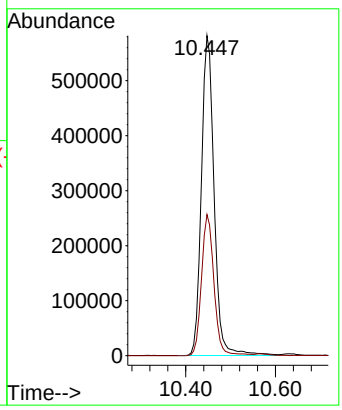
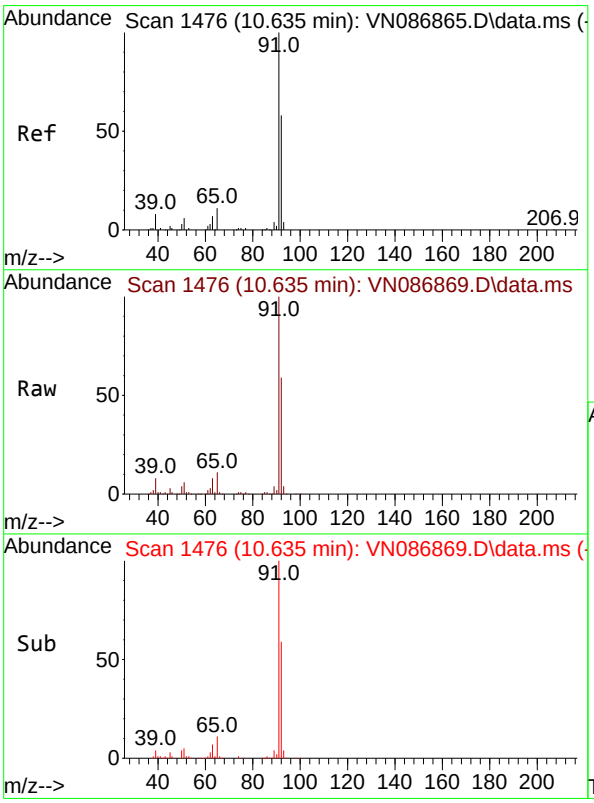
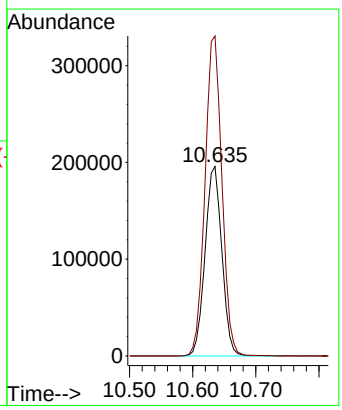


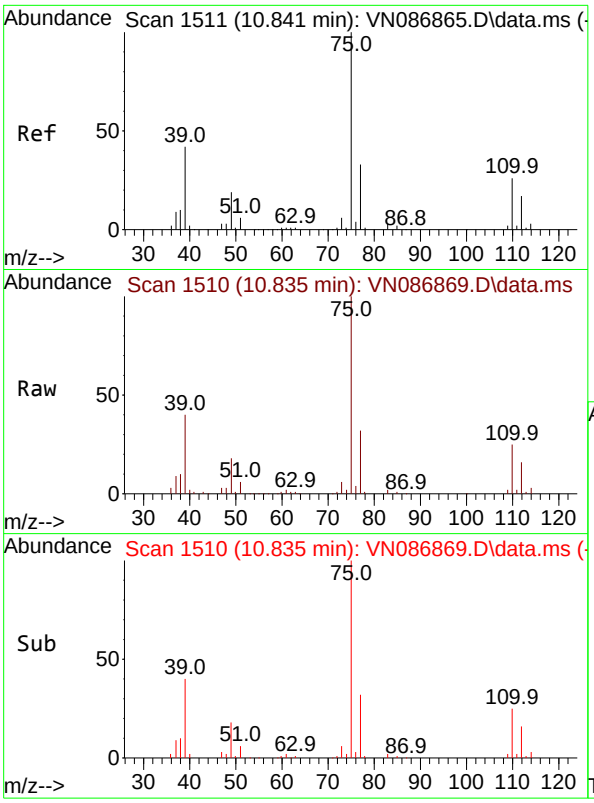




#52
Toluene
Concen: 52.040 ug/l
RT: 10.635 min Scan# 1476
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 92 Resp: 361963

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 169.8 | 136.5 | 204.7 |

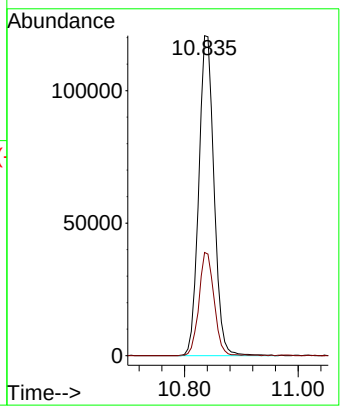





#53
t-1,3-Dichloropropene
Concen: 53.137 ug/l
RT: 10.835 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 75 Resp: 22483

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.3 | 26.4 | 39.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN060625

**Manual Integrations**
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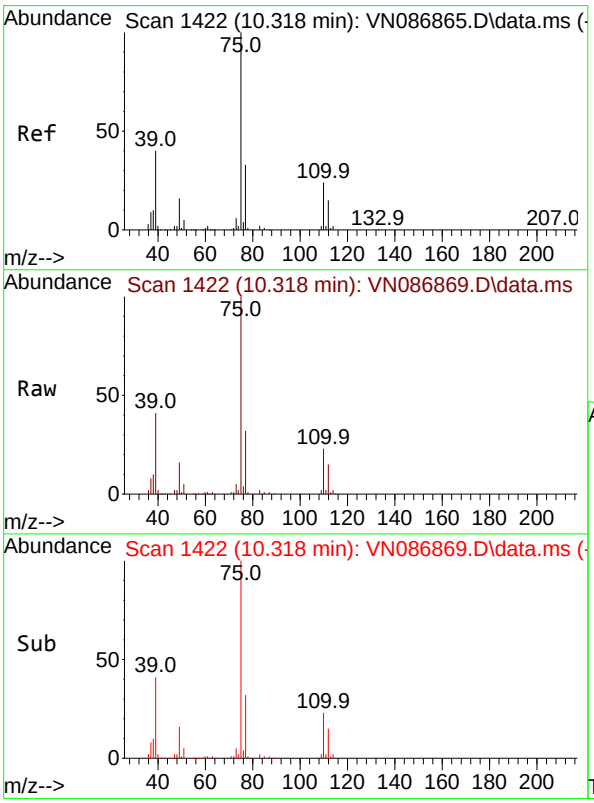
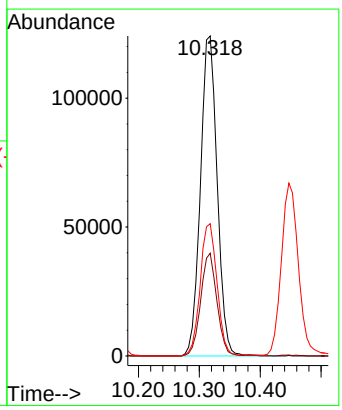
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

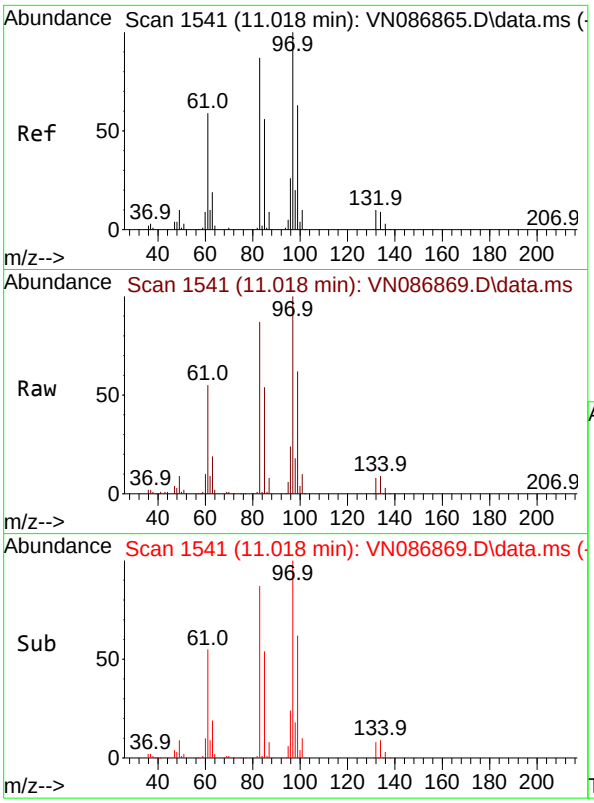



#54
cis-1,3-Dichloropropene
Concen: 52.519 ug/l
RT: 10.318 min Scan# 1422
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 75 Resp: 237774

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.1 | 26.2 | 39.4 |
| 39 | 41.3 | 32.3 | 48.5 |

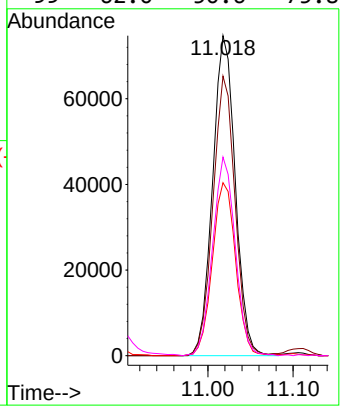





#55
1,1,2-Trichloroethane
Concen: 51.562 ug/l
RT: 11.018 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 97 Resp: 13799

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 87.4 | 69.7 | 104.5 |
| 85 | 54.1 | 45.1 | 67.7 |
| 99 | 62.0 | 50.6 | 75.8 |




**Instrument :**
MSVOA_N
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ICVVN060625

**Manual Integrations**
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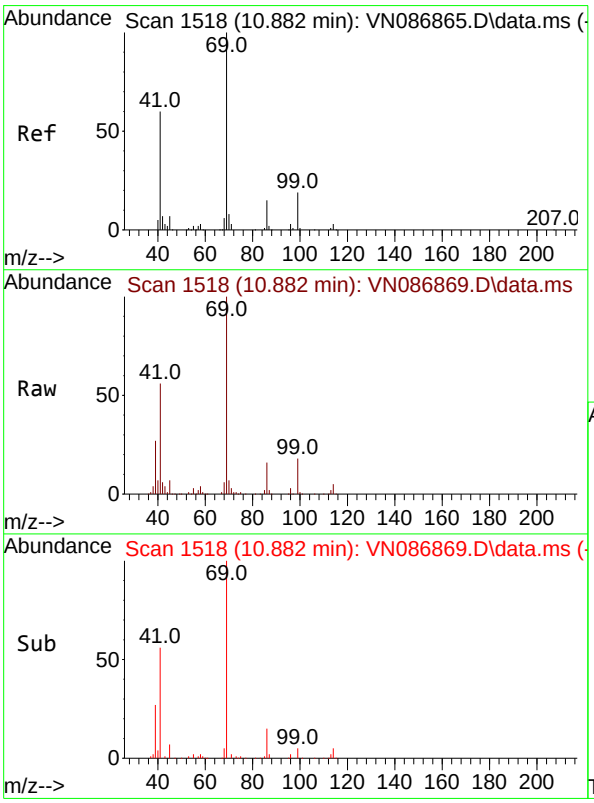
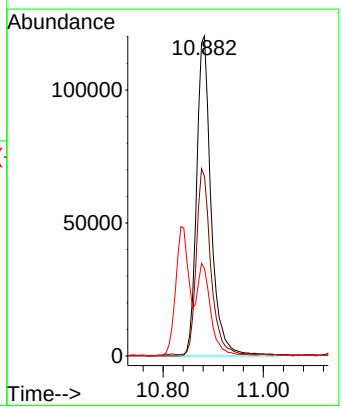
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

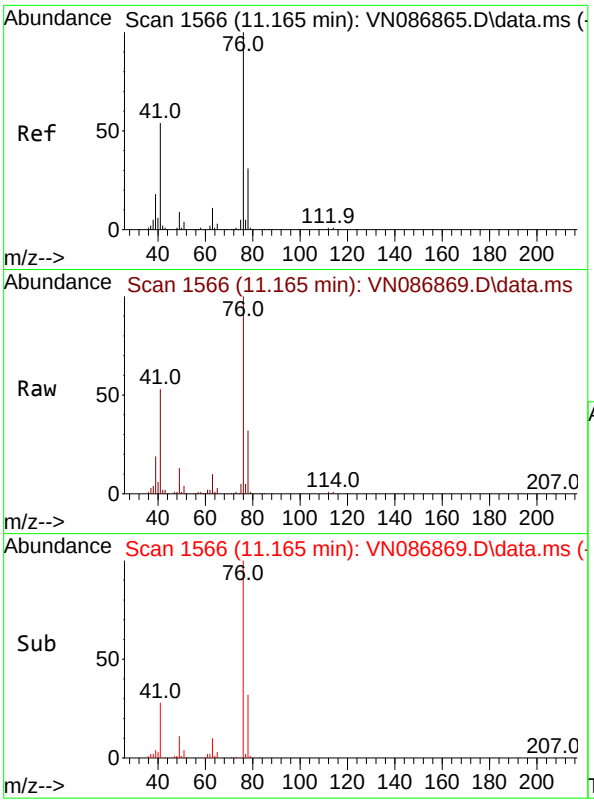



#56
Ethyl methacrylate
Concen: 56.688 ug/l
RT: 10.882 min Scan# 1518
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 69 Resp: 241649

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 57.7 | 47.2 | 70.8 |
| 39 | 27.4 | 23.0 | 34.6 |

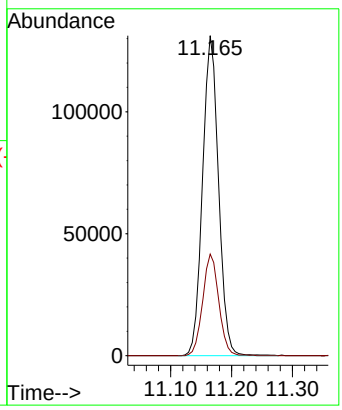





#57
1,3-Dichloropropane
Concen: 51.386 ug/l
RT: 11.165 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 76 Resp: 23857

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.0 | 25.3 | 37.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN060625

**Manual Integrations**
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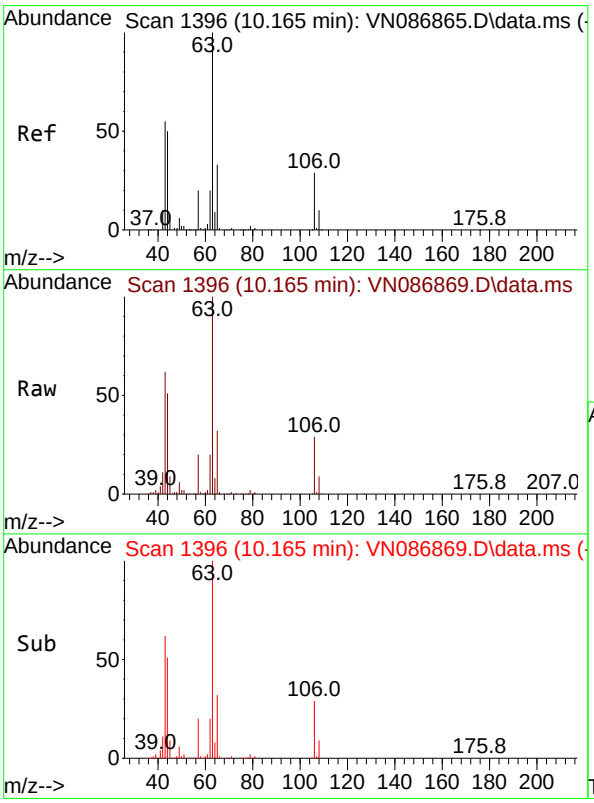
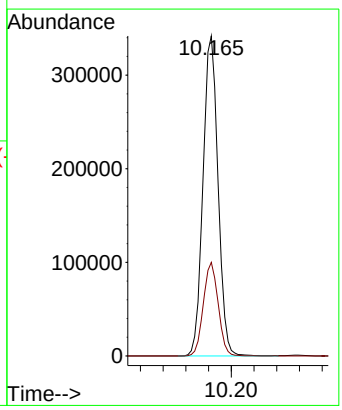
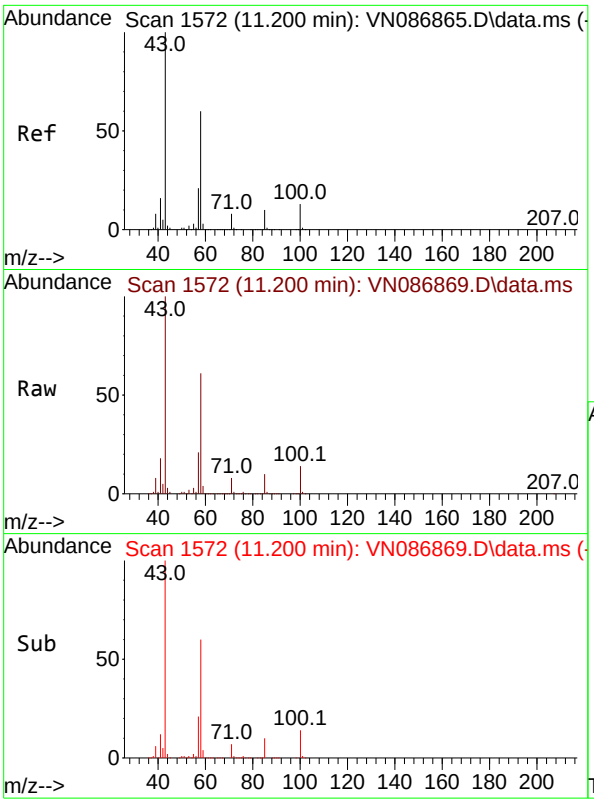



#58
2-Chloroethyl Vinyl ether
Concen: 246.006 ug/l
RT: 10.165 min Scan# 1396
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 63 Resp: 625479

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 28.9 | 23.0 | 34.6 |






#59
2-Hexanone
Concen: 283.478 ug/l
RT: 11.200 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 43 Resp: 78171

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 61.2 | 30.4 | 91.3 |

**Instrument :**
MSVOA_N
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ICVVN060625

**Manual Integrations**
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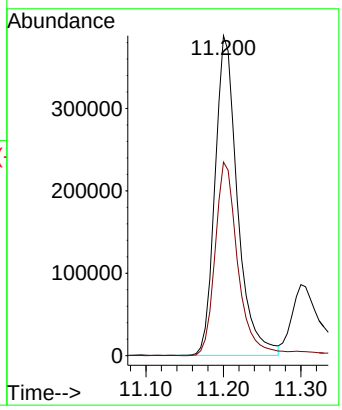
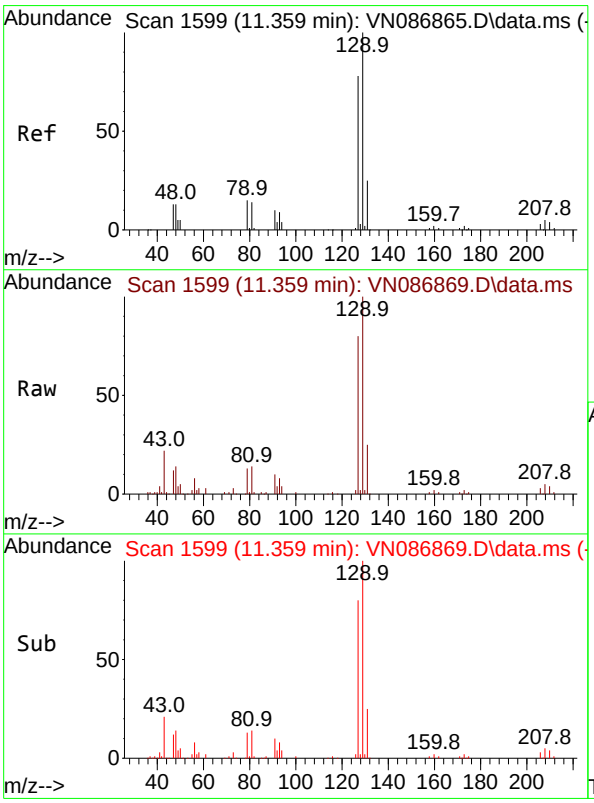
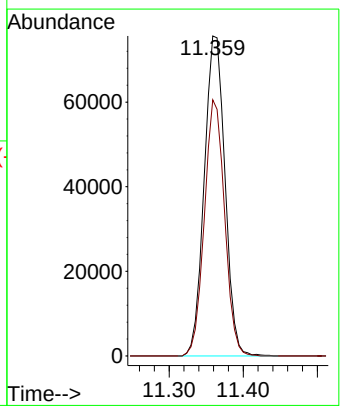


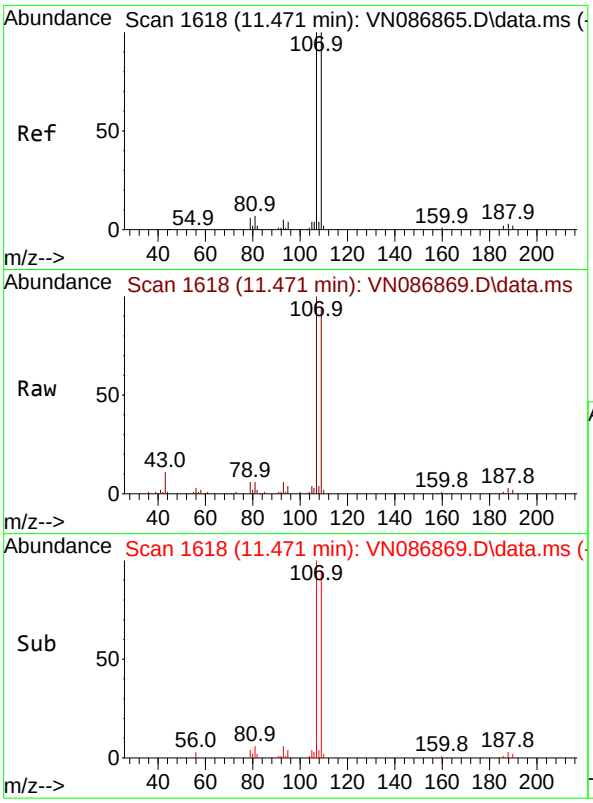




#60
Dibromochloromethane
Concen: 52.627 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion:129 Resp: 146749

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






#61
1,2-Dibromoethane
Concen: 51.887 ug/l
RT: 11.471 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion:107 Resp: 14233

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 94.5 | 76.3 | 114.5 |

**Instrument :**
MSVOA_N
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ICVVN060625

**Manual Integrations**
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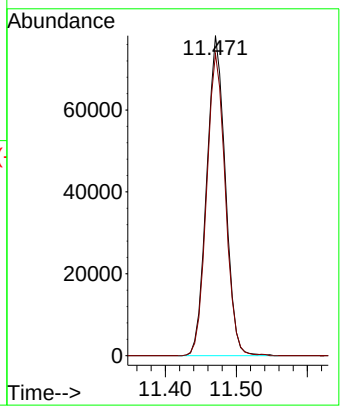
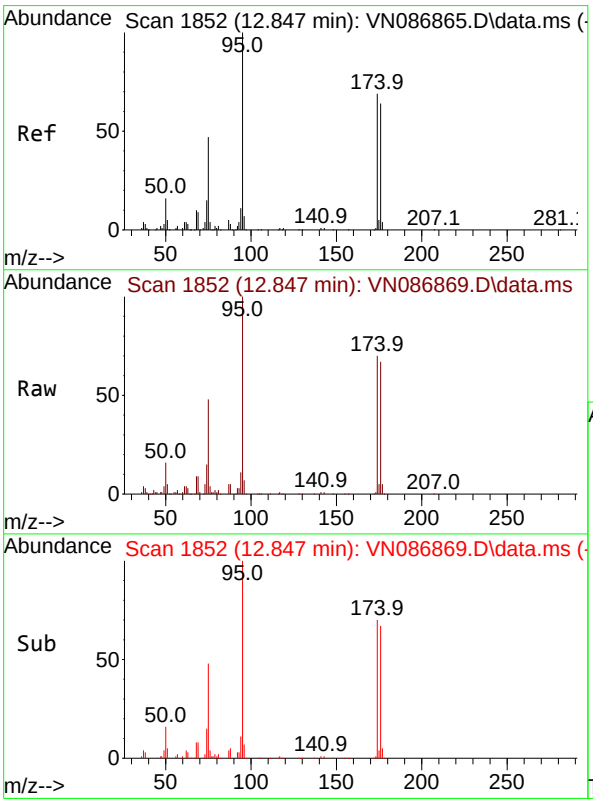
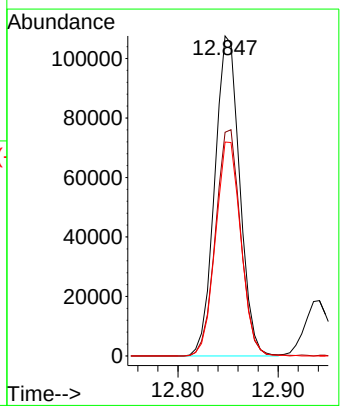


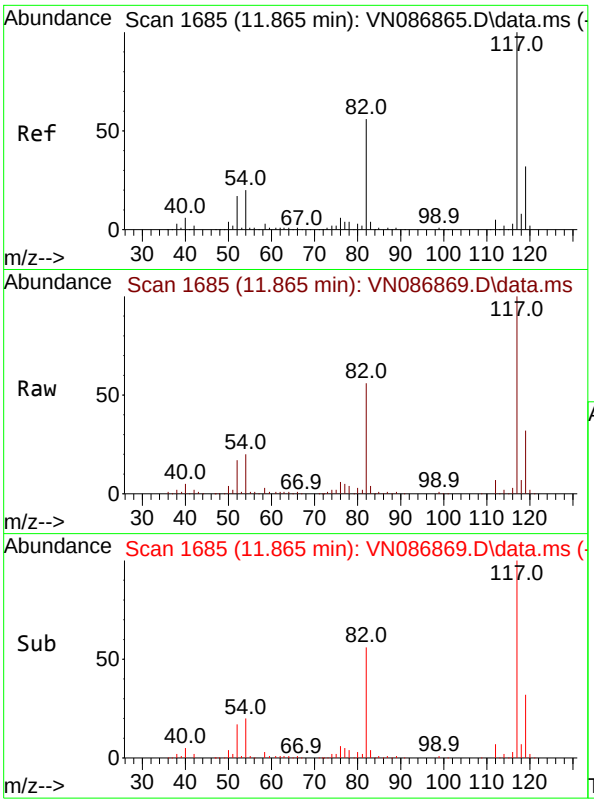




#62
4-Bromofluorobenzene
Concen: 54.081 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 95 Resp: 185792

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 71.4 | 0.0 | 141.8 |
| 176 | 68.1 | 0.0 | 132.6 |






#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion:117 Resp: 34893

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 56.5 | 44.6 | 67.0 |
| 119 | 32.5 | 25.5 | 38.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN060625

**Manual Integrations**
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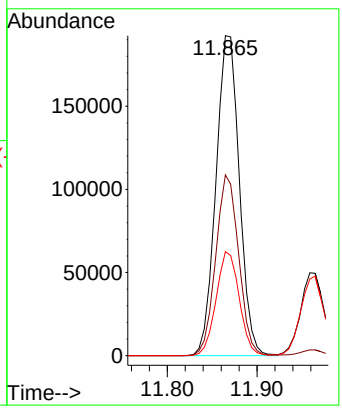
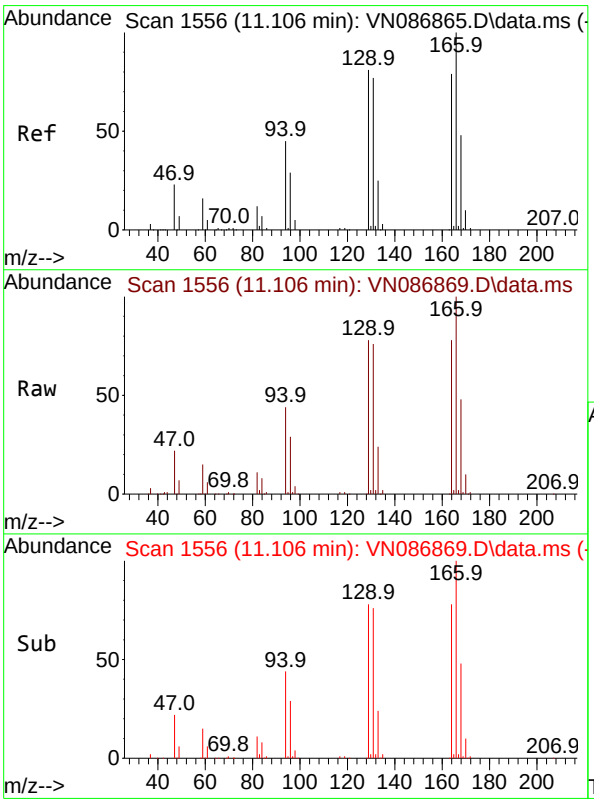
Supervised By :Mahesh Dadoda 06/09/2025

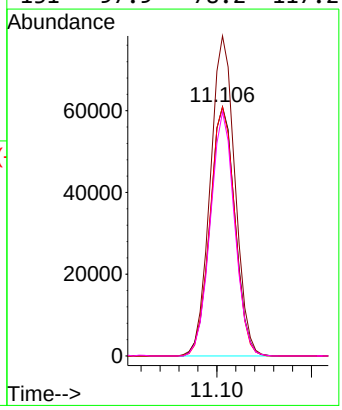


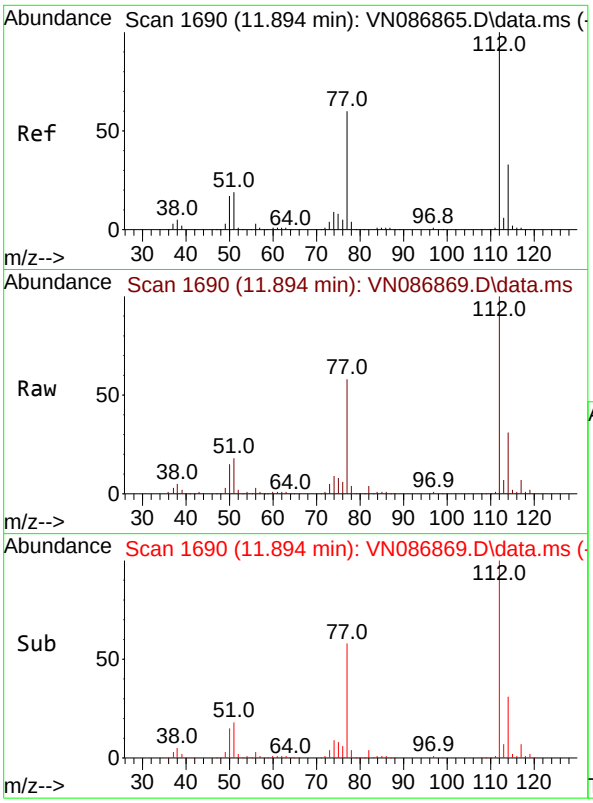




#64
Tetrachloroethene
Concen: 50.450 ug/l
RT: 11.106 min Scan# 1556
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion:164 Resp: 111409

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 128.5 | 101.8 | 152.8 |
| 129 | 99.9 | 83.0 | 124.4 |
| 131 | 97.9 | 78.2 | 117.2 |

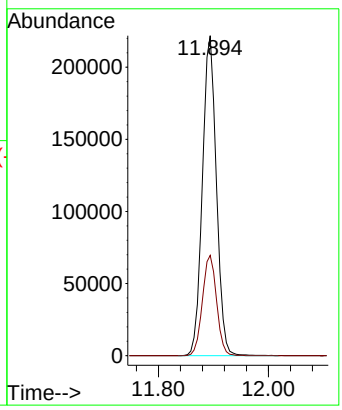





#65
Chlorobenzene
Concen: 50.892 ug/l
RT: 11.894 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion:112 Resp: 39166

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 31.3 | 26.2 | 39.2 |




**Instrument :**
MSVOA_N
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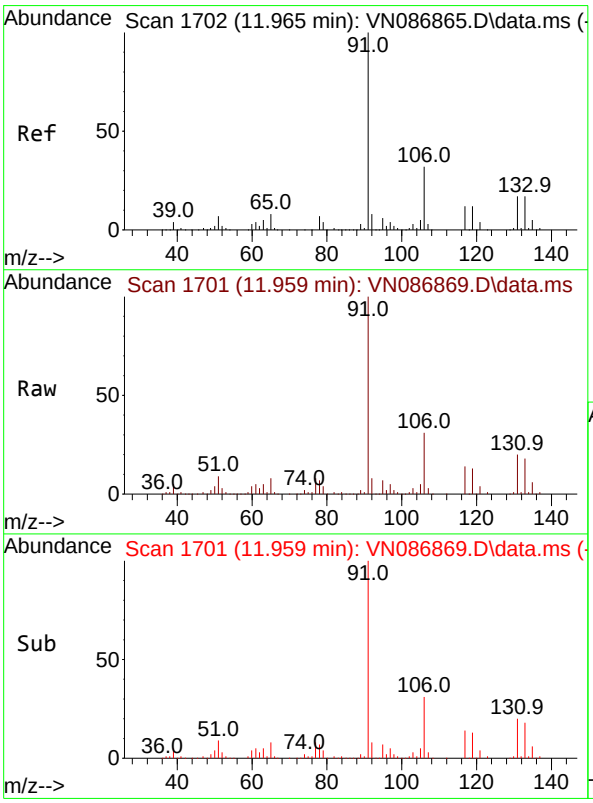
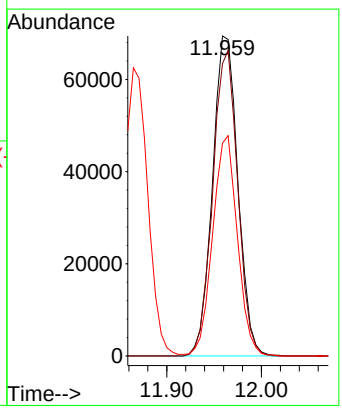
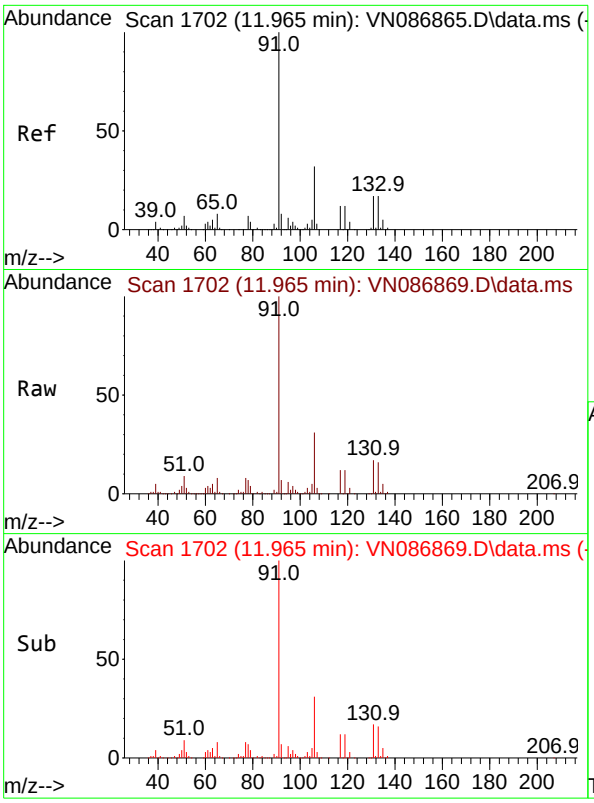



#66
1,1,1,2-Tetrachloroethane
Concen: 52.164 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.006 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion:131 Resp: 129045

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 94.5 | 48.3 | 144.8 |
| 119 | 67.4 | 34.0 | 101.8 |






#67
Ethyl Benzene
Concen: 51.590 ug/l
RT: 11.965 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 91 Resp: 68387

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 30.9 | 25.4 | 38.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN060625

**Manual Integrations**
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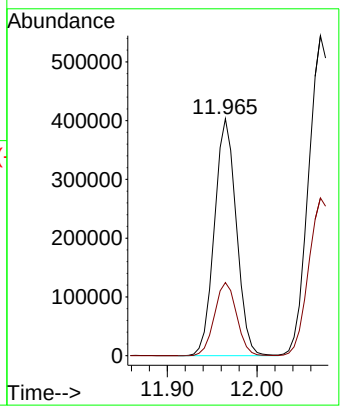
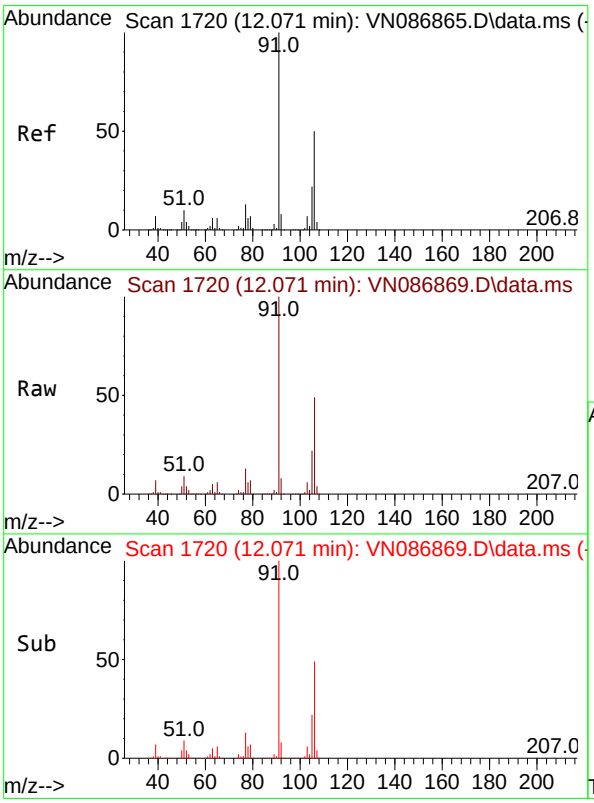
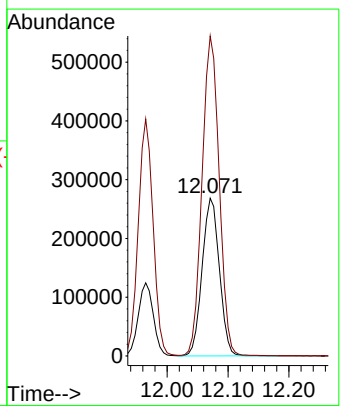


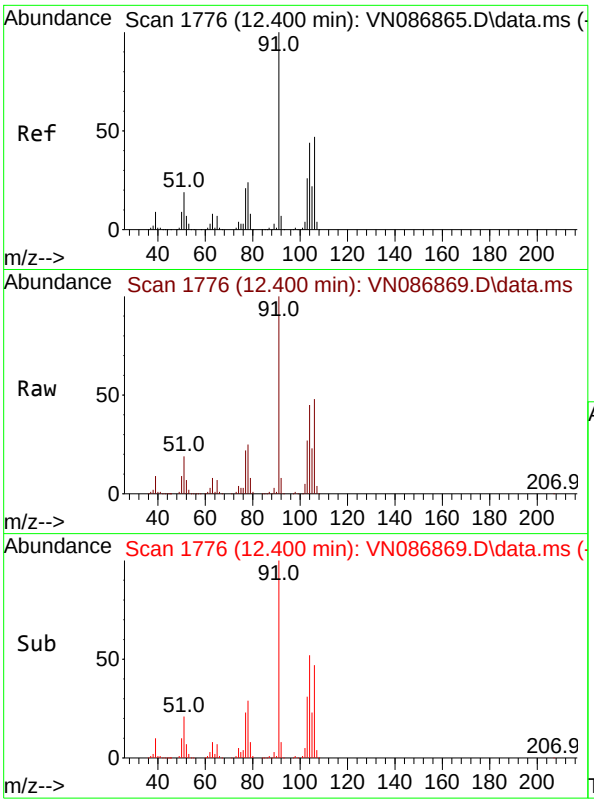




#68
m/p-Xylenes
Concen: 103.912 ug/l
RT: 12.071 min Scan# 1720
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion:106 Resp: 527293

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 202.0 | 159.4 | 239.0 |






#69
o-Xylene
Concen: 52.387 ug/l
RT: 12.400 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion:106 Resp: 25460

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 212.8 | 106.1 | 318.1 |

**Instrument :**
MSVOA_N
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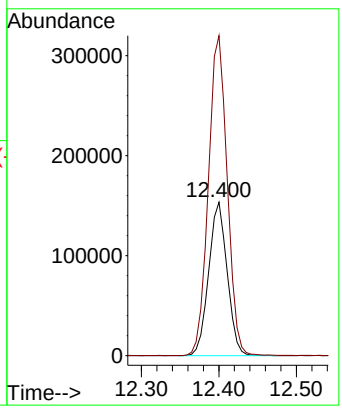
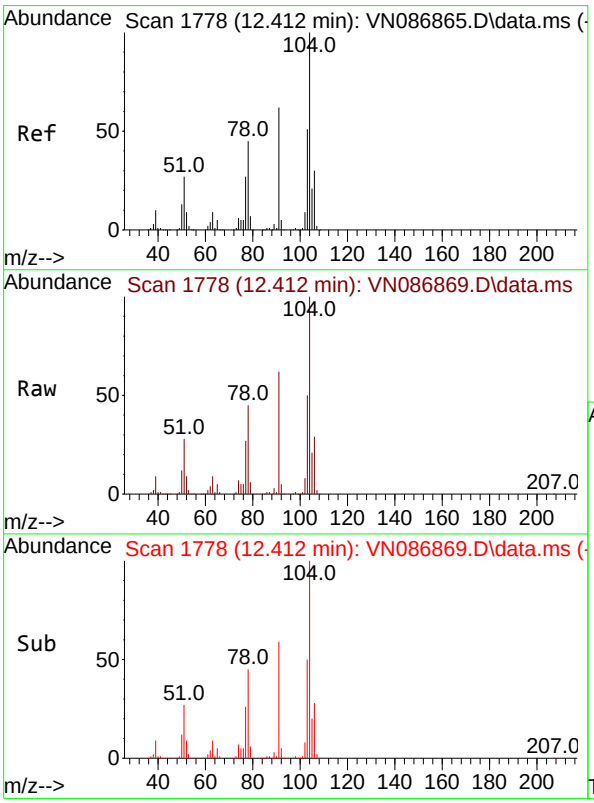
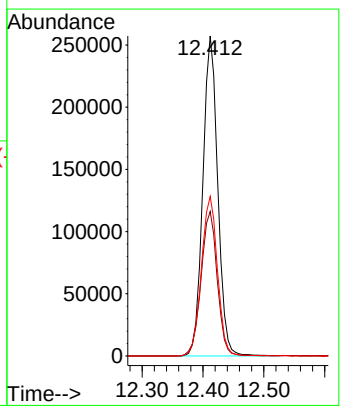


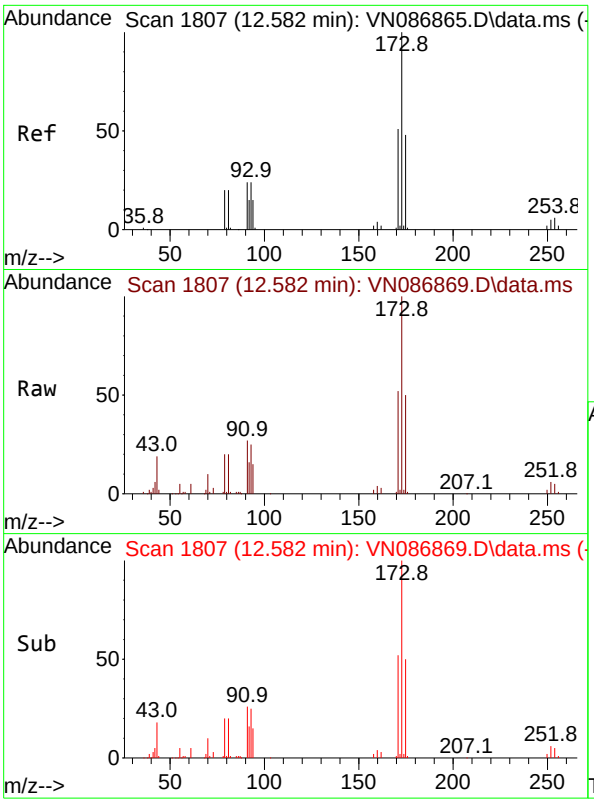




#70
Styrene
Concen: 52.758 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion:104 Resp: 438751

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 48.7 | 38.5 | 57.7 |
| 103 | 53.7 | 43.1 | 64.7 |

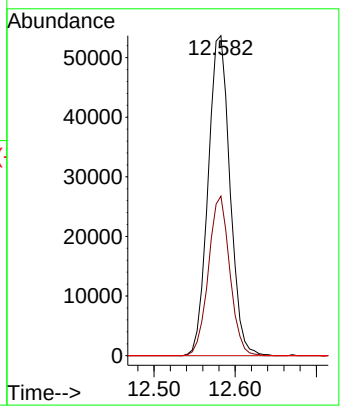





#71
Bromoform
Concen: 54.751 ug/l
RT: 12.582 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion:173 Resp: 10035

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 48.7 | 24.1 | 72.4 |
| 254 | 0.0 | 0.0 | 0.0 |




**Instrument :**
MSVOA_N
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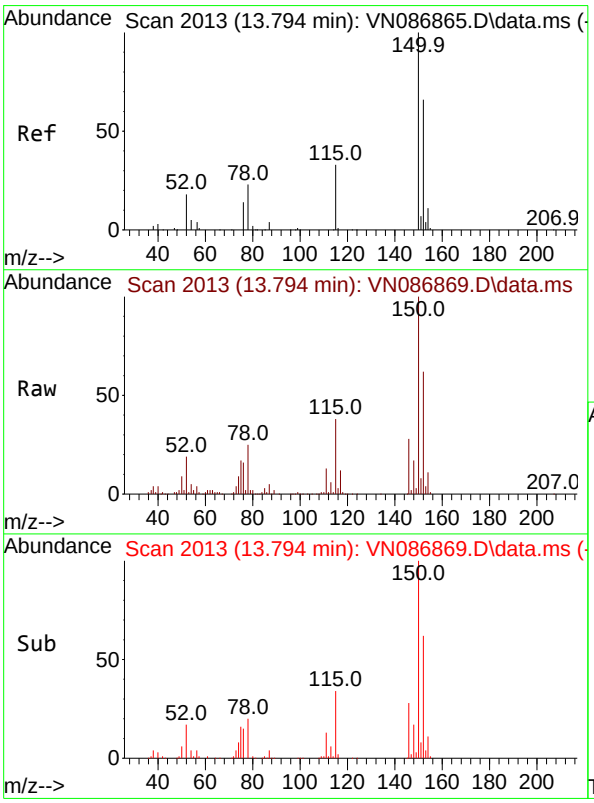
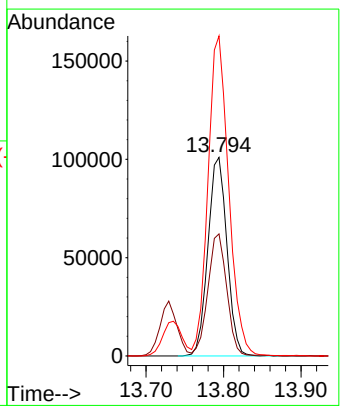
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

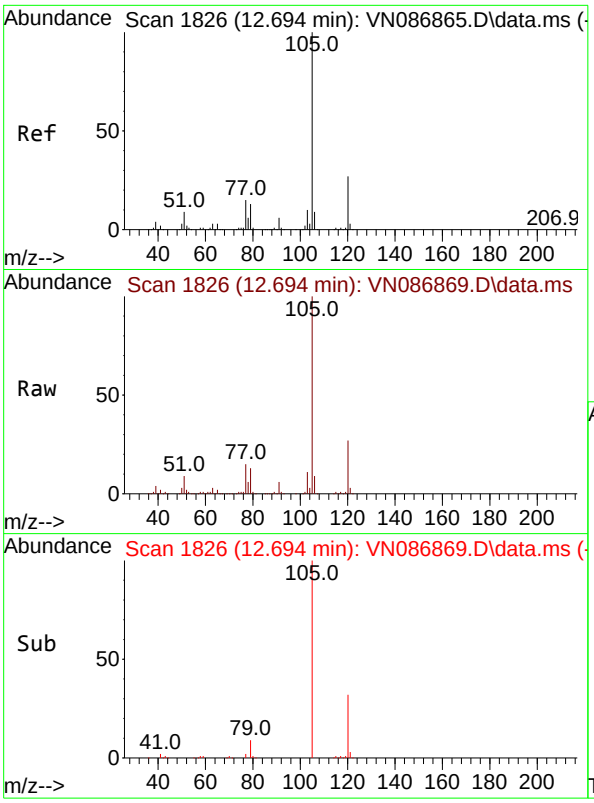



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion:152 Resp: 172710

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 60.6 | 30.1 | 90.5 |
| 150 | 174.0 | 0.0 | 345.0 |






#73
Isopropylbenzene
Concen: 51.823 ug/l
RT: 12.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion:105 Resp: 65204

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 27.1 | 13.5 | 40.4 |

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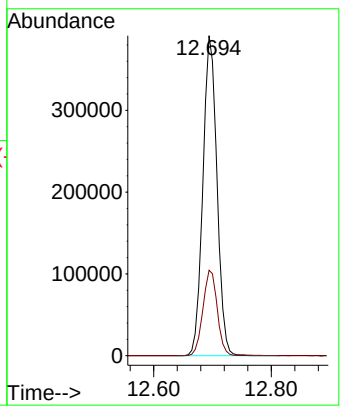
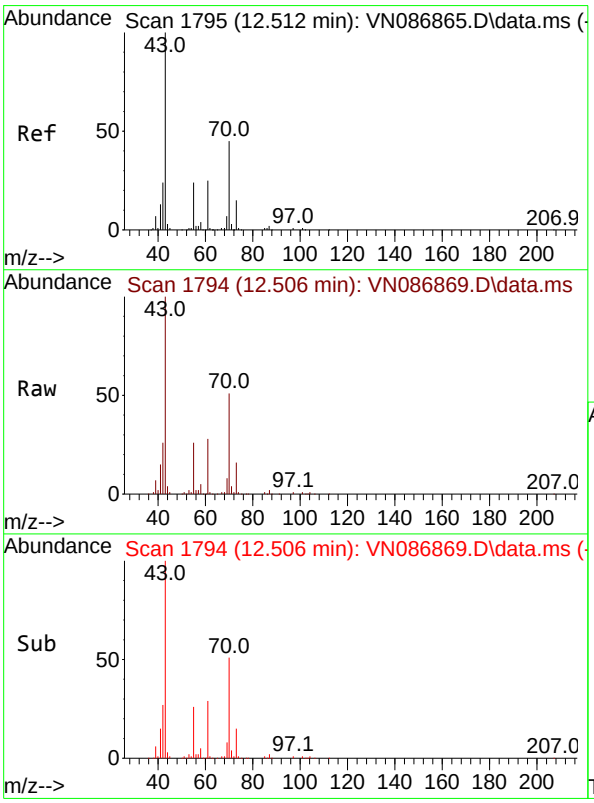
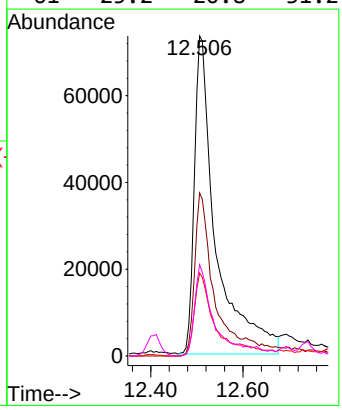


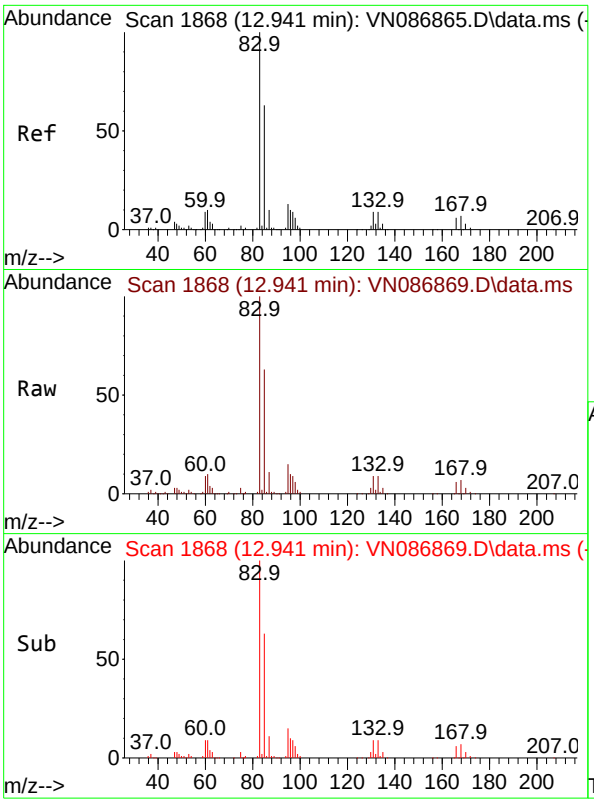




#74
N-amyl acetate
Concen: 54.212 ug/l
RT: 12.506 min Scan# 1794
Delta R.T. -0.006 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 43 Resp: 238355

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 49.3 | 37.6 | 56.4 |
| 55 | 25.3 | 19.0 | 28.6 |
| 61 | 25.2 | 20.8 | 31.2 |






#75
1,1,2,2-Tetrachloroethane
Concen: 51.763 ug/l
RT: 12.941 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 83 Resp: 22064

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 9.8 | 4.9 | 14.7 |
| 85 | 63.9 | 32.0 | 96.0 |

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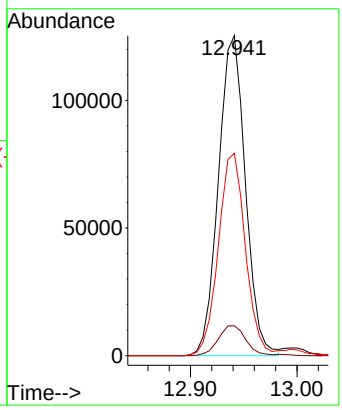
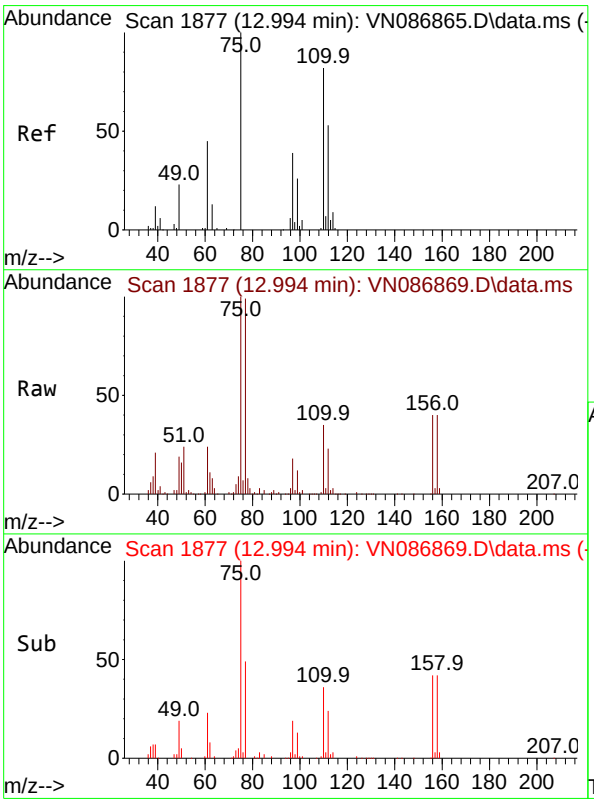
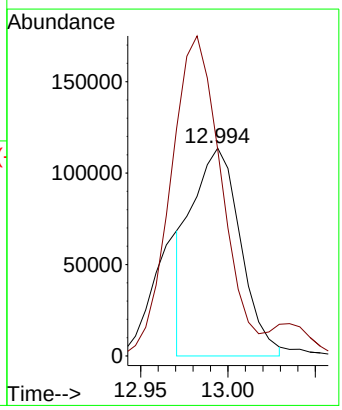


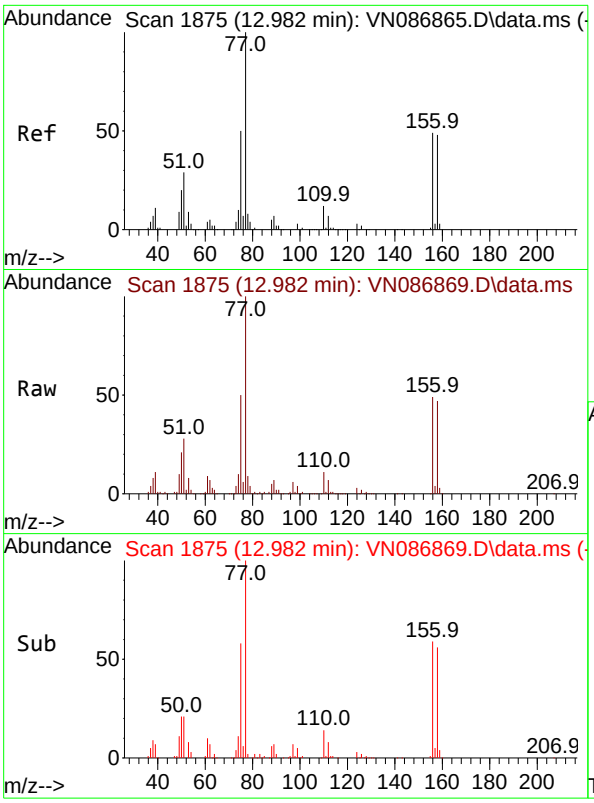




#76
1,2,3-Trichloropropane
Concen: 53.821 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 75 Resp: 220957

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 160.5 | 79.3 | 237.9 |

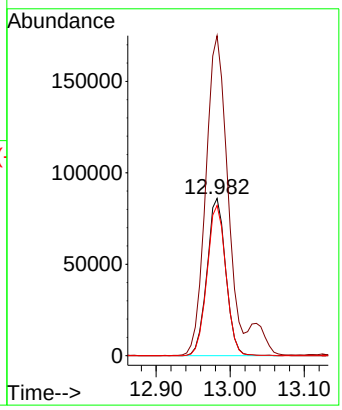





#77
Bromobenzene
Concen: 52.313 ug/l
RT: 12.982 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion:156 Resp: 15095

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 234.9 | 117.7 | 353.1 |
| 158 | 96.5 | 48.1 | 144.4 |

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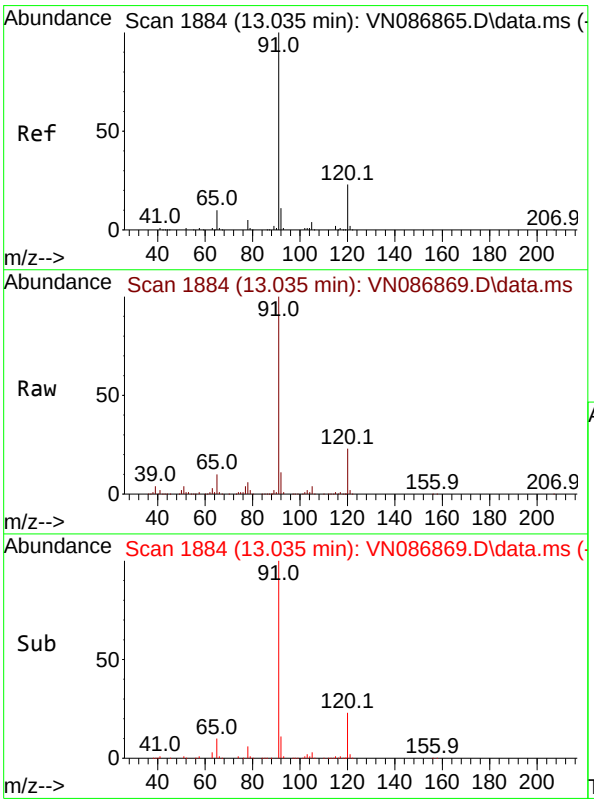
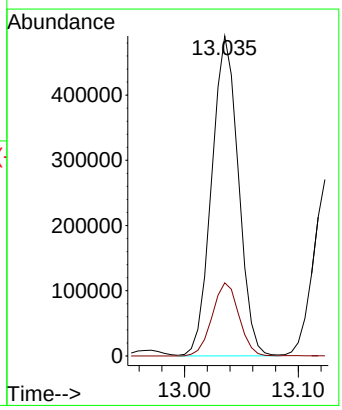
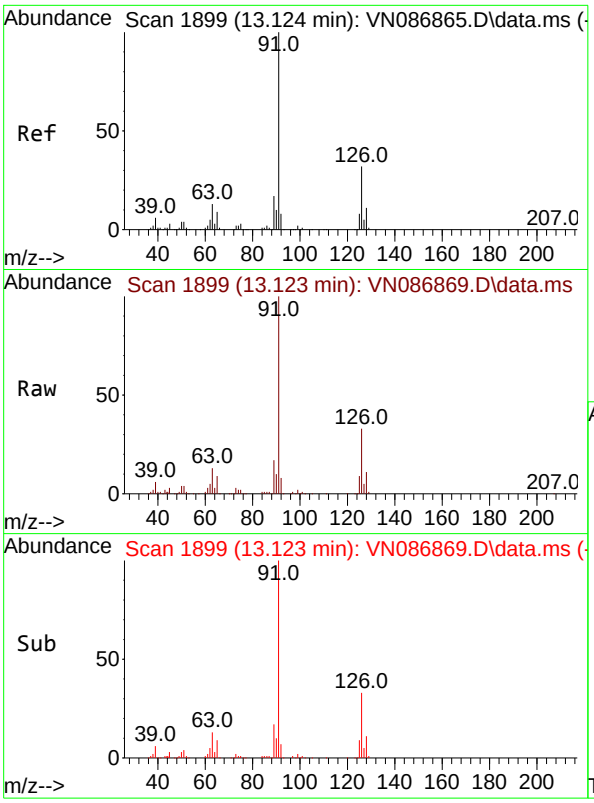



#78
n-propylbenzene
Concen: 52.397 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 91 Resp: 801180

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.9 | 11.4 | 34.2 |






#79
2-Chlorotoluene
Concen: 51.650 ug/l
RT: 13.123 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 91 Resp: 47362

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 32.8 | 16.2 | 48.5 |

**Instrument :**
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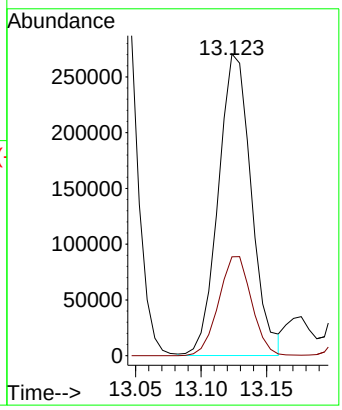
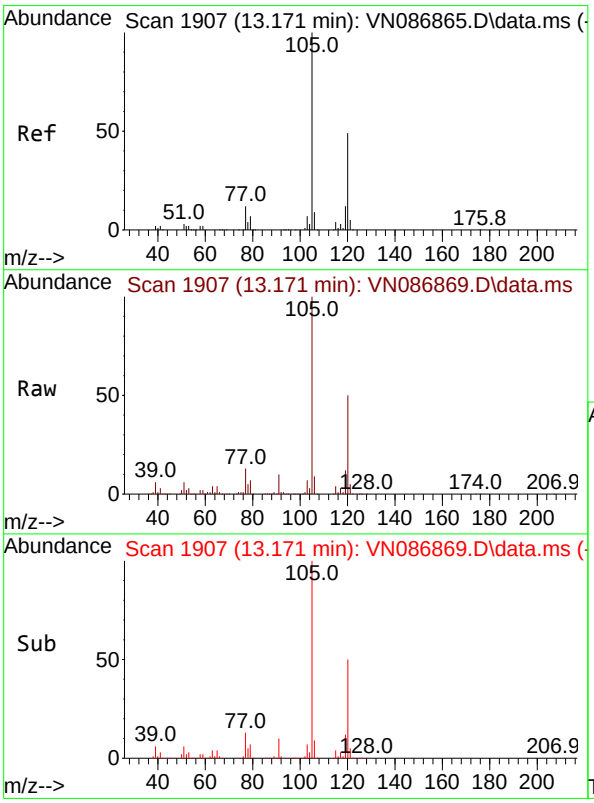
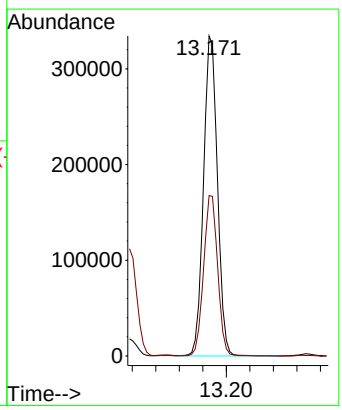


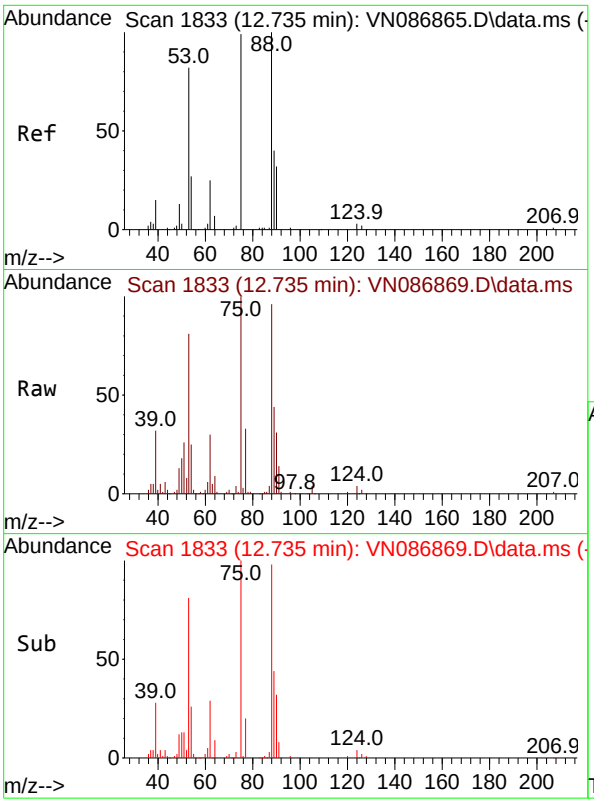




#80
1,3,5-Trimethylbenzene
Concen: 52.787 ug/l
RT: 13.171 min Scan# 1907
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion:105 Resp: 548347

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 50.6 | 24.9 | 74.6 |

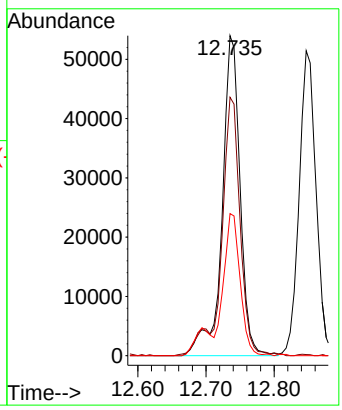





#81
trans-1,4-Dichloro-2-butene
Concen: 55.702 ug/l
RT: 12.735 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 75 Resp: 9934

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 83.7 | 66.6 | 99.8 |
| 89 | 40.4 | 36.7 | 55.1 |

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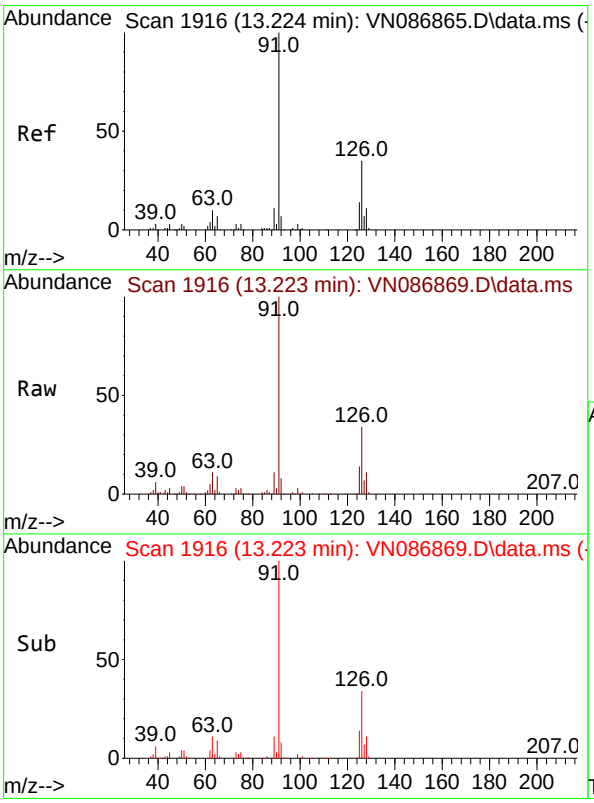
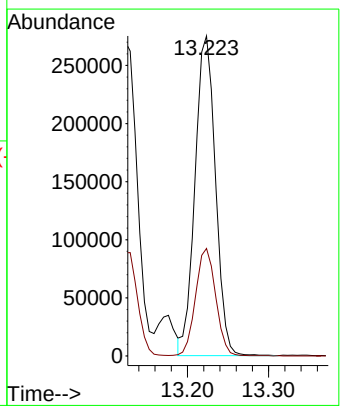
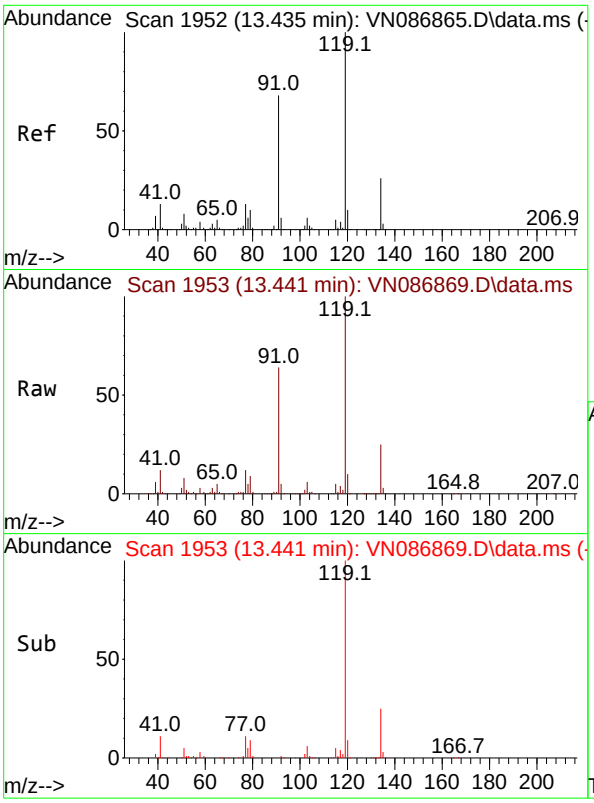



#82
4-Chlorotoluene
Concen: 51.884 ug/l
RT: 13.223 min Scan# 1916
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 91 Resp: 481403

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 33.1 | 16.7 | 50.1 |






#83
tert-Butylbenzene
Concen: 52.532 ug/l
RT: 13.441 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion:119 Resp: 49951

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 63.9 | 32.1 | 96.5 |
| 134 | 26.4 | 13.4 | 40.1 |

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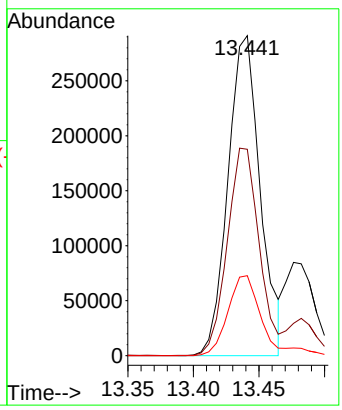
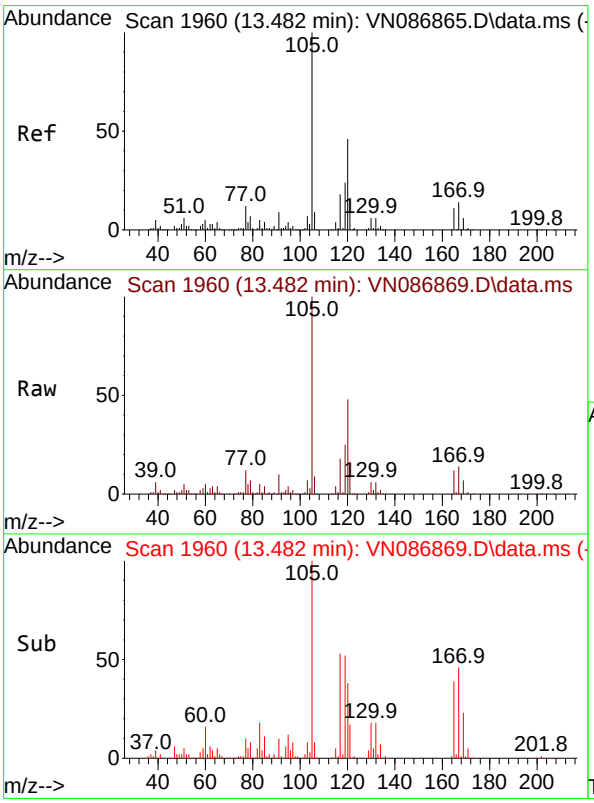
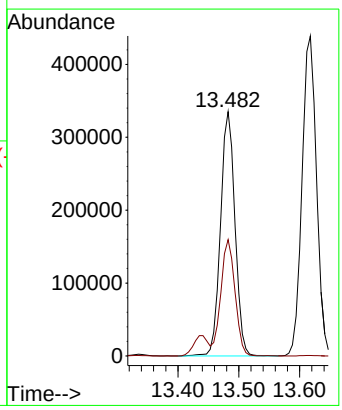


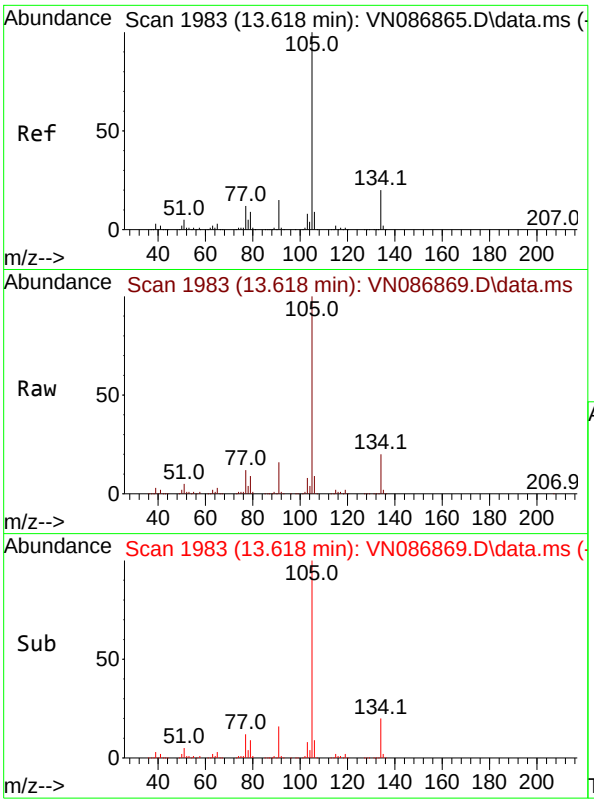




#84
1,2,4-Trimethylbenzene
Concen: 53.024 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion:105 Resp: 552333

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 46.6 | 23.2 | 69.6 |






#85
sec-Butylbenzene
Concen: 52.428 ug/l
RT: 13.618 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion:105 Resp: 72398

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 20.2 | 10.0 | 30.0 |

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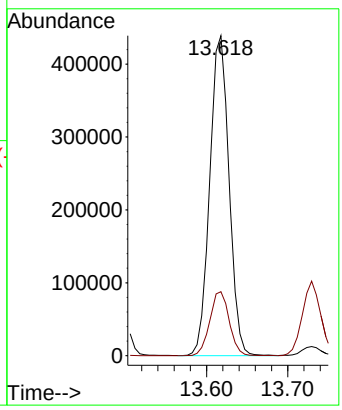
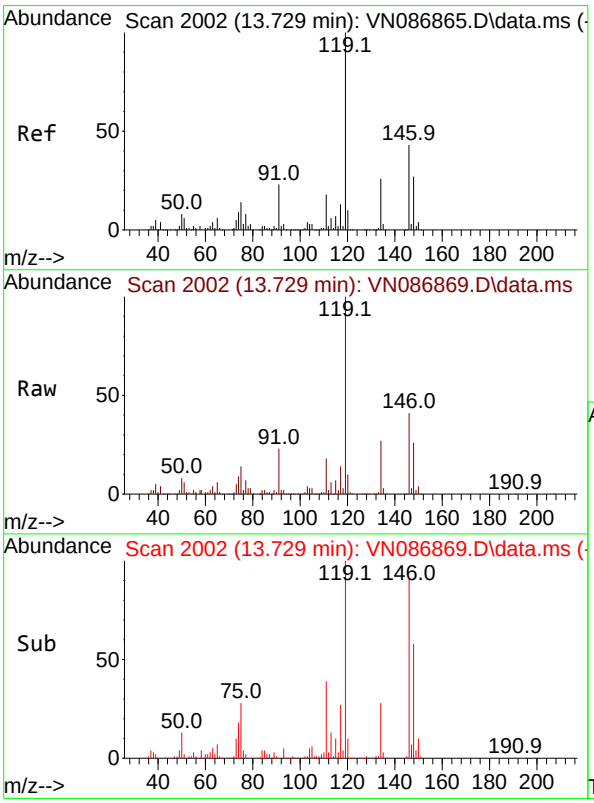
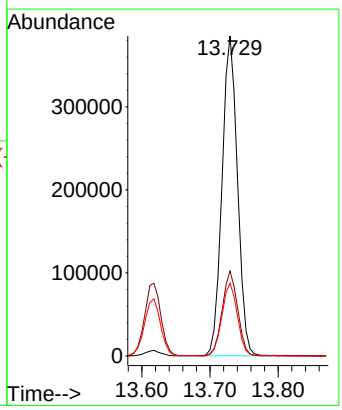


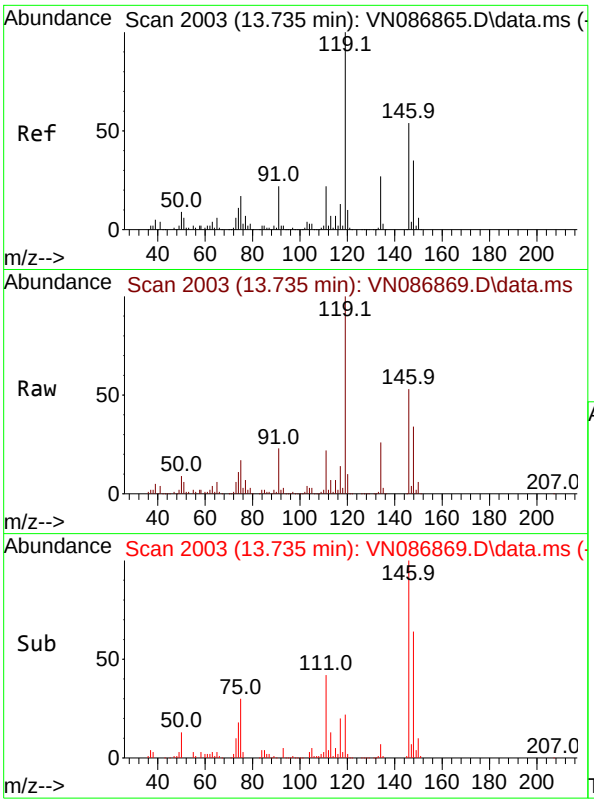




#86
p-Isopropyltoluene
Concen: 53.174 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion:119 Resp: 606979

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 26.5 | 13.5 | 40.4 |
| 91 | 22.7 | 11.5 | 34.4 |

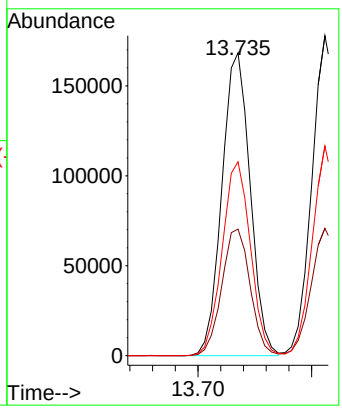





#87
1,3-Dichlorobenzene
Concen: 51.224 ug/l
RT: 13.735 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion:146 Resp: 29081

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.1 | 20.9 | 62.8 |
| 148 | 64.3 | 32.0 | 96.2 |

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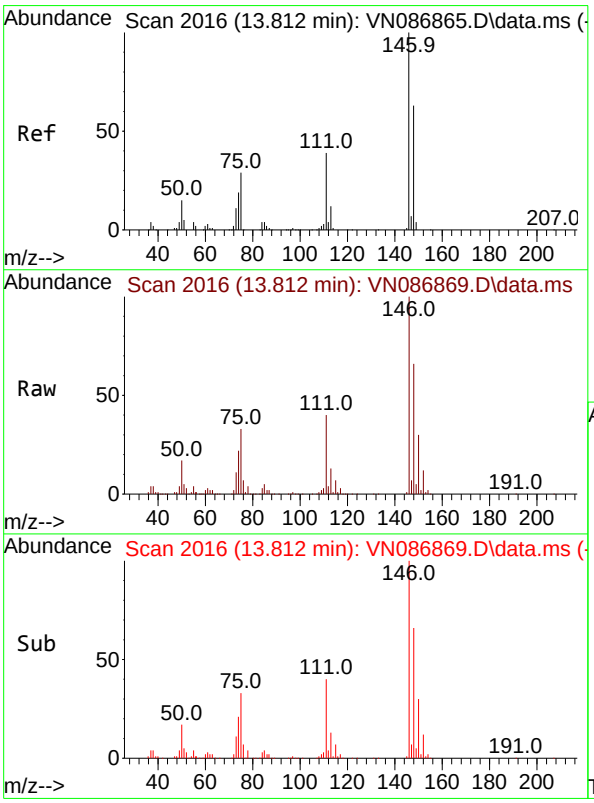
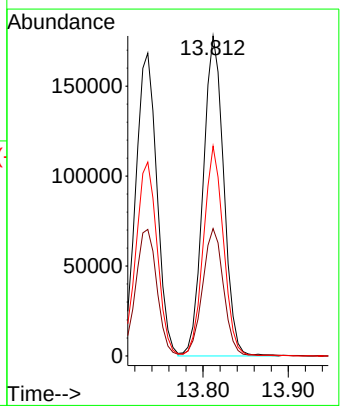
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

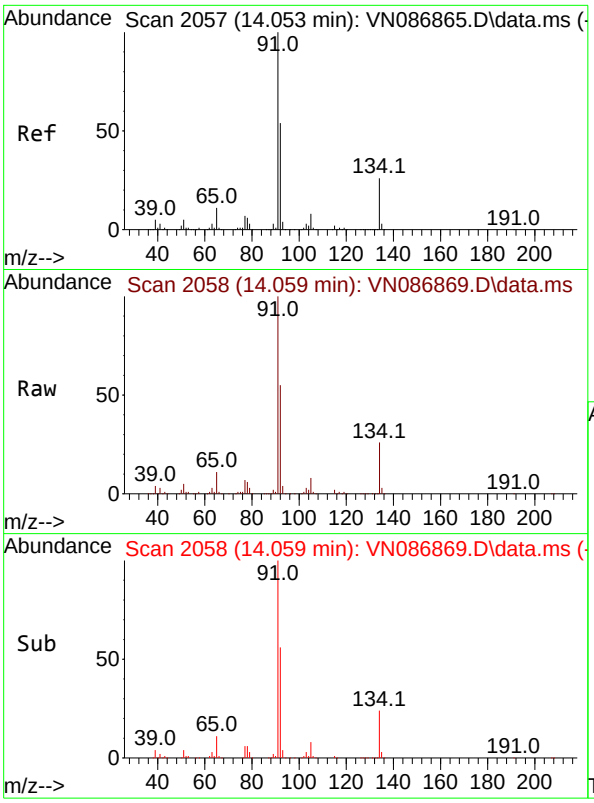



#88
1,4-Dichlorobenzene
Concen: 51.557 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion:146 Resp: 298412

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 40.0 | 19.9 | 59.7 |
| 148 | 63.3 | 31.8 | 95.4 |

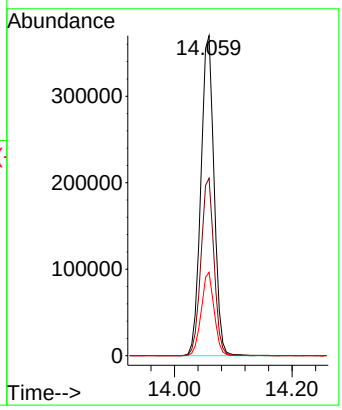





#89
n-Butylbenzene
Concen: 52.424 ug/l
RT: 14.059 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 91 Resp: 57963

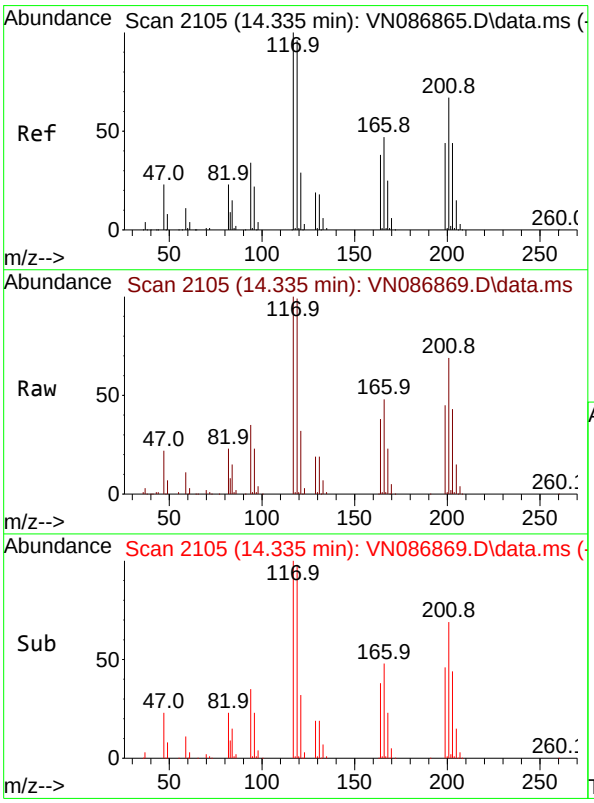
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 55.0 | 27.5 | 82.4 |
| 134 | 25.5 | 13.0 | 39.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN060625

**Manual Integrations**
**APPROVED**

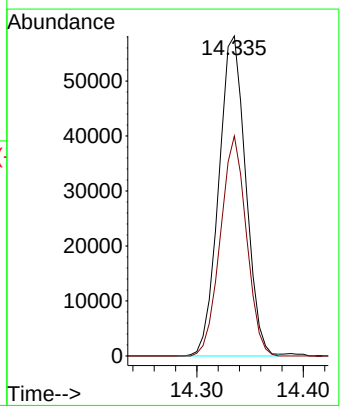
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

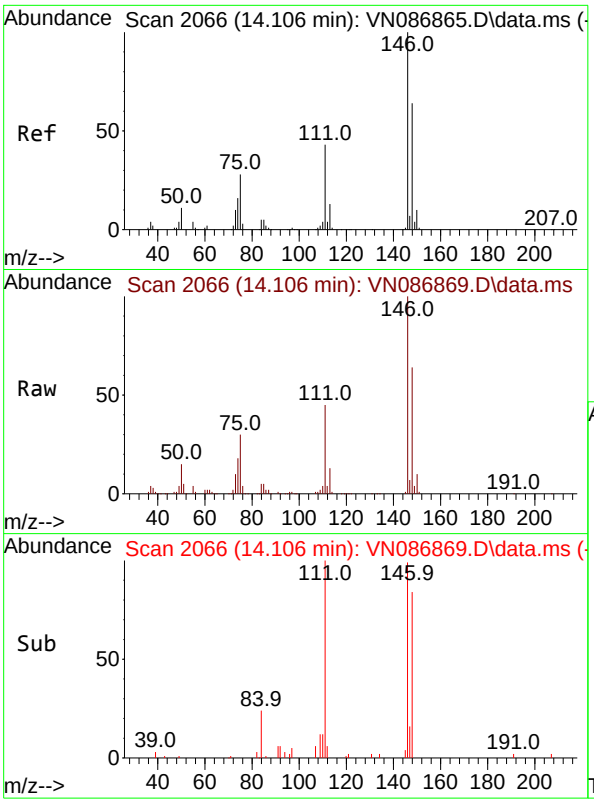



#90
Hexachloroethane
Concen: 52.847 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion:117 Resp: 102254

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 66.4 | 33.2 | 99.6 |






#91
1,2-Dichlorobenzene
Concen: 51.340 ug/l
RT: 14.106 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

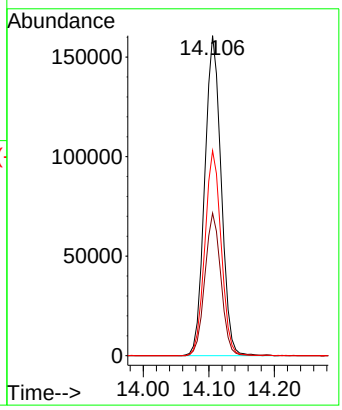
Tgt Ion:146 Resp: 28002

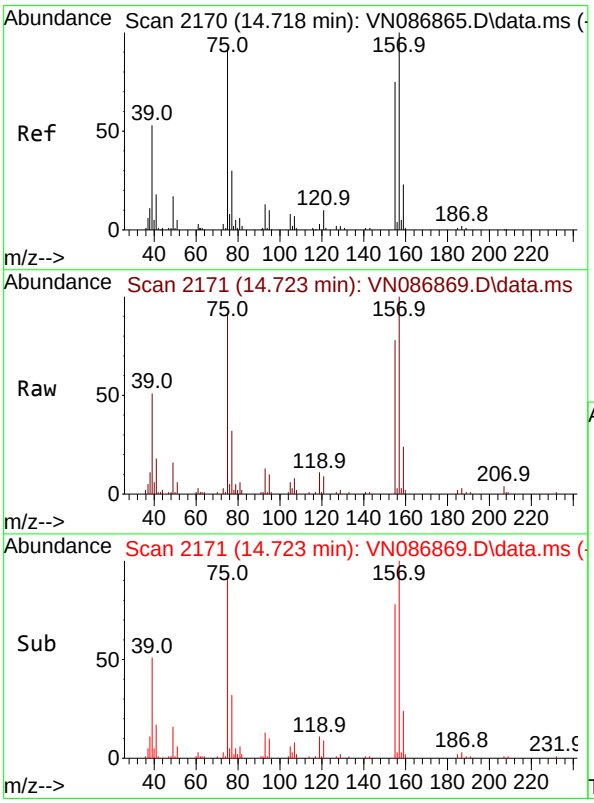
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.5 | 21.6 | 64.6 |
| 148 | 63.4 | 31.7 | 95.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN060625

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

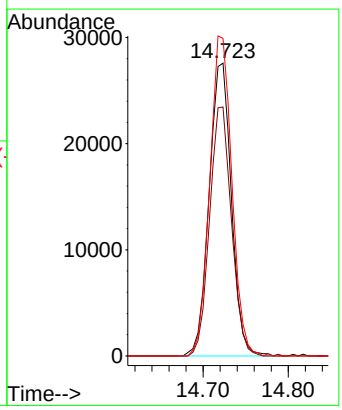


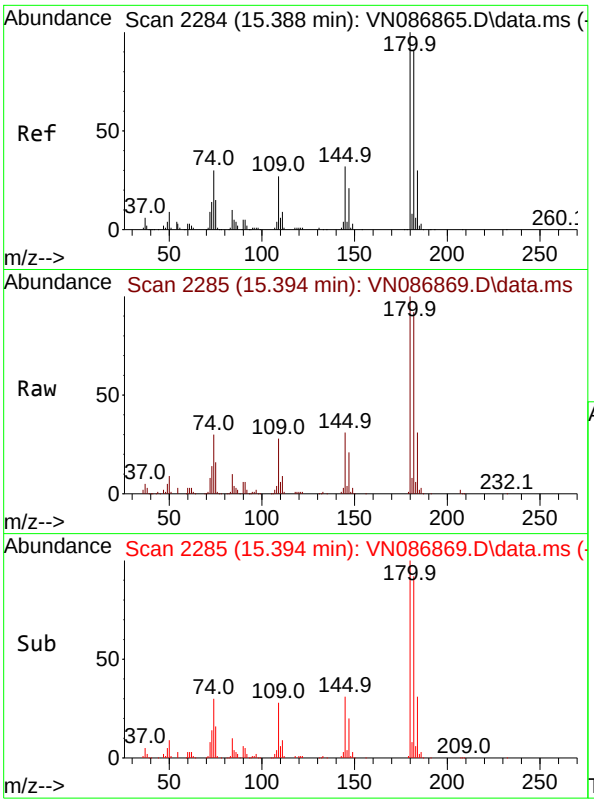




#92
1,2-Dibromo-3-Chloropropane
Concen: 49.161 ug/l
RT: 14.723 min Scan# 2171
Delta R.T. 0.006 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion: 75 Resp: 50115

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 83.5 | 41.1 | 123.4 |
| 157 | 108.6 | 52.7 | 158.1 |

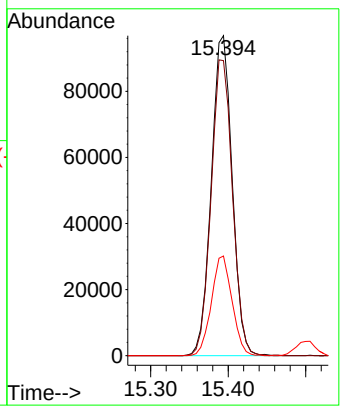





#93
1,2,4-Trichlorobenzene
Concen: 51.986 ug/l
RT: 15.394 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion:180 Resp: 18106

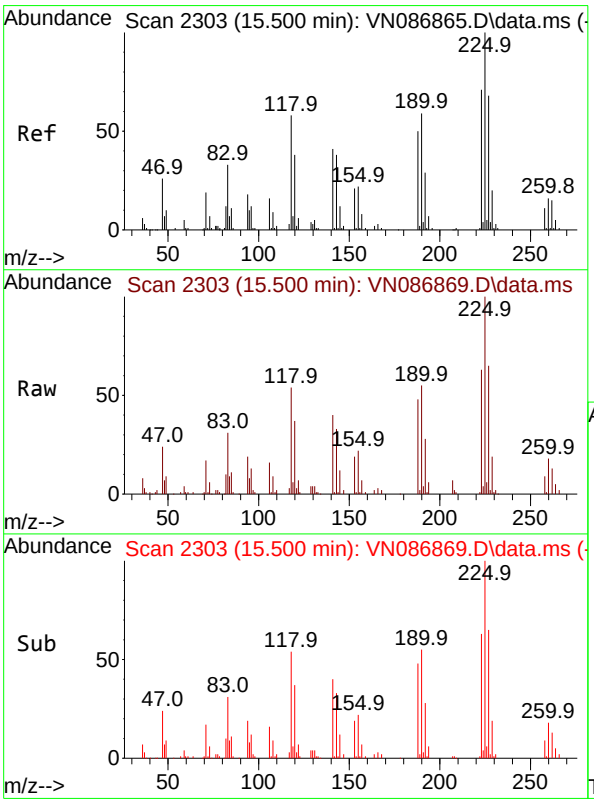
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 94.6 | 46.9 | 140.7 |
| 145 | 30.8 | 16.0 | 47.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN060625

**Manual Integrations**
**APPROVED**

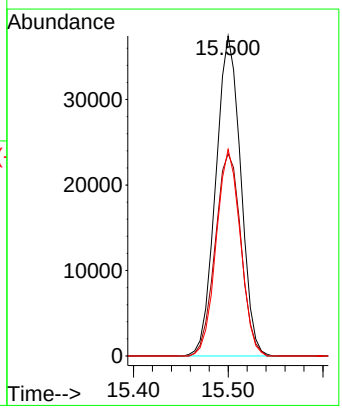
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025

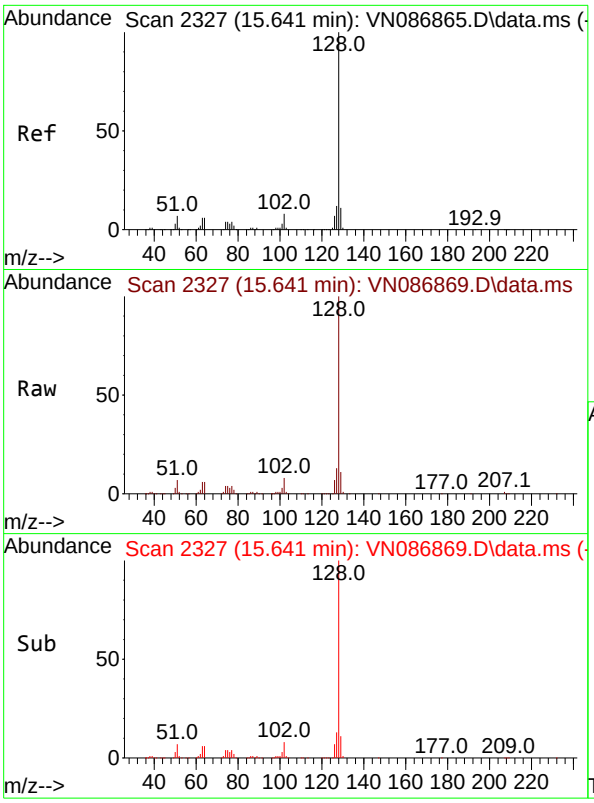



#94
Hexachlorobutadiene
Concen: 52.843 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion:225 Resp: 68570

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 65.3 | 33.5 | 100.4 |
| 227 | 62.5 | 31.1 | 93.5 |

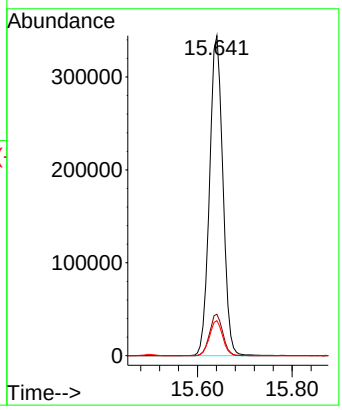





#95
Naphthalene
Concen: 52.005 ug/l
RT: 15.641 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion:128 Resp: 67418

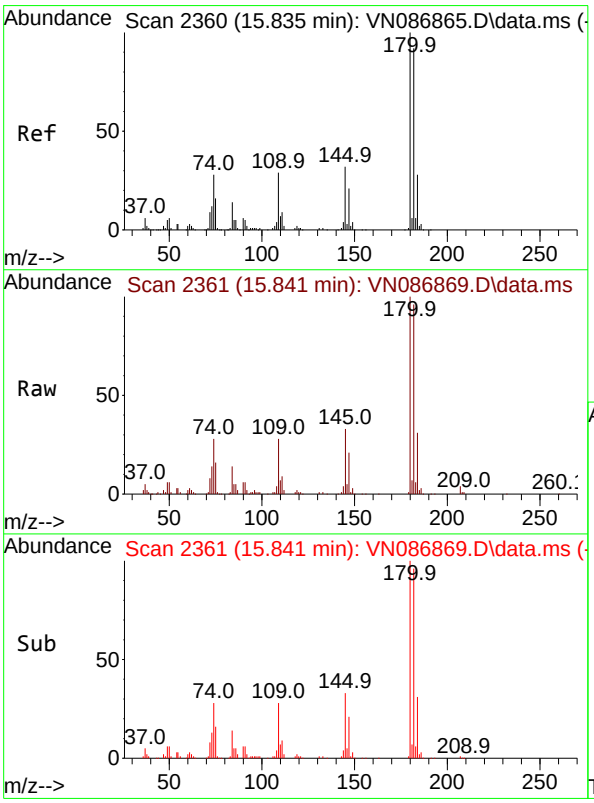
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.8 | 10.2 | 15.2 |
| 129 | 10.9 | 8.8 | 13.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN060625

**Manual Integrations**
**APPROVED**

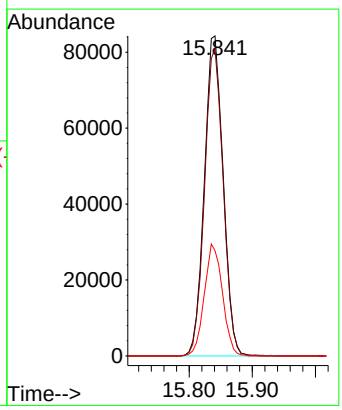
Reviewed By :John Carlone 06/09/2025
Supervised By :Mahesh Dadoda 06/09/2025




#96
1,2,3-Trichlorobenzene
Concen: 50.539 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. 0.006 min
Lab File: VN086869.D
Acq: 06 Jun 2025 15:54

Tgt Ion:180 Resp: 174888

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.2 | 47.0 | 141.0 |
| 145 | 33.8 | 16.6 | 49.8 |



Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086869.D
Acq On : 06 Jun 2025 15:54
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN060625

Quant Time: Jun 07 02:16:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 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 | 105 | 0.00 |
| 2 | T | Dichlorodifluoromethane | 0.499 | 0.551 | -10.4 | 116 | 0.00 |
| 3 | P | Chloromethane | 0.644 | 0.637 | 1.1 | 112 | 0.00 |
| 4 | C | Vinyl Chloride | 0.664 | 0.697 | -5.0# | 114 | 0.00 |
| 5 | T | Bromomethane | 0.372 | 0.411 | -10.5 | 121 | 0.00 |
| 6 | T | Chloroethane | 0.429 | 0.439 | -2.3 | 113 | 0.00 |
| 7 | T | Trichlorofluoromethane | 0.868 | 0.899 | -3.6 | 113 | 0.00 |
| 8 | T | Diethyl Ether | 0.378 | 0.401 | -6.1 | 116 | 0.00 |
| 9 | T | 1,1,2-Trichlorotrifluoroeth | 0.545 | 0.585 | -7.3 | 118 | 0.00 |
| 10 | T | Methyl Iodide | 0.707 | 0.752 | -6.4 | 116 | 0.00 |
| 11 | T | Tert butyl alcohol | 0.182 | 0.191 | -4.9 | 114 | 0.00 |
| 12 | CM | 1,1-Dichloroethene | 0.557 | 0.575 | -3.2# | 113 | 0.00 |
| 13 | T | Acrolein | 0.057 | 0.055 | 3.5 | 128 | 0.00 |
| 14 | T | Allyl chloride | 0.923 | 0.932 | -1.0 | 113 | 0.00 |
| 15 | T | Acrylonitrile | 0.425 | 0.440 | -3.5 | 114 | 0.00 |
| 16 | T | Acetone | 0.355 | 0.350 | 1.4 | 114 | 0.00 |
| 17 | T | Carbon Disulfide | 1.539 | 1.556 | -1.1 | 115 | 0.00 |
| 18 | T | Methyl Acetate | 1.035 | 1.074 | -3.8 | 115 | 0.00 |
| 19 | T | Methyl tert-butyl Ether | 2.015 | 2.084 | -3.4 | 113 | 0.00 |
| 20 | T | Methylene Chloride | 0.665 | 0.660 | 0.8 | 115 | 0.00 |
| 21 | T | trans-1,2-Dichloroethene | 0.619 | 0.612 | 1.1 | 113 | 0.00 |
| 22 | T | Diisopropyl ether | 1.945 | 2.018 | -3.8 | 114 | 0.00 |
| 23 | T | Vinyl Acetate | 1.644 | 1.677 | -2.0 | 111 | 0.00 |
| 24 | P | 1,1-Dichloroethane | 1.120 | 1.153 | -2.9 | 114 | 0.00 |
| 25 | T | 2-Butanone | 0.577 | 0.591 | -2.4 | 113 | 0.00 |
| 26 | T | 2,2-Dichloropropane | 0.871 | 0.993 | -14.0 | 116 | 0.00 |
| 27 | T | cis-1,2-Dichloroethene | 0.740 | 0.756 | -2.2 | 114 | 0.00 |
| 28 | T | Bromochloromethane | 0.550 | 0.499 | 9.3 | 113 | 0.00 |
| 29 | T | Tetrahydrofuran | 0.376 | 0.386 | -2.7 | 113 | 0.00 |
| 30 | C | Chloroform | 1.118 | 1.139 | -1.9# | 113 | 0.00 |
| 31 | T | Cyclohexane | 1.086 | 1.090 | -0.4 | 114 | 0.00 |
| 32 | T | 1,1,1-Trichloroethane | 0.951 | 0.962 | -1.2 | 113 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 | 0.669 | 0.698 | -4.3 | 147 | 0.00 |
| 34 | I | 1,4-Difluorobenzene | 1.000 | 1.000 | 0.0 | 104 | 0.00 |
| 35 | S | Dibromofluoromethane | 0.296 | 0.322 | -8.8 | 153# | 0.00 |
| 36 | T | 1,1-Dichloropropene | 0.442 | 0.460 | -4.1 | 115 | 0.00 |
| 37 | T | Ethyl Acetate | 0.562 | 0.563 | -0.2 | 109 | 0.00 |
| 38 | T | Carbon Tetrachloride | 0.433 | 0.455 | -5.1 | 116 | 0.00 |
| 39 | T | Methylcyclohexane | 0.605 | 0.637 | -5.3 | 116 | 0.00 |
| 40 | TM | Benzene | 1.444 | 1.471 | -1.9 | 114 | 0.00 |
| 41 | T | Methacrylonitrile | 0.316 | 0.332 | -5.1 | 114 | 0.00 |
| 42 | TM | 1,2-Dichloroethane | 0.438 | 0.451 | -3.0 | 114 | 0.00 |
| 43 | T | Isopropyl Acetate | 0.902 | 0.912 | -1.1 | 111 | 0.00 |
| 44 | TM | Trichloroethene | 0.342 | 0.355 | -3.8 | 113 | 0.00 |
| 45 | C | 1,2-Dichloropropane | 0.351 | 0.361 | -2.8# | 113 | 0.00 |
| 46 | T | Dibromomethane | 0.233 | 0.247 | -6.0 | 116 | 0.00 |
| 47 | T | Bromodichloromethane | 0.480 | 0.498 | -3.8 | 113 | 0.00 |
| 48 | T | Methyl methacrylate | 0.415 | 0.426 | -2.7 | 113 | 0.00 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086869.D
Acq On : 06 Jun 2025 15:54
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN060625

Quant Time: Jun 07 02:16:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 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 | 0.008 | 0.008 | 0.0 | 112 | 0.00 |
| 50 | S | Toluene-d8 | 1.173 | 1.246 | -6.2 | 151# | 0.00 |
| 51 | T | 4-Methyl-2-Pentanone | 0.543 | 0.582 | -7.2 | 113 | 0.00 |
| 52 | CM | Toluene | 0.882 | 0.918 | -4.1# | 114 | 0.00 |
| 53 | T | t-1,3-Dichloropropene | 0.537 | 0.570 | -6.1 | 114 | 0.00 |
| 54 | T | cis-1,3-Dichloropropene | 0.574 | 0.603 | -5.1 | 114 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 0.340 | 0.350 | -2.9 | 113 | 0.00 |
| 56 | T | Ethyl methacrylate | 0.541 | 0.613 | -13.3 | 115 | 0.00 |
| 57 | T | 1,3-Dichloropropane | 0.589 | 0.605 | -2.7 | 112 | 0.00 |
| 58 | T | 2-Chloroethyl Vinyl ether | 0.323 | 0.317 | 1.9 | 120 | 0.00 |
| 59 | T | 2-Hexanone | 0.350 | 0.397 | -13.4 | 112 | 0.00 |
| 60 | T | Dibromochloromethane | 0.354 | 0.372 | -5.1 | 114 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 0.348 | 0.361 | -3.7 | 114 | 0.00 |
| 62 | S | 4-Bromofluorobenzene | 0.436 | 0.471 | -8.0 | 151# | 0.00 |
| 63 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 105 | 0.00 |
| 64 | T | Tetrachloroethene | 0.316 | 0.319 | -0.9 | 114 | 0.00 |
| 65 | PM | Chlorobenzene | 1.103 | 1.122 | -1.7 | 115 | 0.00 |
| 66 | T | 1,1,1,2-Tetrachloroethane | 0.354 | 0.370 | -4.5 | 115 | 0.00 |
| 67 | C | Ethyl Benzene | 1.899 | 1.960 | -3.2# | 114 | 0.00 |
| 68 | T | m/p-Xylenes | 0.727 | 0.756 | -4.0 | 113 | 0.00 |
| 69 | T | o-Xylene | 0.696 | 0.730 | -4.9 | 114 | 0.00 |
| 70 | T | Styrene | 1.192 | 1.257 | -5.5 | 113 | 0.00 |
| 71 | P | Bromoform | 0.263 | 0.288 | -9.5 | 114 | 0.00 |
| 72 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 103 | 0.00 |
| 73 | T | Isopropylbenzene | 3.643 | 3.775 | -3.6 | 114 | 0.00 |
| 74 | T | N-amyl acetate | 1.273 | 1.380 | -8.4 | 112 | 0.00 |
| 75 | P | 1,1,2,2-Tetrachloroethane | 1.234 | 1.278 | -3.6 | 112 | 0.00 |
| 76 | T | 1,2,3-Trichloropropane | 1.189 | 1.279 | -7.6 | 112 | 0.00 |
| 77 | T | Bromobenzene | 0.835 | 0.874 | -4.7 | 114 | 0.00 |
| 78 | T | n-propylbenzene | 4.427 | 4.639 | -4.8 | 114 | 0.00 |
| 79 | T | 2-Chlorotoluene | 2.655 | 2.742 | -3.3 | 113 | 0.00 |
| 80 | T | 1,3,5-Trimethylbenzene | 3.007 | 3.175 | -5.6 | 113 | 0.00 |
| 81 | T | trans-1,4-Dichloro-2-butene | 0.516 | 0.575 | -11.4 | 125 | 0.00 |
| 82 | T | 4-Chlorotoluene | 2.686 | 2.787 | -3.8 | 114 | 0.00 |
| 83 | T | tert-Butylbenzene | 2.753 | 2.892 | -5.0 | 114 | 0.00 |
| 84 | T | 1,2,4-Trimethylbenzene | 3.016 | 3.198 | -6.0 | 113 | 0.00 |
| 85 | T | sec-Butylbenzene | 3.998 | 4.192 | -4.9 | 113 | 0.00 |
| 86 | T | p-Isopropyltoluene | 3.305 | 3.514 | -6.3 | 114 | 0.00 |
| 87 | T | 1,3-Dichlorobenzene | 1.644 | 1.684 | -2.4 | 112 | 0.00 |
| 88 | T | 1,4-Dichlorobenzene | 1.676 | 1.728 | -3.1 | 113 | 0.00 |
| 89 | T | n-Butylbenzene | 3.201 | 3.356 | -4.8 | 113 | 0.00 |
| 90 | T | Hexachloroethane | 0.560 | 0.592 | -5.7 | 114 | 0.00 |
| 91 | T | 1,2-Dichlorobenzene | 1.579 | 1.621 | -2.7 | 111 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 0.295 | 0.290 | 1.7 | 110 | 0.00 |
| 93 | T | 1,2,4-Trichlorobenzene | 1.008 | 1.048 | -4.0 | 112 | 0.00 |
| 94 | T | Hexachlorobutadiene | 0.376 | 0.397 | -5.6 | 113 | 0.00 |
| 95 | T | Naphthalene | 3.753 | 3.904 | -4.0 | 112 | 0.00 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086869.D
Acq On : 06 Jun 2025 15:54
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN060625

Quant Time: Jun 07 02:16:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 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 | 1.002 | 1.013 | -1.1 | 110 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 6

# Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086869.D
Acq On : 06 Jun 2025 15:54
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN060625

Quant Time: Jun 07 02:16:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 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 | 105 | 0.00 |
| 2 | T | Dichlorodifluoromethane | 50.000 | 55.286 | -10.6 | 116 | 0.00 |
| 3 | P | Chloromethane | 50.000 | 49.505 | 1.0 | 112 | 0.00 |
| 4 | C | Vinyl Chloride | 50.000 | 52.451 | -4.9# | 114 | 0.00 |
| 5 | T | Bromomethane | 50.000 | 55.292 | -10.6 | 121 | 0.00 |
| 6 | T | Chloroethane | 50.000 | 51.117 | -2.2 | 113 | 0.00 |
| 7 | T | Trichlorofluoromethane | 50.000 | 51.819 | -3.6 | 113 | 0.00 |
| 8 | T | Diethyl Ether | 50.000 | 53.001 | -6.0 | 116 | 0.00 |
| 9 | T | 1,1,2-Trichlorotrifluoroeth | 50.000 | 53.615 | -7.2 | 118 | 0.00 |
| 10 | T | Methyl Iodide | 50.000 | 53.227 | -6.5 | 116 | 0.00 |
| 11 | T | Tert butyl alcohol | 250.000 | 262.193 | -4.9 | 114 | 0.00 |
| 12 | CM | 1,1-Dichloroethene | 50.000 | 51.678 | -3.4# | 113 | 0.00 |
| 13 | T | Acrolein | 250.000 | 240.545 | 3.8 | 128 | 0.00 |
| 14 | T | Allyl chloride | 50.000 | 50.504 | -1.0 | 113 | 0.00 |
| 15 | T | Acrylonitrile | 250.000 | 258.885 | -3.6 | 114 | 0.00 |
| 16 | T | Acetone | 250.000 | 246.750 | 1.3 | 114 | 0.00 |
| 17 | T | Carbon Disulfide | 50.000 | 50.550 | -1.1 | 115 | 0.00 |
| 18 | T | Methyl Acetate | 50.000 | 51.912 | -3.8 | 115 | 0.00 |
| 19 | T | Methyl tert-butyl Ether | 50.000 | 51.720 | -3.4 | 113 | 0.00 |
| 20 | T | Methylene Chloride | 50.000 | 49.617 | 0.8 | 115 | 0.00 |
| 21 | T | trans-1,2-Dichloroethene | 50.000 | 49.437 | 1.1 | 113 | 0.00 |
| 22 | T | Diisopropyl ether | 50.000 | 51.853 | -3.7 | 114 | 0.00 |
| 23 | T | Vinyl Acetate | 250.000 | 255.055 | -2.0 | 111 | 0.00 |
| 24 | P | 1,1-Dichloroethane | 50.000 | 51.487 | -3.0 | 114 | 0.00 |
| 25 | T | 2-Butanone | 250.000 | 255.897 | -2.4 | 113 | 0.00 |
| 26 | T | 2,2-Dichloropropane | 50.000 | 57.031 | -14.1 | 116 | 0.00 |
| 27 | T | cis-1,2-Dichloroethene | 50.000 | 51.073 | -2.1 | 114 | 0.00 |
| 28 | T | Bromochloromethane | 50.000 | 45.310 | 9.4 | 113 | 0.00 |
| 29 | T | Tetrahydrofuran | 250.000 | 256.656 | -2.7 | 113 | 0.00 |
| 30 | C | Chloroform | 50.000 | 50.933 | -1.9# | 113 | 0.00 |
| 31 | T | Cyclohexane | 50.000 | 50.212 | -0.4 | 114 | 0.00 |
| 32 | T | 1,1,1-Trichloroethane | 50.000 | 50.603 | -1.2 | 113 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 | 50.000 | 52.135 | -4.3 | 147 | 0.00 |
| 34 | I | 1,4-Difluorobenzene | 50.000 | 50.000 | 0.0 | 104 | 0.00 |
| 35 | S | Dibromofluoromethane | 50.000 | 54.416 | -8.8 | 153 | 0.00 |
| 36 | T | 1,1-Dichloropropene | 50.000 | 52.123 | -4.2 | 115 | 0.00 |
| 37 | T | Ethyl Acetate | 50.000 | 50.125 | -0.3 | 109 | 0.00 |
| 38 | T | Carbon Tetrachloride | 50.000 | 52.466 | -4.9 | 116 | 0.00 |
| 39 | T | Methylcyclohexane | 50.000 | 52.686 | -5.4 | 116 | 0.00 |
| 40 | TM | Benzene | 50.000 | 50.931 | -1.9 | 114 | 0.00 |
| 41 | T | Methacrylonitrile | 50.000 | 52.607 | -5.2 | 114 | 0.00 |
| 42 | TM | 1,2-Dichloroethane | 50.000 | 51.489 | -3.0 | 114 | 0.00 |
| 43 | T | Isopropyl Acetate | 50.000 | 50.536 | -1.1 | 111 | 0.00 |
| 44 | TM | Trichloroethene | 50.000 | 51.788 | -3.6 | 113 | 0.00 |
| 45 | C | 1,2-Dichloropropane | 50.000 | 51.450 | -2.9# | 113 | 0.00 |
| 46 | T | Dibromomethane | 50.000 | 52.849 | -5.7 | 116 | 0.00 |
| 47 | T | Bromodichloromethane | 50.000 | 51.824 | -3.6 | 113 | 0.00 |
| 48 | T | Methyl methacrylate | 50.000 | 51.328 | -2.7 | 113 | 0.00 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086869.D
Acq On : 06 Jun 2025 15:54
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN060625

Quant Time: Jun 07 02:16:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 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 | 1110.123 | -11.0 | 112 | 0.00 |
| 50 | S | Toluene-d8 | 50.000 | 53.129 | -6.3 | 151 | 0.00 |
| 51 | T | 4-Methyl-2-Pentanone | 250.000 | 267.835 | -7.1 | 113 | 0.00 |
| 52 | CM | Toluene | 50.000 | 52.040 | -4.1# | 114 | 0.00 |
| 53 | T | t-1,3-Dichloropropene | 50.000 | 53.137 | -6.3 | 114 | 0.00 |
| 54 | T | cis-1,3-Dichloropropene | 50.000 | 52.519 | -5.0 | 114 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 50.000 | 51.562 | -3.1 | 113 | 0.00 |
| 56 | T | Ethyl methacrylate | 50.000 | 56.688 | -13.4 | 115 | 0.00 |
| 57 | T | 1,3-Dichloropropane | 50.000 | 51.386 | -2.8 | 112 | 0.00 |
| 58 | T | 2-Chloroethyl Vinyl ether | 250.000 | 246.006 | 1.6 | 120 | 0.00 |
| 59 | T | 2-Hexanone | 250.000 | 283.478 | -13.4 | 112 | 0.00 |
| 60 | T | Dibromochloromethane | 50.000 | 52.627 | -5.3 | 114 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 50.000 | 51.887 | -3.8 | 114 | 0.00 |
| 62 | S | 4-Bromofluorobenzene | 50.000 | 54.081 | -8.2 | 151 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 50.000 | 50.000 | 0.0 | 105 | 0.00 |
| 64 | T | Tetrachloroethene | 50.000 | 50.450 | -0.9 | 114 | 0.00 |
| 65 | PM | Chlorobenzene | 50.000 | 50.892 | -1.8 | 115 | 0.00 |
| 66 | T | 1,1,1,2-Tetrachloroethane | 50.000 | 52.164 | -4.3 | 115 | 0.00 |
| 67 | C | Ethyl Benzene | 50.000 | 51.590 | -3.2# | 114 | 0.00 |
| 68 | T | m/p-Xylenes | 100.000 | 103.912 | -3.9 | 113 | 0.00 |
| 69 | T | o-Xylene | 50.000 | 52.387 | -4.8 | 114 | 0.00 |
| 70 | T | Styrene | 50.000 | 52.758 | -5.5 | 113 | 0.00 |
| 71 | P | Bromoform | 50.000 | 54.751 | -9.5 | 114 | 0.00 |
| 72 | I | 1,4-Dichlorobenzene-d4 | 50.000 | 50.000 | 0.0 | 103 | 0.00 |
| 73 | T | Isopropylbenzene | 50.000 | 51.823 | -3.6 | 114 | 0.00 |
| 74 | T | N-amyl acetate | 50.000 | 54.212 | -8.4 | 112 | 0.00 |
| 75 | P | 1,1,2,2-Tetrachloroethane | 50.000 | 51.763 | -3.5 | 112 | 0.00 |
| 76 | T | 1,2,3-Trichloropropane | 50.000 | 53.821 | -7.6 | 112 | 0.00 |
| 77 | T | Bromobenzene | 50.000 | 52.313 | -4.6 | 114 | 0.00 |
| 78 | T | n-propylbenzene | 50.000 | 52.397 | -4.8 | 114 | 0.00 |
| 79 | T | 2-Chlorotoluene | 50.000 | 51.650 | -3.3 | 113 | 0.00 |
| 80 | T | 1,3,5-Trimethylbenzene | 50.000 | 52.787 | -5.6 | 113 | 0.00 |
| 81 | T | trans-1,4-Dichloro-2-butene | 50.000 | 55.702 | -11.4 | 125 | 0.00 |
| 82 | T | 4-Chlorotoluene | 50.000 | 51.884 | -3.8 | 114 | 0.00 |
| 83 | T | tert-Butylbenzene | 50.000 | 52.532 | -5.1 | 114 | 0.00 |
| 84 | T | 1,2,4-Trimethylbenzene | 50.000 | 53.024 | -6.0 | 113 | 0.00 |
| 85 | T | sec-Butylbenzene | 50.000 | 52.428 | -4.9 | 113 | 0.00 |
| 86 | T | p-Isopropyltoluene | 50.000 | 53.174 | -6.3 | 114 | 0.00 |
| 87 | T | 1,3-Dichlorobenzene | 50.000 | 51.224 | -2.4 | 112 | 0.00 |
| 88 | T | 1,4-Dichlorobenzene | 50.000 | 51.557 | -3.1 | 113 | 0.00 |
| 89 | T | n-Butylbenzene | 50.000 | 52.424 | -4.8 | 113 | 0.00 |
| 90 | T | Hexachloroethane | 50.000 | 52.847 | -5.7 | 114 | 0.00 |
| 91 | T | 1,2-Dichlorobenzene | 50.000 | 51.340 | -2.7 | 111 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 50.000 | 49.161 | 1.7 | 110 | 0.00 |
| 93 | T | 1,2,4-Trichlorobenzene | 50.000 | 51.986 | -4.0 | 112 | 0.00 |
| 94 | T | Hexachlorobutadiene | 50.000 | 52.843 | -5.7 | 113 | 0.00 |
| 95 | T | Naphthalene | 50.000 | 52.005 | -4.0 | 112 | 0.00 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086869.D
Acq On : 06 Jun 2025 15:54
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN060625

Quant Time: Jun 07 02:16:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 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 | 50.539 | -1.1 | 110 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Raw Data: **VN086913.D**

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

## VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q2250 SAS No.: Q2250 SDG No.: Q2250

Instrument ID: MSVOA_N Calibration Date/Time: 06/10/2025 09:13

Lab File ID: VN086913.D Init. Calib. Date(s): 06/06/2025 06/06/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 12:44 14:49

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

| COMPOUND | RRF | RRF050 | MIN RRF | %D | MAX%D |
|---|---|---|---|---|---|
| Vinyl Chloride | 0.664 | 0.653 | | -1.66 | 20 |
| 1,1-Dichloroethene | 0.557 | 0.548 | | -1.62 | 20 |
| 1,1-Dichloroethane | 1.120 | 1.079 | 0.1 | -3.66 | 20 |
| cis-1,2-Dichloroethene | 0.740 | 0.721 | | -2.57 | 20 |
| 1,1,1-Trichloroethane | 0.951 | 0.894 | | -5.99 | 20 |
| Benzene | 1.444 | 1.400 | | -3.05 | 20 |
| 1,2-Dichloroethane | 0.438 | 0.426 | | -2.74 | 20 |
| Trichloroethene | 0.342 | 0.345 | | 0.88 | 20 |
| 1,1,2-Trichloroethane | 0.340 | 0.338 | | -0.59 | 20 |
| Tetrachloroethene | 0.316 | 0.308 | | -2.53 | 20 |
| 1,2-Dichloroethane-d4 | 0.669 | 0.613 | | -8.37 | 20 |
| Dibromofluoromethane | 0.296 | 0.301 | | 1.69 | 20 |
| Toluene-d8 | 1.173 | 1.153 | | -1.71 | 20 |
| 4-Bromofluorobenzene | 0.436 | 0.420 | | -3.67 | 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\VN061025\
Data File : VN086913.D
Acq On : 10 Jun 2025 09:13
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 11 01:47:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.230 | 168 | 239452 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.106 | 114 | 422119 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 362285 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 170987 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.583 | 65 | 146800 | 45.789 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 91.580% | | | |
| 35) Dibromofluoromethane | 8.171 | 113 | 127253 | 50.869 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 101.740% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 486698 | 49.146 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 98.300% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 177087 | 48.131 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 96.260% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.154 | 85 | 120199 | 50.345 | ug/l | 98 |
| 3) Chloromethane | 2.395 | 50 | 132091 | 42.845 | ug/l | 99 |
| 4) Vinyl Chloride | 2.554 | 62 | 156438 | 49.190 | ug/l | 98 |
| 5) Bromomethane | 2.989 | 94 | 85611 | 48.104 | ug/l | 96 |
| 6) Chloroethane | 3.154 | 64 | 100888 | 49.111 | ug/l | 96 |
| 7) Trichlorofluoromethane | 3.530 | 101 | 203113 | 48.882 | ug/l | 99 |
| 8) Diethyl Ether | 3.983 | 74 | 90847 | 50.181 | ug/l | 97 |
| 9) 1,1,2-Trichlorotrifluo... | 4.395 | 101 | 126828 | 48.583 | ug/l | 98 |
| 10) Methyl Iodide | 4.612 | 142 | 142941 | 42.239 | ug/l | 99 |
| 11) Tert butyl alcohol | 5.536 | 59 | 177401 | 203.929 | ug/l | 99 |
| 12) 1,1-Dichloroethene | 4.371 | 96 | 131127 | 49.200 | ug/l | 96 |
| 13) Acrolein | 4.195 | 56 | 63063 | 229.021 | ug/l | 98 |
| 14) Allyl chloride | 5.048 | 41 | 197016 | 44.573 | ug/l | 96 |
| 15) Acrylonitrile | 5.736 | 53 | 467151 | 229.750 | ug/l | 100 |
| 16) Acetone | 4.442 | 43 | 416888 | 245.204 | ug/l | 100 |
| 17) Carbon Disulfide | 4.736 | 76 | 341962 | 46.386 | ug/l | 99 |
| 18) Methyl Acetate | 5.042 | 43 | 225420 | 45.497 | ug/l | 98 |
| 19) Methyl tert-butyl Ether | 5.812 | 73 | 478684 | 49.605 | ug/l | 99 |
| 20) Methylene Chloride | 5.295 | 84 | 147723 | 46.410 | ug/l | 95 |
| 21) trans-1,2-Dichloroethene | 5.806 | 96 | 140464 | 47.370 | ug/l | 97 |
| 22) Diisopropyl ether | 6.683 | 45 | 439557 | 47.178 | ug/l | 98 |
| 23) Vinyl Acetate | 6.618 | 43 | 1865051 | 236.925 | ug/l | 98 |
| 24) 1,1-Dichloroethane | 6.589 | 63 | 258382 | 48.190 | ug/l | 100 |
| 25) 2-Butanone | 7.489 | 43 | 590344 | 213.617 | ug/l | 96 |
| 26) 2,2-Dichloropropane | 7.500 | 77 | 225847 | 54.150 | ug/l | 100 |
| 27) cis-1,2-Dichloroethene | 7.500 | 96 | 172582 | 48.666 | ug/l | 99 |
| 28) Bromochloromethane | 7.824 | 49 | 113231 | 42.951 | ug/l | 92 |
| 29) Tetrahydrofuran | 7.847 | 42 | 389154 | 216.165 | ug/l | 96 |
| 30) Chloroform | 7.977 | 83 | 252183 | 47.097 | ug/l | 99 |
| 31) Cyclohexane | 8.265 | 56 | 217182 | 41.767 | ug/l | 94 |
| 32) 1,1,1-Trichloroethane | 8.177 | 97 | 214121 | 47.016 | ug/l | 98 |
| 36) 1,1-Dichloropropene | 8.377 | 75 | 184378 | 49.463 | ug/l | 99 |
| 37) Ethyl Acetate | 7.571 | 43 | 220517 | 46.471 | ug/l | 98 |
| 38) Carbon Tetrachloride | 8.371 | 117 | 181026 | 49.466 | ug/l | 99 |
| 39) Methylcyclohexane | 9.606 | 83 | 220974 | 43.269 | ug/l | 93 |
| 40) Benzene | 8.612 | 78 | 591102 | 48.493 | ug/l | 100 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061025\
Data File : VN086913.D
Acq On : 10 Jun 2025 09:13
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 11 01:47:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.783 | 41 | 120605 | 45.256 | ug/l | | 93 |
| 42) 1,2-Dichloroethane | 8.677 | 62 | 179943 | 48.671 | ug/l | | 100 |
| 43) Isopropyl Acetate | 8.694 | 43 | 350324 | 45.998 | ug/l | | 97 |
| 44) Trichloroethene | 9.359 | 130 | 145683 | 50.404 | ug/l | | 96 |
| 45) 1,2-Dichloropropane | 9.624 | 63 | 145320 | 49.004 | ug/l | | 100 |
| 46) Dibromomethane | 9.712 | 93 | 99996 | 50.766 | ug/l | | 99 |
| 47) Bromodichloromethane | 9.888 | 83 | 202301 | 49.918 | ug/l | | 99 |
| 48) Methyl methacrylate | 9.683 | 41 | 159853 | 45.601 | ug/l | | 96 |
| 49) 1,4-Dioxane | 9.700 | 88 | 56947 | 892.983 | ug/l | # | 97 |
| 51) 4-Methyl-2-Pentanone | 10.447 | 43 | 1081942 | 235.975 | ug/l | | 97 |
| 52) Toluene | 10.630 | 92 | 367587 | 49.345 | ug/l | | 98 |
| 53) t-1,3-Dichloropropene | 10.835 | 75 | 234554 | 51.759 | ug/l | | 98 |
| 54) cis-1,3-Dichloropropene | 10.312 | 75 | 249744 | 51.506 | ug/l | | 99 |
| 55) 1,1,2-Trichloroethane | 11.018 | 97 | 142700 | 49.785 | ug/l | | 98 |
| 56) Ethyl methacrylate | 10.877 | 69 | 248574 | 54.447 | ug/l | | 93 |
| 57) 1,3-Dichloropropane | 11.165 | 76 | 244911 | 49.255 | ug/l | | 98 |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63 | 665707 | 244.474 | ug/l | | 97 |
| 59) 2-Hexanone | 11.200 | 43 | 715095 | 242.131 | ug/l | | 93 |
| 60) Dibromochloromethane | 11.359 | 129 | 153400 | 51.366 | ug/l | | 99 |
| 61) 1,2-Dibromoethane | 11.471 | 107 | 147800 | 50.307 | ug/l | | 97 |
| 64) Tetrachloroethene | 11.106 | 164 | 111601 | 48.675 | ug/l | | 97 |
| 65) Chlorobenzene | 11.888 | 112 | 404797 | 50.661 | ug/l | | 99 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 132787 | 51.699 | ug/l | | 99 |
| 67) Ethyl Benzene | 11.965 | 91 | 668179 | 48.548 | ug/l | | 99 |
| 68) m/p-Xylenes | 12.071 | 106 | 526722 | 99.975 | ug/l | | 99 |
| 69) o-Xylene | 12.394 | 106 | 258839 | 51.297 | ug/l | | 95 |
| 70) Styrene | 12.412 | 104 | 446437 | 51.704 | ug/l | | 99 |
| 71) Bromoform | 12.576 | 173 | 104086 | 54.693 | ug/l | # | 100 |
| 73) Isopropylbenzene | 12.694 | 105 | 621794 | 49.917 | ug/l | | 99 |
| 74) N-amyl acetate | 12.506 | 43 | 231590 | 53.204 | ug/l | | 93 |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 216753 | 51.363 | ug/l | | 98 |
| 76) 1,2,3-Trichloropropane | 12.994 | 75 | 182840m | 44.986 | ug/l | | |
| 77) Bromobenzene | 12.976 | 156 | 154418 | 54.054 | ug/l | | 97 |
| 78) n-propylbenzene | 13.035 | 91 | 736021 | 48.621 | ug/l | | 98 |
| 79) 2-Chlorotoluene | 13.124 | 91 | 443618 | 48.865 | ug/l | | 97 |
| 80) 1,3,5-Trimethylbenzene | 13.171 | 105 | 505593 | 49.161 | ug/l | | 97 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 91865m | 52.029 | ug/l | | |
| 82) 4-Chlorotoluene | 13.218 | 91 | 463176 | 50.423 | ug/l | | 99 |
| 83) tert-Butylbenzene | 13.435 | 119 | 440956 | 46.840 | ug/l | | 99 |
| 84) 1,2,4-Trimethylbenzene | 13.476 | 105 | 509675 | 49.422 | ug/l | | 98 |
| 85) sec-Butylbenzene | 13.612 | 105 | 629702 | 46.060 | ug/l | | 99 |
| 86) p-Isopropyltoluene | 13.729 | 119 | 535293 | 47.367 | ug/l | | 98 |
| 87) 1,3-Dichlorobenzene | 13.729 | 146 | 286869 | 51.039 | ug/l | | 99 |
| 88) 1,4-Dichlorobenzene | 13.812 | 146 | 290947 | 50.774 | ug/l | | 100 |
| 89) n-Butylbenzene | 14.053 | 91 | 485793 | 44.380 | ug/l | | 99 |
| 90) Hexachloroethane | 14.329 | 117 | 92000 | 48.027 | ug/l | | 99 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 274399 | 50.816 | ug/l | | 99 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.718 | 75 | 47339 | 46.906 | ug/l | | 93 |
| 93) 1,2,4-Trichlorobenzene | 15.388 | 180 | 156993 | 45.529 | ug/l | | 99 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 48622 | 37.848 | ug/l | | 95 |
| 95) Naphthalene | 15.635 | 128 | 625189 | 48.711 | ug/l | | 100 |
| 96) 1,2,3-Trichlorobenzene | 15.835 | 180 | 146962 | 42.897 | ug/l | | 99 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061025\
Data File : VN086913.D
Acq On : 10 Jun 2025 09:13
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 11 01:47:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

| 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\VN061025\
Data File : VN086913.D
Acq On : 10 Jun 2025 09:13
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 11 01:47:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/11/2025
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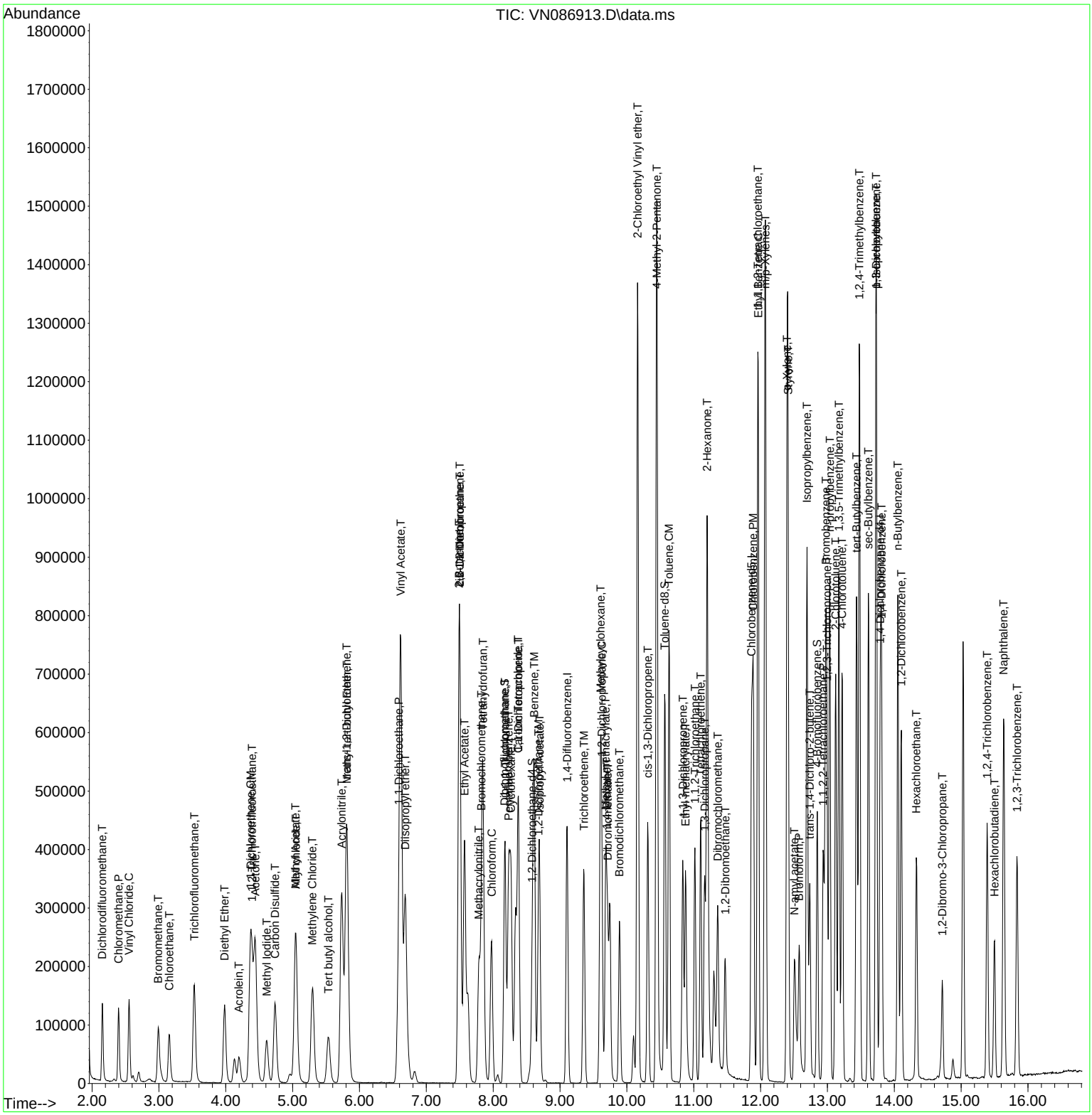
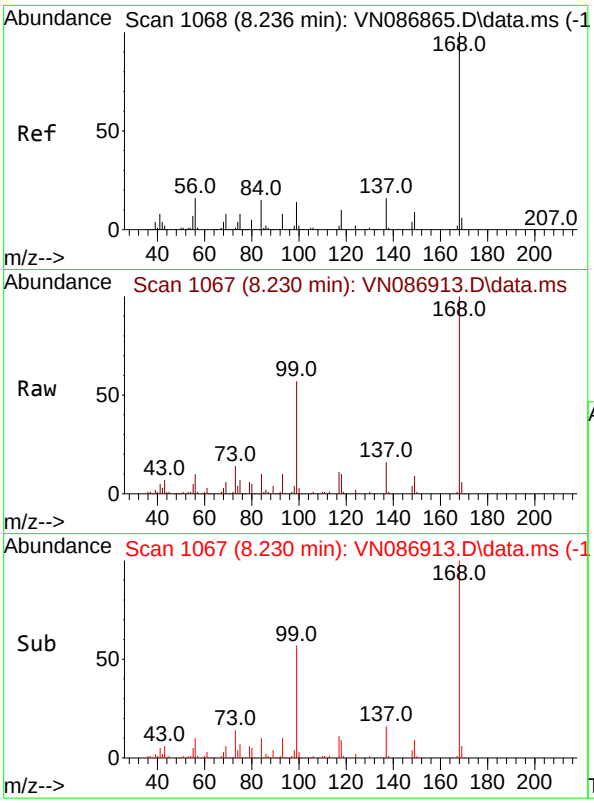
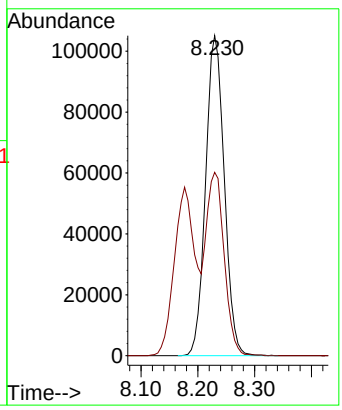





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.230 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion:168 Resp: 23945

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 57.3 | 49.1 | 73.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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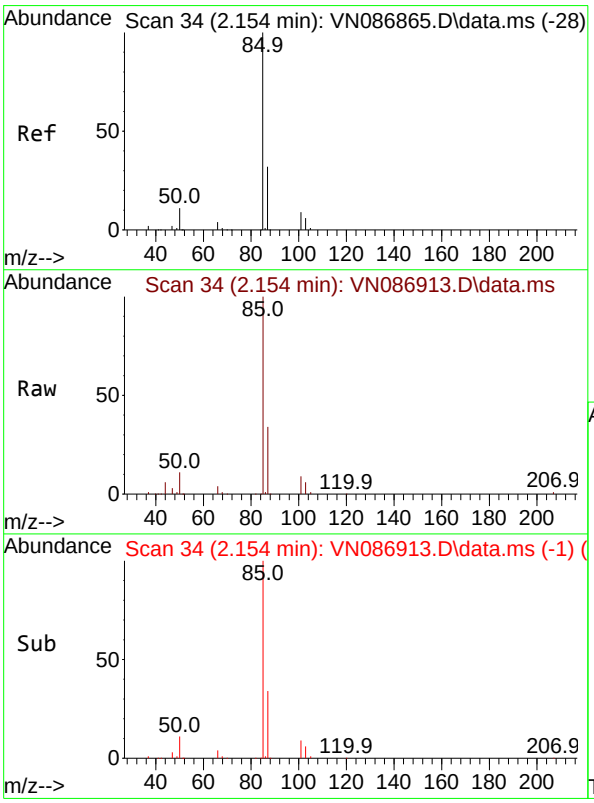
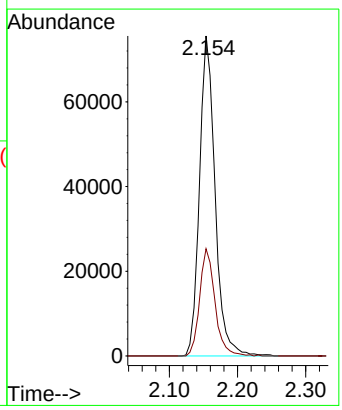
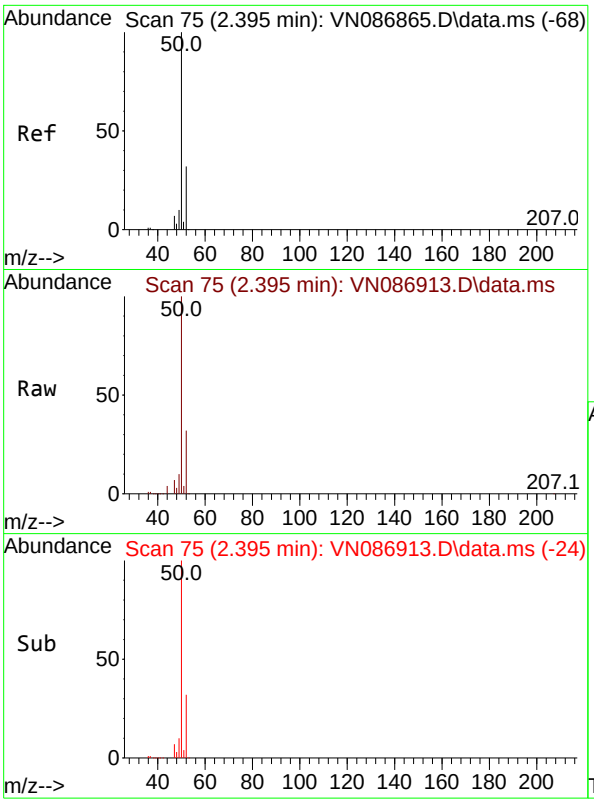



#2
Dichlorodifluoromethane
Concen: 50.345 ug/l
RT: 2.154 min Scan# 34
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 85 Resp: 120199

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 33.5 | 16.2 | 48.6 |

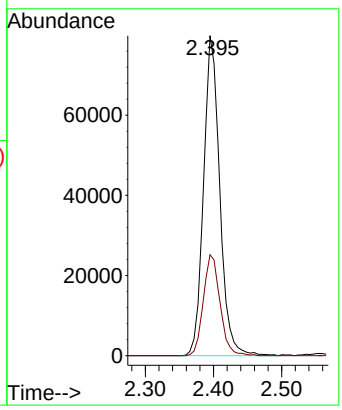





#3
Chloromethane
Concen: 42.845 ug/l
RT: 2.395 min Scan# 7
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 50 Resp: 13209

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 31.6 | 25.7 | 38.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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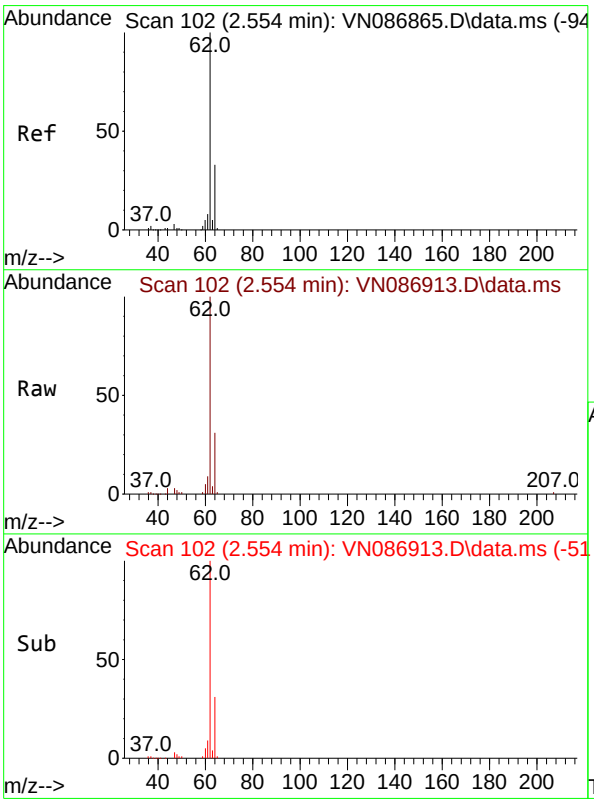
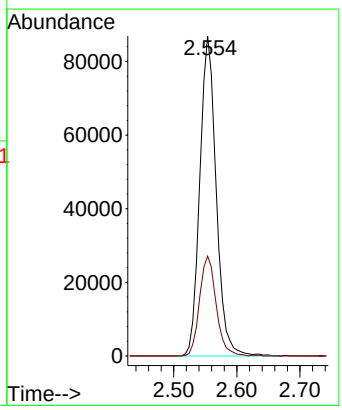
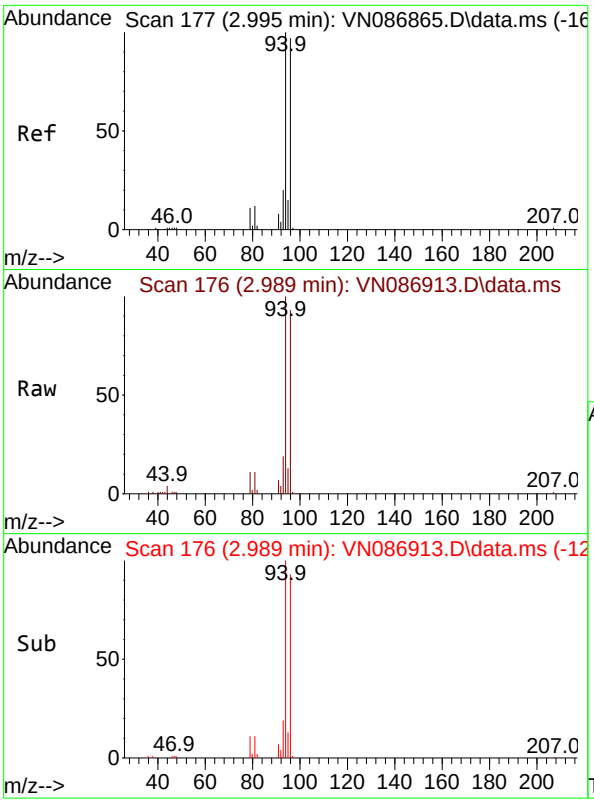



#4
Vinyl Chloride
Concen: 49.190 ug/l
RT: 2.554 min Scan# 102
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 62 Resp: 156438

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 31.2 | 26.0 | 39.0 |

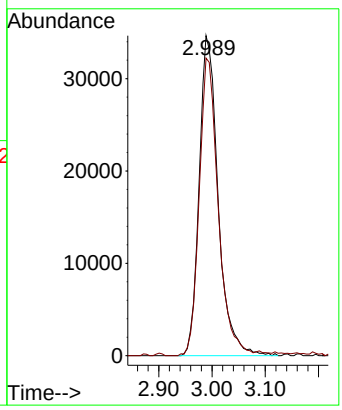





#5
Bromomethane
Concen: 48.104 ug/l
RT: 2.989 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 94 Resp: 8561

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 93.0 | 77.9 | 116.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
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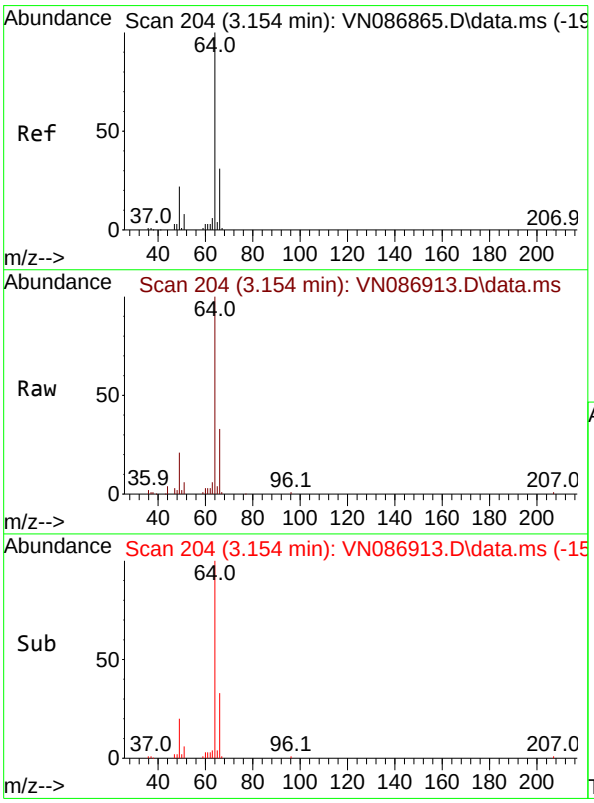
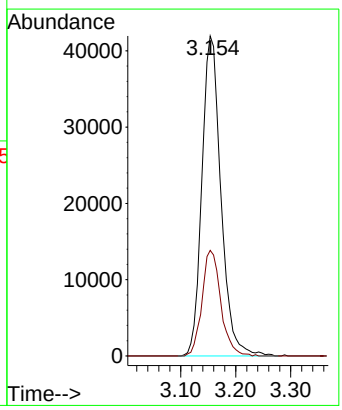
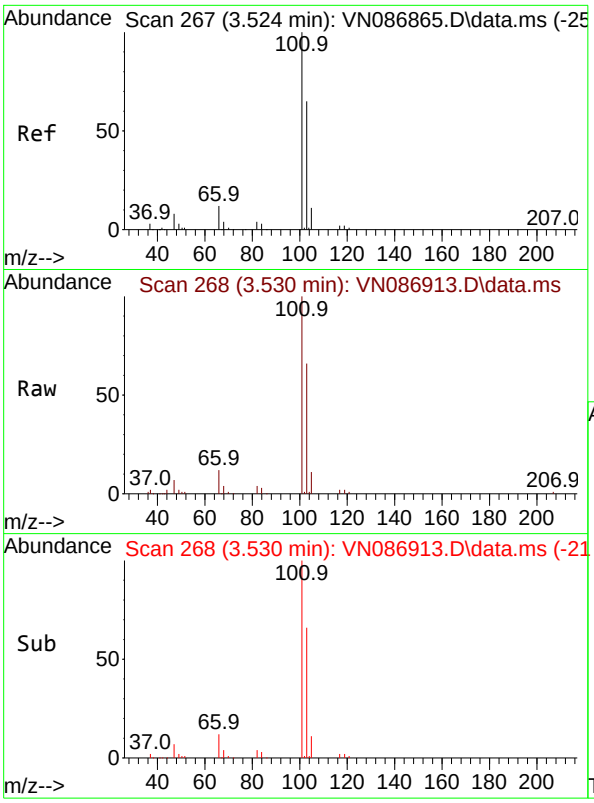



#6
Chloroethane
Concen: 49.111 ug/l
RT: 3.154 min Scan# 204
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 64 Resp: 100888

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 33.0 | 24.6 | 36.8 |

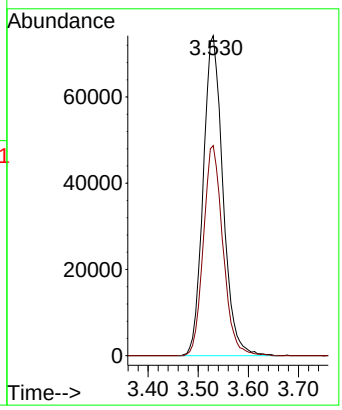





#7
Trichlorofluoromethane
Concen: 48.882 ug/l
RT: 3.530 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion:101 Resp: 20311

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 65.6 | 52.2 | 78.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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Reviewed By :John Carlone 06/11/2025
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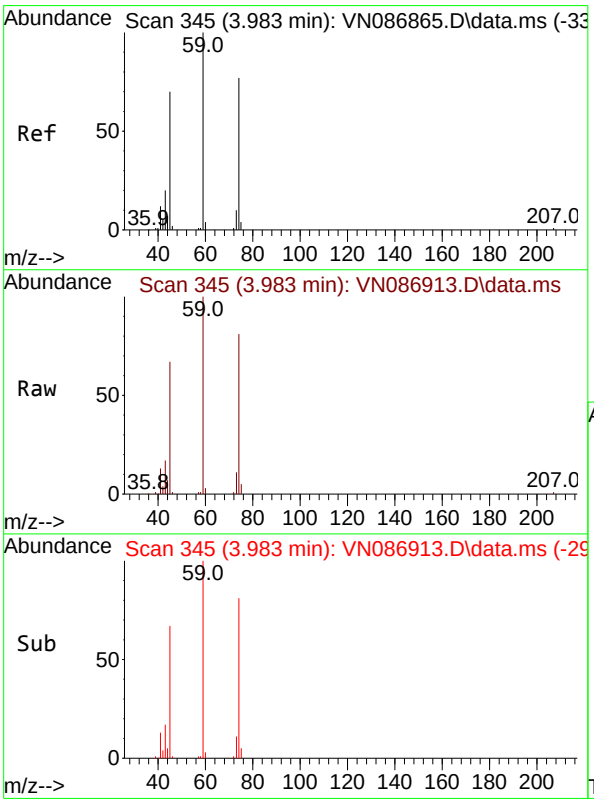
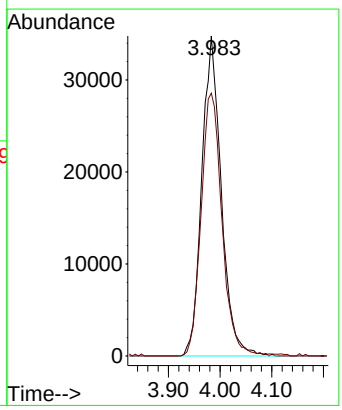
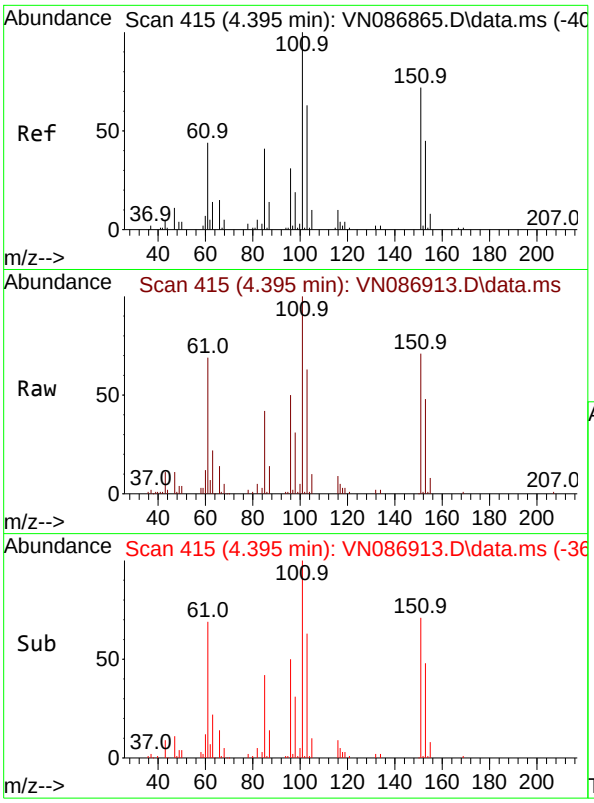



#8
Diethyl Ether
Concen: 50.181 ug/l
RT: 3.983 min Scan# 345
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 74 Resp: 90847

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 88.0 | 45.5 | 136.5 |






#9
1,1,2-Trichlorotrifluoroethane
Concen: 48.583 ug/l
RT: 4.395 min Scan# 4
Delta R.T. -0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion:101 Resp: 12682

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 41.5 | 33.8 | 50.8 |
| 151 | 75.0 | 58.7 | 88.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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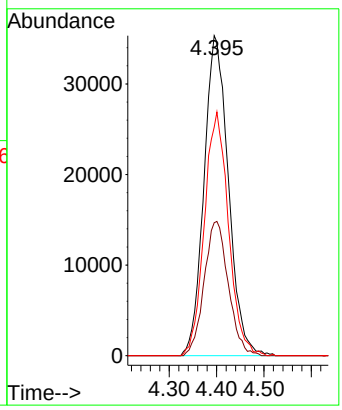
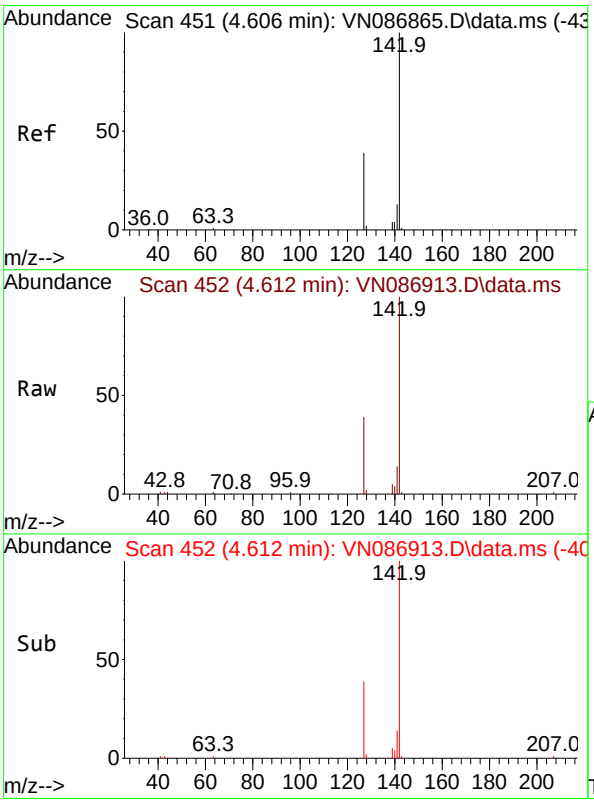
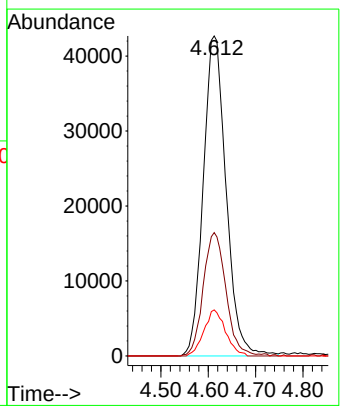


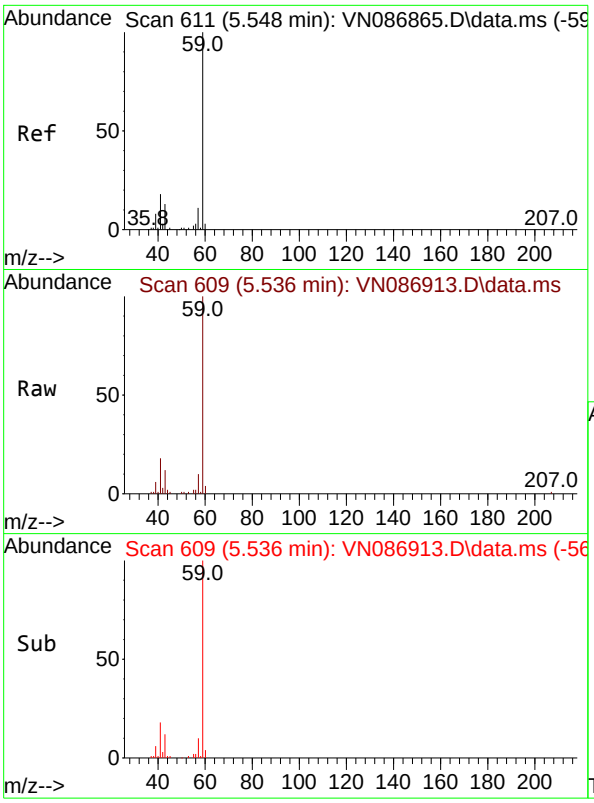




#10
Methyl Iodide
Concen: 42.239 ug/l
RT: 4.612 min Scan# 452
Delta R.T. 0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion:142 Resp: 142941

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 38.6 | 30.9 | 46.3 |
| 141 | 14.4 | 10.4 | 15.6 |






#11
Tert butyl alcohol
Concen: 203.929 ug/l
RT: 5.536 min Scan# 6
Delta R.T. -0.012 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 59 Resp: 17740

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 9.9 | 8.1 | 12.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

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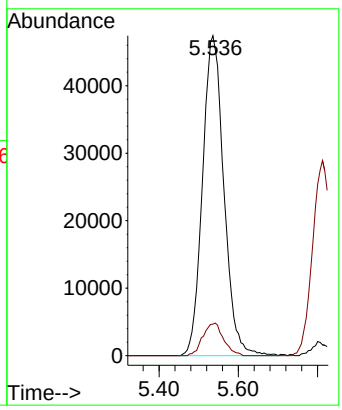
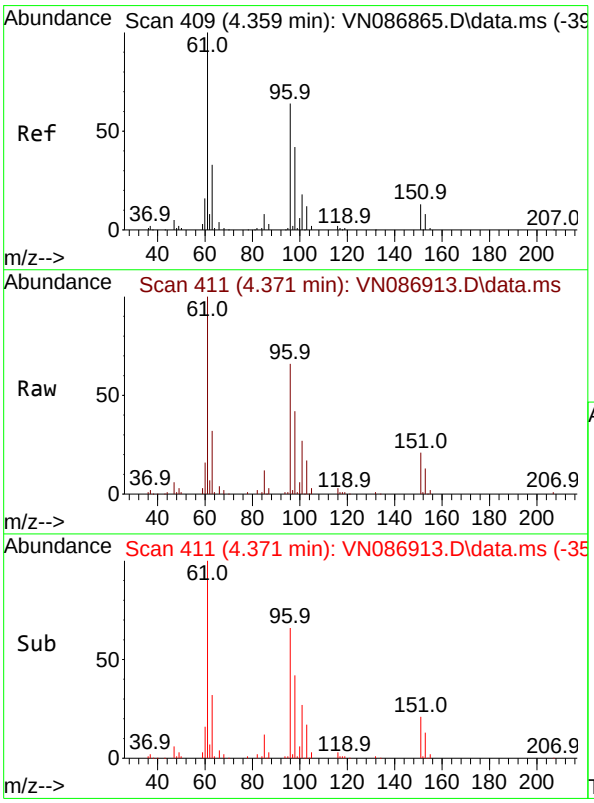
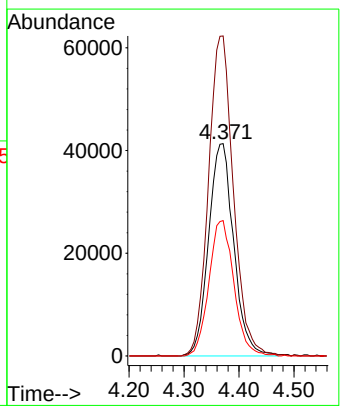


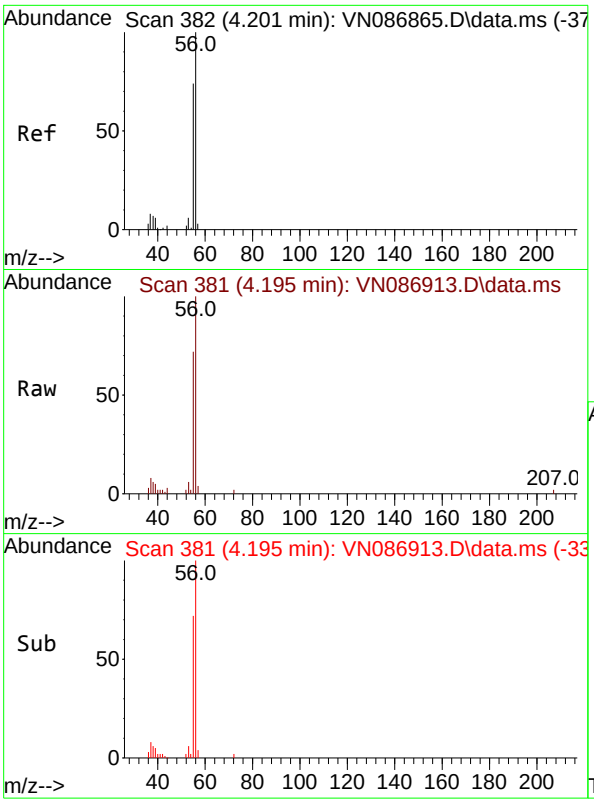




#12
1,1-Dichloroethene
Concen: 49.200 ug/l
RT: 4.371 min Scan# 411
Delta R.T. 0.012 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 96 Resp: 131127

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 150.8 | 125.8 | 188.6 |
| 98 | 63.8 | 52.5 | 78.7 |






#13
Acrolein
Concen: 229.021 ug/l
RT: 4.195 min Scan# 3
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 56 Resp: 6306

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 71.2 | 55.6 | 83.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

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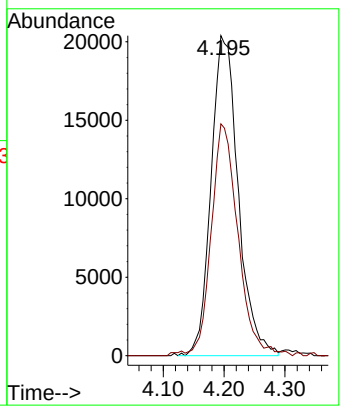
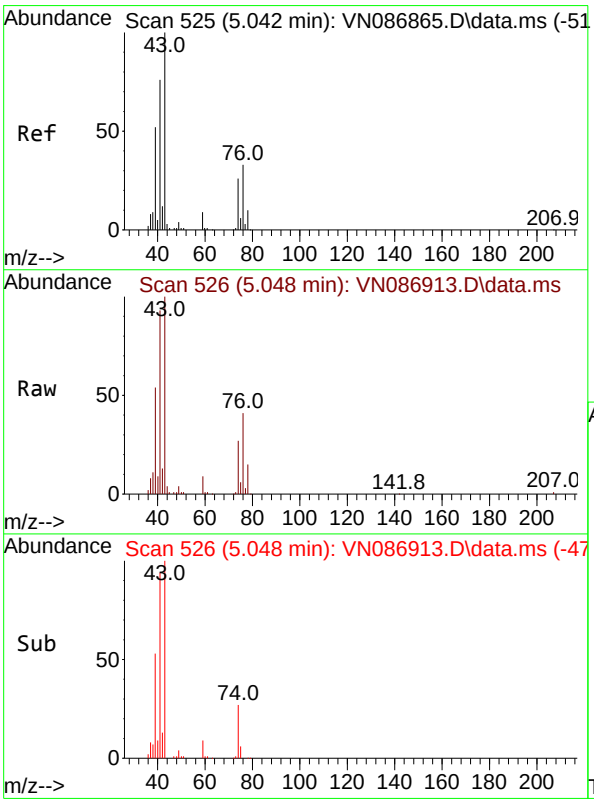
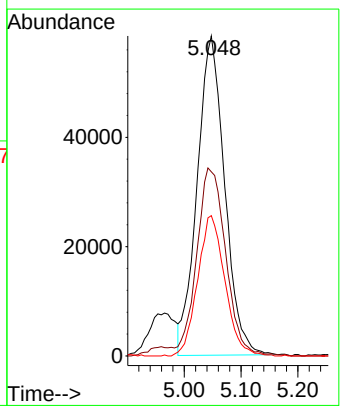


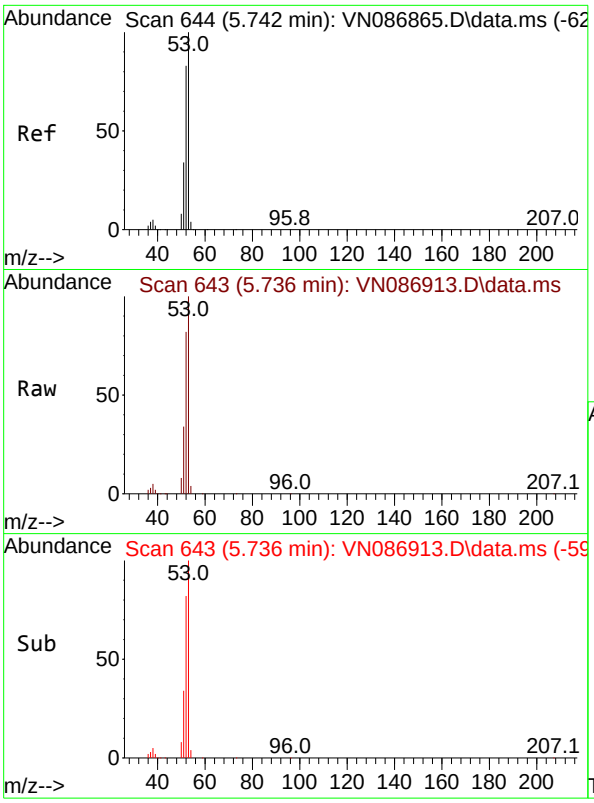




#14
Allyl chloride
Concen: 44.573 ug/l
RT: 5.048 min Scan# 526
Delta R.T. 0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 41 Resp: 197016

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 62.2 | 51.3 | 76.9 |
| 76 | 43.5 | 31.4 | 47.0 |

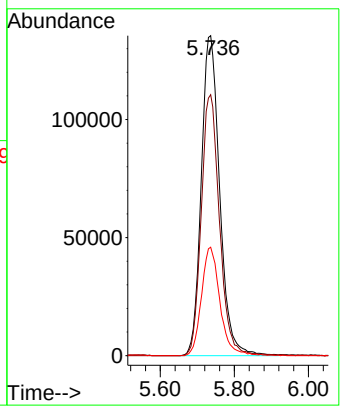





#15
Acrylonitrile
Concen: 229.750 ug/l
RT: 5.736 min Scan# 64
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 53 Resp: 46715

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 80.7 | 65.0 | 97.6 |
| 51 | 34.0 | 27.2 | 40.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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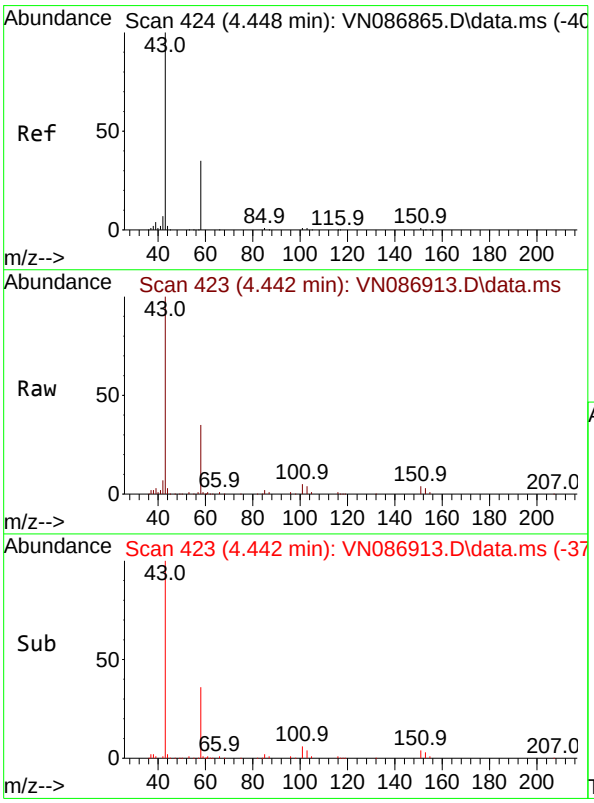
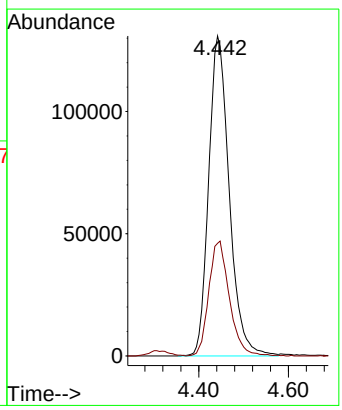
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

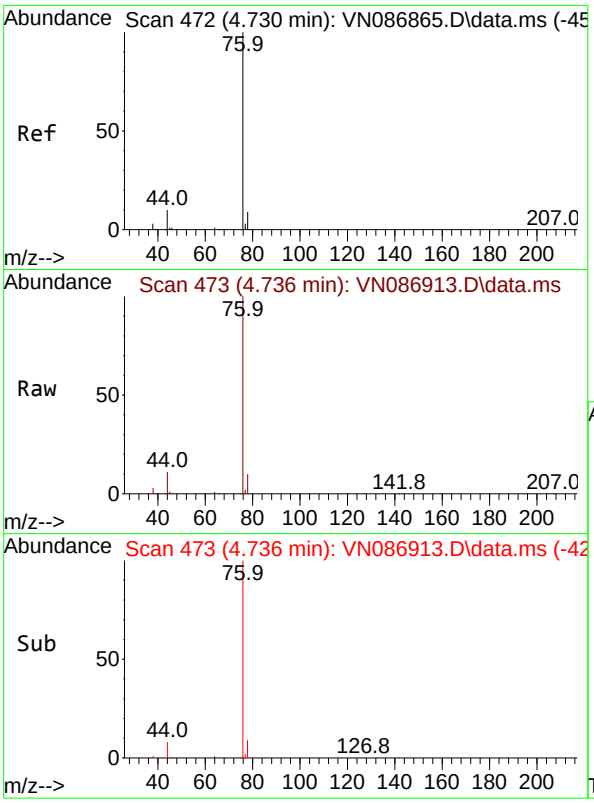



#16
Acetone
Concen: 245.204 ug/l
RT: 4.442 min Scan# 423
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 43 Resp: 416888

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 35.0 | 28.0 | 42.0 |

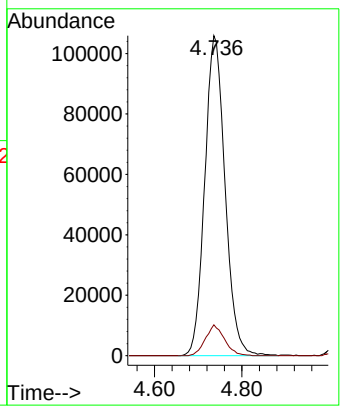





#17
Carbon Disulfide
Concen: 46.386 ug/l
RT: 4.736 min Scan# 4
Delta R.T. 0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 76 Resp: 34196

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.6 | 7.3 | 10.9 |




**Instrument :**
MSVOA_N
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VSTDCCC050

**Manual Integrations**
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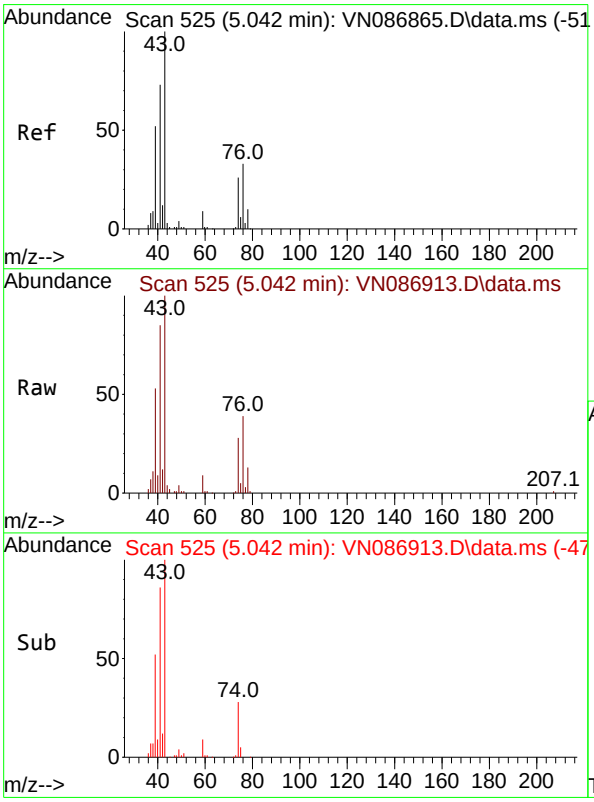
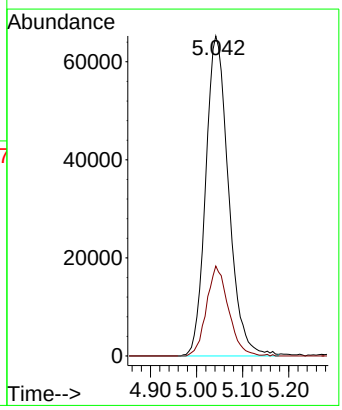
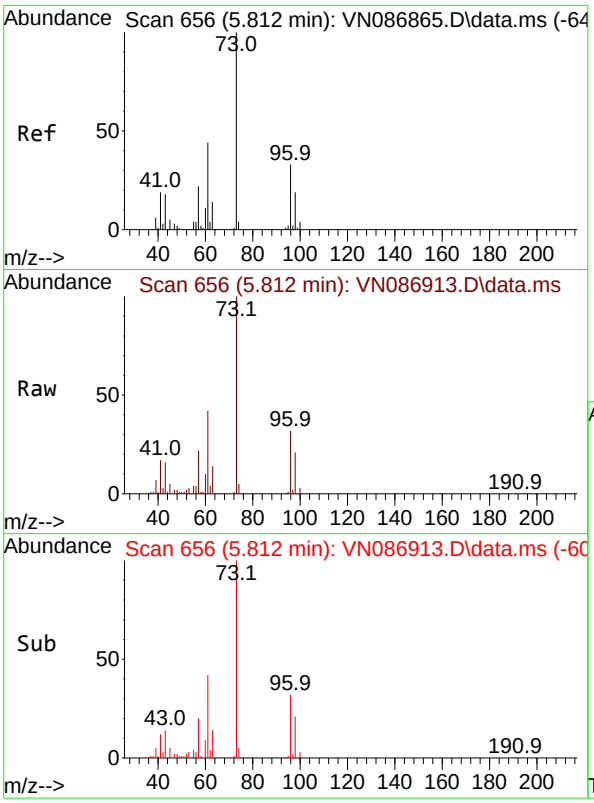



#18
Methyl Acetate
Concen: 45.497 ug/l
RT: 5.042 min Scan# 525
Delta R.T. -0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 43 Resp: 225420

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 27.0 | 20.7 | 31.1 |

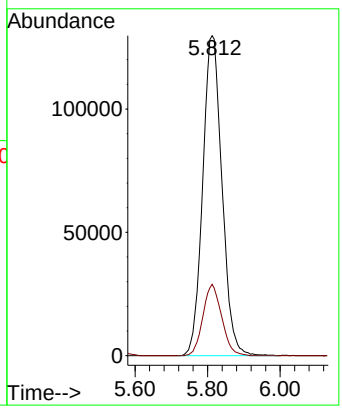





#19
Methyl tert-butyl Ether
Concen: 49.605 ug/l
RT: 5.812 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 73 Resp: 47868

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 22.3 | 17.4 | 26.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

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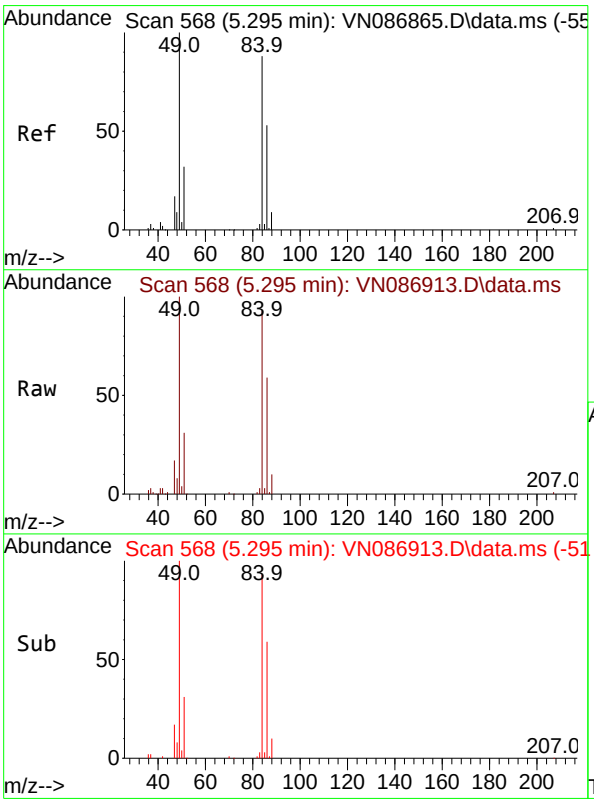
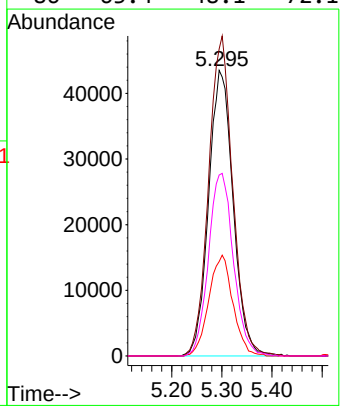
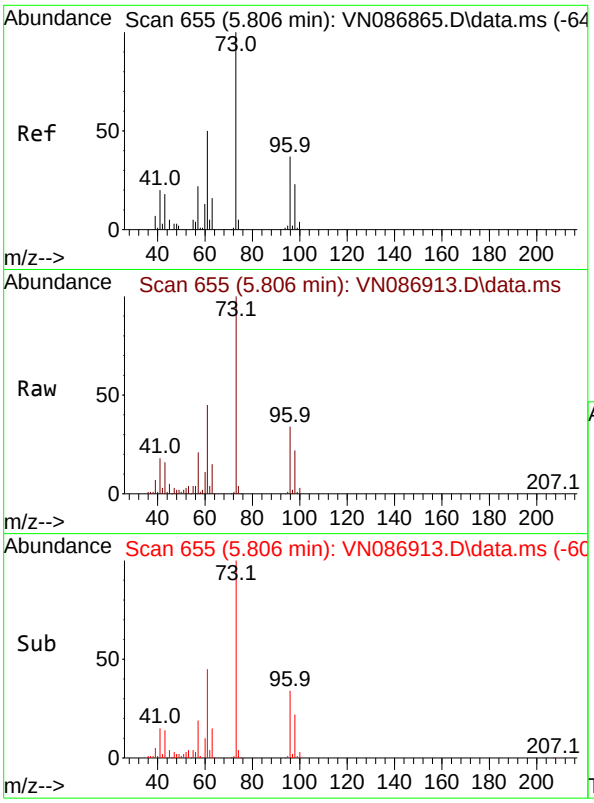



#20
Methylene Chloride
Concen: 46.410 ug/l
RT: 5.295 min Scan# 568
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 84 Resp: 147723

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 107.5 | 90.5 | 135.7 |
| 51 | 33.1 | 28.5 | 42.7 |
| 86 | 63.4 | 48.1 | 72.1 |






#21
trans-1,2-Dichloroethene
Concen: 47.370 ug/l
RT: 5.806 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 96 Resp: 14046

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 133.3 | 109.2 | 163.8 |
| 98 | 64.4 | 49.8 | 74.8 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

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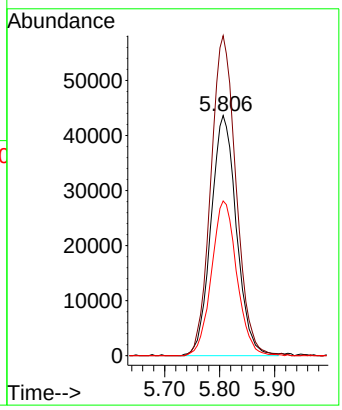
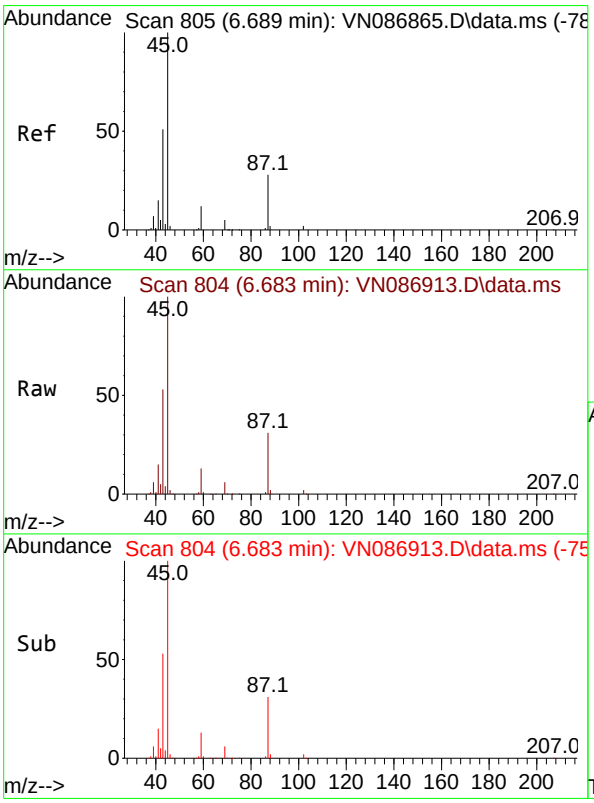
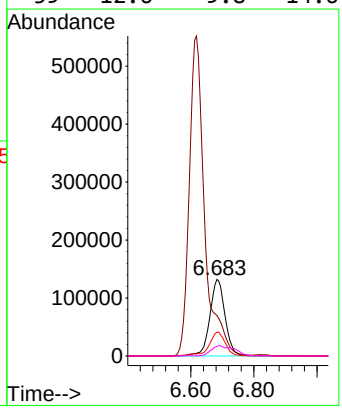


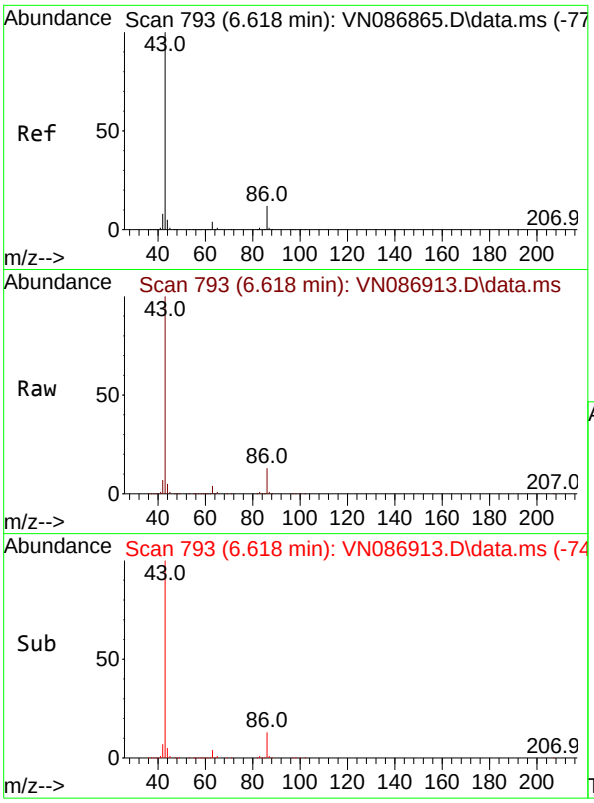




#22
Diisopropyl ether
Concen: 47.178 ug/l
RT: 6.683 min Scan# 804
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 45 Resp: 439557

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 52.7 | 41.9 | 62.9 |
| 87 | 30.9 | 22.4 | 33.6 |
| 59 | 12.6 | 9.8 | 14.6 |






#23
Vinyl Acetate
Concen: 236.925 ug/l
RT: 6.618 min Scan# 7
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 43 Resp: 186505

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 12.7 | 9.5 | 14.3 |

**Instrument :**
MSVOA_N
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VSTDCCC050

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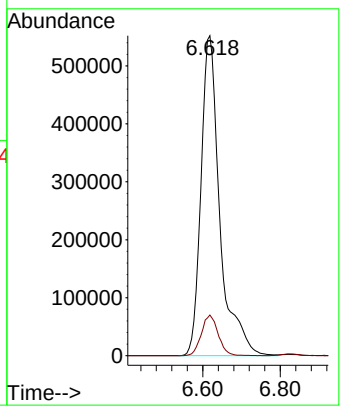
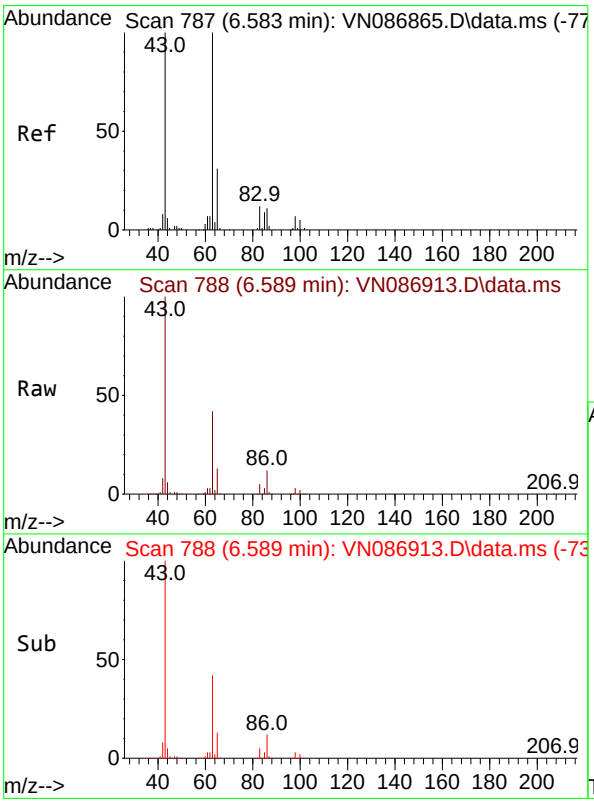
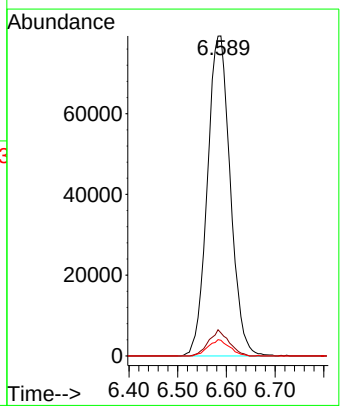


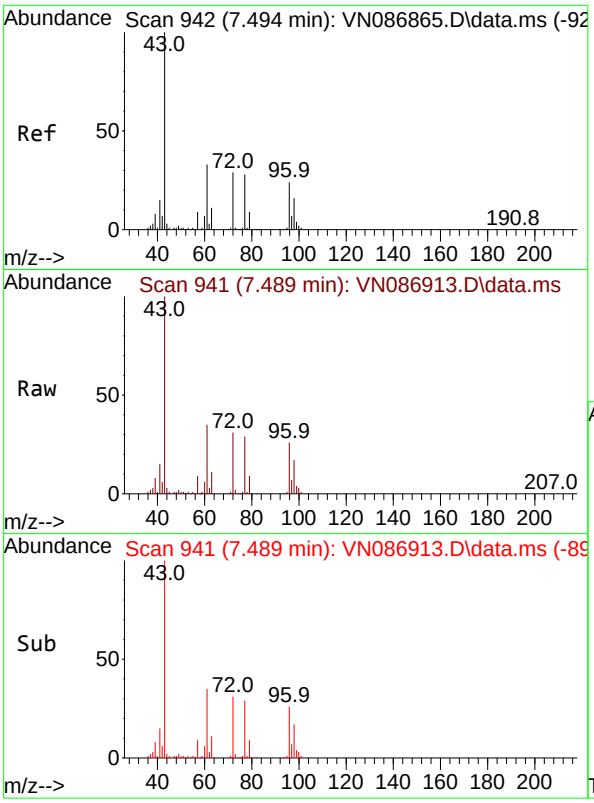




#24
1,1-Dichloroethane
Concen: 48.190 ug/l
RT: 6.589 min Scan# 788
Delta R.T. 0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 63 Resp: 258382

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 7.2 | 3.6 | 10.8 |
| 100 | 4.9 | 2.6 | 7.8 |






#25
2-Butanone
Concen: 213.617 ug/l
RT: 7.489 min Scan# 94
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 43 Resp: 590344

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 31.2 | 23.0 | 34.6 |

**Instrument :**
MSVOA_N
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VSTDCCC050

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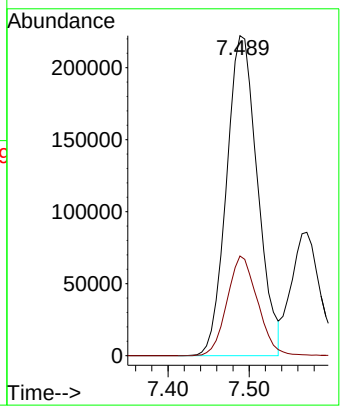
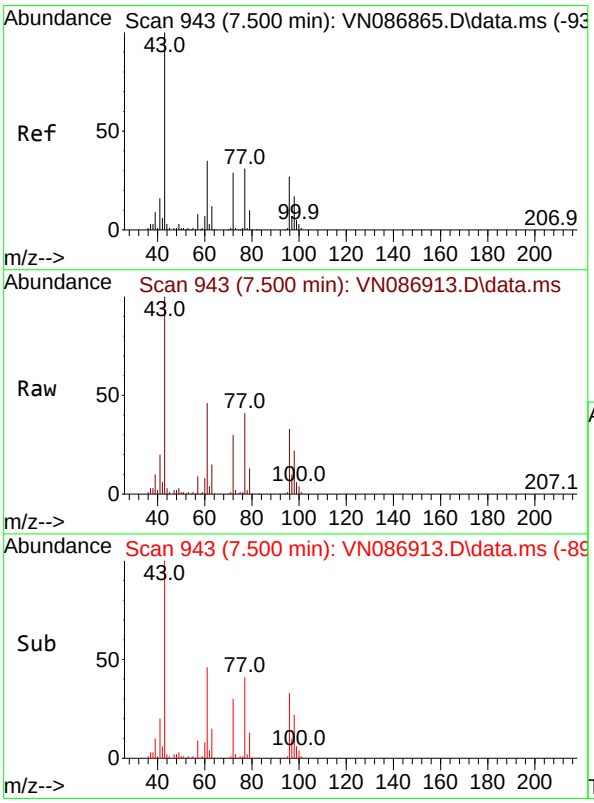
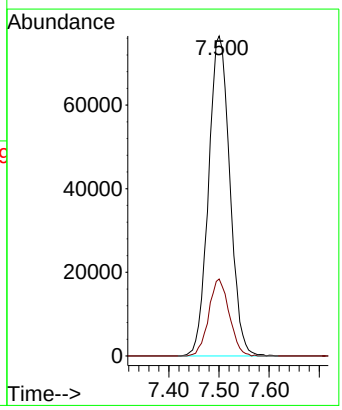


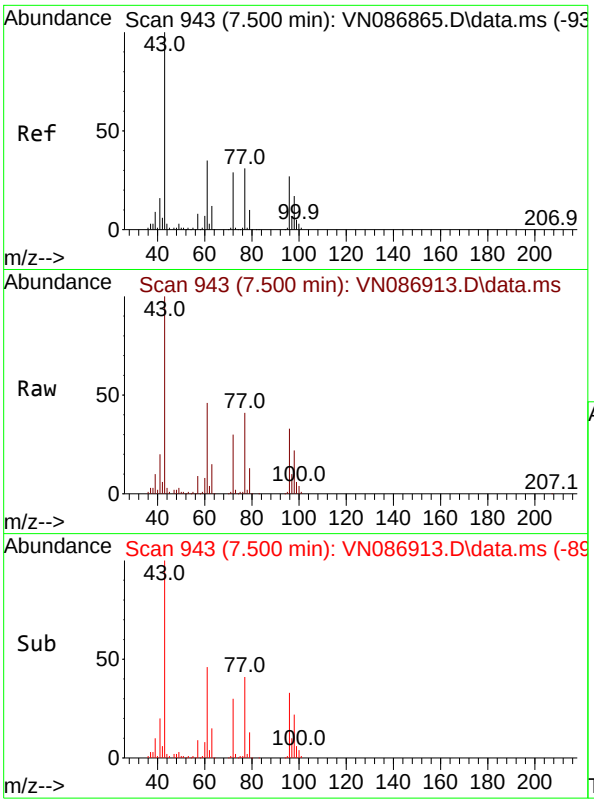




#26
2,2-Dichloropropane
Concen: 54.150 ug/l
RT: 7.500 min Scan# 943
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 77 Resp: 225847

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 23.2 | 11.6 | 34.7 |

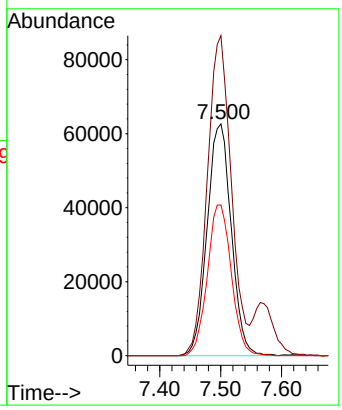





#27
cis-1,2-Dichloroethene
Concen: 48.666 ug/l
RT: 7.500 min Scan# 94
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 96 Resp: 17258

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 137.5 | 0.0 | 278.0 |
| 98 | 64.6 | 0.0 | 128.2 |




**Instrument :**
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VSTDCCC050

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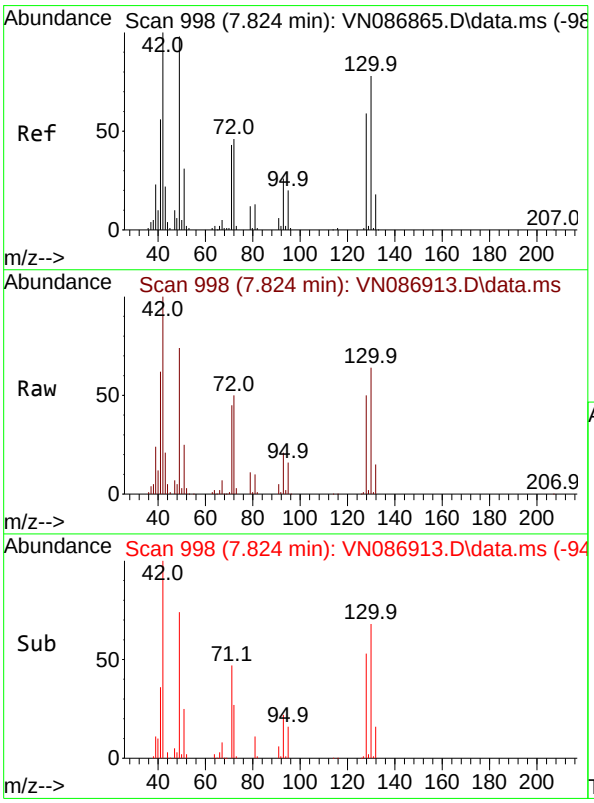
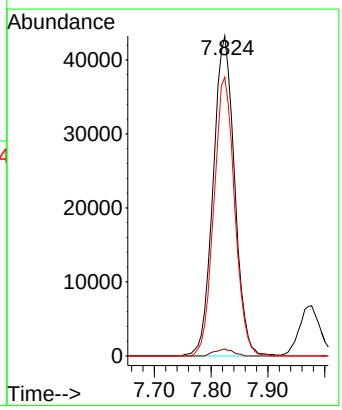
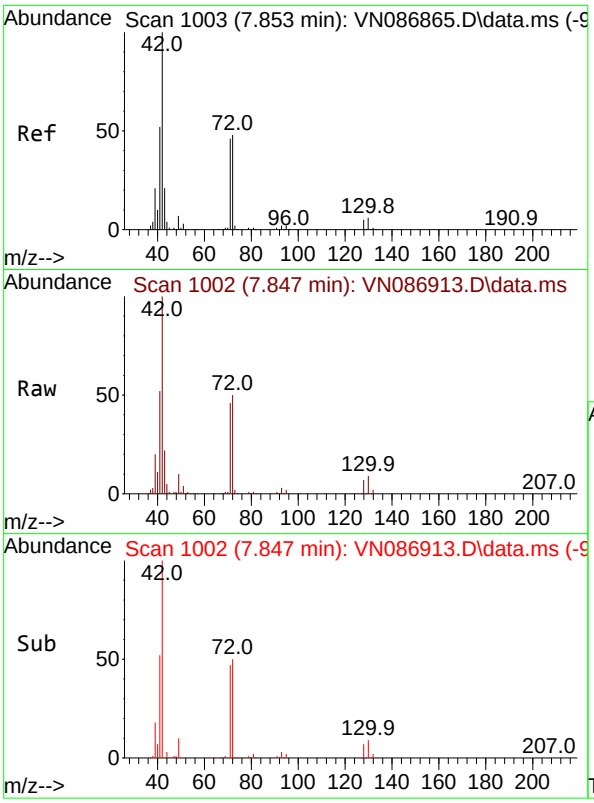



#28
Bromochloromethane
Concen: 42.951 ug/l
RT: 7.824 min Scan# 998
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 49 Resp: 113231

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.9 | 0.0 | 3.8 |
| 130 | 84.6 | 62.2 | 93.2 |

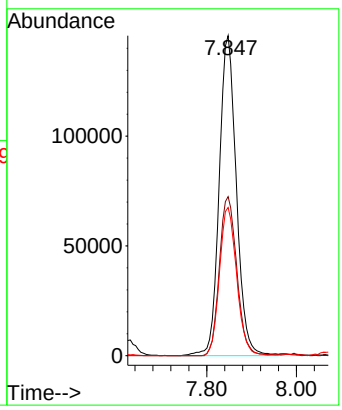





#29
Tetrahydrofuran
Concen: 216.165 ug/l
RT: 7.847 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 42 Resp: 38915

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 50.5 | 37.8 | 56.6 |
| 71 | 46.5 | 35.6 | 53.4 |




**Instrument :**
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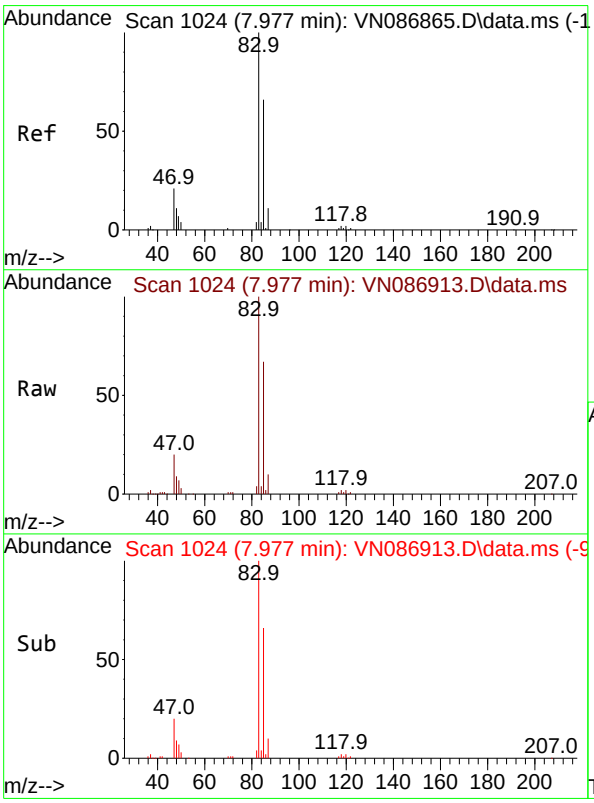
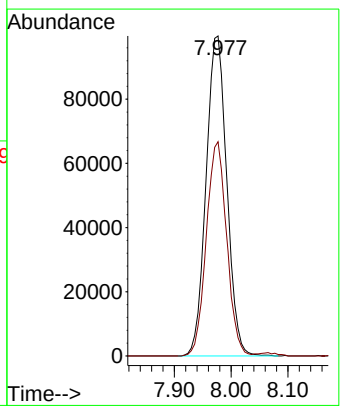
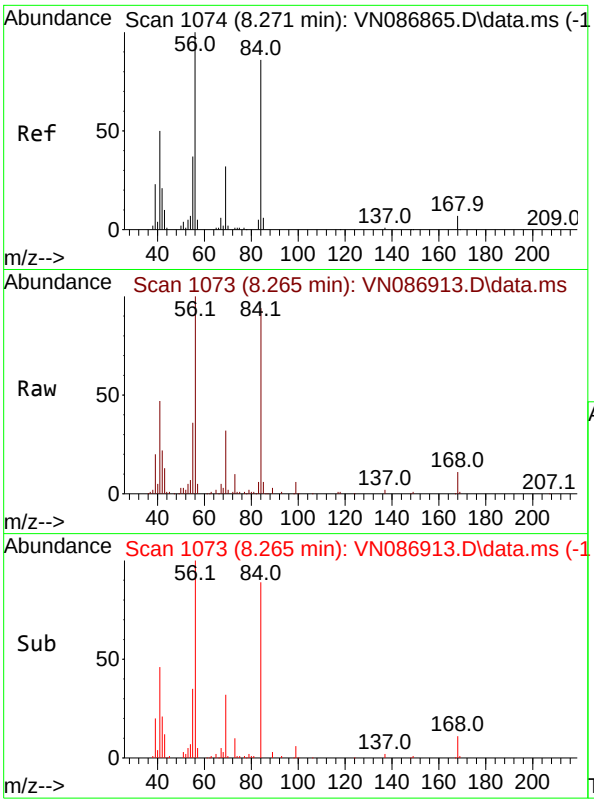



#30
Chloroform
Concen: 47.097 ug/l
RT: 7.977 min Scan# 1024
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 83 Resp: 252183

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 67.0 | 52.9 | 79.3 |

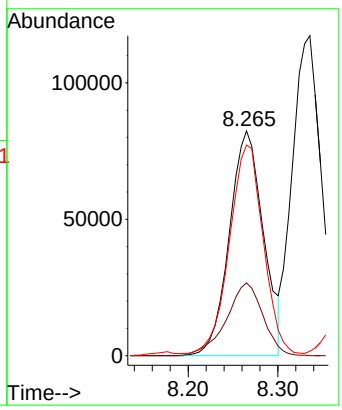





#31
Cyclohexane
Concen: 41.767 ug/l
RT: 8.265 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 56 Resp: 21718

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 32.4 | 25.4 | 38.0 |
| 84 | 92.7 | 68.8 | 103.2 |




**Instrument :**
MSVOA_N
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VSTDCCC050

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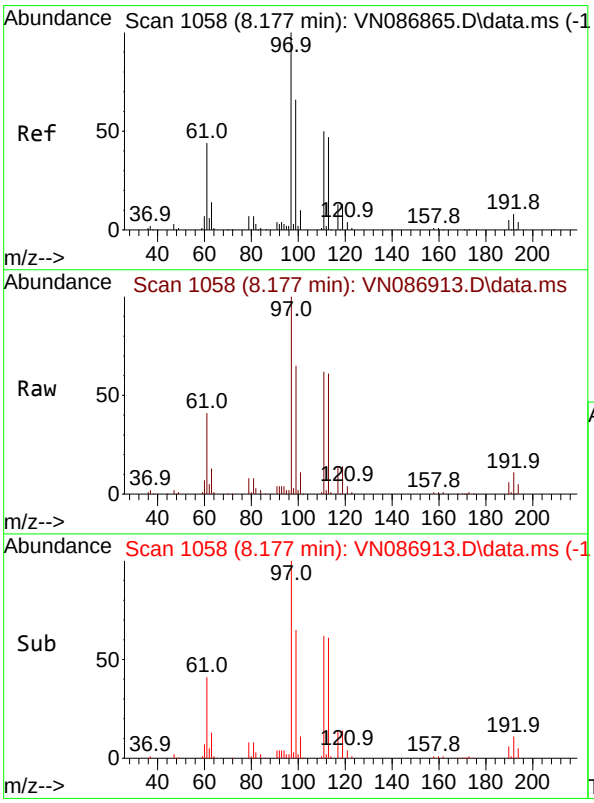
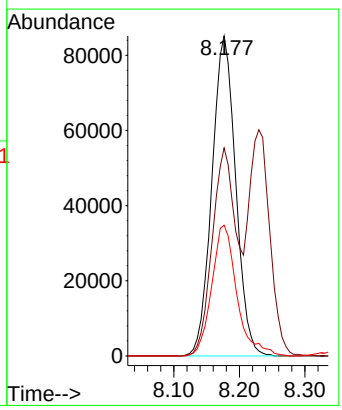
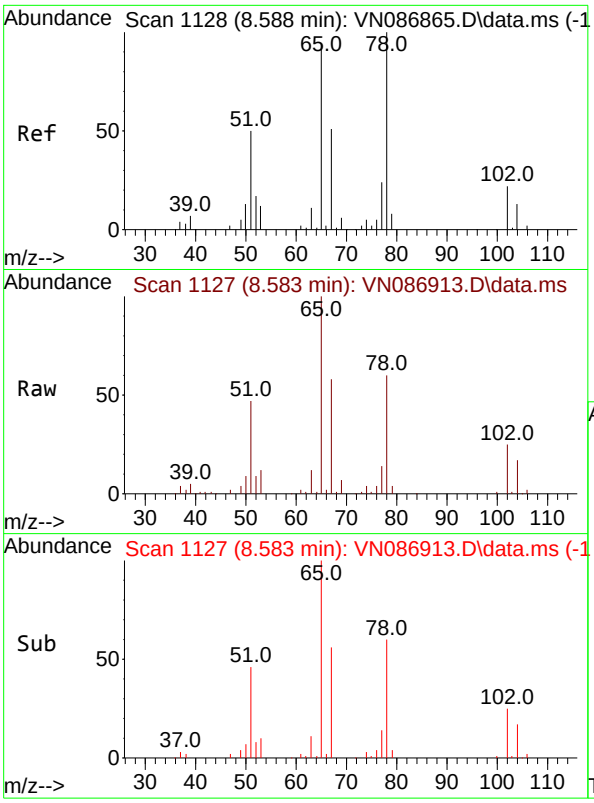



#32
1,1,1-Trichloroethane
Concen: 47.016 ug/l
RT: 8.177 min Scan# 1058
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 97 Resp: 214121

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 66.9 | 52.0 | 78.0 |
| 61 | 43.4 | 35.9 | 53.9 |






#33
1,2-Dichloroethane-d4
Concen: 45.789 ug/l
RT: 8.583 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

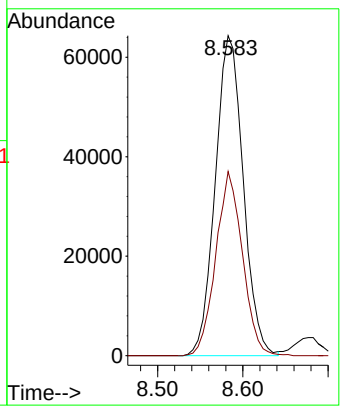
Tgt Ion: 65 Resp: 14680

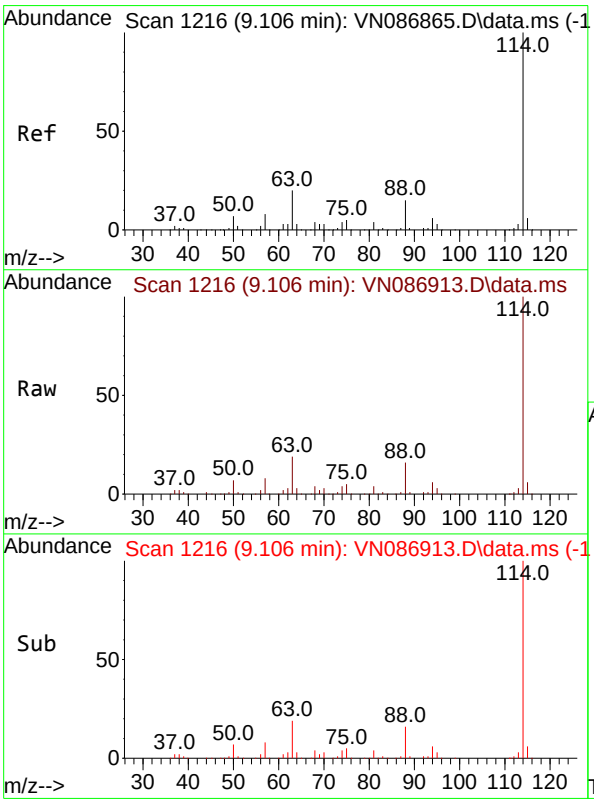
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 54.9 | 0.0 | 105.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

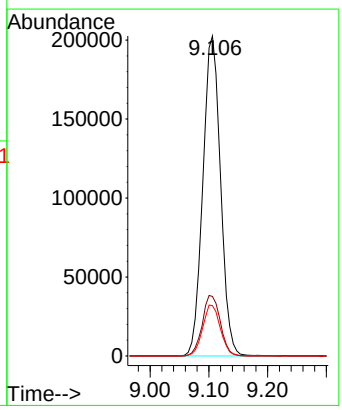


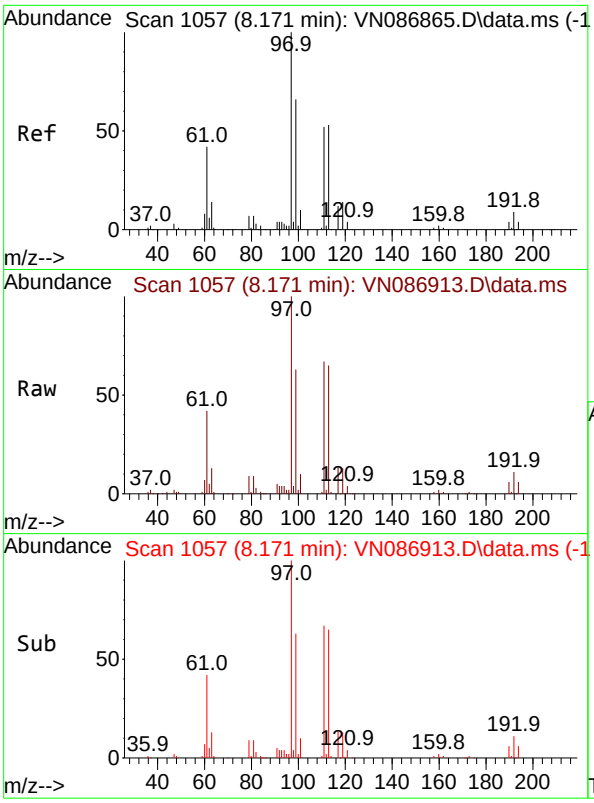




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.106 min Scan# 1216
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion:114 Resp: 422119

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 18.6 | 0.0 | 39.6 |
| 88 | 15.8 | 0.0 | 30.2 |

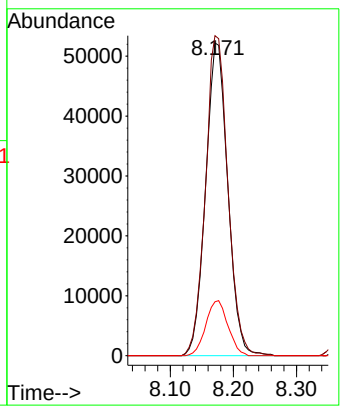





#35
Dibromofluoromethane
Concen: 50.869 ug/l
RT: 8.171 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion:113 Resp: 12725

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 103.6 | 84.2 | 126.2 |
| 192 | 17.6 | 14.2 | 21.4 |




**Instrument :**
MSVOA_N
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VSTDCCC050

**Manual Integrations**
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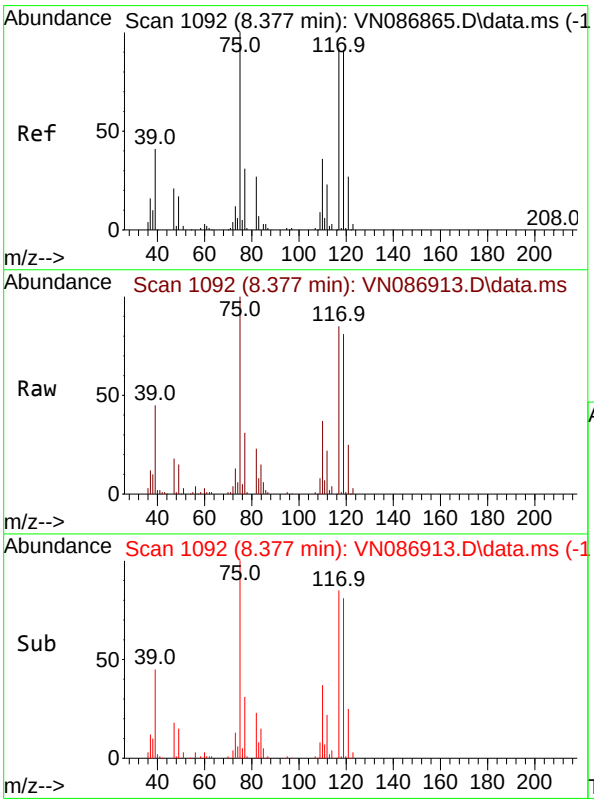
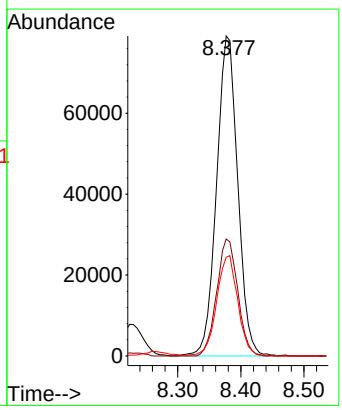
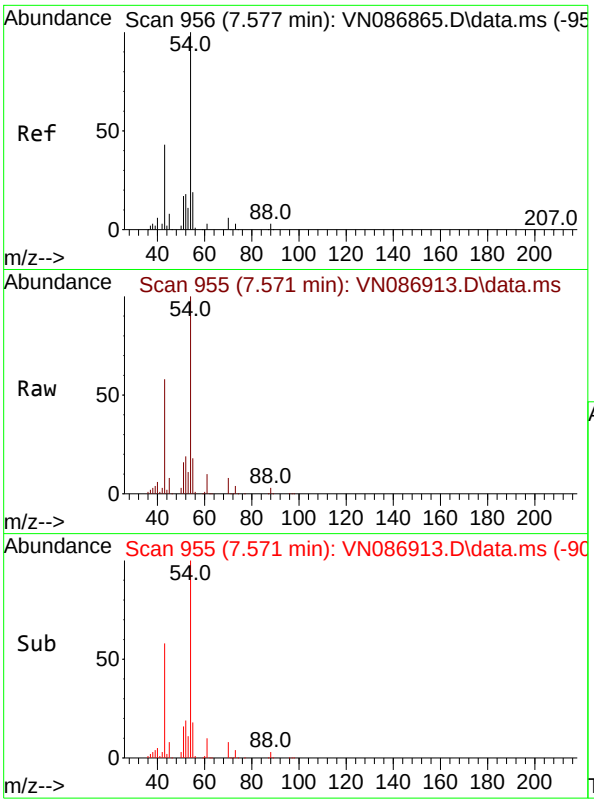



#36
1,1-Dichloropropene
Concen: 49.463 ug/l
RT: 8.377 min Scan# 1092
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 75 Resp: 184378

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 36.2 | 17.6 | 52.9 |
| 77 | 31.3 | 25.3 | 37.9 |






#37
Ethyl Acetate
Concen: 46.471 ug/l
RT: 7.571 min Scan# 9
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 43 Resp: 22051

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 15.0 | 12.1 | 18.1 |
| 70 | 13.4 | 9.8 | 14.6 |

**Instrument :**
MSVOA_N
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VSTDCCC050

**Manual Integrations**
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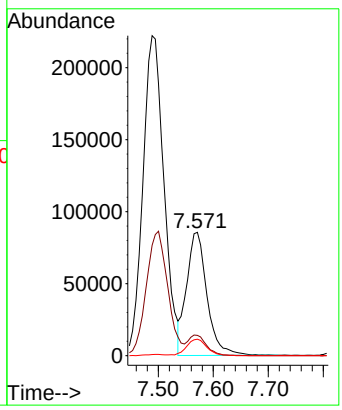
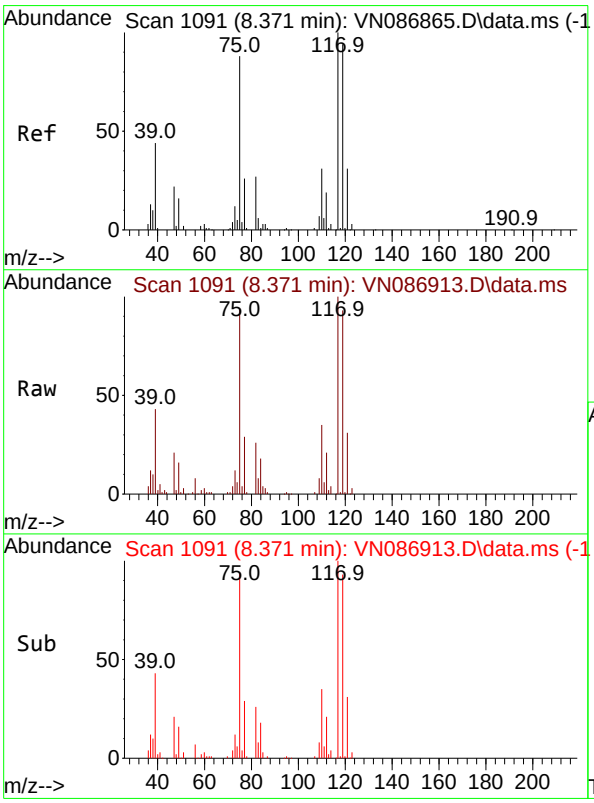
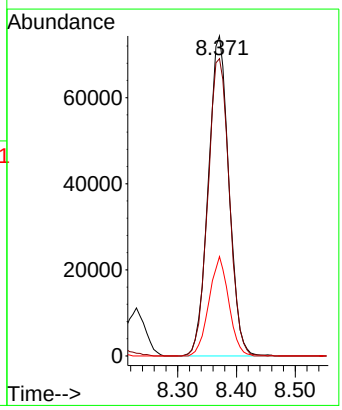


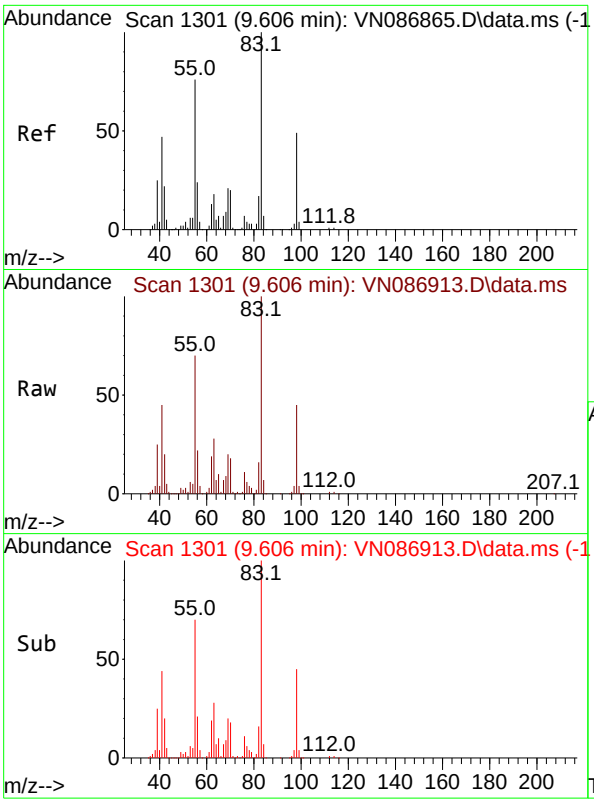




#38
Carbon Tetrachloride
Concen: 49.466 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion:117 Resp: 181026

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 92.9 | 75.0 | 112.6 |
| 121 | 31.1 | 24.9 | 37.3 |






#39
Methylcyclohexane
Concen: 43.269 ug/l
RT: 9.606 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 83 Resp: 22097

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 69.9 | 61.0 | 91.6 |
| 98 | 45.2 | 38.9 | 58.3 |

**Instrument :**
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**Manual Integrations**
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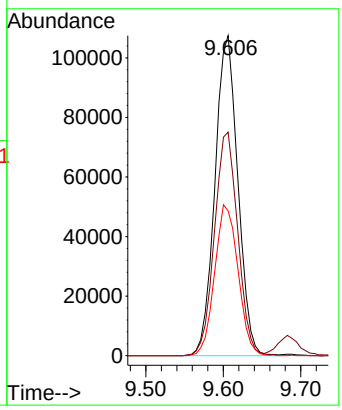
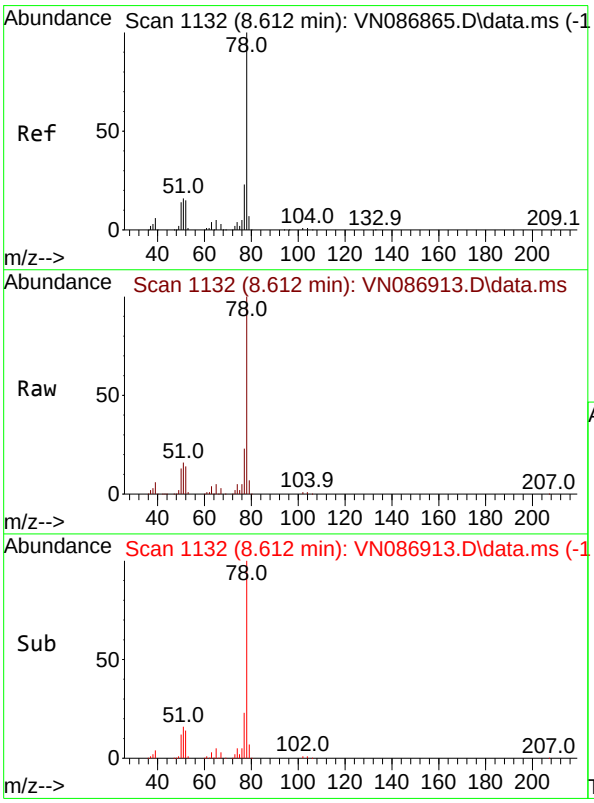
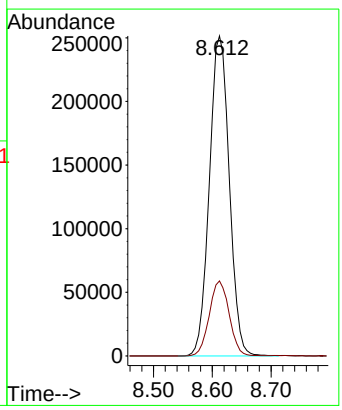


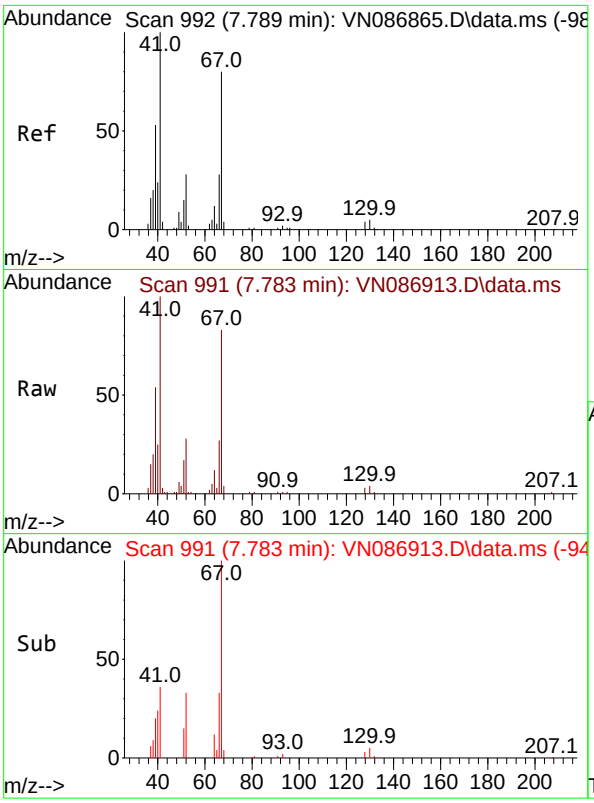




#40
Benzene
Concen: 48.493 ug/l
RT: 8.612 min Scan# 1132
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 78 Resp: 591102

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.4 | 18.7 | 28.1 |

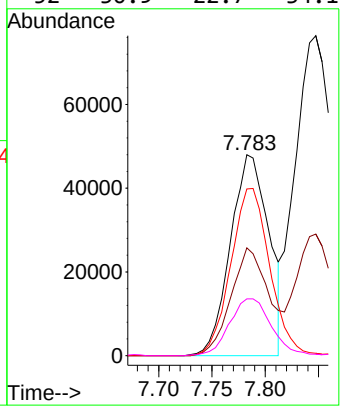





#41
Methacrylonitrile
Concen: 45.256 ug/l
RT: 7.783 min Scan# 9
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 41 Resp: 12060

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 54.3 | 41.2 | 61.8 |
| 67 | 84.7 | 61.4 | 92.2 |
| 52 | 30.9 | 22.7 | 34.1 |




**Instrument :**
MSVOA_N
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VSTDCCC050

**Manual Integrations**
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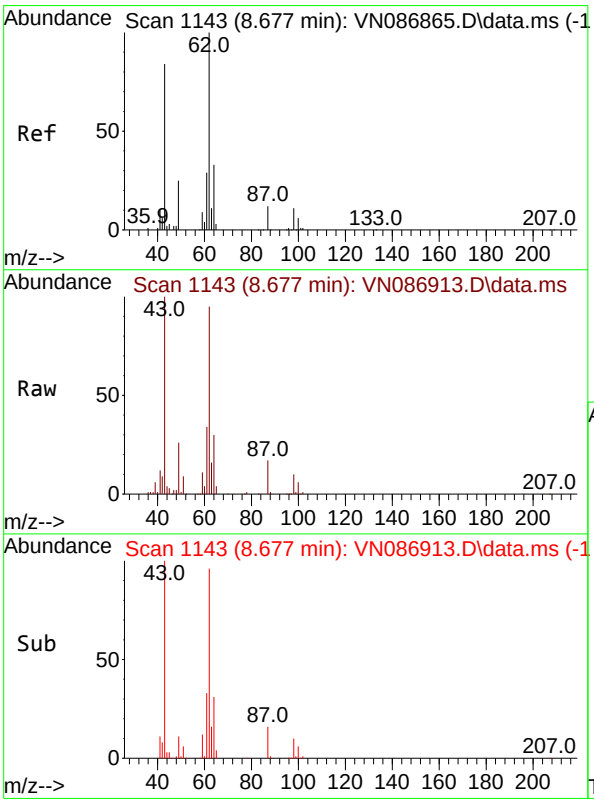
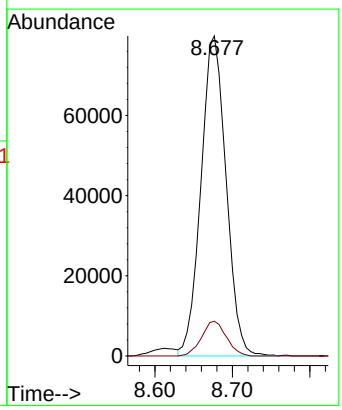
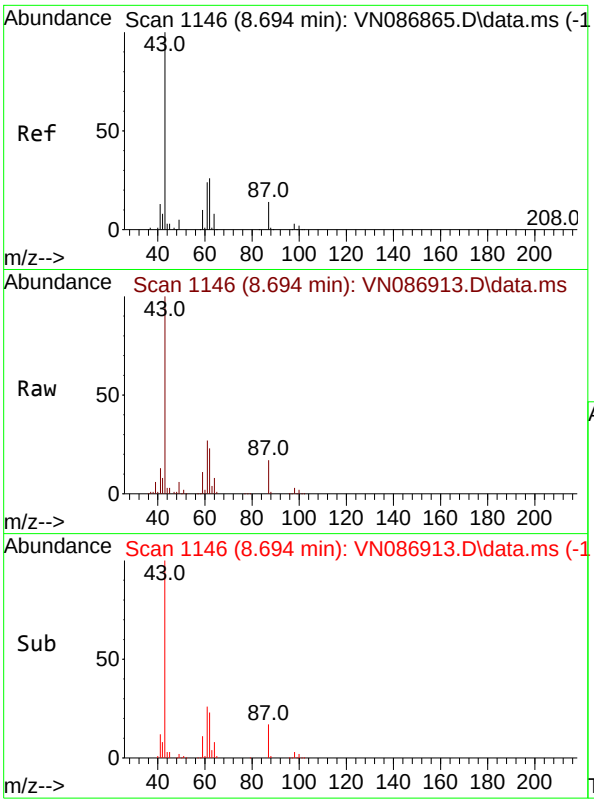



#42
1,2-Dichloroethane
Concen: 48.671 ug/l
RT: 8.677 min Scan# 1143
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 62 Resp: 179943

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 10.7 | 0.0 | 21.2 |






#43
Isopropyl Acetate
Concen: 45.998 ug/l
RT: 8.694 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 43 Resp: 35032

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 29.4 | 22.1 | 33.1 |
| 87 | 15.9 | 11.8 | 17.6 |

**Instrument :**
MSVOA_N
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VSTDCCC050

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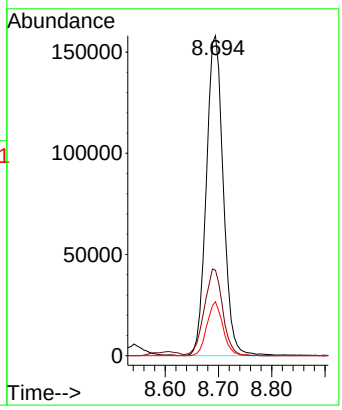
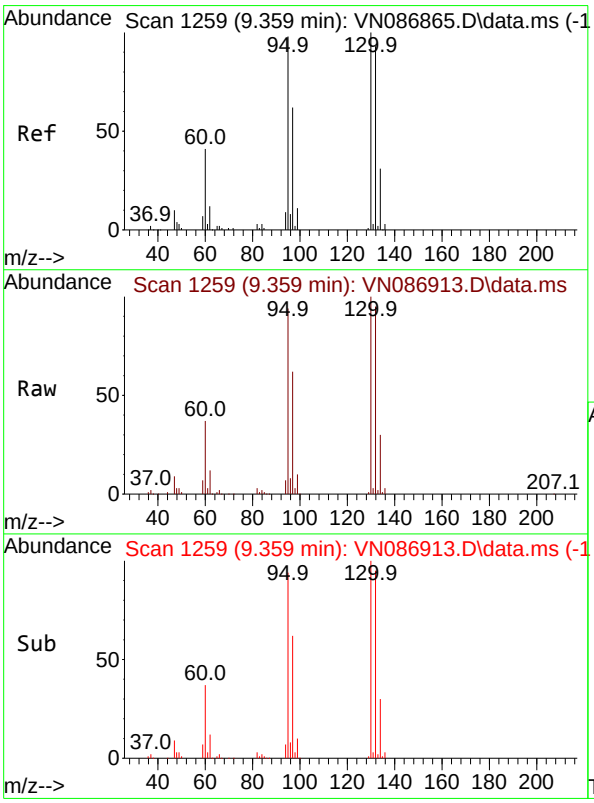
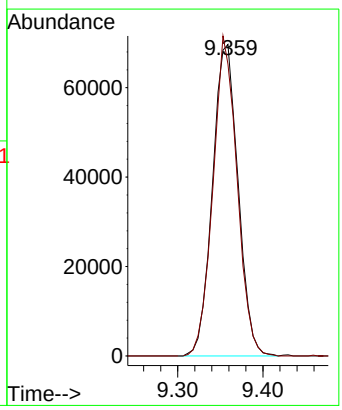


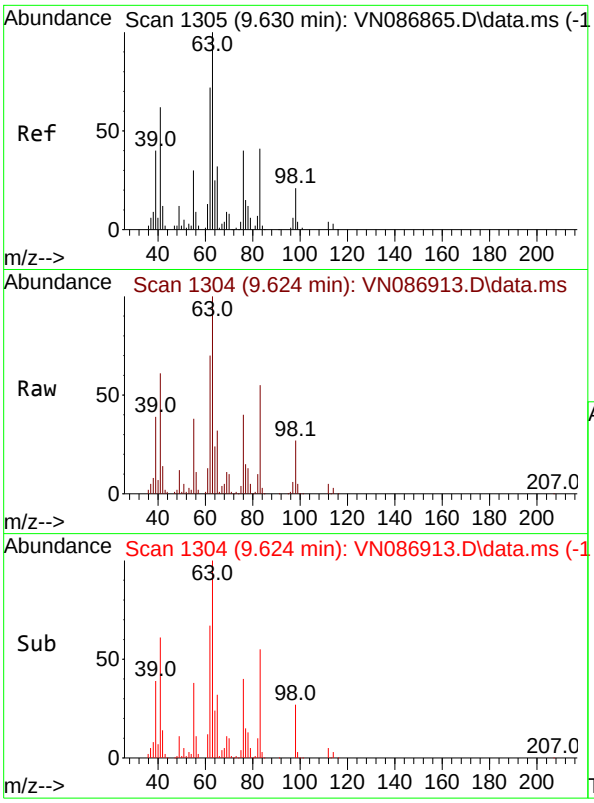




#44
Trichloroethene
Concen: 50.404 ug/l
RT: 9.359 min Scan# 1259
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion:130 Resp: 145683

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 93.7 | 0.0 | 196.2 |

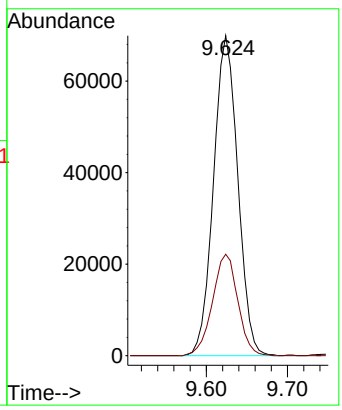





#45
1,2-Dichloropropane
Concen: 49.004 ug/l
RT: 9.624 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 63 Resp: 14532

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 31.7 | 25.5 | 38.3 |




**Instrument :**
MSVOA_N
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VSTDCCC050

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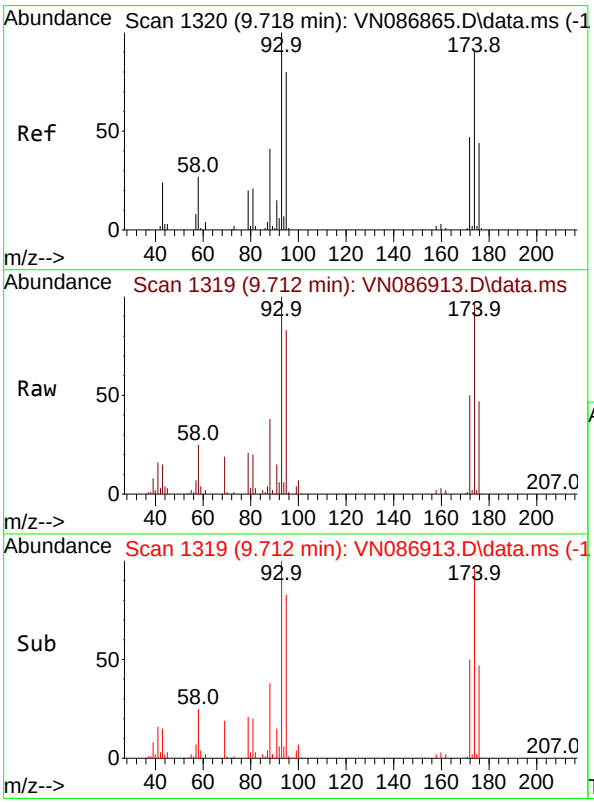
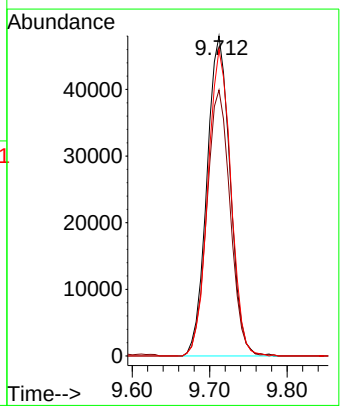
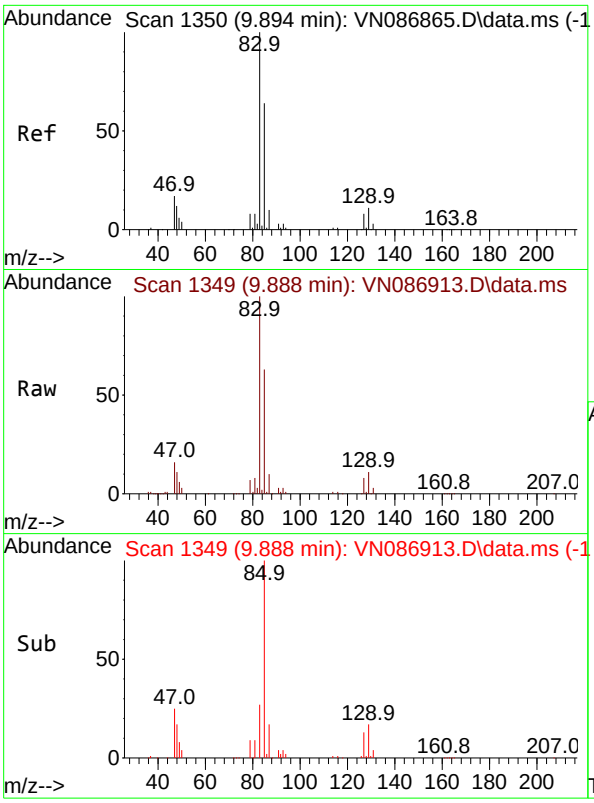



#46
Dibromomethane
Concen: 50.766 ug/l
RT: 9.712 min Scan# 1319
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 93 Resp: 99996

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 83.6 | 67.1 | 100.7 |
| 174 | 94.8 | 74.2 | 111.4 |

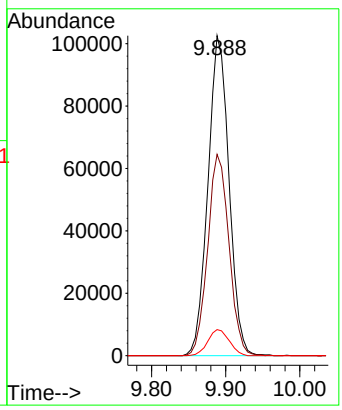





#47
Bromodichloromethane
Concen: 49.918 ug/l
RT: 9.888 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 83 Resp: 20230

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 62.9 | 50.9 | 76.3 |
| 127 | 8.2 | 6.6 | 10.0 |




**Instrument :**
MSVOA_N
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VSTDCCC050

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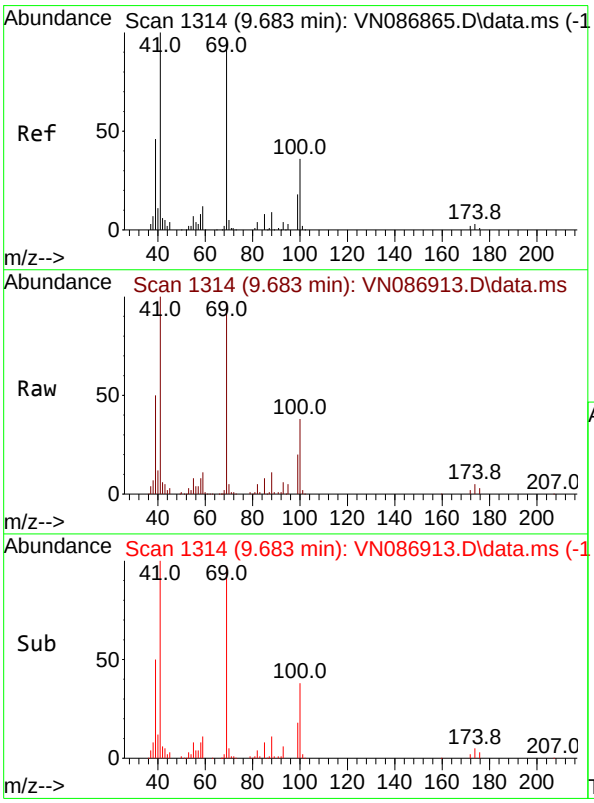
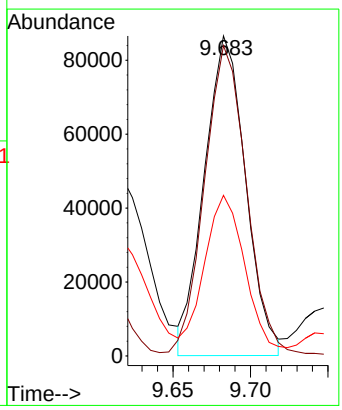
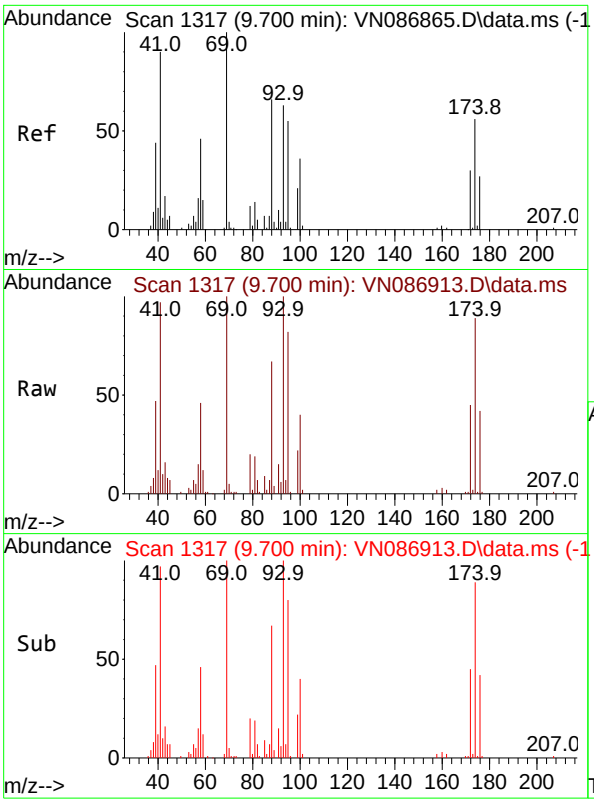



#48
Methyl methacrylate
Concen: 45.601 ug/l
RT: 9.683 min Scan# 1314
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 41 Resp: 159853

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 99.2 | 74.6 | 112.0 |
| 39 | 50.8 | 40.2 | 60.4 |






#49
1,4-Dioxane
Concen: 892.983 ug/l
RT: 9.700 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 88 Resp: 5694

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 0.0 | 0.0 | 0.0 |
| 58 | 70.0 | 57.7 | 86.5 |

**Instrument :**
MSVOA_N
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VSTDCCC050

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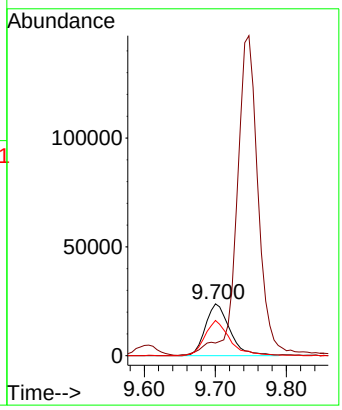
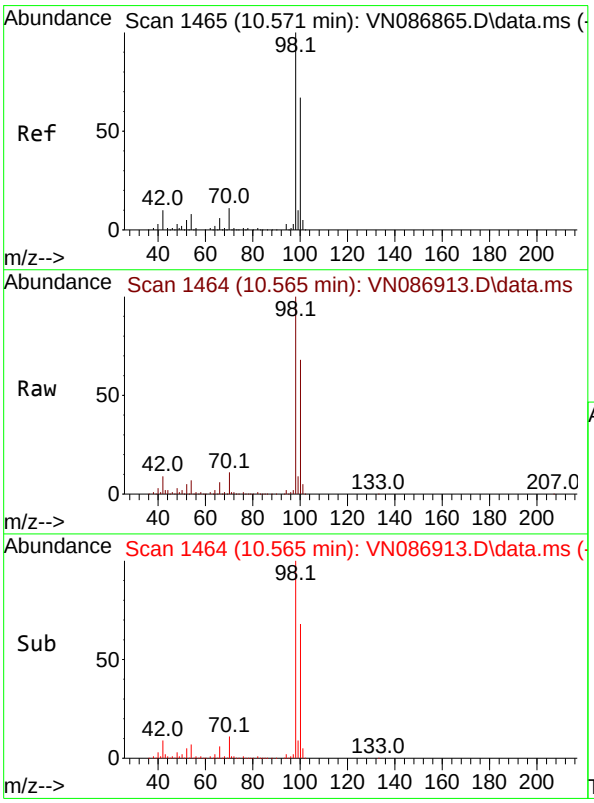
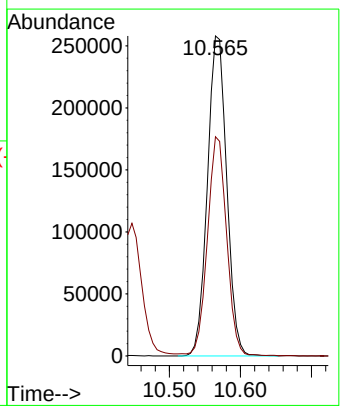


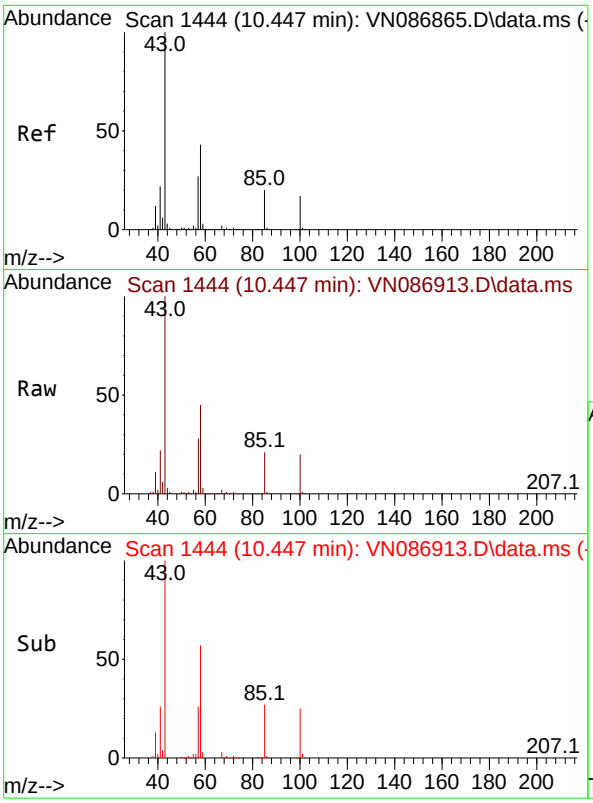




#50
Toluene-d8
Concen: 49.146 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 98 Resp: 486698

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 67.9 | 53.4 | 80.0 |

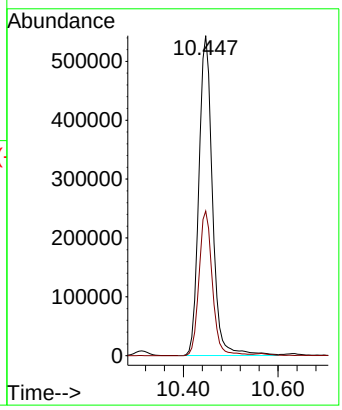





#51
4-Methyl-2-Pentanone
Concen: 235.975 ug/l
RT: 10.447 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 43 Resp: 108194

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 44.4 | 34.2 | 51.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

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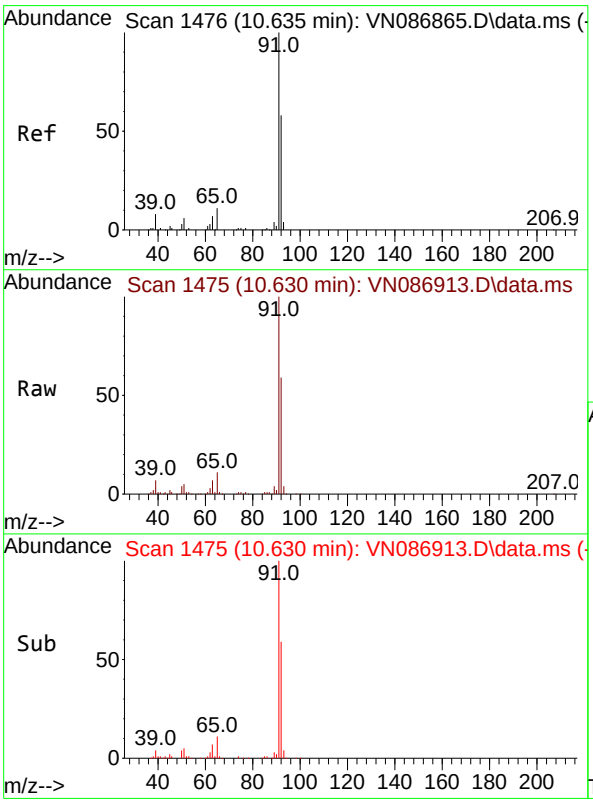
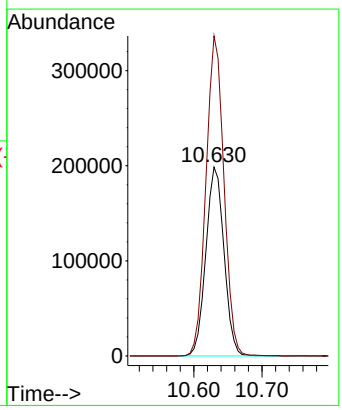
Supervised By :Mahesh Dadoda 06/11/2025

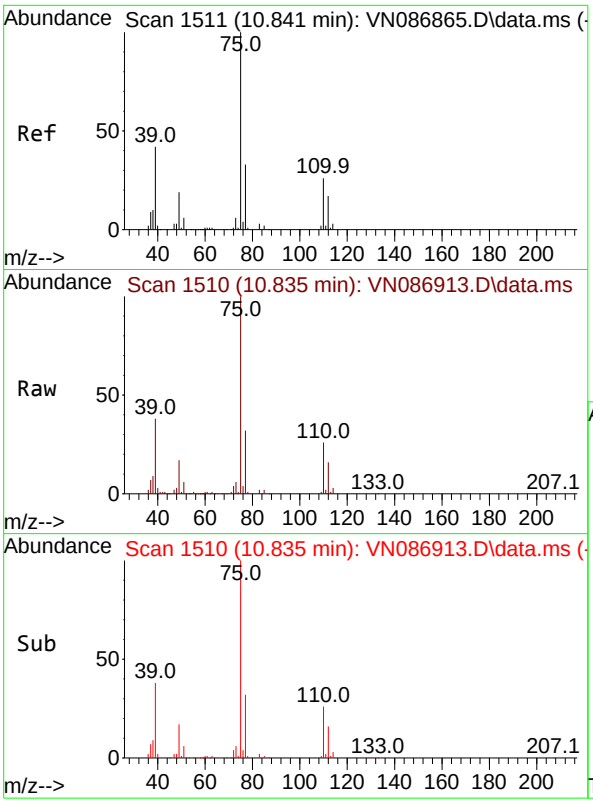



#52
Toluene
Concen: 49.345 ug/l
RT: 10.630 min Scan# 1475
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 92 Resp: 367587

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 167.7 | 136.5 | 204.7 |






#53
t-1,3-Dichloropropene
Concen: 51.759 ug/l
RT: 10.835 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 75 Resp: 23455

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.9 | 26.4 | 39.6 |

**Instrument :**
MSVOA_N
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VSTDCCC050

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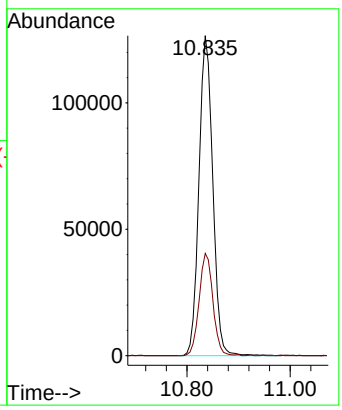
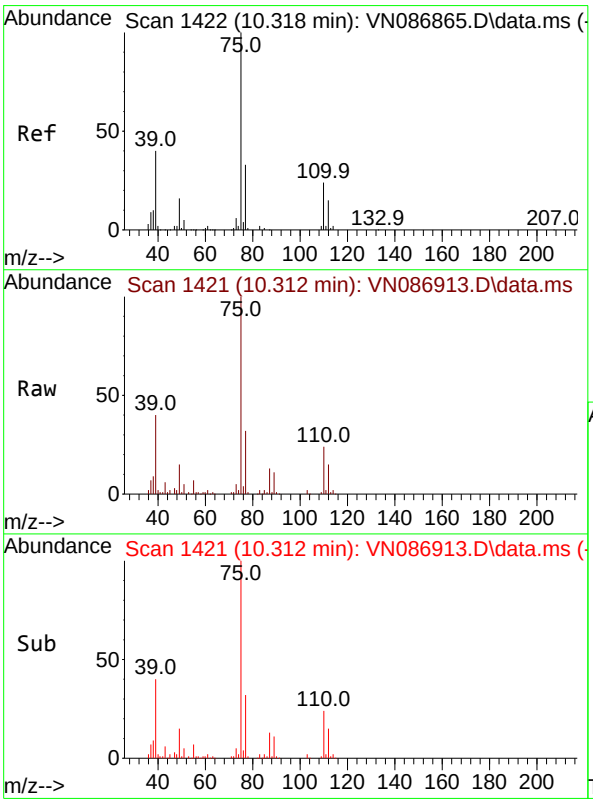
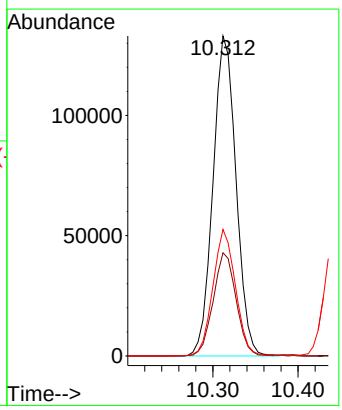


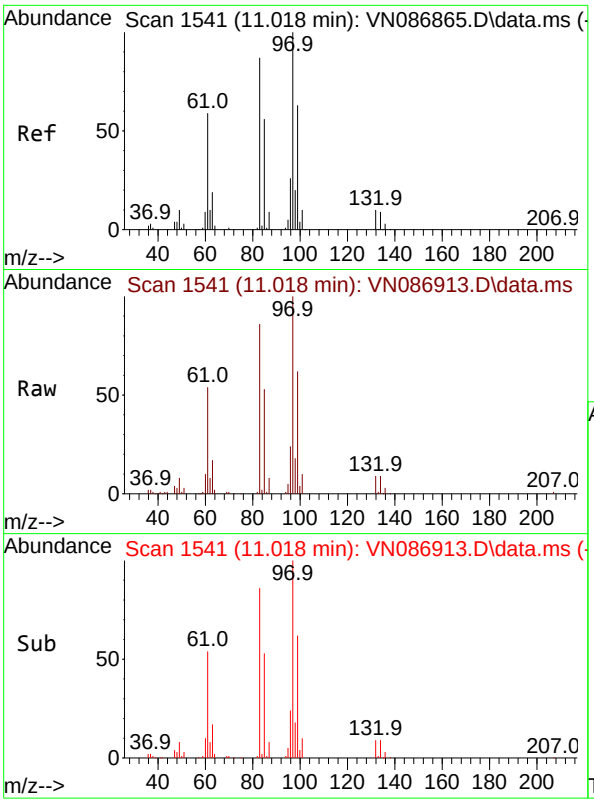




#54
cis-1,3-Dichloropropene
Concen: 51.506 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 75 Resp: 249744

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.3 | 26.2 | 39.4 |
| 39 | 39.4 | 32.3 | 48.5 |

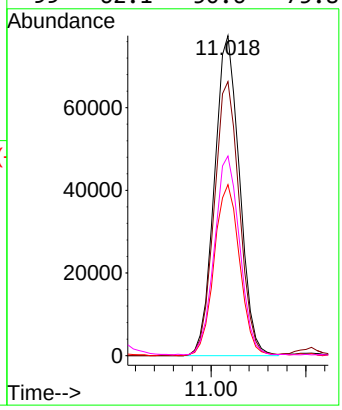





#55
1,1,2-Trichloroethane
Concen: 49.785 ug/l
RT: 11.018 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 97 Resp: 14270

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 85.6 | 69.7 | 104.5 |
| 85 | 53.4 | 45.1 | 67.7 |
| 99 | 62.1 | 50.6 | 75.8 |




**Instrument :**
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VSTDCCC050

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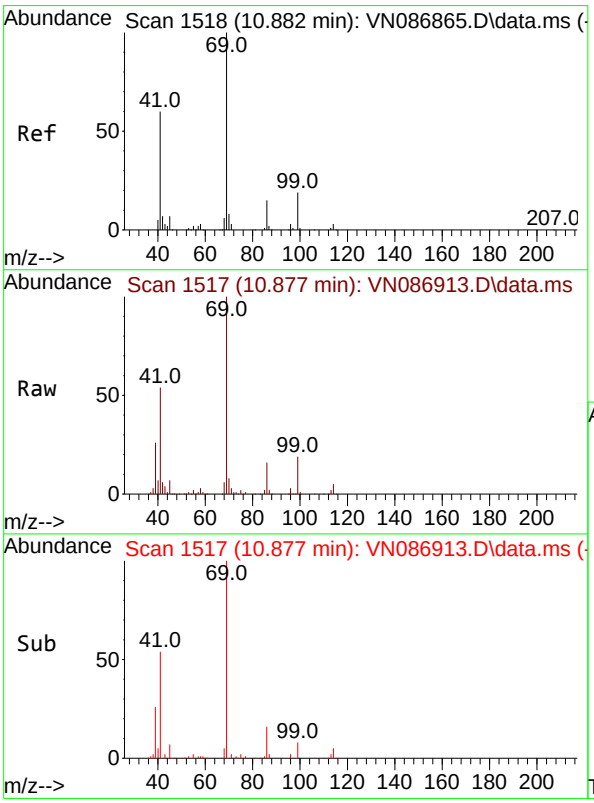
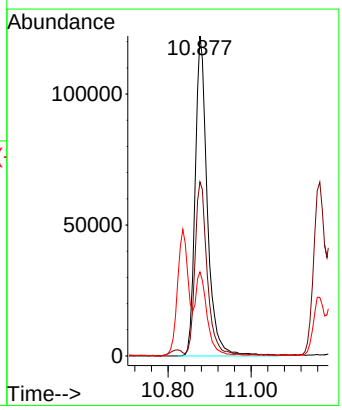
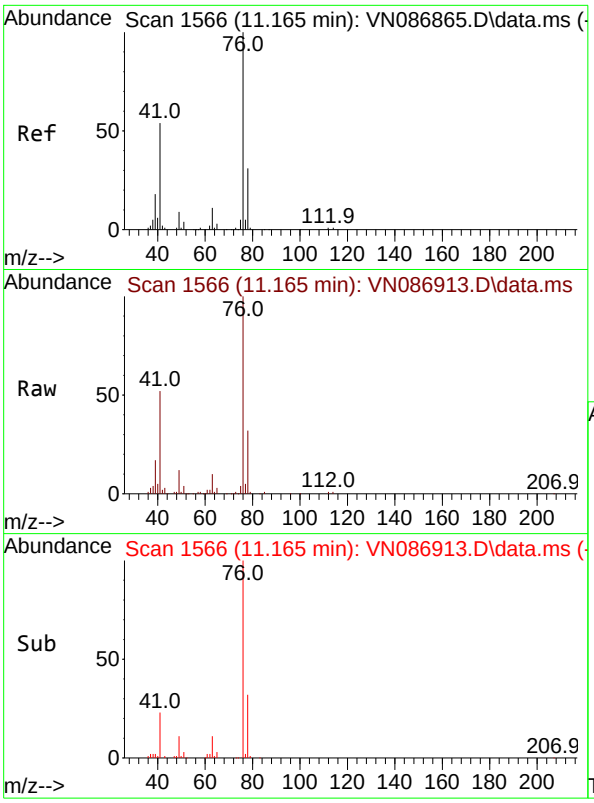



#56
Ethyl methacrylate
Concen: 54.447 ug/l
RT: 10.877 min Scan# 1517
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 69 Resp: 248574

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 54.6 | 47.2 | 70.8 |
| 39 | 24.1 | 23.0 | 34.6 |

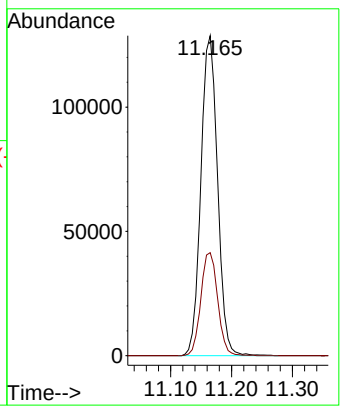





#57
1,3-Dichloropropane
Concen: 49.255 ug/l
RT: 11.165 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 76 Resp: 24491

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.6 | 25.3 | 37.9 |




**Instrument :**
MSVOA_N
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VSTDCCC050

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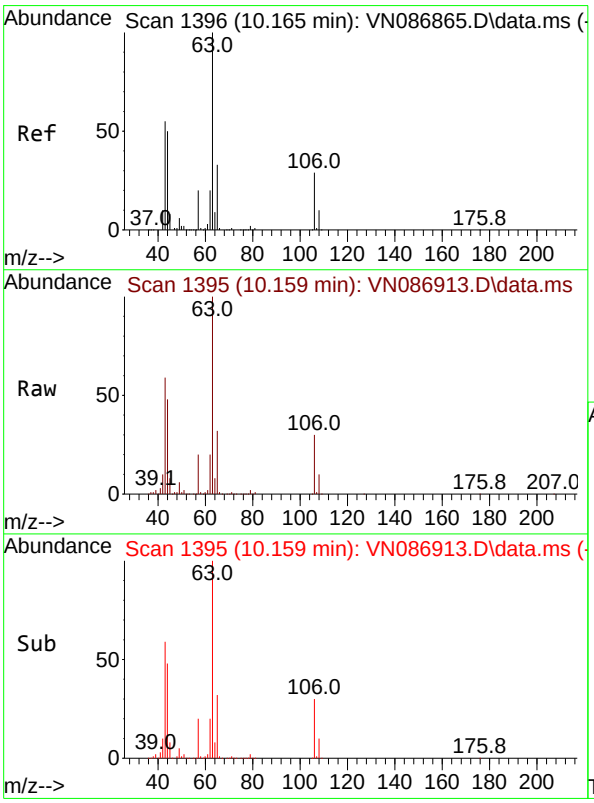
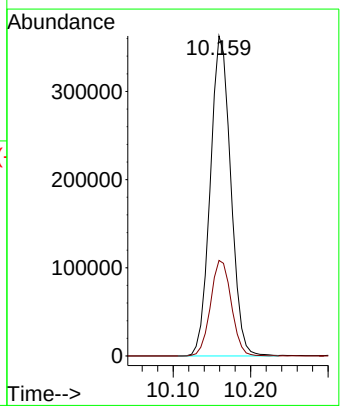
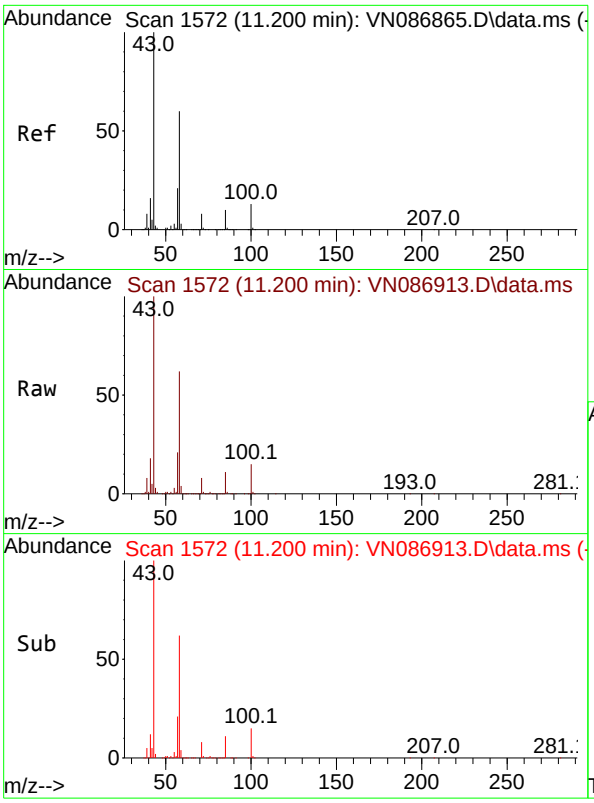



#58
2-Chloroethyl Vinyl ether
Concen: 244.474 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 63 Resp: 665707

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 30.3 | 23.0 | 34.6 |






#59
2-Hexanone
Concen: 242.131 ug/l
RT: 11.200 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 43 Resp: 71509

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 66.5 | 30.4 | 91.3 |

**Instrument :**
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VSTDCCC050

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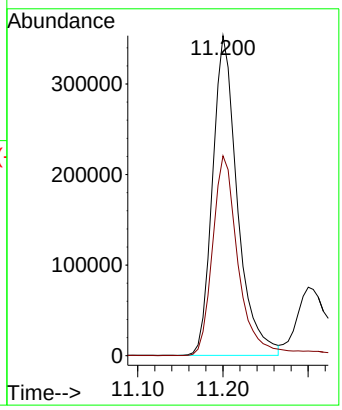
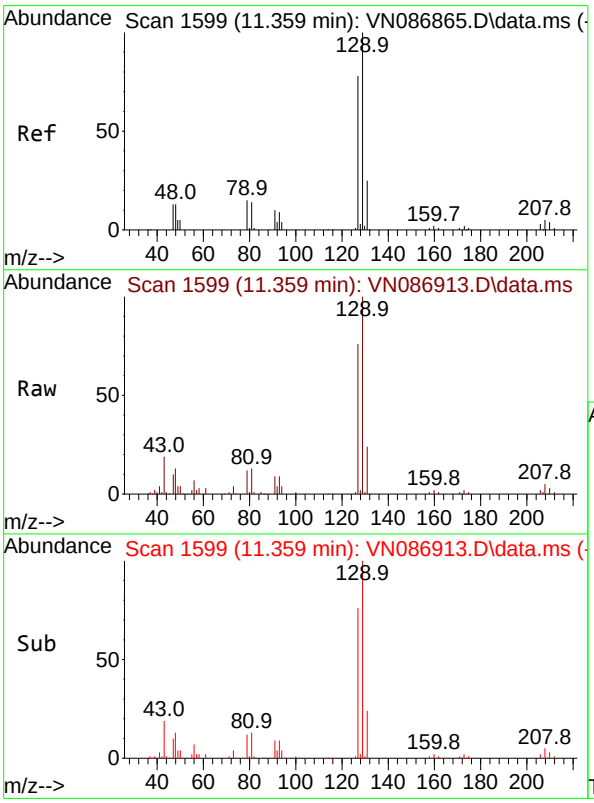
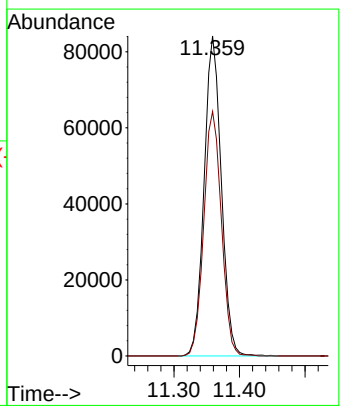


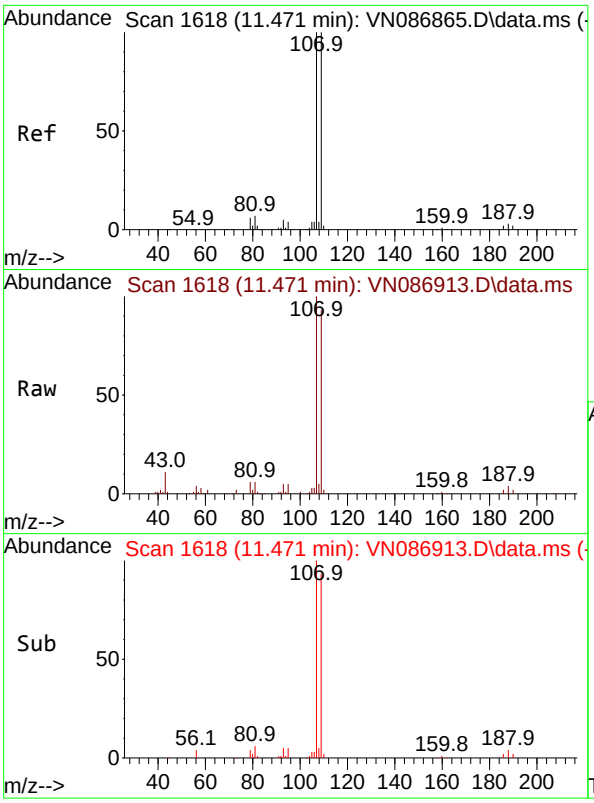




#60
Dibromochloromethane
Concen: 51.366 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion:129 Resp: 153400

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 78.2 | 38.6 | 115.8 |

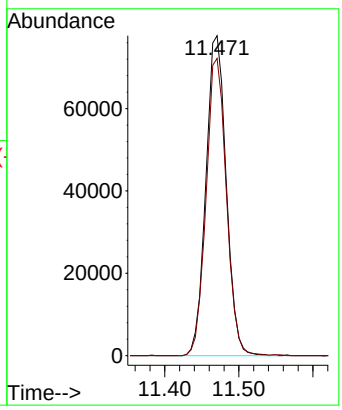





#61
1,2-Dibromoethane
Concen: 50.307 ug/l
RT: 11.471 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion:107 Resp: 14780

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 92.7 | 76.3 | 114.5 |




**Instrument :**
MSVOA_N
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VSTDCCC050

**Manual Integrations**
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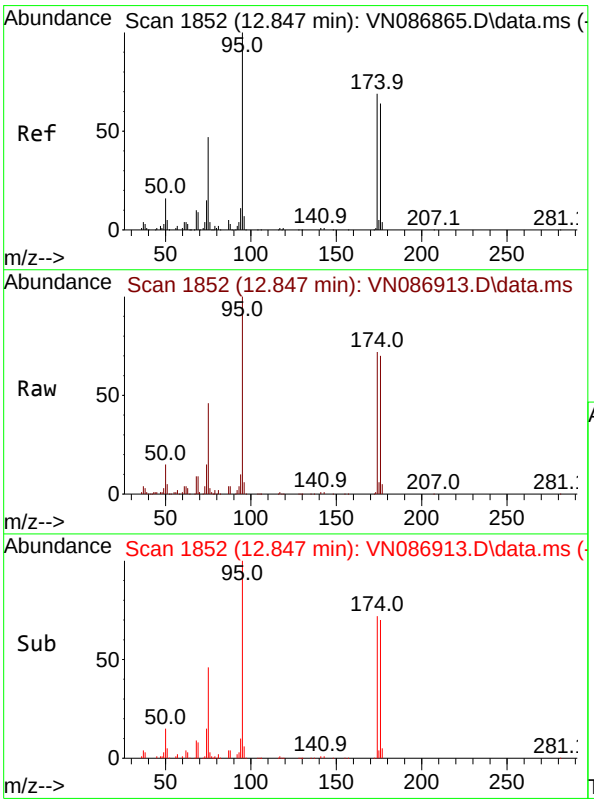
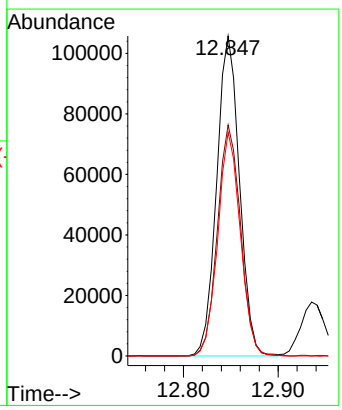
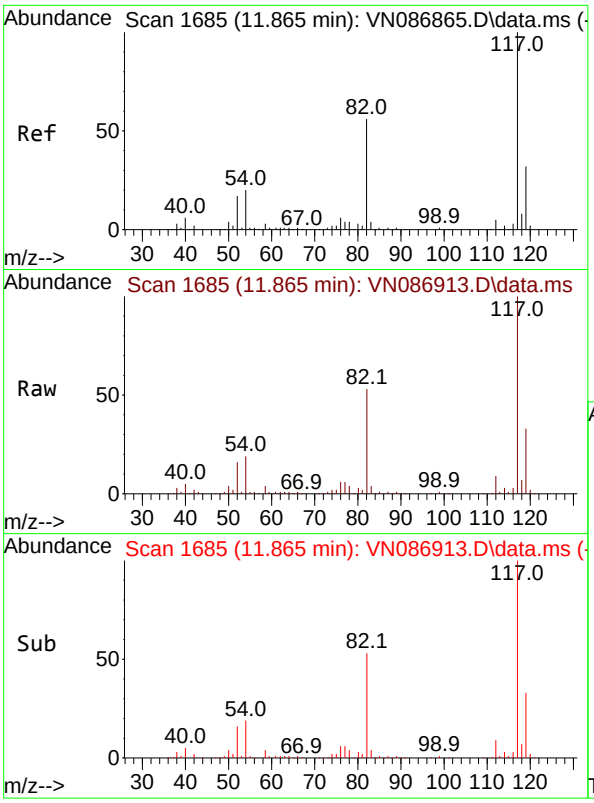



#62
4-Bromofluorobenzene
Concen: 48.131 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 95 Resp: 177087

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 72.9 | 0.0 | 141.8 |
| 176 | 69.1 | 0.0 | 132.6 |

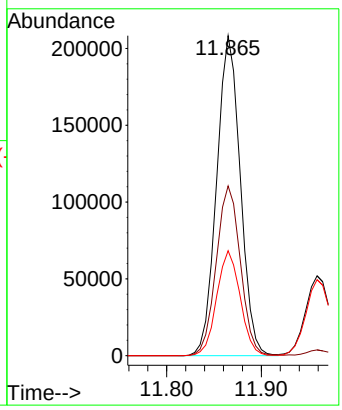





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion:117 Resp: 36228

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 53.0 | 44.6 | 67.0 |
| 119 | 32.8 | 25.5 | 38.3 |




**Instrument :**
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VSTDCCC050

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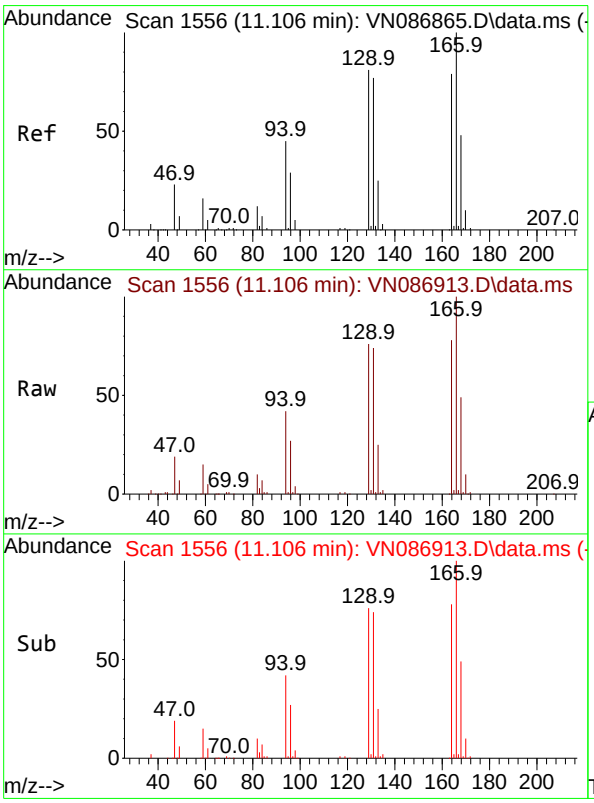
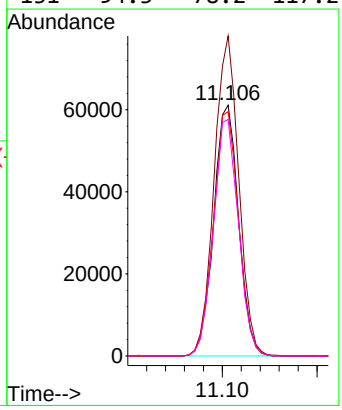
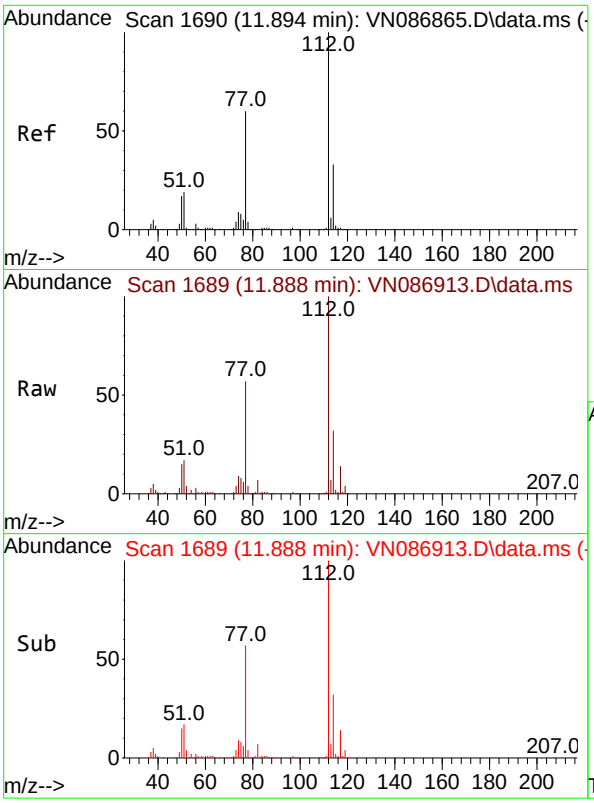



#64
Tetrachloroethene
Concen: 48.675 ug/l
RT: 11.106 min Scan# 1556
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion:164 Resp: 111601

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 127.6 | 101.8 | 152.8 |
| 129 | 97.4 | 83.0 | 124.4 |
| 131 | 94.3 | 78.2 | 117.2 |






#65
Chlorobenzene
Concen: 50.661 ug/l
RT: 11.888 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion:112 Resp: 40479

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 31.9 | 26.2 | 39.2 |

**Instrument :**
MSVOA_N
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VSTDCCC050

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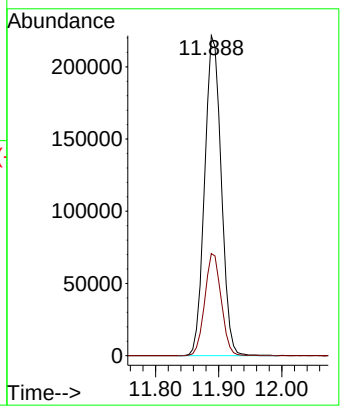
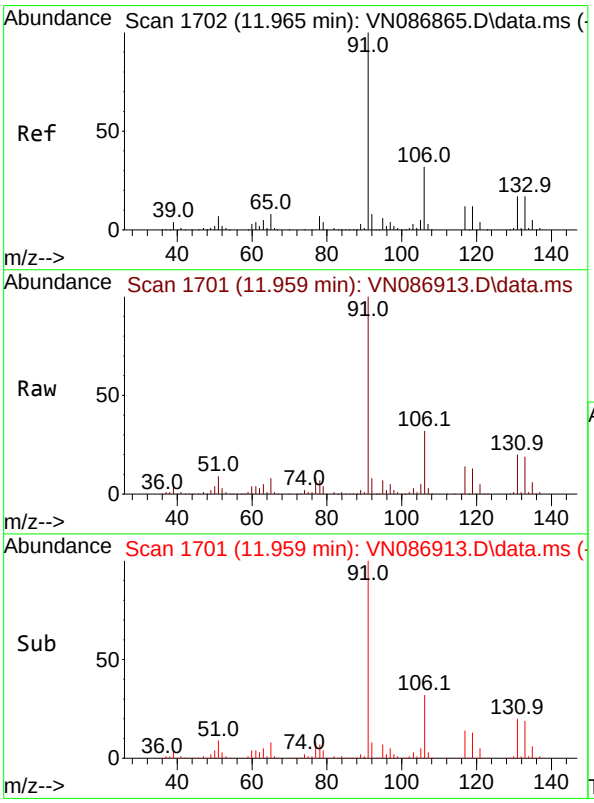
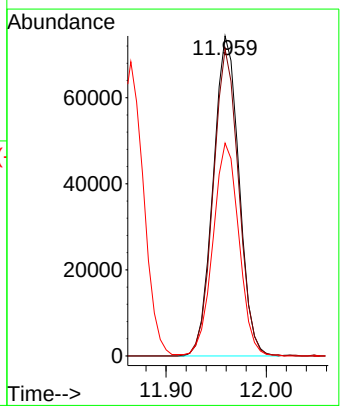


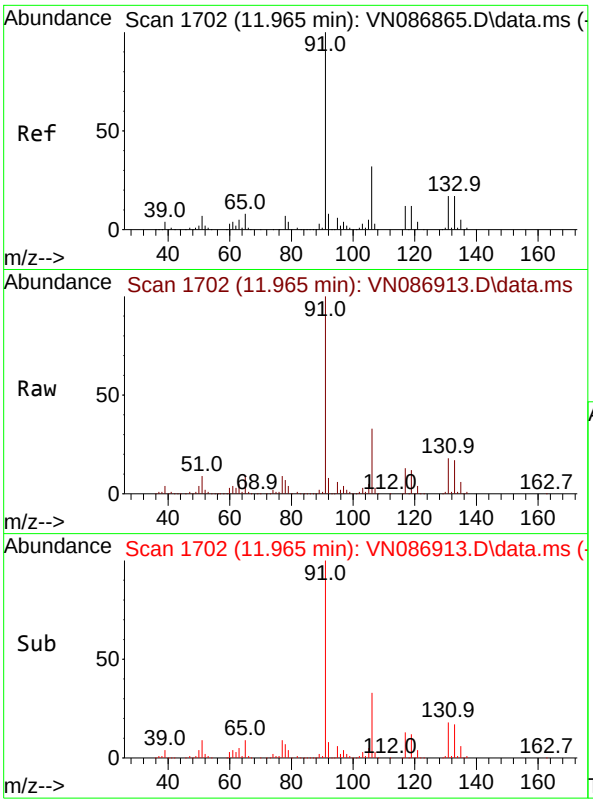




#66
1,1,1,2-Tetrachloroethane
Concen: 51.699 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion:131 Resp: 132787

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 94.8 | 48.3 | 144.8 |
| 119 | 67.2 | 34.0 | 101.8 |

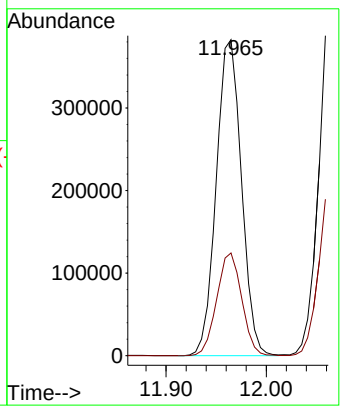





#67
Ethyl Benzene
Concen: 48.548 ug/l
RT: 11.965 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 91 Resp: 66817

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 32.5 | 25.4 | 38.2 |




**Instrument :**
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VSTDCCC050

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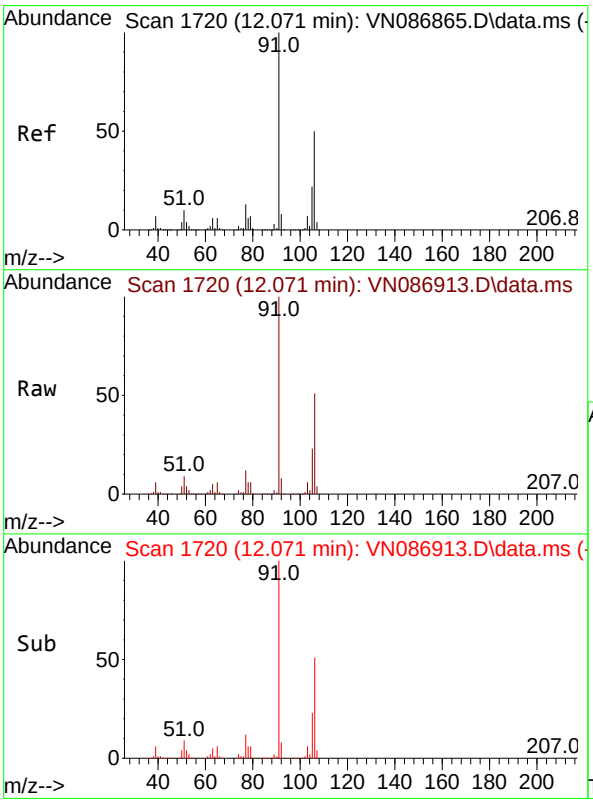
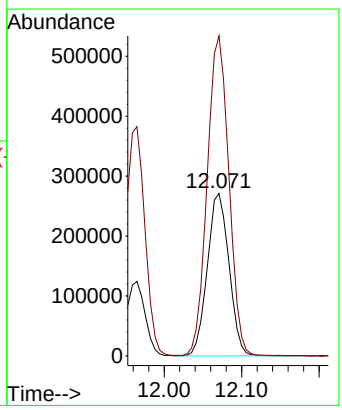
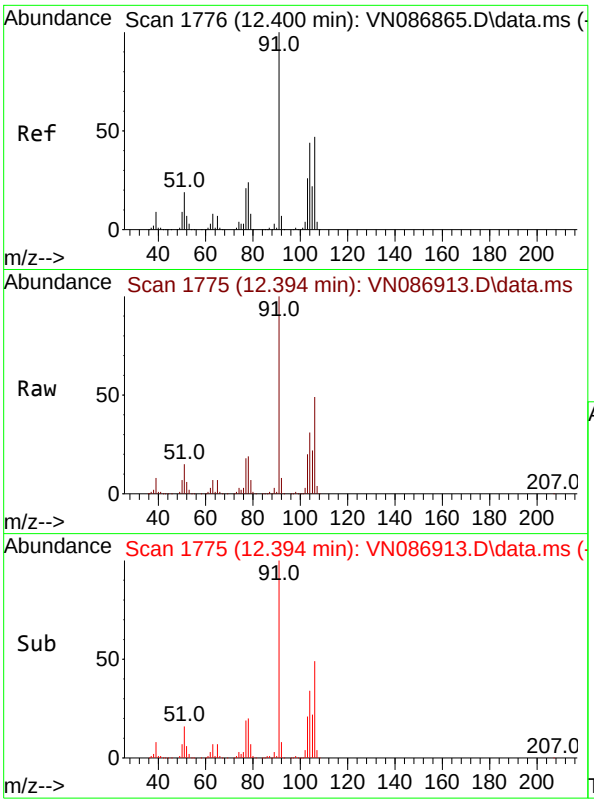



#68
m/p-Xylenes
Concen: 99.975 ug/l
RT: 12.071 min Scan# 1720
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion:106 Resp: 526722

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 198.0 | 159.4 | 239.0 |






#69
o-Xylene
Concen: 51.297 ug/l
RT: 12.394 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

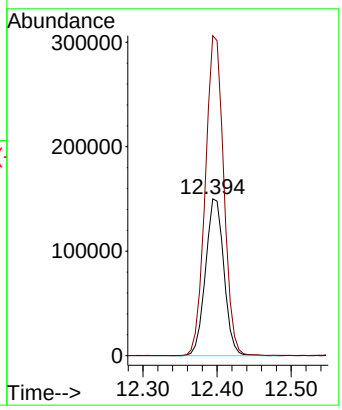
Tgt Ion:106 Resp: 25883

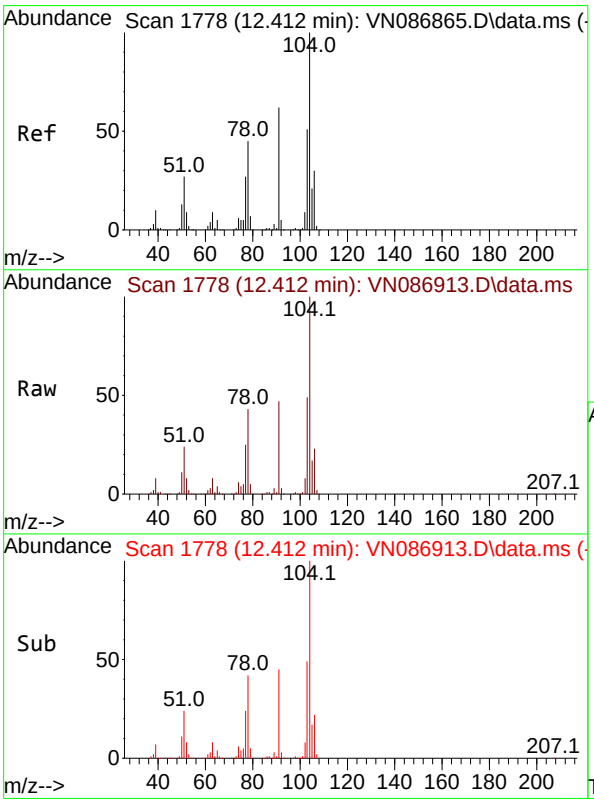
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 204.6 | 106.1 | 318.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

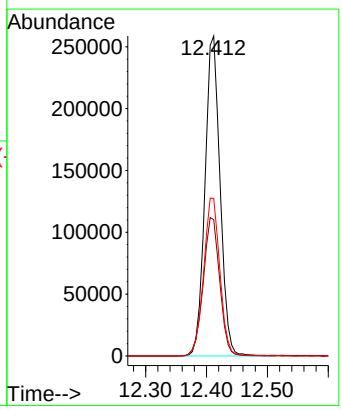


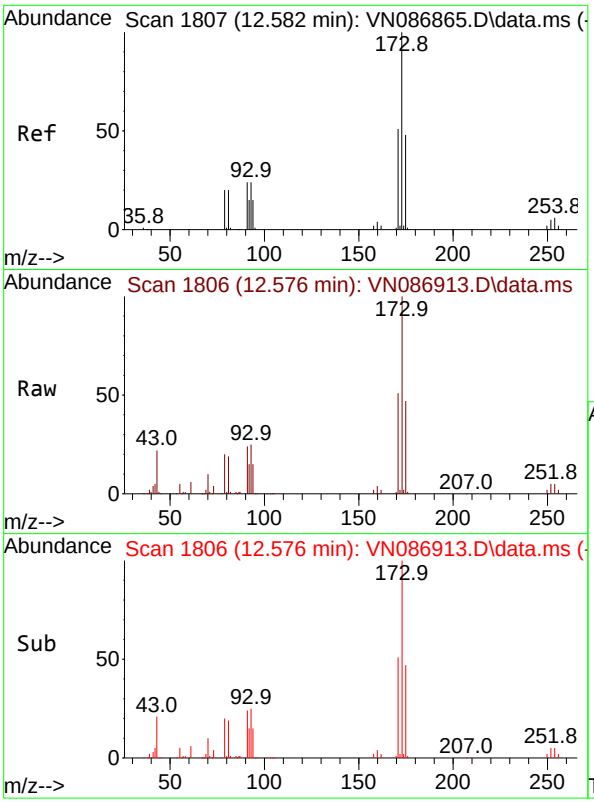




#70
Styrene
Concen: 51.704 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion:104 Resp: 446437

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 46.9 | 38.5 | 57.7 |
| 103 | 53.0 | 43.1 | 64.7 |

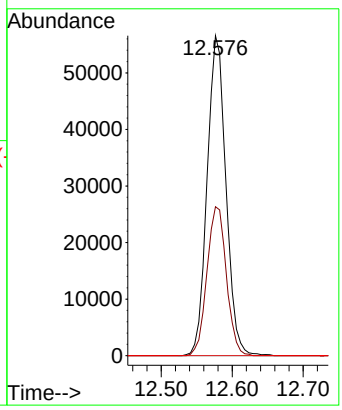





#71
Bromoform
Concen: 54.693 ug/l
RT: 12.576 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion:173 Resp: 10408

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 48.0 | 24.1 | 72.4 |
| 254 | 0.0 | 0.0 | 0.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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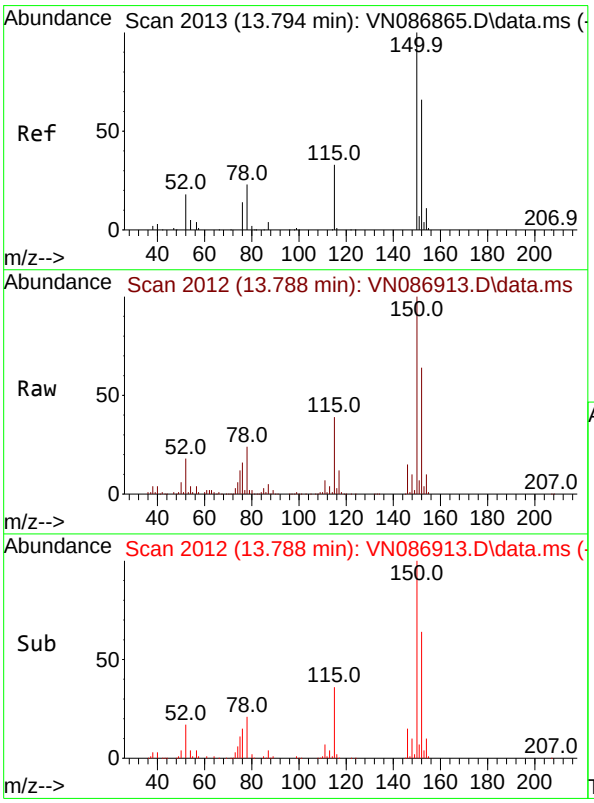
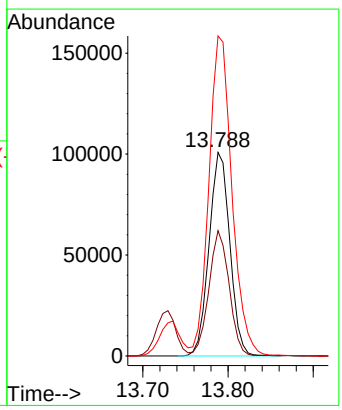
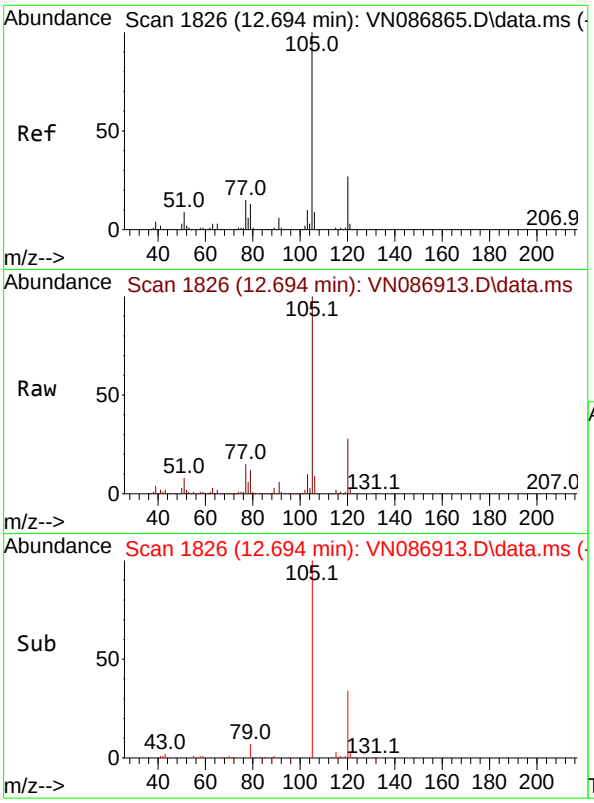



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion:152 Resp: 170987

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 59.8 | 30.1 | 90.5 |
| 150 | 174.7 | 0.0 | 345.0 |






#73
Isopropylbenzene
Concen: 49.917 ug/l
RT: 12.694 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion:105 Resp: 62179

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 27.3 | 13.5 | 40.4 |

**Instrument :**
MSVOA_N
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VSTDCCC050

**Manual Integrations**
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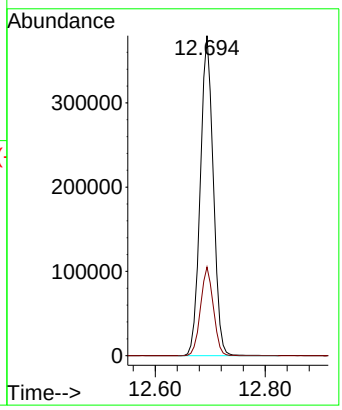
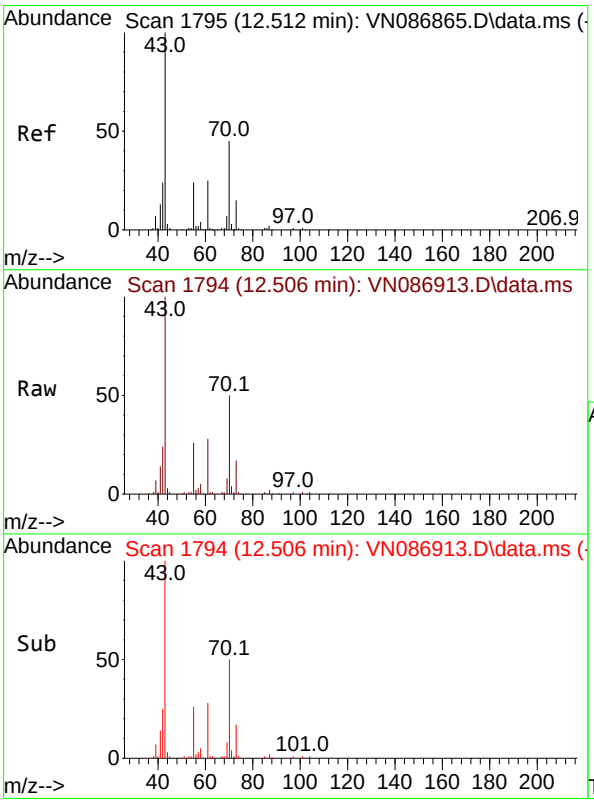
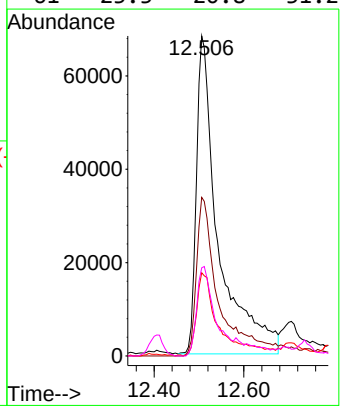


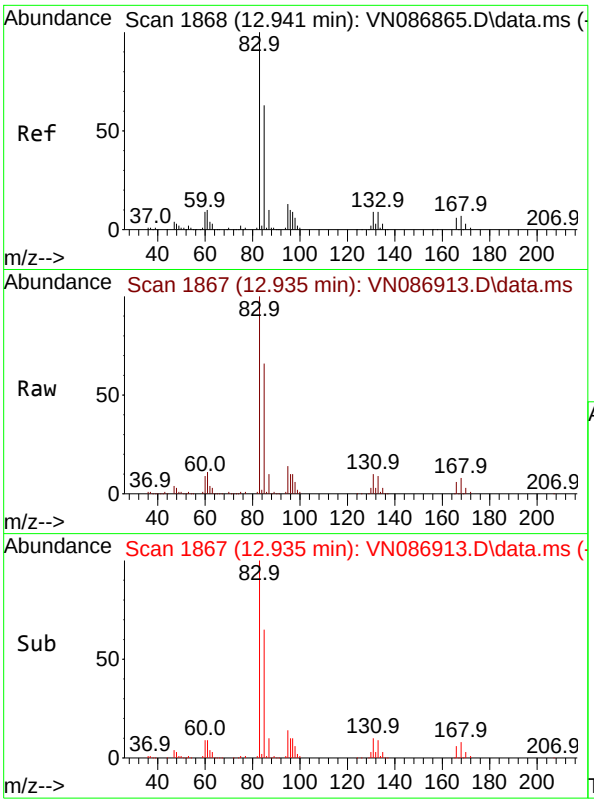




#74
N-amyl acetate
Concen: 53.204 ug/l
RT: 12.506 min Scan# 1794
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 43 Resp: 231590

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 52.9 | 37.6 | 56.4 |
| 55 | 27.1 | 19.0 | 28.6 |
| 61 | 23.3 | 20.8 | 31.2 |






#75
1,1,2,2-Tetrachloroethane
Concen: 51.363 ug/l
RT: 12.935 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 83 Resp: 21675

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 10.1 | 4.9 | 14.7 |
| 85 | 65.6 | 32.0 | 96.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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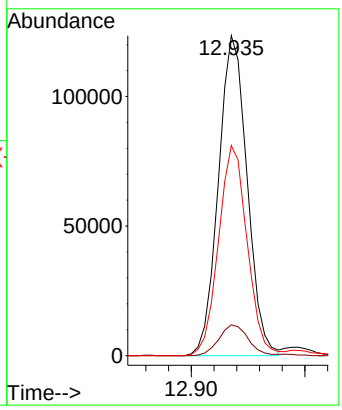
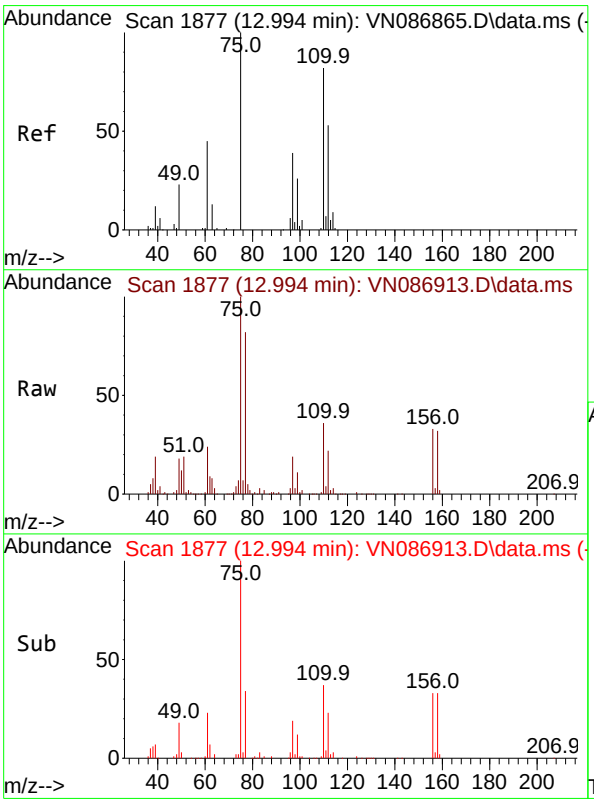
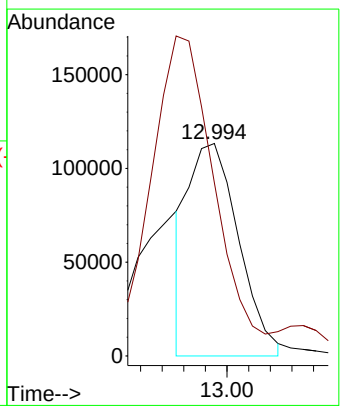


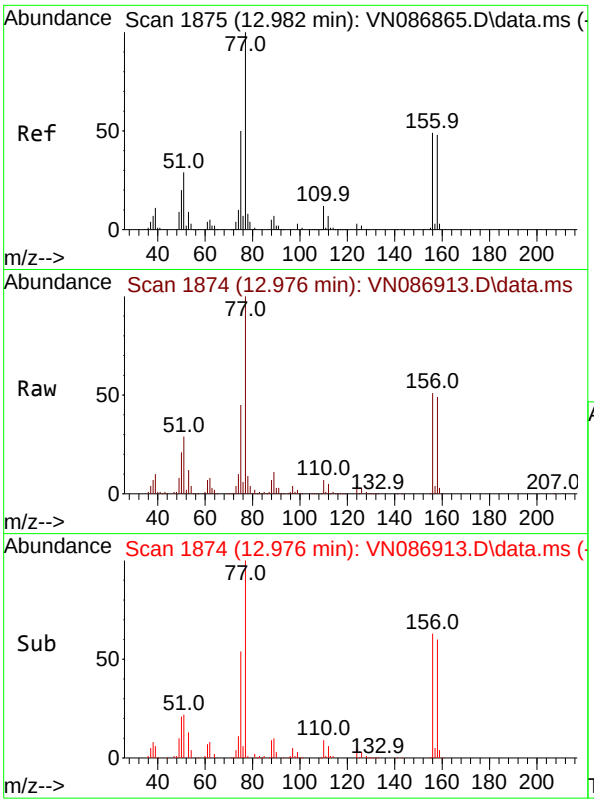




#76
1,2,3-Trichloropropane
Concen: 44.986 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 75 Resp: 182840

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 192.1 | 79.3 | 237.9 |






#77
Bromobenzene
Concen: 54.054 ug/l
RT: 12.976 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion:156 Resp: 15441

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 227.4 | 117.7 | 353.1 |
| 158 | 96.3 | 48.1 | 144.4 |

**Instrument :**
MSVOA_N
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VSTDCCC050

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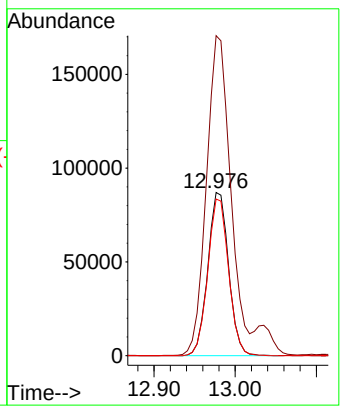
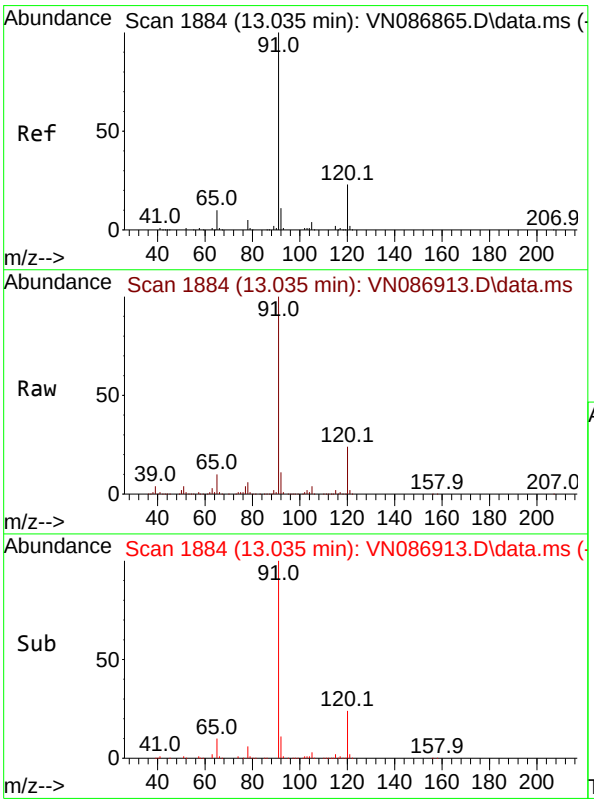
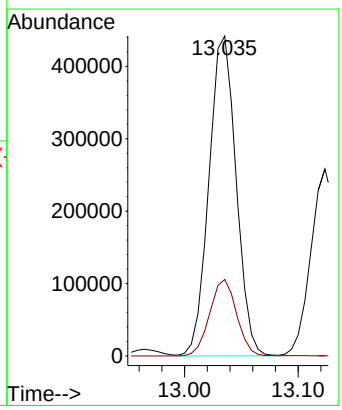


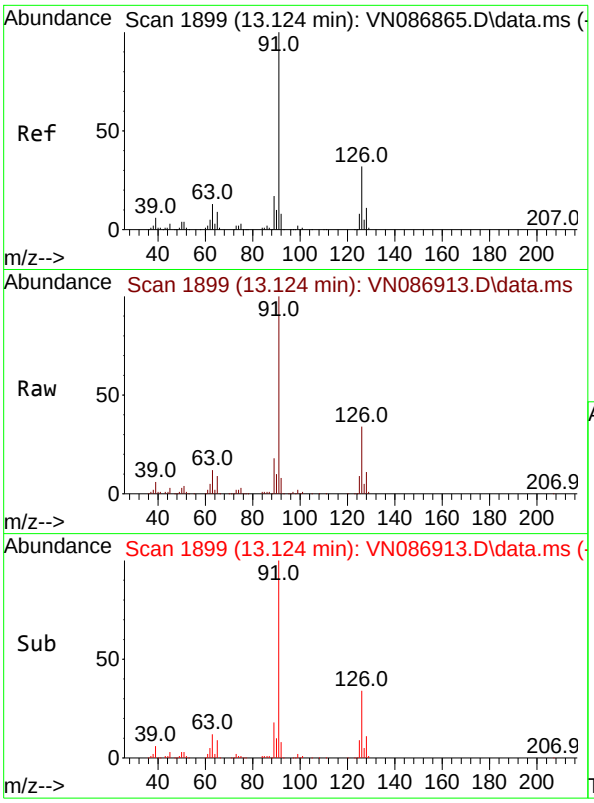




#78
n-propylbenzene
Concen: 48.621 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 91 Resp: 736021

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 23.6 | 11.4 | 34.2 |






#79
2-Chlorotoluene
Concen: 48.865 ug/l
RT: 13.124 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 91 Resp: 44361

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 34.0 | 16.2 | 48.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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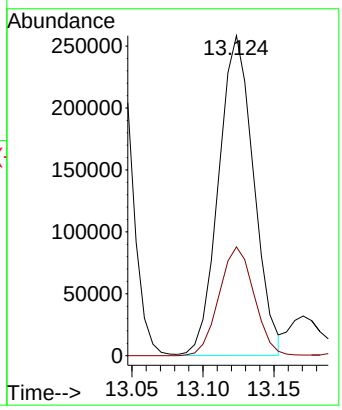
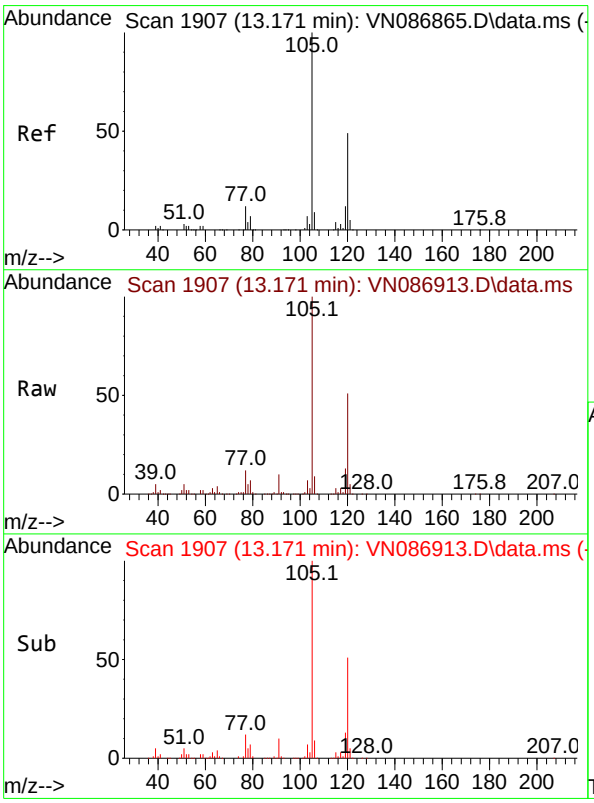
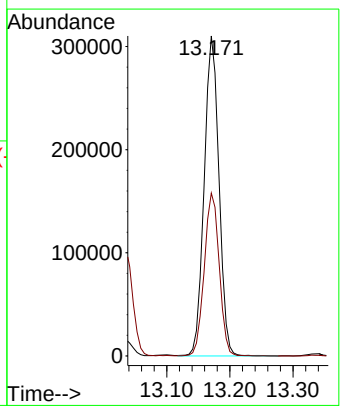


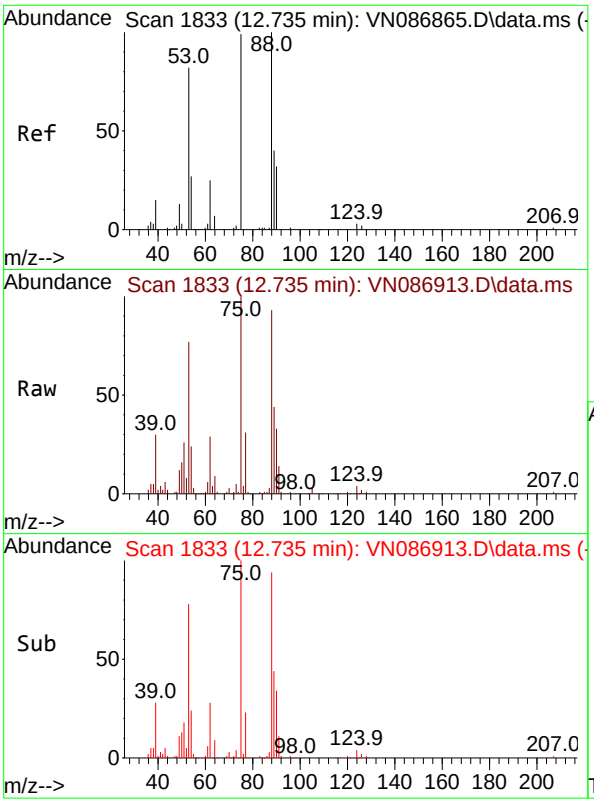




#80
1,3,5-Trimethylbenzene
Concen: 49.161 ug/l
RT: 13.171 min Scan# 1907
Delta R.T. -0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion:105 Resp: 505593

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 51.4 | 24.9 | 74.6 |






#81
trans-1,4-Dichloro-2-butene
Concen: 52.029 ug/l m
RT: 12.735 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 75 Resp: 9186

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 80.7 | 66.6 | 99.8 |
| 89 | 48.3 | 36.7 | 55.1 |

**Instrument :**
MSVOA_N
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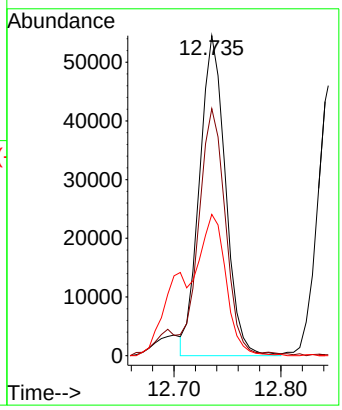
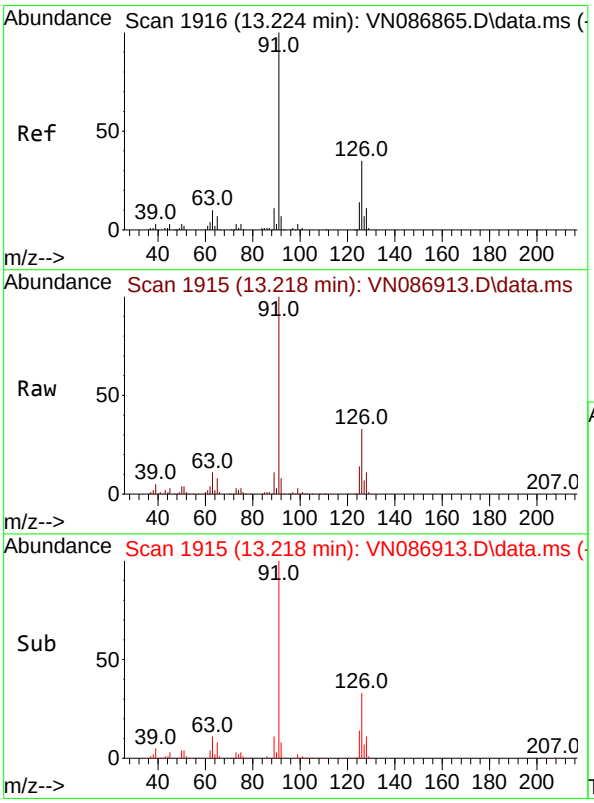
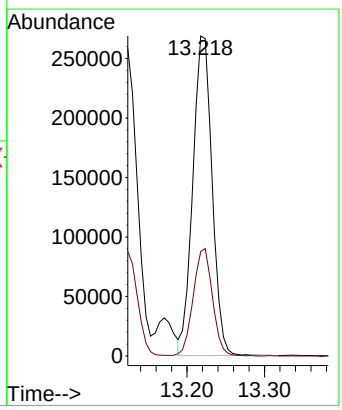


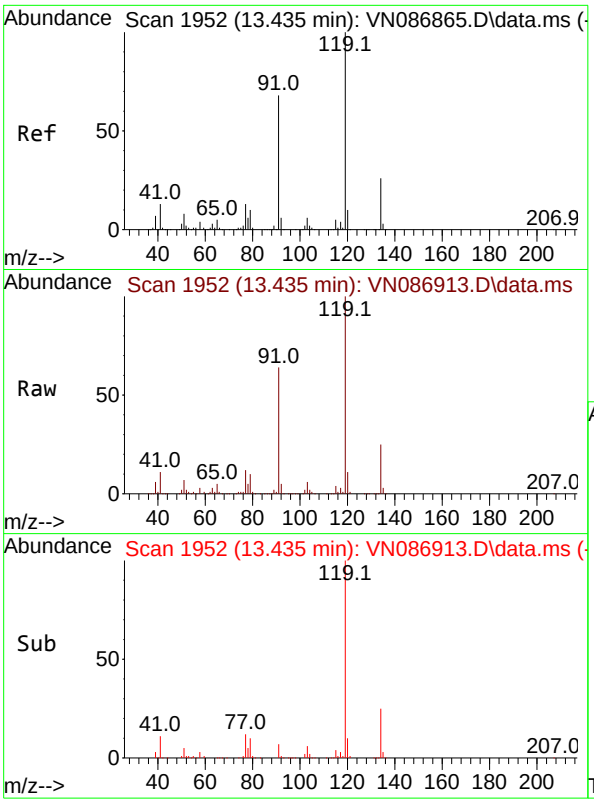




#82
4-Chlorotoluene
Concen: 50.423 ug/l
RT: 13.218 min Scan# 1915
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 91 Resp: 463176

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 33.7 | 16.7 | 50.1 |

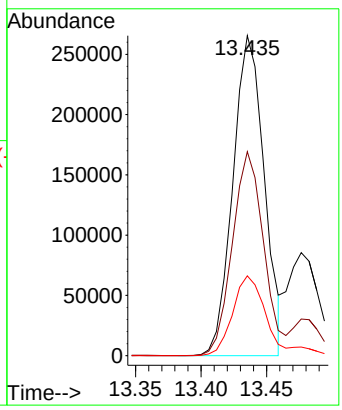





#83
tert-Butylbenzene
Concen: 46.840 ug/l
RT: 13.435 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion:119 Resp: 44095

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 63.7 | 32.1 | 96.5 |
| 134 | 27.5 | 13.4 | 40.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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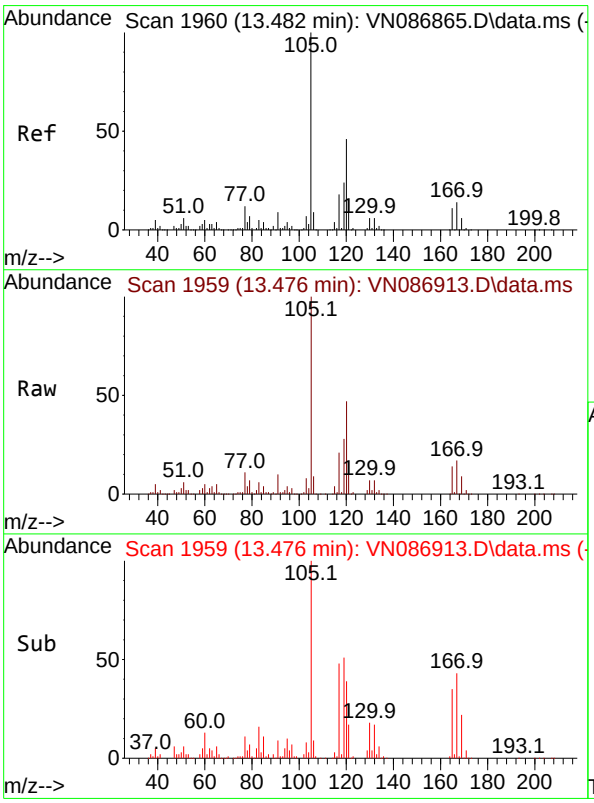
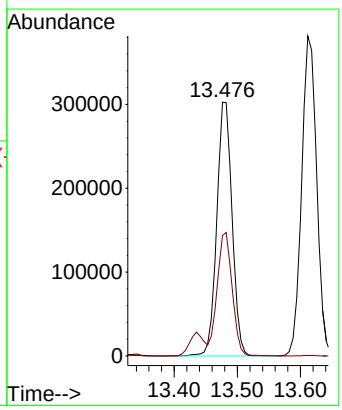
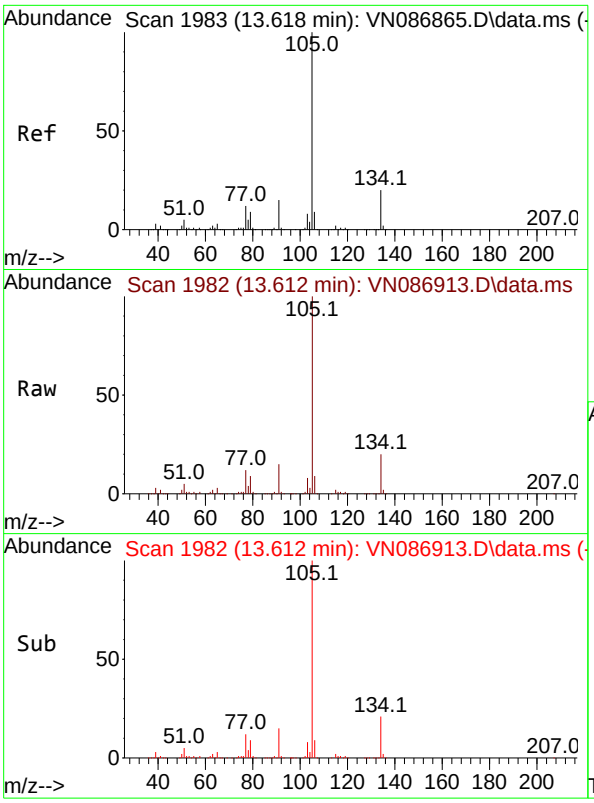



#84
1,2,4-Trimethylbenzene
Concen: 49.422 ug/l
RT: 13.476 min Scan# 1959
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion:105 Resp: 509675

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 47.5 | 23.2 | 69.6 |






#85
sec-Butylbenzene
Concen: 46.060 ug/l
RT: 13.612 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion:105 Resp: 62970

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 20.6 | 10.0 | 30.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

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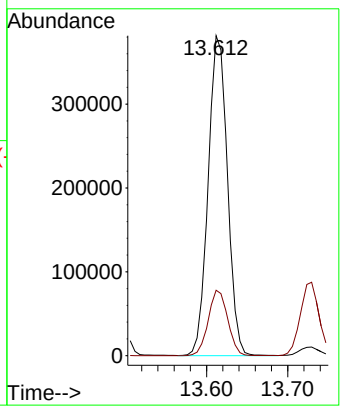
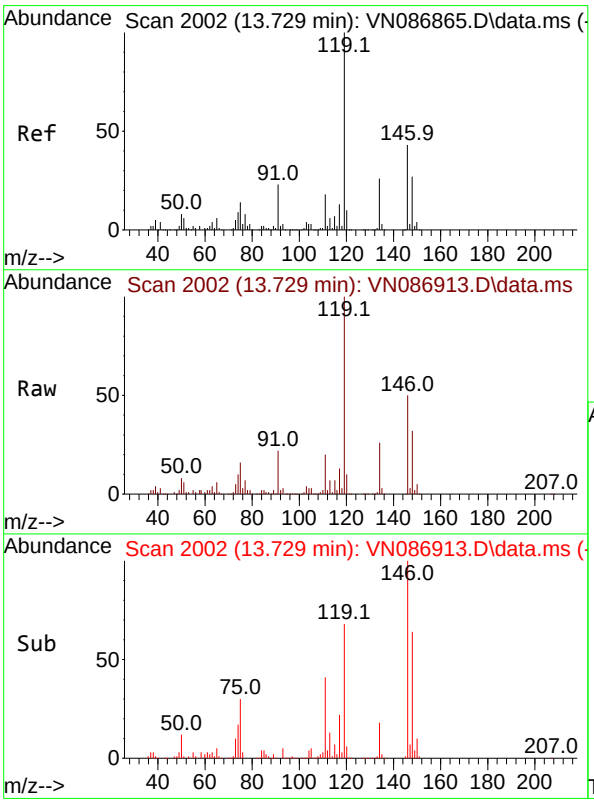
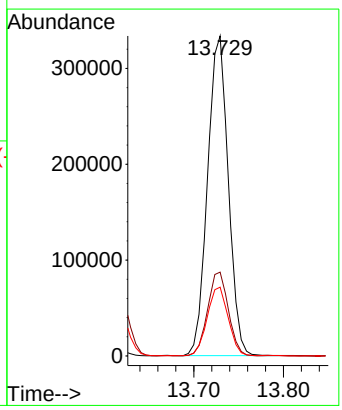


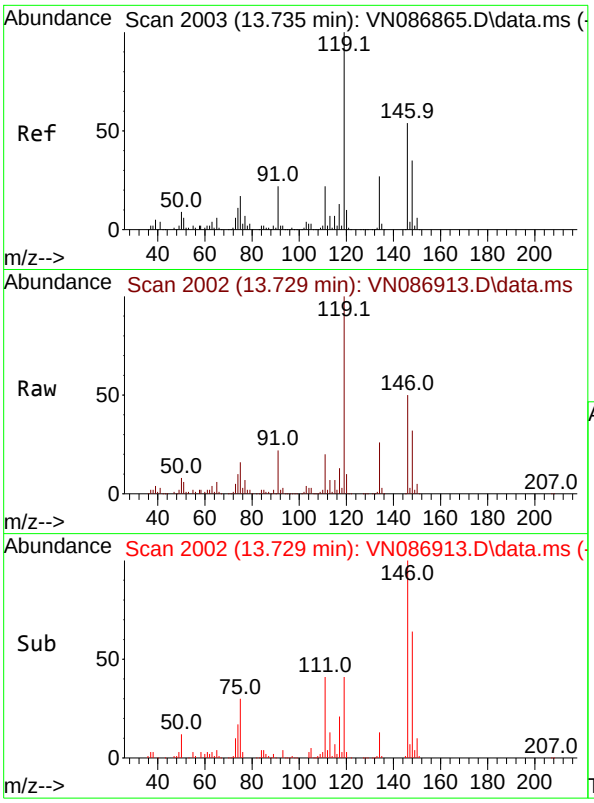




#86
p-Isopropyltoluene
Concen: 47.367 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion:119 Resp: 535293

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 26.2 | 13.5 | 40.4 |
| 91 | 21.7 | 11.5 | 34.4 |

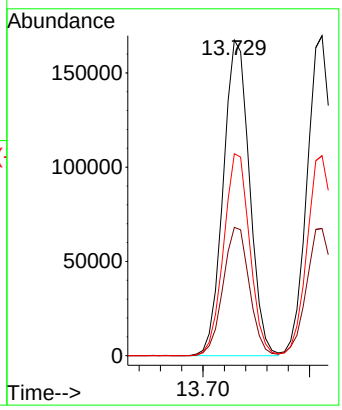





#87
1,3-Dichlorobenzene
Concen: 51.039 ug/l
RT: 13.729 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion:146 Resp: 28686

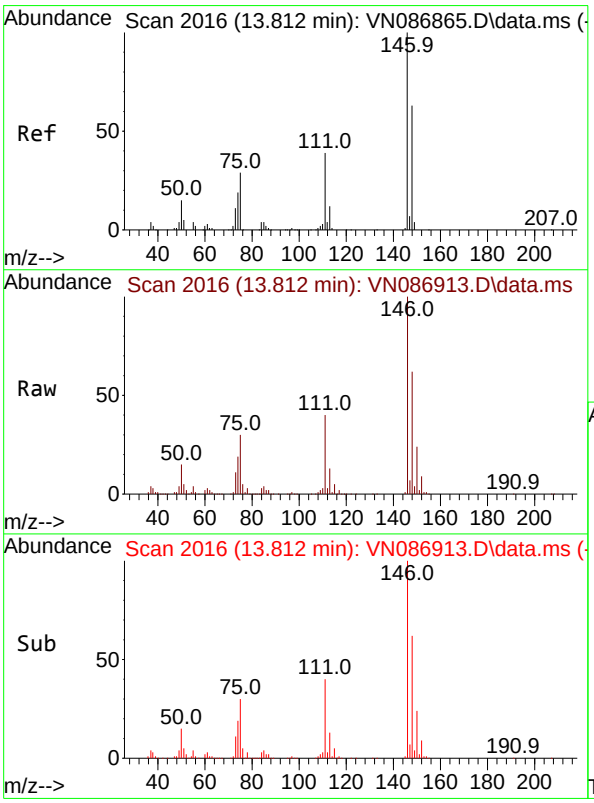
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 40.7 | 20.9 | 62.8 |
| 148 | 63.5 | 32.0 | 96.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

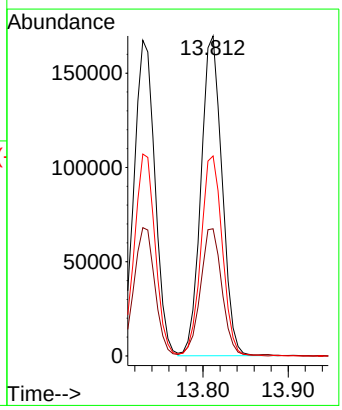
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

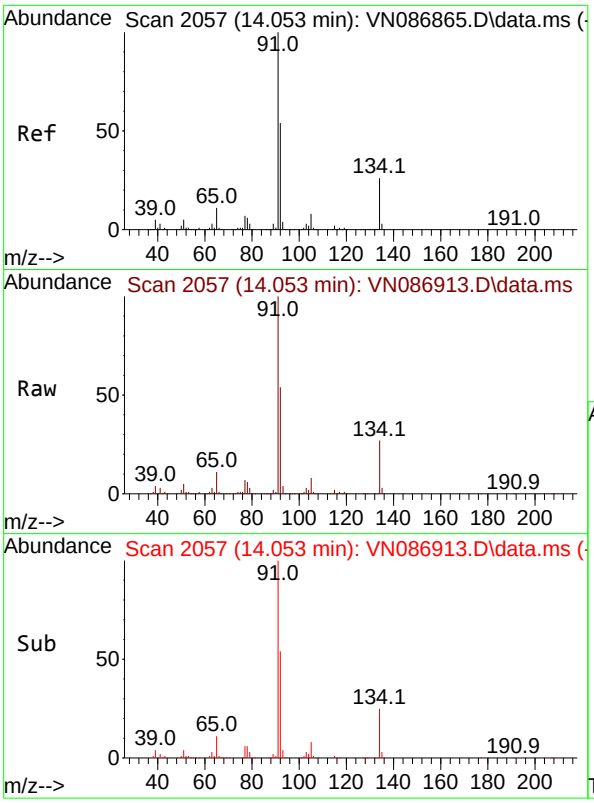



#88
1,4-Dichlorobenzene
Concen: 50.774 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion:146 Resp: 290947

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 40.0 | 19.9 | 59.7 |
| 148 | 63.4 | 31.8 | 95.4 |

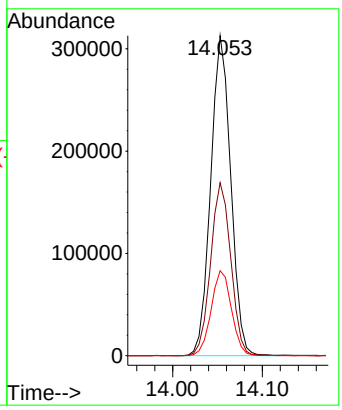





#89
n-Butylbenzene
Concen: 44.380 ug/l
RT: 14.053 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 91 Resp: 48579

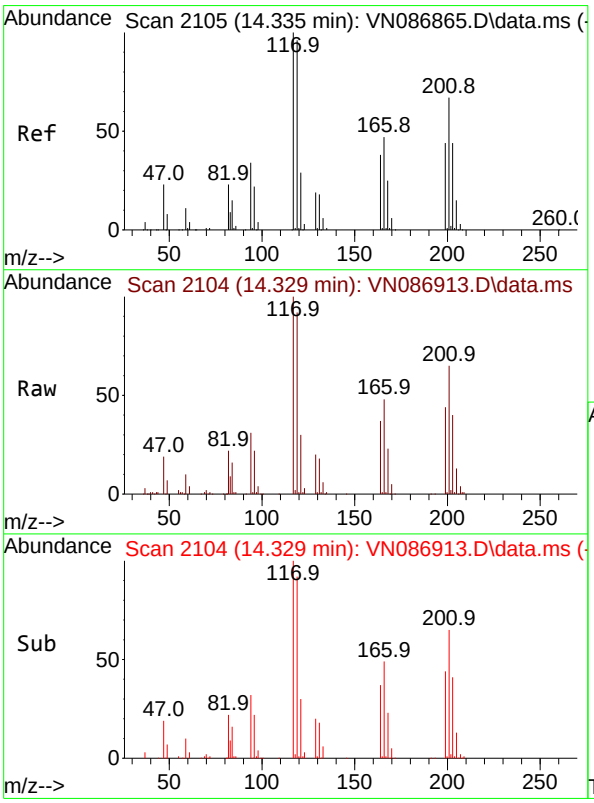
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 54.5 | 27.5 | 82.4 |
| 134 | 26.9 | 13.0 | 39.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

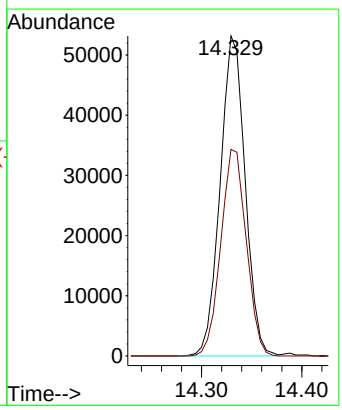
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

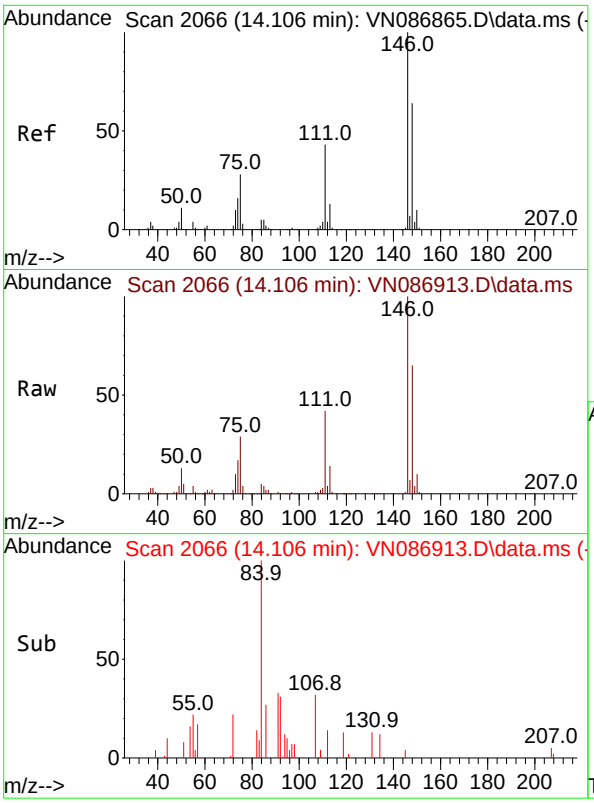



#90
Hexachloroethane
Concen: 48.027 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion:117 Resp: 92000

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 65.8 | 33.2 | 99.6 |

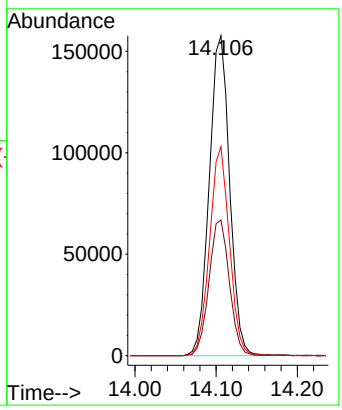





#91
1,2-Dichlorobenzene
Concen: 50.816 ug/l
RT: 14.106 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion:146 Resp: 27439

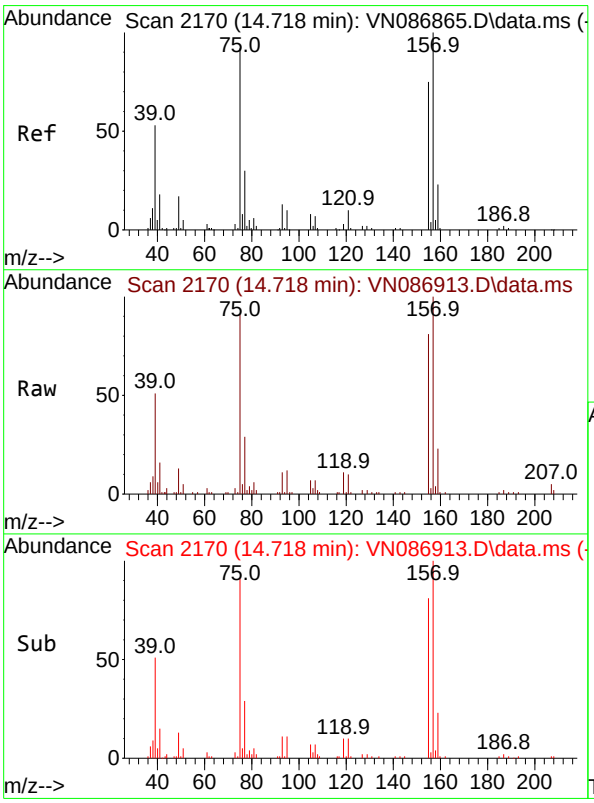
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.7 | 21.6 | 64.6 |
| 148 | 63.7 | 31.7 | 95.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

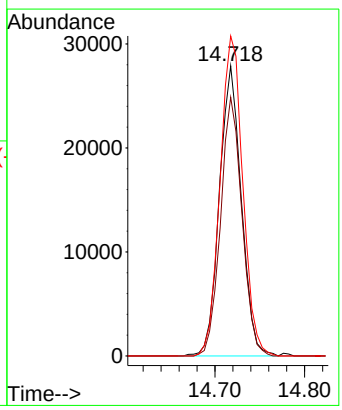
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

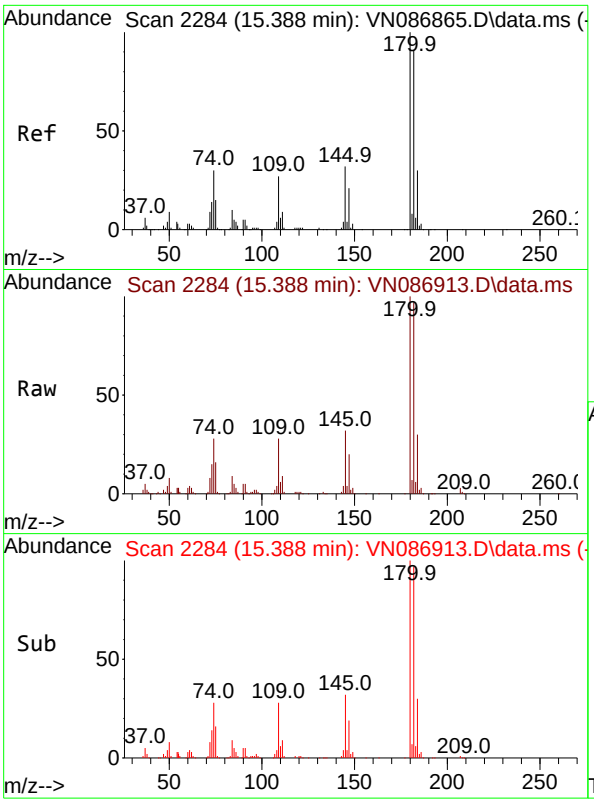



#92
1,2-Dibromo-3-Chloropropane
Concen: 46.906 ug/l
RT: 14.718 min Scan# 2170
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion: 75 Resp: 47339

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 87.0 | 41.1 | 123.4 |
| 157 | 114.2 | 52.7 | 158.1 |






#93
1,2,4-Trichlorobenzene
Concen: 45.529 ug/l
RT: 15.388 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

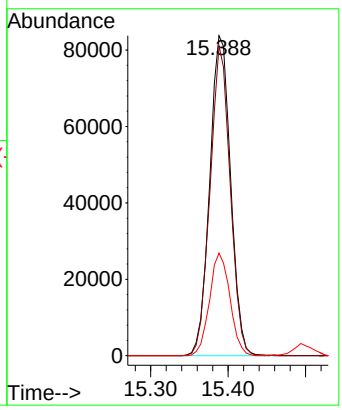
Tgt Ion:180 Resp: 15699

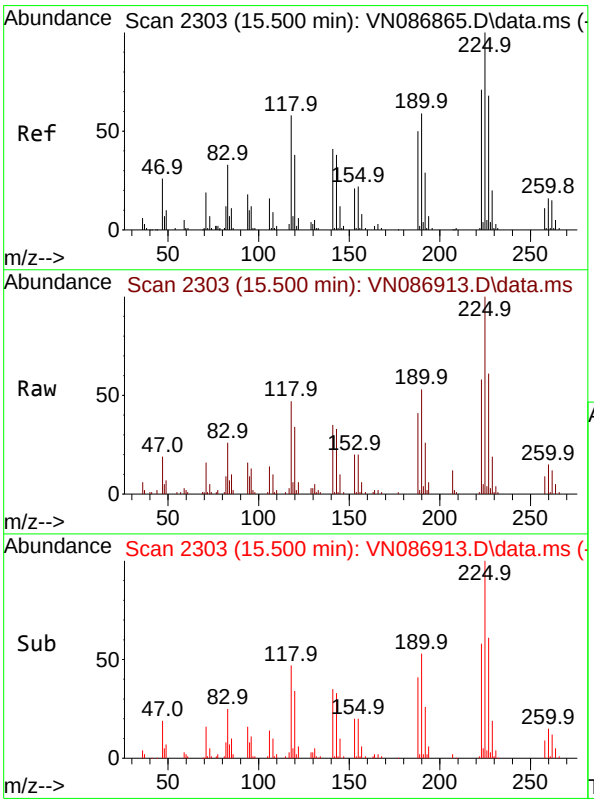
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 93.4 | 46.9 | 140.7 |
| 145 | 31.4 | 16.0 | 47.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

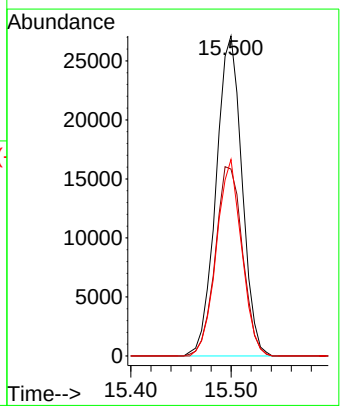


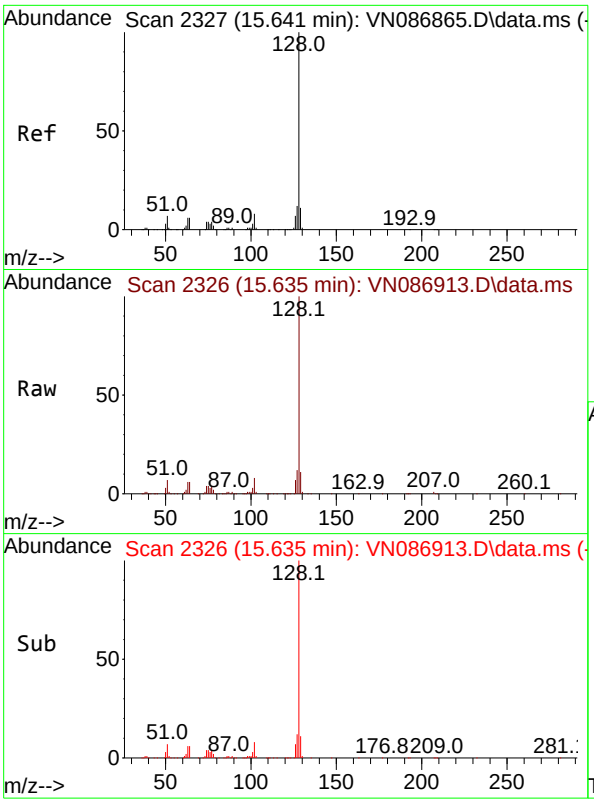




#94
Hexachlorobutadiene
Concen: 37.848 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion:225 Resp: 48622

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 62.1 | 33.5 | 100.4 |
| 227 | 59.7 | 31.1 | 93.5 |

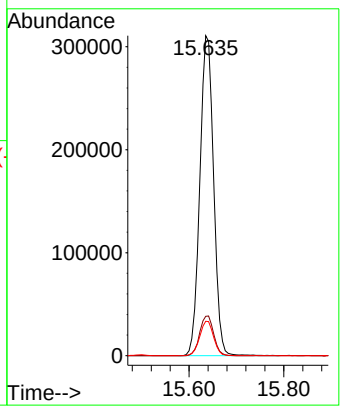





#95
Naphthalene
Concen: 48.711 ug/l
RT: 15.635 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion:128 Resp: 62518

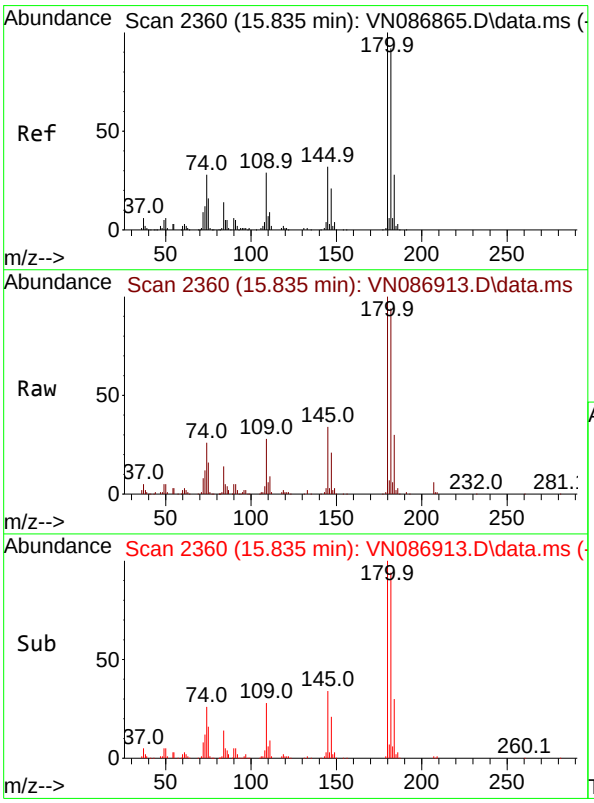
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.6 | 10.2 | 15.2 |
| 129 | 10.9 | 8.8 | 13.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

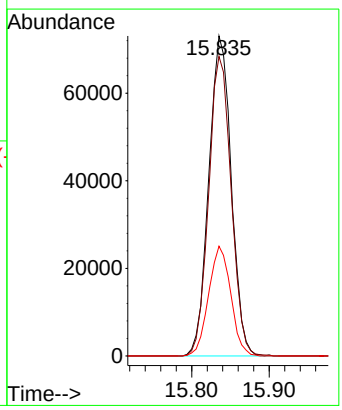
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025




#96
1,2,3-Trichlorobenzene
Concen: 42.897 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. 0.000 min
Lab File: VN086913.D
Acq: 10 Jun 2025 09:13

Tgt Ion:180 Resp: 146962

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 93.7 | 47.0 | 141.0 |
| 145 | 33.9 | 16.6 | 49.8 |



Sample Results: **VN086913.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061025\
Data File : VN086913.D
Acq On : 10 Jun 2025 09:13
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Jun 11 01:47:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 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 | 115 | 0.00 |
| 2 | T | Dichlorodifluoromethane | 0.499 | 0.502 | -0.6 | 116 | 0.00 |
| 3 | P | Chloromethane | 0.644 | 0.552 | 14.3 | 107 | 0.00 |
| 4 | C | Vinyl Chloride | 0.664 | 0.653 | 1.7# | 118 | 0.00 |
| 5 | T | Bromomethane | 0.372 | 0.358 | 3.8 | 116 | 0.00 |
| 6 | T | Chloroethane | 0.429 | 0.421 | 1.9 | 119 | 0.00 |
| 7 | T | Trichlorofluoromethane | 0.868 | 0.848 | 2.3 | 118 | 0.00 |
| 8 | T | Diethyl Ether | 0.378 | 0.379 | -0.3 | 121 | 0.00 |
| 9 | T | 1,1,2-Trichlorotrifluoroeth | 0.545 | 0.530 | 2.8 | 118 | 0.00 |
| 10 | T | Methyl Iodide | 0.707 | 0.597 | 15.6 | 101 | 0.00 |
| 11 | T | Tert butyl alcohol | 0.182 | 0.148 | 18.7 | 97 | -0.01 |
| 12 | CM | 1,1-Dichloroethene | 0.557 | 0.548 | 1.6# | 119 | 0.01 |
| 13 | T | Acrolein | 0.057 | 0.053 | 7.0 | 134 | 0.00 |
| 14 | T | Allyl chloride | 0.923 | 0.823 | 10.8 | 110 | 0.00 |
| 15 | T | Acrylonitrile | 0.425 | 0.390 | 8.2 | 111 | 0.00 |
| 16 | T | Acetone | 0.355 | 0.348 | 2.0 | 125 | 0.00 |
| 17 | T | Carbon Disulfide | 1.539 | 1.428 | 7.2 | 116 | 0.00 |
| 18 | T | Methyl Acetate | 1.035 | 0.941 | 9.1 | 110 | 0.00 |
| 19 | T | Methyl tert-butyl Ether | 2.015 | 1.999 | 0.8 | 119 | 0.00 |
| 20 | T | Methylene Chloride | 0.665 | 0.617 | 7.2 | 118 | 0.00 |
| 21 | T | trans-1,2-Dichloroethene | 0.619 | 0.587 | 5.2 | 119 | 0.00 |
| 22 | T | Diisopropyl ether | 1.945 | 1.836 | 5.6 | 114 | 0.00 |
| 23 | T | Vinyl Acetate | 1.644 | 1.558 | 5.2 | 113 | 0.00 |
| 24 | P | 1,1-Dichloroethane | 1.120 | 1.079 | 3.7 | 117 | 0.00 |
| 25 | T | 2-Butanone | 0.577 | 0.493 | 14.6 | 103 | 0.00 |
| 26 | T | 2,2-Dichloropropane | 0.871 | 0.943 | -8.3 | 120 | 0.00 |
| 27 | T | cis-1,2-Dichloroethene | 0.740 | 0.721 | 2.6 | 119 | 0.00 |
| 28 | T | Bromochloromethane | 0.550 | 0.473 | 14.0 | 117 | 0.00 |
| 29 | T | Tetrahydrofuran | 0.376 | 0.325 | 13.6 | 105 | 0.00 |
| 30 | C | Chloroform | 1.118 | 1.053 | 5.8# | 115 | 0.00 |
| 31 | T | Cyclohexane | 1.086 | 0.907 | 16.5 | 104 | 0.00 |
| 32 | T | 1,1,1-Trichloroethane | 0.951 | 0.894 | 6.0 | 115 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 | 0.669 | 0.613 | 8.4 | 142 | 0.00 |
| 34 | I | 1,4-Difluorobenzene | 1.000 | 1.000 | 0.0 | 111 | 0.00 |
| 35 | S | Dibromofluoromethane | 0.296 | 0.301 | -1.7 | 153# | 0.00 |
| 36 | T | 1,1-Dichloropropene | 0.442 | 0.437 | 1.1 | 116 | 0.00 |
| 37 | T | Ethyl Acetate | 0.562 | 0.522 | 7.1 | 109 | 0.00 |
| 38 | T | Carbon Tetrachloride | 0.433 | 0.429 | 0.9 | 117 | 0.00 |
| 39 | T | Methylcyclohexane | 0.605 | 0.523 | 13.6 | 102 | 0.00 |
| 40 | TM | Benzene | 1.444 | 1.400 | 3.0 | 116 | 0.00 |
| 41 | T | Methacrylonitrile | 0.316 | 0.286 | 9.5 | 105 | 0.00 |
| 42 | TM | 1,2-Dichloroethane | 0.438 | 0.426 | 2.7 | 116 | 0.00 |
| 43 | T | Isopropyl Acetate | 0.902 | 0.830 | 8.0 | 109 | 0.00 |
| 44 | TM | Trichloroethene | 0.342 | 0.345 | -0.9 | 118 | 0.00 |
| 45 | C | 1,2-Dichloropropane | 0.351 | 0.344 | 2.0# | 116 | 0.00 |
| 46 | T | Dibromomethane | 0.233 | 0.237 | -1.7 | 119 | 0.00 |
| 47 | T | Bromodichloromethane | 0.480 | 0.479 | 0.2 | 117 | 0.00 |
| 48 | T | Methyl methacrylate | 0.415 | 0.379 | 8.7 | 107 | 0.00 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061025\
Data File : VN086913.D
Acq On : 10 Jun 2025 09:13
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Jun 11 01:47:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 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 | 0.008 | 0.007 | 12.5 | 96 | 0.00 |
| 50 | S | Toluene-d8 | 1.173 | 1.153 | 1.7 | 149 | 0.00 |
| 51 | T | 4-Methyl-2-Pentanone | 0.543 | 0.513 | 5.5 | 106 | 0.00 |
| 52 | CM | Toluene | 0.882 | 0.871 | 1.2# | 116 | 0.00 |
| 53 | T | t-1,3-Dichloropropene | 0.537 | 0.556 | -3.5 | 119 | 0.00 |
| 54 | T | cis-1,3-Dichloropropene | 0.574 | 0.592 | -3.1 | 120 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 0.340 | 0.338 | 0.6 | 117 | 0.00 |
| 56 | T | Ethyl methacrylate | 0.541 | 0.589 | -8.9 | 118 | 0.00 |
| 57 | T | 1,3-Dichloropropane | 0.589 | 0.580 | 1.5 | 115 | 0.00 |
| 58 | T | 2-Chloroethyl Vinyl ether | 0.323 | 0.315 | 2.5 | 128 | 0.00 |
| 59 | T | 2-Hexanone | 0.350 | 0.339 | 3.1 | 103 | 0.00 |
| 60 | T | Dibromochloromethane | 0.354 | 0.363 | -2.5 | 119 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 0.348 | 0.350 | -0.6 | 119 | 0.00 |
| 62 | S | 4-Bromofluorobenzene | 0.436 | 0.420 | 3.7 | 144 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 109 | 0.00 |
| 64 | T | Tetrachloroethene | 0.316 | 0.308 | 2.5 | 114 | 0.00 |
| 65 | PM | Chlorobenzene | 1.103 | 1.117 | -1.3 | 119 | 0.00 |
| 66 | T | 1,1,1,2-Tetrachloroethane | 0.354 | 0.367 | -3.7 | 118 | 0.00 |
| 67 | C | Ethyl Benzene | 1.899 | 1.844 | 2.9# | 112 | 0.00 |
| 68 | T | m/p-Xylenes | 0.727 | 0.727 | 0.0 | 113 | 0.00 |
| 69 | T | o-Xylene | 0.696 | 0.714 | -2.6 | 115 | 0.00 |
| 70 | T | Styrene | 1.192 | 1.232 | -3.4 | 115 | 0.00 |
| 71 | P | Bromoform | 0.263 | 0.287 | -9.1 | 118 | 0.00 |
| 72 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 102 | 0.00 |
| 73 | T | Isopropylbenzene | 3.643 | 3.636 | 0.2 | 108 | 0.00 |
| 74 | T | N-amyl acetate | 1.273 | 1.354 | -6.4 | 109 | 0.00 |
| 75 | P | 1,1,2,2-Tetrachloroethane | 1.234 | 1.268 | -2.8 | 110 | 0.00 |
| 76 | T | 1,2,3-Trichloropropane | 1.189 | 1.069 | 10.1 | 93 | 0.00 |
| 77 | T | Bromobenzene | 0.835 | 0.903 | -8.1 | 117 | 0.00 |
| 78 | T | n-propylbenzene | 4.427 | 4.305 | 2.8 | 104 | 0.00 |
| 79 | T | 2-Chlorotoluene | 2.655 | 2.594 | 2.3 | 106 | 0.00 |
| 80 | T | 1,3,5-Trimethylbenzene | 3.007 | 2.957 | 1.7 | 104 | 0.00 |
| 81 | T | trans-1,4-Dichloro-2-butene | 0.516 | 0.537 | -4.1 | 115 | 0.00 |
| 82 | T | 4-Chlorotoluene | 2.686 | 2.709 | -0.9 | 109 | 0.00 |
| 83 | T | tert-Butylbenzene | 2.753 | 2.579 | 6.3 | 101 | 0.00 |
| 84 | T | 1,2,4-Trimethylbenzene | 3.016 | 2.981 | 1.2 | 104 | 0.00 |
| 85 | T | sec-Butylbenzene | 3.998 | 3.683 | 7.9 | 98 | 0.00 |
| 86 | T | p-Isopropyltoluene | 3.305 | 3.131 | 5.3 | 100 | 0.00 |
| 87 | T | 1,3-Dichlorobenzene | 1.644 | 1.678 | -2.1 | 110 | 0.00 |
| 88 | T | 1,4-Dichlorobenzene | 1.676 | 1.702 | -1.6 | 110 | 0.00 |
| 89 | T | n-Butylbenzene | 3.201 | 2.841 | 11.2 | 95 | 0.00 |
| 90 | T | Hexachloroethane | 0.560 | 0.538 | 3.9 | 102 | 0.00 |
| 91 | T | 1,2-Dichlorobenzene | 1.579 | 1.605 | -1.6 | 109 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 0.295 | 0.277 | 6.1 | 104 | 0.00 |
| 93 | T | 1,2,4-Trichlorobenzene | 1.008 | 0.918 | 8.9 | 97 | 0.00 |
| 94 | T | Hexachlorobutadiene | 0.376 | 0.284 | 24.5 | 80 | 0.00 |
| 95 | T | Naphthalene | 3.753 | 3.656 | 2.6 | 104 | 0.00 |

Sample Results: **VN086913.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061025\
Data File : VN086913.D
Acq On : 10 Jun 2025 09:13
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Jun 11 01:47:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 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 | 1.002 | 0.859 | 14.3 | 92 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Sample Results: **VN086913.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061025\
Data File : VN086913.D
Acq On : 10 Jun 2025 09:13
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Jun 11 01:47:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 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 | 115 | 0.00 |
| 2 | T | Dichlorodifluoromethane | 50.000 | 50.345 | -0.7 | 116 | 0.00 |
| 3 | P | Chloromethane | 50.000 | 42.845 | 14.3 | 107 | 0.00 |
| 4 | C | Vinyl Chloride | 50.000 | 49.190 | 1.6# | 118 | 0.00 |
| 5 | T | Bromomethane | 50.000 | 48.104 | 3.8 | 116 | 0.00 |
| 6 | T | Chloroethane | 50.000 | 49.111 | 1.8 | 119 | 0.00 |
| 7 | T | Trichlorofluoromethane | 50.000 | 48.882 | 2.2 | 118 | 0.00 |
| 8 | T | Diethyl Ether | 50.000 | 50.181 | -0.4 | 121 | 0.00 |
| 9 | T | 1,1,2-Trichlorotrifluoroeth | 50.000 | 48.583 | 2.8 | 118 | 0.00 |
| 10 | T | Methyl Iodide | 50.000 | 42.239 | 15.5 | 101 | 0.00 |
| 11 | T | Tert butyl alcohol | 250.000 | 203.929 | 18.4 | 97 | -0.01 |
| 12 | CM | 1,1-Dichloroethene | 50.000 | 49.200 | 1.6# | 119 | 0.01 |
| 13 | T | Acrolein | 250.000 | 229.021 | 8.4 | 134 | 0.00 |
| 14 | T | Allyl chloride | 50.000 | 44.573 | 10.9 | 110 | 0.00 |
| 15 | T | Acrylonitrile | 250.000 | 229.750 | 8.1 | 111 | 0.00 |
| 16 | T | Acetone | 250.000 | 245.204 | 1.9 | 125 | 0.00 |
| 17 | T | Carbon Disulfide | 50.000 | 46.386 | 7.2 | 116 | 0.00 |
| 18 | T | Methyl Acetate | 50.000 | 45.497 | 9.0 | 110 | 0.00 |
| 19 | T | Methyl tert-butyl Ether | 50.000 | 49.605 | 0.8 | 119 | 0.00 |
| 20 | T | Methylene Chloride | 50.000 | 46.410 | 7.2 | 118 | 0.00 |
| 21 | T | trans-1,2-Dichloroethene | 50.000 | 47.370 | 5.3 | 119 | 0.00 |
| 22 | T | Diisopropyl ether | 50.000 | 47.178 | 5.6 | 114 | 0.00 |
| 23 | T | Vinyl Acetate | 250.000 | 236.925 | 5.2 | 113 | 0.00 |
| 24 | P | 1,1-Dichloroethane | 50.000 | 48.190 | 3.6 | 117 | 0.00 |
| 25 | T | 2-Butanone | 250.000 | 213.617 | 14.6 | 103 | 0.00 |
| 26 | T | 2,2-Dichloropropane | 50.000 | 54.150 | -8.3 | 120 | 0.00 |
| 27 | T | cis-1,2-Dichloroethene | 50.000 | 48.666 | 2.7 | 119 | 0.00 |
| 28 | T | Bromochloromethane | 50.000 | 42.951 | 14.1 | 117 | 0.00 |
| 29 | T | Tetrahydrofuran | 250.000 | 216.165 | 13.5 | 105 | 0.00 |
| 30 | C | Chloroform | 50.000 | 47.097 | 5.8# | 115 | 0.00 |
| 31 | T | Cyclohexane | 50.000 | 41.767 | 16.5 | 104 | 0.00 |
| 32 | T | 1,1,1-Trichloroethane | 50.000 | 47.016 | 6.0 | 115 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 | 50.000 | 45.789 | 8.4 | 142 | 0.00 |
| 34 | I | 1,4-Difluorobenzene | 50.000 | 50.000 | 0.0 | 111 | 0.00 |
| 35 | S | Dibromofluoromethane | 50.000 | 50.869 | -1.7 | 153 | 0.00 |
| 36 | T | 1,1-Dichloropropene | 50.000 | 49.463 | 1.1 | 116 | 0.00 |
| 37 | T | Ethyl Acetate | 50.000 | 46.471 | 7.1 | 109 | 0.00 |
| 38 | T | Carbon Tetrachloride | 50.000 | 49.466 | 1.1 | 117 | 0.00 |
| 39 | T | Methylcyclohexane | 50.000 | 43.269 | 13.5 | 102 | 0.00 |
| 40 | TM | Benzene | 50.000 | 48.493 | 3.0 | 116 | 0.00 |
| 41 | T | Methacrylonitrile | 50.000 | 45.256 | 9.5 | 105 | 0.00 |
| 42 | TM | 1,2-Dichloroethane | 50.000 | 48.671 | 2.7 | 116 | 0.00 |
| 43 | T | Isopropyl Acetate | 50.000 | 45.998 | 8.0 | 109 | 0.00 |
| 44 | TM | Trichloroethene | 50.000 | 50.404 | -0.8 | 118 | 0.00 |
| 45 | C | 1,2-Dichloropropane | 50.000 | 49.004 | 2.0# | 116 | 0.00 |
| 46 | T | Dibromomethane | 50.000 | 50.766 | -1.5 | 119 | 0.00 |
| 47 | T | Bromodichloromethane | 50.000 | 49.918 | 0.2 | 117 | 0.00 |
| 48 | T | Methyl methacrylate | 50.000 | 45.601 | 8.8 | 107 | 0.00 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061025\
Data File : VN086913.D
Acq On : 10 Jun 2025 09:13
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Jun 11 01:47:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 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 | 892.983 | 10.7 | 96 | 0.00 |
| 50 | S | Toluene-d8 | 50.000 | 49.146 | 1.7 | 149 | 0.00 |
| 51 | T | 4-Methyl-2-Pentanone | 250.000 | 235.975 | 5.6 | 106 | 0.00 |
| 52 | CM | Toluene | 50.000 | 49.345 | 1.3# | 116 | 0.00 |
| 53 | T | t-1,3-Dichloropropene | 50.000 | 51.759 | -3.5 | 119 | 0.00 |
| 54 | T | cis-1,3-Dichloropropene | 50.000 | 51.506 | -3.0 | 120 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 50.000 | 49.785 | 0.4 | 117 | 0.00 |
| 56 | T | Ethyl methacrylate | 50.000 | 54.447 | -8.9 | 118 | 0.00 |
| 57 | T | 1,3-Dichloropropane | 50.000 | 49.255 | 1.5 | 115 | 0.00 |
| 58 | T | 2-Chloroethyl Vinyl ether | 250.000 | 244.474 | 2.2 | 128 | 0.00 |
| 59 | T | 2-Hexanone | 250.000 | 242.131 | 3.1 | 103 | 0.00 |
| 60 | T | Dibromochloromethane | 50.000 | 51.366 | -2.7 | 119 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 50.000 | 50.307 | -0.6 | 119 | 0.00 |
| 62 | S | 4-Bromofluorobenzene | 50.000 | 48.131 | 3.7 | 144 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 50.000 | 50.000 | 0.0 | 109 | 0.00 |
| 64 | T | Tetrachloroethene | 50.000 | 48.675 | 2.7 | 114 | 0.00 |
| 65 | PM | Chlorobenzene | 50.000 | 50.661 | -1.3 | 119 | 0.00 |
| 66 | T | 1,1,1,2-Tetrachloroethane | 50.000 | 51.699 | -3.4 | 118 | 0.00 |
| 67 | C | Ethyl Benzene | 50.000 | 48.548 | 2.9# | 112 | 0.00 |
| 68 | T | m/p-Xylenes | 100.000 | 99.975 | 0.0 | 113 | 0.00 |
| 69 | T | o-Xylene | 50.000 | 51.297 | -2.6 | 115 | 0.00 |
| 70 | T | Styrene | 50.000 | 51.704 | -3.4 | 115 | 0.00 |
| 71 | P | Bromoform | 50.000 | 54.693 | -9.4 | 118 | 0.00 |
| 72 | I | 1,4-Dichlorobenzene-d4 | 50.000 | 50.000 | 0.0 | 102 | 0.00 |
| 73 | T | Isopropylbenzene | 50.000 | 49.917 | 0.2 | 108 | 0.00 |
| 74 | T | N-amyl acetate | 50.000 | 53.204 | -6.4 | 109 | 0.00 |
| 75 | P | 1,1,2,2-Tetrachloroethane | 50.000 | 51.363 | -2.7 | 110 | 0.00 |
| 76 | T | 1,2,3-Trichloropropane | 50.000 | 44.986 | 10.0 | 93 | 0.00 |
| 77 | T | Bromobenzene | 50.000 | 54.054 | -8.1 | 117 | 0.00 |
| 78 | T | n-propylbenzene | 50.000 | 48.621 | 2.8 | 104 | 0.00 |
| 79 | T | 2-Chlorotoluene | 50.000 | 48.865 | 2.3 | 106 | 0.00 |
| 80 | T | 1,3,5-Trimethylbenzene | 50.000 | 49.161 | 1.7 | 104 | 0.00 |
| 81 | T | trans-1,4-Dichloro-2-butene | 50.000 | 52.029 | -4.1 | 115 | 0.00 |
| 82 | T | 4-Chlorotoluene | 50.000 | 50.423 | -0.8 | 109 | 0.00 |
| 83 | T | tert-Butylbenzene | 50.000 | 46.840 | 6.3 | 101 | 0.00 |
| 84 | T | 1,2,4-Trimethylbenzene | 50.000 | 49.422 | 1.2 | 104 | 0.00 |
| 85 | T | sec-Butylbenzene | 50.000 | 46.060 | 7.9 | 98 | 0.00 |
| 86 | T | p-Isopropyltoluene | 50.000 | 47.367 | 5.3 | 100 | 0.00 |
| 87 | T | 1,3-Dichlorobenzene | 50.000 | 51.039 | -2.1 | 110 | 0.00 |
| 88 | T | 1,4-Dichlorobenzene | 50.000 | 50.774 | -1.5 | 110 | 0.00 |
| 89 | T | n-Butylbenzene | 50.000 | 44.380 | 11.2 | 95 | 0.00 |
| 90 | T | Hexachloroethane | 50.000 | 48.027 | 3.9 | 102 | 0.00 |
| 91 | T | 1,2-Dichlorobenzene | 50.000 | 50.816 | -1.6 | 109 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 50.000 | 46.906 | 6.2 | 104 | 0.00 |
| 93 | T | 1,2,4-Trichlorobenzene | 50.000 | 45.529 | 8.9 | 97 | 0.00 |
| 94 | T | Hexachlorobutadiene | 50.000 | 37.848 | 24.3 | 80 | 0.00 |
| 95 | T | Naphthalene | 50.000 | 48.711 | 2.6 | 104 | 0.00 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061025\
Data File : VN086913.D
Acq On : 10 Jun 2025 09:13
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Jun 11 01:47:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 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 | 42.897 | 14.2 | 92 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Raw Data: **VN086940.D**

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

## VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q2250 SAS No.: Q2250 SDG No.: Q2250

Instrument ID: MSVOA_N Calibration Date/Time: 06/11/2025 11:32

Lab File ID: VN086940.D Init. Calib. Date(s): 06/06/2025 06/06/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 12:44 14:49

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

| COMPOUND | RRF | RRF050 | MIN RRF | %D | MAX%D |
|---|---|---|---|---|---|
| Vinyl Chloride | 0.664 | 0.701 | | 5.57 | 20 |
| 1,1-Dichloroethene | 0.557 | 0.593 | | 6.46 | 20 |
| 1,1-Dichloroethane | 1.120 | 1.178 | 0.1 | 5.18 | 20 |
| cis-1,2-Dichloroethene | 0.740 | 0.793 | | 7.16 | 20 |
| 1,1,1-Trichloroethane | 0.951 | 0.976 | | 2.63 | 20 |
| Benzene | 1.444 | 1.554 | | 7.55 | 20 |
| 1,2-Dichloroethane | 0.438 | 0.472 | | 7.76 | 20 |
| Trichloroethene | 0.342 | 0.382 | | 11.7 | 20 |
| 1,1,2-Trichloroethane | 0.340 | 0.383 | | 12.65 | 20 |
| Tetrachloroethene | 0.316 | 0.337 | | 6.65 | 20 |
| 1,2-Dichloroethane-d4 | 0.669 | 0.622 | | -7.03 | 20 |
| Dibromofluoromethane | 0.296 | 0.309 | | 4.39 | 20 |
| Toluene-d8 | 1.173 | 1.181 | | 0.68 | 20 |
| 4-Bromofluorobenzene | 0.436 | 0.440 | | 0.92 | 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\VN061125\
Data File : VN086940.D
Acq On : 11 Jun 2025 11:32
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 12 01:28:53 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/12/2025
Supervised By :Semsettin Yesilyurt 06/12/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) Pentafluorobenzene | 8.230 | 168 | 205098 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.106 | 114 | 357643 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 312173 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 152136 | 50.000 | ug/l | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.583 | 65 | 127629 | 46.478 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 92.960% | | | |
| 35) Dibromofluoromethane | 8.177 | 113 | 110532 | 52.151 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 104.300% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 422391 | 50.342 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 100.680% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 157388 | 50.489 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 100.980% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.154 | 85 | 110255 | 53.916 | ug/l | 100 |
| 3) Chloromethane | 2.395 | 50 | 113731 | 43.069 | ug/l | 94 |
| 4) Vinyl Chloride | 2.554 | 62 | 143755 | 52.773 | ug/l | 99 |
| 5) Bromomethane | 2.989 | 94 | 63914 | 41.928 | ug/l | 96 |
| 6) Chloroethane | 3.154 | 64 | 93702 | 53.253 | ug/l | 99 |
| 7) Trichlorofluoromethane | 3.524 | 101 | 190657 | 53.570 | ug/l | 99 |
| 8) Diethyl Ether | 3.983 | 74 | 85722 | 55.281 | ug/l | 95 |
| 9) 1,1,2-Trichlorotrifluo... | 4.401 | 101 | 119322 | 53.364 | ug/l | 99 |
| 10) Methyl Iodide | 4.618 | 142 | 115825 | 39.959 | ug/l | 97 |
| 11) Tert butyl alcohol | 5.542 | 59 | 183049 | 245.667 | ug/l | 99 |
| 12) 1,1-Dichloroethene | 4.365 | 96 | 121690 | 53.307 | ug/l | 94 |
| 13) Acrolein | 4.201 | 56 | 68006 | 288.340 | ug/l | 99 |
| 14) Allyl chloride | 5.048 | 41 | 187099 | 49.420 | ug/l | 96 |
| 15) Acrylonitrile | 5.736 | 53 | 456903 | 262.349 | ug/l | 99 |
| 16) Acetone | 4.442 | 43 | 393802 | 270.423 | ug/l | 97 |
| 17) Carbon Disulfide | 4.736 | 76 | 308706 | 48.889 | ug/l | 100 |
| 18) Methyl Acetate | 5.042 | 43 | 222452 | 52.419 | ug/l | 98 |
| 19) Methyl tert-butyl Ether | 5.812 | 73 | 445459 | 53.894 | ug/l | 98 |
| 20) Methylene Chloride | 5.295 | 84 | 138117 | 50.660 | ug/l | 95 |
| 21) trans-1,2-Dichloroethene | 5.806 | 96 | 129921 | 51.154 | ug/l | 98 |
| 22) Diisopropyl ether | 6.683 | 45 | 412097 | 51.639 | ug/l | 99 |
| 23) Vinyl Acetate | 6.618 | 43 | 1766271 | 261.960 | ug/l | 98 |
| 24) 1,1-Dichloroethane | 6.589 | 63 | 241575 | 52.602 | ug/l | 99 |
| 25) 2-Butanone | 7.489 | 43 | 582343 | 246.018 | ug/l | 95 |
| 26) 2,2-Dichloropropane | 7.506 | 77 | 215080 | 60.206 | ug/l | 99 |
| 27) cis-1,2-Dichloroethene | 7.500 | 96 | 162658 | 53.551 | ug/l | 98 |
| 28) Bromochloromethane | 7.824 | 49 | 118461 | 52.462 | ug/l | 95 |
| 29) Tetrahydrofuran | 7.847 | 42 | 380103 | 246.502 | ug/l | 96 |
| 30) Chloroform | 7.977 | 83 | 241191 | 52.589 | ug/l | 98 |
| 31) Cyclohexane | 8.265 | 56 | 208644 | 46.846 | ug/l | 97 |
| 32) 1,1,1-Trichloroethane | 8.177 | 97 | 200139 | 51.307 | ug/l | 97 |
| 36) 1,1-Dichloropropene | 8.377 | 75 | 172642 | 54.664 | ug/l | 99 |
| 37) Ethyl Acetate | 7.571 | 43 | 211755 | 52.670 | ug/l | 99 |
| 38) Carbon Tetrachloride | 8.371 | 117 | 168940 | 54.485 | ug/l | 94 |
| 39) Methylcyclohexane | 9.606 | 83 | 206018 | 47.613 | ug/l | 96 |
| 40) Benzene | 8.612 | 78 | 555597 | 53.798 | ug/l | 98 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061125\
Data File : VN086940.D
Acq On : 11 Jun 2025 11:32
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 12 01:28:53 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/12/2025
Supervised By :Semsettin Yesilyurt 06/12/2025

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.789 | 41 | 115191 | 51.017 ug/l | 93 |
| 42) 1,2-Dichloroethane | 8.677 | 62 | 168630 | 53.833 ug/l | 99 |
| 43) Isopropyl Acetate | 8.694 | 43 | 338399 | 52.442 ug/l | 97 |
| 44) Trichloroethene | 9.353 | 130 | 136748 | 55.842 ug/l | 98 |
| 45) 1,2-Dichloropropane | 9.624 | 63 | 137250 | 54.626 ug/l | 100 |
| 46) Dibromomethane | 9.712 | 93 | 94620 | 56.697 ug/l | 99 |
| 47) Bromodichloromethane | 9.888 | 83 | 190362 | 55.440 ug/l | 100 |
| 48) Methyl methacrylate | 9.683 | 41 | 154138 | 51.898 ug/l | 96 |
| 49) 1,4-Dioxane | 9.700 | 88 | 60969 | 1128.409 ug/l # | 96 |
| 51) 4-Methyl-2-Pentanone | 10.447 | 43 | 1054797 | 271.529 ug/l | 98 |
| 52) Toluene | 10.630 | 92 | 349873 | 55.435 ug/l | 98 |
| 53) t-1,3-Dichloropropene | 10.835 | 75 | 217752 | 56.714 ug/l | 100 |
| 54) cis-1,3-Dichloropropene | 10.312 | 75 | 236296 | 57.518 ug/l | 97 |
| 55) 1,1,2-Trichloroethane | 11.018 | 97 | 137099 | 56.454 ug/l | 99 |
| 56) Ethyl methacrylate | 10.877 | 69 | 231226 | 59.778 ug/l | 95 |
| 57) 1,3-Dichloropropane | 11.165 | 76 | 232746 | 55.247 ug/l | 98 |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63 | 665780 | 288.579 ug/l | 99 |
| 59) 2-Hexanone | 11.200 | 43 | 705660 | 282.011 ug/l | 97 |
| 60) Dibromochloromethane | 11.359 | 129 | 148069 | 58.520 ug/l | 99 |
| 61) 1,2-Dibromoethane | 11.471 | 107 | 137779 | 55.351 ug/l | 99 |
| 64) Tetrachloroethene | 11.106 | 164 | 105084 | 53.190 ug/l | 95 |
| 65) Chlorobenzene | 11.888 | 112 | 381598 | 55.424 ug/l | 97 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 124964 | 56.463 ug/l | 99 |
| 67) Ethyl Benzene | 11.965 | 91 | 642857 | 54.206 ug/l | 99 |
| 68) m/p-Xylenes | 12.071 | 106 | 500895 | 110.334 ug/l | 99 |
| 69) o-Xylene | 12.400 | 106 | 244038 | 56.127 ug/l | 98 |
| 70) Styrene | 12.412 | 104 | 424060 | 56.996 ug/l | 100 |
| 71) Bromoform | 12.576 | 173 | 99616 | 60.747 ug/l # | 100 |
| 73) Isopropylbenzene | 12.694 | 105 | 593080 | 53.511 ug/l | 99 |
| 74) N-amyl acetate | 12.512 | 43 | 208229 | 53.765 ug/l | 94 |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 213329 | 56.816 ug/l | 99 |
| 76) 1,2,3-Trichloropropane | 12.994 | 75 | 179987m | 49.771 ug/l | |
| 77) Bromobenzene | 12.976 | 156 | 146181 | 57.512 ug/l | 98 |
| 78) n-propylbenzene | 13.035 | 91 | 717012 | 53.234 ug/l | 99 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 439522 | 54.413 ug/l | 98 |
| 80) 1,3,5-Trimethylbenzene | 13.171 | 105 | 490727 | 53.628 ug/l | 98 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 93790 | 59.701 ug/l # | 87 |
| 82) 4-Chlorotoluene | 13.218 | 91 | 446237 | 54.598 ug/l | 99 |
| 83) tert-Butylbenzene | 13.435 | 119 | 448106 | 53.498 ug/l | 97 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 495936 | 54.048 ug/l | 99 |
| 85) sec-Butylbenzene | 13.612 | 105 | 617792 | 50.788 ug/l | 99 |
| 86) p-Isopropyltoluene | 13.729 | 119 | 524440 | 52.156 ug/l | 98 |
| 87) 1,3-Dichlorobenzene | 13.729 | 146 | 280357 | 56.062 ug/l | 99 |
| 88) 1,4-Dichlorobenzene | 13.812 | 146 | 287122 | 56.315 ug/l | 99 |
| 89) n-Butylbenzene | 14.053 | 91 | 477306 | 49.007 ug/l | 100 |
| 90) Hexachloroethane | 14.329 | 117 | 89886 | 52.738 ug/l | 99 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 267932 | 55.766 ug/l | 100 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75 | 47326 | 52.704 ug/l | 92 |
| 93) 1,2,4-Trichlorobenzene | 15.388 | 180 | 160030 | 52.161 ug/l | 99 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 51073 | 44.682 ug/l | 99 |
| 95) Naphthalene | 15.635 | 128 | 624421 | 54.679 ug/l | 100 |
| 96) 1,2,3-Trichlorobenzene | 15.835 | 180 | 151411 | 49.672 ug/l | 99 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061125\
Data File : VN086940.D
Acq On : 11 Jun 2025 11:32
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 12 01:28:53 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

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Supervised By :Semsettin Yesilyurt 06/12/2025

| 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\VN061125\
Data File : VN086940.D
Acq On : 11 Jun 2025 11:32
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 12 01:28:53 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

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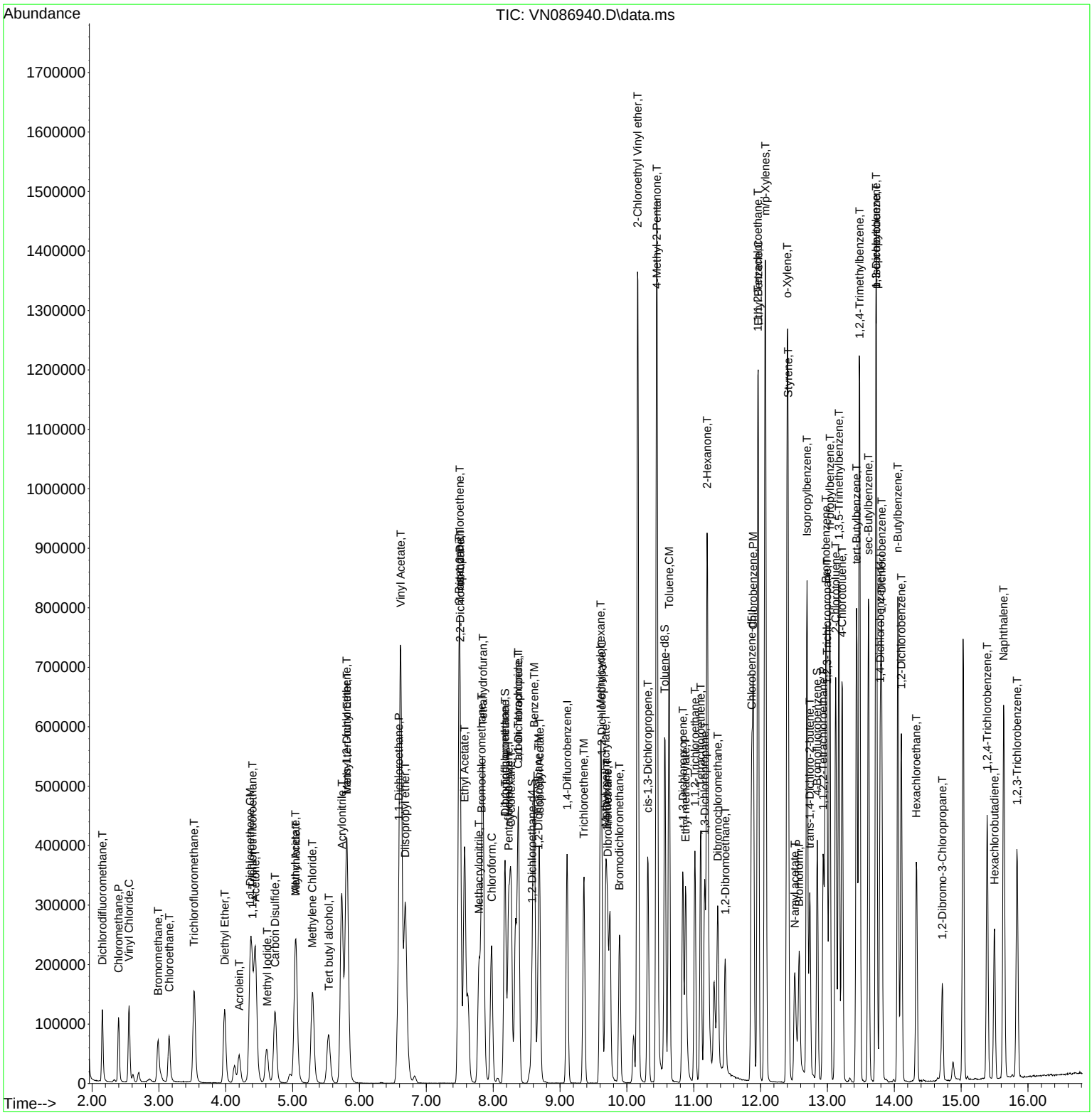
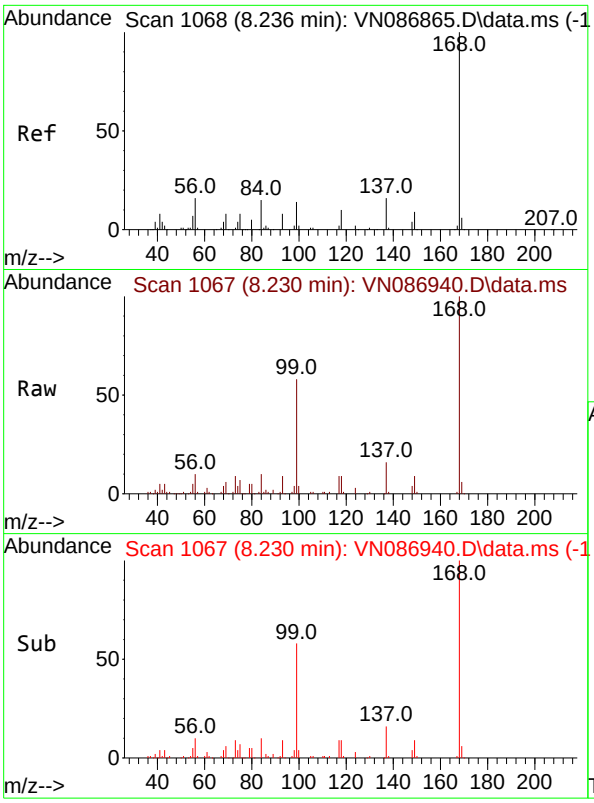
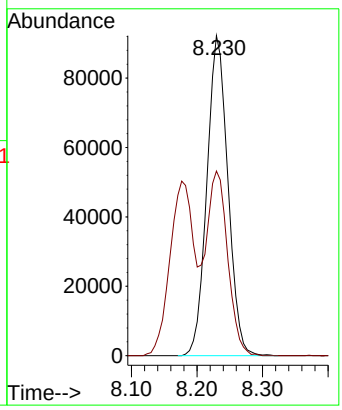





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.230 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion:168 Resp: 20509

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 57.7 | 49.1 | 73.7 |




**Instrument :**
MSVOA_N
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VSTDCCC050

**Manual Integrations**
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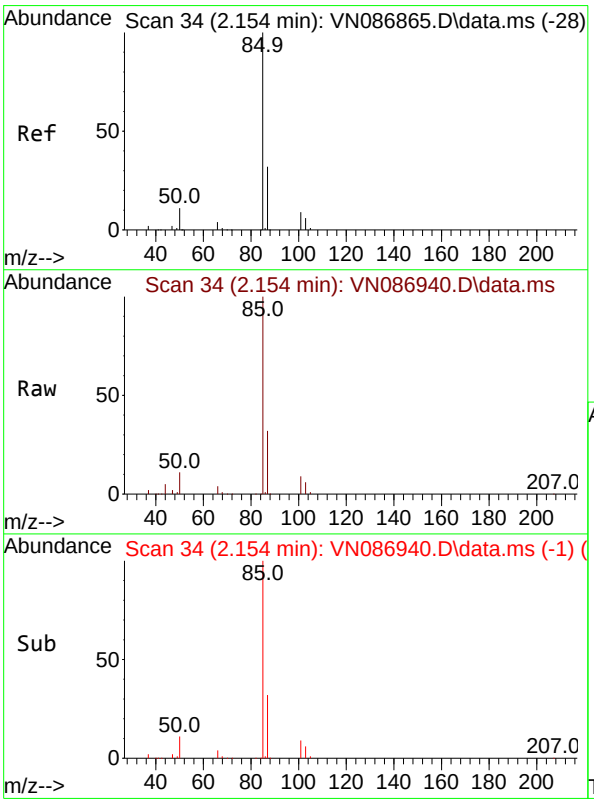
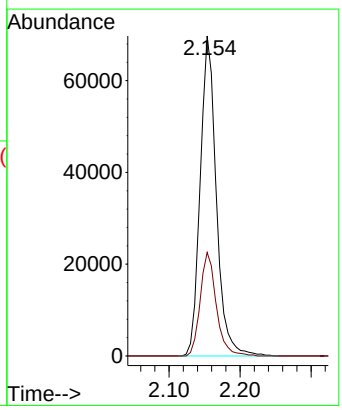
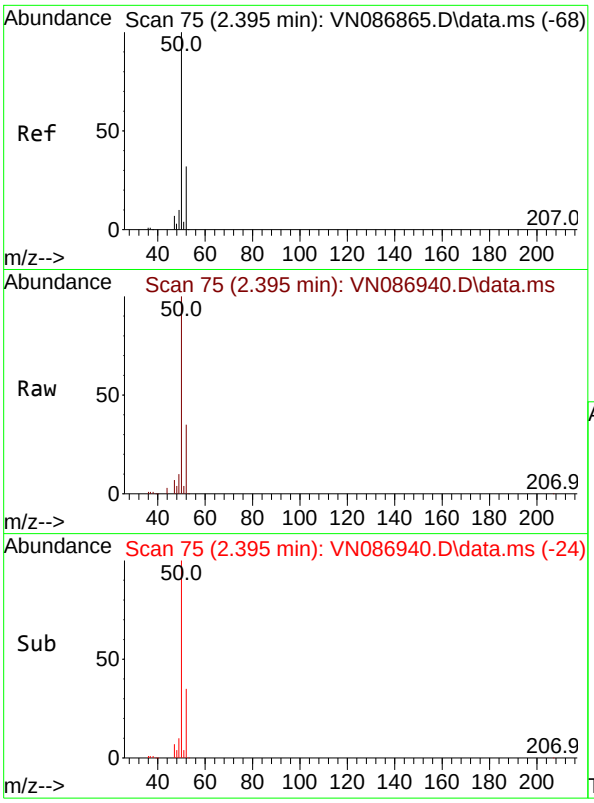



#2
Dichlorodifluoromethane
Concen: 53.916 ug/l
RT: 2.154 min Scan# 34
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 85 Resp: 110255

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.4 | 16.2 | 48.6 |

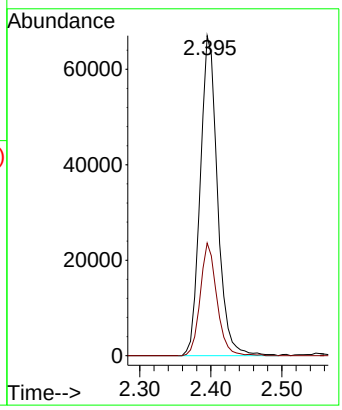





#3
Chloromethane
Concen: 43.069 ug/l
RT: 2.395 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 50 Resp: 11373

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 35.2 | 25.7 | 38.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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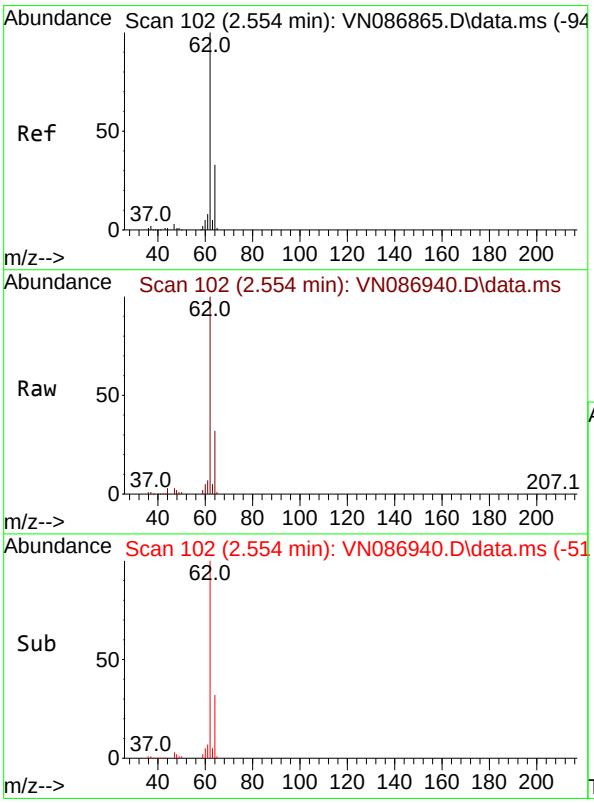
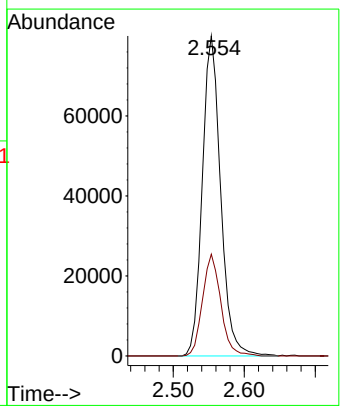
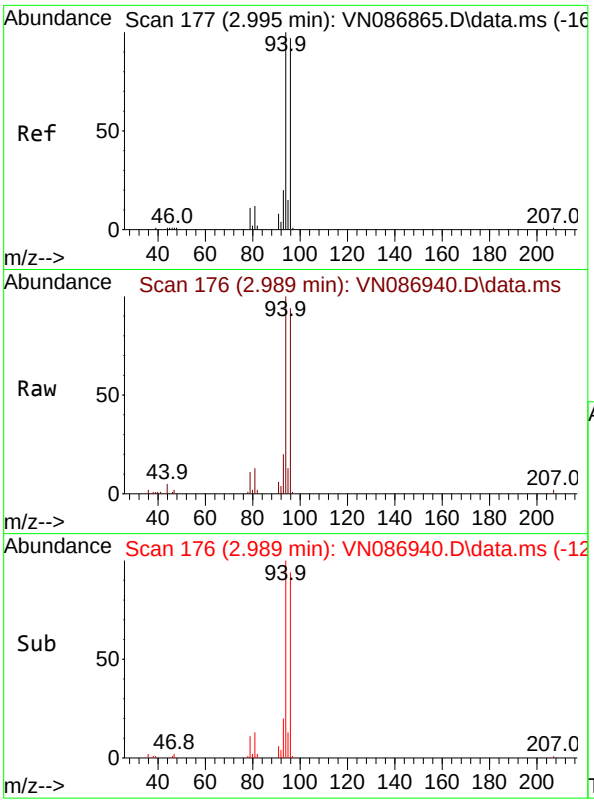



#4
Vinyl Chloride
Concen: 52.773 ug/l
RT: 2.554 min Scan# 102
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 62 Resp: 143755

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 31.8 | 26.0 | 39.0 |






#5
Bromomethane
Concen: 41.928 ug/l
RT: 2.989 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 94 Resp: 6391

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 93.9 | 77.9 | 116.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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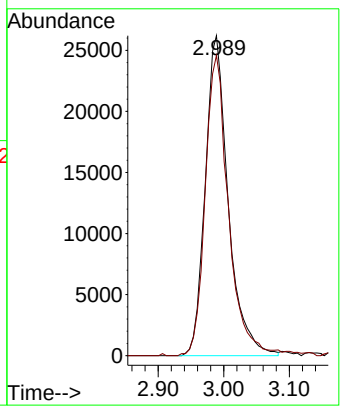
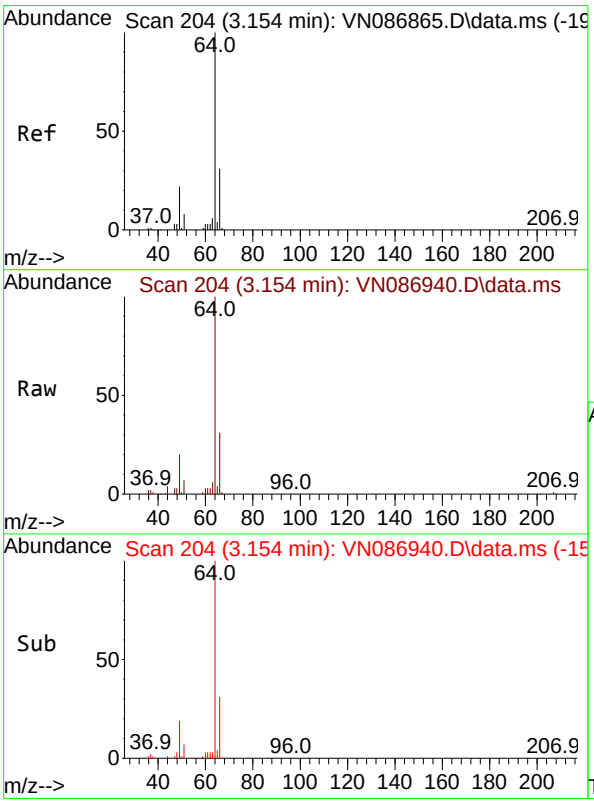
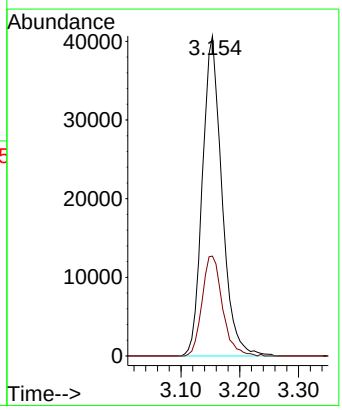


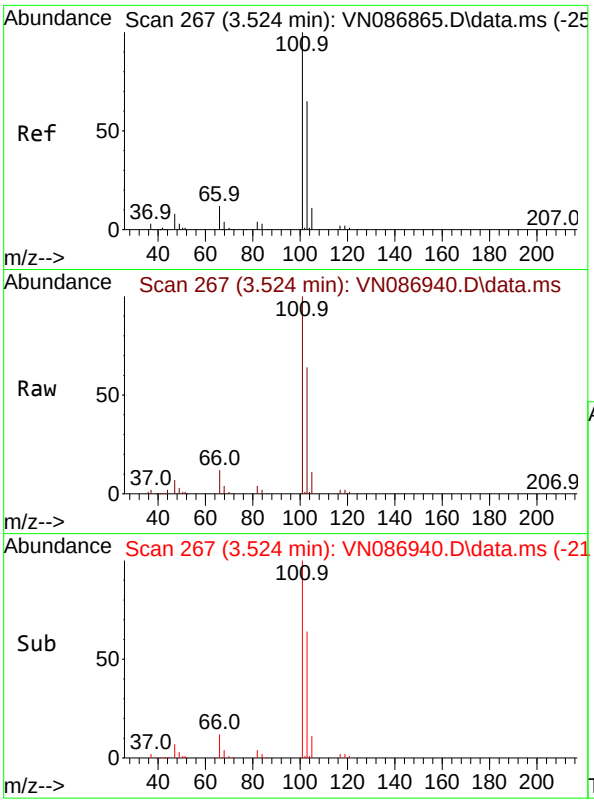




#6
Chloroethane
Concen: 53.253 ug/l
RT: 3.154 min Scan# 204
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 64 Resp: 93702

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 31.2 | 24.6 | 36.8 |






#7
Trichlorofluoromethane
Concen: 53.570 ug/l
RT: 3.524 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion:101 Resp: 19065

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 64.5 | 52.2 | 78.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

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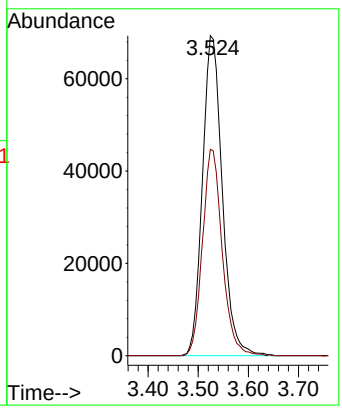
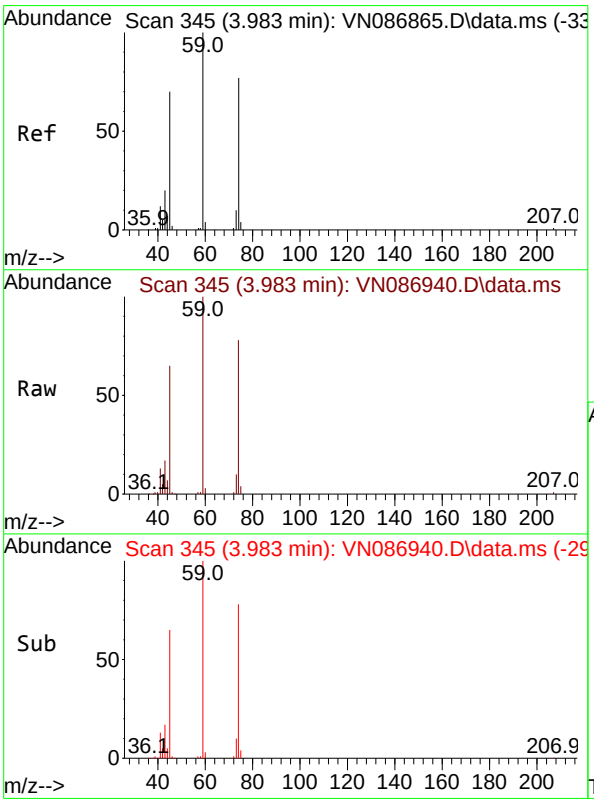
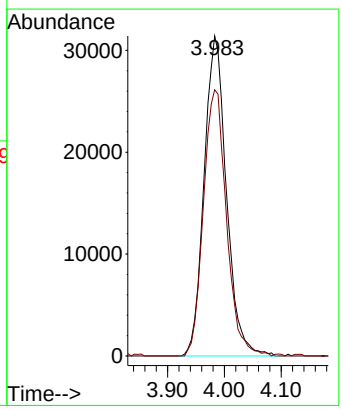


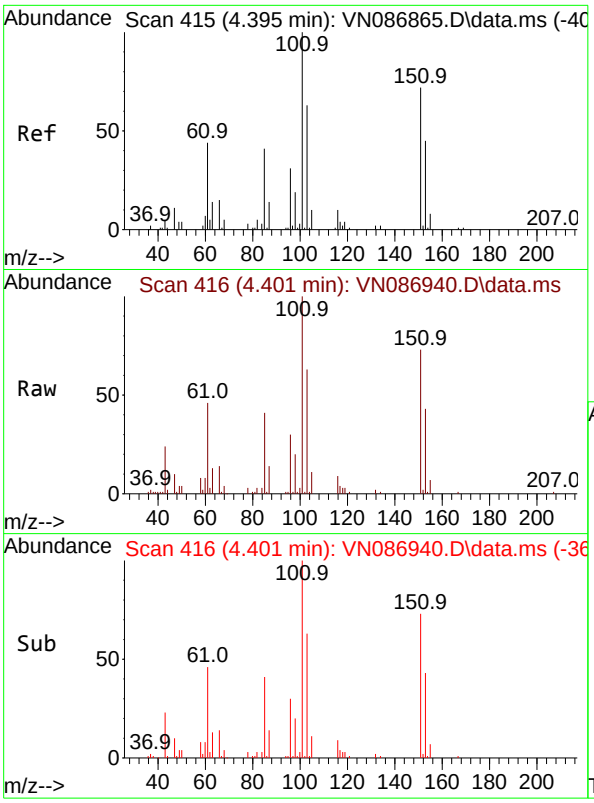




#8
Diethyl Ether
Concen: 55.281 ug/l
RT: 3.983 min Scan# 345
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 74 Resp: 85722

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 85.9 | 45.5 | 136.5 |






#9
1,1,2-Trichlorotrifluoroethane
Concen: 53.364 ug/l
RT: 4.401 min Scan# 4
Delta R.T. 0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion:101 Resp: 11932

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 42.3 | 33.8 | 50.8 |
| 151 | 74.7 | 58.7 | 88.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

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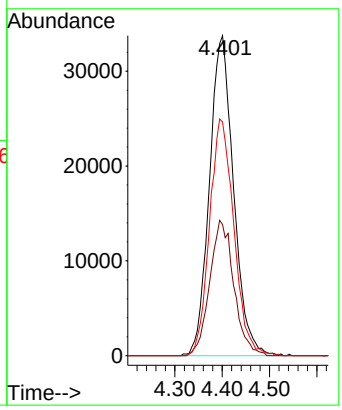
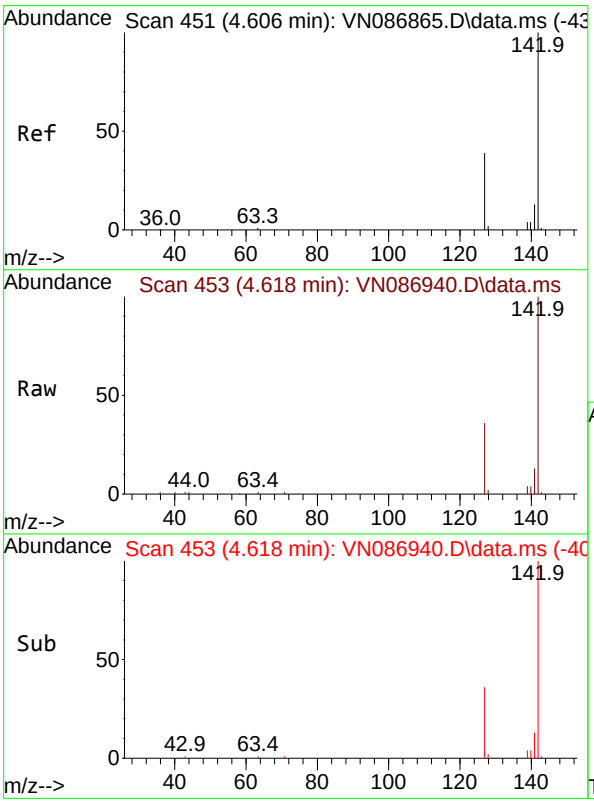
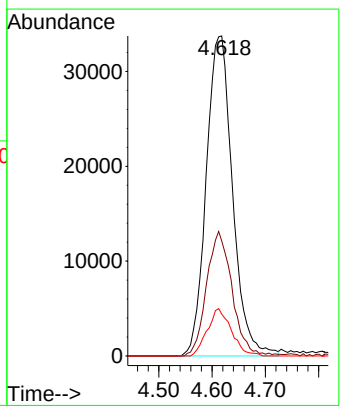


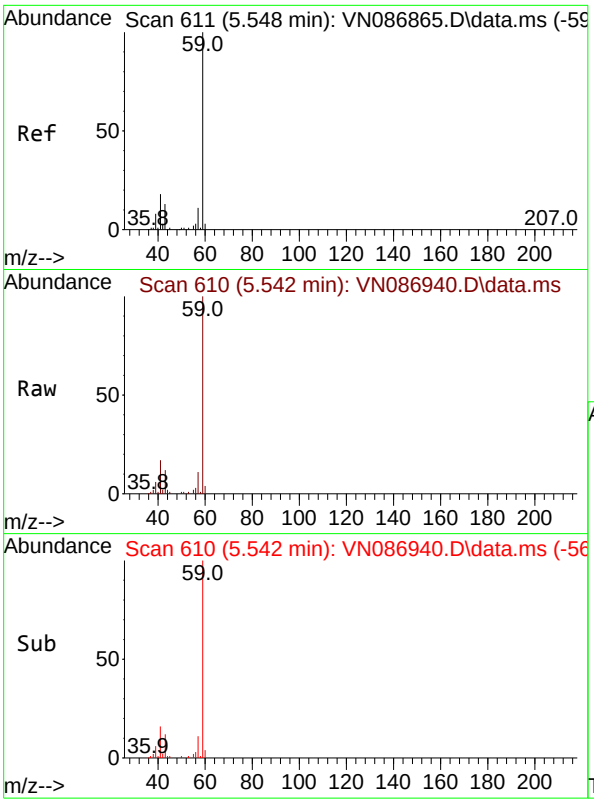




#10
Methyl Iodide
Concen: 39.959 ug/l
RT: 4.618 min Scan# 453
Delta R.T. 0.012 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion:142 Resp: 115825

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 36.0 | 30.9 | 46.3 |
| 141 | 13.1 | 10.4 | 15.6 |






#11
Tert butyl alcohol
Concen: 245.667 ug/l
RT: 5.542 min Scan# 61
Delta R.T. -0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 59 Resp: 18304

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 9.9 | 8.1 | 12.1 |

**Instrument :**
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VSTDCCC050

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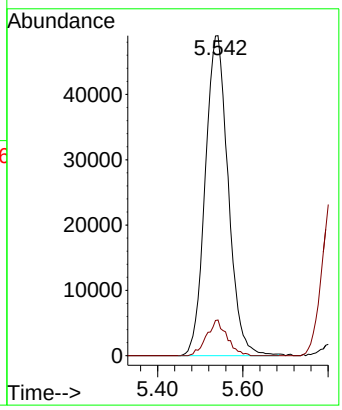
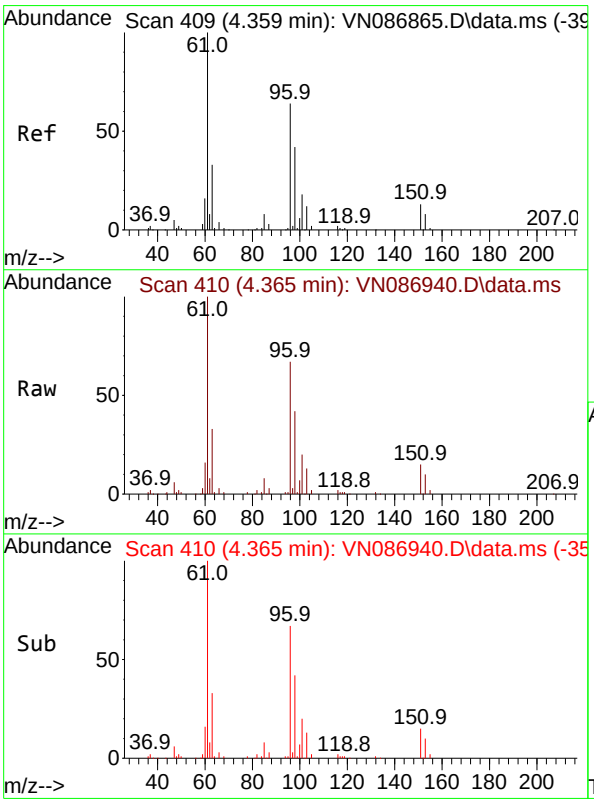
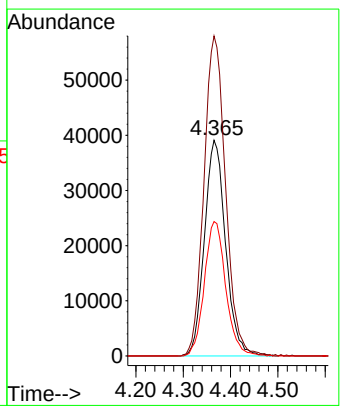


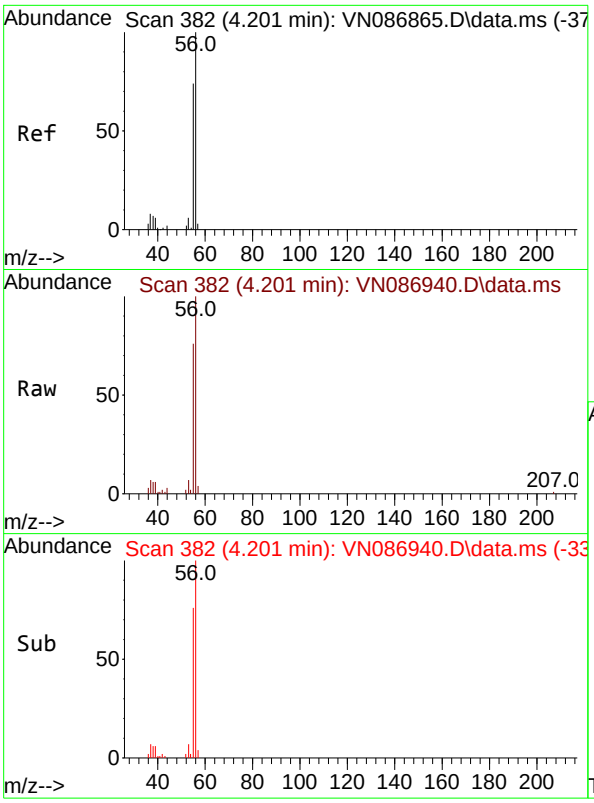




#12
1,1-Dichloroethene
Concen: 53.307 ug/l
RT: 4.365 min Scan# 410
Delta R.T. 0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 96 Resp: 121690

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 148.3 | 125.8 | 188.6 |
| 98 | 62.3 | 52.5 | 78.7 |

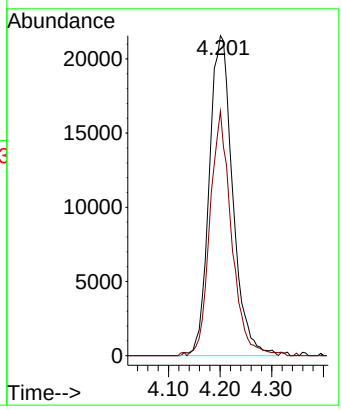





#13
Acrolein
Concen: 288.340 ug/l
RT: 4.201 min Scan# 3
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 56 Resp: 6800

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 70.2 | 55.6 | 83.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

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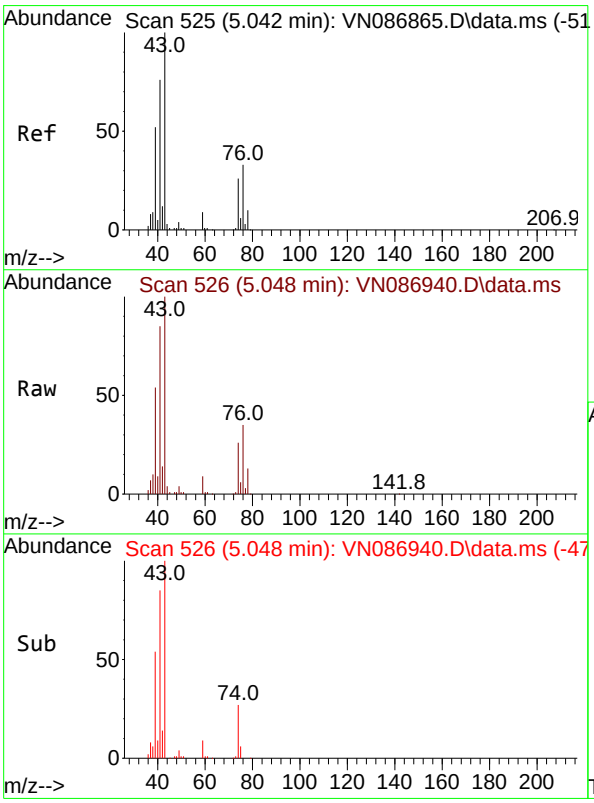
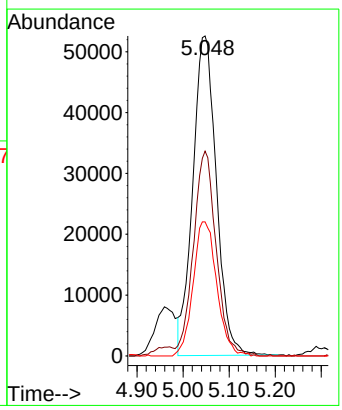
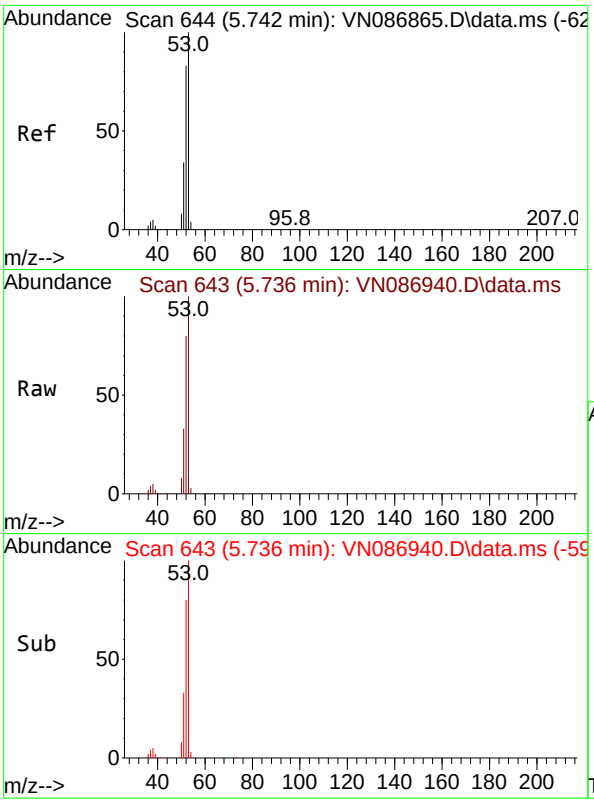



#14
Allyl chloride
Concen: 49.420 ug/l
RT: 5.048 min Scan# 526
Delta R.T. 0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 41 Resp: 187099

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 62.0 | 51.3 | 76.9 |
| 76 | 42.2 | 31.4 | 47.0 |






#15
Acrylonitrile
Concen: 262.349 ug/l
RT: 5.736 min Scan# 64
Delta R.T. -0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 53 Resp: 45690

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 80.2 | 65.0 | 97.6 |
| 51 | 33.6 | 27.2 | 40.8 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

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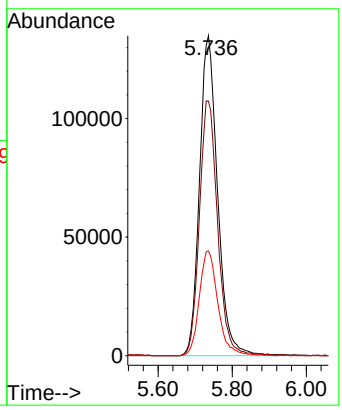
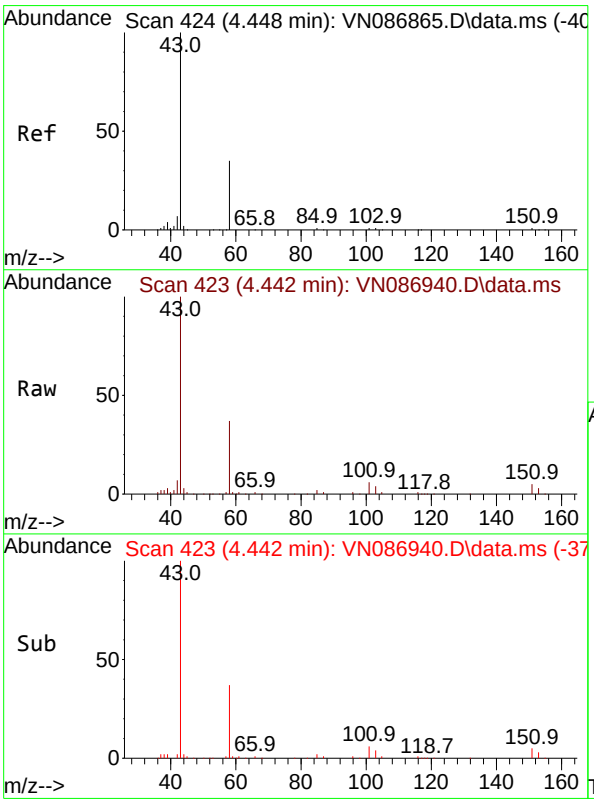
Reviewed By :John Carlone 06/12/2025
Supervised By :Semsettin Yesilyurt 06/12/2025

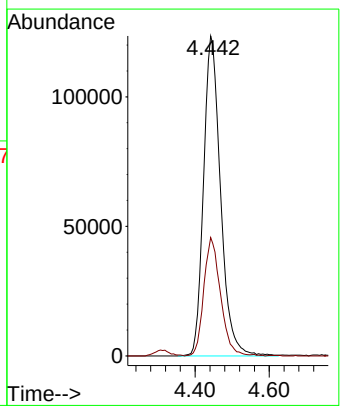


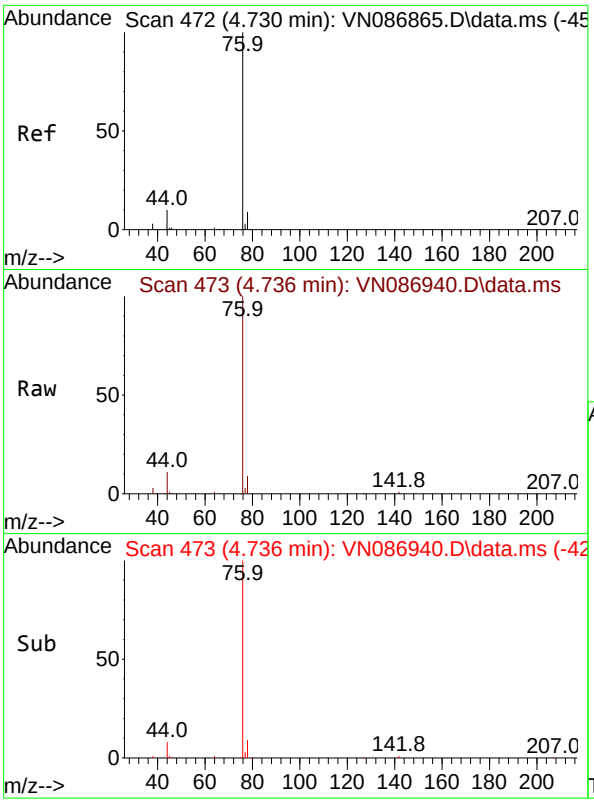




#16
Acetone
Concen: 270.423 ug/l
RT: 4.442 min Scan# 423
Delta R.T. -0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 43 Resp: 393802

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 36.9 | 28.0 | 42.0 |






#17
Carbon Disulfide
Concen: 48.889 ug/l
RT: 4.736 min Scan# 4
Delta R.T. 0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 76 Resp: 30870

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.2 | 7.3 | 10.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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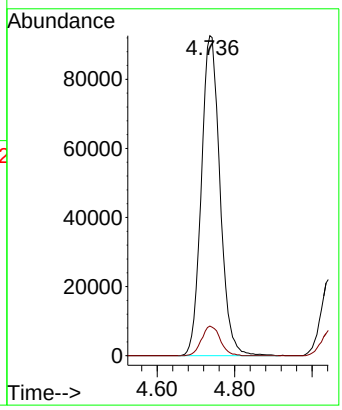
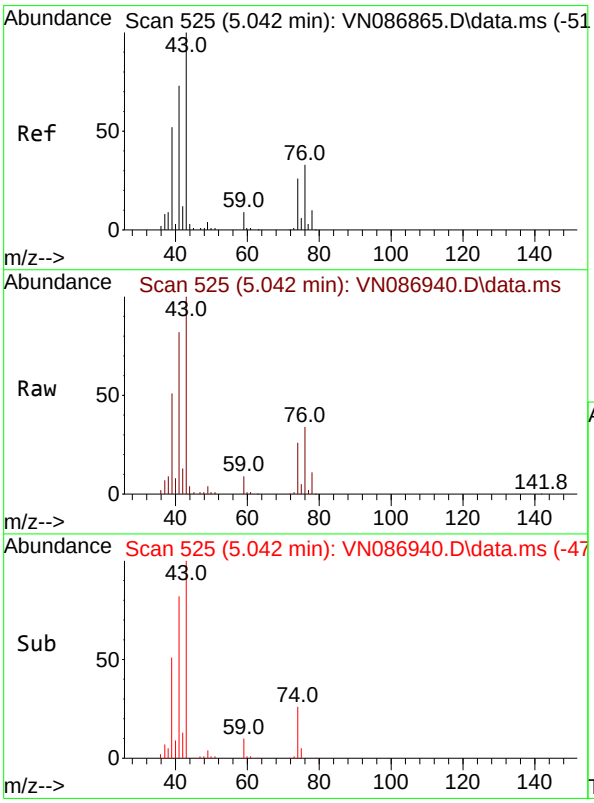
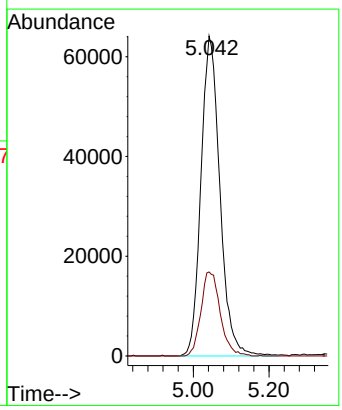


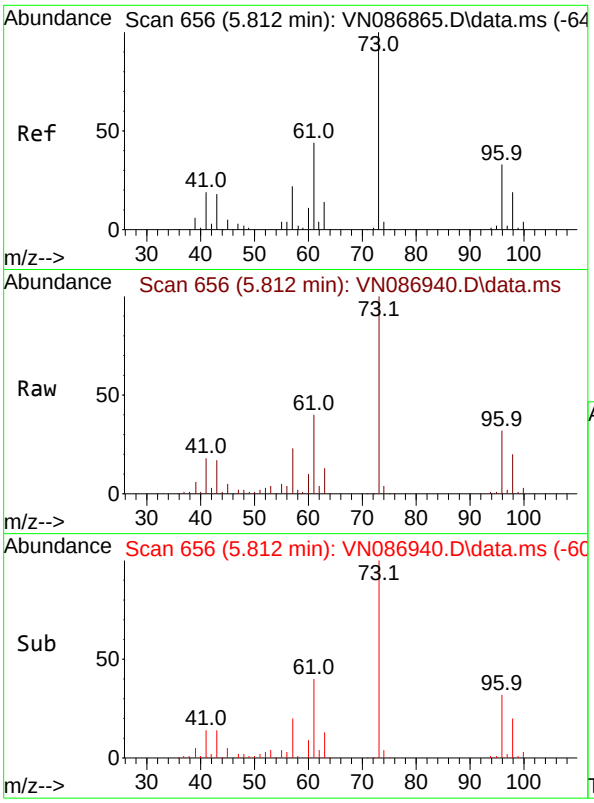




#18
Methyl Acetate
Concen: 52.419 ug/l
RT: 5.042 min Scan# 525
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 43 Resp: 222452

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 26.7 | 20.7 | 31.1 |






#19
Methyl tert-butyl Ether
Concen: 53.894 ug/l
RT: 5.812 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 73 Resp: 44545

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 22.7 | 17.4 | 26.2 |

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VSTDCCC050

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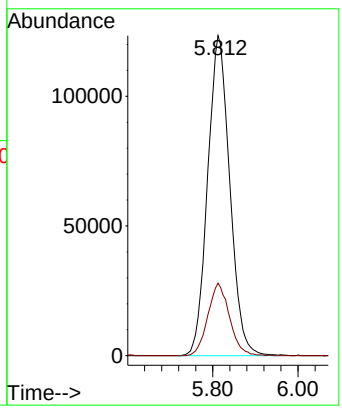
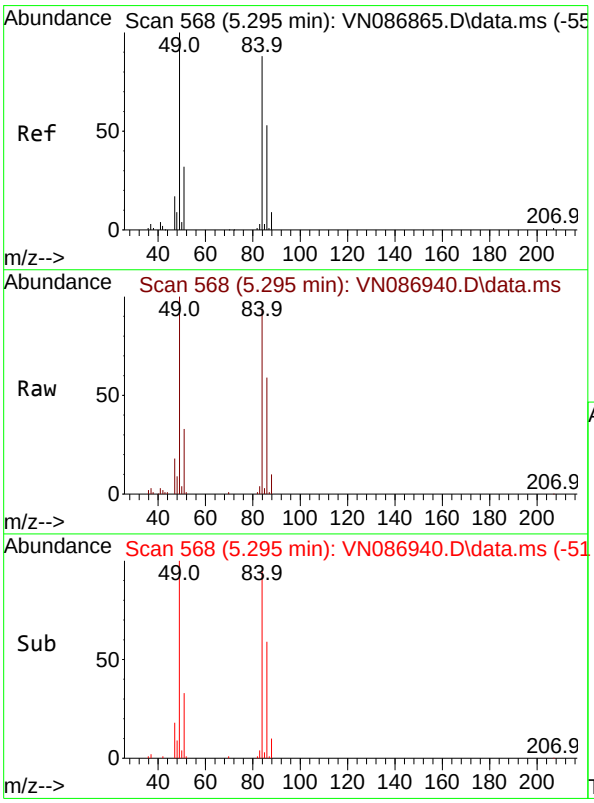
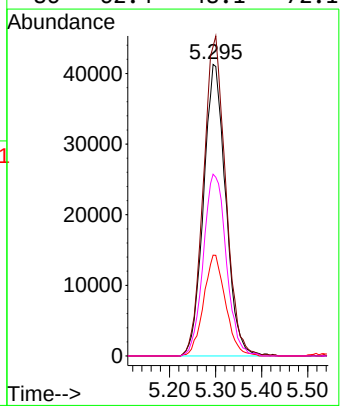


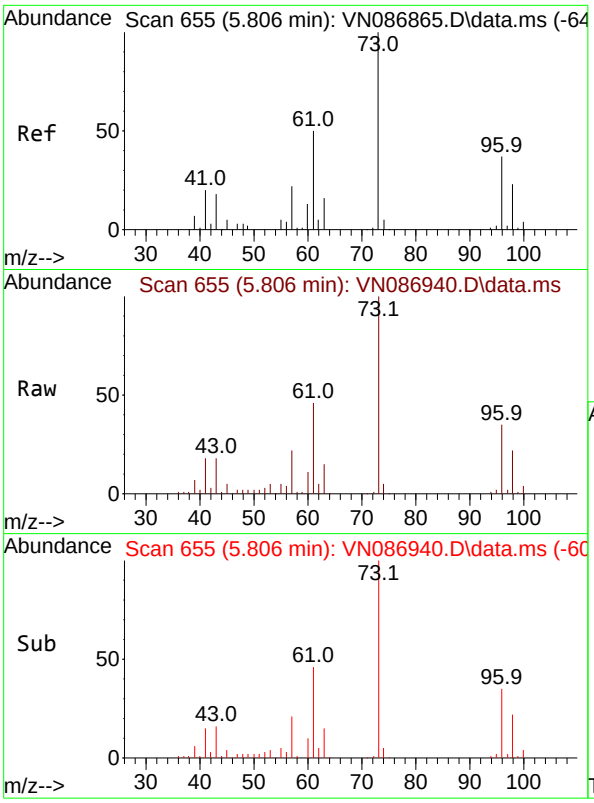




#20
Methylene Chloride
Concen: 50.660 ug/l
RT: 5.295 min Scan# 568
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 84 Resp: 138117

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 106.1 | 90.5 | 135.7 |
| 51 | 34.5 | 28.5 | 42.7 |
| 86 | 62.4 | 48.1 | 72.1 |






#21
trans-1,2-Dichloroethene
Concen: 51.154 ug/l
RT: 5.806 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 96 Resp: 12992

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 132.3 | 109.2 | 163.8 |
| 98 | 62.4 | 49.8 | 74.8 |

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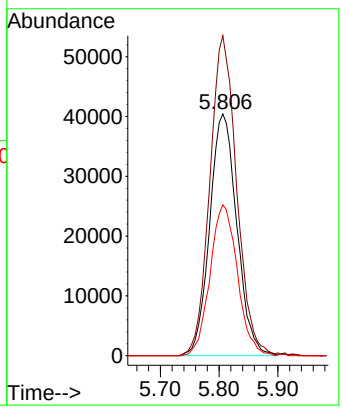
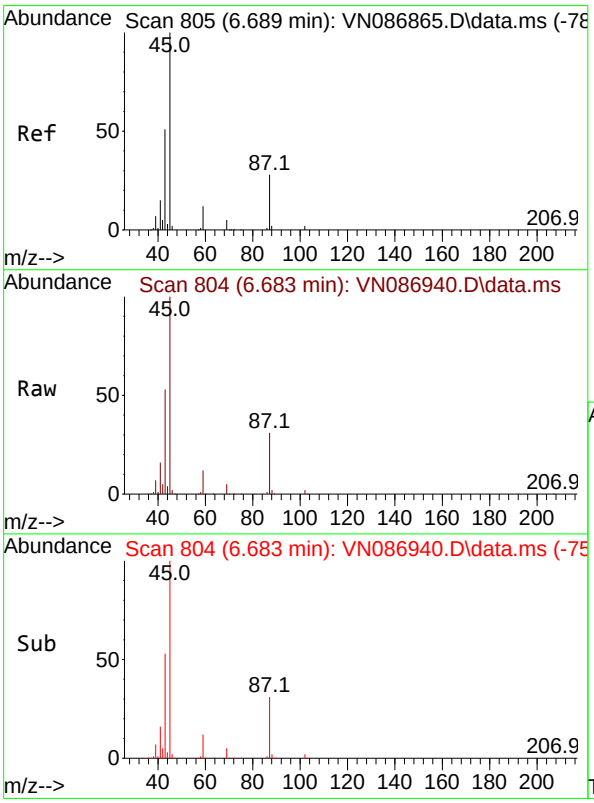
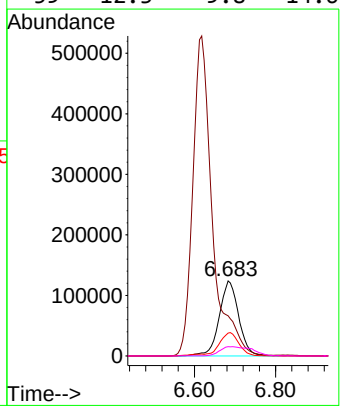


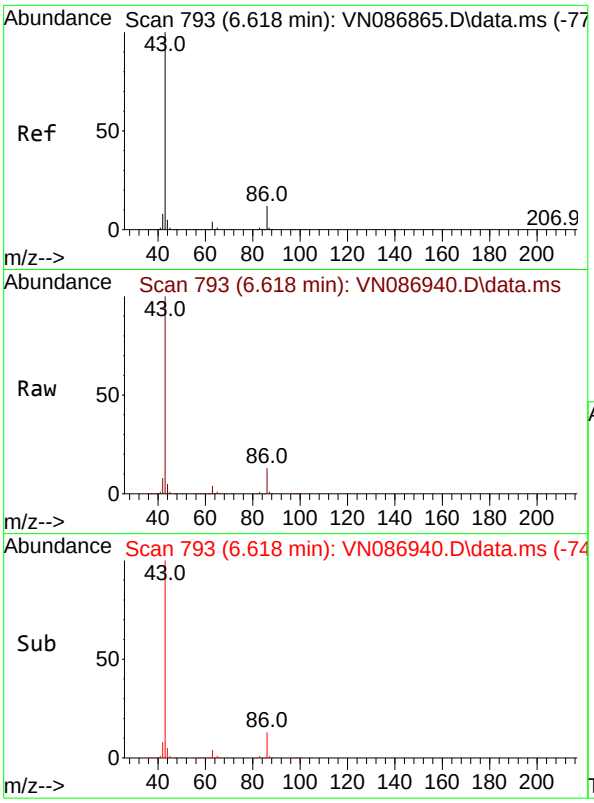




#22
Diisopropyl ether
Concen: 51.639 ug/l
RT: 6.683 min Scan# 804
Delta R.T. -0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 45 Resp: 412097

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 52.4 | 41.9 | 62.9 |
| 87 | 30.3 | 22.4 | 33.6 |
| 59 | 12.3 | 9.8 | 14.6 |






#23
Vinyl Acetate
Concen: 261.960 ug/l
RT: 6.618 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 43 Resp: 176627

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 12.8 | 9.5 | 14.3 |

**Instrument :**
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VSTDCCC050

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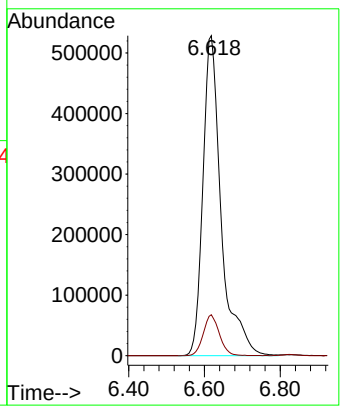
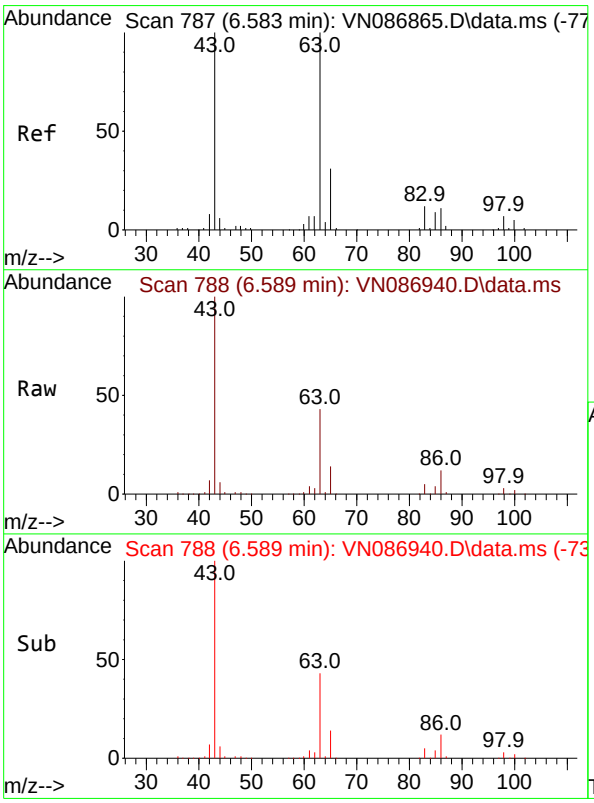
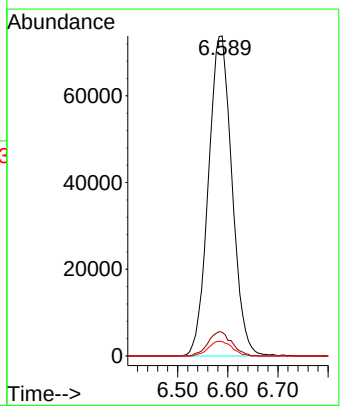


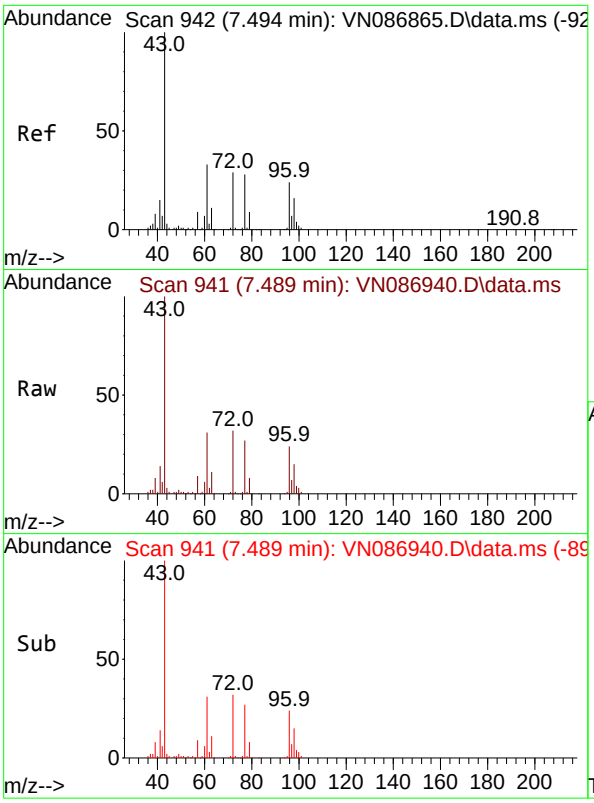




#24
1,1-Dichloroethane
Concen: 52.602 ug/l
RT: 6.589 min Scan# 788
Delta R.T. 0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 63 Resp: 241575

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 7.4 | 3.6 | 10.8 |
| 100 | 4.5 | 2.6 | 7.8 |






#25
2-Butanone
Concen: 246.018 ug/l
RT: 7.489 min Scan# 94
Delta R.T. -0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 43 Resp: 58234

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 31.5 | 23.0 | 34.6 |

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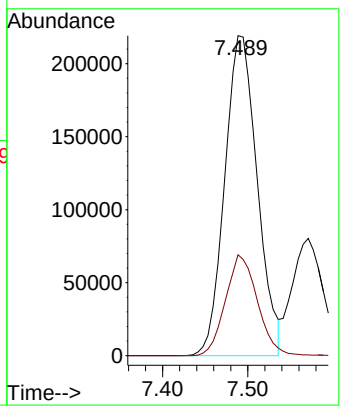
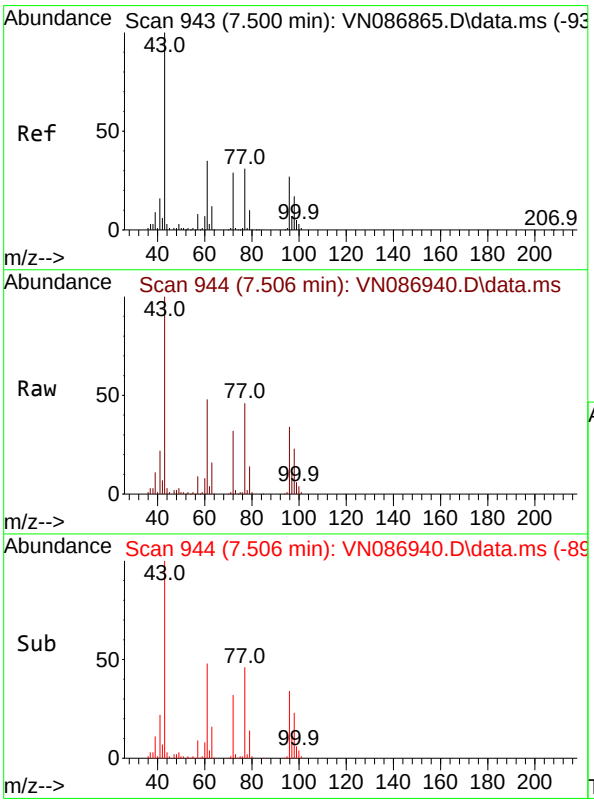
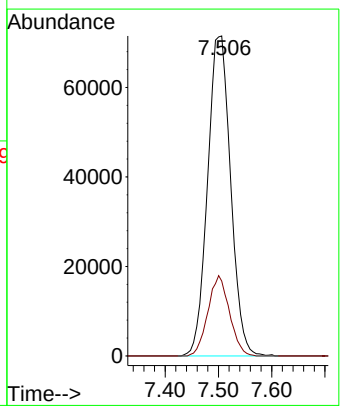


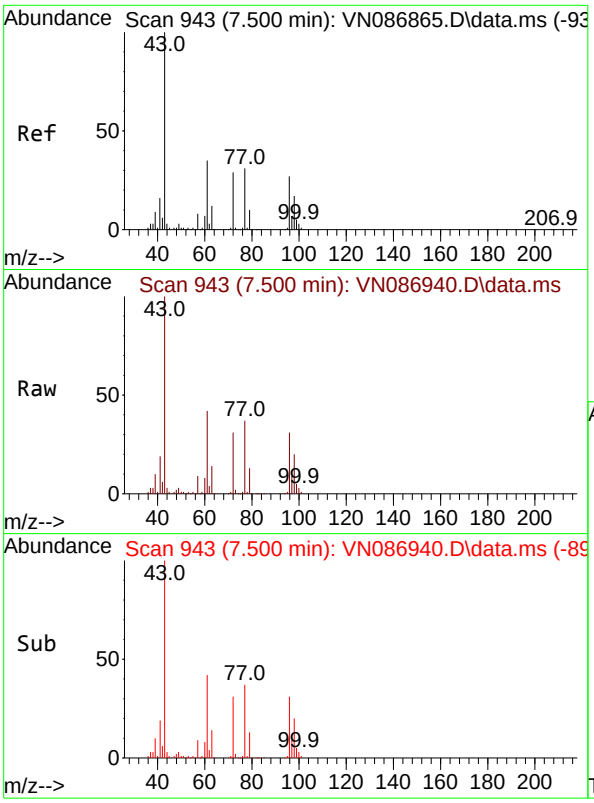




#26
2,2-Dichloropropane
Concen: 60.206 ug/l
RT: 7.506 min Scan# 944
Delta R.T. 0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 77 Resp: 215080

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 23.4 | 11.6 | 34.7 |

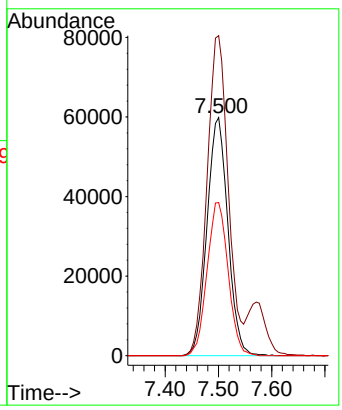





#27
cis-1,2-Dichloroethene
Concen: 53.551 ug/l
RT: 7.500 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 96 Resp: 16265

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 136.9 | 0.0 | 278.0 |
| 98 | 65.1 | 0.0 | 128.2 |

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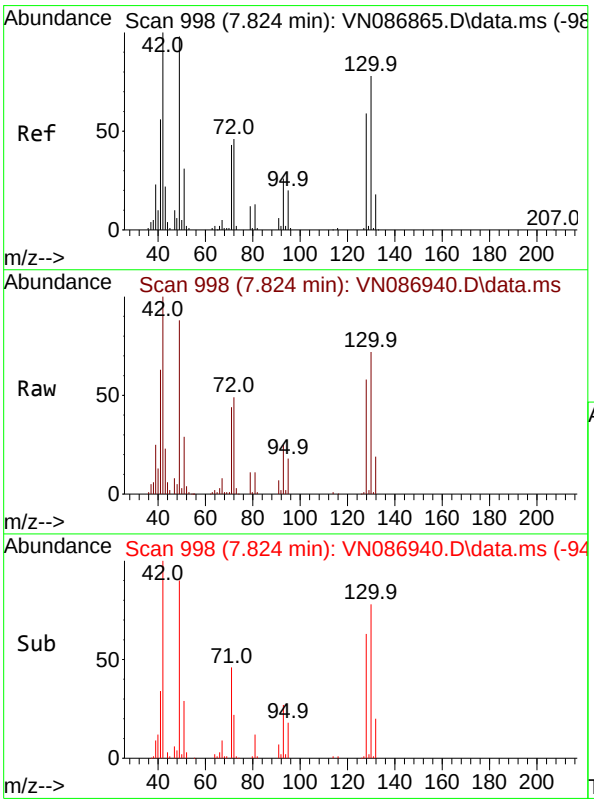
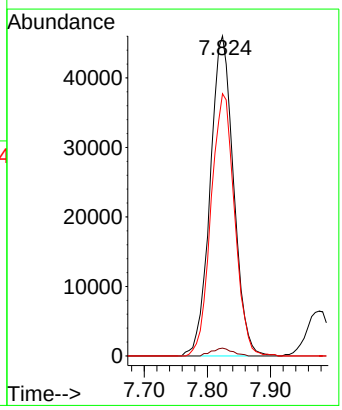
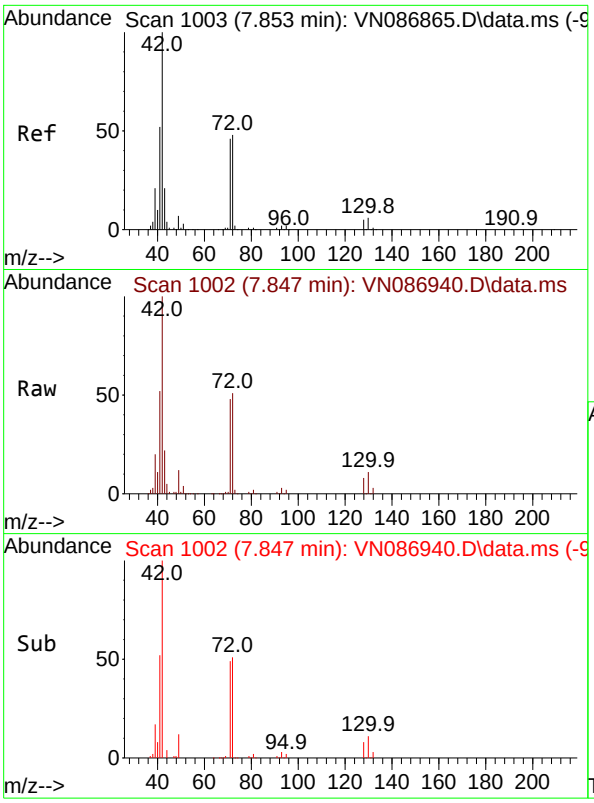



#28
Bromochloromethane
Concen: 52.462 ug/l
RT: 7.824 min Scan# 998
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 49 Resp: 118461

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 2.2 | 0.0 | 3.8 |
| 130 | 82.4 | 62.2 | 93.2 |






#29
Tetrahydrofuran
Concen: 246.502 ug/l
RT: 7.847 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 42 Resp: 38010

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 50.1 | 37.8 | 56.6 |
| 71 | 47.0 | 35.6 | 53.4 |

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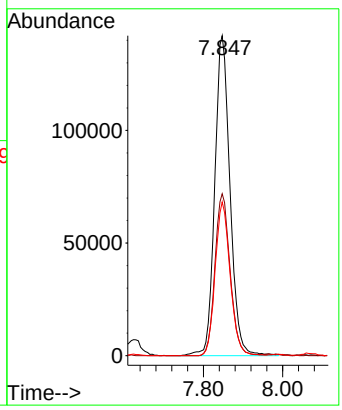
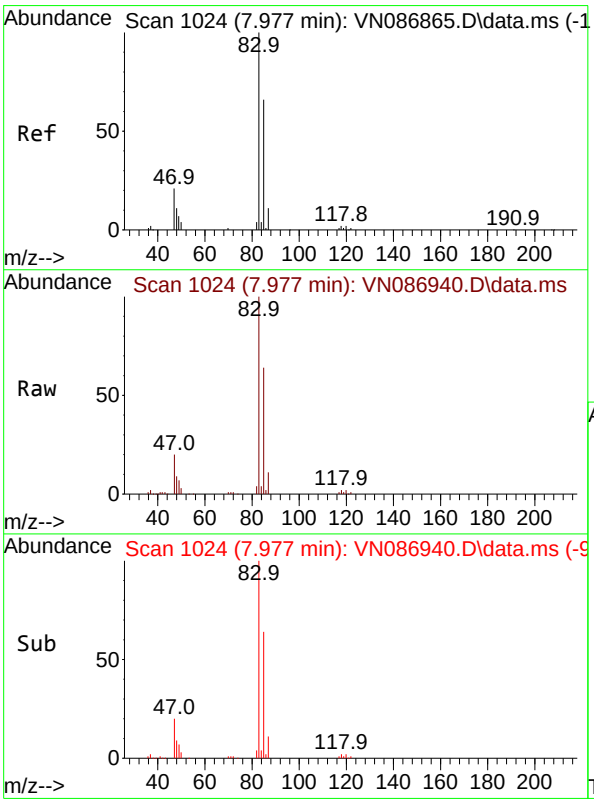
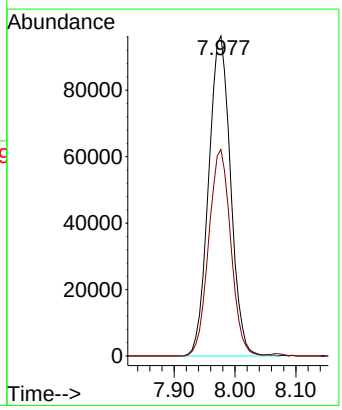


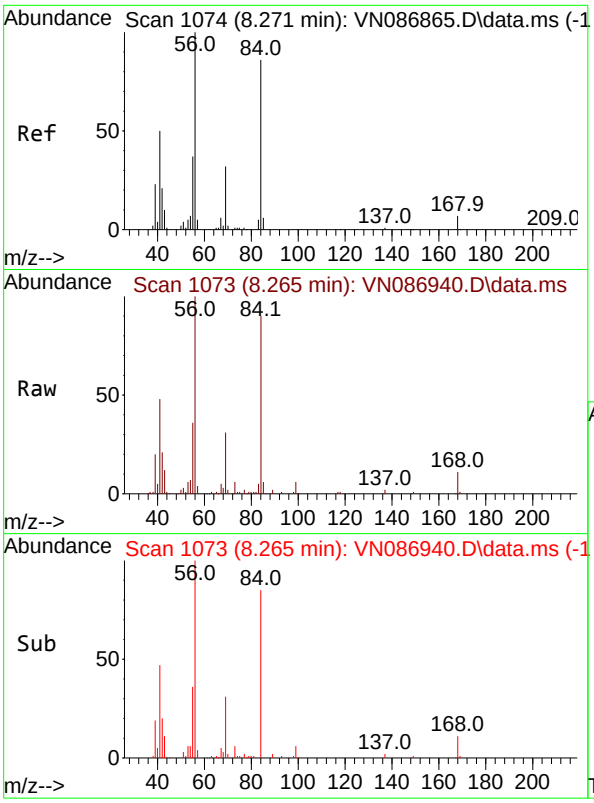




#30
Chloroform
Concen: 52.589 ug/l
RT: 7.977 min Scan# 1024
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 83 Resp: 241191

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.5 | 52.9 | 79.3 |

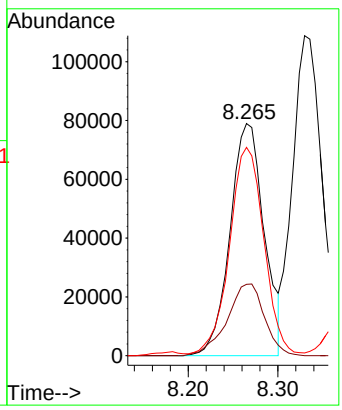





#31
Cyclohexane
Concen: 46.846 ug/l
RT: 8.265 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 56 Resp: 20864

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 30.7 | 25.4 | 38.0 |
| 84 | 88.6 | 68.8 | 103.2 |

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VSTDCCC050

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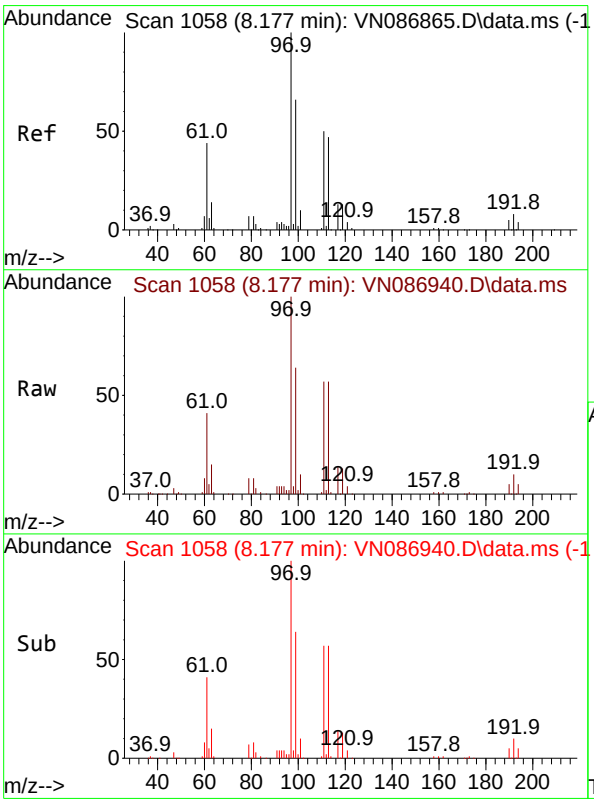
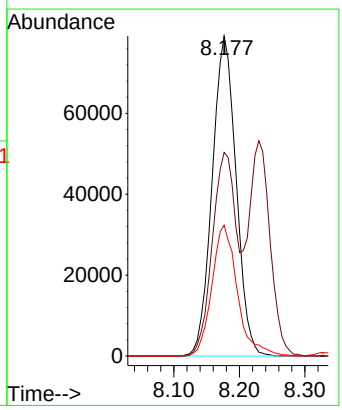
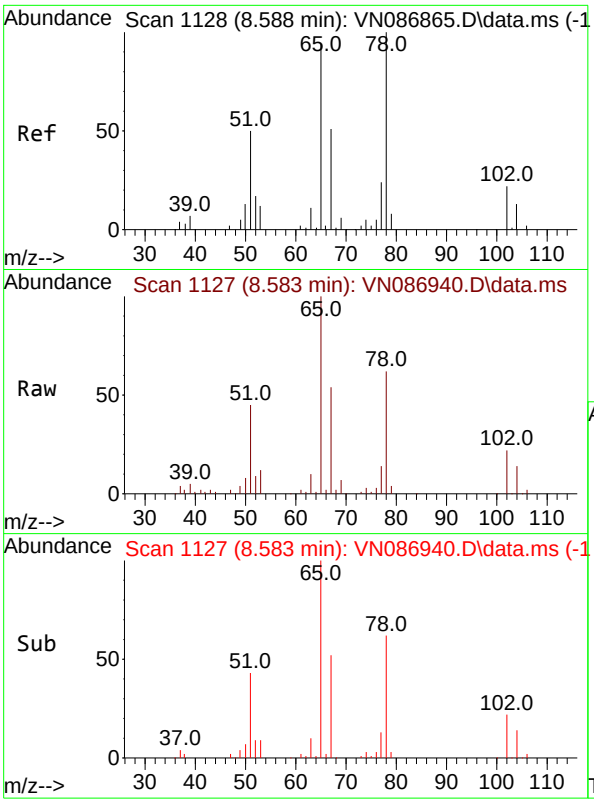



#32
1,1,1-Trichloroethane
Concen: 51.307 ug/l
RT: 8.177 min Scan# 1058
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 97 Resp: 200139

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 62.4 | 52.0 | 78.0 |
| 61 | 43.5 | 35.9 | 53.9 |






#33
1,2-Dichloroethane-d4
Concen: 46.478 ug/l
RT: 8.583 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 65 Resp: 12762

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 55.0 | 0.0 | 105.6 |

**Instrument :**
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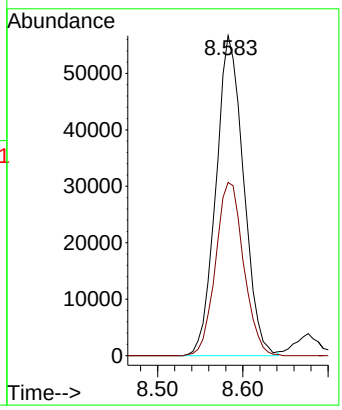
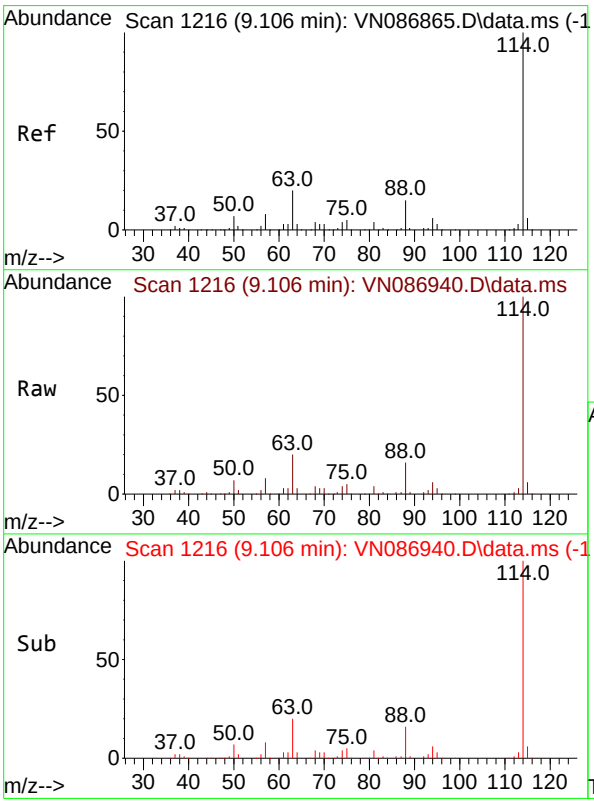
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/12/2025
Supervised By :Semsettin Yesilyurt 06/12/2025

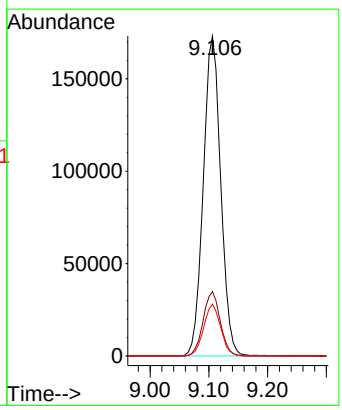


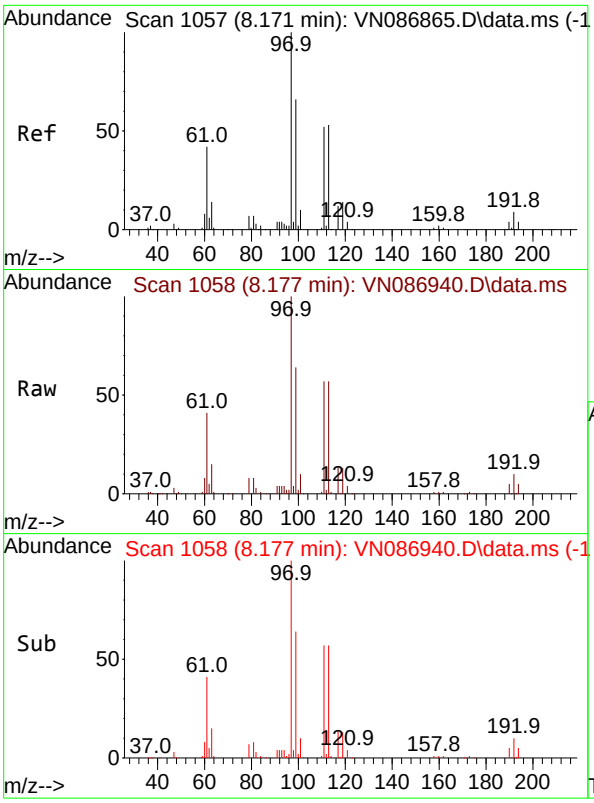




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.106 min Scan# 1216
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion:114 Resp: 357643

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 20.1 | 0.0 | 39.6 |
| 88 | 16.2 | 0.0 | 30.2 |

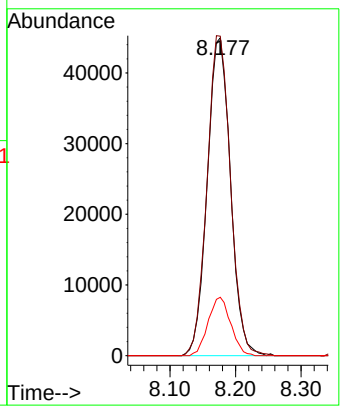





#35
Dibromofluoromethane
Concen: 52.151 ug/l
RT: 8.177 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion:113 Resp: 11053

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 101.8 | 84.2 | 126.2 |
| 192 | 17.9 | 14.2 | 21.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

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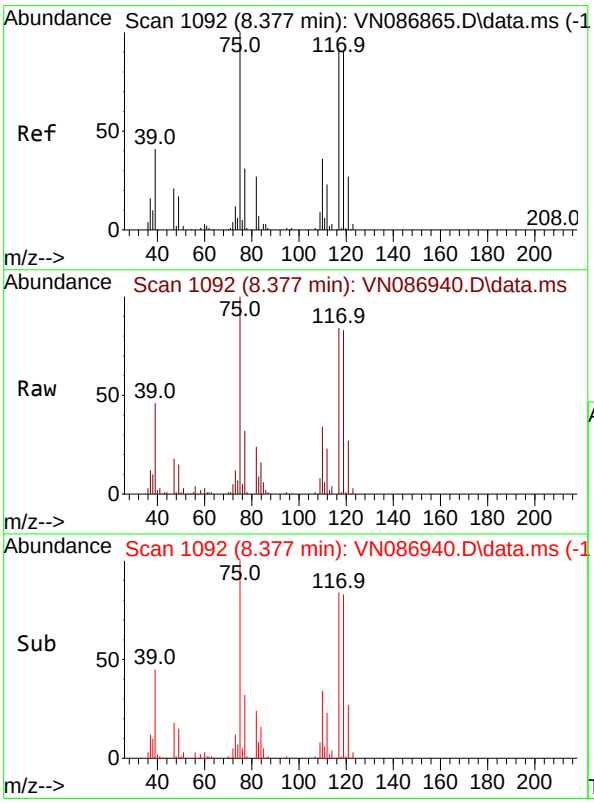
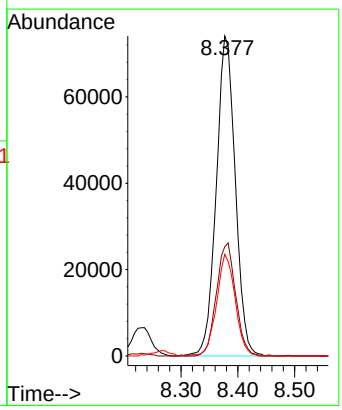
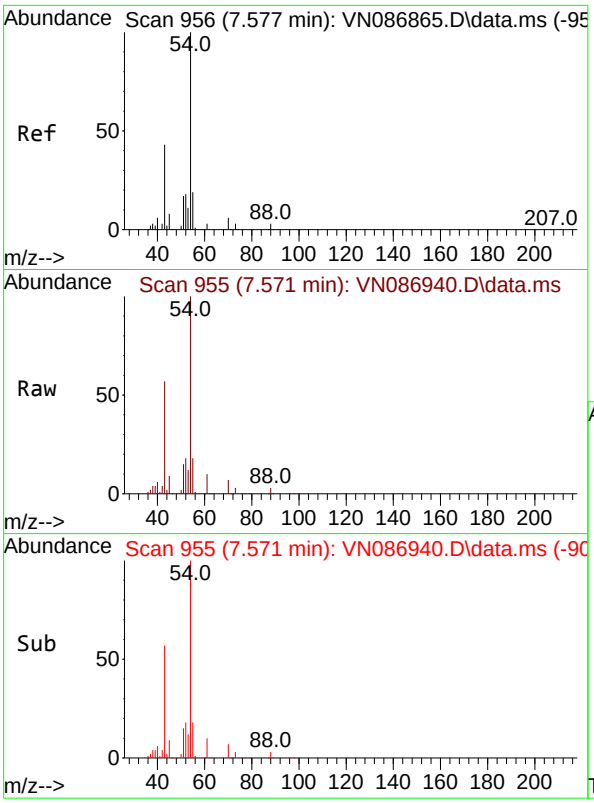



#36
1,1-Dichloropropene
Concen: 54.664 ug/l
RT: 8.377 min Scan# 1092
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 75 Resp: 172642

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 35.6 | 17.6 | 52.9 |
| 77 | 31.1 | 25.3 | 37.9 |






#37
Ethyl Acetate
Concen: 52.670 ug/l
RT: 7.571 min Scan# 9
Delta R.T. -0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 43 Resp: 21175

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 15.2 | 12.1 | 18.1 |
| 70 | 12.8 | 9.8 | 14.6 |

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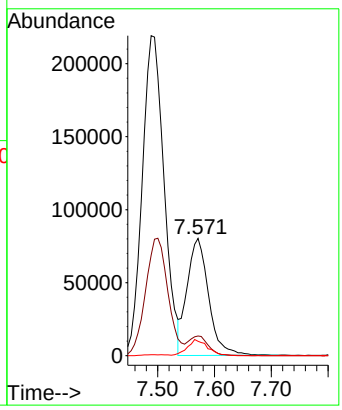
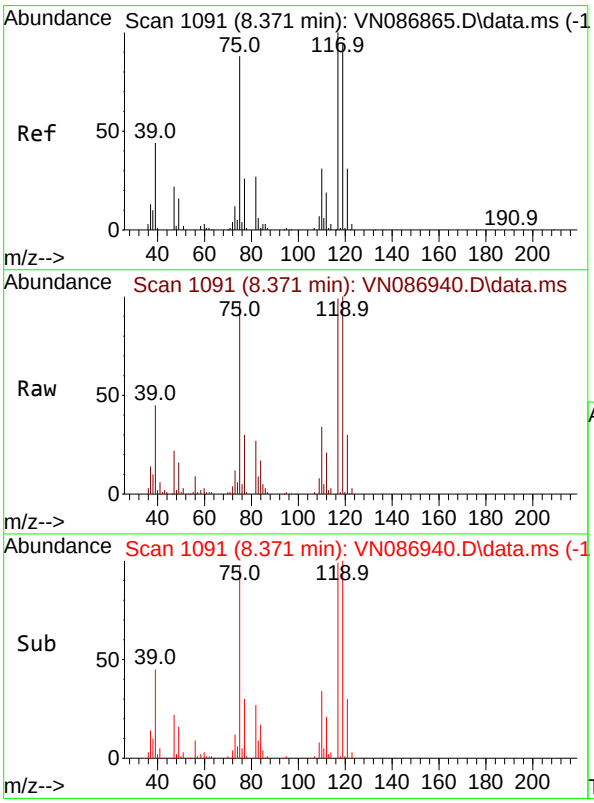
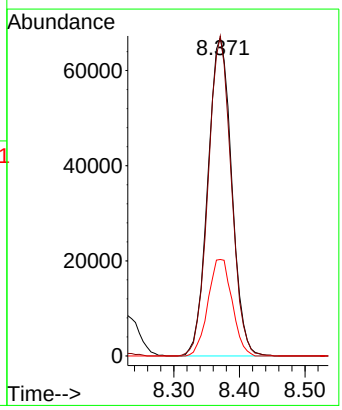


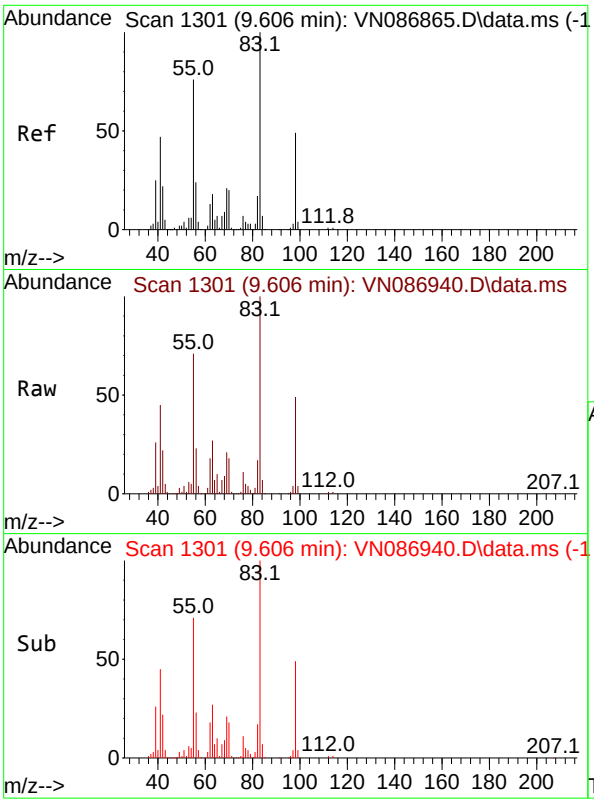




#38
Carbon Tetrachloride
Concen: 54.485 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion:117 Resp: 168940

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 100.6 | 75.0 | 112.6 |
| 121 | 30.4 | 24.9 | 37.3 |






#39
Methylcyclohexane
Concen: 47.613 ug/l
RT: 9.606 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 83 Resp: 20601

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 71.2 | 61.0 | 91.6 |
| 98 | 48.5 | 38.9 | 58.3 |

**Instrument :**
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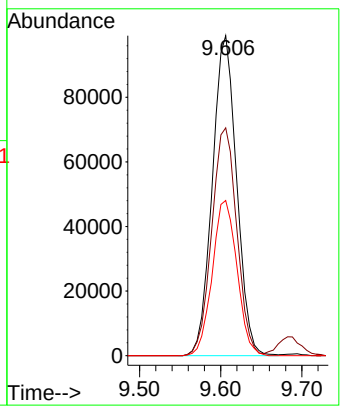
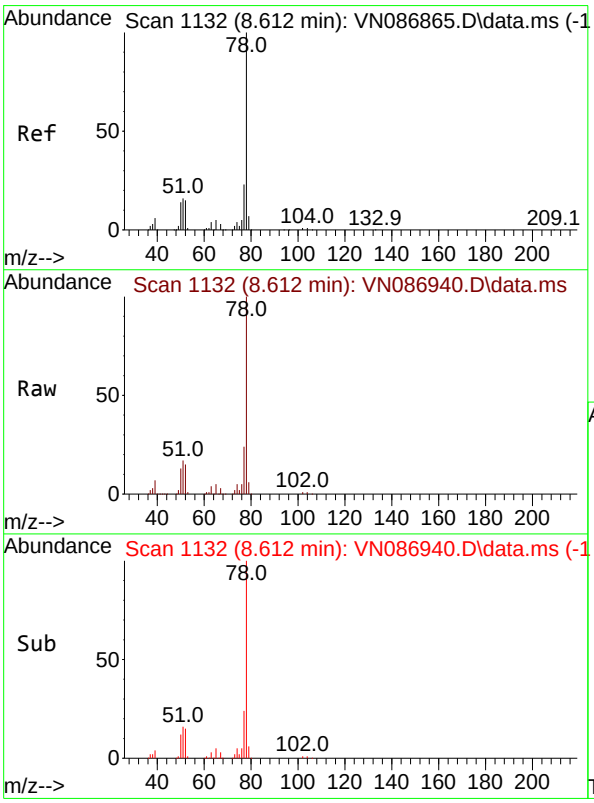
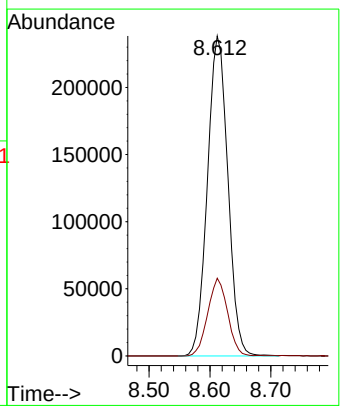


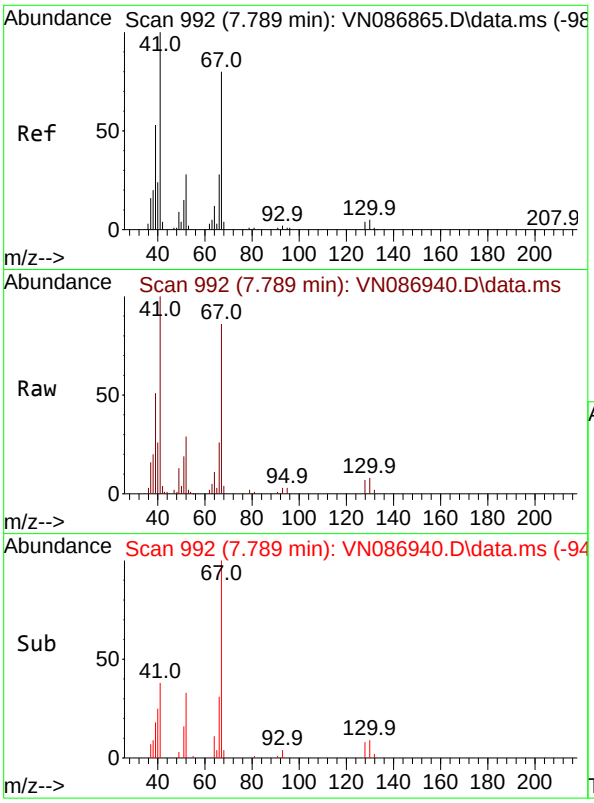




#40
Benzene
Concen: 53.798 ug/l
RT: 8.612 min Scan# 1132
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 78 Resp: 555597

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 24.3 | 18.7 | 28.1 |

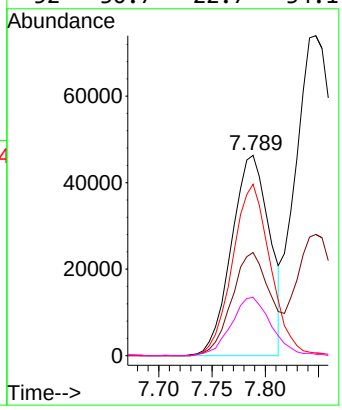





#41
Methacrylonitrile
Concen: 51.017 ug/l
RT: 7.789 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 41 Resp: 11519

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 53.8 | 41.2 | 61.8 |
| 67 | 85.5 | 61.4 | 92.2 |
| 52 | 30.7 | 22.7 | 34.1 |

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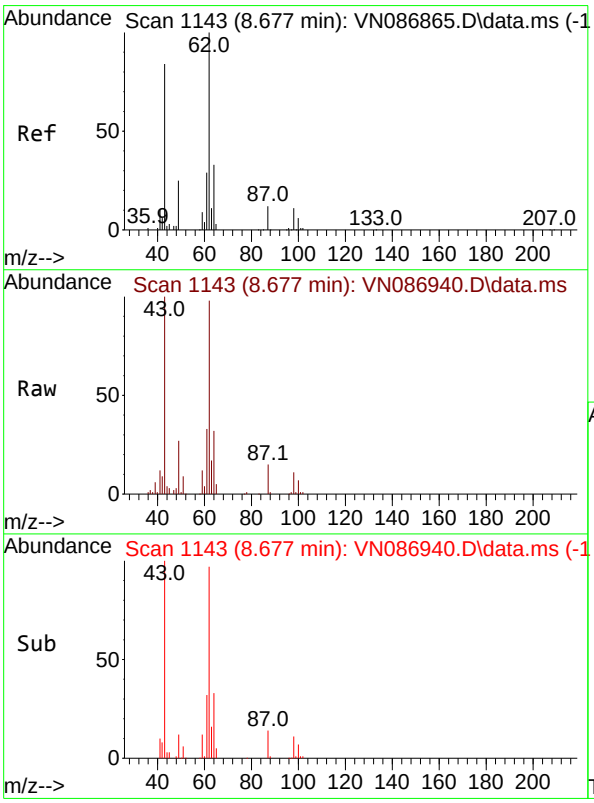
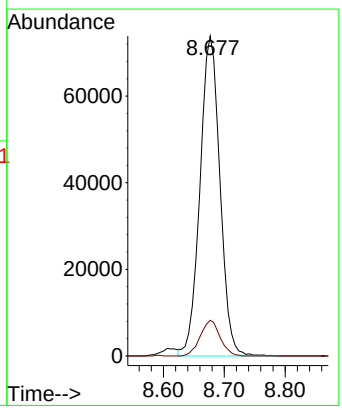
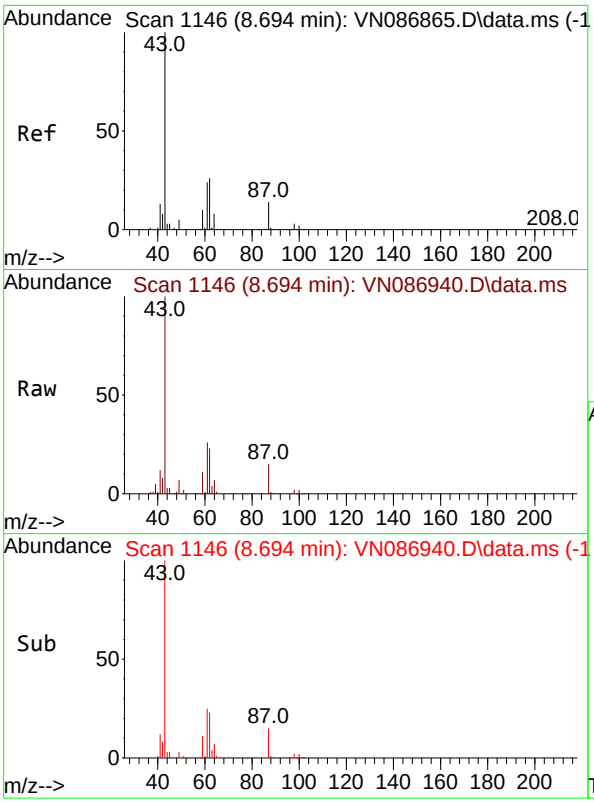



#42
1,2-Dichloroethane
Concen: 53.833 ug/l
RT: 8.677 min Scan# 1143
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 62 Resp: 168630

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 11.0 | 0.0 | 21.2 |






#43
Isopropyl Acetate
Concen: 52.442 ug/l
RT: 8.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 43 Resp: 33839

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 29.2 | 22.1 | 33.1 |
| 87 | 15.7 | 11.8 | 17.6 |

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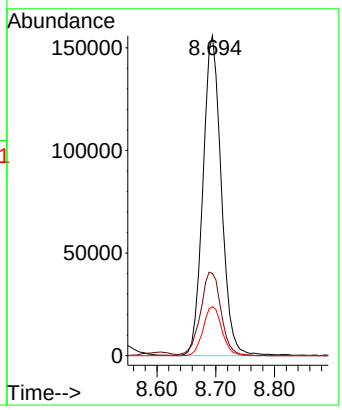
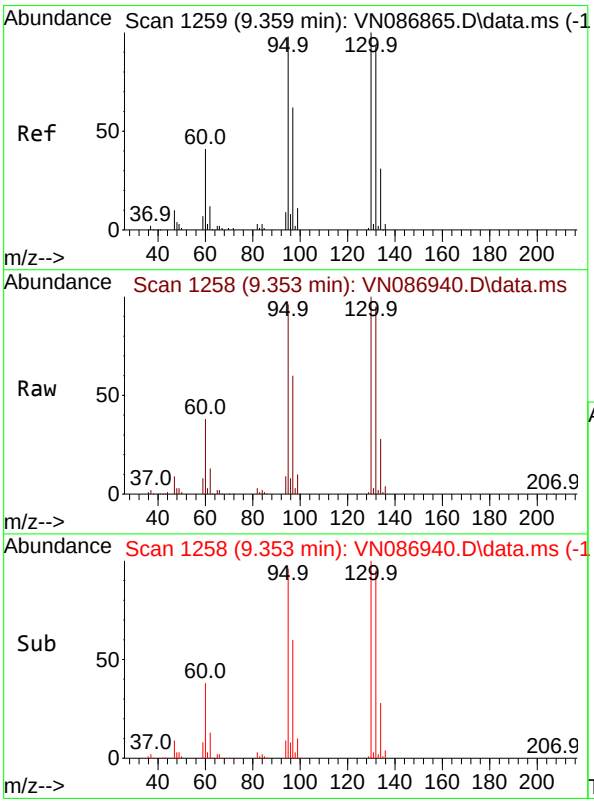
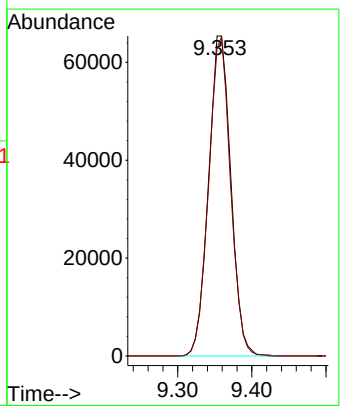


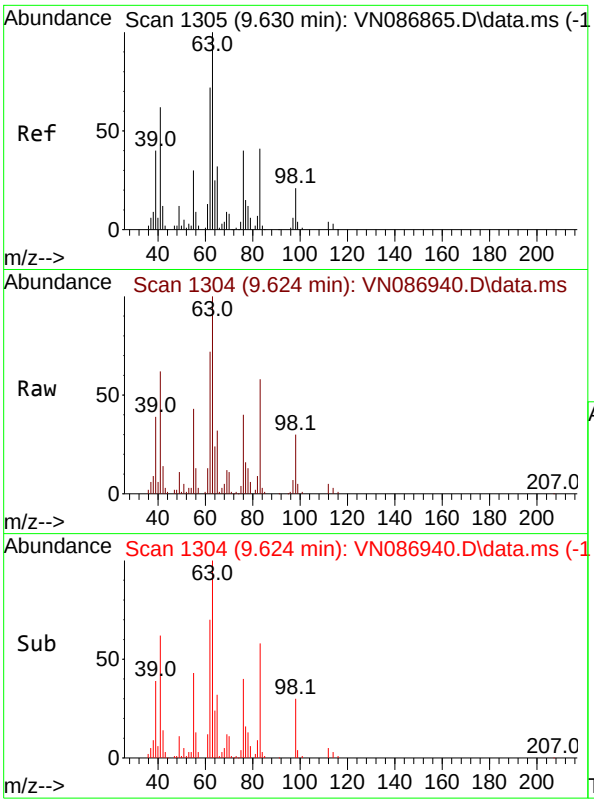




#44
Trichloroethene
Concen: 55.842 ug/l
RT: 9.353 min Scan# 1258
Delta R.T. -0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion:130 Resp: 136748

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 96.1 | 0.0 | 196.2 |

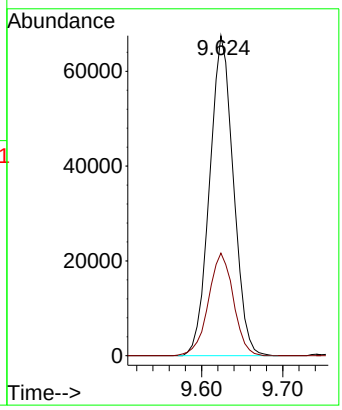





#45
1,2-Dichloropropane
Concen: 54.626 ug/l
RT: 9.624 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 63 Resp: 13725

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 32.0 | 25.5 | 38.3 |

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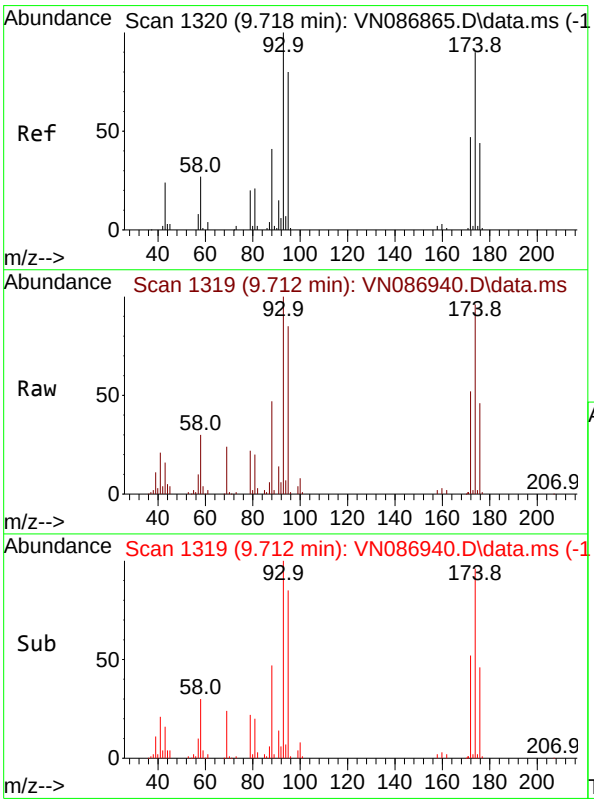
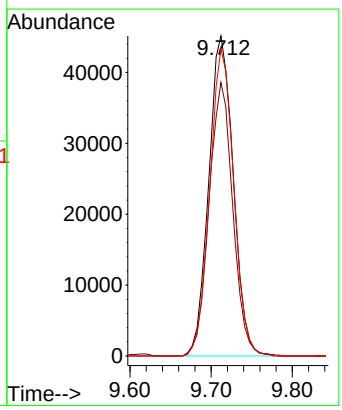
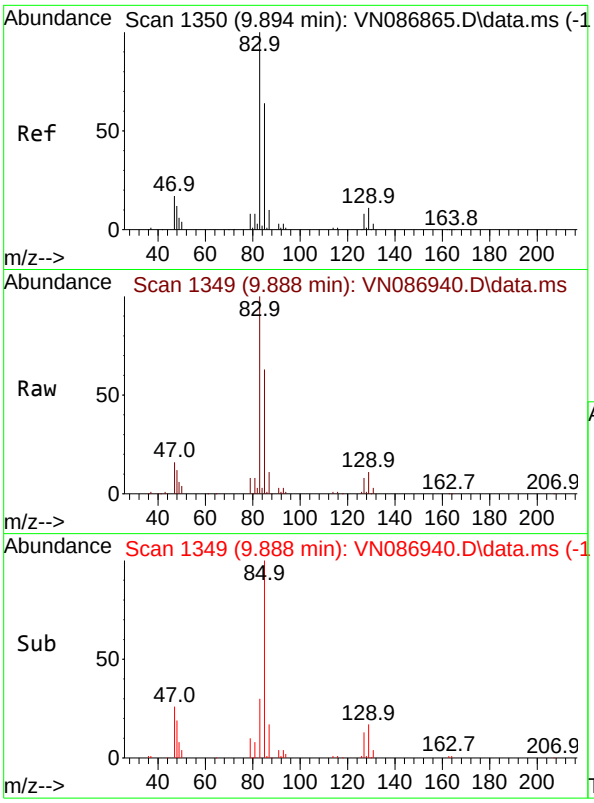



#46
Dibromomethane
Concen: 56.697 ug/l
RT: 9.712 min Scan# 1319
Delta R.T. -0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 93 Resp: 94620

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 82.9 | 67.1 | 100.7 |
| 174 | 94.1 | 74.2 | 111.4 |

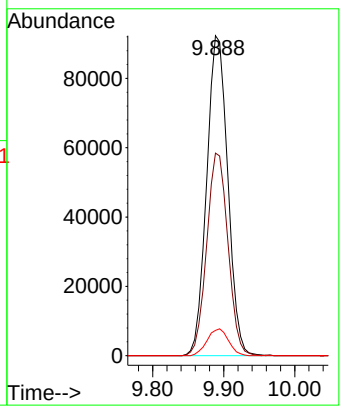





#47
Bromodichloromethane
Concen: 55.440 ug/l
RT: 9.888 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 83 Resp: 19036

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 63.3 | 50.9 | 76.3 |
| 127 | 7.9 | 6.6 | 10.0 |

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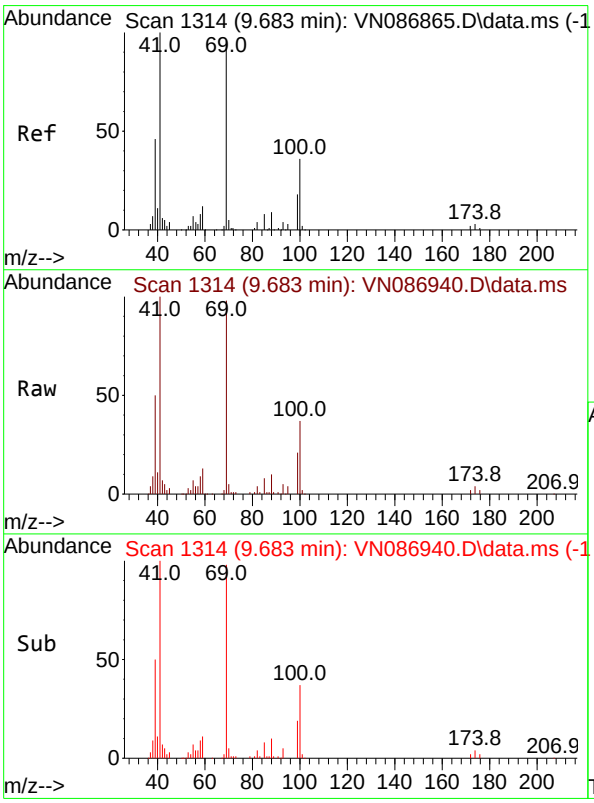
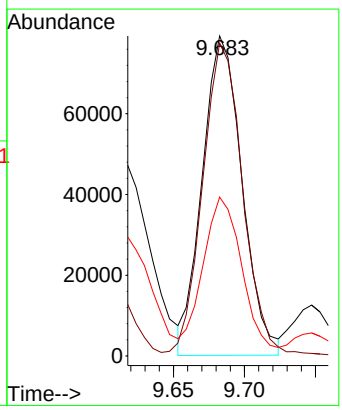
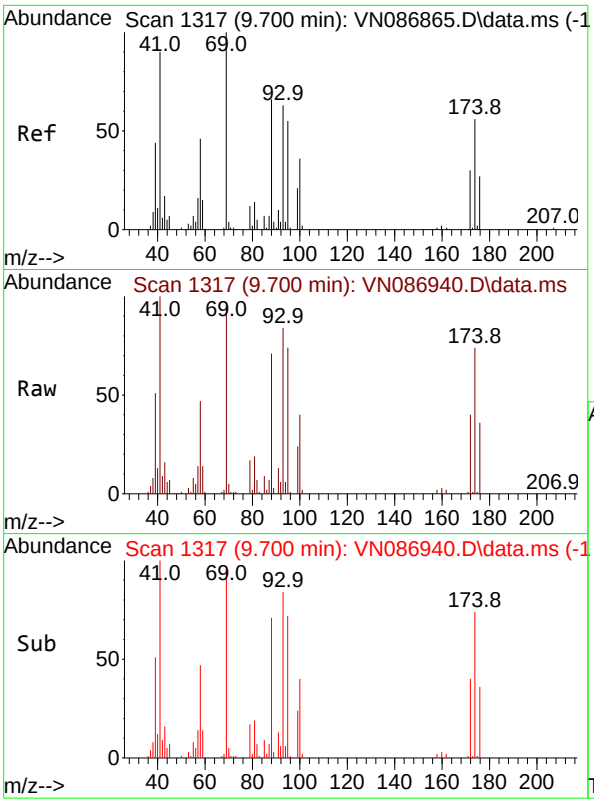



#48
Methyl methacrylate
Concen: 51.898 ug/l
RT: 9.683 min Scan# 1314
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 41 Resp: 154138

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 98.4 | 74.6 | 112.0 |
| 39 | 49.7 | 40.2 | 60.4 |

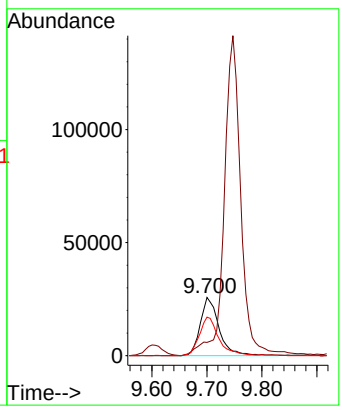





#49
1,4-Dioxane
Concen: 1128.409 ug/l
RT: 9.700 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 88 Resp: 6096

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 0.0 | 0.0 | 0.0 |
| 58 | 68.8 | 57.7 | 86.5 |




**Instrument :**
MSVOA_N
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VSTDCCC050

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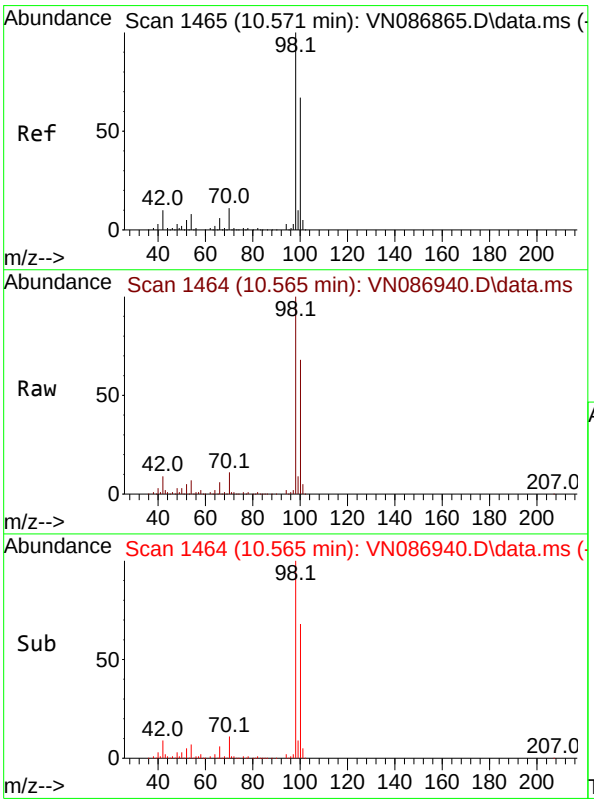
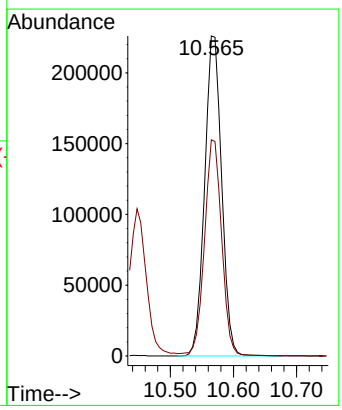
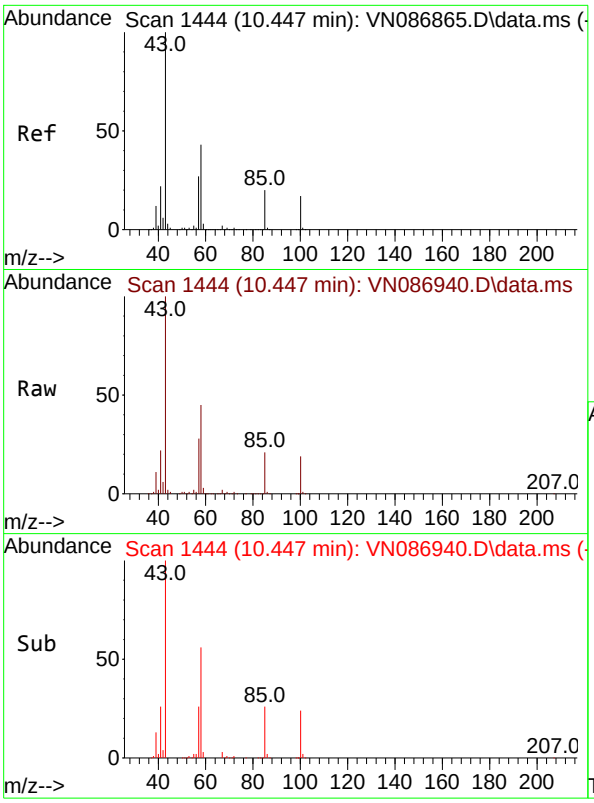



#50
Toluene-d8
Concen: 50.342 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 98 Resp: 422391

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 68.2 | 53.4 | 80.0 |






#51
4-Methyl-2-Pentanone
Concen: 271.529 ug/l
RT: 10.447 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

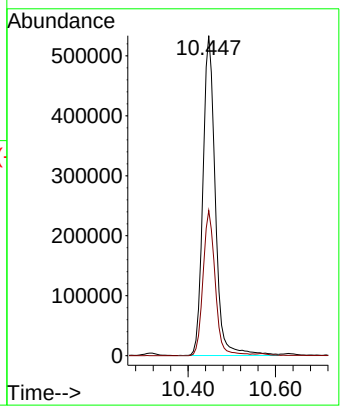
Tgt Ion: 43 Resp: 105479

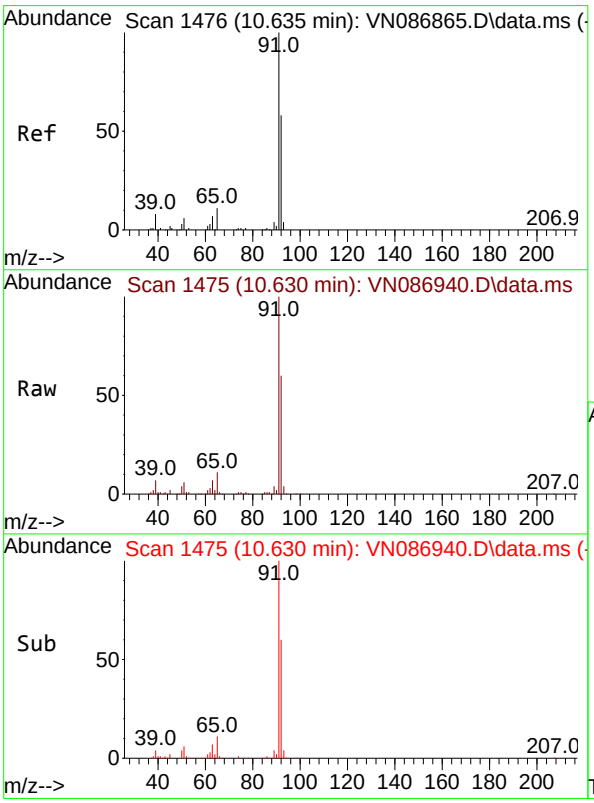
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 44.3 | 34.2 | 51.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/12/2025
Supervised By :Semsettin Yesilyurt 06/12/2025

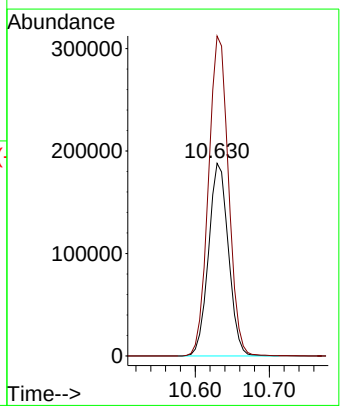


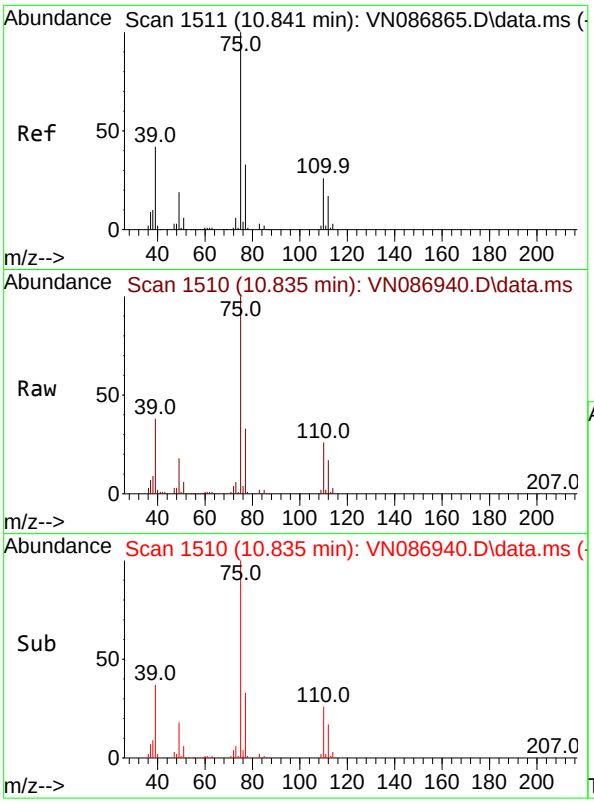




#52
Toluene
Concen: 55.435 ug/l
RT: 10.630 min Scan# 1475
Delta R.T. -0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 92 Resp: 349873

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 167.2 | 136.5 | 204.7 |






#53
t-1,3-Dichloropropene
Concen: 56.714 ug/l
RT: 10.835 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 75 Resp: 21775

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.7 | 26.4 | 39.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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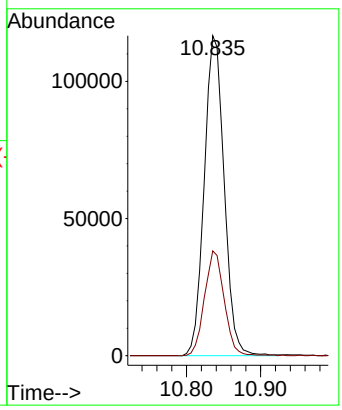
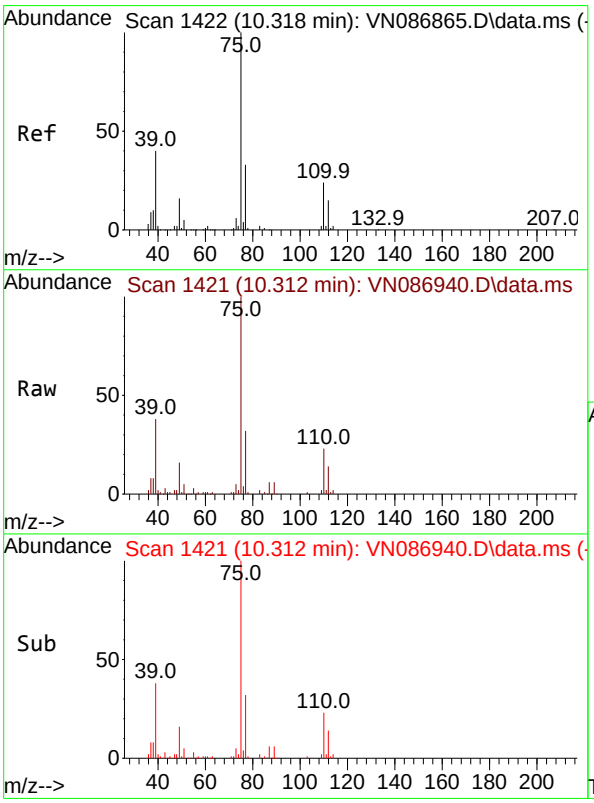
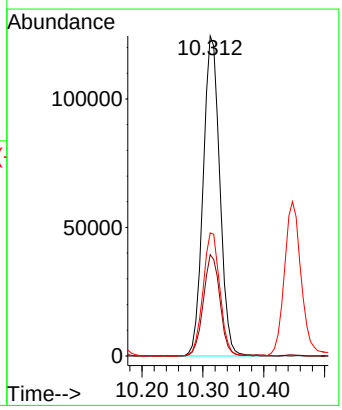


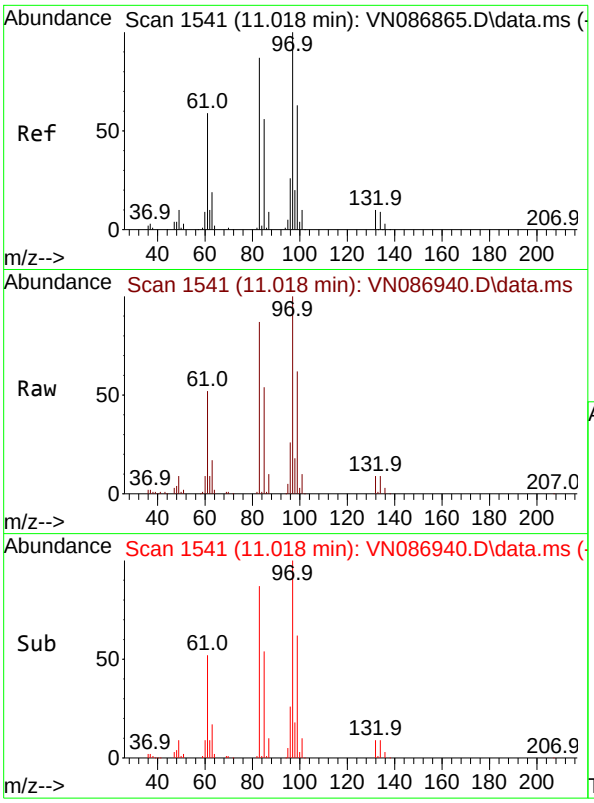




#54
cis-1,3-Dichloropropene
Concen: 57.518 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. -0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 75 Resp: 236296

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.6 | 26.2 | 39.4 |
| 39 | 38.5 | 32.3 | 48.5 |

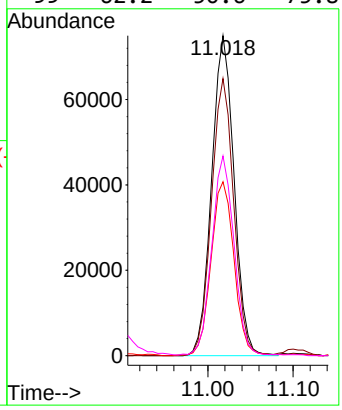





#55
1,1,2-Trichloroethane
Concen: 56.454 ug/l
RT: 11.018 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 97 Resp: 13709

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 86.6 | 69.7 | 104.5 |
| 85 | 54.1 | 45.1 | 67.7 |
| 99 | 62.2 | 50.6 | 75.8 |




**Instrument :**
MSVOA_N
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VSTDCCC050

**Manual Integrations**
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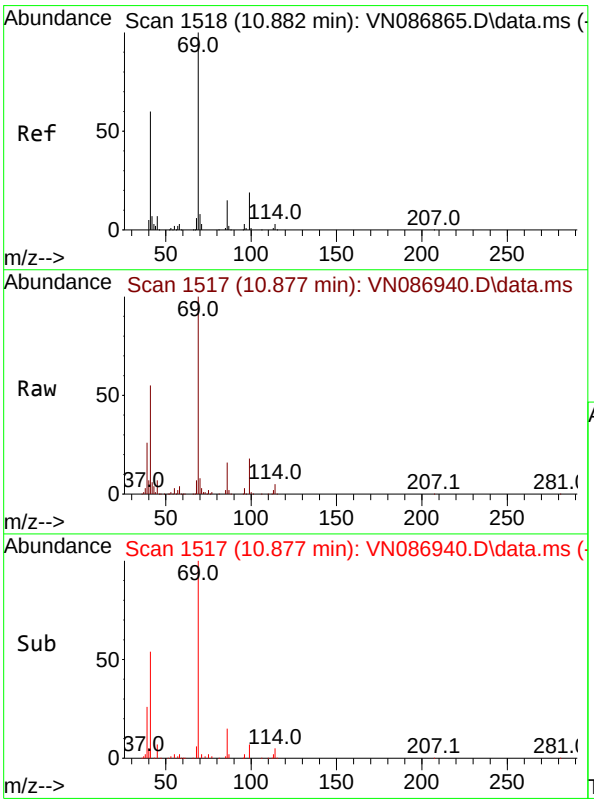
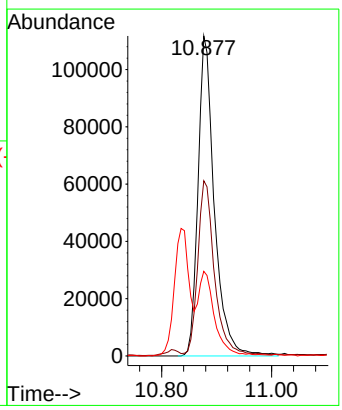
Supervised By :Semsettin Yesilyurt 06/12/2025

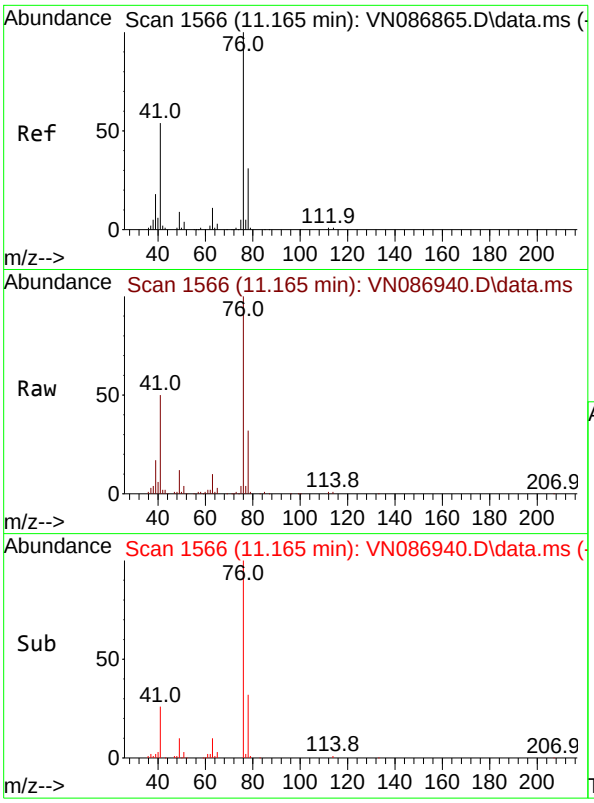



#56
Ethyl methacrylate
Concen: 59.778 ug/l
RT: 10.877 min Scan# 1517
Delta R.T. -0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 69 Resp: 231226

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 55.6 | 47.2 | 70.8 |
| 39 | 26.0 | 23.0 | 34.6 |

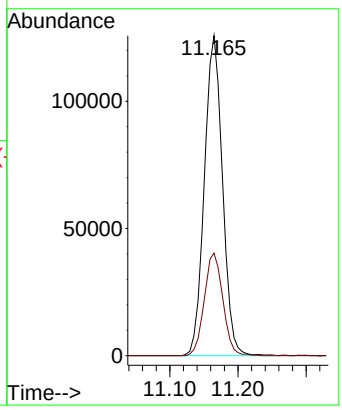





#57
1,3-Dichloropropane
Concen: 55.247 ug/l
RT: 11.165 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 76 Resp: 23274

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.8 | 25.3 | 37.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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Reviewed By :John Carlone 06/12/2025
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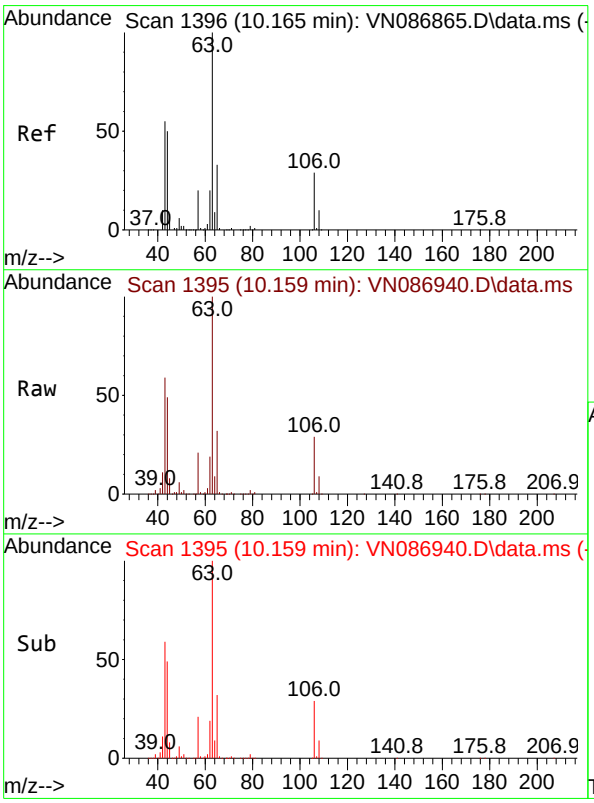
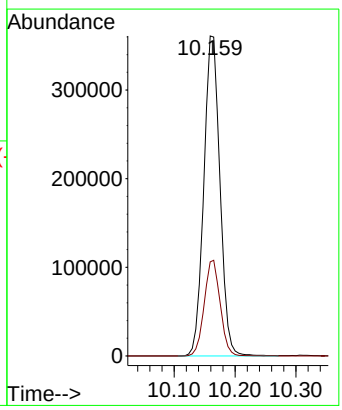
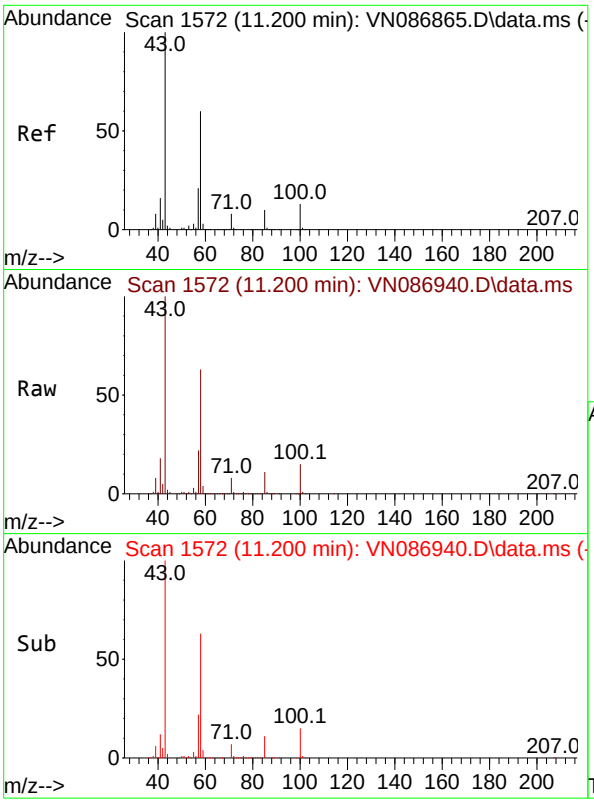



#58
2-Chloroethyl Vinyl ether
Concen: 288.579 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. -0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 63 Resp: 665780

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 29.5 | 23.0 | 34.6 |






#59
2-Hexanone
Concen: 282.011 ug/l
RT: 11.200 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 43 Resp: 70566

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 63.5 | 30.4 | 91.3 |

**Instrument :**
MSVOA_N
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VSTDCCC050

**Manual Integrations**
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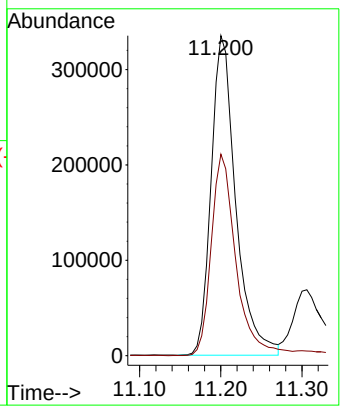
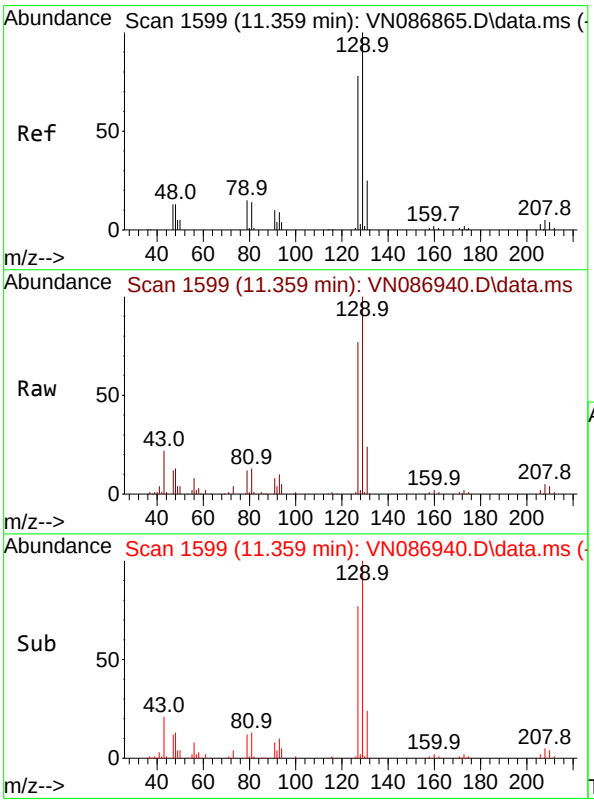
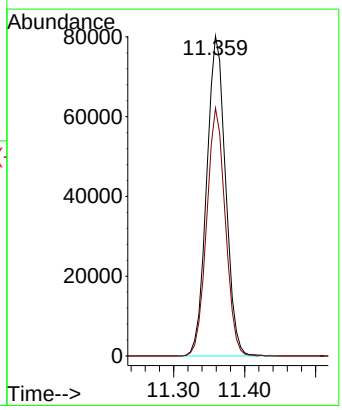


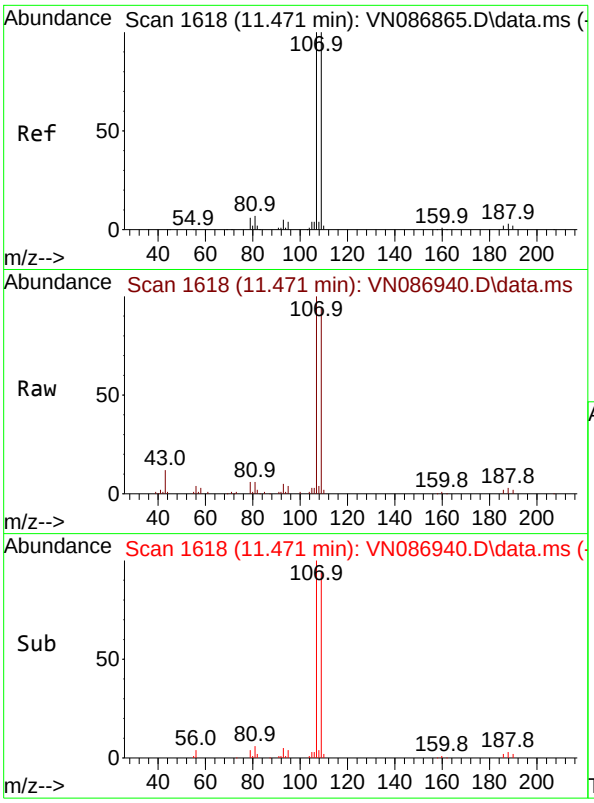




#60
Dibromochloromethane
Concen: 58.520 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion:129 Resp: 148069

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 76.4 | 38.6 | 115.8 |






#61
1,2-Dibromoethane
Concen: 55.351 ug/l
RT: 11.471 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion:107 Resp: 13777

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 96.1 | 76.3 | 114.5 |

**Instrument :**
MSVOA_N
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VSTDCCC050

**Manual Integrations**
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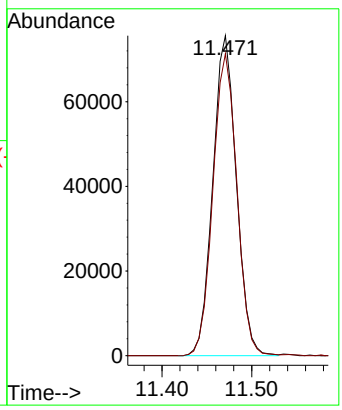
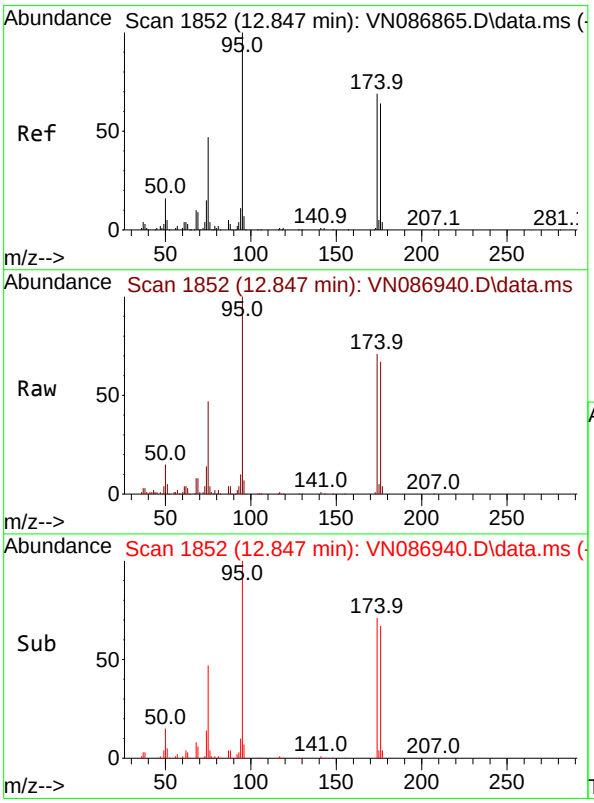
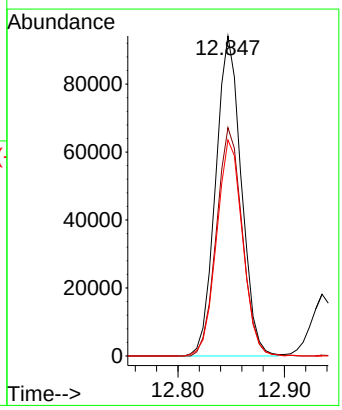


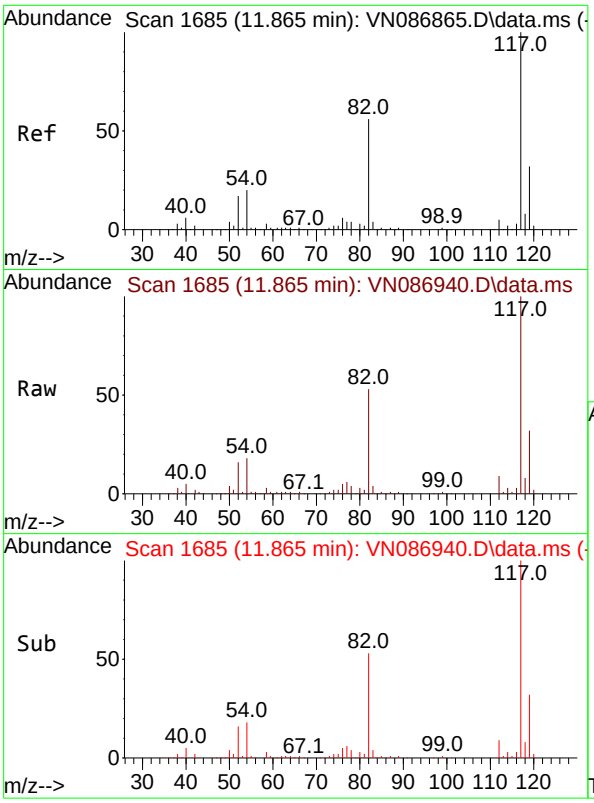




#62
4-Bromofluorobenzene
Concen: 50.489 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 95 Resp: 157388

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 71.7 | 0.0 | 141.8 |
| 176 | 68.2 | 0.0 | 132.6 |






#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion:117 Resp: 31217

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 53.3 | 44.6 | 67.0 |
| 119 | 31.8 | 25.5 | 38.3 |

**Instrument :**
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VSTDCCC050

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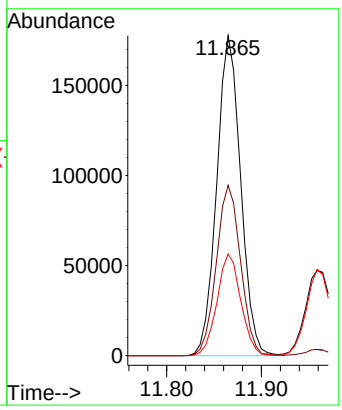
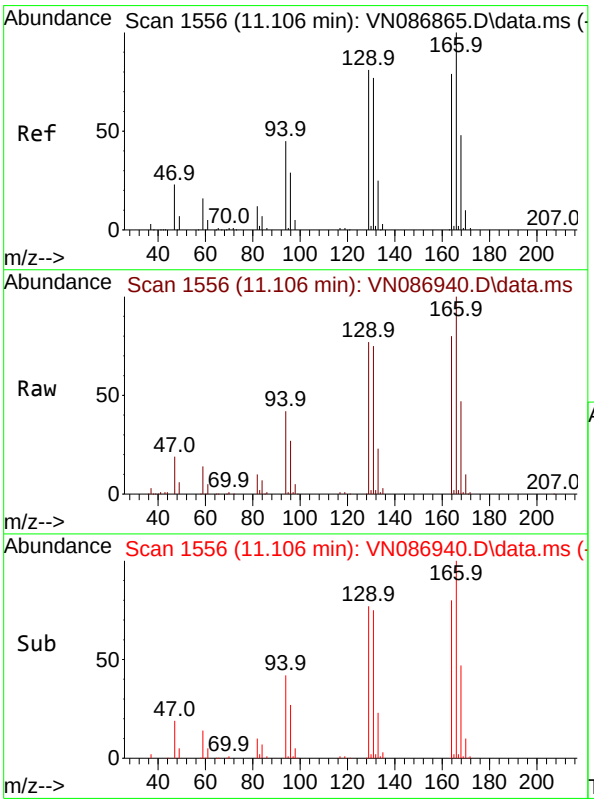
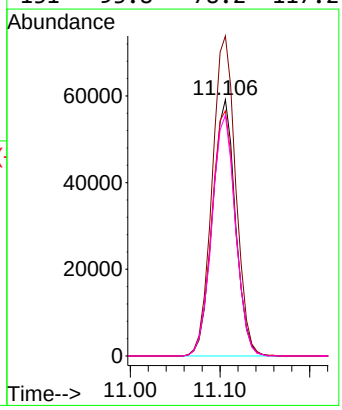


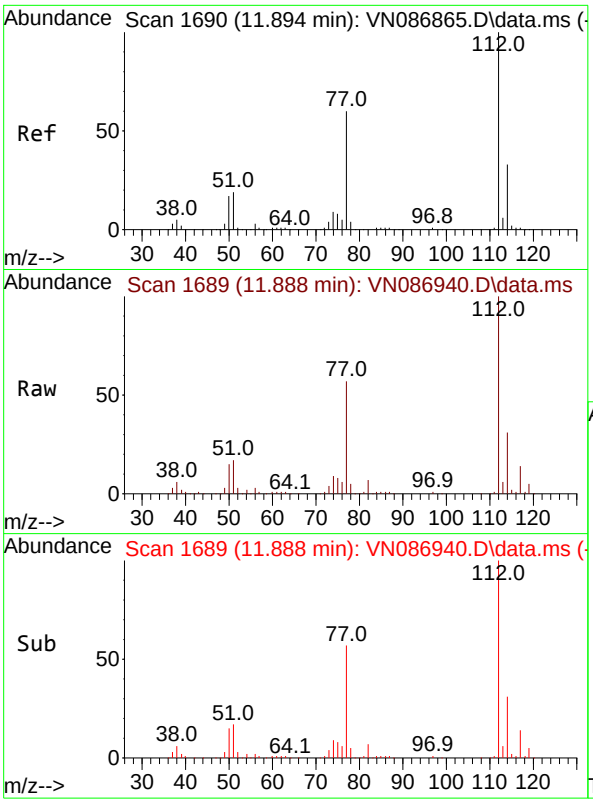




#64
Tetrachloroethene
Concen: 53.190 ug/l
RT: 11.106 min Scan# 1556
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion:164 Resp: 105084

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 124.8 | 101.8 | 152.8 |
| 129 | 95.6 | 83.0 | 124.4 |
| 131 | 93.8 | 78.2 | 117.2 |

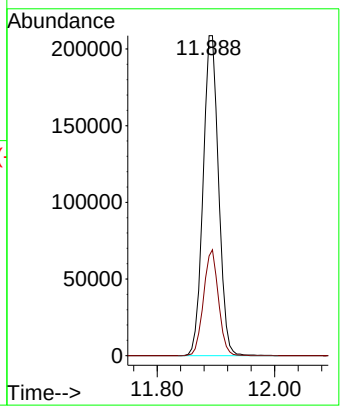





#65
Chlorobenzene
Concen: 55.424 ug/l
RT: 11.888 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion:112 Resp: 38159

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 31.1 | 26.2 | 39.2 |




**Instrument :**
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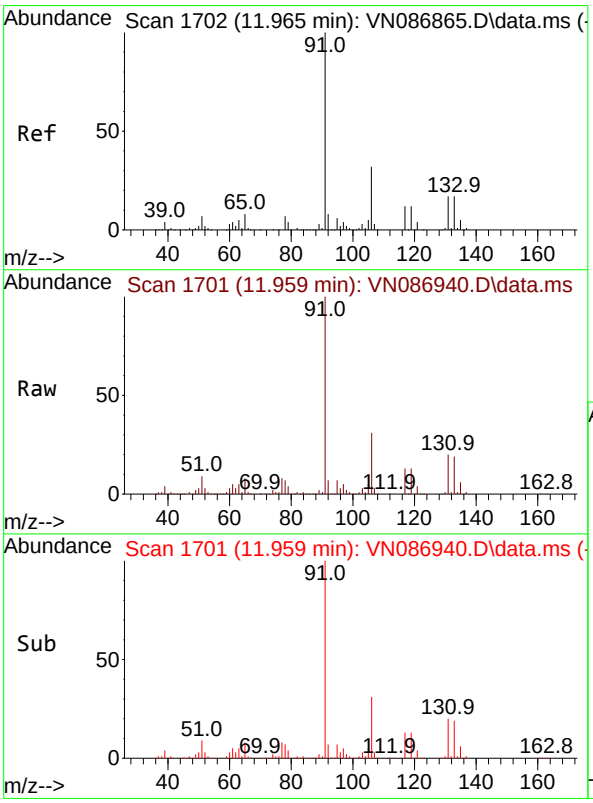
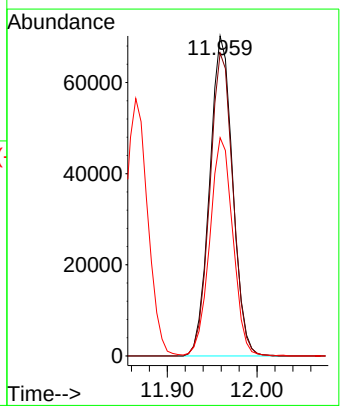
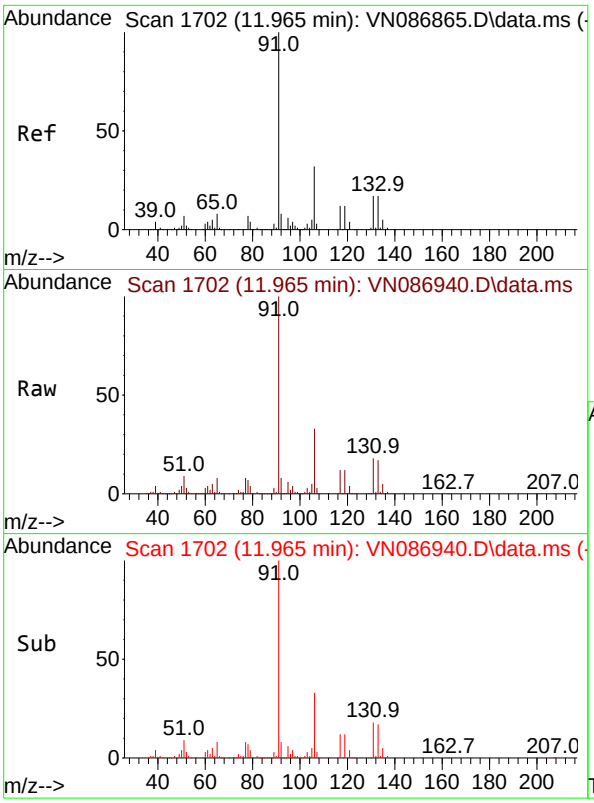



#66
1,1,1,2-Tetrachloroethane
Concen: 56.463 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion:131 Resp: 124964

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 95.4 | 48.3 | 144.8 |
| 119 | 68.5 | 34.0 | 101.8 |






#67
Ethyl Benzene
Concen: 54.206 ug/l
RT: 11.965 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 91 Resp: 64285

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 32.5 | 25.4 | 38.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

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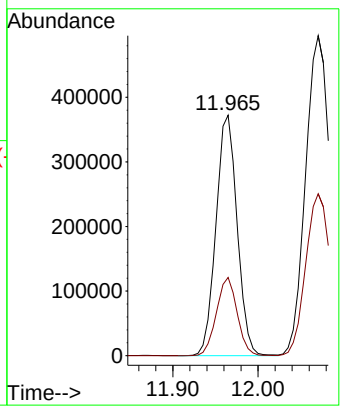
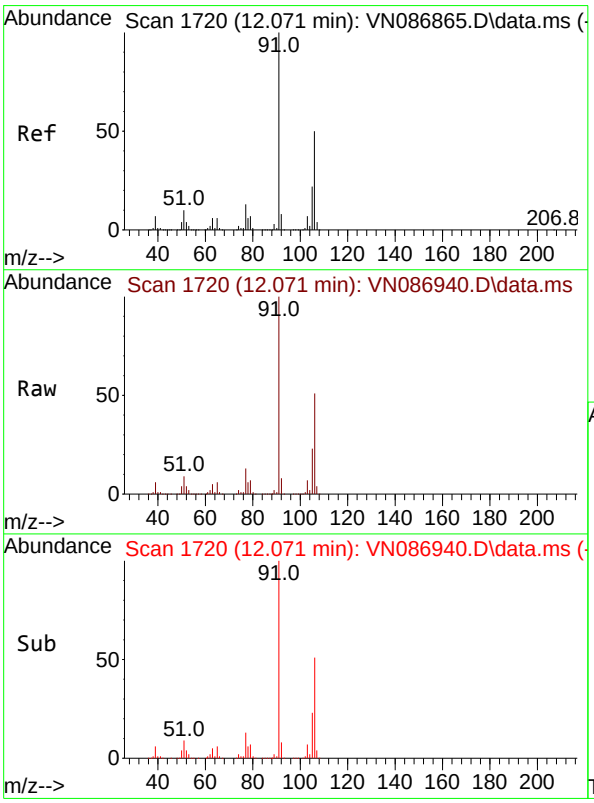
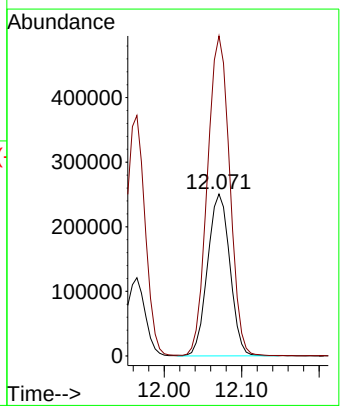


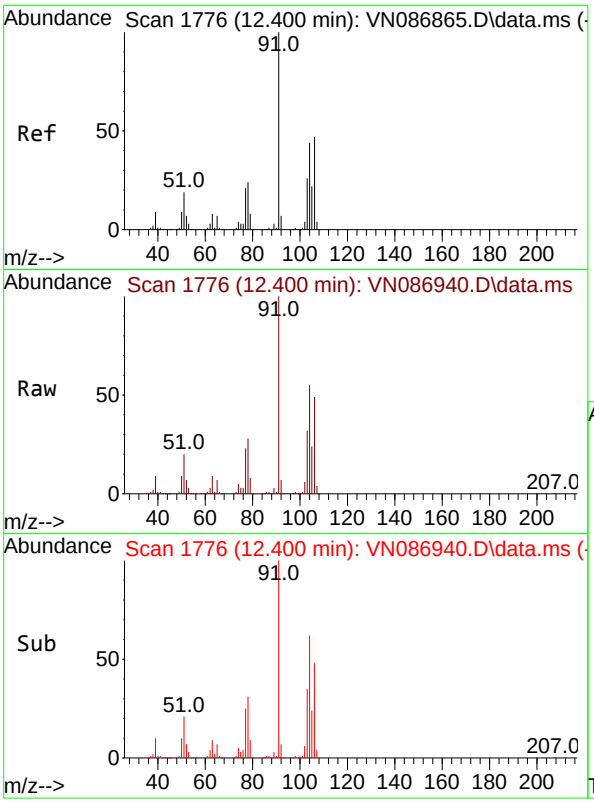




#68
m/p-Xylenes
Concen: 110.334 ug/l
RT: 12.071 min Scan# 1720
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion:106 Resp: 500895

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 198.0 | 159.4 | 239.0 |






#69
o-Xylene
Concen: 56.127 ug/l
RT: 12.400 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

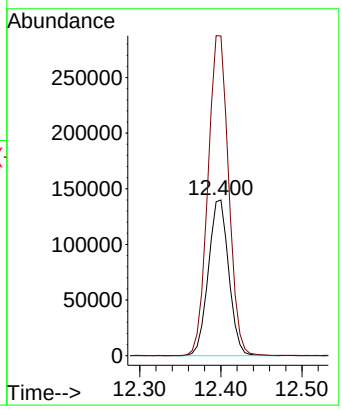
Tgt Ion:106 Resp: 24403

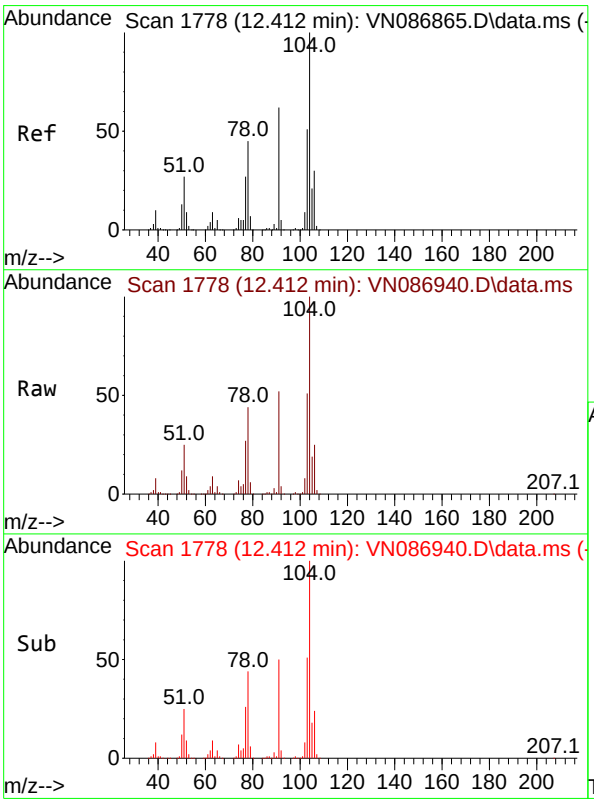
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 208.5 | 106.1 | 318.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/12/2025
Supervised By :Semsettin Yesilyurt 06/12/2025

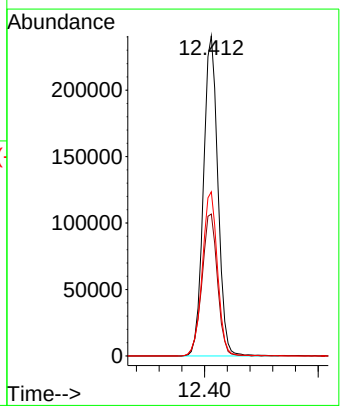


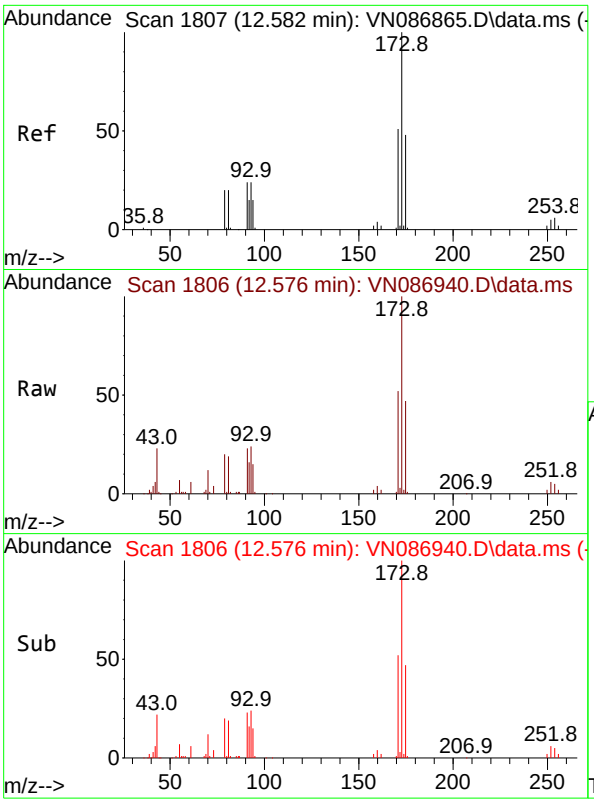




#70
Styrene
Concen: 56.996 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion:104 Resp: 424060

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 47.4 | 38.5 | 57.7 |
| 103 | 53.9 | 43.1 | 64.7 |






#71
Bromoform
Concen: 60.747 ug/l
RT: 12.576 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion:173 Resp: 9961

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 48.1 | 24.1 | 72.4 |
| 254 | 0.0 | 0.0 | 0.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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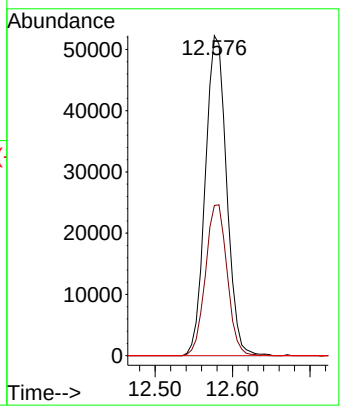
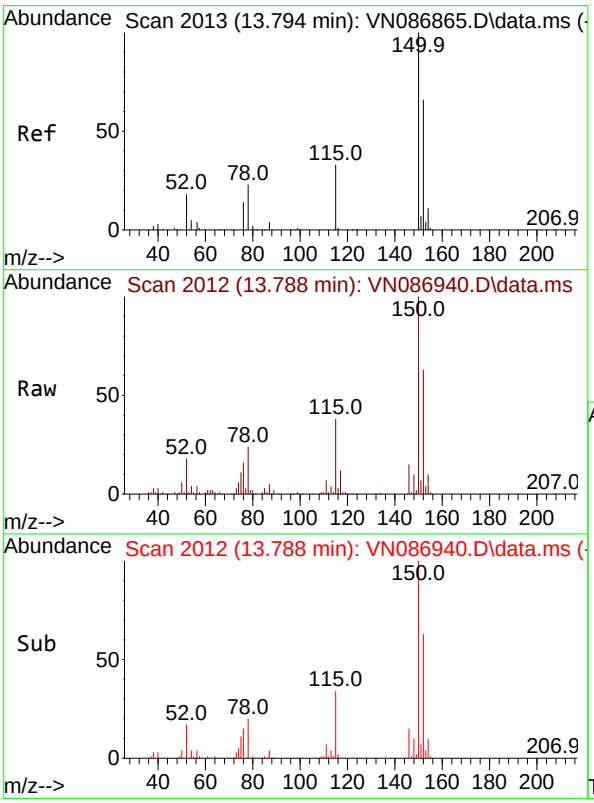
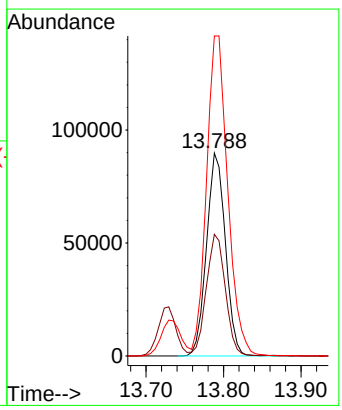


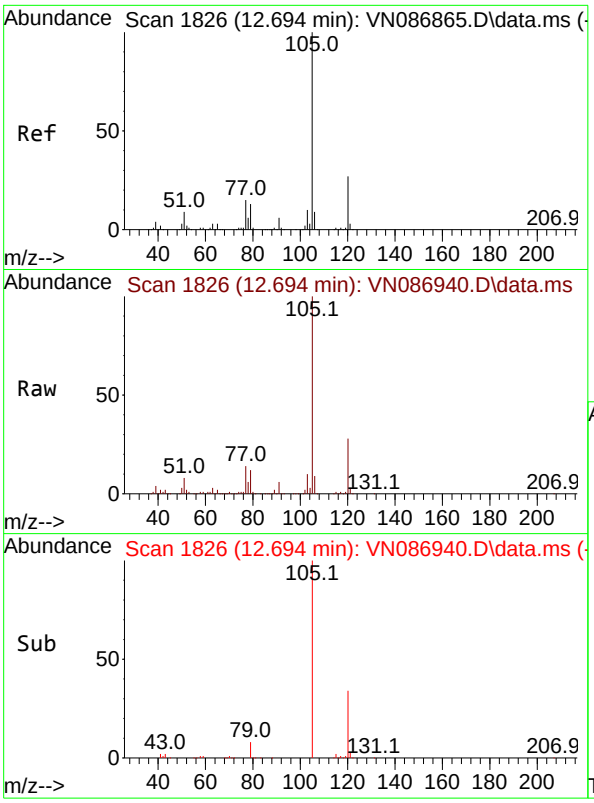




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion:152 Resp: 152136

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 60.1 | 30.1 | 90.5 |
| 150 | 176.5 | 0.0 | 345.0 |






#73
Isopropylbenzene
Concen: 53.511 ug/l
RT: 12.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion:105 Resp: 59308

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 27.5 | 13.5 | 40.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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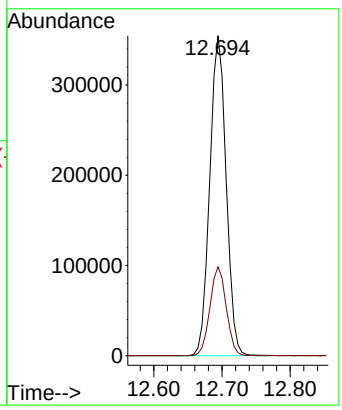
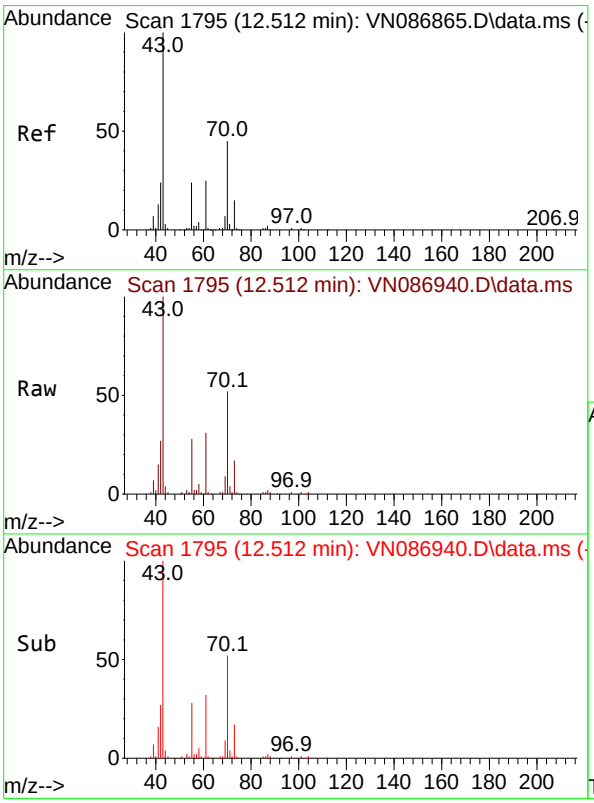
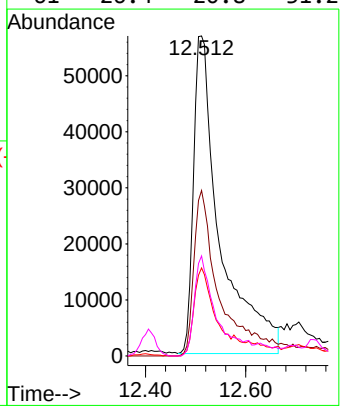


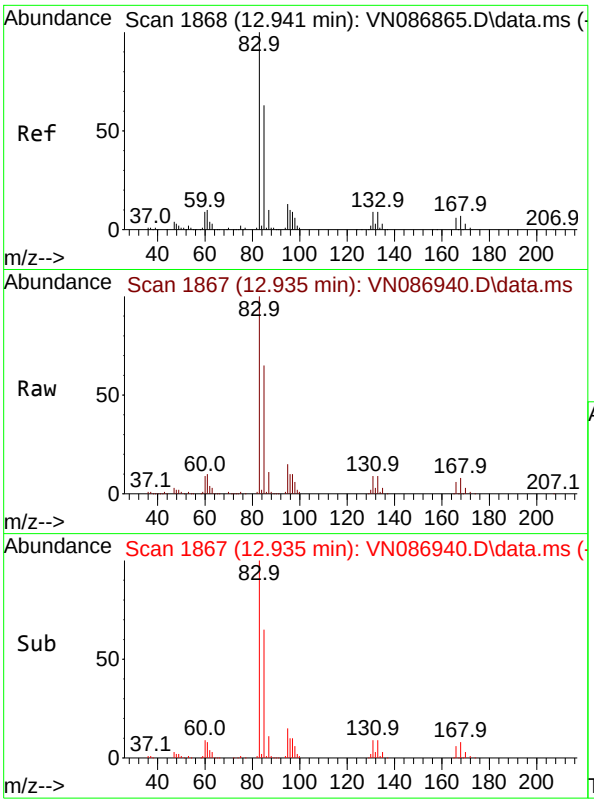




#74
N-amyl acetate
Concen: 53.765 ug/l
RT: 12.512 min Scan# 1795
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 43 Resp: 208229

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 52.6 | 37.6 | 56.4 |
| 55 | 26.6 | 19.0 | 28.6 |
| 61 | 26.4 | 20.8 | 31.2 |






#75
1,1,2,2-Tetrachloroethane
Concen: 56.816 ug/l
RT: 12.935 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 83 Resp: 21332

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 9.8 | 4.9 | 14.7 |
| 85 | 64.5 | 32.0 | 96.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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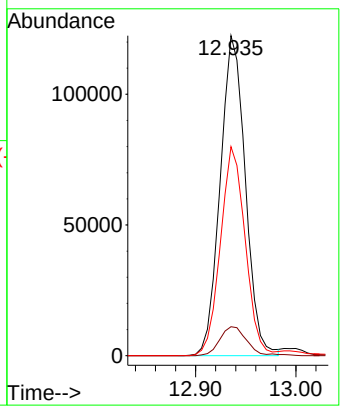
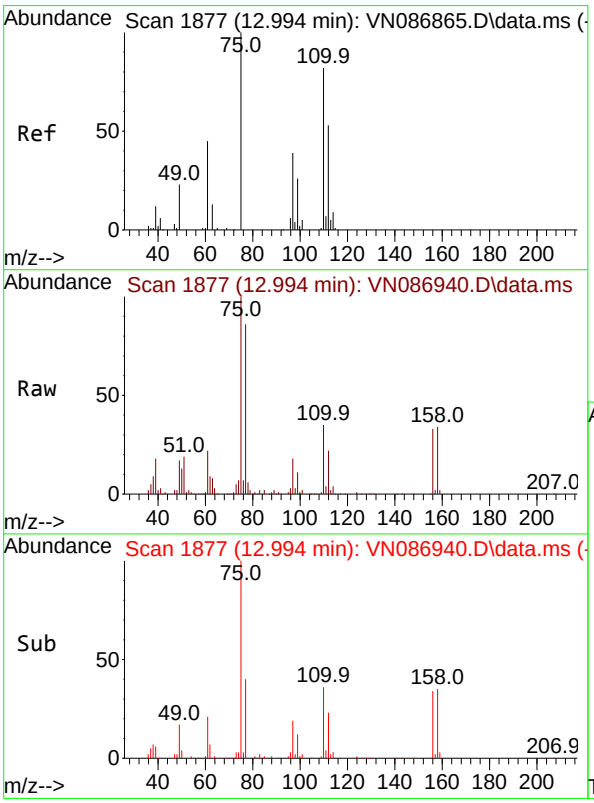
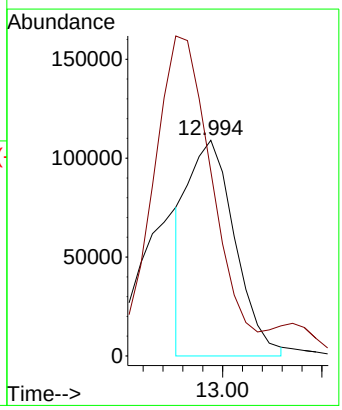


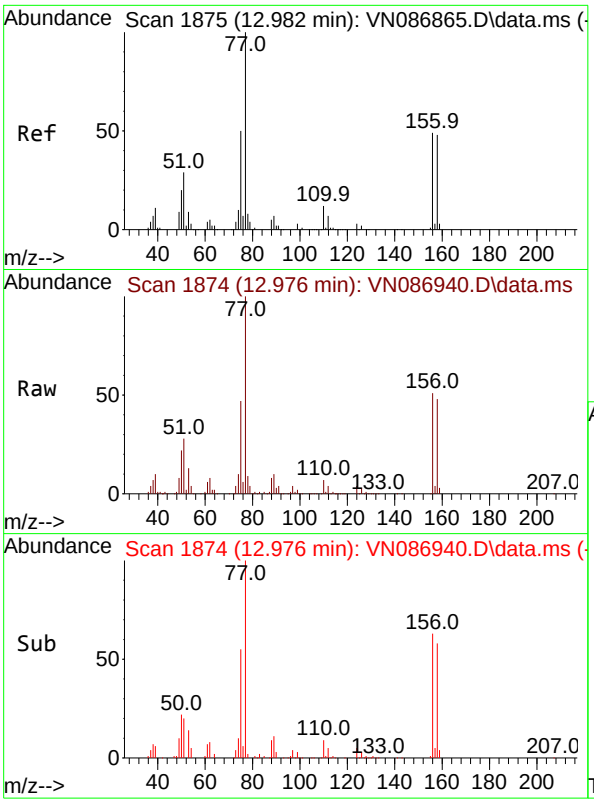




#76
1,2,3-Trichloropropane
Concen: 49.771 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 75 Resp: 179987

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 187.3 | 79.3 | 237.9 |






#77
Bromobenzene
Concen: 57.512 ug/l
RT: 12.976 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion:156 Resp: 14618

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 230.6 | 117.7 | 353.1 |
| 158 | 97.1 | 48.1 | 144.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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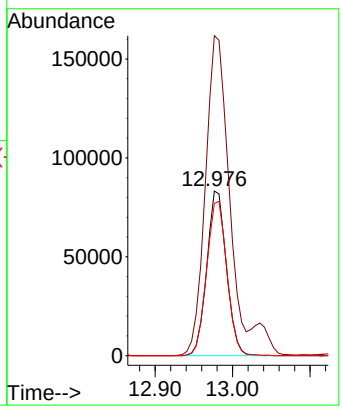
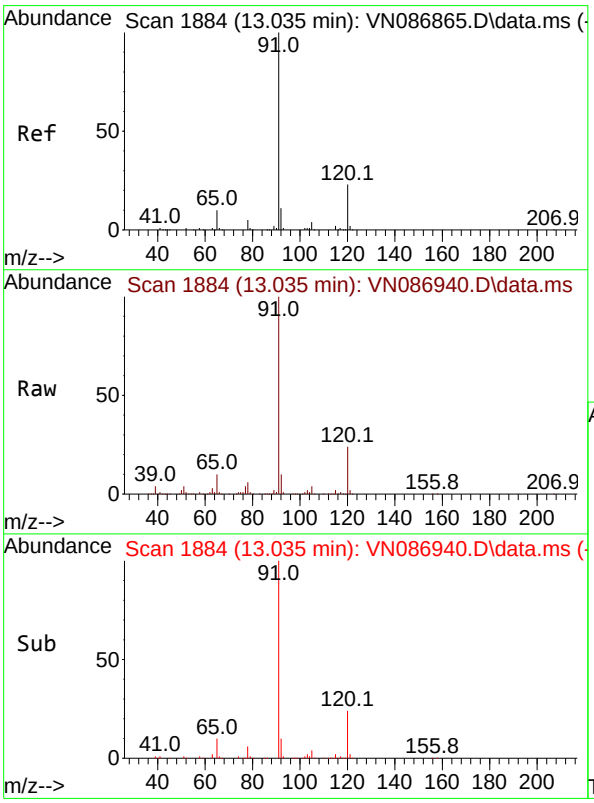
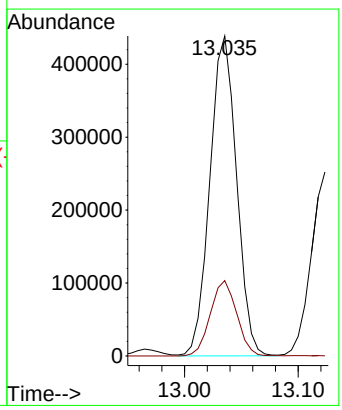


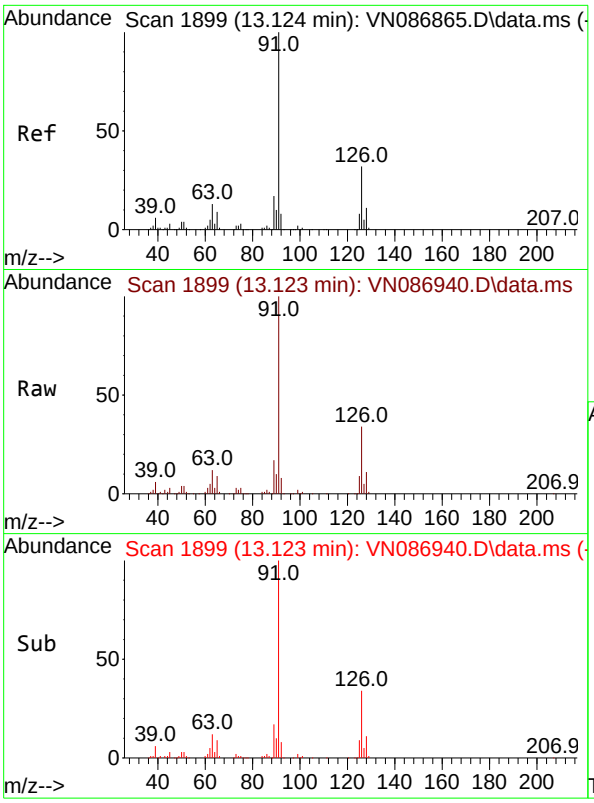




#78
n-propylbenzene
Concen: 53.234 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 91 Resp: 717012

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 23.3 | 11.4 | 34.2 |






#79
2-Chlorotoluene
Concen: 54.413 ug/l
RT: 13.123 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 91 Resp: 43952

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 33.4 | 16.2 | 48.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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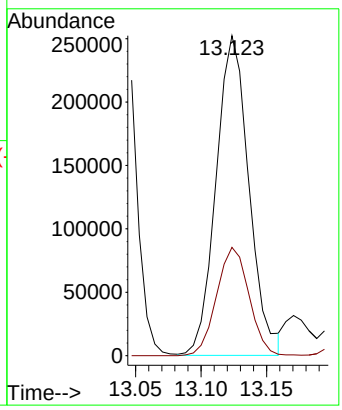
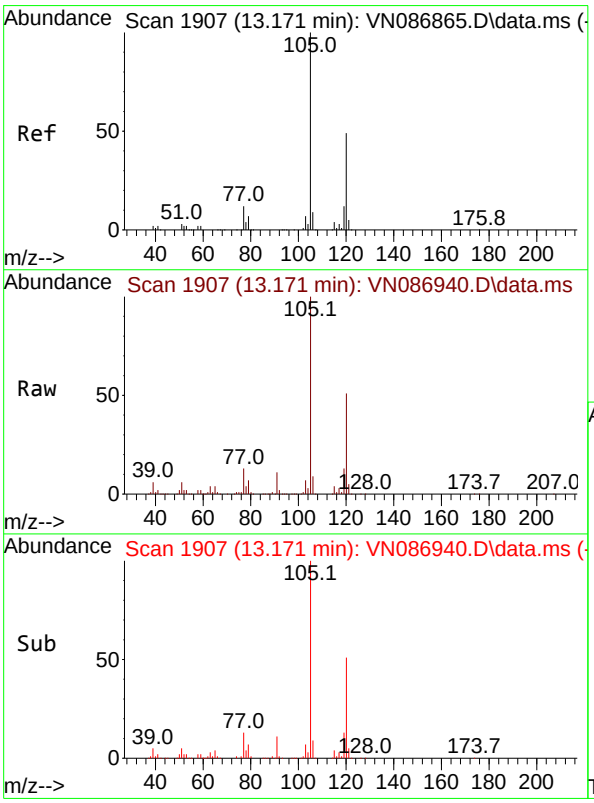
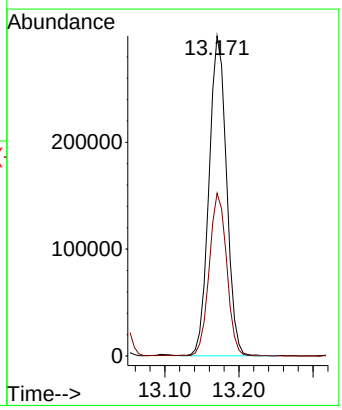


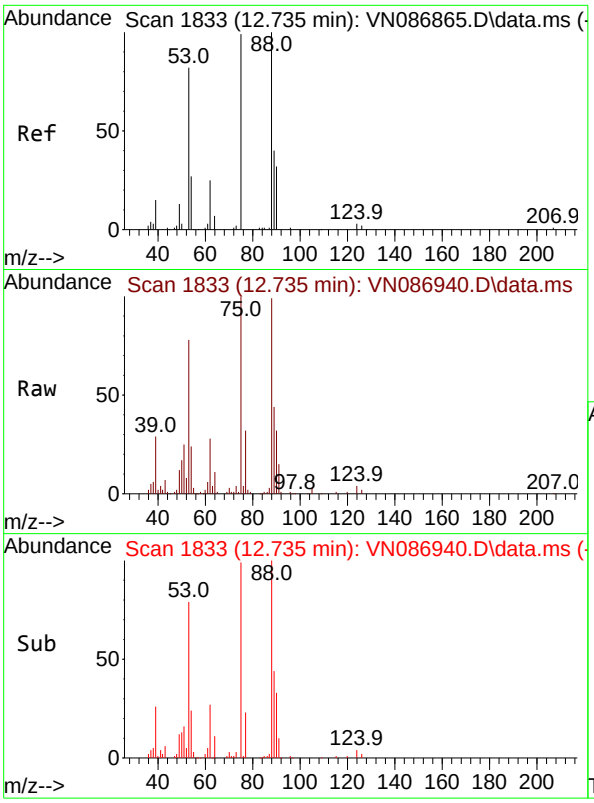




#80
1,3,5-Trimethylbenzene
Concen: 53.628 ug/l
RT: 13.171 min Scan# 1907
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion:105 Resp: 490727

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 50.8 | 24.9 | 74.6 |






#81
trans-1,4-Dichloro-2-butene
Concen: 59.701 ug/l
RT: 12.735 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 75 Resp: 9379

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 74.1 | 66.6 | 99.8 |
| 89 | 57.1 | 36.7 | 55.1# |

**Instrument :**
MSVOA_N
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VSTDCCC050

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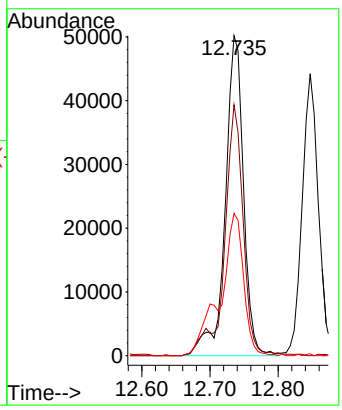
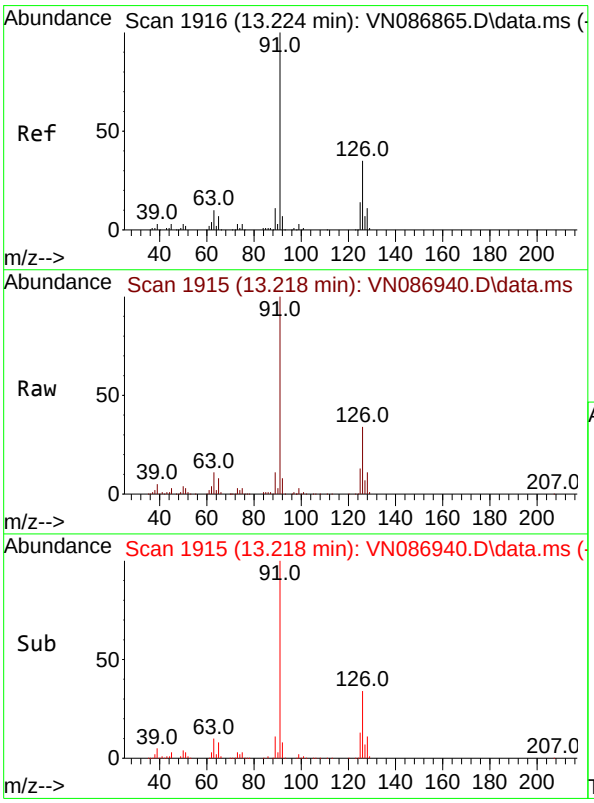
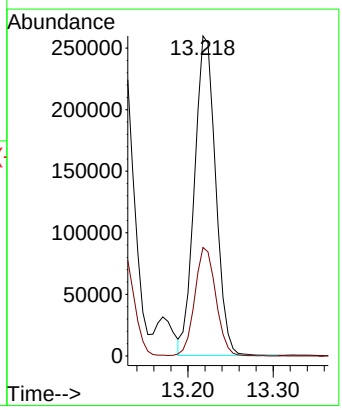


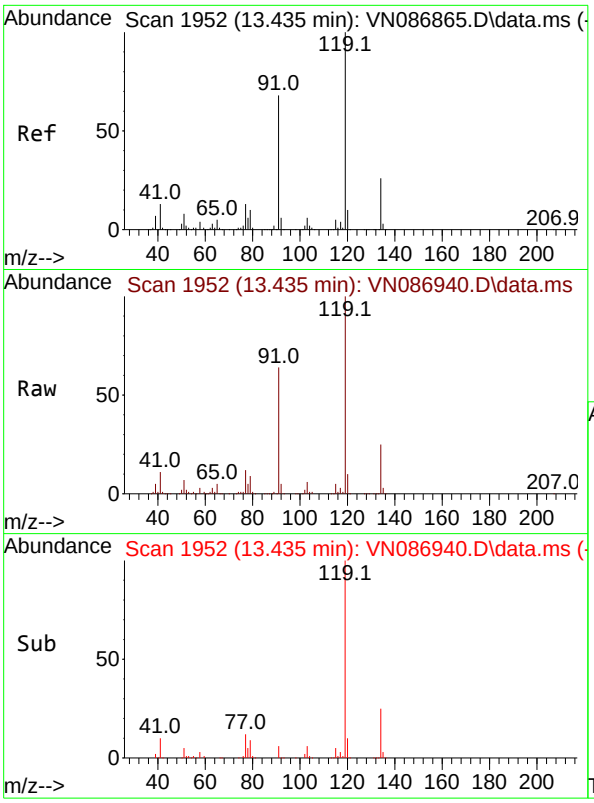




#82
4-Chlorotoluene
Concen: 54.598 ug/l
RT: 13.218 min Scan# 1915
Delta R.T. -0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 91 Resp: 446237

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 34.0 | 16.7 | 50.1 |






#83
tert-Butylbenzene
Concen: 53.498 ug/l
RT: 13.435 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion:119 Resp: 44810

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 61.2 | 32.1 | 96.5 |
| 134 | 26.3 | 13.4 | 40.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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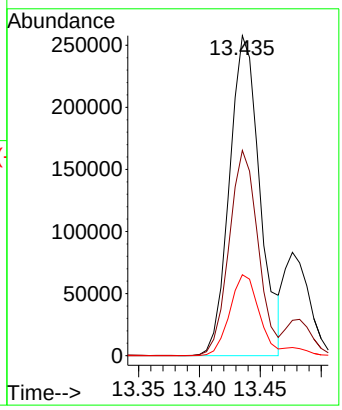
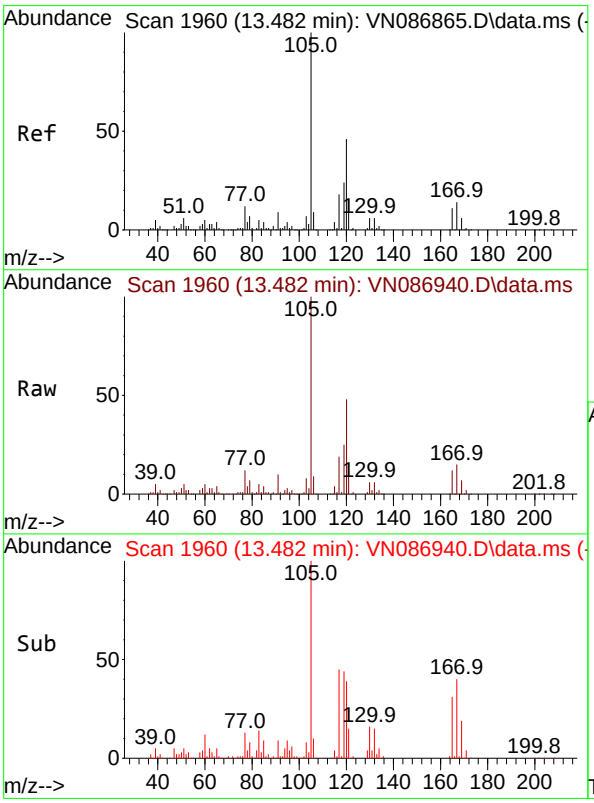
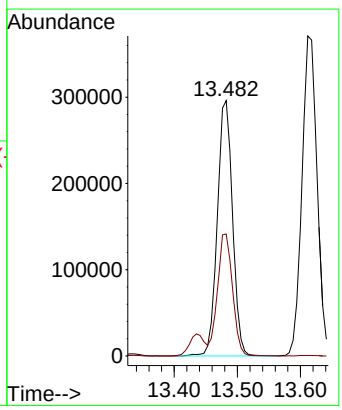


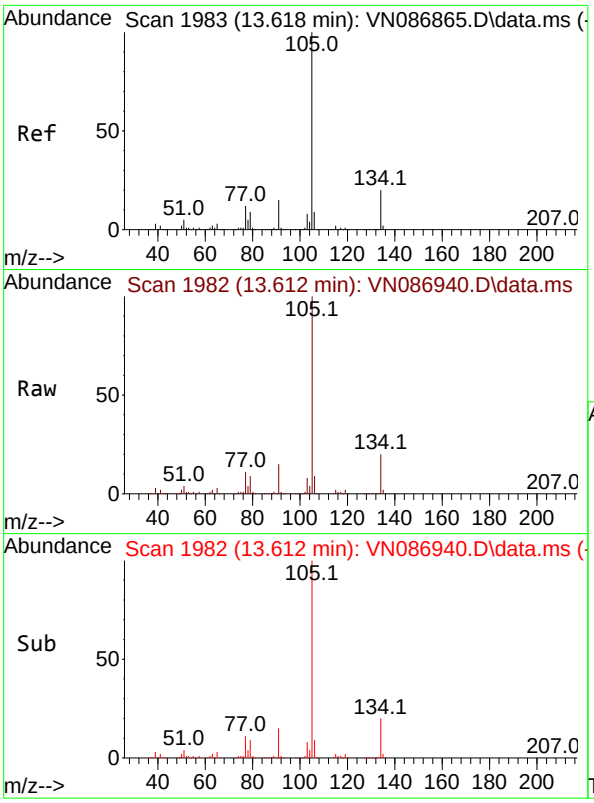




#84
1,2,4-Trimethylbenzene
Concen: 54.048 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion:105 Resp: 495936

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 47.2 | 23.2 | 69.6 |






#85
sec-Butylbenzene
Concen: 50.788 ug/l
RT: 13.612 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion:105 Resp: 61779

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 20.6 | 10.0 | 30.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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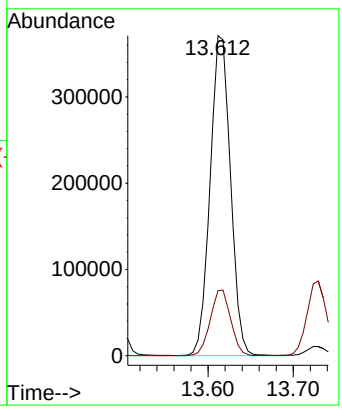
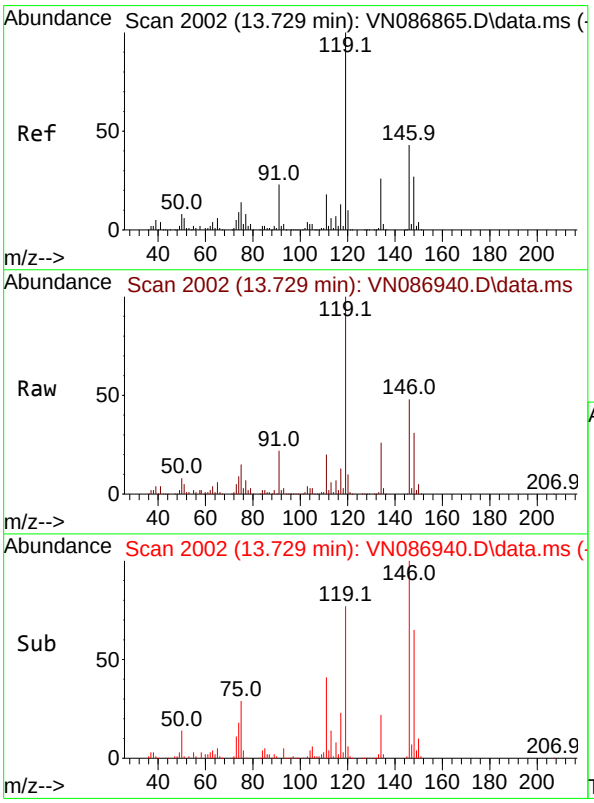
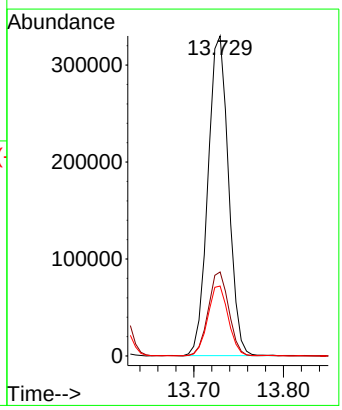


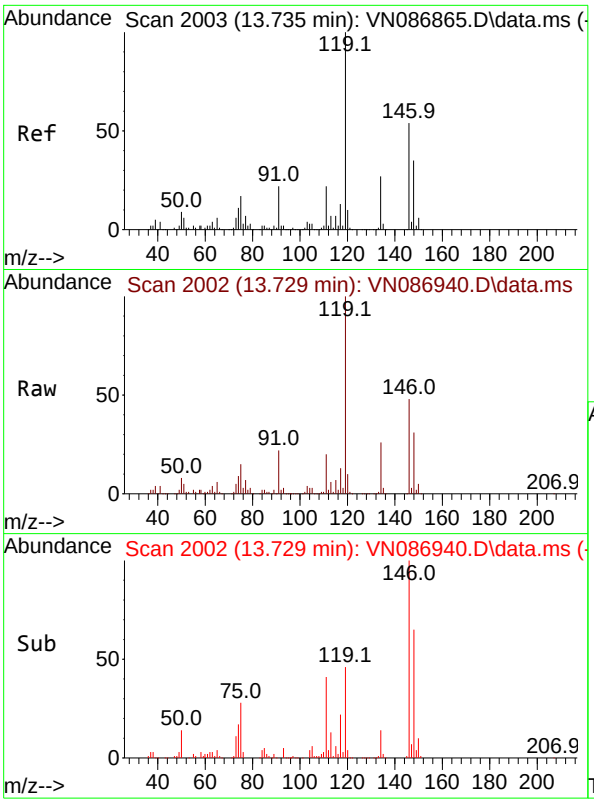




#86
p-Isopropyltoluene
Concen: 52.156 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion:119 Resp: 524440

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 26.4 | 13.5 | 40.4 |
| 91 | 21.8 | 11.5 | 34.4 |

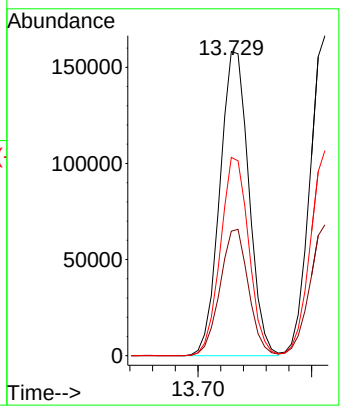





#87
1,3-Dichlorobenzene
Concen: 56.062 ug/l
RT: 13.729 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion:146 Resp: 28035

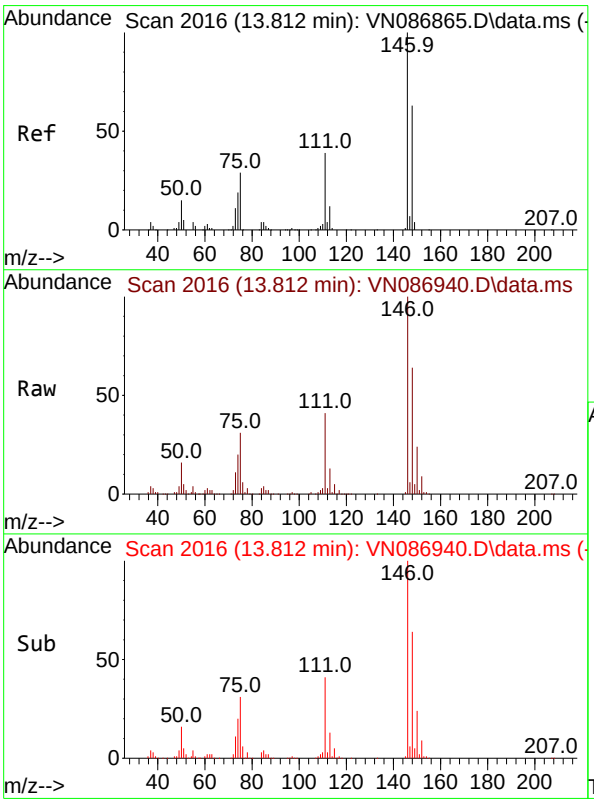
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 40.9 | 20.9 | 62.8 |
| 148 | 63.8 | 32.0 | 96.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

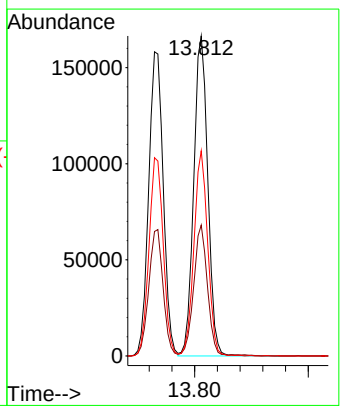
Reviewed By :John Carlone 06/12/2025
Supervised By :Semsettin Yesilyurt 06/12/2025

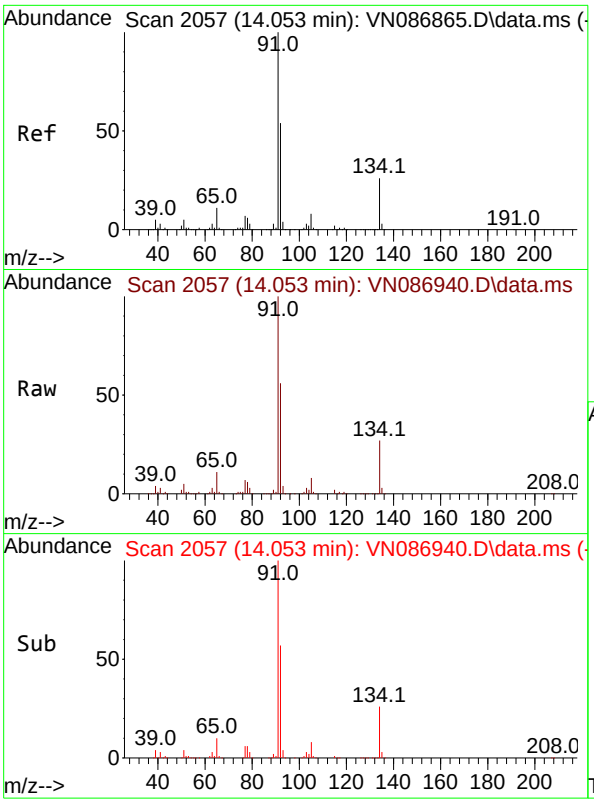



#88
1,4-Dichlorobenzene
Concen: 56.315 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion:146 Resp: 287122

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 39.5 | 19.9 | 59.7 |
| 148 | 62.7 | 31.8 | 95.4 |

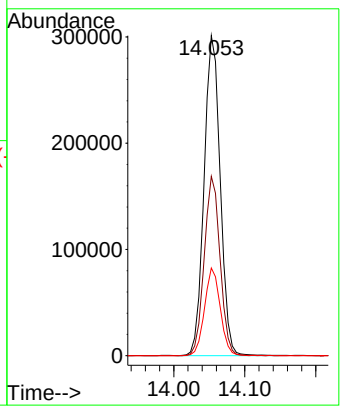





#89
n-Butylbenzene
Concen: 49.007 ug/l
RT: 14.053 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 91 Resp: 47730

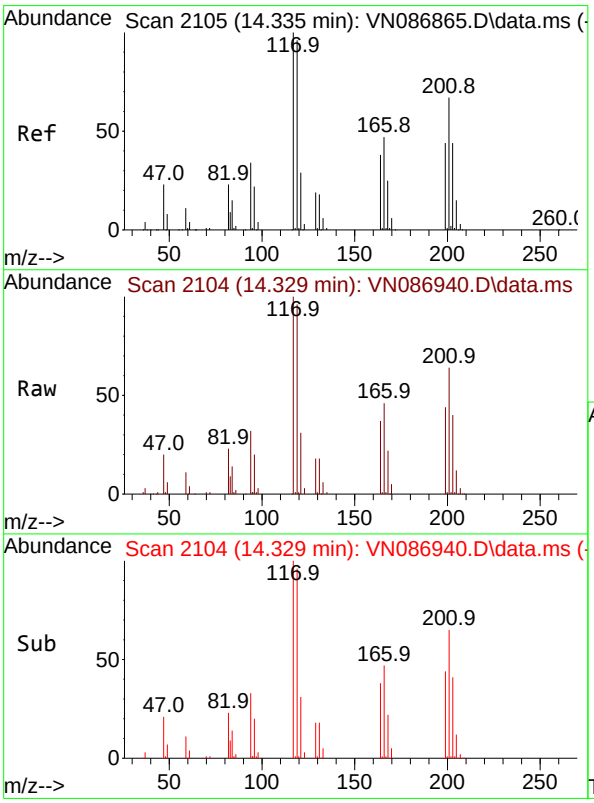
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 54.9 | 27.5 | 82.4 |
| 134 | 26.6 | 13.0 | 39.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

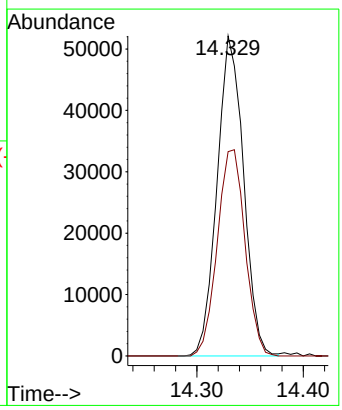
Reviewed By :John Carlone 06/12/2025
Supervised By :Semsettin Yesilyurt 06/12/2025

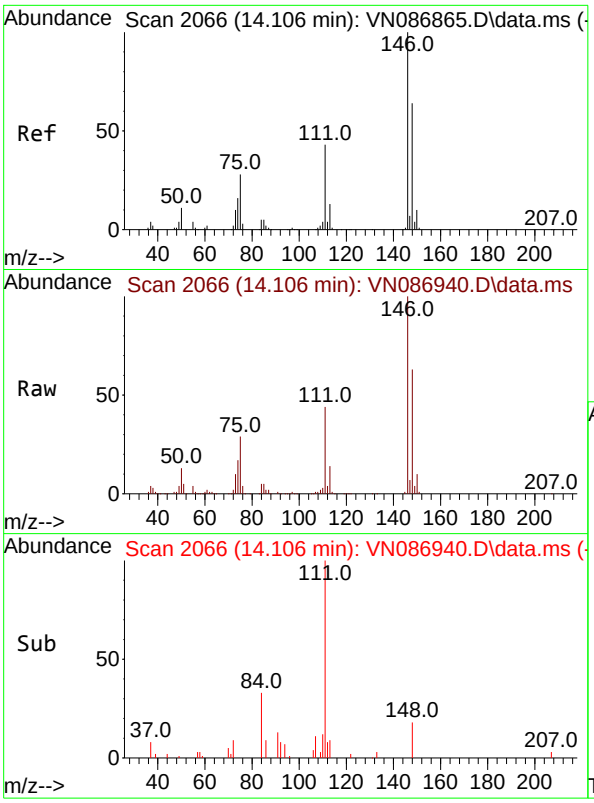



#90
Hexachloroethane
Concen: 52.738 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. -0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion:117 Resp: 89886

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 67.6 | 33.2 | 99.6 |






#91
1,2-Dichlorobenzene
Concen: 55.766 ug/l
RT: 14.106 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

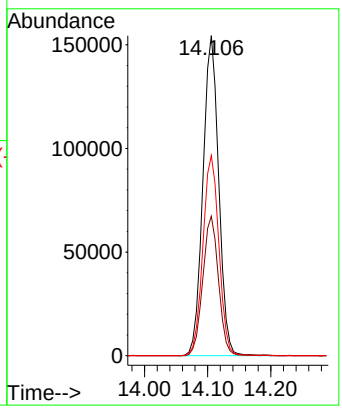
Tgt Ion:146 Resp: 26793

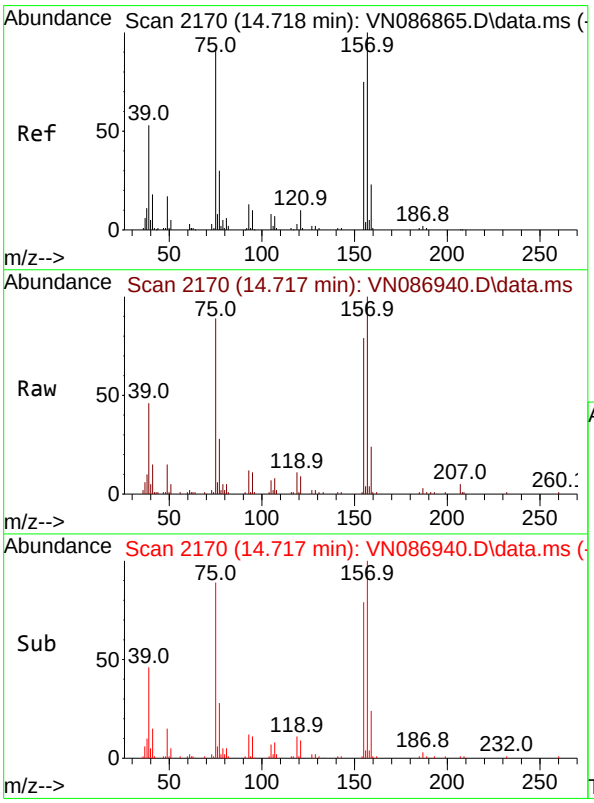
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.2 | 21.6 | 64.6 |
| 148 | 63.3 | 31.7 | 95.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/12/2025
Supervised By :Semsettin Yesilyurt 06/12/2025

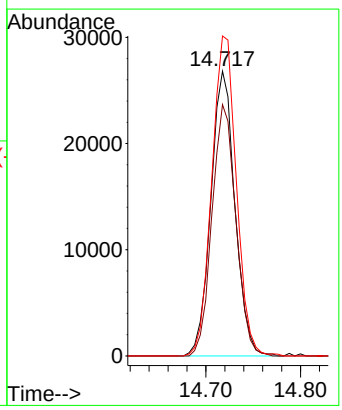


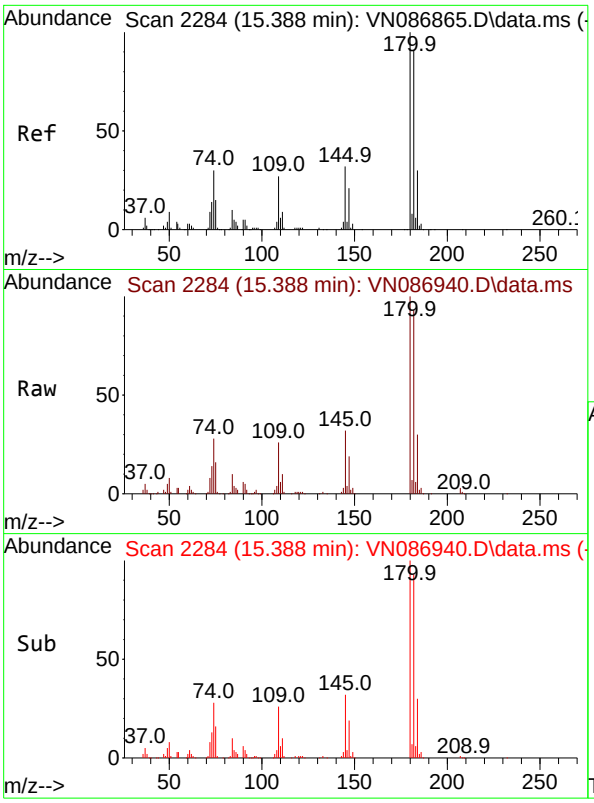




#92
1,2-Dibromo-3-Chloropropane
Concen: 52.704 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion: 75 Resp: 47326

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 87.3 | 41.1 | 123.4 |
| 157 | 114.9 | 52.7 | 158.1 |

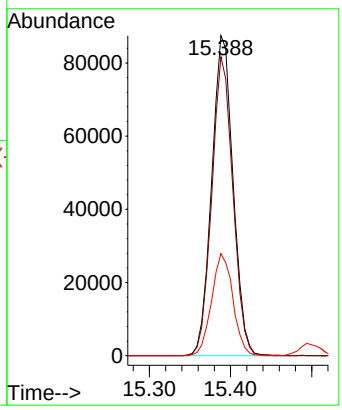





#93
1,2,4-Trichlorobenzene
Concen: 52.161 ug/l
RT: 15.388 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion:180 Resp: 16003

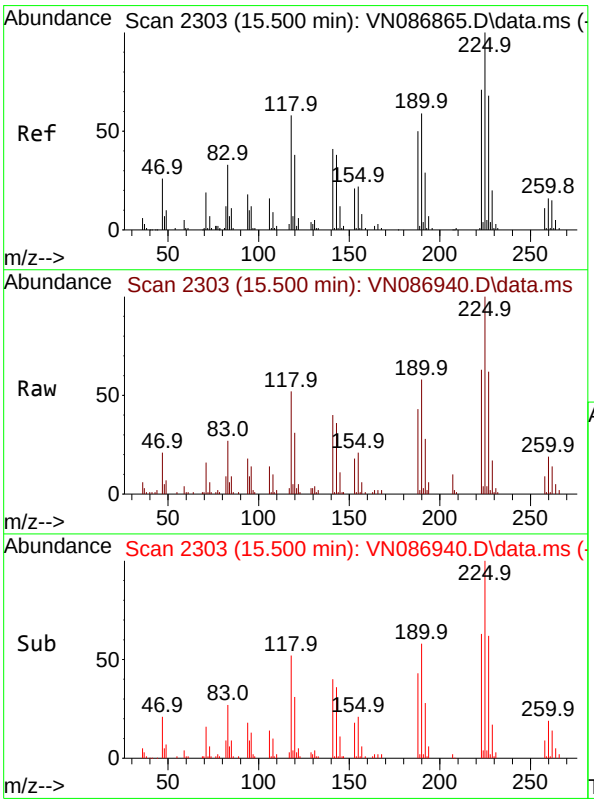
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 92.1 | 46.9 | 140.7 |
| 145 | 31.7 | 16.0 | 47.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

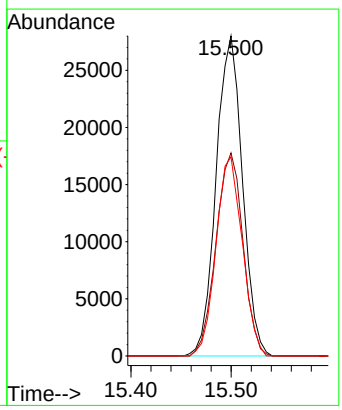
Reviewed By :John Carlone 06/12/2025
Supervised By :Semsettin Yesilyurt 06/12/2025

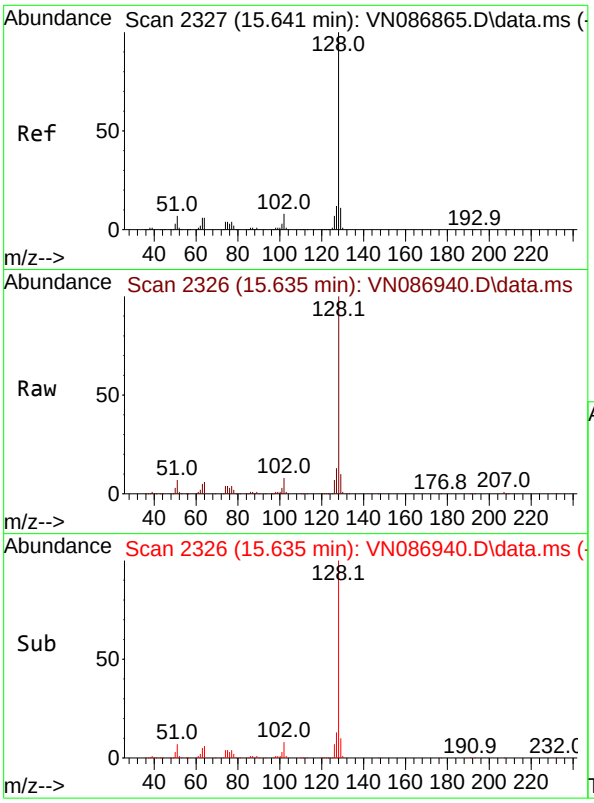



#94
Hexachlorobutadiene
Concen: 44.682 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion:225 Resp: 51073

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 65.0 | 33.5 | 100.4 |
| 227 | 62.2 | 31.1 | 93.5 |

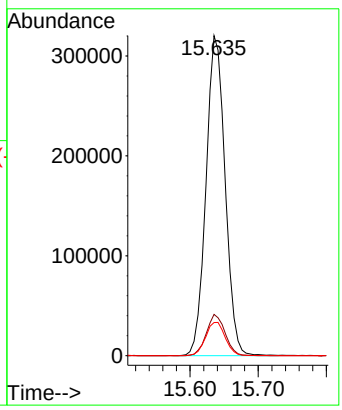





#95
Naphthalene
Concen: 54.679 ug/l
RT: 15.635 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion:128 Resp: 62442

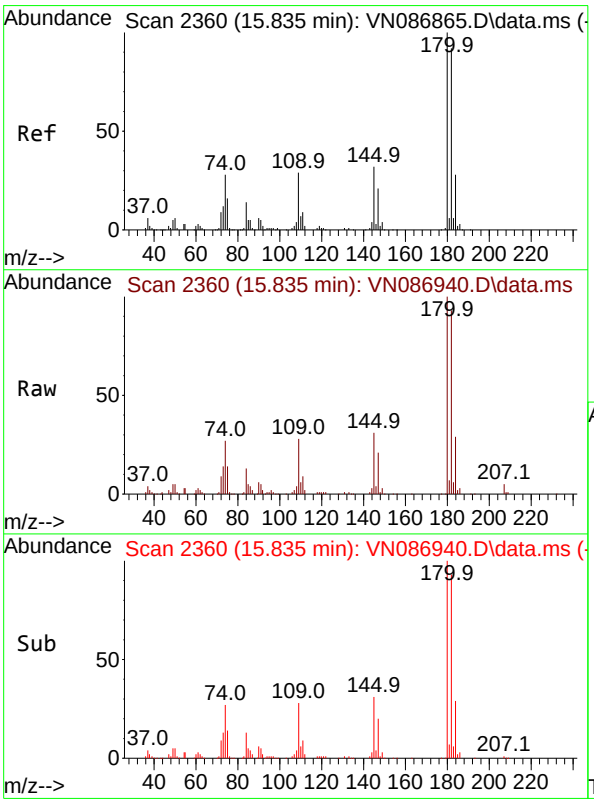
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.6 | 10.2 | 15.2 |
| 129 | 10.8 | 8.8 | 13.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

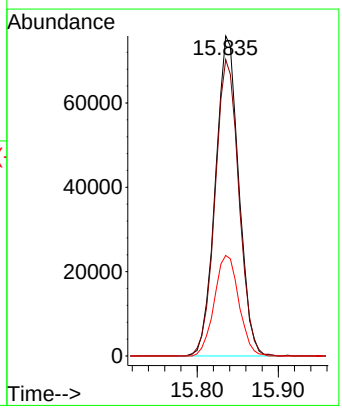
Reviewed By :John Carlone 06/12/2025
Supervised By :Semsettin Yesilyurt 06/12/2025




#96
1,2,3-Trichlorobenzene
Concen: 49.672 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. -0.000 min
Lab File: VN086940.D
Acq: 11 Jun 2025 11:32

Tgt Ion:180 Resp: 151411

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 94.5 | 47.0 | 141.0 |
| 145 | 33.0 | 16.6 | 49.8 |



Sample Results: **VN086940.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061125\
Data File : VN086940.D
Acq On : 11 Jun 2025 11:32
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Jun 12 01:28:53 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 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 | 99 | 0.00 |
| 2 | T | Dichlorodifluoromethane | 0.499 | 0.538 | -7.8 | 106 | 0.00 |
| 3 | P | Chloromethane | 0.644 | 0.555 | 13.8 | 92 | 0.00 |
| 4 | C | Vinyl Chloride | 0.664 | 0.701 | -5.6# | 108 | 0.00 |
| 5 | T | Bromomethane | 0.372 | 0.312 | 16.1 | 86 | 0.00 |
| 6 | T | Chloroethane | 0.429 | 0.457 | -6.5 | 111 | 0.00 |
| 7 | T | Trichlorofluoromethane | 0.868 | 0.930 | -7.1 | 110 | 0.00 |
| 8 | T | Diethyl Ether | 0.378 | 0.418 | -10.6 | 114 | 0.00 |
| 9 | T | 1,1,2-Trichlorotrifluoroeth | 0.545 | 0.582 | -6.8 | 111 | 0.00 |
| 10 | T | Methyl Iodide | 0.707 | 0.565 | 20.1 | 82 | 0.01 |
| 11 | T | Tert butyl alcohol | 0.182 | 0.178 | 2.2 | 100 | 0.00 |
| 12 | CM | 1,1-Dichloroethene | 0.557 | 0.593 | -6.5# | 110 | 0.00 |
| 13 | T | Acrolein | 0.057 | 0.066 | -15.8 | 145 | 0.00 |
| 14 | T | Allyl chloride | 0.923 | 0.912 | 1.2 | 104 | 0.00 |
| 15 | T | Acrylonitrile | 0.425 | 0.446 | -4.9 | 108 | 0.00 |
| 16 | T | Acetone | 0.355 | 0.384 | -8.2 | 118 | 0.00 |
| 17 | T | Carbon Disulfide | 1.539 | 1.505 | 2.2 | 104 | 0.00 |
| 18 | T | Methyl Acetate | 1.035 | 1.085 | -4.8 | 109 | 0.00 |
| 19 | T | Methyl tert-butyl Ether | 2.015 | 2.172 | -7.8 | 111 | 0.00 |
| 20 | T | Methylene Chloride | 0.665 | 0.673 | -1.2 | 110 | 0.00 |
| 21 | T | trans-1,2-Dichloroethene | 0.619 | 0.633 | -2.3 | 110 | 0.00 |
| 22 | T | Diisopropyl ether | 1.945 | 2.009 | -3.3 | 107 | 0.00 |
| 23 | T | Vinyl Acetate | 1.644 | 1.722 | -4.7 | 107 | 0.00 |
| 24 | P | 1,1-Dichloroethane | 1.120 | 1.178 | -5.2 | 110 | 0.00 |
| 25 | T | 2-Butanone | 0.577 | 0.568 | 1.6 | 102 | 0.00 |
| 26 | T | 2,2-Dichloropropane | 0.871 | 1.049 | -20.4 | 115 | 0.00 |
| 27 | T | cis-1,2-Dichloroethene | 0.740 | 0.793 | -7.2 | 112 | 0.00 |
| 28 | T | Bromochloromethane | 0.550 | 0.578 | -5.1 | 122 | 0.00 |
| 29 | T | Tetrahydrofuran | 0.376 | 0.371 | 1.3 | 102 | 0.00 |
| 30 | C | Chloroform | 1.118 | 1.176 | -5.2# | 110 | 0.00 |
| 31 | T | Cyclohexane | 1.086 | 1.017 | 6.4 | 100 | 0.00 |
| 32 | T | 1,1,1-Trichloroethane | 0.951 | 0.976 | -2.6 | 108 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 | 0.669 | 0.622 | 7.0 | 123 | 0.00 |
| 34 | I | 1,4-Difluorobenzene | 1.000 | 1.000 | 0.0 | 94 | 0.00 |
| 35 | S | Dibromofluoromethane | 0.296 | 0.309 | -4.4 | 133 | 0.00 |
| 36 | T | 1,1-Dichloropropene | 0.442 | 0.483 | -9.3 | 109 | 0.00 |
| 37 | T | Ethyl Acetate | 0.562 | 0.592 | -5.3 | 104 | 0.00 |
| 38 | T | Carbon Tetrachloride | 0.433 | 0.472 | -9.0 | 109 | 0.00 |
| 39 | T | Methylcyclohexane | 0.605 | 0.576 | 4.8 | 95 | 0.00 |
| 40 | TM | Benzene | 1.444 | 1.553 | -7.5 | 109 | 0.00 |
| 41 | T | Methacrylonitrile | 0.316 | 0.322 | -1.9 | 100 | 0.00 |
| 42 | TM | 1,2-Dichloroethane | 0.438 | 0.472 | -7.8 | 108 | 0.00 |
| 43 | T | Isopropyl Acetate | 0.902 | 0.946 | -4.9 | 105 | 0.00 |
| 44 | TM | Trichloroethene | 0.342 | 0.382 | -11.7 | 110 | 0.00 |
| 45 | C | 1,2-Dichloropropane | 0.351 | 0.384 | -9.4# | 109 | 0.00 |
| 46 | T | Dibromomethane | 0.233 | 0.265 | -13.7 | 113 | 0.00 |
| 47 | T | Bromodichloromethane | 0.480 | 0.532 | -10.8 | 110 | 0.00 |
| 48 | T | Methyl methacrylate | 0.415 | 0.431 | -3.9 | 103 | 0.00 |

Sample Results: **VN086940.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061125\
Data File : VN086940.D
Acq On : 11 Jun 2025 11:32
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Jun 12 01:28:53 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 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 | 0.008 | 0.009 | -12.5 | 103 | 0.00 |
| 50 | S | Toluene-d8 | 1.173 | 1.181 | -0.7 | 130 | 0.00 |
| 51 | T | 4-Methyl-2-Pentanone | 0.543 | 0.590 | -8.7 | 104 | 0.00 |
| 52 | CM | Toluene | 0.882 | 0.978 | -10.9# | 111 | 0.00 |
| 53 | T | t-1,3-Dichloropropene | 0.537 | 0.609 | -13.4 | 110 | 0.00 |
| 54 | T | cis-1,3-Dichloropropene | 0.574 | 0.661 | -15.2 | 113 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 0.340 | 0.383 | -12.6 | 112 | 0.00 |
| 56 | T | Ethyl methacrylate | 0.541 | 0.647 | -19.6 | 110 | 0.00 |
| 57 | T | 1,3-Dichloropropane | 0.589 | 0.651 | -10.5 | 110 | 0.00 |
| 58 | T | 2-Chloroethyl Vinyl ether | 0.323 | 0.372 | -15.2 | 128 | 0.00 |
| 59 | T | 2-Hexanone | 0.350 | 0.395 | -12.9 | 101 | 0.00 |
| 60 | T | Dibromochloromethane | 0.354 | 0.414 | -16.9 | 115 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 0.348 | 0.385 | -10.6 | 111 | 0.00 |
| 62 | S | 4-Bromofluorobenzene | 0.436 | 0.440 | -0.9 | 128 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 94 | 0.00 |
| 64 | T | Tetrachloroethene | 0.316 | 0.337 | -6.6 | 108 | 0.00 |
| 65 | PM | Chlorobenzene | 1.103 | 1.222 | -10.8 | 112 | 0.00 |
| 66 | T | 1,1,1,2-Tetrachloroethane | 0.354 | 0.400 | -13.0 | 111 | 0.00 |
| 67 | C | Ethyl Benzene | 1.899 | 2.059 | -8.4# | 108 | 0.00 |
| 68 | T | m/p-Xylenes | 0.727 | 0.802 | -10.3 | 107 | 0.00 |
| 69 | T | o-Xylene | 0.696 | 0.782 | -12.4 | 109 | 0.00 |
| 70 | T | Styrene | 1.192 | 1.358 | -13.9 | 110 | 0.00 |
| 71 | P | Bromoform | 0.263 | 0.319 | -21.3 | 113 | 0.00 |
| 72 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 91 | 0.00 |
| 73 | T | Isopropylbenzene | 3.643 | 3.898 | -7.0 | 103 | 0.00 |
| 74 | T | N-amyl acetate | 1.273 | 1.369 | -7.5 | 98 | 0.00 |
| 75 | P | 1,1,2,2-Tetrachloroethane | 1.234 | 1.402 | -13.6 | 108 | 0.00 |
| 76 | T | 1,2,3-Trichloropropane | 1.189 | 1.183 | 0.5 | 92 | 0.00 |
| 77 | T | Bromobenzene | 0.835 | 0.961 | -15.1 | 110 | 0.00 |
| 78 | T | n-propylbenzene | 4.427 | 4.713 | -6.5 | 102 | 0.00 |
| 79 | T | 2-Chlorotoluene | 2.655 | 2.889 | -8.8 | 105 | 0.00 |
| 80 | T | 1,3,5-Trimethylbenzene | 3.007 | 3.226 | -7.3 | 101 | 0.00 |
| 81 | T | trans-1,4-Dichloro-2-butene | 0.516 | 0.616 | -19.4 | 118 | 0.00 |
| 82 | T | 4-Chlorotoluene | 2.686 | 2.933 | -9.2 | 105 | 0.00 |
| 83 | T | tert-Butylbenzene | 2.753 | 2.945 | -7.0 | 102 | 0.00 |
| 84 | T | 1,2,4-Trimethylbenzene | 3.016 | 3.260 | -8.1 | 102 | 0.00 |
| 85 | T | sec-Butylbenzene | 3.998 | 4.061 | -1.6 | 96 | 0.00 |
| 86 | T | p-Isopropyltoluene | 3.305 | 3.447 | -4.3 | 98 | 0.00 |
| 87 | T | 1,3-Dichlorobenzene | 1.644 | 1.843 | -12.1 | 108 | 0.00 |
| 88 | T | 1,4-Dichlorobenzene | 1.676 | 1.887 | -12.6 | 109 | 0.00 |
| 89 | T | n-Butylbenzene | 3.201 | 3.137 | 2.0 | 93 | 0.00 |
| 90 | T | Hexachloroethane | 0.560 | 0.591 | -5.5 | 100 | 0.00 |
| 91 | T | 1,2-Dichlorobenzene | 1.579 | 1.761 | -11.5 | 107 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 0.295 | 0.311 | -5.4 | 104 | 0.00 |
| 93 | T | 1,2,4-Trichlorobenzene | 1.008 | 1.052 | -4.4 | 99 | 0.00 |
| 94 | T | Hexachlorobutadiene | 0.376 | 0.336 | 10.6 | 84 | 0.00 |
| 95 | T | Naphthalene | 3.753 | 4.104 | -9.4 | 104 | 0.00 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061125\
Data File : VN086940.D
Acq On : 11 Jun 2025 11:32
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Jun 12 01:28:53 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 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 | 1.002 | 0.995 | 0.7 | 95 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Sample Results: **VN086940.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061125\
Data File : VN086940.D
Acq On : 11 Jun 2025 11:32
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Jun 12 01:28:53 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 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 | 99 | 0.00 |
| 2 | T | Dichlorodifluoromethane | 50.000 | 53.916 | -7.8 | 106 | 0.00 |
| 3 | P | Chloromethane | 50.000 | 43.069 | 13.9 | 92 | 0.00 |
| 4 | C | Vinyl Chloride | 50.000 | 52.773 | -5.5# | 108 | 0.00 |
| 5 | T | Bromomethane | 50.000 | 41.928 | 16.1 | 86 | 0.00 |
| 6 | T | Chloroethane | 50.000 | 53.253 | -6.5 | 111 | 0.00 |
| 7 | T | Trichlorofluoromethane | 50.000 | 53.570 | -7.1 | 110 | 0.00 |
| 8 | T | Diethyl Ether | 50.000 | 55.281 | -10.6 | 114 | 0.00 |
| 9 | T | 1,1,2-Trichlorotrifluoroeth | 50.000 | 53.364 | -6.7 | 111 | 0.00 |
| 10 | T | Methyl Iodide | 50.000 | 39.959 | 20.1 | 82 | 0.01 |
| 11 | T | Tert butyl alcohol | 250.000 | 245.667 | 1.7 | 100 | 0.00 |
| 12 | CM | 1,1-Dichloroethene | 50.000 | 53.307 | -6.6# | 110 | 0.00 |
| 13 | T | Acrolein | 250.000 | 288.340 | -15.3 | 145 | 0.00 |
| 14 | T | Allyl chloride | 50.000 | 49.420 | 1.2 | 104 | 0.00 |
| 15 | T | Acrylonitrile | 250.000 | 262.349 | -4.9 | 108 | 0.00 |
| 16 | T | Acetone | 250.000 | 270.423 | -8.2 | 118 | 0.00 |
| 17 | T | Carbon Disulfide | 50.000 | 48.889 | 2.2 | 104 | 0.00 |
| 18 | T | Methyl Acetate | 50.000 | 52.419 | -4.8 | 109 | 0.00 |
| 19 | T | Methyl tert-butyl Ether | 50.000 | 53.894 | -7.8 | 111 | 0.00 |
| 20 | T | Methylene Chloride | 50.000 | 50.660 | -1.3 | 110 | 0.00 |
| 21 | T | trans-1,2-Dichloroethene | 50.000 | 51.154 | -2.3 | 110 | 0.00 |
| 22 | T | Diisopropyl ether | 50.000 | 51.639 | -3.3 | 107 | 0.00 |
| 23 | T | Vinyl Acetate | 250.000 | 261.960 | -4.8 | 107 | 0.00 |
| 24 | P | 1,1-Dichloroethane | 50.000 | 52.602 | -5.2 | 110 | 0.00 |
| 25 | T | 2-Butanone | 250.000 | 246.018 | 1.6 | 102 | 0.00 |
| 26 | T | 2,2-Dichloropropane | 50.000 | 60.206 | -20.4 | 115 | 0.00 |
| 27 | T | cis-1,2-Dichloroethene | 50.000 | 53.551 | -7.1 | 112 | 0.00 |
| 28 | T | Bromochloromethane | 50.000 | 52.462 | -4.9 | 122 | 0.00 |
| 29 | T | Tetrahydrofuran | 250.000 | 246.502 | 1.4 | 102 | 0.00 |
| 30 | C | Chloroform | 50.000 | 52.589 | -5.2# | 110 | 0.00 |
| 31 | T | Cyclohexane | 50.000 | 46.846 | 6.3 | 100 | 0.00 |
| 32 | T | 1,1,1-Trichloroethane | 50.000 | 51.307 | -2.6 | 108 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 | 50.000 | 46.478 | 7.0 | 123 | 0.00 |
| 34 | I | 1,4-Difluorobenzene | 50.000 | 50.000 | 0.0 | 94 | 0.00 |
| 35 | S | Dibromofluoromethane | 50.000 | 52.151 | -4.3 | 133 | 0.00 |
| 36 | T | 1,1-Dichloropropene | 50.000 | 54.664 | -9.3 | 109 | 0.00 |
| 37 | T | Ethyl Acetate | 50.000 | 52.670 | -5.3 | 104 | 0.00 |
| 38 | T | Carbon Tetrachloride | 50.000 | 54.485 | -9.0 | 109 | 0.00 |
| 39 | T | Methylcyclohexane | 50.000 | 47.613 | 4.8 | 95 | 0.00 |
| 40 | TM | Benzene | 50.000 | 53.798 | -7.6 | 109 | 0.00 |
| 41 | T | Methacrylonitrile | 50.000 | 51.017 | -2.0 | 100 | 0.00 |
| 42 | TM | 1,2-Dichloroethane | 50.000 | 53.833 | -7.7 | 108 | 0.00 |
| 43 | T | Isopropyl Acetate | 50.000 | 52.442 | -4.9 | 105 | 0.00 |
| 44 | TM | Trichloroethene | 50.000 | 55.842 | -11.7 | 110 | 0.00 |
| 45 | C | 1,2-Dichloropropane | 50.000 | 54.626 | -9.3# | 109 | 0.00 |
| 46 | T | Dibromomethane | 50.000 | 56.697 | -13.4 | 113 | 0.00 |
| 47 | T | Bromodichloromethane | 50.000 | 55.440 | -10.9 | 110 | 0.00 |
| 48 | T | Methyl methacrylate | 50.000 | 51.898 | -3.8 | 103 | 0.00 |

Sample Results: **VN086940.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061125\
Data File : VN086940.D
Acq On : 11 Jun 2025 11:32
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Jun 12 01:28:53 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 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 | 1128.409 | -12.8 | 103 | 0.00 |
| 50 | S | Toluene-d8 | 50.000 | 50.342 | -0.7 | 130 | 0.00 |
| 51 | T | 4-Methyl-2-Pentanone | 250.000 | 271.529 | -8.6 | 104 | 0.00 |
| 52 | CM | Toluene | 50.000 | 55.435 | -10.9# | 111 | 0.00 |
| 53 | T | t-1,3-Dichloropropene | 50.000 | 56.714 | -13.4 | 110 | 0.00 |
| 54 | T | cis-1,3-Dichloropropene | 50.000 | 57.518 | -15.0 | 113 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 50.000 | 56.454 | -12.9 | 112 | 0.00 |
| 56 | T | Ethyl methacrylate | 50.000 | 59.778 | -19.6 | 110 | 0.00 |
| 57 | T | 1,3-Dichloropropane | 50.000 | 55.247 | -10.5 | 110 | 0.00 |
| 58 | T | 2-Chloroethyl Vinyl ether | 250.000 | 288.579 | -15.4 | 128 | 0.00 |
| 59 | T | 2-Hexanone | 250.000 | 282.011 | -12.8 | 101 | 0.00 |
| 60 | T | Dibromochloromethane | 50.000 | 58.520 | -17.0 | 115 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 50.000 | 55.351 | -10.7 | 111 | 0.00 |
| 62 | S | 4-Bromofluorobenzene | 50.000 | 50.489 | -1.0 | 128 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 50.000 | 50.000 | 0.0 | 94 | 0.00 |
| 64 | T | Tetrachloroethene | 50.000 | 53.190 | -6.4 | 108 | 0.00 |
| 65 | PM | Chlorobenzene | 50.000 | 55.424 | -10.8 | 112 | 0.00 |
| 66 | T | 1,1,1,2-Tetrachloroethane | 50.000 | 56.463 | -12.9 | 111 | 0.00 |
| 67 | C | Ethyl Benzene | 50.000 | 54.206 | -8.4# | 108 | 0.00 |
| 68 | T | m/p-Xylenes | 100.000 | 110.334 | -10.3 | 107 | 0.00 |
| 69 | T | o-Xylene | 50.000 | 56.127 | -12.3 | 109 | 0.00 |
| 70 | T | Styrene | 50.000 | 56.996 | -14.0 | 110 | 0.00 |
| 71 | P | Bromoform | 50.000 | 60.747 | -21.5 | 113 | 0.00 |
| 72 | I | 1,4-Dichlorobenzene-d4 | 50.000 | 50.000 | 0.0 | 91 | 0.00 |
| 73 | T | Isopropylbenzene | 50.000 | 53.511 | -7.0 | 103 | 0.00 |
| 74 | T | N-amyl acetate | 50.000 | 53.765 | -7.5 | 98 | 0.00 |
| 75 | P | 1,1,2,2-Tetrachloroethane | 50.000 | 56.816 | -13.6 | 108 | 0.00 |
| 76 | T | 1,2,3-Trichloropropane | 50.000 | 49.771 | 0.5 | 92 | 0.00 |
| 77 | T | Bromobenzene | 50.000 | 57.512 | -15.0 | 110 | 0.00 |
| 78 | T | n-propylbenzene | 50.000 | 53.234 | -6.5 | 102 | 0.00 |
| 79 | T | 2-Chlorotoluene | 50.000 | 54.413 | -8.8 | 105 | 0.00 |
| 80 | T | 1,3,5-Trimethylbenzene | 50.000 | 53.628 | -7.3 | 101 | 0.00 |
| 81 | T | trans-1,4-Dichloro-2-butene | 50.000 | 59.701 | -19.4 | 118 | 0.00 |
| 82 | T | 4-Chlorotoluene | 50.000 | 54.598 | -9.2 | 105 | 0.00 |
| 83 | T | tert-Butylbenzene | 50.000 | 53.498 | -7.0 | 102 | 0.00 |
| 84 | T | 1,2,4-Trimethylbenzene | 50.000 | 54.048 | -8.1 | 102 | 0.00 |
| 85 | T | sec-Butylbenzene | 50.000 | 50.788 | -1.6 | 96 | 0.00 |
| 86 | T | p-Isopropyltoluene | 50.000 | 52.156 | -4.3 | 98 | 0.00 |
| 87 | T | 1,3-Dichlorobenzene | 50.000 | 56.062 | -12.1 | 108 | 0.00 |
| 88 | T | 1,4-Dichlorobenzene | 50.000 | 56.315 | -12.6 | 109 | 0.00 |
| 89 | T | n-Butylbenzene | 50.000 | 49.007 | 2.0 | 93 | 0.00 |
| 90 | T | Hexachloroethane | 50.000 | 52.738 | -5.5 | 100 | 0.00 |
| 91 | T | 1,2-Dichlorobenzene | 50.000 | 55.766 | -11.5 | 107 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 50.000 | 52.704 | -5.4 | 104 | 0.00 |
| 93 | T | 1,2,4-Trichlorobenzene | 50.000 | 52.161 | -4.3 | 99 | 0.00 |
| 94 | T | Hexachlorobutadiene | 50.000 | 44.682 | 10.6 | 84 | 0.00 |
| 95 | T | Naphthalene | 50.000 | 54.679 | -9.4 | 104 | 0.00 |

Sample Results: **VN086940.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061125\
Data File : VN086940.D
Acq On : 11 Jun 2025 11:32
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Jun 12 01:28:53 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 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 | 49.672 | 0.7 | 95 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 6

# QC SAMPLE DATA

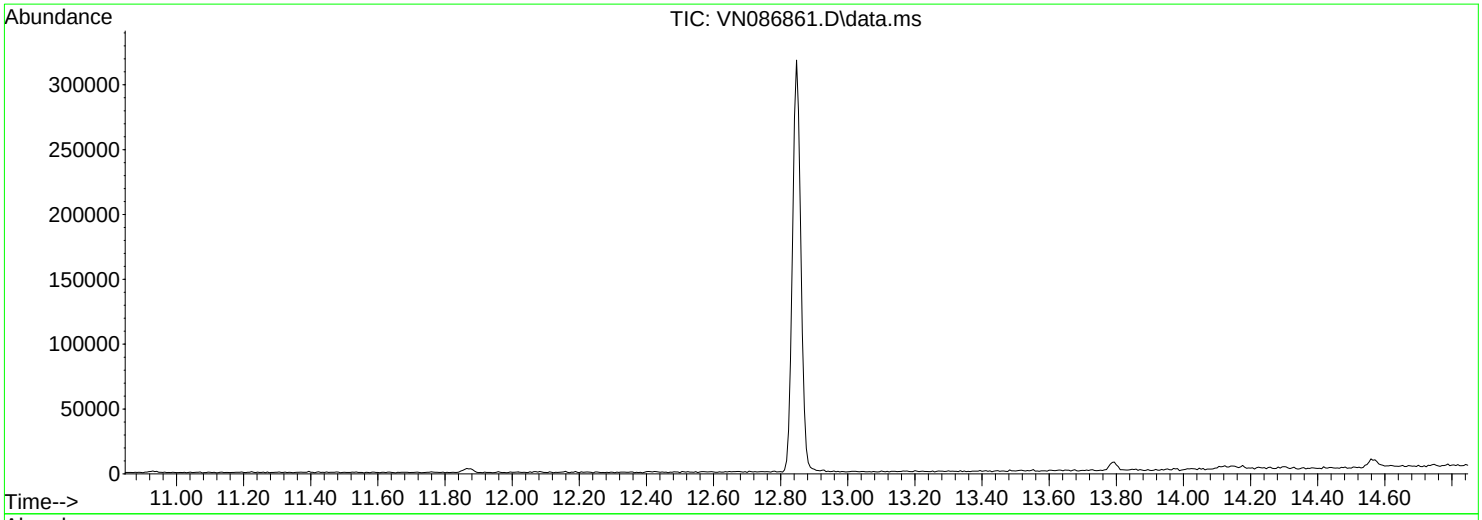
Sample Results: **VN086861.D**

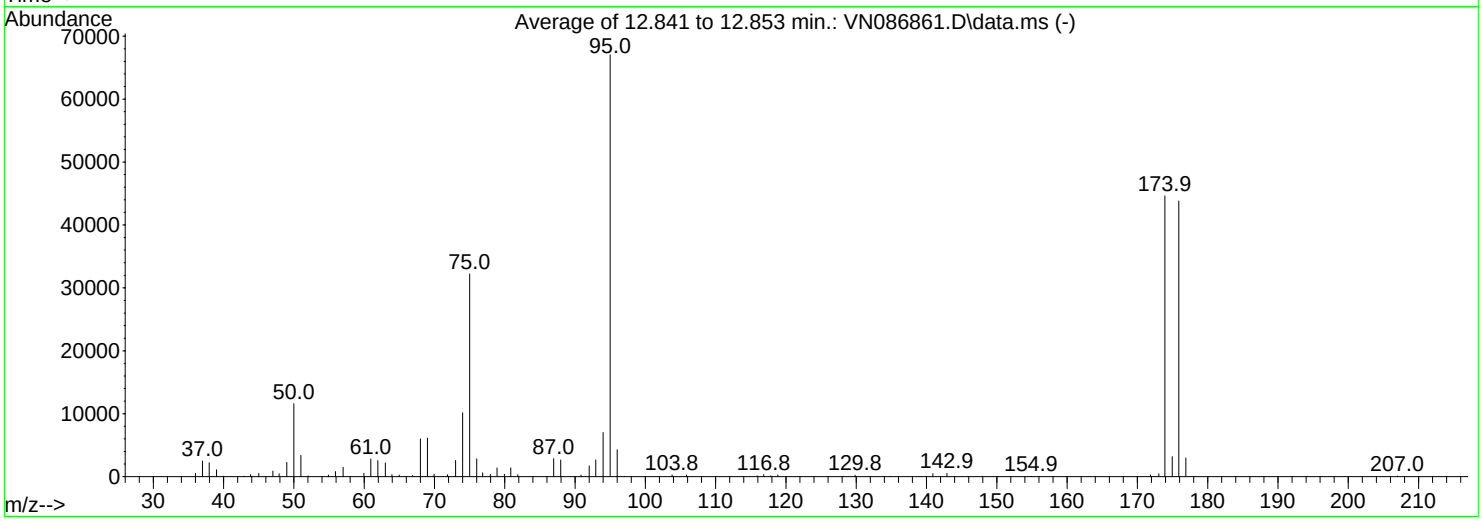
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN060625\
Data File : VN086861.D
Acq On : 06 Jun 2025 07:59
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Title : SW846 8260
Last Update : Sat Jun 07 02:12:50 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 | 17.3 | 11610 | PASS |
| 75 | 95 | 30 | 60 | 48.1 | 32235 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 67037 | PASS |
| 96 | 95 | 5 | 9 | 6.4 | 4284 | PASS |
| 173 | 174 | 0.00 | 2 | 1.0 | 453 | PASS |
| 174 | 95 | 50 | 100 | 66.6 | 44632 | PASS |
| 175 | 174 | 5 | 9 | 7.1 | 3184 | PASS |
| 176 | 174 | 95 | 101 | 98.1 | 43805 | PASS |
| 177 | 176 | 5 | 9 | 6.8 | 2979 | PASS |

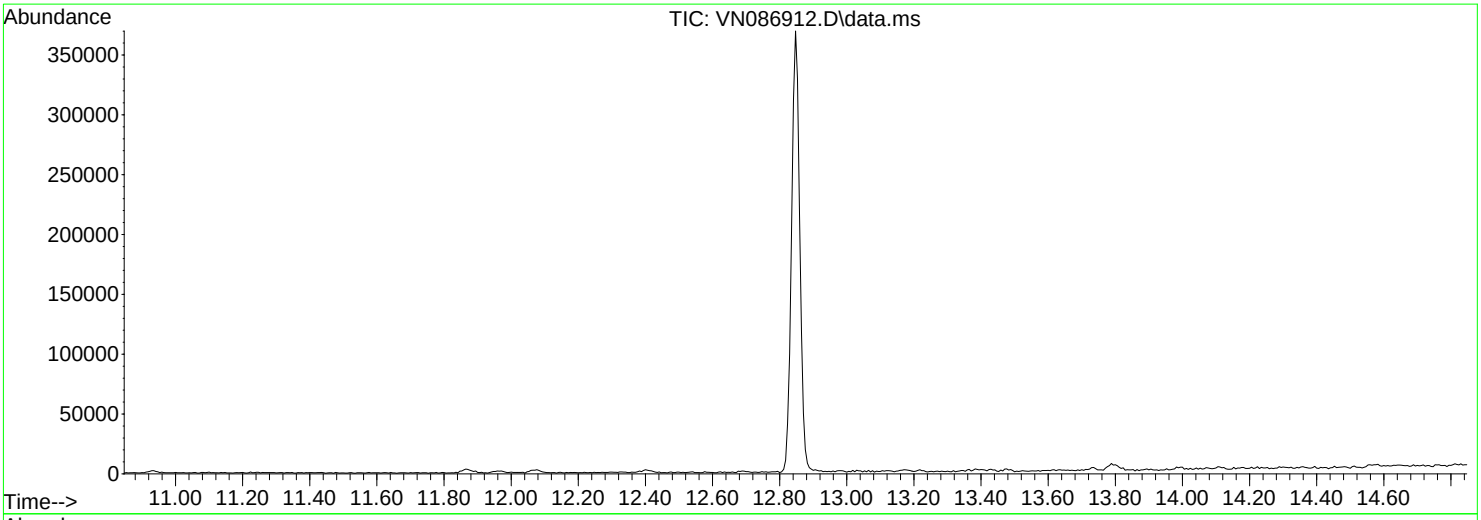
Sample Results: **VN086912.D**

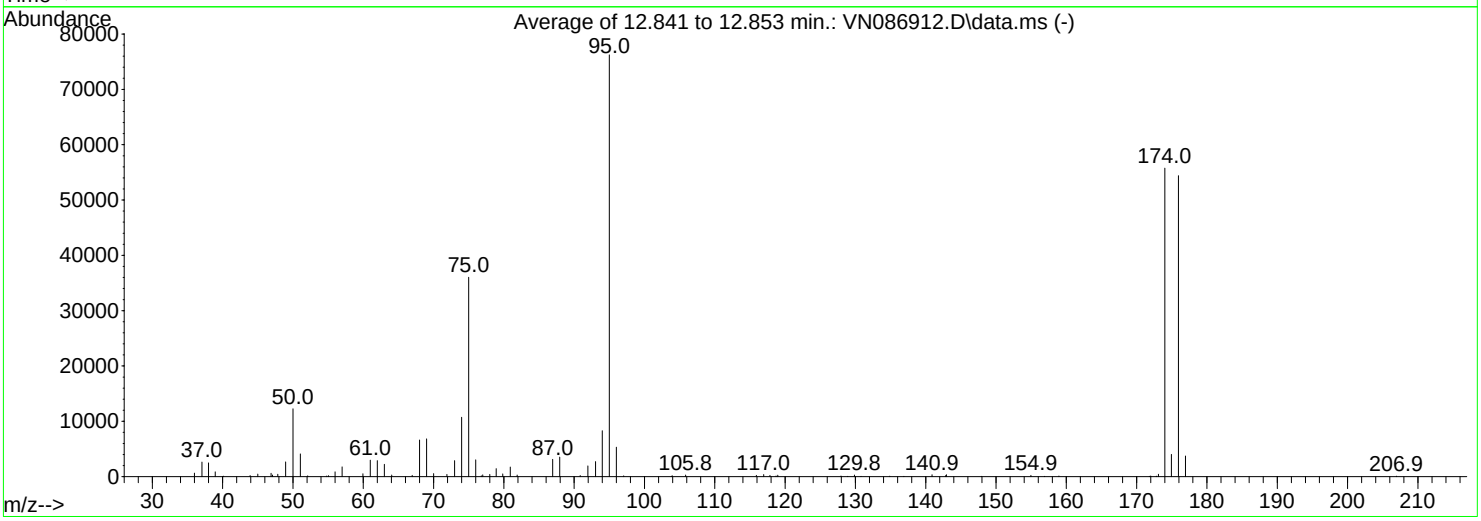
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061025\
Data File : VN086912.D
Acq On : 10 Jun 2025 08:39
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Title : SW846 8260
Last Update : Sat Jun 07 02:12:50 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 | 16.1 | 12262 | PASS |
| 75 | 95 | 30 | 60 | 47.3 | 36032 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 76240 | PASS |
| 96 | 95 | 5 | 9 | 7.0 | 5316 | PASS |
| 173 | 174 | 0.00 | 2 | 0.8 | 431 | PASS |
| 174 | 95 | 50 | 100 | 73.1 | 55768 | PASS |
| 175 | 174 | 5 | 9 | 7.2 | 4025 | PASS |
| 176 | 174 | 95 | 101 | 97.5 | 54389 | PASS |
| 177 | 176 | 5 | 9 | 6.9 | 3729 | PASS |

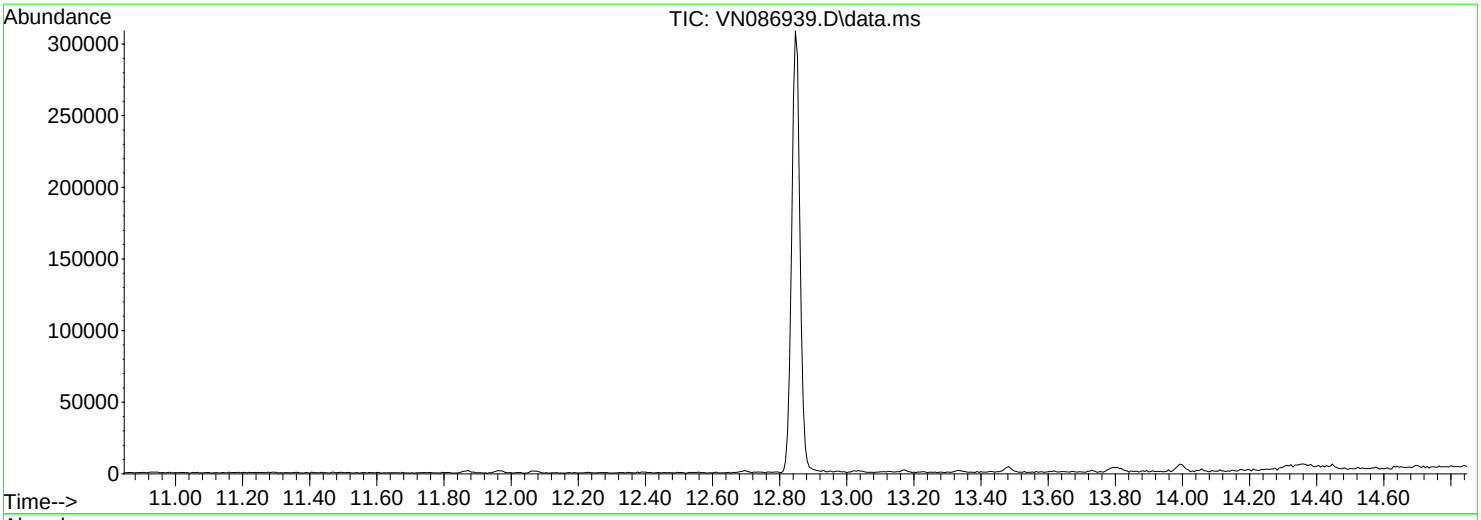
Sample Results: **VN086939.D**

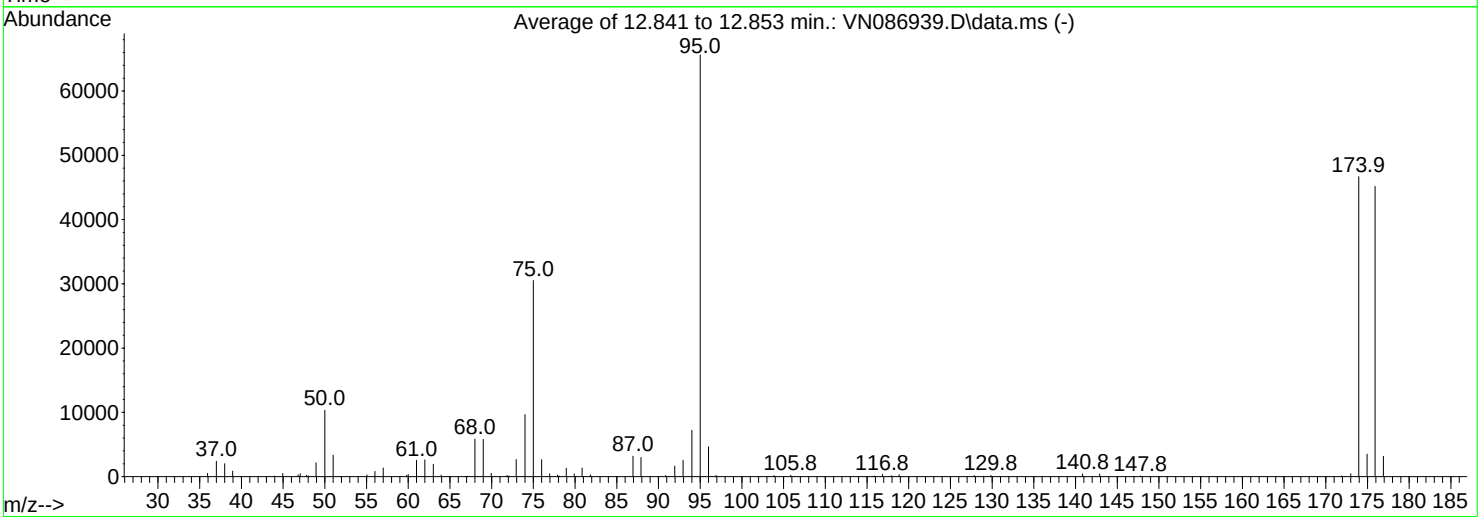
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061125\
Data File : VN086939.D
Acq On : 11 Jun 2025 10:22
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Title : SW846 8260
Last Update : Sat Jun 07 02:12:50 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 | 15.7 | 10335 | PASS |
| 75 | 95 | 30 | 60 | 46.5 | 30525 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 65627 | PASS |
| 96 | 95 | 5 | 9 | 7.1 | 4656 | PASS |
| 173 | 174 | 0.00 | 2 | 1.0 | 446 | PASS |
| 174 | 95 | 50 | 100 | 71.1 | 46675 | PASS |
| 175 | 174 | 5 | 9 | 7.5 | 3520 | PASS |
| 176 | 174 | 95 | 101 | 96.8 | 45165 | PASS |
| 177 | 176 | 5 | 9 | 7.0 | 3156 | PASS |

Raw Data: **VN086915.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | |
| Project: | Former Schlumberger STC PTC Site D3868221 | Date Received: | |
| Client Sample ID: | VN0610WBL01 | SDG No.: | Q2250 |
| Lab Sample ID: | VN0610WBL01 | Matrix: | Water |
| Analytical Method: | 8260D | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group3 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN086915.D | 1 | | 06/10/25 10:09 | VN061025 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-01-4 | Vinyl Chloride | 0.26 | U | 0.26 | 1.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 0.23 | U | 0.23 | 1.00 | ug/L |
| 75-34-3 | 1,1-Dichloroethane | 0.23 | U | 0.23 | 1.00 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 0.19 | U | 0.19 | 1.00 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 0.20 | U | 0.20 | 1.00 | ug/L |
| 71-43-2 | Benzene | 0.15 | U | 0.15 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 0.22 | U | 0.22 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 0.090 | U | 0.090 | 1.00 | ug/L |
| 79-00-5 | 1,1,2-Trichloroethane | 0.21 | U | 0.21 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 0.23 | U | 0.23 | 1.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 46.7 | | 70 (74) - 130 (125) | 93% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 49.0 | | 70 (75) - 130 (124) | 98% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 51.5 | | 70 (86) - 130 (113) | 103% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 49.0 | | 70 (77) - 130 (121) | 98% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 241000 | 8.23 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 441000 | 9.106 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 386000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 183000 | 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\VN061025\
Data File : VN086915.D
Acq On : 10 Jun 2025 10:09
Operator : JC\MD
Sample : VN0610WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBL01

Quant Time: Jun 11 01:48:33 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

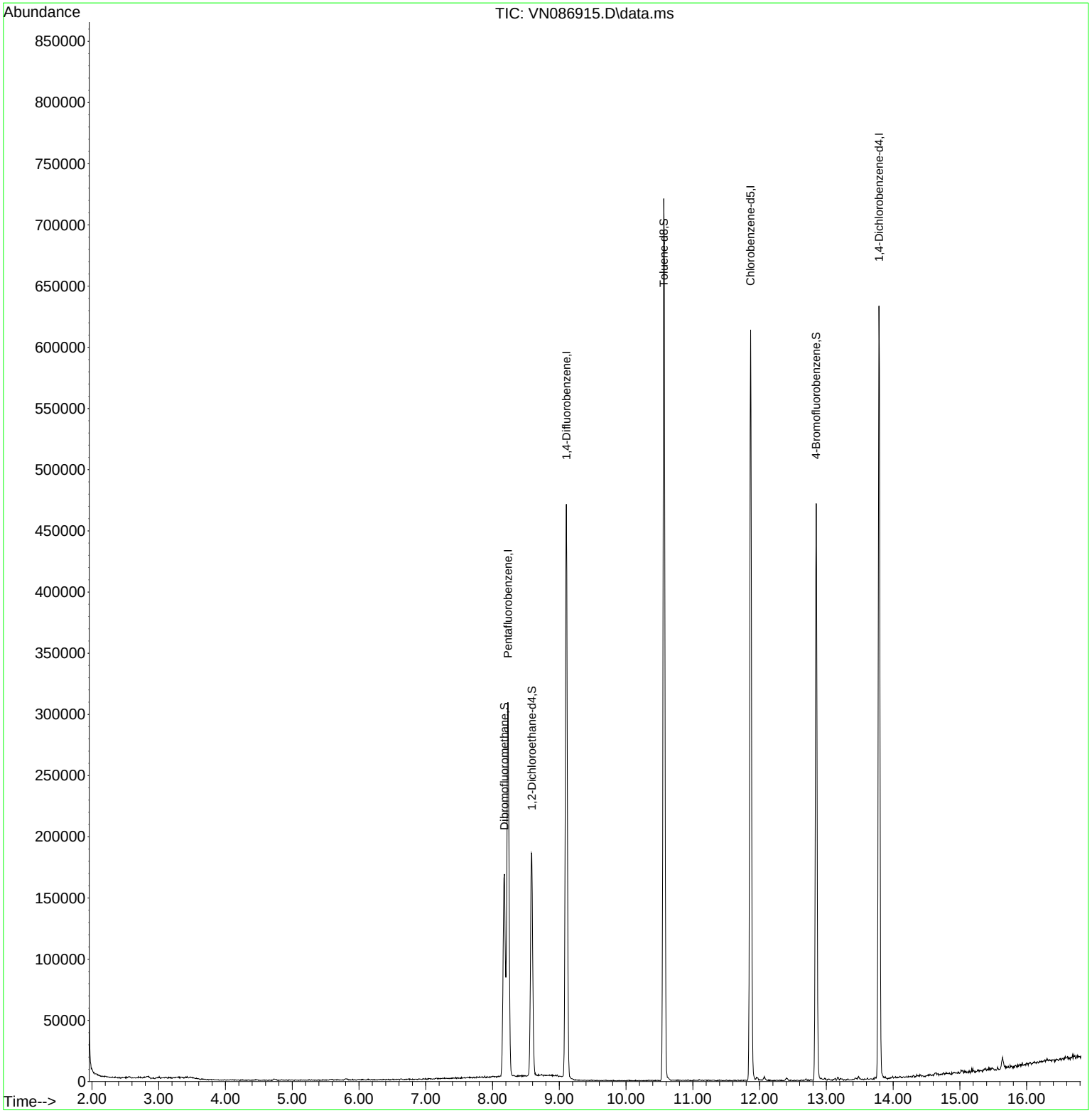
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.230 | 168 | 241251 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.106 | 114 | 440901 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 386425 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 183380 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.589 | 65 | 150863 | 46.706 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 93.420% | | | |
| 35) Dibromofluoromethane | 8.177 | 113 | 127940 | 48.965 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 97.940% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 532983 | 51.527 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 103.060% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 188114 | 48.950 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 97.900% | | | |
| Target Compounds | | | | | | Qvalue |

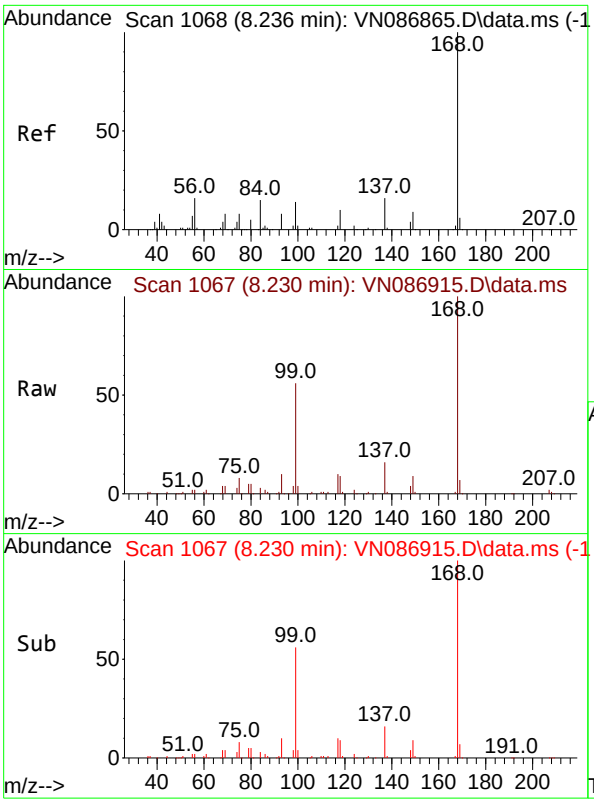
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061025\
Data File : VN086915.D
Acq On : 10 Jun 2025 10:09
Operator : JC\MD
Sample : VN0610WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBL01

Quant Time: Jun 11 01:48:33 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration



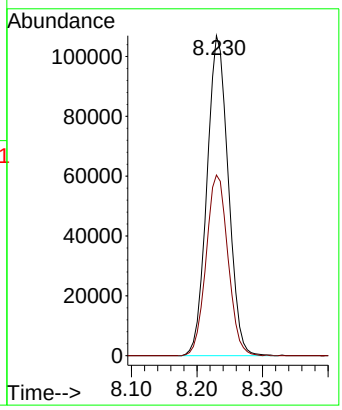


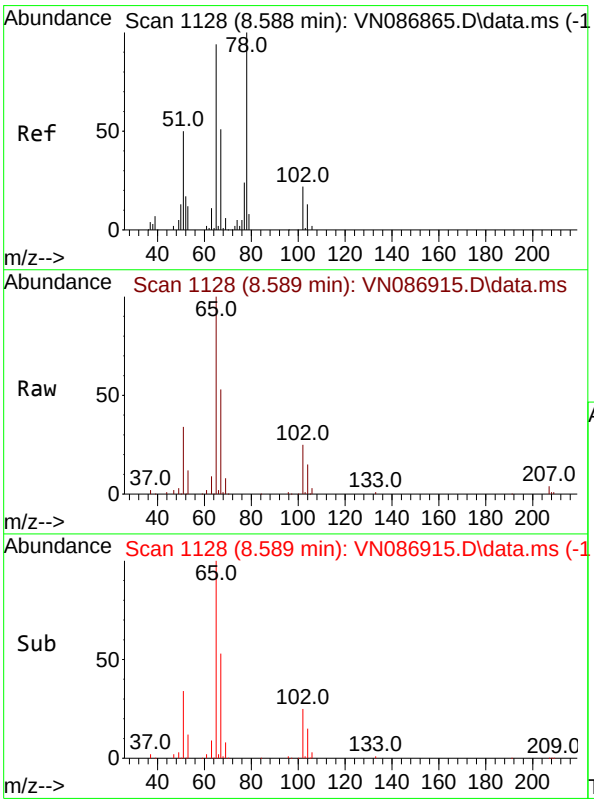

#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.230 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086915.D
Acq: 10 Jun 2025 10:09

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBL01

Tgt Ion:168 Resp: 241251

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 56.4 | 49.1 | 73.7 |

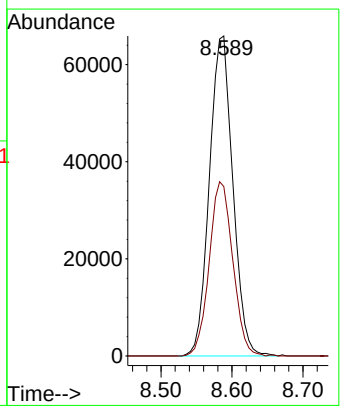


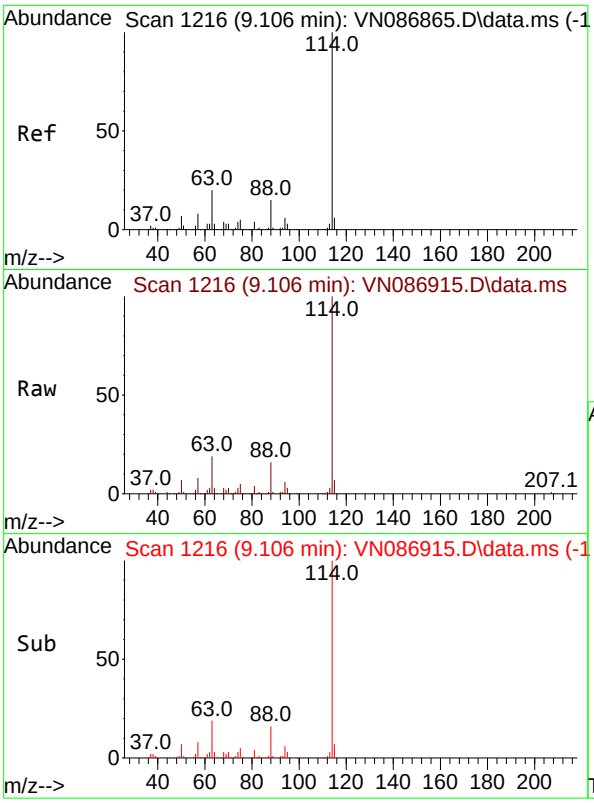




#33
1,2-Dichloroethane-d4
Concen: 46.706 ug/l
RT: 8.589 min Scan# 1128
Delta R.T. 0.000 min
Lab File: VN086915.D
Acq: 10 Jun 2025 10:09

Tgt Ion: 65 Resp: 150863

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 54.8 | 0.0 | 105.6 |



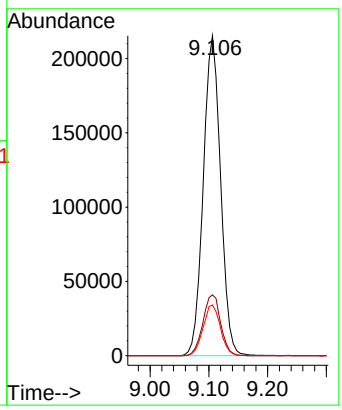


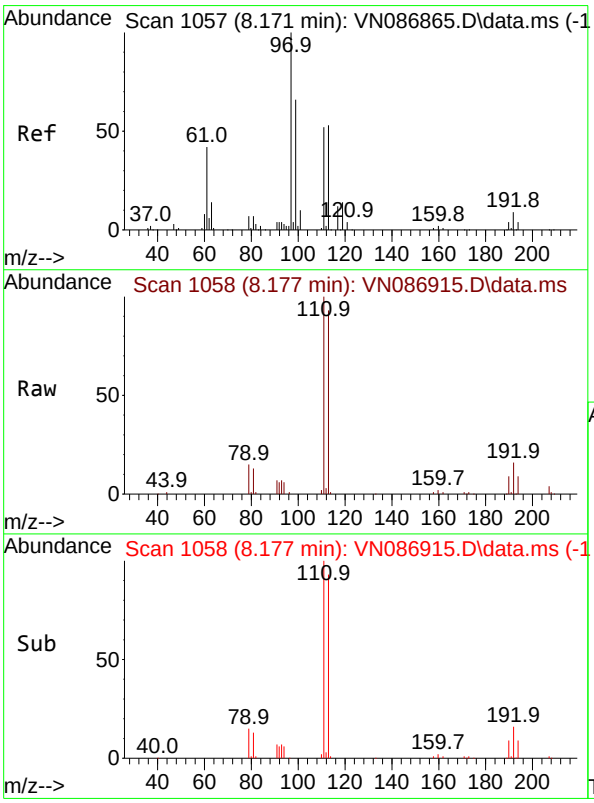

#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.106 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086915.D
Acq: 10 Jun 2025 10:09

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBL01

Tgt Ion:114 Resp: 440901

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 19.0 | 0.0 | 39.6 |
| 88 | 15.9 | 0.0 | 30.2 |

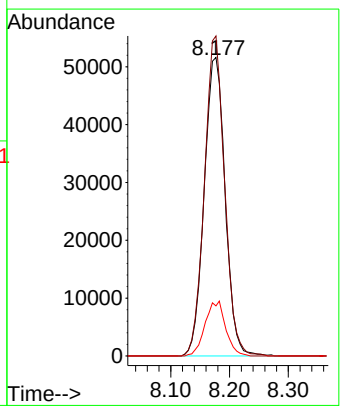


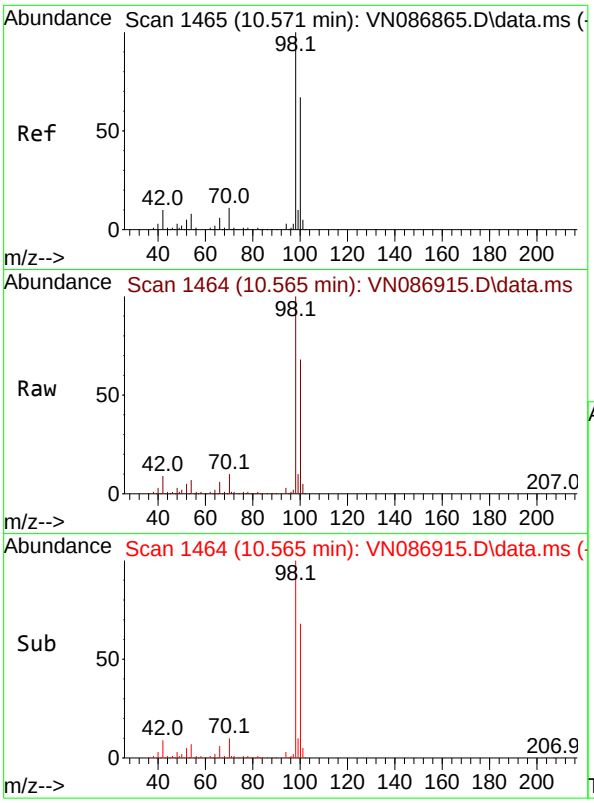




#35
Dibromofluoromethane
Concen: 48.965 ug/l
RT: 8.177 min Scan# 1058
Delta R.T. 0.006 min
Lab File: VN086915.D
Acq: 10 Jun 2025 10:09

Tgt Ion:113 Resp: 127940

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 103.3 | 84.2 | 126.2 |
| 192 | 18.1 | 14.2 | 21.4 |



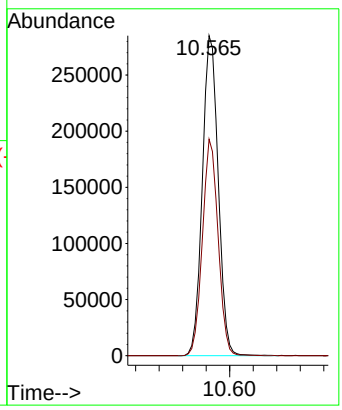


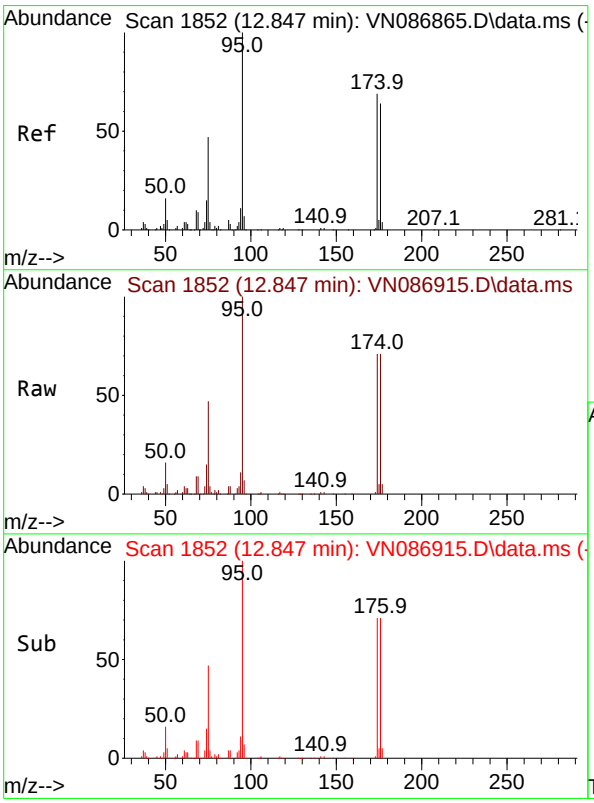

#50
Toluene-d8
Concen: 51.527 ug/l
RT: 10.565 min Scan# 14
Delta R.T. -0.006 min
Lab File: VN086915.D
Acq: 10 Jun 2025 10:09

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBL01

Tgt Ion: 98 Resp: 532983

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 66.7 | 53.4 | 80.0 |

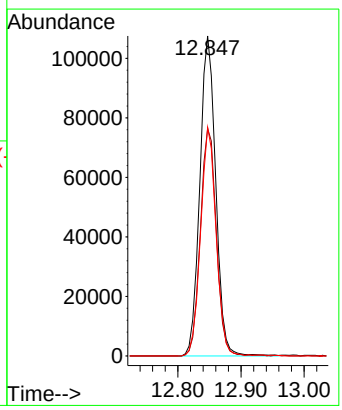


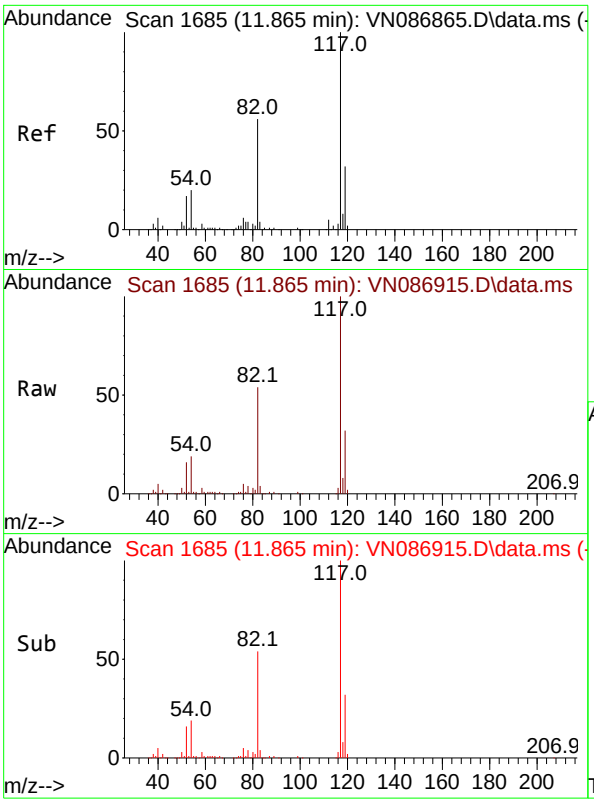




#62
4-Bromofluorobenzene
Concen: 48.950 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN086915.D
Acq: 10 Jun 2025 10:09

Tgt Ion: 95 Resp: 188114

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 71.2 | 0.0 | 141.8 |
| 176 | 69.4 | 0.0 | 132.6 |



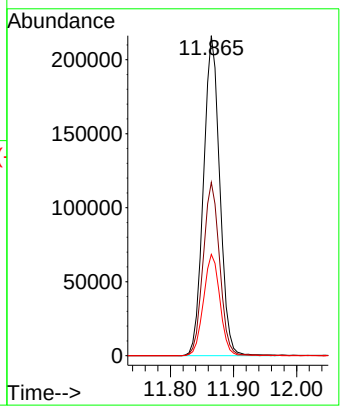


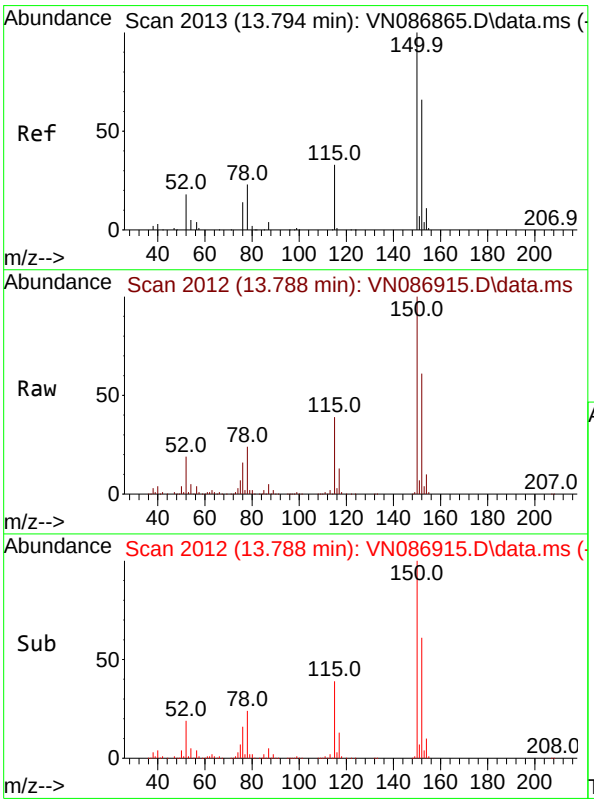

#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086915.D
Acq: 10 Jun 2025 10:09

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBL01

Tgt Ion:117 Resp: 386425

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 54.2 | 44.6 | 67.0 |
| 119 | 31.7 | 25.5 | 38.3 |

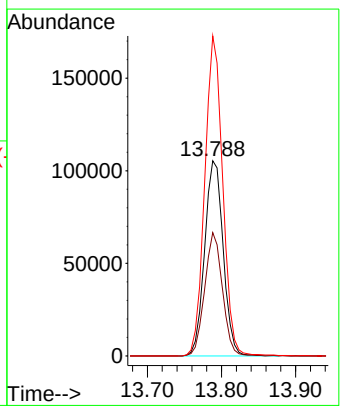



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.006 min
Lab File: VN086915.D
Acq: 10 Jun 2025 10:09

Tgt Ion:152 Resp: 183380

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 60.4 | 30.1 | 90.5 |
| 150 | 158.5 | 0.0 | 345.0 |



Raw Data: **VN086942.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | |
| Project: | Former Schlumberger STC PTC Site D3868221 | Date Received: | |
| Client Sample ID: | VN0611WBL01 | SDG No.: | Q2250 |
| Lab Sample ID: | VN0611WBL01 | Matrix: | Water |
| Analytical Method: | 8260D | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group3 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN086942.D | 1 | | 06/11/25 12:28 | VN061125 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-01-4 | Vinyl Chloride | 0.26 | U | 0.26 | 1.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 0.23 | U | 0.23 | 1.00 | ug/L |
| 75-34-3 | 1,1-Dichloroethane | 0.23 | U | 0.23 | 1.00 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 0.19 | U | 0.19 | 1.00 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 0.20 | U | 0.20 | 1.00 | ug/L |
| 71-43-2 | Benzene | 0.15 | U | 0.15 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 0.22 | U | 0.22 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 0.090 | U | 0.090 | 1.00 | ug/L |
| 79-00-5 | 1,1,2-Trichloroethane | 0.21 | U | 0.21 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 0.23 | U | 0.23 | 1.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 48.3 | | 70 (74) - 130 (125) | 97% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 49.3 | | 70 (75) - 130 (124) | 99% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 51.7 | | 70 (86) - 130 (113) | 103% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 49.4 | | 70 (77) - 130 (121) | 99% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 328000 | 8.23 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 619000 | 9.106 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 543000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 257000 | 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\VN061125\
Data File : VN086942.D
Acq On : 11 Jun 2025 12:28
Operator : JC\MD
Sample : VN0611WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBL01

Quant Time: Jun 12 01:30:13 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.230 | 168 | 328120 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.106 | 114 | 618651 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 543433 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 257257 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.583 | 65 | 212062 | 48.271 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 96.540% | | | |
| 35) Dibromofluoromethane | 8.177 | 113 | 180701 | 49.287 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 98.580% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 749967 | 51.673 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 103.340% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 266545 | 49.431 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 98.860% | | | |

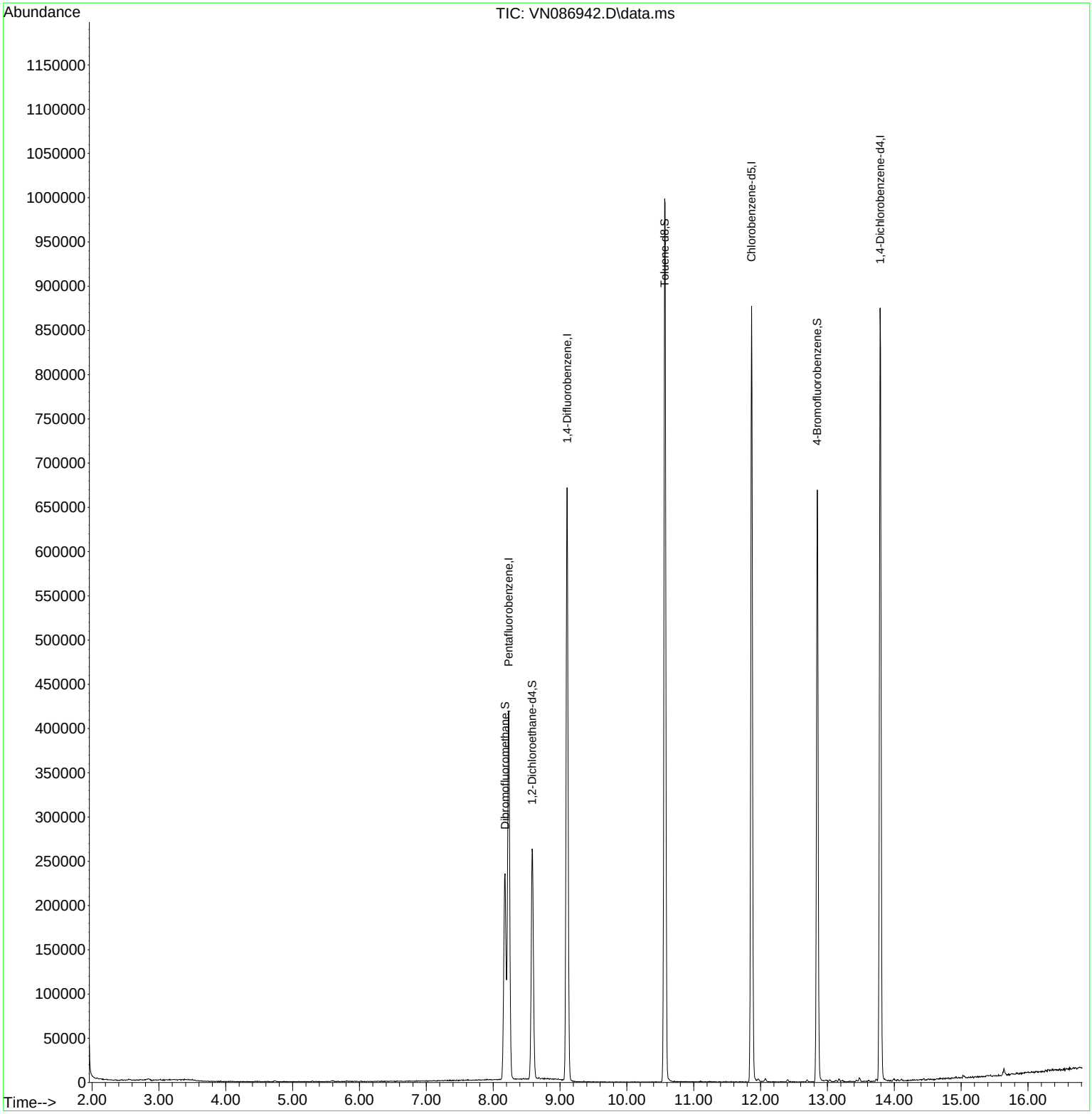
Target Compounds Qvalue

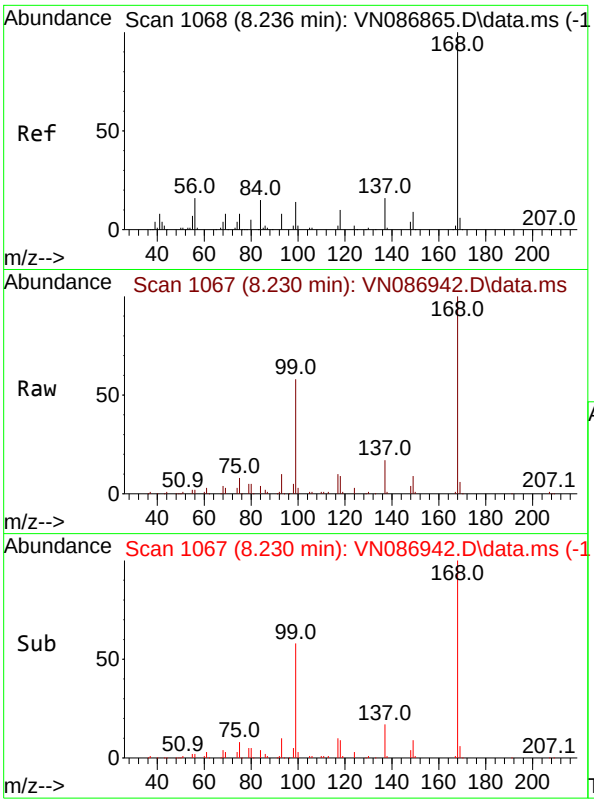
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061125\
Data File : VN086942.D
Acq On : 11 Jun 2025 12:28
Operator : JC\MD
Sample : VN0611WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBL01

Quant Time: Jun 12 01:30:13 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration



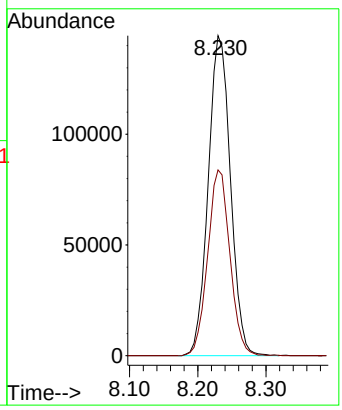


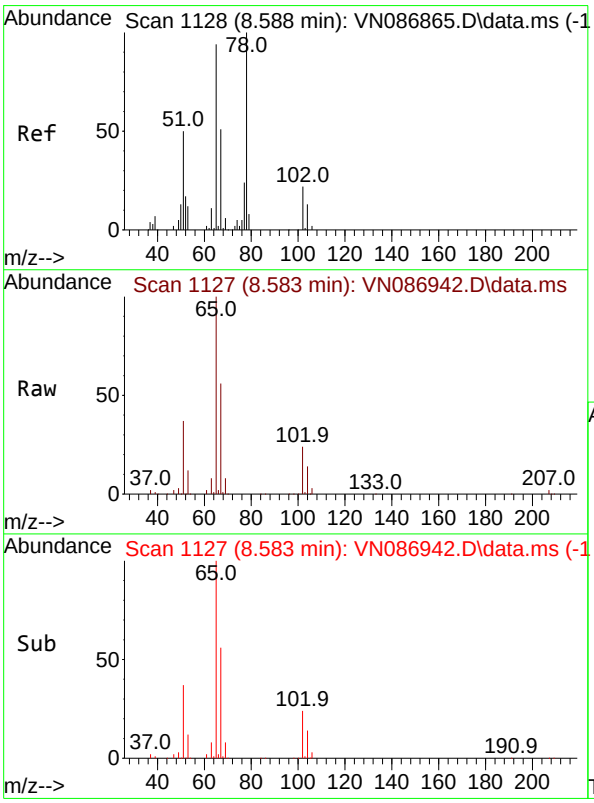

#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.230 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086942.D
Acq: 11 Jun 2025 12:28

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBL01

Tgt Ion:168 Resp: 328120

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 58.0 | 49.1 | 73.7 |

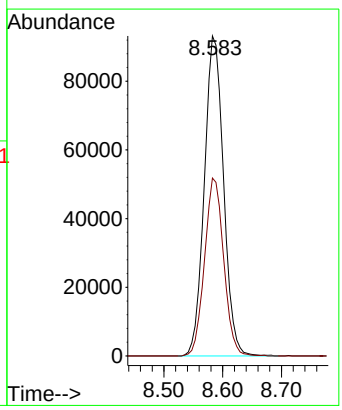


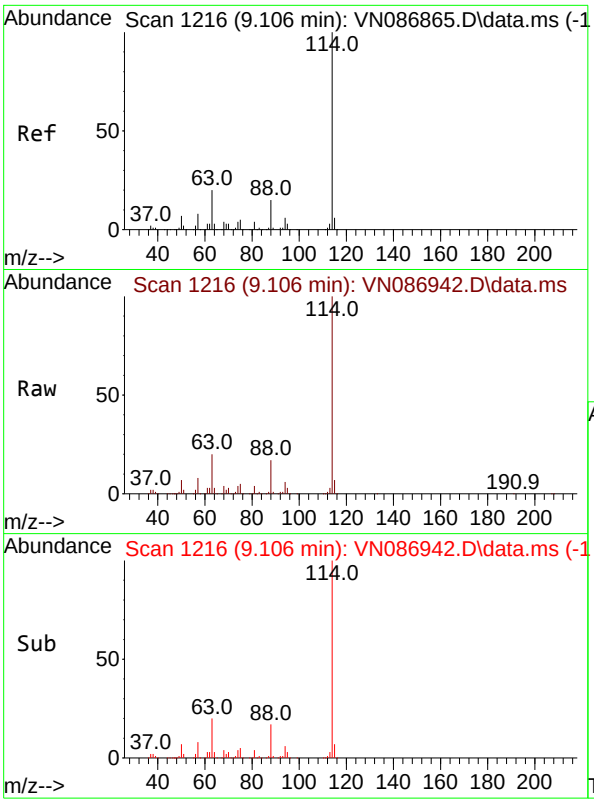




#33
1,2-Dichloroethane-d4
Concen: 48.271 ug/l
RT: 8.583 min Scan# 1127
Delta R.T. -0.006 min
Lab File: VN086942.D
Acq: 11 Jun 2025 12:28

Tgt Ion: 65 Resp: 212062

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 55.4 | 0.0 | 105.6 |



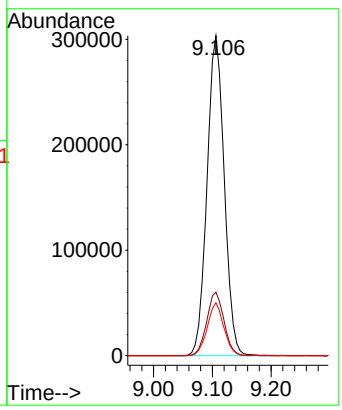


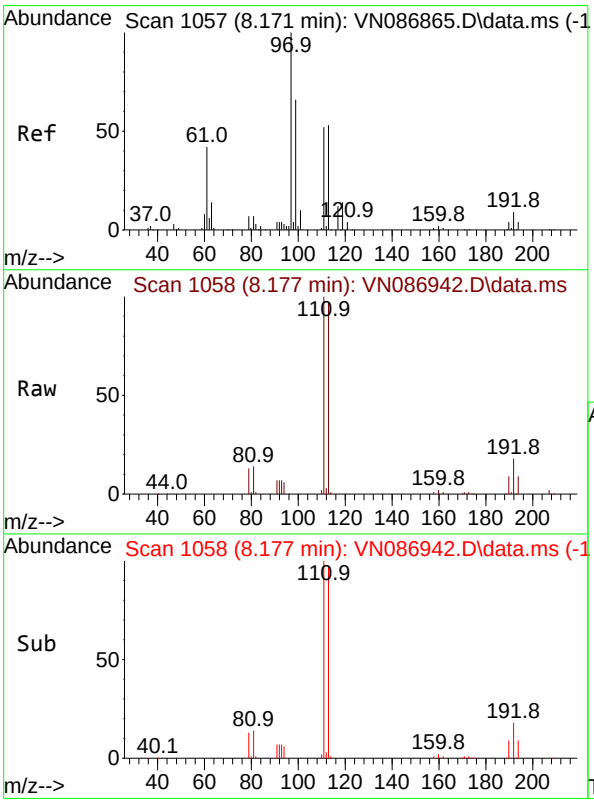

#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.106 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086942.D
Acq: 11 Jun 2025 12:28

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBL01

Tgt Ion:114 Resp: 618651

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 19.9 | 0.0 | 39.6 |
| 88 | 16.5 | 0.0 | 30.2 |

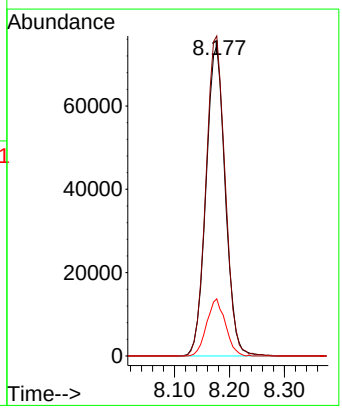


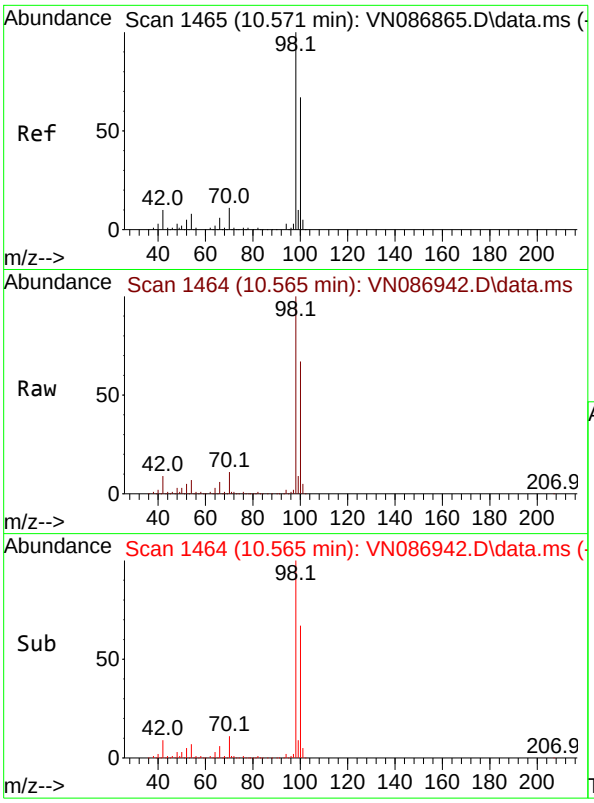




#35
Dibromofluoromethane
Concen: 49.287 ug/l
RT: 8.177 min Scan# 1058
Delta R.T. 0.006 min
Lab File: VN086942.D
Acq: 11 Jun 2025 12:28

Tgt Ion:113 Resp: 180701

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 103.1 | 84.2 | 126.2 |
| 192 | 18.0 | 14.2 | 21.4 |



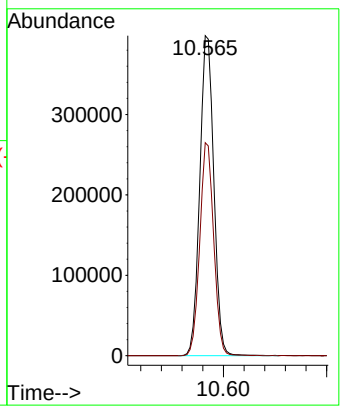


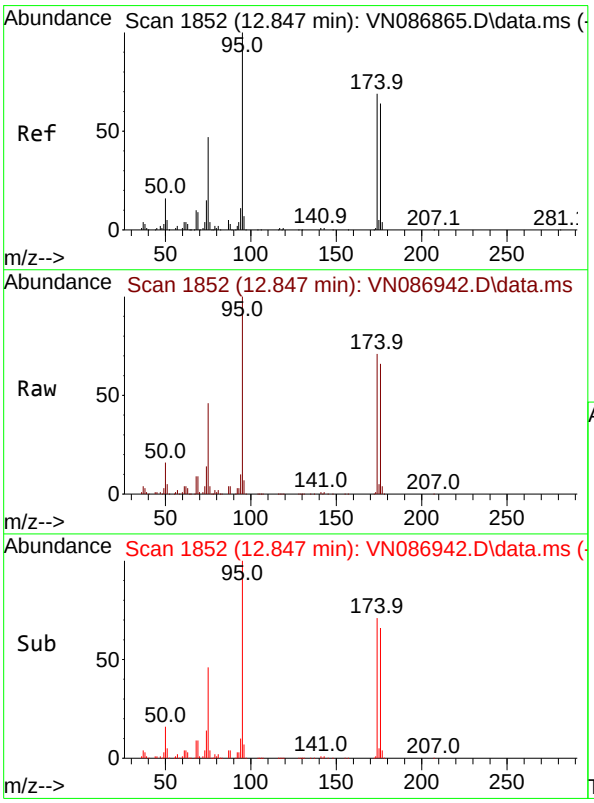

#50
Toluene-d8
Concen: 51.673 ug/l
RT: 10.565 min Scan# 14
Delta R.T. -0.006 min
Lab File: VN086942.D
Acq: 11 Jun 2025 12:28

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBL01

Tgt Ion: 98 Resp: 749967

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 66.0 | 53.4 | 80.0 |

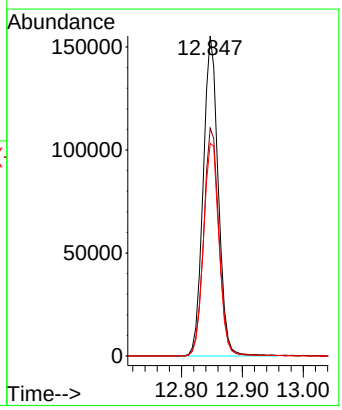


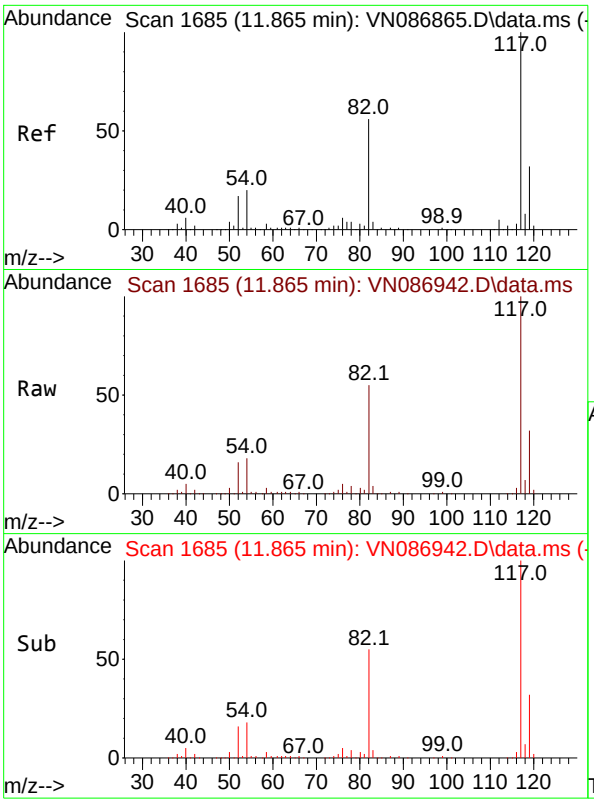




#62
4-Bromofluorobenzene
Concen: 49.431 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN086942.D
Acq: 11 Jun 2025 12:28

Tgt Ion: 95 Resp: 266545

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 72.3 | 0.0 | 141.8 |
| 176 | 68.8 | 0.0 | 132.6 |



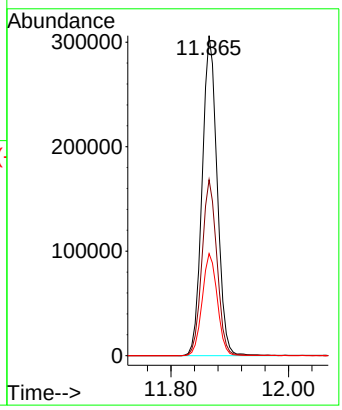


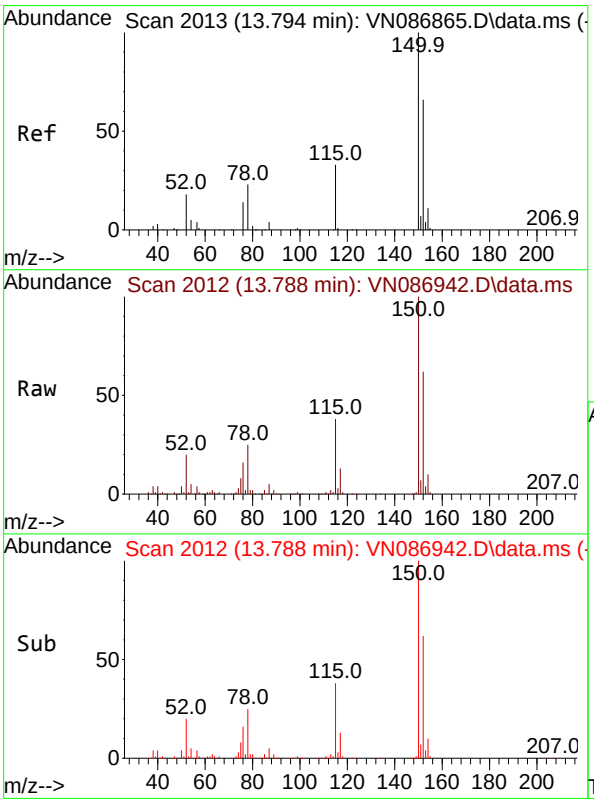

#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086942.D
Acq: 11 Jun 2025 12:28

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBL01

Tgt Ion:117 Resp: 543433

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 55.0 | 44.6 | 67.0 |
| 119 | 31.9 | 25.5 | 38.3 |

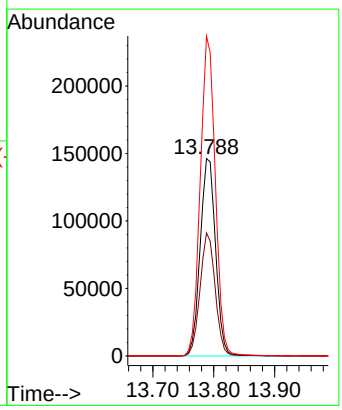



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.006 min
Lab File: VN086942.D
Acq: 11 Jun 2025 12:28

Tgt Ion:152 Resp: 257257

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 61.2 | 30.1 | 90.5 |
| 150 | 157.9 | 0.0 | 345.0 |



Raw Data: **VN086916.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | |
| Project: | Former Schlumberger STC PTC Site D3868221 | Date Received: | |
| Client Sample ID: | VN0610WBS01 | SDG No.: | Q2250 |
| Lab Sample ID: | VN0610WBS01 | Matrix: | Water |
| Analytical Method: | 8260D | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group3 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN086916.D | 1 | | 06/10/25 10:30 | VN061025 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-01-4 | Vinyl Chloride | 18.0 | | 0.26 | 1.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 18.7 | | 0.23 | 1.00 | ug/L |
| 75-34-3 | 1,1-Dichloroethane | 18.2 | | 0.23 | 1.00 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 18.7 | | 0.19 | 1.00 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 18.1 | | 0.20 | 1.00 | ug/L |
| 71-43-2 | Benzene | 18.5 | | 0.15 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 18.7 | | 0.22 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 19.3 | | 0.090 | 1.00 | ug/L |
| 79-00-5 | 1,1,2-Trichloroethane | 19.5 | | 0.21 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 17.9 | | 0.23 | 1.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 45.4 | | 70 (74) - 130 (125) | 91% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 49.5 | | 70 (75) - 130 (124) | 99% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 48.6 | | 70 (86) - 130 (113) | 97% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 48.3 | | 70 (77) - 130 (121) | 97% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 250000 | 8.23 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 443000 | 9.106 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 389000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 190000 | 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\VN061025\
Data File : VN086916.D
Acq On : 10 Jun 2025 10:30
Operator : JC\MD
Sample : VN0610WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 11 01:48:54 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.230 | 168 | 249843 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.106 | 114 | 443174 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 389297 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 189620 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.582 | 65 | 151805 | 45.381 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 90.760% | | | |
| 35) Dibromofluoromethane | 8.177 | 113 | 129937 | 49.474 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 98.940% | | | |
| 50) Toluene-d8 | 10.571 | 98 | 505508 | 48.620 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 97.240% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 186676 | 48.327 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 96.660% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.153 | 85 | 47416 | 19.034 | ug/l | 98 |
| 3) Chloromethane | 2.401 | 50 | 51246 | 15.931 | ug/l | 100 |
| 4) Vinyl Chloride | 2.553 | 62 | 59638 | 17.973 | ug/l | 98 |
| 5) Bromomethane | 3.000 | 94 | 36539 | 19.677 | ug/l | 96 |
| 6) Chloroethane | 3.159 | 64 | 39443 | 18.402 | ug/l | 96 |
| 7) Trichlorofluoromethane | 3.530 | 101 | 79526 | 18.343 | ug/l | 97 |
| 8) Diethyl Ether | 3.983 | 74 | 35508 | 18.798 | ug/l | 95 |
| 9) 1,1,2-Trichlorotrifluo... | 4.400 | 101 | 49596 | 18.208 | ug/l | 99 |
| 10) Methyl Iodide | 4.612 | 142 | 51915 | 14.703 | ug/l | 95 |
| 11) Tert butyl alcohol | 5.530 | 59 | 74605 | 82.194 | ug/l | 99 |
| 12) 1,1-Dichloroethene | 4.365 | 96 | 52125 | 18.744 | ug/l | 90 |
| 13) Acrolein | 4.200 | 56 | 22542 | 78.459 | ug/l | 98 |
| 14) Allyl chloride | 5.047 | 41 | 78157 | 16.947 | ug/l | 97 |
| 15) Acrylonitrile | 5.741 | 53 | 189727 | 89.429 | ug/l | 99 |
| 16) Acetone | 4.447 | 43 | 142458 | 80.306 | ug/l | 97 |
| 17) Carbon Disulfide | 4.736 | 76 | 131873 | 17.144 | ug/l | 100 |
| 18) Methyl Acetate | 5.047 | 43 | 88551 | 17.129 | ug/l | 97 |
| 19) Methyl tert-butyl Ether | 5.812 | 73 | 187833 | 18.655 | ug/l | 99 |
| 20) Methylene Chloride | 5.300 | 84 | 57671 | 17.365 | ug/l | 95 |
| 21) trans-1,2-Dichloroethene | 5.812 | 96 | 55486 | 17.934 | ug/l | 96 |
| 22) Diisopropyl ether | 6.688 | 45 | 176809 | 18.188 | ug/l | 96 |
| 23) Vinyl Acetate | 6.618 | 43 | 744861 | 90.687 | ug/l | 98 |
| 24) 1,1-Dichloroethane | 6.583 | 63 | 101669 | 18.173 | ug/l | 98 |
| 25) 2-Butanone | 7.494 | 43 | 242187 | 83.991 | ug/l | 95 |
| 26) 2,2-Dichloropropane | 7.500 | 77 | 89631 | 20.596 | ug/l | 100 |
| 27) cis-1,2-Dichloroethene | 7.494 | 96 | 69159 | 18.691 | ug/l | 99 |
| 28) Bromochloromethane | 7.824 | 49 | 45748 | 16.632 | ug/l | 93 |
| 29) Tetrahydrofuran | 7.847 | 42 | 160591 | 85.494 | ug/l | 97 |
| 30) Chloroform | 7.977 | 83 | 101594 | 18.184 | ug/l | 97 |
| 31) Cyclohexane | 8.265 | 56 | 89487 | 16.494 | ug/l | 98 |
| 32) 1,1,1-Trichloroethane | 8.177 | 97 | 85981 | 18.094 | ug/l | 98 |
| 36) 1,1-Dichloropropene | 8.382 | 75 | 74129 | 18.942 | ug/l | 100 |
| 37) Ethyl Acetate | 7.571 | 43 | 88740 | 17.812 | ug/l | 99 |
| 38) Carbon Tetrachloride | 8.371 | 117 | 72144 | 18.777 | ug/l | 97 |
| 39) Methylcyclohexane | 9.606 | 83 | 85476 | 15.942 | ug/l | 96 |
| 40) Benzene | 8.612 | 78 | 236213 | 18.458 | ug/l | 99 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061025\
Data File : VN086916.D
Acq On : 10 Jun 2025 10:30
Operator : JC\MD
Sample : VN0610WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 11 01:48:54 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.788 | 41 | 48124 | 17.200 | ug/l | | 93 |
| 42) 1,2-Dichloroethane | 8.677 | 62 | 72690 | 18.727 | ug/l | | 99 |
| 43) Isopropyl Acetate | 8.694 | 43 | 144037 | 18.014 | ug/l | | 97 |
| 44) Trichloroethene | 9.353 | 130 | 58449 | 19.262 | ug/l | | 97 |
| 45) 1,2-Dichloropropane | 9.624 | 63 | 58046 | 18.644 | ug/l | | 97 |
| 46) Dibromomethane | 9.712 | 93 | 39229 | 18.970 | ug/l | | 98 |
| 47) Bromodichloromethane | 9.888 | 83 | 80034 | 18.810 | ug/l | | 99 |
| 48) Methyl methacrylate | 9.682 | 41 | 64650 | 17.567 | ug/l | | 96 |
| 49) 1,4-Dioxane | 9.700 | 88 | 23656 | 353.325 | ug/l | # | 98 |
| 51) 4-Methyl-2-Pentanone | 10.447 | 43 | 440301 | 91.469 | ug/l | | 98 |
| 52) Toluene | 10.629 | 92 | 148340 | 18.967 | ug/l | | 97 |
| 53) t-1,3-Dichloropropene | 10.835 | 75 | 93038 | 19.555 | ug/l | | 98 |
| 54) cis-1,3-Dichloropropene | 10.312 | 75 | 98066 | 19.264 | ug/l | | 99 |
| 55) 1,1,2-Trichloroethane | 11.018 | 97 | 58629 | 19.483 | ug/l | | 99 |
| 56) Ethyl methacrylate | 10.882 | 69 | 93272 | 19.460 | ug/l | | 96 |
| 57) 1,3-Dichloropropane | 11.165 | 76 | 99132 | 18.990 | ug/l | | 99 |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63 | 251485 | 87.967 | ug/l | | 98 |
| 59) 2-Hexanone | 11.206 | 43 | 271013 | 87.405 | ug/l | | 91 |
| 60) Dibromochloromethane | 11.359 | 129 | 61081 | 19.481 | ug/l | | 99 |
| 61) 1,2-Dibromoethane | 11.470 | 107 | 58347 | 18.916 | ug/l | | 100 |
| 64) Tetrachloroethene | 11.106 | 164 | 44151 | 17.920 | ug/l | | 94 |
| 65) Chlorobenzene | 11.888 | 112 | 162051 | 18.874 | ug/l | | 98 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 52766 | 19.118 | ug/l | | 99 |
| 67) Ethyl Benzene | 11.965 | 91 | 270410 | 18.284 | ug/l | | 98 |
| 68) m/p-Xylenes | 12.070 | 106 | 213409 | 37.696 | ug/l | | 96 |
| 69) o-Xylene | 12.400 | 106 | 102597 | 18.922 | ug/l | | 98 |
| 70) Styrene | 12.412 | 104 | 176358 | 19.008 | ug/l | | 99 |
| 71) Bromoform | 12.576 | 173 | 41058 | 20.077 | ug/l | # | 98 |
| 73) Isopropylbenzene | 12.694 | 105 | 249411 | 18.055 | ug/l | | 100 |
| 74) N-amyl acetate | 12.529 | 43 | 98634m | 20.433 | ug/l | | |
| 75) 1,1,2,2-Tetrachloroethane | 12.941 | 83 | 90657 | 19.372 | ug/l | | 99 |
| 76) 1,2,3-Trichloropropane | 12.994 | 75 | 77098m | 17.105 | ug/l | | |
| 77) Bromobenzene | 12.976 | 156 | 61956 | 19.557 | ug/l | | 97 |
| 78) n-propylbenzene | 13.035 | 91 | 298896 | 17.805 | ug/l | | 100 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 183491 | 18.226 | ug/l | | 96 |
| 80) 1,3,5-Trimethylbenzene | 13.170 | 105 | 201924 | 17.705 | ug/l | | 97 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 39145 | 19.992 | ug/l | | 91 |
| 82) 4-Chlorotoluene | 13.217 | 91 | 188207 | 18.476 | ug/l | | 99 |
| 83) tert-Butylbenzene | 13.435 | 119 | 186449 | 17.859 | ug/l | | 97 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 206670 | 18.071 | ug/l | | 100 |
| 85) sec-Butylbenzene | 13.612 | 105 | 255364 | 16.843 | ug/l | | 99 |
| 86) p-Isopropyltoluene | 13.729 | 119 | 212141 | 16.927 | ug/l | | 99 |
| 87) 1,3-Dichlorobenzene | 13.729 | 146 | 117325 | 18.823 | ug/l | | 99 |
| 88) 1,4-Dichlorobenzene | 13.812 | 146 | 118648 | 18.671 | ug/l | | 99 |
| 89) n-Butylbenzene | 14.053 | 91 | 197259 | 16.250 | ug/l | | 99 |
| 90) Hexachloroethane | 14.329 | 117 | 36492 | 17.178 | ug/l | | 99 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 112799 | 18.837 | ug/l | | 100 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75 | 20803 | 18.587 | ug/l | | 99 |
| 93) 1,2,4-Trichlorobenzene | 15.388 | 180 | 64838 | 16.956 | ug/l | | 100 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 20732 | 14.552 | ug/l | | 98 |
| 95) Naphthalene | 15.635 | 128 | 257750 | 18.109 | ug/l | | 100 |
| 96) 1,2,3-Trichlorobenzene | 15.835 | 180 | 59536 | 15.670 | ug/l | | 99 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061025\
Data File : VN086916.D
Acq On : 10 Jun 2025 10:30
Operator : JC\MD
Sample : VN0610WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 11 01:48:54 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

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

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

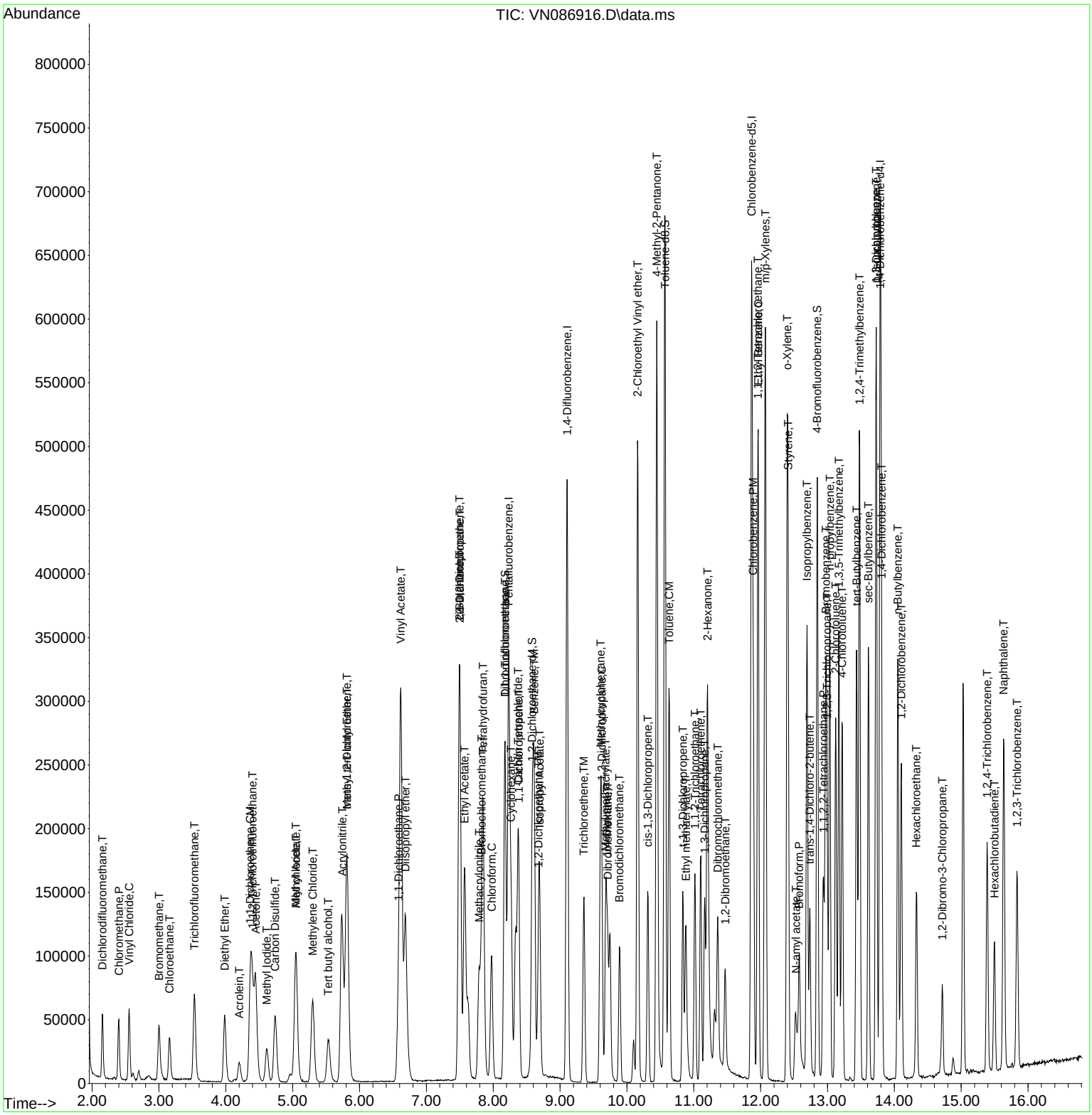
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061025\
Data File : VN086916.D
Acq On : 10 Jun 2025 10:30
Operator : JC\MD
Sample : VN0610WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

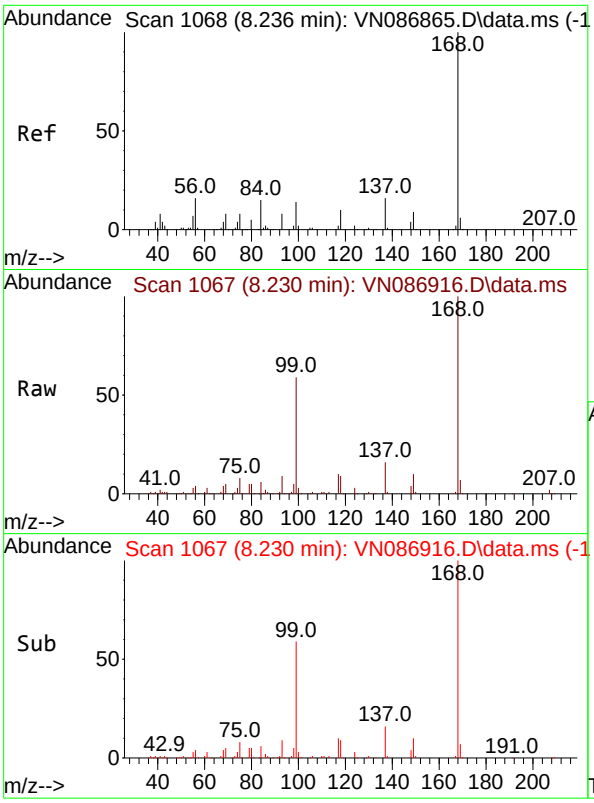
Quant Time: Jun 11 01:48:54 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

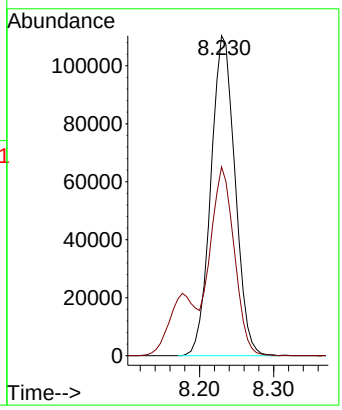





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.230 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:168 Resp: 24984

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 59.0 | 49.1 | 73.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations**
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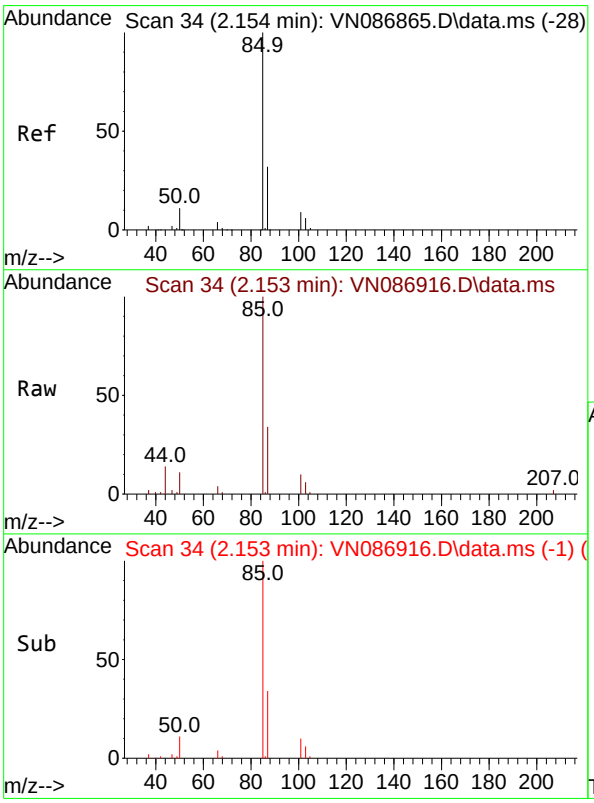
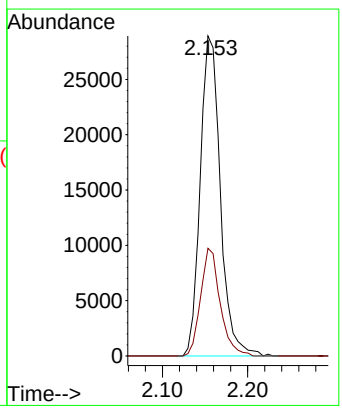
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

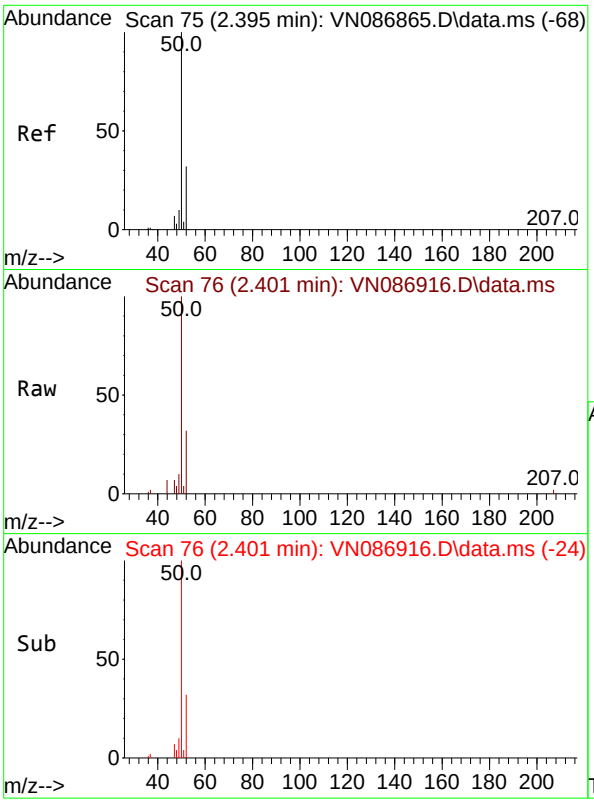



#2
Dichlorodifluoromethane
Concen: 19.034 ug/l
RT: 2.153 min Scan# 34
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 85 Resp: 47416

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 33.6 | 16.2 | 48.6 |

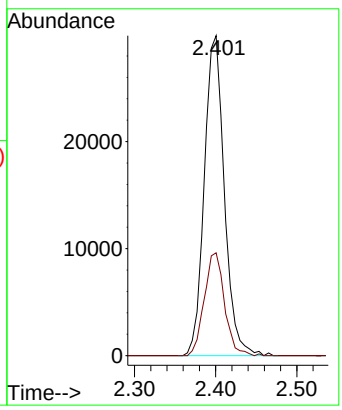





#3
Chloromethane
Concen: 15.931 ug/l
RT: 2.401 min Scan# 7
Delta R.T. 0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 50 Resp: 5124

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 32.1 | 25.7 | 38.5 |




**Instrument :**
MSVOA_N
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**Manual Integrations**
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Reviewed By :John Carlone 06/11/2025
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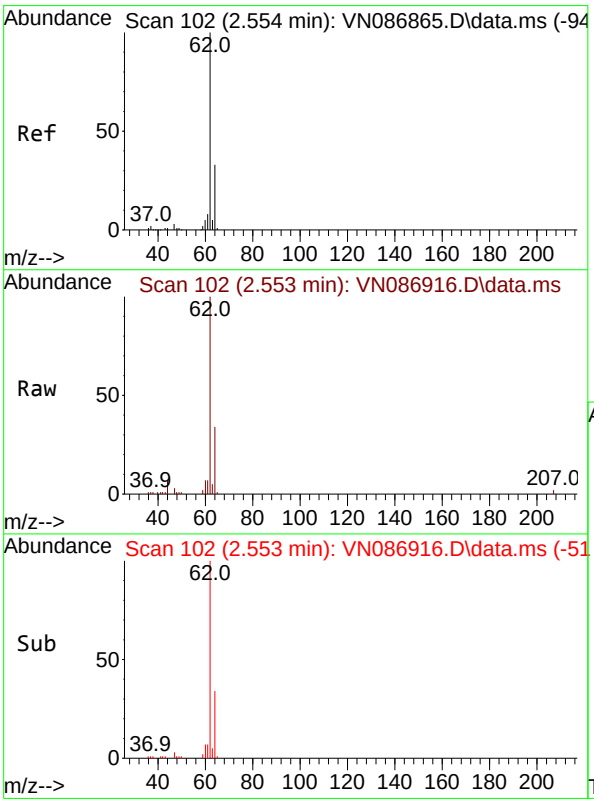
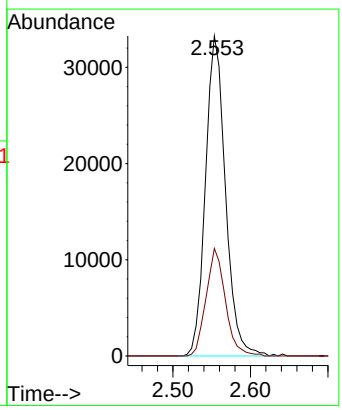
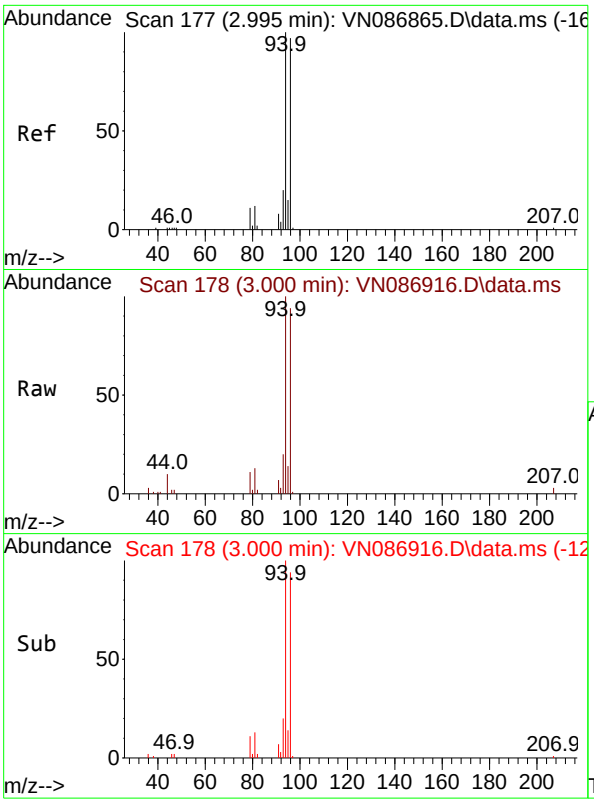



#4
Vinyl Chloride
Concen: 17.973 ug/l
RT: 2.553 min Scan# 102
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 62 Resp: 59638

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 33.6 | 26.0 | 39.0 |

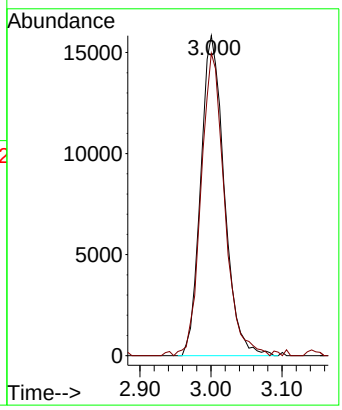





#5
Bromomethane
Concen: 19.677 ug/l
RT: 3.000 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 94 Resp: 3653

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 93.4 | 77.9 | 116.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations**
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Reviewed By :John Carlone 06/11/2025
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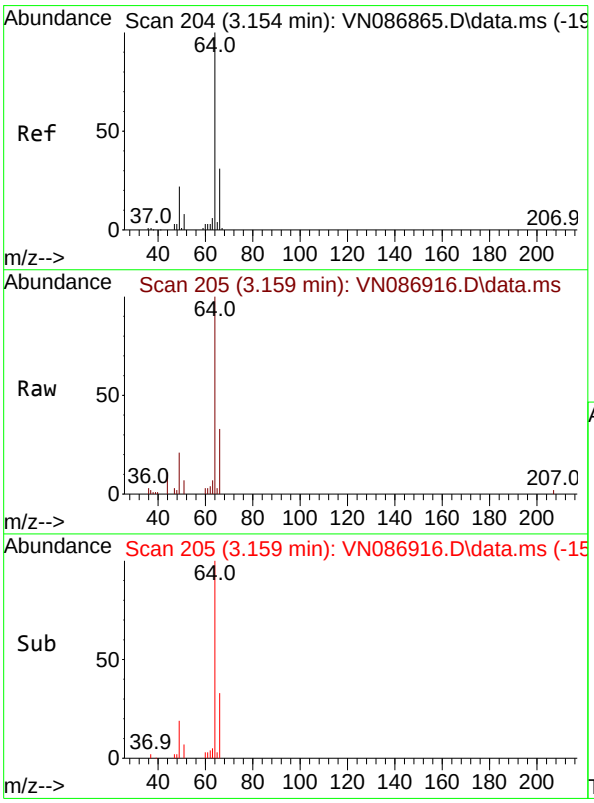
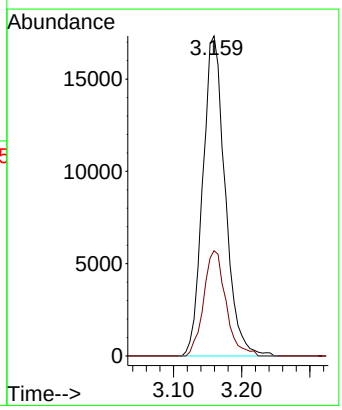
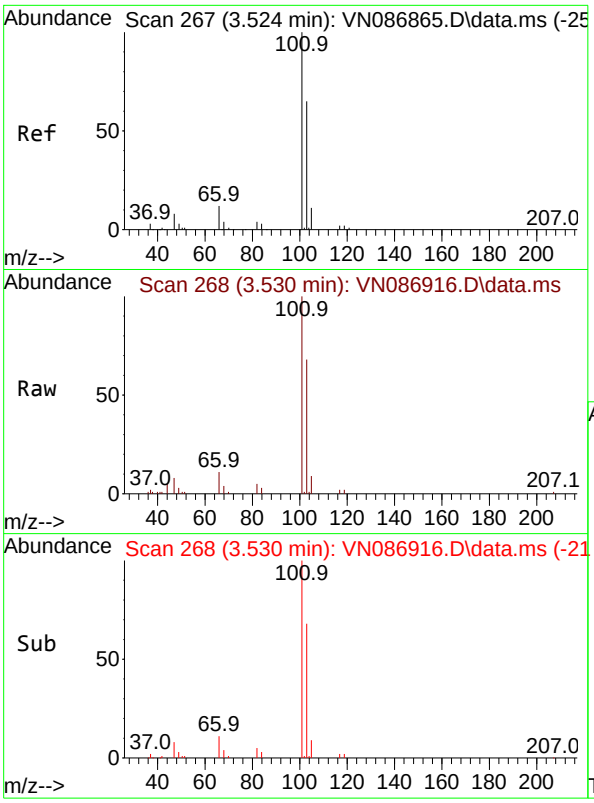



#6
Chloroethane
Concen: 18.402 ug/l
RT: 3.159 min Scan# 205
Delta R.T. 0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 64 Resp: 39443

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 32.9 | 24.6 | 36.8 |






#7
Trichlorofluoromethane
Concen: 18.343 ug/l
RT: 3.530 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:101 Resp: 7952

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 67.6 | 52.2 | 78.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

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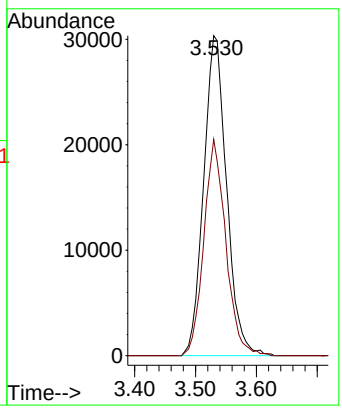
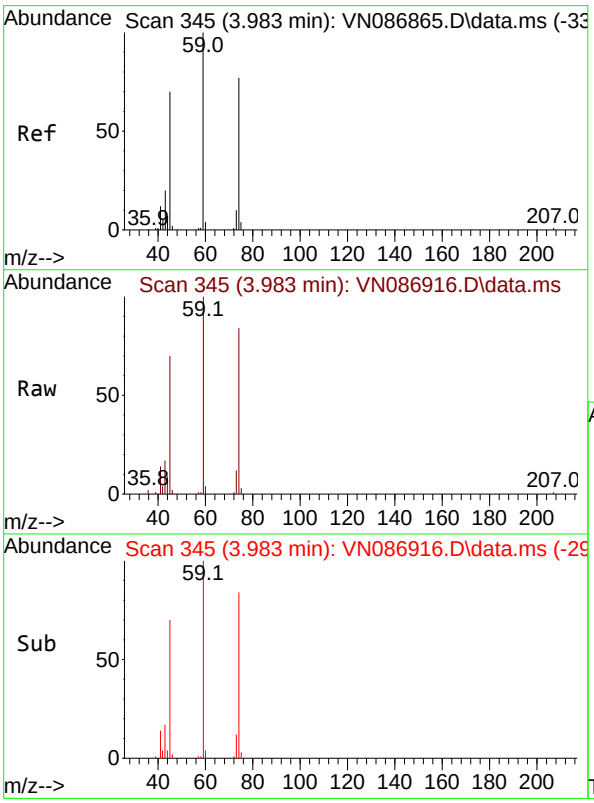
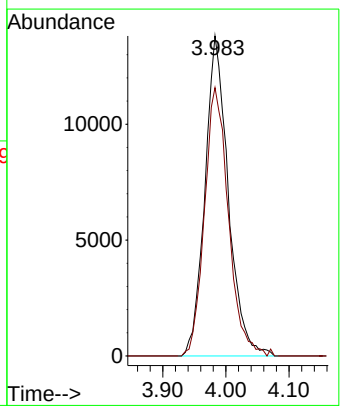


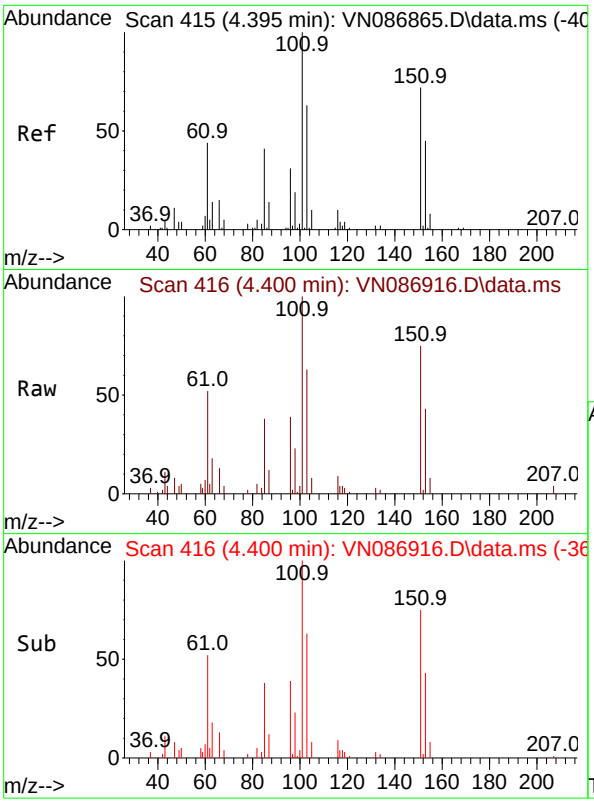




#8
Diethyl Ether
Concen: 18.798 ug/l
RT: 3.983 min Scan# 345
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 74 Resp: 35508

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 86.0 | 45.5 | 136.5 |






#9
1,1,2-Trichlorotrifluoroethane
Concen: 18.208 ug/l
RT: 4.400 min Scan# 4
Delta R.T. 0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:101 Resp: 4959

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 42.1 | 33.8 | 50.8 |
| 151 | 74.8 | 58.7 | 88.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

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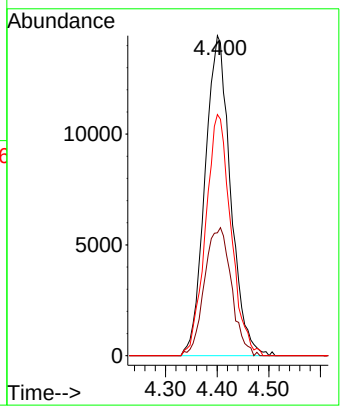
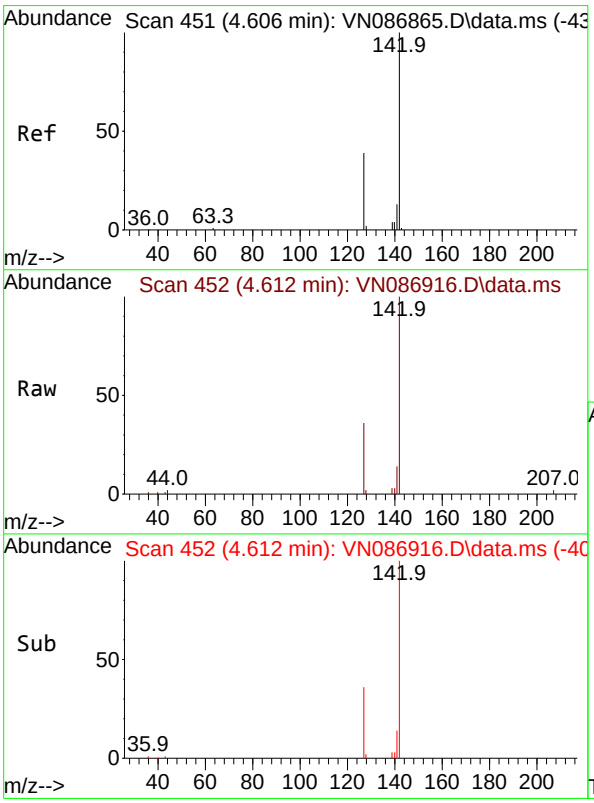
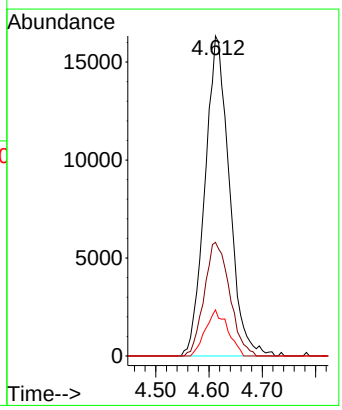


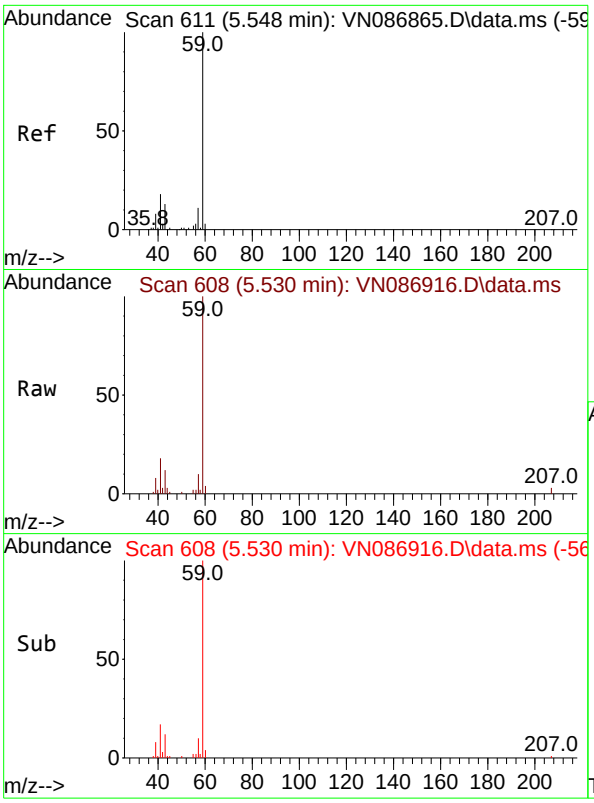




#10
Methyl Iodide
Concen: 14.703 ug/l
RT: 4.612 min Scan# 452
Delta R.T. 0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:142 Resp: 51915

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 35.5 | 30.9 | 46.3 |
| 141 | 14.4 | 10.4 | 15.6 |






#11
Tert butyl alcohol
Concen: 82.194 ug/l
RT: 5.530 min Scan# 6
Delta R.T. -0.018 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 59 Resp: 7460

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 9.7 | 8.1 | 12.1 |

**Instrument :**
MSVOA_N
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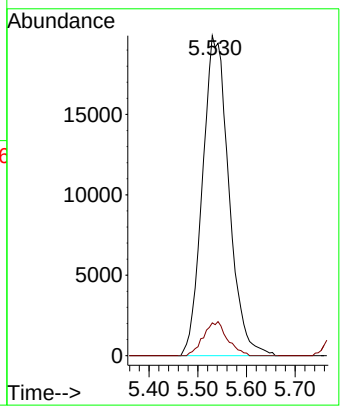
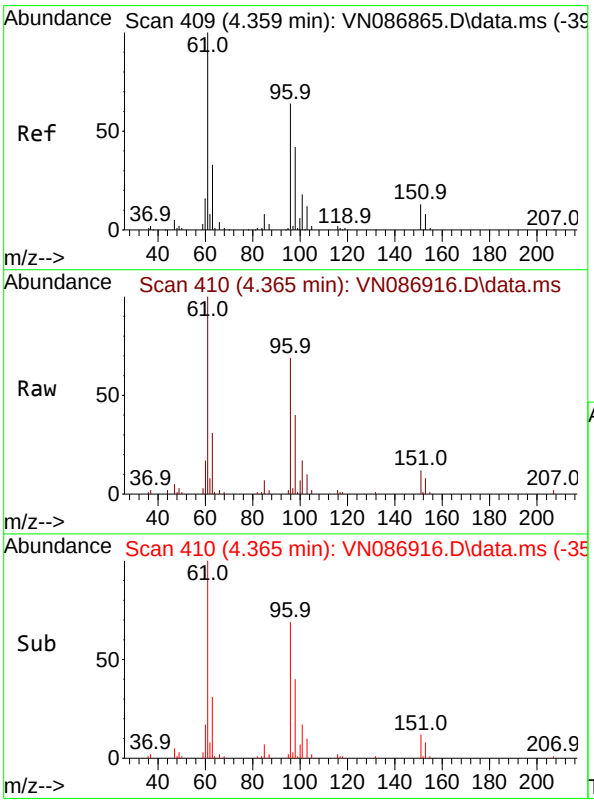
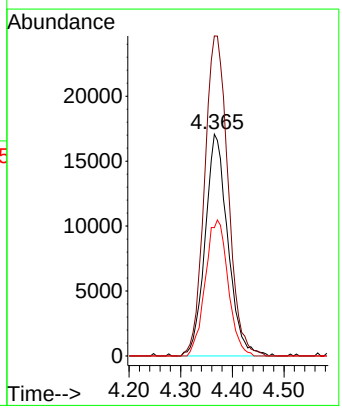


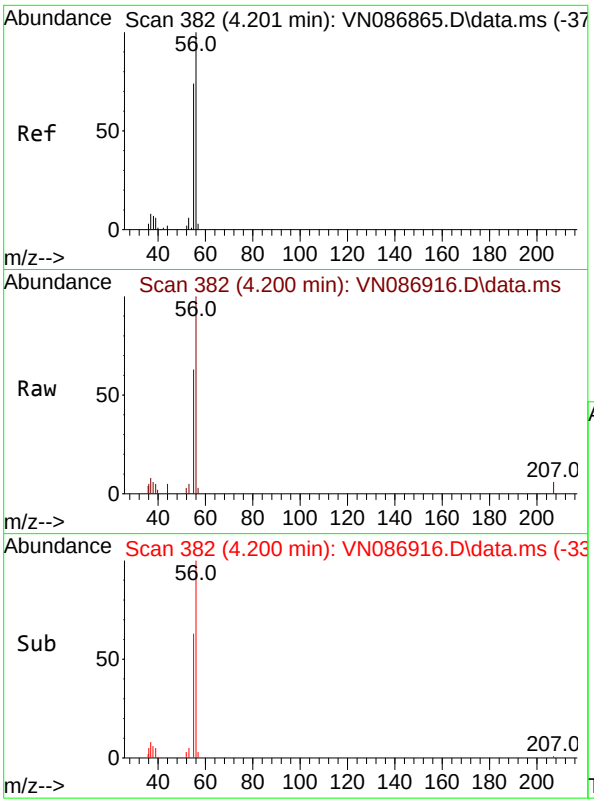




#12
1,1-Dichloroethene
Concen: 18.744 ug/l
RT: 4.365 min Scan# 410
Delta R.T. 0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 96 Resp: 52125

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 144.3 | 125.8 | 188.6 |
| 98 | 57.9 | 52.5 | 78.7 |

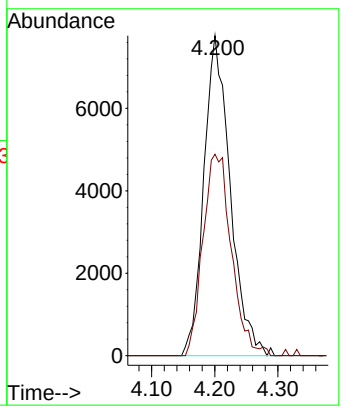





#13
Acrolein
Concen: 78.459 ug/l
RT: 4.200 min Scan# 3
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 56 Resp: 2254

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 68.0 | 55.6 | 83.4 |

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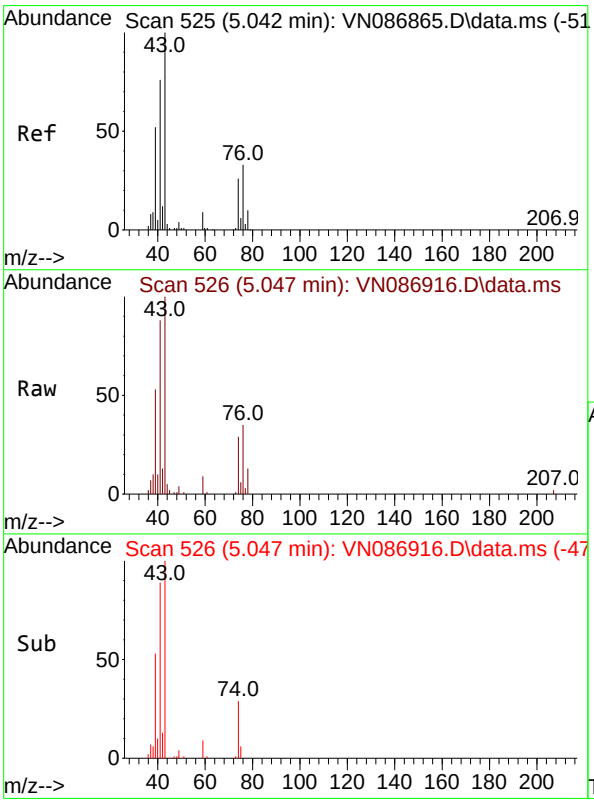
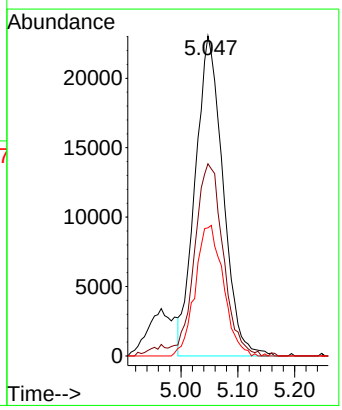
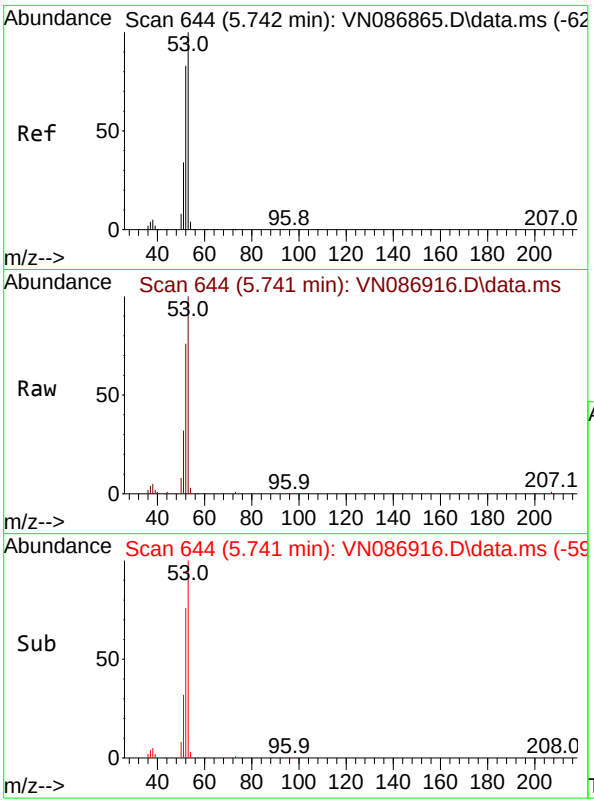



#14
Allyl chloride
Concen: 16.947 ug/l
RT: 5.047 min Scan# 526
Delta R.T. 0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 41 Resp: 78157

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 62.2 | 51.3 | 76.9 |
| 76 | 41.3 | 31.4 | 47.0 |

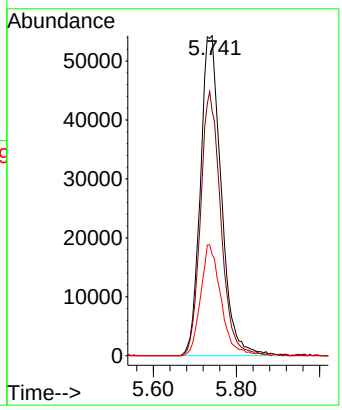





#15
Acrylonitrile
Concen: 89.429 ug/l
RT: 5.741 min Scan# 64
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 53 Resp: 18972

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 79.9 | 65.0 | 97.6 |
| 51 | 33.6 | 27.2 | 40.8 |




**Instrument :**
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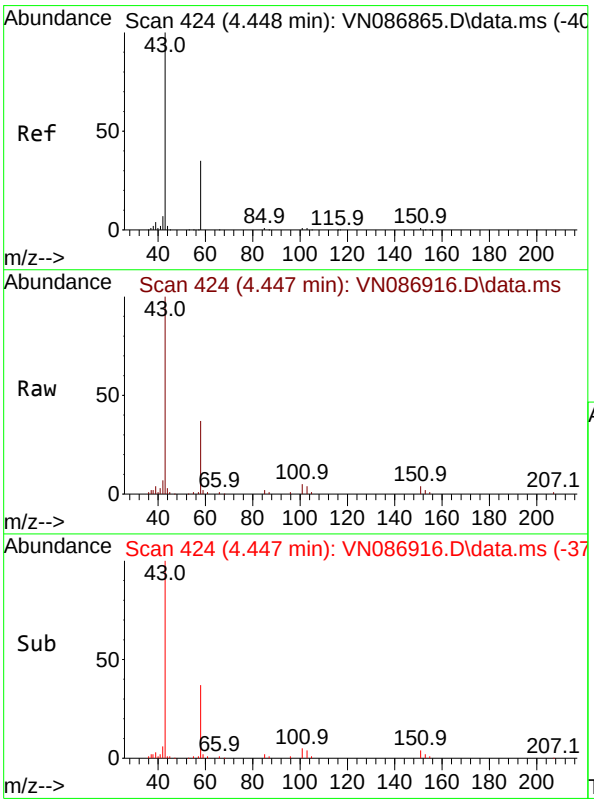
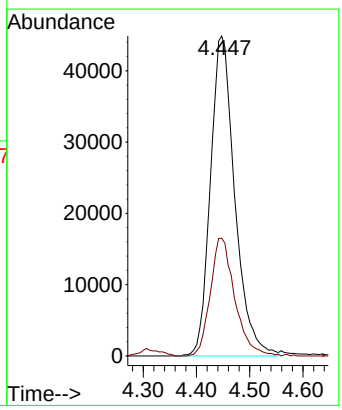
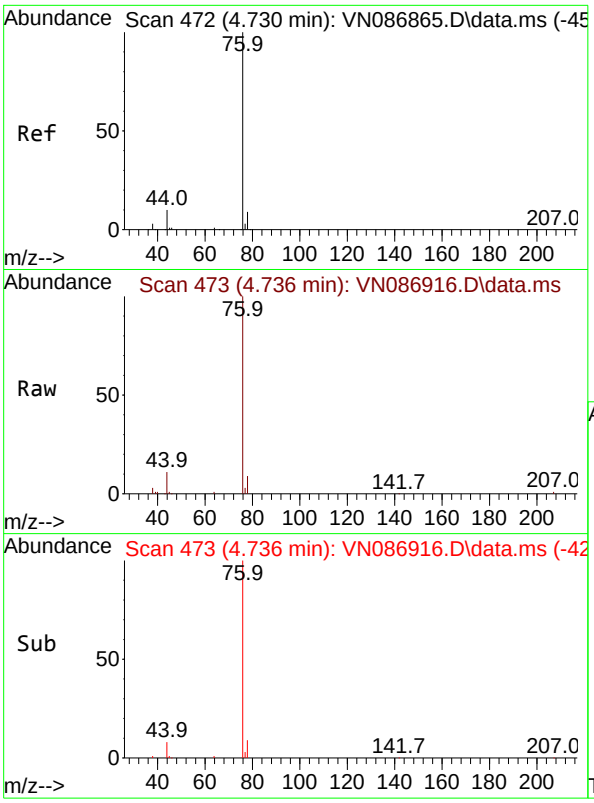



#16
Acetone
Concen: 80.306 ug/l
RT: 4.447 min Scan# 424
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 43 Resp: 142458

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 36.8 | 28.0 | 42.0 |






#17
Carbon Disulfide
Concen: 17.144 ug/l
RT: 4.736 min Scan# 4
Delta R.T. 0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 76 Resp: 13187

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.1 | 7.3 | 10.9 |

**Instrument :**
MSVOA_N
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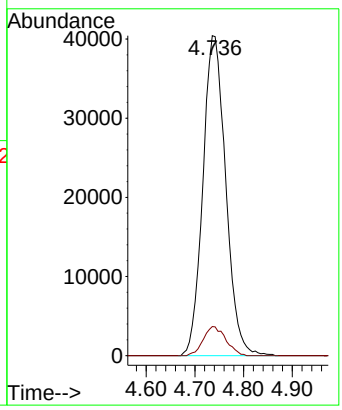
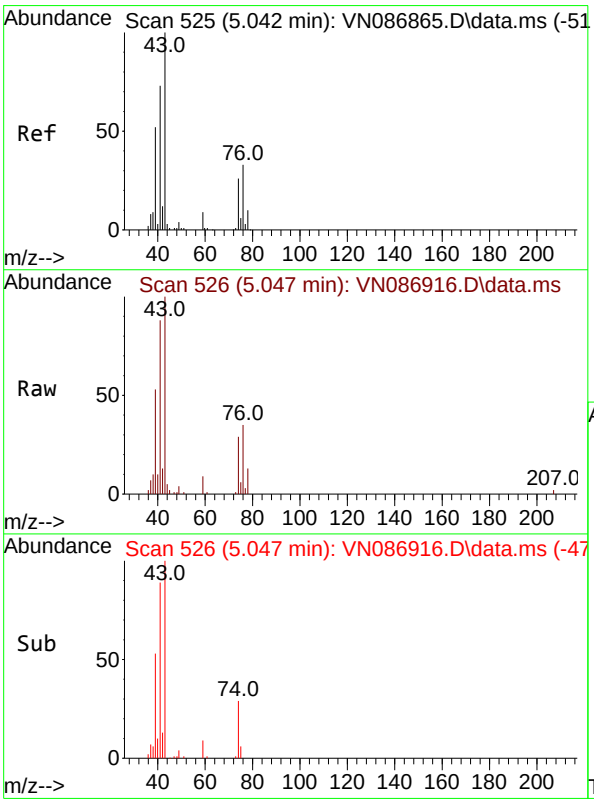
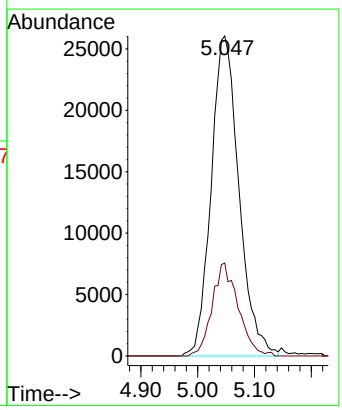


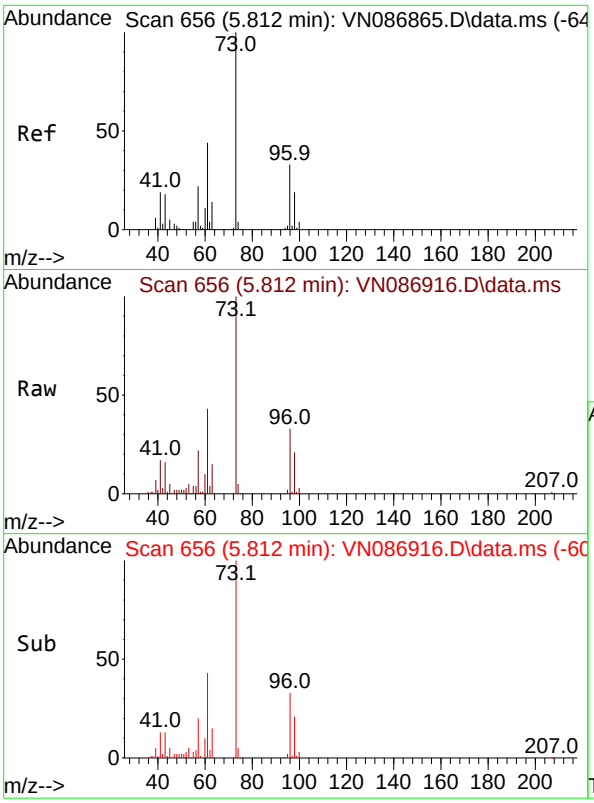




#18
Methyl Acetate
Concen: 17.129 ug/l
RT: 5.047 min Scan# 526
Delta R.T. 0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 43 Resp: 88551

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 27.2 | 20.7 | 31.1 |

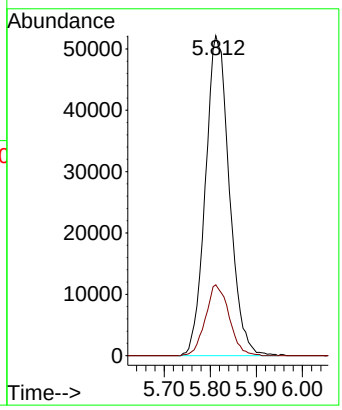





#19
Methyl tert-butyl Ether
Concen: 18.655 ug/l
RT: 5.812 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 73 Resp: 18783

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 22.1 | 17.4 | 26.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations**
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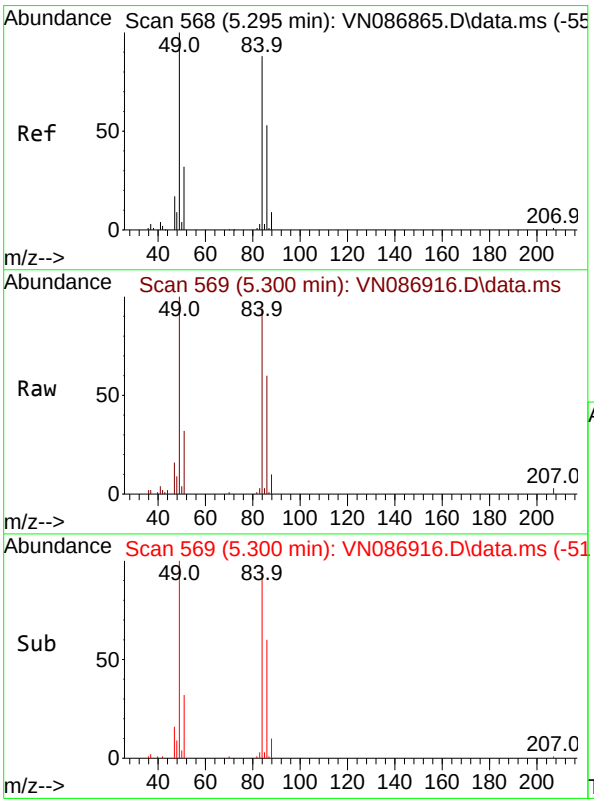
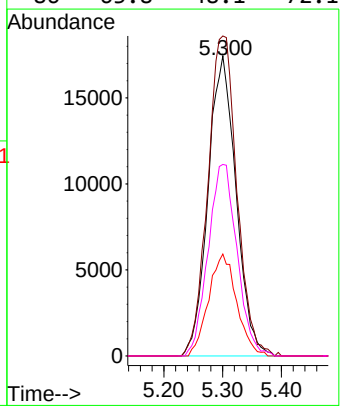
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

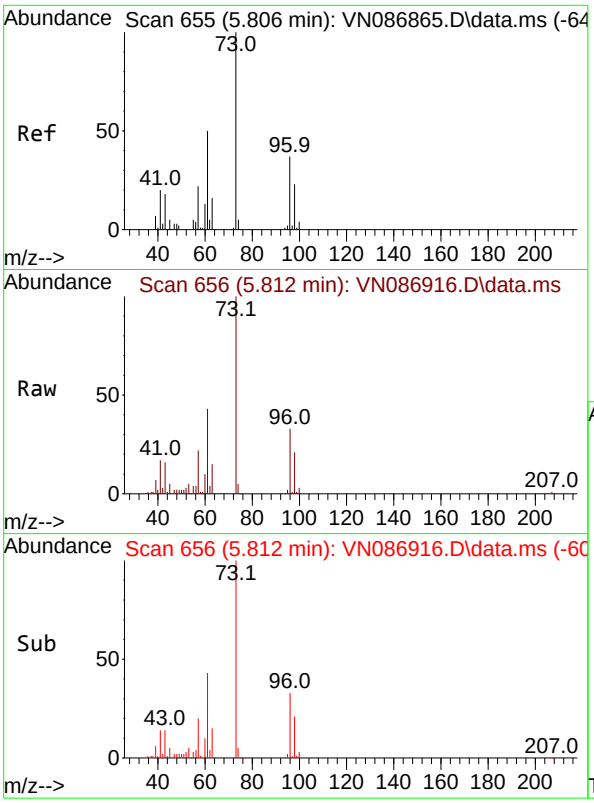



#20
Methylene Chloride
Concen: 17.365 ug/l
RT: 5.300 min Scan# 569
Delta R.T. 0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 84 Resp: 57671

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 106.7 | 90.5 | 135.7 |
| 51 | 34.0 | 28.5 | 42.7 |
| 86 | 63.8 | 48.1 | 72.1 |






#21
trans-1,2-Dichloroethene
Concen: 17.934 ug/l
RT: 5.812 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 96 Resp: 5548

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 130.3 | 109.2 | 163.8 |
| 98 | 64.3 | 49.8 | 74.8 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations**
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Reviewed By :John Carlone 06/11/2025
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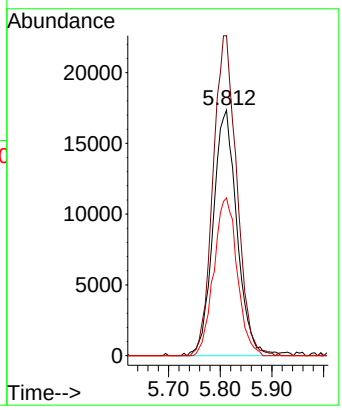
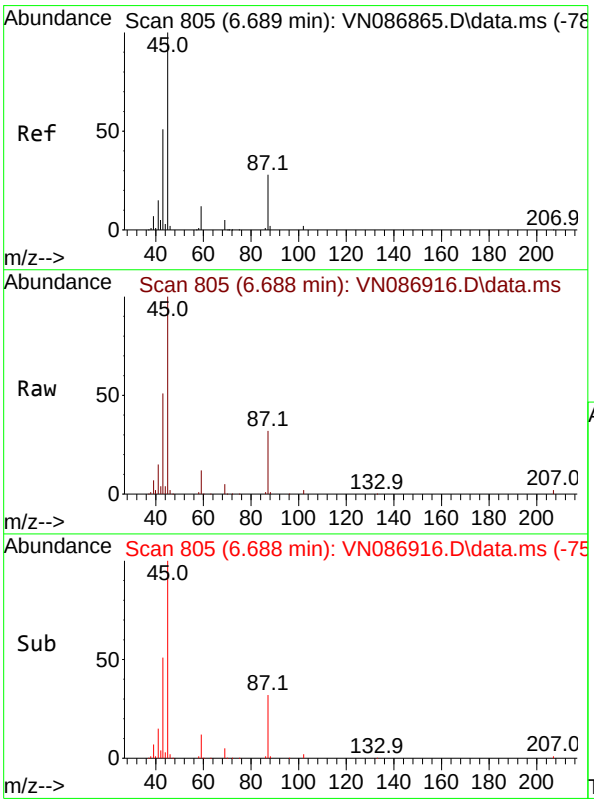
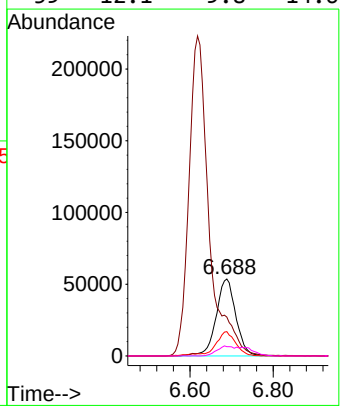


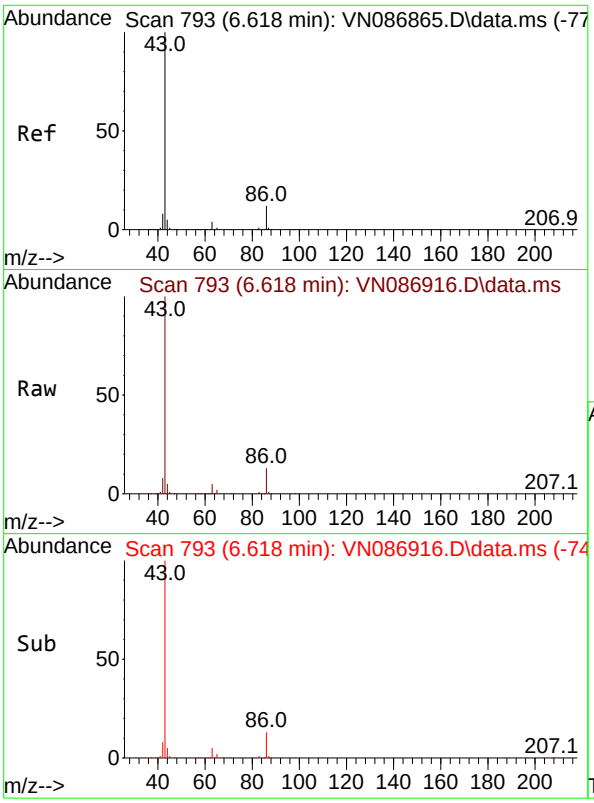




#22
Diisopropyl ether
Concen: 18.188 ug/l
RT: 6.688 min Scan# 805
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 45 Resp: 176809

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 49.8 | 41.9 | 62.9 |
| 87 | 31.5 | 22.4 | 33.6 |
| 59 | 12.1 | 9.8 | 14.6 |

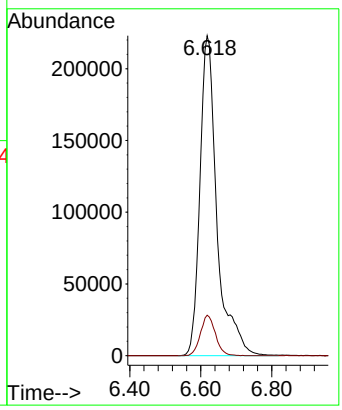





#23
Vinyl Acetate
Concen: 90.687 ug/l
RT: 6.618 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 43 Resp: 74486

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 12.6 | 9.5 | 14.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations**
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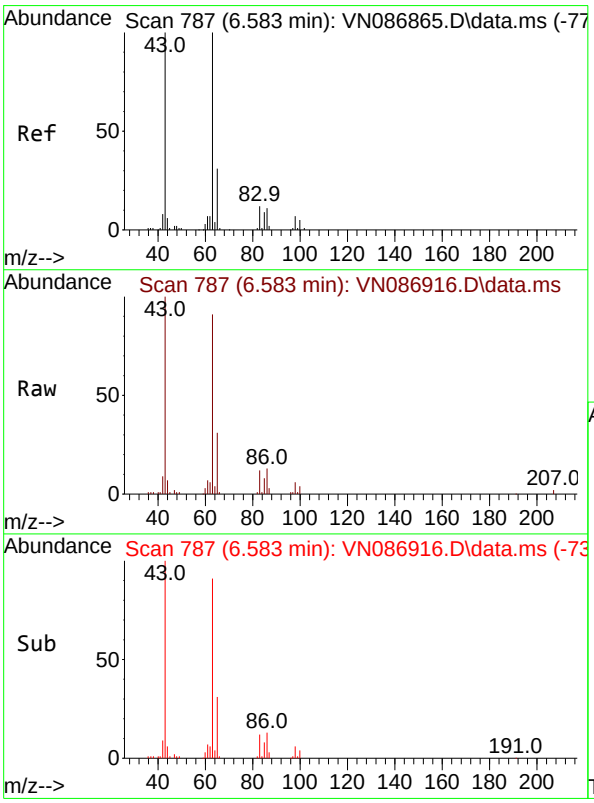
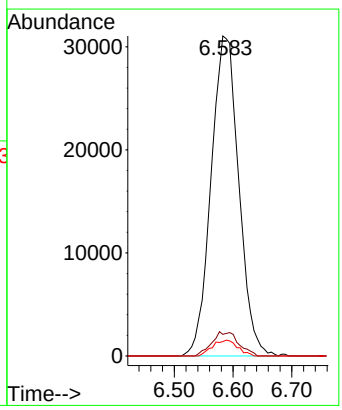
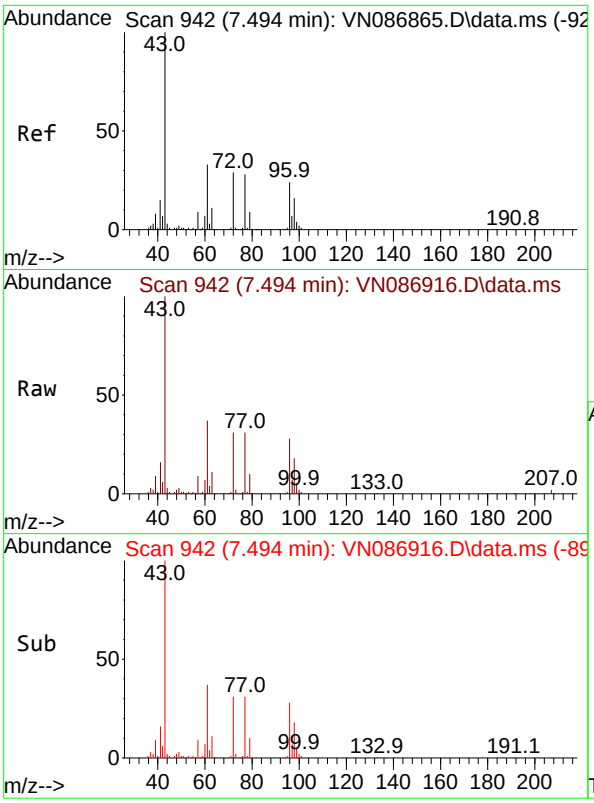



#24
1,1-Dichloroethane
Concen: 18.173 ug/l
RT: 6.583 min Scan# 787
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 63 Resp: 101669

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 6.8 | 3.6 | 10.8 |
| 100 | 4.5 | 2.6 | 7.8 |






#25
2-Butanone
Concen: 83.991 ug/l
RT: 7.494 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 43 Resp: 24218

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 31.4 | 23.0 | 34.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations**
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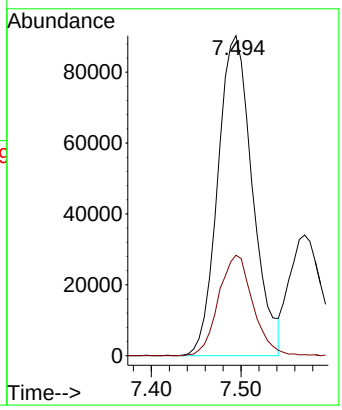
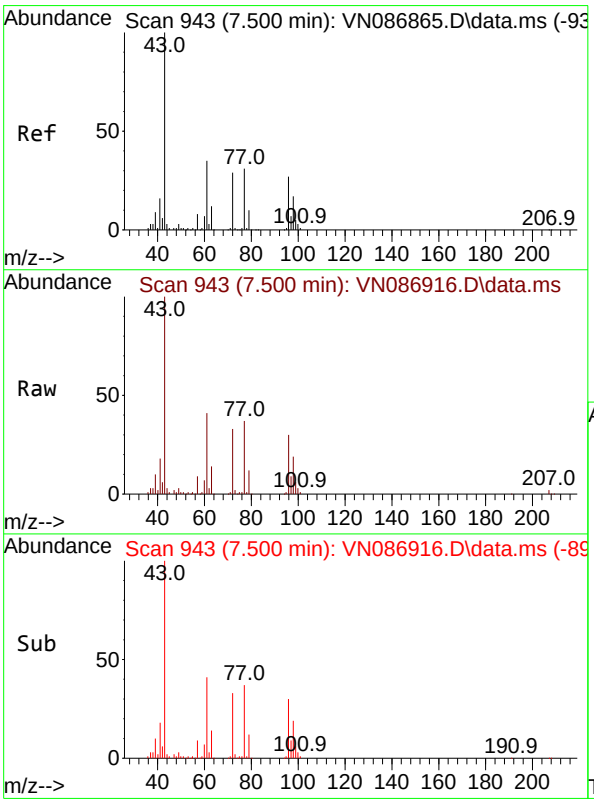
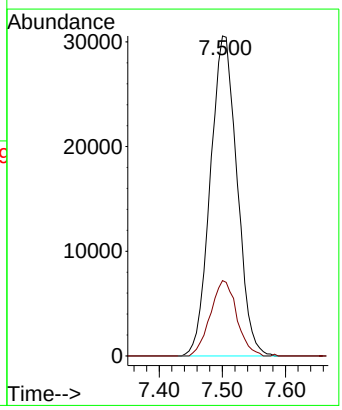


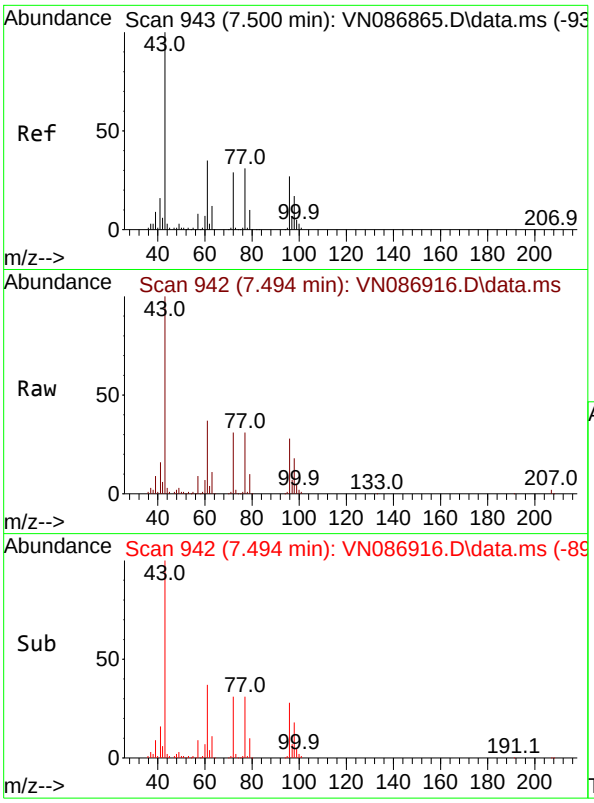




#26
2,2-Dichloropropane
Concen: 20.596 ug/l
RT: 7.500 min Scan# 943
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 77 Resp: 89631

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 23.2 | 11.6 | 34.7 |






#27
cis-1,2-Dichloroethene
Concen: 18.691 ug/l
RT: 7.494 min Scan# 94
Delta R.T. -0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 96 Resp: 6915

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 136.8 | 0.0 | 278.0 |
| 98 | 63.7 | 0.0 | 128.2 |

**Instrument :**
MSVOA_N
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VN0610WBS01

**Manual Integrations**
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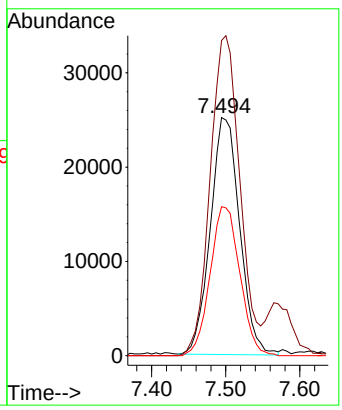
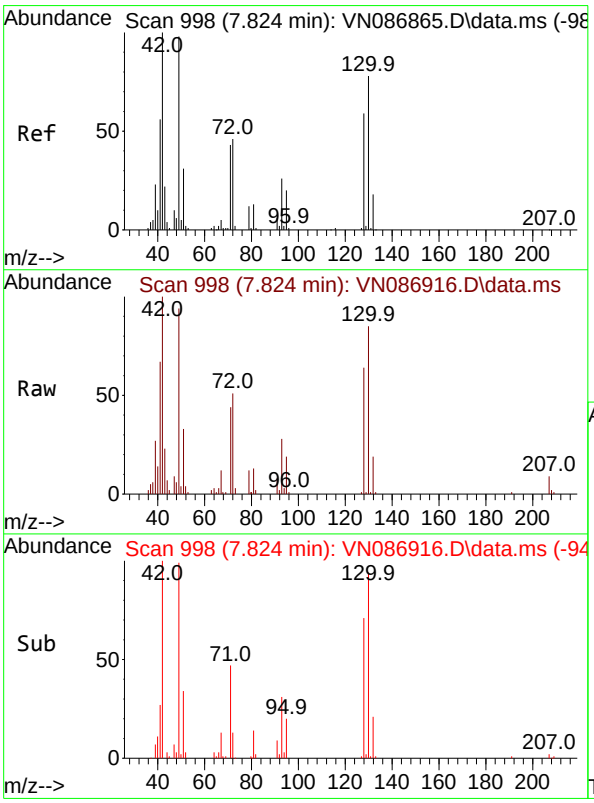
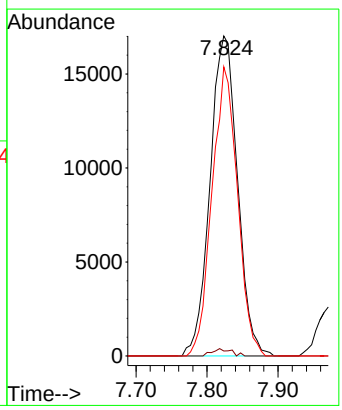


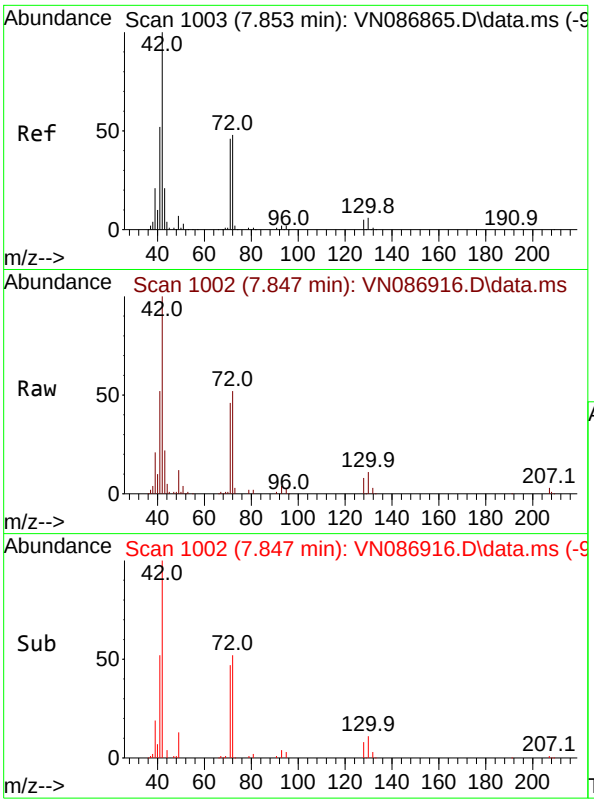




#28
Bromochloromethane
Concen: 16.632 ug/l
RT: 7.824 min Scan# 998
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 49 Resp: 45748

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.6 | 0.0 | 3.8 |
| 130 | 83.6 | 62.2 | 93.2 |






#29
Tetrahydrofuran
Concen: 85.494 ug/l
RT: 7.847 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 42 Resp: 16059

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 49.5 | 37.8 | 56.6 |
| 71 | 45.7 | 35.6 | 53.4 |

**Instrument :**
MSVOA_N
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VN0610WBS01

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Reviewed By :John Carlone 06/11/2025
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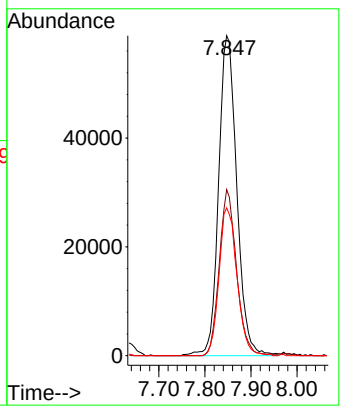
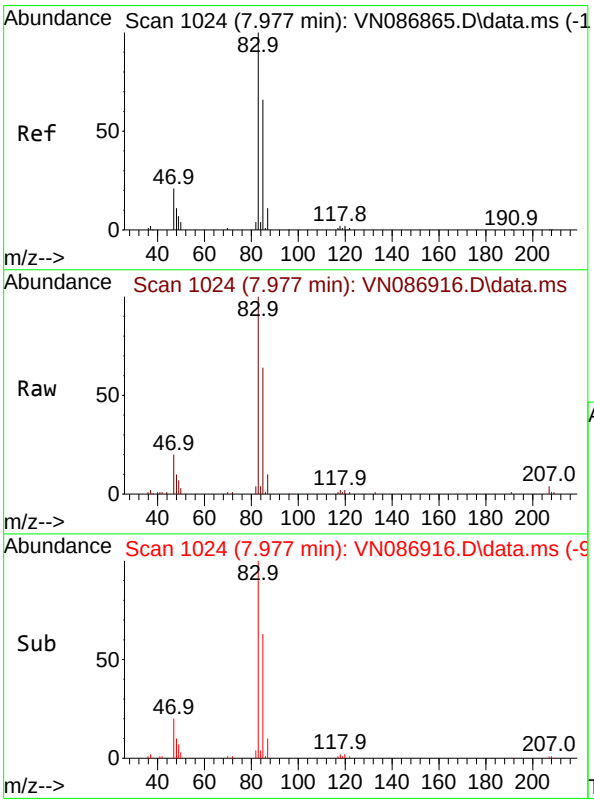
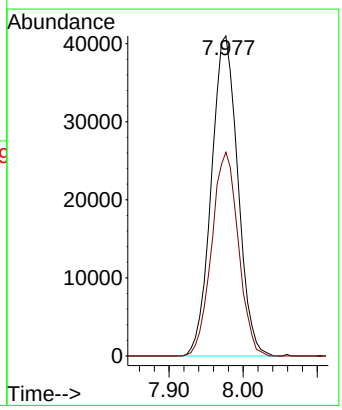


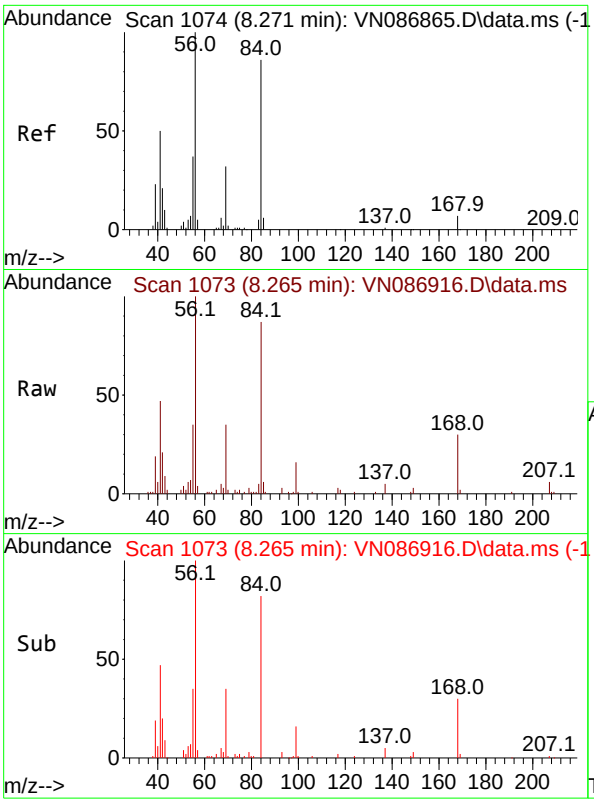




#30
Chloroform
Concen: 18.184 ug/l
RT: 7.977 min Scan# 1024
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 83 Resp: 101594

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 63.7 | 52.9 | 79.3 |

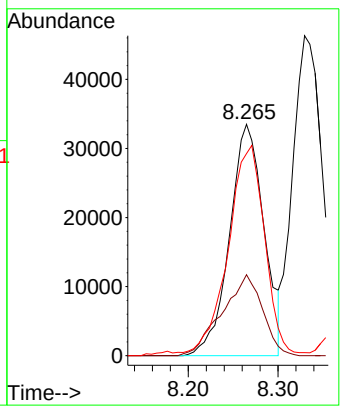





#31
Cyclohexane
Concen: 16.494 ug/l
RT: 8.265 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 56 Resp: 8948

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 35.0 | 25.4 | 38.0 |
| 84 | 85.9 | 68.8 | 103.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations**
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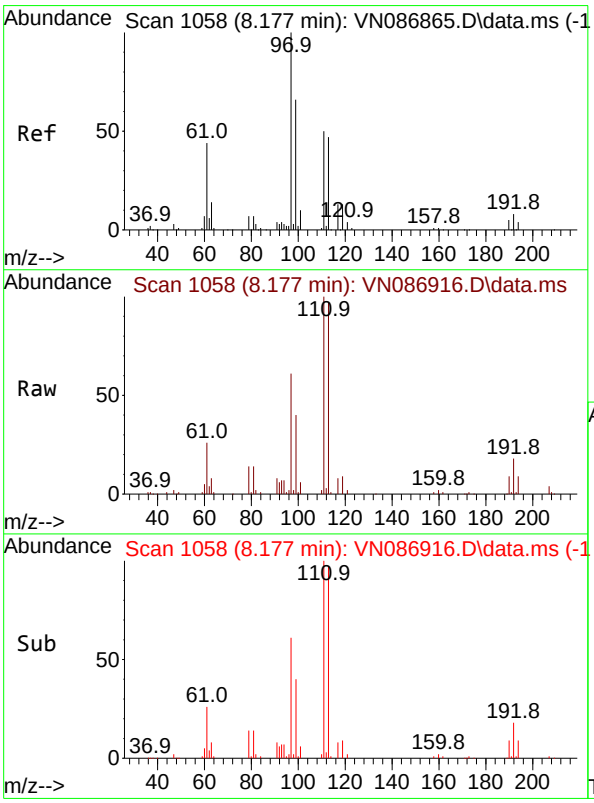
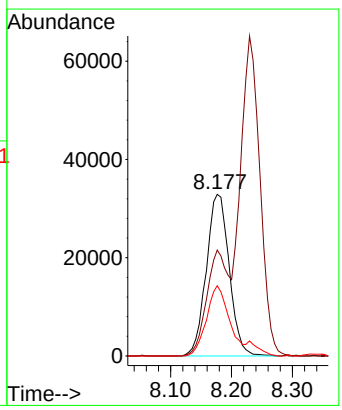
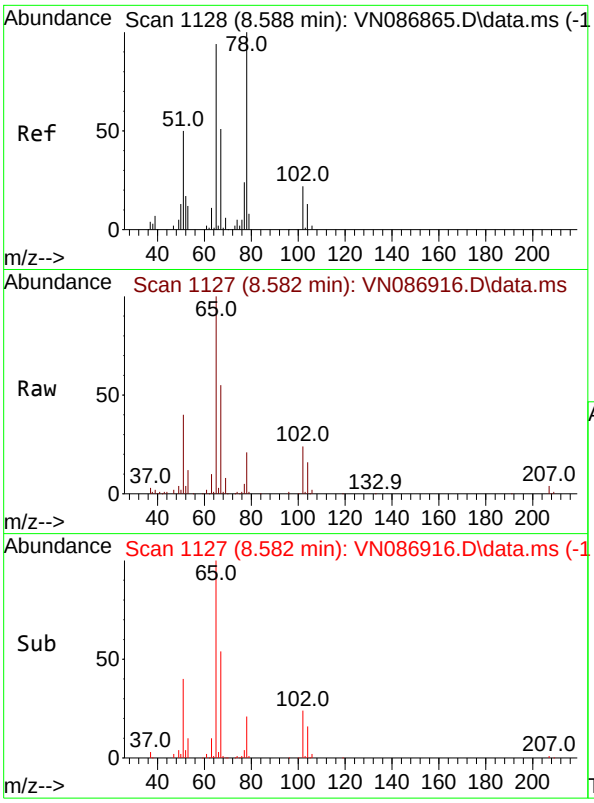



#32
1,1,1-Trichloroethane
Concen: 18.094 ug/l
RT: 8.177 min Scan# 1058
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 97 Resp: 85981

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 63.7 | 52.0 | 78.0 |
| 61 | 43.5 | 35.9 | 53.9 |






#33
1,2-Dichloroethane-d4
Concen: 45.381 ug/l
RT: 8.582 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 65 Resp: 15180

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 54.9 | 0.0 | 105.6 |

**Instrument :**
MSVOA_N
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VN0610WBS01

**Manual Integrations**
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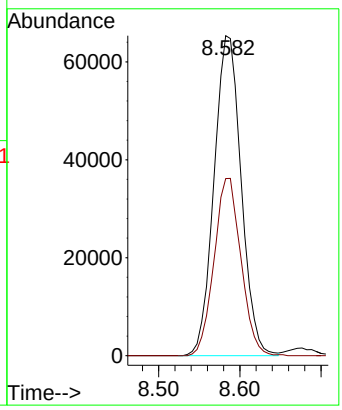
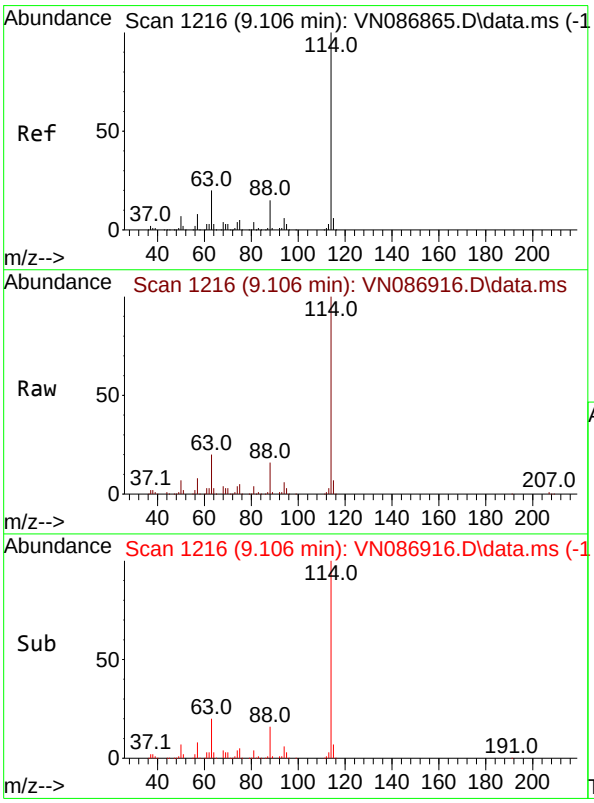
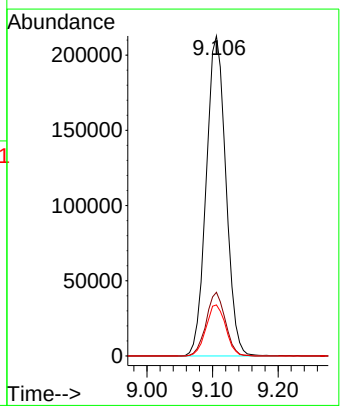


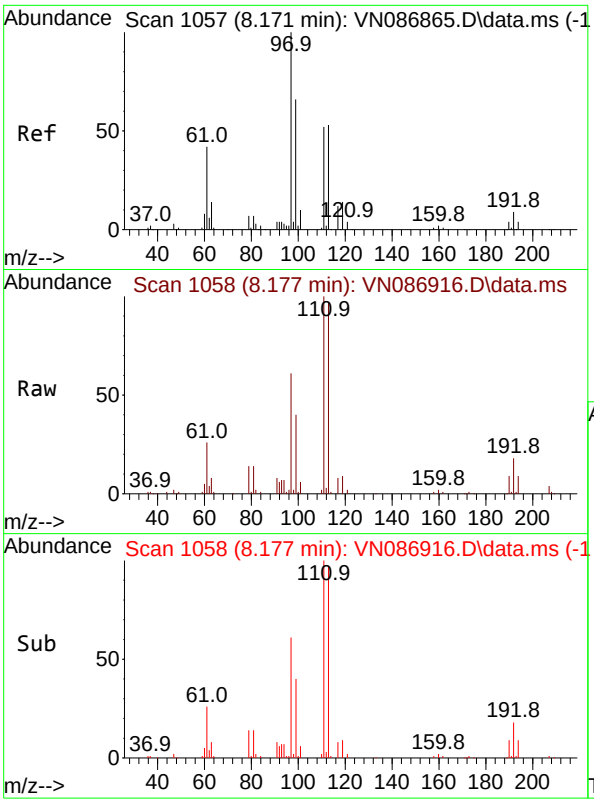




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.106 min Scan# 1216
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:114 Resp: 443174

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 19.9 | 0.0 | 39.6 |
| 88 | 15.9 | 0.0 | 30.2 |

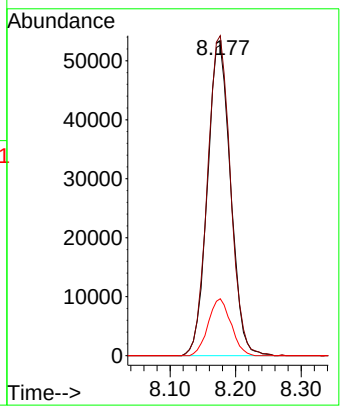





#35
Dibromofluoromethane
Concen: 49.474 ug/l
RT: 8.177 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:113 Resp: 12993

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 102.0 | 84.2 | 126.2 |
| 192 | 17.9 | 14.2 | 21.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations**
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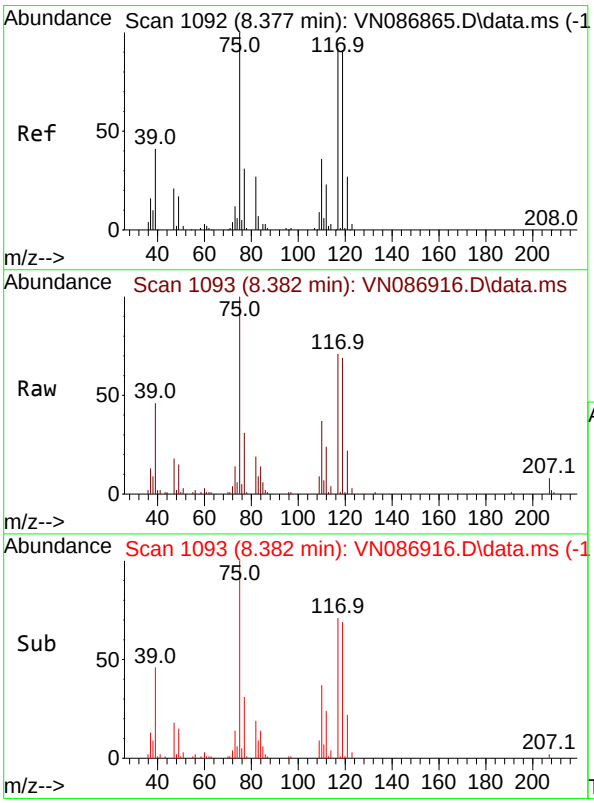
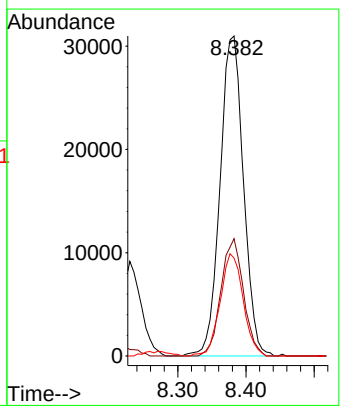
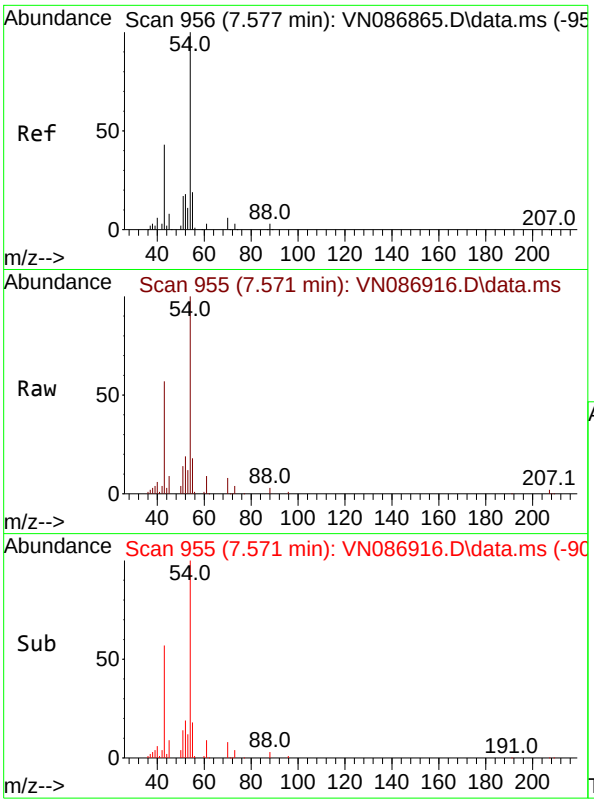



#36
1,1-Dichloropropene
Concen: 18.942 ug/l
RT: 8.382 min Scan# 1093
Delta R.T. 0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 75 Resp: 74129

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 35.1 | 17.6 | 52.9 |
| 77 | 31.3 | 25.3 | 37.9 |






#37
Ethyl Acetate
Concen: 17.812 ug/l
RT: 7.571 min Scan# 9
Delta R.T. -0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

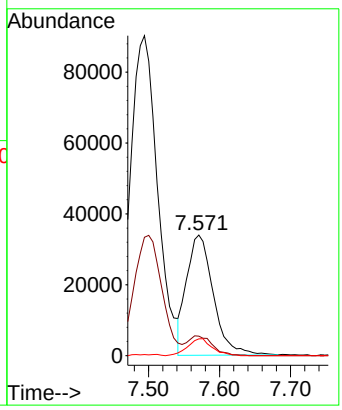
Tgt Ion: 43 Resp: 8874

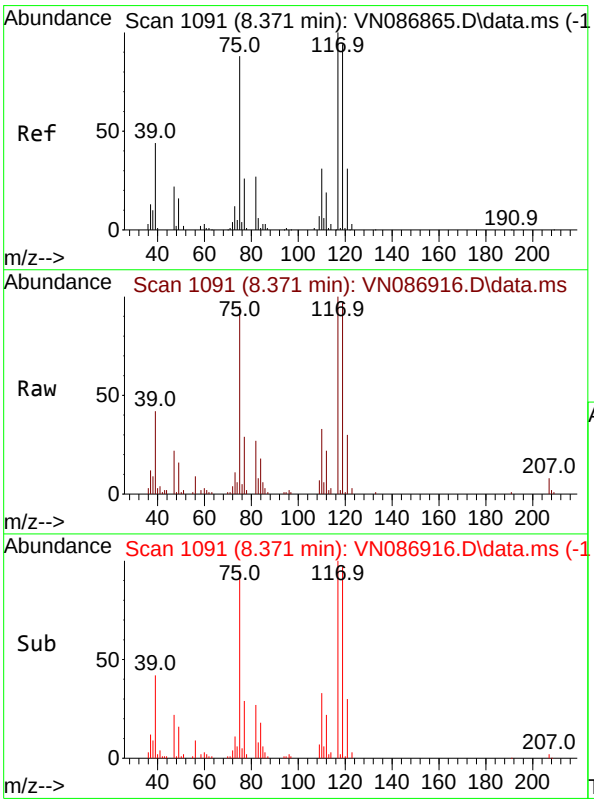
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 15.4 | 12.1 | 18.1 |
| 70 | 12.8 | 9.8 | 14.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

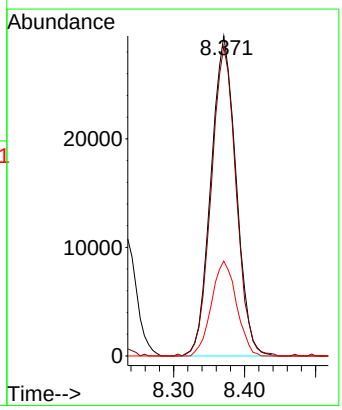


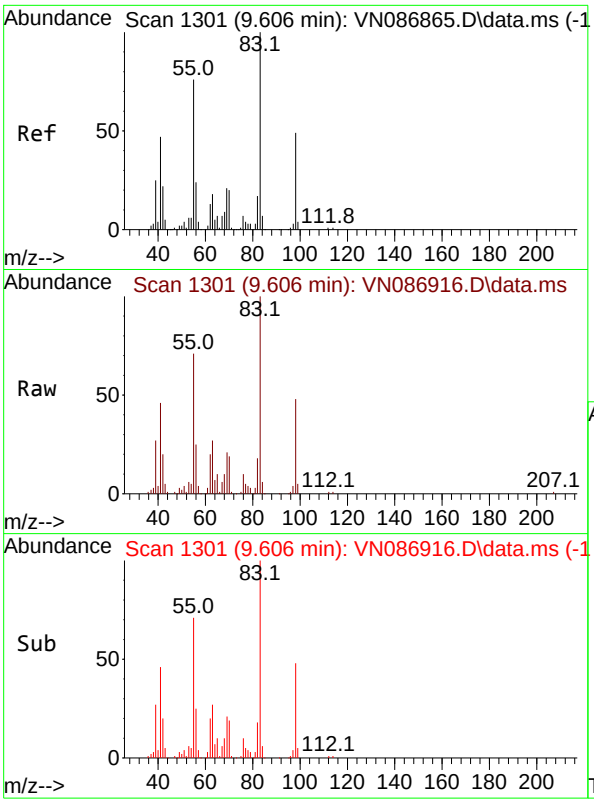




#38
Carbon Tetrachloride
Concen: 18.777 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:117 Resp: 72144

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 96.8 | 75.0 | 112.6 |
| 121 | 29.7 | 24.9 | 37.3 |






#39
Methylcyclohexane
Concen: 15.942 ug/l
RT: 9.606 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

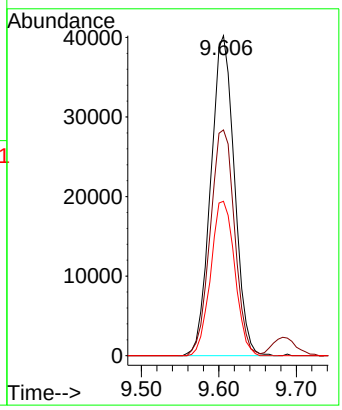
Tgt Ion: 83 Resp: 8547

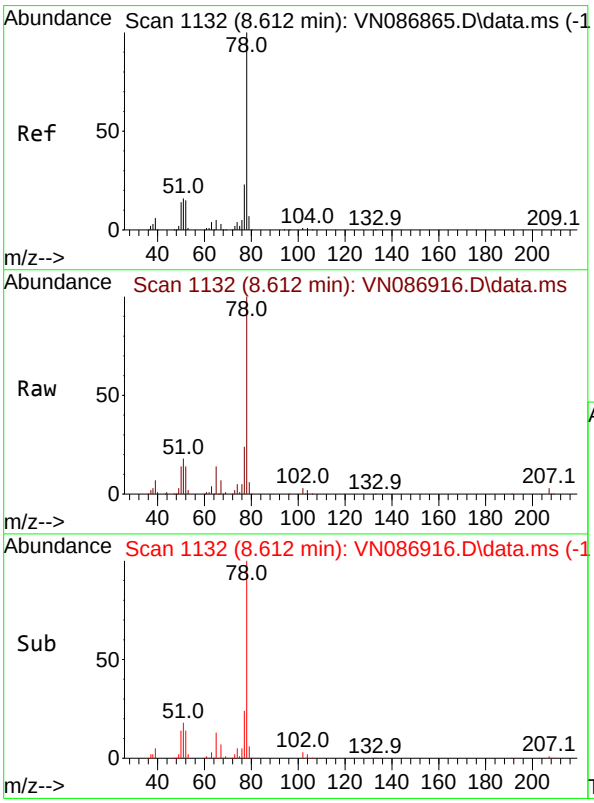
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 70.6 | 61.0 | 91.6 |
| 98 | 48.3 | 38.9 | 58.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

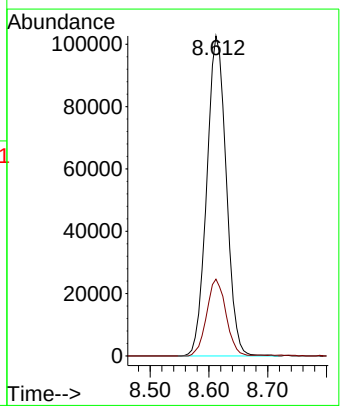


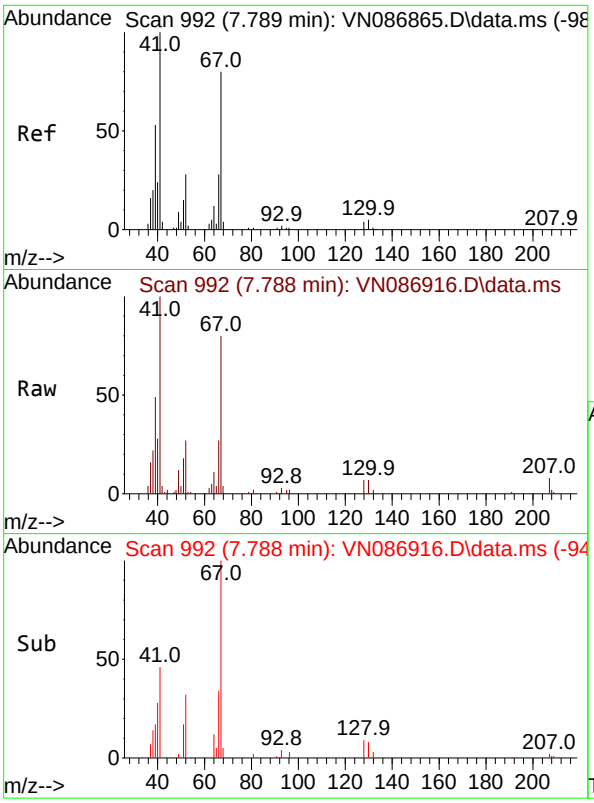




#40
Benzene
Concen: 18.458 ug/l
RT: 8.612 min Scan# 1132
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 78 Resp: 236213

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 24.0 | 18.7 | 28.1 |

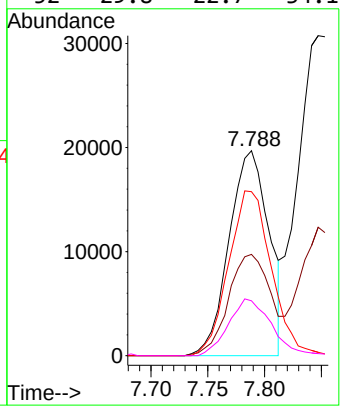





#41
Methacrylonitrile
Concen: 17.200 ug/l
RT: 7.788 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 41 Resp: 4812

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 53.7 | 41.2 | 61.8 |
| 67 | 86.4 | 61.4 | 92.2 |
| 52 | 29.8 | 22.7 | 34.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations**
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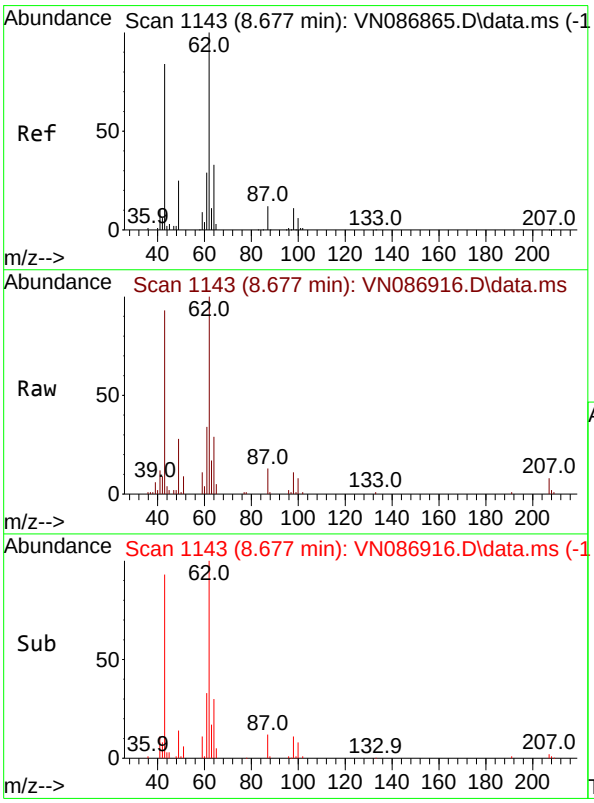
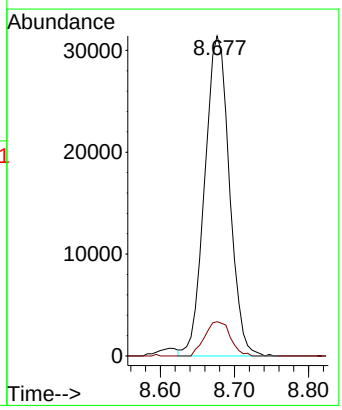
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

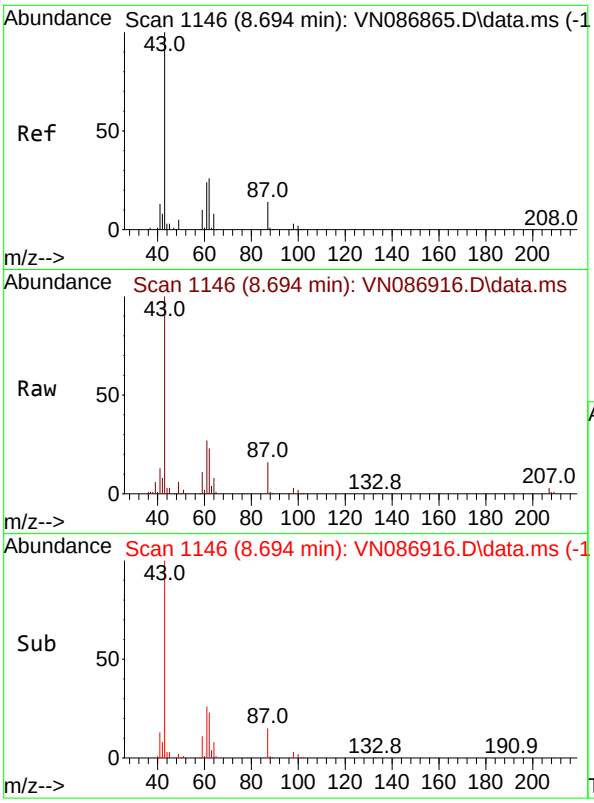



#42
1,2-Dichloroethane
Concen: 18.727 ug/l
RT: 8.677 min Scan# 1143
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 62 Resp: 72690

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 11.1 | 0.0 | 21.2 |

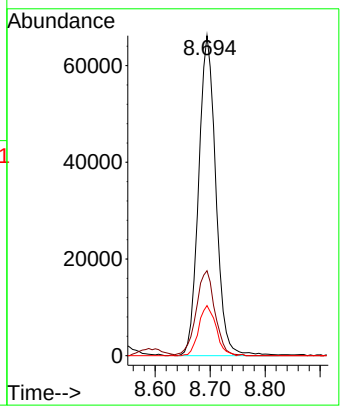





#43
Isopropyl Acetate
Concen: 18.014 ug/l
RT: 8.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 43 Resp: 14403

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 29.0 | 22.1 | 33.1 |
| 87 | 15.9 | 11.8 | 17.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
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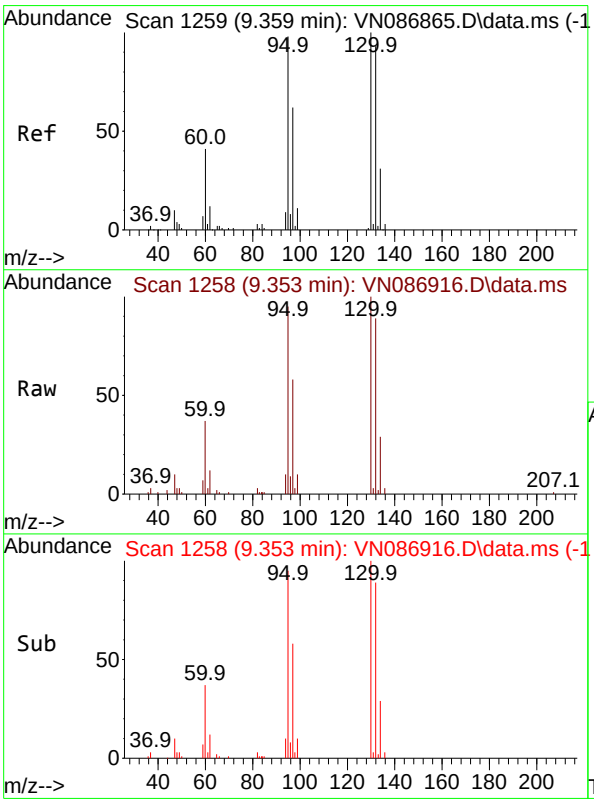
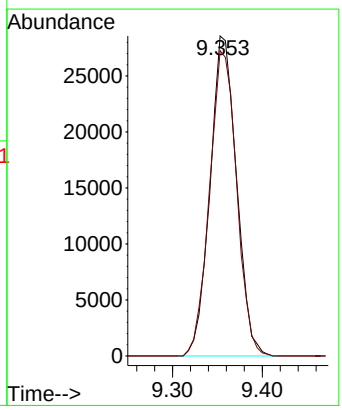
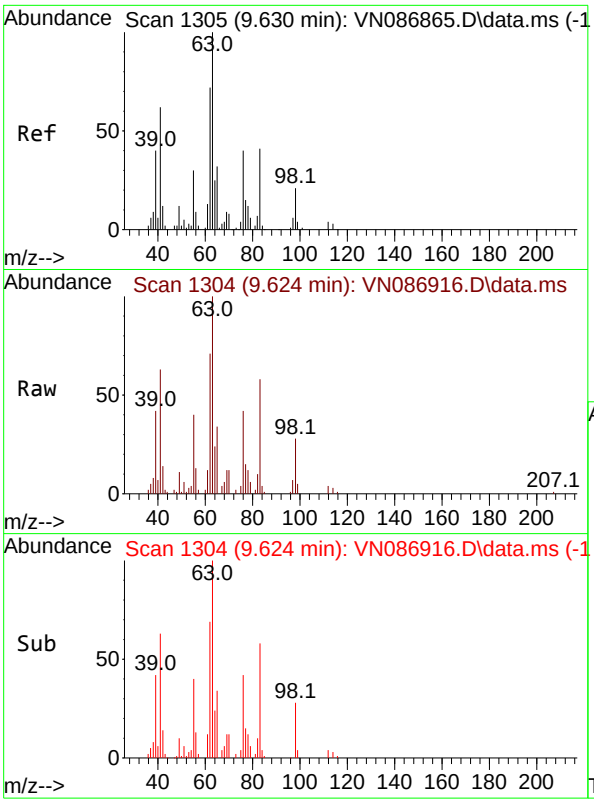



#44
Trichloroethene
Concen: 19.262 ug/l
RT: 9.353 min Scan# 1258
Delta R.T. -0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:130 Resp: 58449

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 95.4 | 0.0 | 196.2 |






#45
1,2-Dichloropropane
Concen: 18.644 ug/l
RT: 9.624 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 63 Resp: 5804

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 33.7 | 25.5 | 38.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations**
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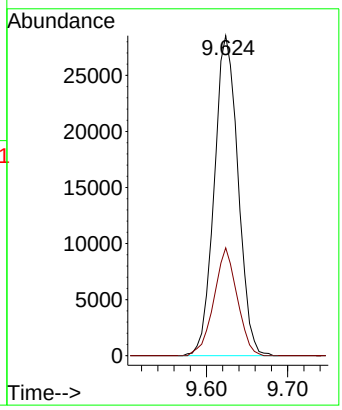
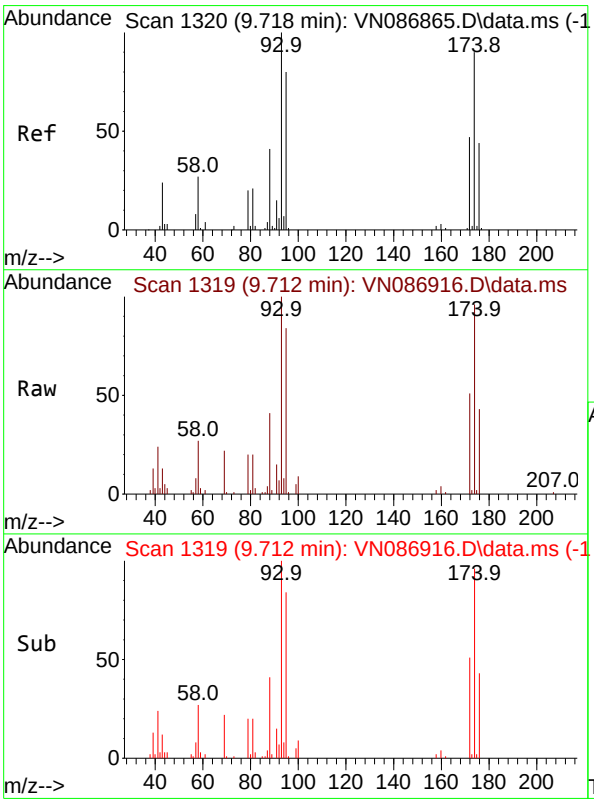
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

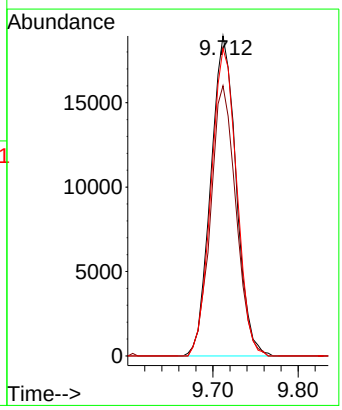


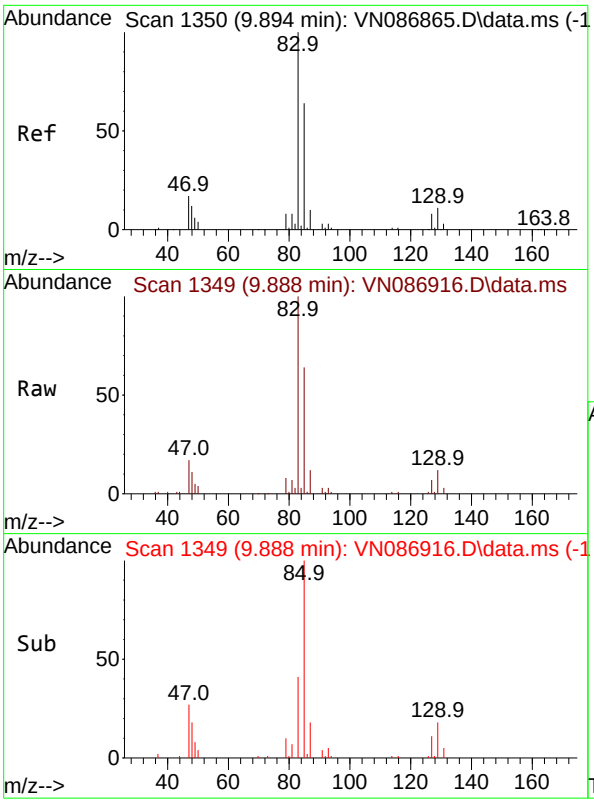




#46
Dibromomethane
Concen: 18.970 ug/l
RT: 9.712 min Scan# 1319
Delta R.T. -0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 93 Resp: 39229

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 84.5 | 67.1 | 100.7 |
| 174 | 96.7 | 74.2 | 111.4 |

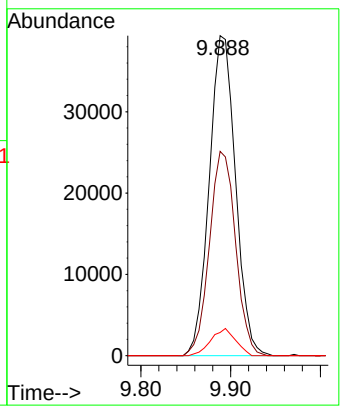





#47
Bromodichloromethane
Concen: 18.810 ug/l
RT: 9.888 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 83 Resp: 8003

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 63.9 | 50.9 | 76.3 |
| 127 | 7.2 | 6.6 | 10.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
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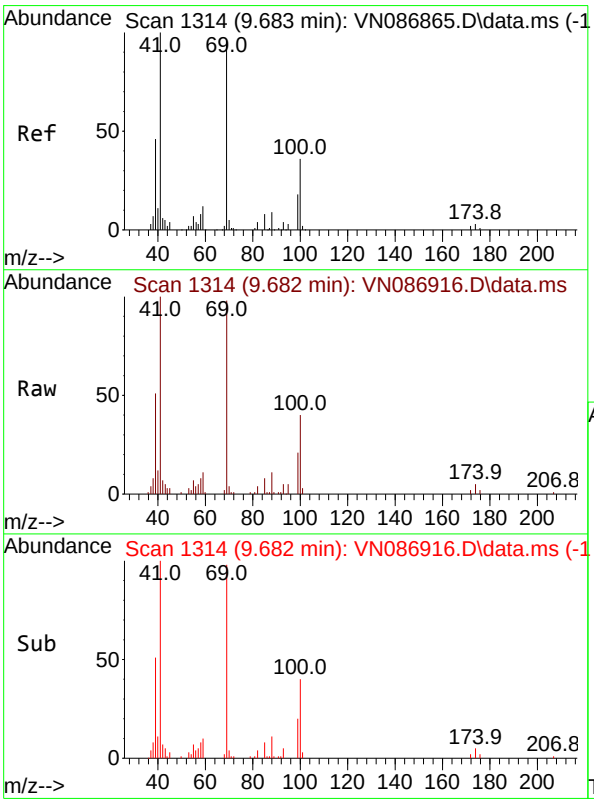
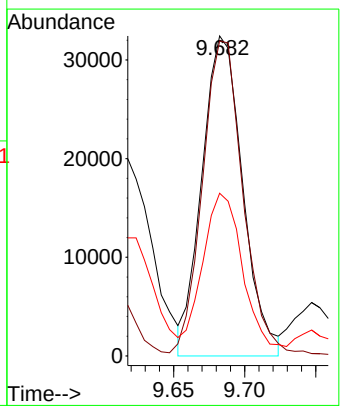
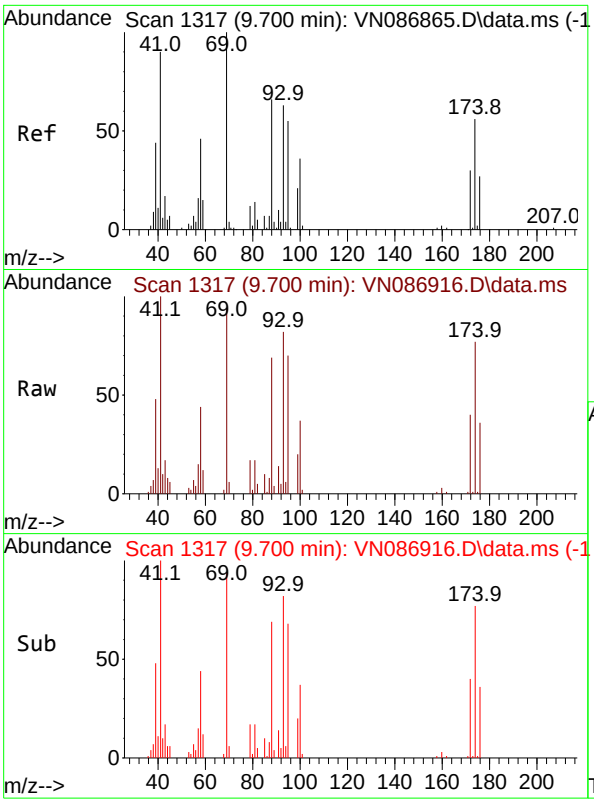



#48
Methyl methacrylate
Concen: 17.567 ug/l
RT: 9.682 min Scan# 1314
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 41 Resp: 64650

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 98.8 | 74.6 | 112.0 |
| 39 | 51.7 | 40.2 | 60.4 |






#49
1,4-Dioxane
Concen: 353.325 ug/l
RT: 9.700 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 88 Resp: 2365

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 0.0 | 0.0 | 0.0 |
| 58 | 70.2 | 57.7 | 86.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations**
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Reviewed By :John Carlone 06/11/2025
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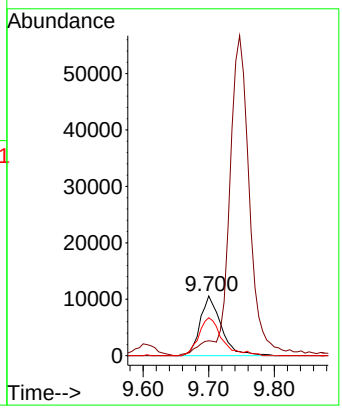
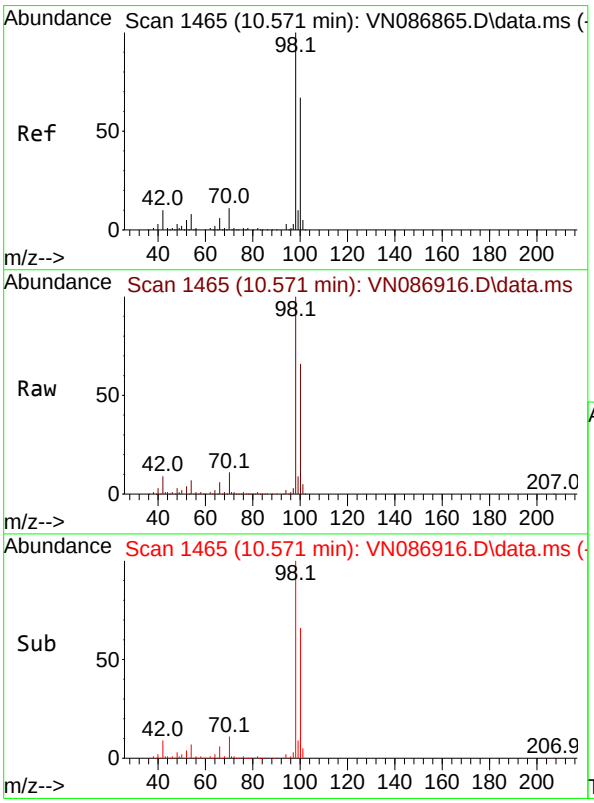
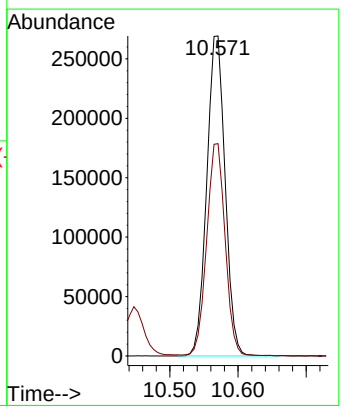


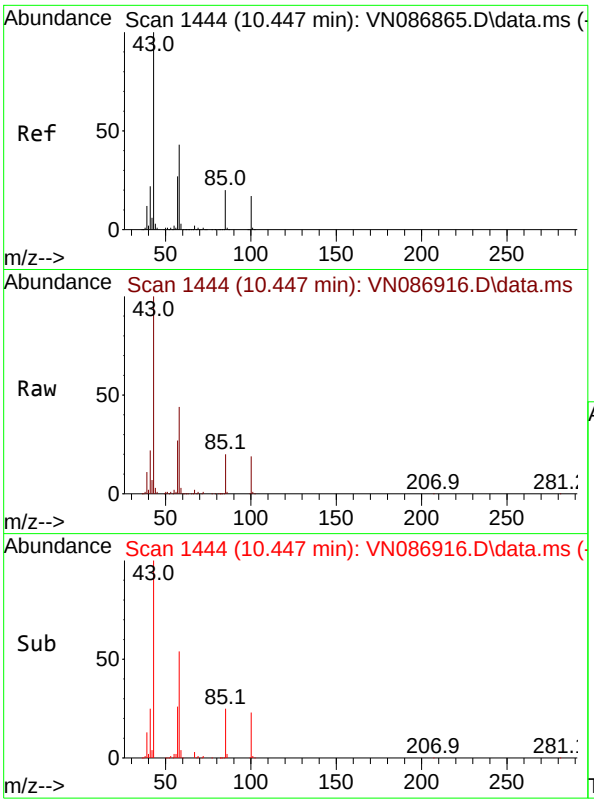




#50
Toluene-d8
Concen: 48.620 ug/l
RT: 10.571 min Scan# 1465
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 98 Resp: 505508

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 66.9 | 53.4 | 80.0 |






#51
4-Methyl-2-Pentanone
Concen: 91.469 ug/l
RT: 10.447 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 43 Resp: 44030

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 43.8 | 34.2 | 51.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations**
**APPROVED**

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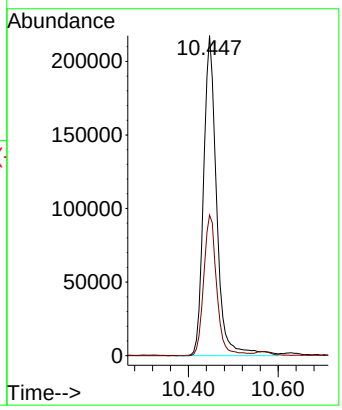
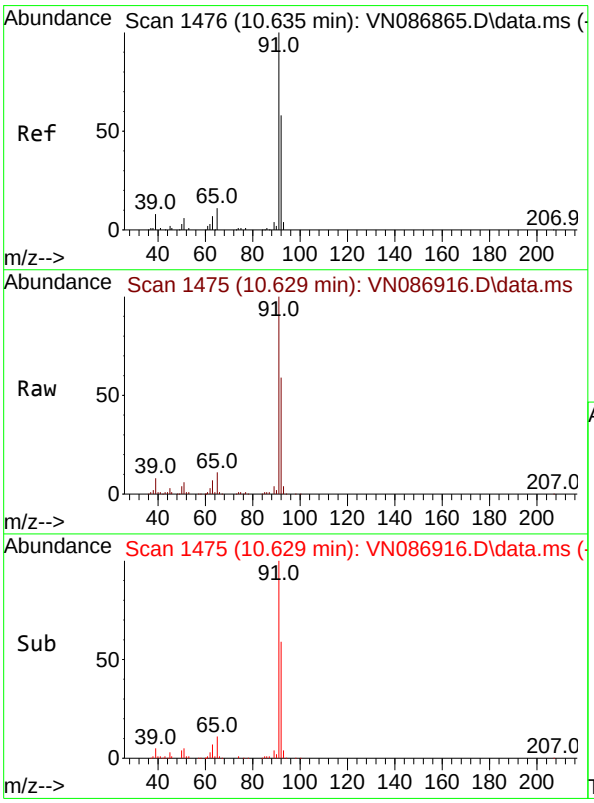
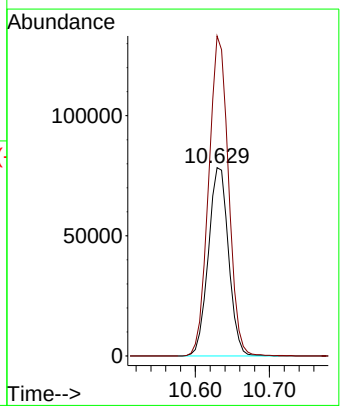


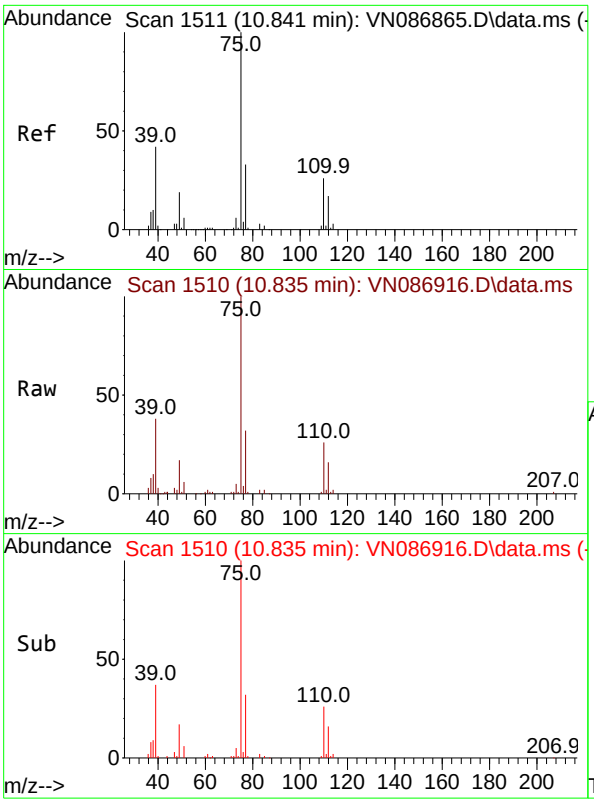




#52
Toluene
Concen: 18.967 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. -0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 92 Resp: 148340

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 166.8 | 136.5 | 204.7 |






#53
t-1,3-Dichloropropene
Concen: 19.555 ug/l
RT: 10.835 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 75 Resp: 9303

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.1 | 26.4 | 39.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations**
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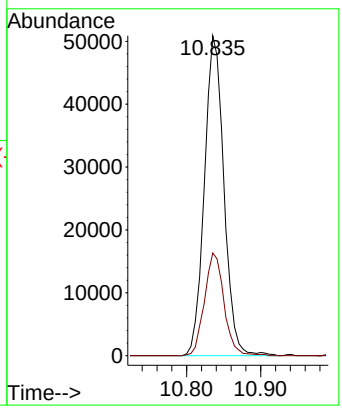
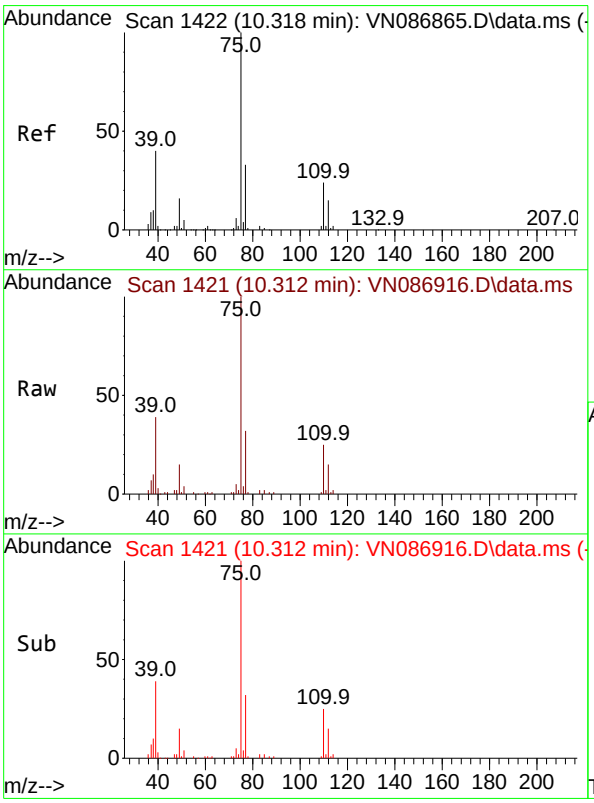
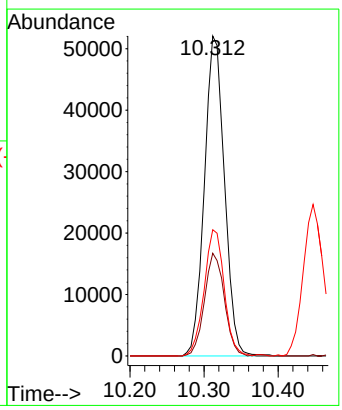


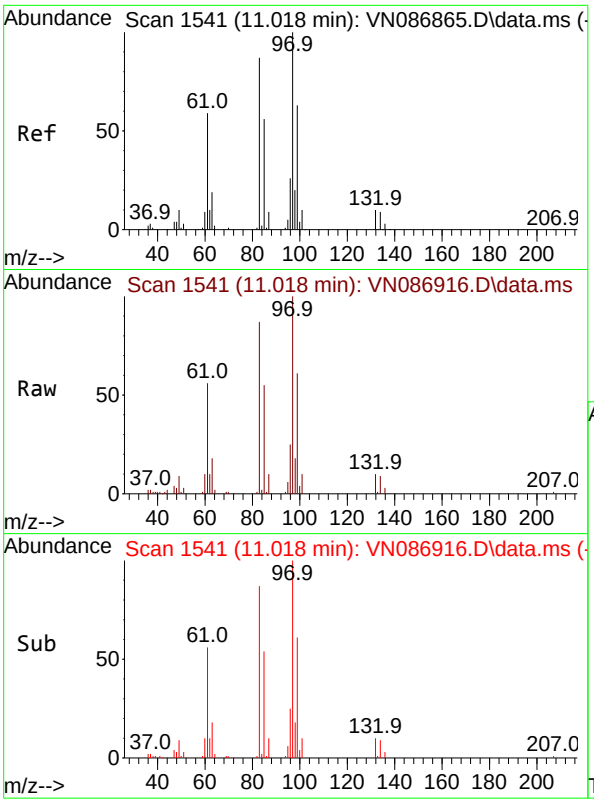




#54
cis-1,3-Dichloropropene
Concen: 19.264 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. -0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 75 Resp: 98066

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.1 | 26.2 | 39.4 |
| 39 | 39.4 | 32.3 | 48.5 |

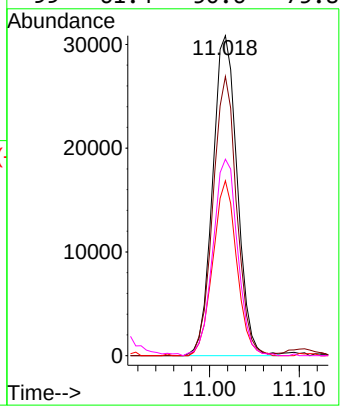





#55
1,1,2-Trichloroethane
Concen: 19.483 ug/l
RT: 11.018 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 97 Resp: 5862

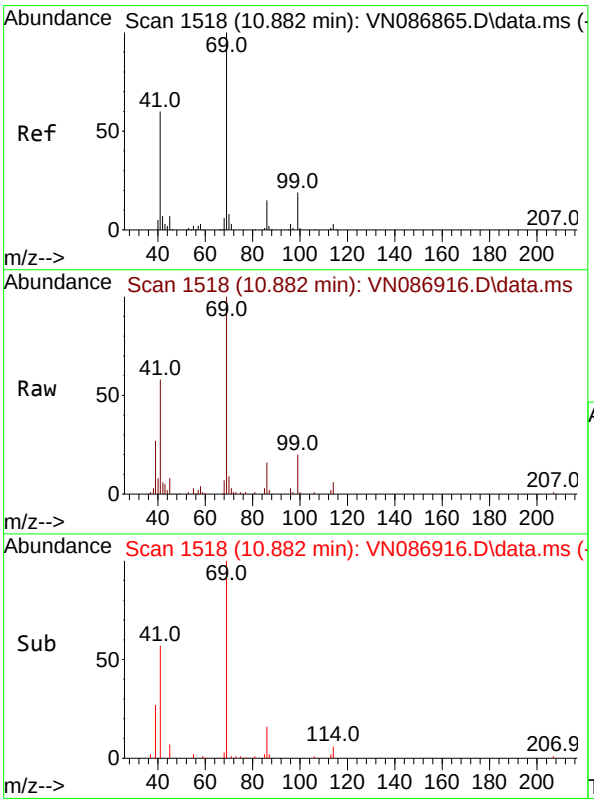
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 87.3 | 69.7 | 104.5 |
| 85 | 54.6 | 45.1 | 67.7 |
| 99 | 61.4 | 50.6 | 75.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations**
**APPROVED**

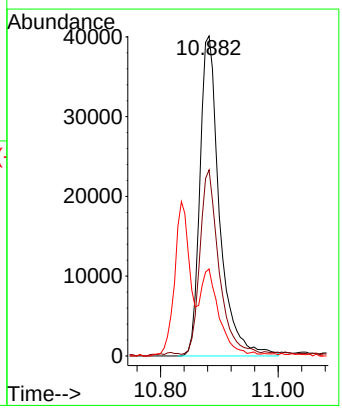
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

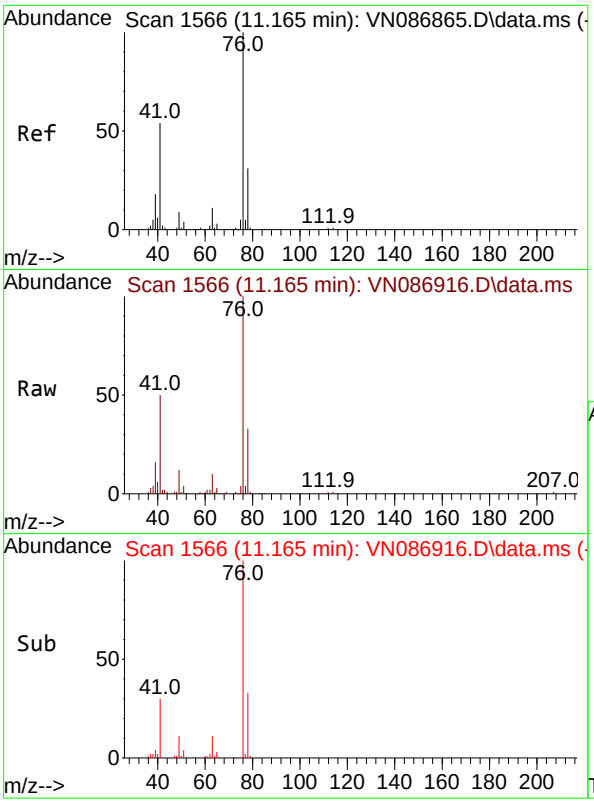



#56
Ethyl methacrylate
Concen: 19.460 ug/l
RT: 10.882 min Scan# 1518
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 69 Resp: 93272

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 56.3 | 47.2 | 70.8 |
| 39 | 25.5 | 23.0 | 34.6 |






#57
1,3-Dichloropropane
Concen: 18.990 ug/l
RT: 11.165 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 76 Resp: 9913

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.3 | 25.3 | 37.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations**
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Reviewed By :John Carlone 06/11/2025
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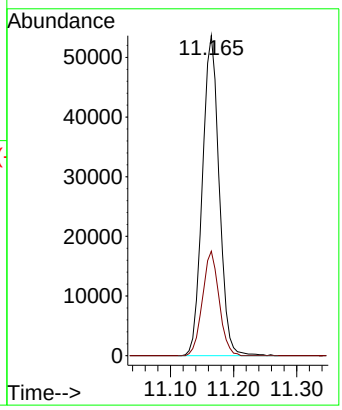
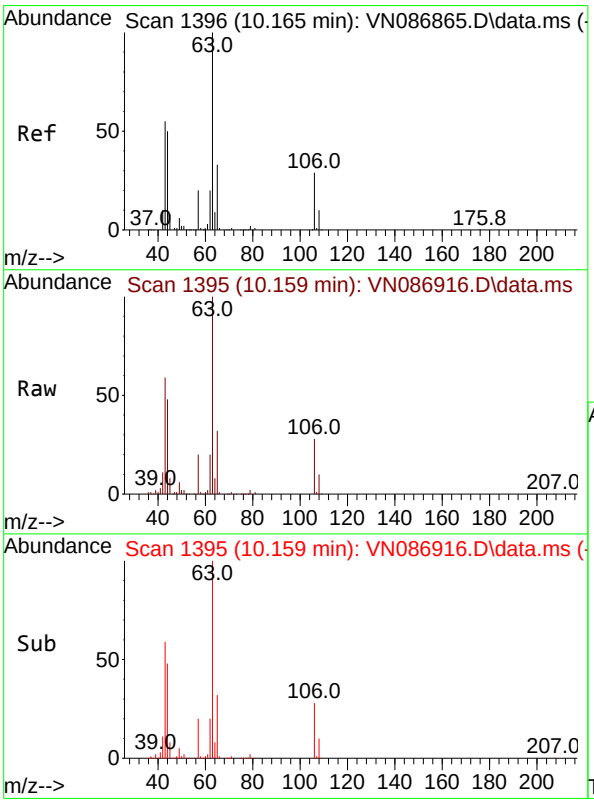
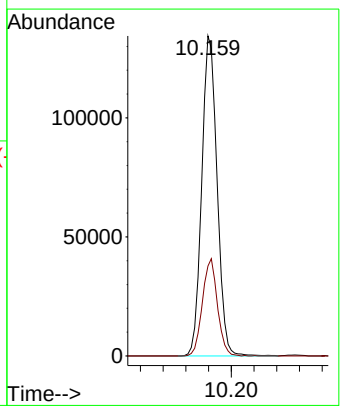


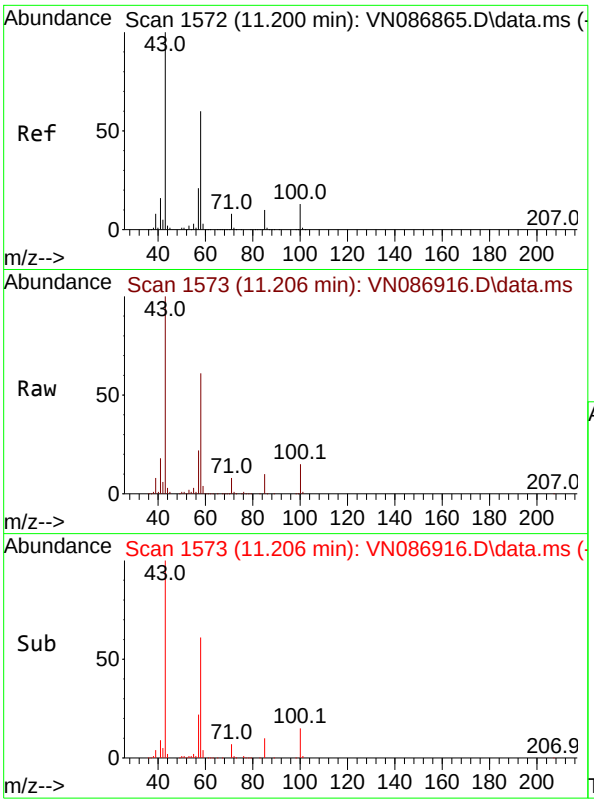




#58
2-Chloroethyl Vinyl ether
Concen: 87.967 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. -0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 63 Resp: 251485

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 29.7 | 23.0 | 34.6 |






#59
2-Hexanone
Concen: 87.405 ug/l
RT: 11.206 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 43 Resp: 27101

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 67.8 | 30.4 | 91.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations**
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Reviewed By :John Carlone 06/11/2025
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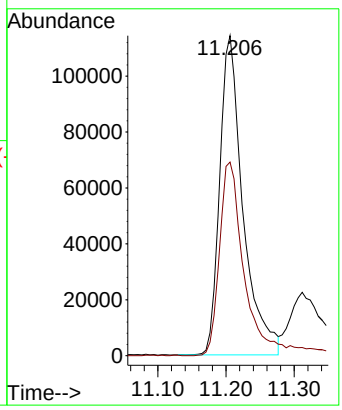
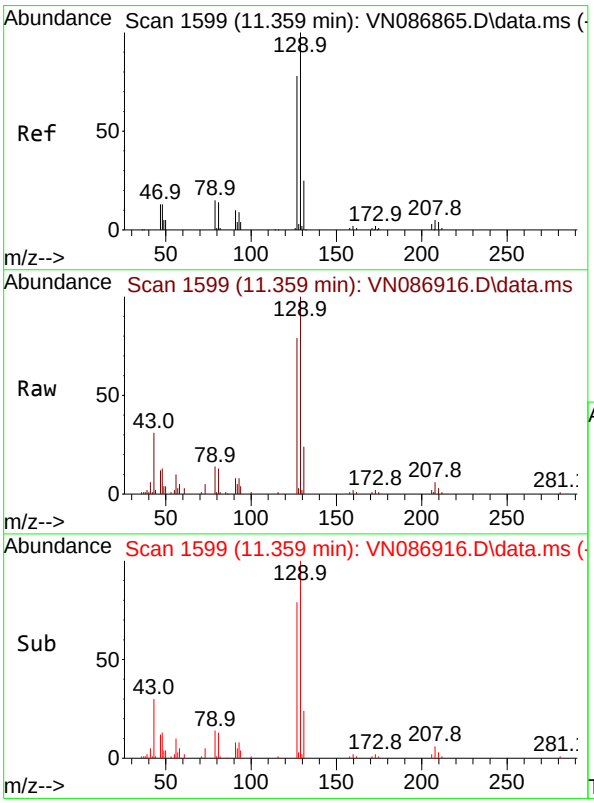
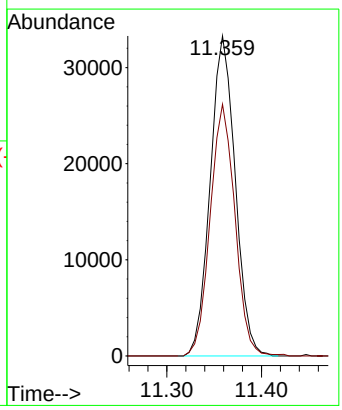


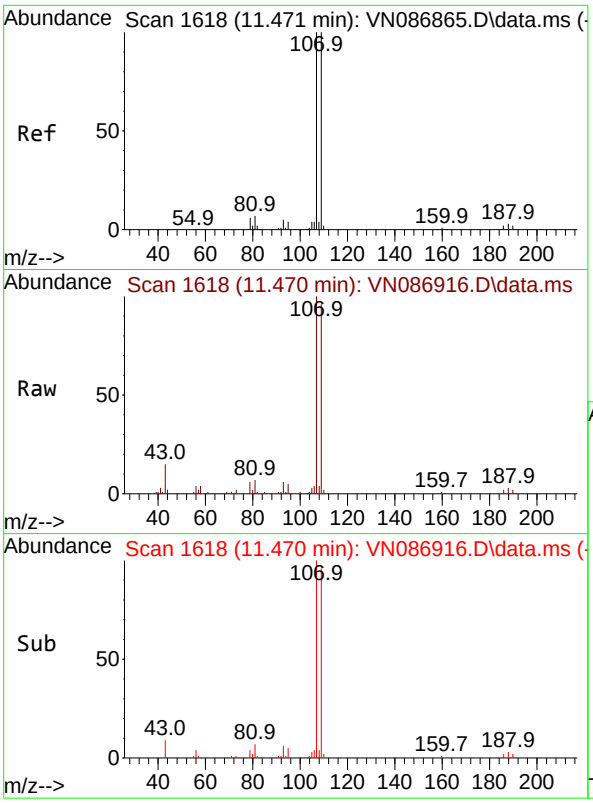




#60
Dibromochloromethane
Concen: 19.481 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:129 Resp: 61081

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 77.9 | 38.6 | 115.8 |






#61
1,2-Dibromoethane
Concen: 18.916 ug/l
RT: 11.470 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:107 Resp: 5834

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 95.3 | 76.3 | 114.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations**
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Reviewed By :John Carlone 06/11/2025
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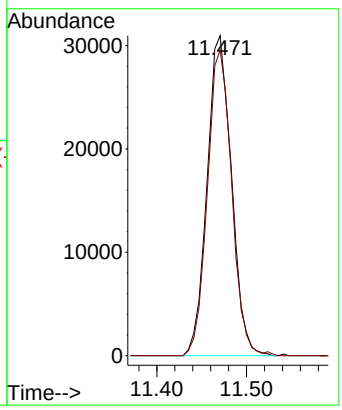
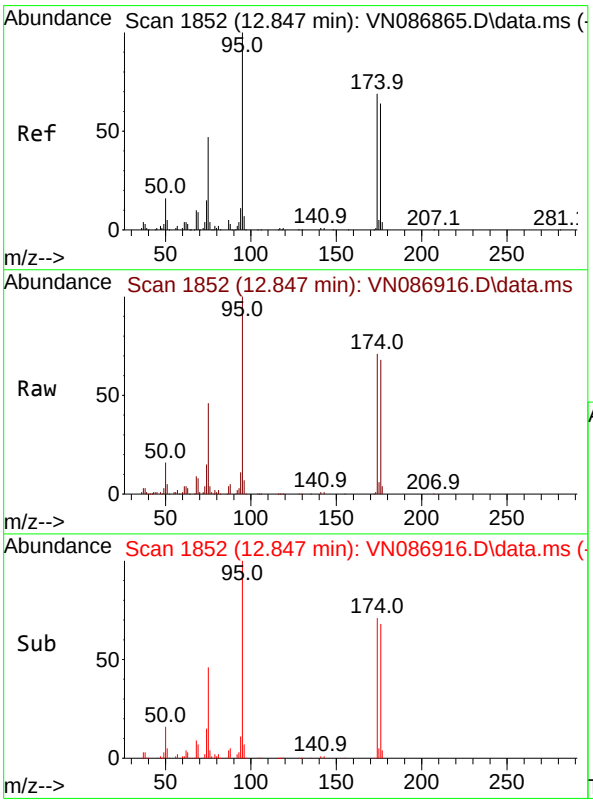
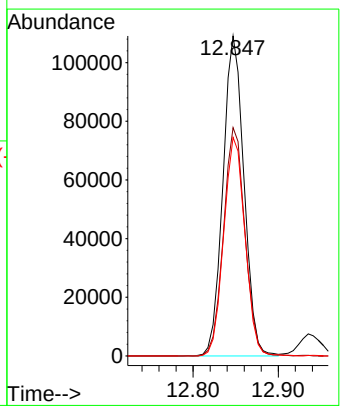


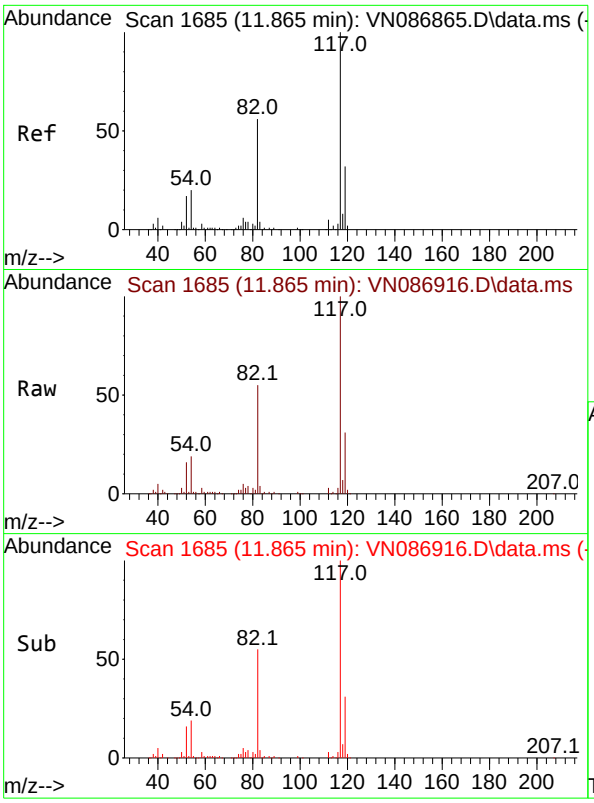




#62
4-Bromofluorobenzene
Concen: 48.327 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 95 Resp: 186676

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 72.7 | 0.0 | 141.8 |
| 176 | 69.2 | 0.0 | 132.6 |

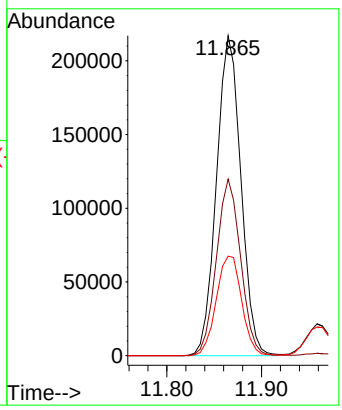





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:117 Resp: 38929

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 55.2 | 44.6 | 67.0 |
| 119 | 31.1 | 25.5 | 38.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations**
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Reviewed By :John Carlone 06/11/2025
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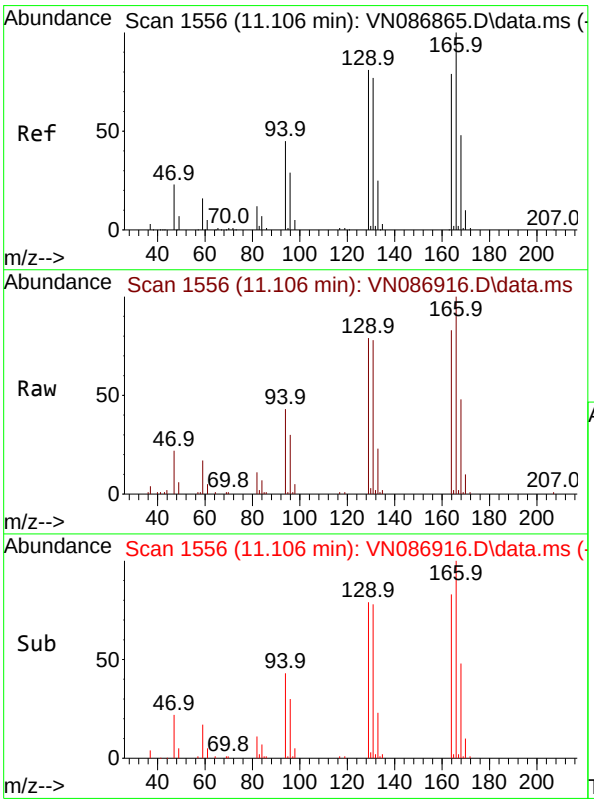
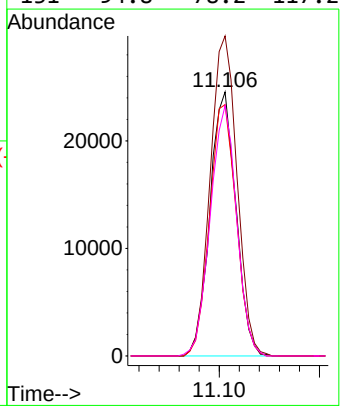
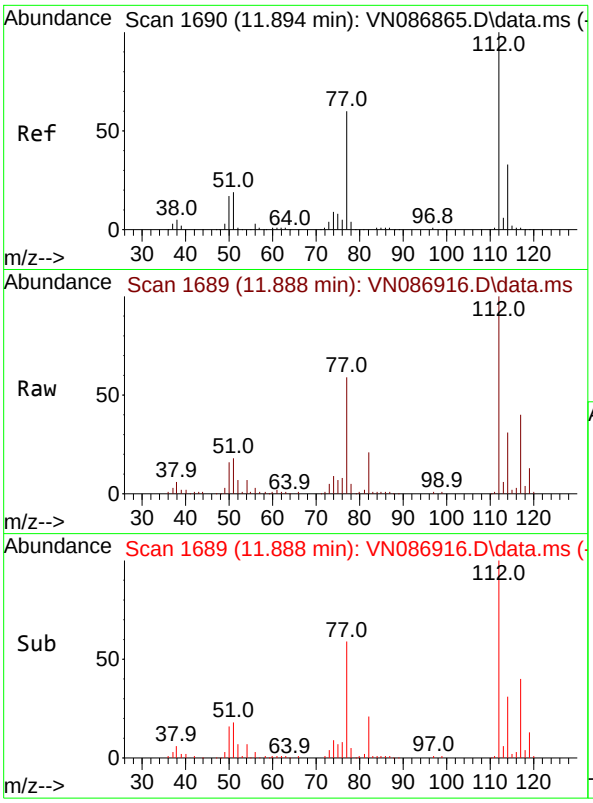



#64
Tetrachloroethene
Concen: 17.920 ug/l
RT: 11.106 min Scan# 1556
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:164 Resp: 44151

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 121.2 | 101.8 | 152.8 |
| 129 | 95.2 | 83.0 | 124.4 |
| 131 | 94.8 | 78.2 | 117.2 |






#65
Chlorobenzene
Concen: 18.874 ug/l
RT: 11.888 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:112 Resp: 16205

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 31.4 | 26.2 | 39.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations**
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Reviewed By :John Carlone 06/11/2025
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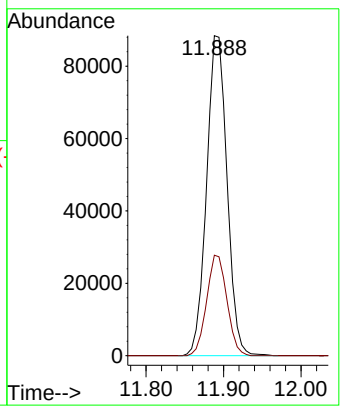
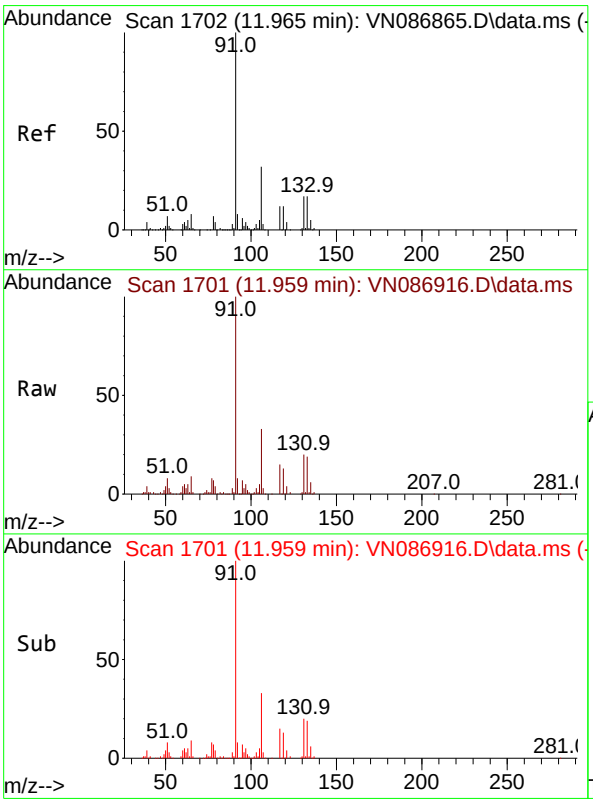
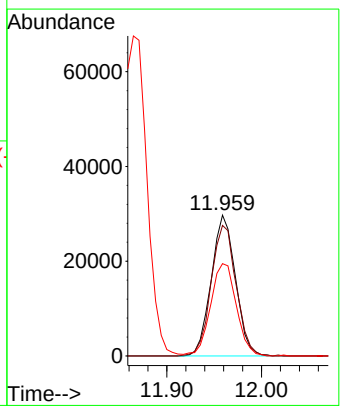


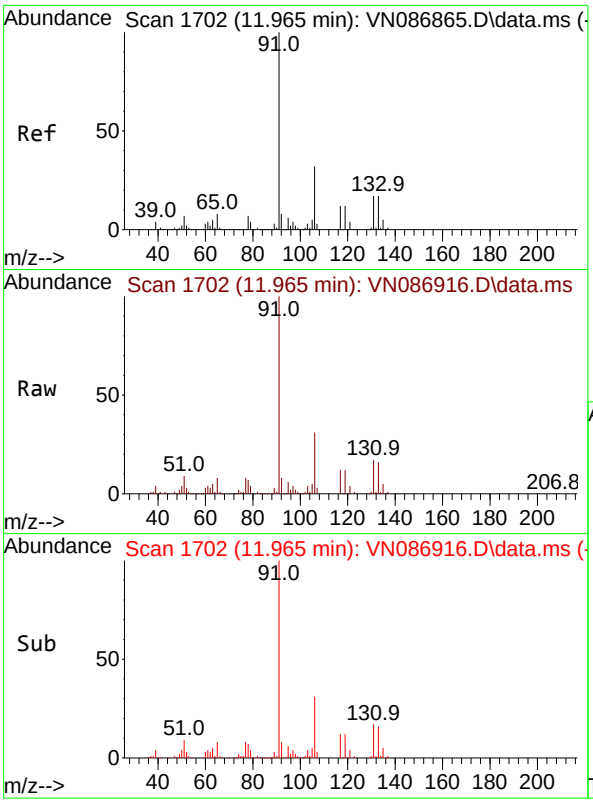




#66
1,1,1,2-Tetrachloroethane
Concen: 19.118 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:131 Resp: 52766

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 96.0 | 48.3 | 144.8 |
| 119 | 69.7 | 34.0 | 101.8 |






#67
Ethyl Benzene
Concen: 18.284 ug/l
RT: 11.965 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 91 Resp: 27041

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 30.7 | 25.4 | 38.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations**
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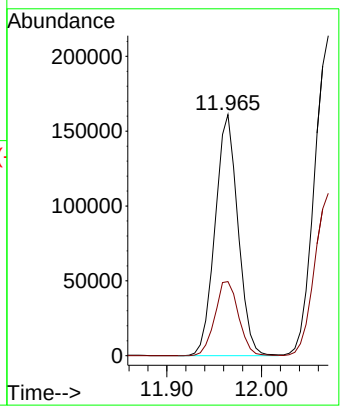
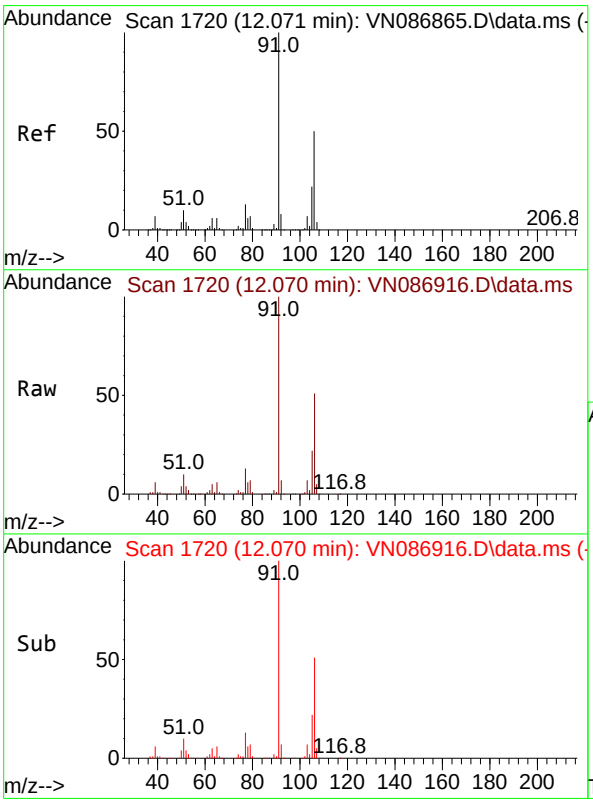
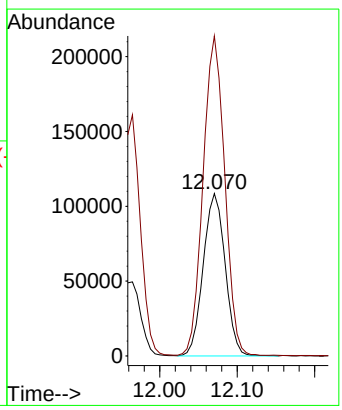


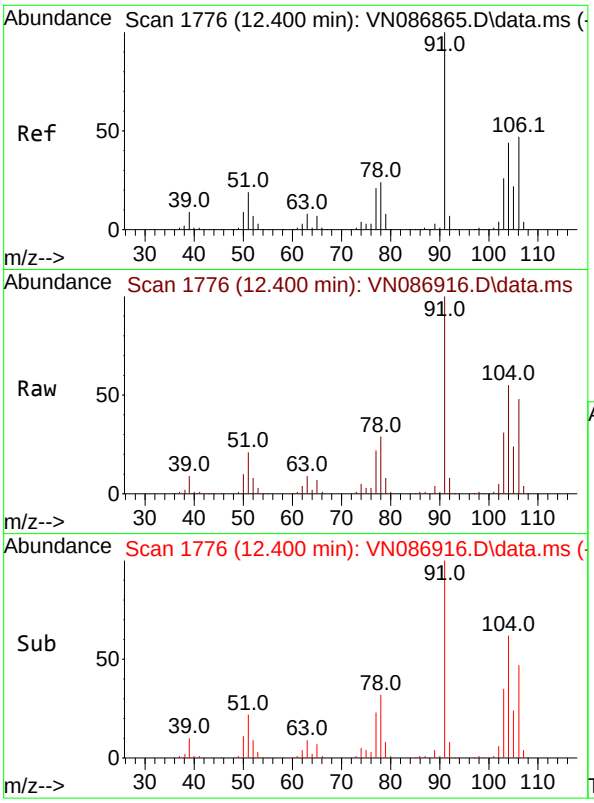




#68
m/p-Xylenes
Concen: 37.696 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:106 Resp: 213409

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 193.9 | 159.4 | 239.0 |






#69
o-Xylene
Concen: 18.922 ug/l
RT: 12.400 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:106 Resp: 10259

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 209.7 | 106.1 | 318.1 |

**Instrument :**
MSVOA_N
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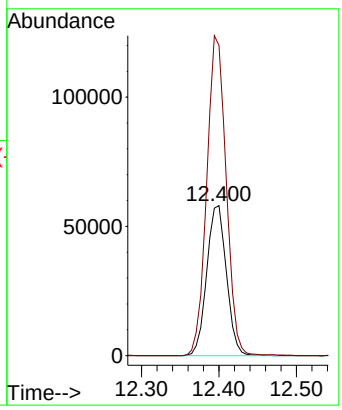
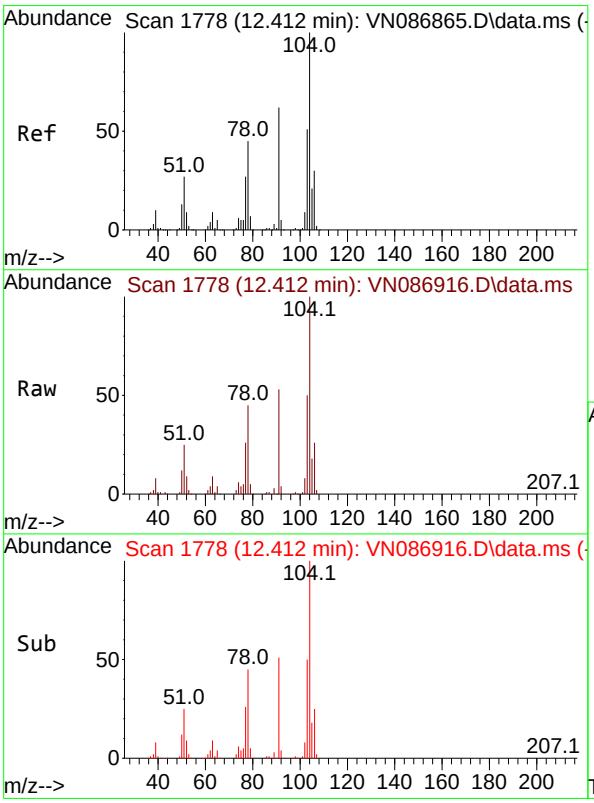
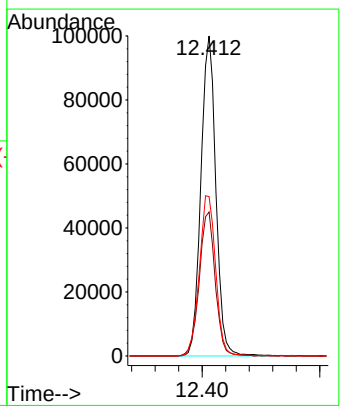


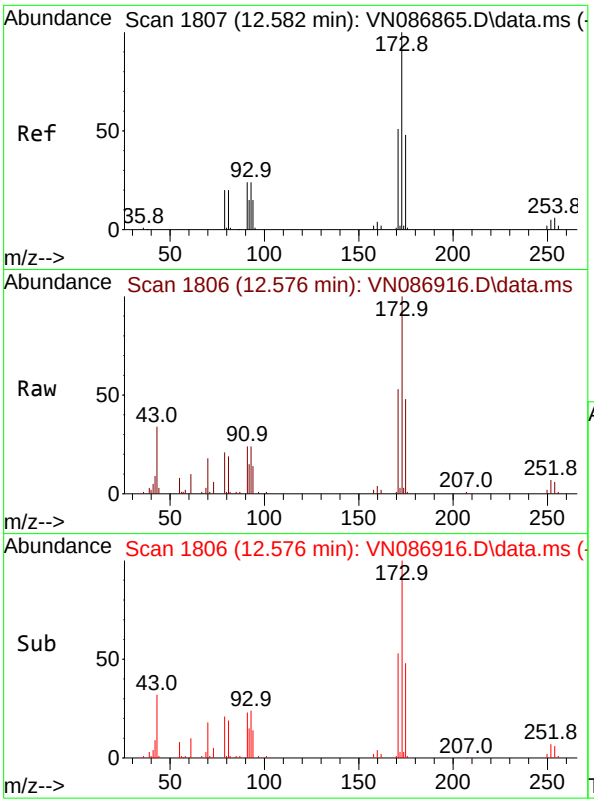




#70
Styrene
Concen: 19.008 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:104 Resp: 176358

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 48.0 | 38.5 | 57.7 |
| 103 | 54.6 | 43.1 | 64.7 |






#71
Bromoform
Concen: 20.077 ug/l
RT: 12.576 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:173 Resp: 4105

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 47.0 | 24.1 | 72.4 |
| 254 | 0.0 | 0.0 | 0.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations**
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Reviewed By :John Carlone 06/11/2025
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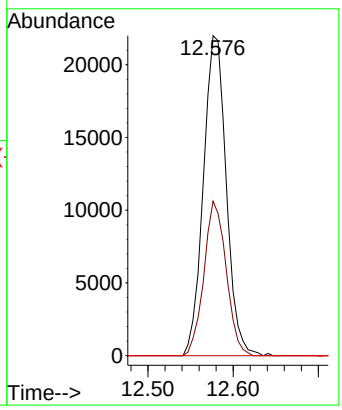
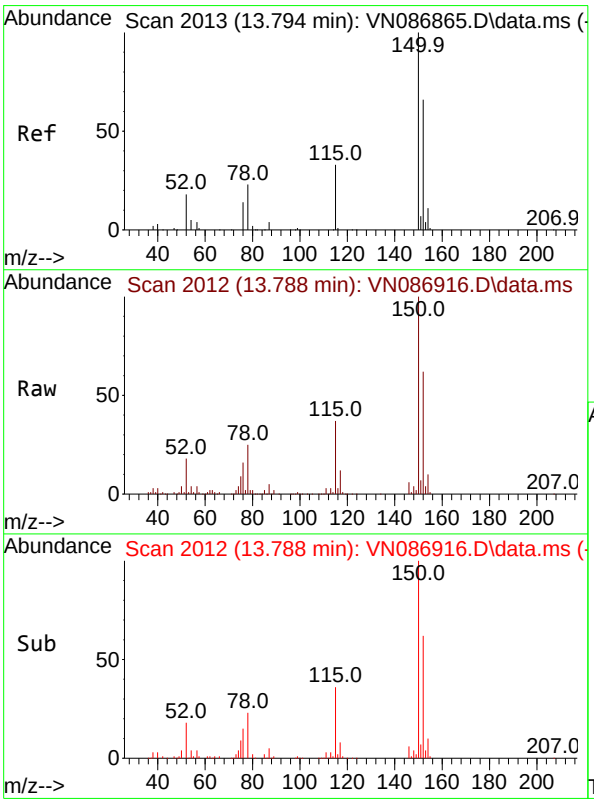
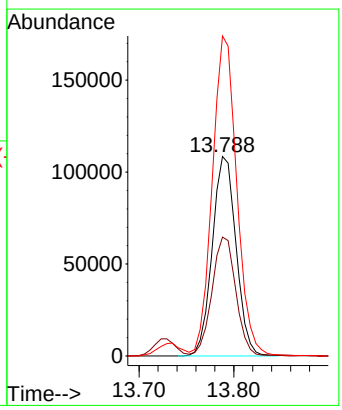


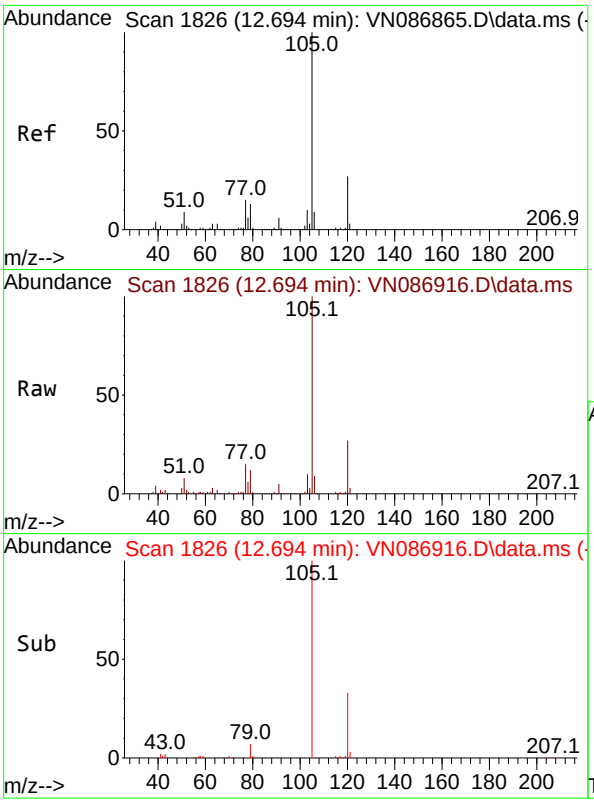




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:152 Resp: 189620

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 59.9 | 30.1 | 90.5 |
| 150 | 164.9 | 0.0 | 345.0 |

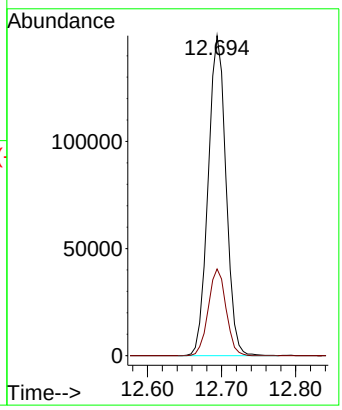





#73
Isopropylbenzene
Concen: 18.055 ug/l
RT: 12.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:105 Resp: 24941

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.9 | 13.5 | 40.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations**
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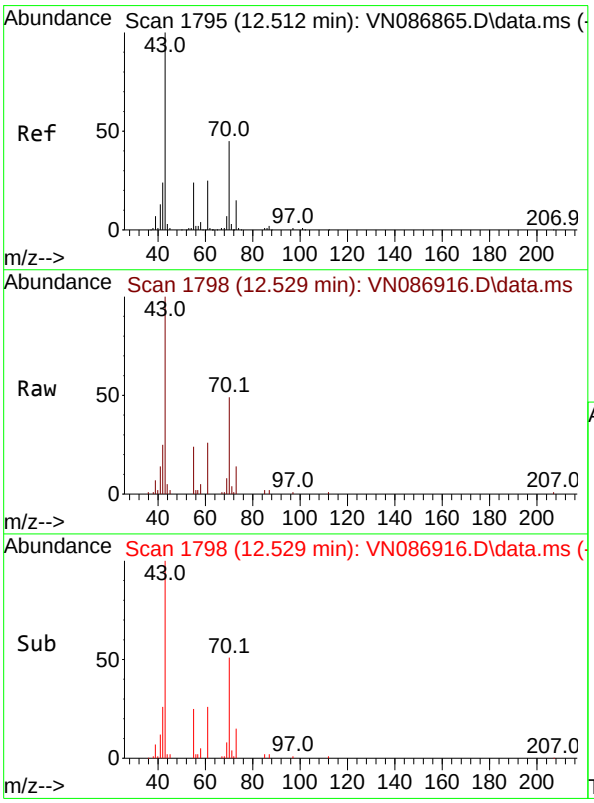
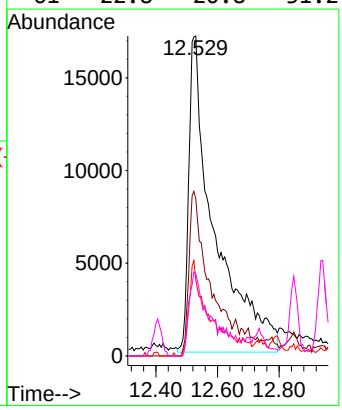
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

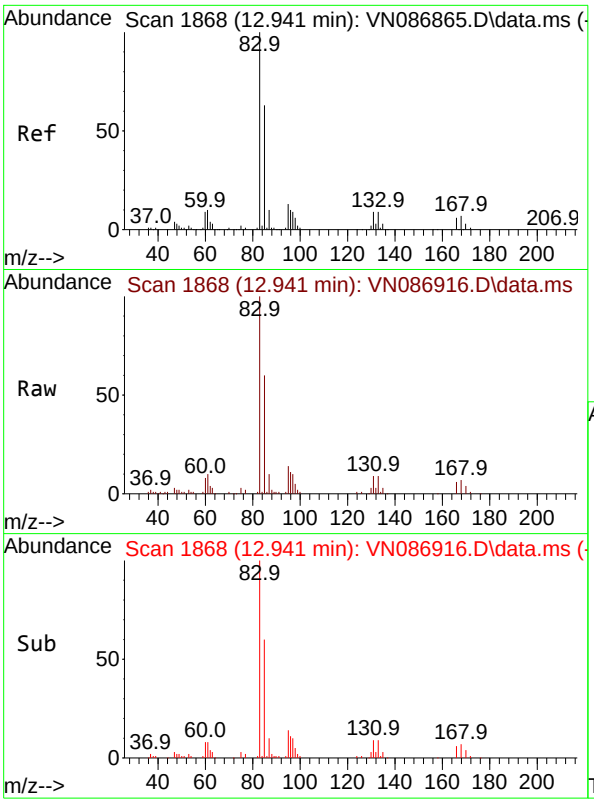



#74
N-amyl acetate
Concen: 20.433 ug/l m
RT: 12.529 min Scan# 1798
Delta R.T. 0.017 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 43 Resp: 98634

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 40.2 | 37.6 | 56.4 |
| 55 | 18.8 | 19.0 | 28.6# |
| 61 | 22.8 | 20.8 | 31.2 |






#75
1,1,2,2-Tetrachloroethane
Concen: 19.372 ug/l
RT: 12.941 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 83 Resp: 9065

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 9.6 | 4.9 | 14.7 |
| 85 | 63.0 | 32.0 | 96.0 |

**Instrument :**
MSVOA_N
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VN0610WBS01

**Manual Integrations**
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Reviewed By :John Carlone 06/11/2025
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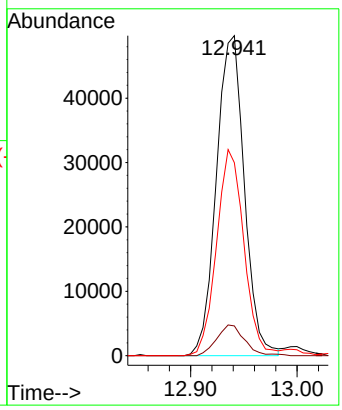
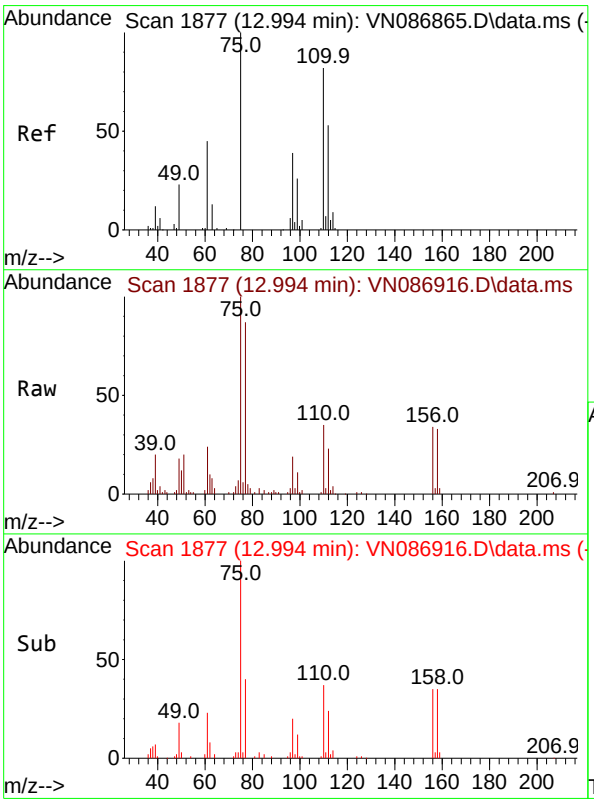
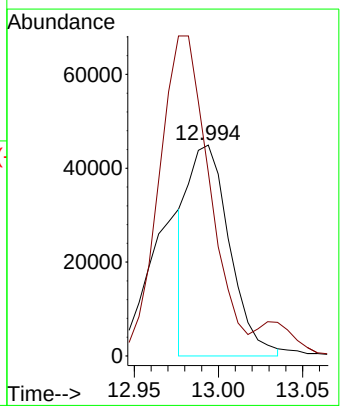


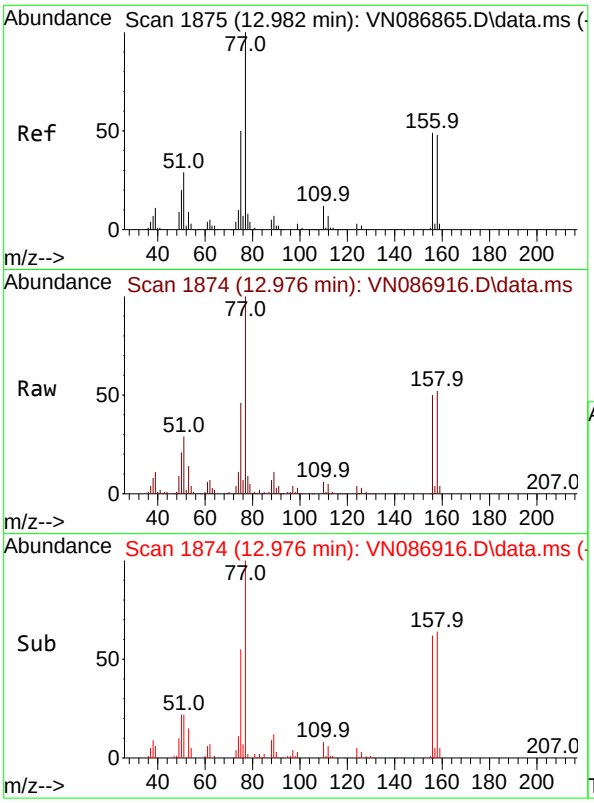




#76
1,2,3-Trichloropropane
Concen: 17.105 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 75 Resp: 77098

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 185.1 | 79.3 | 237.9 |

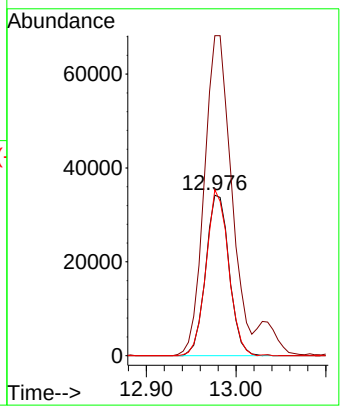





#77
Bromobenzene
Concen: 19.557 ug/l
RT: 12.976 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:156 Resp: 6195

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 230.3 | 117.7 | 353.1 |
| 158 | 99.6 | 48.1 | 144.4 |




**Instrument :**
MSVOA_N
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VN0610WBS01

**Manual Integrations**
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Reviewed By :John Carlone 06/11/2025
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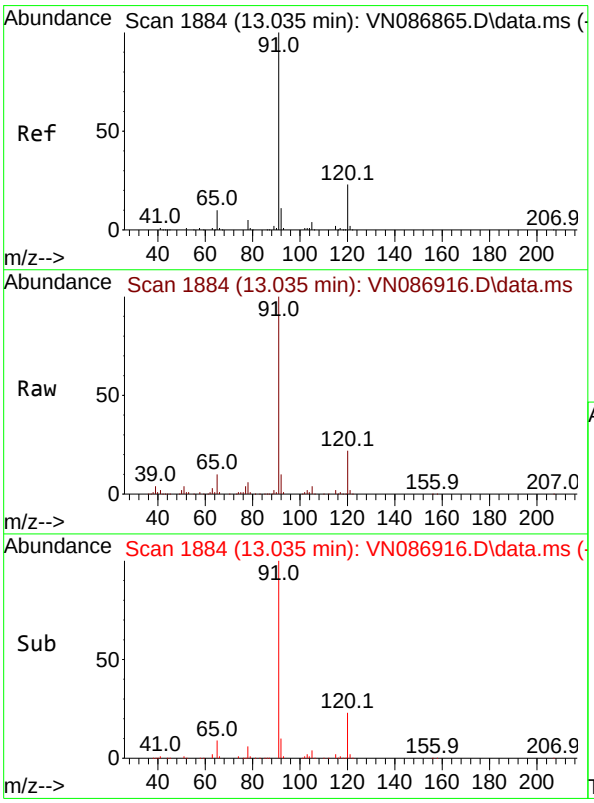
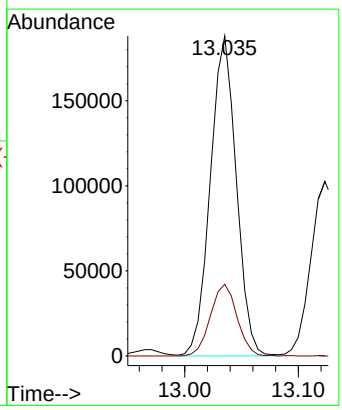
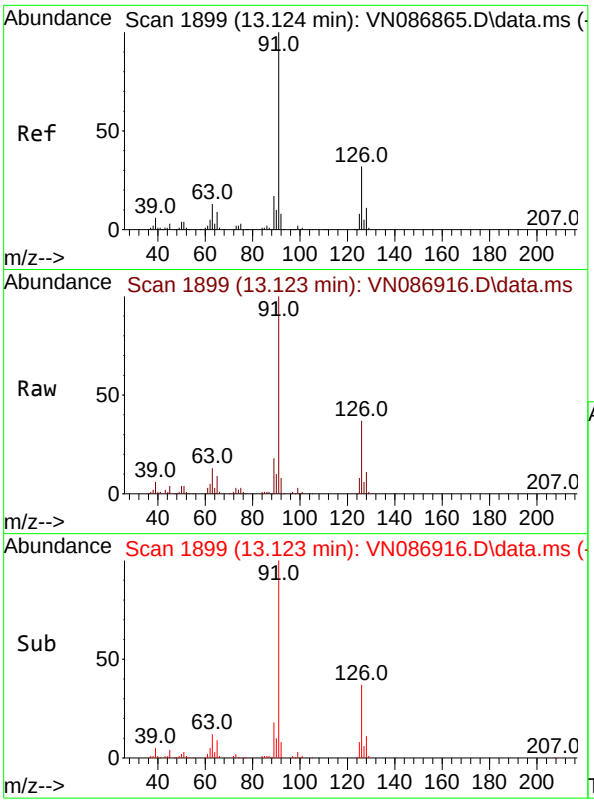



#78
n-propylbenzene
Concen: 17.805 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 91 Resp: 298896

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.9 | 11.4 | 34.2 |

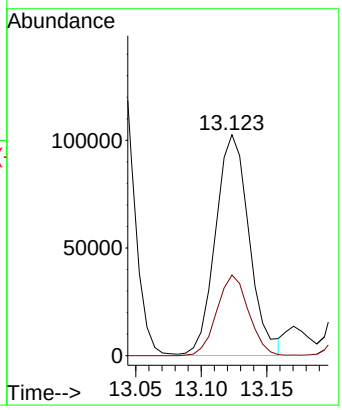





#79
2-Chlorotoluene
Concen: 18.226 ug/l
RT: 13.123 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 91 Resp: 18349

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 34.4 | 16.2 | 48.5 |




**Instrument :**
MSVOA_N
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VN0610WBS01

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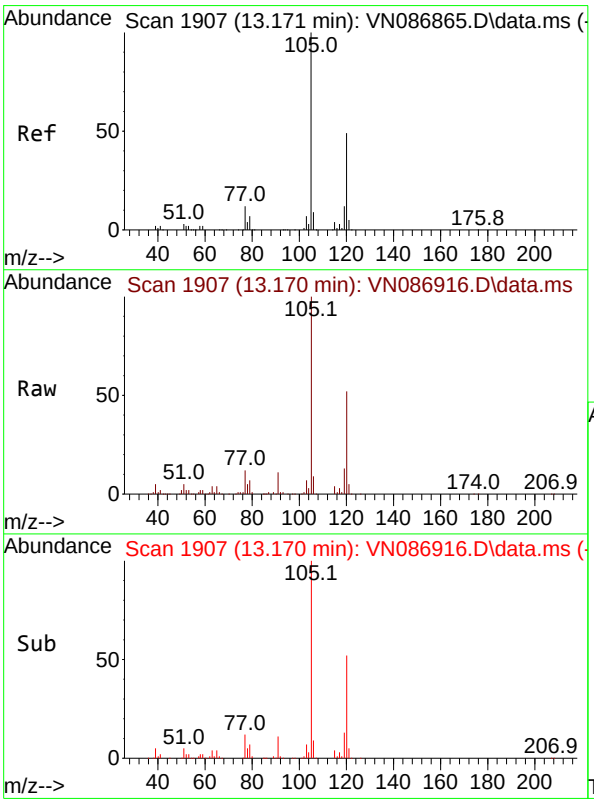
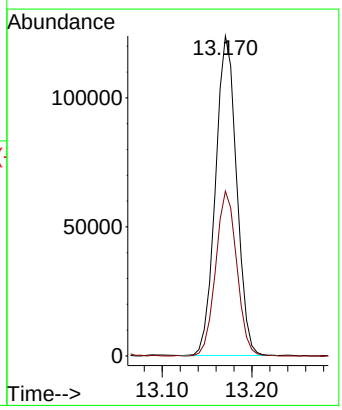
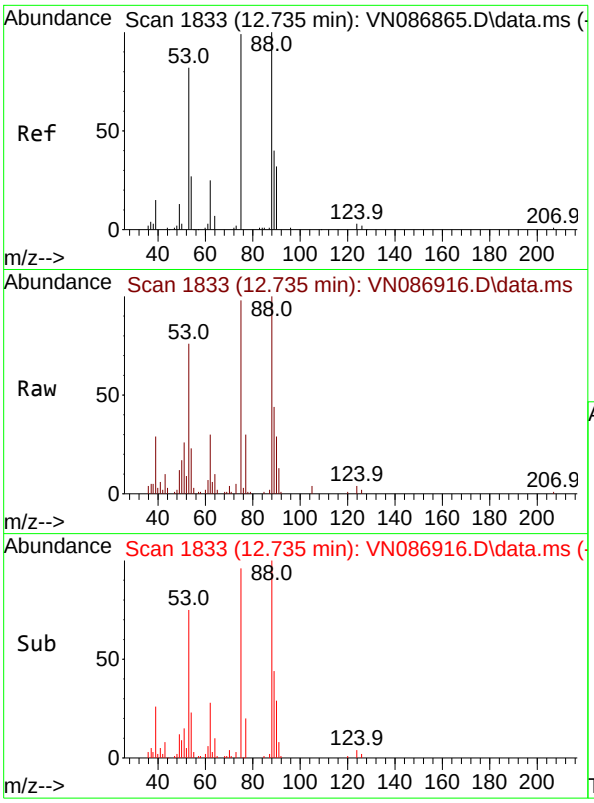



#80
1,3,5-Trimethylbenzene
Concen: 17.705 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:105 Resp: 201924

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 51.6 | 24.9 | 74.6 |






#81
trans-1,4-Dichloro-2-butene
Concen: 19.992 ug/l
RT: 12.735 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 75 Resp: 3914

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 74.1 | 66.6 | 99.8 |
| 89 | 41.5 | 36.7 | 55.1 |

**Instrument :**
MSVOA_N
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VN0610WBS01

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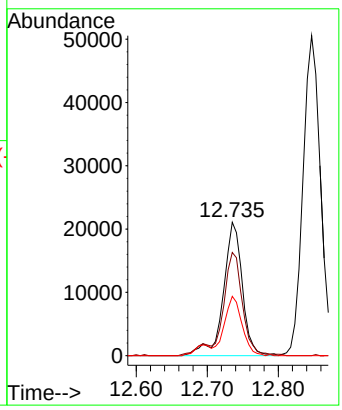
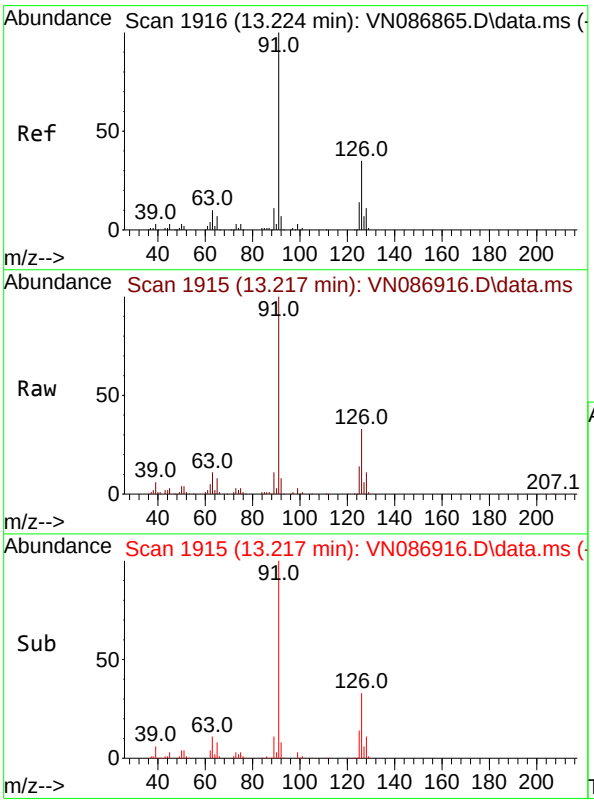
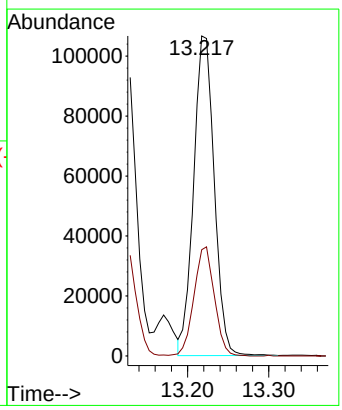


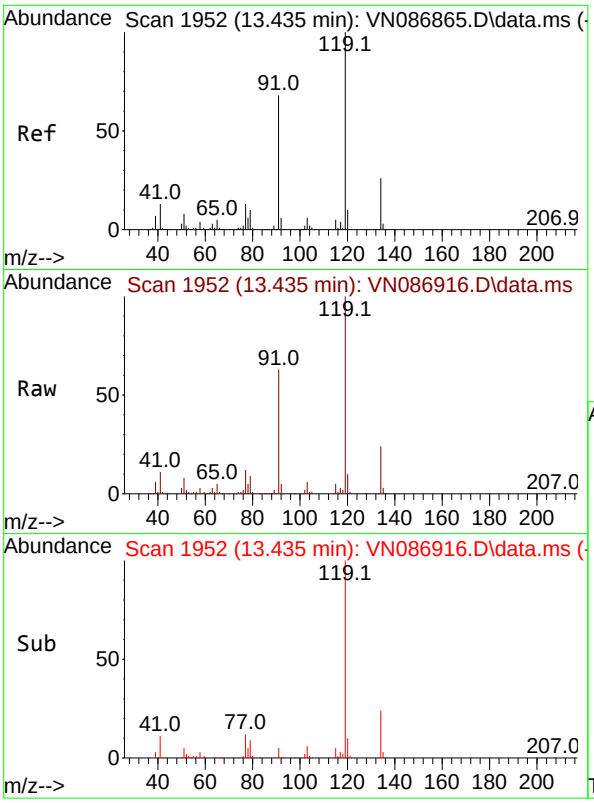




#82
4-Chlorotoluene
Concen: 18.476 ug/l
RT: 13.217 min Scan# 1915
Delta R.T. -0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 91 Resp: 188207

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 33.9 | 16.7 | 50.1 |

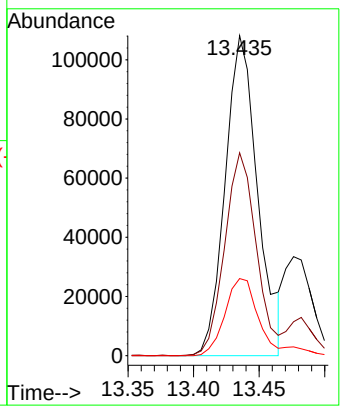





#83
tert-Butylbenzene
Concen: 17.859 ug/l
RT: 13.435 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:119 Resp: 18644

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 61.7 | 32.1 | 96.5 |
| 134 | 26.2 | 13.4 | 40.1 |




**Instrument :**
MSVOA_N
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VN0610WBS01

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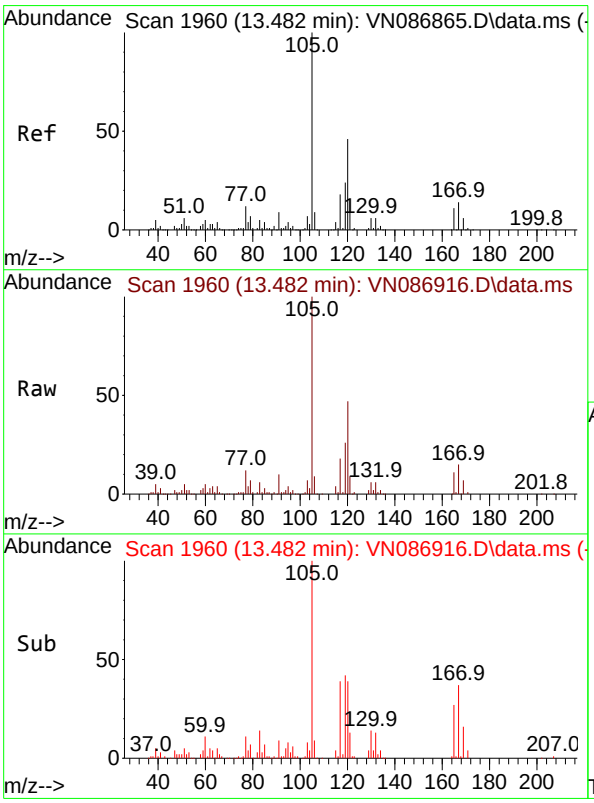
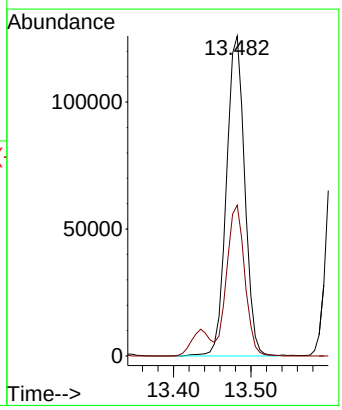
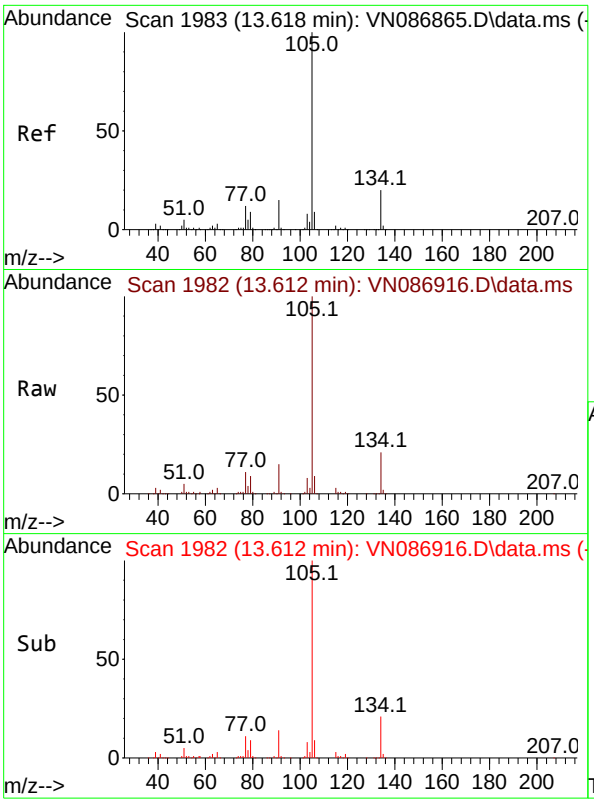



#84
1,2,4-Trimethylbenzene
Concen: 18.071 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:105 Resp: 206670

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 46.5 | 23.2 | 69.6 |

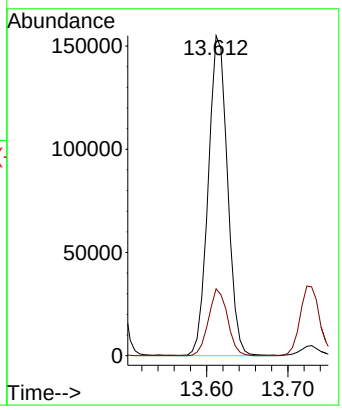





#85
sec-Butylbenzene
Concen: 16.843 ug/l
RT: 13.612 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:105 Resp: 25536

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 20.5 | 10.0 | 30.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

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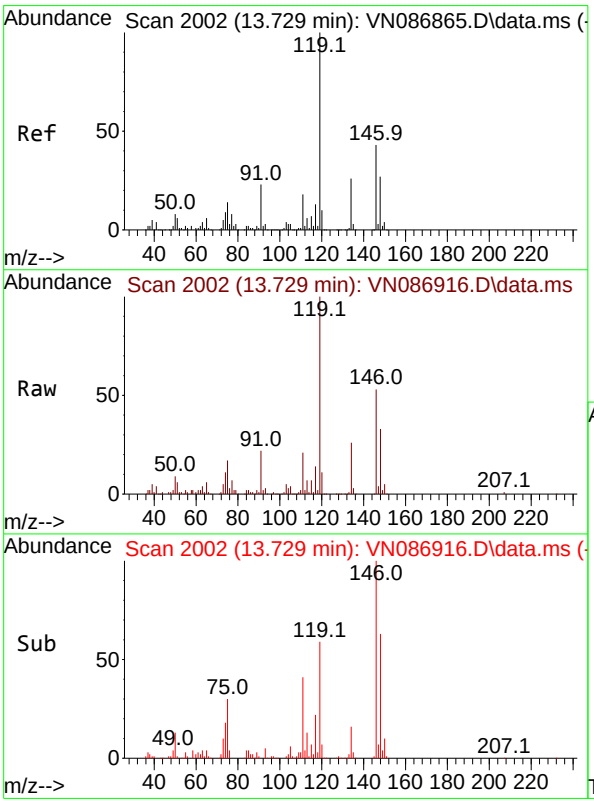
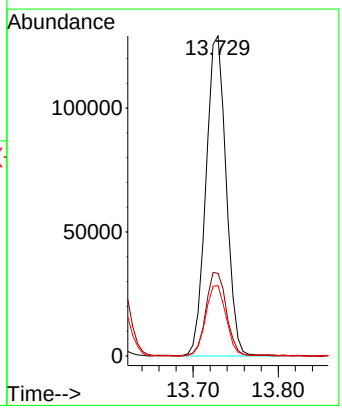
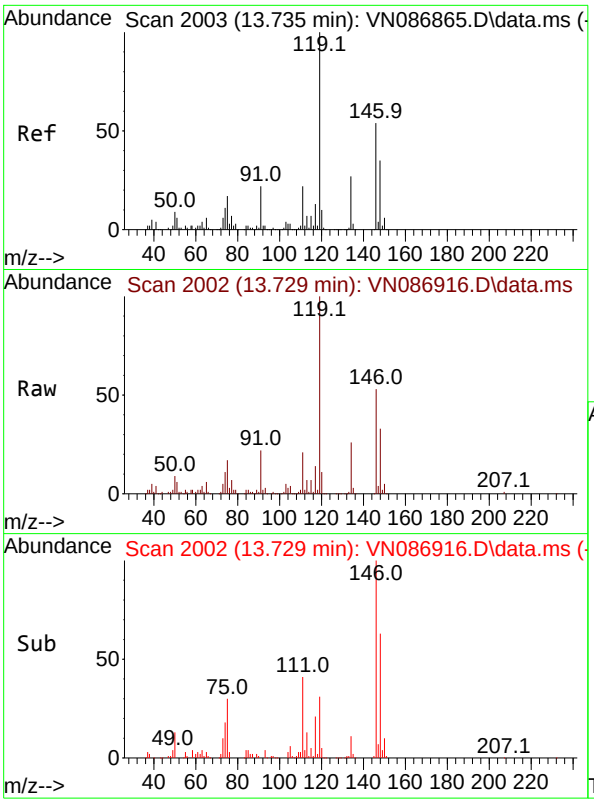



#86
p-Isopropyltoluene
Concen: 16.927 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:119 Resp: 212141

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 26.6 | 13.5 | 40.4 |
| 91 | 22.5 | 11.5 | 34.4 |






#87
1,3-Dichlorobenzene
Concen: 18.823 ug/l
RT: 13.729 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:146 Resp: 11732

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 41.0 | 20.9 | 62.8 |
| 148 | 63.0 | 32.0 | 96.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations**
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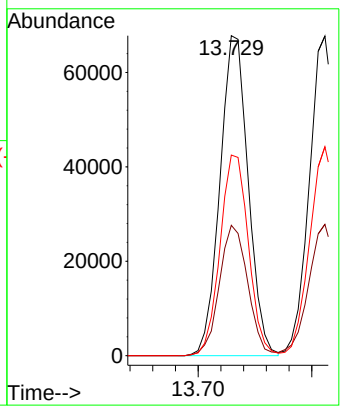
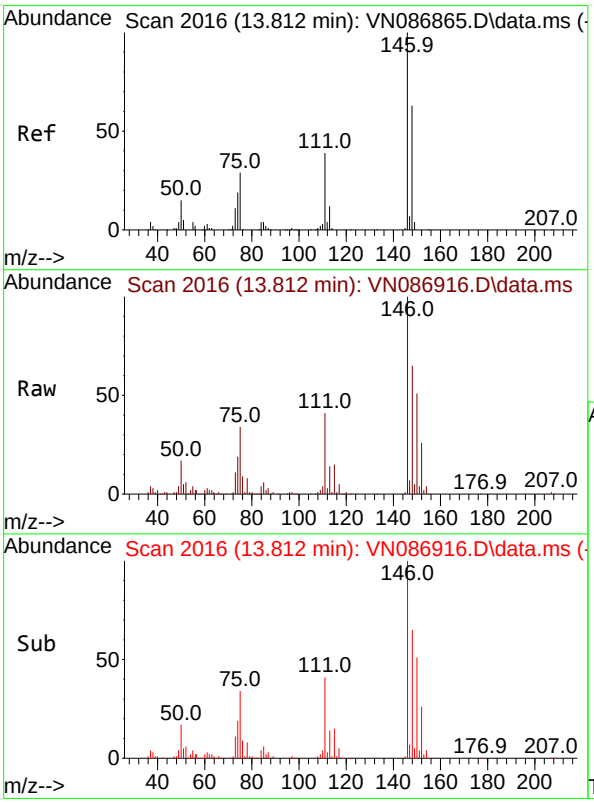
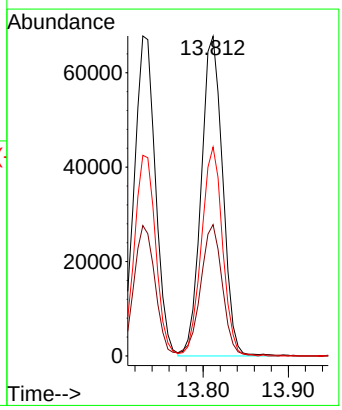


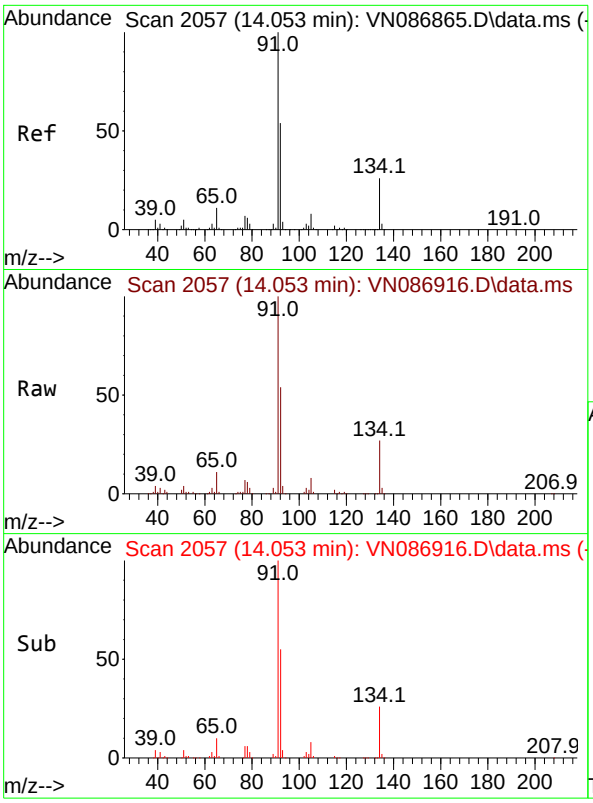




#88
1,4-Dichlorobenzene
Concen: 18.671 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:146 Resp: 118648

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 40.8 | 19.9 | 59.7 |
| 148 | 64.3 | 31.8 | 95.4 |

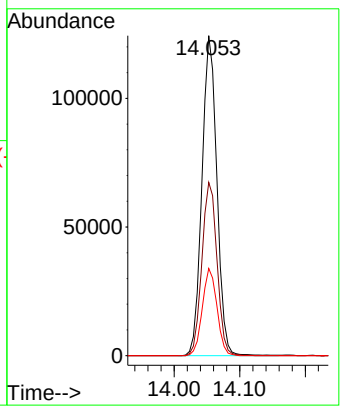





#89
n-Butylbenzene
Concen: 16.250 ug/l
RT: 14.053 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 91 Resp: 19725

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 54.8 | 27.5 | 82.4 |
| 134 | 26.7 | 13.0 | 39.0 |




**Instrument :**
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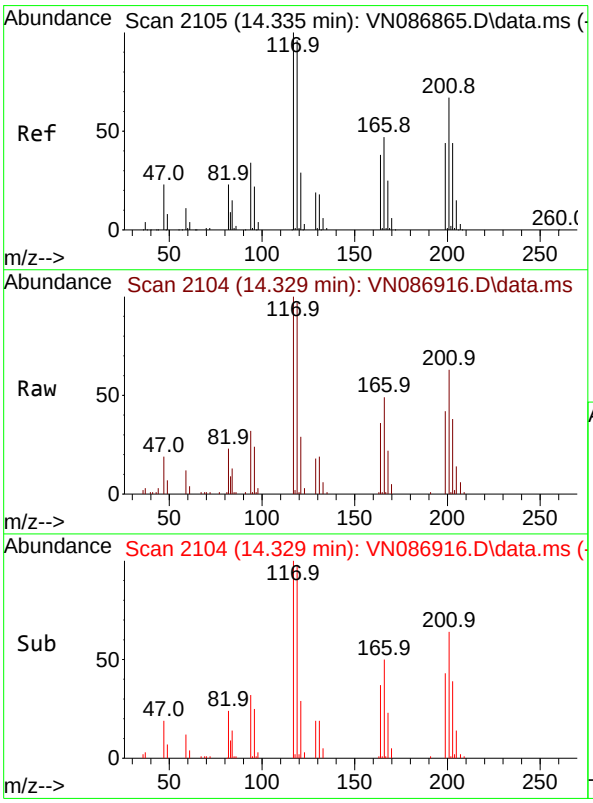
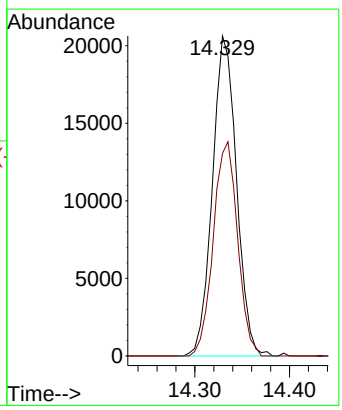
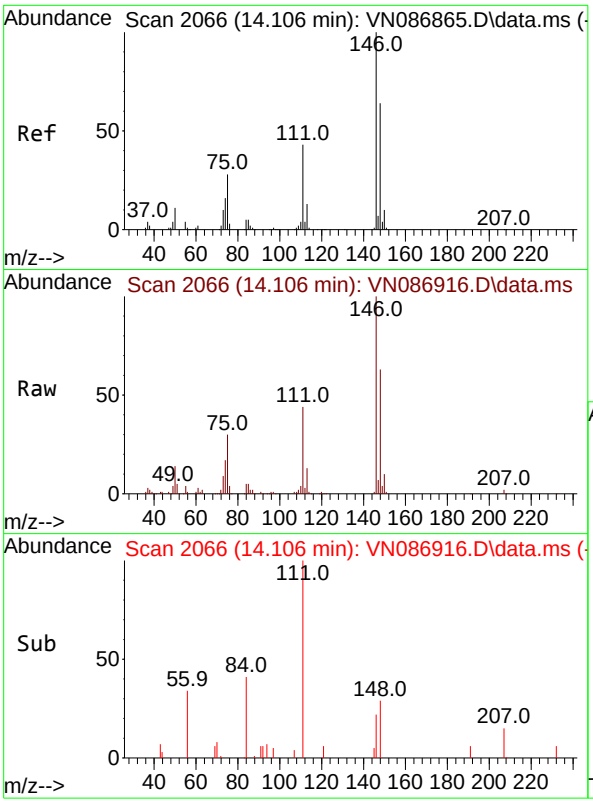



#90
Hexachloroethane
Concen: 17.178 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. -0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:117 Resp: 36492

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 67.5 | 33.2 | 99.6 |

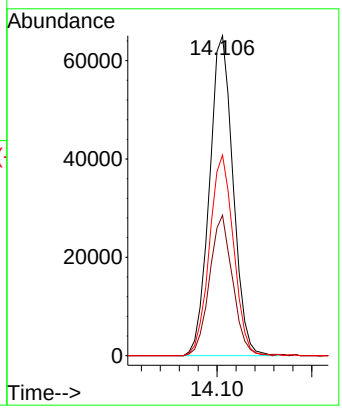





#91
1,2-Dichlorobenzene
Concen: 18.837 ug/l
RT: 14.106 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:146 Resp: 11279

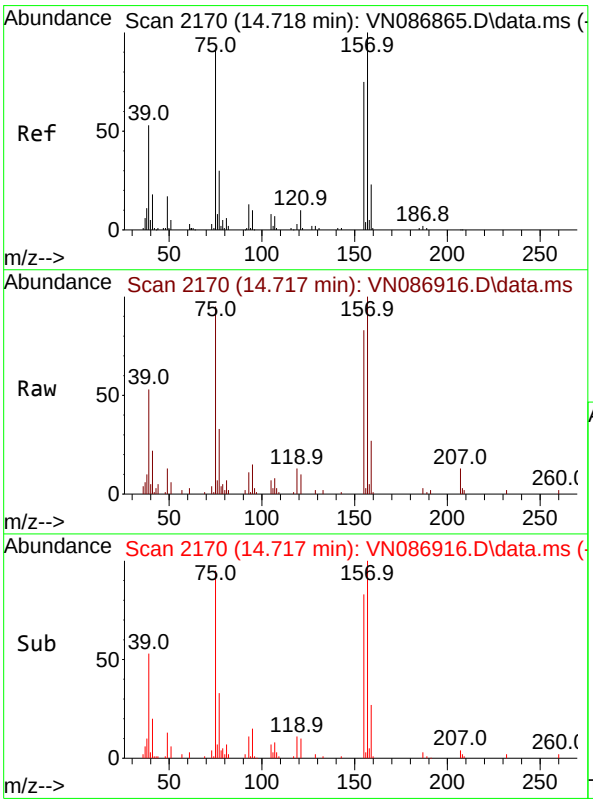
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.9 | 21.6 | 64.6 |
| 148 | 63.8 | 31.7 | 95.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations**
**APPROVED**

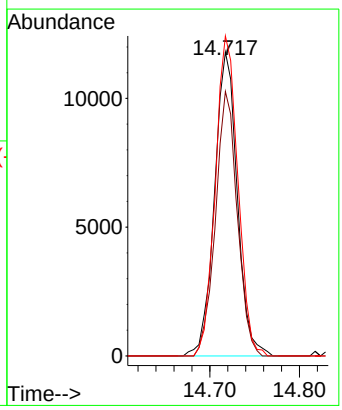
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

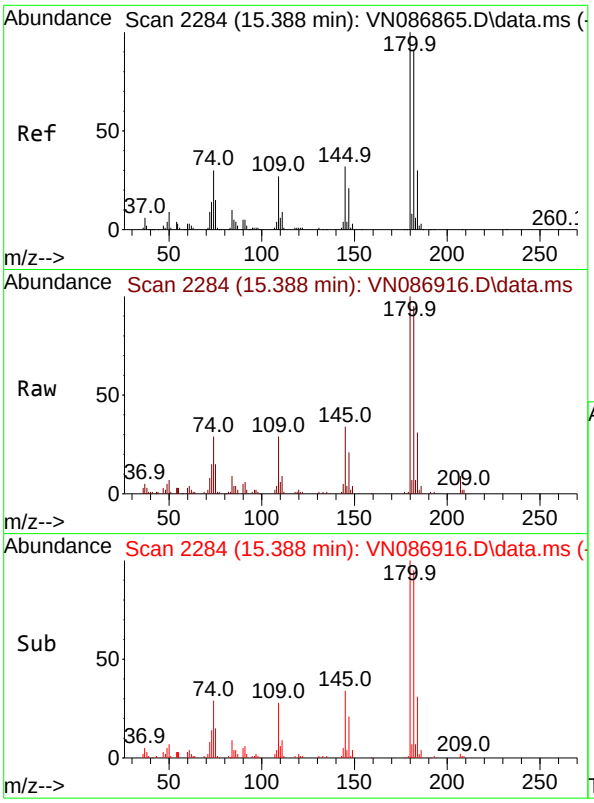



#92
1,2-Dibromo-3-Chloropropane
Concen: 18.587 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion: 75 Resp: 20803

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 83.1 | 41.1 | 123.4 |
| 157 | 104.1 | 52.7 | 158.1 |

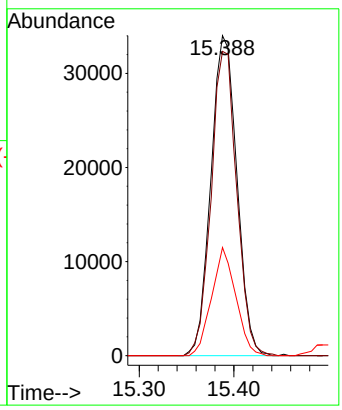





#93
1,2,4-Trichlorobenzene
Concen: 16.956 ug/l
RT: 15.388 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:180 Resp: 6483

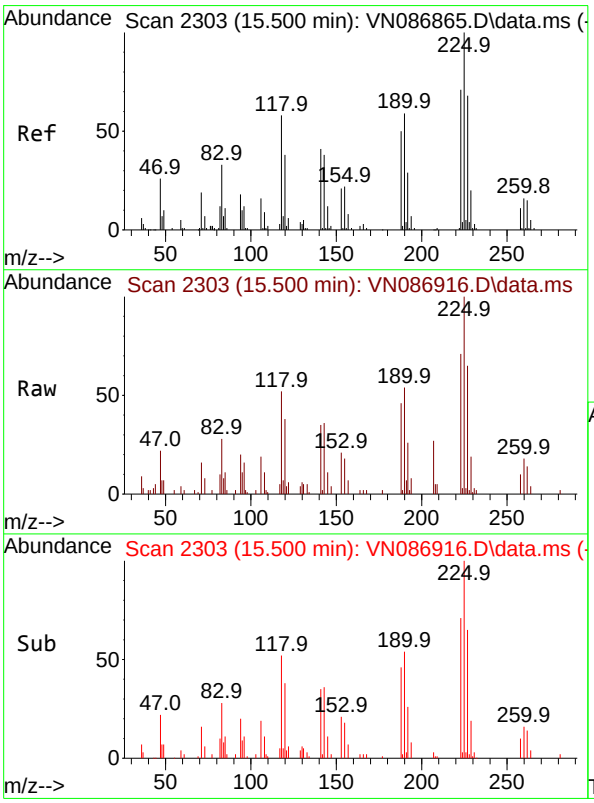
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 93.8 | 46.9 | 140.7 |
| 145 | 31.5 | 16.0 | 47.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations**
**APPROVED**

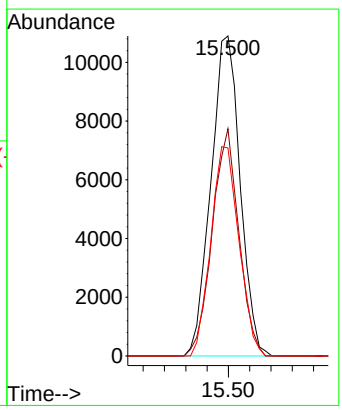
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

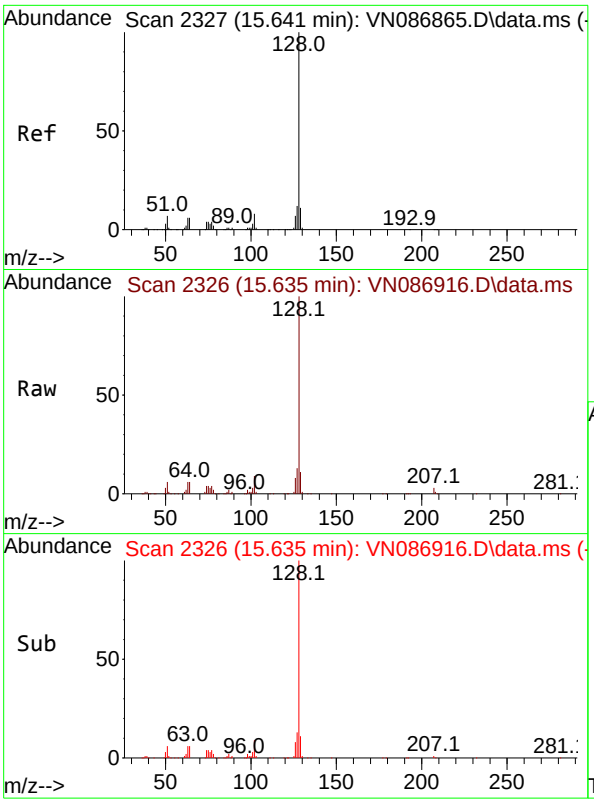



#94
Hexachlorobutadiene
Concen: 14.552 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:225 Resp: 20732

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 64.7 | 33.5 | 100.4 |
| 227 | 63.1 | 31.1 | 93.5 |

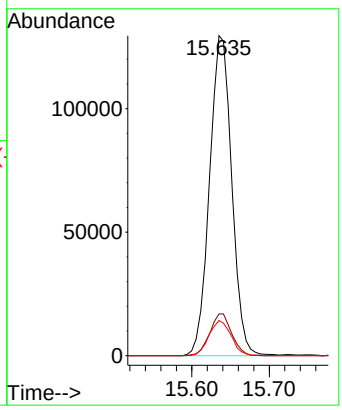





#95
Naphthalene
Concen: 18.109 ug/l
RT: 15.635 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:128 Resp: 25775

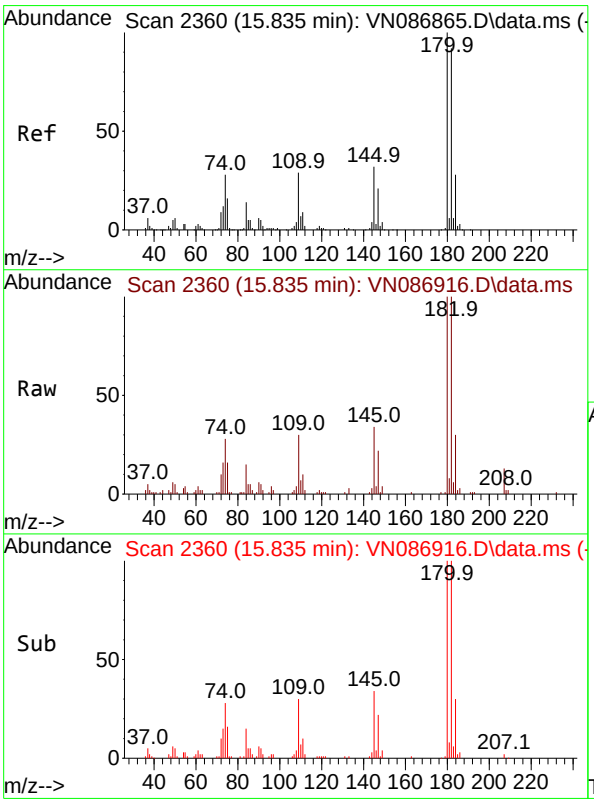
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 13.0 | 10.2 | 15.2 |
| 129 | 11.0 | 8.8 | 13.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0610WBS01

**Manual Integrations**
**APPROVED**

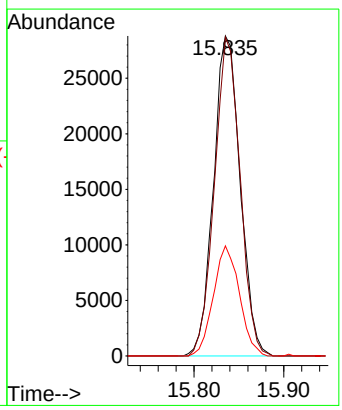
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025




#96
1,2,3-Trichlorobenzene
Concen: 15.670 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. -0.000 min
Lab File: VN086916.D
Acq: 10 Jun 2025 10:30

Tgt Ion:180 Resp: 59536

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.5 | 47.0 | 141.0 |
| 145 | 33.5 | 16.6 | 49.8 |



Raw Data: **VN086944.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | |
| Project: | Former Schlumberger STC PTC Site D3868221 | Date Received: | |
| Client Sample ID: | VN0611WBS02 | SDG No.: | Q2250 |
| Lab Sample ID: | VN0611WBS02 | Matrix: | Water |
| Analytical Method: | 8260D | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group3 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN086944.D | 1 | | 06/11/25 13:27 | VN061125 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-01-4 | Vinyl Chloride | 18.9 | | 0.26 | 1.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 19.2 | | 0.23 | 1.00 | ug/L |
| 75-34-3 | 1,1-Dichloroethane | 19.4 | | 0.23 | 1.00 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 19.5 | | 0.19 | 1.00 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 19.0 | | 0.20 | 1.00 | ug/L |
| 71-43-2 | Benzene | 19.3 | | 0.15 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 19.5 | | 0.22 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 19.9 | | 0.090 | 1.00 | ug/L |
| 79-00-5 | 1,1,2-Trichloroethane | 20.4 | | 0.21 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 19.2 | | 0.23 | 1.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 47.1 | | 70 (74) - 130 (125) | 94% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 51.1 | | 70 (75) - 130 (124) | 102% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 48.7 | | 70 (86) - 130 (113) | 97% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 50.0 | | 70 (77) - 130 (121) | 100% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 207000 | 8.235 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 371000 | 9.106 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 321000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 157000 | 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\VN061125\
Data File : VN086944.D
Acq On : 11 Jun 2025 13:27
Operator : JC\MD
Sample : VN0611WBS02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 12 01:31:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/12/2025
Supervised By :Semsettin Yesilyurt 06/12/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) Pentafluorobenzene | 8.235 | 168 | 206799 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.106 | 114 | 370524 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 321188 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 157403 | 50.000 | ug/l | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.588 | 65 | 130342 | 47.075 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 94.160% | | | |
| 35) Dibromofluoromethane | 8.177 | 113 | 112198 | 51.096 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 102.200% | | | |
| 50) Toluene-d8 | 10.571 | 98 | 423380 | 48.706 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 97.420% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 161321 | 49.951 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 99.900% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.153 | 85 | 40672 | 19.725 | ug/l | 100 |
| 3) Chloromethane | 2.401 | 50 | 42812 | 16.079 | ug/l | 97 |
| 4) Vinyl Chloride | 2.553 | 62 | 51780 | 18.852 | ug/l | 95 |
| 5) Bromomethane | 3.000 | 94 | 25577 | 16.641 | ug/l | 90 |
| 6) Chloroethane | 3.153 | 64 | 34500 | 19.446 | ug/l | 99 |
| 7) Trichlorofluoromethane | 3.530 | 101 | 68752 | 19.159 | ug/l | 99 |
| 8) Diethyl Ether | 3.983 | 74 | 30914 | 19.772 | ug/l | 94 |
| 9) 1,1,2-Trichlorotrifluo... | 4.400 | 101 | 44117 | 19.568 | ug/l | 99 |
| 10) Methyl Iodide | 4.612 | 142 | 36924 | 12.634 | ug/l | 100 |
| 11) Tert butyl alcohol | 5.541 | 59 | 69743 | 92.831 | ug/l | 99 |
| 12) 1,1-Dichloroethene | 4.365 | 96 | 44269 | 19.233 | ug/l | 97 |
| 13) Acrolein | 4.206 | 56 | 22290 | 93.730 | ug/l | 98 |
| 14) Allyl chloride | 5.047 | 41 | 68027 | 17.821 | ug/l | 97 |
| 15) Acrylonitrile | 5.741 | 53 | 166971 | 95.084 | ug/l | 100 |
| 16) Acetone | 4.447 | 43 | 145322 | 98.972 | ug/l | 98 |
| 17) Carbon Disulfide | 4.742 | 76 | 113132 | 17.769 | ug/l | 100 |
| 18) Methyl Acetate | 5.047 | 43 | 81357 | 19.013 | ug/l | 99 |
| 19) Methyl tert-butyl Ether | 5.812 | 73 | 163338 | 19.599 | ug/l | 98 |
| 20) Methylene Chloride | 5.294 | 84 | 52196 | 18.988 | ug/l | 96 |
| 21) trans-1,2-Dichloroethene | 5.812 | 96 | 47284 | 18.464 | ug/l | 95 |
| 22) Diisopropyl ether | 6.688 | 45 | 155508 | 19.326 | ug/l | 97 |
| 23) Vinyl Acetate | 6.618 | 43 | 653278 | 96.092 | ug/l | 98 |
| 24) 1,1-Dichloroethane | 6.588 | 63 | 89930 | 19.421 | ug/l | 100 |
| 25) 2-Butanone | 7.494 | 43 | 215760 | 90.401 | ug/l | 96 |
| 26) 2,2-Dichloropropane | 7.500 | 77 | 78031 | 21.663 | ug/l | 98 |
| 27) cis-1,2-Dichloroethene | 7.500 | 96 | 59578 | 19.453 | ug/l | 99 |
| 28) Bromochloromethane | 7.824 | 49 | 45329 | 19.909 | ug/l | 95 |
| 29) Tetrahydrofuran | 7.853 | 42 | 143866 | 92.532 | ug/l | 97 |
| 30) Chloroform | 7.977 | 83 | 90272 | 19.521 | ug/l | 98 |
| 31) Cyclohexane | 8.265 | 56 | 79050 | 17.603 | ug/l | 97 |
| 32) 1,1,1-Trichloroethane | 8.182 | 97 | 74861 | 19.033 | ug/l | 97 |
| 36) 1,1-Dichloropropene | 8.377 | 75 | 63577 | 19.431 | ug/l | 99 |
| 37) Ethyl Acetate | 7.571 | 43 | 80415 | 19.306 | ug/l | 99 |
| 38) Carbon Tetrachloride | 8.371 | 117 | 61747 | 19.222 | ug/l | 97 |
| 39) Methylcyclohexane | 9.606 | 83 | 75971 | 16.947 | ug/l | 98 |
| 40) Benzene | 8.612 | 78 | 206255 | 19.277 | ug/l | 99 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061125\
Data File : VN086944.D
Acq On : 11 Jun 2025 13:27
Operator : JC\MD
Sample : VN0611WBS02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 12 01:31:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/12/2025
Supervised By :Semsettin Yesilyurt 06/12/2025

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.788 | 41 | 42617 | 18.218 | ug/l | | 93 |
| 42) 1,2-Dichloroethane | 8.677 | 62 | 63379 | 19.530 | ug/l | | 98 |
| 43) Isopropyl Acetate | 8.694 | 43 | 126914 | 18.984 | ug/l | | 98 |
| 44) Trichloroethene | 9.359 | 130 | 50593 | 19.942 | ug/l | | 99 |
| 45) 1,2-Dichloropropane | 9.624 | 63 | 51091 | 19.628 | ug/l | | 95 |
| 46) Dibromomethane | 9.712 | 93 | 34741 | 20.093 | ug/l | | 99 |
| 47) Bromodichloromethane | 9.894 | 83 | 69845 | 19.634 | ug/l | | 98 |
| 48) Methyl methacrylate | 9.682 | 41 | 57757 | 18.771 | ug/l | | 99 |
| 49) 1,4-Dioxane | 9.706 | 88 | 22914 | 409.347 | ug/l | # | 97 |
| 51) 4-Methyl-2-Pentanone | 10.447 | 43 | 394396 | 97.997 | ug/l | | 99 |
| 52) Toluene | 10.629 | 92 | 127563 | 19.509 | ug/l | | 99 |
| 53) t-1,3-Dichloropropene | 10.835 | 75 | 79224 | 19.917 | ug/l | | 100 |
| 54) cis-1,3-Dichloropropene | 10.318 | 75 | 85586 | 20.109 | ug/l | | 99 |
| 55) 1,1,2-Trichloroethane | 11.018 | 97 | 51421 | 20.438 | ug/l | | 94 |
| 56) Ethyl methacrylate | 10.882 | 69 | 80942 | 20.198 | ug/l | | 94 |
| 57) 1,3-Dichloropropane | 11.165 | 76 | 85602 | 19.613 | ug/l | | 99 |
| 58) 2-Chloroethyl Vinyl ether | 10.165 | 63 | 243584 | 101.910 | ug/l | | 99 |
| 59) 2-Hexanone | 11.206 | 43 | 231264 | 89.210 | ug/l | | 95 |
| 60) Dibromochloromethane | 11.359 | 129 | 53655 | 20.468 | ug/l | | 99 |
| 61) 1,2-Dibromoethane | 11.471 | 107 | 50832 | 19.711 | ug/l | | 99 |
| 64) Tetrachloroethene | 11.106 | 164 | 38926 | 19.150 | ug/l | | 98 |
| 65) Chlorobenzene | 11.894 | 112 | 141721 | 20.006 | ug/l | | 98 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 46404 | 20.378 | ug/l | | 99 |
| 67) Ethyl Benzene | 11.965 | 91 | 239733 | 19.647 | ug/l | | 100 |
| 68) m/p-Xylenes | 12.070 | 106 | 185026 | 39.613 | ug/l | | 99 |
| 69) o-Xylene | 12.400 | 106 | 90240 | 20.172 | ug/l | | 99 |
| 70) Styrene | 12.412 | 104 | 154149 | 20.137 | ug/l | | 99 |
| 71) Bromoform | 12.582 | 173 | 35350 | 20.952 | ug/l | # | 96 |
| 73) Isopropylbenzene | 12.694 | 105 | 221545 | 19.320 | ug/l | | 99 |
| 74) N-amyl acetate | 12.529 | 43 | 63289 | 15.794 | ug/l | # | 85 |
| 75) 1,1,2,2-Tetrachloroethane | 12.941 | 83 | 81476 | 20.973 | ug/l | | 100 |
| 76) 1,2,3-Trichloropropane | 12.994 | 75 | 71582m | 19.132 | ug/l | | |
| 77) Bromobenzene | 12.982 | 156 | 55176 | 20.981 | ug/l | | 98 |
| 78) n-propylbenzene | 13.035 | 91 | 267384 | 19.187 | ug/l | | 100 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 164813 | 19.721 | ug/l | | 99 |
| 80) 1,3,5-Trimethylbenzene | 13.170 | 105 | 181773 | 19.200 | ug/l | | 99 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 30121 | 18.532 | ug/l | # | 82 |
| 82) 4-Chlorotoluene | 13.217 | 91 | 167991 | 19.866 | ug/l | | 100 |
| 83) tert-Butylbenzene | 13.435 | 119 | 161593 | 18.646 | ug/l | | 99 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 182431 | 19.216 | ug/l | | 98 |
| 85) sec-Butylbenzene | 13.617 | 105 | 228907 | 18.189 | ug/l | | 100 |
| 86) p-Isopropyltoluene | 13.729 | 119 | 192991 | 18.551 | ug/l | | 99 |
| 87) 1,3-Dichlorobenzene | 13.735 | 146 | 104883 | 20.271 | ug/l | | 98 |
| 88) 1,4-Dichlorobenzene | 13.812 | 146 | 107750 | 20.426 | ug/l | | 99 |
| 89) n-Butylbenzene | 14.053 | 91 | 177482 | 17.613 | ug/l | | 100 |
| 90) Hexachloroethane | 14.329 | 117 | 33456 | 18.972 | ug/l | | 99 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 99394 | 19.995 | ug/l | | 98 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75 | 17796 | 19.155 | ug/l | | 98 |
| 93) 1,2,4-Trichlorobenzene | 15.394 | 180 | 58509 | 18.433 | ug/l | | 98 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 19592 | 16.567 | ug/l | | 97 |
| 95) Naphthalene | 15.635 | 128 | 232760 | 19.700 | ug/l | | 100 |
| 96) 1,2,3-Trichlorobenzene | 15.841 | 180 | 56144 | 17.802 | ug/l | | 98 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061125\
Data File : VN086944.D
Acq On : 11 Jun 2025 13:27
Operator : JC\MD
Sample : VN0611WBS02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 12 01:31:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/12/2025
Supervised By :Semsettin Yesilyurt 06/12/2025

| 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\VN061125\
Data File : VN086944.D
Acq On : 11 Jun 2025 13:27
Operator : JC\MD
Sample : VN0611WBS02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 12 01:31:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations APPROVED**

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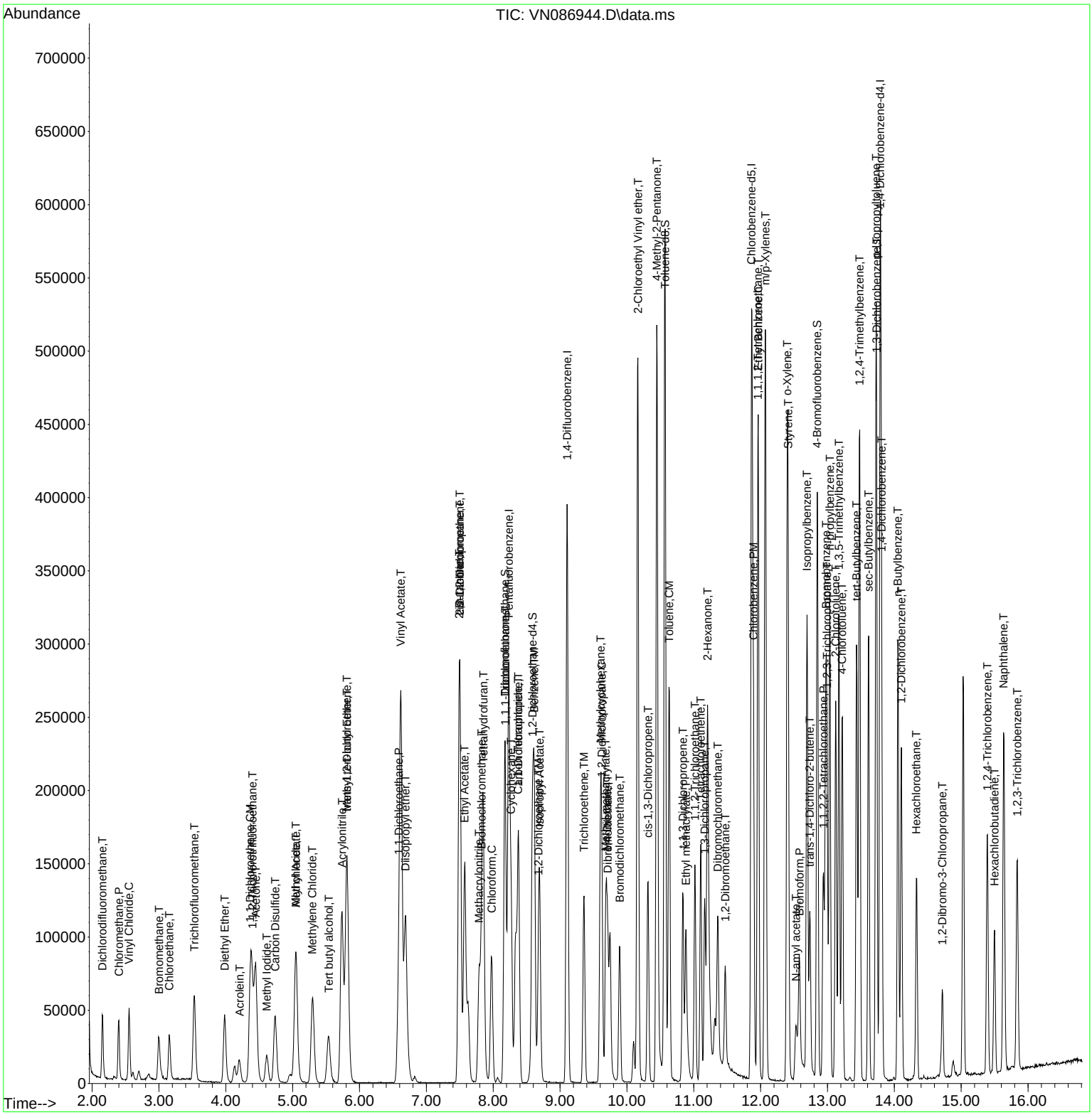
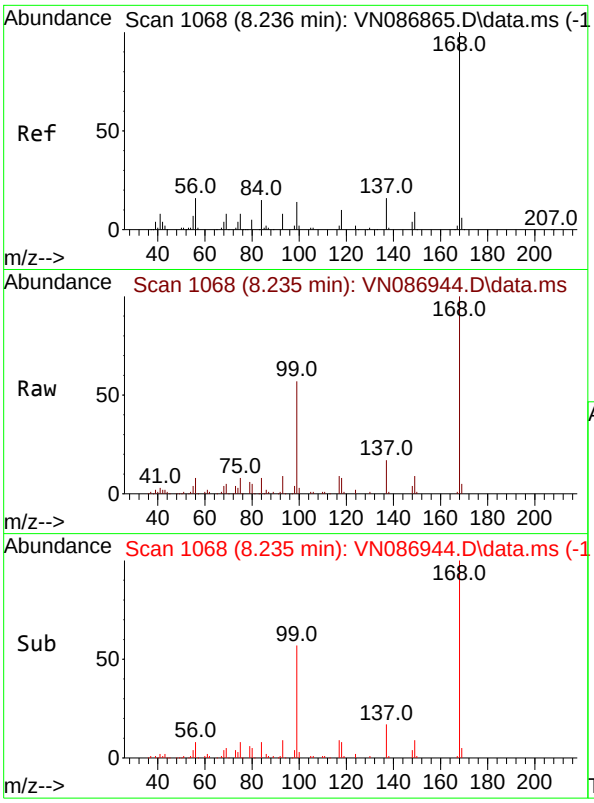
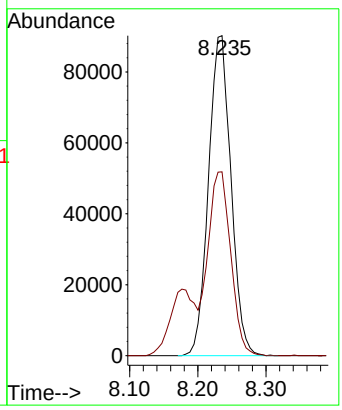





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.235 min Scan# 1
Delta R.T. -0.001 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:168 Resp: 206799

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 57.5 | 49.1 | 73.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/12/2025
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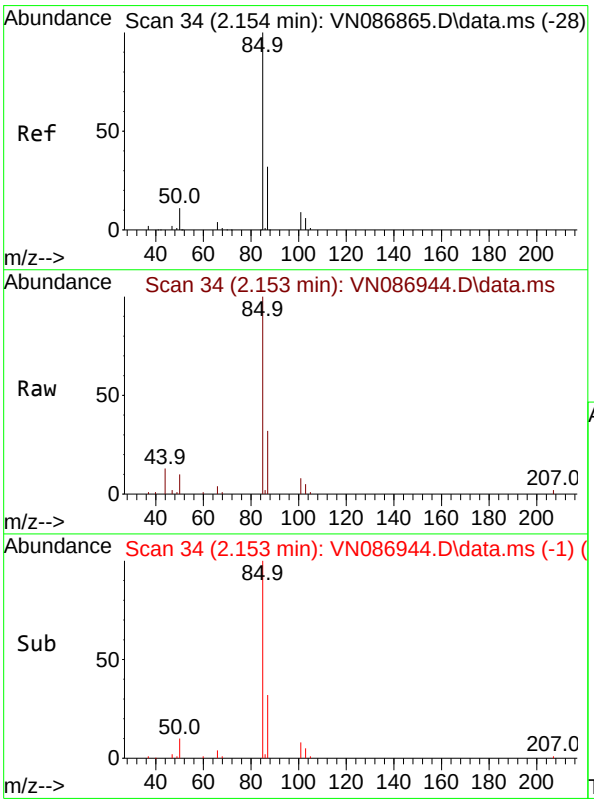
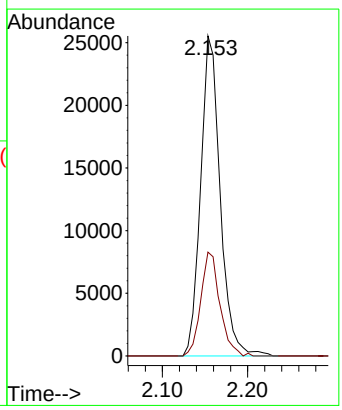
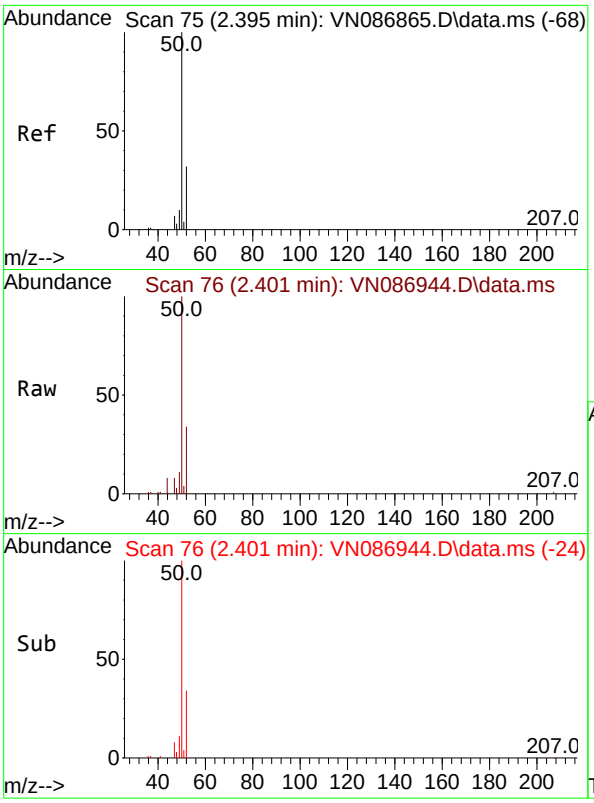



#2
Dichlorodifluoromethane
Concen: 19.725 ug/l
RT: 2.153 min Scan# 34
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 85 Resp: 40672

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.5 | 16.2 | 48.6 |

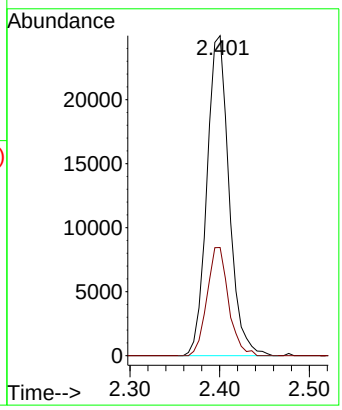





#3
Chloromethane
Concen: 16.079 ug/l
RT: 2.401 min Scan# 7
Delta R.T. 0.006 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 50 Resp: 4281

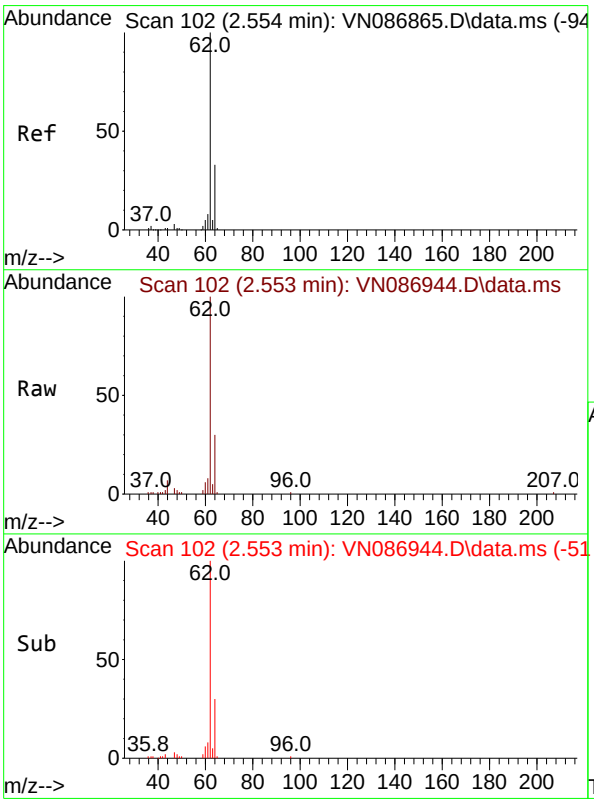
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 33.8 | 25.7 | 38.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
**APPROVED**

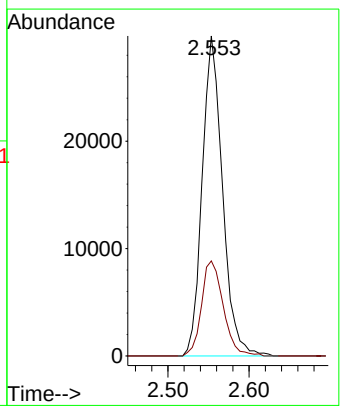
Reviewed By :John Carlone 06/12/2025
Supervised By :Semsettin Yesilyurt 06/12/2025

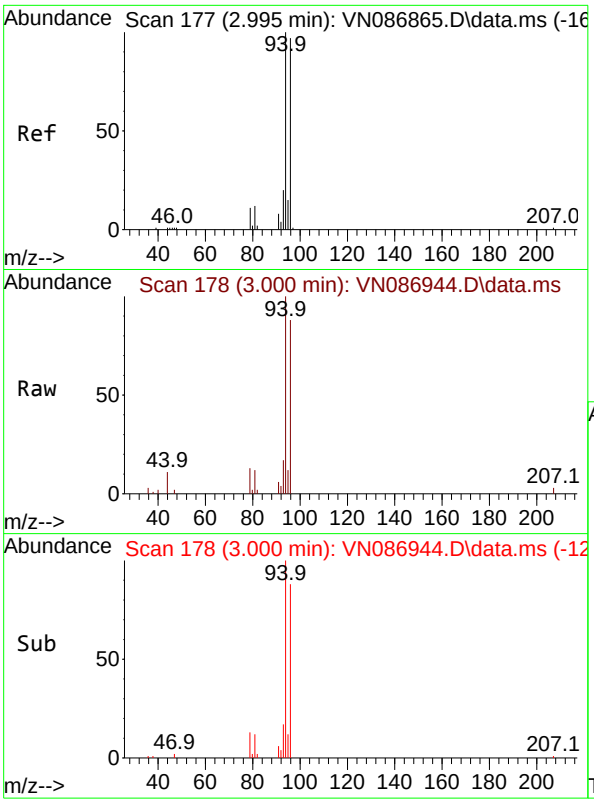



#4
Vinyl Chloride
Concen: 18.852 ug/l
RT: 2.553 min Scan# 102
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 62 Resp: 51780

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 29.7 | 26.0 | 39.0 |

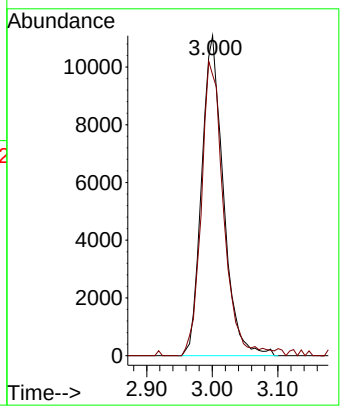





#5
Bromomethane
Concen: 16.641 ug/l
RT: 3.000 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 94 Resp: 2557

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 87.8 | 77.9 | 116.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/12/2025
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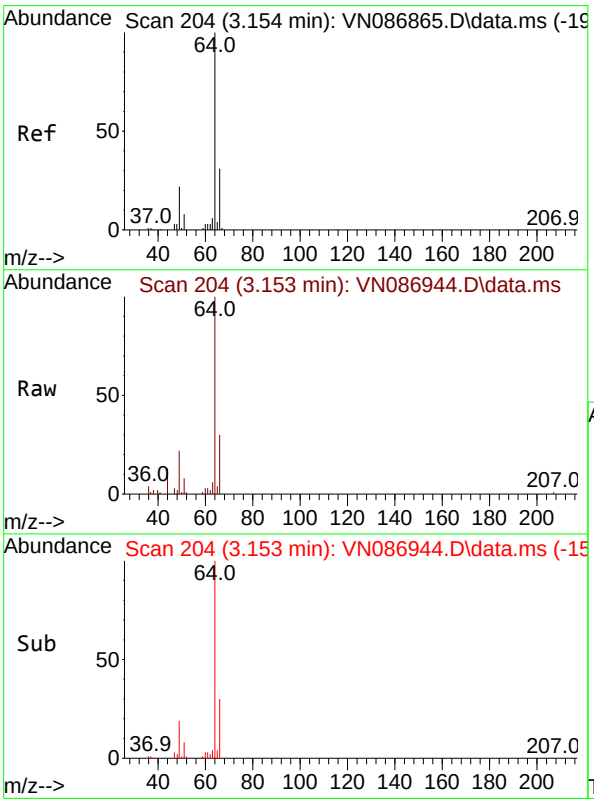
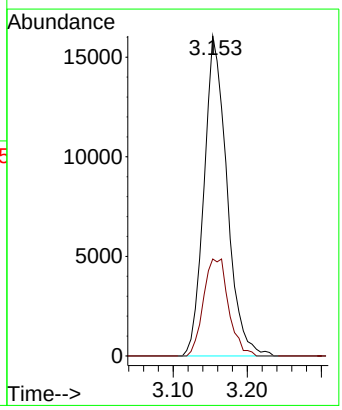
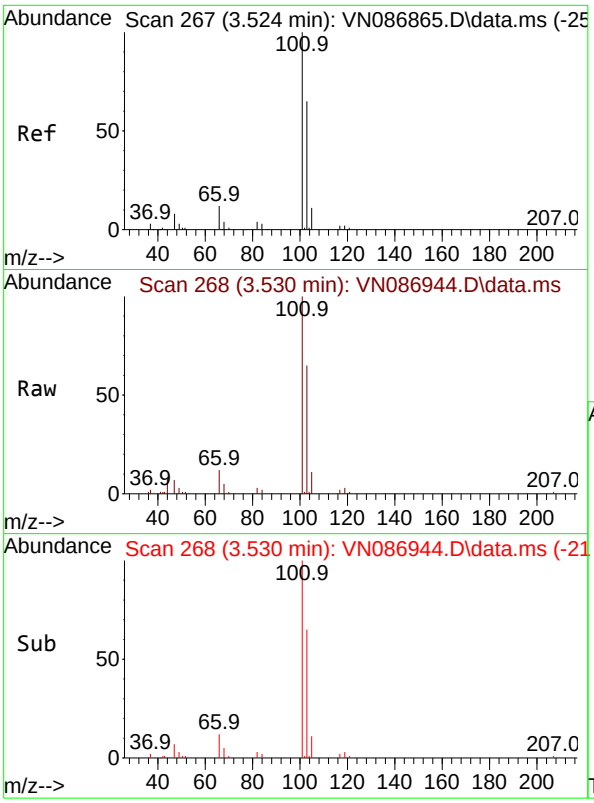



#6
Chloroethane
Concen: 19.446 ug/l
RT: 3.153 min Scan# 204
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 64 Resp: 34500

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 30.3 | 24.6 | 36.8 |

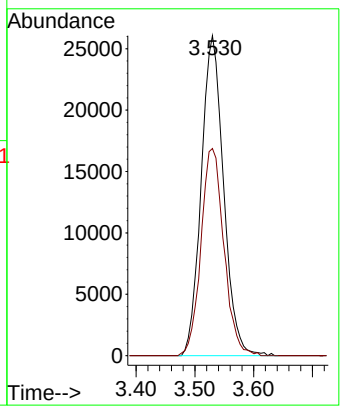





#7
Trichlorofluoromethane
Concen: 19.159 ug/l
RT: 3.530 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:101 Resp: 6875

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 64.8 | 52.2 | 78.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
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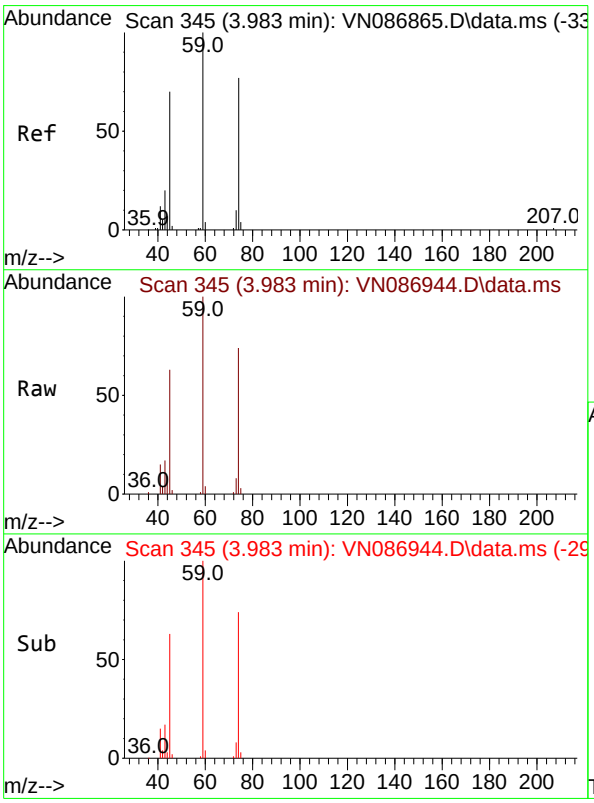
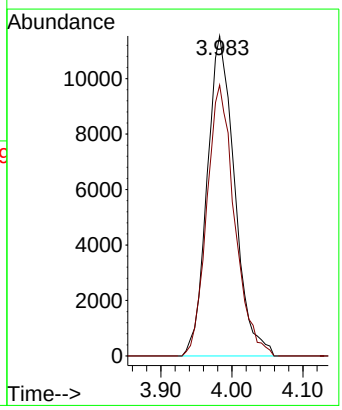
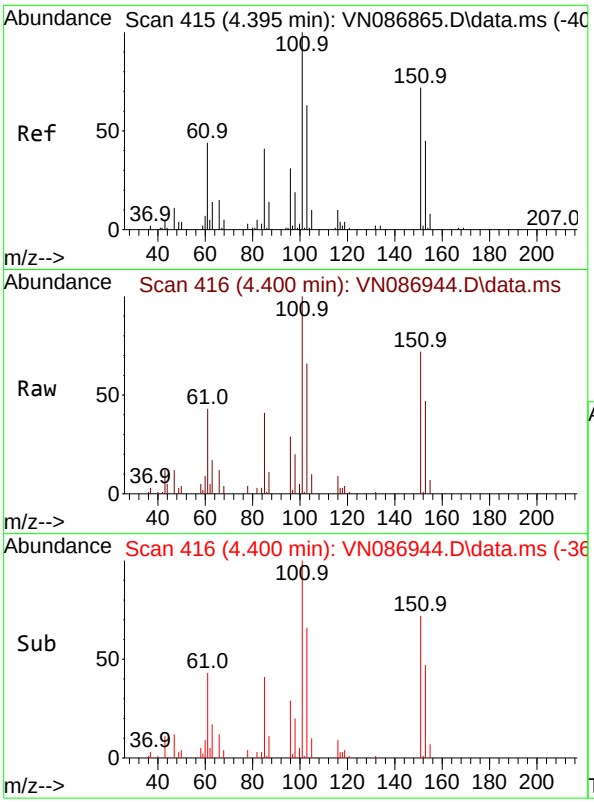



#8
Diethyl Ether
Concen: 19.772 ug/l
RT: 3.983 min Scan# 345
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 74 Resp: 30914

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 85.5 | 45.5 | 136.5 |






#9
1,1,2-Trichlorotrifluoroethane
Concen: 19.568 ug/l
RT: 4.400 min Scan# 41
Delta R.T. 0.006 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:101 Resp: 4411

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 41.5 | 33.8 | 50.8 |
| 151 | 74.0 | 58.7 | 88.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
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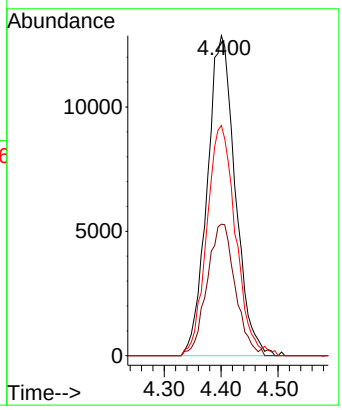
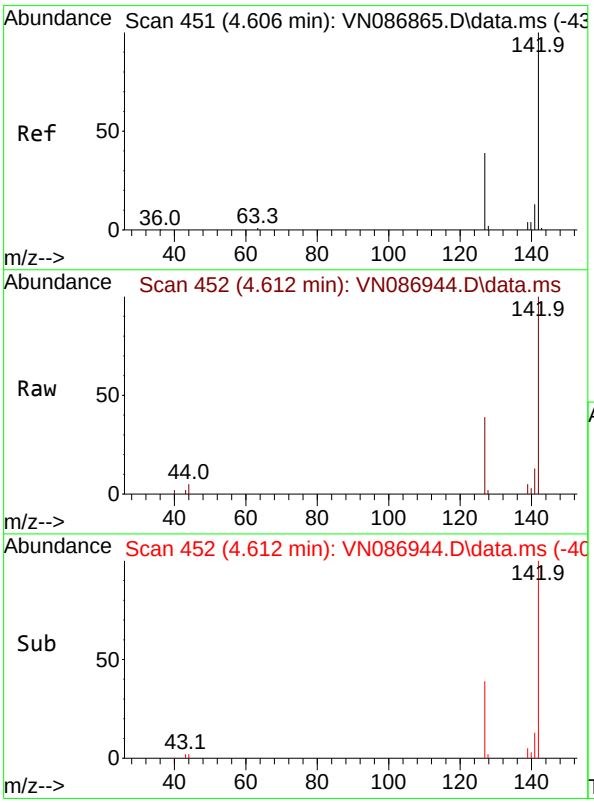
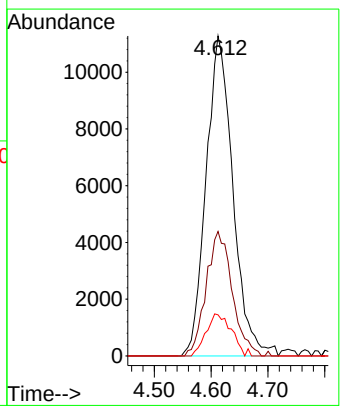


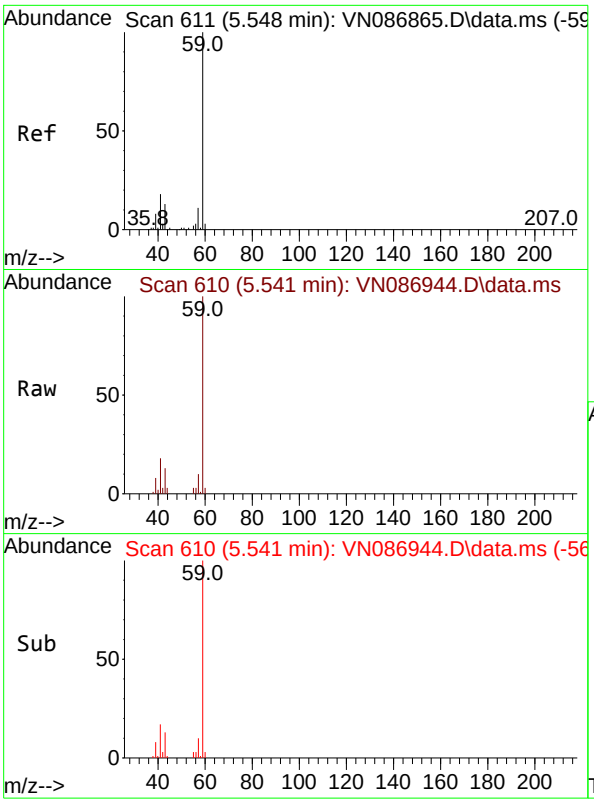




#10
Methyl Iodide
Concen: 12.634 ug/l
RT: 4.612 min Scan# 452
Delta R.T. 0.006 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:142 Resp: 36924

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 38.9 | 30.9 | 46.3 |
| 141 | 12.9 | 10.4 | 15.6 |






#11
Tert butyl alcohol
Concen: 92.831 ug/l
RT: 5.541 min Scan# 61
Delta R.T. -0.006 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 59 Resp: 6974

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 9.8 | 8.1 | 12.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
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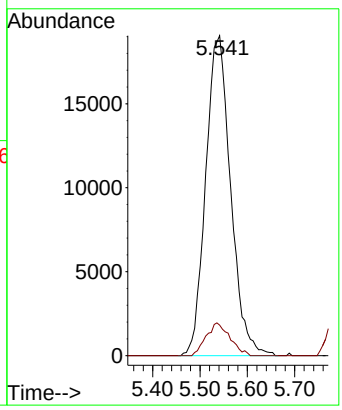
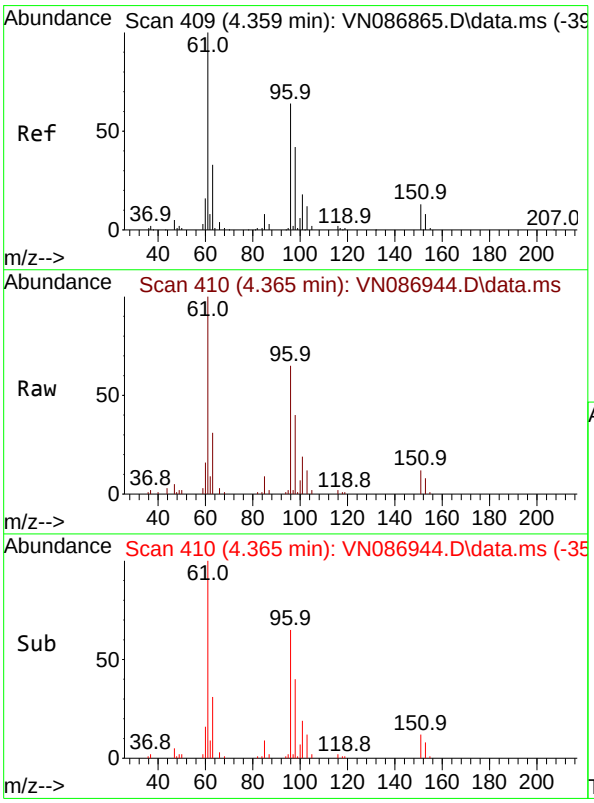
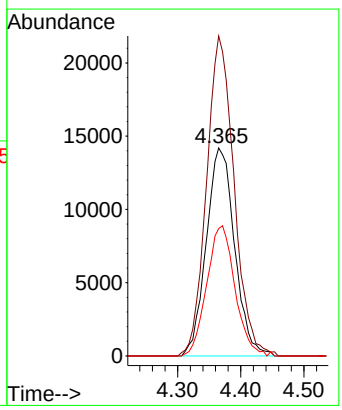


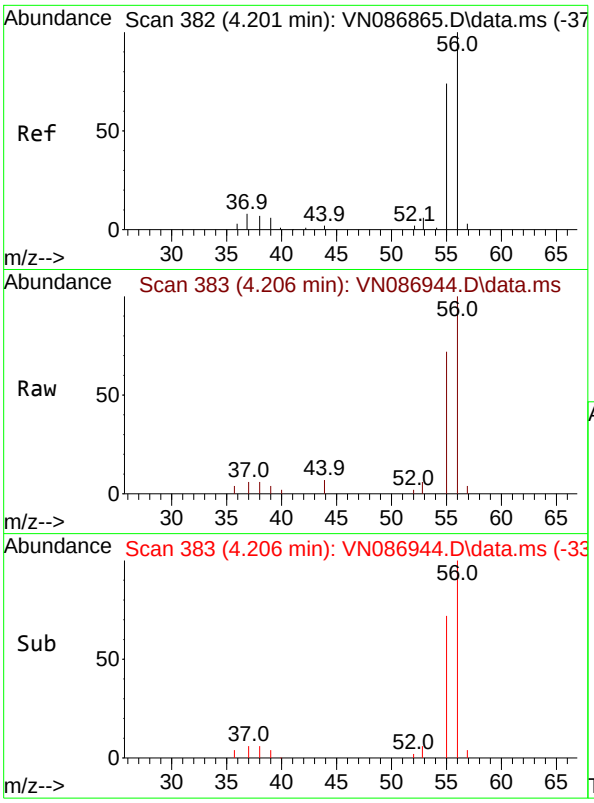




#12
1,1-Dichloroethene
Concen: 19.233 ug/l
RT: 4.365 min Scan# 410
Delta R.T. 0.006 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 96 Resp: 44269

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 153.8 | 125.8 | 188.6 |
| 98 | 61.2 | 52.5 | 78.7 |






#13
Acrolein
Concen: 93.730 ug/l
RT: 4.206 min Scan# 3
Delta R.T. 0.006 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 56 Resp: 2229

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 70.9 | 55.6 | 83.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
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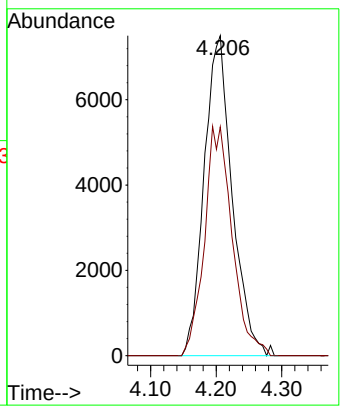
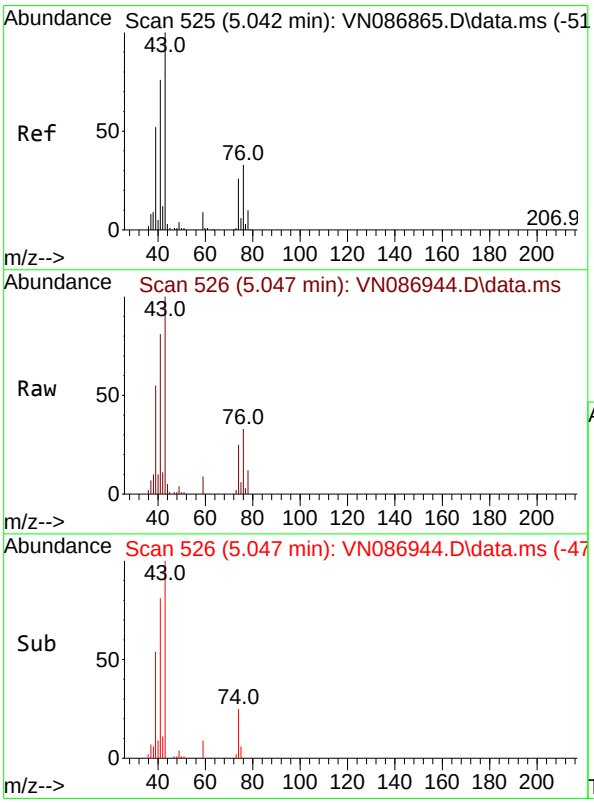
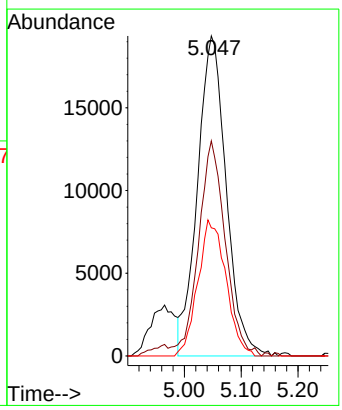


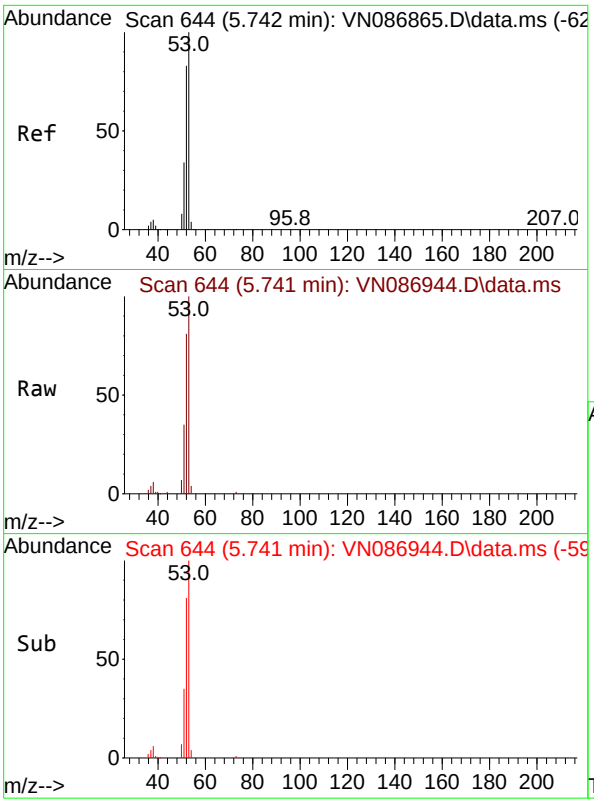




#14
Allyl chloride
Concen: 17.821 ug/l
RT: 5.047 min Scan# 526
Delta R.T. 0.006 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 41 Resp: 68027

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 62.5 | 51.3 | 76.9 |
| 76 | 41.4 | 31.4 | 47.0 |






#15
Acrylonitrile
Concen: 95.084 ug/l
RT: 5.741 min Scan# 64
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 53 Resp: 16697

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 81.1 | 65.0 | 97.6 |
| 51 | 34.5 | 27.2 | 40.8 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
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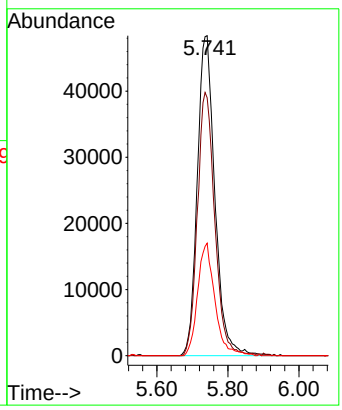
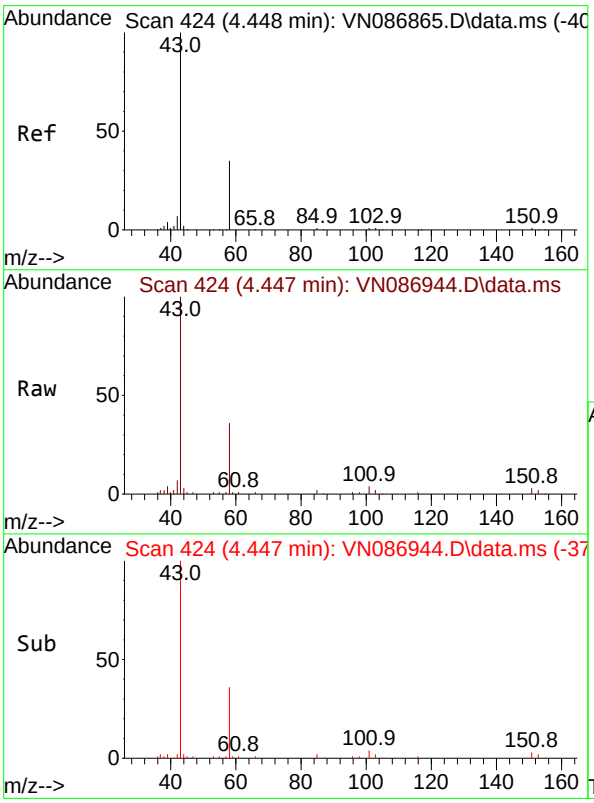
Supervised By :Semsettin Yesilyurt 06/12/2025

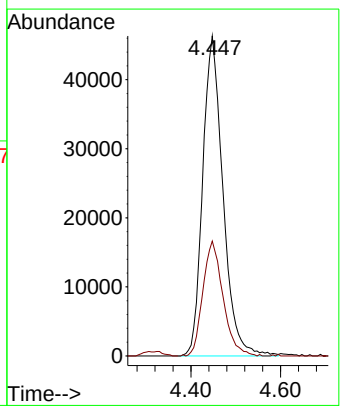


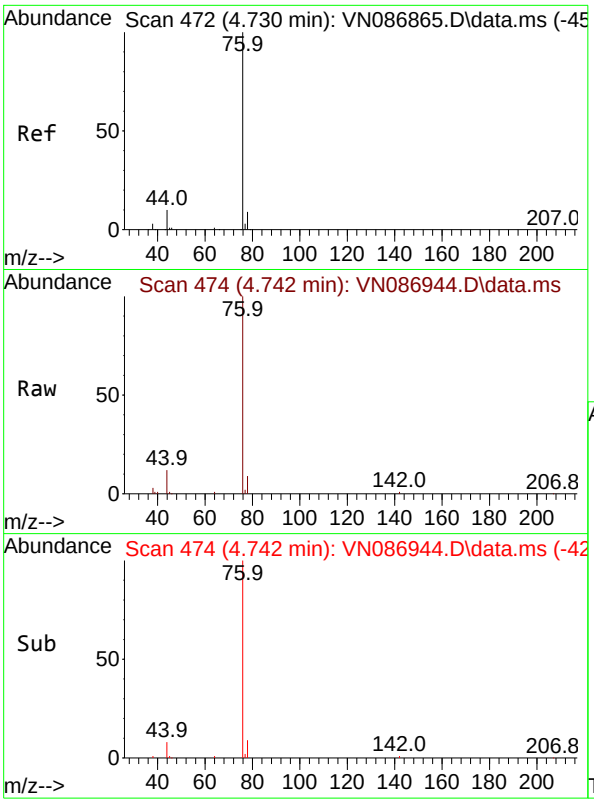




#16
Acetone
Concen: 98.972 ug/l
RT: 4.447 min Scan# 424
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 43 Resp: 145322

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 35.9 | 28.0 | 42.0 |






#17
Carbon Disulfide
Concen: 17.769 ug/l
RT: 4.742 min Scan# 4
Delta R.T. 0.012 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

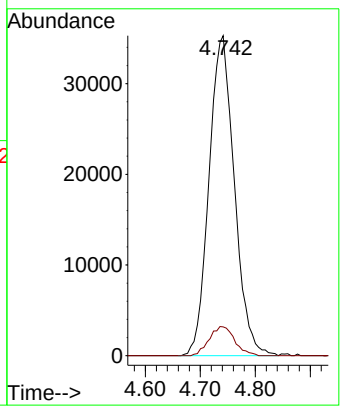
Tgt Ion: 76 Resp: 11313

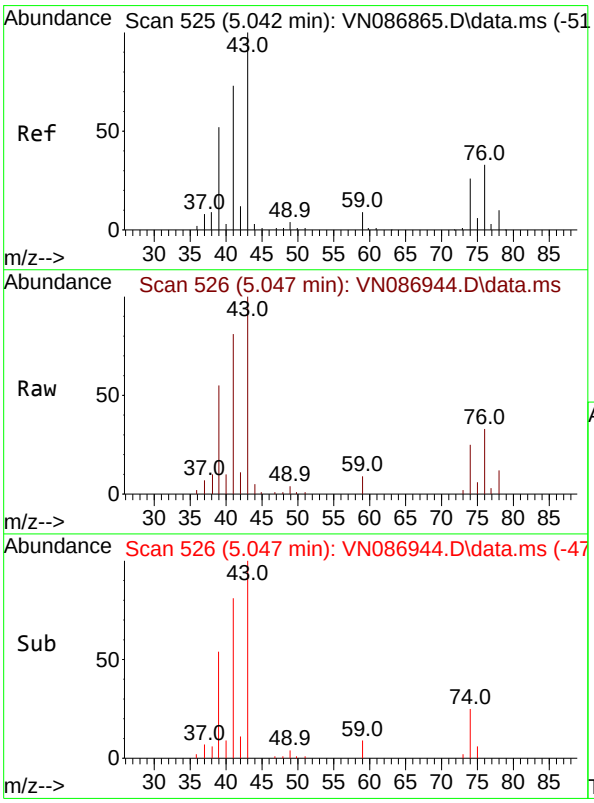
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.0 | 7.3 | 10.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/12/2025
Supervised By :Semsettin Yesilyurt 06/12/2025

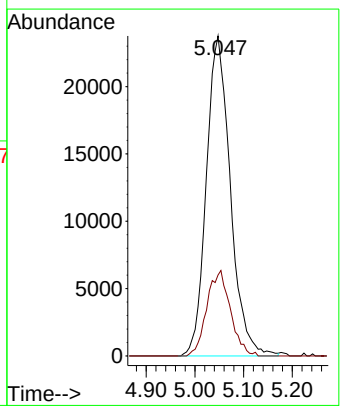


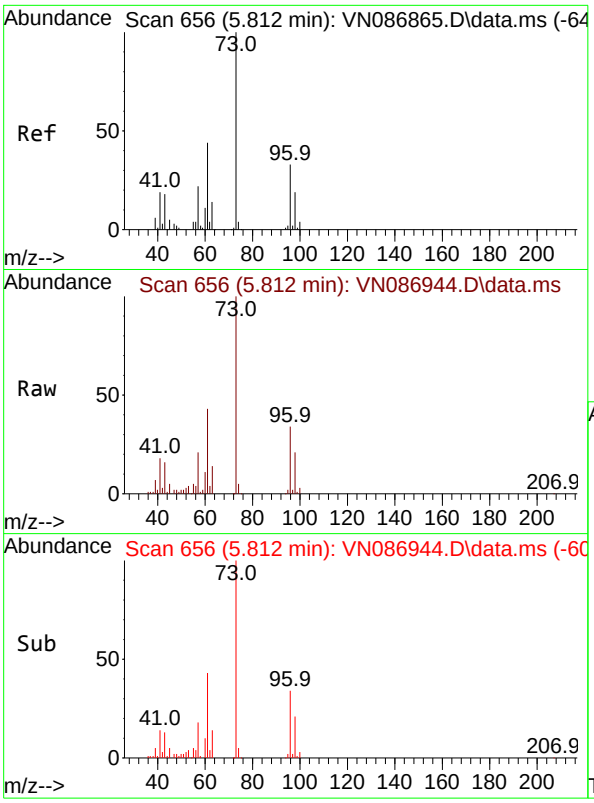




#18
Methyl Acetate
Concen: 19.013 ug/l
RT: 5.047 min Scan# 526
Delta R.T. 0.006 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 43 Resp: 81357

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 26.2 | 20.7 | 31.1 |

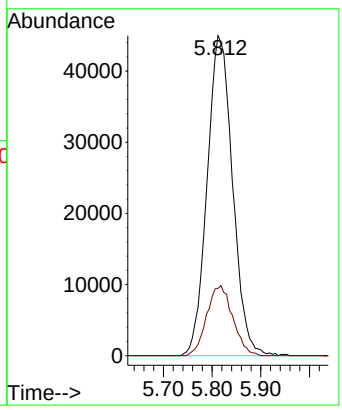





#19
Methyl tert-butyl Ether
Concen: 19.599 ug/l
RT: 5.812 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 73 Resp: 16333

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 21.0 | 17.4 | 26.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
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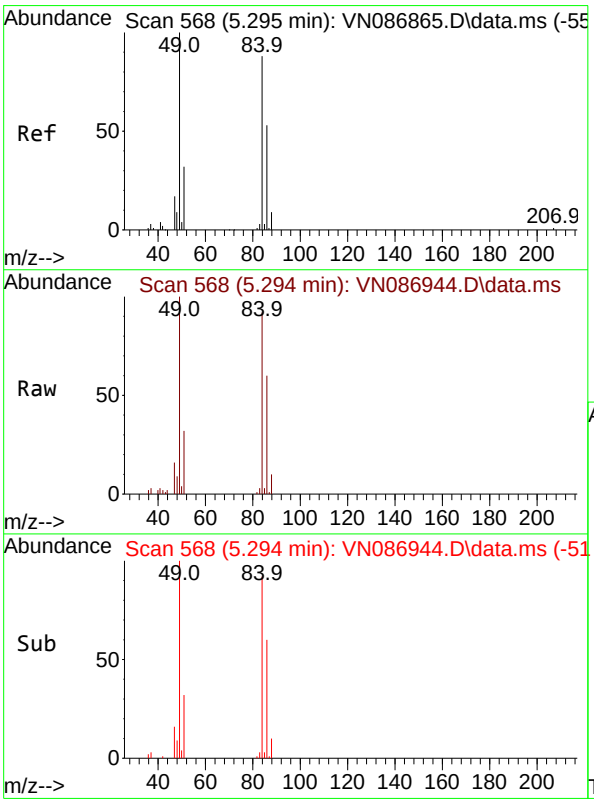
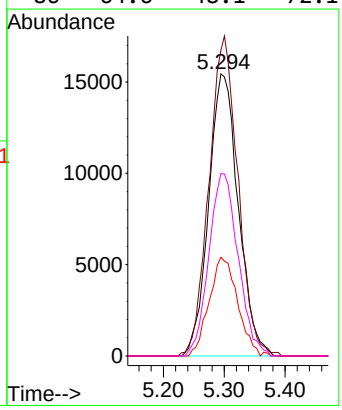
Reviewed By :John Carlone 06/12/2025
Supervised By :Semsettin Yesilyurt 06/12/2025

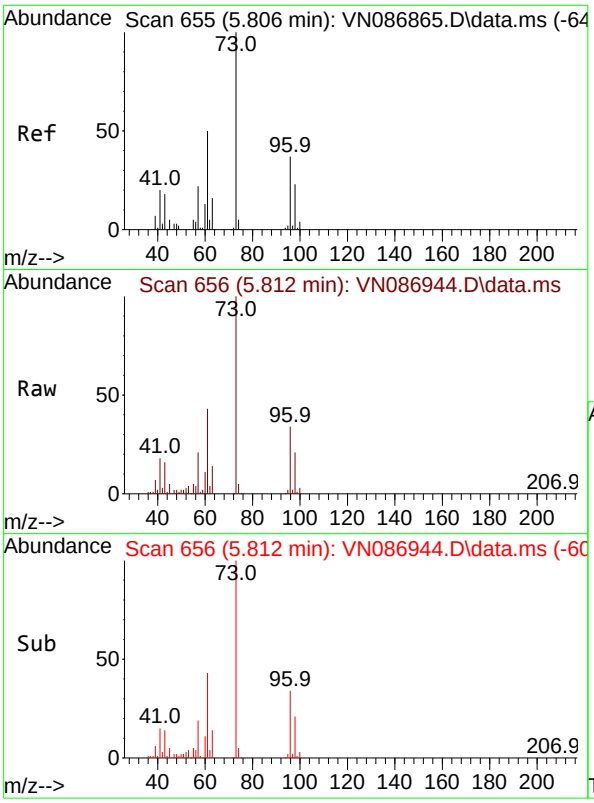



#20
Methylene Chloride
Concen: 18.988 ug/l
RT: 5.294 min Scan# 568
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 84 Resp: 52196

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 108.4 | 90.5 | 135.7 |
| 51 | 35.0 | 28.5 | 42.7 |
| 86 | 64.6 | 48.1 | 72.1 |






#21
trans-1,2-Dichloroethene
Concen: 18.464 ug/l
RT: 5.812 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 96 Resp: 4728

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 127.9 | 109.2 | 163.8 |
| 98 | 61.9 | 49.8 | 74.8 |

**Instrument :**
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VN0611WBS02

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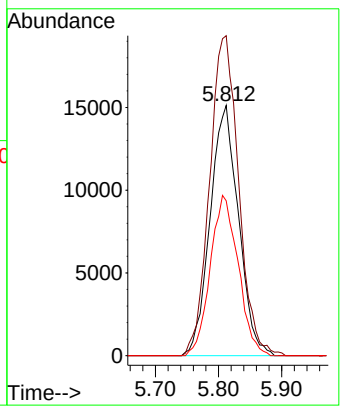
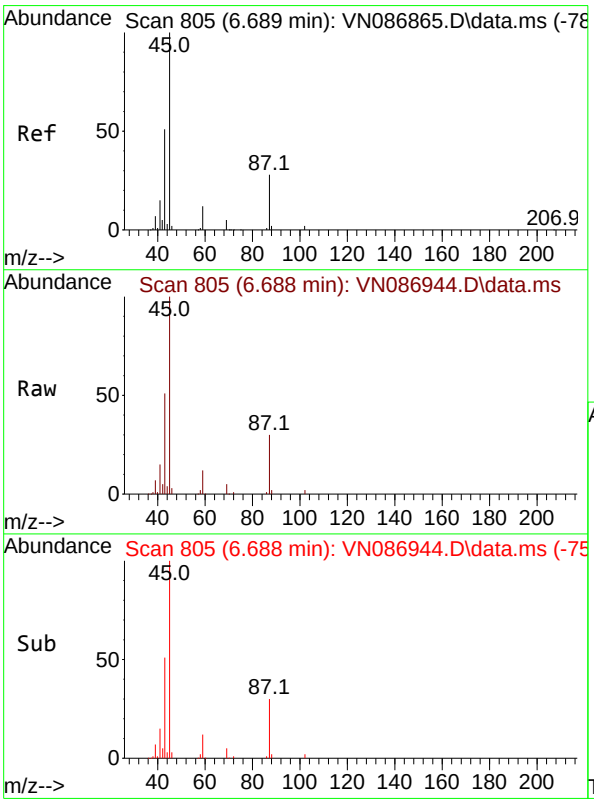
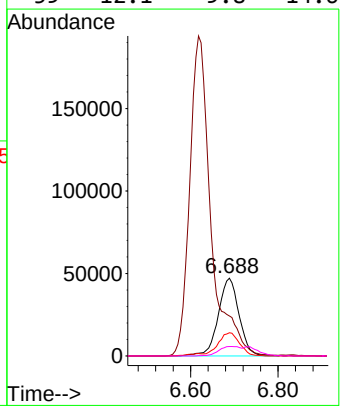


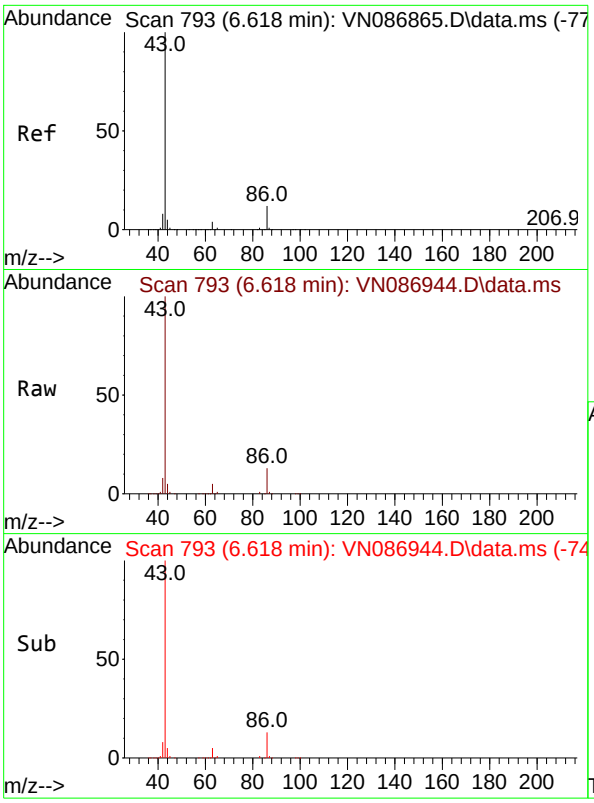




#22
Diisopropyl ether
Concen: 19.326 ug/l
RT: 6.688 min Scan# 805
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 45 Resp: 155508

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 50.5 | 41.9 | 62.9 |
| 87 | 29.8 | 22.4 | 33.6 |
| 59 | 12.1 | 9.8 | 14.6 |






#23
Vinyl Acetate
Concen: 96.092 ug/l
RT: 6.618 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 43 Resp: 65327

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 12.6 | 9.5 | 14.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
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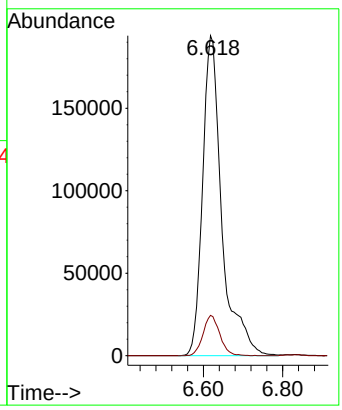
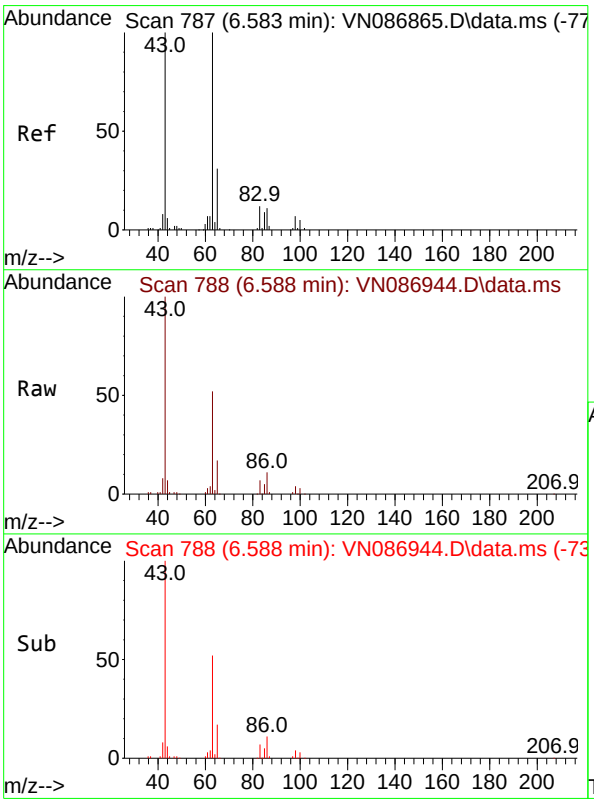
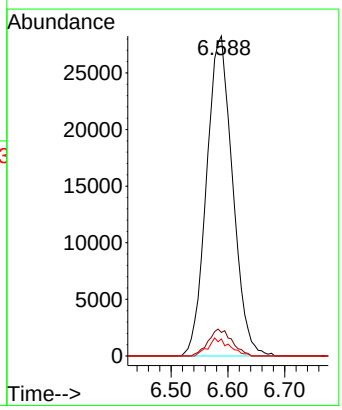


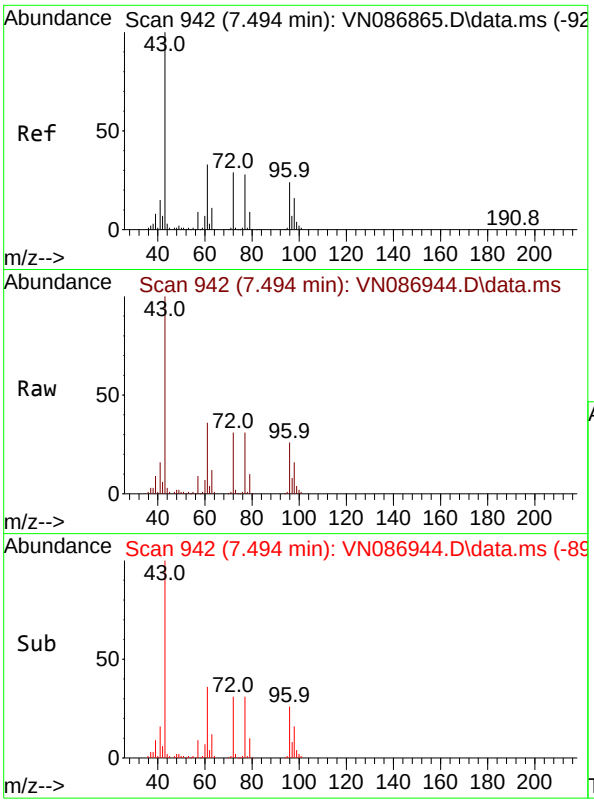




#24
1,1-Dichloroethane
Concen: 19.421 ug/l
RT: 6.588 min Scan# 788
Delta R.T. 0.006 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 63 Resp: 89930

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 7.3 | 3.6 | 10.8 |
| 100 | 5.3 | 2.6 | 7.8 |






#25
2-Butanone
Concen: 90.401 ug/l
RT: 7.494 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 43 Resp: 21576

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 30.8 | 23.0 | 34.6 |

**Instrument :**
MSVOA_N
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VN0611WBS02

**Manual Integrations**
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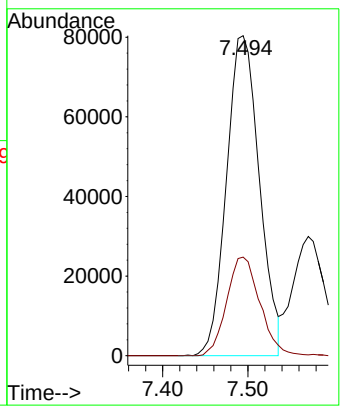
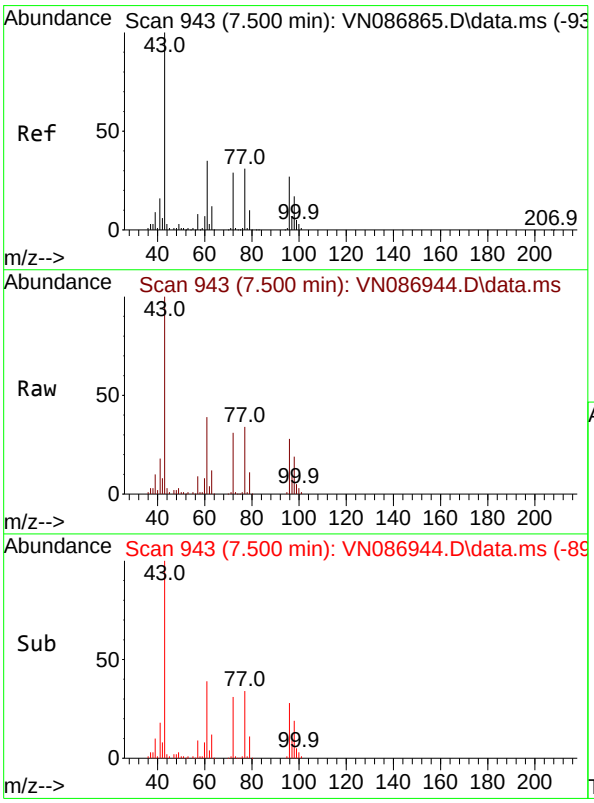
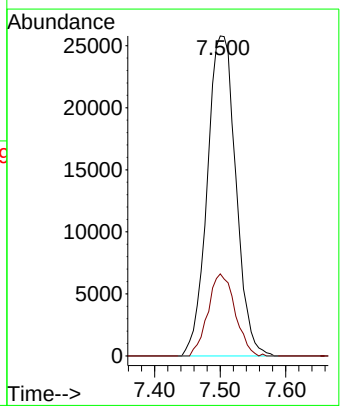


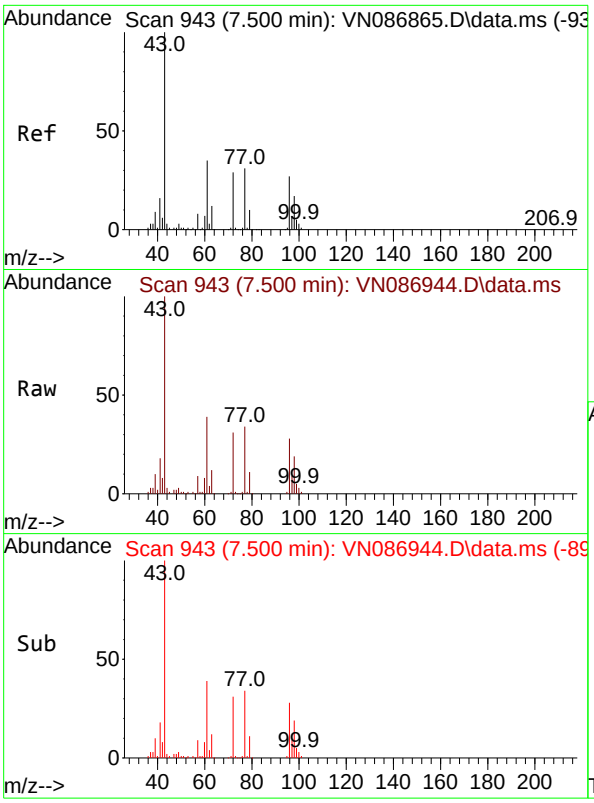




#26
2,2-Dichloropropane
Concen: 21.663 ug/l
RT: 7.500 min Scan# 943
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 77 Resp: 78031

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 24.3 | 11.6 | 34.7 |

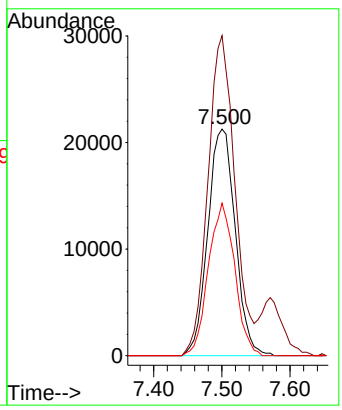





#27
cis-1,2-Dichloroethene
Concen: 19.453 ug/l
RT: 7.500 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 96 Resp: 5957

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 138.3 | 0.0 | 278.0 |
| 98 | 64.6 | 0.0 | 128.2 |




**Instrument :**
MSVOA_N
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VN0611WBS02

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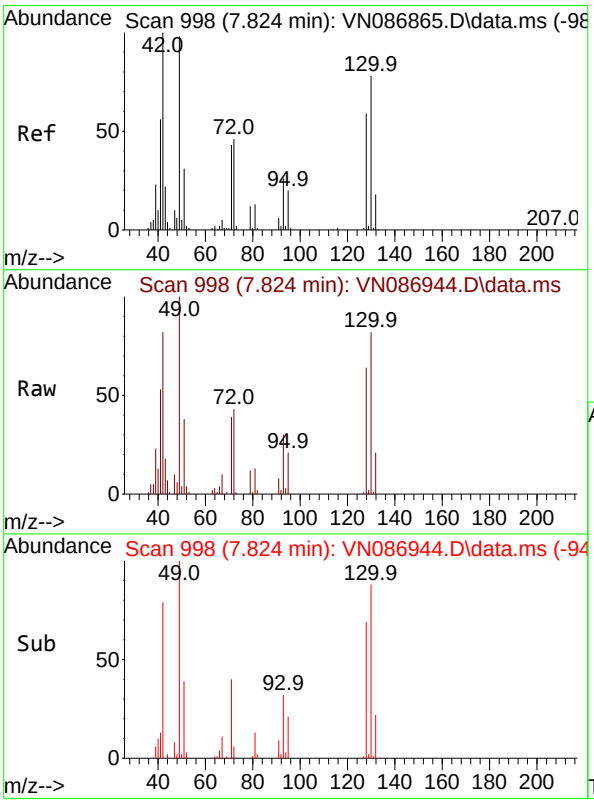
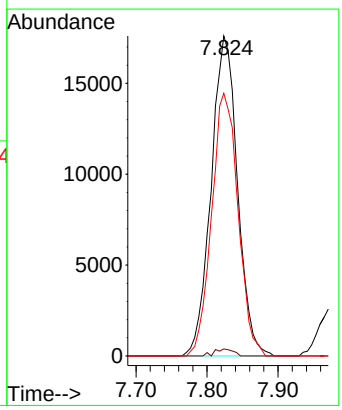
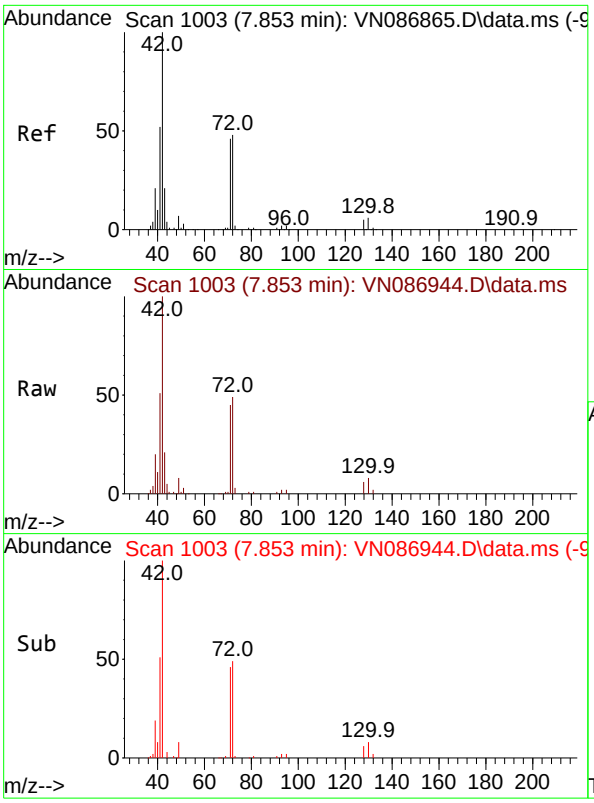



#28
Bromochloromethane
Concen: 19.909 ug/l
RT: 7.824 min Scan# 998
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 49 Resp: 45329

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.6 | 0.0 | 3.8 |
| 130 | 82.2 | 62.2 | 93.2 |






#29
Tetrahydrofuran
Concen: 92.532 ug/l
RT: 7.853 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 42 Resp: 14386

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 49.4 | 37.8 | 56.6 |
| 71 | 46.2 | 35.6 | 53.4 |

**Instrument :**
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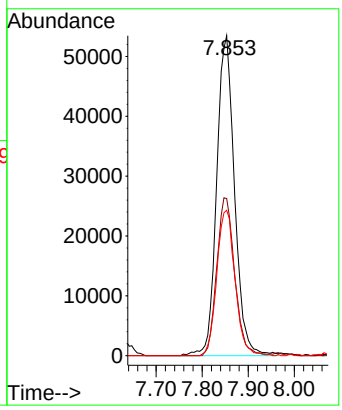
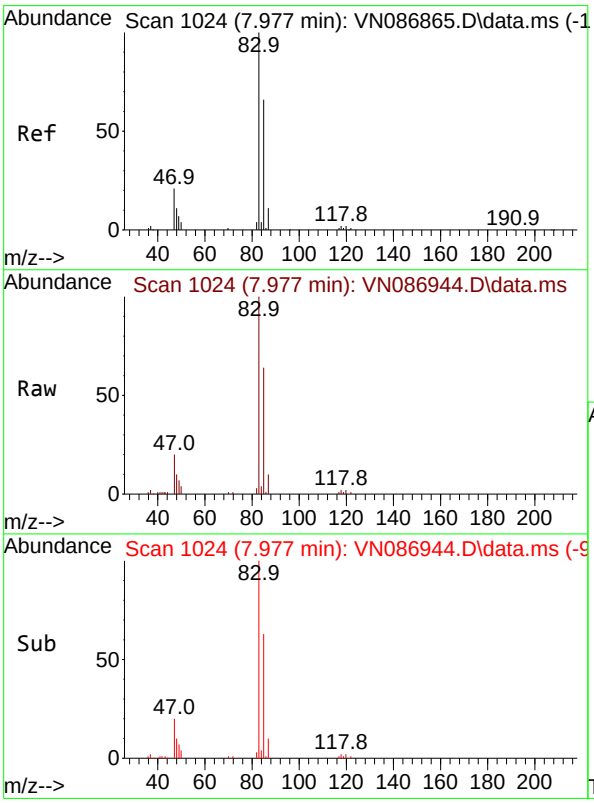
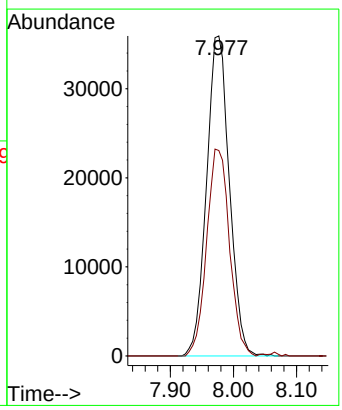


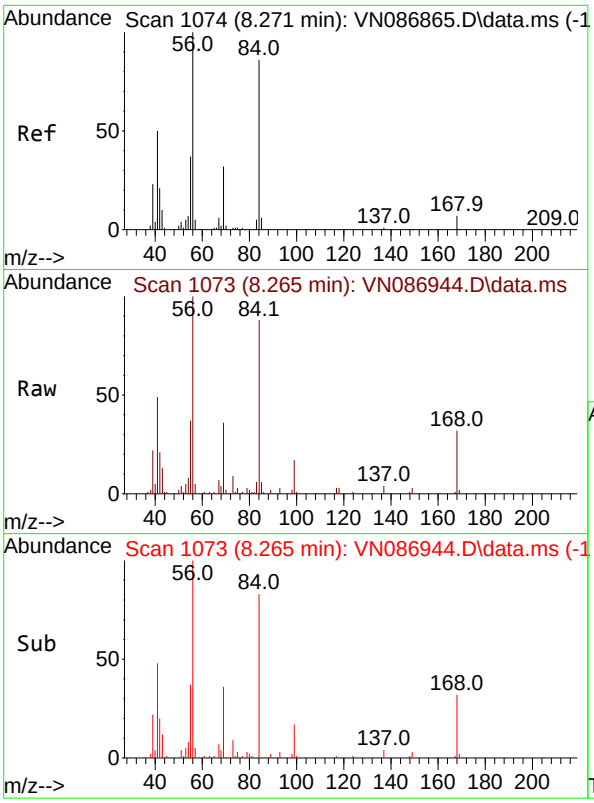




#30
Chloroform
Concen: 19.521 ug/l
RT: 7.977 min Scan# 1024
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 83 Resp: 90272

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.2 | 52.9 | 79.3 |






#31
Cyclohexane
Concen: 17.603 ug/l
RT: 8.265 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 56 Resp: 7905

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 35.7 | 25.4 | 38.0 |
| 84 | 87.1 | 68.8 | 103.2 |

**Instrument :**
MSVOA_N
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VN0611WBS02

**Manual Integrations**
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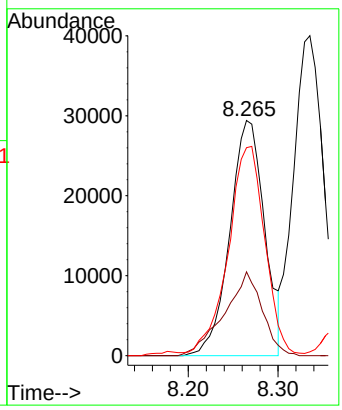
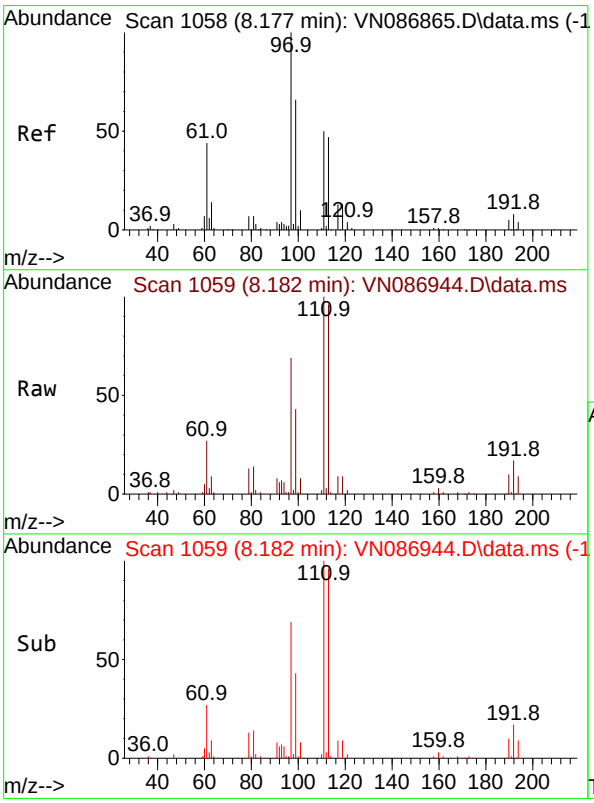
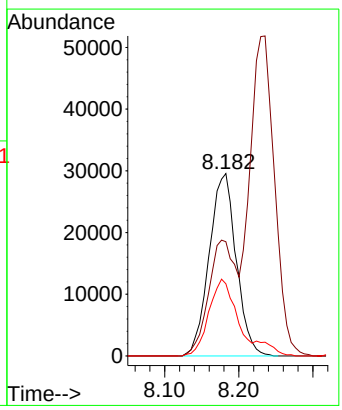


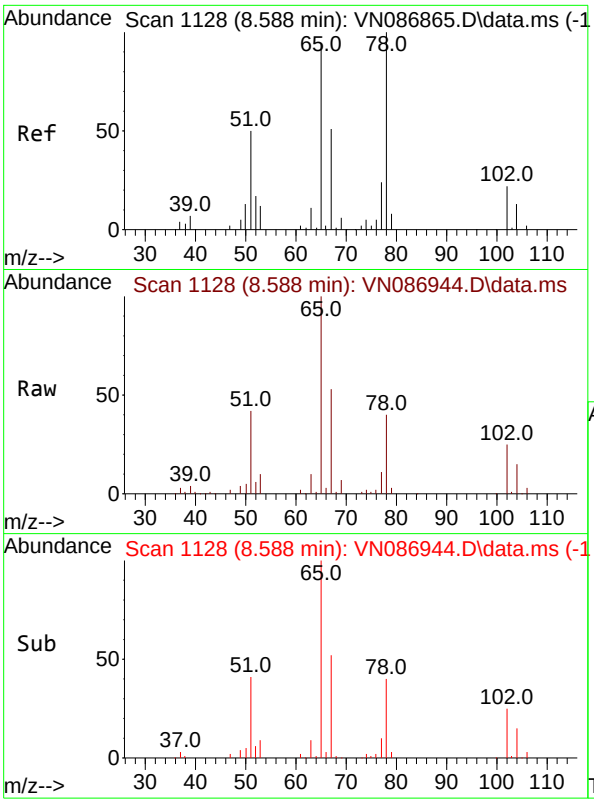




#32
1,1,1-Trichloroethane
Concen: 19.033 ug/l
RT: 8.182 min Scan# 1059
Delta R.T. 0.006 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 97 Resp: 74861

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 64.2 | 52.0 | 78.0 |
| 61 | 47.9 | 35.9 | 53.9 |






#33
1,2-Dichloroethane-d4
Concen: 47.075 ug/l
RT: 8.588 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 65 Resp: 13034

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 54.7 | 0.0 | 105.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
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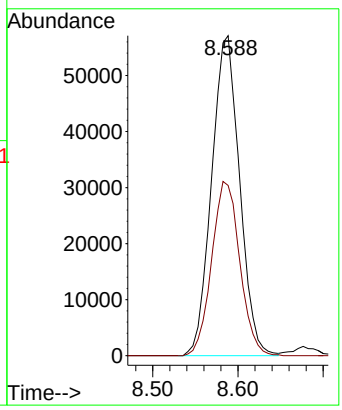
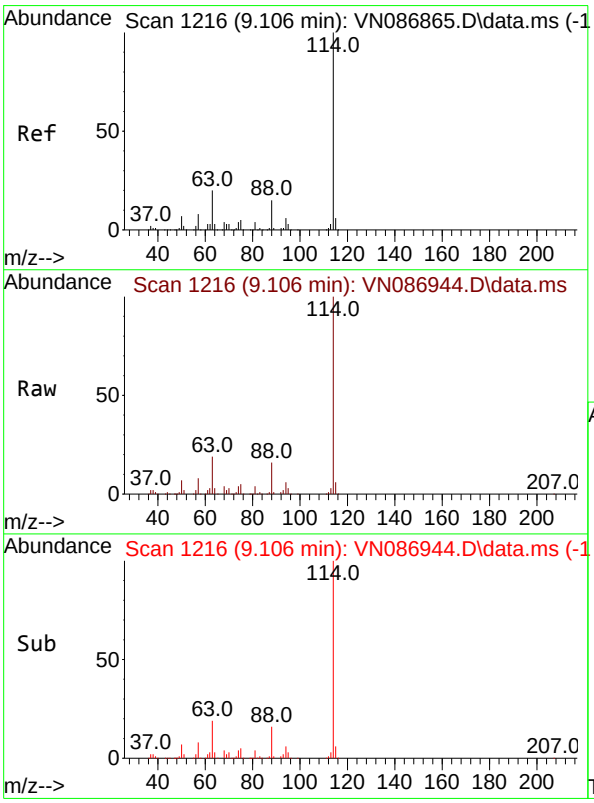
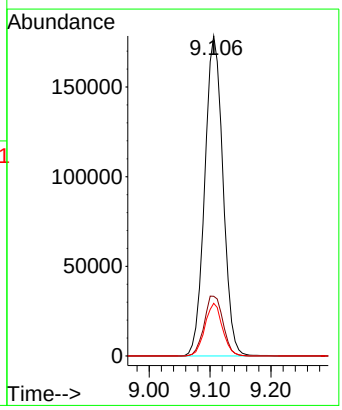


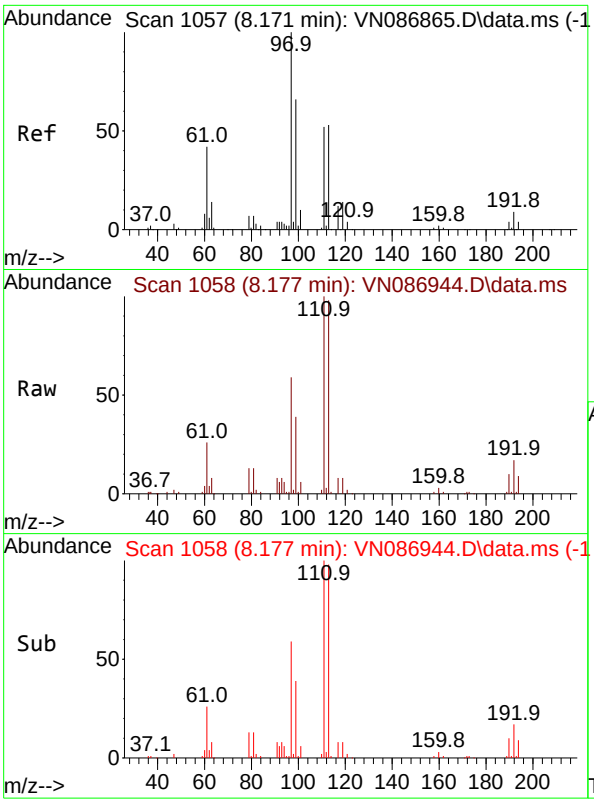




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.106 min Scan# 1216
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:114 Resp: 370524

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 18.7 | 0.0 | 39.6 |
| 88 | 16.4 | 0.0 | 30.2 |

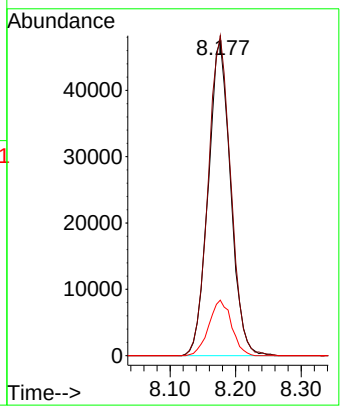





#35
Dibromofluoromethane
Concen: 51.096 ug/l
RT: 8.177 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:113 Resp: 11219

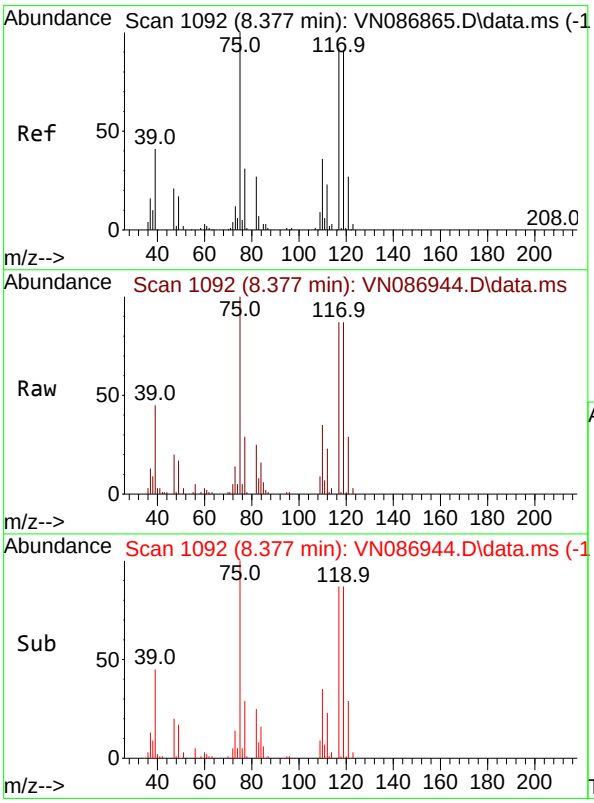
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 102.8 | 84.2 | 126.2 |
| 192 | 17.9 | 14.2 | 21.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
**APPROVED**

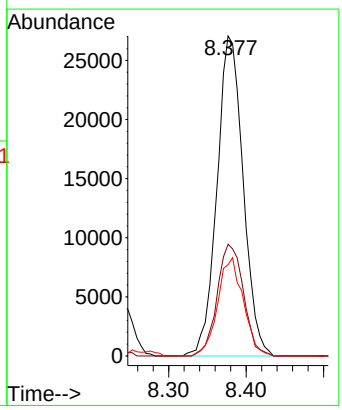
Reviewed By :John Carlone 06/12/2025
Supervised By :Semsettin Yesilyurt 06/12/2025

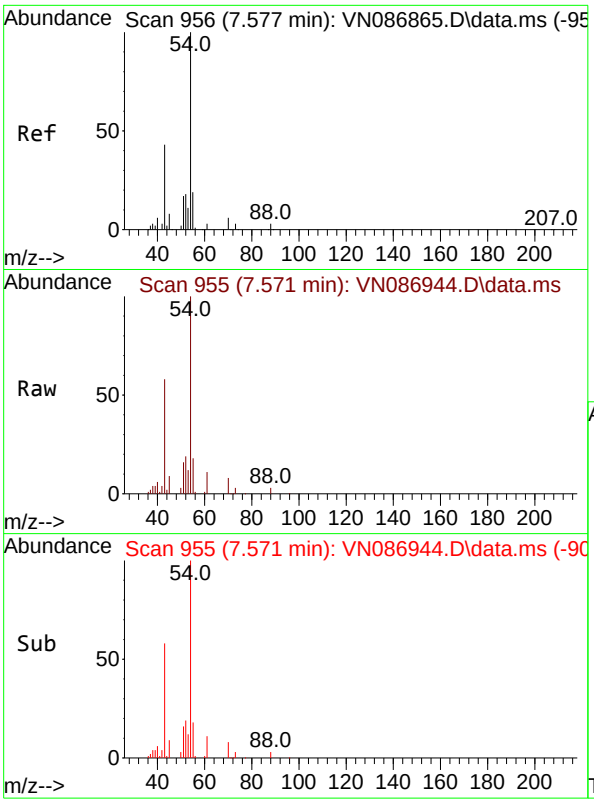



#36
1,1-Dichloropropene
Concen: 19.431 ug/l
RT: 8.377 min Scan# 1092
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 75 Resp: 63577

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 35.1 | 17.6 | 52.9 |
| 77 | 30.1 | 25.3 | 37.9 |






#37
Ethyl Acetate
Concen: 19.306 ug/l
RT: 7.571 min Scan# 9
Delta R.T. -0.006 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 43 Resp: 8041

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 15.4 | 12.1 | 18.1 |
| 70 | 12.3 | 9.8 | 14.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
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Reviewed By :John Carlone 06/12/2025
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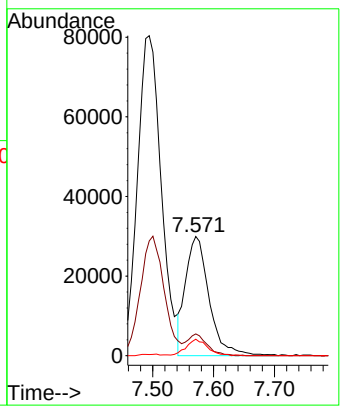
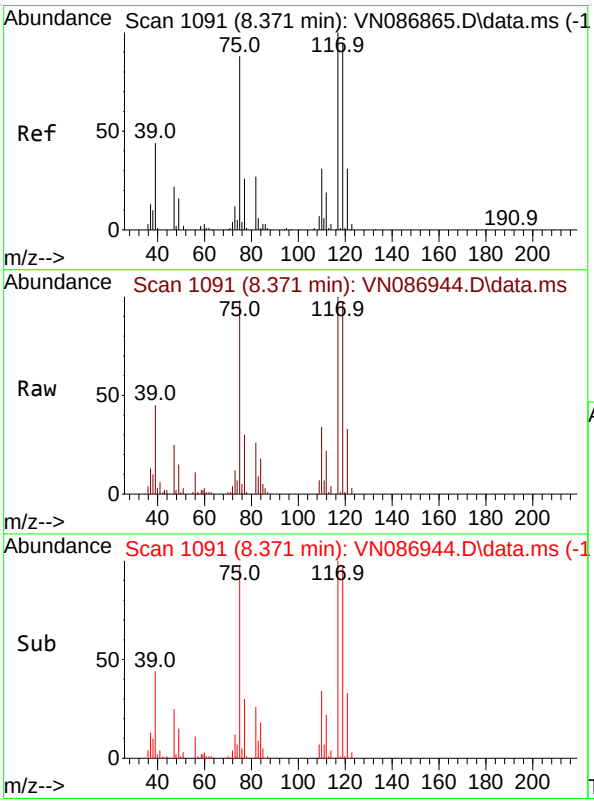
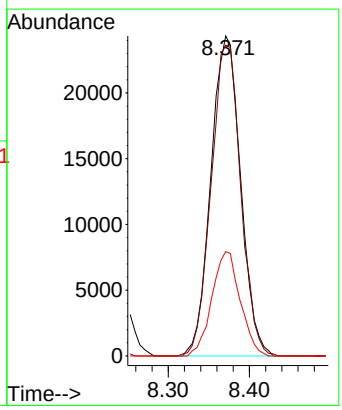


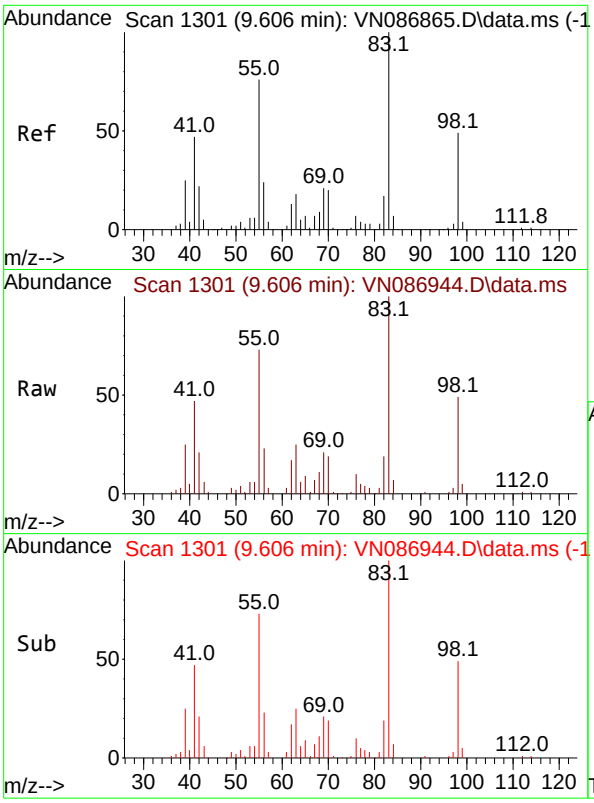




#38
Carbon Tetrachloride
Concen: 19.222 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:117 Resp: 61747

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 97.1 | 75.0 | 112.6 |
| 121 | 32.6 | 24.9 | 37.3 |

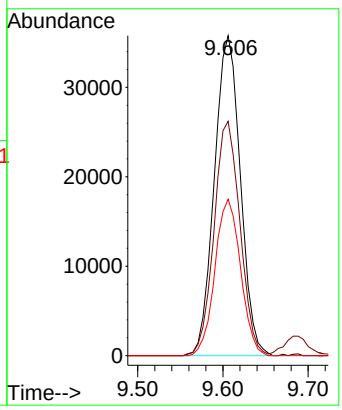





#39
Methylcyclohexane
Concen: 16.947 ug/l
RT: 9.606 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 83 Resp: 7597

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 73.2 | 61.0 | 91.6 |
| 98 | 48.9 | 38.9 | 58.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
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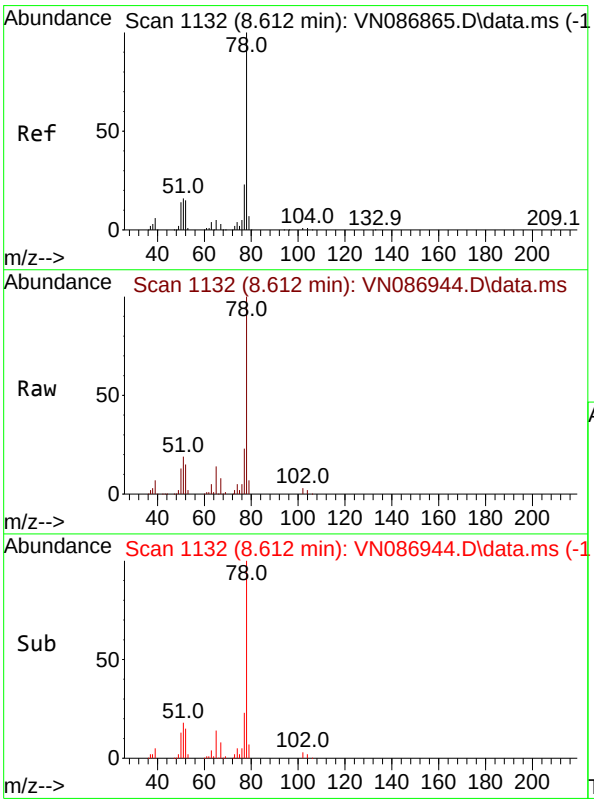
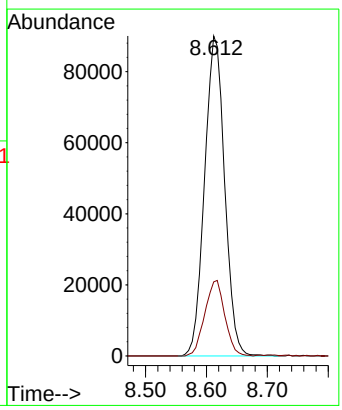
Supervised By :Semsettin Yesilyurt 06/12/2025

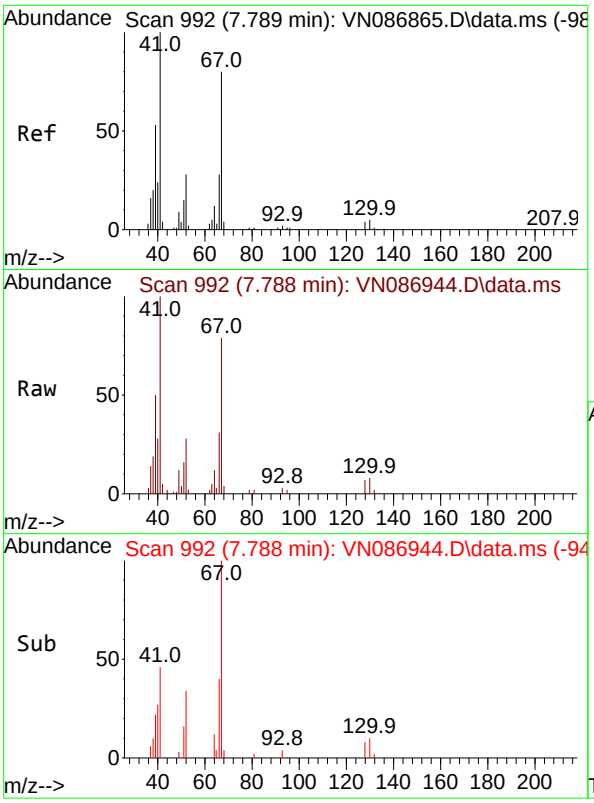



#40
Benzene
Concen: 19.277 ug/l
RT: 8.612 min Scan# 1132
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 78 Resp: 206255

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.1 | 18.7 | 28.1 |

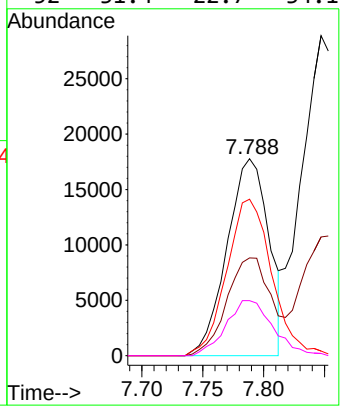





#41
Methacrylonitrile
Concen: 18.218 ug/l
RT: 7.788 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 41 Resp: 4261

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 53.5 | 41.2 | 61.8 |
| 67 | 85.5 | 61.4 | 92.2 |
| 52 | 31.4 | 22.7 | 34.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
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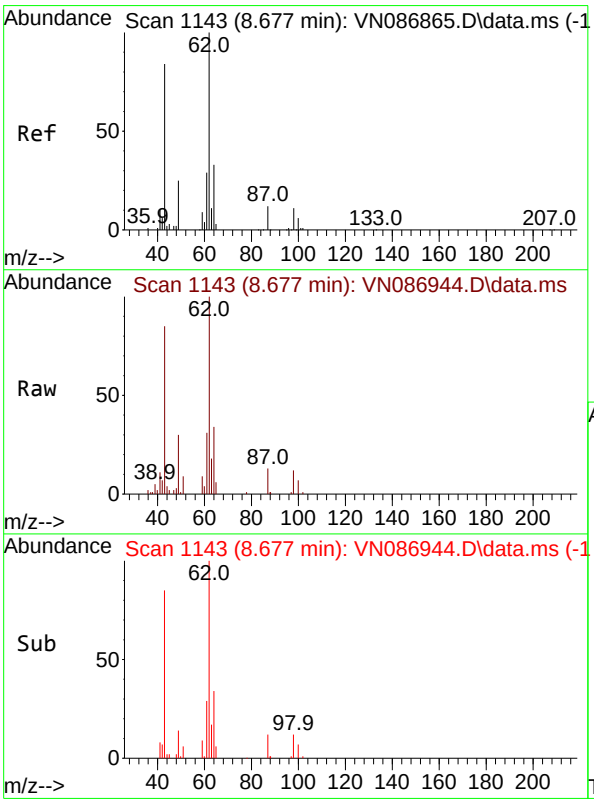
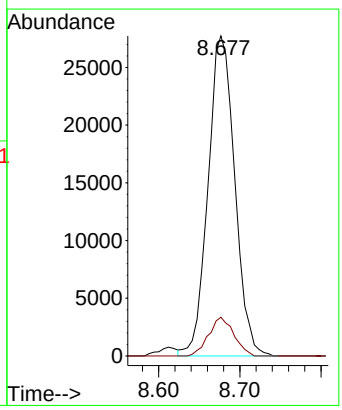
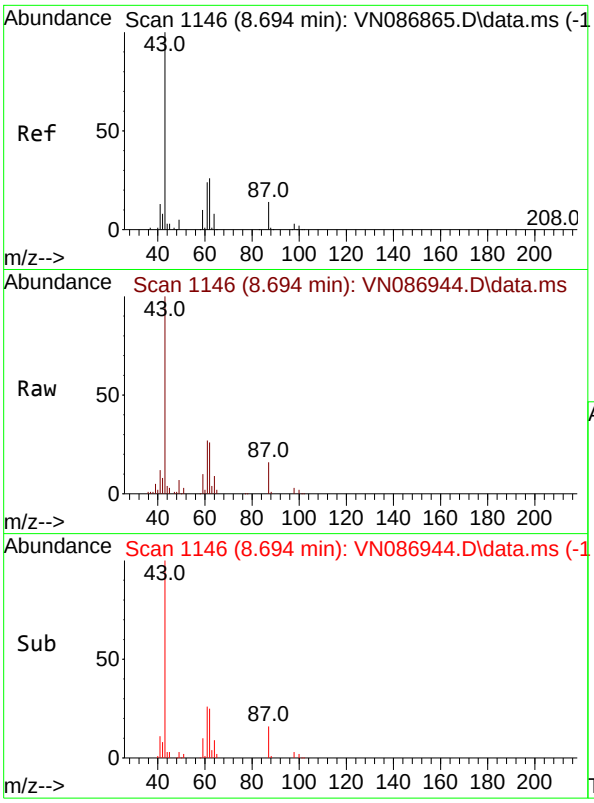



#42
1,2-Dichloroethane
Concen: 19.530 ug/l
RT: 8.677 min Scan# 1143
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 62 Resp: 63379

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 11.4 | 0.0 | 21.2 |






#43
Isopropyl Acetate
Concen: 18.984 ug/l
RT: 8.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 43 Resp: 12691

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 28.5 | 22.1 | 33.1 |
| 87 | 15.6 | 11.8 | 17.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
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Reviewed By :John Carlone 06/12/2025
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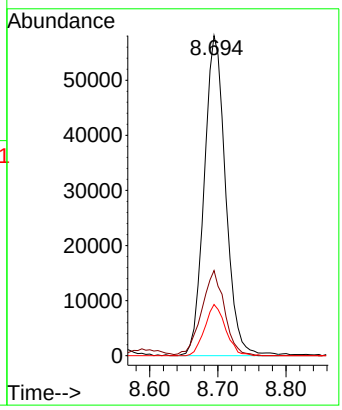
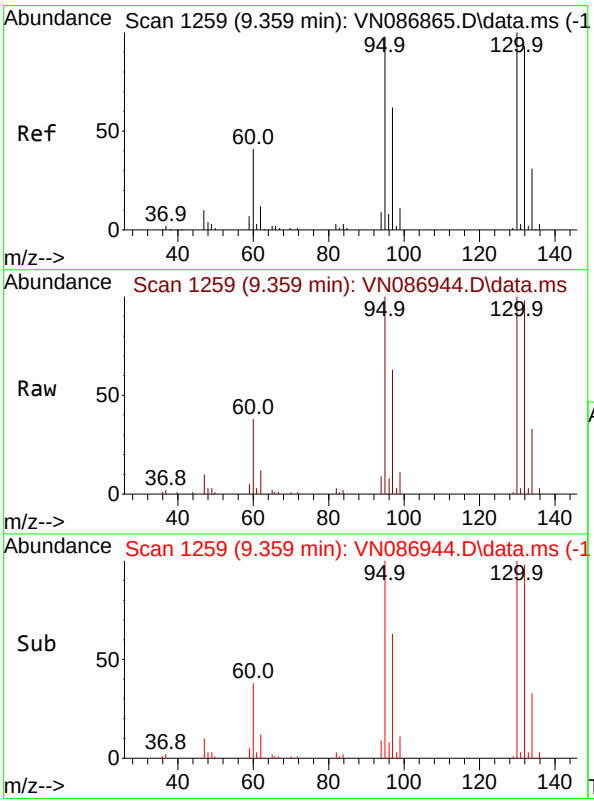
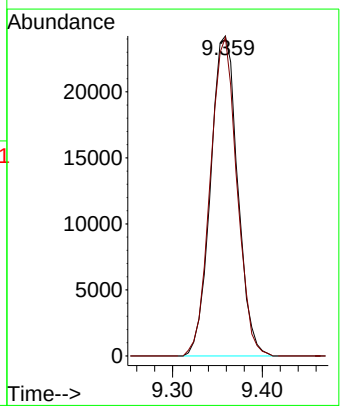


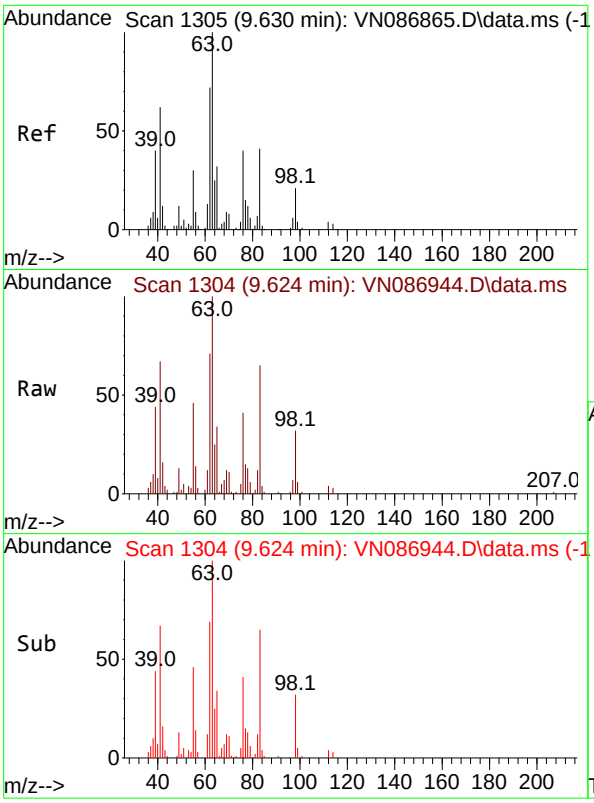




#44
Trichloroethene
Concen: 19.942 ug/l
RT: 9.359 min Scan# 1259
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:130 Resp: 50593

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 99.6 | 0.0 | 196.2 |






#45
1,2-Dichloropropane
Concen: 19.628 ug/l
RT: 9.624 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 63 Resp: 5109

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 34.4 | 25.5 | 38.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
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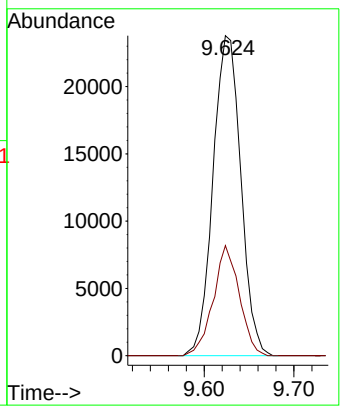
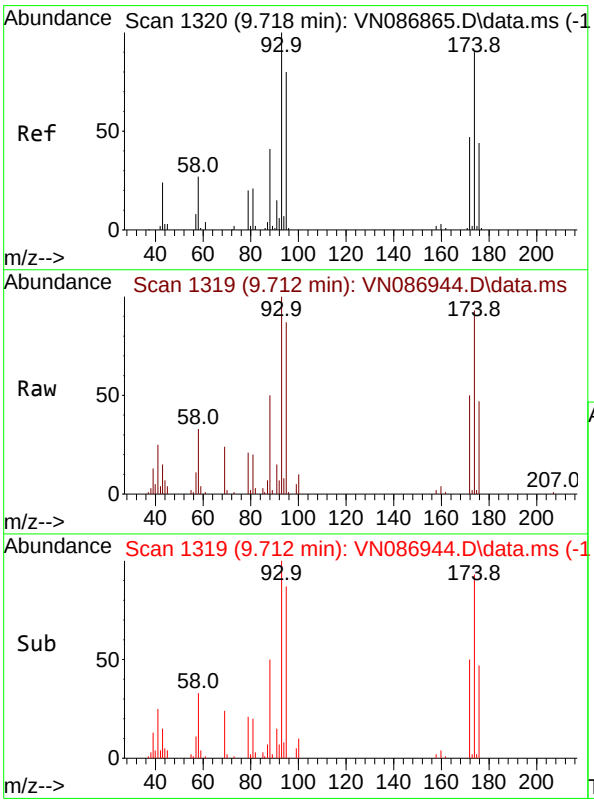
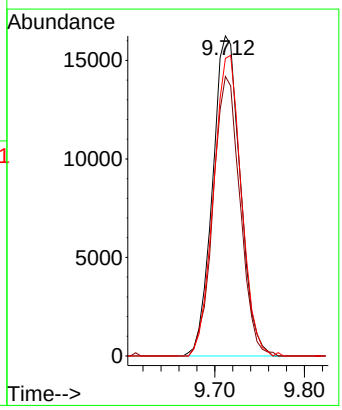


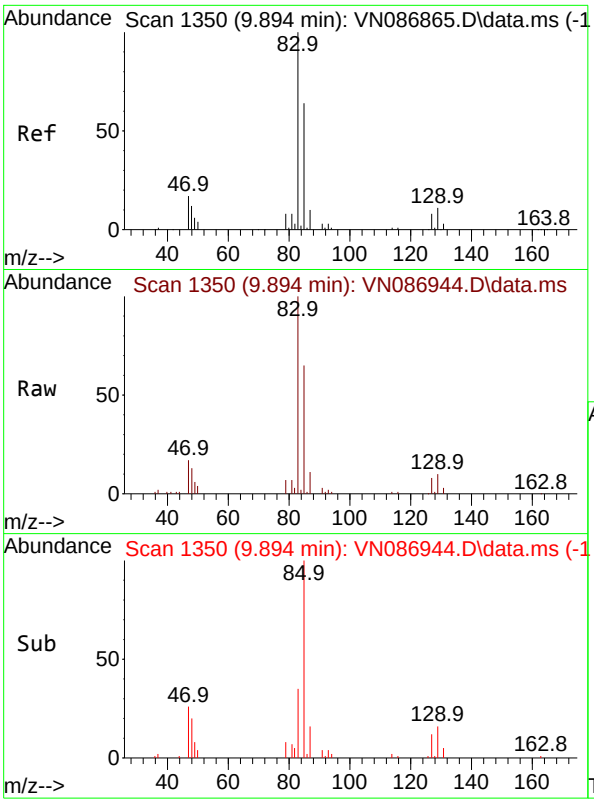




#46
Dibromomethane
Concen: 20.093 ug/l
RT: 9.712 min Scan# 1319
Delta R.T. -0.006 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 93 Resp: 34741

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 85.1 | 67.1 | 100.7 |
| 174 | 94.0 | 74.2 | 111.4 |

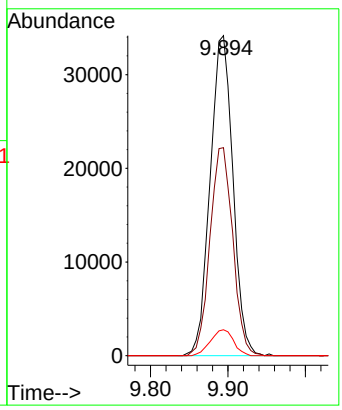





#47
Bromodichloromethane
Concen: 19.634 ug/l
RT: 9.894 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 83 Resp: 6984

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 65.0 | 50.9 | 76.3 |
| 127 | 8.1 | 6.6 | 10.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
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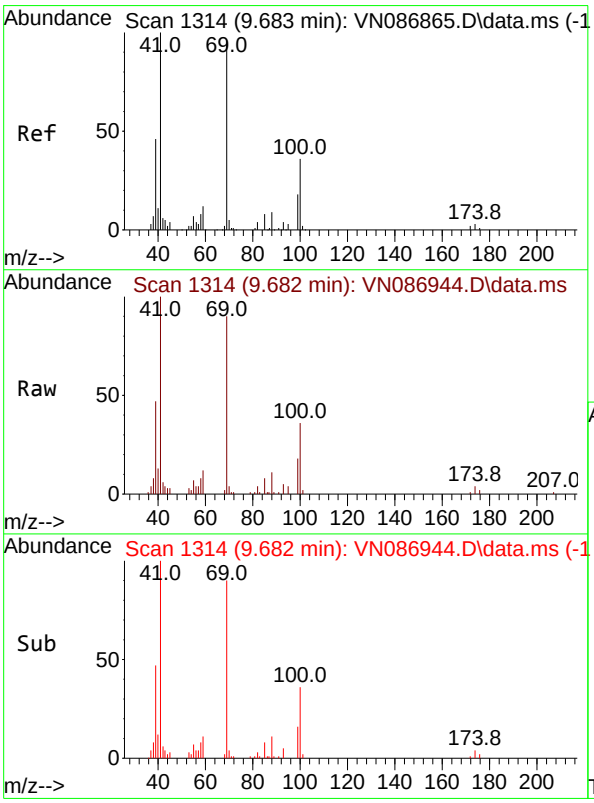
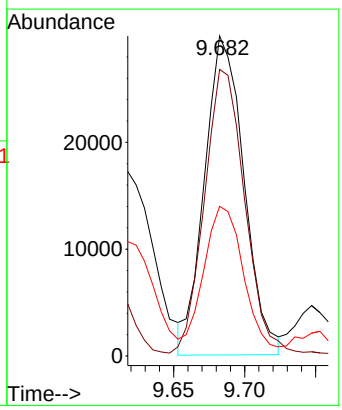
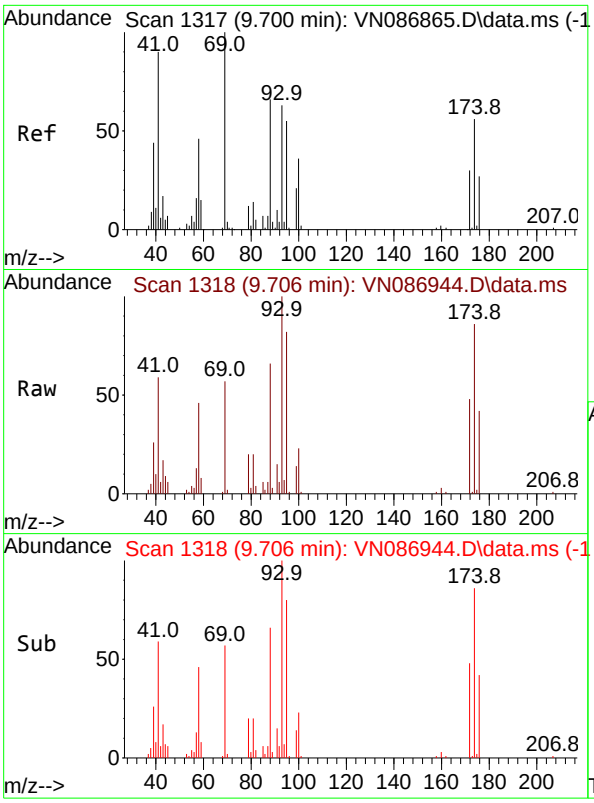



#48
Methyl methacrylate
Concen: 18.771 ug/l
RT: 9.682 min Scan# 1314
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 41 Resp: 57757

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 93.3 | 74.6 | 112.0 |
| 39 | 48.5 | 40.2 | 60.4 |

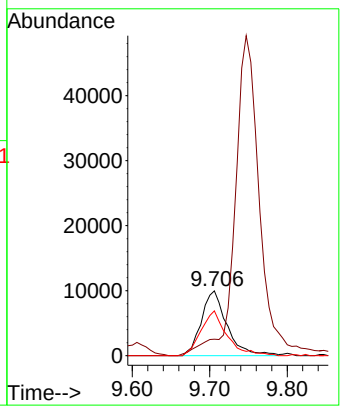





#49
1,4-Dioxane
Concen: 409.347 ug/l
RT: 9.706 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 88 Resp: 2291

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 0.0 | 0.0 | 0.0 |
| 58 | 69.9 | 57.7 | 86.5 |




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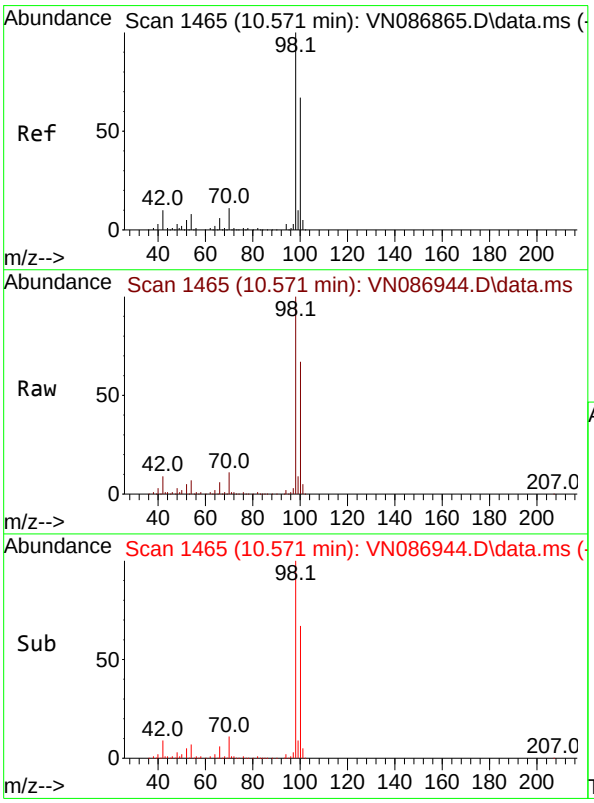
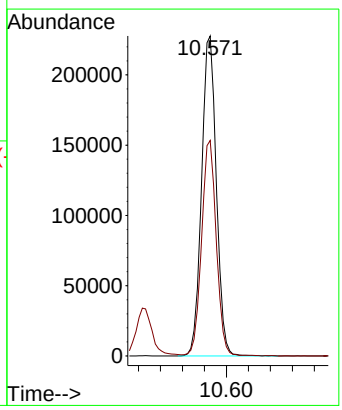
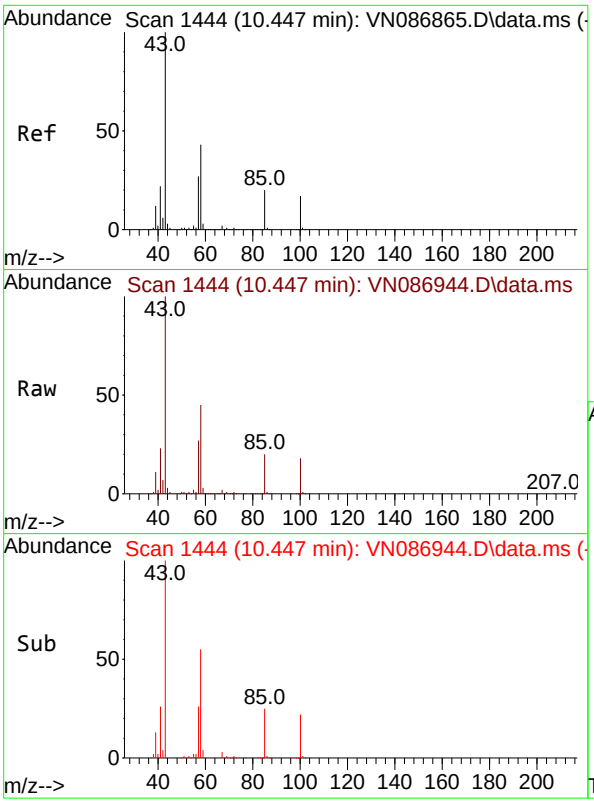



#50
Toluene-d8
Concen: 48.706 ug/l
RT: 10.571 min Scan# 1465
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 98 Resp: 423380

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 67.3 | 53.4 | 80.0 |






#51
4-Methyl-2-Pentanone
Concen: 97.997 ug/l
RT: 10.447 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 43 Resp: 39439

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 42.4 | 34.2 | 51.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

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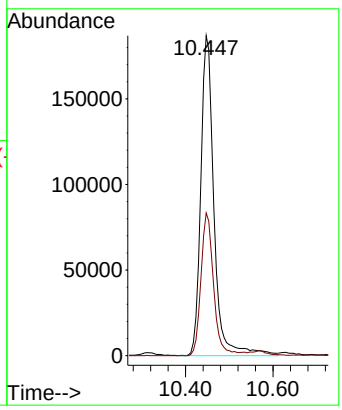
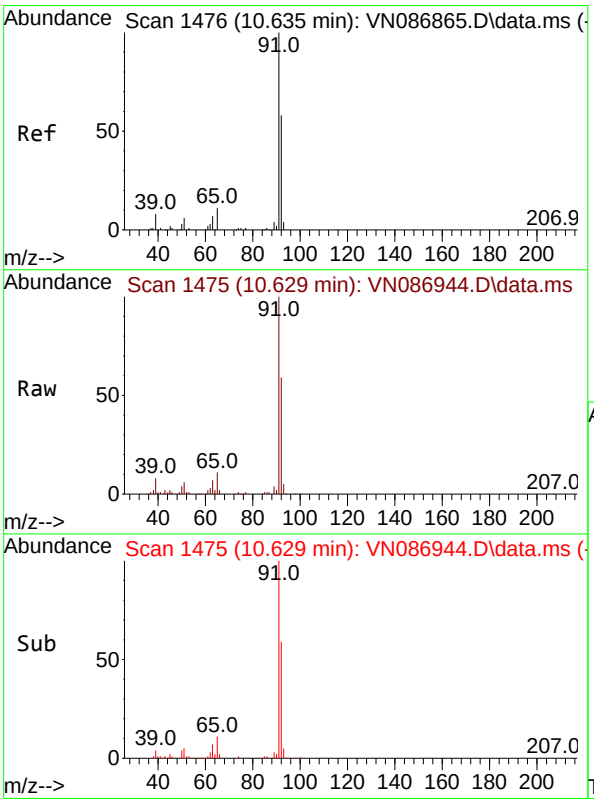
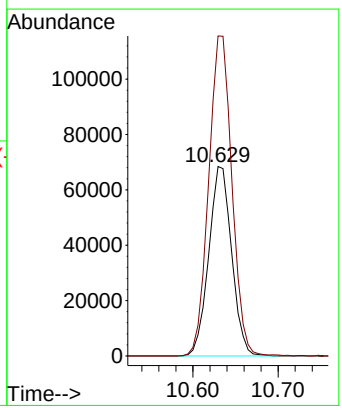


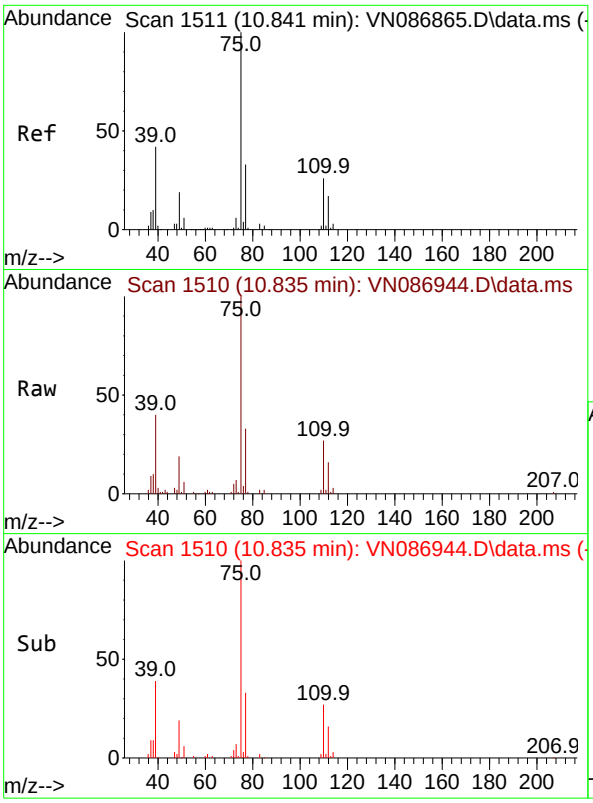




#52
Toluene
Concen: 19.509 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. -0.006 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 92 Resp: 127563

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 171.7 | 136.5 | 204.7 |






#53
t-1,3-Dichloropropene
Concen: 19.917 ug/l
RT: 10.835 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

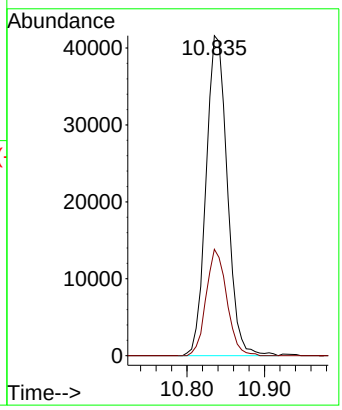
Tgt Ion: 75 Resp: 7922

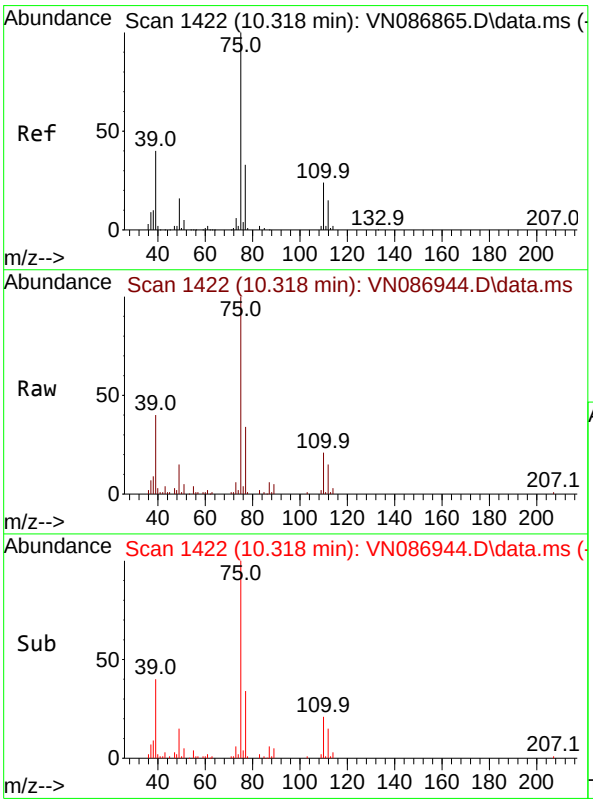
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 33.3 | 26.4 | 39.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/12/2025
Supervised By :Semsettin Yesilyurt 06/12/2025

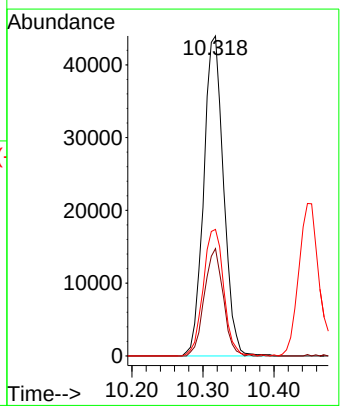


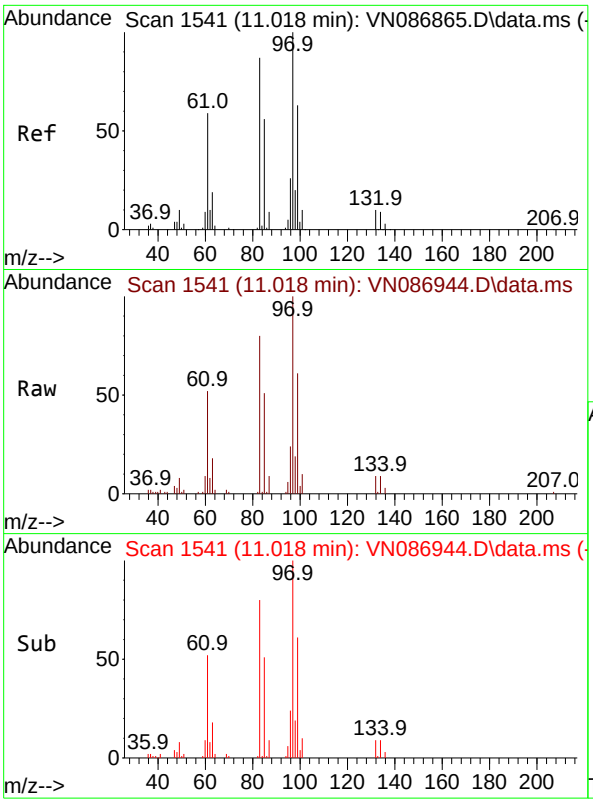




#54
cis-1,3-Dichloropropene
Concen: 20.109 ug/l
RT: 10.318 min Scan# 1422
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 75 Resp: 85586

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 33.6 | 26.2 | 39.4 |
| 39 | 39.5 | 32.3 | 48.5 |

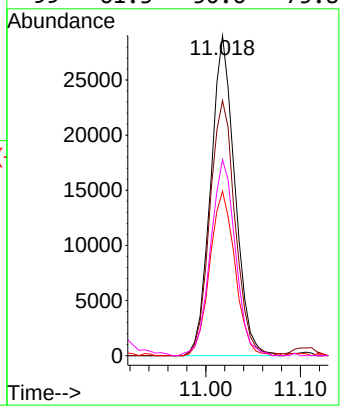





#55
1,1,2-Trichloroethane
Concen: 20.438 ug/l
RT: 11.018 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 97 Resp: 5142

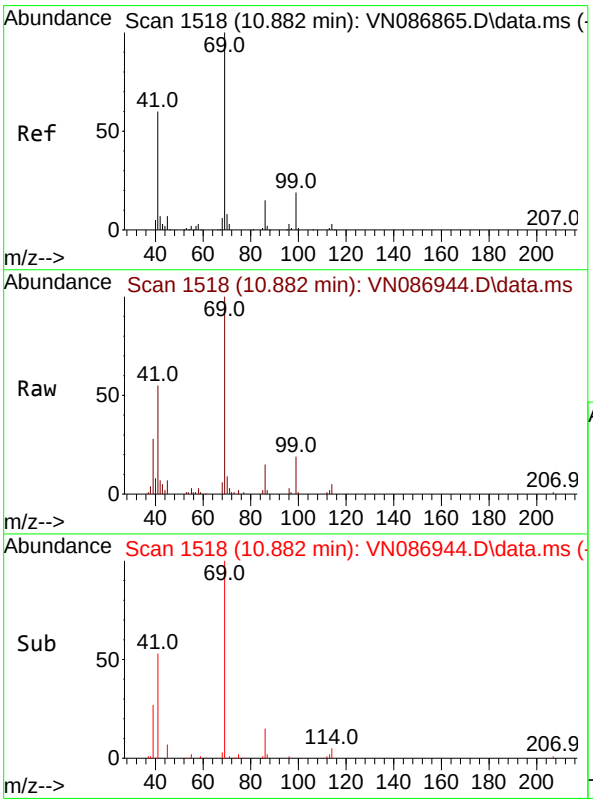
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 79.7 | 69.7 | 104.5 |
| 85 | 51.4 | 45.1 | 67.7 |
| 99 | 61.3 | 50.6 | 75.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
**APPROVED**

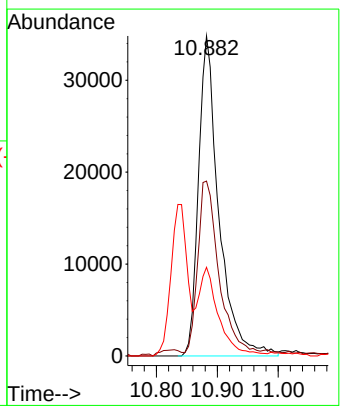
Reviewed By :John Carlone 06/12/2025
Supervised By :Semsettin Yesilyurt 06/12/2025

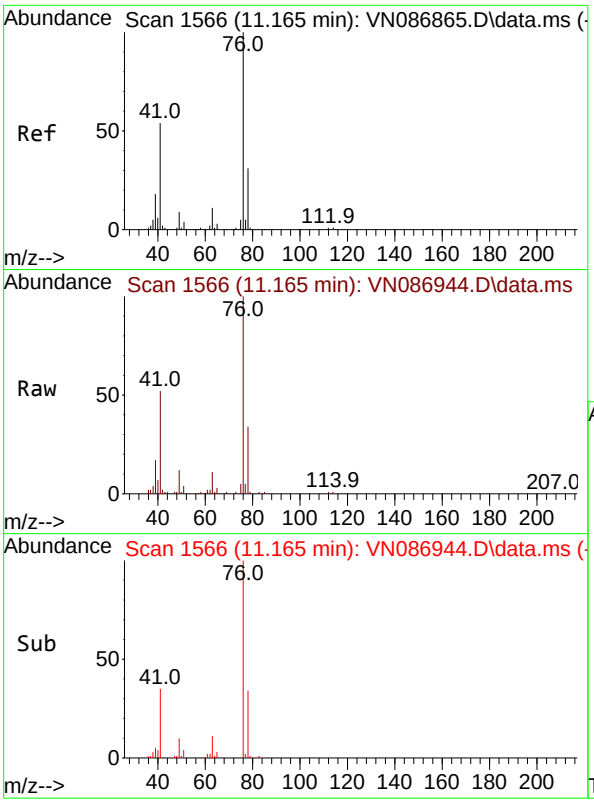



#56
Ethyl methacrylate
Concen: 20.198 ug/l
RT: 10.882 min Scan# 1518
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 69 Resp: 80942

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 55.5 | 47.2 | 70.8 |
| 39 | 24.3 | 23.0 | 34.6 |






#57
1,3-Dichloropropane
Concen: 19.613 ug/l
RT: 11.165 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 76 Resp: 8560

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.4 | 25.3 | 37.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
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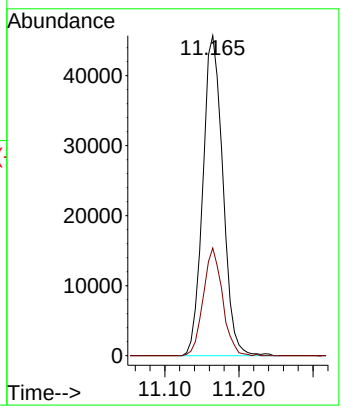
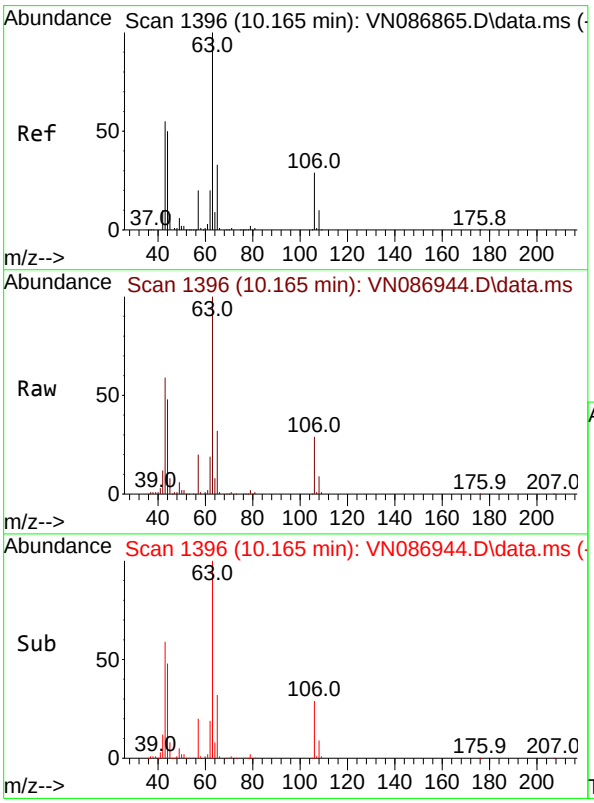
Reviewed By :John Carlone 06/12/2025
Supervised By :Semsettin Yesilyurt 06/12/2025

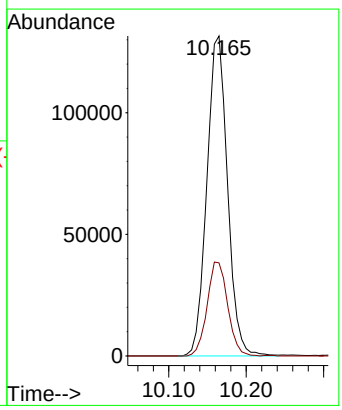


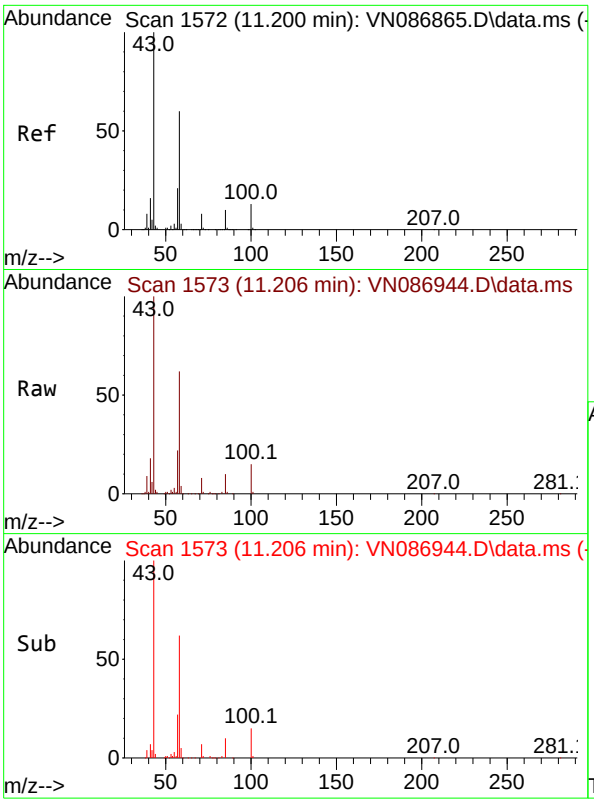




#58
2-Chloroethyl Vinyl ether
Concen: 101.910 ug/l
RT: 10.165 min Scan# 1396
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 63 Resp: 243584

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 29.2 | 23.0 | 34.6 |






#59
2-Hexanone
Concen: 89.210 ug/l
RT: 11.206 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 43 Resp: 23126

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 65.0 | 30.4 | 91.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
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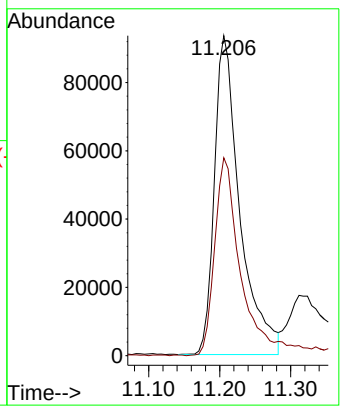
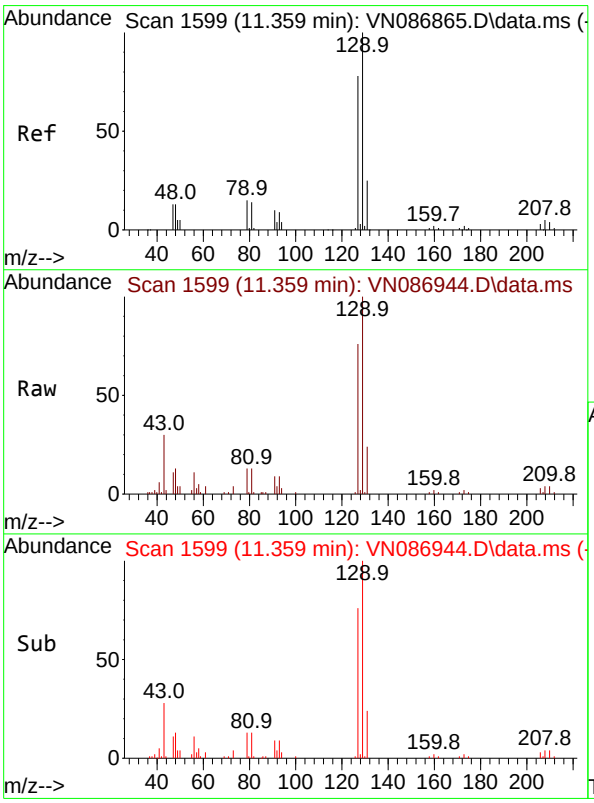
Reviewed By :John Carlone 06/12/2025
Supervised By :Semsettin Yesilyurt 06/12/2025

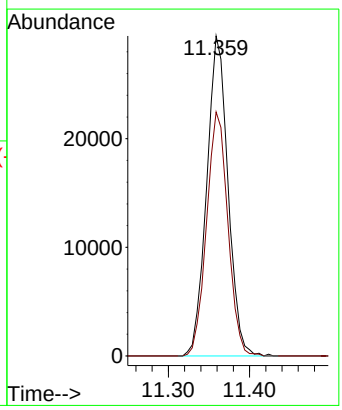


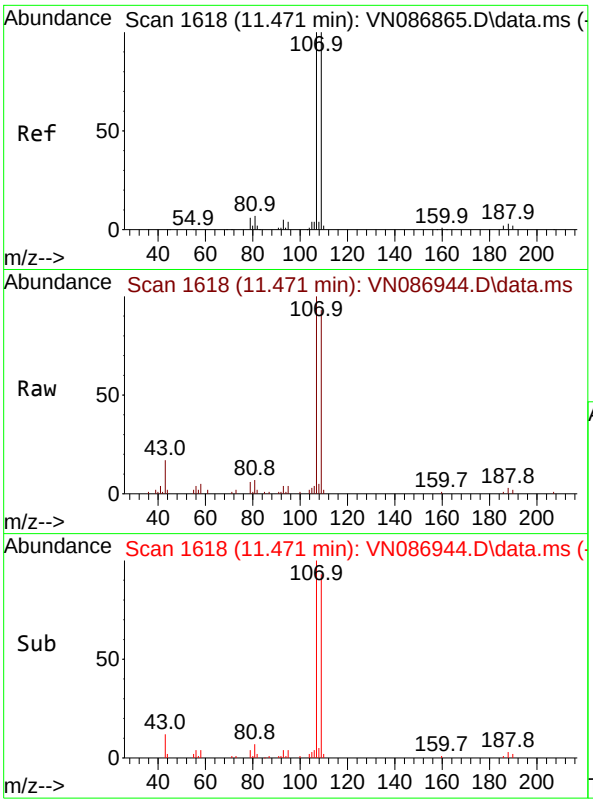




#60
Dibromochloromethane
Concen: 20.468 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:129 Resp: 53655

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 76.3 | 38.6 | 115.8 |






#61
1,2-Dibromoethane
Concen: 19.711 ug/l
RT: 11.471 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:107 Resp: 5083

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 96.3 | 76.3 | 114.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
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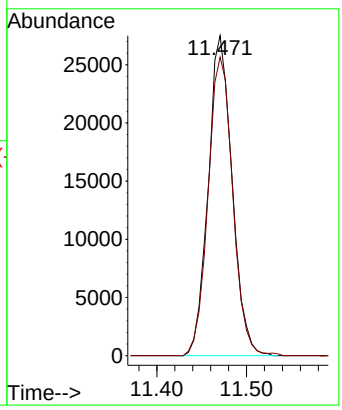
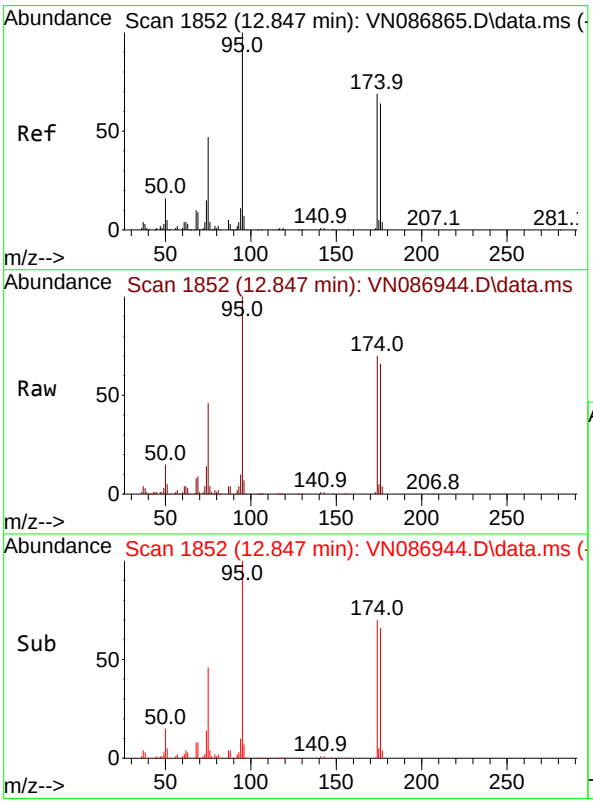
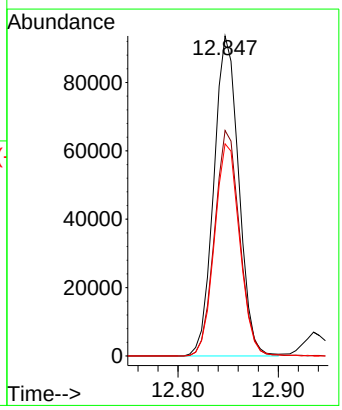


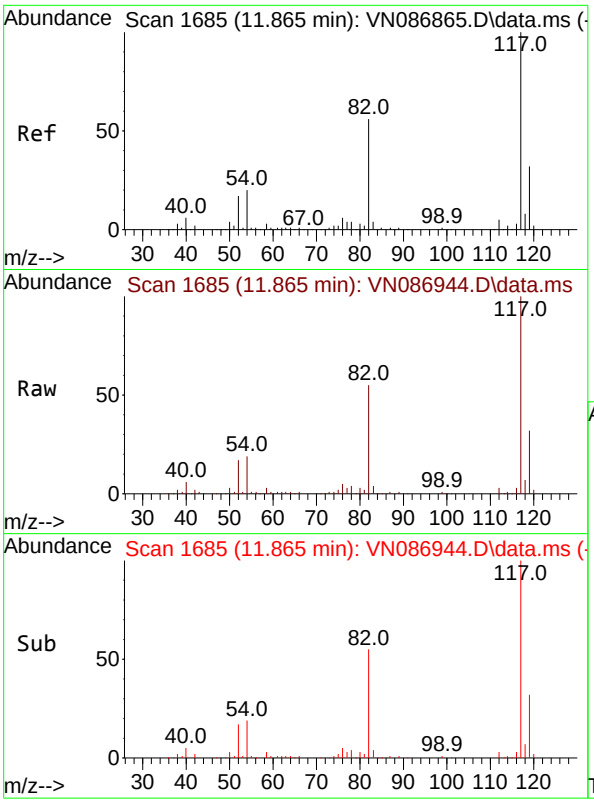




#62
4-Bromofluorobenzene
Concen: 49.951 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 95 Resp: 161321

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 71.0 | 0.0 | 141.8 |
| 176 | 67.2 | 0.0 | 132.6 |






#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:117 Resp: 32118

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 54.7 | 44.6 | 67.0 |
| 119 | 31.9 | 25.5 | 38.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
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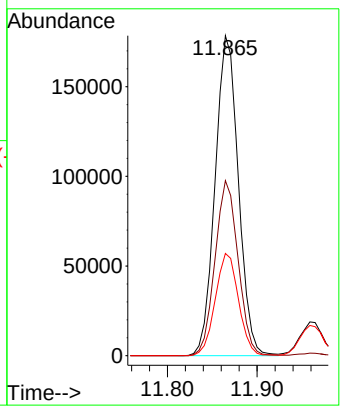
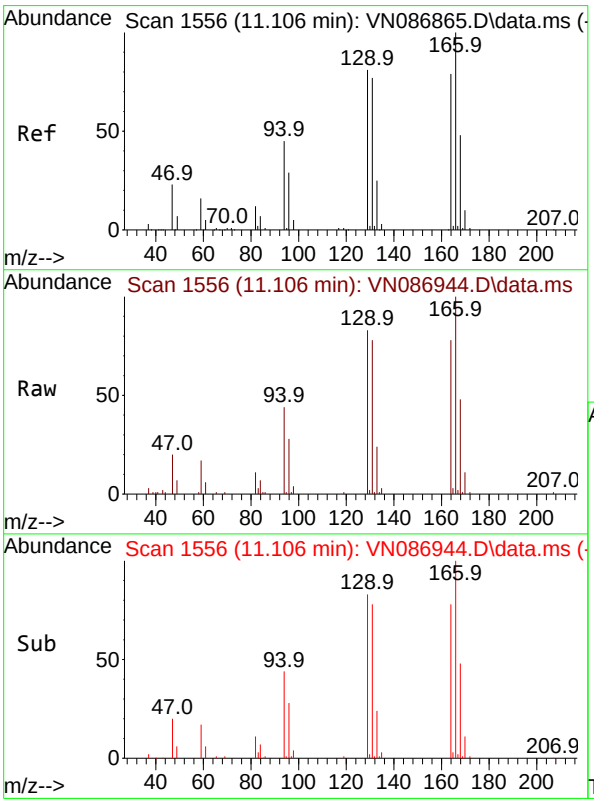
Supervised By :Semsettin Yesilyurt 06/12/2025

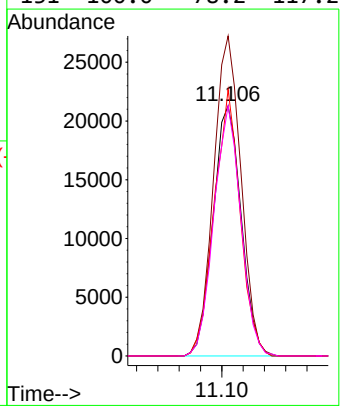


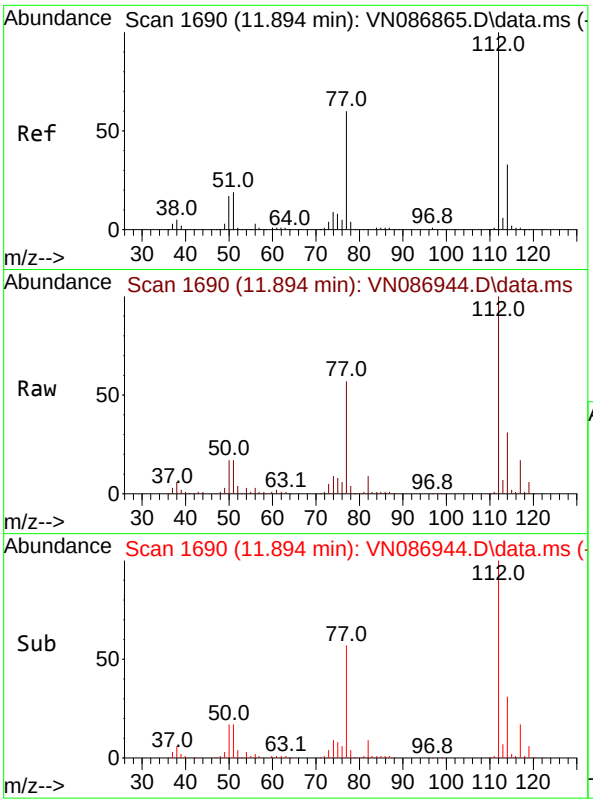




#64
Tetrachloroethene
Concen: 19.150 ug/l
RT: 11.106 min Scan# 1556
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:164 Resp: 38926

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 128.0 | 101.8 | 152.8 |
| 129 | 106.5 | 83.0 | 124.4 |
| 131 | 100.0 | 78.2 | 117.2 |

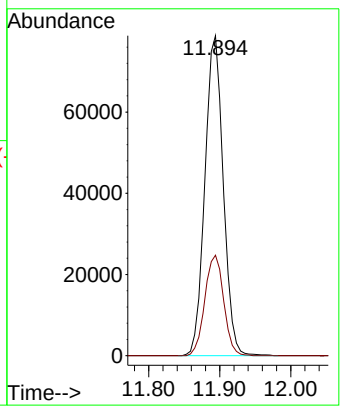





#65
Chlorobenzene
Concen: 20.006 ug/l
RT: 11.894 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:112 Resp: 14172

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 31.4 | 26.2 | 39.2 |




**Instrument :**
MSVOA_N
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VN0611WBS02

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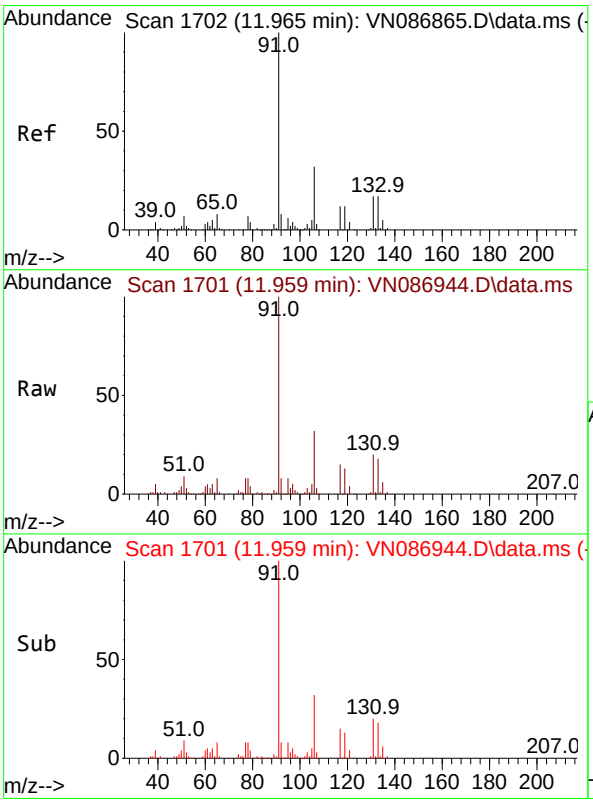
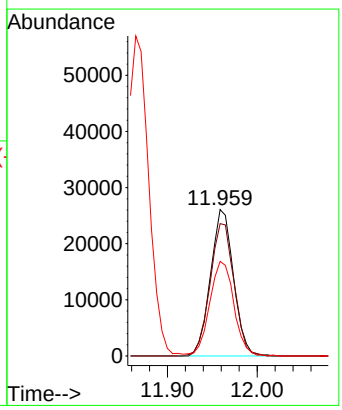
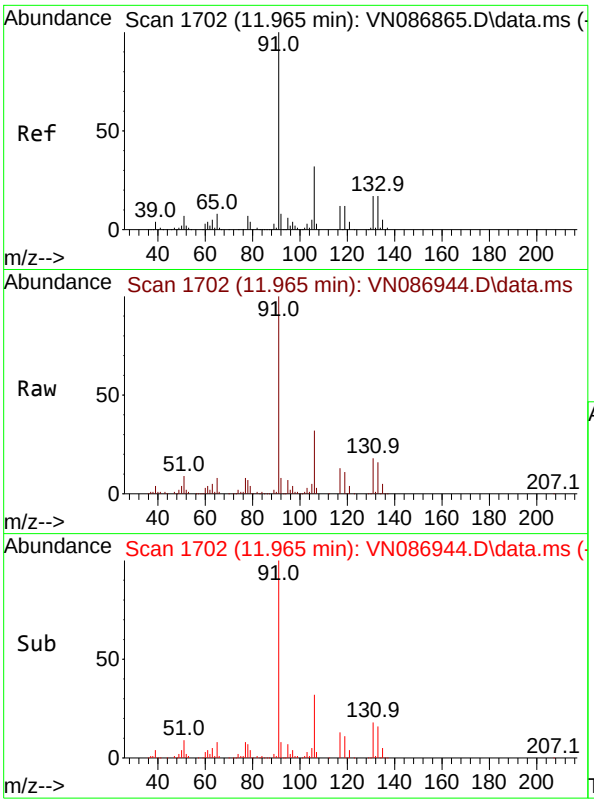



#66
1,1,1,2-Tetrachloroethane
Concen: 20.378 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.006 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:131 Resp: 46404

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 94.2 | 48.3 | 144.8 |
| 119 | 68.0 | 34.0 | 101.8 |






#67
Ethyl Benzene
Concen: 19.647 ug/l
RT: 11.965 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 91 Resp: 23973

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 31.9 | 25.4 | 38.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
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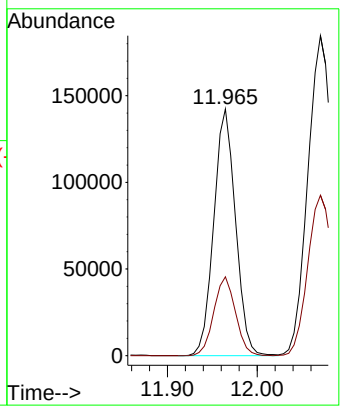
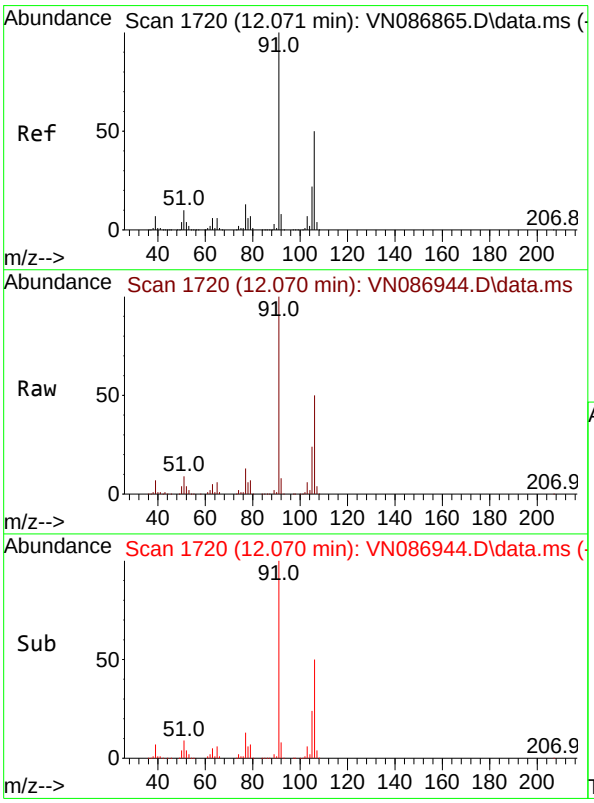
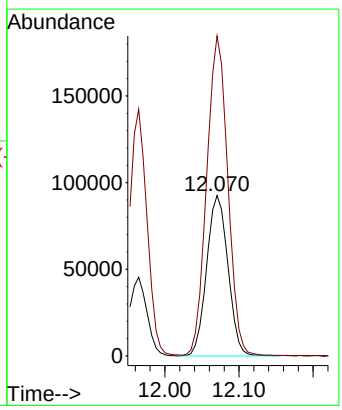


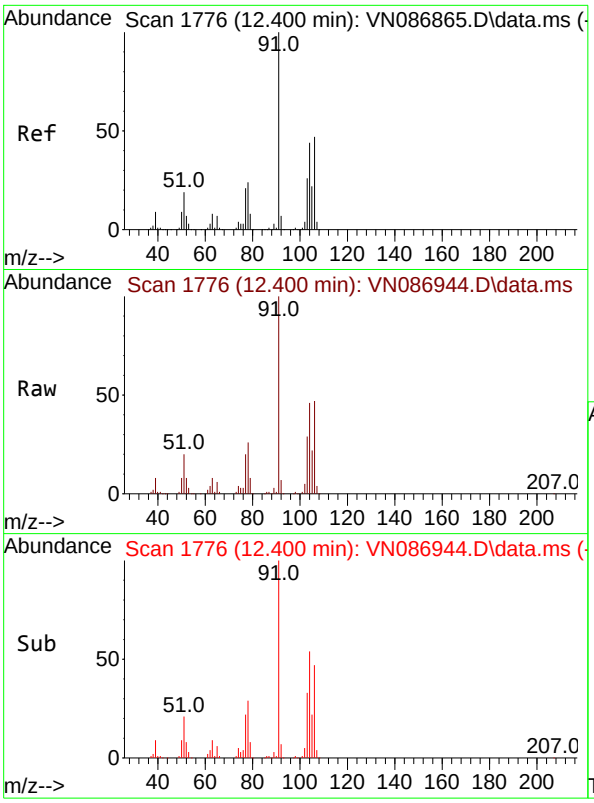




#68
m/p-Xylenes
Concen: 39.613 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:106 Resp: 185026

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 197.2 | 159.4 | 239.0 |






#69
o-Xylene
Concen: 20.172 ug/l
RT: 12.400 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:106 Resp: 9024

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 210.1 | 106.1 | 318.1 |

**Instrument :**
MSVOA_N
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VN0611WBS02

**Manual Integrations**
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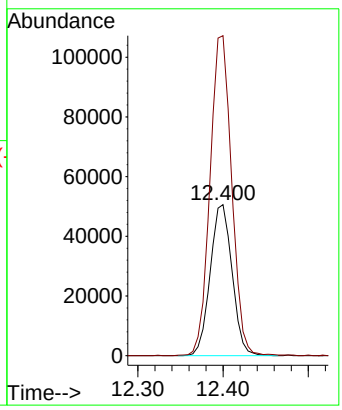
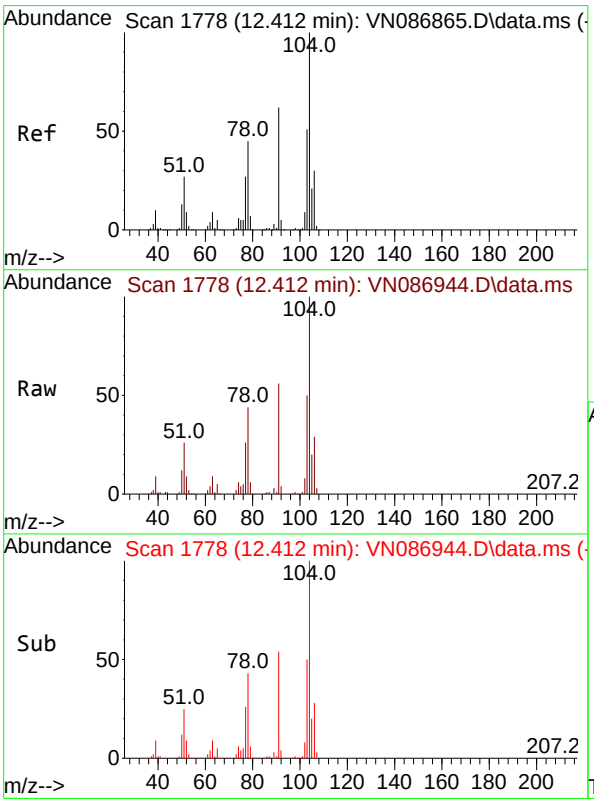
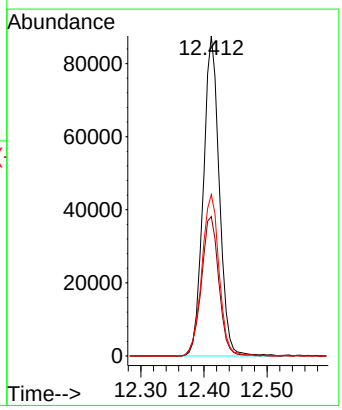


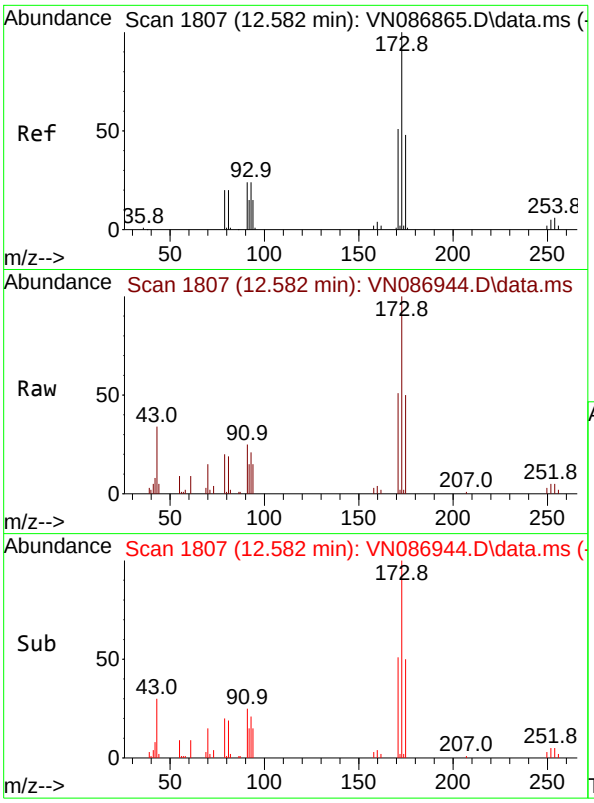




#70
Styrene
Concen: 20.137 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:104 Resp: 154149

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 47.5 | 38.5 | 57.7 |
| 103 | 54.3 | 43.1 | 64.7 |

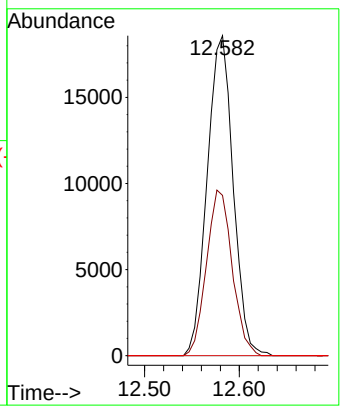





#71
Bromoform
Concen: 20.952 ug/l
RT: 12.582 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:173 Resp: 3535

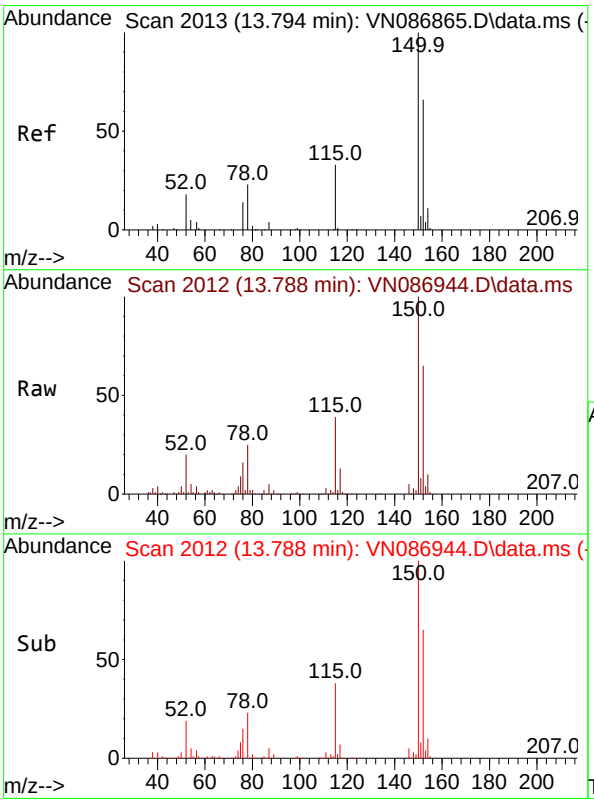
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 51.2 | 24.1 | 72.4 |
| 254 | 0.0 | 0.0 | 0.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
**APPROVED**

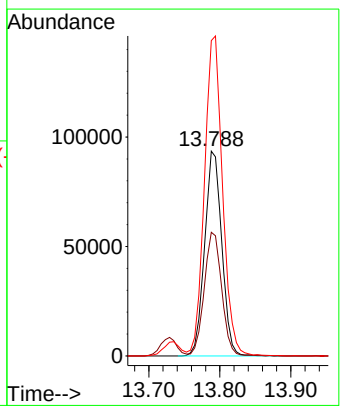
Reviewed By :John Carlone 06/12/2025
Supervised By :Semsettin Yesilyurt 06/12/2025

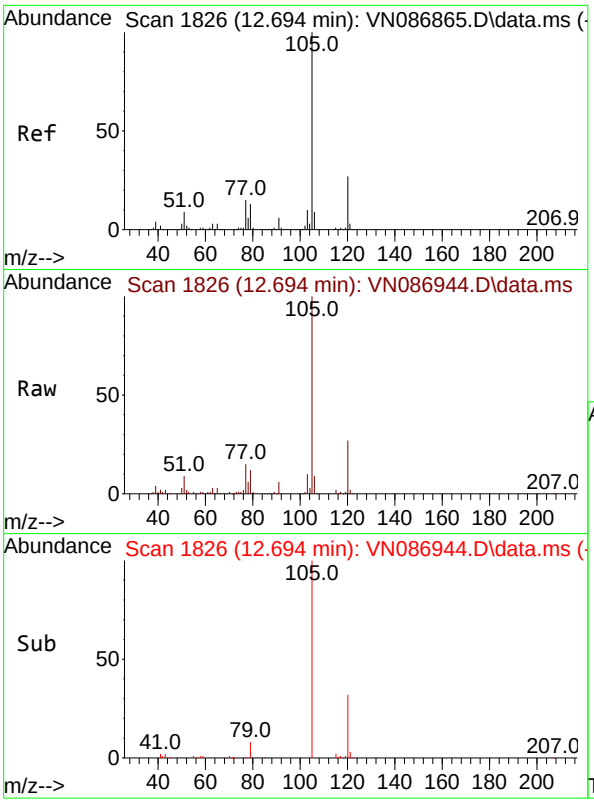



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.006 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:152 Resp: 157403

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 61.4 | 30.1 | 90.5 |
| 150 | 164.6 | 0.0 | 345.0 |






#73
Isopropylbenzene
Concen: 19.320 ug/l
RT: 12.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:105 Resp: 22154

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 27.3 | 13.5 | 40.4 |

**Instrument :**
MSVOA_N
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VN0611WBS02

**Manual Integrations**
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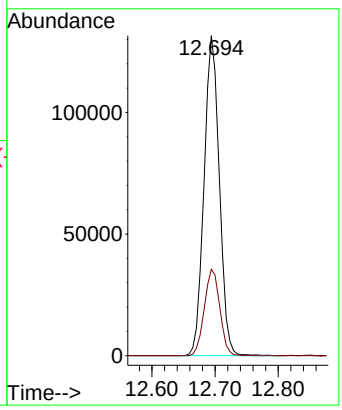
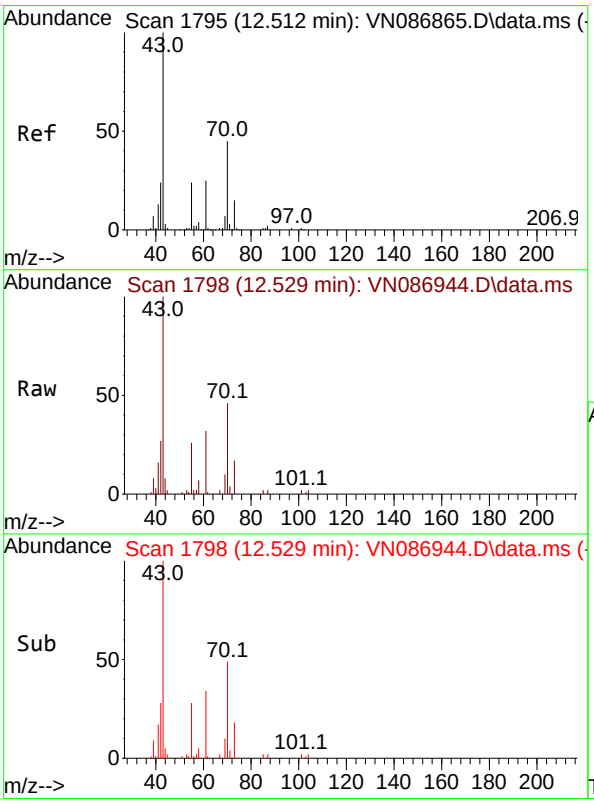
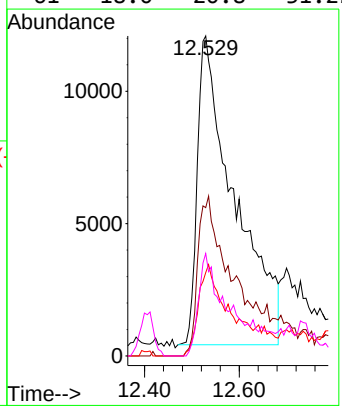


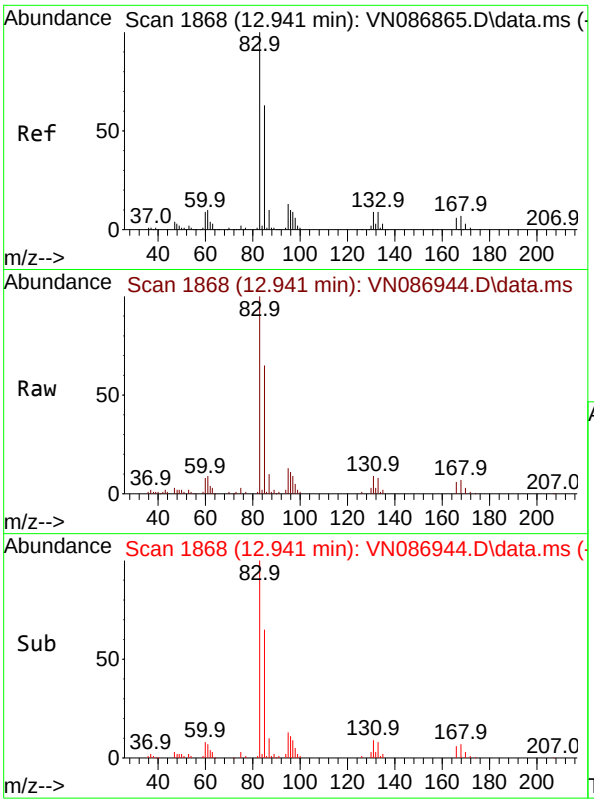




#74
N-amyl acetate
Concen: 15.794 ug/l
RT: 12.529 min Scan# 1798
Delta R.T. 0.017 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 43 Resp: 63289

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 34.9 | 37.6 | 56.4# |
| 55 | 19.9 | 19.0 | 28.6 |
| 61 | 18.0 | 20.8 | 31.2# |






#75
1,1,2,2-Tetrachloroethane
Concen: 20.973 ug/l
RT: 12.941 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 83 Resp: 8147

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 9.3 | 4.9 | 14.7 |
| 85 | 64.3 | 32.0 | 96.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
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Reviewed By :John Carlone 06/12/2025
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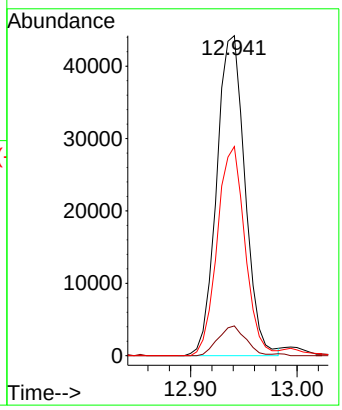
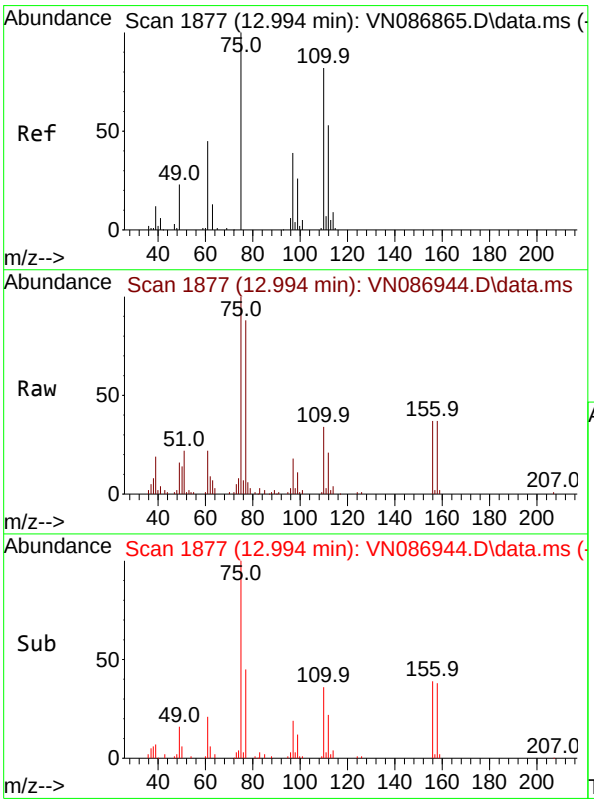
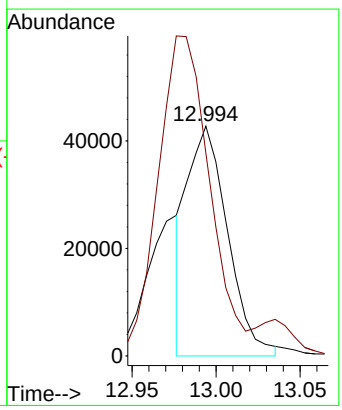


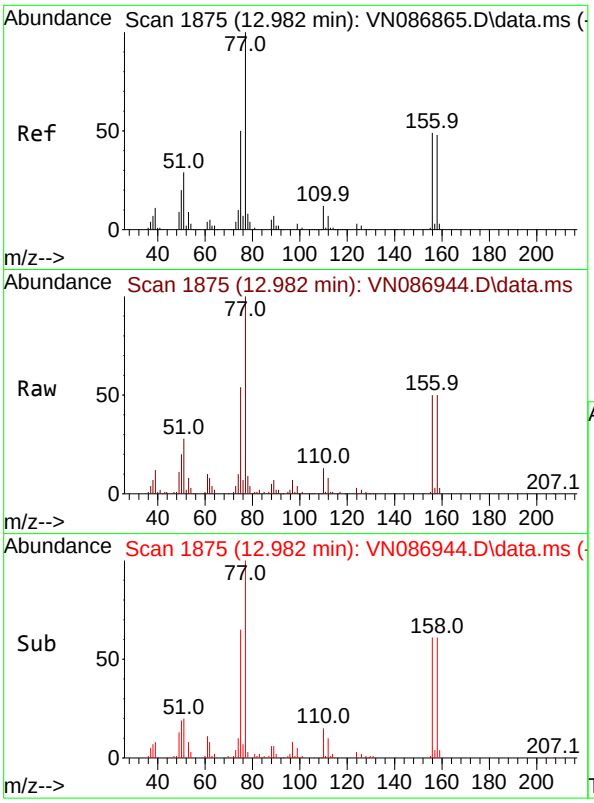




#76
1,2,3-Trichloropropane
Concen: 19.132 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 75 Resp: 71582

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 177.6 | 79.3 | 237.9 |






#77
Bromobenzene
Concen: 20.981 ug/l
RT: 12.982 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:156 Resp: 5517

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 230.4 | 117.7 | 353.1 |
| 158 | 95.7 | 48.1 | 144.4 |

**Instrument :**
MSVOA_N
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VN0611WBS02

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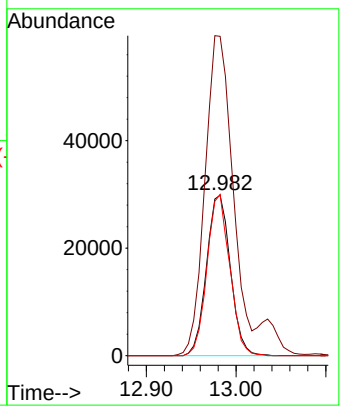
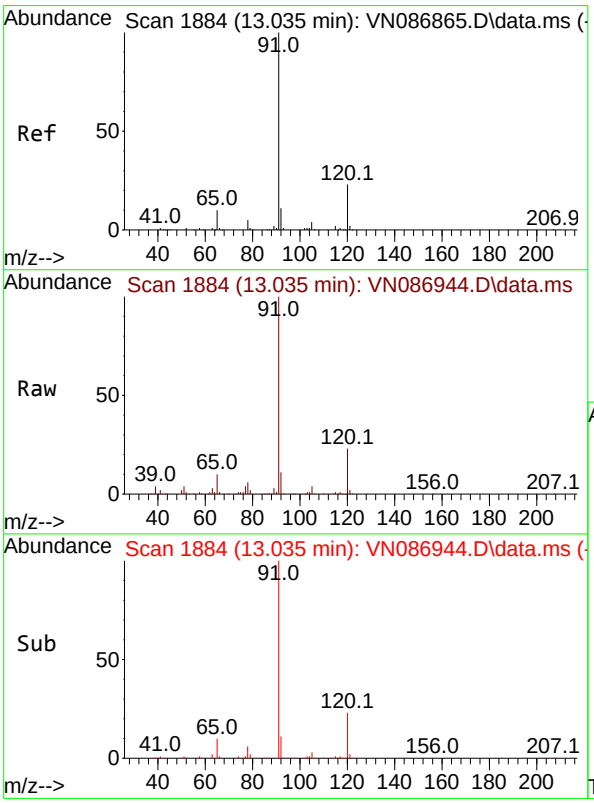
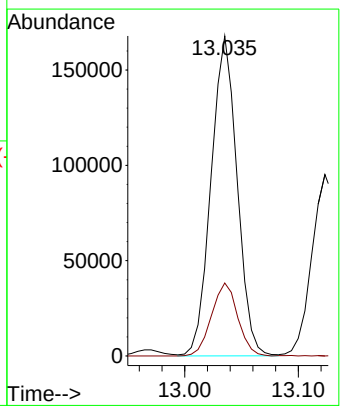


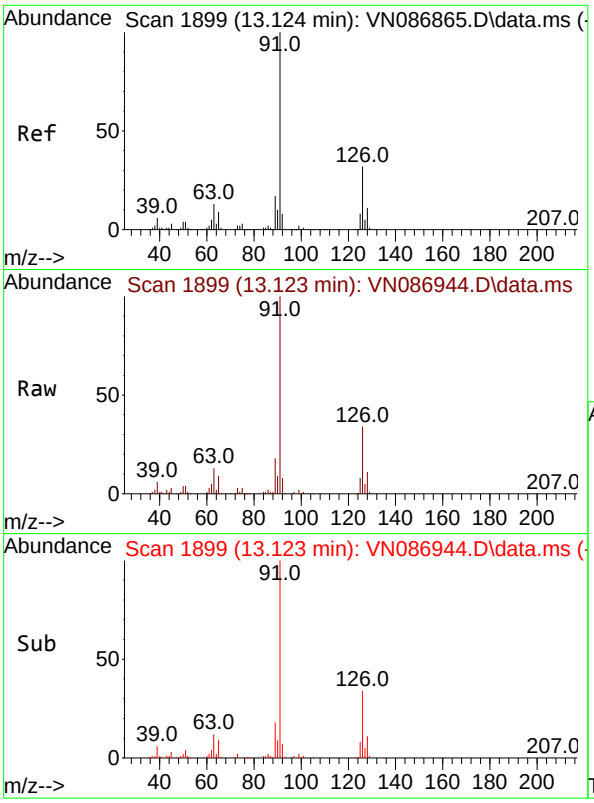




#78
n-propylbenzene
Concen: 19.187 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 91 Resp: 267384

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.9 | 11.4 | 34.2 |






#79
2-Chlorotoluene
Concen: 19.721 ug/l
RT: 13.123 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 91 Resp: 16481

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 32.6 | 16.2 | 48.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
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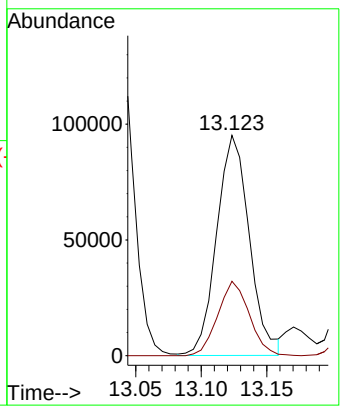
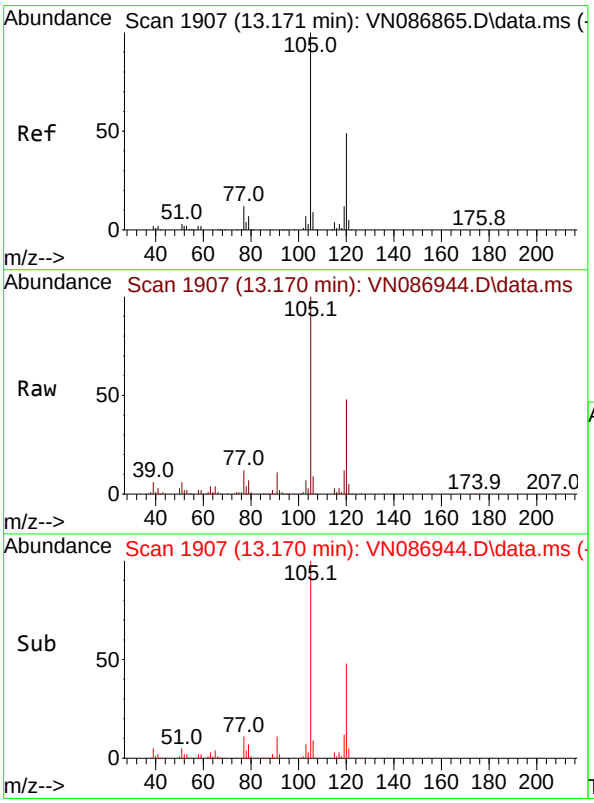
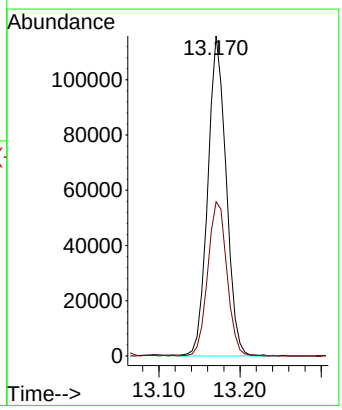


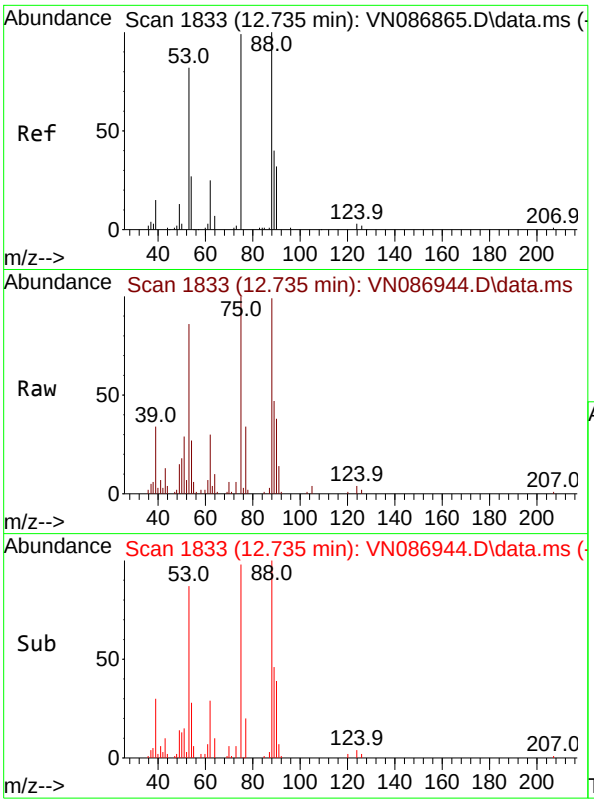




#80
1,3,5-Trimethylbenzene
Concen: 19.200 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:105 Resp: 181773

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 50.4 | 24.9 | 74.6 |

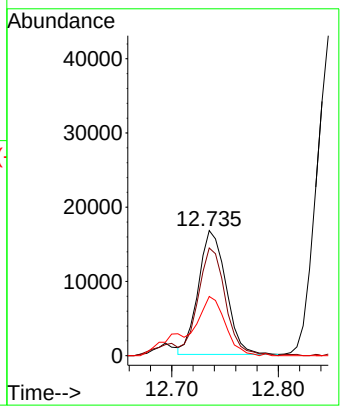





#81
trans-1,4-Dichloro-2-butene
Concen: 18.532 ug/l
RT: 12.735 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 75 Resp: 3012

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 94.2 | 66.6 | 99.8 |
| 89 | 63.9 | 36.7 | 55.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
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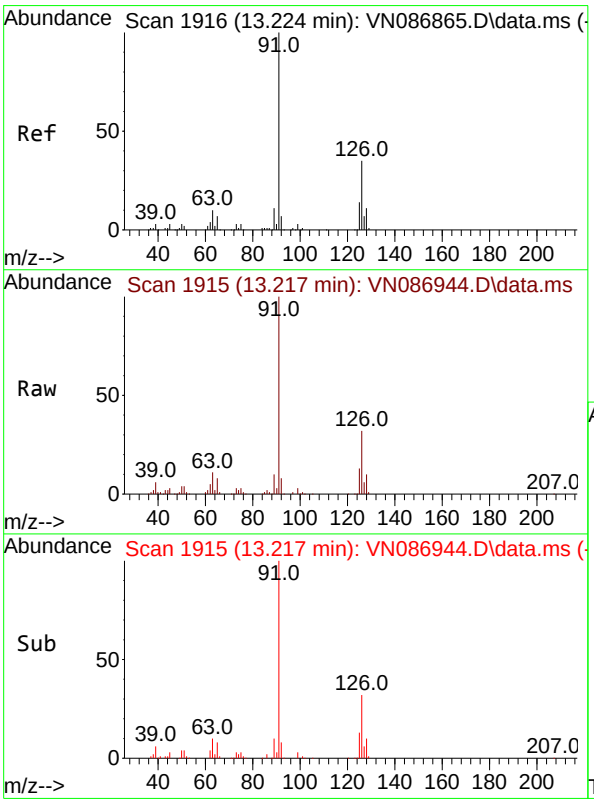
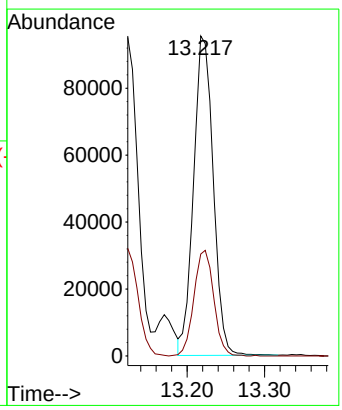
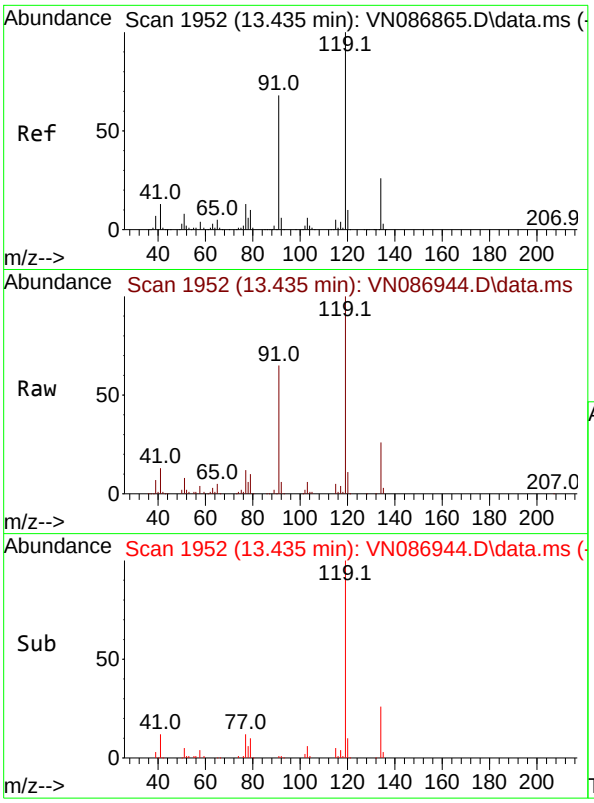



#82
4-Chlorotoluene
Concen: 19.866 ug/l
RT: 13.217 min Scan# 1915
Delta R.T. -0.006 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 91 Resp: 167991

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 33.4 | 16.7 | 50.1 |






#83
tert-Butylbenzene
Concen: 18.646 ug/l
RT: 13.435 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:119 Resp: 16159

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 63.1 | 32.1 | 96.5 |
| 134 | 26.9 | 13.4 | 40.1 |

**Instrument :**
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VN0611WBS02

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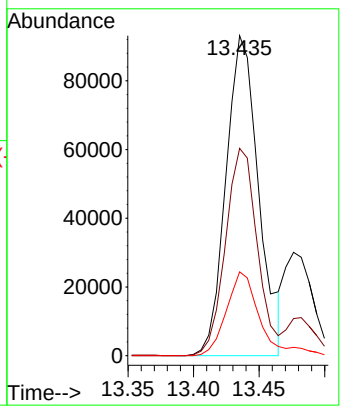
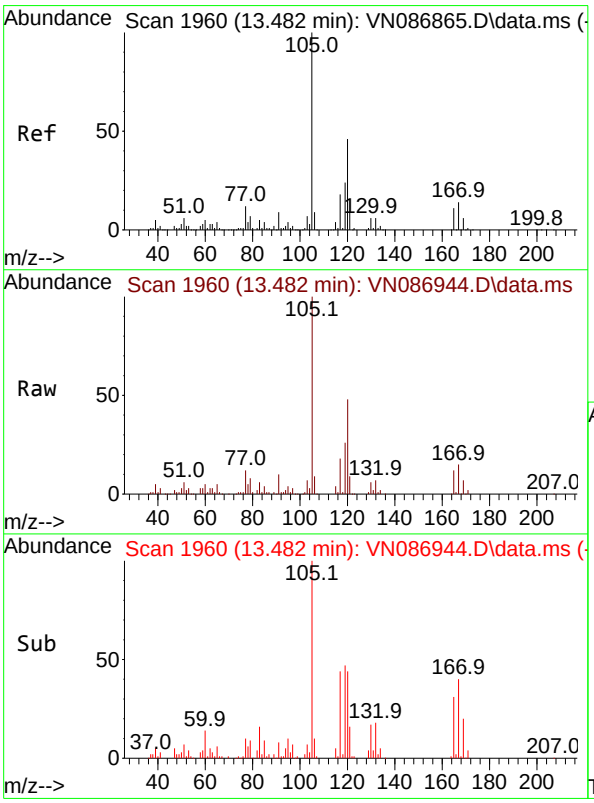
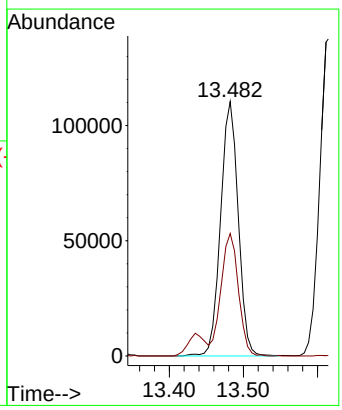


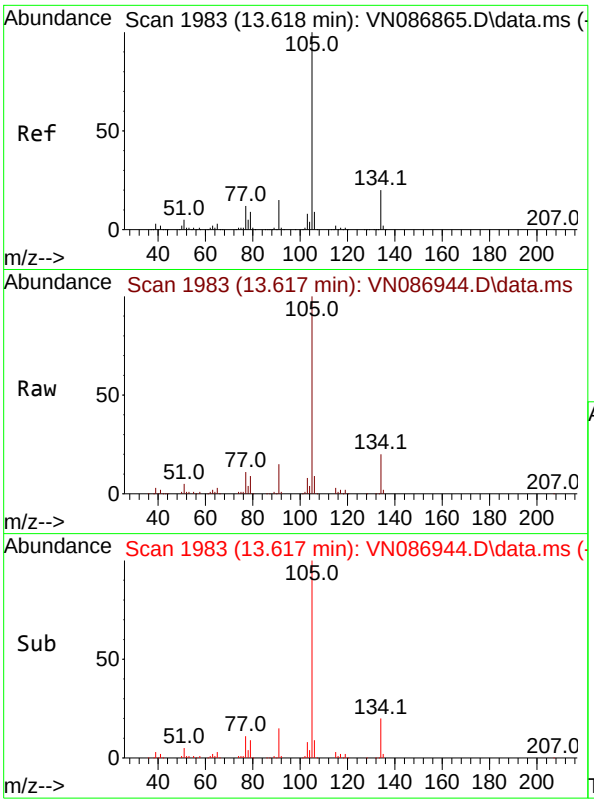




#84
1,2,4-Trimethylbenzene
Concen: 19.216 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:105 Resp: 182431

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 47.6 | 23.2 | 69.6 |






#85
sec-Butylbenzene
Concen: 18.189 ug/l
RT: 13.617 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:105 Resp: 22890

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.9 | 10.0 | 30.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
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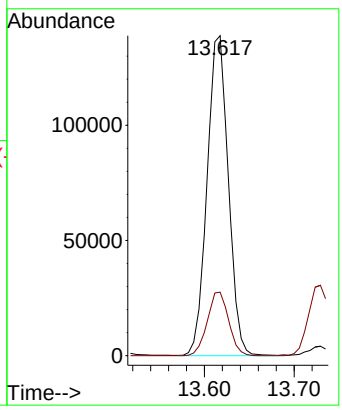
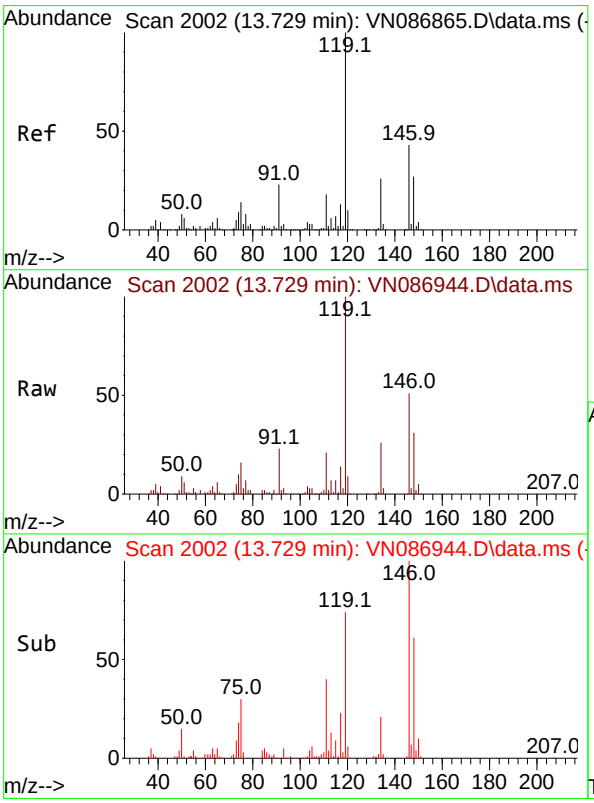
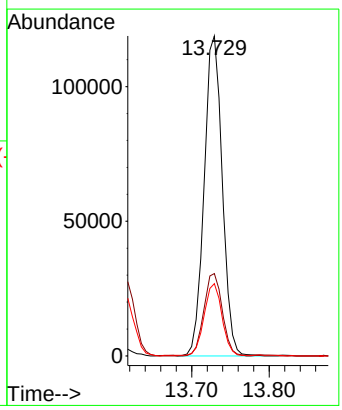


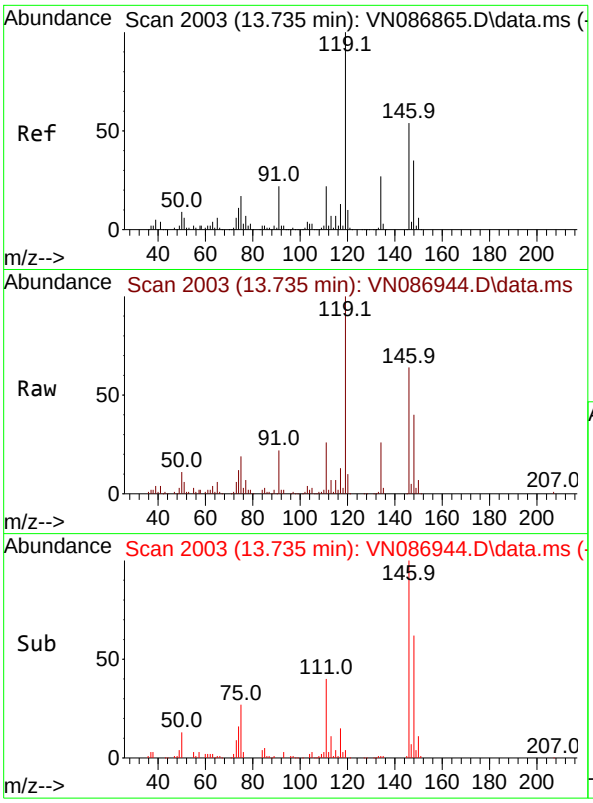




#86
p-Isopropyltoluene
Concen: 18.551 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:119 Resp: 192991

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 26.2 | 13.5 | 40.4 |
| 91 | 22.1 | 11.5 | 34.4 |






#87
1,3-Dichlorobenzene
Concen: 20.271 ug/l
RT: 13.735 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:146 Resp: 10488

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 41.3 | 20.9 | 62.8 |
| 148 | 62.6 | 32.0 | 96.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
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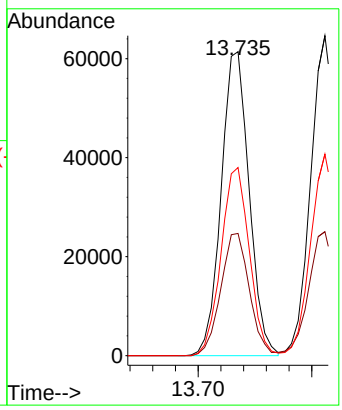
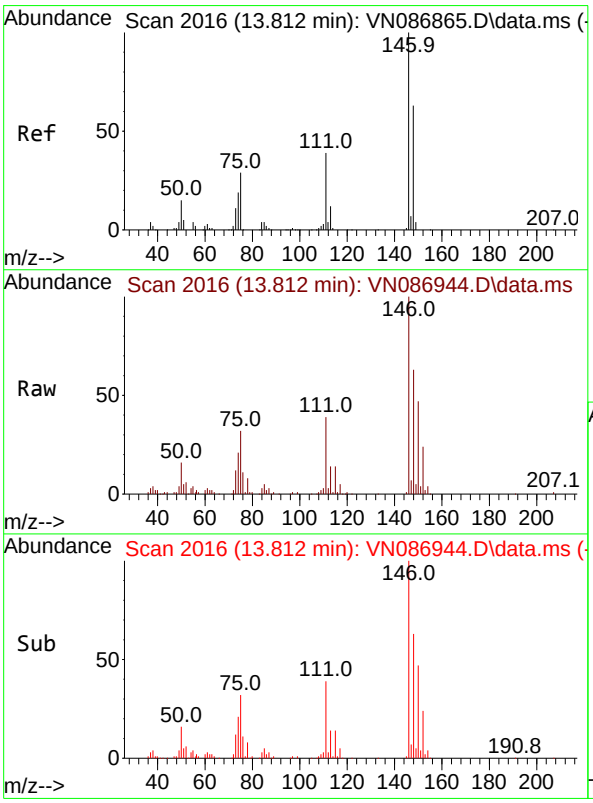
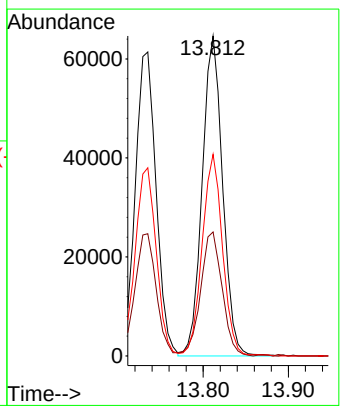


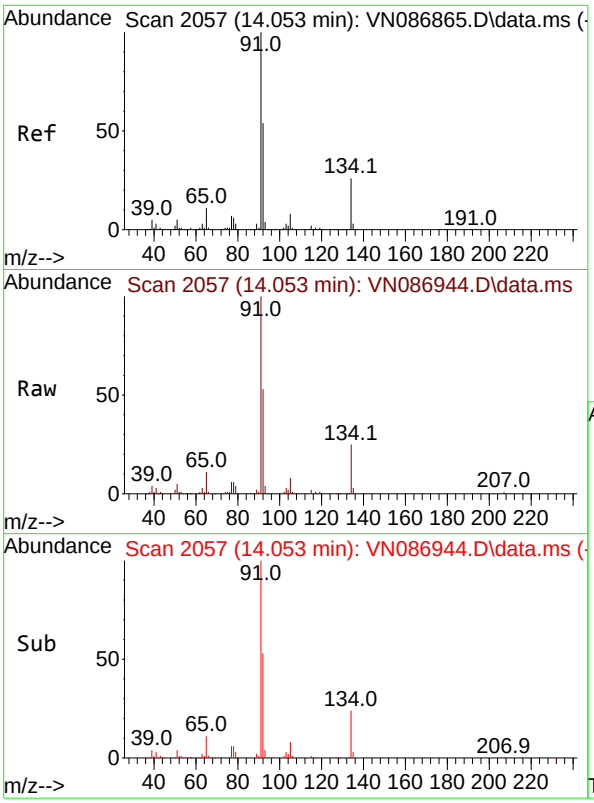




#88
1,4-Dichlorobenzene
Concen: 20.426 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:146 Resp: 107750

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 40.7 | 19.9 | 59.7 |
| 148 | 63.1 | 31.8 | 95.4 |






#89
n-Butylbenzene
Concen: 17.613 ug/l
RT: 14.053 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

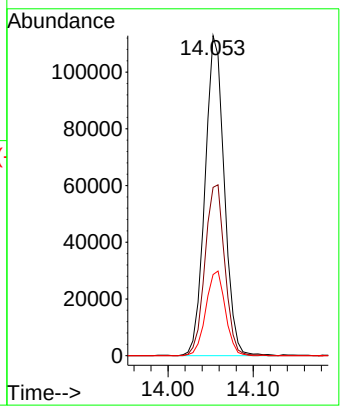
Tgt Ion: 91 Resp: 17748

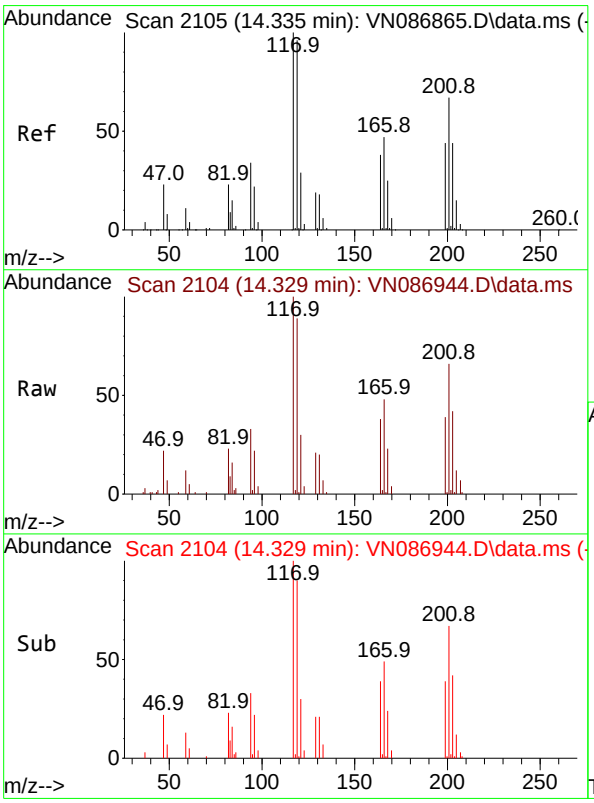
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 54.9 | 27.5 | 82.4 |
| 134 | 26.7 | 13.0 | 39.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/12/2025
Supervised By :Semsettin Yesilyurt 06/12/2025

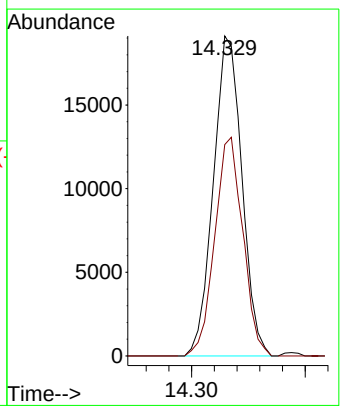


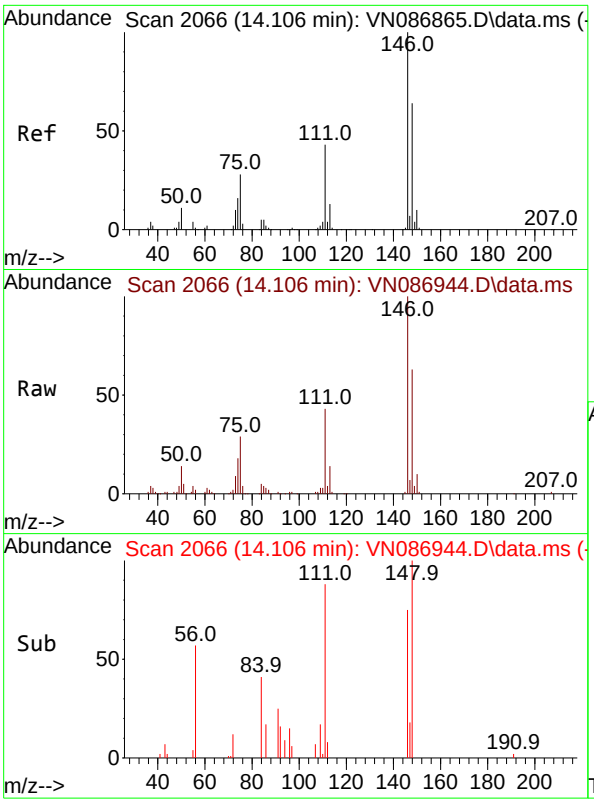




#90
Hexachloroethane
Concen: 18.972 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. -0.006 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:117 Resp: 33456

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 67.1 | 33.2 | 99.6 |

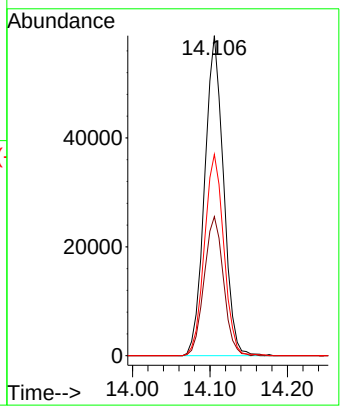





#91
1,2-Dichlorobenzene
Concen: 19.995 ug/l
RT: 14.106 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:146 Resp: 9939

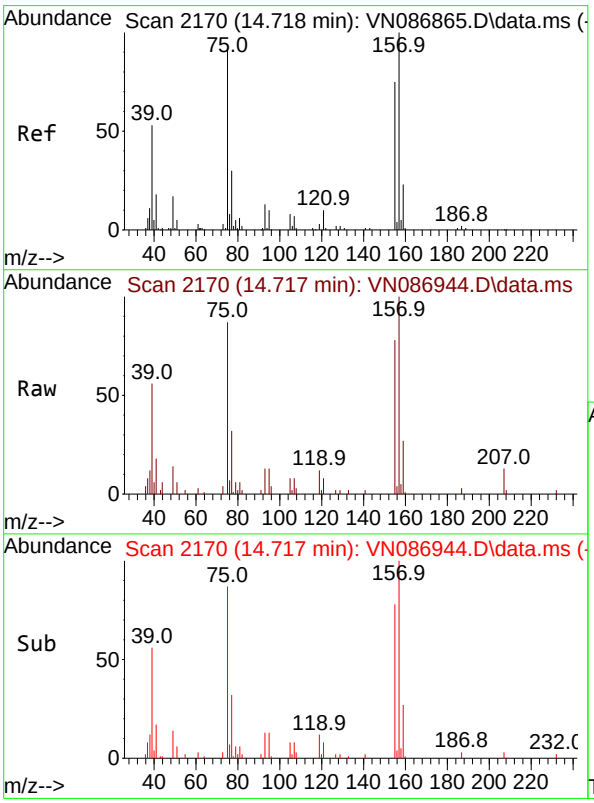
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 44.5 | 21.6 | 64.6 |
| 148 | 64.5 | 31.7 | 95.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
**APPROVED**

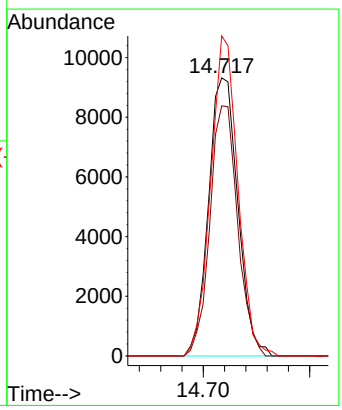
Reviewed By :John Carlone 06/12/2025
Supervised By :Semsettin Yesilyurt 06/12/2025

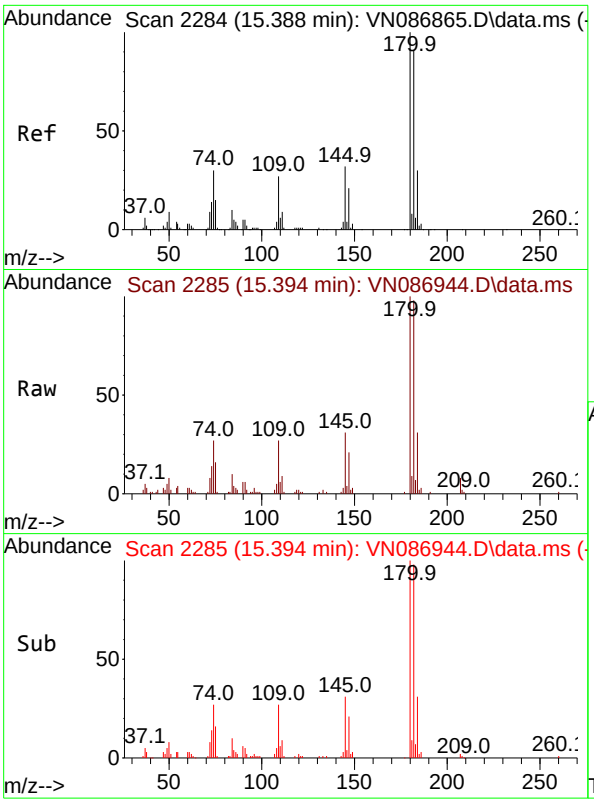



#92
1,2-Dibromo-3-Chloropropane
Concen: 19.155 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion: 75 Resp: 17796

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 85.2 | 41.1 | 123.4 |
| 157 | 106.8 | 52.7 | 158.1 |






#93
1,2,4-Trichlorobenzene
Concen: 18.433 ug/l
RT: 15.394 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

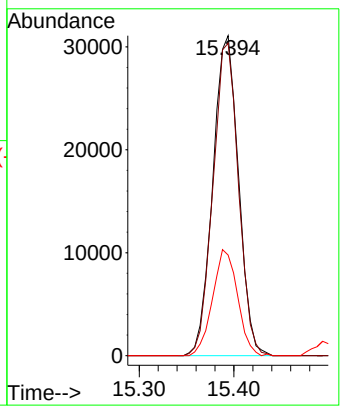
**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

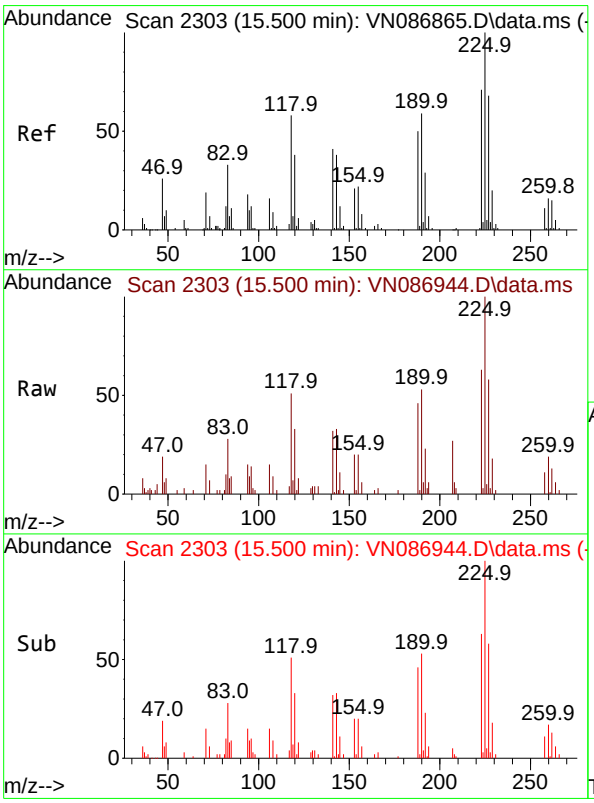
Tgt Ion:180 Resp: 5850

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 96.7 | 46.9 | 140.7 |
| 145 | 32.3 | 16.0 | 47.9 |

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/12/2025
Supervised By :Semsettin Yesilyurt 06/12/2025

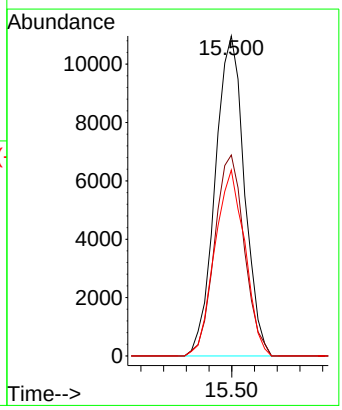


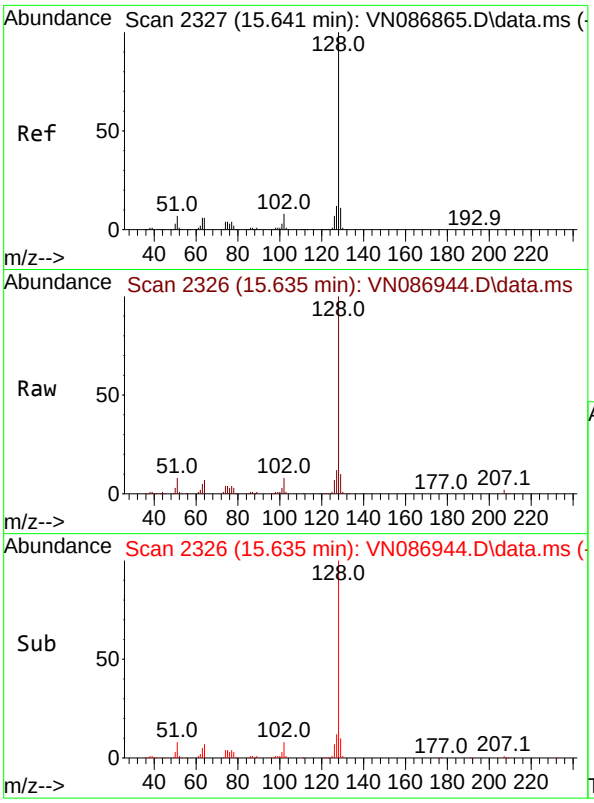




#94
Hexachlorobutadiene
Concen: 16.567 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. -0.000 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:225 Resp: 19592

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 64.0 | 33.5 | 100.4 |
| 227 | 60.0 | 31.1 | 93.5 |

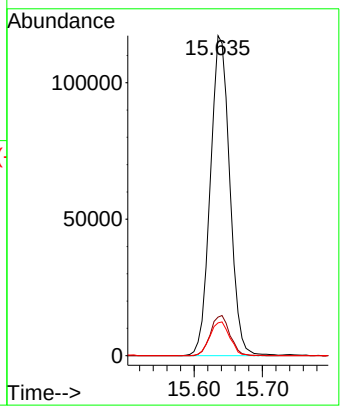





#95
Naphthalene
Concen: 19.700 ug/l
RT: 15.635 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:128 Resp: 23276

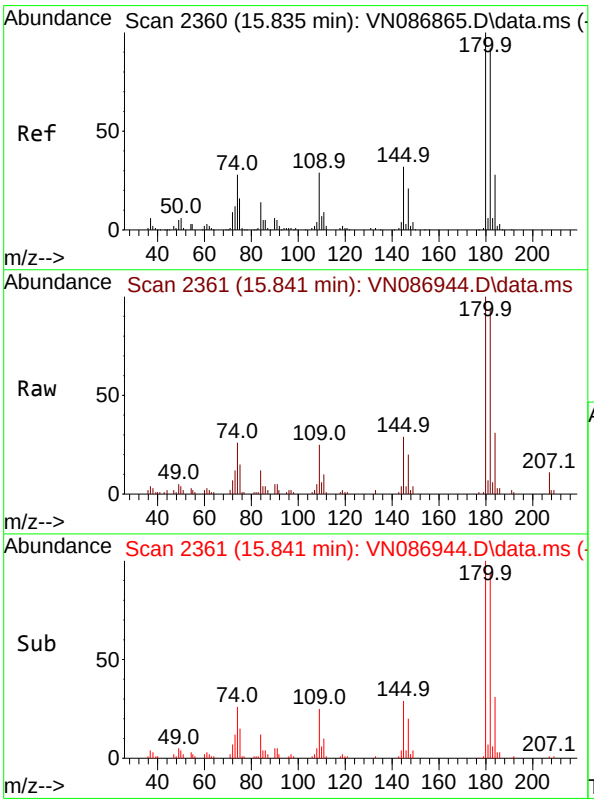
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.6 | 10.2 | 15.2 |
| 129 | 10.9 | 8.8 | 13.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0611WBS02

**Manual Integrations**
**APPROVED**

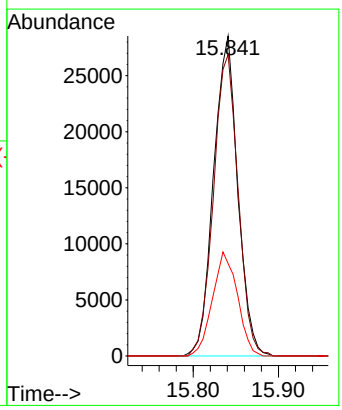
Reviewed By :John Carlone 06/12/2025
Supervised By :Semsettin Yesilyurt 06/12/2025




#96
1,2,3-Trichlorobenzene
Concen: 17.802 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. 0.006 min
Lab File: VN086944.D
Acq: 11 Jun 2025 13:27

Tgt Ion:180 Resp: 56144

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 96.0 | 47.0 | 141.0 |
| 145 | 33.6 | 16.6 | 49.8 |



Raw Data: **VN086922.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | 06/05/25 |
| Project: | Former Schlumberger STC PTC Site D3868221 | Date Received: | 06/05/25 |
| Client Sample ID: | MW-11A-13.5-060525MS | SDG No.: | Q2250 |
| Lab Sample ID: | Q2250-02MS | Matrix: | Water |
| Analytical Method: | 8260D | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group3 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN086922.D | 1 | | 06/10/25 12:51 | VN061025 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-01-4 | Vinyl Chloride | 50.4 | | 0.26 | 1.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 47.9 | | 0.23 | 1.00 | ug/L |
| 75-34-3 | 1,1-Dichloroethane | 45.2 | | 0.23 | 1.00 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 1900 | E | 0.19 | 1.00 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 37.2 | | 0.20 | 1.00 | ug/L |
| 71-43-2 | Benzene | 39.1 | | 0.15 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 39.3 | | 0.22 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 2900 | E | 0.090 | 1.00 | ug/L |
| 79-00-5 | 1,1,2-Trichloroethane | 40.0 | | 0.21 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 57.0 | | 0.23 | 1.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 49.9 | | 70 (74) - 130 (125) | 100% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 52.4 | | 70 (75) - 130 (124) | 105% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 51.2 | | 70 (86) - 130 (113) | 102% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 50.9 | | 70 (77) - 130 (121) | 102% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 174000 | 8.23 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 311000 | 9.106 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 271000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 133000 | 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\VN061025\
Data File : VN086922.D
Acq On : 10 Jun 2025 12:51
Operator : JC\MD
Sample : Q2250-02MS
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 11 01:52:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.230 | 168 | 174378 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.106 | 114 | 310932 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 270945 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 132628 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.583 | 65 | 116443 | 49.874 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 99.740% | | | |
| 35) Dibromofluoromethane | 8.177 | 113 | 96506 | 52.373 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 104.740% | | | |
| 50) Toluene-d8 | 10.571 | 98 | 373191 | 51.160 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 102.320% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 138034 | 50.932 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 101.860% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.154 | 85 | 68302 | 39.284 | ug/l | 96 |
| 3) Chloromethane | 2.395 | 50 | 80842 | 36.007 | ug/l | 100 |
| 4) Vinyl Chloride | 2.554 | 62 | 116824 | 50.442 | ug/l | 100 |
| 5) Bromomethane | 3.001 | 94 | 51812 | 39.977 | ug/l | 94 |
| 6) Chloroethane | 3.159 | 64 | 58869 | 39.351 | ug/l | 100 |
| 7) Trichlorofluoromethane | 3.530 | 101 | 115932 | 38.313 | ug/l | 96 |
| 8) Diethyl Ether | 3.989 | 74 | 51551 | 39.101 | ug/l | 97 |
| 9) 1,1,2-Trichlorotrifluo... | 4.400 | 101 | 367438 | 193.276 | ug/l | 99 |
| 10) Methyl Iodide | 4.618 | 142 | 79922 | 32.430 | ug/l | 97 |
| 11) Tert butyl alcohol | 5.530 | 59 | 107683 | 169.980 | ug/l | 98 |
| 12) 1,1-Dichloroethene | 4.371 | 96 | 92890 | 47.860 | ug/l | 93 |
| 13) Acrolein | 4.200 | 56 | 33731 | 168.212 | ug/l | 98 |
| 14) Allyl chloride | 5.047 | 41 | 117940 | 36.641 | ug/l | 96 |
| 15) Acrylonitrile | 5.736 | 53 | 284483 | 192.124 | ug/l | 98 |
| 16) Acetone | 4.448 | 43 | 215008 | 173.656 | ug/l | 99 |
| 17) Carbon Disulfide | 4.742 | 76 | 196337 | 36.571 | ug/l | 98 |
| 18) Methyl Acetate | 5.047 | 43 | 132769 | 36.798 | ug/l | 99 |
| 19) Methyl tert-butyl Ether | 5.812 | 73 | 271783 | 38.674 | ug/l | 98 |
| 20) Methylene Chloride | 5.300 | 84 | 87753 | 37.857 | ug/l | 96 |
| 21) trans-1,2-Dichloroethene | 5.806 | 96 | 102714 | 47.566 | ug/l | 97 |
| 22) Diisopropyl ether | 6.689 | 45 | 255658 | 37.680 | ug/l | 99 |
| 23) Vinyl Acetate | 6.618 | 43 | 1062011 | 185.258 | ug/l | 99 |
| 24) 1,1-Dichloroethane | 6.583 | 63 | 176376 | 45.171 | ug/l | 99 |
| 25) 2-Butanone | 7.494 | 43 | 364801 | 181.265 | ug/l # | 80 |
| 26) 2,2-Dichloropropane | 7.506 | 77 | 128482 | 42.301 | ug/l # | 1 |
| 27) cis-1,2-Dichloroethene | 7.500 | 96 | 4853647 | 1879.430 | ug/l | 90 |
| 28) Bromochloromethane | 7.824 | 49 | 78797 | 41.044 | ug/l | 93 |
| 29) Tetrahydrofuran | 7.847 | 42 | 239404 | 182.609 | ug/l | 96 |
| 30) Chloroform | 7.977 | 83 | 151067 | 38.741 | ug/l | 99 |
| 31) Cyclohexane | 8.265 | 56 | 123047 | 32.495 | ug/l | 99 |
| 32) 1,1,1-Trichloroethane | 8.177 | 97 | 123440 | 37.219 | ug/l | 98 |
| 36) 1,1-Dichloropropene | 8.377 | 75 | 106081 | 38.635 | ug/l | 100 |
| 37) Ethyl Acetate | 7.571 | 43 | 126676 | 36.242 | ug/l # | 79 |
| 38) Carbon Tetrachloride | 8.371 | 117 | 102158 | 37.897 | ug/l | 96 |
| 39) Methylcyclohexane | 9.606 | 83 | 118983 | 31.630 | ug/l | 95 |
| 40) Benzene | 8.612 | 78 | 351060 | 39.099 | ug/l | 98 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061025\
Data File : VN086922.D
Acq On : 10 Jun 2025 12:51
Operator : JC\MD
Sample : Q2250-02MS
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 11 01:52:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.788 | 41 | 70459 | 35.893 | ug/l | | 94 |
| 42) 1,2-Dichloroethane | 8.677 | 62 | 106970 | 39.279 | ug/l | | 100 |
| 43) Isopropyl Acetate | 8.694 | 43 | 203030 | 36.190 | ug/l | | 98 |
| 44) Trichloroethene | 9.359 | 130 | 6264273 | 2942.351 | ug/l | | 98 |
| 45) 1,2-Dichloropropane | 9.624 | 63 | 84220 | 38.556 | ug/l | | 99 |
| 46) Dibromomethane | 9.712 | 93 | 58291 | 40.176 | ug/l | | 99 |
| 47) Bromodichloromethane | 9.888 | 83 | 115490 | 38.688 | ug/l | | 98 |
| 48) Methyl methacrylate | 9.682 | 41 | 95039 | 36.807 | ug/l | | 97 |
| 49) 1,4-Dioxane | 9.700 | 88 | 37276 | 793.544 | ug/l | # | 94 |
| 51) 4-Methyl-2-Pentanone | 10.447 | 43 | 627690 | 185.856 | ug/l | | 97 |
| 52) Toluene | 10.629 | 92 | 211099 | 38.472 | ug/l | | 99 |
| 53) t-1,3-Dichloropropene | 10.835 | 75 | 134072 | 40.165 | ug/l | | 98 |
| 54) cis-1,3-Dichloropropene | 10.312 | 75 | 141166 | 39.524 | ug/l | | 98 |
| 55) 1,1,2-Trichloroethane | 11.018 | 97 | 84553 | 40.047 | ug/l | | 98 |
| 56) Ethyl methacrylate | 10.882 | 69 | 138783 | 41.269 | ug/l | | 95 |
| 57) 1,3-Dichloropropane | 11.165 | 76 | 142808 | 38.991 | ug/l | | 98 |
| 59) 2-Hexanone | 11.200 | 43 | 410712 | 188.796 | ug/l | | 94 |
| 60) Dibromochloromethane | 11.359 | 129 | 88571 | 40.264 | ug/l | | 98 |
| 61) 1,2-Dibromoethane | 11.471 | 107 | 85449 | 39.485 | ug/l | | 98 |
| 64) Tetrachloroethene | 11.106 | 164 | 97793 | 57.032 | ug/l | | 97 |
| 65) Chlorobenzene | 11.894 | 112 | 236181 | 39.523 | ug/l | | 98 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 74715 | 38.896 | ug/l | | 99 |
| 67) Ethyl Benzene | 11.965 | 91 | 387237 | 37.621 | ug/l | | 99 |
| 68) m/p-Xylenes | 12.071 | 106 | 305789 | 77.607 | ug/l | | 97 |
| 69) o-Xylene | 12.394 | 106 | 147363 | 39.050 | ug/l | | 98 |
| 70) Styrene | 12.412 | 104 | 254157 | 39.358 | ug/l | | 100 |
| 71) Bromoform | 12.576 | 173 | 59843 | 42.046 | ug/l | # | 100 |
| 73) Isopropylbenzene | 12.694 | 105 | 356009 | 36.846 | ug/l | | 100 |
| 74) N-amyl acetate | 12.512 | 43 | 142895m | 42.322 | ug/l | | |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 131015 | 40.025 | ug/l | | 100 |
| 76) 1,2,3-Trichloropropane | 12.994 | 75 | 111129m | 35.250 | ug/l | | |
| 77) Bromobenzene | 12.982 | 156 | 89530 | 40.405 | ug/l | | 98 |
| 78) n-propylbenzene | 13.035 | 91 | 421170 | 35.869 | ug/l | | 99 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 262472 | 37.274 | ug/l | | 97 |
| 80) 1,3,5-Trimethylbenzene | 13.170 | 105 | 287840 | 36.083 | ug/l | | 99 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 56257 | 41.077 | ug/l | | 97 |
| 82) 4-Chlorotoluene | 13.218 | 91 | 272044 | 38.181 | ug/l | | 100 |
| 83) tert-Butylbenzene | 13.435 | 119 | 247652 | 33.915 | ug/l | | 99 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 294041 | 36.759 | ug/l | | 100 |
| 85) sec-Butylbenzene | 13.612 | 105 | 353284 | 33.315 | ug/l | | 100 |
| 86) p-Isopropyltoluene | 13.723 | 119 | 297463 | 33.934 | ug/l | | 99 |
| 87) 1,3-Dichlorobenzene | 13.729 | 146 | 165194 | 37.892 | ug/l | | 99 |
| 88) 1,4-Dichlorobenzene | 13.812 | 146 | 172677 | 38.850 | ug/l | | 99 |
| 89) n-Butylbenzene | 14.053 | 91 | 270209 | 31.824 | ug/l | | 100 |
| 90) Hexachloroethane | 14.329 | 117 | 52840 | 35.562 | ug/l | | 96 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 161871 | 38.647 | ug/l | | 99 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75 | 28266 | 36.108 | ug/l | | 96 |
| 93) 1,2,4-Trichlorobenzene | 15.388 | 180 | 89607 | 33.503 | ug/l | | 99 |
| 94) Hexachlorobutadiene | 15.494 | 225 | 26250 | 26.343 | ug/l | | 99 |
| 95) Naphthalene | 15.635 | 128 | 365200 | 36.684 | ug/l | | 99 |
| 96) 1,2,3-Trichlorobenzene | 15.835 | 180 | 85176 | 32.053 | ug/l | | 99 |

Sample Results: **VN086922.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061025\
Data File : VN086922.D
Acq On : 10 Jun 2025 12:51
Operator : JC\MD
Sample : Q2250-02MS
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 11 01:52:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

| 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\VN061025\
Data File : VN086922.D
Acq On : 10 Jun 2025 12:51
Operator : JC\MD
Sample : Q2250-02MS
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 11 01:52:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/11/2025
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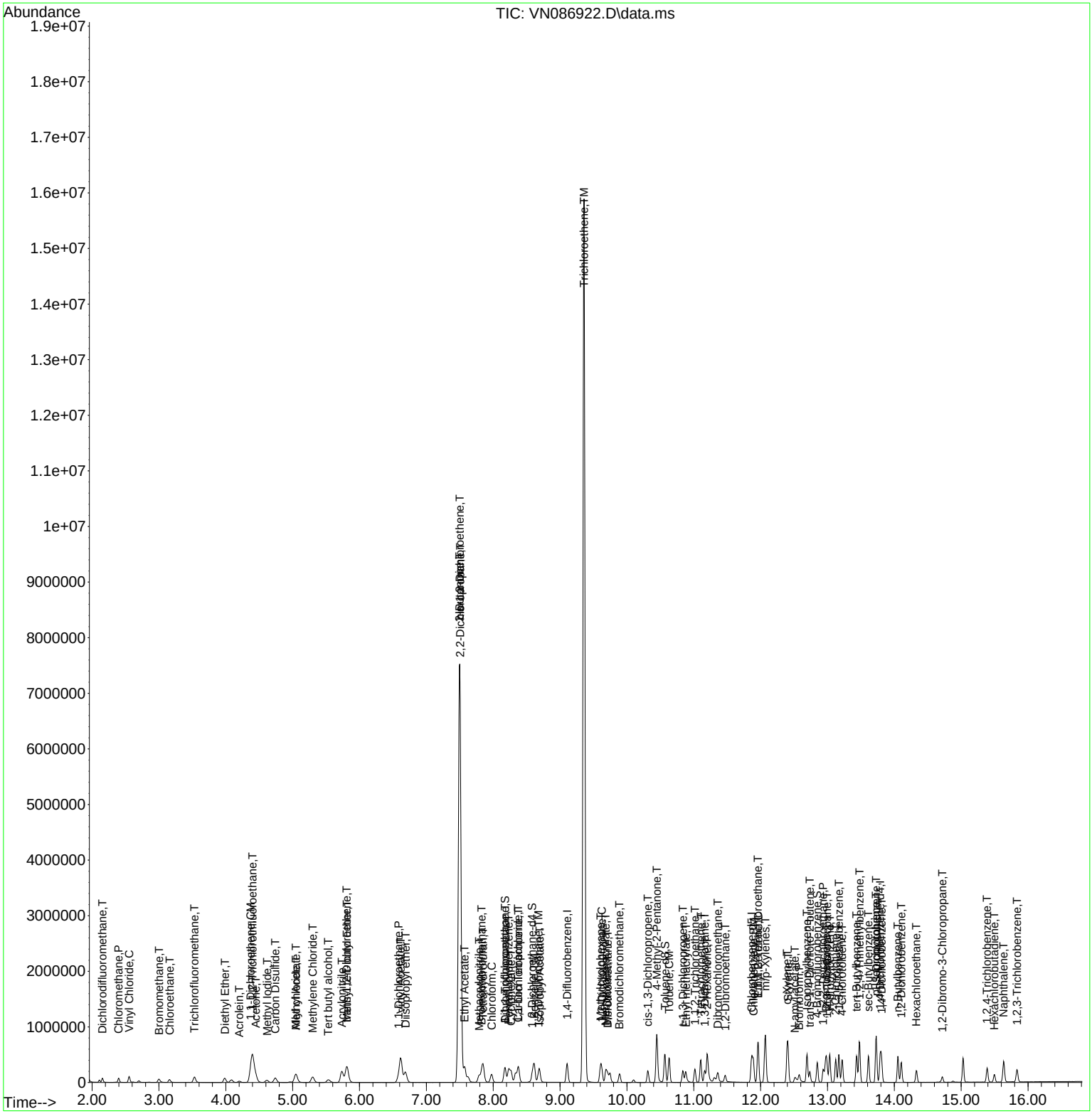
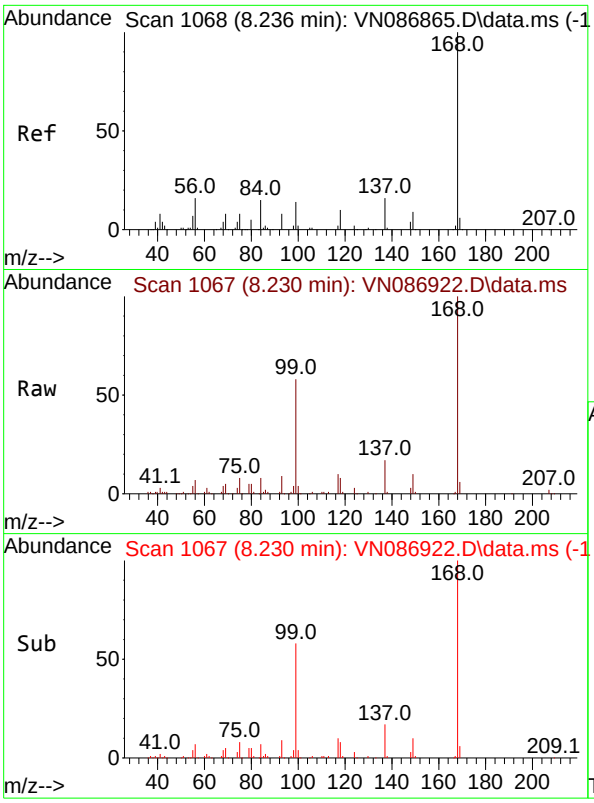
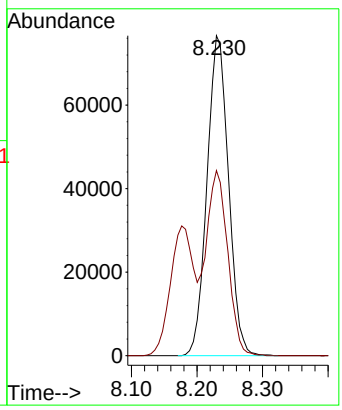





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.230 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion:168 Resp: 17437

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 57.9 | 49.1 | 73.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
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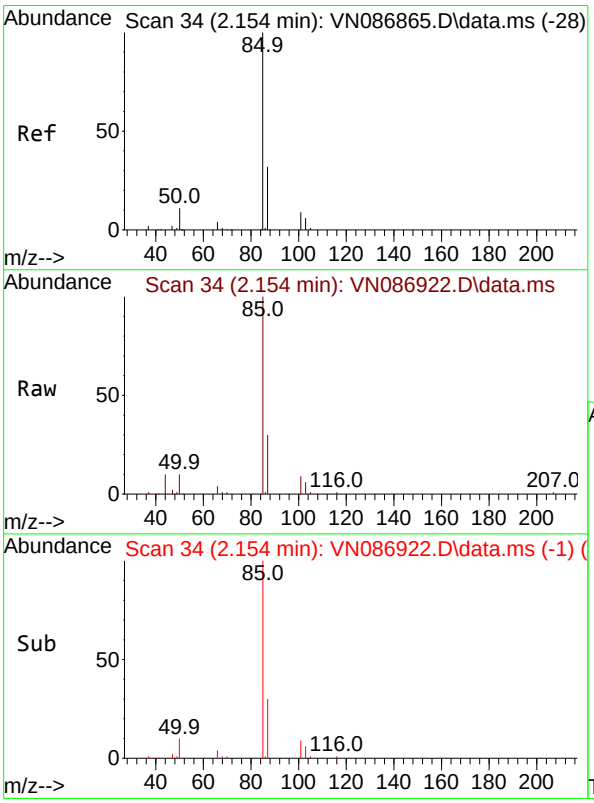
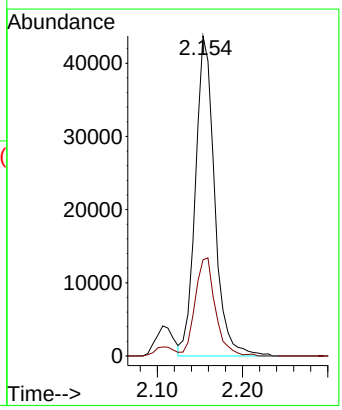
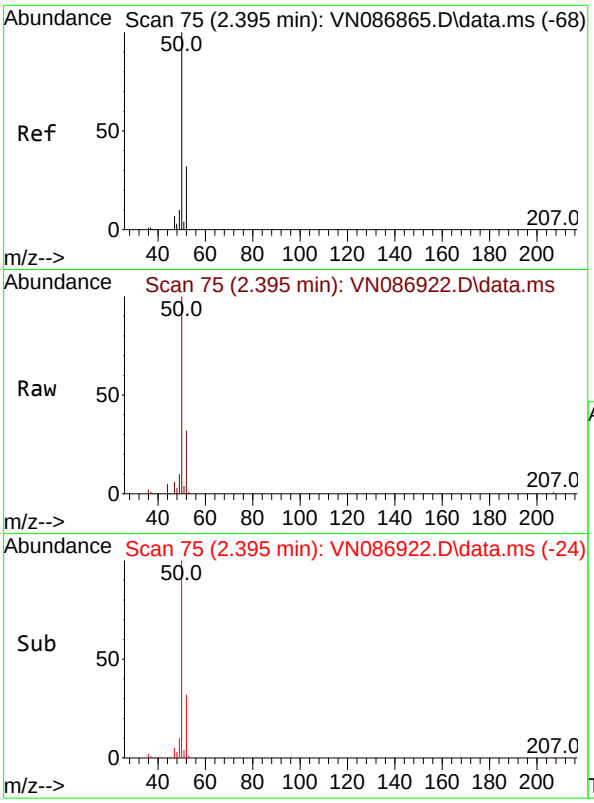



#2
Dichlorodifluoromethane
Concen: 39.284 ug/l
RT: 2.154 min Scan# 34
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 85 Resp: 68302

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 30.1 | 16.2 | 48.6 |






#3
Chloromethane
Concen: 36.007 ug/l
RT: 2.395 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 50 Resp: 8084

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 31.9 | 25.7 | 38.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
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Reviewed By :John Carlone 06/11/2025
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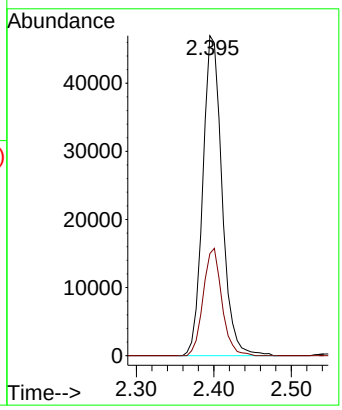
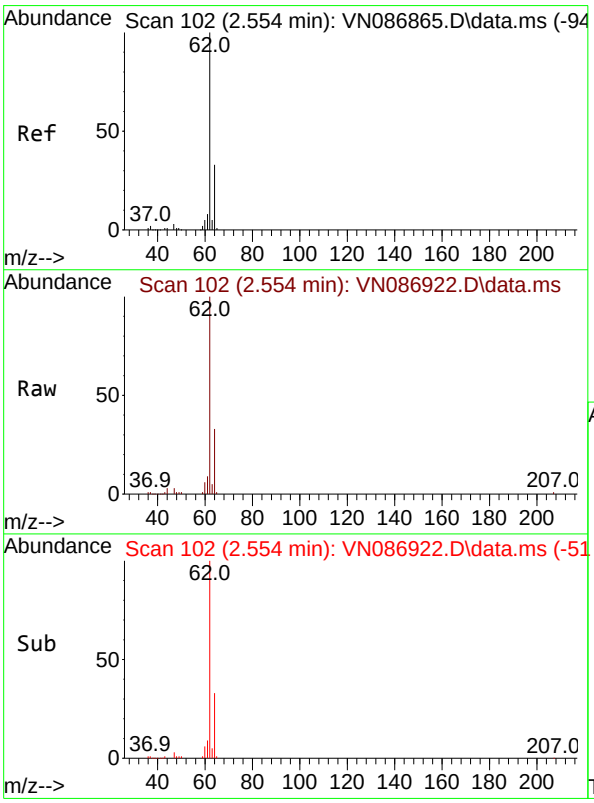
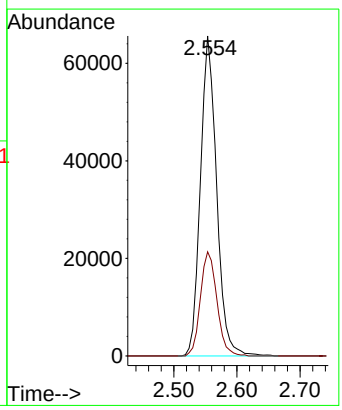


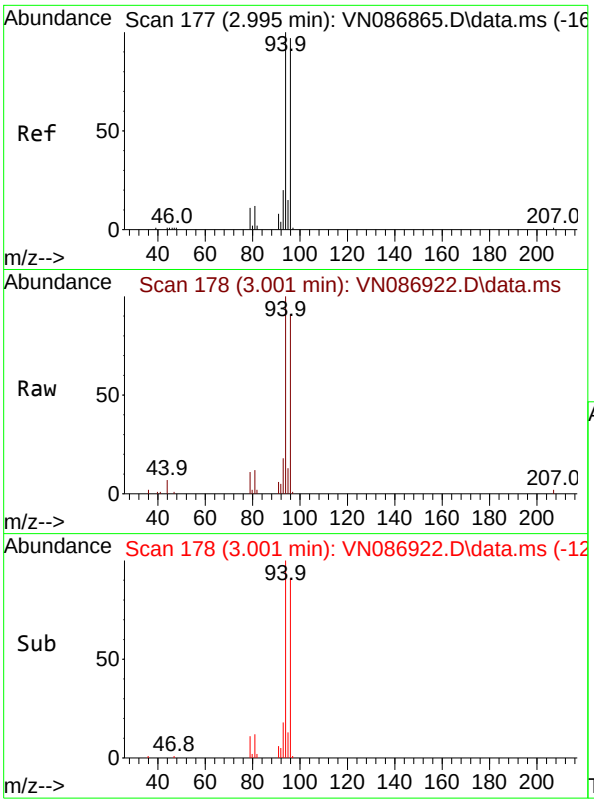




#4
Vinyl Chloride
Concen: 50.442 ug/l
RT: 2.554 min Scan# 102
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 62 Resp: 116824

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 32.5 | 26.0 | 39.0 |

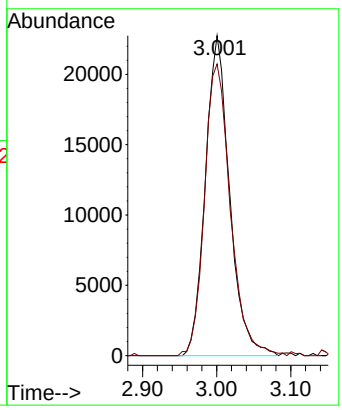





#5
Bromomethane
Concen: 39.977 ug/l
RT: 3.001 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 94 Resp: 5181

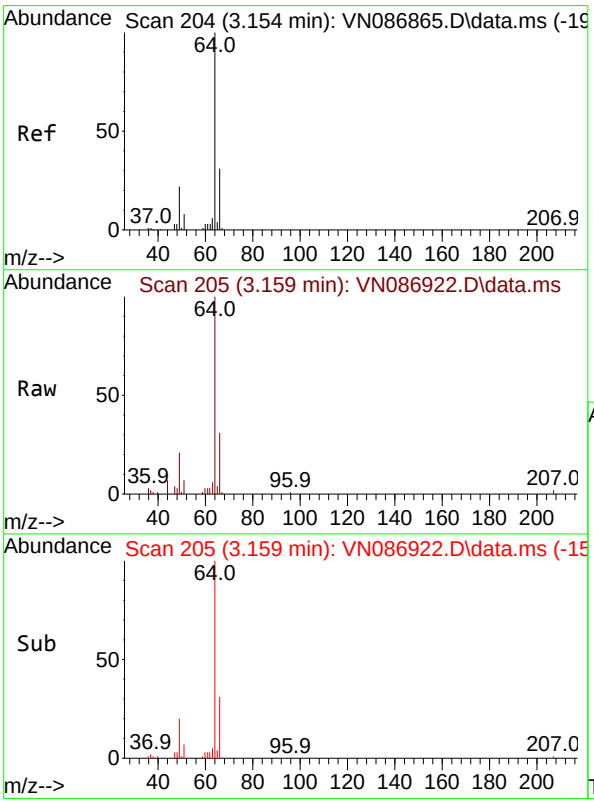
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 91.1 | 77.9 | 116.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
**APPROVED**

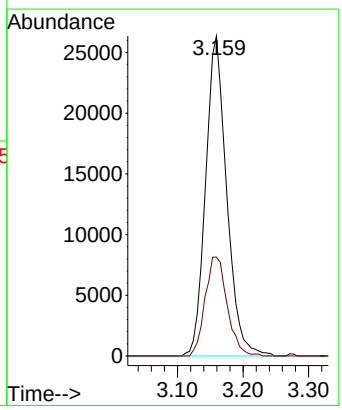
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

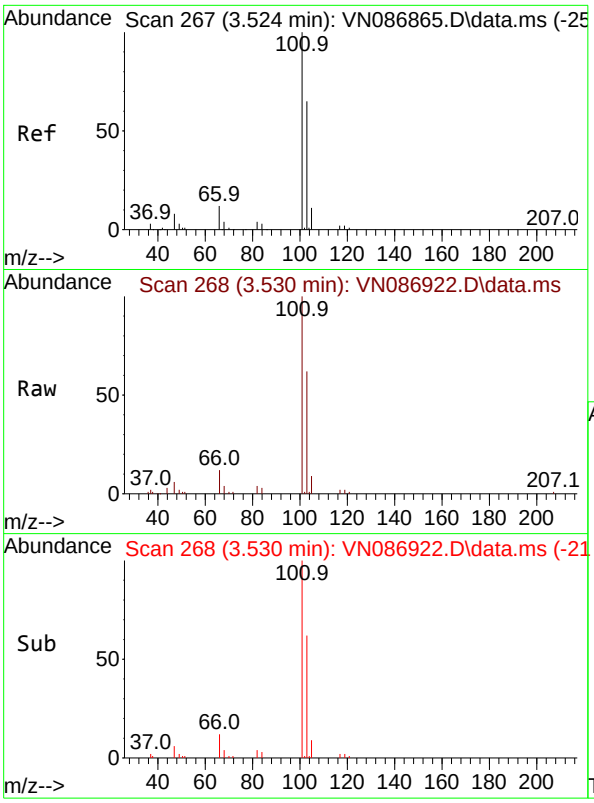



#6
Chloroethane
Concen: 39.351 ug/l
RT: 3.159 min Scan# 205
Delta R.T. 0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 64 Resp: 58869

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 30.9 | 24.6 | 36.8 |






#7
Trichlorofluoromethane
Concen: 38.313 ug/l
RT: 3.530 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion:101 Resp: 11593

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 61.9 | 52.2 | 78.2 |

**Instrument :**
MSVOA_N
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MW-11A-13.5-060525MS

**Manual Integrations**
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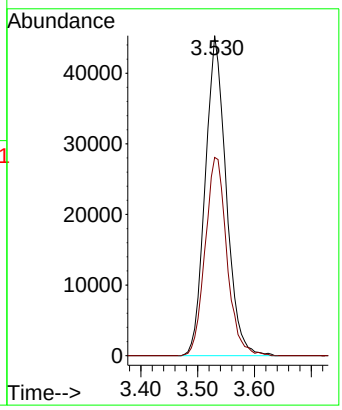
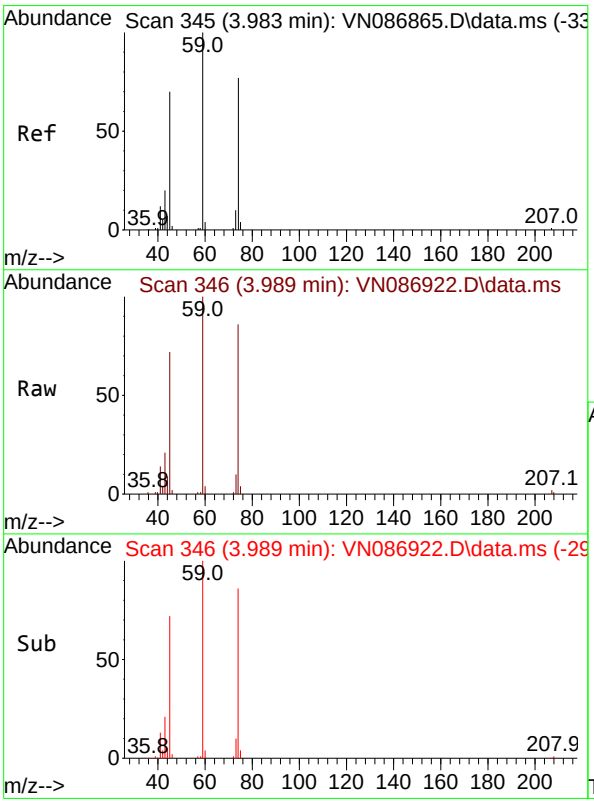
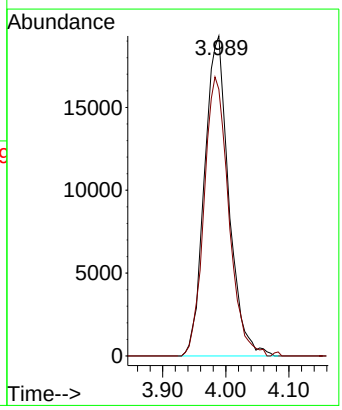


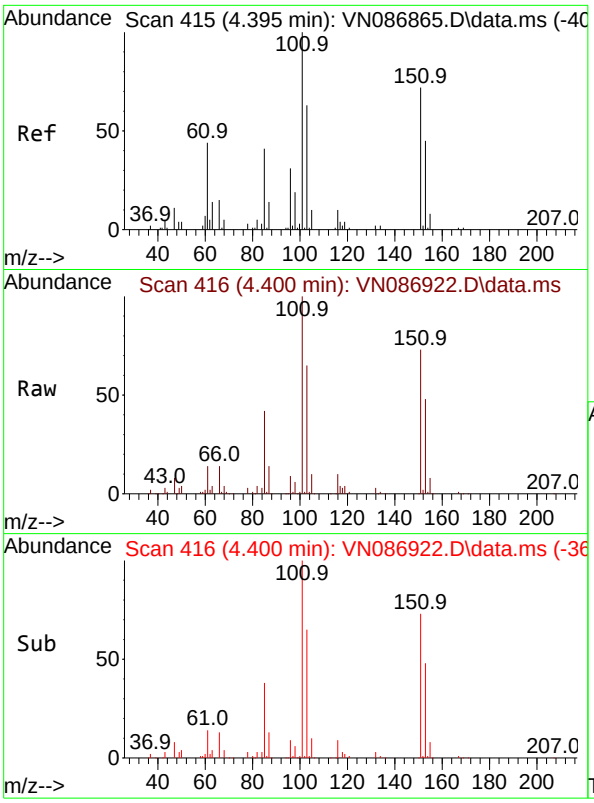




#8
Diethyl Ether
Concen: 39.101 ug/l
RT: 3.989 min Scan# 346
Delta R.T. 0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 74 Resp: 51551

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 88.6 | 45.5 | 136.5 |






#9
1,1,2-Trichlorotrifluoroethane
Concen: 193.276 ug/l
RT: 4.400 min Scan# 4
Delta R.T. 0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion:101 Resp: 36743

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 41.8 | 33.8 | 50.8 |
| 151 | 74.1 | 58.7 | 88.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

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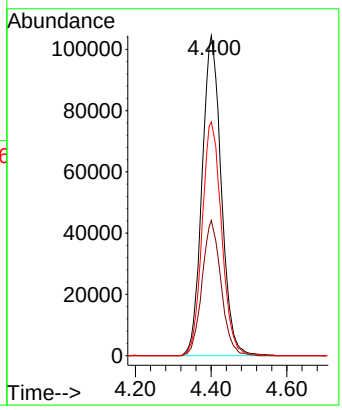
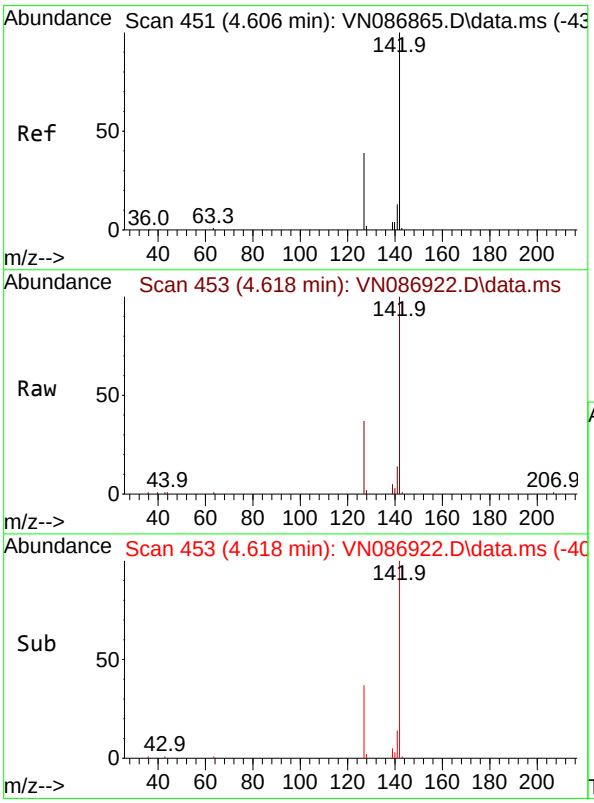
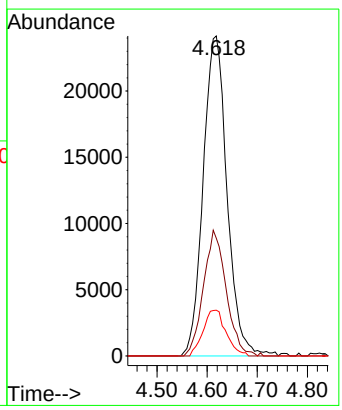


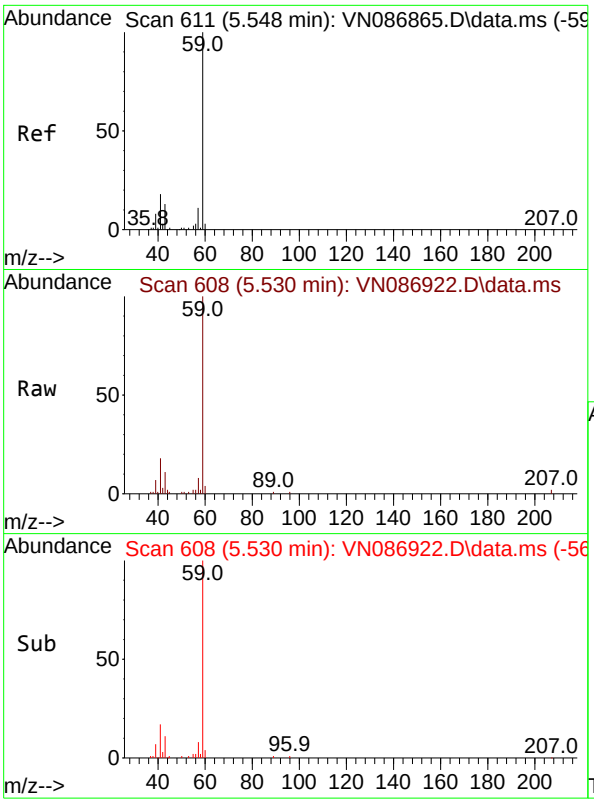




#10
Methyl Iodide
Concen: 32.430 ug/l
RT: 4.618 min Scan# 453
Delta R.T. 0.012 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion:142 Resp: 79922

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 36.8 | 30.9 | 46.3 |
| 141 | 14.3 | 10.4 | 15.6 |






#11
Tert butyl alcohol
Concen: 169.980 ug/l
RT: 5.530 min Scan# 6
Delta R.T. -0.018 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 59 Resp: 10768

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 9.5 | 8.1 | 12.1 |

**Instrument :**
MSVOA_N
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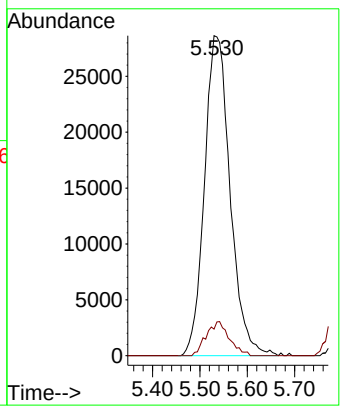
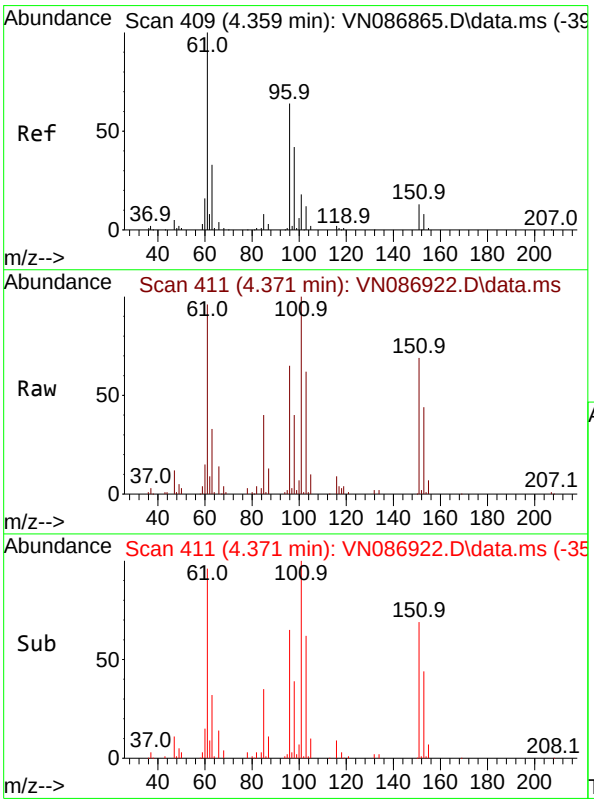
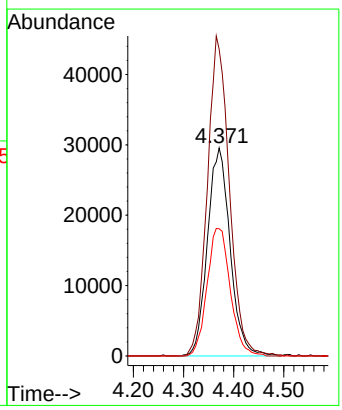


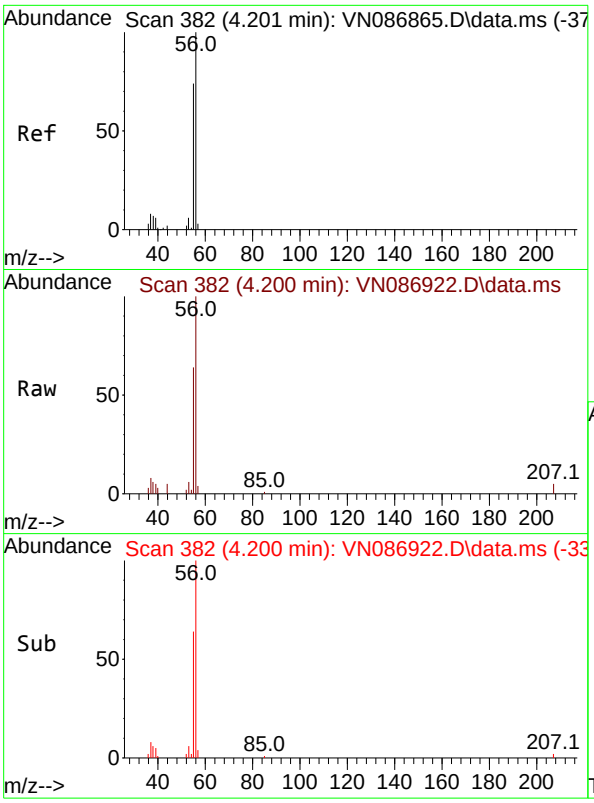




#12
1,1-Dichloroethene
Concen: 47.860 ug/l
RT: 4.371 min Scan# 411
Delta R.T. 0.012 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 96 Resp: 92890

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 147.5 | 125.8 | 188.6 |
| 98 | 61.2 | 52.5 | 78.7 |

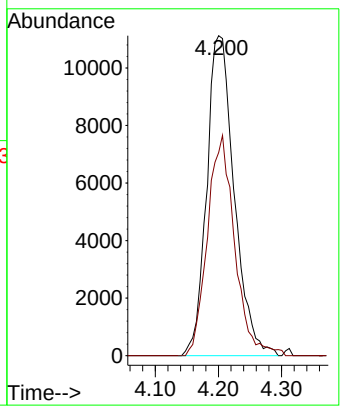





#13
Acrolein
Concen: 168.212 ug/l
RT: 4.200 min Scan# 3
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 56 Resp: 3373

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 68.1 | 55.6 | 83.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
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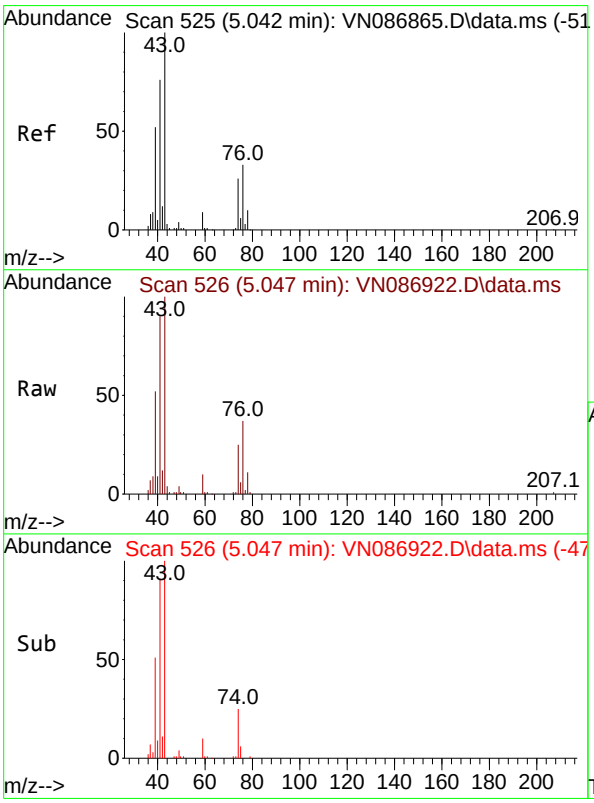
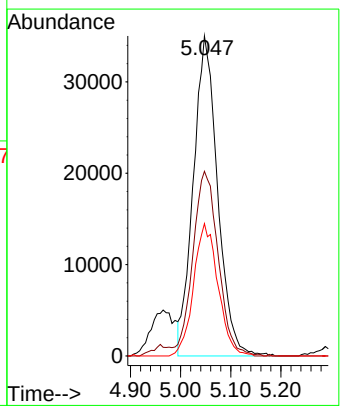
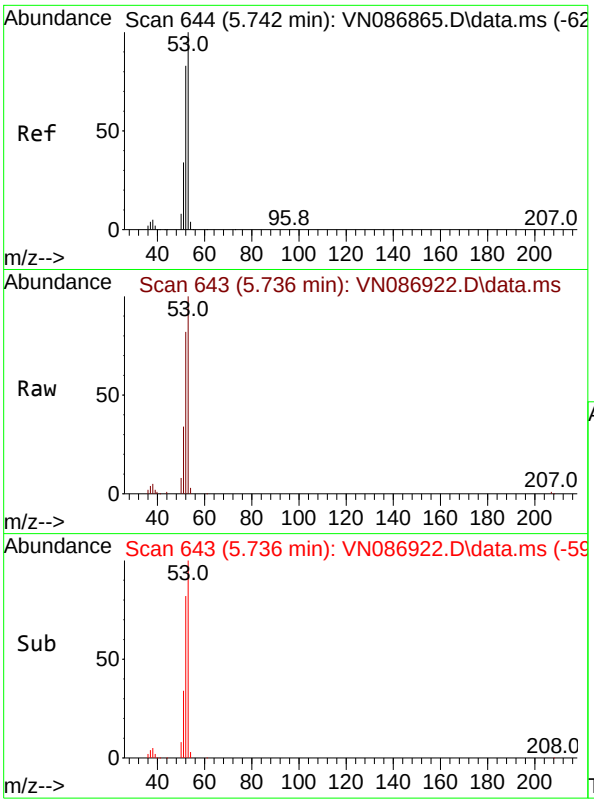



#14
Allyl chloride
Concen: 36.641 ug/l
RT: 5.047 min Scan# 526
Delta R.T. 0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 41 Resp: 117940

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 60.5 | 51.3 | 76.9 |
| 76 | 41.5 | 31.4 | 47.0 |






#15
Acrylonitrile
Concen: 192.124 ug/l
RT: 5.736 min Scan# 64
Delta R.T. -0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

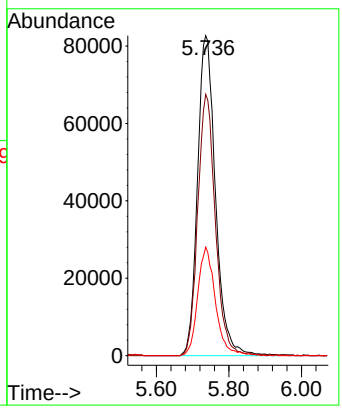
Tgt Ion: 53 Resp: 28448

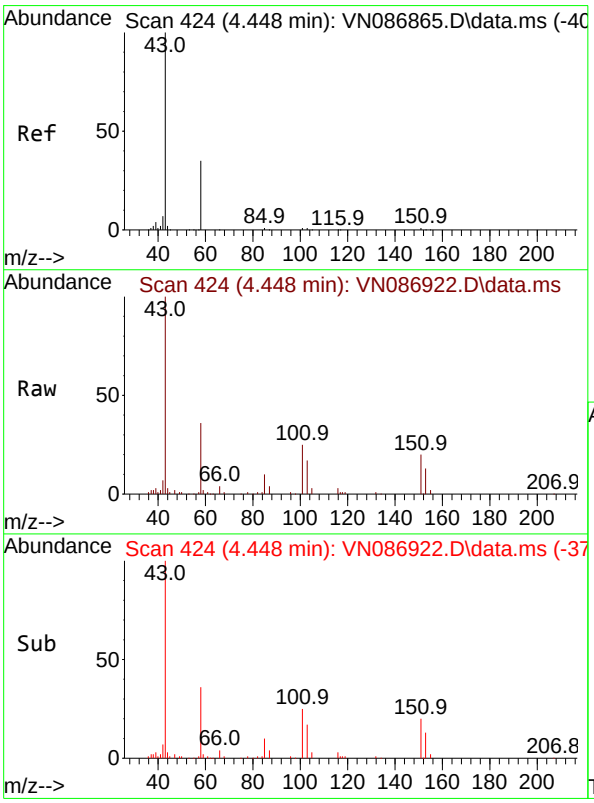
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 79.6 | 65.0 | 97.6 |
| 51 | 33.5 | 27.2 | 40.8 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

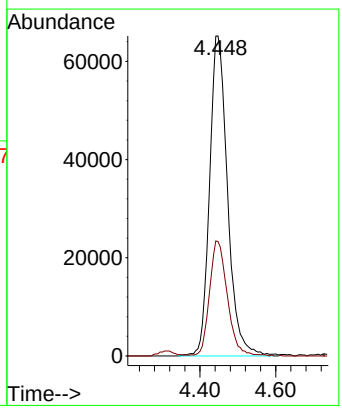


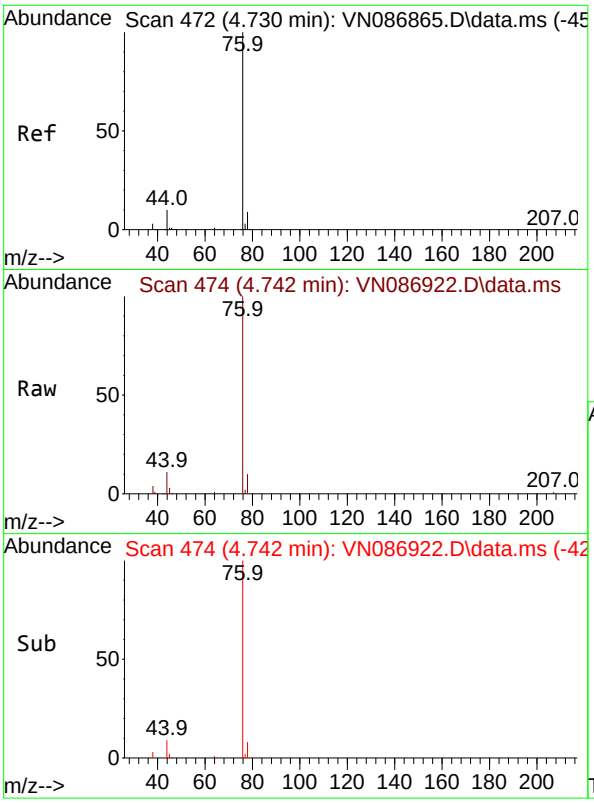




#16
Acetone
Concen: 173.656 ug/l
RT: 4.448 min Scan# 424
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 43 Resp: 215008

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 35.8 | 28.0 | 42.0 |

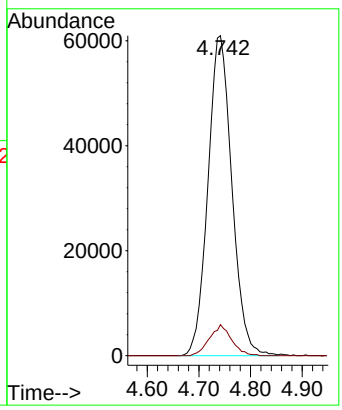





#17
Carbon Disulfide
Concen: 36.571 ug/l
RT: 4.742 min Scan# 4
Delta R.T. 0.012 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 76 Resp: 19633

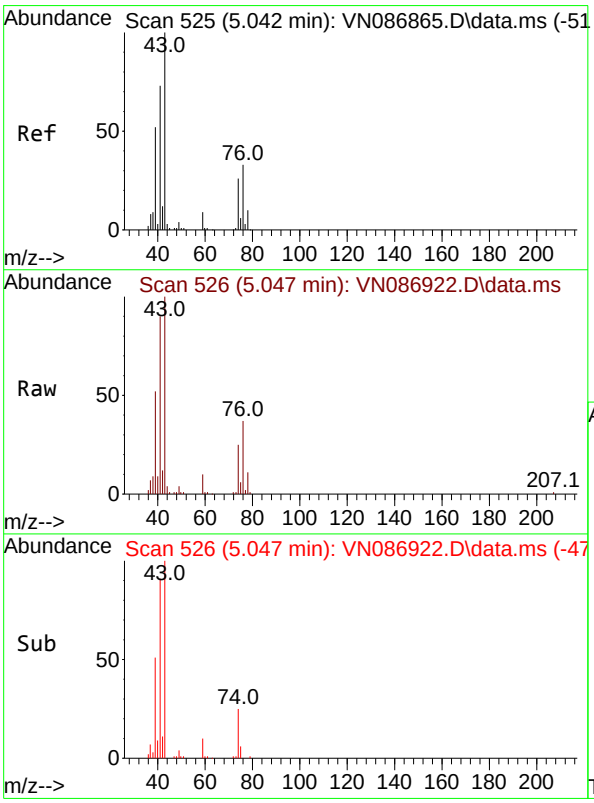
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.7 | 7.3 | 10.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
**APPROVED**

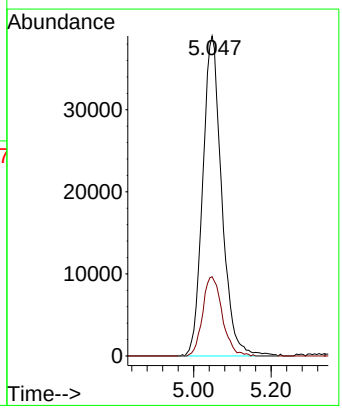
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

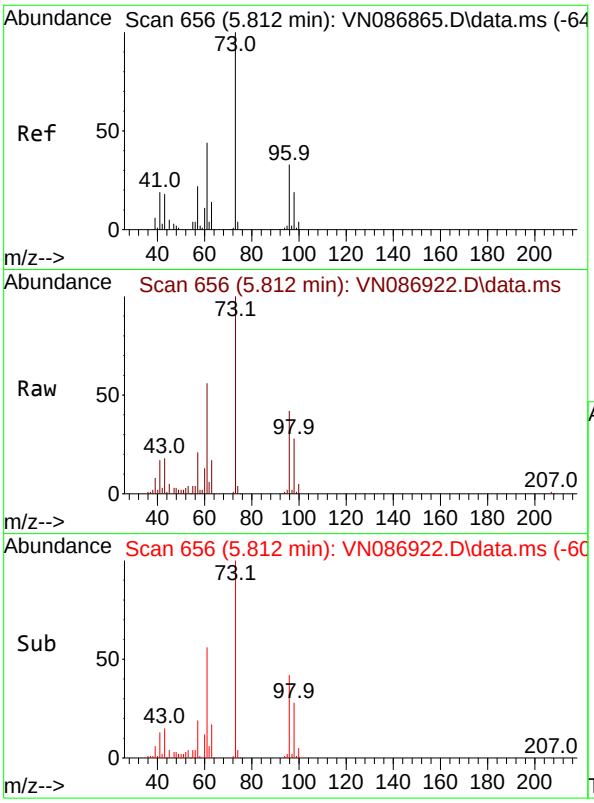



#18
Methyl Acetate
Concen: 36.798 ug/l
RT: 5.047 min Scan# 526
Delta R.T. 0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 43 Resp: 132769

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 25.5 | 20.7 | 31.1 |

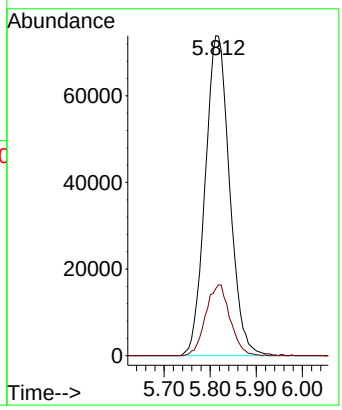





#19
Methyl tert-butyl Ether
Concen: 38.674 ug/l
RT: 5.812 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 73 Resp: 27178

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 21.0 | 17.4 | 26.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
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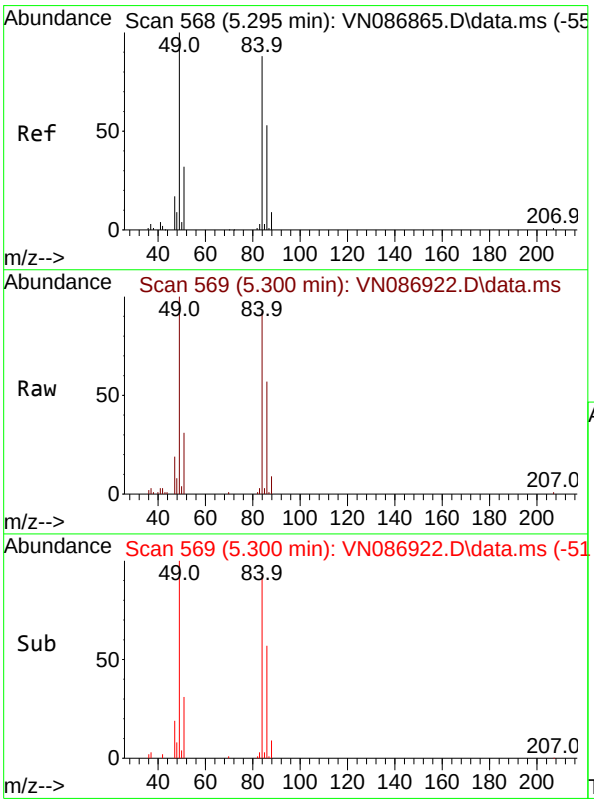
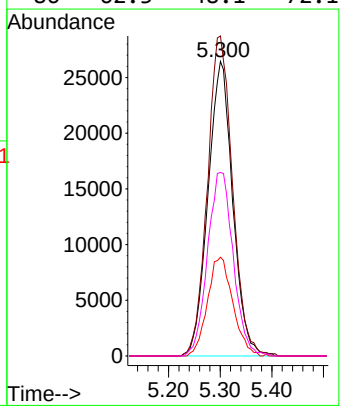
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

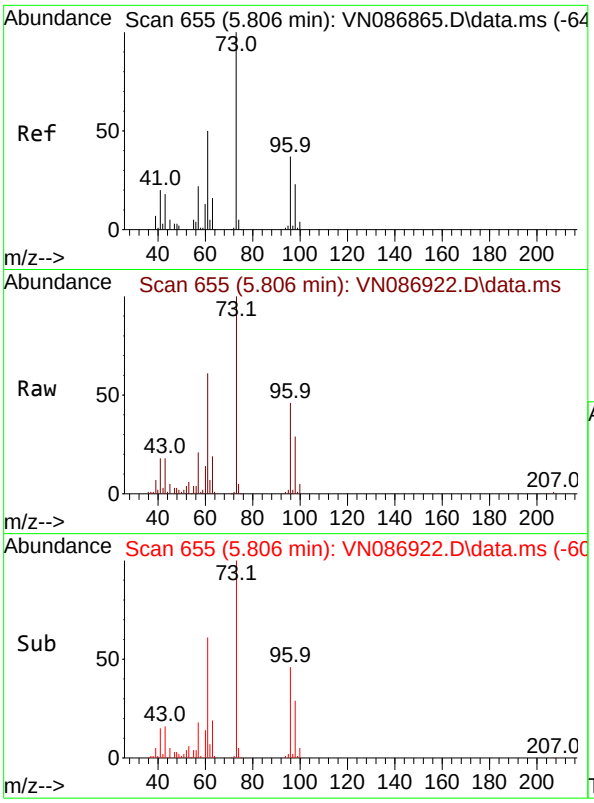



#20
Methylene Chloride
Concen: 37.857 ug/l
RT: 5.300 min Scan# 569
Delta R.T. 0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 84 Resp: 87753

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 108.7 | 90.5 | 135.7 |
| 51 | 33.5 | 28.5 | 42.7 |
| 86 | 62.3 | 48.1 | 72.1 |

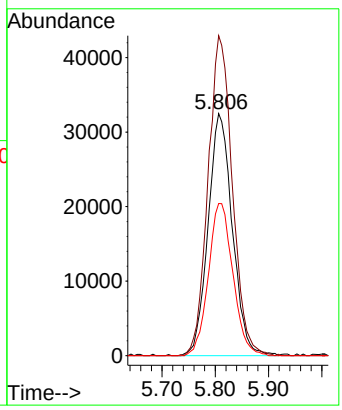





#21
trans-1,2-Dichloroethene
Concen: 47.566 ug/l
RT: 5.806 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 96 Resp: 10271

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 132.2 | 109.2 | 163.8 |
| 98 | 62.8 | 49.8 | 74.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
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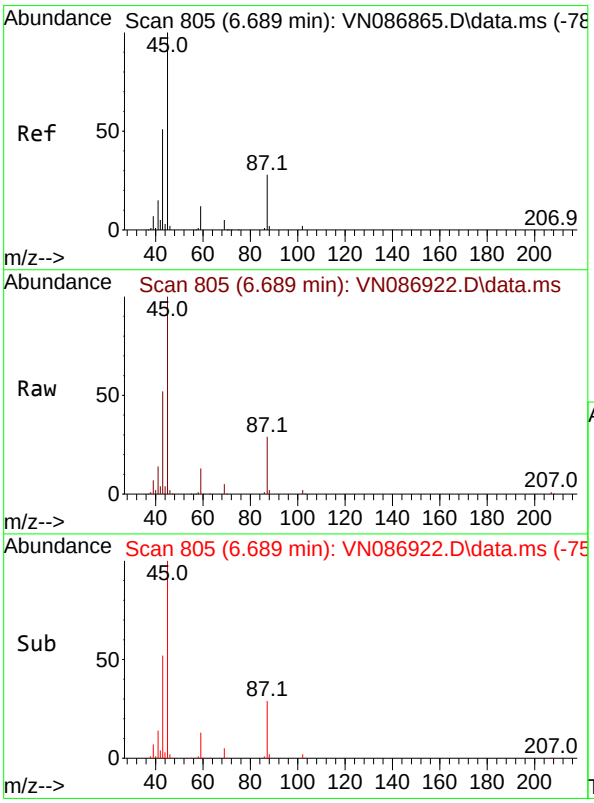
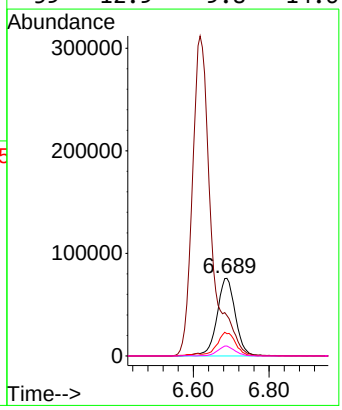
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

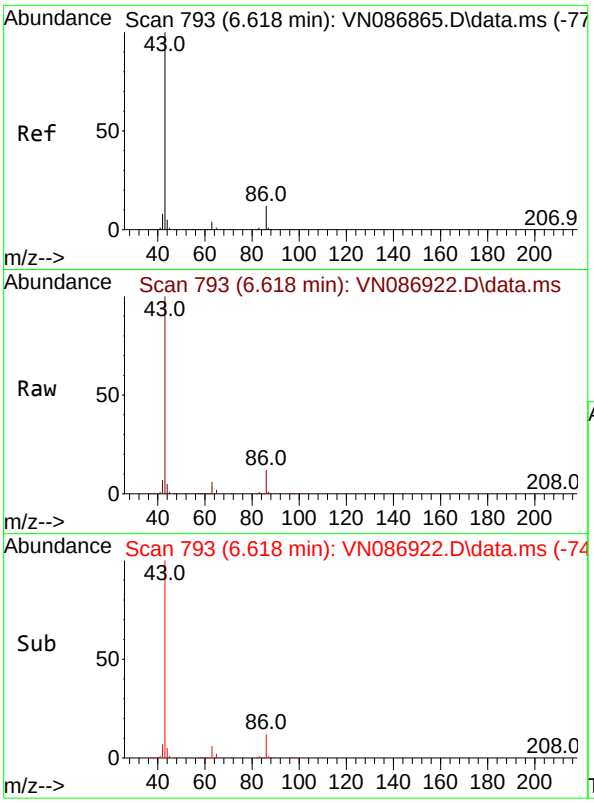



#22
Diisopropyl ether
Concen: 37.680 ug/l
RT: 6.689 min Scan# 805
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 45 Resp: 255658

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 51.5 | 41.9 | 62.9 |
| 87 | 28.6 | 22.4 | 33.6 |
| 59 | 12.9 | 9.8 | 14.6 |






#23
Vinyl Acetate
Concen: 185.258 ug/l
RT: 6.618 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 43 Resp: 106201

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 12.3 | 9.5 | 14.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
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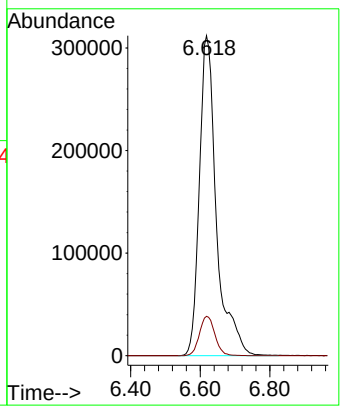
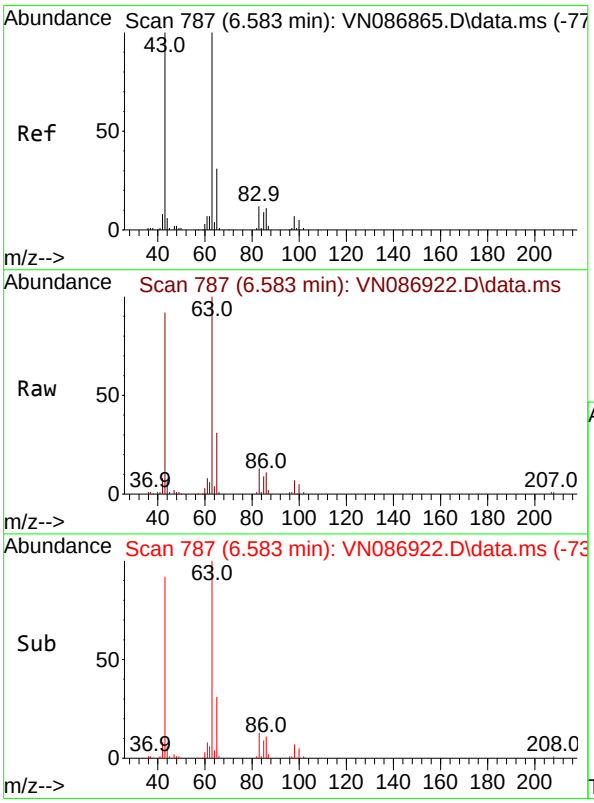
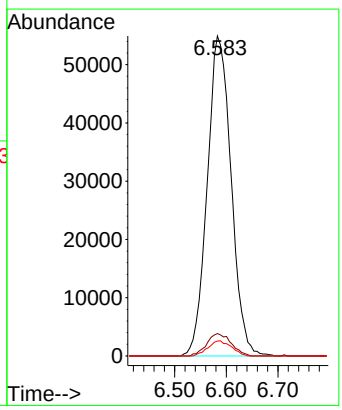


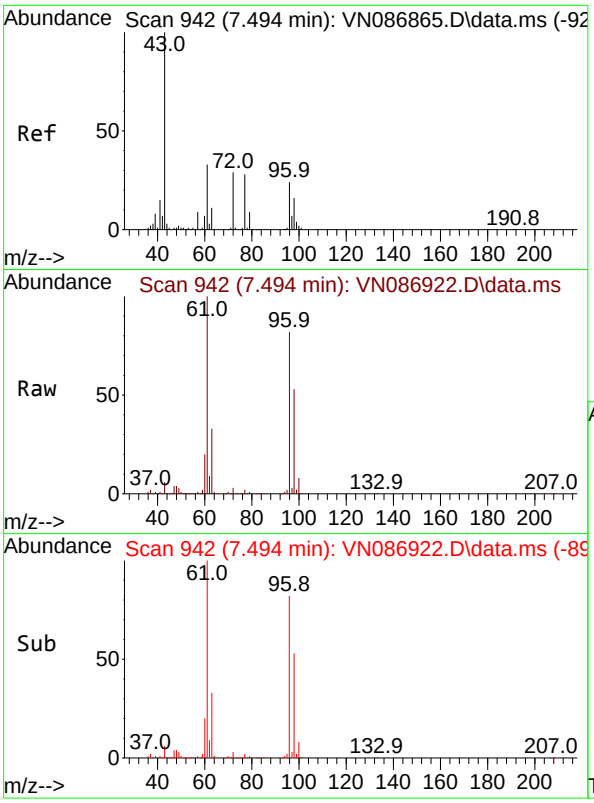




#24
1,1-Dichloroethane
Concen: 45.171 ug/l
RT: 6.583 min Scan# 787
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 63 Resp: 176376

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 7.0 | 3.6 | 10.8 |
| 100 | 4.7 | 2.6 | 7.8 |






#25
2-Butanone
Concen: 181.265 ug/l
RT: 7.494 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 43 Resp: 36480

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 39.2 | 23.0 | 34.6# |

**Instrument :**
MSVOA_N
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MW-11A-13.5-060525MS

**Manual Integrations**
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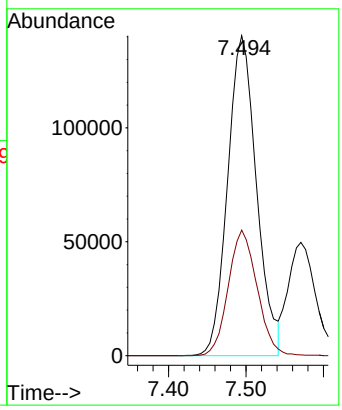
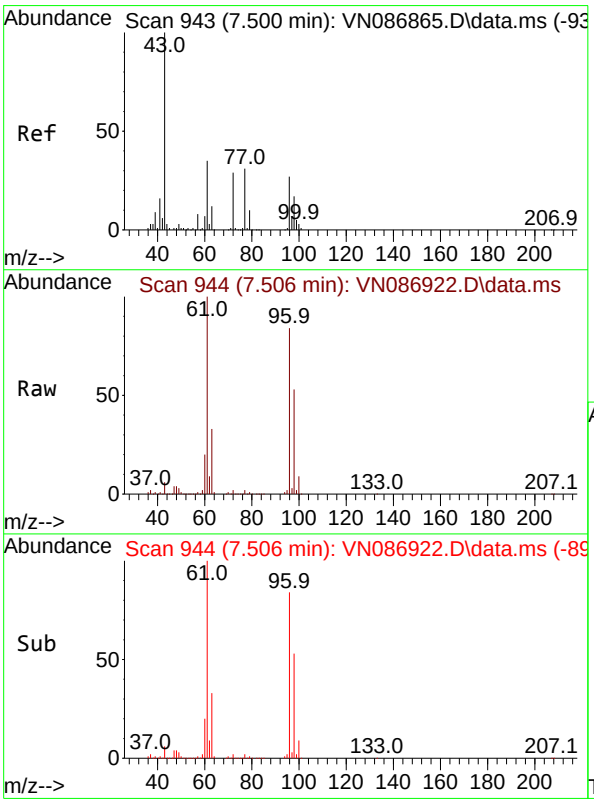
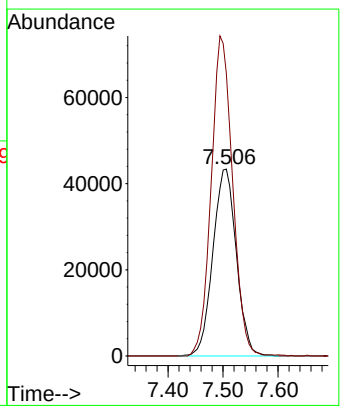


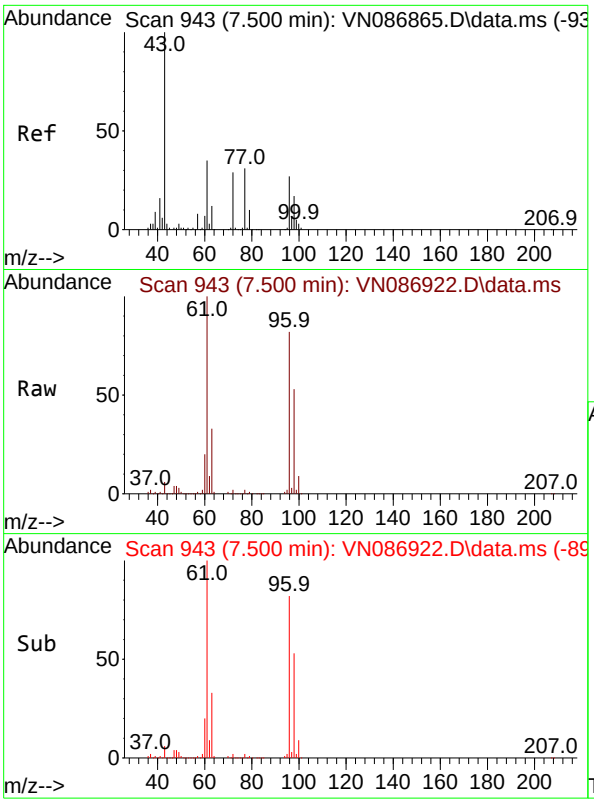




#26
2,2-Dichloropropane
Concen: 42.301 ug/l
RT: 7.506 min Scan# 944
Delta R.T. 0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 77 Resp: 128482

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 156.1 | 11.6 | 34.7# |






#27
cis-1,2-Dichloroethene
Concen: 1879.430 ug/l
RT: 7.500 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 96 Resp: 485364

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 121.8 | 0.0 | 278.0 |
| 98 | 64.3 | 0.0 | 128.2 |

**Instrument :**
MSVOA_N
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MW-11A-13.5-060525MS

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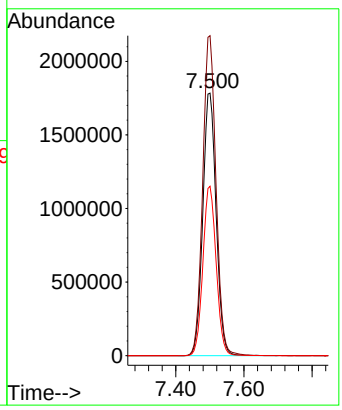
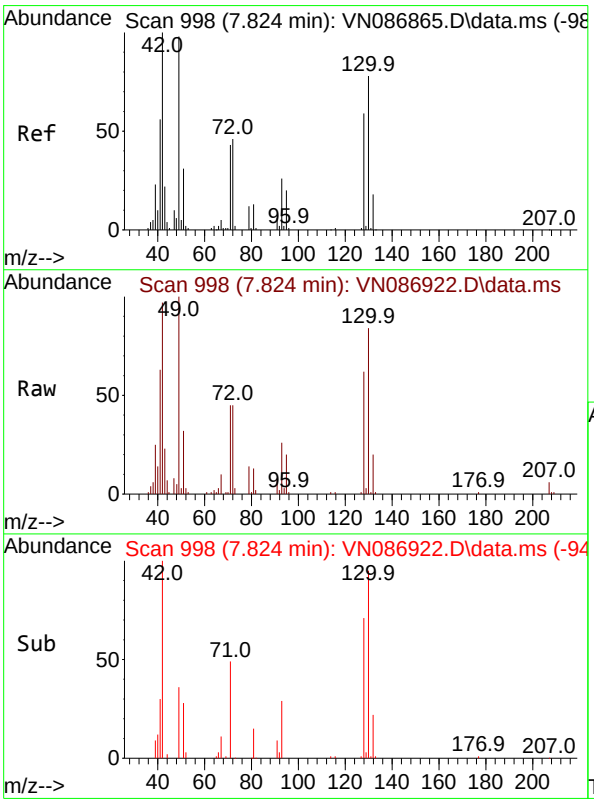
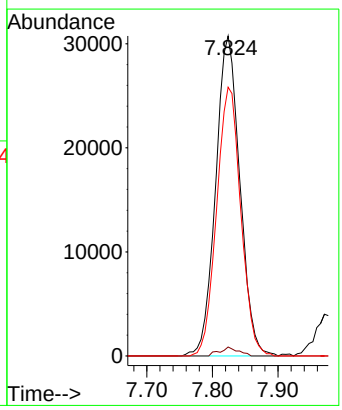


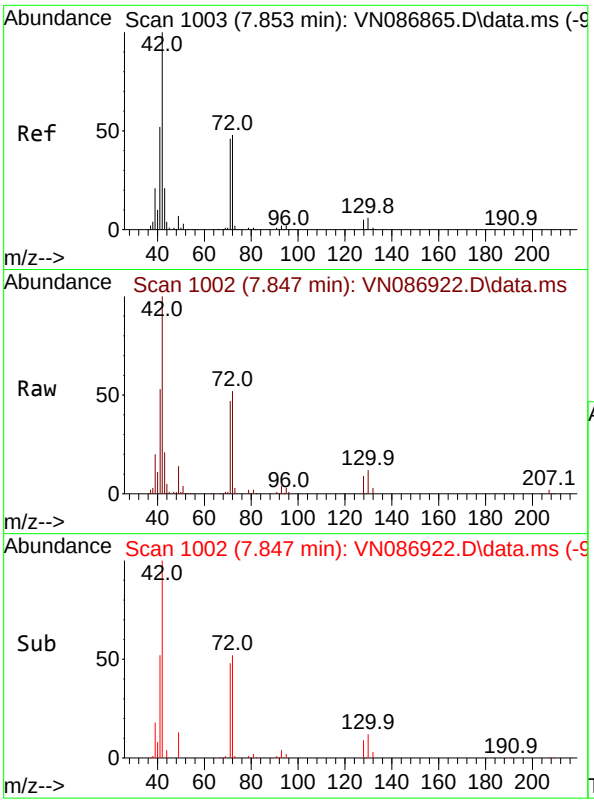




#28
Bromochloromethane
Concen: 41.044 ug/l
RT: 7.824 min Scan# 998
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 49 Resp: 78797

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 2.1 | 0.0 | 3.8 |
| 130 | 83.7 | 62.2 | 93.2 |






#29
Tetrahydrofuran
Concen: 182.609 ug/l
RT: 7.847 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 42 Resp: 23940

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 50.5 | 37.8 | 56.6 |
| 71 | 46.9 | 35.6 | 53.4 |

**Instrument :**
MSVOA_N
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MW-11A-13.5-060525MS

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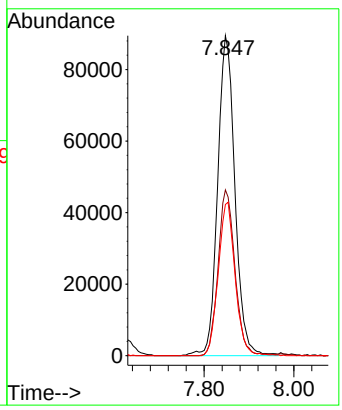
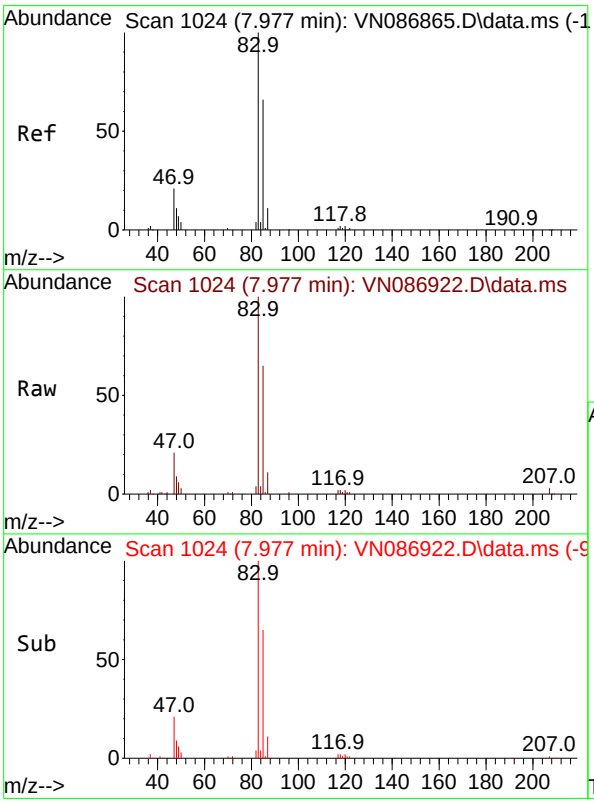
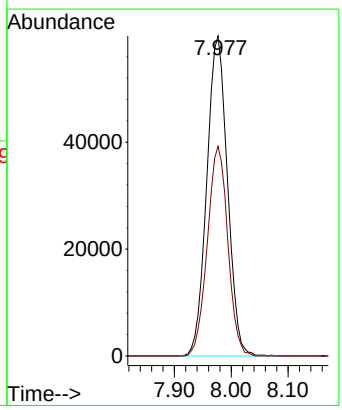


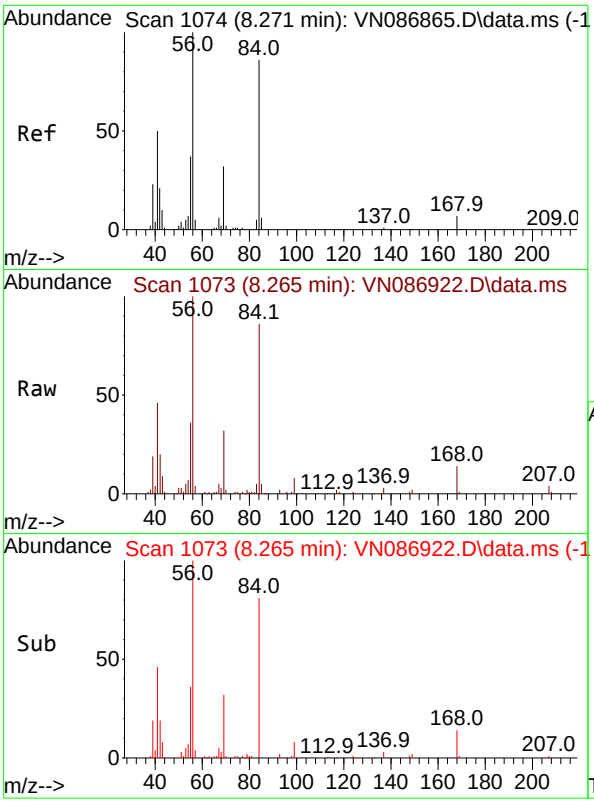




#30
Chloroform
Concen: 38.741 ug/l
RT: 7.977 min Scan# 1024
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 83 Resp: 151067

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 65.5 | 52.9 | 79.3 |

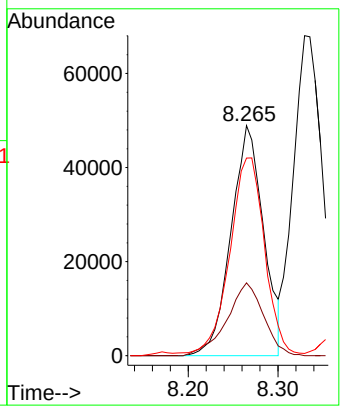





#31
Cyclohexane
Concen: 32.495 ug/l
RT: 8.265 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 56 Resp: 12304

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 31.6 | 25.4 | 38.0 |
| 84 | 84.7 | 68.8 | 103.2 |

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MW-11A-13.5-060525MS

**Manual Integrations**
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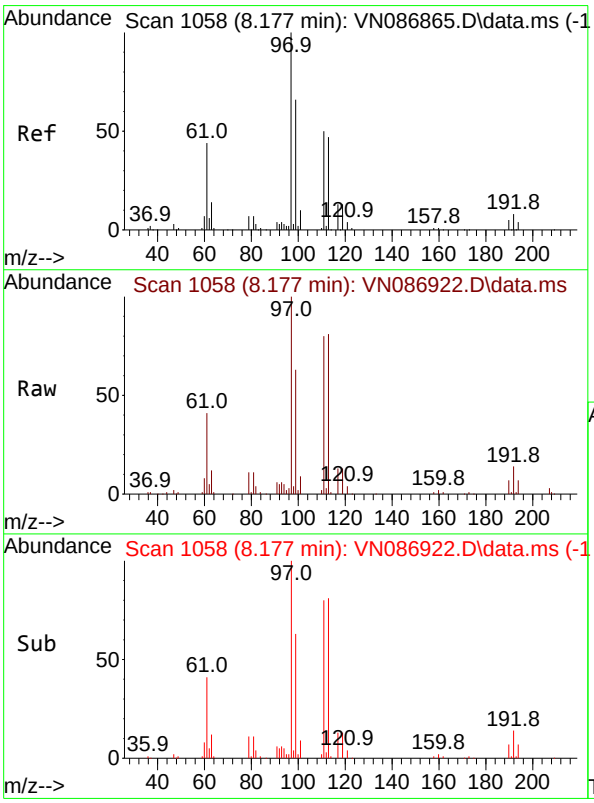
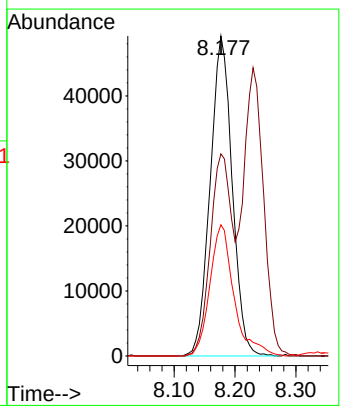
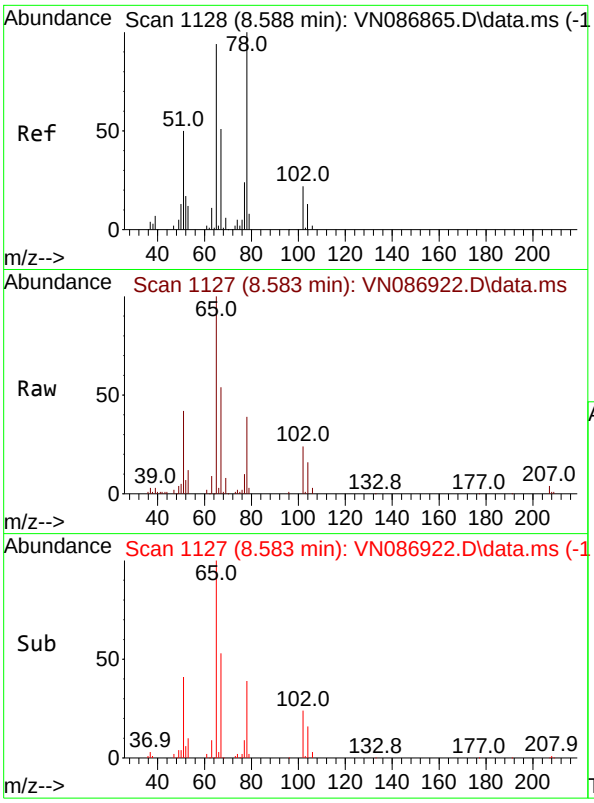



#32
1,1,1-Trichloroethane
Concen: 37.219 ug/l
RT: 8.177 min Scan# 1058
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 97 Resp: 123440

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 62.0 | 52.0 | 78.0 |
| 61 | 44.9 | 35.9 | 53.9 |






#33
1,2-Dichloroethane-d4
Concen: 49.874 ug/l
RT: 8.583 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

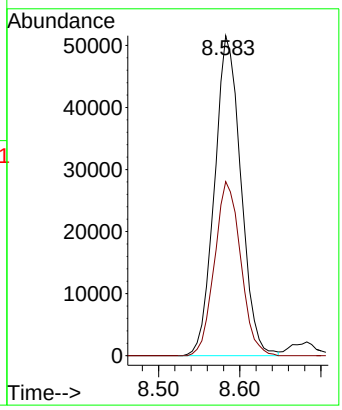
Tgt Ion: 65 Resp: 11644

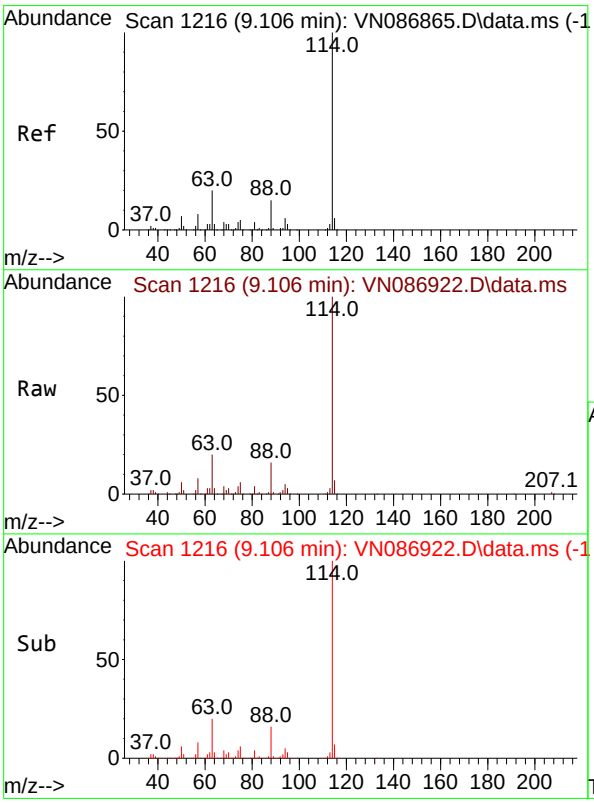
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 54.0 | 0.0 | 105.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

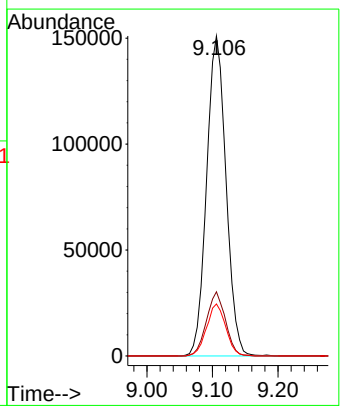


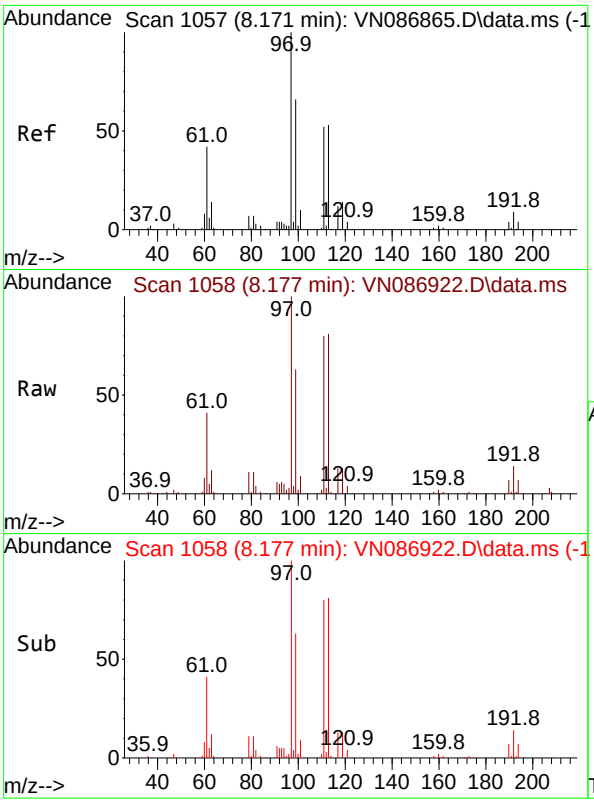




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.106 min Scan# 1216
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion:114 Resp: 310932

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 20.0 | 0.0 | 39.6 |
| 88 | 16.3 | 0.0 | 30.2 |

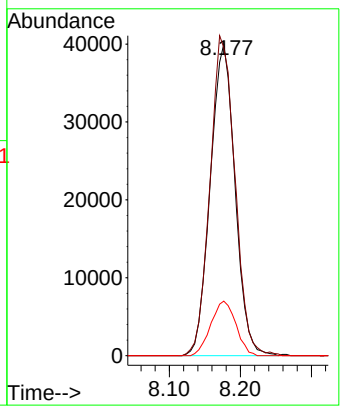





#35
Dibromofluoromethane
Concen: 52.373 ug/l
RT: 8.177 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion:113 Resp: 9650

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 103.7 | 84.2 | 126.2 |
| 192 | 17.8 | 14.2 | 21.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
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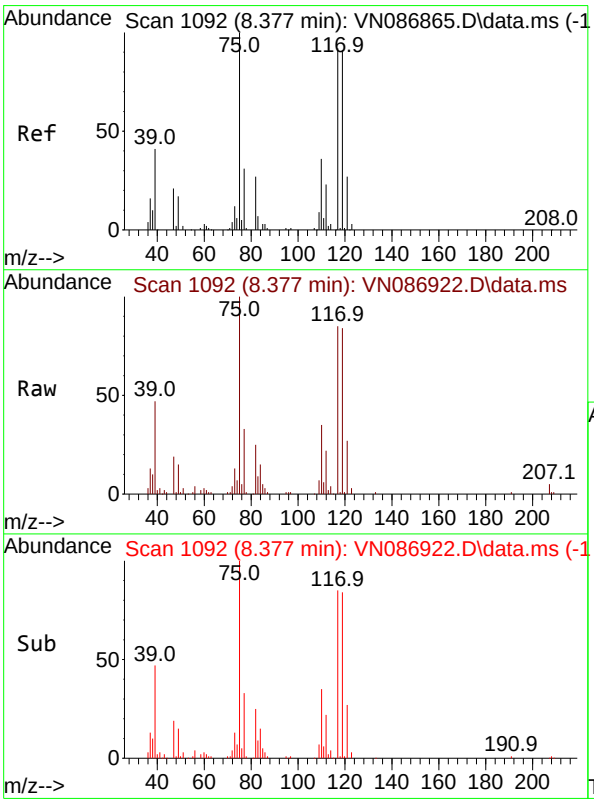
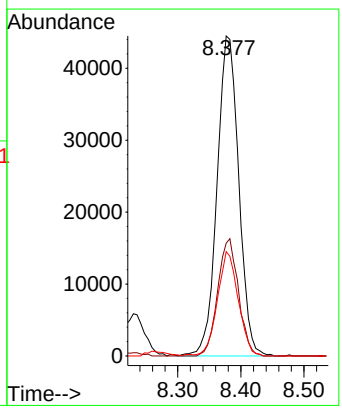
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

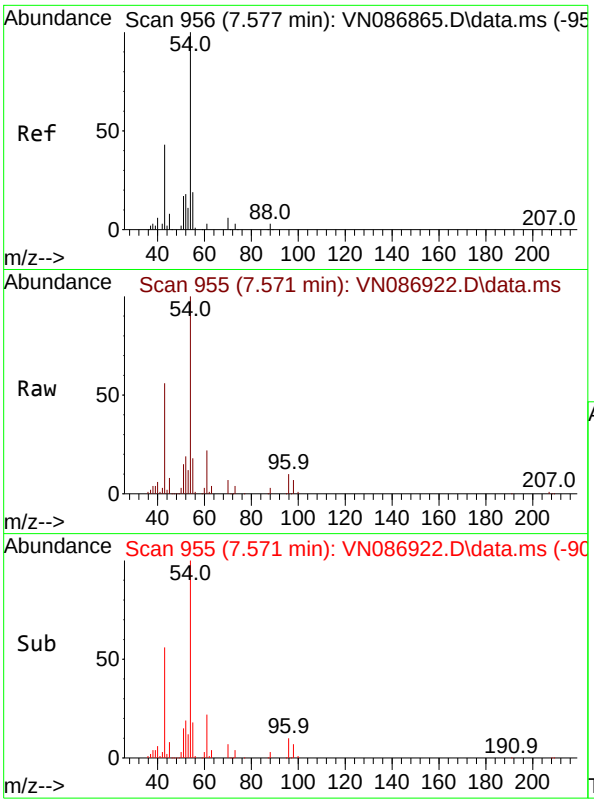



#36
1,1-Dichloropropene
Concen: 38.635 ug/l
RT: 8.377 min Scan# 1092
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 75 Resp: 106081

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 35.0 | 17.6 | 52.9 |
| 77 | 31.4 | 25.3 | 37.9 |






#37
Ethyl Acetate
Concen: 36.242 ug/l
RT: 7.571 min Scan# 9
Delta R.T. -0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 43 Resp: 12667

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 0.0 | 12.1 | 18.1# |
| 70 | 12.7 | 9.8 | 14.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
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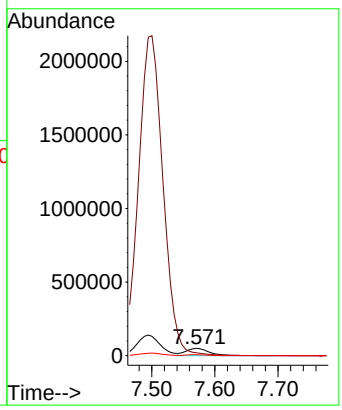
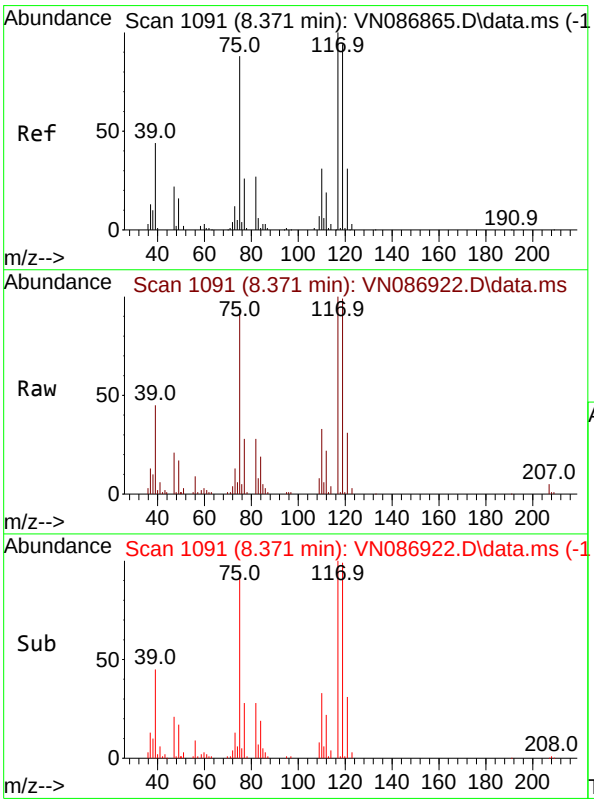
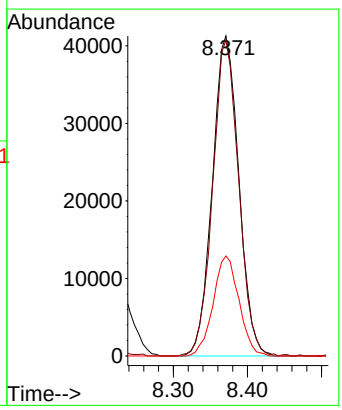


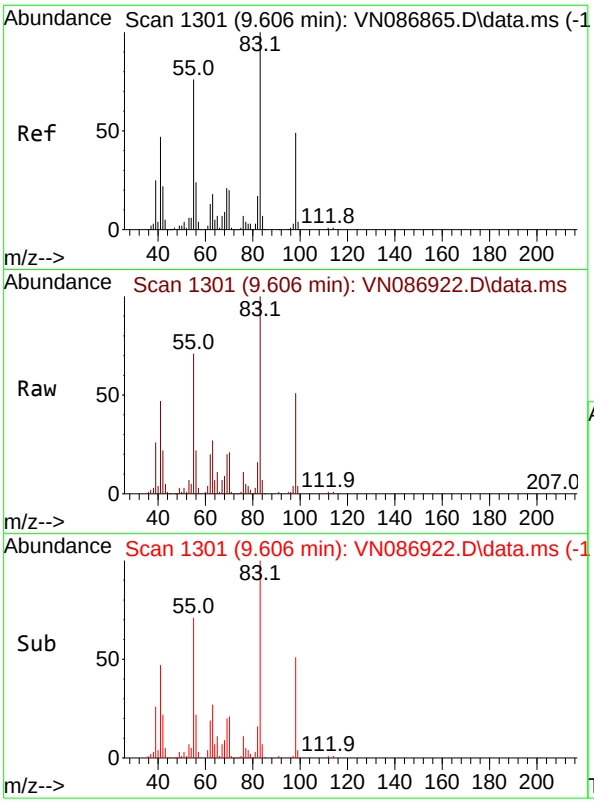




#38
Carbon Tetrachloride
Concen: 37.897 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion:117 Resp: 102158

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 98.8 | 75.0 | 112.6 |
| 121 | 31.2 | 24.9 | 37.3 |






#39
Methylcyclohexane
Concen: 31.630 ug/l
RT: 9.606 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 83 Resp: 11898

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 71.5 | 61.0 | 91.6 |
| 98 | 50.8 | 38.9 | 58.3 |

**Instrument :**
MSVOA_N
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MW-11A-13.5-060525MS

**Manual Integrations**
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Reviewed By :John Carlone 06/11/2025
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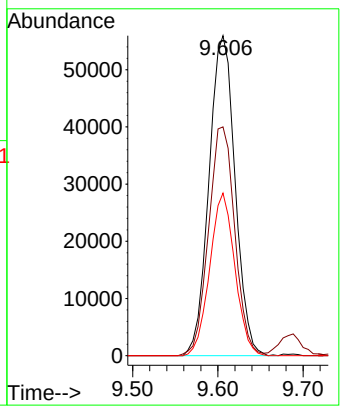
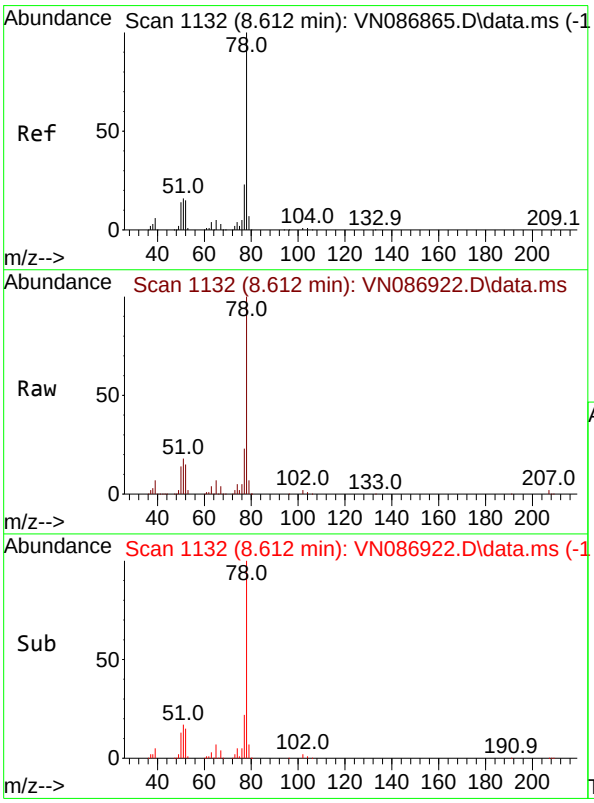
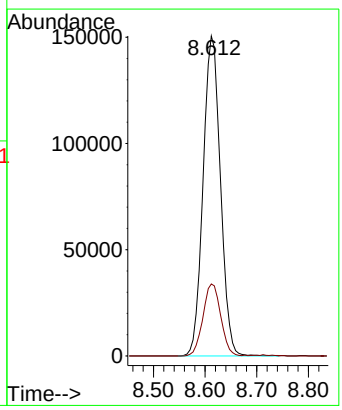


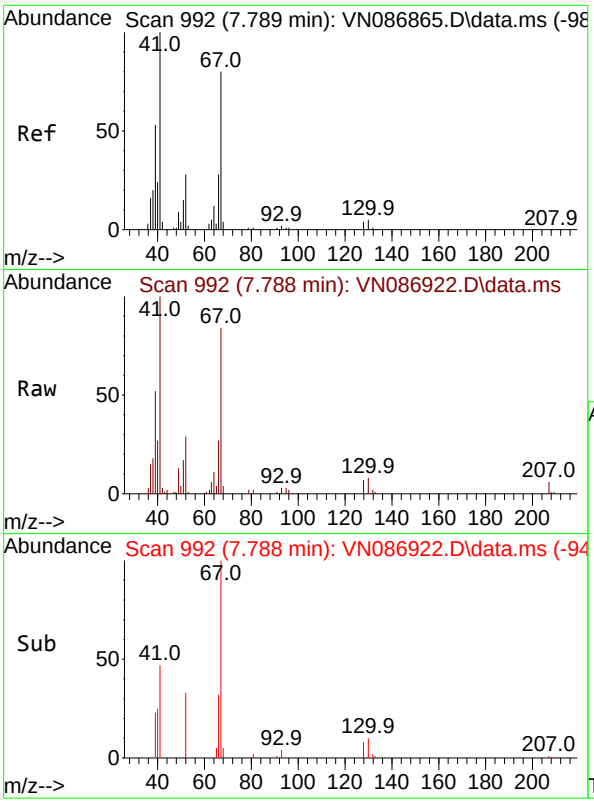




#40
Benzene
Concen: 39.099 ug/l
RT: 8.612 min Scan# 1132
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 78 Resp: 351060

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 22.5 | 18.7 | 28.1 |

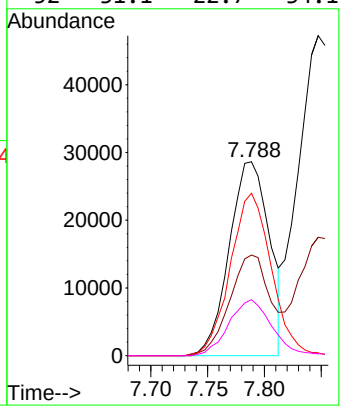





#41
Methacrylonitrile
Concen: 35.893 ug/l
RT: 7.788 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 41 Resp: 7045

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 51.2 | 41.2 | 61.8 |
| 67 | 85.6 | 61.4 | 92.2 |
| 52 | 31.1 | 22.7 | 34.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
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Reviewed By :John Carlone 06/11/2025
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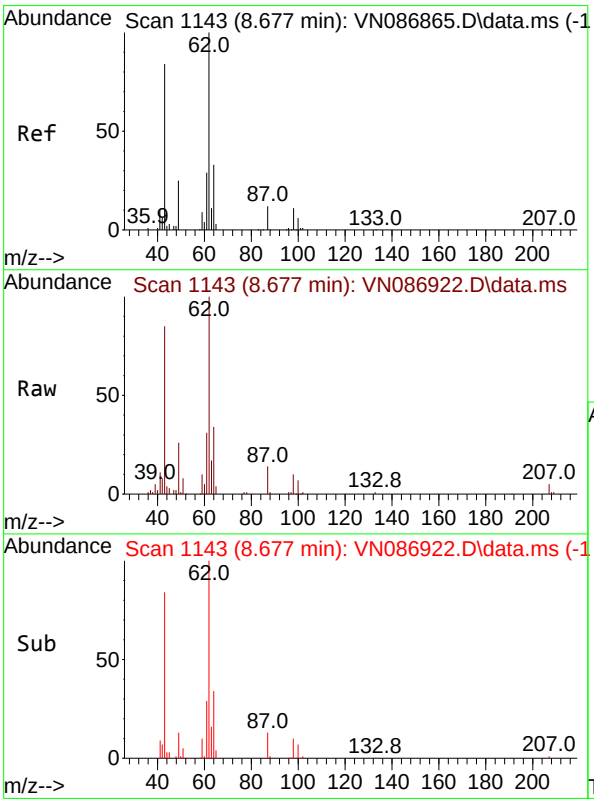
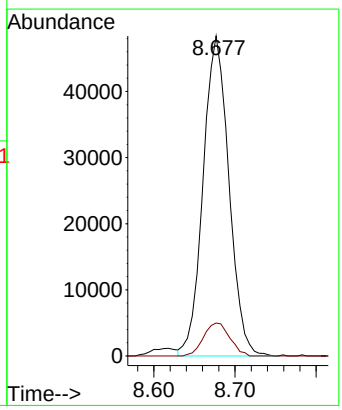
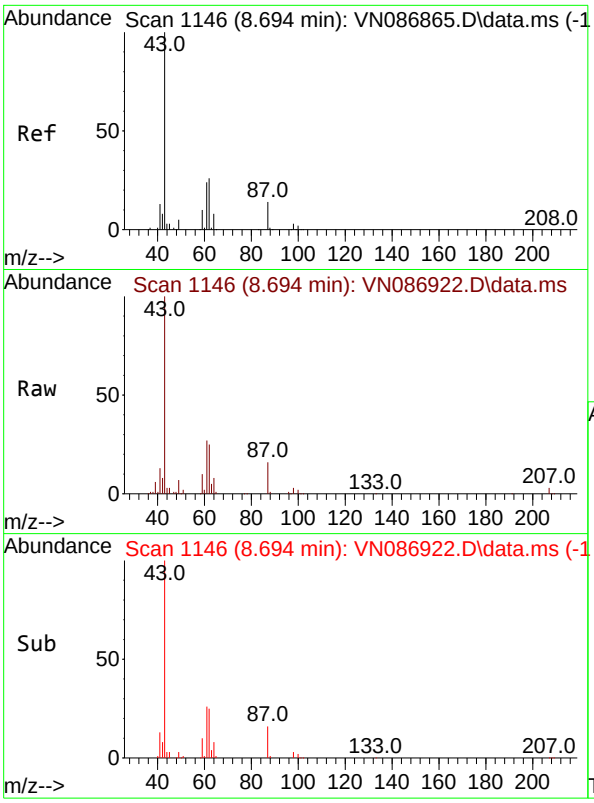



#42
1,2-Dichloroethane
Concen: 39.279 ug/l
RT: 8.677 min Scan# 1143
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 62 Resp: 106970

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 10.4 | 0.0 | 21.2 |

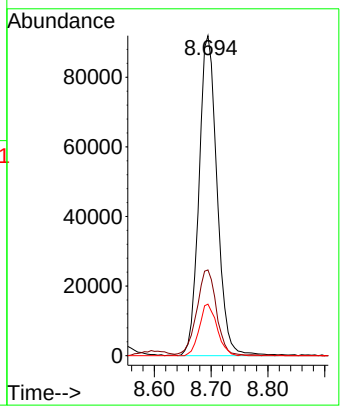





#43
Isopropyl Acetate
Concen: 36.190 ug/l
RT: 8.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 43 Resp: 20303

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 28.8 | 22.1 | 33.1 |
| 87 | 15.8 | 11.8 | 17.6 |




**Instrument :**
MSVOA_N
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MW-11A-13.5-060525MS

**Manual Integrations**
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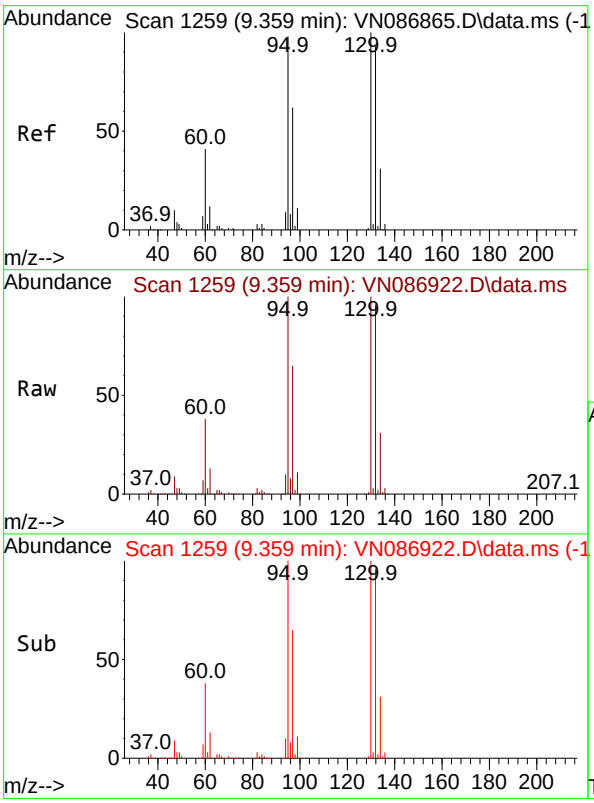
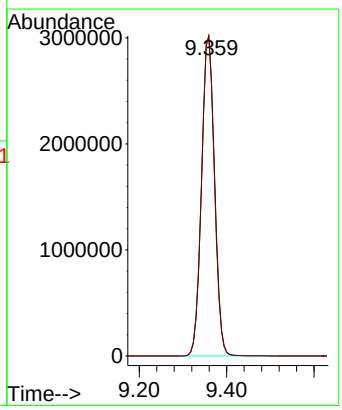
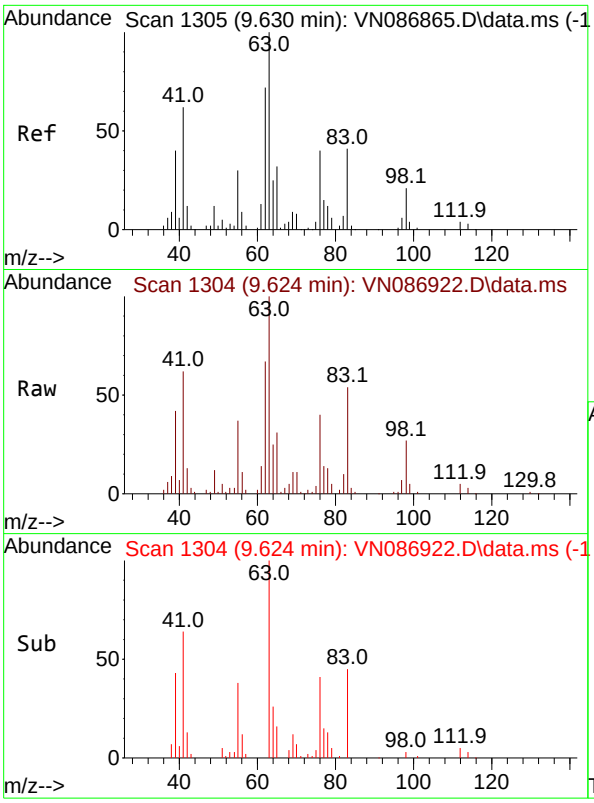



#44
Trichloroethene
Concen: 2942.351 ug/l
RT: 9.359 min Scan# 1259
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion:130 Resp: 6264273

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 99.9 | 0.0 | 196.2 |






#45
1,2-Dichloropropane
Concen: 38.556 ug/l
RT: 9.624 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 63 Resp: 8422

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 31.3 | 25.5 | 38.3 |

**Instrument :**
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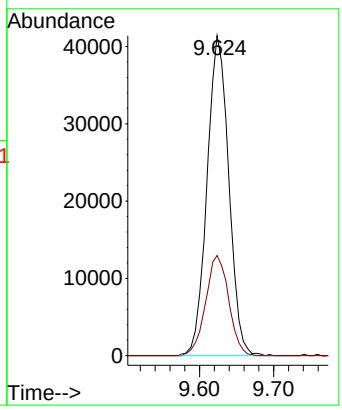
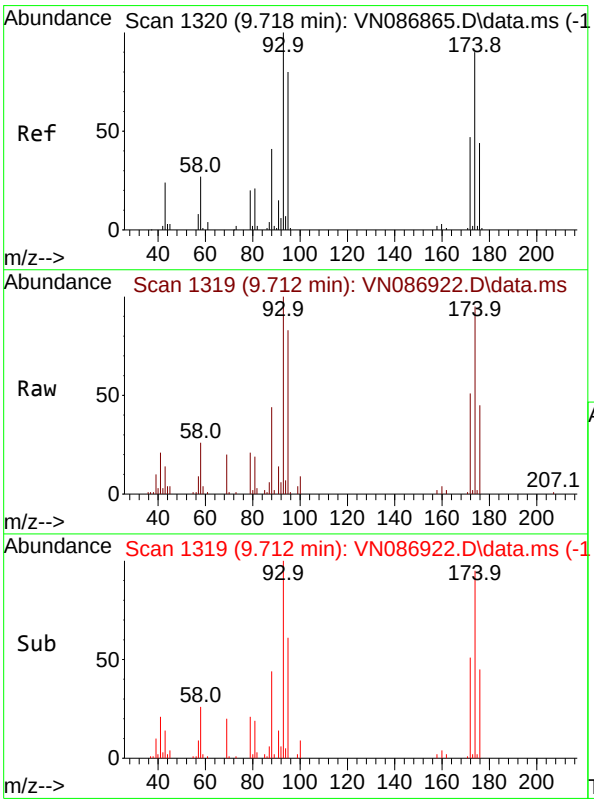
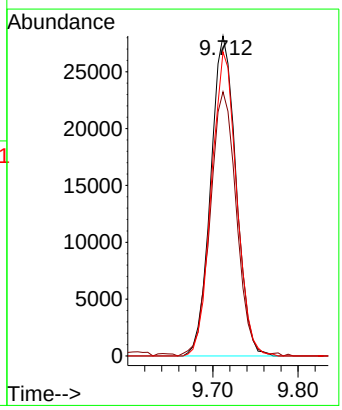


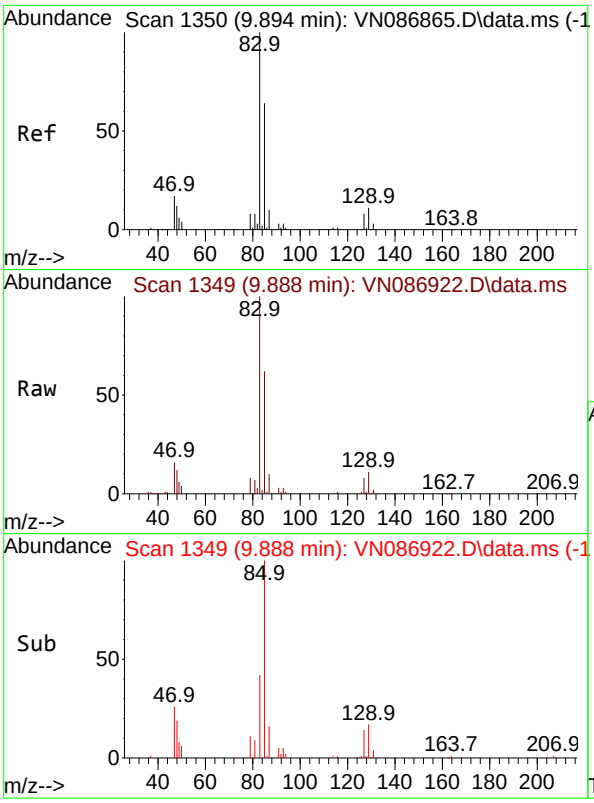




#46
Dibromomethane
Concen: 40.176 ug/l
RT: 9.712 min Scan# 1319
Delta R.T. -0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 93 Resp: 58291

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 85.4 | 67.1 | 100.7 |
| 174 | 94.1 | 74.2 | 111.4 |

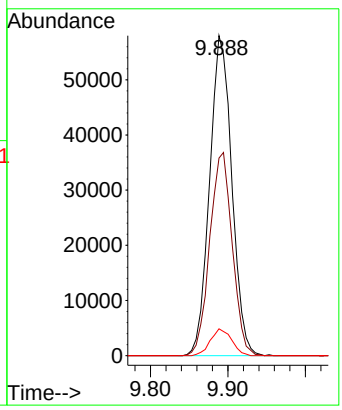





#47
Bromodichloromethane
Concen: 38.688 ug/l
RT: 9.888 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 83 Resp: 11549

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 61.7 | 50.9 | 76.3 |
| 127 | 8.4 | 6.6 | 10.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
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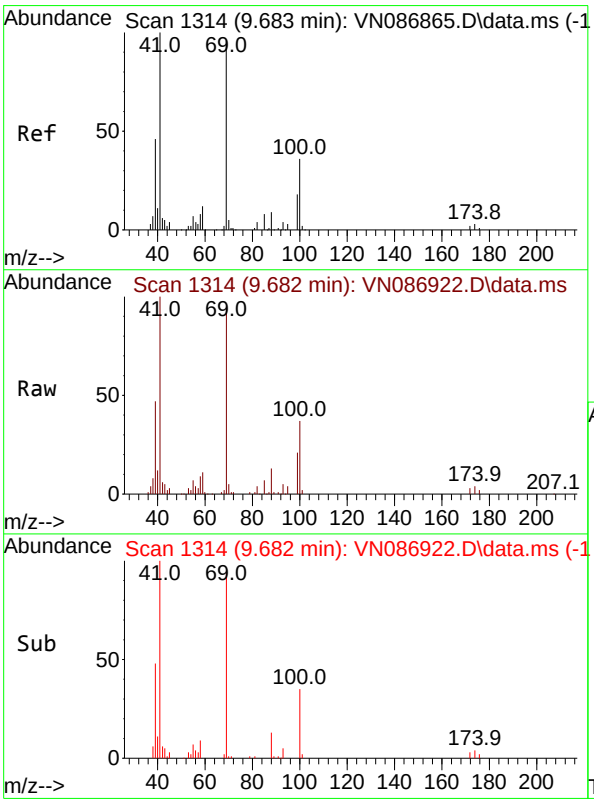
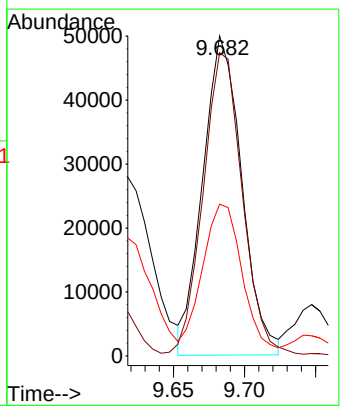
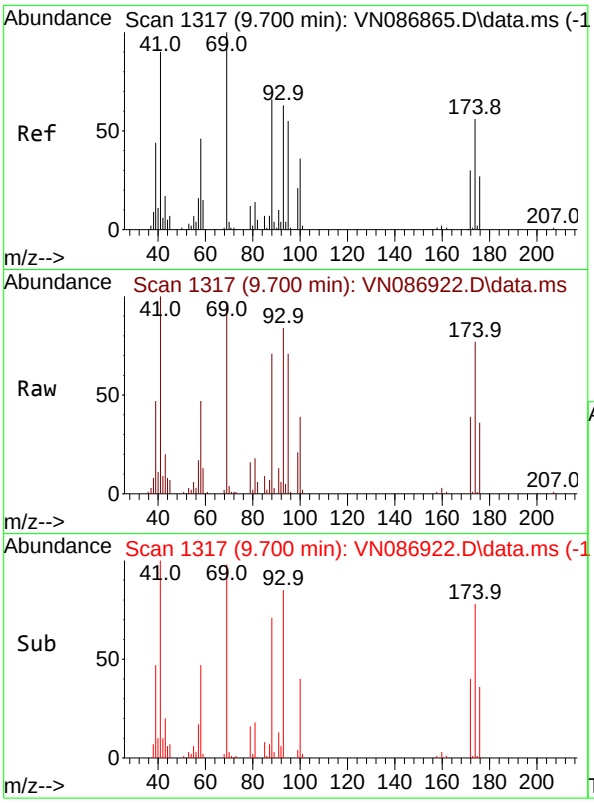



#48
Methyl methacrylate
Concen: 36.807 ug/l
RT: 9.682 min Scan# 1314
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 41 Resp: 95039

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 96.9 | 74.6 | 112.0 |
| 39 | 49.8 | 40.2 | 60.4 |






#49
1,4-Dioxane
Concen: 793.544 ug/l
RT: 9.700 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 88 Resp: 3727

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 0.0 | 0.0 | 0.0 |
| 58 | 67.0 | 57.7 | 86.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

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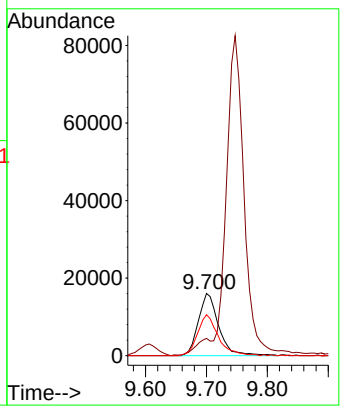
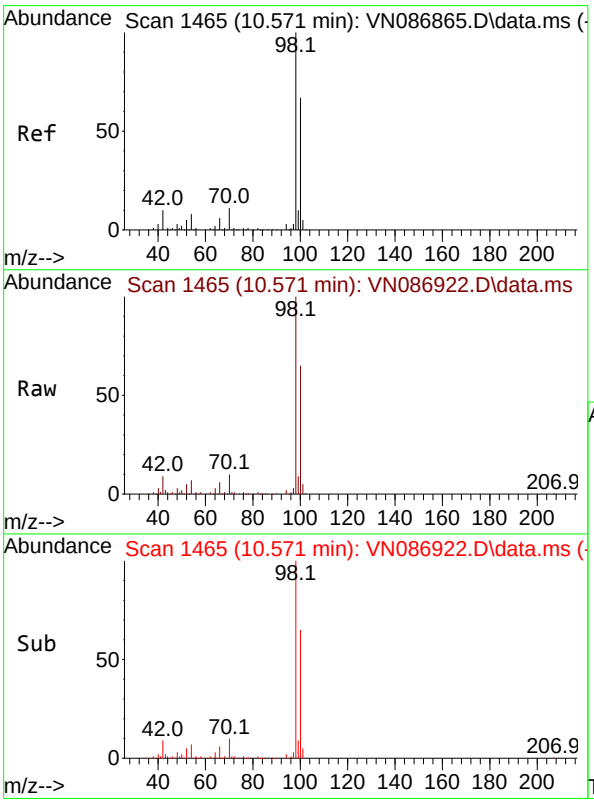
Supervised By :Mahesh Dadoda 06/11/2025

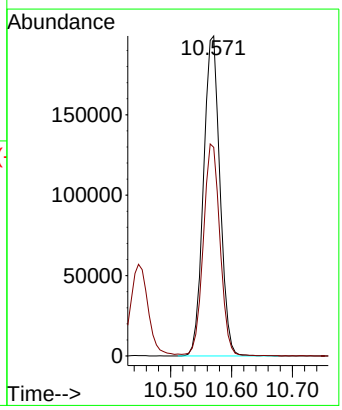


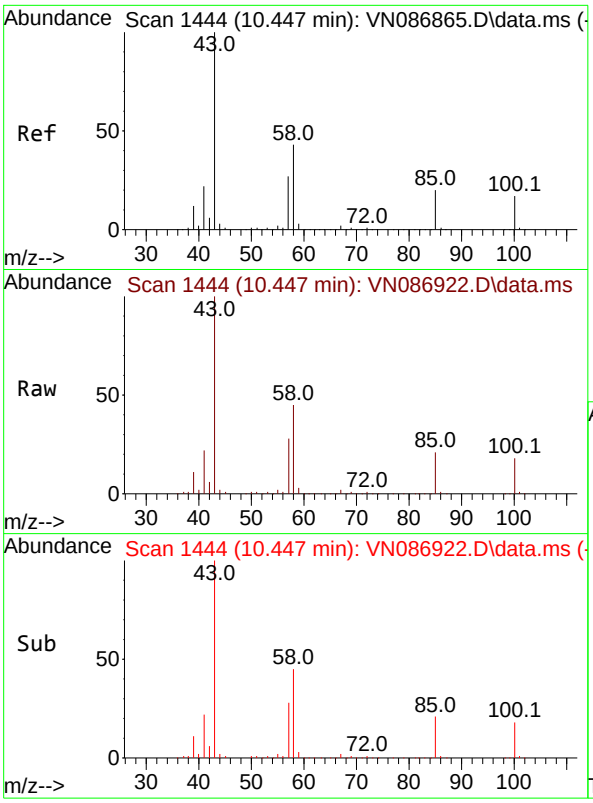




#50
Toluene-d8
Concen: 51.160 ug/l
RT: 10.571 min Scan# 1465
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 98 Resp: 373191

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 67.5 | 53.4 | 80.0 |






#51
4-Methyl-2-Pentanone
Concen: 185.856 ug/l
RT: 10.447 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

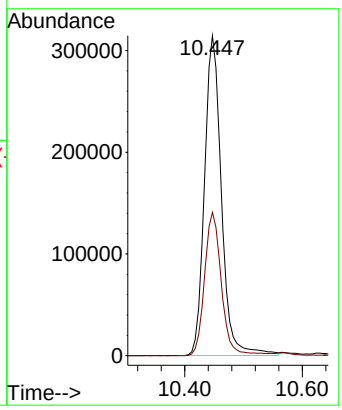
Tgt Ion: 43 Resp: 62769

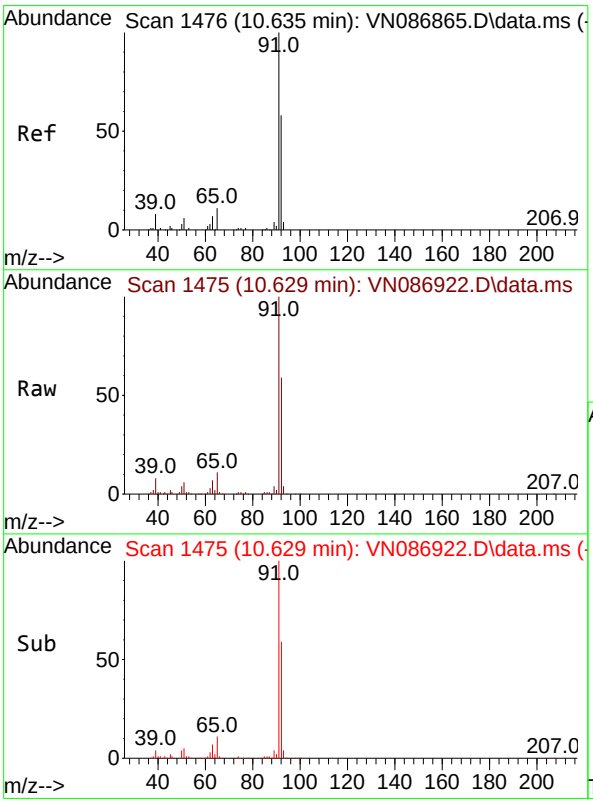
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 44.6 | 34.2 | 51.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

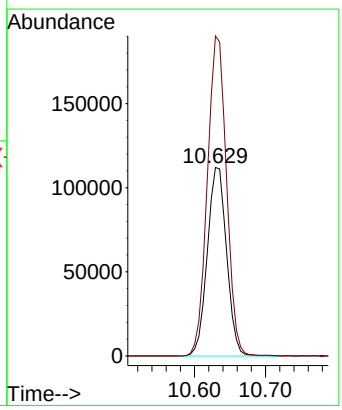


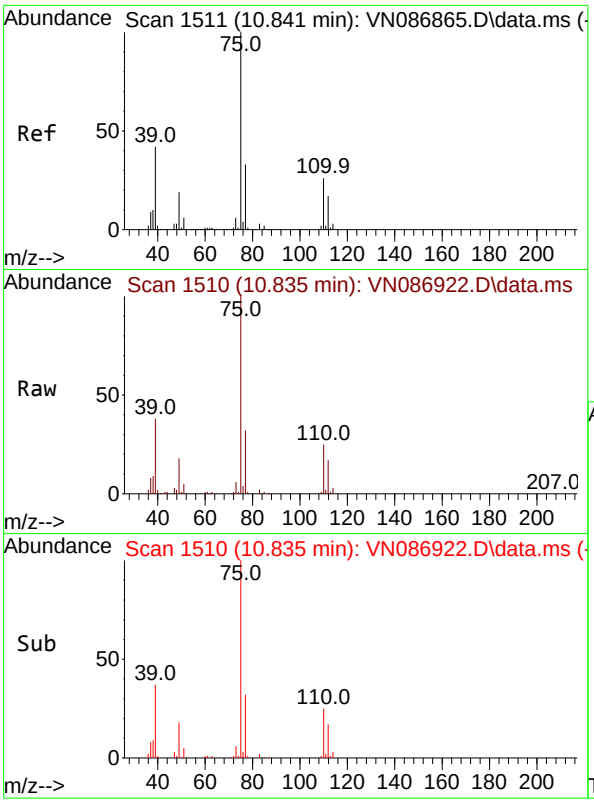




#52
Toluene
Concen: 38.472 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. -0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 92 Resp: 211099

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 169.0 | 136.5 | 204.7 |






#53
t-1,3-Dichloropropene
Concen: 40.165 ug/l
RT: 10.835 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 75 Resp: 13407

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.9 | 26.4 | 39.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
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Reviewed By :John Carlone 06/11/2025
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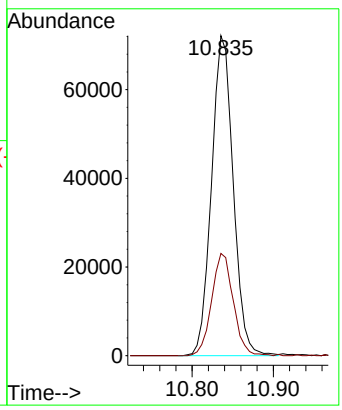
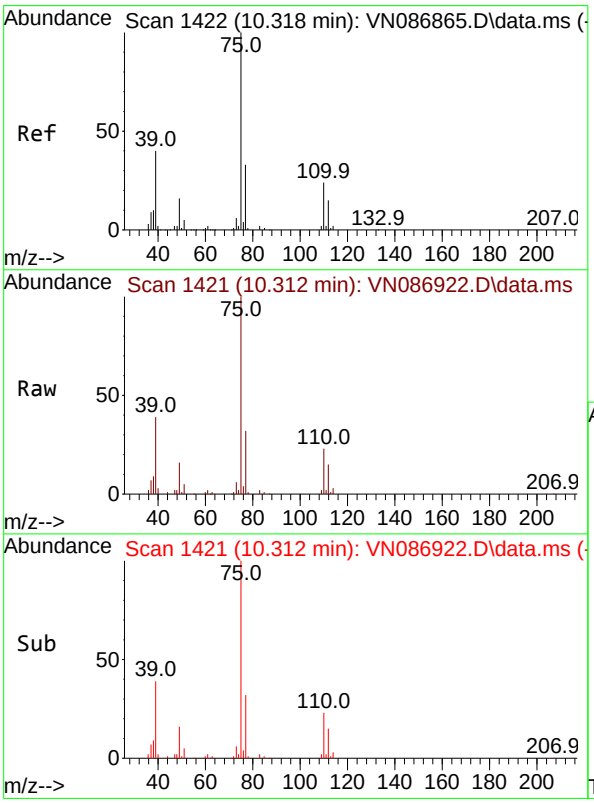
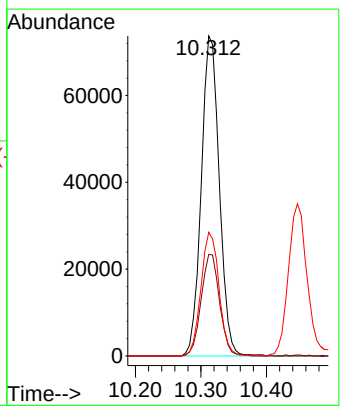


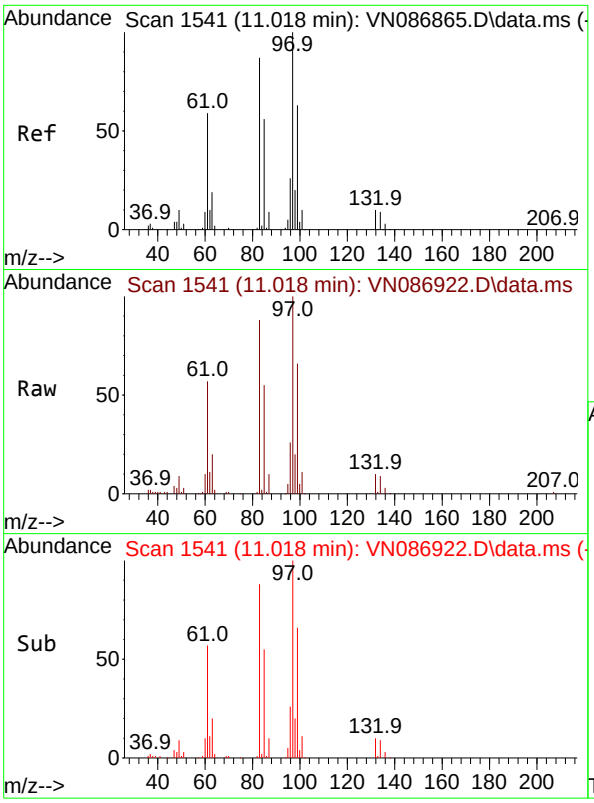




#54
cis-1,3-Dichloropropene
Concen: 39.524 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. -0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 75 Resp: 141166

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.8 | 26.2 | 39.4 |
| 39 | 38.6 | 32.3 | 48.5 |

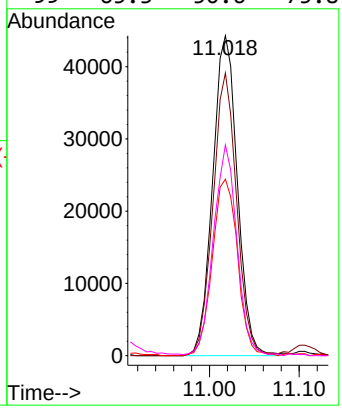





#55
1,1,2-Trichloroethane
Concen: 40.047 ug/l
RT: 11.018 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 97 Resp: 8455

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 88.3 | 69.7 | 104.5 |
| 85 | 55.1 | 45.1 | 67.7 |
| 99 | 65.3 | 50.6 | 75.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
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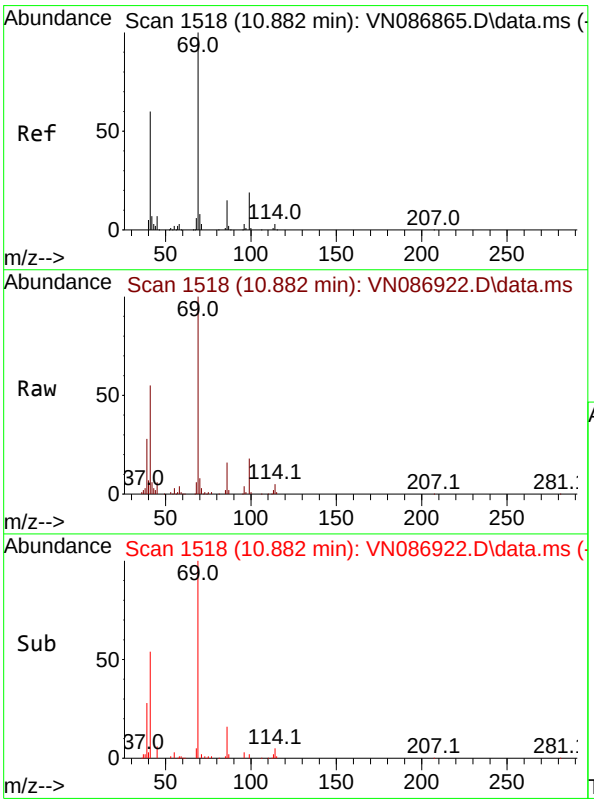
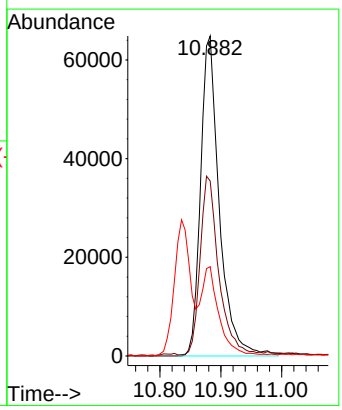
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

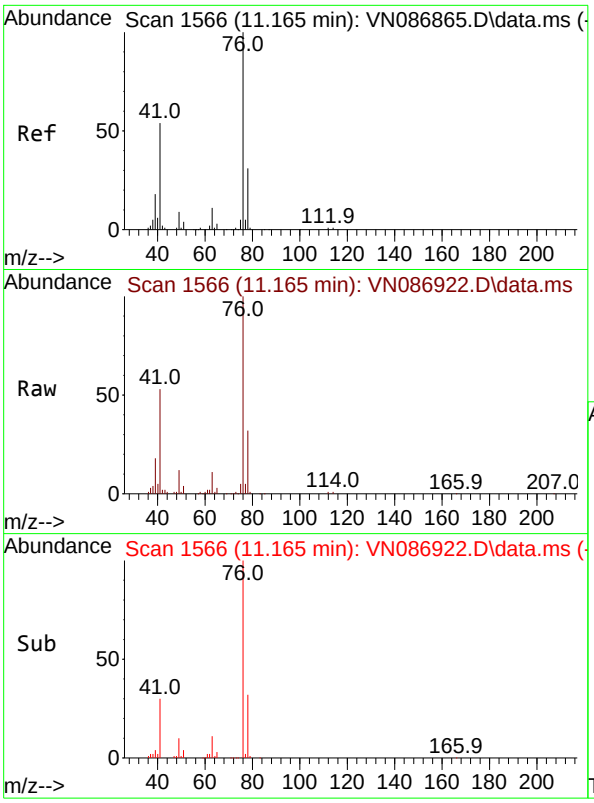



#56
Ethyl methacrylate
Concen: 41.269 ug/l
RT: 10.882 min Scan# 1518
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 69 Resp: 138783

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 55.4 | 47.2 | 70.8 |
| 39 | 25.7 | 23.0 | 34.6 |






#57
1,3-Dichloropropane
Concen: 38.991 ug/l
RT: 11.165 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 76 Resp: 14280

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.6 | 25.3 | 37.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
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Reviewed By :John Carlone 06/11/2025
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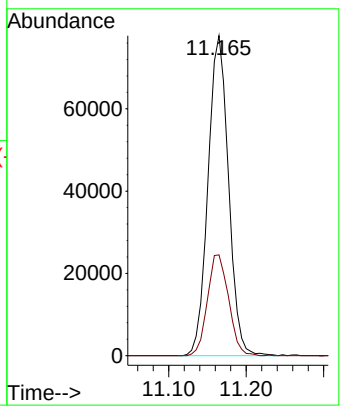
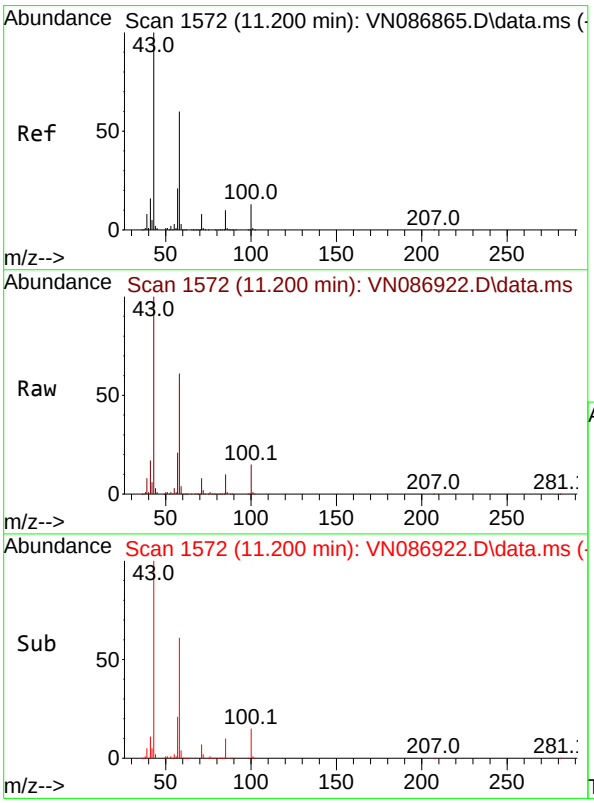
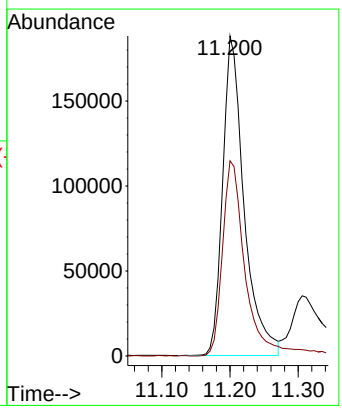


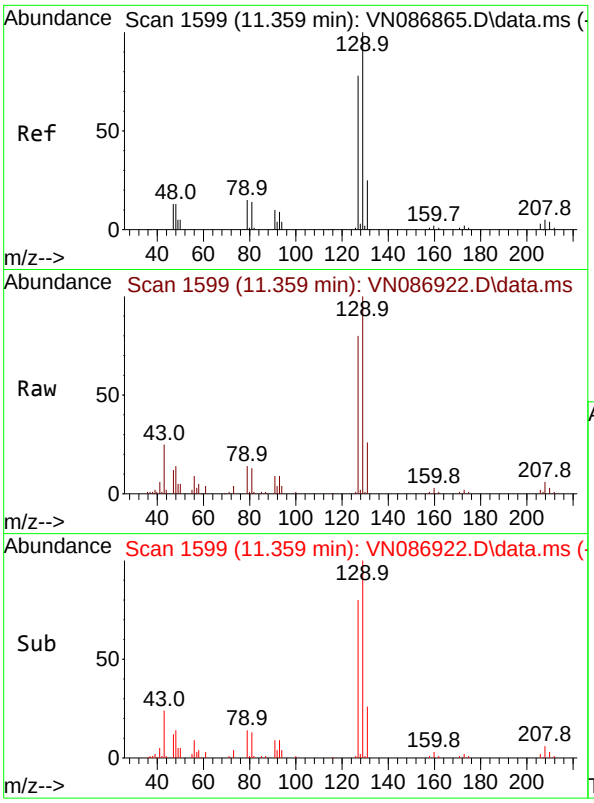




#59
2-Hexanone
Concen: 188.796 ug/l
RT: 11.200 min Scan# 1572
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 43 Resp: 410712

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 65.8 | 30.4 | 91.3 |

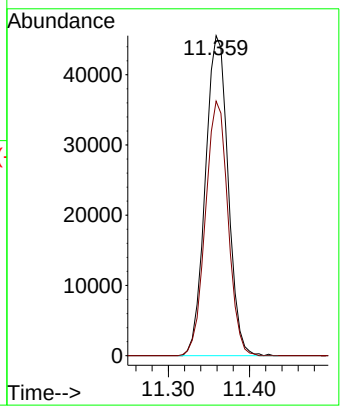





#60
Dibromochloromethane
Concen: 40.264 ug/l
RT: 11.359 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion:129 Resp: 8857

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 78.8 | 38.6 | 115.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
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Reviewed By :John Carlone 06/11/2025
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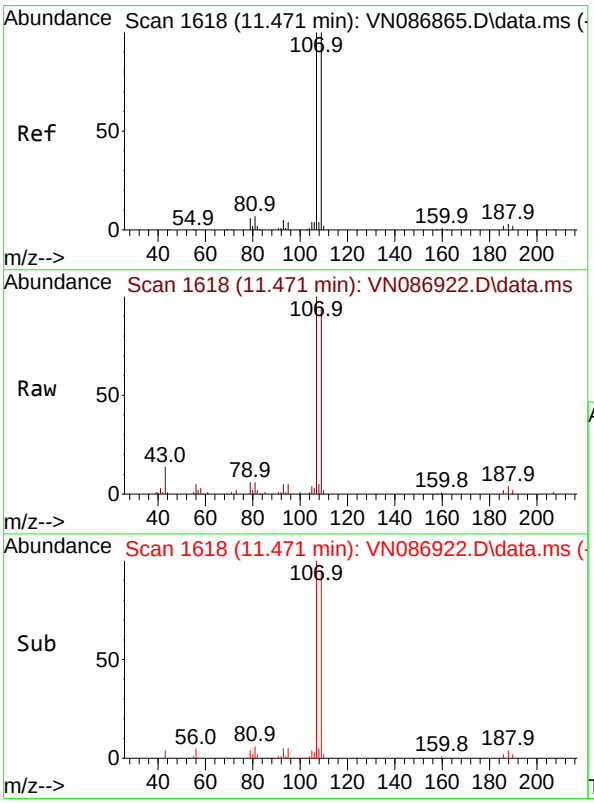
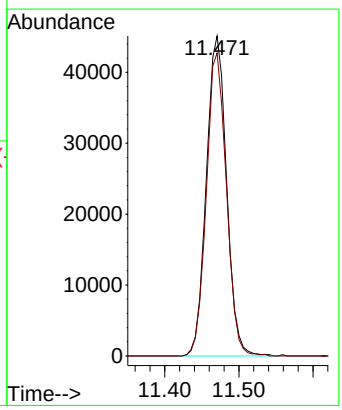
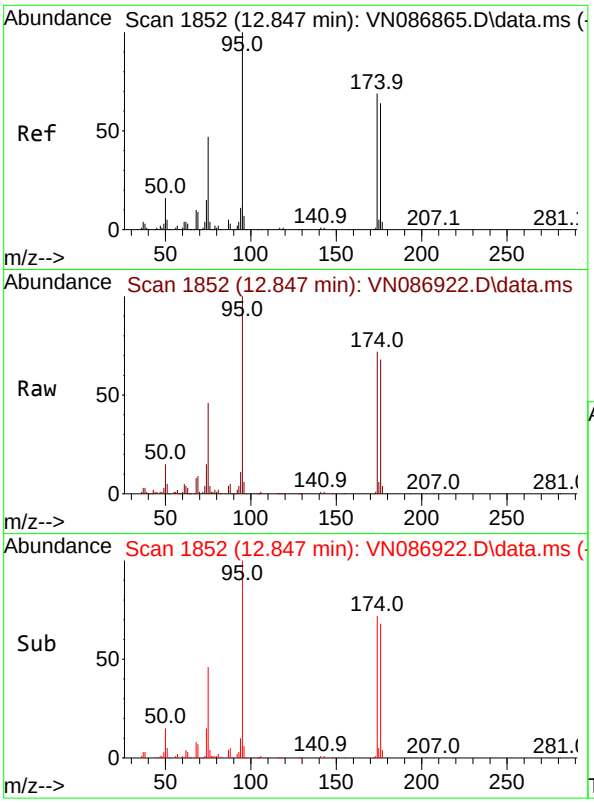



#61
1,2-Dibromoethane
Concen: 39.485 ug/l
RT: 11.471 min Scan# 1618
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion:107 Resp: 85449

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 93.7 | 76.3 | 114.5 |

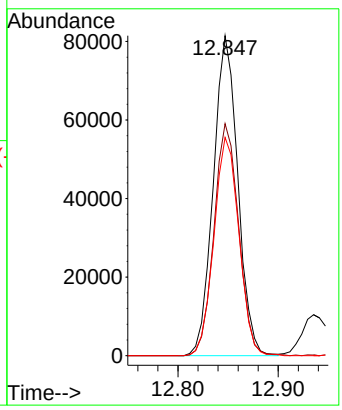





#62
4-Bromofluorobenzene
Concen: 50.932 ug/l
RT: 12.847 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 95 Resp: 13803

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 72.8 | 0.0 | 141.8 |
| 176 | 69.6 | 0.0 | 132.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
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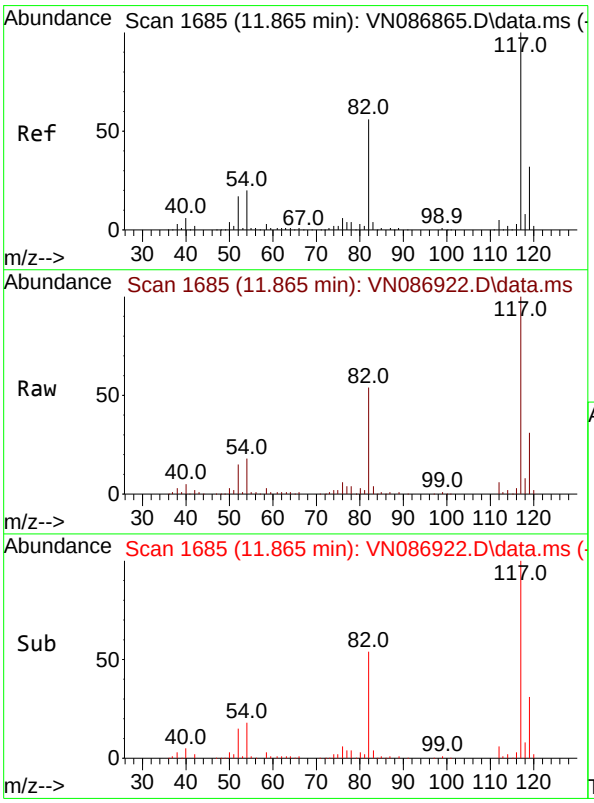
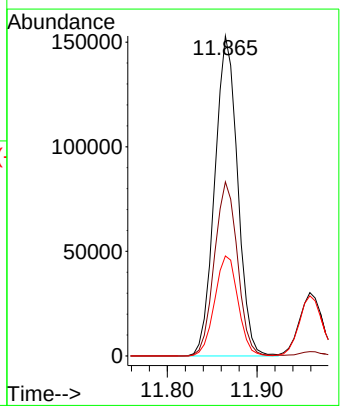
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

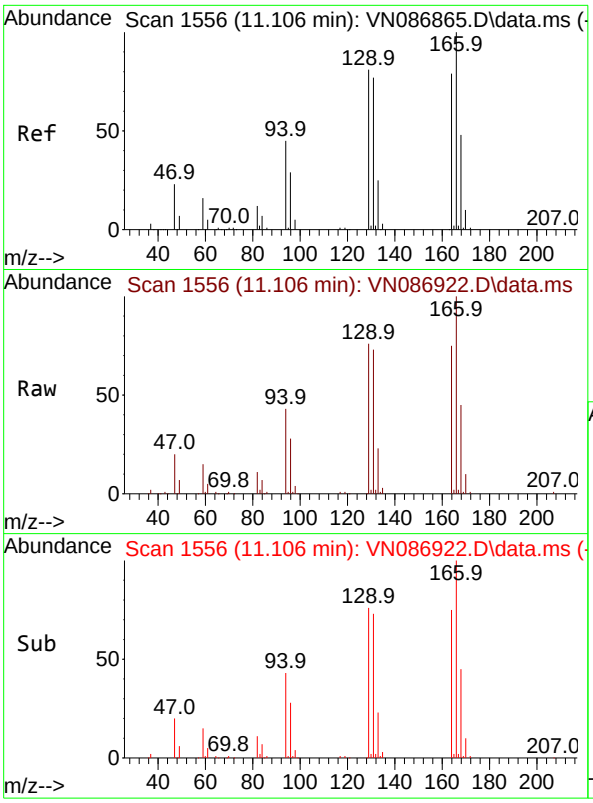



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion:117 Resp: 270945

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 54.4 | 44.6 | 67.0 |
| 119 | 31.3 | 25.5 | 38.3 |

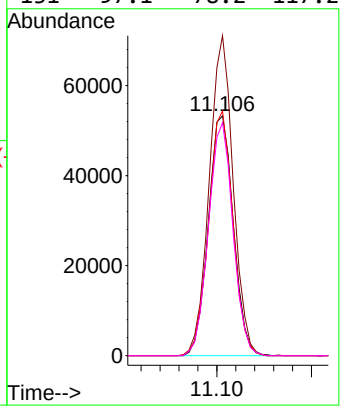





#64
Tetrachloroethene
Concen: 57.032 ug/l
RT: 11.106 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion:164 Resp: 9779

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 133.4 | 101.8 | 152.8 |
| 129 | 102.0 | 83.0 | 124.4 |
| 131 | 97.1 | 78.2 | 117.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
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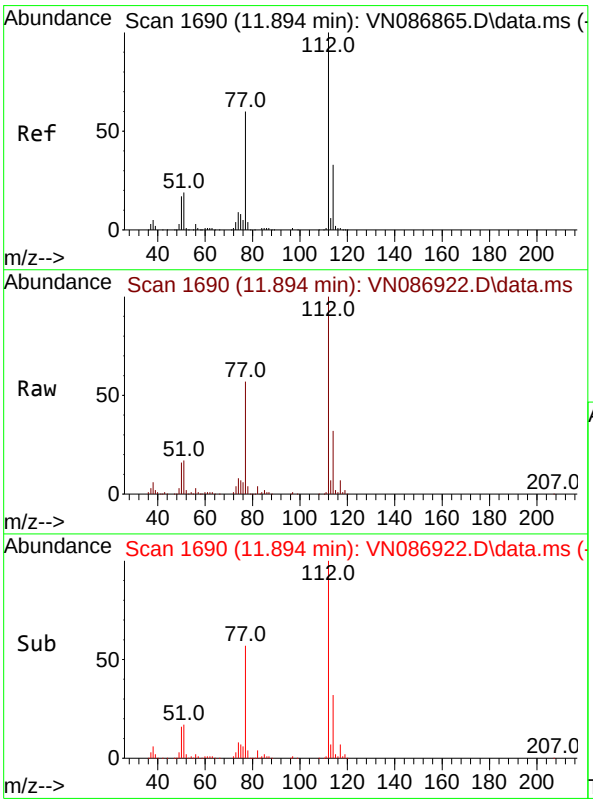
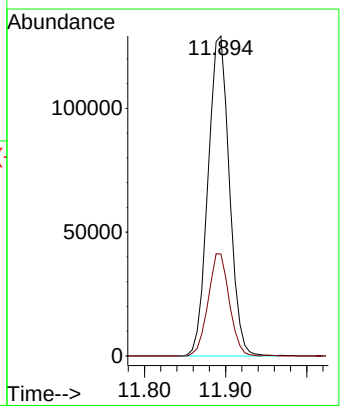
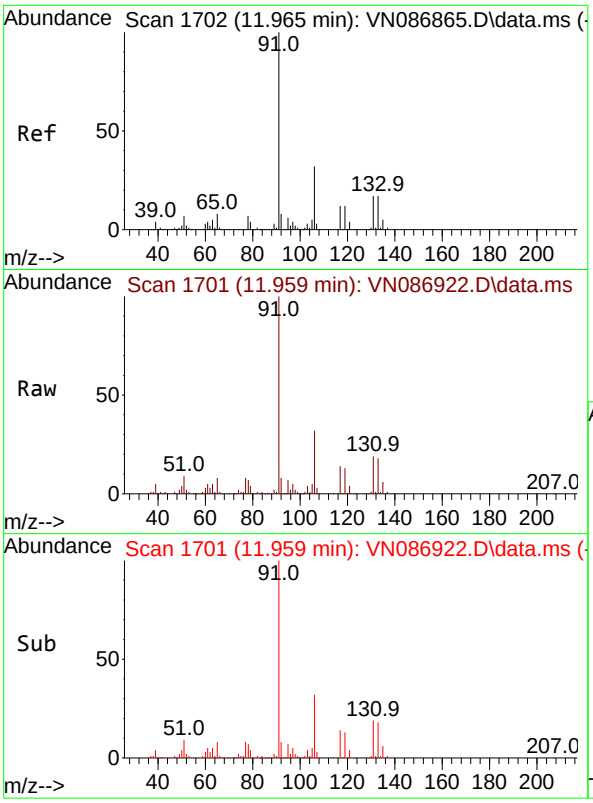



#65
Chlorobenzene
Concen: 39.523 ug/l
RT: 11.894 min Scan# 1690
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion:112 Resp: 236181

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 31.8 | 26.2 | 39.2 |






#66
1,1,1,2-Tetrachloroethane
Concen: 38.896 ug/l
RT: 11.959 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

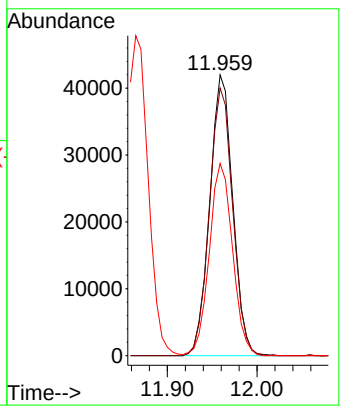
Tgt Ion:131 Resp: 7471

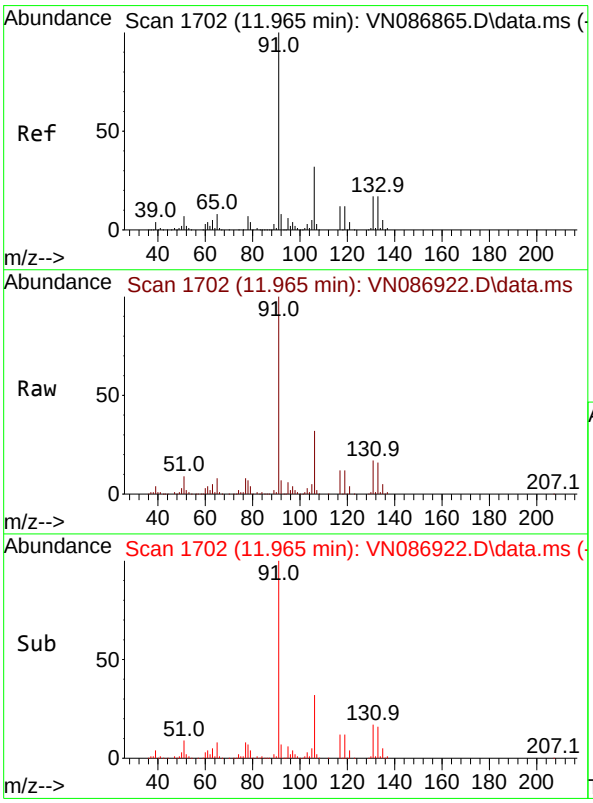
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 96.9 | 48.3 | 144.8 |
| 119 | 69.1 | 34.0 | 101.8 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

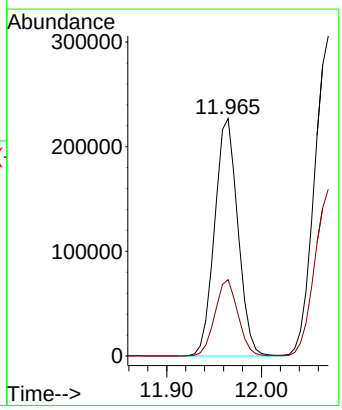


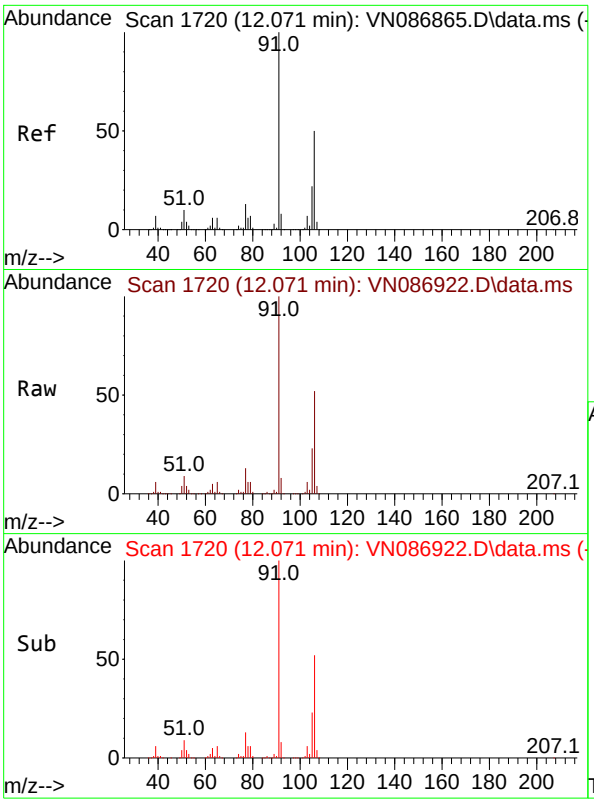




#67
Ethyl Benzene
Concen: 37.621 ug/l
RT: 11.965 min Scan# 1702
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 91 Resp: 387237

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 32.1 | 25.4 | 38.2 |






#68
m/p-Xylenes
Concen: 77.607 ug/l
RT: 12.071 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

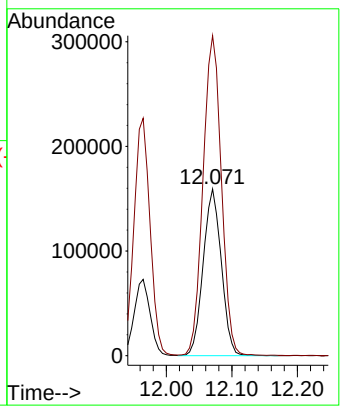
Tgt Ion:106 Resp: 30578

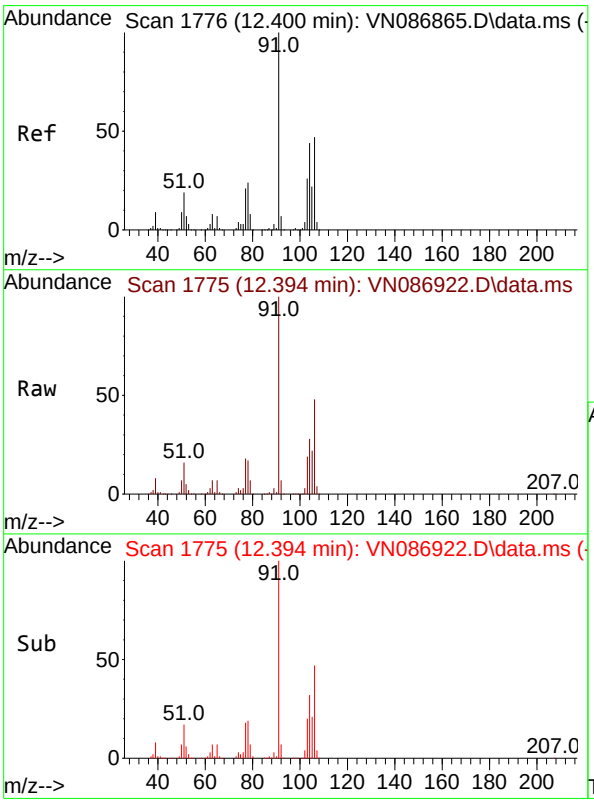
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 194.4 | 159.4 | 239.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

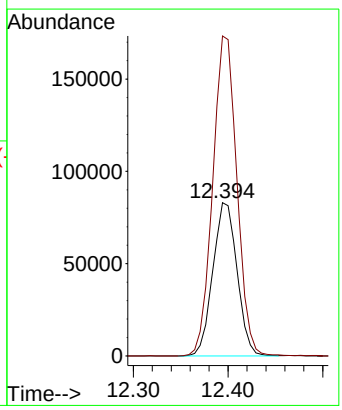


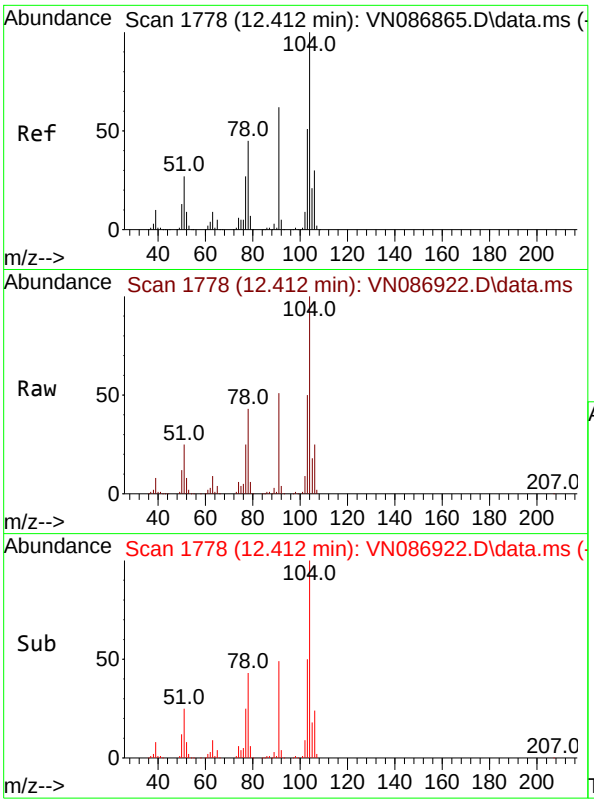




#69
o-Xylene
Concen: 39.050 ug/l
RT: 12.394 min Scan# 1775
Delta R.T. -0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion:106 Resp: 147363

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 208.6 | 106.1 | 318.1 |

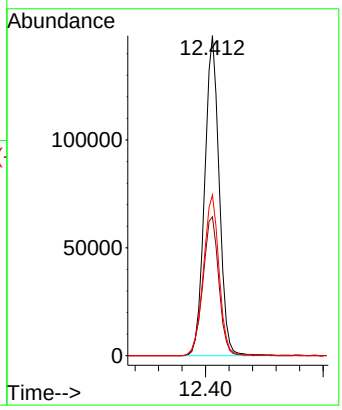





#70
Styrene
Concen: 39.358 ug/l
RT: 12.412 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion:104 Resp: 25415

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 47.4 | 38.5 | 57.7 |
| 103 | 53.9 | 43.1 | 64.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
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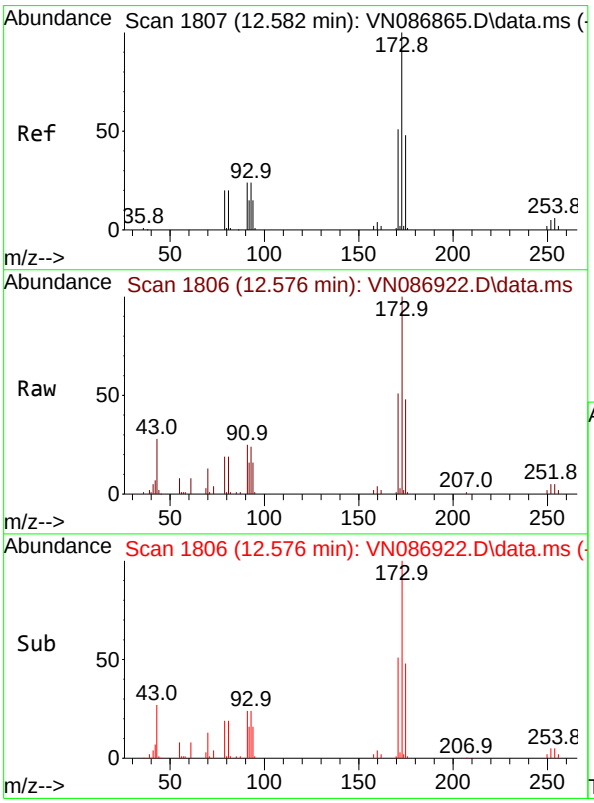
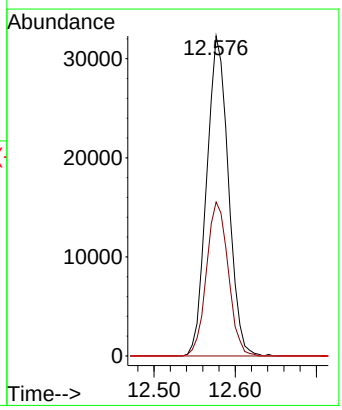
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

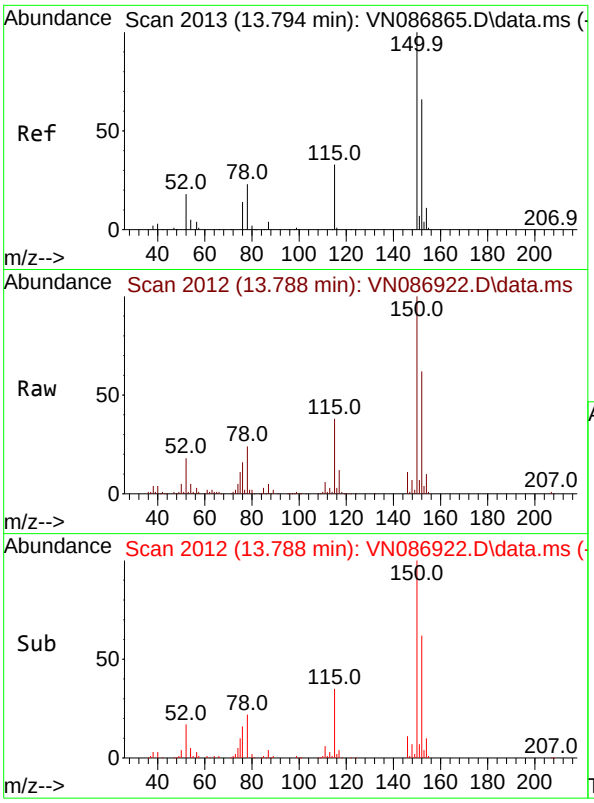



#71
Bromoform
Concen: 42.046 ug/l
RT: 12.576 min Scan# 1806
Delta R.T. -0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion:173 Resp: 59843

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 48.3 | 24.1 | 72.4 |
| 254 | 0.0 | 0.0 | 0.0 |

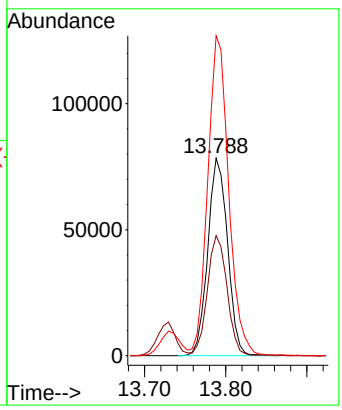





#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion:152 Resp: 13262

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 59.6 | 30.1 | 90.5 |
| 150 | 171.8 | 0.0 | 345.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
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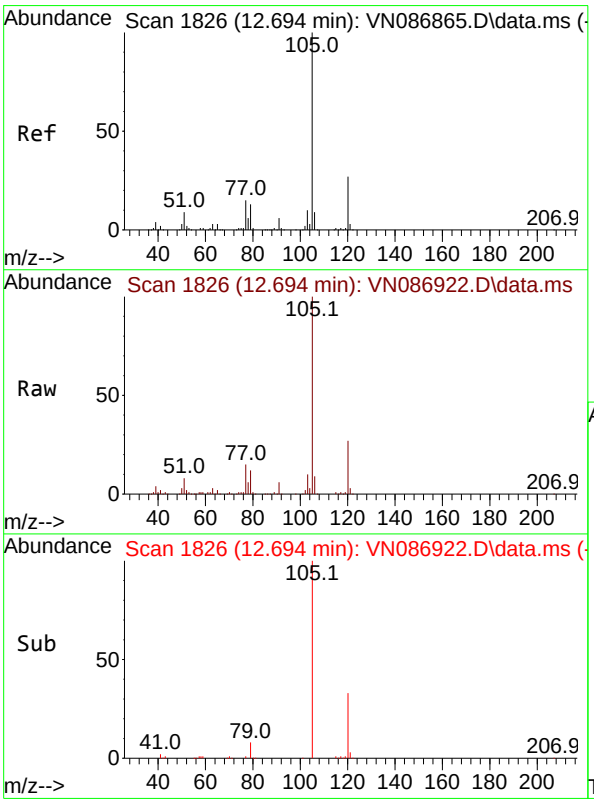
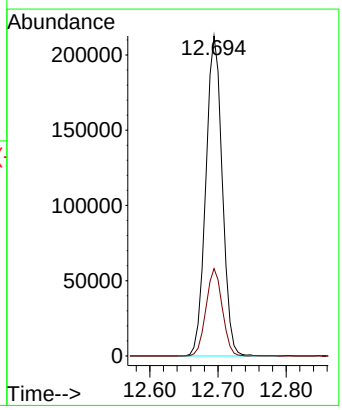
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

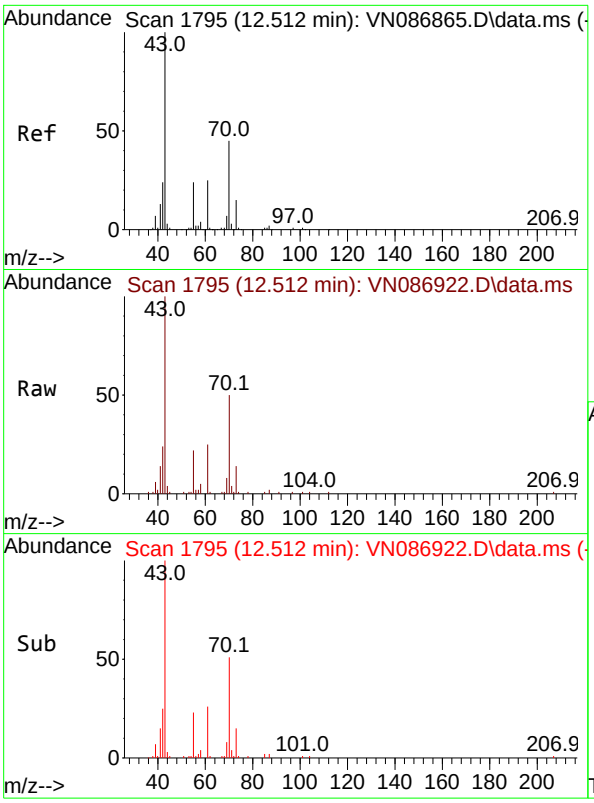



#73
Isopropylbenzene
Concen: 36.846 ug/l
RT: 12.694 min Scan# 1826
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion:105 Resp: 356009

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.9 | 13.5 | 40.4 |

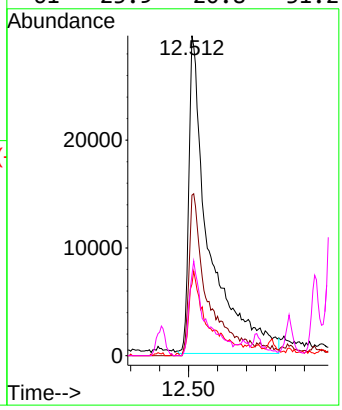





#74
N-amyl acetate
Concen: 42.322 ug/l m
RT: 12.512 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 43 Resp: 14289

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 43.8 | 37.6 | 56.4 |
| 55 | 23.5 | 19.0 | 28.6 |
| 61 | 23.9 | 20.8 | 31.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
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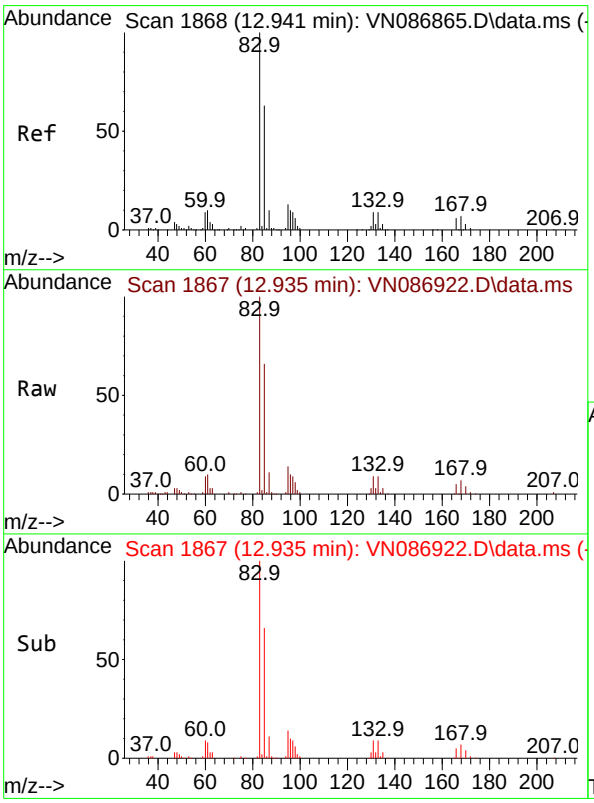
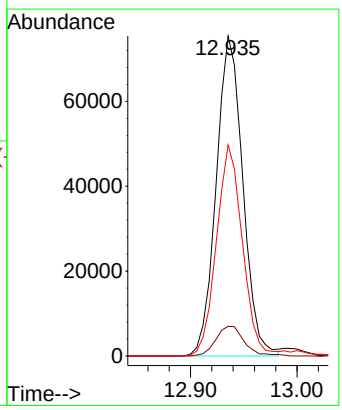
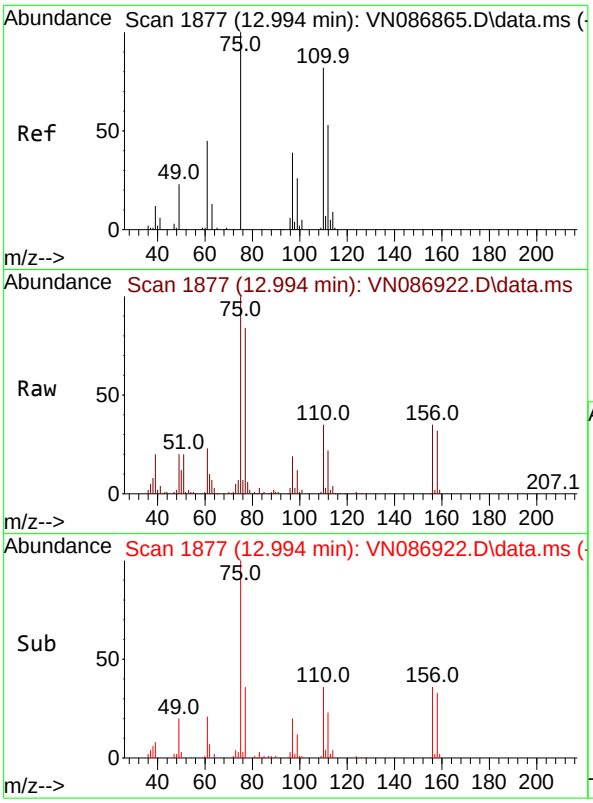



#75
1,1,2,2-Tetrachloroethane
Concen: 40.025 ug/l
RT: 12.935 min Scan# 1867
Delta R.T. -0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 83 Resp: 131015

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 9.9 | 4.9 | 14.7 |
| 85 | 64.2 | 32.0 | 96.0 |






#76
1,2,3-Trichloropropane
Concen: 35.250 ug/l m
RT: 12.994 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 75 Resp: 11112

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 185.2 | 79.3 | 237.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
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Reviewed By :John Carlone 06/11/2025
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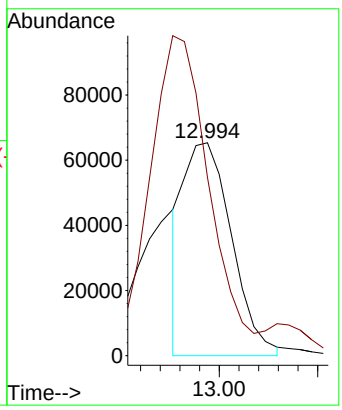
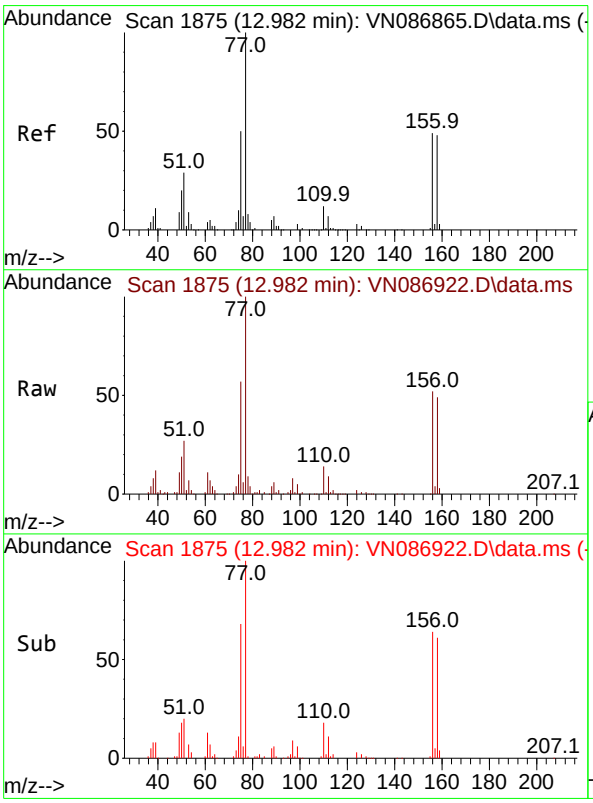
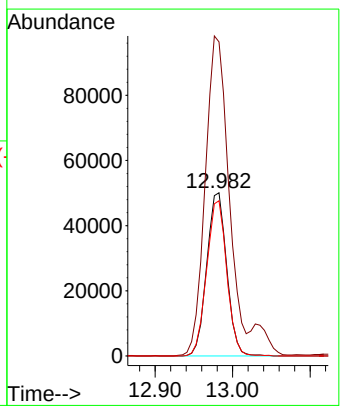


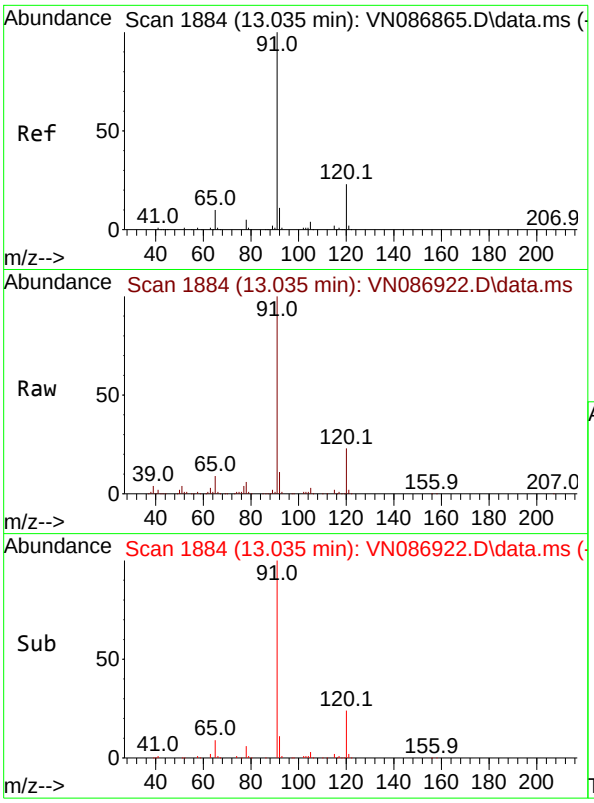




#77
Bromobenzene
Concen: 40.405 ug/l
RT: 12.982 min Scan# 1875
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion:156 Resp: 89530

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 229.9 | 117.7 | 353.1 |
| 158 | 96.2 | 48.1 | 144.4 |






#78
n-propylbenzene
Concen: 35.869 ug/l
RT: 13.035 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 91 Resp: 42117

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 23.3 | 11.4 | 34.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
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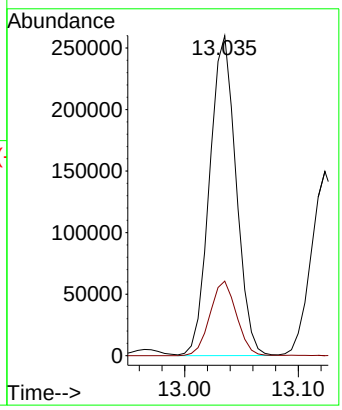
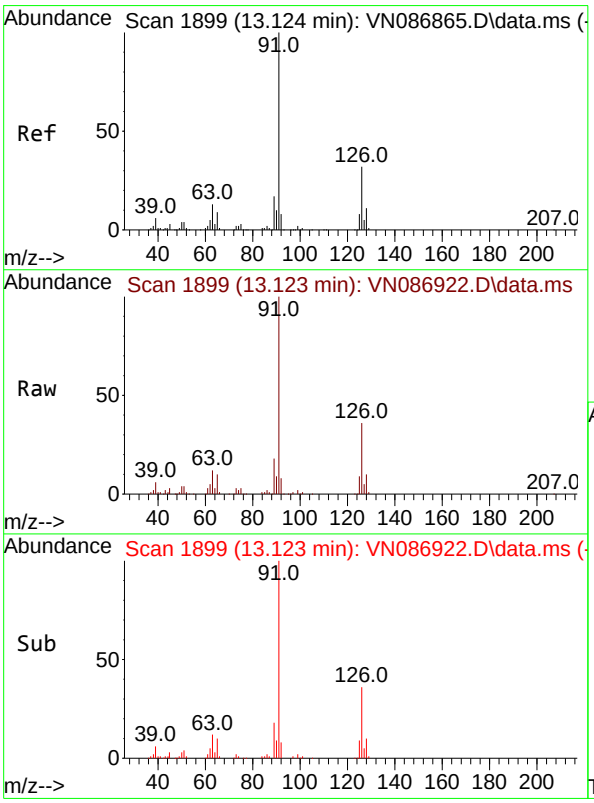
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

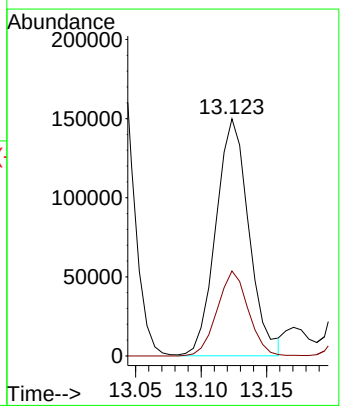


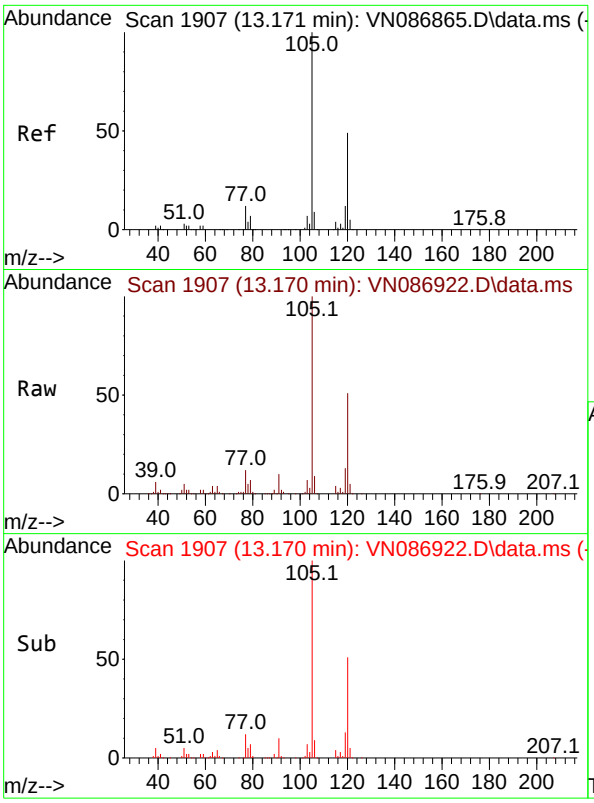




#79
2-Chlorotoluene
Concen: 37.274 ug/l
RT: 13.123 min Scan# 1899
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 91 Resp: 262472

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 33.7 | 16.2 | 48.5 |






#80
1,3,5-Trimethylbenzene
Concen: 36.083 ug/l
RT: 13.170 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion:105 Resp: 28784

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 50.7 | 24.9 | 74.6 |

**Instrument :**
MSVOA_N
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MW-11A-13.5-060525MS

**Manual Integrations**
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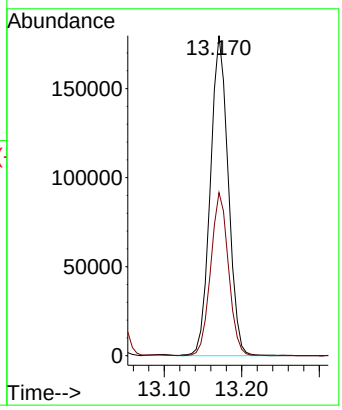
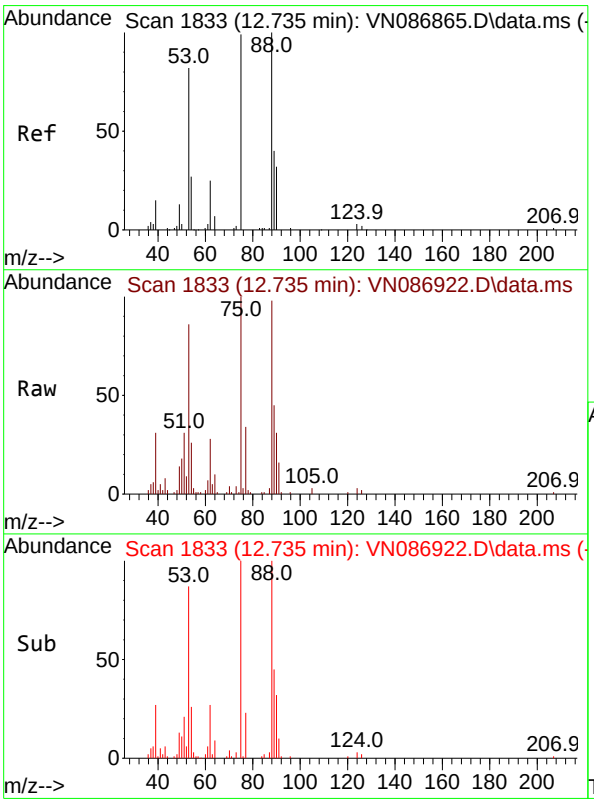
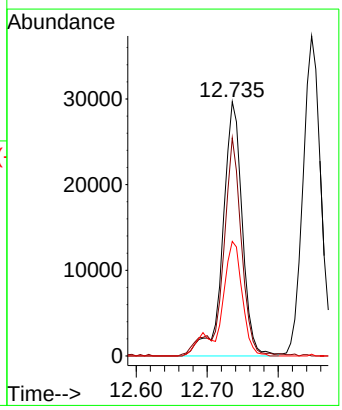


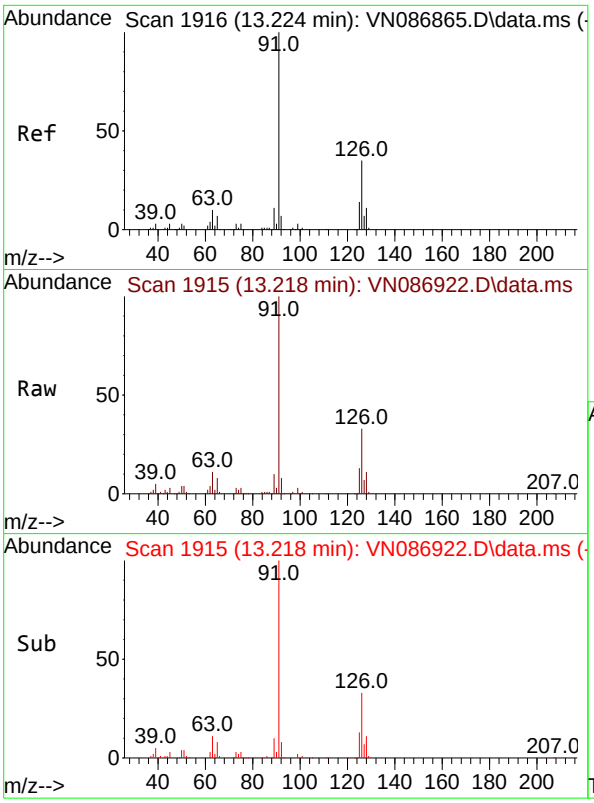




#81
trans-1,4-Dichloro-2-butene
Concen: 41.077 ug/l
RT: 12.735 min Scan# 1833
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 75 Resp: 56257

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 82.3 | 66.6 | 99.8 |
| 89 | 41.1 | 36.7 | 55.1 |






#82
4-Chlorotoluene
Concen: 38.181 ug/l
RT: 13.218 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 91 Resp: 27204

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 33.3 | 16.7 | 50.1 |

**Instrument :**
MSVOA_N
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MW-11A-13.5-060525MS

**Manual Integrations**
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Reviewed By :John Carlone 06/11/2025
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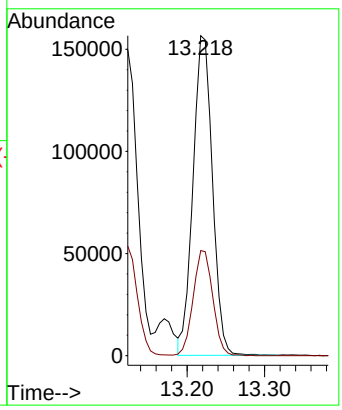
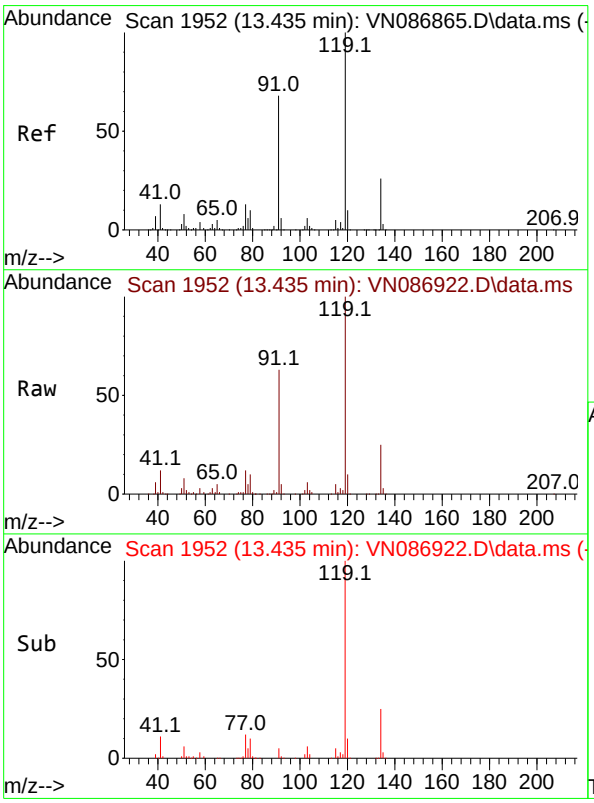
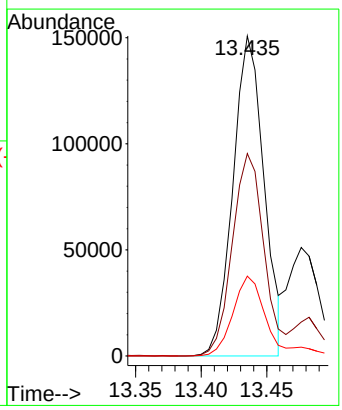


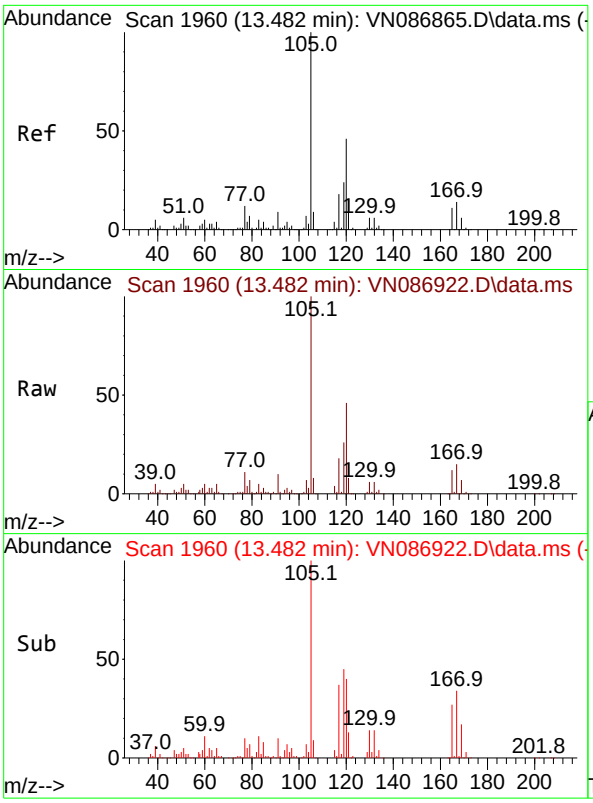




#83
tert-Butylbenzene
Concen: 33.915 ug/l
RT: 13.435 min Scan# 1952
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion:119 Resp: 247652

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 64.8 | 32.1 | 96.5 |
| 134 | 27.4 | 13.4 | 40.1 |






#84
1,2,4-Trimethylbenzene
Concen: 36.759 ug/l
RT: 13.482 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion:105 Resp: 29404

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 46.7 | 23.2 | 69.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
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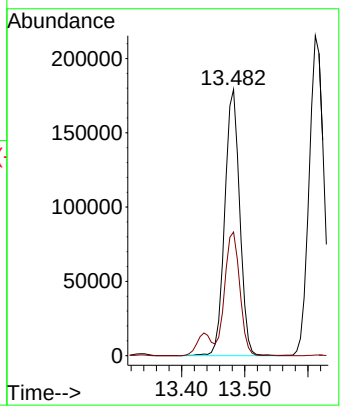
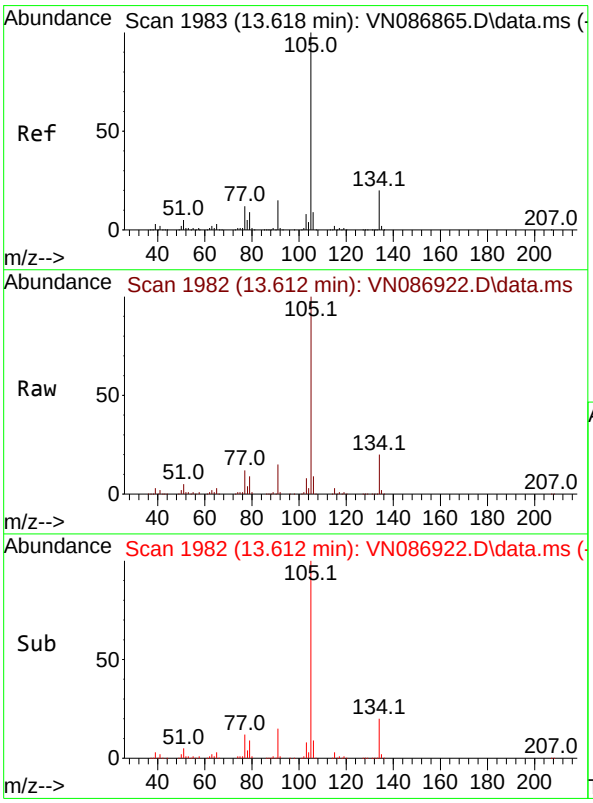
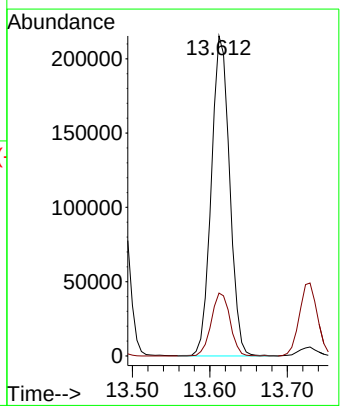


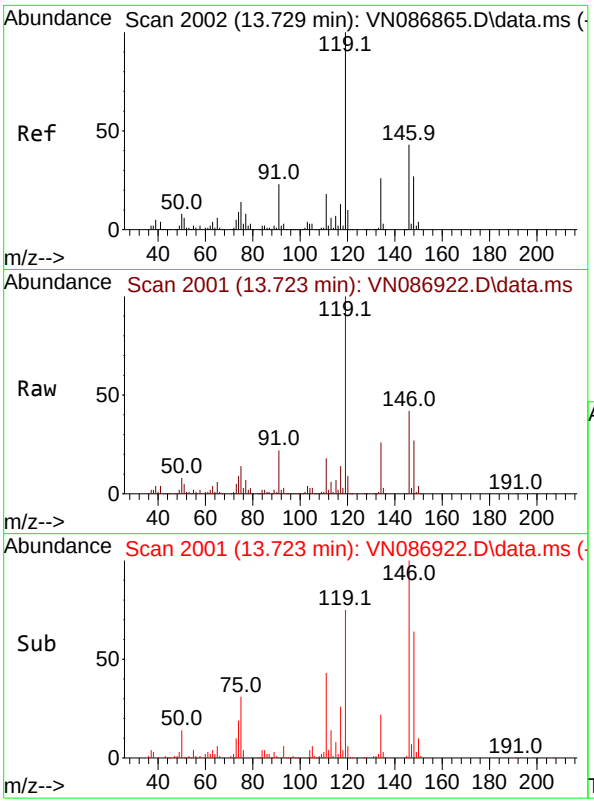




#85
sec-Butylbenzene
Concen: 33.315 ug/l
RT: 13.612 min Scan# 1982
Delta R.T. -0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion:105 Resp: 353284

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 20.2 | 10.0 | 30.0 |






#86
p-Isopropyltoluene
Concen: 33.934 ug/l
RT: 13.723 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

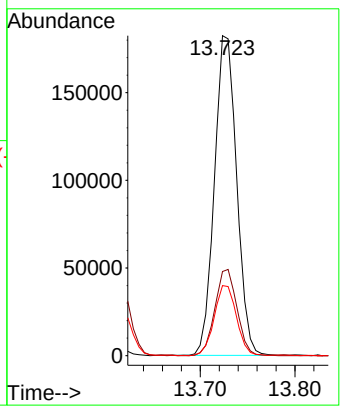
Tgt Ion:119 Resp: 29746

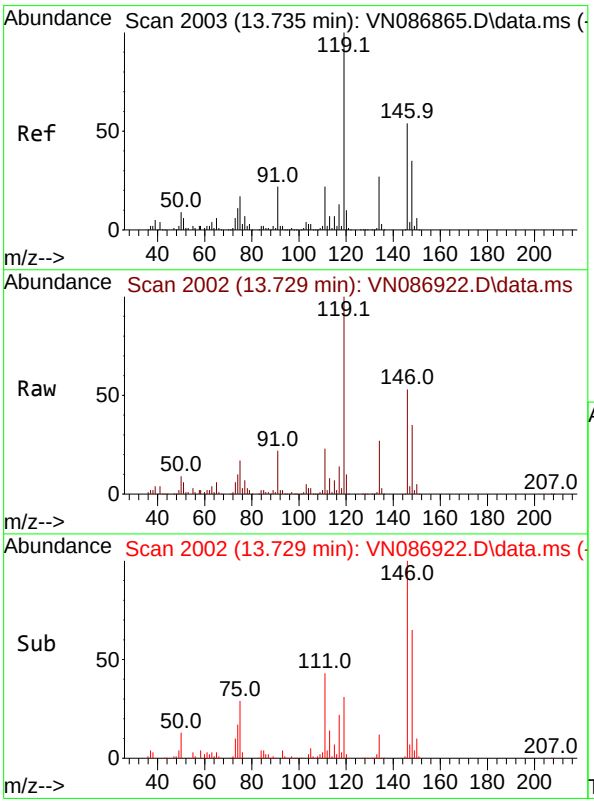
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 26.8 | 13.5 | 40.4 |
| 91 | 22.1 | 11.5 | 34.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

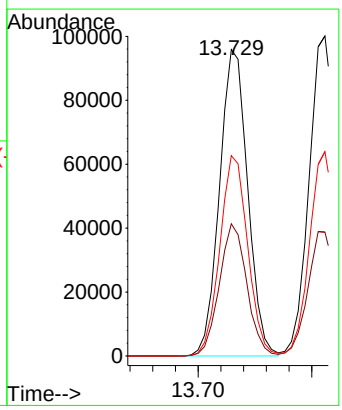


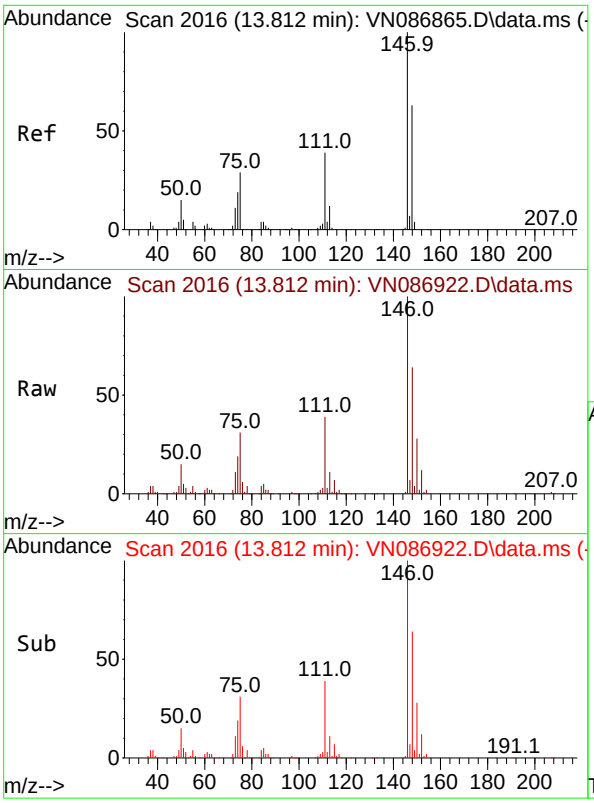




#87
1,3-Dichlorobenzene
Concen: 37.892 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. -0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion:146 Resp: 165194

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.1 | 20.9 | 62.8 |
| 148 | 64.7 | 32.0 | 96.2 |






#88
1,4-Dichlorobenzene
Concen: 38.850 ug/l
RT: 13.812 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

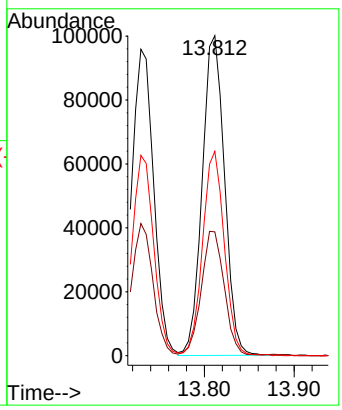
Tgt Ion:146 Resp: 17267

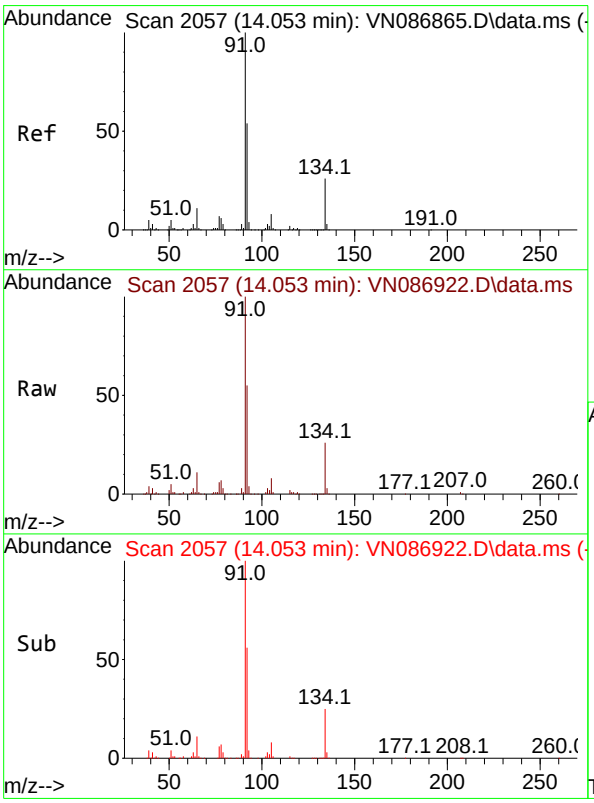
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 39.5 | 19.9 | 59.7 |
| 148 | 62.6 | 31.8 | 95.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

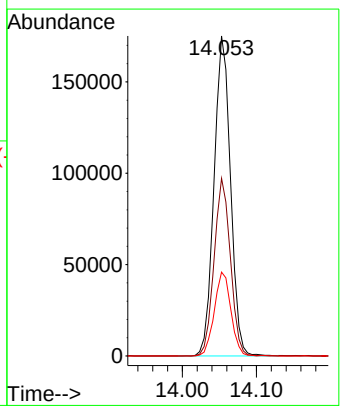


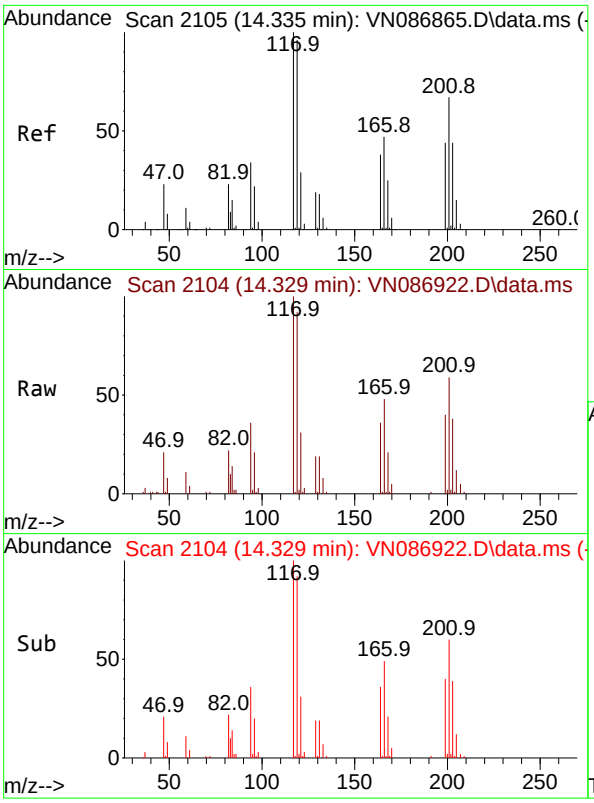




#89
n-Butylbenzene
Concen: 31.824 ug/l
RT: 14.053 min Scan# 2057
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion: 91 Resp: 270209

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 54.9 | 27.5 | 82.4 |
| 134 | 26.4 | 13.0 | 39.0 |






#90
Hexachloroethane
Concen: 35.562 ug/l
RT: 14.329 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

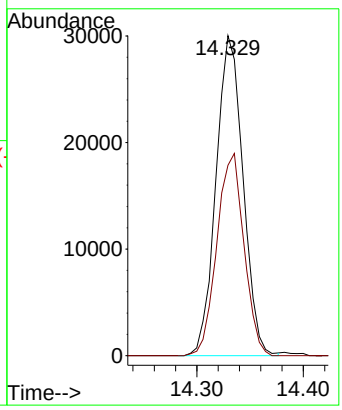
Tgt Ion:117 Resp: 5284

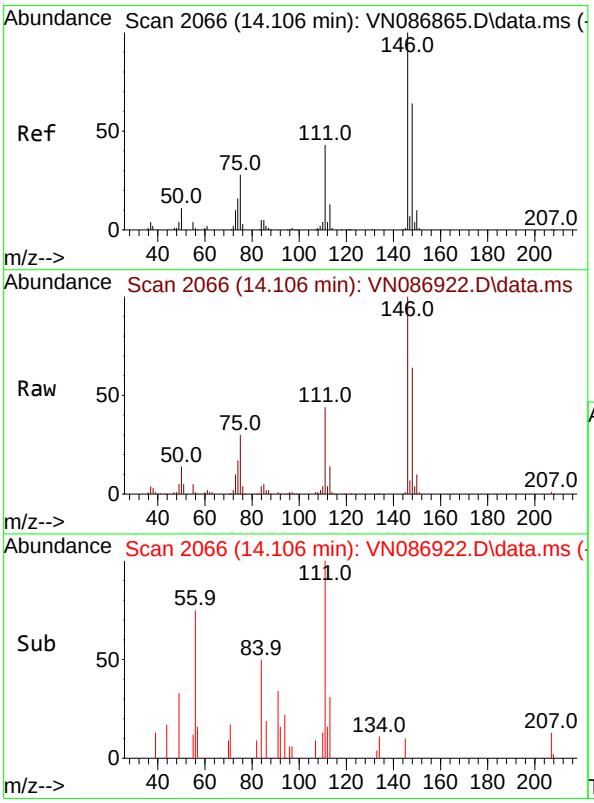
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 63.3 | 33.2 | 99.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

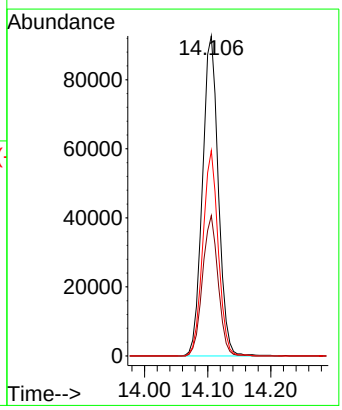


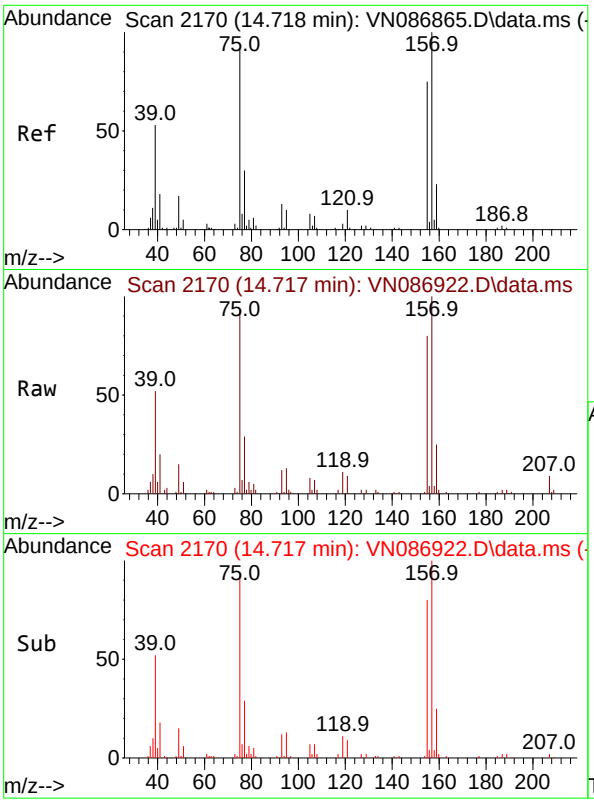




#91
1,2-Dichlorobenzene
Concen: 38.647 ug/l
RT: 14.106 min Scan# 2066
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion:146 Resp: 161871

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.0 | 21.6 | 64.6 |
| 148 | 62.1 | 31.7 | 95.1 |






#92
1,2-Dibromo-3-Chloropropane
Concen: 36.108 ug/l
RT: 14.717 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

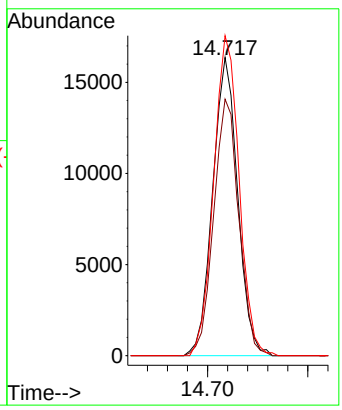
Tgt Ion: 75 Resp: 2826

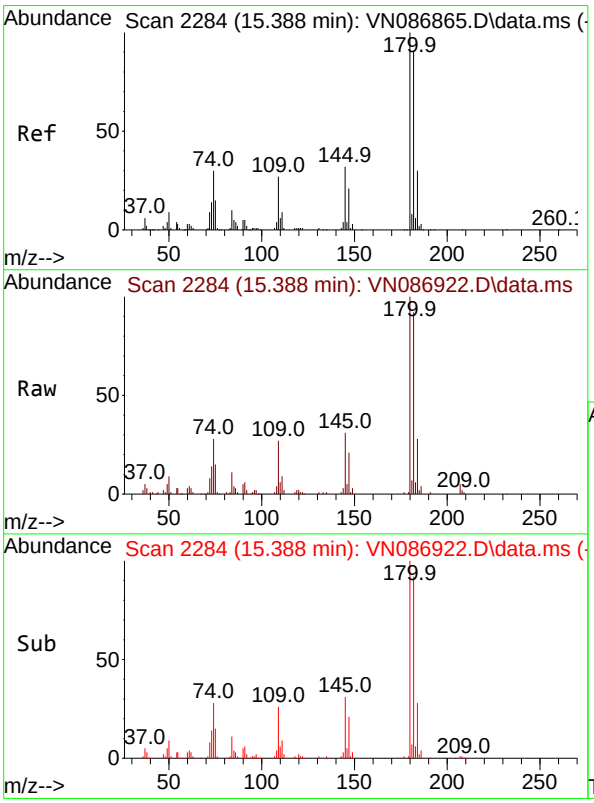
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 86.6 | 41.1 | 123.4 |
| 157 | 108.9 | 52.7 | 158.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

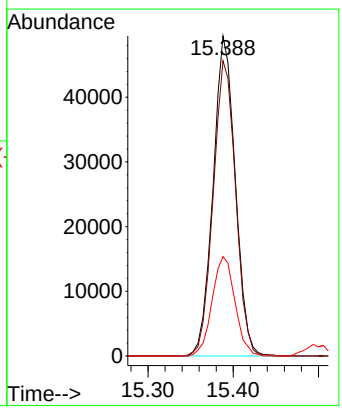


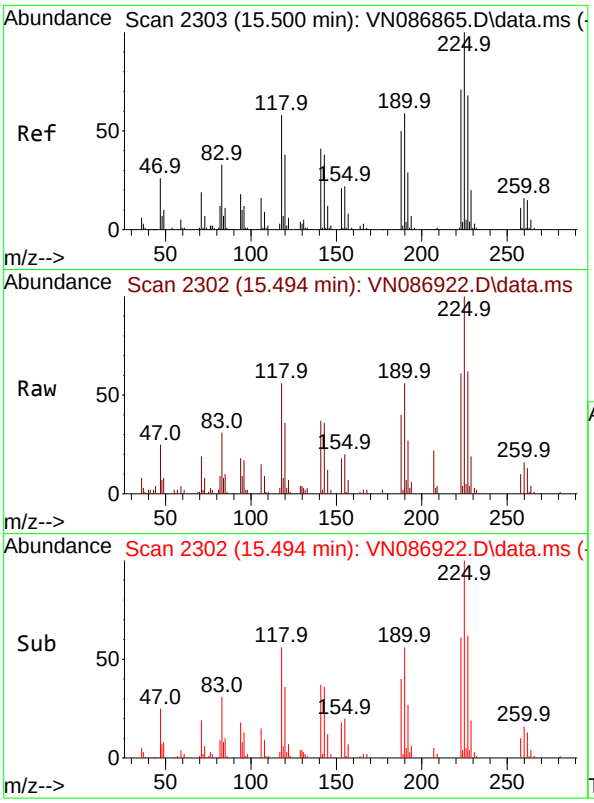




#93
1,2,4-Trichlorobenzene
Concen: 33.503 ug/l
RT: 15.388 min Scan# 2284
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion:180 Resp: 89607

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 93.1 | 46.9 | 140.7 |
| 145 | 32.0 | 16.0 | 47.9 |

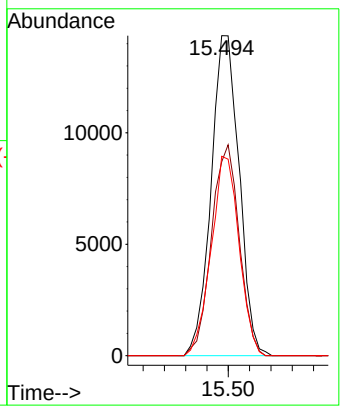





#94
Hexachlorobutadiene
Concen: 26.343 ug/l
RT: 15.494 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion:225 Resp: 2625

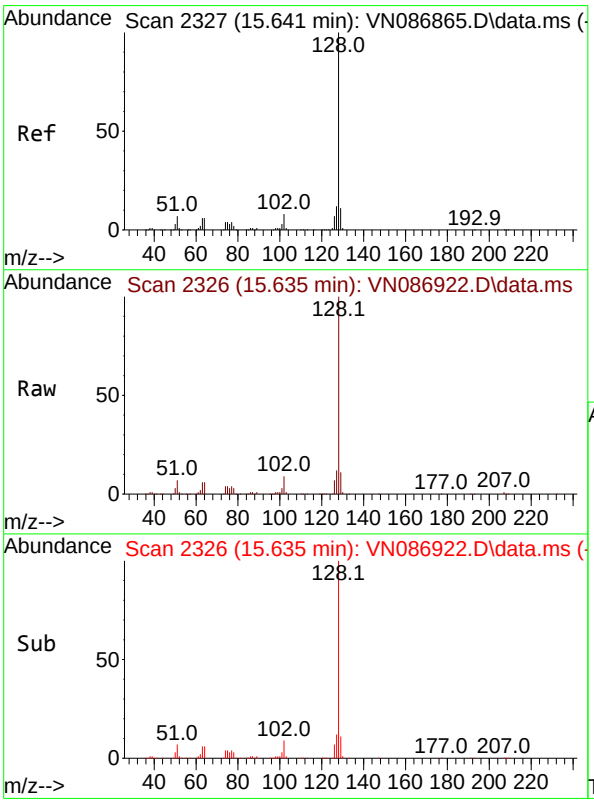
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 65.2 | 33.5 | 100.4 |
| 227 | 62.1 | 31.1 | 93.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
**APPROVED**

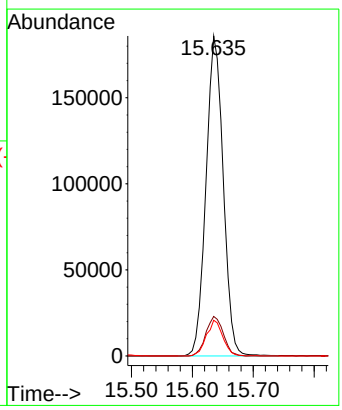
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

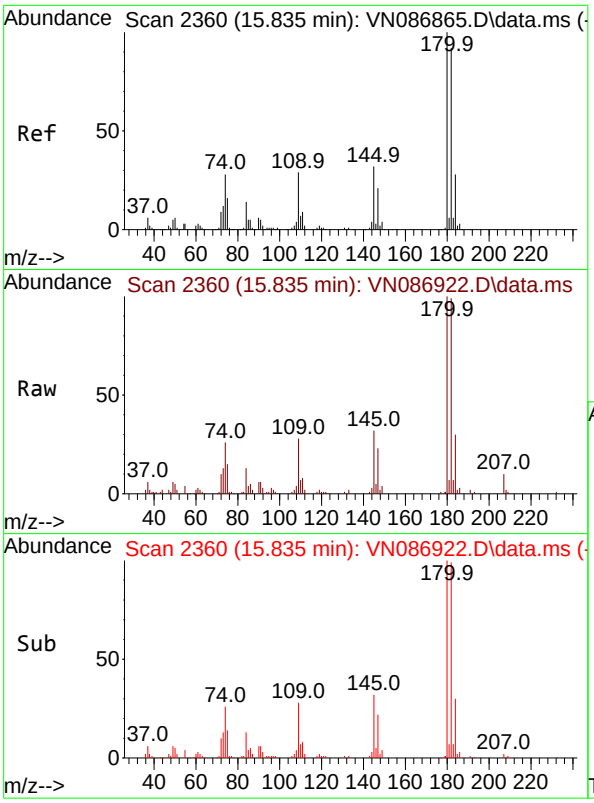



#95
Naphthalene
Concen: 36.684 ug/l
RT: 15.635 min Scan# 2326
Delta R.T. -0.006 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion:128 Resp: 365200

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.5 | 10.2 | 15.2 |
| 129 | 10.6 | 8.8 | 13.2 |

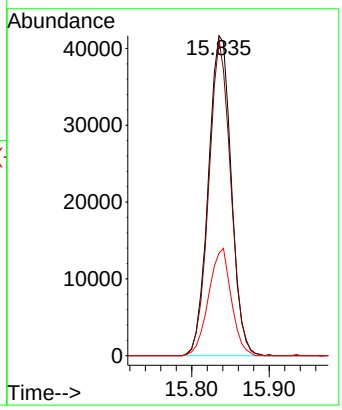





#96
1,2,3-Trichlorobenzene
Concen: 32.053 ug/l
RT: 15.835 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086922.D
Acq: 10 Jun 2025 12:51

Tgt Ion:180 Resp: 8517

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 94.7 | 47.0 | 141.0 |
| 145 | 33.4 | 16.6 | 49.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MS

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

Raw Data: **VN086923.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | 06/05/25 |
| Project: | Former Schlumberger STC PTC Site D3868221 | Date Received: | 06/05/25 |
| Client Sample ID: | MW-11A-13.5-060525MSD | SDG No.: | Q2250 |
| Lab Sample ID: | Q2250-03MSD | Matrix: | Water |
| Analytical Method: | 8260D | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group3 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN086923.D | 1 | | 06/10/25 13:12 | VN061025 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-01-4 | Vinyl Chloride | 57.2 | | 0.26 | 1.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 53.1 | | 0.23 | 1.00 | ug/L |
| 75-34-3 | 1,1-Dichloroethane | 49.5 | | 0.23 | 1.00 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 2100 | E | 0.19 | 1.00 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 41.4 | | 0.20 | 1.00 | ug/L |
| 71-43-2 | Benzene | 43.0 | | 0.15 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 43.1 | | 0.22 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 3300 | E | 0.090 | 1.00 | ug/L |
| 79-00-5 | 1,1,2-Trichloroethane | 44.5 | | 0.21 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 66.0 | | 0.23 | 1.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 52.7 | | 70 (74) - 130 (125) | 105% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 56.6 | | 70 (75) - 130 (124) | 113% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 54.8 | | 70 (86) - 130 (113) | 110% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 55.3 | | 70 (77) - 130 (121) | 111% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 173000 | 8.23 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 310000 | 9.106 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 267000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 130000 | 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\VN061025\
Data File : VN086923.D
Acq On : 10 Jun 2025 13:12
Operator : JC\MD
Sample : Q2250-03MSD
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 11 01:53:29 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.230 | 168 | 172955 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.106 | 114 | 309901 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 266637 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 129873 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.588 | 65 | 121937 | 52.657 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 105.320% | | | |
| 35) Dibromofluoromethane | 8.177 | 113 | 103950 | 56.601 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 113.200% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 398352 | 54.791 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 109.580% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 149297 | 55.271 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 110.540% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.154 | 85 | 73929 | 42.871 | ug/l | 99 |
| 3) Chloromethane | 2.395 | 50 | 84867 | 38.111 | ug/l | 97 |
| 4) Vinyl Chloride | 2.554 | 62 | 131440 | 57.220 | ug/l | 98 |
| 5) Bromomethane | 3.001 | 94 | 58237 | 45.304 | ug/l | 96 |
| 6) Chloroethane | 3.159 | 64 | 65054 | 43.843 | ug/l | 99 |
| 7) Trichlorofluoromethane | 3.530 | 101 | 127412 | 42.453 | ug/l | 99 |
| 8) Diethyl Ether | 3.989 | 74 | 57896 | 44.275 | ug/l | 94 |
| 9) 1,1,2-Trichlorotrifluo... | 4.401 | 101 | 438614 | 232.614 | ug/l | 99 |
| 10) Methyl Iodide | 4.618 | 142 | 90414 | 36.989 | ug/l | 97 |
| 11) Tert butyl alcohol | 5.536 | 59 | 118532 | 188.644 | ug/l | 99 |
| 12) 1,1-Dichloroethene | 4.371 | 96 | 102158 | 53.068 | ug/l | 93 |
| 13) Acrolein | 4.195 | 56 | 33620 | 169.038 | ug/l | 100 |
| 14) Allyl chloride | 5.053 | 41 | 127951 | 40.078 | ug/l | 96 |
| 15) Acrylonitrile | 5.736 | 53 | 308878 | 210.315 | ug/l | 100 |
| 16) Acetone | 4.442 | 43 | 233959 | 190.517 | ug/l | 98 |
| 17) Carbon Disulfide | 4.742 | 76 | 217837 | 40.910 | ug/l | 100 |
| 18) Methyl Acetate | 5.048 | 43 | 144814 | 40.466 | ug/l | 99 |
| 19) Methyl tert-butyl Ether | 5.812 | 73 | 300398 | 43.098 | ug/l | 99 |
| 20) Methylene Chloride | 5.300 | 84 | 95461 | 41.521 | ug/l | 96 |
| 21) trans-1,2-Dichloroethene | 5.812 | 96 | 108472 | 50.646 | ug/l | 95 |
| 22) Diisopropyl ether | 6.689 | 45 | 277373 | 41.216 | ug/l | 97 |
| 23) Vinyl Acetate | 6.618 | 43 | 1159679 | 203.959 | ug/l | 100 |
| 24) 1,1-Dichloroethane | 6.589 | 63 | 191588 | 49.470 | ug/l | 98 |
| 25) 2-Butanone | 7.494 | 43 | 391789 | 196.276 | ug/l # | 80 |
| 26) 2,2-Dichloropropane | 7.506 | 77 | 139381 | 46.267 | ug/l # | 1 |
| 27) cis-1,2-Dichloroethene | 7.500 | 96 | 5451059 | 2128.127 | ug/l | 90 |
| 28) Bromochloromethane | 7.824 | 49 | 74118 | 38.924 | ug/l | 97 |
| 29) Tetrahydrofuran | 7.847 | 42 | 263616 | 202.731 | ug/l | 96 |
| 30) Chloroform | 7.977 | 83 | 162638 | 42.052 | ug/l | 97 |
| 31) Cyclohexane | 8.265 | 56 | 133904 | 35.653 | ug/l | 98 |
| 32) 1,1,1-Trichloroethane | 8.177 | 97 | 136050 | 41.359 | ug/l | 99 |
| 36) 1,1-Dichloropropene | 8.377 | 75 | 117527 | 42.946 | ug/l | 99 |
| 37) Ethyl Acetate | 7.571 | 43 | 139485 | 40.039 | ug/l # | 79 |
| 38) Carbon Tetrachloride | 8.371 | 117 | 113739 | 42.334 | ug/l | 97 |
| 39) Methylcyclohexane | 9.606 | 83 | 133181 | 35.522 | ug/l | 97 |
| 40) Benzene | 8.612 | 78 | 385021 | 43.024 | ug/l | 99 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061025\
Data File : VN086923.D
Acq On : 10 Jun 2025 13:12
Operator : JC\MD
Sample : Q2250-03MSD
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 11 01:53:29 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.789 | 41 | 82542 | 42.189 | ug/l | | 97 |
| 42) 1,2-Dichloroethane | 8.677 | 62 | 116885 | 43.063 | ug/l | | 100 |
| 43) Isopropyl Acetate | 8.694 | 43 | 222284 | 39.754 | ug/l | | 96 |
| 44) Trichloroethene | 9.359 | 130 | 6931651 | 3266.653 | ug/l | | 99 |
| 45) 1,2-Dichloropropane | 9.624 | 63 | 92441 | 42.460 | ug/l | | 99 |
| 46) Dibromomethane | 9.712 | 93 | 64838 | 44.837 | ug/l | | 99 |
| 47) Bromodichloromethane | 9.888 | 83 | 126533 | 42.528 | ug/l | | 100 |
| 48) Methyl methacrylate | 9.682 | 41 | 101839 | 39.572 | ug/l | | 95 |
| 49) 1,4-Dioxane | 9.700 | 88 | 40909 | 873.782 | ug/l | # | 99 |
| 51) 4-Methyl-2-Pentanone | 10.447 | 43 | 702657 | 208.746 | ug/l | | 99 |
| 52) Toluene | 10.630 | 92 | 233021 | 42.608 | ug/l | | 99 |
| 53) t-1,3-Dichloropropene | 10.835 | 75 | 146110 | 43.917 | ug/l | | 97 |
| 54) cis-1,3-Dichloropropene | 10.312 | 75 | 154243 | 43.329 | ug/l | | 97 |
| 55) 1,1,2-Trichloroethane | 11.018 | 97 | 93633 | 44.495 | ug/l | | 99 |
| 56) Ethyl methacrylate | 10.877 | 69 | 153861 | 45.905 | ug/l | | 95 |
| 57) 1,3-Dichloropropane | 11.165 | 76 | 155775 | 42.673 | ug/l | | 97 |
| 59) 2-Hexanone | 11.200 | 43 | 455196 | 209.941 | ug/l | | 95 |
| 60) Dibromochloromethane | 11.359 | 129 | 99583 | 45.420 | ug/l | | 99 |
| 61) 1,2-Dibromoethane | 11.471 | 107 | 92981 | 43.108 | ug/l | | 99 |
| 64) Tetrachloroethene | 11.106 | 164 | 111429 | 66.034 | ug/l | | 95 |
| 65) Chlorobenzene | 11.894 | 112 | 259599 | 44.144 | ug/l | | 100 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 84686 | 44.799 | ug/l | | 99 |
| 67) Ethyl Benzene | 11.965 | 91 | 427727 | 42.226 | ug/l | | 99 |
| 68) m/p-Xylenes | 12.071 | 106 | 333950 | 86.123 | ug/l | | 98 |
| 69) o-Xylene | 12.400 | 106 | 162838 | 43.848 | ug/l | | 97 |
| 70) Styrene | 12.412 | 104 | 282053 | 44.384 | ug/l | | 99 |
| 71) Bromoform | 12.576 | 173 | 65807 | 46.983 | ug/l | # | 99 |
| 73) Isopropylbenzene | 12.694 | 105 | 394852 | 41.733 | ug/l | | 100 |
| 74) N-amyl acetate | 12.518 | 43 | 143729 | 43.473 | ug/l | | 96 |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 144127 | 44.965 | ug/l | | 99 |
| 76) 1,2,3-Trichloropropane | 12.994 | 75 | 118377m | 38.345 | ug/l | | |
| 77) Bromobenzene | 12.976 | 156 | 99031 | 45.640 | ug/l | | 98 |
| 78) n-propylbenzene | 13.035 | 91 | 464253 | 40.377 | ug/l | | 98 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 289730 | 42.017 | ug/l | | 98 |
| 80) 1,3,5-Trimethylbenzene | 13.171 | 105 | 321135 | 41.111 | ug/l | | 99 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 62181 | 46.366 | ug/l | | 98 |
| 82) 4-Chlorotoluene | 13.218 | 91 | 298311 | 42.756 | ug/l | | 99 |
| 83) tert-Butylbenzene | 13.435 | 119 | 273596 | 38.263 | ug/l | | 99 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 326290 | 41.655 | ug/l | | 100 |
| 85) sec-Butylbenzene | 13.612 | 105 | 394374 | 37.979 | ug/l | | 99 |
| 86) p-Isopropyltoluene | 13.729 | 119 | 332552 | 38.742 | ug/l | | 99 |
| 87) 1,3-Dichlorobenzene | 13.729 | 146 | 184900 | 43.312 | ug/l | | 99 |
| 88) 1,4-Dichlorobenzene | 13.812 | 146 | 191420 | 43.980 | ug/l | | 99 |
| 89) n-Butylbenzene | 14.053 | 91 | 302661 | 36.403 | ug/l | | 99 |
| 90) Hexachloroethane | 14.335 | 117 | 57752 | 39.692 | ug/l | | 98 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 177603 | 43.302 | ug/l | | 100 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75 | 31210 | 40.715 | ug/l | | 94 |
| 93) 1,2,4-Trichlorobenzene | 15.388 | 180 | 98501 | 37.609 | ug/l | | 98 |
| 94) Hexachlorobutadiene | 15.494 | 225 | 28911 | 29.629 | ug/l | | 98 |
| 95) Naphthalene | 15.635 | 128 | 399267 | 40.957 | ug/l | | 100 |
| 96) 1,2,3-Trichlorobenzene | 15.835 | 180 | 93291 | 35.852 | ug/l | | 98 |

Sample Results: **VN086923.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061025\
Data File : VN086923.D
Acq On : 10 Jun 2025 13:12
Operator : JC\MD
Sample : Q2250-03MSD
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 11 01:53:29 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

| 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\VN061025\
Data File : VN086923.D
Acq On : 10 Jun 2025 13:12
Operator : JC\MD
Sample : Q2250-03MSD
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 11 01:53:29 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060625W.M
Quant Title : SW846 8260
QLast Update : Sat Jun 07 02:12:50 2025
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations APPROVED**

Reviewed By :John Carlone 06/11/2025
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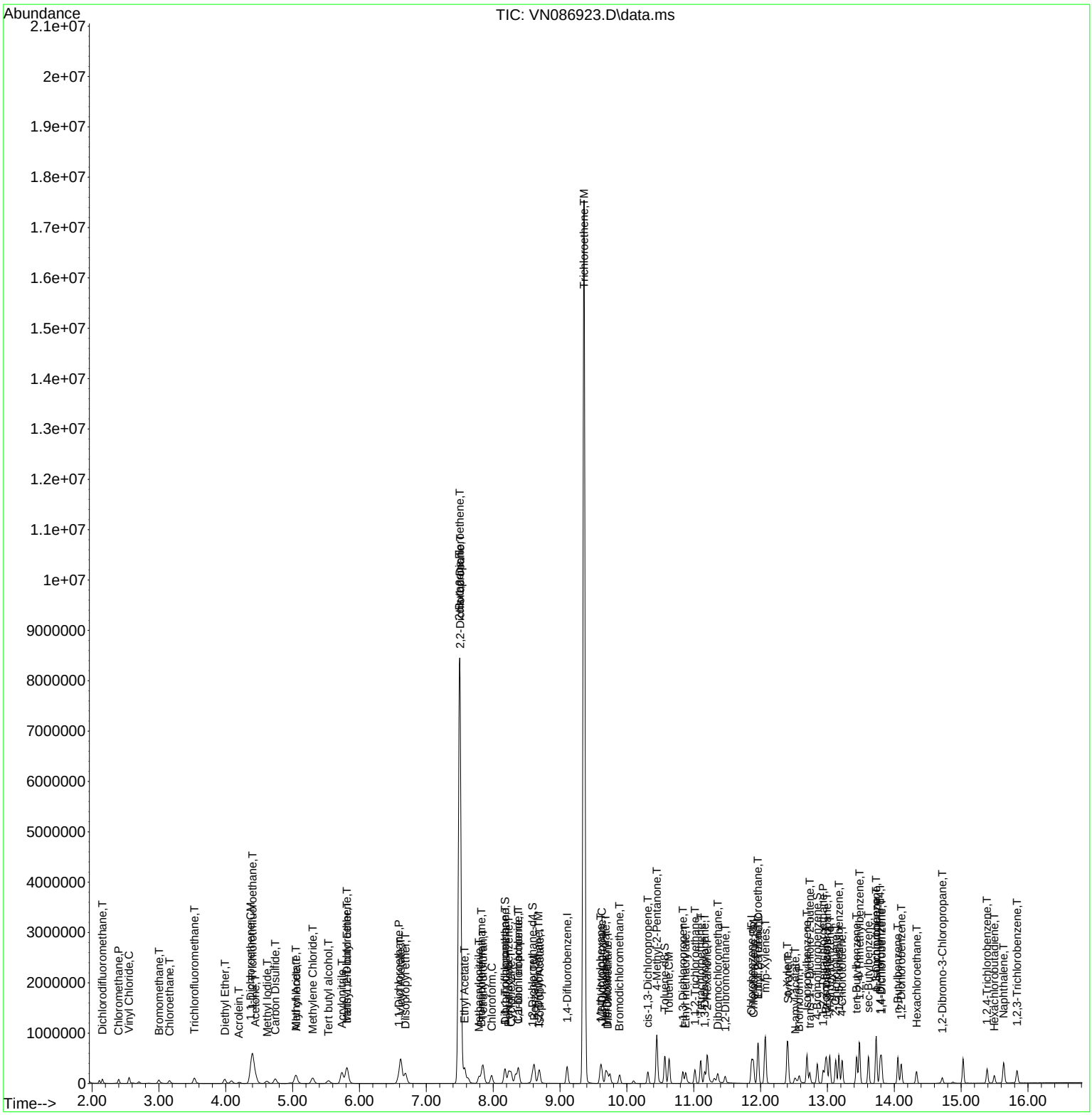
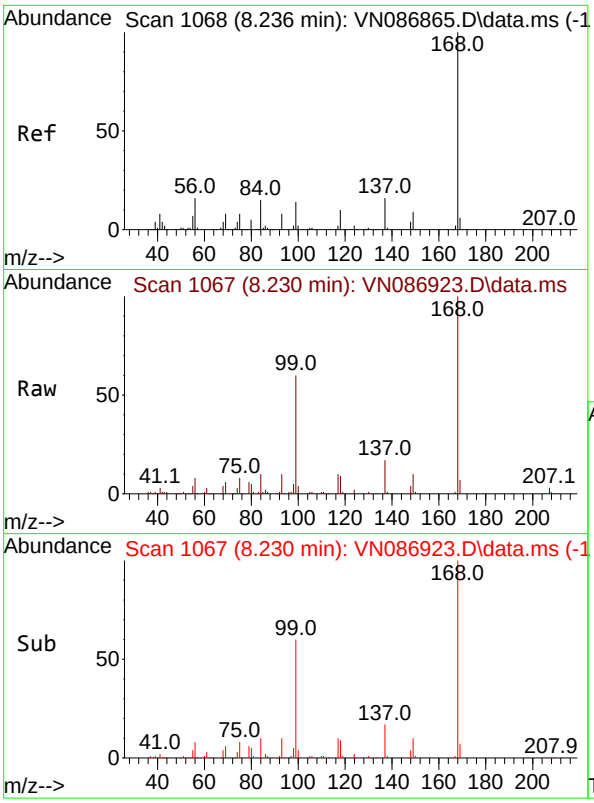
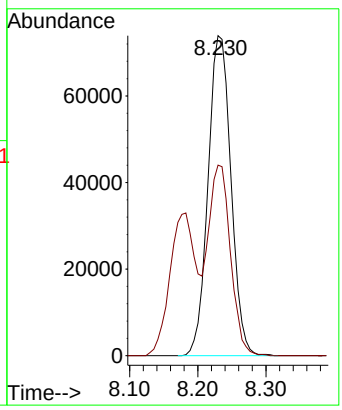





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.230 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion:168 Resp: 17295

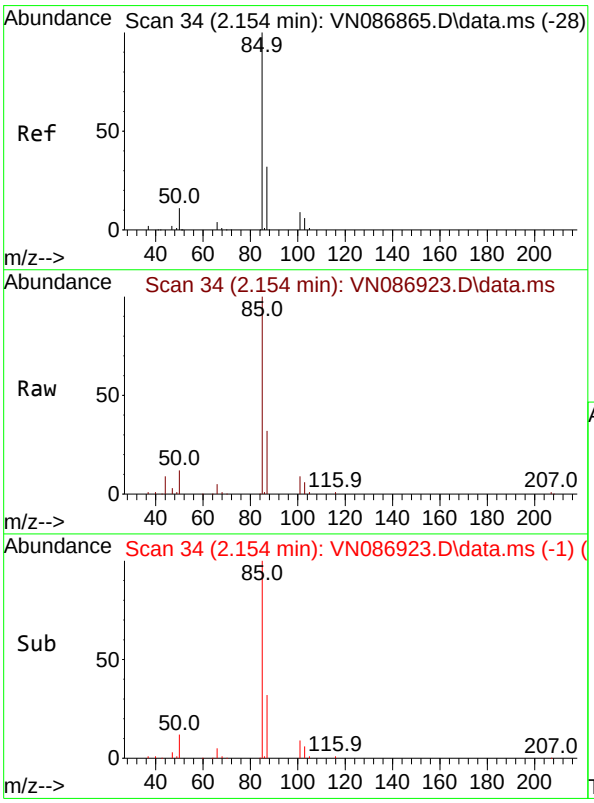
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 59.6 | 49.1 | 73.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
**APPROVED**

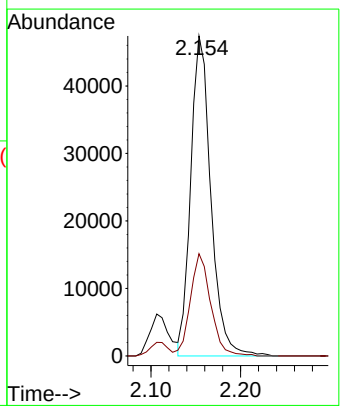
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

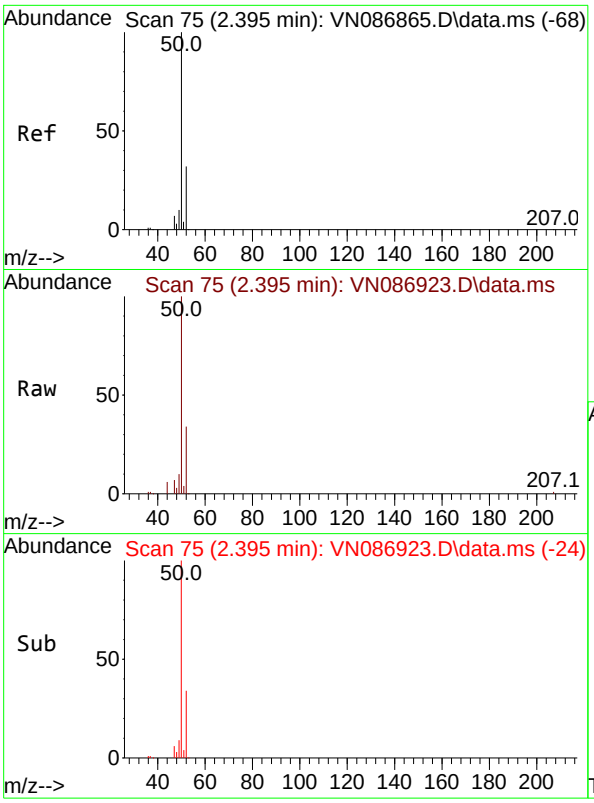



#2
Dichlorodifluoromethane
Concen: 42.871 ug/l
RT: 2.154 min Scan# 34
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 85 Resp: 73929

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 31.9 | 16.2 | 48.6 |






#3
Chloromethane
Concen: 38.111 ug/l
RT: 2.395 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

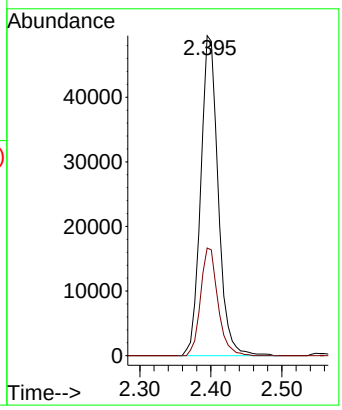
Tgt Ion: 50 Resp: 8486

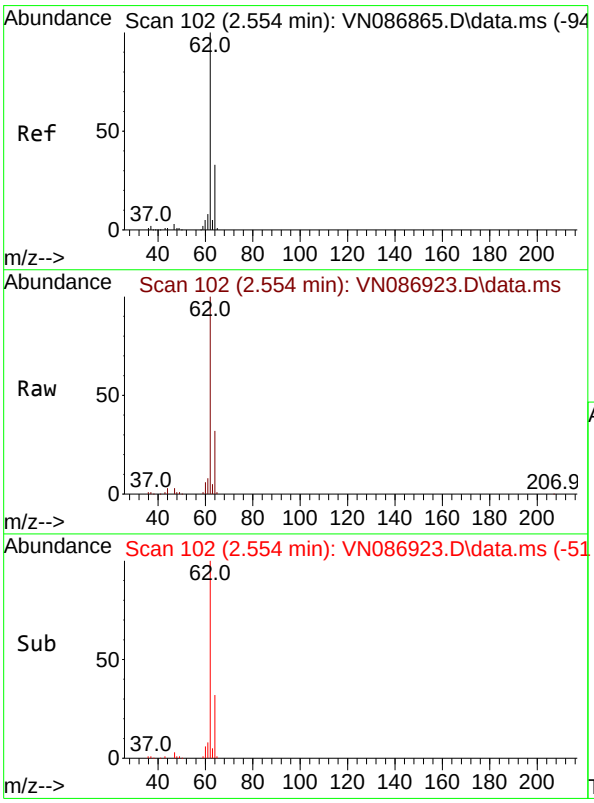
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 33.6 | 25.7 | 38.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

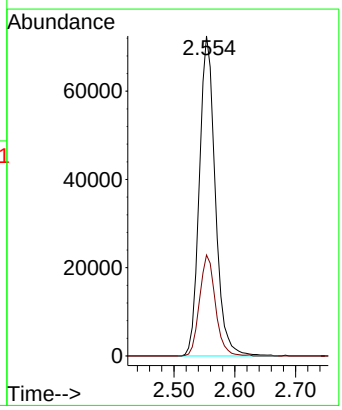


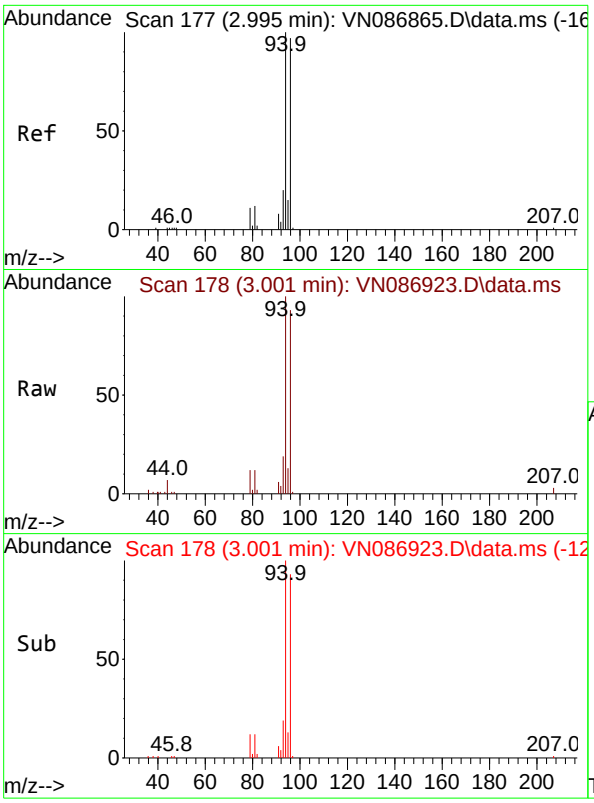




#4
Vinyl Chloride
Concen: 57.220 ug/l
RT: 2.554 min Scan# 102
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 62 Resp: 131440

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 31.5 | 26.0 | 39.0 |

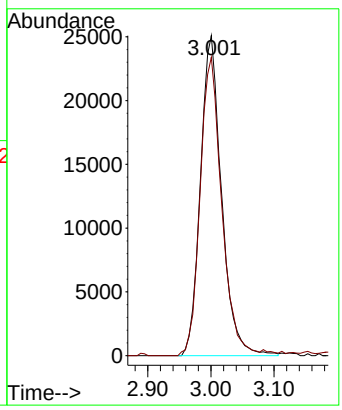





#5
Bromomethane
Concen: 45.304 ug/l
RT: 3.001 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 94 Resp: 5823

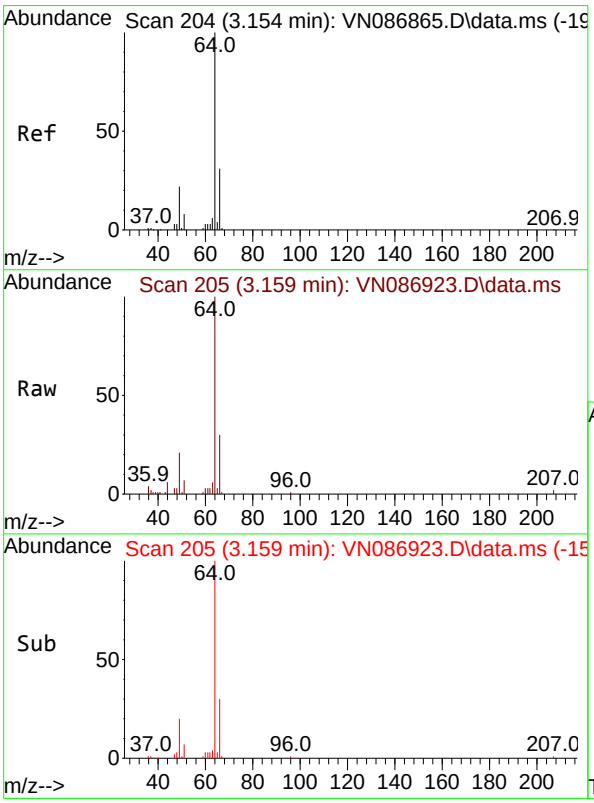
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 93.3 | 77.9 | 116.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
**APPROVED**

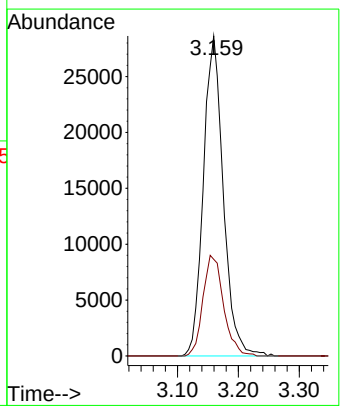
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

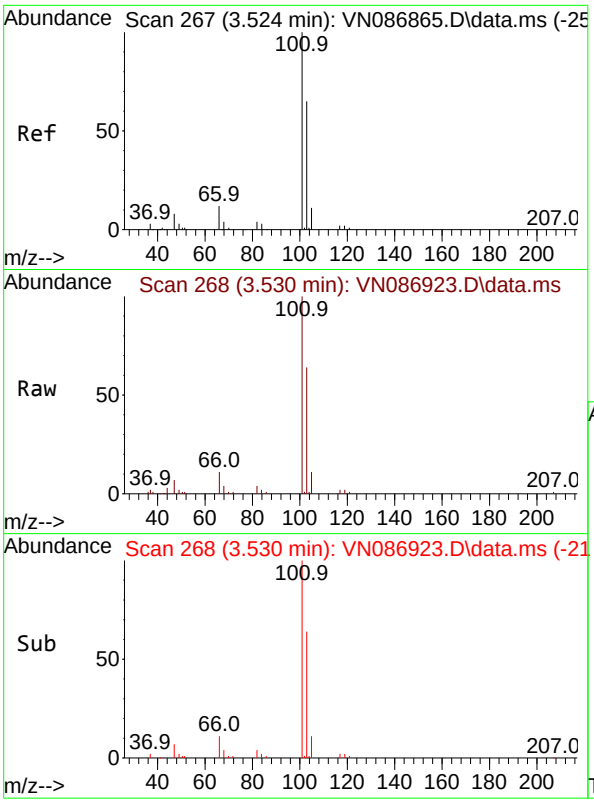



#6
Chloroethane
Concen: 43.843 ug/l
RT: 3.159 min Scan# 205
Delta R.T. 0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 64 Resp: 65054

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 30.2 | 24.6 | 36.8 |






#7
Trichlorofluoromethane
Concen: 42.453 ug/l
RT: 3.530 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

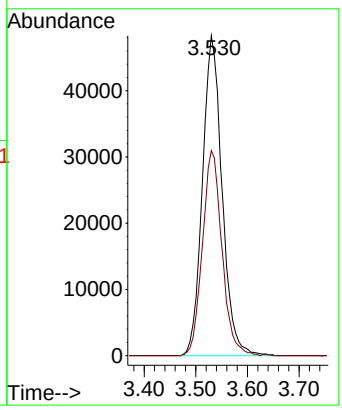
Tgt Ion:101 Resp: 12741

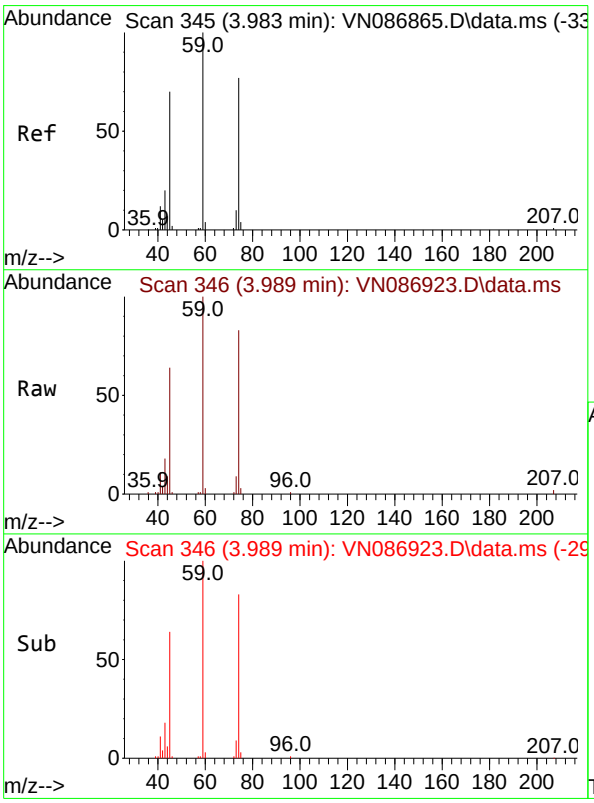
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 64.1 | 52.2 | 78.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

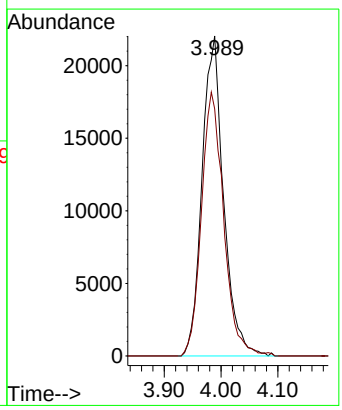


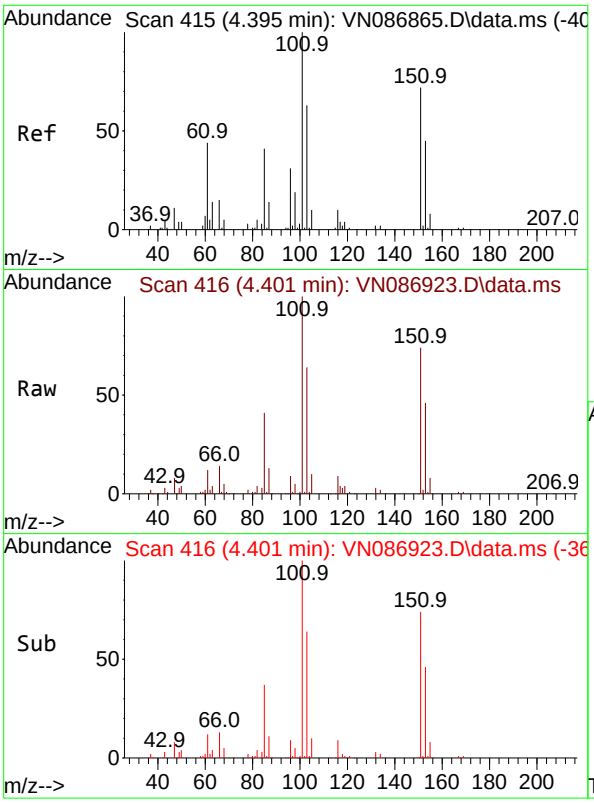




#8
Diethyl Ether
Concen: 44.275 ug/l
RT: 3.989 min Scan# 346
Delta R.T. 0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 74 Resp: 57896

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 85.5 | 45.5 | 136.5 |






#9
1,1,2-Trichlorotrifluoroethane
Concen: 232.614 ug/l
RT: 4.401 min Scan# 4
Delta R.T. 0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

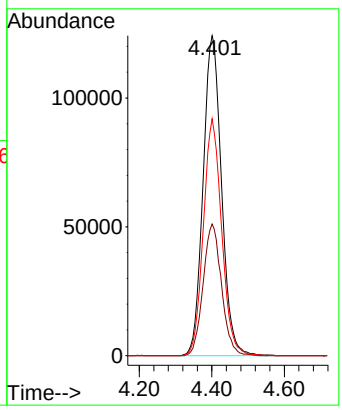
Tgt Ion:101 Resp: 43861

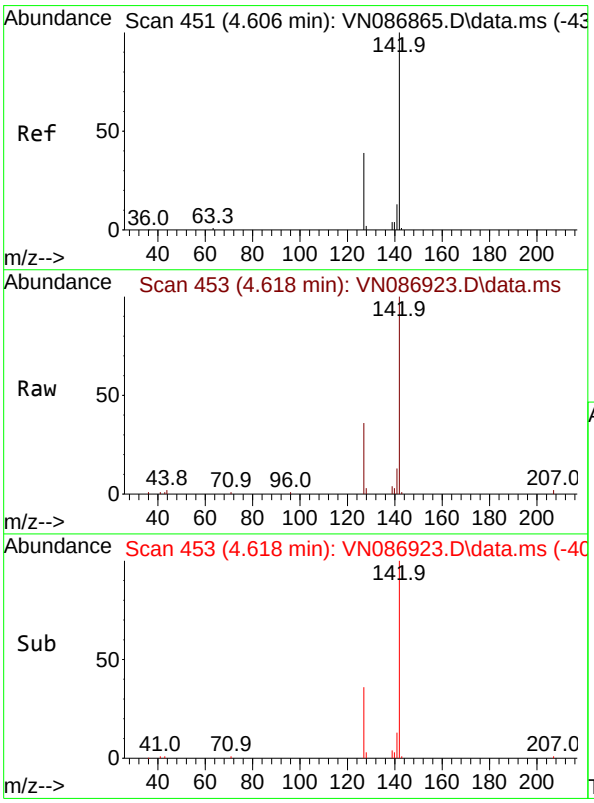
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 41.1 | 33.8 | 50.8 |
| 151 | 73.4 | 58.7 | 88.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

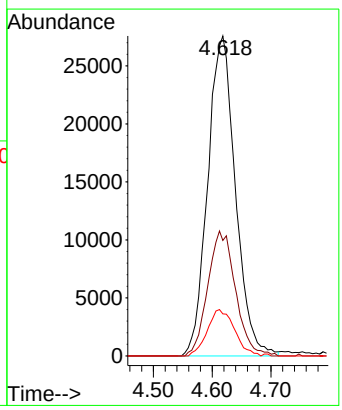


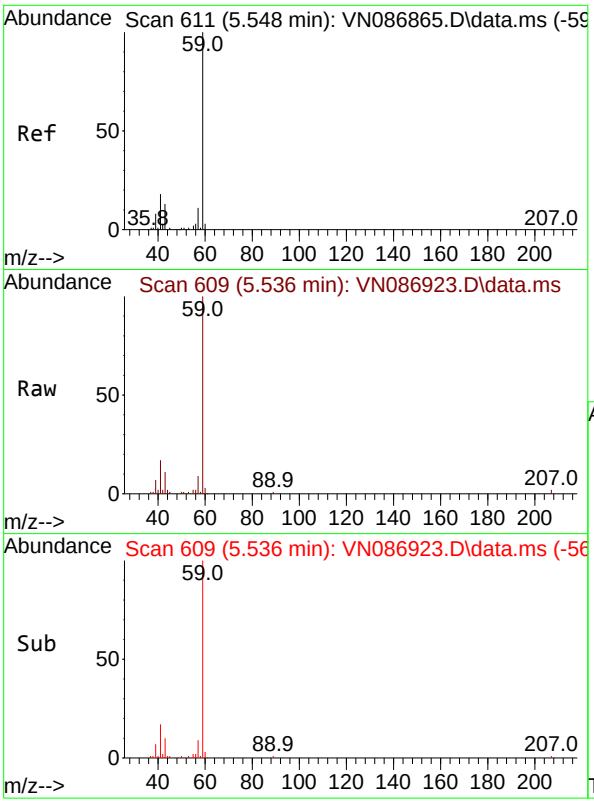




#10
Methyl Iodide
Concen: 36.989 ug/l
RT: 4.618 min Scan# 453
Delta R.T. 0.012 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion:142 Resp: 90414

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 36.1 | 30.9 | 46.3 |
| 141 | 13.1 | 10.4 | 15.6 |






#11
Tert butyl alcohol
Concen: 188.644 ug/l
RT: 5.536 min Scan# 6
Delta R.T. -0.012 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

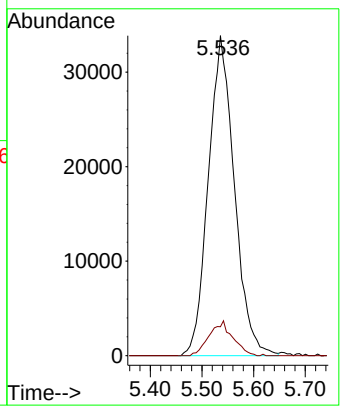
Tgt Ion: 59 Resp: 11853

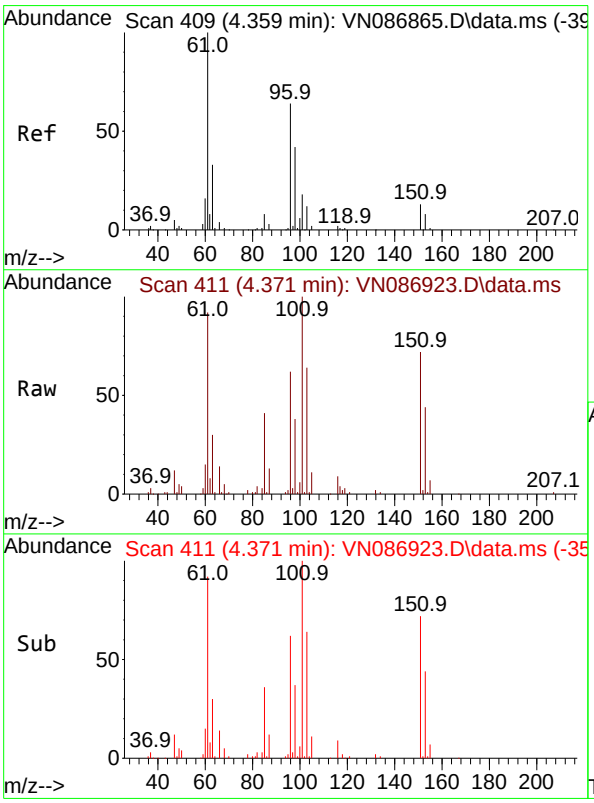
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 9.8 | 8.1 | 12.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

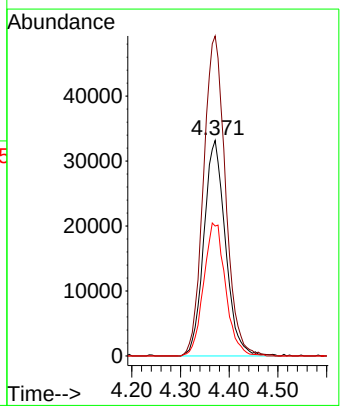


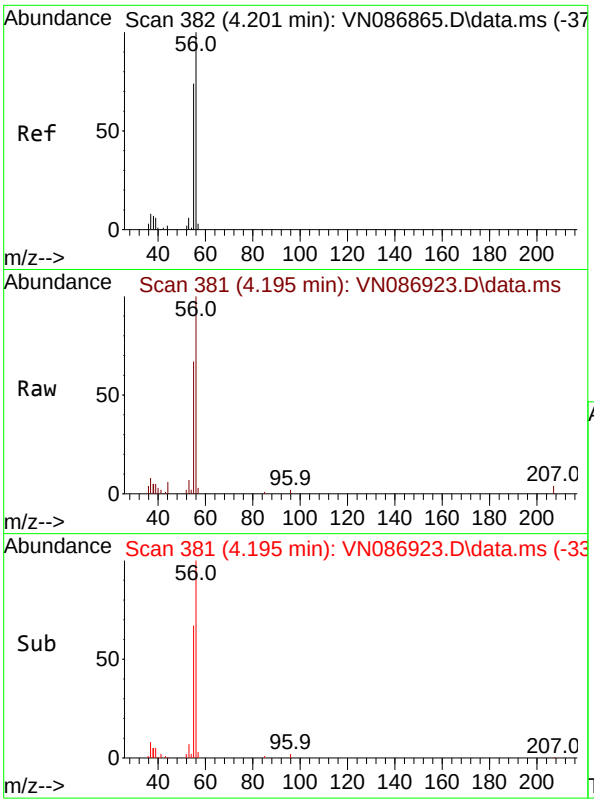




#12
1,1-Dichloroethene
Concen: 53.068 ug/l
RT: 4.371 min Scan# 411
Delta R.T. 0.012 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 96 Resp: 102158

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 148.5 | 125.8 | 188.6 |
| 98 | 60.2 | 52.5 | 78.7 |

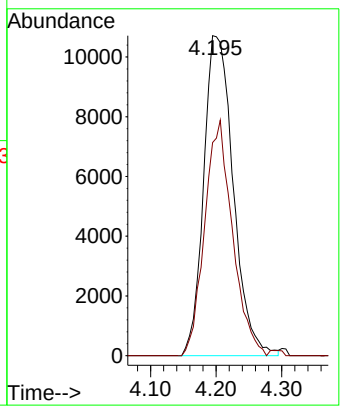





#13
Acrolein
Concen: 169.038 ug/l
RT: 4.195 min Scan# 3
Delta R.T. -0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 56 Resp: 3362

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 69.1 | 55.6 | 83.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
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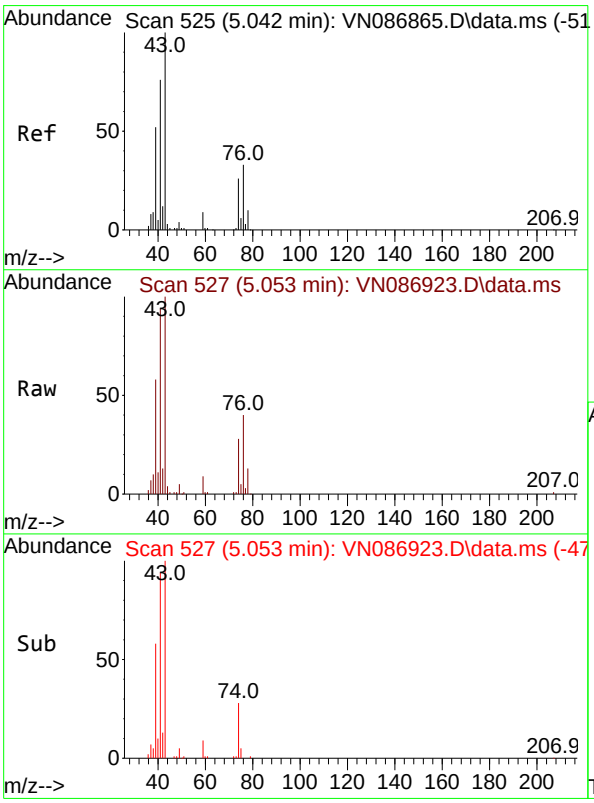
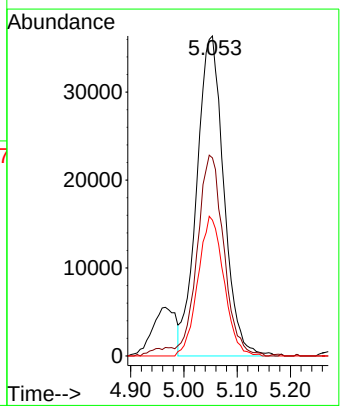
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

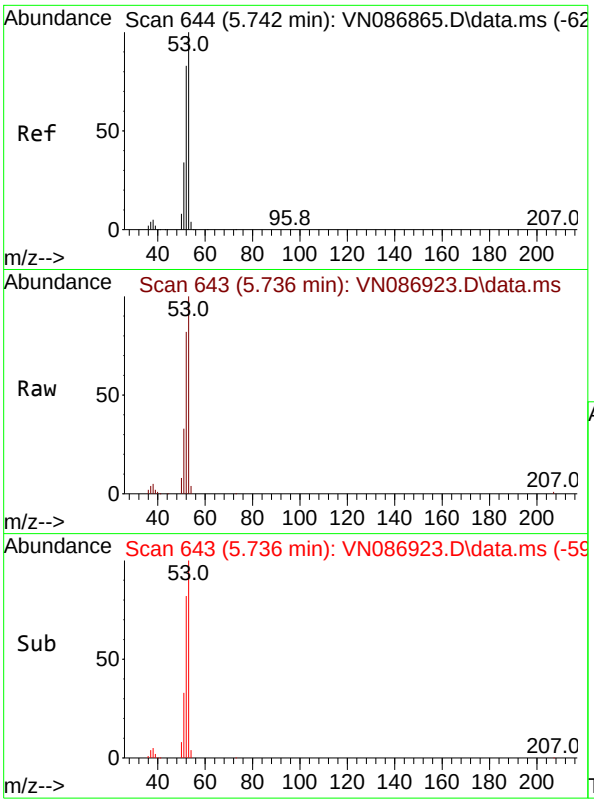



#14
Allyl chloride
Concen: 40.078 ug/l
RT: 5.053 min Scan# 527
Delta R.T. 0.012 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 41 Resp: 127951

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 61.5 | 51.3 | 76.9 |
| 76 | 42.0 | 31.4 | 47.0 |






#15
Acrylonitrile
Concen: 210.315 ug/l
RT: 5.736 min Scan# 64
Delta R.T. -0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 53 Resp: 30887

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 81.0 | 65.0 | 97.6 |
| 51 | 33.8 | 27.2 | 40.8 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
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Reviewed By :John Carlone 06/11/2025
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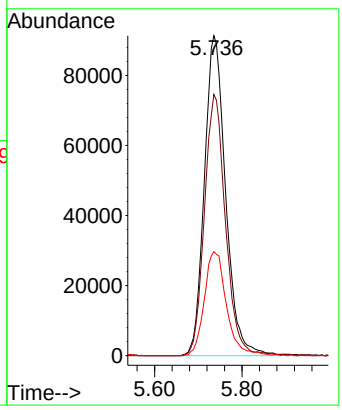
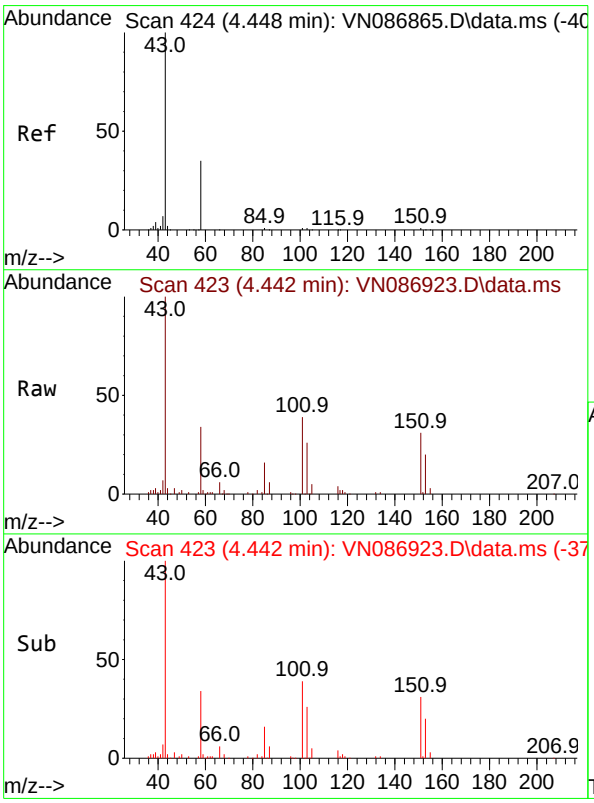
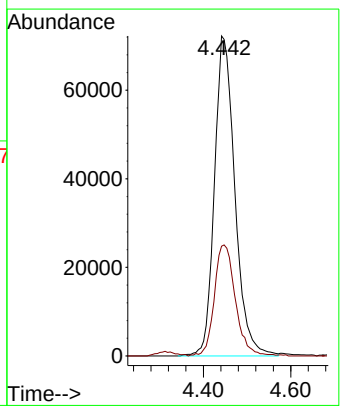


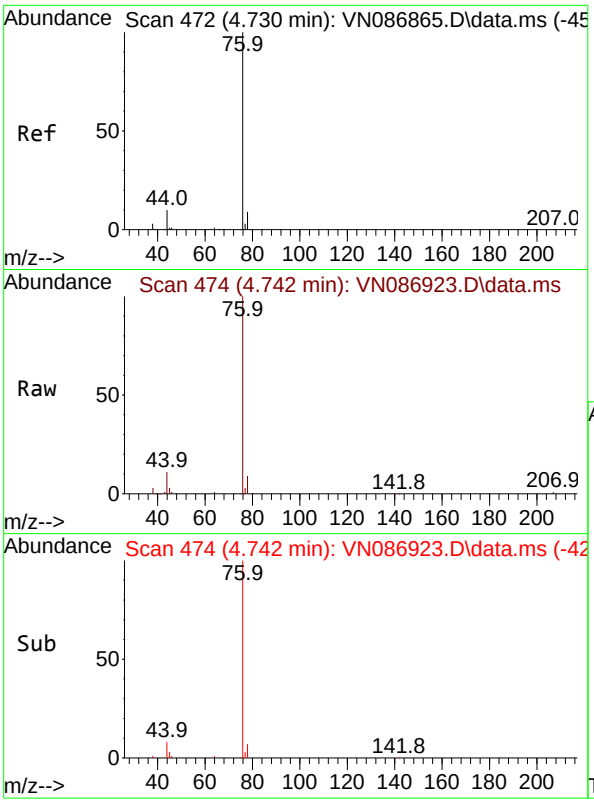




#16
Acetone
Concen: 190.517 ug/l
RT: 4.442 min Scan# 423
Delta R.T. -0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 43 Resp: 233959

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 34.0 | 28.0 | 42.0 |

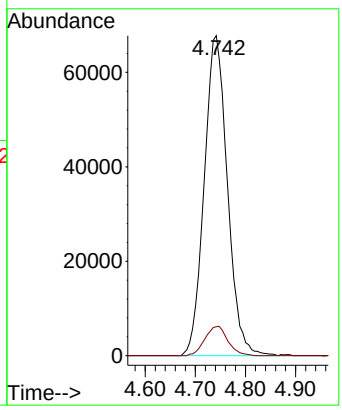





#17
Carbon Disulfide
Concen: 40.910 ug/l
RT: 4.742 min Scan# 4
Delta R.T. 0.012 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 76 Resp: 21783

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.1 | 7.3 | 10.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
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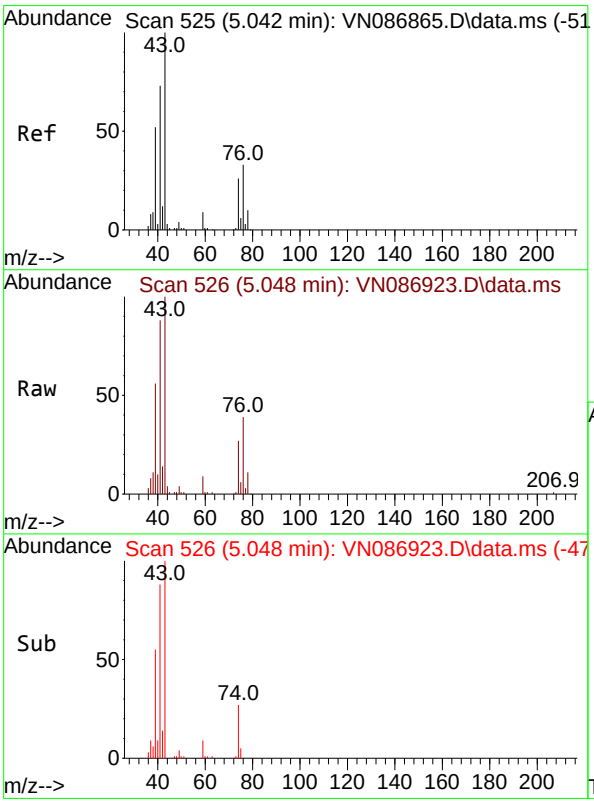
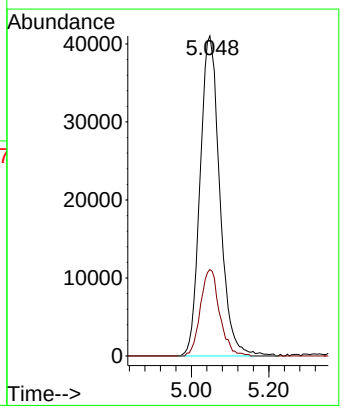
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

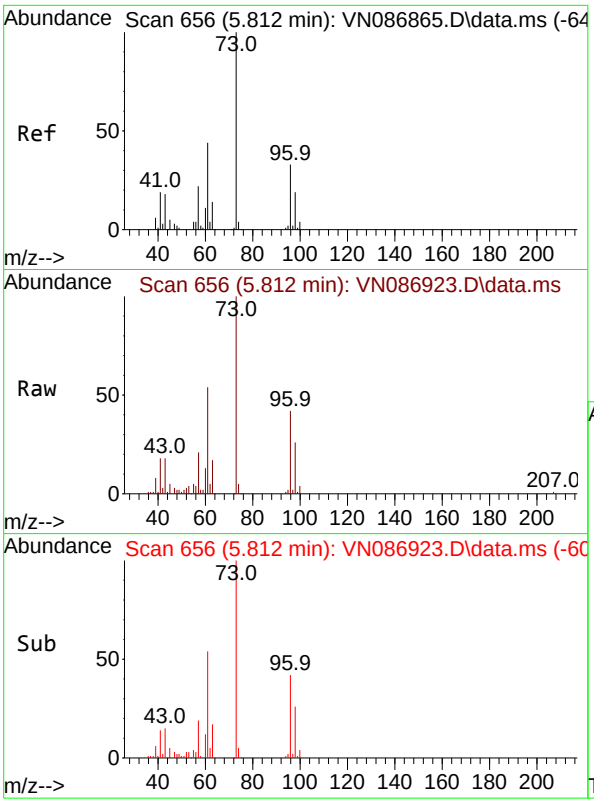



#18
Methyl Acetate
Concen: 40.466 ug/l
RT: 5.048 min Scan# 526
Delta R.T. 0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 43 Resp: 144814

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 26.3 | 20.7 | 31.1 |

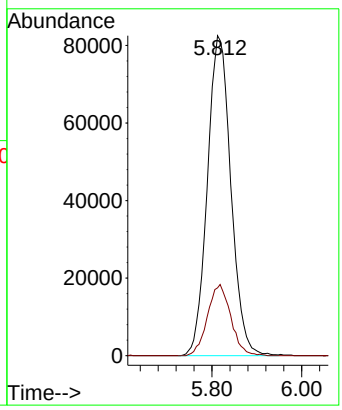





#19
Methyl tert-butyl Ether
Concen: 43.098 ug/l
RT: 5.812 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 73 Resp: 30039

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 21.2 | 17.4 | 26.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
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Reviewed By :John Carlone 06/11/2025
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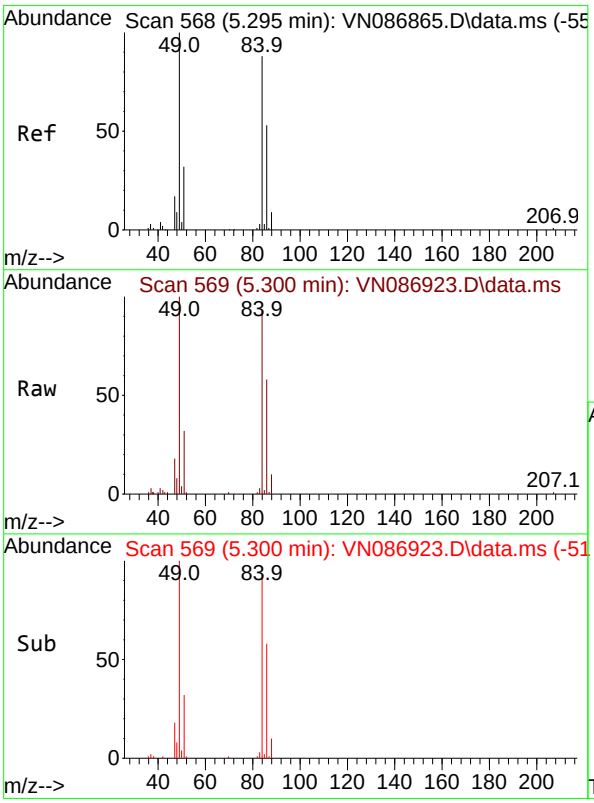
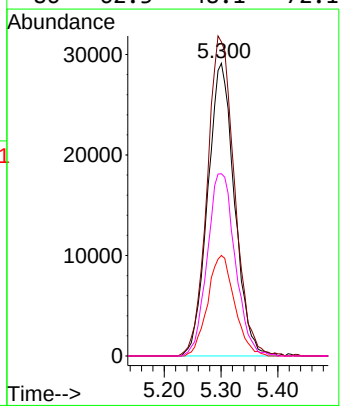
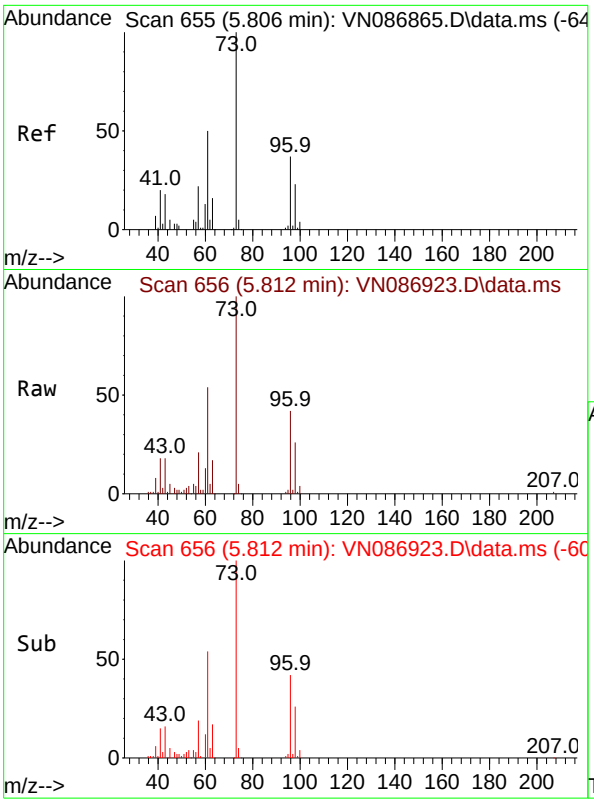



#20
Methylene Chloride
Concen: 41.521 ug/l
RT: 5.300 min Scan# 569
Delta R.T. 0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 84 Resp: 95461

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 107.3 | 90.5 | 135.7 |
| 51 | 34.3 | 28.5 | 42.7 |
| 86 | 62.3 | 48.1 | 72.1 |

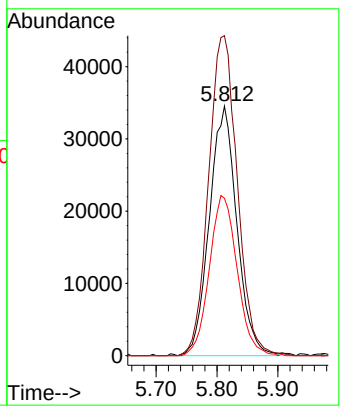





#21
trans-1,2-Dichloroethene
Concen: 50.646 ug/l
RT: 5.812 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 96 Resp: 10847

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 128.2 | 109.2 | 163.8 |
| 98 | 63.1 | 49.8 | 74.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
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Reviewed By :John Carlone 06/11/2025
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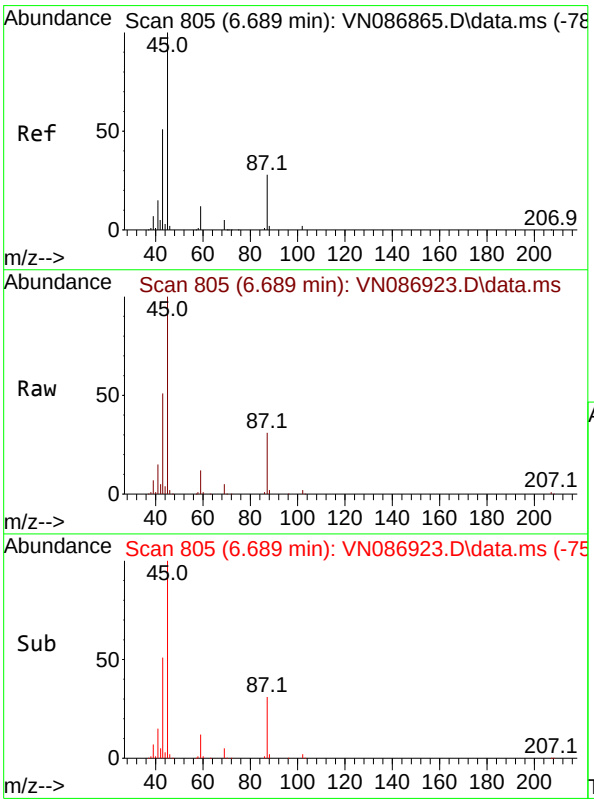
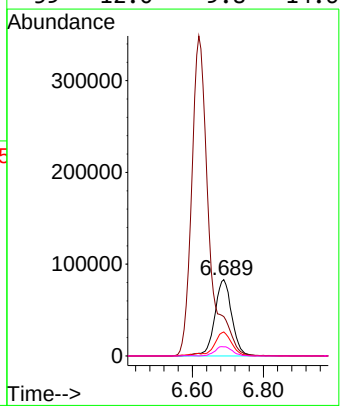
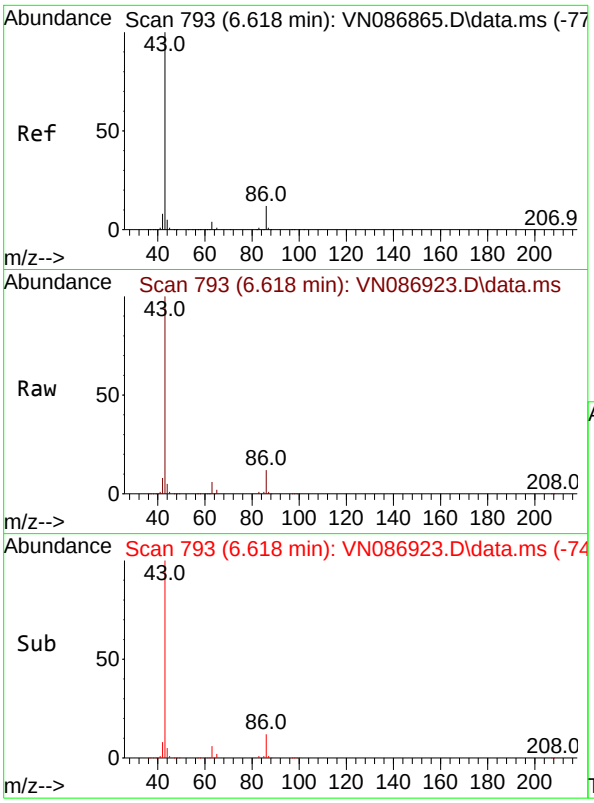



#22
Diisopropyl ether
Concen: 41.216 ug/l
RT: 6.689 min Scan# 805
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 45 Resp: 277373

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 51.1 | 41.9 | 62.9 |
| 87 | 31.4 | 22.4 | 33.6 |
| 59 | 12.0 | 9.8 | 14.6 |






#23
Vinyl Acetate
Concen: 203.959 ug/l
RT: 6.618 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 43 Resp: 115967

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 12.1 | 9.5 | 14.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
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Reviewed By :John Carlone 06/11/2025
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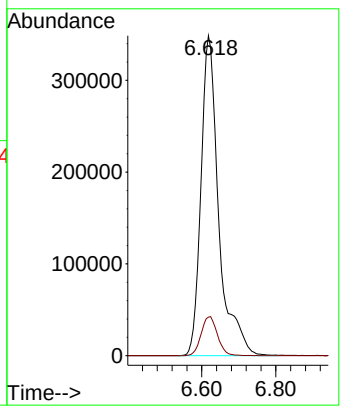
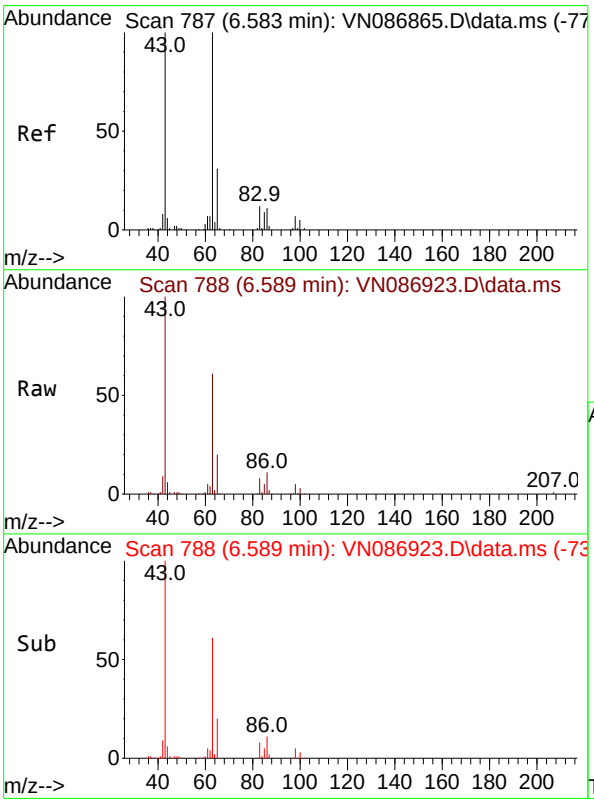
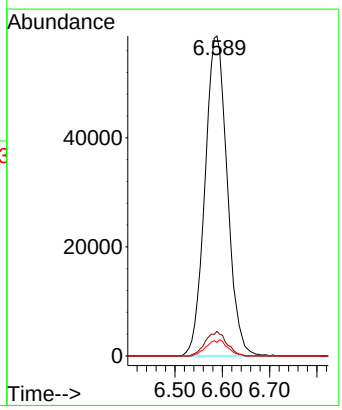


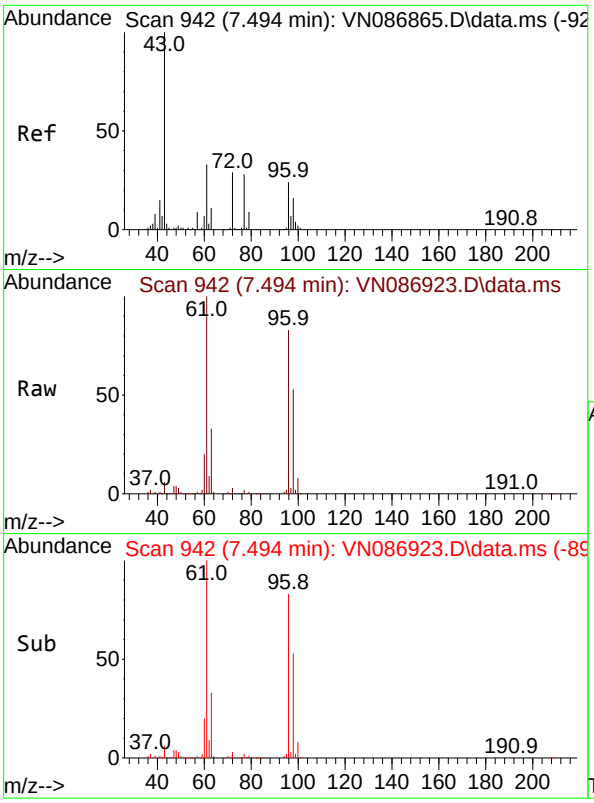




#24
1,1-Dichloroethane
Concen: 49.470 ug/l
RT: 6.589 min Scan# 788
Delta R.T. 0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 63 Resp: 191588

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 7.7 | 3.6 | 10.8 |
| 100 | 4.3 | 2.6 | 7.8 |






#25
2-Butanone
Concen: 196.276 ug/l
RT: 7.494 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 43 Resp: 391789

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 39.4 | 23.0 | 34.6# |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

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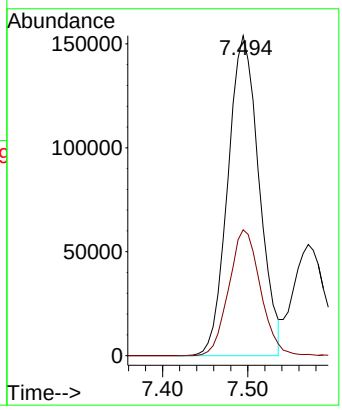
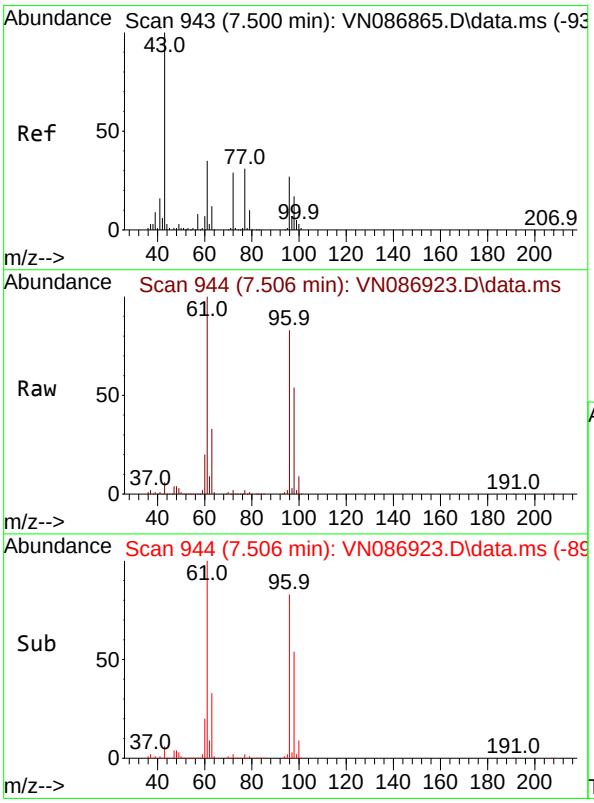
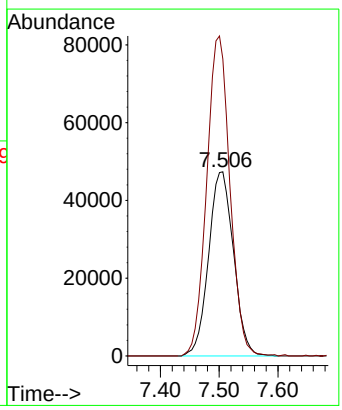


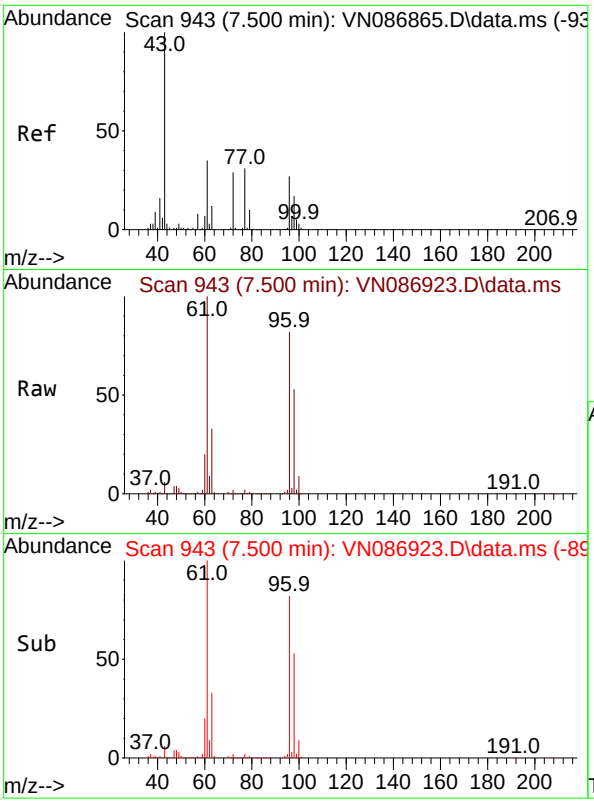




#26
2,2-Dichloropropane
Concen: 46.267 ug/l
RT: 7.506 min Scan# 944
Delta R.T. 0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 77 Resp: 139381

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 162.1 | 11.6 | 34.7# |






#27
cis-1,2-Dichloroethene
Concen: 2128.127 ug/l
RT: 7.500 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 96 Resp: 545105

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 121.6 | 0.0 | 278.0 |
| 98 | 64.4 | 0.0 | 128.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
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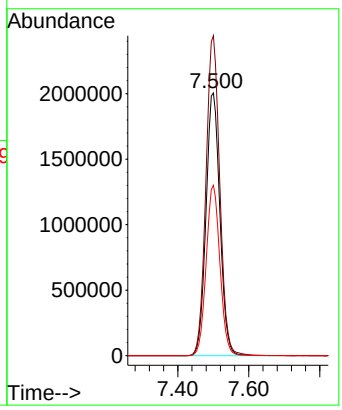
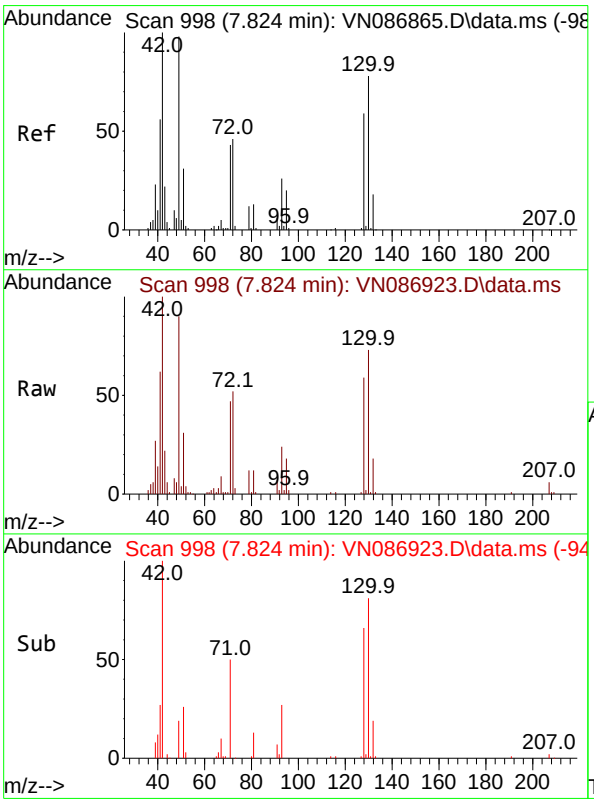
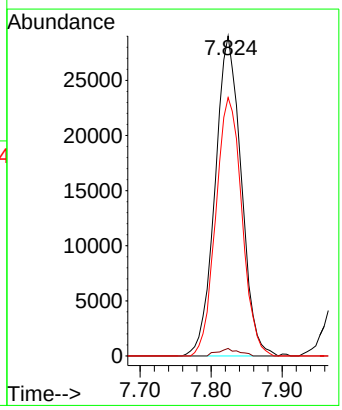


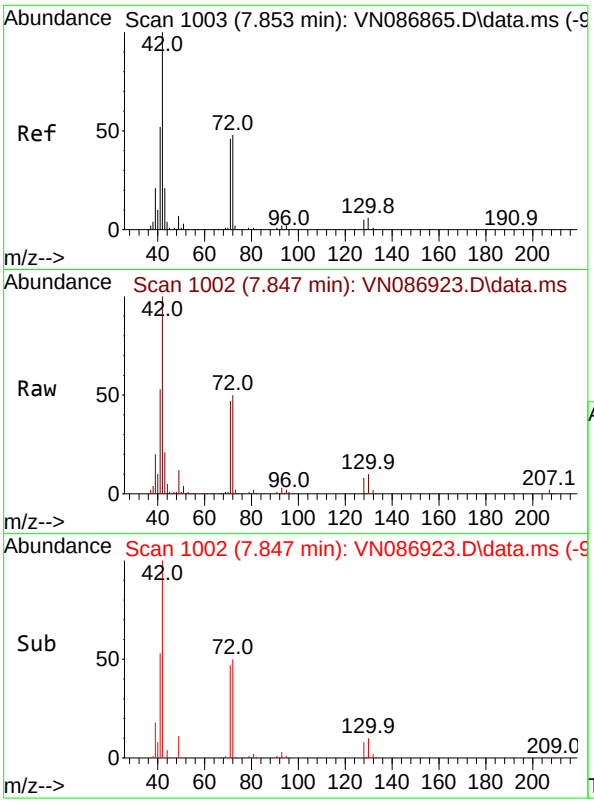




#28
Bromochloromethane
Concen: 38.924 ug/l
RT: 7.824 min Scan# 998
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 49 Resp: 74118

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.9 | 0.0 | 3.8 |
| 130 | 80.7 | 62.2 | 93.2 |






#29
Tetrahydrofuran
Concen: 202.731 ug/l
RT: 7.847 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 42 Resp: 26361

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 50.3 | 37.8 | 56.6 |
| 71 | 46.7 | 35.6 | 53.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
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Reviewed By :John Carlone 06/11/2025
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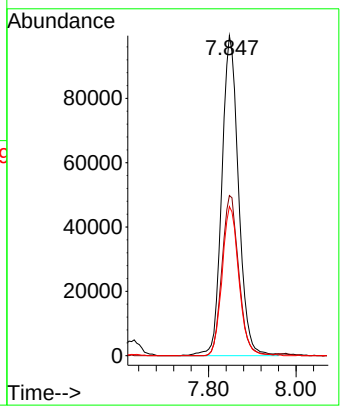
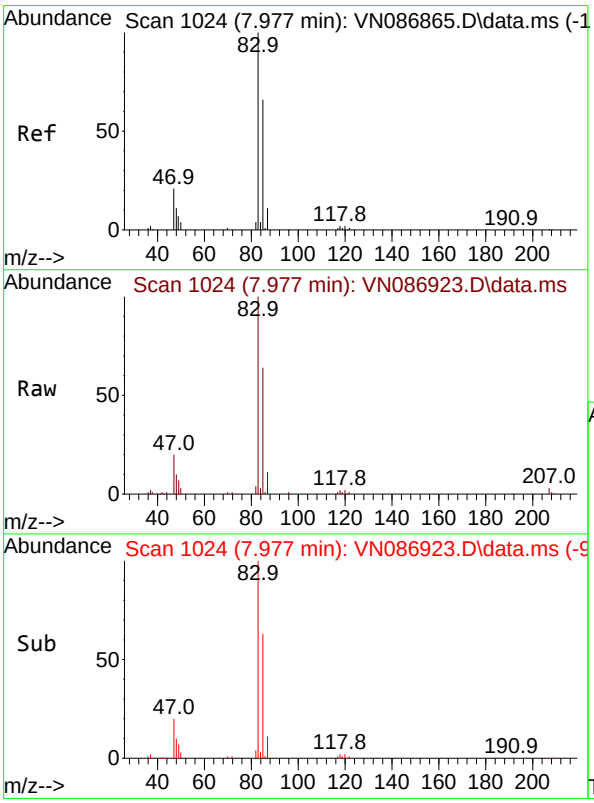
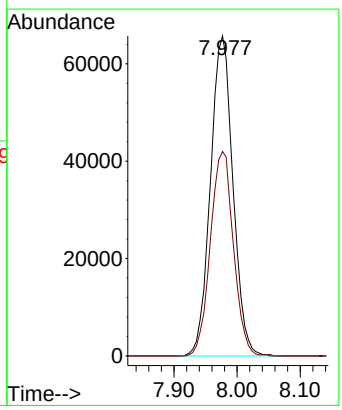


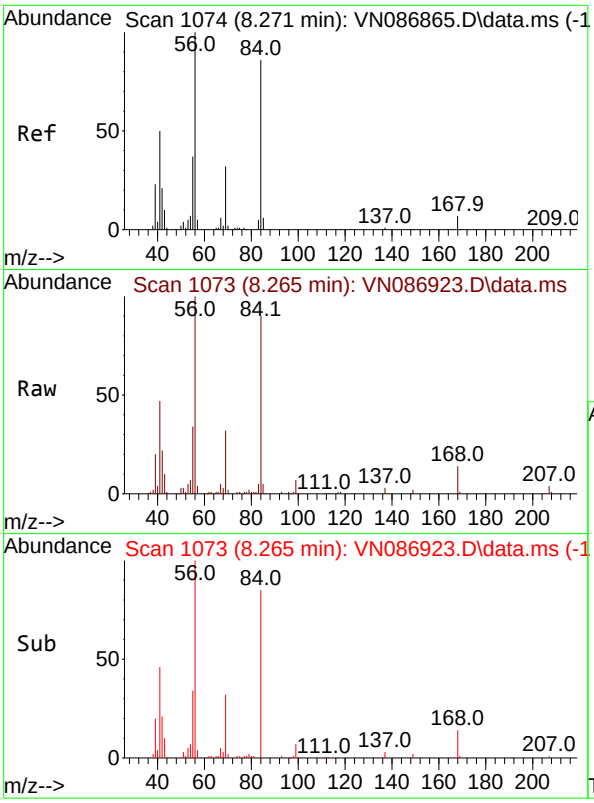




#30
Chloroform
Concen: 42.052 ug/l
RT: 7.977 min Scan# 1024
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 83 Resp: 162638

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 63.9 | 52.9 | 79.3 |






#31
Cyclohexane
Concen: 35.653 ug/l
RT: 8.265 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

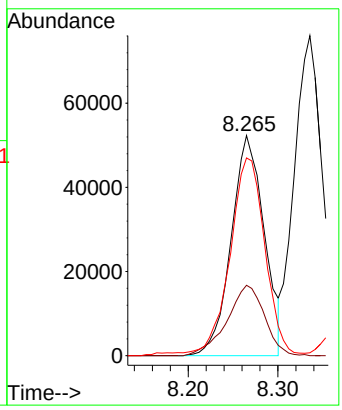
Tgt Ion: 56 Resp: 13390

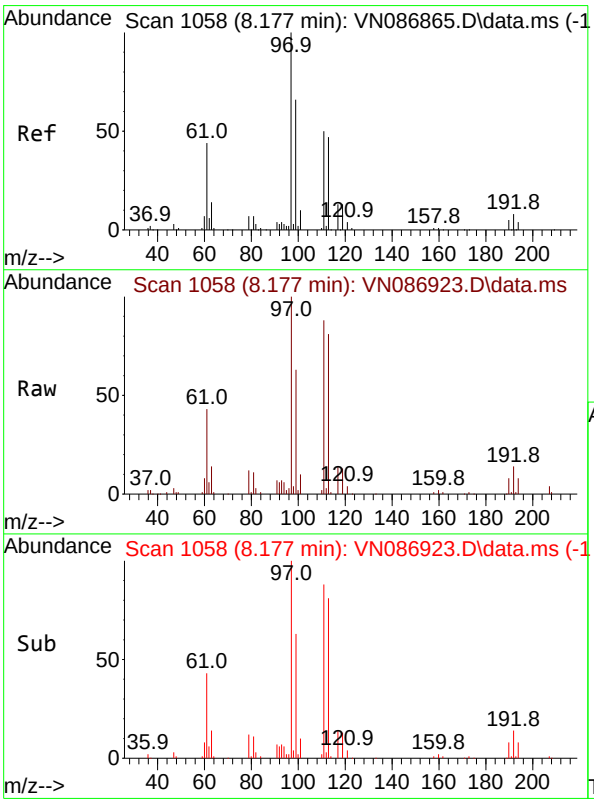
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 32.0 | 25.4 | 38.0 |
| 84 | 88.4 | 68.8 | 103.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

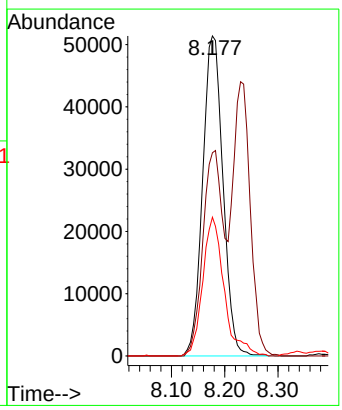


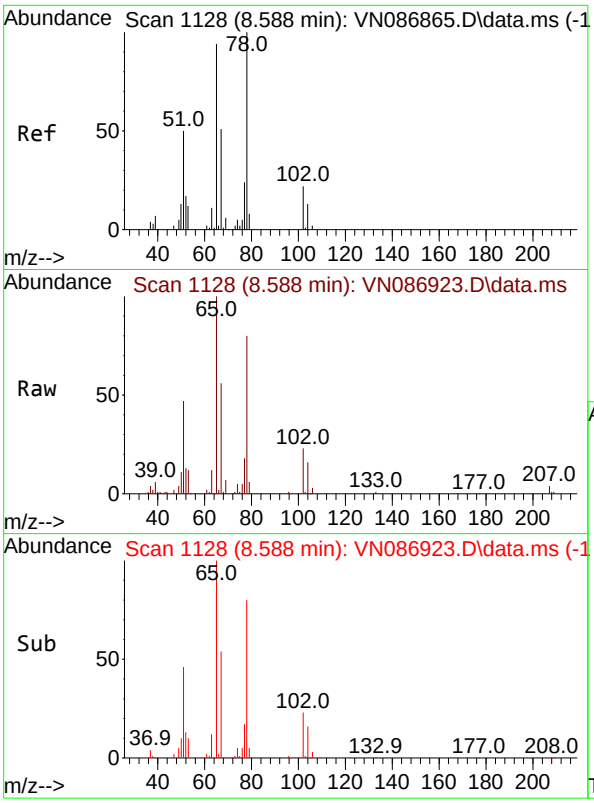




#32
1,1,1-Trichloroethane
Concen: 41.359 ug/l
RT: 8.177 min Scan# 1058
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 97 Resp: 136050

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 65.9 | 52.0 | 78.0 |
| 61 | 45.7 | 35.9 | 53.9 |






#33
1,2-Dichloroethane-d4
Concen: 52.657 ug/l
RT: 8.588 min Scan# 11
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

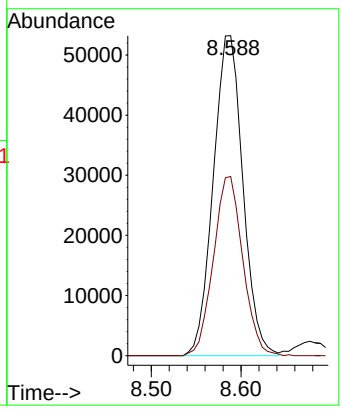
Tgt Ion: 65 Resp: 12193

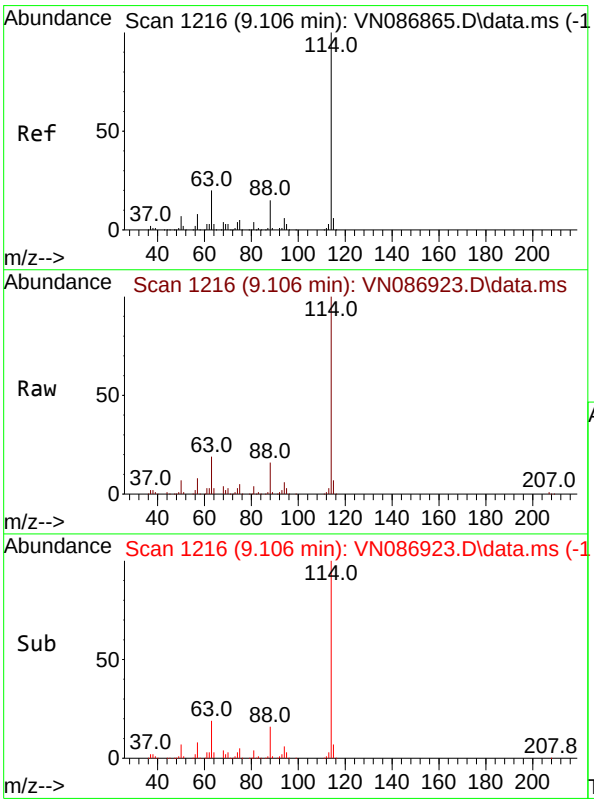
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 55.5 | 0.0 | 105.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

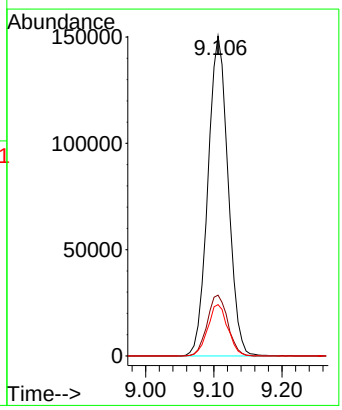


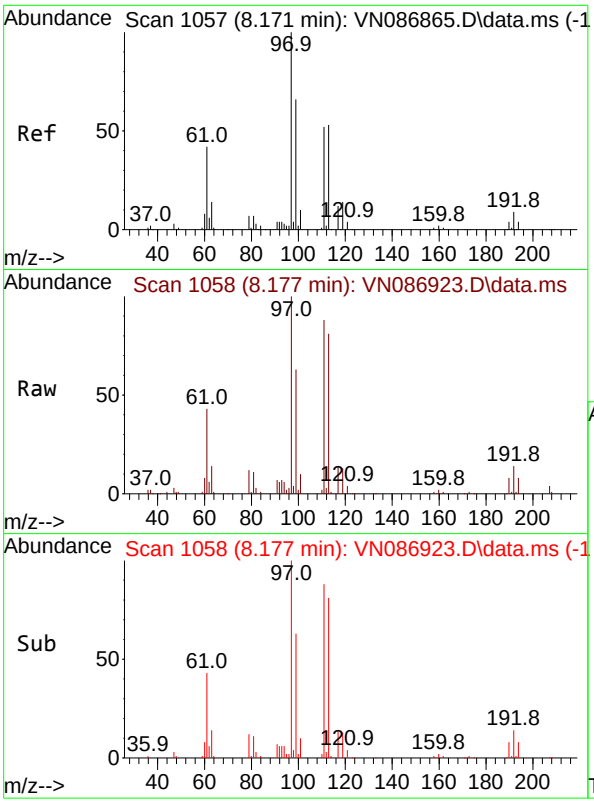




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.106 min Scan# 1216
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion:114 Resp: 309901

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 19.0 | 0.0 | 39.6 |
| 88 | 16.1 | 0.0 | 30.2 |






#35
Dibromofluoromethane
Concen: 56.601 ug/l
RT: 8.177 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

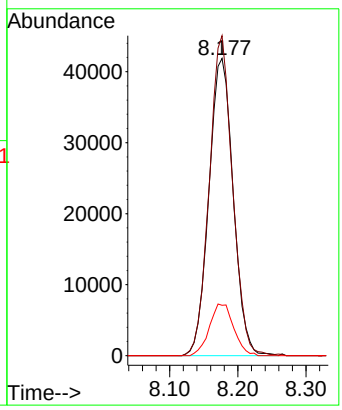
**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

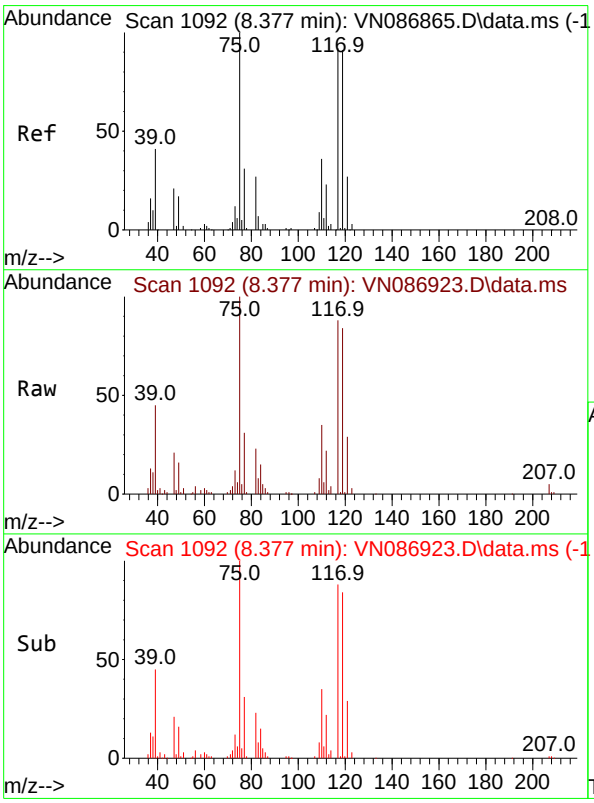
Tgt Ion:113 Resp: 10395

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 103.1 | 84.2 | 126.2 |
| 192 | 17.4 | 14.2 | 21.4 |

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

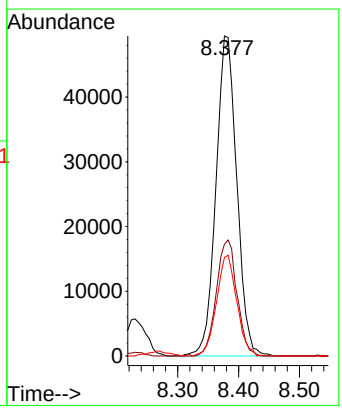


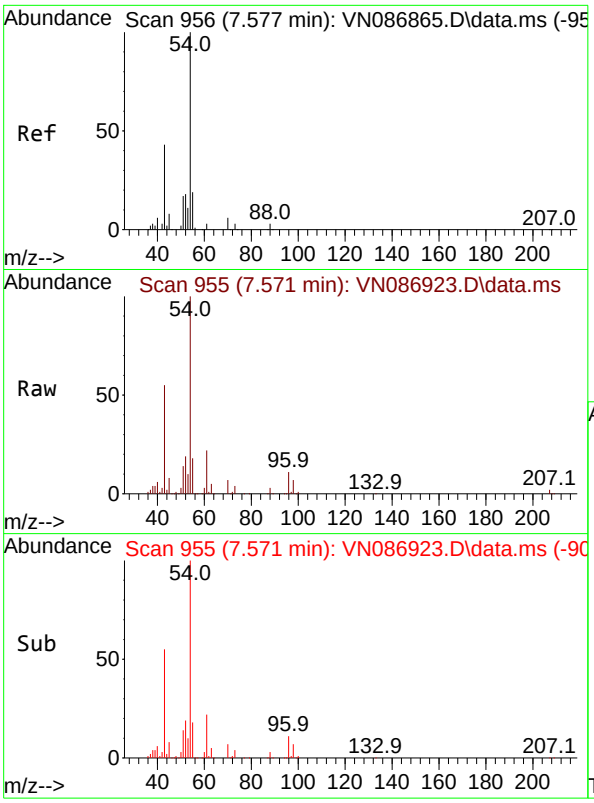




#36
1,1-Dichloropropene
Concen: 42.946 ug/l
RT: 8.377 min Scan# 1092
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 75 Resp: 117527

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 35.8 | 17.6 | 52.9 |
| 77 | 30.8 | 25.3 | 37.9 |






#37
Ethyl Acetate
Concen: 40.039 ug/l
RT: 7.571 min Scan# 9
Delta R.T. -0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

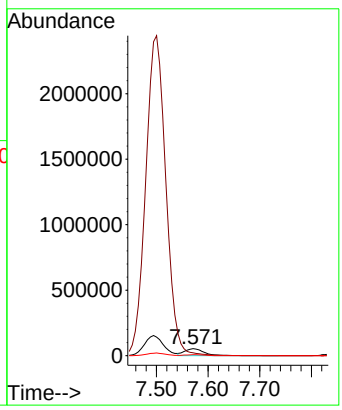
Tgt Ion: 43 Resp: 13948

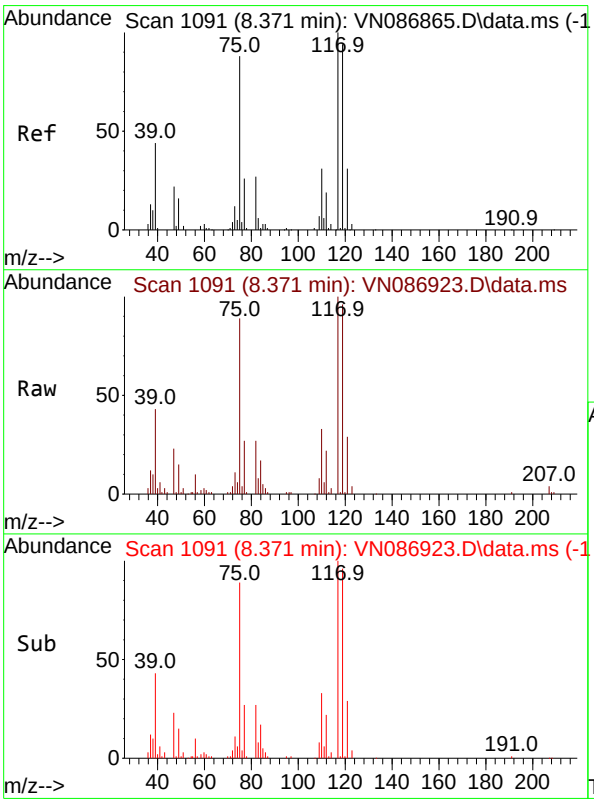
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 0.0 | 12.1 | 18.1# |
| 70 | 13.3 | 9.8 | 14.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

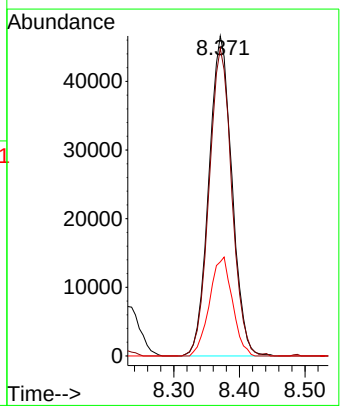


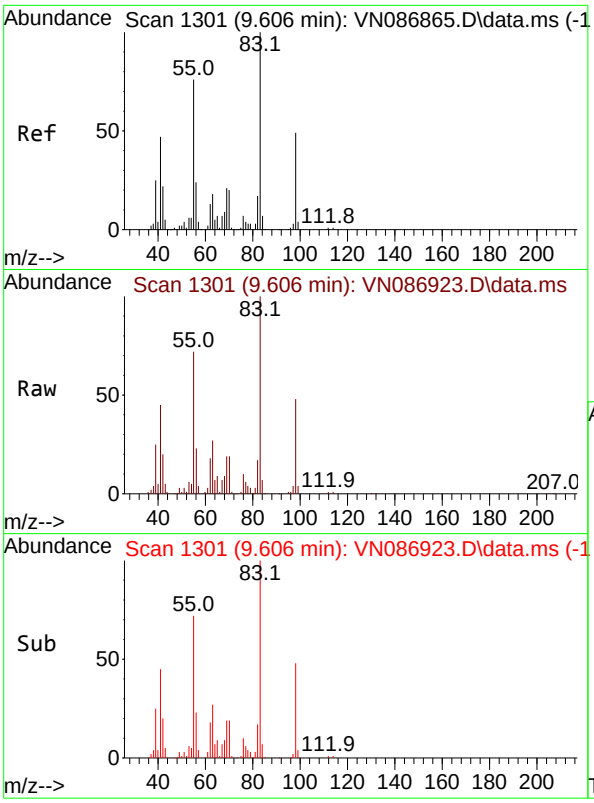




#38
Carbon Tetrachloride
Concen: 42.334 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion:117 Resp: 113739

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 96.2 | 75.0 | 112.6 |
| 121 | 29.4 | 24.9 | 37.3 |






#39
Methylcyclohexane
Concen: 35.522 ug/l
RT: 9.606 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

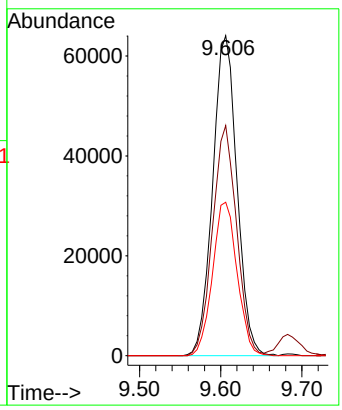
Tgt Ion: 83 Resp: 13318

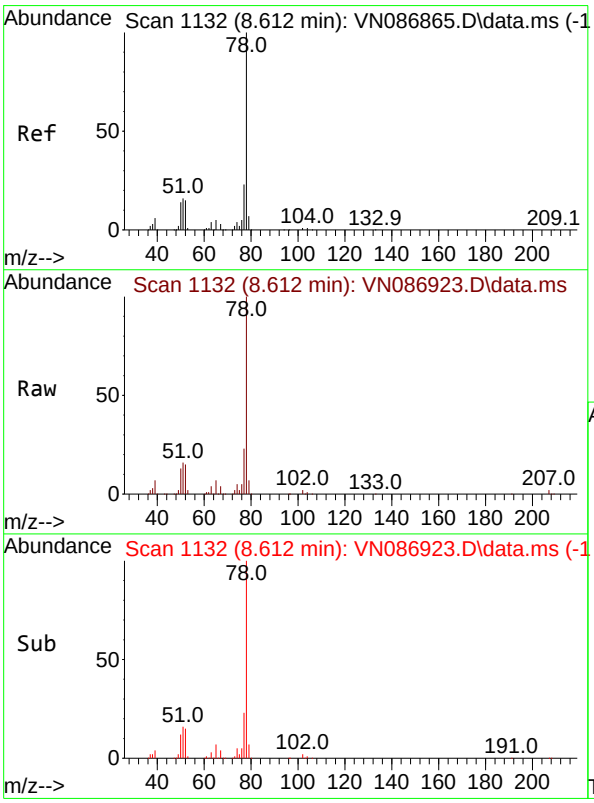
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 71.9 | 61.0 | 91.6 |
| 98 | 48.0 | 38.9 | 58.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

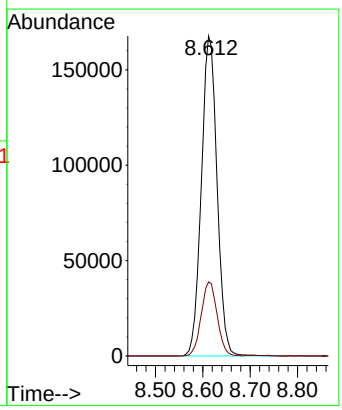


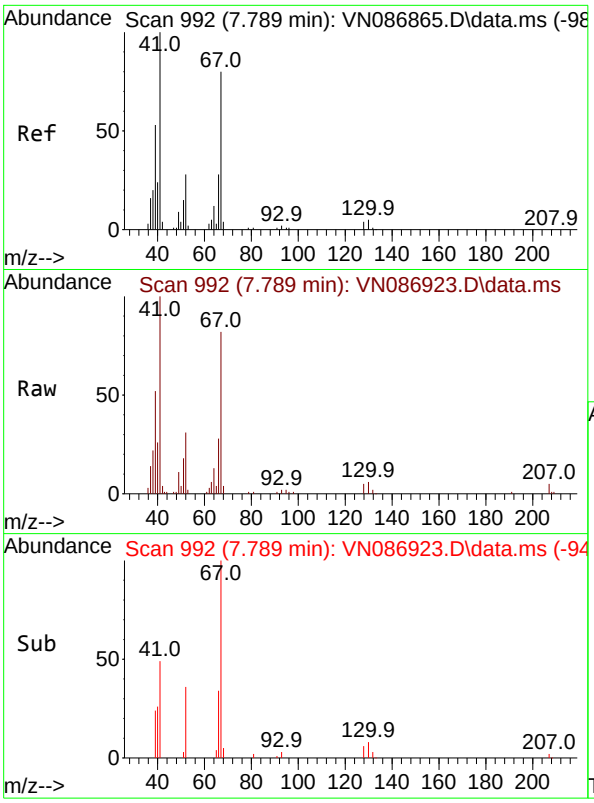




#40
Benzene
Concen: 43.024 ug/l
RT: 8.612 min Scan# 1132
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 78 Resp: 385021

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.1 | 18.7 | 28.1 |

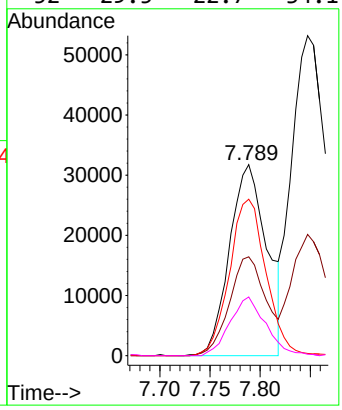





#41
Methacrylonitrile
Concen: 42.189 ug/l
RT: 7.789 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 41 Resp: 8254

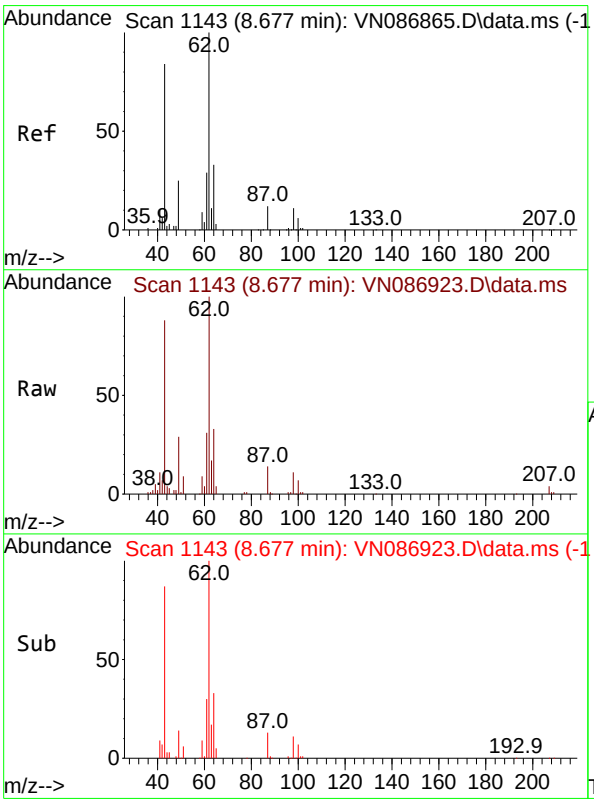
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 50.7 | 41.2 | 61.8 |
| 67 | 80.4 | 61.4 | 92.2 |
| 52 | 29.5 | 22.7 | 34.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
**APPROVED**

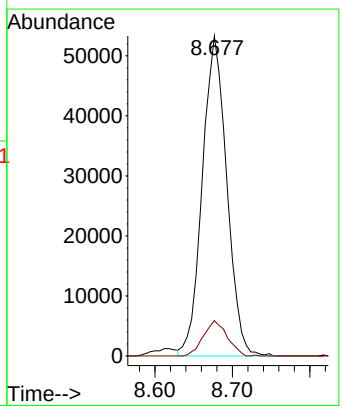
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

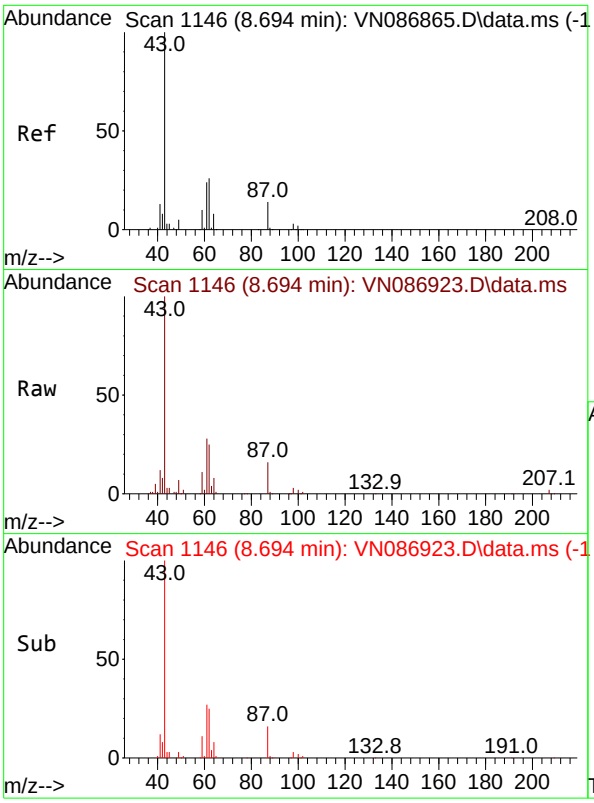



#42
1,2-Dichloroethane
Concen: 43.063 ug/l
RT: 8.677 min Scan# 1143
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 62 Resp: 116885

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 10.7 | 0.0 | 21.2 |






#43
Isopropyl Acetate
Concen: 39.754 ug/l
RT: 8.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 43 Resp: 22228

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 29.8 | 22.1 | 33.1 |
| 87 | 15.9 | 11.8 | 17.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
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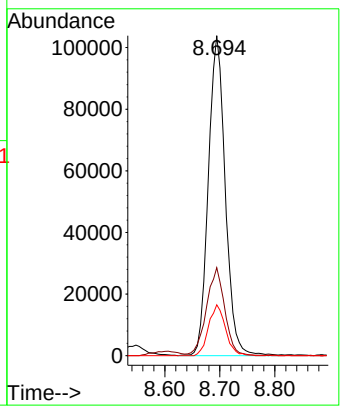
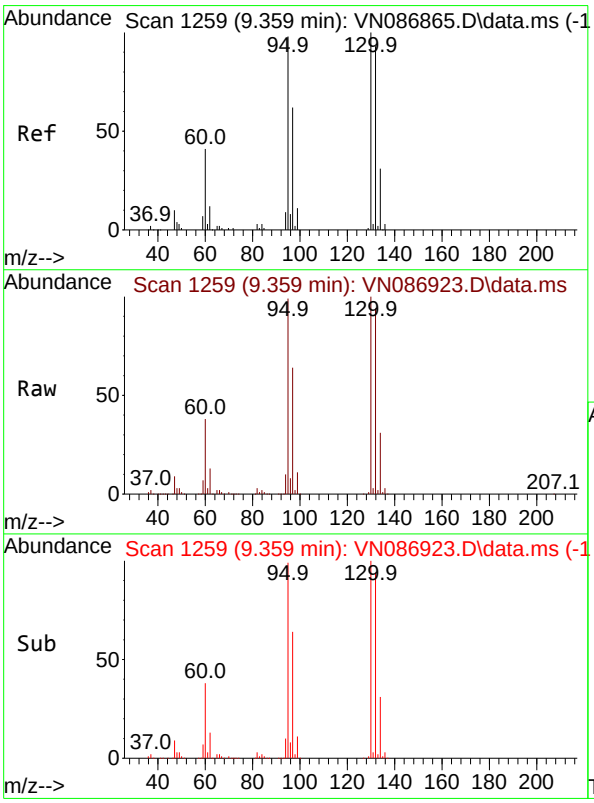
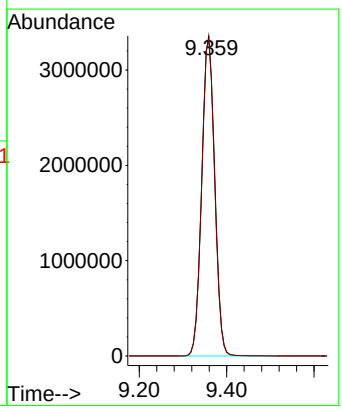


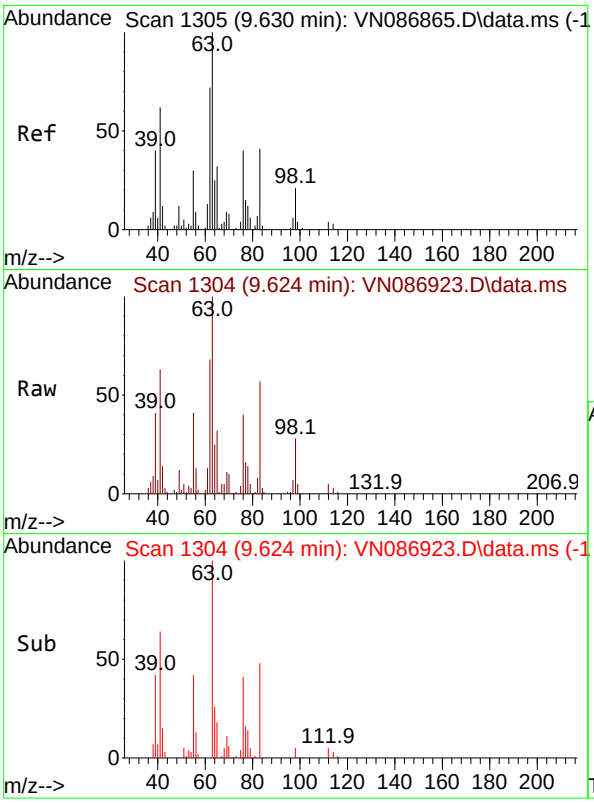




#44
Trichloroethene
Concen: 3266.653 ug/l
RT: 9.359 min Scan# 1259
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion:130 Resp: 6931651

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 98.9 | 0.0 | 196.2 |






#45
1,2-Dichloropropane
Concen: 42.460 ug/l
RT: 9.624 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

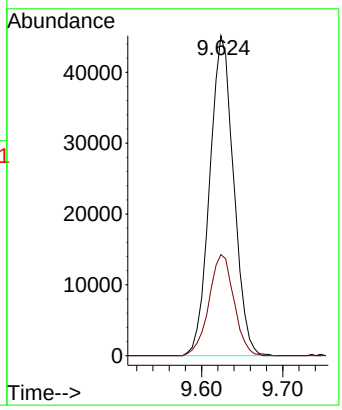
Tgt Ion: 63 Resp: 9244

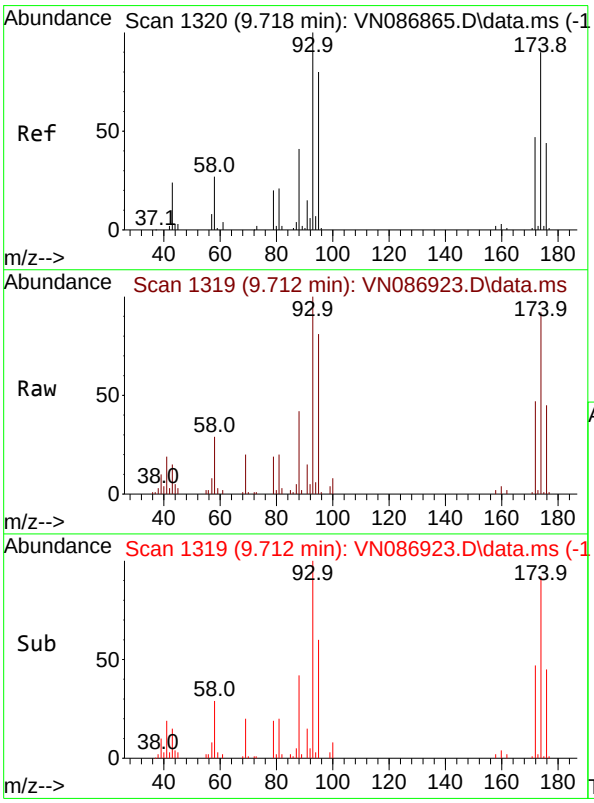
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 31.6 | 25.5 | 38.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

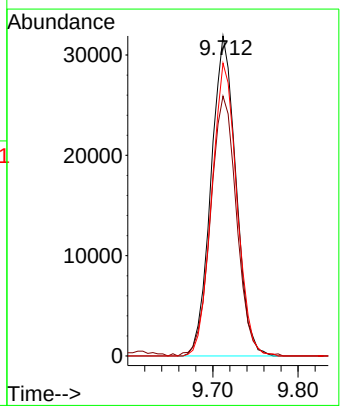


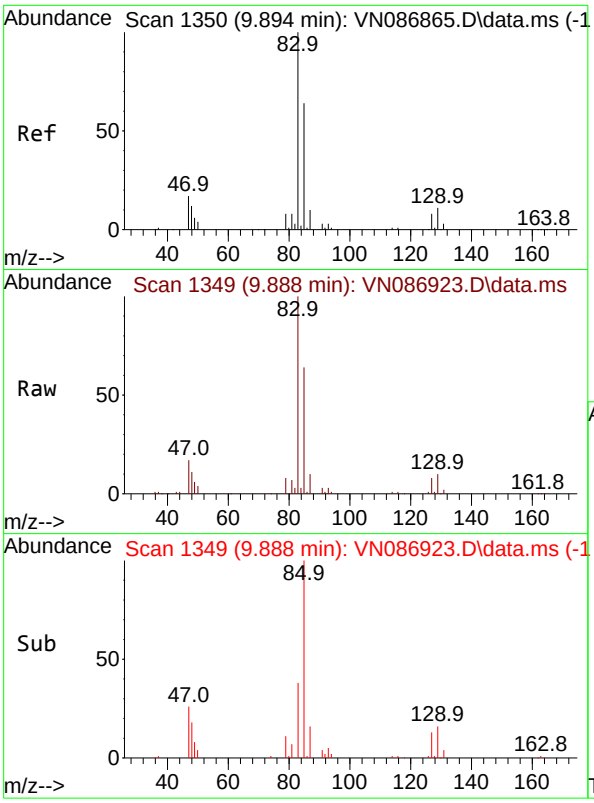




#46
Dibromomethane
Concen: 44.837 ug/l
RT: 9.712 min Scan# 1319
Delta R.T. -0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 93 Resp: 64838

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 84.6 | 67.1 | 100.7 |
| 174 | 92.0 | 74.2 | 111.4 |






#47
Bromodichloromethane
Concen: 42.528 ug/l
RT: 9.888 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 83 Resp: 12653

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 63.6 | 50.9 | 76.3 |
| 127 | 8.4 | 6.6 | 10.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
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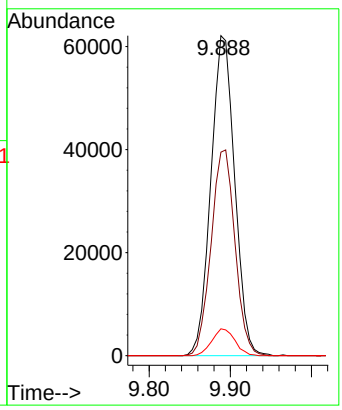
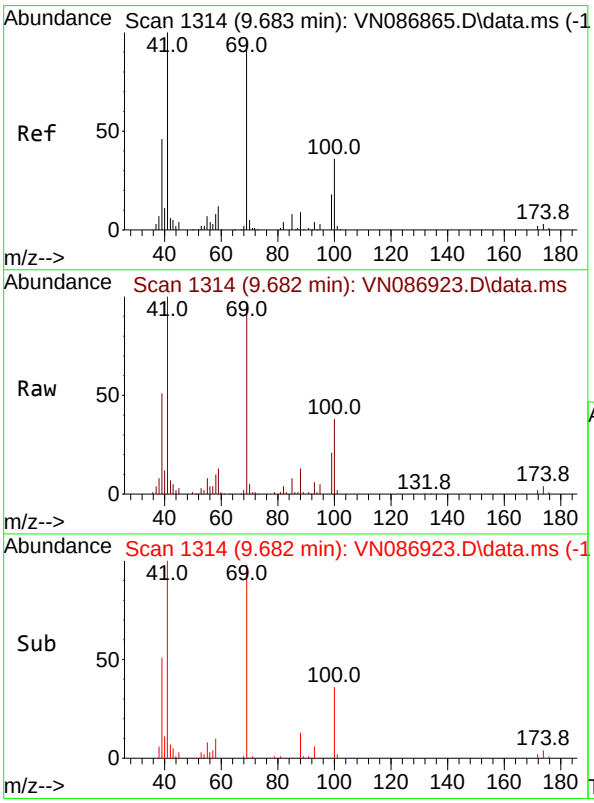
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

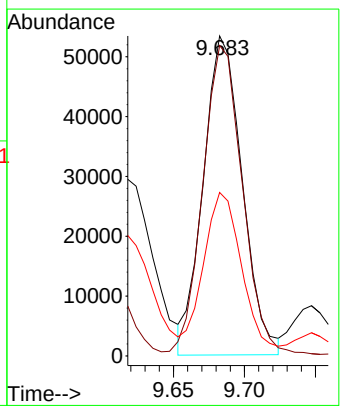


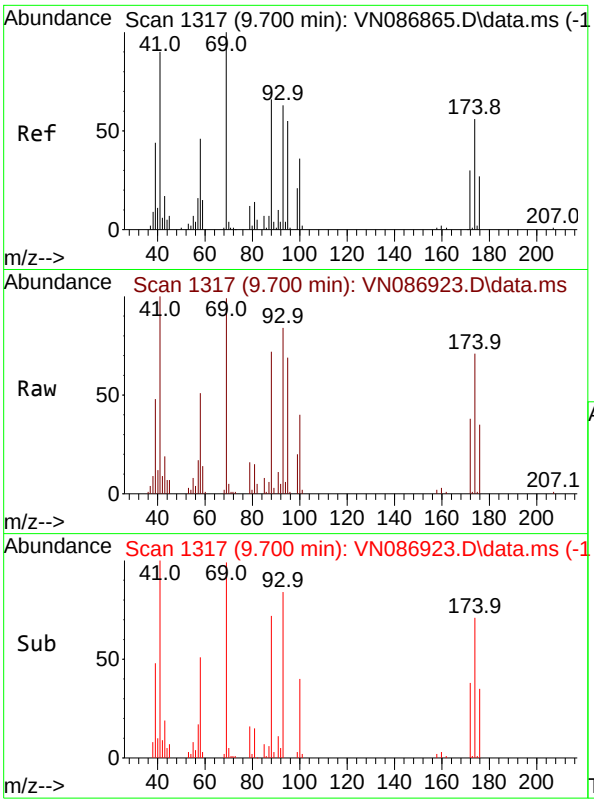




#48
Methyl methacrylate
Concen: 39.572 ug/l
RT: 9.682 min Scan# 1314
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 41 Resp: 101839

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 100.5 | 74.6 | 112.0 |
| 39 | 51.5 | 40.2 | 60.4 |






#49
1,4-Dioxane
Concen: 873.782 ug/l
RT: 9.700 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

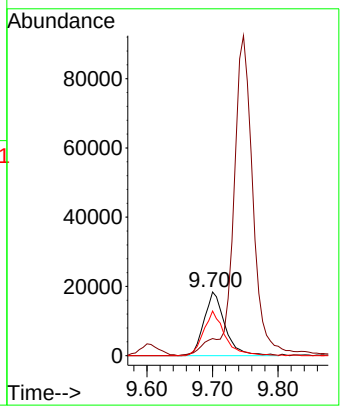
Tgt Ion: 88 Resp: 4090

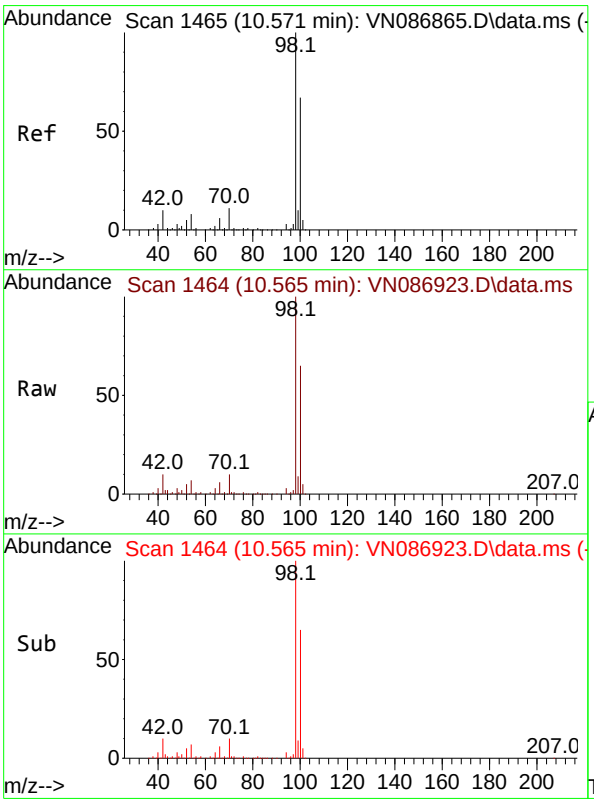
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 0.0 | 0.0 | 0.0 |
| 58 | 71.1 | 57.7 | 86.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

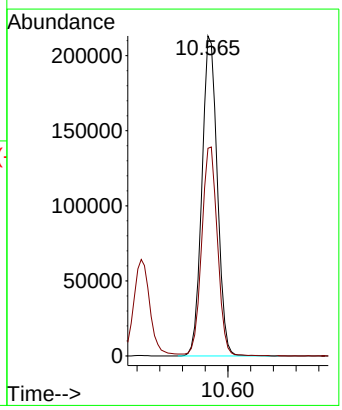


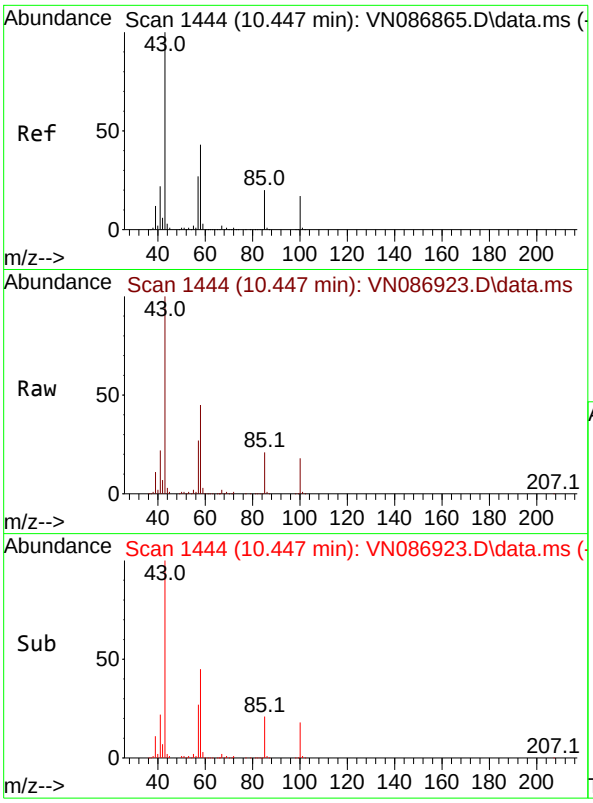




#50
Toluene-d8
Concen: 54.791 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 98 Resp: 398352

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 67.1 | 53.4 | 80.0 |






#51
4-Methyl-2-Pentanone
Concen: 208.746 ug/l
RT: 10.447 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 43 Resp: 70265

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 43.3 | 34.2 | 51.4 |

**Instrument :**
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MW-11A-13.5-060525MSD

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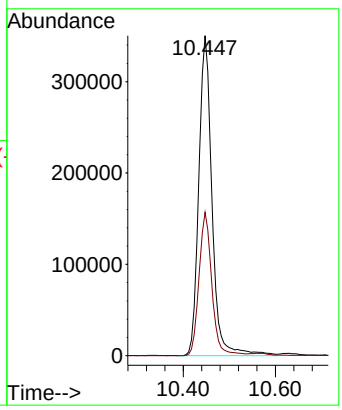
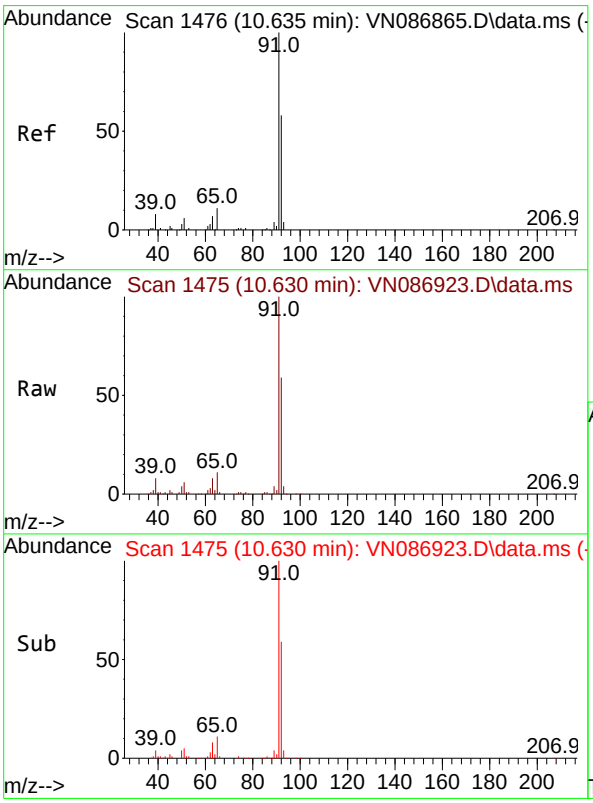
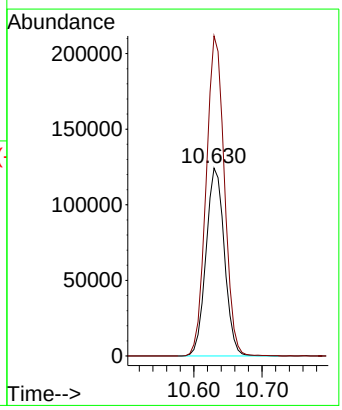


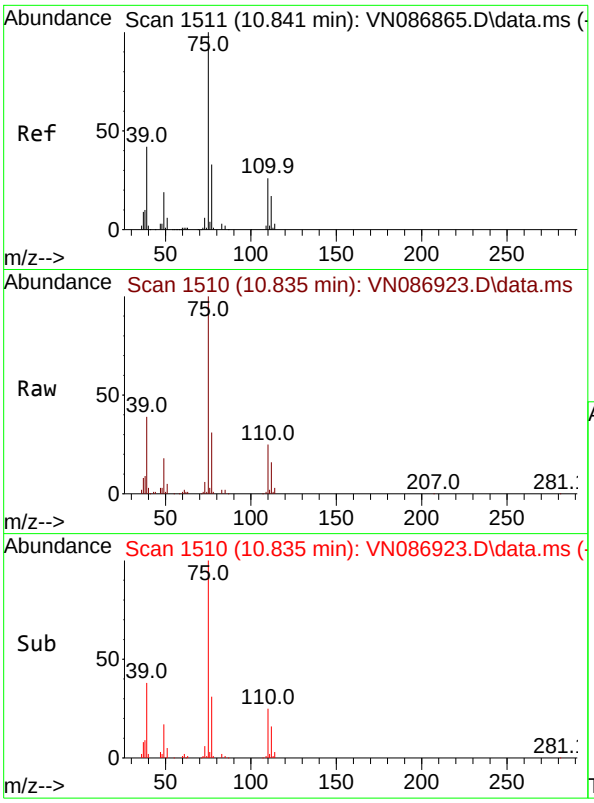




#52
Toluene
Concen: 42.608 ug/l
RT: 10.630 min Scan# 1475
Delta R.T. -0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 92 Resp: 233021

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 168.9 | 136.5 | 204.7 |






#53
t-1,3-Dichloropropene
Concen: 43.917 ug/l
RT: 10.835 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 75 Resp: 14611

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.4 | 26.4 | 39.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
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Reviewed By :John Carlone 06/11/2025
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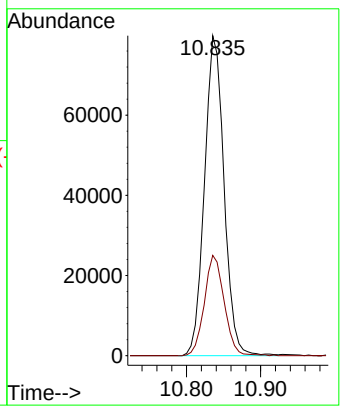
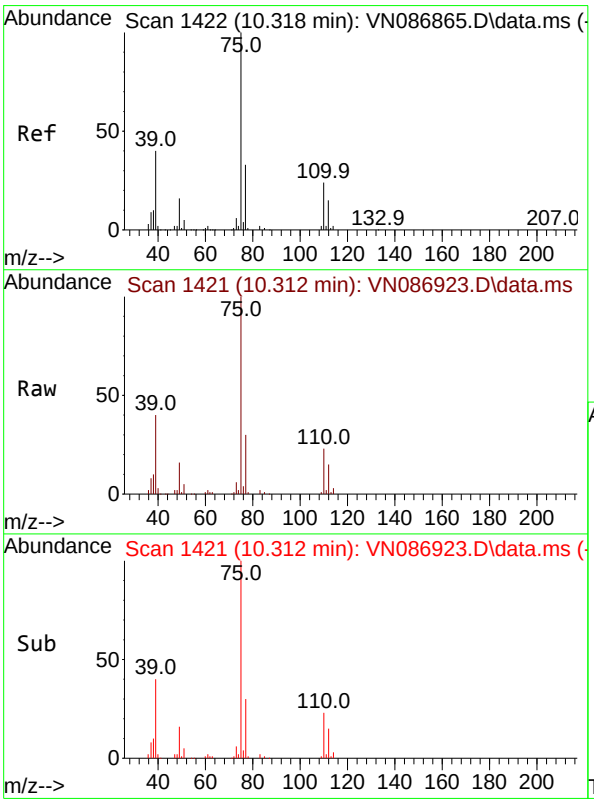
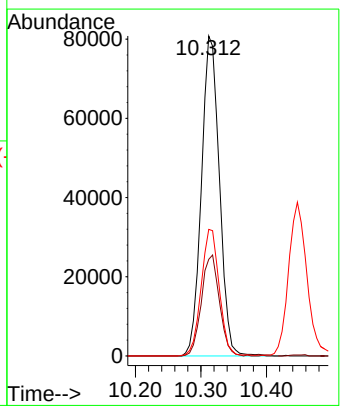


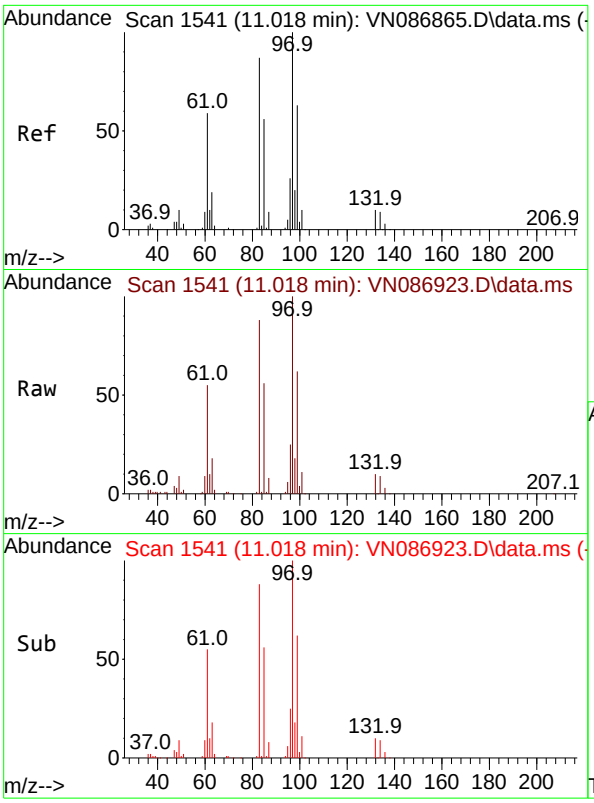




#54
cis-1,3-Dichloropropene
Concen: 43.329 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. -0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 75 Resp: 154243

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 30.2 | 26.2 | 39.4 |
| 39 | 39.6 | 32.3 | 48.5 |

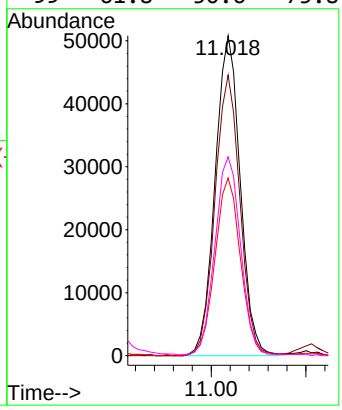





#55
1,1,2-Trichloroethane
Concen: 44.495 ug/l
RT: 11.018 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 97 Resp: 9363

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 87.7 | 69.7 | 104.5 |
| 85 | 55.5 | 45.1 | 67.7 |
| 99 | 61.8 | 50.6 | 75.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
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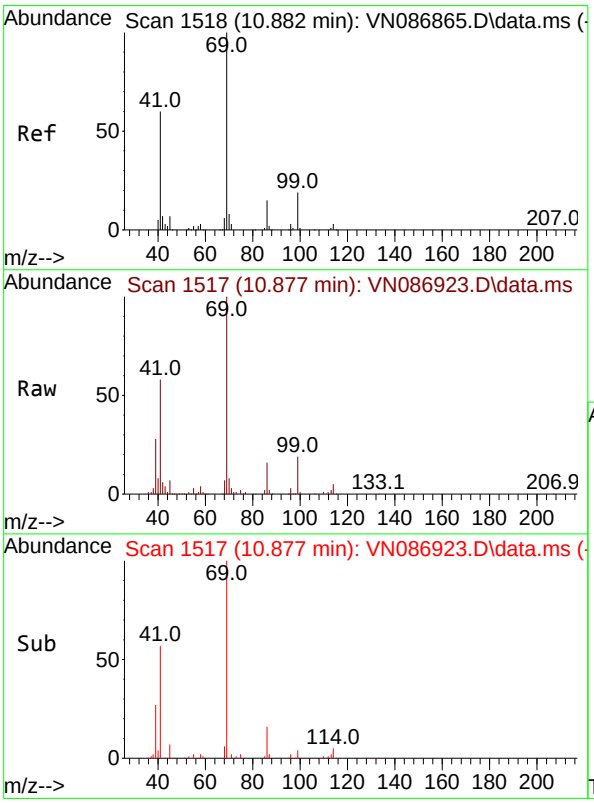
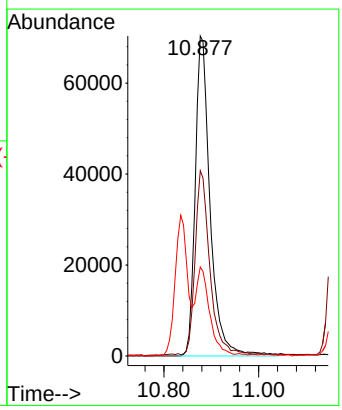
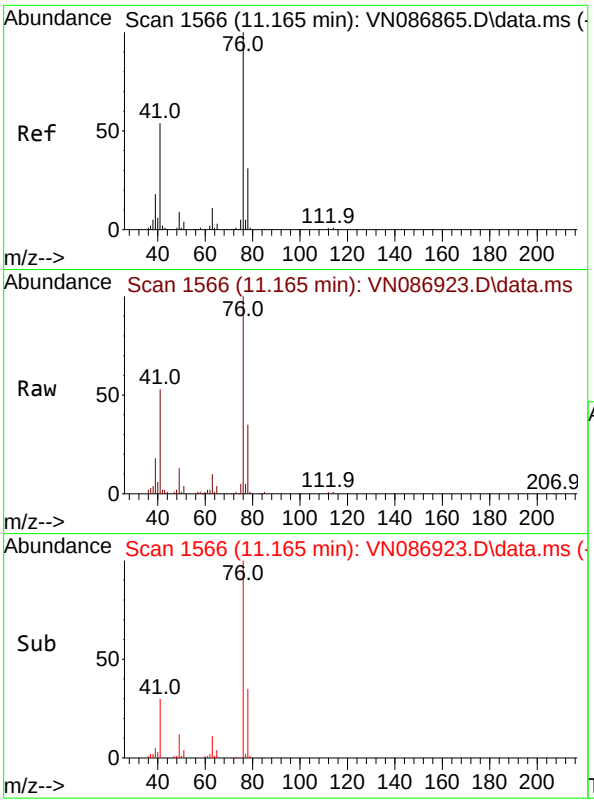



#56
Ethyl methacrylate
Concen: 45.905 ug/l
RT: 10.877 min Scan# 1517
Delta R.T. -0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 69 Resp: 153861

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 56.1 | 47.2 | 70.8 |
| 39 | 25.1 | 23.0 | 34.6 |






#57
1,3-Dichloropropane
Concen: 42.673 ug/l
RT: 11.165 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 76 Resp: 15577

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 33.5 | 25.3 | 37.9 |

**Instrument :**
MSVOA_N
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MW-11A-13.5-060525MSD

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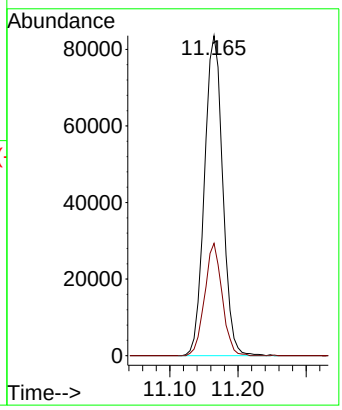
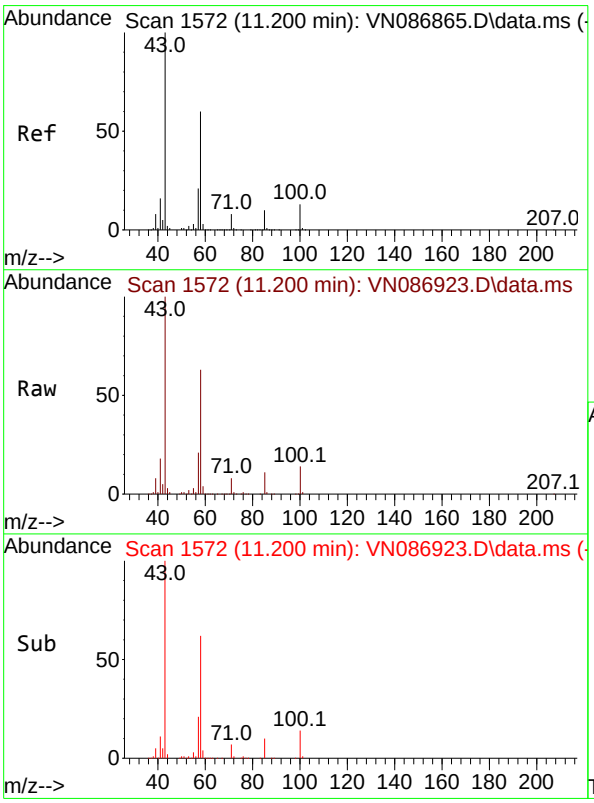
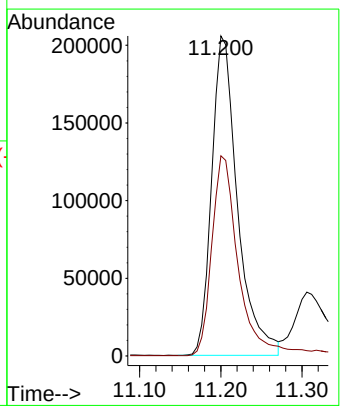


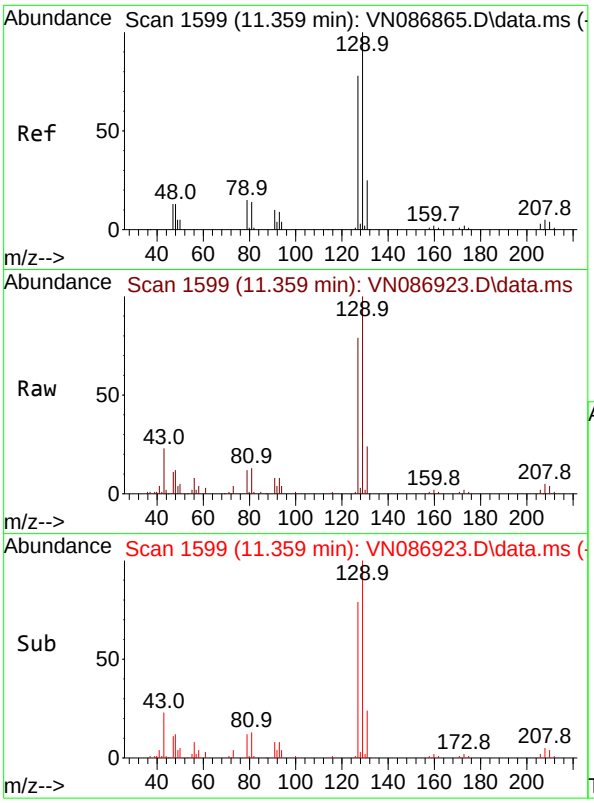




#59
2-Hexanone
Concen: 209.941 ug/l
RT: 11.200 min Scan# 1572
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 43 Resp: 455196

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 64.6 | 30.4 | 91.3 |

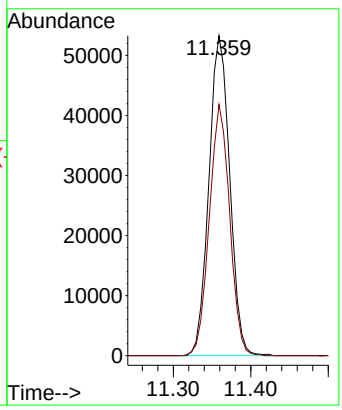





#60
Dibromochloromethane
Concen: 45.420 ug/l
RT: 11.359 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion:129 Resp: 9958

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 76.6 | 38.6 | 115.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
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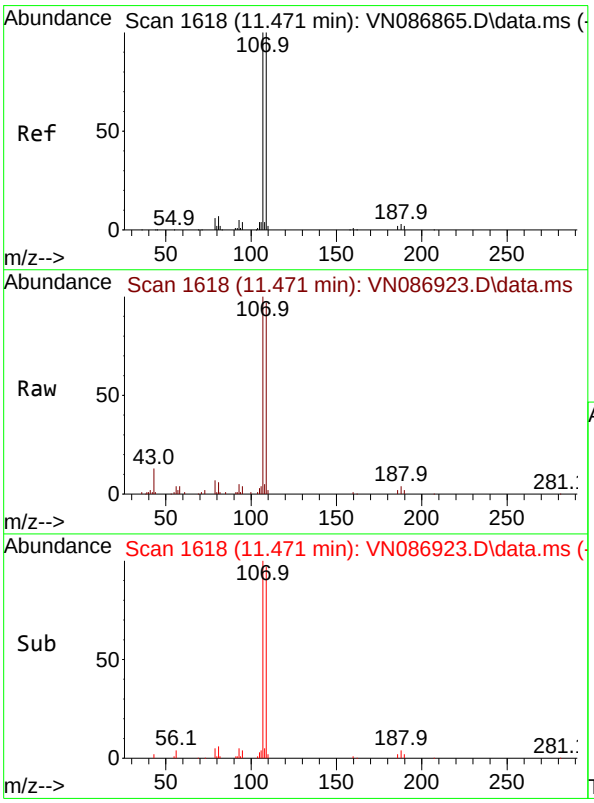
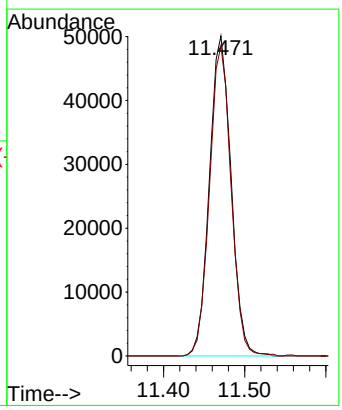
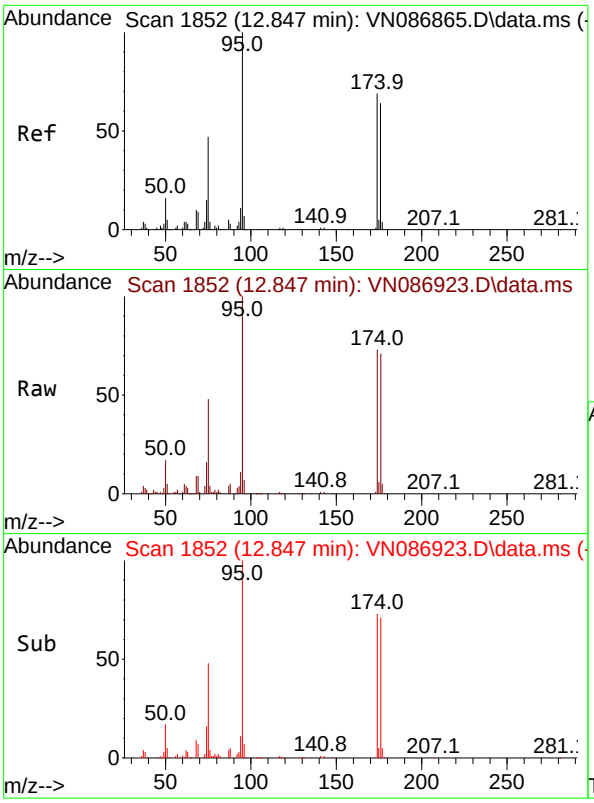



#61
1,2-Dibromoethane
Concen: 43.108 ug/l
RT: 11.471 min Scan# 1618
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion:107 Resp: 92981

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 96.1 | 76.3 | 114.5 |

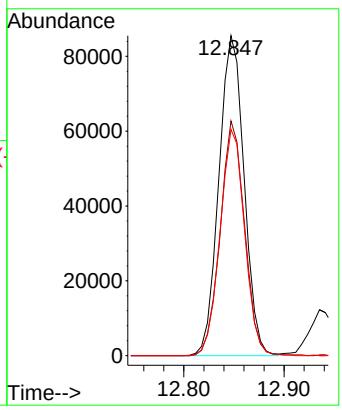





#62
4-Bromofluorobenzene
Concen: 55.271 ug/l
RT: 12.847 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 95 Resp: 14929

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 70.9 | 0.0 | 141.8 |
| 176 | 69.0 | 0.0 | 132.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
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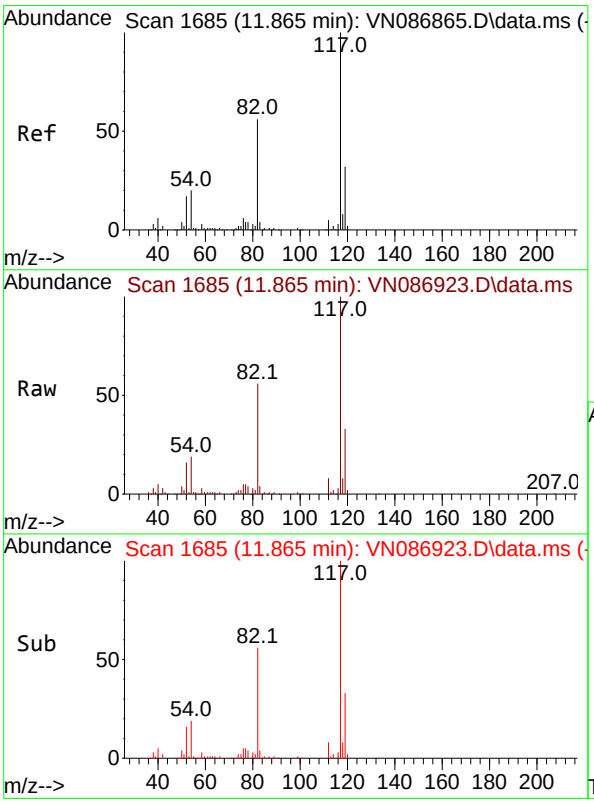
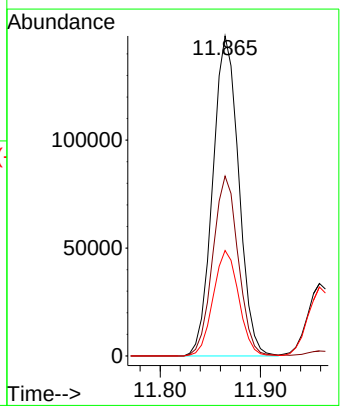
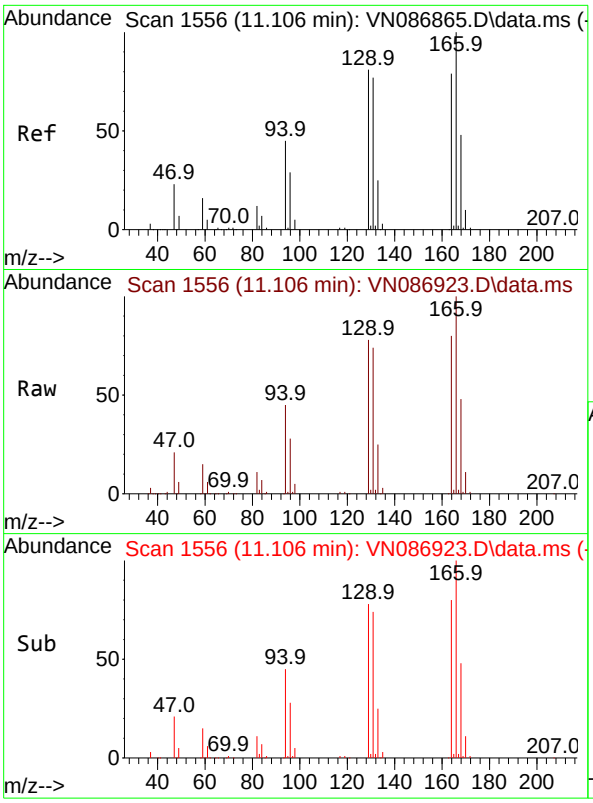



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion:117 Resp: 266637

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 56.2 | 44.6 | 67.0 |
| 119 | 32.9 | 25.5 | 38.3 |

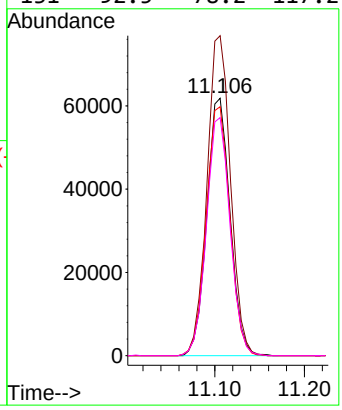





#64
Tetrachloroethene
Concen: 66.034 ug/l
RT: 11.106 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion:164 Resp: 11142

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 124.3 | 101.8 | 152.8 |
| 129 | 96.7 | 83.0 | 124.4 |
| 131 | 92.5 | 78.2 | 117.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
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Reviewed By :John Carlone 06/11/2025
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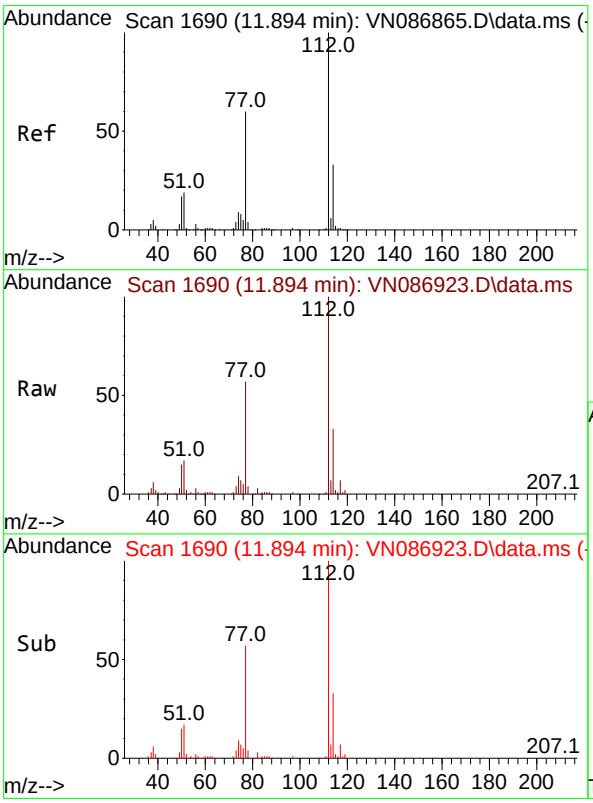
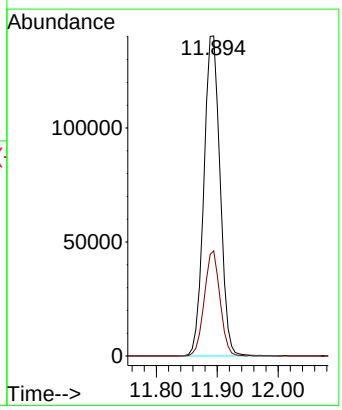
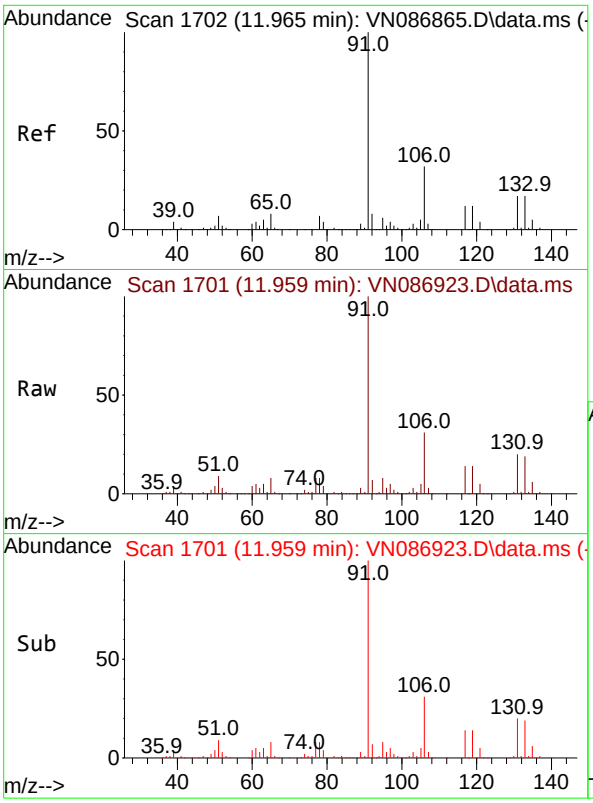



#65
Chlorobenzene
Concen: 44.144 ug/l
RT: 11.894 min Scan# 1690
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion:112 Resp: 259599

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 32.9 | 26.2 | 39.2 |






#66
1,1,1,2-Tetrachloroethane
Concen: 44.799 ug/l
RT: 11.959 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

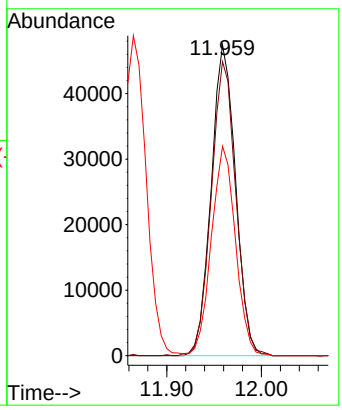
Tgt Ion:131 Resp: 8468

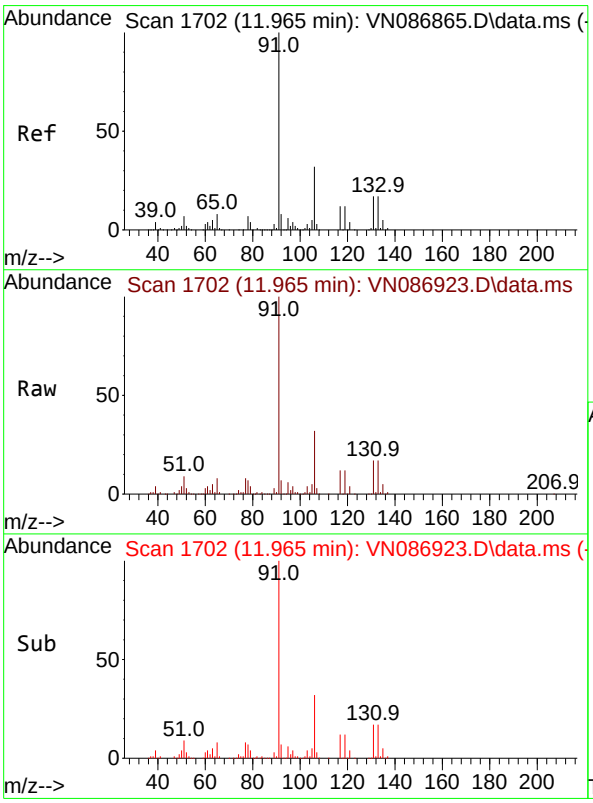
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 95.8 | 48.3 | 144.8 |
| 119 | 66.9 | 34.0 | 101.8 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

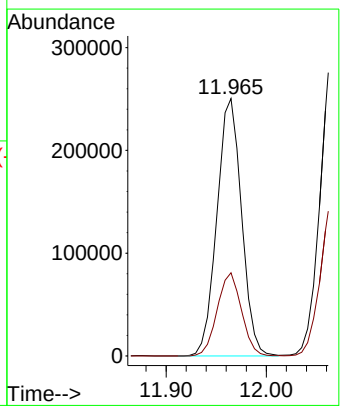


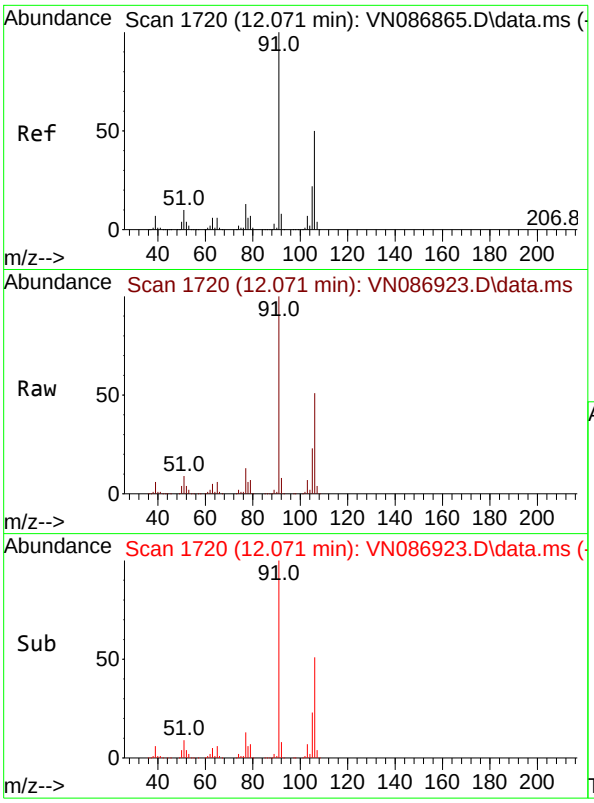




#67
Ethyl Benzene
Concen: 42.226 ug/l
RT: 11.965 min Scan# 1702
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 91 Resp: 427727

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 32.3 | 25.4 | 38.2 |






#68
m/p-Xylenes
Concen: 86.123 ug/l
RT: 12.071 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

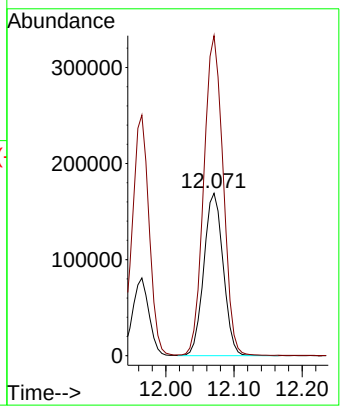
Tgt Ion:106 Resp: 33395

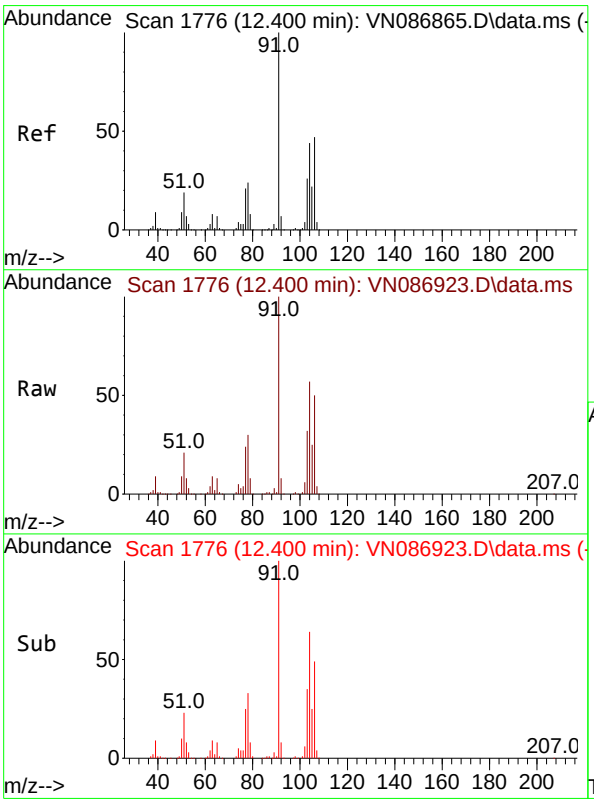
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 196.5 | 159.4 | 239.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

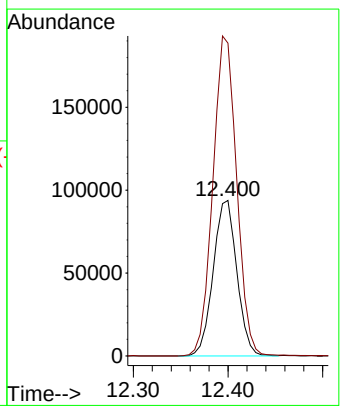


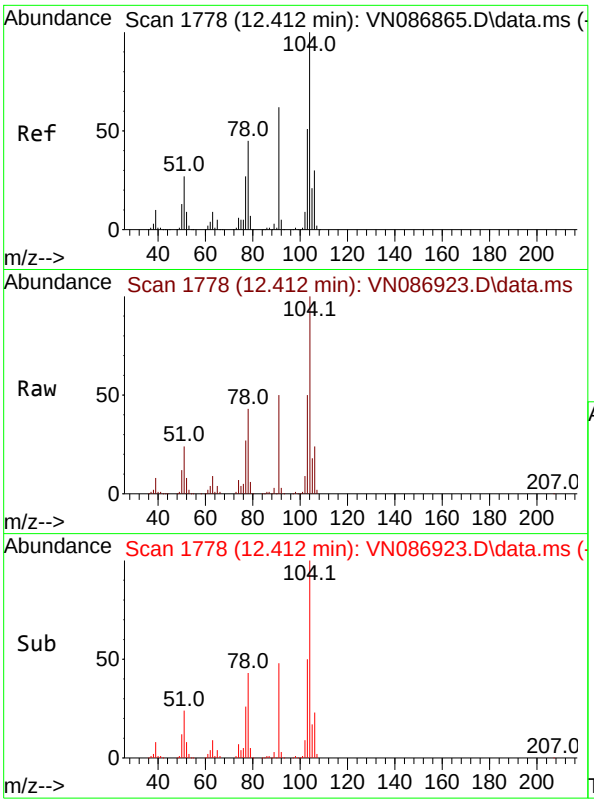




#69
o-Xylene
Concen: 43.848 ug/l
RT: 12.400 min Scan# 1776
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion:106 Resp: 162838

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 207.3 | 106.1 | 318.1 |






#70
Styrene
Concen: 44.384 ug/l
RT: 12.412 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion:104 Resp: 28205

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 47.4 | 38.5 | 57.7 |
| 103 | 53.7 | 43.1 | 64.7 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
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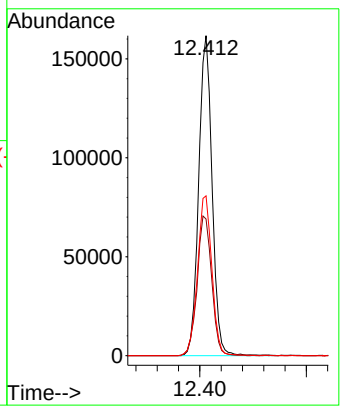
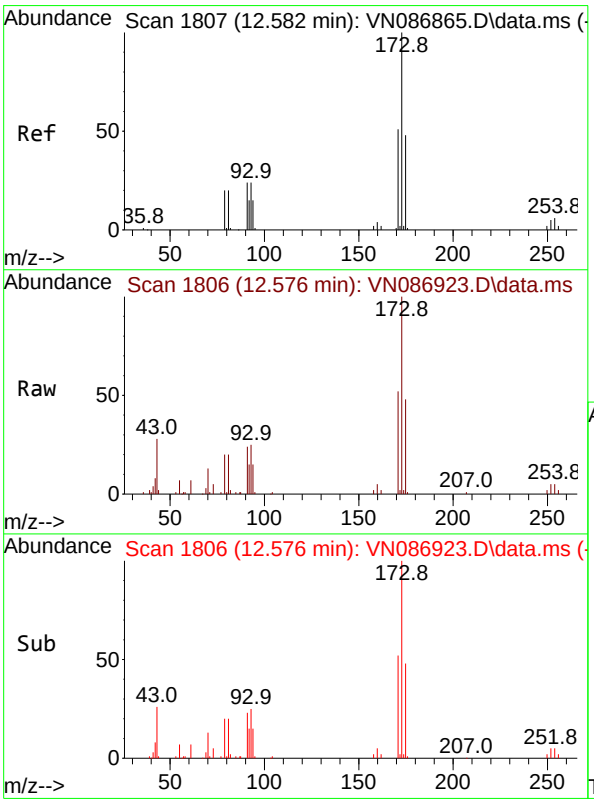
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

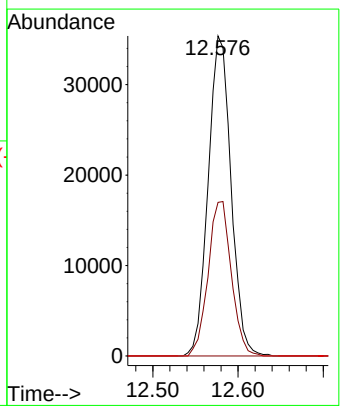


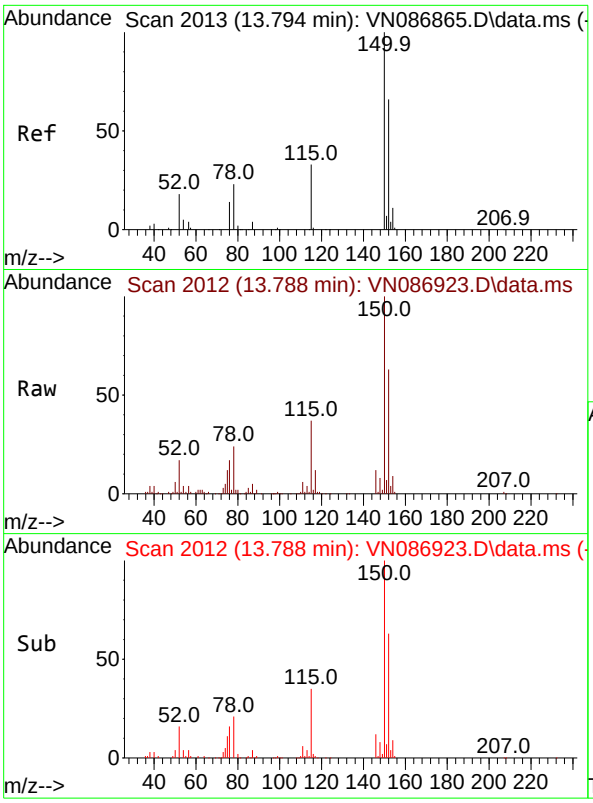




#71
Bromoform
Concen: 46.983 ug/l
RT: 12.576 min Scan# 1806
Delta R.T. -0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion:173 Resp: 65807

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 49.1 | 24.1 | 72.4 |
| 254 | 0.0 | 0.0 | 0.0 |






#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion:152 Resp: 12987

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 61.0 | 30.1 | 90.5 |
| 150 | 173.5 | 0.0 | 345.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
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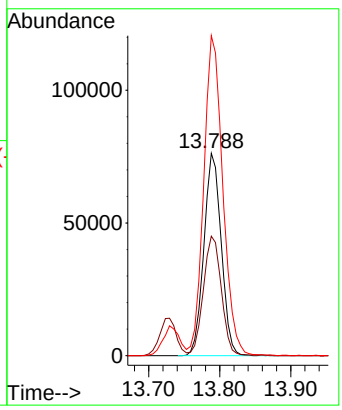
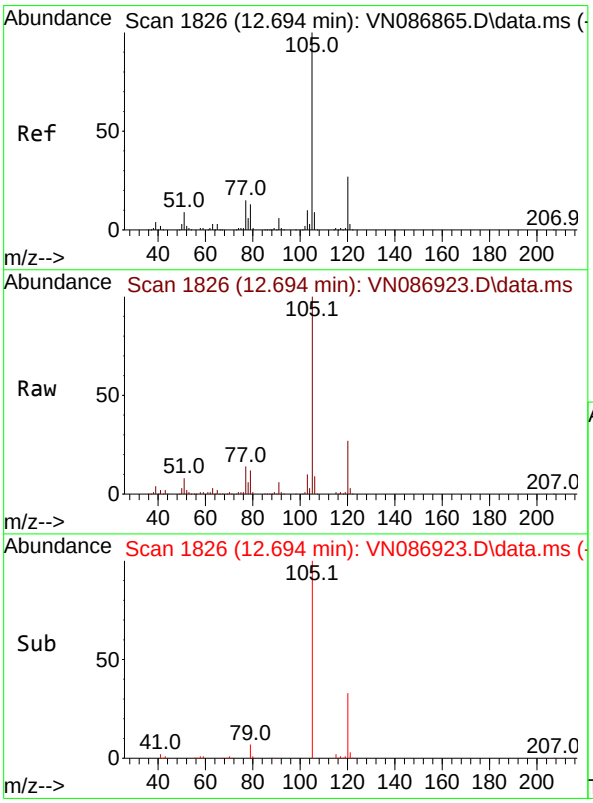
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

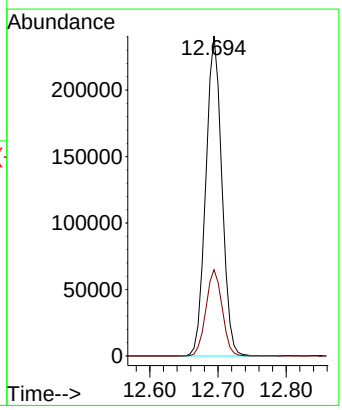


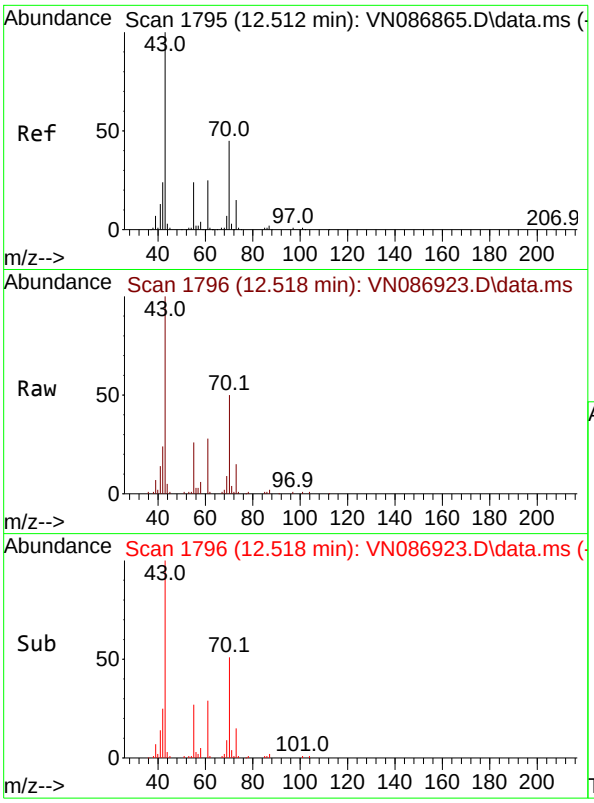




#73
Isopropylbenzene
Concen: 41.733 ug/l
RT: 12.694 min Scan# 1826
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion:105 Resp: 394852

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 27.1 | 13.5 | 40.4 |

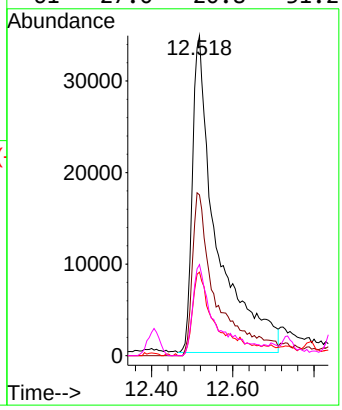





#74
N-amyl acetate
Concen: 43.473 ug/l
RT: 12.518 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 43 Resp: 14372

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 50.9 | 37.6 | 56.4 |
| 55 | 25.6 | 19.0 | 28.6 |
| 61 | 27.0 | 20.8 | 31.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
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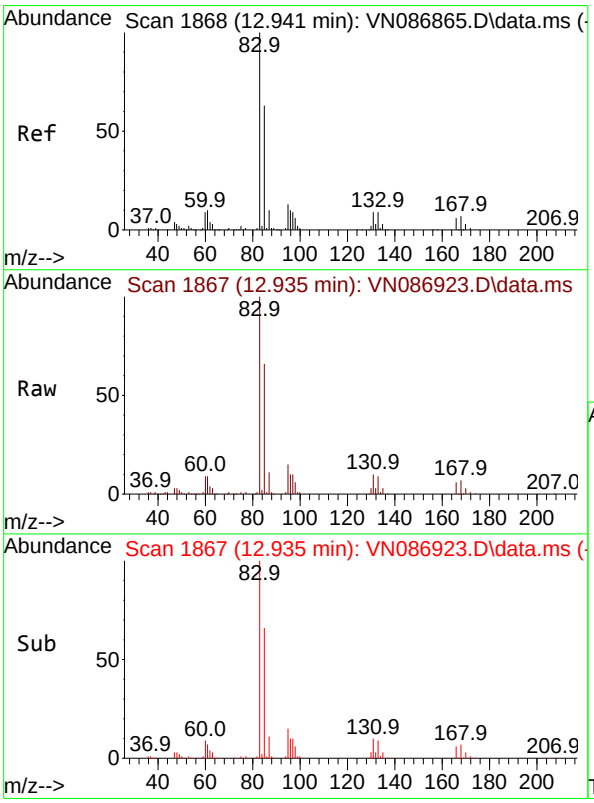
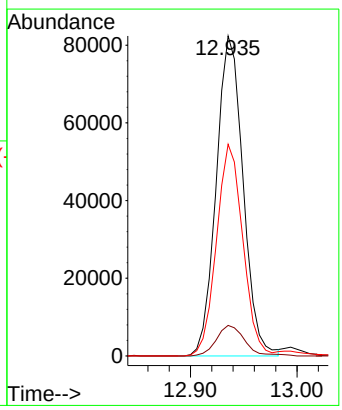
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

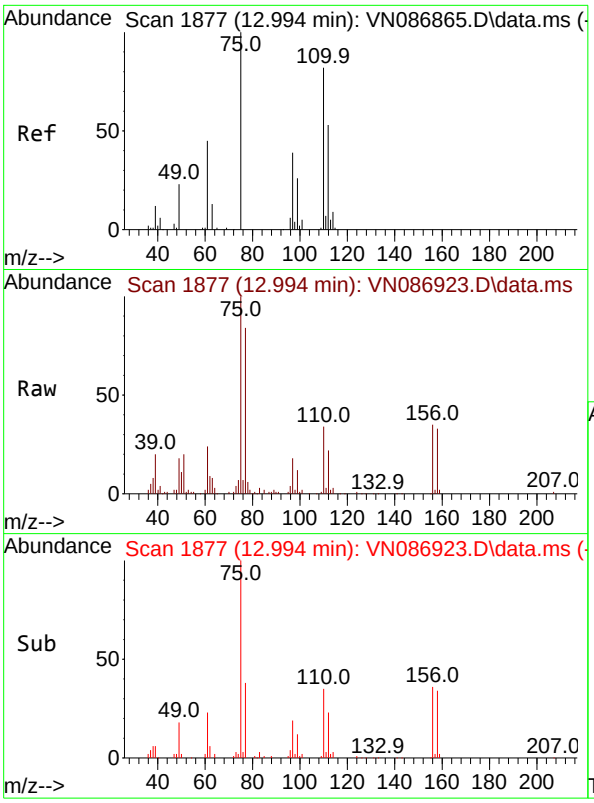



#75
1,1,2,2-Tetrachloroethane
Concen: 44.965 ug/l
RT: 12.935 min Scan# 1867
Delta R.T. -0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 83 Resp: 144127

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 10.1 | 4.9 | 14.7 |
| 85 | 64.9 | 32.0 | 96.0 |






#76
1,2,3-Trichloropropane
Concen: 38.345 ug/l m
RT: 12.994 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 75 Resp: 11837

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 193.2 | 79.3 | 237.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

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Reviewed By :John Carlone 06/11/2025
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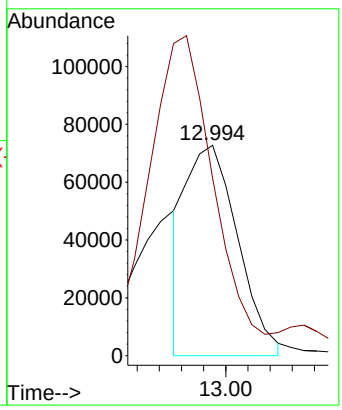
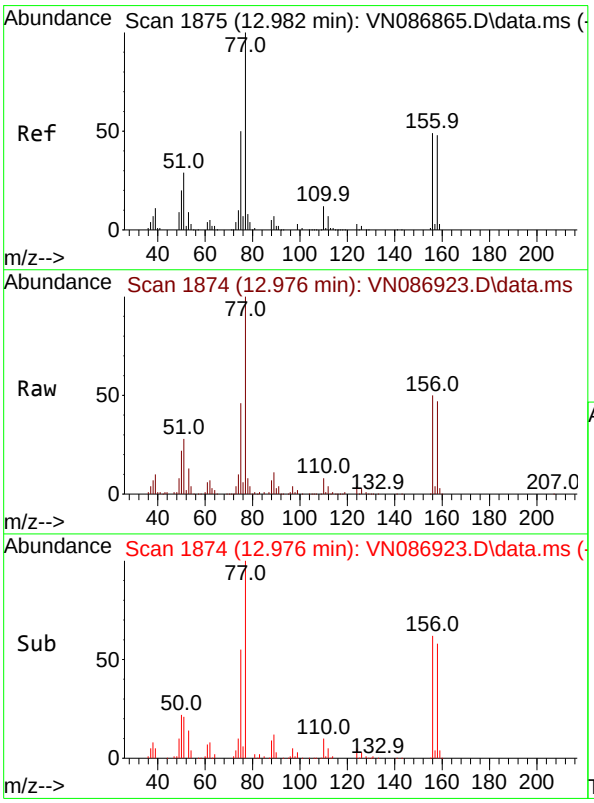
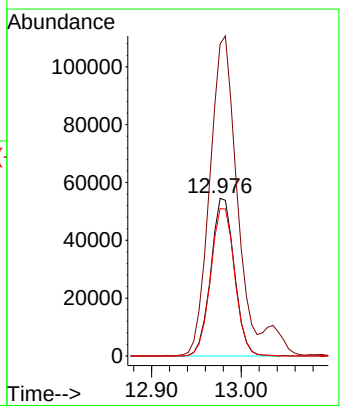


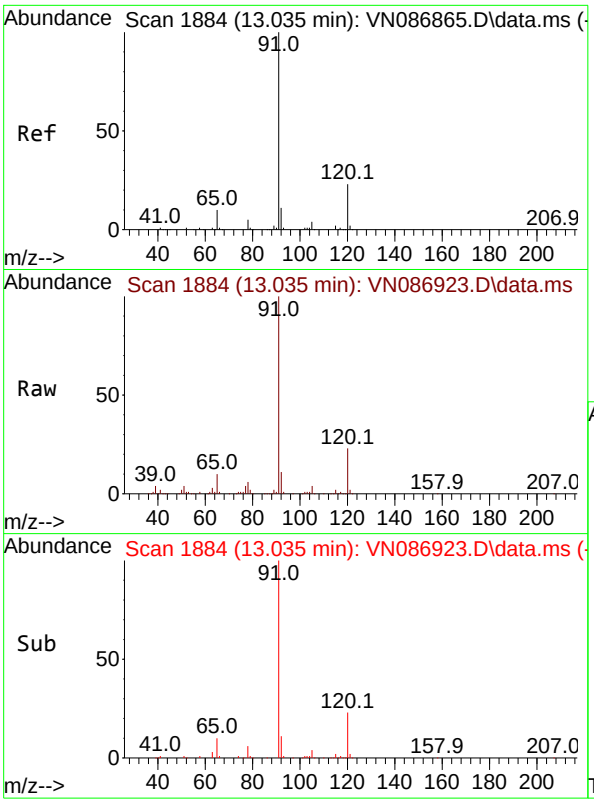




#77
Bromobenzene
Concen: 45.640 ug/l
RT: 12.976 min Scan# 1874
Delta R.T. -0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion:156 Resp: 99031

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 230.9 | 117.7 | 353.1 |
| 158 | 95.9 | 48.1 | 144.4 |






#78
n-propylbenzene
Concen: 40.377 ug/l
RT: 13.035 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 91 Resp: 46425

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 23.6 | 11.4 | 34.2 |

**Instrument :**
MSVOA_N
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MW-11A-13.5-060525MSD

**Manual Integrations**
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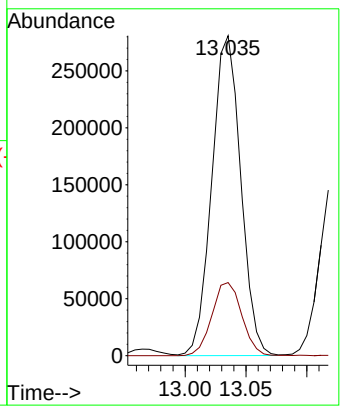
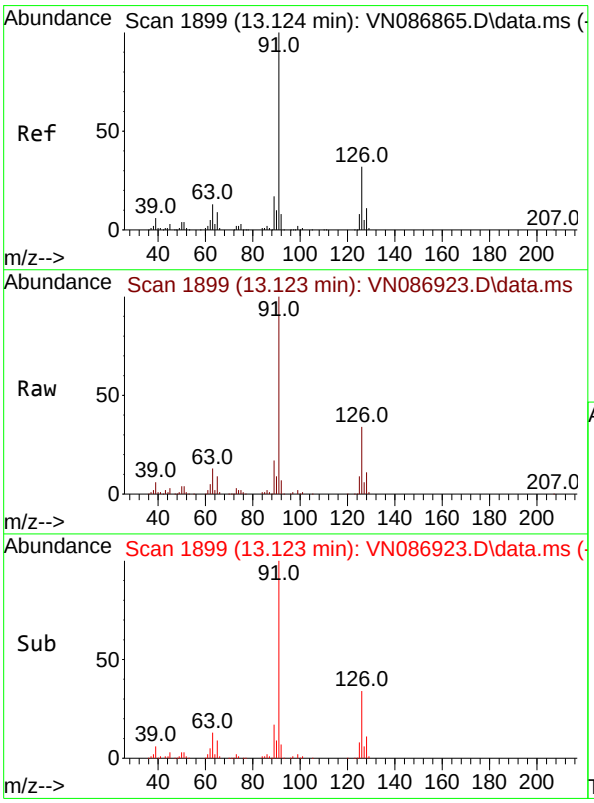
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

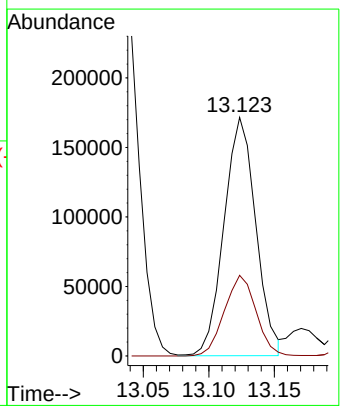


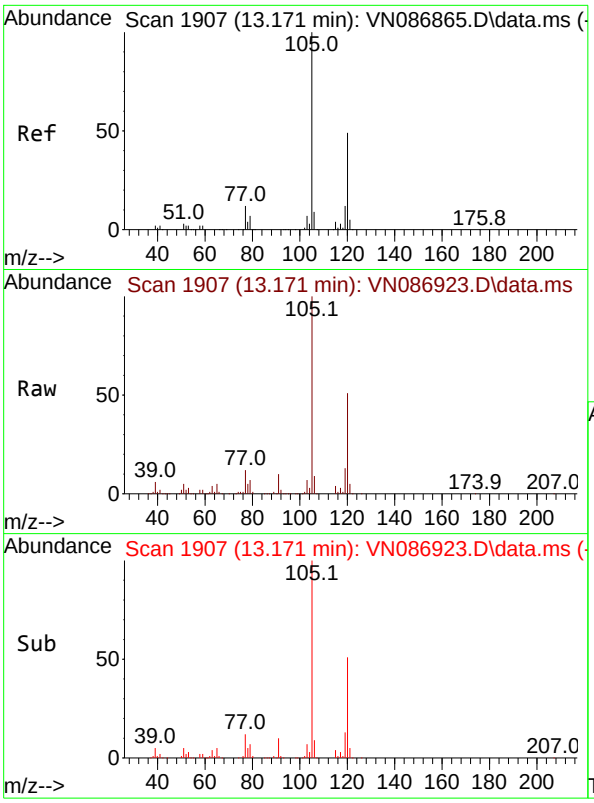




#79
2-Chlorotoluene
Concen: 42.017 ug/l
RT: 13.123 min Scan# 1899
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 91 Resp: 289730

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 33.6 | 16.2 | 48.5 |

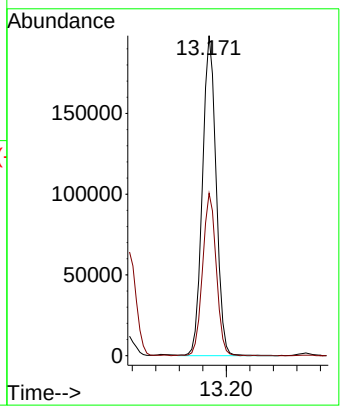





#80
1,3,5-Trimethylbenzene
Concen: 41.111 ug/l
RT: 13.171 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion:105 Resp: 32113

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 50.4 | 24.9 | 74.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

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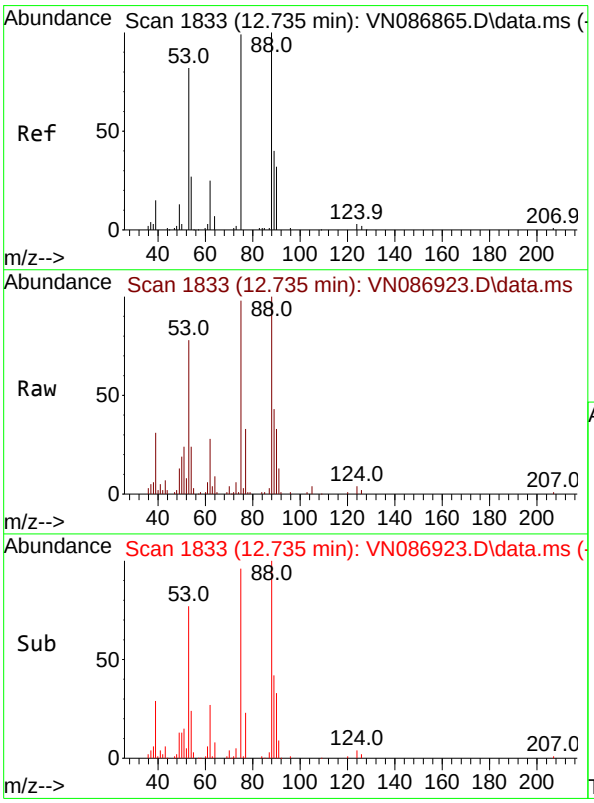
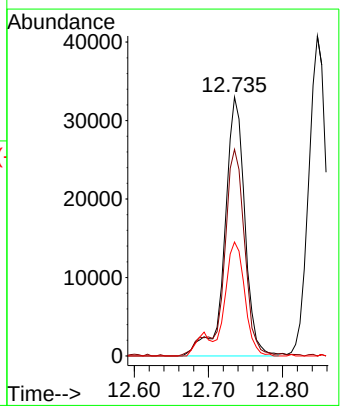
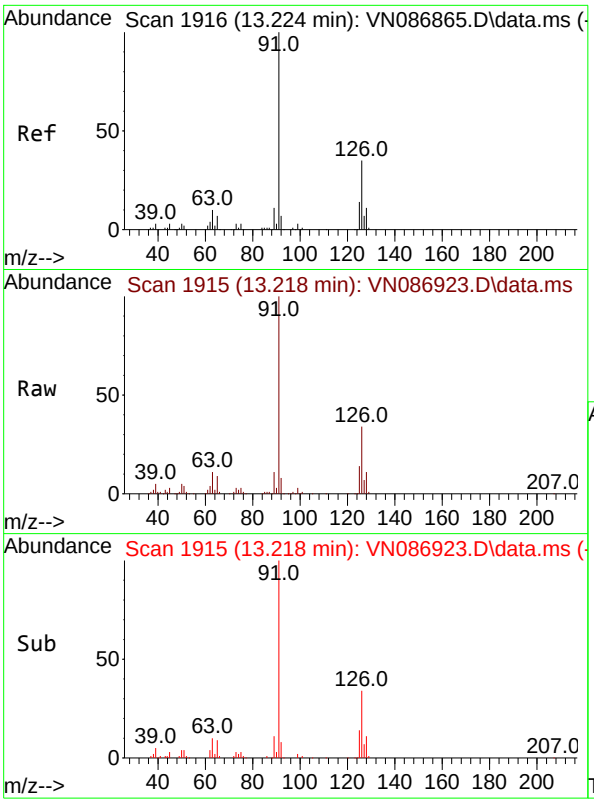



#81
trans-1,4-Dichloro-2-butene
Concen: 46.366 ug/l
RT: 12.735 min Scan# 1833
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 75 Resp: 62181

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 83.5 | 66.6 | 99.8 |
| 89 | 42.1 | 36.7 | 55.1 |






#82
4-Chlorotoluene
Concen: 42.756 ug/l
RT: 13.218 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

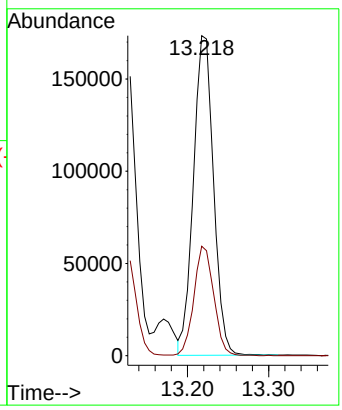
Tgt Ion: 91 Resp: 29831

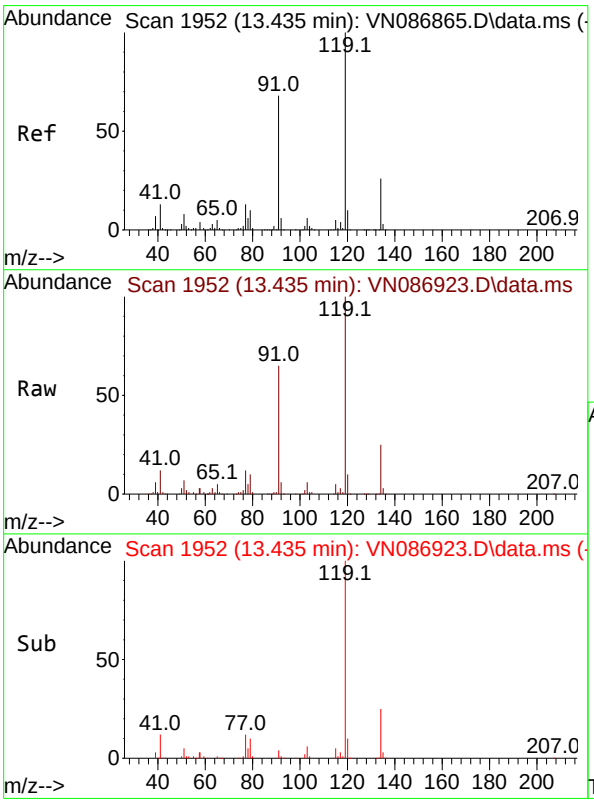
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 33.9 | 16.7 | 50.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

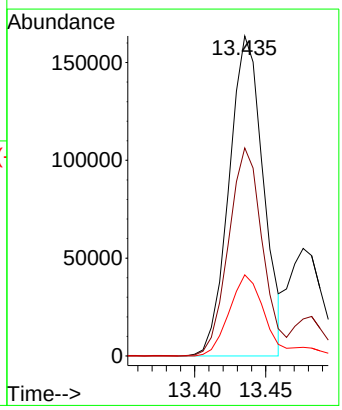


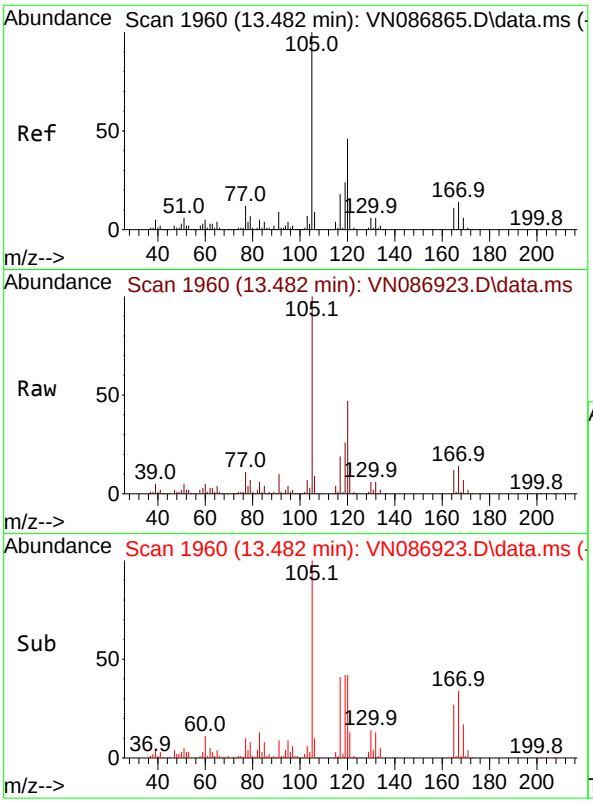




#83
tert-Butylbenzene
Concen: 38.263 ug/l
RT: 13.435 min Scan# 1952
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion:119 Resp: 273596

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 65.0 | 32.1 | 96.5 |
| 134 | 27.7 | 13.4 | 40.1 |

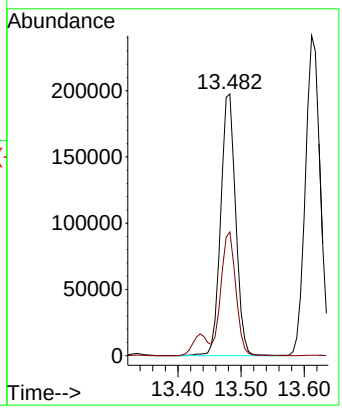





#84
1,2,4-Trimethylbenzene
Concen: 41.655 ug/l
RT: 13.482 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion:105 Resp: 32629

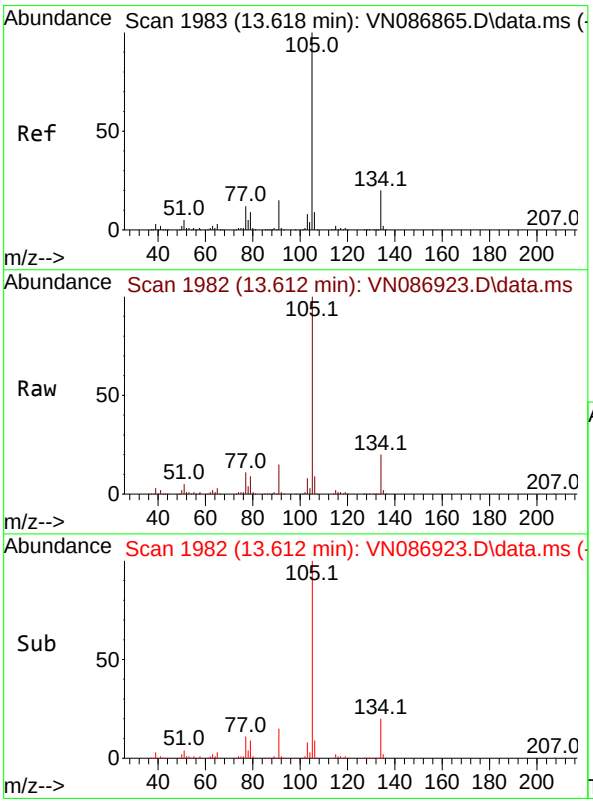
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 46.7 | 23.2 | 69.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
**APPROVED**

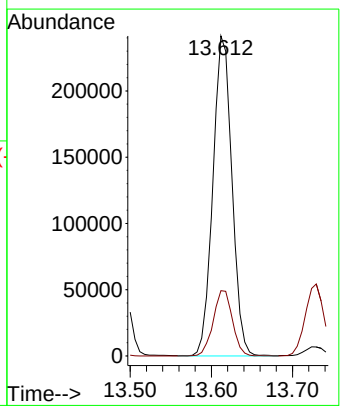
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

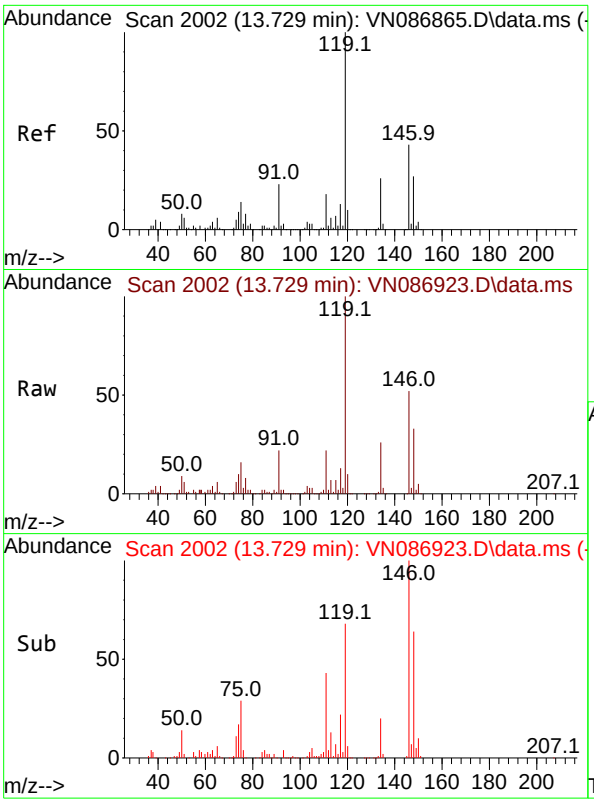



#85
sec-Butylbenzene
Concen: 37.979 ug/l
RT: 13.612 min Scan# 1982
Delta R.T. -0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion:105 Resp: 394374

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 20.6 | 10.0 | 30.0 |






#86
p-Isopropyltoluene
Concen: 38.742 ug/l
RT: 13.729 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

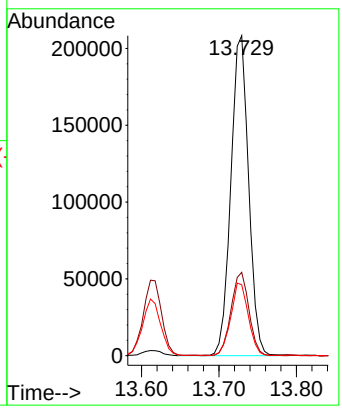
Tgt Ion:119 Resp: 33255

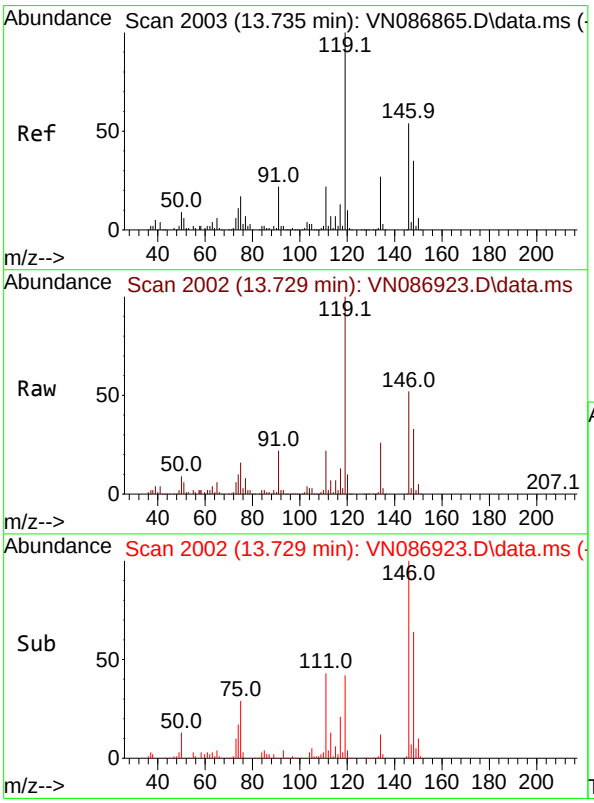
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 26.3 | 13.5 | 40.4 |
| 91 | 22.3 | 11.5 | 34.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

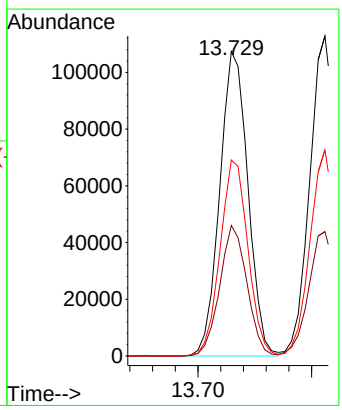


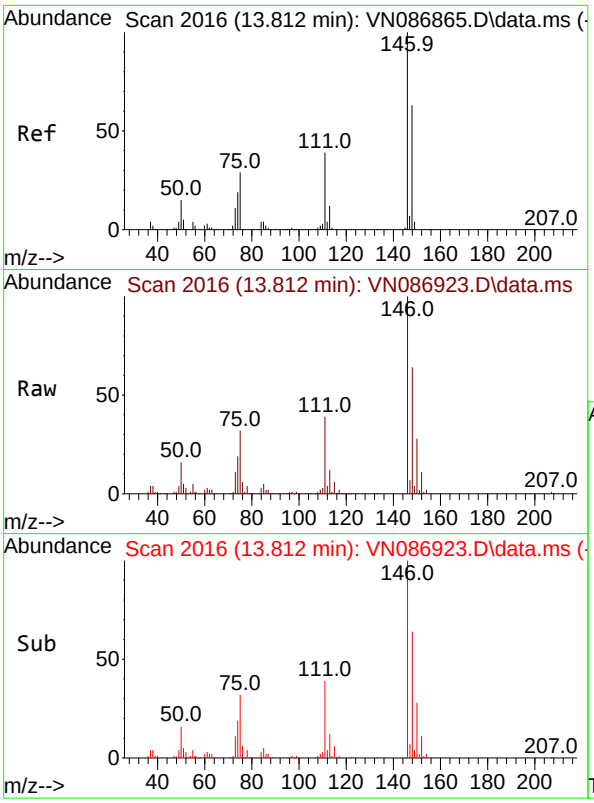




#87
1,3-Dichlorobenzene
Concen: 43.312 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. -0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion:146 Resp: 184900

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 41.4 | 20.9 | 62.8 |
| 148 | 63.6 | 32.0 | 96.2 |






#88
1,4-Dichlorobenzene
Concen: 43.980 ug/l
RT: 13.812 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

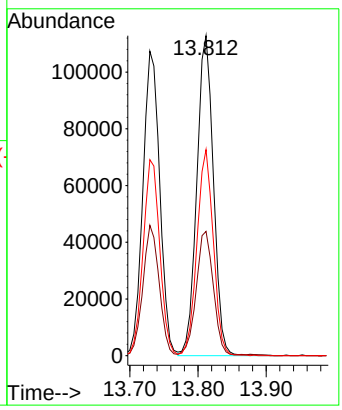
Tgt Ion:146 Resp: 19142

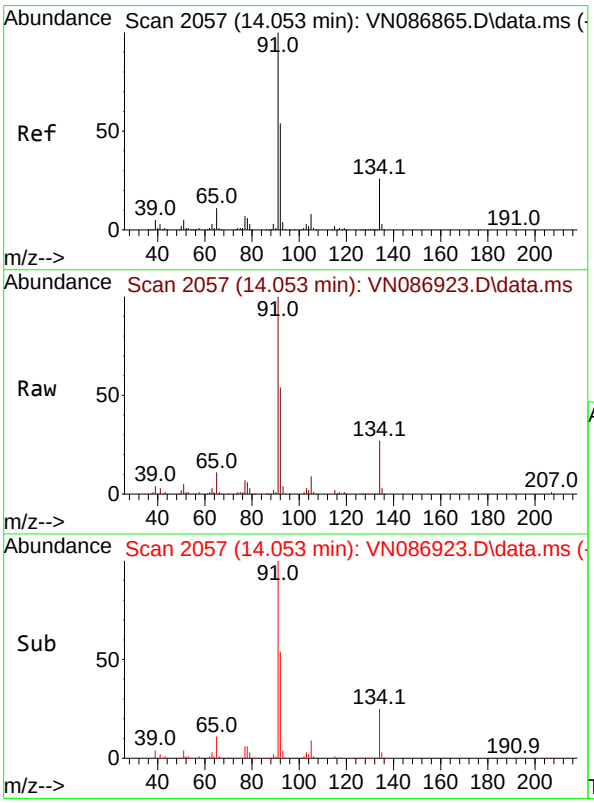
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 39.4 | 19.9 | 59.7 |
| 148 | 63.3 | 31.8 | 95.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

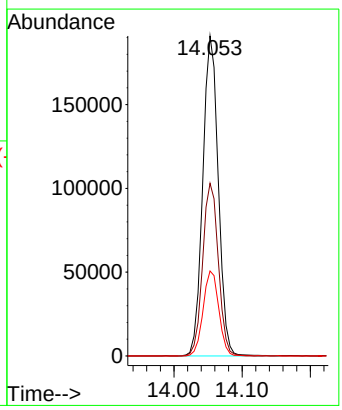


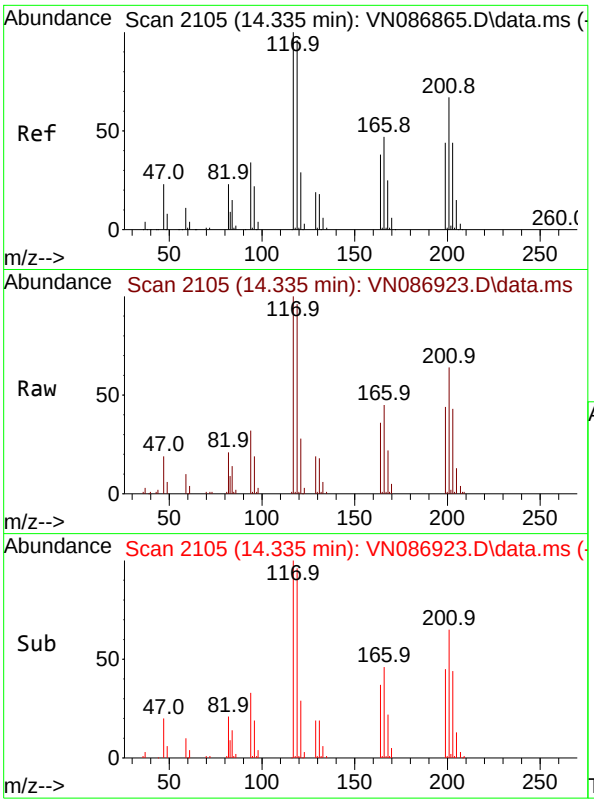




#89
n-Butylbenzene
Concen: 36.403 ug/l
RT: 14.053 min Scan# 2057
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 91 Resp: 302661

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 54.5 | 27.5 | 82.4 |
| 134 | 26.8 | 13.0 | 39.0 |

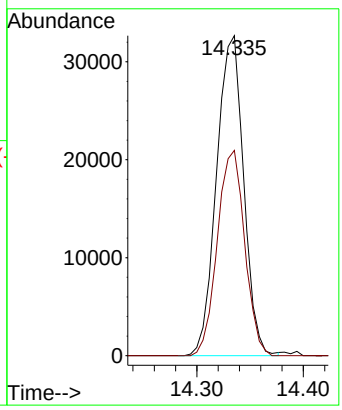





#90
Hexachloroethane
Concen: 39.692 ug/l
RT: 14.335 min Scan# 21
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion:117 Resp: 5775

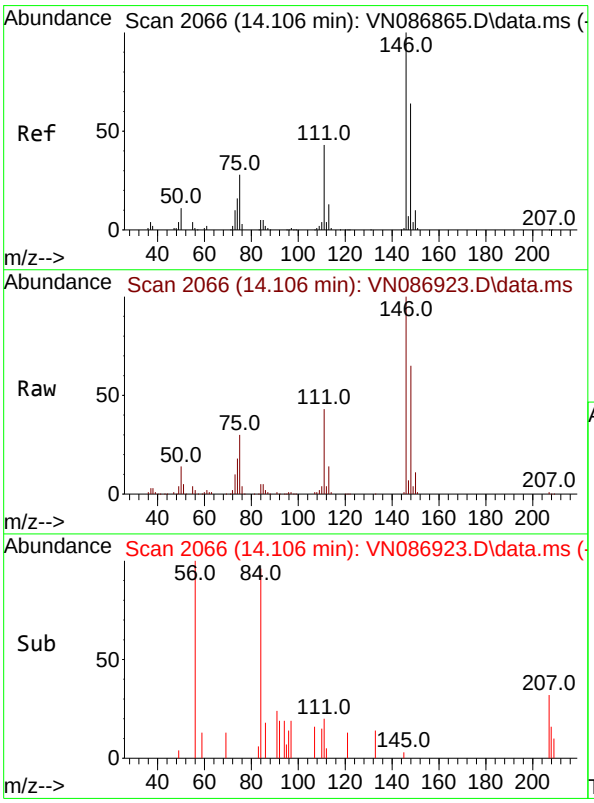
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 64.6 | 33.2 | 99.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
**APPROVED**

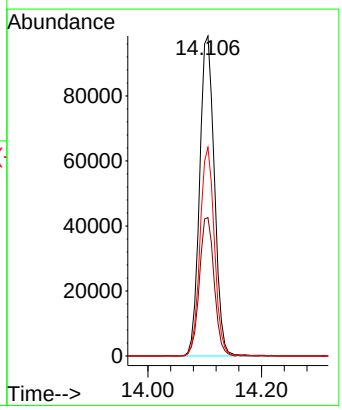
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

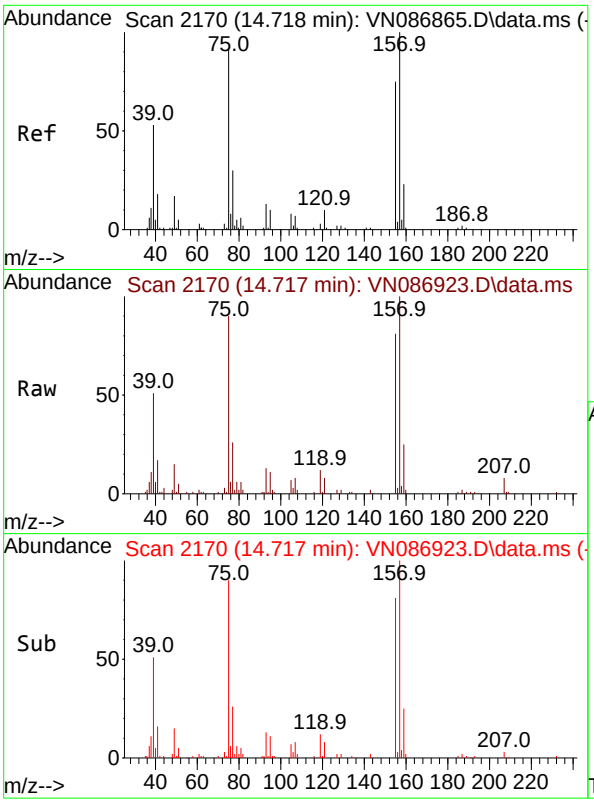



#91
1,2-Dichlorobenzene
Concen: 43.302 ug/l
RT: 14.106 min Scan# 2066
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion:146 Resp: 177603

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.1 | 21.6 | 64.6 |
| 148 | 63.3 | 31.7 | 95.1 |

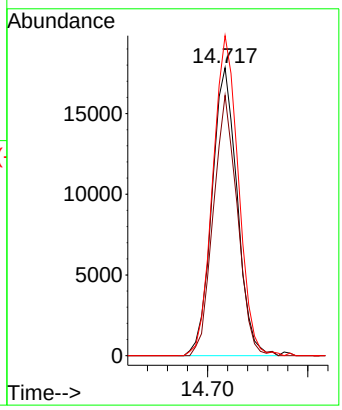





#92
1,2-Dibromo-3-Chloropropane
Concen: 40.715 ug/l
RT: 14.717 min Scan# 21
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion: 75 Resp: 3121

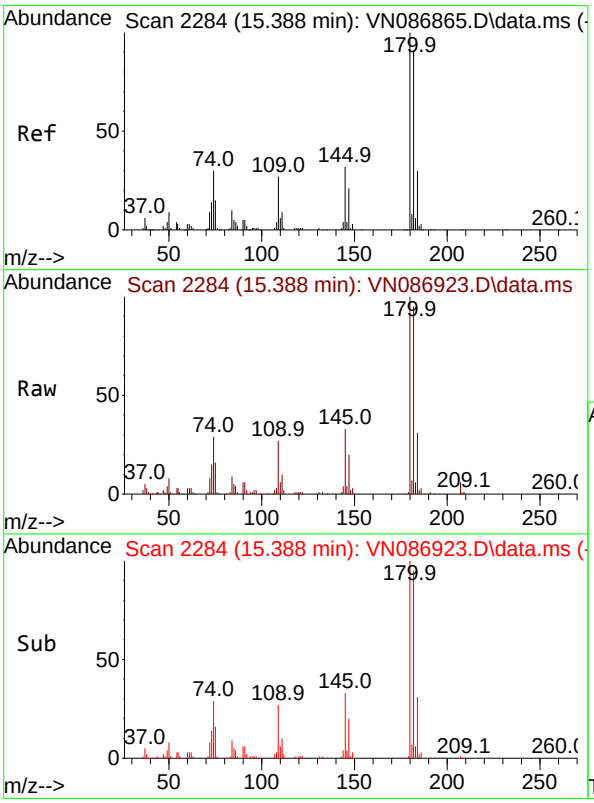
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 85.9 | 41.1 | 123.4 |
| 157 | 112.8 | 52.7 | 158.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
**APPROVED**

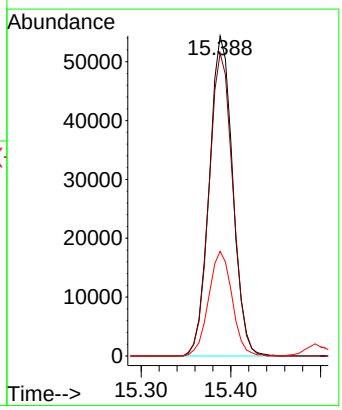
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

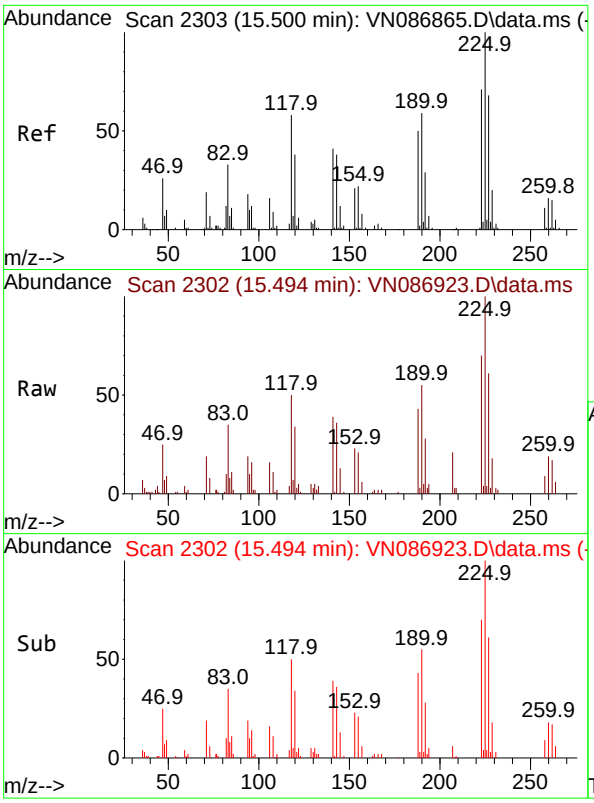



#93
1,2,4-Trichlorobenzene
Concen: 37.609 ug/l
RT: 15.388 min Scan# 2284
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion:180 Resp: 98501

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 96.0 | 46.9 | 140.7 |
| 145 | 32.7 | 16.0 | 47.9 |

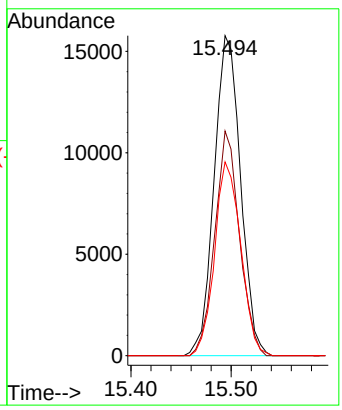





#94
Hexachlorobutadiene
Concen: 29.629 ug/l
RT: 15.494 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion:225 Resp: 2891

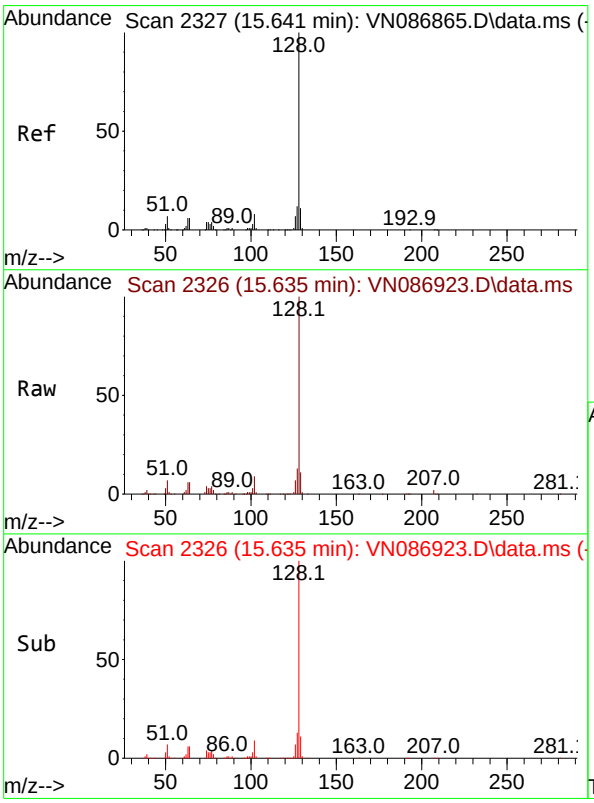
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 65.5 | 33.5 | 100.4 |
| 227 | 59.8 | 31.1 | 93.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
**APPROVED**

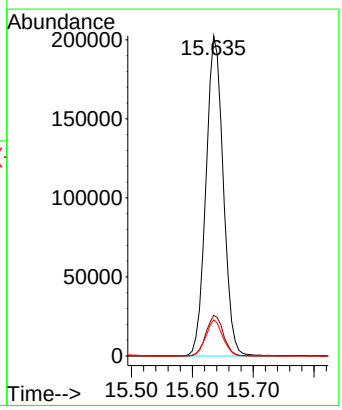
Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

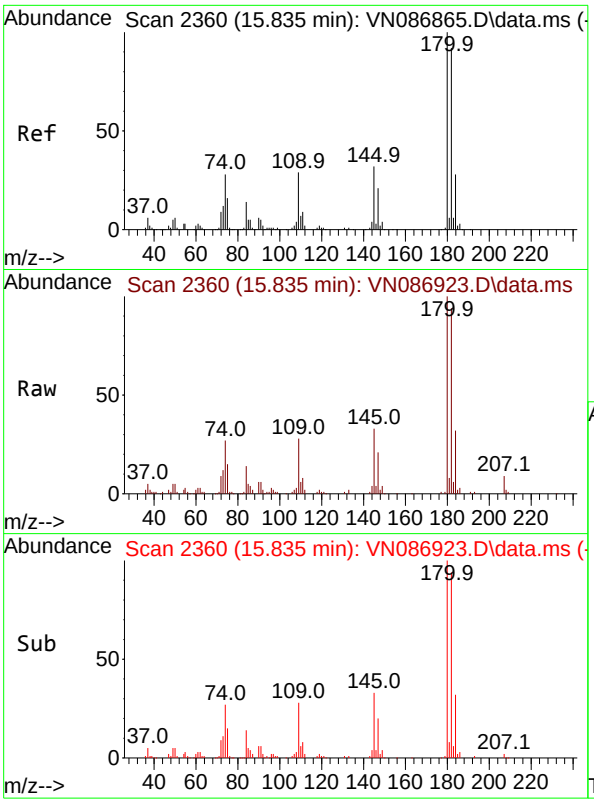



#95
Naphthalene
Concen: 40.957 ug/l
RT: 15.635 min Scan# 2326
Delta R.T. -0.006 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion:128 Resp: 399267

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.8 | 10.2 | 15.2 |
| 129 | 11.0 | 8.8 | 13.2 |

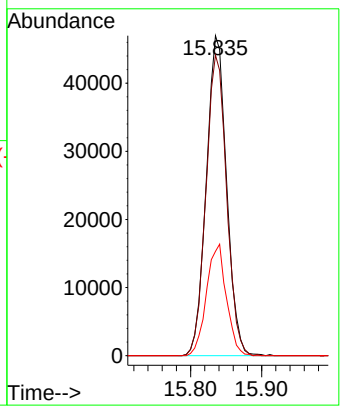





#96
1,2,3-Trichlorobenzene
Concen: 35.852 ug/l
RT: 15.835 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086923.D
Acq: 10 Jun 2025 13:12

Tgt Ion:180 Resp: 9329

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.6 | 47.0 | 141.0 |
| 145 | 34.1 | 16.6 | 49.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
MW-11A-13.5-060525MSD

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 06/11/2025
Supervised By :Mahesh Dadoda 06/11/2025

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# Manual Integration Report

| Sequence: | vn060625 | Instrument | MSVOA_n |
|---|---|---|---|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|
| VSTDICC001 | VN086862.D | 1,1,2-Trichlorotrifluoroethane | JOHN | 6/9/2025 8:02:09 AM | MMDadoda | 6/9/2025 1:13:18 PM | Peak Integrated by Software |
| VSTDICC001 | VN086862.D | 1,2,3-Trichloropropane | JOHN | 6/9/2025 8:02:09 AM | MMDadoda | 6/9/2025 1:13:18 PM | Peak Integrated by Software |
| VSTDICC001 | VN086862.D | 1,4-Dichlorobenzene | JOHN | 6/9/2025 8:02:09 AM | MMDadoda | 6/9/2025 1:13:18 PM | Peak Integrated by Software |
| VSTDICC001 | VN086862.D | 2-Hexanone | JOHN | 6/9/2025 8:02:09 AM | MMDadoda | 6/9/2025 1:13:18 PM | Peak Integrated by Software |
| VSTDICC001 | VN086862.D | N-amyl acetate | JOHN | 6/9/2025 8:02:09 AM | MMDadoda | 6/9/2025 1:13:18 PM | Peak Integrated by Software |
| VSTDICC005 | VN086863.D | 1,2,3-Trichloropropane | JOHN | 6/9/2025 8:02:13 AM | MMDadoda | 6/9/2025 1:13:19 PM | Peak Integrated by Software |
| VSTDICC005 | VN086863.D | N-amyl acetate | JOHN | 6/9/2025 8:02:13 AM | MMDadoda | 6/9/2025 1:13:19 PM | Peak Integrated by Software |
| VSTDICC020 | VN086864.D | 1,2,3-Trichloropropane | JOHN | 6/9/2025 8:02:19 AM | MMDadoda | 6/9/2025 1:13:21 PM | Peak Integrated by Software |
| VSTDICCC050 | VN086865.D | 1,2,3-Trichloropropane | JOHN | 6/9/2025 8:02:25 AM | MMDadoda | 6/9/2025 1:13:23 PM | Peak Integrated by Software |
| VSTDICC100 | VN086866.D | 1,2,3-Trichloropropane | JOHN | 6/9/2025 8:02:29 AM | MMDadoda | 6/9/2025 1:13:28 PM | Peak Integrated by Software |
| VSTDICC150 | VN086867.D | 1,2,3-Trichloropropane | JOHN | 6/9/2025 8:02:34 AM | MMDadoda | 6/9/2025 1:13:30 PM | Peak Integrated by Software |
| VSTDICV050 | VN086869.D | 1,2,3-Trichloropropane | JOHN | 6/9/2025 8:02:38 AM | MMDadoda | 6/9/2025 1:13:34 PM | Peak Integrated by Software |
| VSTDCCC050 | VN086886.D | 1,2,3-Trichloropropane | JOHN | 6/9/2025 8:02:55 AM | MMDadoda | 6/9/2025 1:13:44 PM | Peak Integrated by Software |

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# Manual Integration Report

| Sequence: | vn060625 | Instrument | MSVOA_n |
|---|---|---|---|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|

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# Manual Integration Report

| Sequence: | VN061025 | Instrument | MSVOA_n |
|---|---|---|---|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|
| VSTDCCC050 | VN086913.D | 1,2,3-Trichloropropane | JOHN | 6/11/2025 9:51:44 AM | MMDadoda | 6/11/2025 11:12:24 AM | Peak Integrated by Software |
| VSTDCCC050 | VN086913.D | trans-1,4-Dichloro-2-but ene | JOHN | 6/11/2025 9:51:44 AM | MMDadoda | 6/11/2025 11:12:24 AM | Peak Integrated by Software |
| VN0610WBS01 | VN086916.D | 1,2,3-Trichloropropane | JOHN | 6/11/2025 9:51:48 AM | MMDadoda | 6/11/2025 11:12:38 AM | Peak Integrated by Software |
| VN0610WBS01 | VN086916.D | N-amyl acetate | JOHN | 6/11/2025 9:51:48 AM | MMDadoda | 6/11/2025 11:12:38 AM | Peak Integrated by Software |
| Q2250-02MS | VN086922.D | 1,2,3-Trichloropropane | JOHN | 6/11/2025 9:51:56 AM | MMDadoda | 6/11/2025 11:12:42 AM | Peak Integrated by Software |
| Q2250-02MS | VN086922.D | N-amyl acetate | JOHN | 6/11/2025 9:51:56 AM | MMDadoda | 6/11/2025 11:12:42 AM | Peak Integrated by Software |
| Q2250-03MSD | VN086923.D | 1,2,3-Trichloropropane | JOHN | 6/11/2025 9:52:00 AM | MMDadoda | 6/11/2025 11:12:43 AM | Peak Integrated by Software |
| VSTDCCC050 | VN086938.D | 1,2,3-Trichloropropane | JOHN | 6/11/2025 9:52:32 AM | MMDadoda | 6/11/2025 11:12:50 AM | Peak Integrated by Software |
| VSTDCCC050 | VN086938.D | trans-1,4-Dichloro-2-but ene | JOHN | 6/11/2025 9:52:32 AM | MMDadoda | 6/11/2025 11:12:50 AM | Peak Integrated by Software |

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# Manual Integration Report

| Sequence: | vn061125 | Instrument | MSVOA_n |
|---|---|---|---|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|
| VSTDCCC050 | VN086940.D | 1,2,3-Trichloropropane | JOHN | 6/12/2025 9:47:09 AM | Sam | 6/12/2025 3:54:50 PM | Peak Integrated by Software |
| VN0611WBS02 | VN086944.D | 1,2,3-Trichloropropane | JOHN | 6/12/2025 9:47:21 AM | Sam | 6/12/2025 3:54:50 PM | Peak Integrated by Software |
| VSTDCCC050 | VN086965.D | 1,2,3-Trichloropropane | JOHN | 6/12/2025 9:53:57 AM | Sam | 6/12/2025 3:54:56 PM | Peak Integrated by Software |

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Fax : 908 789 8922

**Instrument ID: MSVOA_N**

## Daily Analysis Runlog For Sequence/QCBatch ID # VN060625

| | | | | | |
|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 6/9/2025 8:08:23 AM | | |
| Supervise By | Mahesh Dadoda | Supervise On | 6/9/2025 1:13:51 PM | | |
| SubDirectory | VN060625 | HP Acquire Method | | HP Processing Method | 82N060625W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP134155 |
| Initial Calibration Stds | VP134242,VP134243,VP134244,VP134245,VP134246,VP134247 |
| CCC | VP134156 |
| Internal Standard/PEM | |
| ICV/I.BLK | VP134248 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr # | SampleId | Data File Name | Date-Time | Operator | Status |
|---|---|---|---|---|---|
| 1 | BFB | VN086861.D | 06 Jun 2025 07:59 | JC\MD | Ok |
| 2 | VSTDICC001 | VN086862.D | 06 Jun 2025 12:44 | JC\MD | Ok,M |
| 3 | VSTDICC005 | VN086863.D | 06 Jun 2025 13:17 | JC\MD | Ok,M |
| 4 | VSTDICC020 | VN086864.D | 06 Jun 2025 13:40 | JC\MD | Ok,M |
| 5 | VSTDICCC050 | VN086865.D | 06 Jun 2025 14:03 | JC\MD | Ok,M |
| 6 | VSTDICC100 | VN086866.D | 06 Jun 2025 14:26 | JC\MD | Ok,M |
| 7 | VSTDICC150 | VN086867.D | 06 Jun 2025 14:49 | JC\MD | Ok,M |
| 8 | IBLK | VN086868.D | 06 Jun 2025 15:12 | JC\MD | Ok |
| 9 | VSTDICV050 | VN086869.D | 06 Jun 2025 15:54 | JC\MD | Ok,M |
| 10 | VN0606WBL01 | VN086870.D | 06 Jun 2025 16:47 | JC\MD | Ok |
| 11 | VN0606WBL02 | VN086871.D | 06 Jun 2025 17:10 | JC\MD | Ok |
| 12 | VN0606WBS01 | VN086872.D | 06 Jun 2025 17:33 | JC\MD | Ok,M |
| 13 | VN0606WBSD01 | VN086873.D | 06 Jun 2025 17:56 | JC\MD | Ok,M |
| 14 | Q2254-01 | VN086874.D | 06 Jun 2025 18:19 | JC\MD | Not Ok |
| 15 | Q2237-02 | VN086875.D | 06 Jun 2025 18:42 | JC\MD | Ok |
| 16 | Q2216-02 | VN086876.D | 06 Jun 2025 19:05 | JC\MD | Ok |
| 17 | Q2216-03 | VN086877.D | 06 Jun 2025 19:28 | JC\MD | Ok |
| 18 | Q2216-04 | VN086878.D | 06 Jun 2025 19:51 | JC\MD | Ok |
| 19 | Q2216-05 | VN086879.D | 06 Jun 2025 20:13 | JC\MD | Not Ok |
| 20 | Q2216-06 | VN086880.D | 06 Jun 2025 20:36 | JC\MD | Not Ok |
| 21 | Q2206-04 | VN086881.D | 06 Jun 2025 20:59 | JC\MD | Not Ok |

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**Instrument ID: MSVOA_N**

## Daily Analysis Runlog For Sequence/QCBatch ID # VN060625

| | | | | | |
|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 6/9/2025 8:08:23 AM | | |
| Supervise By | Mahesh Dadoda | Supervise On | 6/9/2025 1:13:51 PM | | |
| SubDirectory | VN060625 | HP Acquire Method | | HP Processing Method | 82N060625W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP134155 |
| Initial Calibration Stds | VP134242,VP134243,VP134244,VP134245,VP134246,VP134247 |
| CCC | VP134156 |
| Internal Standard/PEM | |
| ICV/I.BLK | VP134248 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| | | | | | |
|---|---|---|---|---|---|
| 22 | Q2242-04 | VN086882.D | 06 Jun 2025 21:21 | JC\MD | Not Ok |
| 23 | Q2192-01 | VN086883.D | 06 Jun 2025 21:44 | JC\MD | Not Ok |
| 24 | Q2198-02 | VN086884.D | 06 Jun 2025 22:07 | JC\MD | Not Ok |
| 25 | Q2198-04 | VN086885.D | 06 Jun 2025 22:29 | JC\MD | Not Ok |
| 26 | VSTDCCC050 | VN086886.D | 06 Jun 2025 22:52 | JC\MD | Not Ok |

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**Instrument ID: MSVOA_N**

## Daily Analysis Runlog For Sequence/QCBatch ID # VN061025

| | | | | | |
|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 6/11/2025 9:59:27 AM | | |
| Supervise By | Mahesh Dadoda | Supervise On | 6/11/2025 11:14:28 AM | | |
| SubDirectory | VN061025 | HP Acquire Method | | HP Processing Method | 82N060625W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP134203 |
| Initial Calibration Stds | |
| CCC | VP134204,VP134205 |
| Internal Standard/PEM | |
| ICV/I.BLK | |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr # | SampleId | Data File Name | Date-Time | Operator | Status |
|---|---|---|---|---|---|
| 1 | BFB | VN086912.D | 10 Jun 2025 08:39 | JC\MD | Ok |
| 2 | VSTDCCC050 | VN086913.D | 10 Jun 2025 09:13 | JC\MD | Ok,M |
| 3 | VN0610MBL01 | VN086914.D | 10 Jun 2025 09:47 | JC\MD | Ok |
| 4 | VN0610WBL01 | VN086915.D | 10 Jun 2025 10:09 | JC\MD | Ok |
| 5 | VN0610WBS01 | VN086916.D | 10 Jun 2025 10:30 | JC\MD | Ok,M |
| 6 | VN0610WBSD01 | VN086917.D | 10 Jun 2025 11:04 | JC\MD | Ok,M |
| 7 | IBLK | VN086918.D | 10 Jun 2025 11:25 | JC\MD | Ok |
| 8 | Q2250-05 | VN086919.D | 10 Jun 2025 11:47 | JC\MD | Ok |
| 9 | Q2250-06 | VN086920.D | 10 Jun 2025 12:08 | JC\MD | Ok |
| 10 | Q2250-01 | VN086921.D | 10 Jun 2025 12:30 | JC\MD | Dilution |
| 11 | Q2250-02MS | VN086922.D | 10 Jun 2025 12:51 | JC\MD | Ok,M |
| 12 | Q2250-03MSD | VN086923.D | 10 Jun 2025 13:12 | JC\MD | Ok,M |
| 13 | IBLK | VN086924.D | 10 Jun 2025 13:34 | JC\MD | Ok |
| 14 | Q2251-01 | VN086925.D | 10 Jun 2025 13:55 | JC\MD | Not Ok |
| 15 | Q2251-06 | VN086926.D | 10 Jun 2025 14:17 | JC\MD | Not Ok |
| 16 | Q2251-05 | VN086927.D | 10 Jun 2025 14:38 | JC\MD | ReRun |
| 17 | Q2251-02 | VN086928.D | 10 Jun 2025 15:00 | JC\MD | Ok |
| 18 | Q2251-03 | VN086929.D | 10 Jun 2025 15:22 | JC\MD | Ok |
| 19 | IBLK | VN086930.D | 10 Jun 2025 15:43 | JC\MD | Ok |
| 20 | IBLK | VN086931.D | 10 Jun 2025 16:05 | JC\MD | Ok |
| 21 | Q2251-01 | VN086932.D | 10 Jun 2025 16:26 | JC\MD | Ok |

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**Instrument ID: MSVOA_N**

## Daily Analysis Runlog For Sequence/QCBatch ID # VN061025

| | | | | | |
|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 6/11/2025 9:59:27 AM | | |
| Supervise By | Mahesh Dadoda | Supervise On | 6/11/2025 11:14:28 AM | | |
| SubDirectory | VN061025 | HP Acquire Method | | HP Processing Method | 82N060625W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP134203 |
| Initial Calibration Stds | |
| CCC | VP134204,VP134205 |
| Internal Standard/PEM | |
| ICV/I.BLK | |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| | | | | | |
|---|---|---|---|---|---|
| 22 | Q2251-05 | VN086933.D | 10 Jun 2025 16:48 | JC\MD | Ok |
| 23 | Q2202-01 | VN086934.D | 10 Jun 2025 17:09 | JC\MD | Ok |
| 24 | Q2202-02 | VN086935.D | 10 Jun 2025 17:31 | JC\MD | Ok |
| 25 | Q2202-03 | VN086936.D | 10 Jun 2025 17:52 | JC\MD | Dilution |
| 26 | Q2279-01 | VN086937.D | 10 Jun 2025 18:14 | JC\MD | Ok |
| 27 | VSTDCCC050 | VN086938.D | 10 Jun 2025 18:57 | JC\MD | Ok,M |

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**Instrument ID: MSVOA_N**

## Daily Analysis Runlog For Sequence/QCBatch ID # VN061125

| | | | | | |
|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 6/12/2025 9:57:37 AM | | |
| Supervise By | Semsettin Yesilyurt | Supervise On | 6/12/2025 3:55:33 PM | | |
| SubDirectory | VN061125 | HP Acquire Method | | HP Processing Method | 82N060625W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP134284 |
| Initial Calibration Stds | |
| CCC | VP134285,VP134286 |
| Internal Standard/PEM | |
| ICV/I.BLK | |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr # | SampleId | Data File Name | Date-Time | Operator | Status |
|---|---|---|---|---|---|
| 1 | BFB | VN086939.D | 11 Jun 2025 10:22 | JC\MD | Ok |
| 2 | VSTDCCC050 | VN086940.D | 11 Jun 2025 11:32 | JC\MD | Ok,M |
| 3 | VN0611MBL01 | VN086941.D | 11 Jun 2025 12:06 | JC\MD | Ok |
| 4 | VN0611WBL01 | VN086942.D | 11 Jun 2025 12:28 | JC\MD | Ok |
| 5 | VN0611WBS01 | VN086943.D | 11 Jun 2025 12:50 | JC\MD | Not Ok |
| 6 | VN0611WBS02 | VN086944.D | 11 Jun 2025 13:27 | JC\MD | Ok,M |
| 7 | VN0611WBSD02 | VN086945.D | 11 Jun 2025 14:01 | JC\MD | Ok,M |
| 8 | Q2251-06 | VN086946.D | 11 Jun 2025 14:22 | JC\MD | Ok |
| 9 | Q2202-03DL | VN086947.D | 11 Jun 2025 14:44 | JC\MD | Ok,M |
| 10 | Q2250-01DL | VN086948.D | 11 Jun 2025 15:06 | JC\MD | Ok |
| 11 | Q2202-06 | VN086949.D | 11 Jun 2025 15:28 | JC\MD | Ok |
| 12 | Q2189-01 | VN086950.D | 11 Jun 2025 15:50 | JC\MD | Ok |
| 13 | Q2202-05 | VN086951.D | 11 Jun 2025 16:12 | JC\MD | Ok |
| 14 | Q2202-04 | VN086952.D | 11 Jun 2025 16:35 | JC\MD | Ok |
| 15 | Q2231-01 | VN086953.D | 11 Jun 2025 16:57 | JC\MD | Ok |
| 16 | Q2231-02 | VN086954.D | 11 Jun 2025 17:19 | JC\MD | Ok,M |
| 17 | Q2231-03 | VN086955.D | 11 Jun 2025 17:41 | JC\MD | Ok |
| 18 | Q2231-04 | VN086956.D | 11 Jun 2025 18:04 | JC\MD | Ok |
| 19 | Q2231-05 | VN086957.D | 11 Jun 2025 18:26 | JC\MD | Ok |
| 20 | Q2231-06 | VN086958.D | 11 Jun 2025 18:48 | JC\MD | Ok |
| 21 | Q2210-01 | VN086959.D | 11 Jun 2025 19:10 | JC\MD | Ok |

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**Instrument ID: MSVOA_N**

## Daily Analysis Runlog For Sequence/QCBatch ID # VN061125

| | | | | | |
|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 6/12/2025 9:57:37 AM | | |
| Supervise By | Semsettin Yesilyurt | Supervise On | 6/12/2025 3:55:33 PM | | |
| SubDirectory | VN061125 | HP Acquire Method | | HP Processing Method | 82N060625W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP134284 |
| Initial Calibration Stds | |
| CCC | VP134285,VP134286 |
| Internal Standard/PEM | |
| ICV/I.BLK | |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| | | | | | |
|---|---|---|---|---|---|
| 22 | Q2209-01 | VN086960.D | 11 Jun 2025 19:33 | JC\MD | Ok |
| 23 | IBLK | VN086961.D | 11 Jun 2025 19:55 | JC\MD | Ok |
| 24 | IBLK | VN086962.D | 11 Jun 2025 20:17 | JC\MD | Ok |
| 25 | Q2263-01 | VN086963.D | 11 Jun 2025 20:39 | JC\MD | Ok |
| 26 | Q2263-02 | VN086964.D | 11 Jun 2025 21:01 | JC\MD | Ok |
| 27 | VSTDCCC050 | VN086965.D | 11 Jun 2025 21:23 | JC\MD | Ok,M |

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**Instrument ID:** MSVOA_N

## Daily Analysis Runlog For Sequence/QCBatch ID # VN060625

| | | | | | |
|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 6/9/2025 8:08:23 AM | | |
| Supervise By | Mahesh Dadoda | Supervise On | 6/9/2025 1:13:51 PM | | |
| SubDirectory | VN060625 | HP Acquire Method | | HP Processing Method | 82N060625W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP134155 |
| Initial Calibration Stds | VP134242,VP134243,VP134244,VP134245,VP134246,VP134247 |
| CCC | VP134156 |
| Internal Standard/PEM | |
| ICV/I.BLK | VP134248 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr # | SampleId | ClientID | Data File Name | Date-Time | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | BFB | BFB | VN086861.D | 06 Jun 2025 07:59 | | JC\MD | Ok |
| 2 | VSTDICC001 | VSTDICC001 | VN086862.D | 06 Jun 2025 12:44 | Method failed for com.#13 | JC\MD | Ok,M |
| 3 | VSTDICC005 | VSTDICC005 | VN086863.D | 06 Jun 2025 13:17 | | JC\MD | Ok,M |
| 4 | VSTDICC020 | VSTDICC020 | VN086864.D | 06 Jun 2025 13:40 | | JC\MD | Ok,M |
| 5 | VSTDICCC050 | VSTDICCC050 | VN086865.D | 06 Jun 2025 14:03 | | JC\MD | Ok,M |
| 6 | VSTDICC100 | VSTDICC100 | VN086866.D | 06 Jun 2025 14:26 | | JC\MD | Ok,M |
| 7 | VSTDICC150 | VSTDICC150 | VN086867.D | 06 Jun 2025 14:49 | | JC\MD | Ok,M |
| 8 | IBLK | IBLK | VN086868.D | 06 Jun 2025 15:12 | | JC\MD | Ok |
| 9 | VSTDICV050 | ICVVN060625 | VN086869.D | 06 Jun 2025 15:54 | | JC\MD | Ok,M |
| 10 | VN0606WBL01 | VN0606WBL01 | VN086870.D | 06 Jun 2025 16:47 | | JC\MD | Ok |
| 11 | VN0606WBL02 | VN0606WBL02 | VN086871.D | 06 Jun 2025 17:10 | | JC\MD | Ok |
| 12 | VN0606WBS01 | VN0606WBS01 | VN086872.D | 06 Jun 2025 17:33 | | JC\MD | Ok,M |
| 13 | VN0606WBSD01 | VN0606WBSD01 | VN086873.D | 06 Jun 2025 17:56 | | JC\MD | Ok,M |
| 14 | Q2254-01 | BP-VPB-182-GW-810-8 | VN086874.D | 06 Jun 2025 18:19 | vial A pH<2 endccc out of tune | JC\MD | Not Ok |
| 15 | Q2237-02 | TW-WTS-10 | VN086875.D | 06 Jun 2025 18:42 | vial A pH<2 | JC\MD | Ok |
| 16 | Q2216-02 | 3887 | VN086876.D | 06 Jun 2025 19:05 | vial A pH<2 | JC\MD | Ok |
| 17 | Q2216-03 | 3888 | VN086877.D | 06 Jun 2025 19:28 | vial A pH<2 | JC\MD | Ok |
| 18 | Q2216-04 | 3864 | VN086878.D | 06 Jun 2025 19:51 | vial A pH<2 | JC\MD | Ok |

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**Instrument ID:** MSVOA_N

## Daily Analysis Runlog For Sequence/QCBatch ID # VN060625

| | | | | | |
|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 6/9/2025 8:08:23 AM | | |
| Supervise By | Mahesh Dadoda | Supervise On | 6/9/2025 1:13:51 PM | | |
| SubDirectory | VN060625 | HP Acquire Method | | HP Processing Method | 82N060625W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP134155 |
| Initial Calibration Stds | VP134242,VP134243,VP134244,VP134245,VP134246,VP134247 |
| CCC | VP134156 |
| Internal Standard/PEM | |
| ICV/I.BLK | VP134248 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 19 | Q2216-05 | 3865 | VN086879.D | 06 Jun 2025 20:13 | vial A pH<2 Out of Tune | JC\MD | Not Ok |
| 20 | Q2216-06 | 3851 | VN086880.D | 06 Jun 2025 20:36 | vial A pH<2 Out of Tune | JC\MD | Not Ok |
| 21 | Q2206-04 | TP-1 | VN086881.D | 06 Jun 2025 20:59 | vial A pH<2 Out of Tune | JC\MD | Not Ok |
| 22 | Q2242-04 | TP09-MHJ | VN086882.D | 06 Jun 2025 21:21 | vial A pH<2 Out of Tune | JC\MD | Not Ok |
| 23 | Q2192-01 | SB-1 | VN086883.D | 06 Jun 2025 21:44 | vial A pH<2 Out of Tune | JC\MD | Not Ok |
| 24 | Q2198-02 | B-202-SB02 | VN086884.D | 06 Jun 2025 22:07 | vial A pH<2 Out of Tune | JC\MD | Not Ok |
| 25 | Q2198-04 | B-207-SB02 | VN086885.D | 06 Jun 2025 22:29 | vial A pH<2 Out of Tune | JC\MD | Not Ok |
| 26 | VSTDCCC050 | VSTDCCC050EC | VN086886.D | 06 Jun 2025 22:52 | Out of Tune | JC\MD | Not Ok |

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**Instrument ID:** MSVOA_N

## Daily Analysis Runlog For Sequence/QCBatch ID # VN061025

| | | | | | |
|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 6/11/2025 9:59:27 AM | | |
| Supervise By | Mahesh Dadoda | Supervise On | 6/11/2025 11:14:28 AM | | |
| SubDirectory | VN061025 | HP Acquire Method | | HP Processing Method | 82N060625W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP134203 |
| Initial Calibration Stds | |
| CCC | VP134204,VP134205 |
| 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 | VN086912.D | 10 Jun 2025 08:39 | | JC\MD | Ok |
| 2 | VSTDCCC050 | VSTDCCC050 | VN086913.D | 10 Jun 2025 09:13 | pH#Lot#V12668 | JC\MD | Ok,M |
| 3 | VN0610MBL01 | VN0610MBL01 | VN086914.D | 10 Jun 2025 09:47 | | JC\MD | Ok |
| 4 | VN0610WBL01 | VN0610WBL01 | VN086915.D | 10 Jun 2025 10:09 | | JC\MD | Ok |
| 5 | VN0610WBS01 | VN0610WBS01 | VN086916.D | 10 Jun 2025 10:30 | | JC\MD | Ok,M |
| 6 | VN0610WBSD01 | VN0610WBSD01 | VN086917.D | 10 Jun 2025 11:04 | | JC\MD | Ok,M |
| 7 | IBLK | IBLK | VN086918.D | 10 Jun 2025 11:25 | | JC\MD | Ok |
| 8 | Q2250-05 | EB02-060525 | VN086919.D | 10 Jun 2025 11:47 | vial A pH<2 EB | JC\MD | Ok |
| 9 | Q2250-06 | TB-01-060525 | VN086920.D | 10 Jun 2025 12:08 | vial A pH<2 TB | JC\MD | Ok |
| 10 | Q2250-01 | MW-11A-13.5-060525 | VN086921.D | 10 Jun 2025 12:30 | vial A pH<2 Need 20X | JC\MD | Dilution |
| 11 | Q2250-02MS | MW-11A-13.5-060525M | VN086922.D | 10 Jun 2025 12:51 | vial A pH<2 | JC\MD | Ok,M |
| 12 | Q2250-03MSD | MW-11A-13.5-060525M | VN086923.D | 10 Jun 2025 13:12 | vial A pH<2 | JC\MD | Ok,M |
| 13 | IBLK | IBLK | VN086924.D | 10 Jun 2025 13:34 | | JC\MD | Ok |
| 14 | Q2251-01 | BP-VPB-182-TB-20250 | VN086925.D | 10 Jun 2025 13:55 | Confirm concentration | JC\MD | Not Ok |
| 15 | Q2251-06 | VPB182-HYD-2025060 | VN086926.D | 10 Jun 2025 14:17 | Confirm concentration | JC\MD | Not Ok |
| 16 | Q2251-05 | BP-VPB-182-EB-20250 | VN086927.D | 10 Jun 2025 14:38 | vial A pH<2 EB;Hit of comp.#16,25 | JC\MD | ReRun |
| 17 | Q2251-02 | BP-VPB-182-GW-740-7 | VN086928.D | 10 Jun 2025 15:00 | vial A pH<2 | JC\MD | Ok |

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**Instrument ID:** MSVOA_N

## Daily Analysis Runlog For Sequence/QCBatch ID # VN061025

| | | | | | |
|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 6/11/2025 9:59:27 AM | | |
| Supervise By | Mahesh Dadoda | Supervise On | 6/11/2025 11:14:28 AM | | |
| SubDirectory | VN061025 | HP Acquire Method | | HP Processing Method | 82N060625W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP134203 |
| Initial Calibration Stds | |
| CCC | VP134204,VP134205 |
| Internal Standard/PEM | |
| ICV/I.BLK | |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 18 | Q2251-03 | BP-VPB-182-GW-760-7 | VN086929.D | 10 Jun 2025 15:22 | vial A pH<2 | JC\MD | Ok |
| 19 | IBLK | IBLK | VN086930.D | 10 Jun 2025 15:43 | | JC\MD | Ok |
| 20 | IBLK | IBLK | VN086931.D | 10 Jun 2025 16:05 | | JC\MD | Ok |
| 21 | Q2251-01 | BP-VPB-182-TB-20250 | VN086932.D | 10 Jun 2025 16:26 | vial A pH<2 TB | JC\MD | Ok |
| 22 | Q2251-05 | BP-VPB-182-EB-20250 | VN086933.D | 10 Jun 2025 16:48 | vial B pH<2 EB | JC\MD | Ok |
| 23 | Q2202-01 | MW-9-20250603 | VN086934.D | 10 Jun 2025 17:09 | vial A pH<2 | JC\MD | Ok |
| 24 | Q2202-02 | MW-11-20250603 | VN086935.D | 10 Jun 2025 17:31 | vial A pH<2 | JC\MD | Ok |
| 25 | Q2202-03 | MW-12-20250603 | VN086936.D | 10 Jun 2025 17:52 | vial A pH<2 Need 5X | JC\MD | Dilution |
| 26 | Q2279-01 | 301-469-5TH-AVE | VN086937.D | 10 Jun 2025 18:14 | vial A pH<2 | JC\MD | Ok |
| 27 | VSTDCCC050 | VSTDCCC050EC | VN086938.D | 10 Jun 2025 18:57 | | JC\MD | Ok,M |

M : Manual Integration

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**Instrument ID:** MSVOA_N

## Daily Analysis Runlog For Sequence/QCBatch ID # VN061125

| | | | | | |
|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 6/12/2025 9:57:37 AM | | |
| Supervise By | Semsettin Yesilyurt | Supervise On | 6/12/2025 3:55:33 PM | | |
| SubDirectory | VN061125 | HP Acquire Method | | HP Processing Method | 82N060625W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP134284 |
| Initial Calibration Stds | |
| CCC | VP134285,VP134286 |
| 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 | VN086939.D | 11 Jun 2025 10:22 | | JC\MD | Ok |
| 2 | VSTDCCC050 | VSTDCCC050 | VN086940.D | 11 Jun 2025 11:32 | pH#Lot#V12668 | JC\MD | Ok,M |
| 3 | VN0611MBL01 | VN0611MBL01 | VN086941.D | 11 Jun 2025 12:06 | | JC\MD | Ok |
| 4 | VN0611WBL01 | VN0611WBL01 | VN086942.D | 11 Jun 2025 12:28 | | JC\MD | Ok |
| 5 | VN0611WBS01 | VN0611WBS01 | VN086943.D | 11 Jun 2025 12:50 | Recovery fail | JC\MD | Not Ok |
| 6 | VN0611WBS02 | VN0611WBS02 | VN086944.D | 11 Jun 2025 13:27 | | JC\MD | Ok,M |
| 7 | VN0611WBSD02 | VN0611WBSD02 | VN086945.D | 11 Jun 2025 14:01 | | JC\MD | Ok,M |
| 8 | Q2251-06 | VPB182-HYD-2025060 | VN086946.D | 11 Jun 2025 14:22 | vial A pH<2 | JC\MD | Ok |
| 9 | Q2202-03DL | MW-12-20250603DL | VN086947.D | 11 Jun 2025 14:44 | vial B pH<2 | JC\MD | Ok,M |
| 10 | Q2250-01DL | MW-11A-13.5-060525D | VN086948.D | 11 Jun 2025 15:06 | vial B pH<2 | JC\MD | Ok |
| 11 | Q2202-06 | TB-20250603 | VN086949.D | 11 Jun 2025 15:28 | vial A pH<2 TB | JC\MD | Ok |
| 12 | Q2189-01 | MW-7-20250602 | VN086950.D | 11 Jun 2025 15:50 | vial B pH<2 | JC\MD | Ok |
| 13 | Q2202-05 | MW-1A-20250603 | VN086951.D | 11 Jun 2025 16:12 | vial A pH<2 | JC\MD | Ok |
| 14 | Q2202-04 | MW-130-20250603 | VN086952.D | 11 Jun 2025 16:35 | vial A pH<2 | JC\MD | Ok |
| 15 | Q2231-01 | MW-10D-20250604 | VN086953.D | 11 Jun 2025 16:57 | vial A pH<2 | JC\MD | Ok |
| 16 | Q2231-02 | MW-14-20250604 | VN086954.D | 11 Jun 2025 17:19 | vial A pH<2 | JC\MD | Ok,M |
| 17 | Q2231-03 | MW-15-20250604 | VN086955.D | 11 Jun 2025 17:41 | vial A pH<2 | JC\MD | Ok |
| 18 | Q2231-04 | MW-16D-20250604 | VN086956.D | 11 Jun 2025 18:04 | vial A pH<2 | JC\MD | Ok |

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**Instrument ID:** MSVOA_N

## Daily Analysis Runlog For Sequence/QCBatch ID # VN061125

| | | | | | |
|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 6/12/2025 9:57:37 AM | | |
| Supervise By | Semsettin Yesilyurt | Supervise On | 6/12/2025 3:55:33 PM | | |
| SubDirectory | VN061125 | HP Acquire Method | | HP Processing Method | 82N060625W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP134284 |
| Initial Calibration Stds | |
| CCC | VP134285,VP134286 |
| Internal Standard/PEM | |
| ICV/I.BLK | |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 19 | Q2231-05 | MW-17-20250604 | VN086957.D | 11 Jun 2025 18:26 | vial A pH<2 | JC\MD | Ok |
| 20 | Q2231-06 | TB-20250604 | VN086958.D | 11 Jun 2025 18:48 | vial A pH<2 TB | JC\MD | Ok |
| 21 | Q2210-01 | TW1 | VN086959.D | 11 Jun 2025 19:10 | vial A pH<2 | JC\MD | Ok |
| 22 | Q2209-01 | P01W | VN086960.D | 11 Jun 2025 19:33 | vial A pH<2 | JC\MD | Ok |
| 23 | IBLK | IBLK | VN086961.D | 11 Jun 2025 19:55 | | JC\MD | Ok |
| 24 | IBLK | IBLK | VN086962.D | 11 Jun 2025 20:17 | | JC\MD | Ok |
| 25 | Q2263-01 | RW9-MW01D3-202506 | VN086963.D | 11 Jun 2025 20:39 | vial A pH<2 | JC\MD | Ok |
| 26 | Q2263-02 | RW9-MW01S-2025060 | VN086964.D | 11 Jun 2025 21:01 | vial A pH<2 | JC\MD | Ok |
| 27 | VSTDCCC050 | VSTDCCC050EC | VN086965.D | 11 Jun 2025 21:23 | | JC\MD | Ok,M |

M : Manual Integration

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# Prep Standard - Chemical Standard Summary

**Order ID :** Q2250

**Test :** VOCMS Group3

**Prepbatch ID :**

**Sequence ID/Qc Batch ID:** VN061025,vn061125,

**Standard ID :**
VP133174,VP133887,VP133935,VP133953,VP133991,VP134142,VP134149,VP134203,VP134204,VP134205,VP134284,VP134285,VP134286,

**Chemical ID :**
V13391,V13706,V14290,V14432,V14435,V14503,V14504,V14525,V14526,V14613,V14620,V14626,V14636,V14637,V14638,V14639,V14668,V14671,V14673,V14675,V14711,V14717,V14718,V14721,V14749,V14750,V14811,V14812,V14843,V14921,V14929,V14944,V14945,V14946,V14947,W3112,

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 617 | 8260 Surrogate, 400PPM | VP133174 | 02/27/2025 | 08/27/2025 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 03/04/2025 |

**FROM** 0.40000ml of V13706 + 24.60000ml of V14613 = Final Quantity: 25.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 257 | 8260 Calibration Working STD Mix-First source, 160PPM | VP133887 | 05/12/2025 | 06/23/2025 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 05/14/2025 |

**FROM** 0.40000ml of V14843 + 1.00000ml of V14432 + 1.00000ml of V14435 + 1.00000ml of V14503 + 1.00000ml of V14504 + 1.00000ml of V14525 + 1.00000ml of V14526 + 1.00000ml of V14711 + 1.00000ml of V14717 + 1.00000ml of V14718 + 1.00000ml of V14721 + 1.00000ml of V14749 + 1.00000ml of V14750 + 1.00000ml of V14811 + 1.00000ml of V14812 + 10.60000ml of V14921 = Final Quantity: 25.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 247 | 8260 Internal Standard, 250PPM | VP133935 | 05/16/2025 | 11/12/2025 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 05/21/2025 |

**FROM** 0.25000ml of V14290 + 24.75000ml of V14921 = Final Quantity: 25.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 218 | BFB, 25PPM | VP133953 | 05/19/2025 | 11/09/2025 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 05/21/2025 |

**FROM** 0.25000ml of V13391 + 24.75000ml of V14626 = Final Quantity: 25.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 51 | 8260 Working STD (Acrolein) -first source, 800PPM | VP133991 | 05/22/2025 | 06/19/2025 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 05/24/2025 |

**FROM** 1.00000ml of V14944 + 1.00000ml of V14945 + 1.00000ml of V14946 + 1.00000ml of V14947 + 21.00000ml of V14620 = Final Quantity: 25.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 719 | 8260 Working STD (BCM)-First source, 400PPM | VP134142 | 06/06/2025 | 12/06/2025 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 06/10/2025 |

**FROM** 1.00000ml of V14668 + 1.00000ml of V14671 + 1.00000ml of V14673 + 1.00000ml of V14675 + 16.00000ml of V14929 = Final Quantity: 20.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1810 | 8260 Working Std(2-CVE)-800ppm | VP134149 | 06/06/2025 | 12/06/2025 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 06/10/2025 |

**FROM** 1.00000ml of V14636 + 1.00000ml of V14637 + 1.00000ml of V14638 + 1.00000ml of V14639 + 46.00000ml of V14929 = Final Quantity: 50.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 589 | BFB TUNE CHECK | VP134203 | 06/10/2025 | 06/11/2025 | John Carlone | None | None | Mahesh Dadoda 06/10/2025 |

**FROM** 39.98400ml of W3112 + 0.01600ml of VP133953 = Final Quantity: 40.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 620 | 50 PPB CCC, 8260-Water | VP134204 | 06/10/2025 | 06/11/2025 | John Carlone | None | None | Mahesh Dadoda 06/10/2025 |

**FROM** 39.94450ml of W3112 + 0.00500ml of VP133174 + 0.00500ml of VP134142 + 0.00800ml of VP133935 + 0.01250ml of VP133887 + 0.01250ml of VP133991 + 0.01250ml of VP134149 = 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 | VP134205 | 06/10/2025 | 06/11/2025 | John Carlone | None | None | Mahesh Dadoda 06/10/2025 |

**FROM** 39.94450ml of W3112 + 0.00500ml of VP133174 + 0.00500ml of VP134142 + 0.00800ml of VP133935 + 0.01250ml of VP133887 + 0.01250ml of VP133991 + 0.01250ml of VP134149 = Final Quantity: 40.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 589 | BFB TUNE CHECK | VP134284 | 06/11/2025 | 06/12/2025 | John Carlone | None | None | Mahesh Dadoda 06/12/2025 |

**FROM** 39.98400ml of W3112 + 0.01600ml of VP133953 = 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 | VP134285 | 06/11/2025 | 06/12/2025 | John Carlone | None | None | Mahesh Dadoda 06/12/2025 |

**FROM** 39.94450ml of W3112 + 0.00500ml of VP133174 + 0.00500ml of VP134142 + 0.00800ml of VP133935 + 0.01250ml of VP133887 + 0.01250ml of VP133991 + 0.01250ml of VP134149 = Final Quantity: 40.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 620 | 50 PPB CCC, 8260-Water | VP134286 | 06/11/2025 | 06/12/2025 | John Carlone | None | None | Mahesh Dadoda 06/12/2025 |

**FROM** 39.94450ml of W3112 + 0.00500ml of VP133174 + 0.00500ml of VP134142 + 0.00800ml of VP133935 + 0.01250ml of VP133887 + 0.01250ml of VP133991 + 0.01250ml of VP134149 = Final Quantity: 40.000 ml

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# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 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 | 555582 / Custom Mixture, 8260 A/B Surrogate Mix [CS 5179-2] | A0196865 | 02/27/2026 | 02/27/2025 / SAM | 04/12/2023 / SAM | V13706 |

| 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 | 12/12/2025 | 12/12/2024 / SAM | 04/15/2024 / SAM | V14290 |

| 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 | 09/30/2025 | 05/12/2025 / SAM | 08/15/2024 / SAM | V14432 |

| 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 | 09/20/2025 | 03/20/2025 / SAM | 08/15/2024 / SAM | V14435 |

| 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 | 11/12/2025 | 05/12/2025 / SAM | 09/17/2024 / SAM | V14503 |

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# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 95317 / Universal VOA Mega Mix (Min order = 5) | 021624 | 11/12/2025 | 05/12/2025 / SAM | 09/17/2024 / SAM | V14504 |

| 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 | 11/12/2025 | 05/12/2025 / SAM | 09/18/2024 / SAM | V14525 |

| 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 | 11/12/2025 | 05/12/2025 / SAM | 09/18/2024 / SAM | V14526 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | BA9077-02 / Methanol, Purge/Trap (cs=6x1L) | 22L0562016 | 08/27/2025 | 02/27/2025 / SAM | 11/26/2024 / SAM | V14613 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | BA9077-02 / Methanol, Purge/Trap (cs=6x1L) | 22L0562016 | 10/25/2025 | 05/09/2025 / SAM | 11/26/2024 / SAM | V14620 |

| 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 | 11/09/2025 | 05/09/2025 / SAM | 11/26/2024 / SAM | V14626 |

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# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | / 2-Chloroethyl vinyl ether | 120524 | 12/06/2025 | 06/06/2025 / SAM | 12/06/2024 / SAM | V14636 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | / 2-Chloroethyl vinyl ether | 120524 | 12/06/2025 | 06/06/2025 / SAM | 12/06/2024 / SAM | V14637 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | / 2-Chloroethyl vinyl ether | 120524 | 12/06/2025 | 06/06/2025 / SAM | 12/06/2024 / SAM | V14638 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | / 2-Chloroethyl vinyl ether | 120524 | 12/06/2025 | 06/06/2025 / SAM | 12/06/2024 / SAM | V14639 |

| 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 | A0214960 | 12/06/2025 | 06/06/2025 / SAM | 12/09/2024 / SAM | V14668 |

| 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 | A0214960 | 12/06/2025 | 06/06/2025 / SAM | 12/09/2024 / SAM | V14671 |

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# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul | A0214960 | 12/06/2025 | 06/06/2025 / SAM | 12/09/2024 / SAM | V14673 |

| 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 | A0214960 | 12/06/2025 | 06/06/2025 / SAM | 12/09/2024 / SAM | V14675 |

| 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 | 11/12/2025 | 05/12/2025 / SAM | 12/17/2024 / SAM | V14711 |

| 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 | 11/12/2025 | 05/12/2025 / SAM | 12/17/2024 / SAM | V14717 |

| 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 | 11/12/2025 | 05/12/2025 / SAM | 12/17/2024 / SAM | V14718 |

| 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 | 11/12/2025 | 05/12/2025 / SAM | 12/17/2024 / SAM | V14721 |

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# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30042 / VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml | A0216826 | 11/13/2025 | 05/12/2025 / SAM | 12/17/2024 / SAM | V14749 |

| 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 | 11/12/2025 | 05/12/2025 / SAM | 12/17/2024 / SAM | V14750 |

| 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 | 11/12/2025 | 05/12/2025 / SAM | 01/08/2025 / SAM | V14811 |

| 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 | 06/30/2026 | 05/12/2025 / SAM | 01/08/2025 / SAM | V14812 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30470 / VOA Stock Solution, tert-butanol std, 1mL, P&TM | A0217535 | 11/12/2025 | 05/12/2025 / SAM | 01/21/2025 / SAM | V14843 |

| 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) | 24G0262002 | 11/12/2025 | 05/12/2025 / SAM | 05/09/2025 / SAM | V14921 |

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) | 24G0262002 | 12/06/2025 | 06/06/2025 / SAM | 05/09/2025 / SAM | V14929 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 91980 / Acrolin Std (Min = 5) | 051925 | 06/19/2025 | 05/22/2025 / SAM | 05/21/2025 / SAM | V14944 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 91980 / Acrolin Std (Min = 5) | 051925 | 06/19/2025 | 05/22/2025 / SAM | 05/21/2025 / SAM | V14945 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 91980 / Acrolin Std (Min = 5) | 051925 | 06/19/2025 | 05/22/2025 / SAM | 05/21/2025 / SAM | V14946 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 91980 / Acrolin Std (Min = 5) | 051925 | 06/19/2025 | 05/22/2025 / SAM | 05/21/2025 / SAM | V14947 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | DIW / DI Water | Daily Lab-Certified | 07/03/2029 | 07/03/2024 / Iwona | 07/03/2024 / Iwona | W3112 |

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

avantor™ | J.T.Baker®

Material No.: 9077-02
Batch No.: 2310762004
Manufactured Date: 2023-08-11
Expiration Date: 2026-08-10
Revision No.: 0

# Certificate of Analysis

| Test | Specification | Result |
|---|---|---|
| Assay ($CH_3OH$) (by GC, corrected for water) | ≥ 99.9 % | 100.0 % |
| Residue after Evaporation | ≤ 1.0 ppm | 0.5 ppm |
| Titrable Acid (µeq/g) | ≤ 0.3 | 0.2 |
| Titrable Base (µeq/g) | ≤ 0.10 | 0.01 |
| Water (by KF, coulometric) | ≤ 0.08 % | < 0.01 % |
| Volatile Organic Trace Analysis – Below EPA 8260B CRQL | Conforms | Conforms |

For Laboratory,Research,or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Ken Koehnlein
Sr. Manager, Quality Assurance

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

12 Bottles

avantor™ | J.T.Baker®

Material No.: 9077-02
Batch No.: 22L0562016
Manufactured Date: 2022-10-26
Expiration Date: 2025-10-25
Revision No.: 0

# Certificate of Analysis

| Test | Specification | Result |
|---|---|---|
| Assay ($CH_3OH$) (by GC, corrected for water) | ≥ 99.9 % | 100.0 % |
| Residue after Evaporation | ≤ 1.0 ppm | 0.2 ppm |
| Titrable Acid (µeq/g) | ≤ 0.3 | 0.2 |
| Titrable Base (µeq/g) | ≤ 0.10 | 0.03 |
| Water (by KF, coulometric) | ≤ 0.08 % | < 0.01 % |
| Volatile Organic Trace Analysis – Below EPA 8260B CRQL | Conforms | Conforms |

For Laboratory,Research,or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

James Ethier

Jamie Ethier
Vice President Global Quality

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

12 Bottles

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**

Rec 09/17/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

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): Lot#
Methanol 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.(ug/mL) | Nominal Conc (µg/mL) | Purity (%) | Purity Uncertainty | Uncertainty Pipette (mL) | Target Weight(g) | Actual Weight(g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | Acetonitrile | (0324) | 021644 | NA | NA | NA | 2000 | 99.99 | 0.2 | NA | 0.20007 | 0.20020 | 2001.3 | 8.1 | 75-05-8 | 40 ppm (70mg/m3/8H) | orl-rat 2460mg/kg |
| 2. | Allyl chloride (3-Chloropropene) | (0325) | 102396 | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20207 | 0.20221 | 2001.4 | 8.2 | 107-05-1 | 1 ppm (3mg/m3/8H) | orl-rat 700mg/kg |
| 3. | Carbon disulphide | (0060) | MKCR8561 | NA | NA | NA | 2000 | 99.99 | 0.2 | NA | 0.20007 | 0.20023 | 2001.6 | 8.1 | 75-15-0 | 4 ppm (12mg/m3) (skin) | orl-rat 1200mg/kg |
| 4. | cis-1,4-Dichloro-2-butene | (1196) | 14718EF | NA | NA | NA | 2000 | 95 | 0.2 | NA | 0.21058 | 0.21069 | 2001.1 | 8.5 | 1476-11-5 | N/A | N/A |
| 5. | trans-1,4-Dichloro-2-butene | (0466) | 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) | 06128PX | 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 | 20.8 | 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 | 40017.6 | 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 (45mg/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 149.8mg/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 | 1999.8 | 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 | 1999.8 | 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 | 40003.8 | 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 8040mg/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 | 40000.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.5 | 22.9 | 106-42-3 | 100 ppm (435mg/m3/8H) | orl-rat 5g/kg |

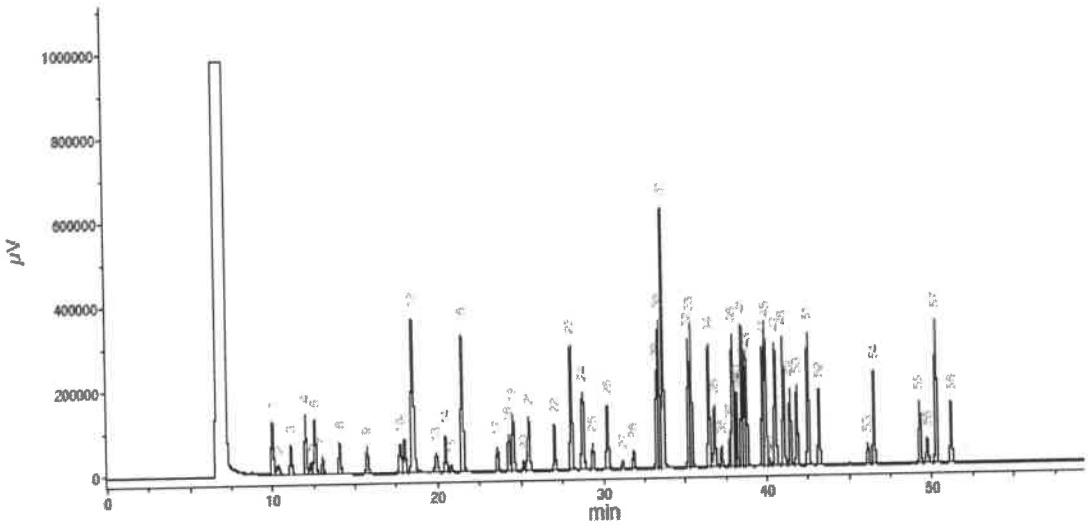
- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening 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).

## 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-1,2,3-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 | 18.49 |
| 13 | Isobutanol/1,1,1-Trichloroethane | 18.91 |
| 14 | 1,1-Dichloropropene | 20.46 |
| 15 | Carbon tetrachloride | 20.79 |
| 16 | Benzene/1,2-Dichloroethane | 21.48 |
| 17 | Trichloroethene | 23.86 |
| 18 | 1,2-Dichloropropane | 24.26 |
| 19 | Methyl methacrylate | 24.62 |
| 20 | Bromodichloromethane | 25.13 |
| 21 | Dibromomethane/2-Nitropropane | 25.46 |
| 22 | cis-1,3-Dichloropropene | 27.07 |
| 23 | Toluene | 28.09 |
| 24 | Ethyl methacrylate/trans-1,3-Dichloropropene | 28.73 |
| 25 | 1,1,2-Trichloroethane | 29.34 |
| 26 | Tetrachloroethane/1,3-Dichloropropane | 30.34 |
| 27 | Dibromochloromethane | 31.16 |
| 28 | 1,2-Dibromoethane | 31.84 |
| 29 | Chlorobenzene | 33.26 |
| 30 | Ethylbenzene/1,1,1,2-Tetrachloroethane | 33.40 |
| 31 | m-Xylene/p-Xylene | 33.85 |
| 32 | o-Xylene | 35.33 |
| 33 | Styrene | 35.50 |
| 34 | Isopropylbenzene/Bromoform | 35.48 |
| 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 | 37.92 |
| 39 | trans-1,4-Dichloro-2-butene | 38.05 |
| 40 | Bromobenzene | 38.14 |
| 41 | 1,3,5-Trimethylbenzene | 38.50 |
| 42 | 2-Chlorotoluene | 38.62 |
| 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 | 41.63 |
| 51 | n-Butylbenzene | 42.02 |
| 52 | 1,2-Dichlorobenzene | 42.18 |
| 53 | 1,2-Dibromo-3-chloropropane | 46.12 |
| 54 | Nitrobenzene | 46.58 |
| 55 | 1,2,4-Trichlorobenzene | 49.26 |
| 56 | Hexachlorobutadiene | 49.72 |
| 57 | Naphthalene | 50.46 |
| 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. | 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)**

| | | | |
|---|---|---|---|
| **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 09/17/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

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): Lot#
Methanol 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.(ug/mL) | Nominal Conc (µg/mL) | Purity (%) | Purity Uncertainty | Uncertainty Pipette (mL) | Target Weight(g) | Actual Weight(g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | Acetonitrile | (0324) | 021644 | NA | NA | NA | 2000 | 99.99 | 0.2 | NA | 0.20007 | 0.20020 | 2001.3 | 8.1 | 75-05-8 | 40 ppm (70mg/m3/8H) | orl-rat 2460mg/kg |
| 2. | Allyl chloride (3-Chloropropene) | (0325) | 102396 | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20207 | 0.20221 | 2001.4 | 8.2 | 107-05-1 | 1 ppm (3mg/m3/8H) | orl-rat 700mg/kg |
| 3. | Carbon disulphide | (0060) | MKCR8561 | NA | NA | NA | 2000 | 99.99 | 0.2 | NA | 0.20007 | 0.20023 | 2001.6 | 8.1 | 75-15-0 | 4 ppm (12mg/m3) (skin) | orl-rat 1200mg/kg |
| 4. | cis-1,4-Dichloro-2-butene | (1196) | 14718EF | NA | NA | NA | 2000 | 95 | 0.2 | NA | 0.21058 | 0.21069 | 2001.1 | 8.5 | 1476-11-5 | N/A | N/A |
| 5. | trans-1,4-Dichloro-2-butene | (0466) | 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) | 06128PX | 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 | 20.8 | 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 | 40017.6 | 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 (45mg/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 149.8mg/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 | 1999.8 | 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 | 1999.8 | 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 | 40003.8 | 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 8040mg/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 | 40000.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.5 | 22.9 | 106-42-3 | 100 ppm (435mg/m3/8H) | orl-rat 5g/kg |

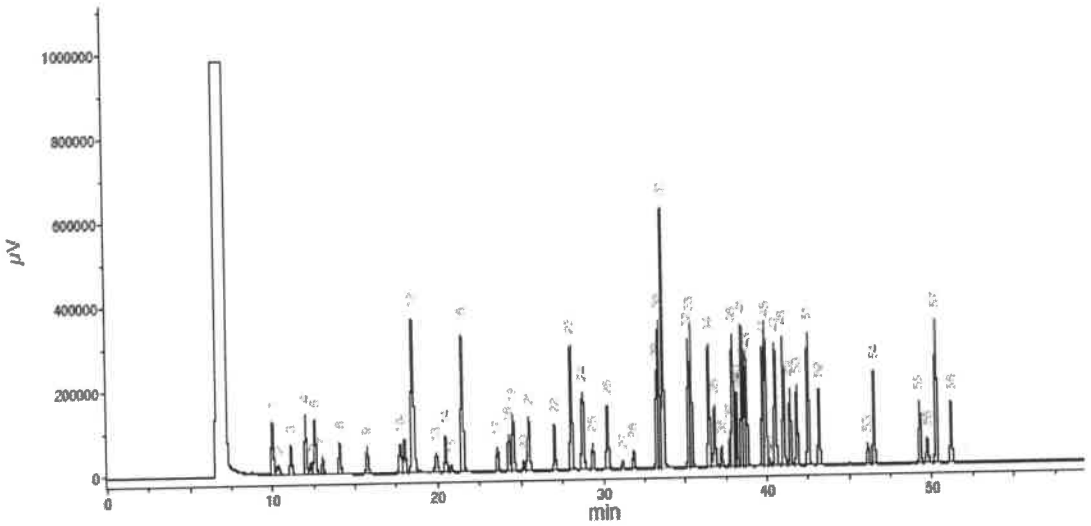
- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening 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).

## 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-1,2,3-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 | 18.49 |
| 13 | Isobutanol/1,1,1-Trichloroethane | 18.91 |
| 14 | 1,1-Dichloropropene | 20.46 |
| 15 | Carbon tetrachloride | 20.79 |
| 16 | Benzene/1,2-Dichloroethane | 21.48 |
| 17 | Trichloroethene | 23.86 |
| 18 | 1,2-Dichloropropane | 24.26 |
| 19 | Methyl methacrylate | 24.62 |
| 20 | Bromodichloromethane | 25.13 |
| 21 | Dibromomethane/2-Nitropropane | 25.46 |
| 22 | cis-1,3-Dichloropropene | 27.07 |
| 23 | Toluene | 28.09 |
| 24 | Ethyl methacrylate/trans-1,3-Dichloropropene | 28.73 |
| 25 | 1,1,2-Trichloroethane | 29.34 |
| 26 | Tetrachloroethane/1,3-Dichloropropane | 30.34 |
| 27 | Dibromochloromethane | 31.16 |
| 28 | 1,2-Dibromoethane | 31.84 |
| 29 | Chlorobenzene | 33.26 |
| 30 | Ethylbenzene/1,1,1,2-Tetrachloroethane | 33.40 |
| 31 | m-Xylene/p-Xylene | 33.85 |
| 32 | o-Xylene | 35.33 |
| 33 | Styrene | 35.50 |
| 34 | Isopropylbenzene/Bromoform | 35.48 |
| 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 | 37.92 |
| 39 | trans-1,4-Dichloro-2-butene | 38.05 |
| 40 | Bromobenzene | 38.14 |
| 41 | 1,3,5-Trimethylbenzene | 38.50 |
| 42 | 2-Chlorotoluene | 38.62 |
| 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 | 41.63 |
| 51 | n-Butylbenzene | 42.02 |
| 52 | 1,2-Dichlorobenzene | 42.18 |
| 53 | 1,2-Dibromo-3-chloropropane | 46.12 |
| 54 | Nitrobenzene | 46.58 |
| 55 | 1,2,4-Trichlorobenzene | 49.26 |
| 56 | Hexachlorobutadiene | 49.72 |
| 57 | Naphthalene | 50.46 |
| 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. | 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)**

| | | | |
|---|---|---|---|
| **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 Number
https://Absolutestandards.com

## CERTIFIED WEIGHT REPORT

**Part Number:** 91980
Lot Number: 091424
Description: Acrolein

Expiration Date: 101424
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

**Solvent(s):** **Lot#**
Water 072324Q

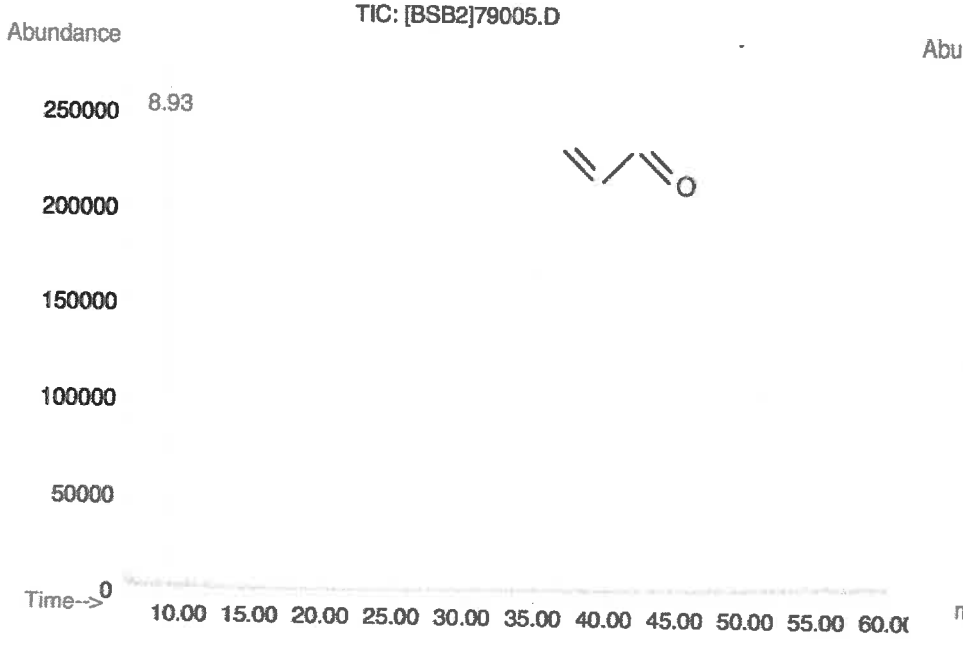
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

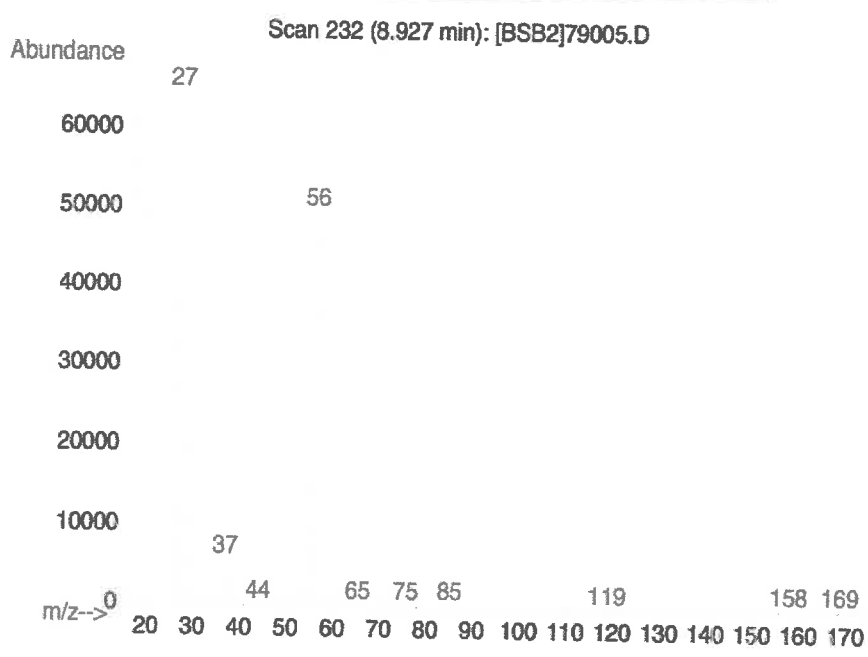
Justin Dippold 091424
Formulated By: Justin Dippold DATE

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.

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- 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.
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Rec 09/16/24 2 Vials

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## CERTIFIED WEIGHT REPORT

**Part Number:** 91980
Lot Number: 091424
Description: Acrolein

Expiration Date: 101424
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

**Solvent(s):** **Lot#**
Water 072324Q

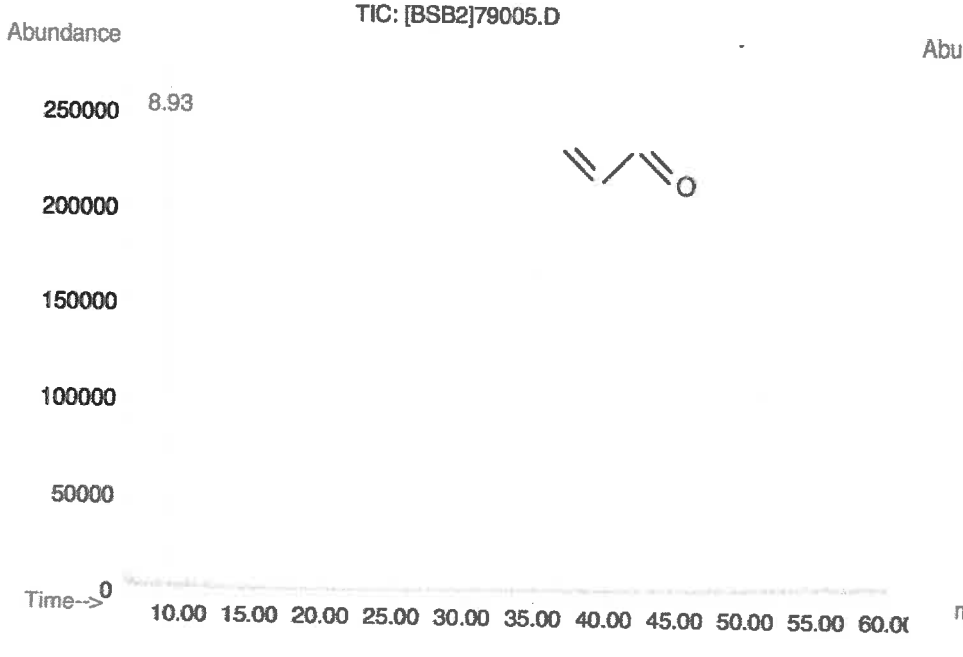
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

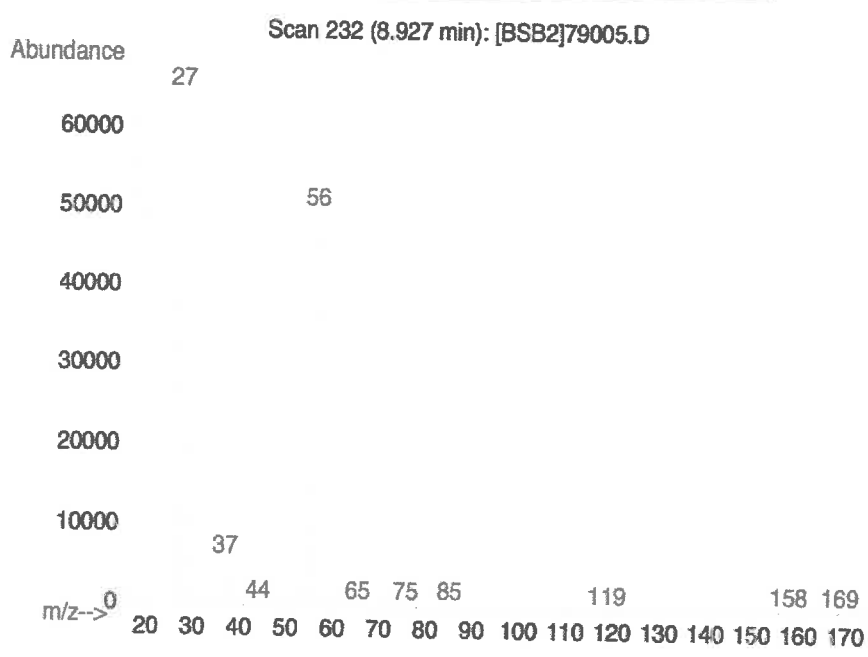
Justin Dippold 091424
Formulated By: Justin Dippold DATE

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.

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***Certified Reference Material CRM***

Rec 12/6/24
20 vial

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

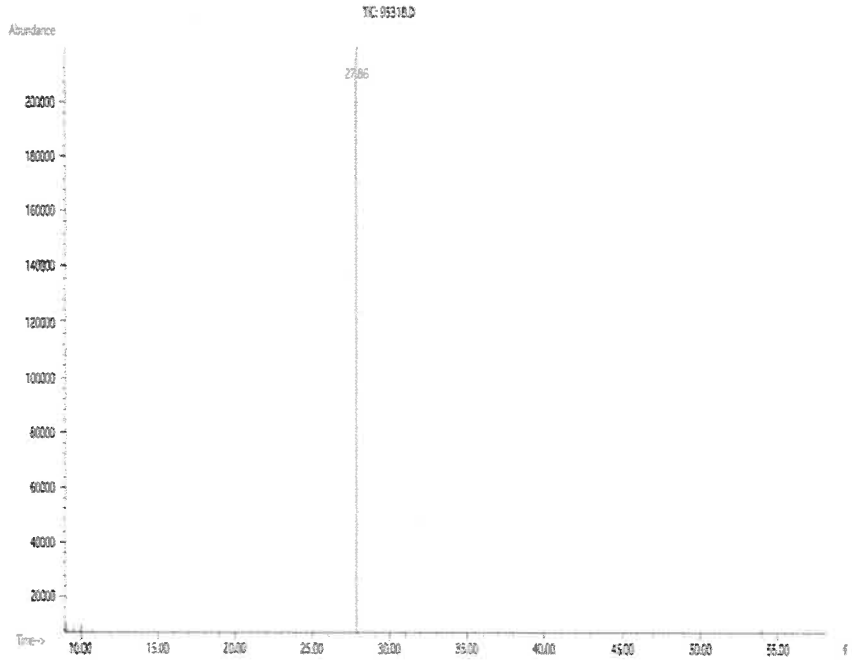
V14630 to V14649

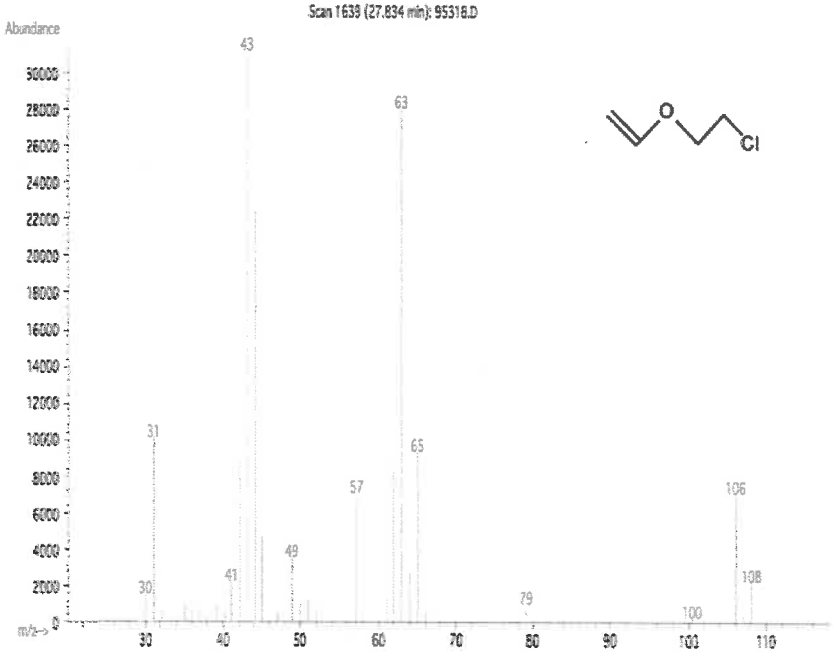
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

| Formulated By: | Prashant Chauhan | 120524 DATE |
|---|---|---|
| Reviewed By: | Pedro L. Rentas | 120524 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

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

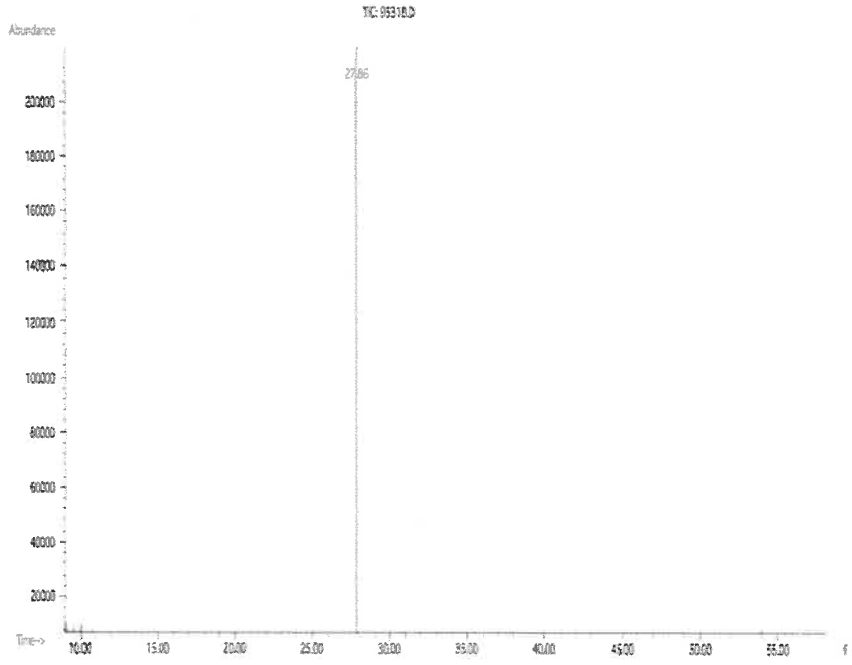
V14630 to V14649

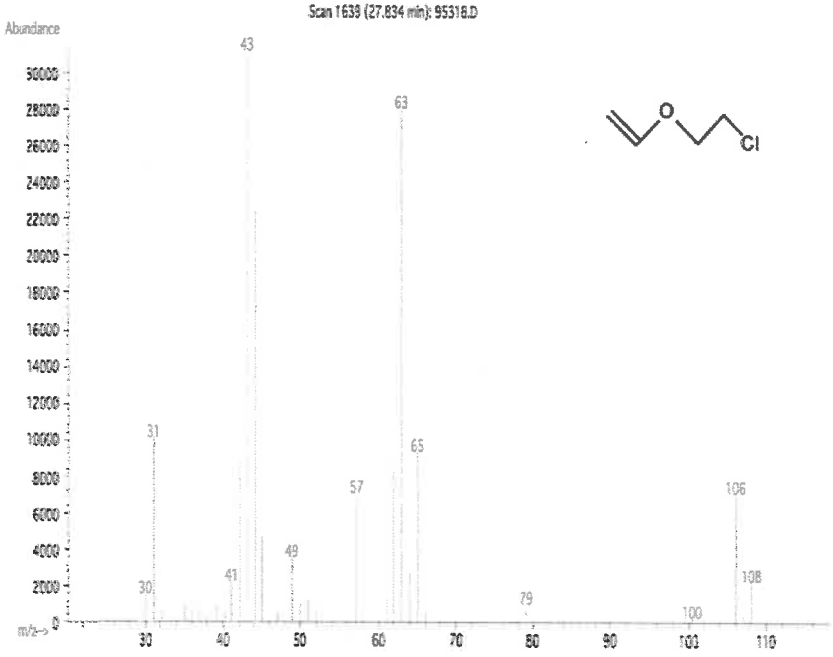
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

| Formulated By: | Prashant Chauhan | 120524 DATE |
|---|---|---|
| Reviewed By: | Pedro L. Rentas | 120524 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.

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Hamden, CT 06518-0585

Phone: 203-281-2917
FAX: 203-281-2922

**Safety Data Sheet (SDS)** GHS/OSHA Compliant

## Section I Product and Company Identification

**IDENTITY** **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

| | | | |
|---|---|---|---|
| Manufacturer's Name | ABSOLUTE STANDARDS INC | Emergency Telephone USA & CANADA | **1-800-535-5053** |
| Address | 44 Rossotto Dr.<br>Hamden CT, 06514 | Emergency Telephone International<br>Date Prepared/Revised | **1-352-323-3500**<br>January 1, 2024 |

## Section II - Hazards Identification

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

| | | | |
|---|---|---|---|
| **H225** | **Highly Flammable Liquid and Vapor** | **H301, 311, 331** | **Toxic if swallowed, skin contact, inhaled** |
| **H370** | **Cause damage to organs** | **H351** | **Suspected of causing cancer** |
| **P271** | **Use in ventilated area** | **P280** | **Use gloves, eye protection/face sheild** |
| **P302,332** | **If on skin, wash with soap and water** | **P305,351,338** | **If in eyes, remove contacts, rinse with water** |

**Signal Word: DANGER**

## Section III - Composition

| Components (Specific Chemical Identity; Common Name(s)) | | | % (optional) |
|---|---|---|---|
| Methanol | METHYL ALCOHOL | CAS#: 67-56-1 | > 97 |

**See Certified Weight Report For Other Analytes Present At Trace Quantities.**

**INTENDED USE: REFERENCE MATERIAL**

## Section IV. FIRST AID MEASURES

| | |
|---|---|
| **General advice** | Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area. |
| **If inhaled** | If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| **In case of skin contact** | Wash with soap and water. Consult a physician. |
| **In case of eye contact** | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. |
| **If swallowed** | Do NOT induce vomiting. Rinse mouth with water. Consult a physician. |

## Section V. FIREFIGHTING MEASURES

| | |
|---|---|
| **Flammability** | Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking. |
| **Suitable extinguishing media** | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| **Protective equipment for fire** | Wear self contained breathing apparatus for fire fighting if necessary. |

## Section VI. ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| Personal precautions | Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations. |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. Do not let product enter drains. |
| Clean up | Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13). |

## Section VII. HANDLING AND STORAGE

| | |
|---|---|
| Precautions for safe handling | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.<br>Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. |
| Storage Conditions | Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. |

## Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

## Section IX - Physical/Chemical Characteristics

| | | | |
|---|---|---|---|
| Boiling Point | 65°C | Specific Gravity (H2O = 1) | 0.79 |
| Vapor Pressure (mm Hg) | 96 | Melting Point | -98°C |
| Vapor Density (AIR = 1) | 1.11 | Evaporation rate (Butyl Acetate = 1) | 4.6 |

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

## Section X. STABILITY AND REACTIVITY

Chemical stability — Stable under recommended storage conditions.
Possibility of hazardous reactions — Vapours may form explosive mixture with air.
Conditions to avoid — Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid — Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

## Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

## Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

| | |
|---|---|
| LC50 | 15,400 mg/l - 96 h |
| EC50 | 24,500.00 mg/l - 48 h |
| EC100 | 10,000.00 mg/l - 24 h |

## Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

## Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

## Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

## Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

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***Certified Reference Material CRM***

Rec 12/6/24
20 vial

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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

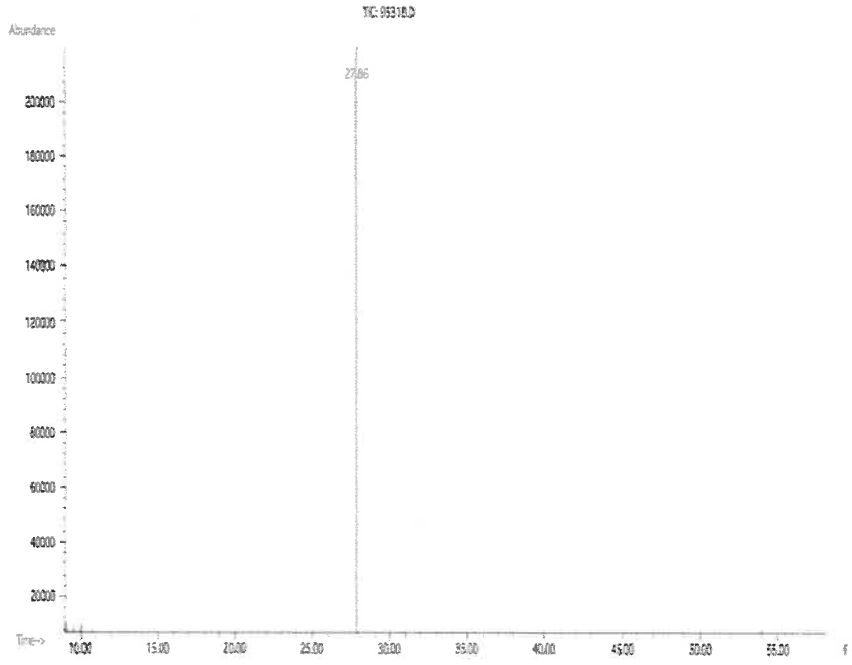
V14630 to V14649

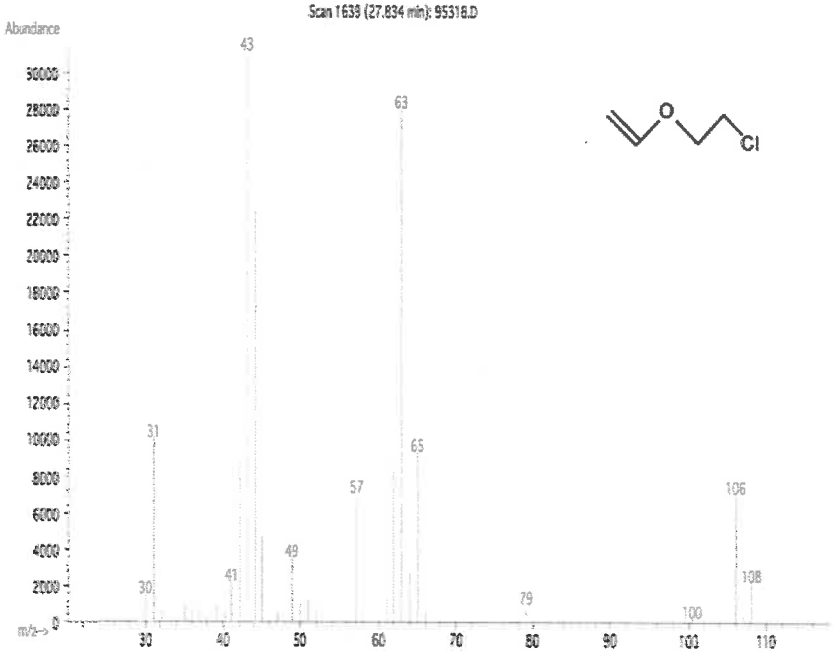
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

| Formulated By: | Prashant Chauhan | 120524 DATE |
|---|---|---|
| Reviewed By: | Pedro L. Rentas | 120524 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.







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**Safety Data Sheet (SDS)** GHS/OSHA Compliant

## Section I Product and Company Identification

**IDENTITY** **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

| | | | |
|---|---|---|---|
| Manufacturer's Name | ABSOLUTE STANDARDS INC | Emergency Telephone USA & CANADA | **1-800-535-5053** |
| Address | 44 Rossotto Dr.<br>Hamden CT, 06514 | Emergency Telephone International<br>Date Prepared/Revised | **1-352-323-3500**<br>January 1, 2024 |

## Section II - Hazards Identification

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

| | | | |
|---|---|---|---|
| **H225** | **Highly Flammable Liquid and Vapor** | **H301, 311, 331** | **Toxic if swallowed, skin contact, inhaled** |
| **H370** | **Cause damage to organs** | **H351** | **Suspected of causing cancer** |
| **P271** | **Use in ventilated area** | **P280** | **Use gloves, eye protection/face sheild** |
| **P302,332** | **If on skin, wash with soap and water** | **P305,351,338** | **If in eyes, remove contacts, rinse with water** |

**Signal Word: DANGER**

## Section III - Composition

| Components (Specific Chemical Identity; Common Name(s)) | | | % (optional) |
|---|---|---|---|
| Methanol | METHYL ALCOHOL | CAS#: 67-56-1 | > 97 |

**See Certified Weight Report For Other Analytes Present At Trace Quantities.**

**INTENDED USE: REFERENCE MATERIAL**

## Section IV. FIRST AID MEASURES

| | |
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| **General advice** | Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area. |
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| 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

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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

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

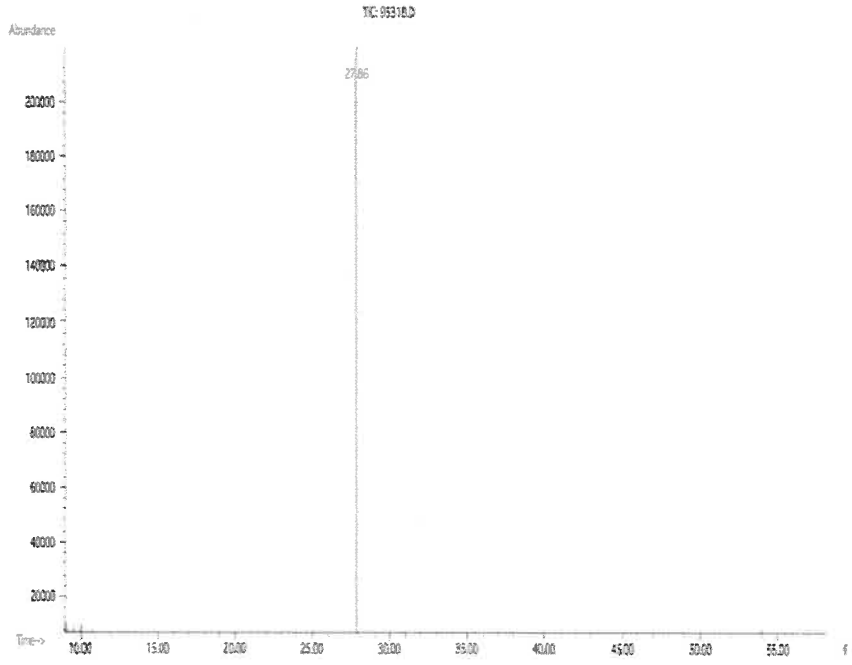
V14630 to V14649

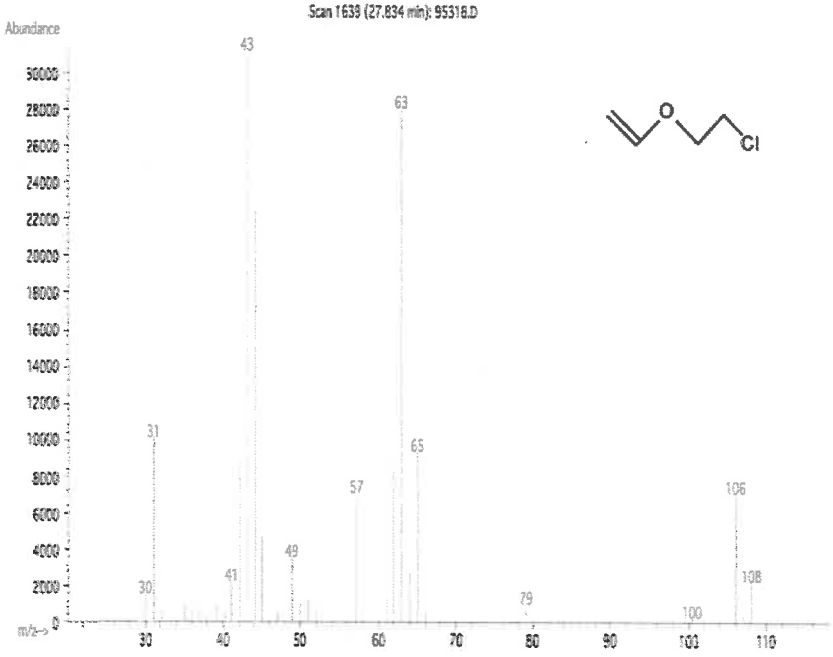
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

| Formulated By: | Prashant Chauhan | 120524 DATE |
|---|---|---|
| Reviewed By: | Pedro L. Rentas | 120524 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.

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| | |
|---|---|
| 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: 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.)

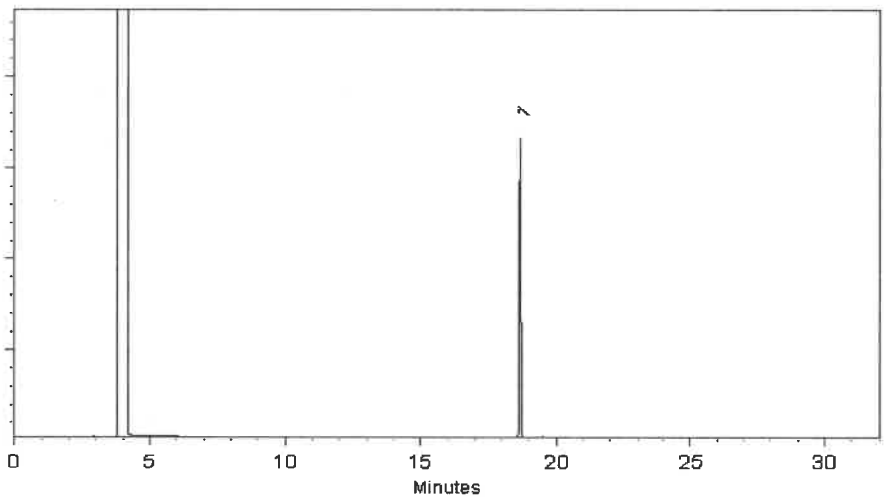
**Inj. Temp:**
200°C

**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.

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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.

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CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

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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.)

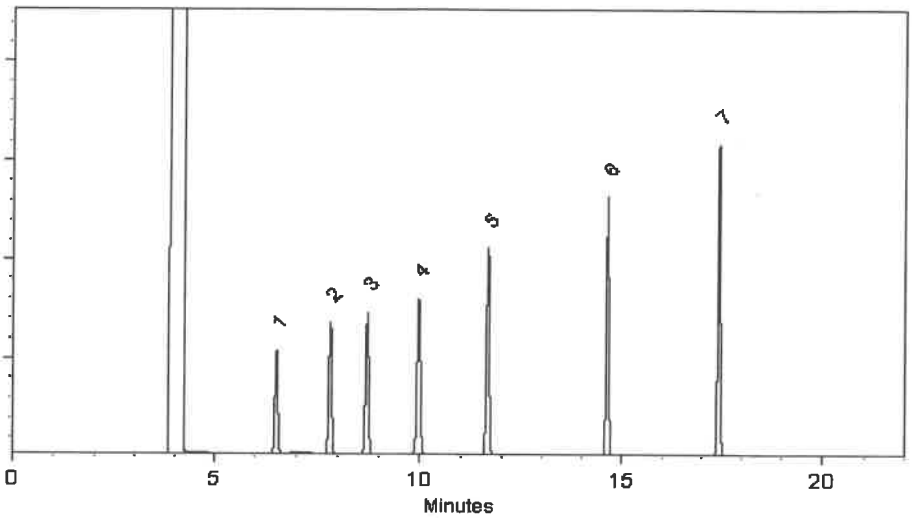
**Inj. Temp:**
200°C

**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.

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CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

*chromatographic plus*

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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.)

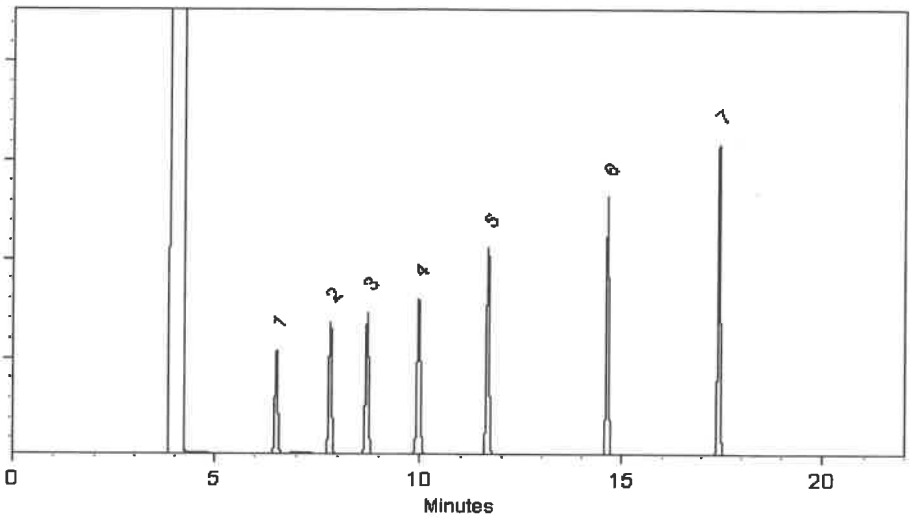
**Inj. Temp:**
200°C

**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.
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## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

***gravimetric***

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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.
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# CERTIFIED REFERENCE MATERIAL

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# Certificate of Analysis

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**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 30006 **Lot No.:** A0210618

**Description :** VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** July 31, 2027 **Storage:** 0°C or colder

**Ship:** Ambient

**CERTIFIED VALUES**

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Acetone | 67-64-1 | SHBQ8504 | 99% | 5,014.8 µg/mL | +/- 173.2883 |
| 2 | 2-Butanone (MEK) | 78-93-3 | SHBQ4704 | 99% | 5,012.4 µg/mL | +/- 173.2054 |
| 3 | 4-Methyl-2-pentanone (MIBK) | 108-10-1 | SHBP9200 | 99% | 5,011.6 µg/mL | +/- 173.1777 |
| 4 | 2-Hexanone | 591-78-6 | MKCQ6663 | 99% | 5,013.0 µg/mL | +/- 173.2261 |

* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** P&T Methanol/Water (90:10)
**CAS #** 67-56-1/7732-18-5
**Purity** 99%

# Quality Confirmation Test

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

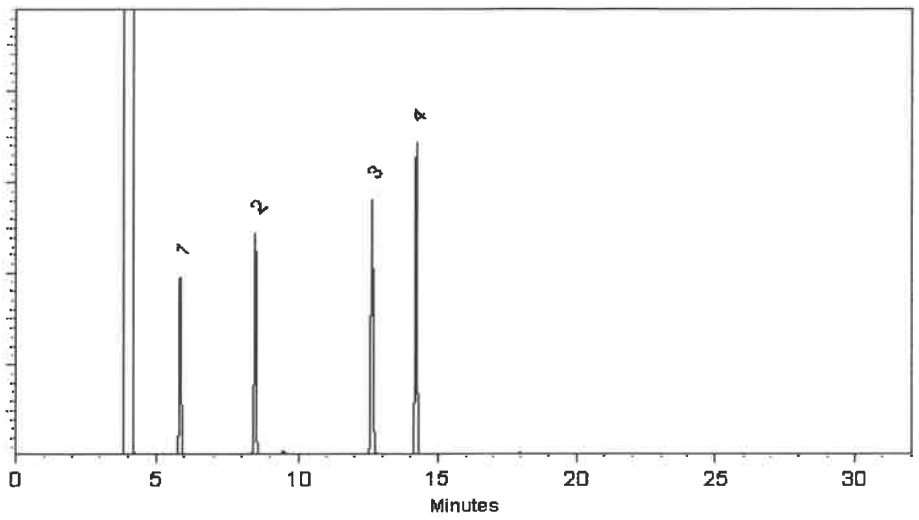
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dakota Parson - Operations Technician I

**Date Mixed:** 22-Apr-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 24-Apr-2024

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

# General Certified Reference Material Notes

## Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

## Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

## Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  $k$ is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

## Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

## Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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# Certificate of Analysis

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Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 30006 **Lot No.:** A0210618

**Description :** VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** July 31, 2027 **Storage:** 0°C or colder

**Ship:** Ambient

**CERTIFIED VALUES**

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Acetone | 67-64-1 | SHBQ8504 | 99% | 5,014.8 µg/mL | +/- 173.2883 |
| 2 | 2-Butanone (MEK) | 78-93-3 | SHBQ4704 | 99% | 5,012.4 µg/mL | +/- 173.2054 |
| 3 | 4-Methyl-2-pentanone (MIBK) | 108-10-1 | SHBP9200 | 99% | 5,011.6 µg/mL | +/- 173.1777 |
| 4 | 2-Hexanone | 591-78-6 | MKCQ6663 | 99% | 5,013.0 µg/mL | +/- 173.2261 |

* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** P&T Methanol/Water (90:10)
**CAS #** 67-56-1/7732-18-5
**Purity** 99%

# Quality Confirmation Test

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

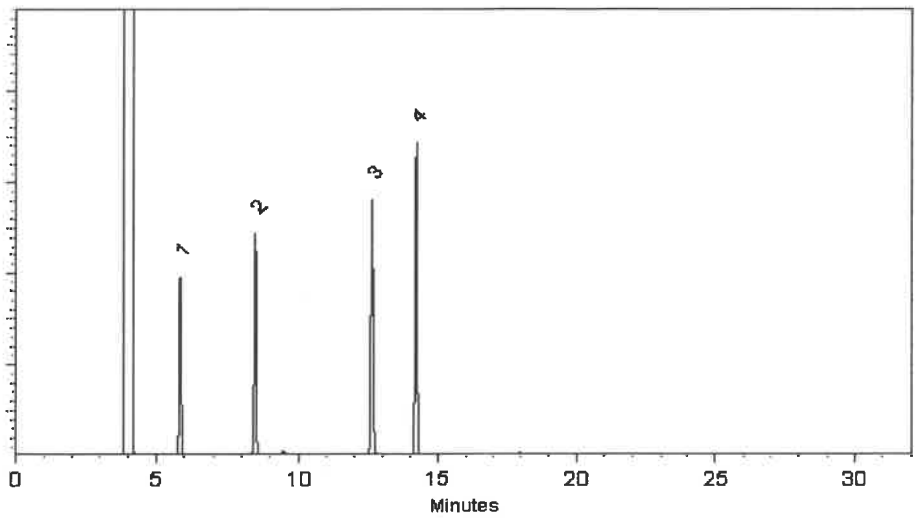
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dakota Parson - Operations Technician I

**Date Mixed:** 22-Apr-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 24-Apr-2024

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

# General Certified Reference Material Notes

## Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

## Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

## Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  $k$ is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

## Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

## Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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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.)

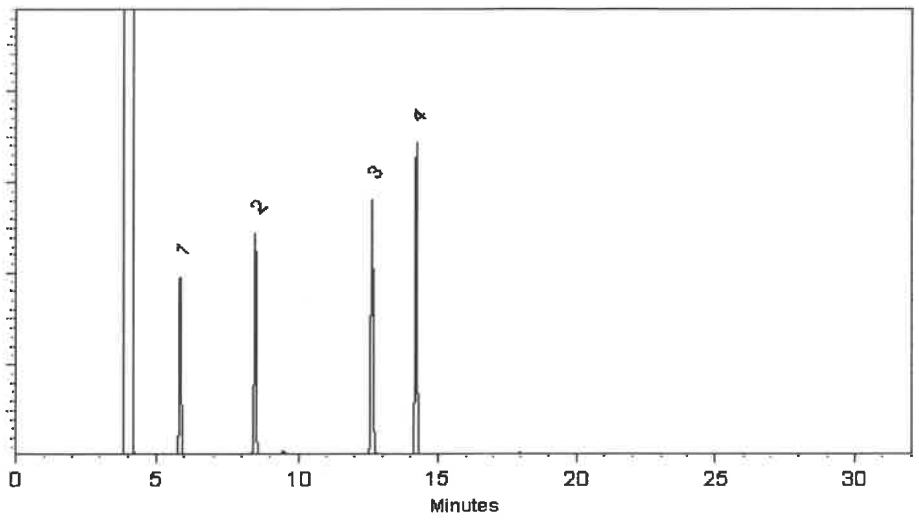
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl

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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:

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  $k$ is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

## Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

## Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Rec 12/17/24

# CERTIFIED REFERENCE MATERIAL

30 V.4

# Certificate of Analysis

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 30006 **Lot No.:** A0210618

**Description :** VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** July 31, 2027 **Storage:** 0°C or colder

**Ship:** Ambient

**CERTIFIED VALUES**

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Acetone | 67-64-1 | SHBQ8504 | 99% | 5,014.8 µg/mL | +/- 173.2883 |
| 2 | 2-Butanone (MEK) | 78-93-3 | SHBQ4704 | 99% | 5,012.4 µg/mL | +/- 173.2054 |
| 3 | 4-Methyl-2-pentanone (MIBK) | 108-10-1 | SHBP9200 | 99% | 5,011.6 µg/mL | +/- 173.1777 |
| 4 | 2-Hexanone | 591-78-6 | MKCQ6663 | 99% | 5,013.0 µg/mL | +/- 173.2261 |

* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** P&T Methanol/Water (90:10)
**CAS #** 67-56-1/7732-18-5
**Purity** 99%

# Quality Confirmation Test

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

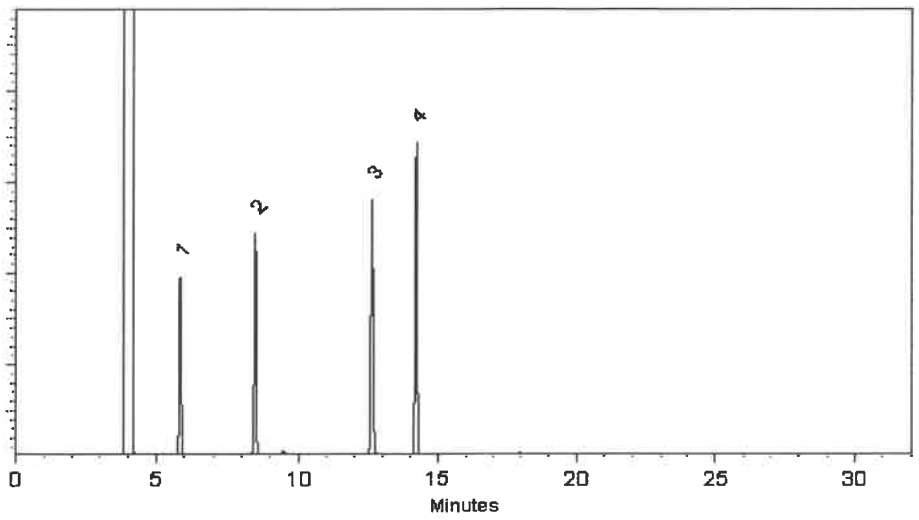
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dakota Parson - Operations Technician I

**Date Mixed:** 22-Apr-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 24-Apr-2024

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

# General Certified Reference Material Notes

## Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

## Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

## Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  $k$ is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

## Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

## Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Dec: 12/09/24

# Certificate of Analysis

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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.:** A0214960

**Description :** Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** August 31, 2029 **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 | SYN240416CTH | 99% | 2,012.0 µg/mL | +/- 113.0519 |

* 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.)

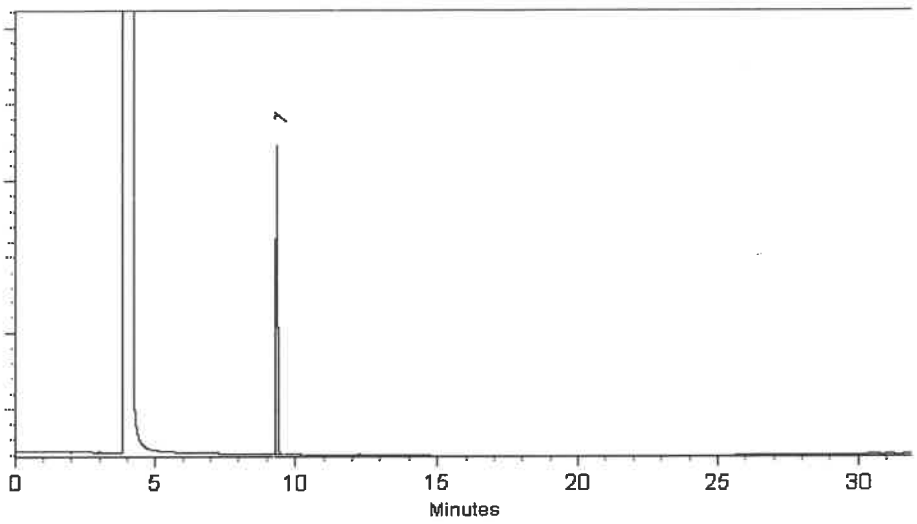
**Inj. Temp:**
200°C

**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.

Stacey Wanner - Operations Technician I

**Date Mixed:** 08-Aug-2024 **Balance Serial #** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 14-Aug-2024

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  $k$ is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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CERTIFIED REFERENCE MATERIAL

Dec: 12/09/24

# Certificate of Analysis

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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.:** A0214960

**Description :** Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** August 31, 2029 **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 | SYN240416CTH | 99% | 2,012.0 µg/mL | +/- 113.0519 |

* 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.)

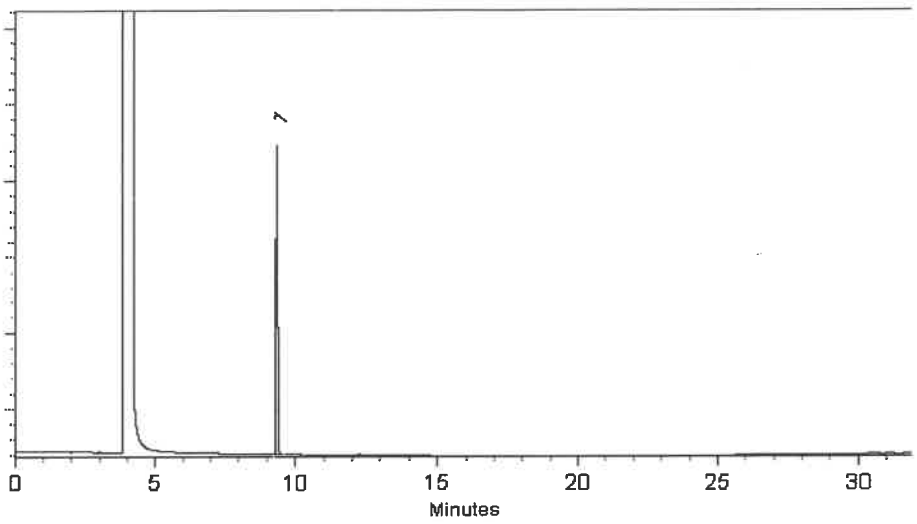
**Inj. Temp:**
200°C

**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.

Stacey Wanner - Operations Technician I

**Date Mixed:** 08-Aug-2024 **Balance Serial #** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 14-Aug-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:

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Dec: 12/09/24

# Certificate of Analysis

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**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.:** A0214960

**Description :** Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** August 31, 2029 **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 | SYN240416CTH | 99% | 2,012.0 µg/mL | +/- 113.0519 |

* 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.)

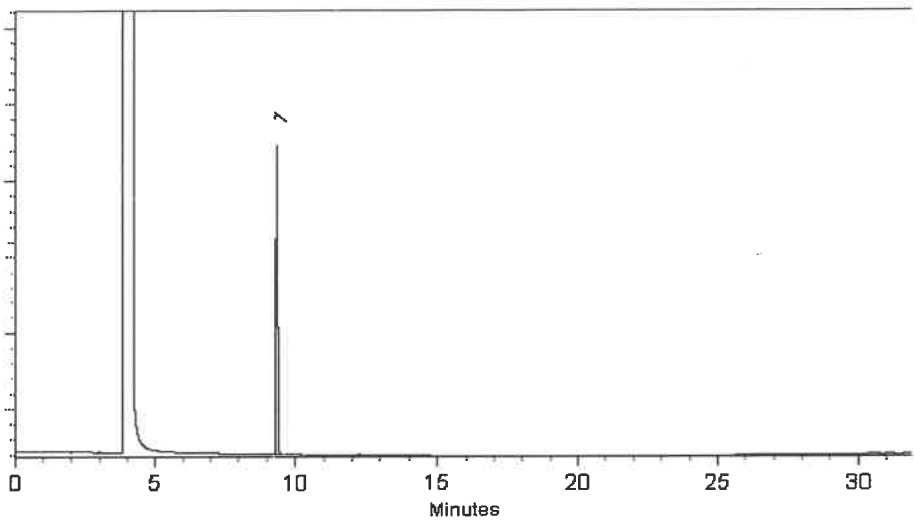
**Inj. Temp:**
200°C

**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.

Stacey Wanner - Operations Technician I

**Date Mixed:** 08-Aug-2024 **Balance Serial #** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 14-Aug-2024

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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  $k$ is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

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CERTIFIED REFERENCE MATERIAL

Dec: 12/09/24

# Certificate of Analysis

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**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.:** A0214960

**Description :** Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** August 31, 2029 **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 | SYN240416CTH | 99% | 2,012.0 µg/mL | +/- 113.0519 |

* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

# Quality Confirmation Test

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

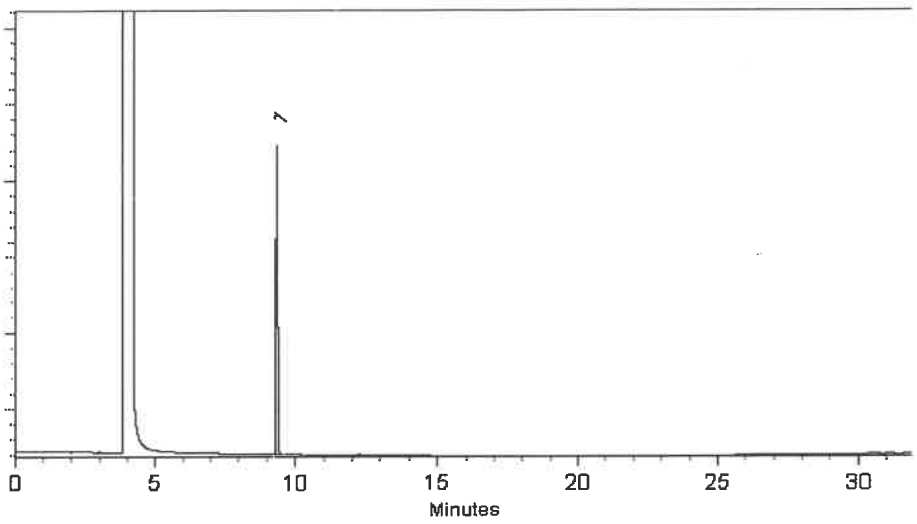
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl

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Stacey Wanner - Operations Technician I

**Date Mixed:** 08-Aug-2024 **Balance Serial #** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 14-Aug-2024

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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### Manufacturing Notes:

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Rec 12/17/24

# CERTIFIED REFERENCE MATERIAL

30 Vial

# Certificate of Analysis

***chromatographic plus***

V14727 to
V14756

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Reference Material Producer
Certificate #3222.01

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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.

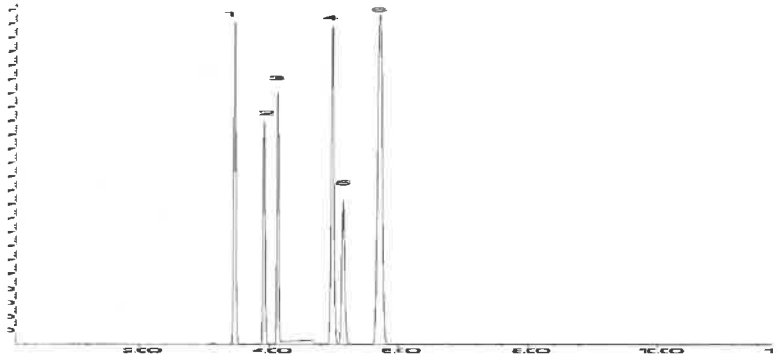
**Inj. Temp:**
200°C

**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.

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Rec 12/17/24

# CERTIFIED REFERENCE MATERIAL

30 Vial

# Certificate of Analysis

***chromatographic plus***

V14727 to
V14756

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 30042 **Lot No.:** A0216826

**Description :** 502.2 Calibration Mix #1

502.2 Calibration Mix #1 2,000µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** May 31, 2031 **Storage:** 0°C or colder

**Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Dichlorodifluoromethane (CFC-12) | 75-71-8 | 00022922 | 99% | 2,000.9 µg/mL | +/- 112.4144 |
| 2 | Chloromethane (methyl chloride) | 74-87-3 | 00022694 | 99% | 2,000.7 µg/mL | +/- 112.3998 |
| 3 | Vinyl chloride | 75-01-4 | 00015559 | 99% | 2,000.3 µg/mL | +/- 112.3779 |
| 4 | Bromomethane (methyl bromide) | 74-83-9 | 00017022 | 99% | 2,001.8 µg/mL | +/- 112.4650 |
| 5 | Chloroethane (ethyl chloride) | 75-00-3 | 107-401039114-1 | 99% | 2,000.1 µg/mL | +/- 112.3700 |
| 6 | Trichlorofluoromethane (CFC-11) | 75-69-4 | MKCJ8658 | 99% | 2,000.7 µg/mL | +/- 112.3992 |

* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

# Quality Confirmation Test

**Column:**
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

**Carrier Gas:**
helium-constant flow 2.0 mL/min.

**Temp. Program:**
40°C (hold 6 min.) to 100°C
@ 6°C/min.

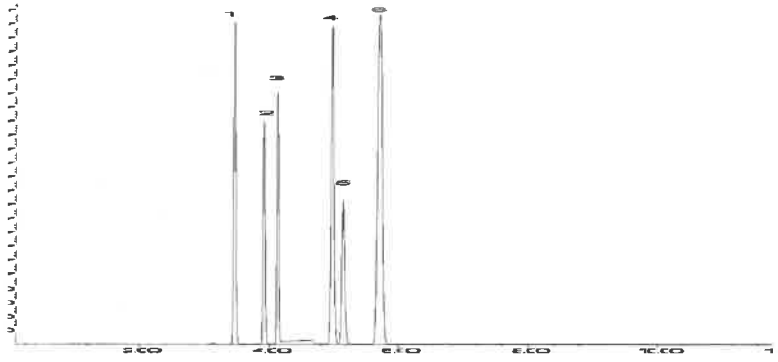
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
MSD

**Split Vent:**
Split ratio 10:1

**Inj. Vol**
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

**Date Mixed:** 23-Sep-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 04-Oct-2024

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

# General Certified Reference Material Notes

## Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

## Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

## Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  $k$ is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

## Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

## Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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CERTIFIED REFERENCE MATERIAL

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

# Certificate of Analysis

***chromatographic plus***

J 148421 to 148426

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 30470 **Lot No.:** A0217535

**Description :** tert-Butanol Standard

tert-Butanol Std 50,000µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** October 31, 2027 **Storage:** 0°C or colder

**Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | tert-Butanol (TBA) | 75-65-0 | SHBQ8002-1 | 99% | 50,007.5 µg/mL | +/- 717.6137 |

* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

# Quality Confirmation Test

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

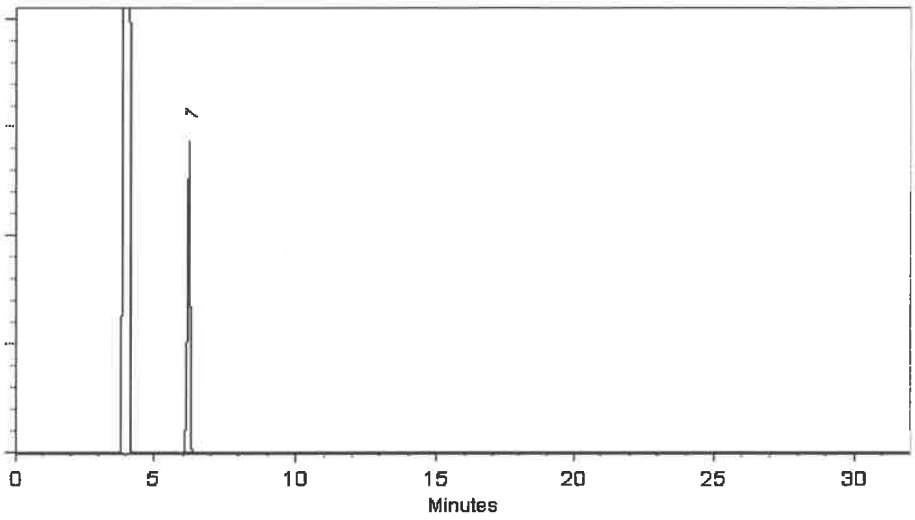
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Aaron Enyart - Operations Tech I

**Date Mixed:** 07-Oct-2024 **Balance Serial #** B251644995

Brittany Federinko - Operations Tech I

**Date Passed:** 09-Oct-2024

**Manufactured under Restek's ISO 9001:2015**
**Registered Quality System**
**Certificate #FM 80397**

# General Certified Reference Material Notes

## Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

## Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

## Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  $k$ is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

## Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

## Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Zoviy Rec 01/08/21

CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

*chromatographic*

V14803 - V14822

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 555408-SL **Lot No.:** A0220471

**Description :** Custom Vinyl Acetate Standard

Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** June 30, 2026 **Storage:** -20°C or colder

**Handling:** This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Vinyl acetate | 108-05-4 | RD240423RSR | 99% | 8,066.0 µg/mL | +/- 278.7979 |

* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Tech Tips:**

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

# Quality Confirmation Test

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

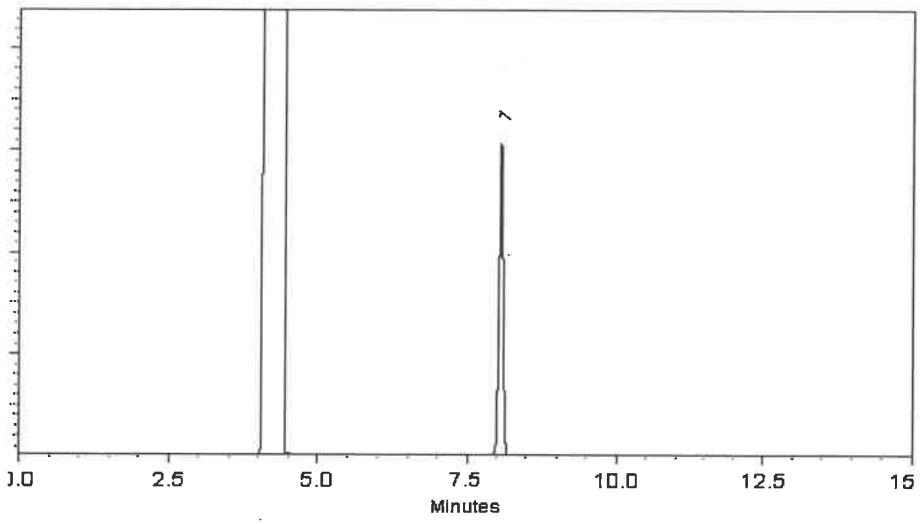
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Ethan Winiarski - Operations Tech I

**Date Mixed:** 24-Dec-2024 **Balance Serial #** 1127510105

Dillan Murphy - Operations Technician I

**Date Passed:** 02-Jan-2025

REVIEWED

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

# General Certified Reference Material Notes

## Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

## Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

## Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  $k$ is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

## Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

## Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

*chromatographic*

V14803 - V14822

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 555408-SL **Lot No.:** A0220471

**Description :** Custom Vinyl Acetate Standard

Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** June 30, 2026 **Storage:** -20°C or colder

**Handling:** This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Vinyl acetate | 108-05-4 | RD240423RSR | 99% | 8,066.0 µg/mL | +/- 278.7979 |

* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Tech Tips:**

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

# Quality Confirmation Test

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

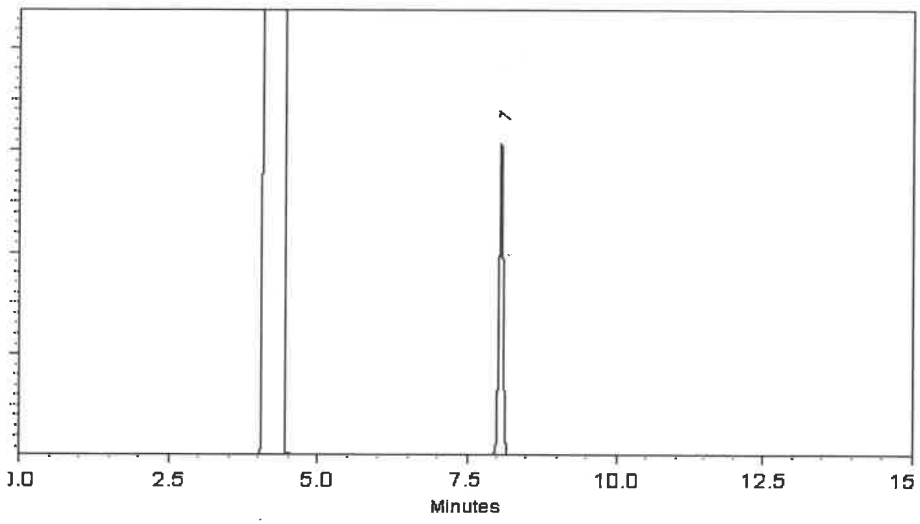
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Ethan Winiarski - Operations Tech I

**Date Mixed:** 24-Dec-2024 **Balance Serial #** 1127510105

Dillan Murphy - Operations Technician I

**Date Passed:** 02-Jan-2025

REVIEWED

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

# General Certified Reference Material Notes

## Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

## Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

## Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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- 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:

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## Handling Notes:

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Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

Rec 05/09/25

avantor™ | J.T.Baker®

V 14921 to
V 14938

Material No.: 9077-02
Batch No.: 24G0262002
Manufactured Date: 2024-05-14
Expiration Date: 2027-05-14
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 | 0.3 ppm |
| Titrable Acid (µeq/g) | ≤ 0.3 | 0.3 |
| 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

JCroak

Jamie Croak
Director Quality Operations, Bioscience Production

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

Rec 05/09/25

avantor™ | J.T.Baker®

V 14921 to
V 14938

Material No.: 9077-02
Batch No.: 24G0262002
Manufactured Date: 2024-05-14
Expiration Date: 2027-05-14
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 | 0.3 ppm |
| Titrable Acid (µeq/g) | ≤ 0.3 | 0.3 |
| 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

JCroak

Jamie Croak
Director Quality Operations, Bioscience Production

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

**Certified Reference Material CRM**

Dec 05/21/25

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

5.019

| | |
|---|---|
| **Part Number:** | 91980 |
| Lot Number: | 051925 |
| Description: | Acrolein |
| Expiration Date: | 061925 |
| Recommended Storage: | Refrigerate (4 °C) |
| Nominal Concentration (µg/mL): | 5000 |
| NIST Test ID#: | 6UTB |

**Solvent(s):** Water **Lot#** 041725Q

J14944-V14948

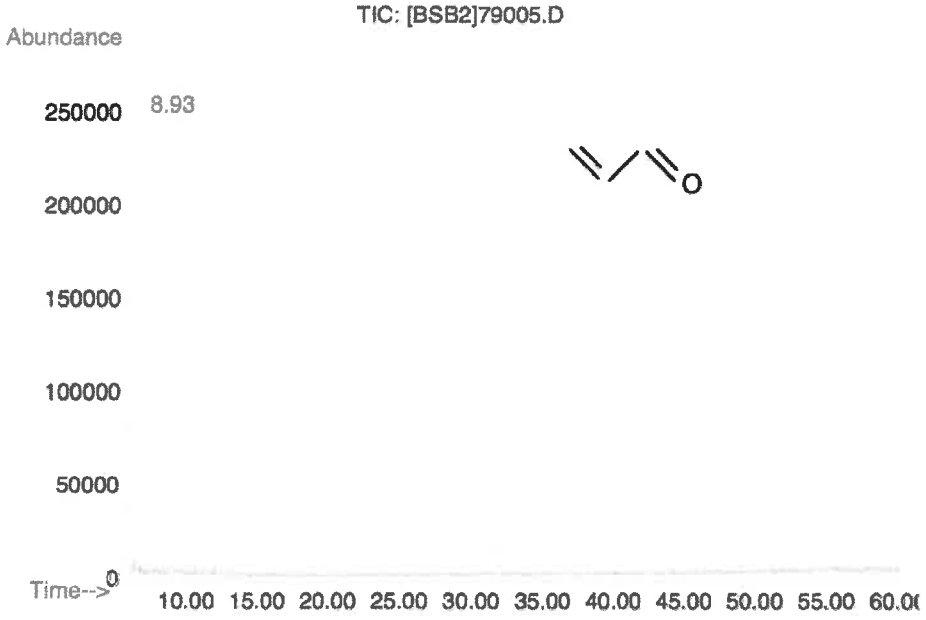
5E-05 Balance Uncertainty

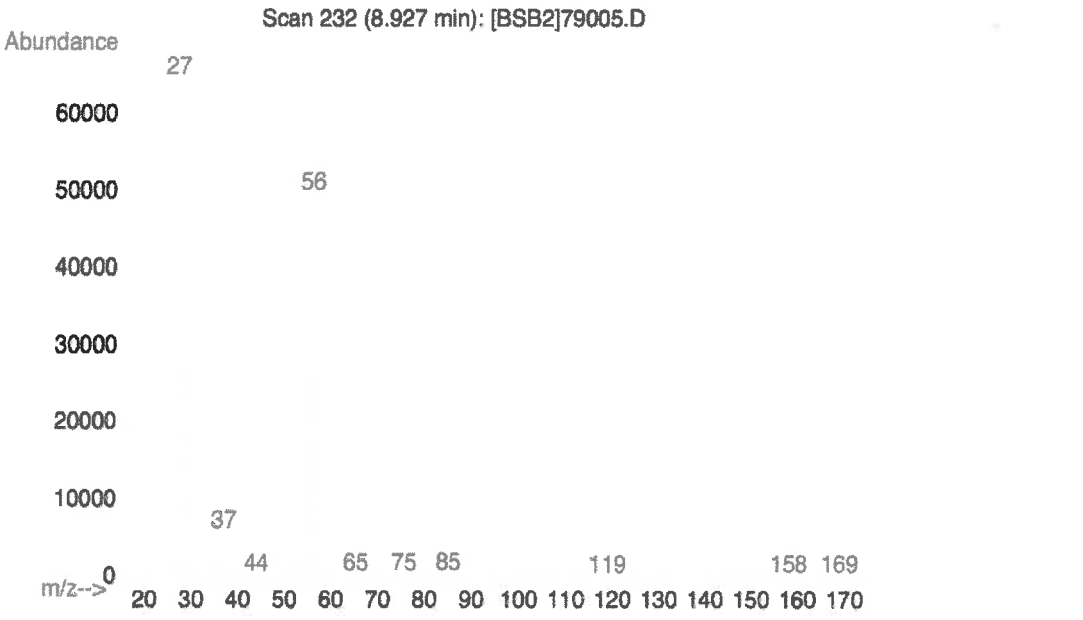
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

| | |
|---|---|
| Formulated By: Lawrence Barry | 051925 DATE |
| Reviewed By: Pedro L. Rentas | 051925 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 | 0.05170 | 5004.1 | 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 by an ISO 17025 certified organization with weights traceable through NIST to the SI kilogram (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).**
  **Rev 1.0, 2/25/2025**

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CERTIFIED WEIGHT REPORT

5.019

| | |
|---|---|
| **Part Number:** | 91980 |
| Lot Number: | 051925 |
| Description: | Acrolein |
| Expiration Date: | 061925 |
| Recommended Storage: | Refrigerate (4 °C) |
| Nominal Concentration (µg/mL): | 5000 |
| NIST Test ID#: | 6UTB |

**Solvent(s):** Water **Lot#** 041725Q

J14944-V14948

5E-05 Balance Uncertainty

Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

| | |
|---|---|
| Formulated By: Lawrence Barry | 051925 DATE |
| Reviewed By: Pedro L. Rentas | 051925 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
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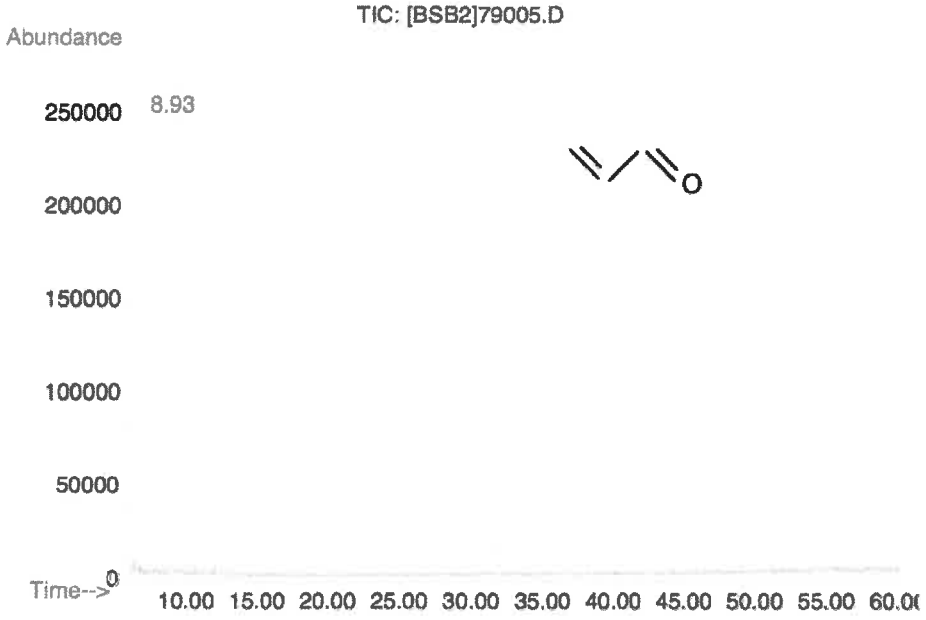


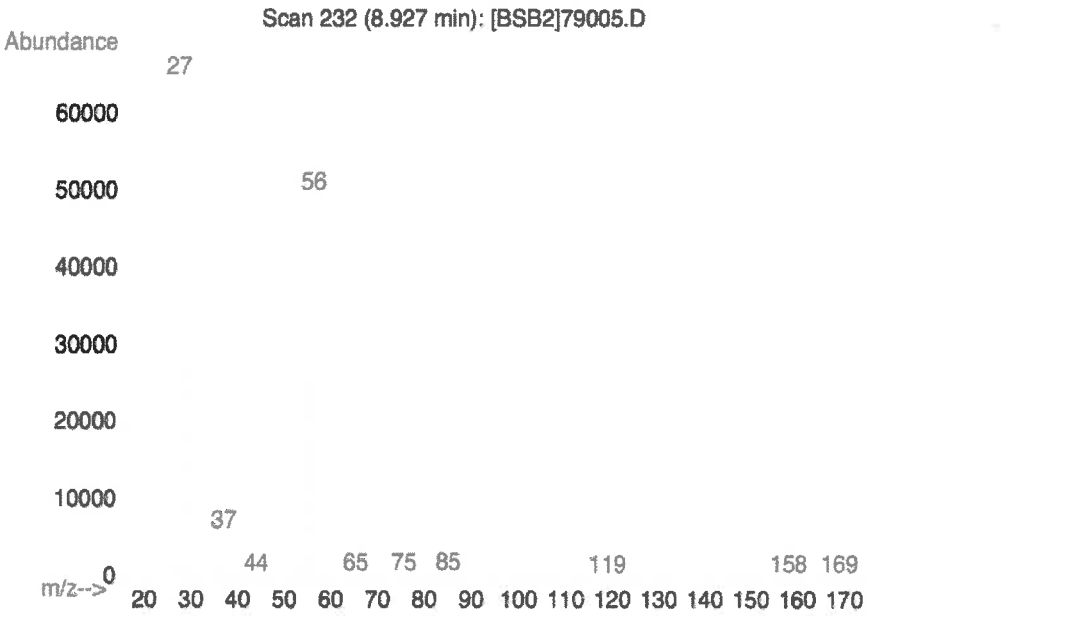


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CERTIFIED WEIGHT REPORT

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| Lot Number: | 051925 |
| Description: | Acrolein |
| Expiration Date: | 061925 |
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| Nominal Concentration (µg/mL): | 5000 |
| NIST Test ID#: | 6UTB |

**Solvent(s):** Water **Lot#** 041725Q

J14944-V14948

5E-05 Balance Uncertainty

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| | |
|---|---|
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| Reviewed By: Pedro L. Rentas | 051925 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 |
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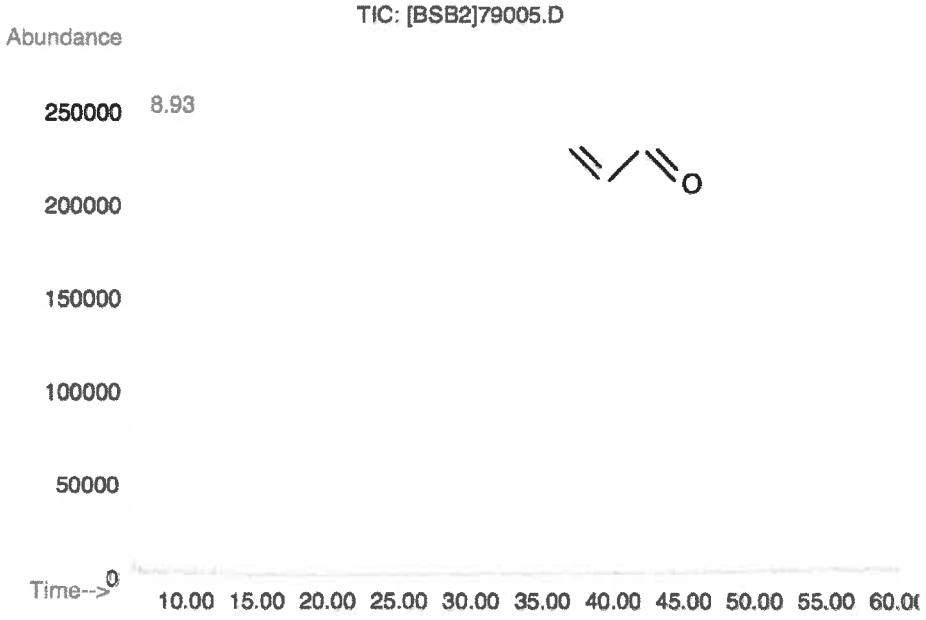


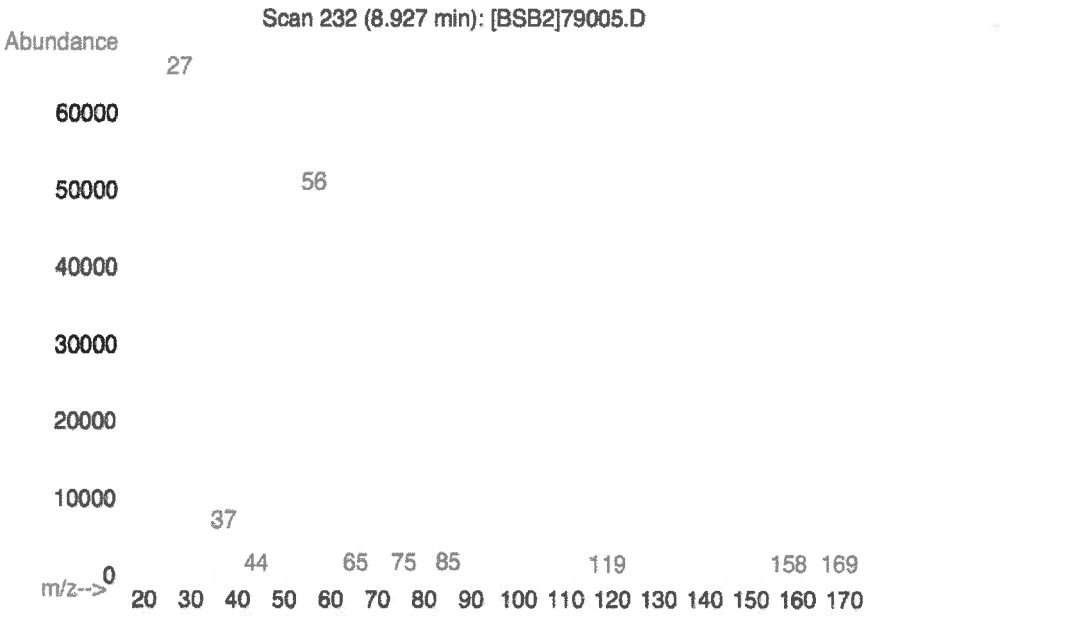


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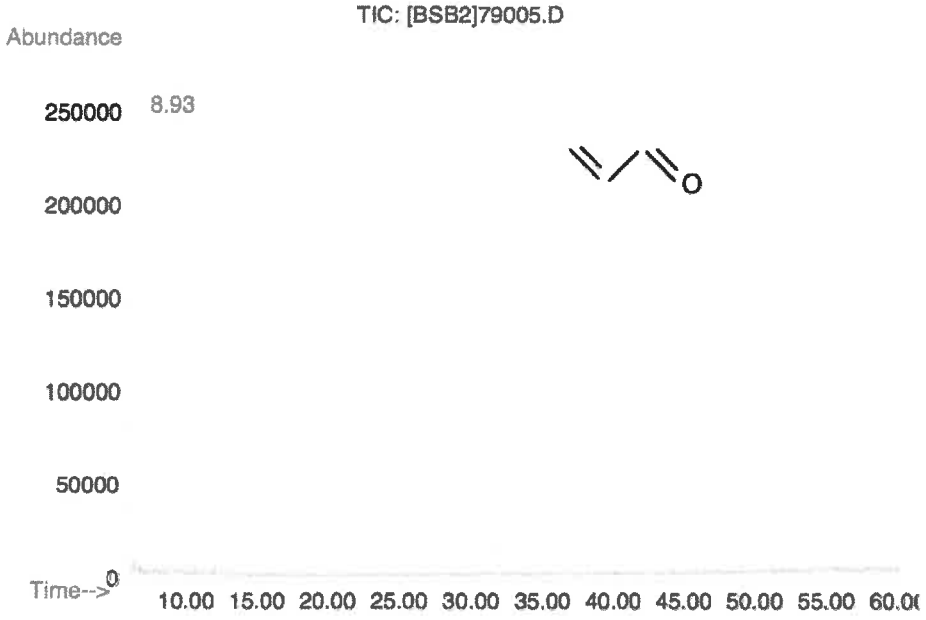


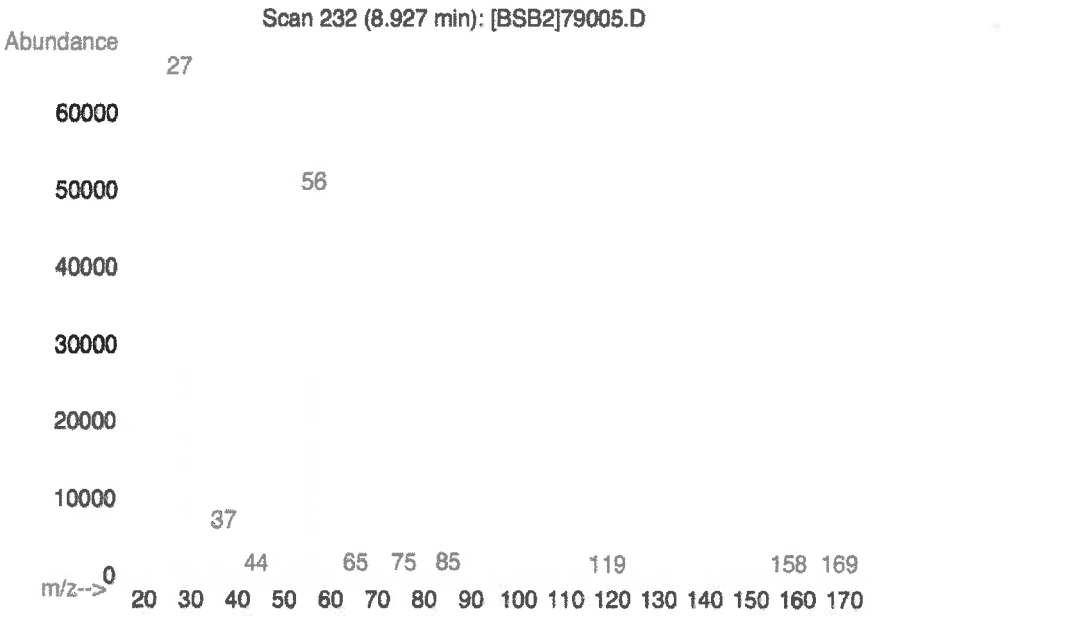


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  **Rev 1.0, 2/25/2025**

# SHIPPING DOCUMENTS

Alliance TECHNICAL GROUP

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

ALLIANCE PROJECT NO.
QUOTE NO. Q2250
COC Number 2046478

## CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: Jacobs
ADDRESS: 412 Mt. Kemble Ave., Suite 100
CITY Morristown STATE: NJ ZIP: 07960
ATTENTION: John Yntema John.Yntema@Jacobs.com e-mail:
PHONE: FAX:

## CLIENT PROJECT INFORMATION

PROJECT NAME: STC Princeton
PROJECT NO.: D3868221 LOCATION: Princeton Junction
PROJECT MANAGER: Mary Murphy
e-mail: Mary.Murphy@Jacobs.com
PHONE: FAX:

## CLIENT BILLING INFORMATION

BILL TO: Mary Murphy PO#:
ADDRESS:
CITY STATE: ZIP:
ATTENTION: PHONE:

## DATA TURNAROUND INFORMATION

FAX (RUSH) Standard TAT DAYS*
HARDCOPY (DATA PACKAGE): DAYS*
EDD: DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

## DATA DELIVERABLE INFORMATION

☐ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data)
☐ Level 2 (Results + QC) ☐ NJ Reduced ☐ US EPA CLP
☑ Level 3 (Results + QC + Raw Data) ☐ NYS ASP A ☐ NYS ASP B
☐ Other
☐ EDD FORMAT

## ANALYSIS

1. Site specific VOC's (8260D-Low)
2. 1,4-Dioxane (8270E-SIM)
3. Total Metals (6020B)
4. D3859E23 from (6020B)
5. Alkalinity (SM2320B)
6. TDS (SM 2540C)
7. Anions (9056)
8. Ti

| ALLIANCE SAMPLE ID | PROJECT SAMPLE IDENTIFICATION | SAMPLE MATRIX | SAMPLE TYPE COMP | SAMPLE TYPE GRAB | SAMPLE COLLECTION DATE | SAMPLE COLLECTION TIME | # OF BOTTLES | PRESERVATIVES 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | A/E | E | B/E | B/E | E | E | E | | | ← Specify Preservatives A-HCl D-NaOH B-HN03 E-ICE C-H2SO4 F-OTHER |
| 1. | MW-11A-13.5-060525 | GW | | X | 6/5/25 | 1230 | 15 | X | X | | | | | | | | MS/MSD |
| 2. | MW-06-6.5-060525 | GW | | X | 6/5/25 | 1310 | 8 (OH) 2 (DR) | | X | | | | | | | | |
| 3. | EB02-060525 | DI | | X | 6/5/25 | 0930 | 10 | X | X | X | X | X | X | X | | | |
| 4. | TB-01-060525 | DI | | X | 6/5/25 | 1600 | 2 | X | | | | | | | | | |
| 5. | | | | | | | | | | | | | | | | | |
| 6. | | | | | | | | | | | | | | | | | |
| 7. | | | | | | | | | | | | | | | | | |
| 8. | | | | | | | | | | | | | | | | | |
| 9. | | | | | | | | | | | | | | | | | |
| 10. | | | | | | | | | | | | | | | | | |

## SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

| RELINQUISHED BY SAMPLER: | DATE/TIME: | RECEIVED BY: |
|---|---|---|
| 1. | 6/5/25 1550 | 1. IT |
| 2. | | 2. |
| 3. IT | 6.5.25 1730 | 3. |

Conditions of bottles or coolers at receipt: ☑ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 3.2 °C
Comments: See work order for list of site specific VOC's
PO# 1480645(1

Page 1 of 2

CLIENT: ☐ Hand Delivered ☐ Other

Shipment Complete ☐ YES ☐ NO

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WHITE - ALLIANCE COPY FOR RETURN TO CLIENT YELLOW - ALLIANCE COPY PINK - SAMPLER COPY

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 |

QA Control Code: A2070148

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

# LOGIN REPORT/SAMPLE TRANSFER

**Order ID :** Q2250 JACO05
**Client Name :** JACOBS Engineering Grou
**Client Contact :** John Ynfante
**Invoice Name :** JACOBS Engineering Grou
**Invoice Contact :** John Ynfante

**Order Date :** 6/5/2025 4:22:00 PM
**Project Name :** Former Schlumberger STC
**Receive DateTime :** 6/5/2025 ~~12:00:00~~ 17:30 AM
**Purchase Order :**

**Project Mgr :**
**Report Type :** Level 4
**EDD Type :** CH2MHILL
**Hard Copy Date :**
**Date Signoff :**

| LAB ID | CLIENT ID | MATRIX | SAMPLE DATE | SAMPLE TIME | TEST | TEST GROUP | METHOD | | FAX DATE | DUE DATES |
|---|---|---|---|---|---|---|---|---|---|---|
| Q2250-01 | MW-11A-13.5-060525 | Water | 06/05/2025 | 12:30 | | | | | | |
| | | | | | VOCMS Group3 | | 8260-Low | 10 Bus. Days | | |
| Q2250-02 | Q2250-01MS | Water | 06/05/2025 | 12:30 | | | | | | |
| | | | | | VOCMS Group3 | | 8260-Low | 10 Bus. Days | | |
| Q2250-03 | Q2250-01MSD | Water | 06/05/2025 | 12:30 | | | | | | |
| | | | | | VOCMS Group3 | | 8260-Low | 10 Bus. Days | | |
| ~~Q2250-04~~ | ~~MW-06-6.5-060525~~ | ~~Water~~ | ~~06/05/2025~~ | ~~13:10~~ | | | | | | |
| | | | | | ~~VOCMS Group3~~ | | ~~8260-Low~~ | ~~10 Bus. Days~~ | yg 06/11/25 | |
| Q2250-05 | EB02-060525 | Water | 06/05/2025 | 09:30 | | | | | | |
| | | | | | VOCMS Group3 | | 8260-Low | 10 Bus. Days | | |
| Q2250-06 | TB-01-060525 | Water | 06/05/2025 | 16:00 | | | | | | |
| | | | | | VOCMS Group3 | | 8260-Low | 10 Bus. Days | | |

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

# LOGIN REPORT/SAMPLE TRANSFER

| | | | | | |
|---|---|---|---|---|---|
| **Order ID :** | Q2250 JACO05 | **Order Date :** | 6/5/2025 4:22:00 PM | **Project Mgr :** | |
| **Client Name :** | JACOBS Engineering Grou | **Project Name :** | Former Schlumberger STC | **Report Type :** | Level 4 |
| **Client Contact :** | John Ynfante | **Receive DateTime :** | 6/5/2025 ~~12:00:00~~ 17:30 AM | **EDD Type :** | CH2MHILL |
| **Invoice Name :** | JACOBS Engineering Grou | **Purchase Order :** | | **Hard Copy Date :** | |
| **Invoice Contact :** | John Ynfante | | | **Date Signoff :** | |

| LAB ID | CLIENT ID | MATRIX | SAMPLE DATE | SAMPLE TIME | TEST | TEST GROUP | METHOD | FAX DATE | DUE DATES |
|---|---|---|---|---|---|---|---|---|---|

**Relinguished By :** [signature]

**Date / Time :** 6/6/25 0810

**Received By :** Sam

**Date / Time :** 06/06/25 8:10 RJH 4

**Storage Area :** VOA Refridgerator Room

SAMPLES RECEIVED ON 6/5/25
PLACED IN SM-REF-2